

## BRIDGE / MEMBER DATA

Bridge ID 7777777\_20120905cy01\_01of01

NBI ID 7777-777

Feature Intersected Road

Material of Construction CSC  
 Year of Construction 2012  
 Roadway width 0.000  
 Number of Spans 1

Live Load Distribution Factor 0.353

Condition Factor: 1.000  
 System Factor: 1.000  
 ADTT: 300

Shear Live Load Dist. Factor 0.353  
 LRFD LLDF Moment

	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
1-lane DF	0.212	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
2-lane DF	0.212	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

LRFD LLDF Shear

	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
1-lane DF	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
2-lane DF	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Comments:

Member ID G01 01-EG001  
 Symmetry:

Span Length: Span 1 160.100 Span 2 0.000 Span 3 0.000 Span 4 0.000 Span 5 0.000

Range Length -- Non-Composite:

Span No.	Range No.	Range Length	Section Left	Section Right	Section Variation	Hinge Location No. 1	Hinge Location No. 2
1	1	30.000	1	0		0.0	0.0
1	2	100.100	2	0		0.0	0.0
1	3	30.000	1	0		0.0	0.0

Range Length -- Composite:

Span No.	Range No.	Range Length	Composite Code
1	1	160.100	C

Superimposed Dead Load:

Span No.	Load Type	Dist. from Left Supp.	Distributed Load (lbs/ft)		Concentrated Load (kips)
			Left	Right	
1	W	0.000	295.0	295.0	0.0

1 Z 0.000 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
64.0 64.0 160.100 0.0

NOTE: All distances are shown in decimal feet, moments are shown in foot-kips, and shears are shown in kips. Section and section properties are shown as: in., in.\*\*2, in.\*\*3, and in.\*\*4.

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#### SECTION DATA

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Span	Height	Web Depth	Web Thk.	Effective width	Slab Thk.	Fy
(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(ksi)
1.000	68.58	66.00	0.63	90.6	9.0	50.
1.100	68.58	66.00	0.63	90.6	9.0	50.
1.200	69.74	66.00	0.63	90.6	9.0	50.
1.300	69.74	66.00	0.63	90.6	9.0	50.
1.400	69.74	66.00	0.63	90.6	9.0	50.
1.500	69.74	66.00	0.63	90.6	9.0	50.
1.600	69.74	66.00	0.63	90.6	9.0	50.
1.700	69.74	66.00	0.63	90.6	9.0	50.
1.800	69.74	66.00	0.63	90.6	9.0	50.
1.900	68.58	66.00	0.63	90.6	9.0	50.
2.000	68.58	66.00	0.63	90.6	9.0	50.

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#### SECTION STRENGTH

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Span	Section Area		Neutral Axis		Moment of Inertia		Section Modulus			
	Gross	Net	Top	Bott.	+Bend	-Bend	+Bend Top	+Bend Bott.	-Bend Top	-Bend Bott.
1.000	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.100	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.200	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.300	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.400	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.500	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.600	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.700	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.800	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.900	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
2.000	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0

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#### SECTION STRENGTH (N=N)

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Span	Section Area		Neutral Axis		Moment of Inertia		Section Modulus			
	Gross	Net	Top	Bott.	+Bend	-Bend	+Bend Top	+Bend Bott.	-Bend Top	-Bend Bott.
1.000	184.10	184.10	15.20	53.39	173141.1	72325.6	11392.3	3243.1	1894.8	2378.0
1.100	184.10	184.10	15.20	53.39	173141.1	72325.6	11392.3	3243.1	1894.8	2378.0
1.200	207.20	207.20	17.74	52.00	211630.5	100214.4	11932.0	4069.5	2629.3	3168.8
1.300	207.20	207.20	17.74	52.00	211630.5	100214.4	11932.0	4069.5	2629.3	3168.8
1.400	207.20	207.20	17.74	52.00	211630.5	100214.4	11932.0	4069.5	2629.3	3168.8

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1.500	207.20	207.20	17.74	52.00	211630.5	100214.4	11932.0	4069.5	2629.3	3168.8
1.600	207.20	207.20	17.74	52.00	211630.5	100214.4	11932.0	4069.5	2629.3	3168.8
1.700	207.20	207.20	17.74	52.00	211630.5	100214.4	11932.0	4069.5	2629.3	3168.8
1.800	207.20	207.20	17.74	52.00	211630.5	100214.4	11932.0	4069.5	2629.3	3168.8
1.900	184.10	184.10	15.20	53.39	173141.1	72325.6	11392.3	3243.1	1894.8	2378.0
2.000	184.10	184.10	15.20	53.39	173141.1	72325.6	11392.3	3243.1	1894.8	2378.0

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SECTION STRENGTH (N=3N)

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Span	Section Gross	Area Net	Neutral Top	Axis Bott.	Moment +Bend	of Inertia -Bend	Section Modulus			
							+Bend Top	Bott.	-Bend Top	Bott.
1.000	123.70	123.70	26.77	41.81	122245.0	72325.6	4566.0	2923.7	1894.8	2378.0
1.100	123.70	123.70	26.77	41.81	122245.0	72325.6	4566.0	2923.7	1894.8	2378.0
1.200	146.80	146.80	28.53	41.21	152545.4	100214.4	5347.2	3701.5	2629.3	3168.8
1.300	146.80	146.80	28.53	41.21	152545.4	100214.4	5347.2	3701.5	2629.3	3168.8
1.400	146.80	146.80	28.53	41.21	152545.4	100214.4	5347.2	3701.5	2629.3	3168.8
1.500	146.80	146.80	28.53	41.21	152545.4	100214.4	5347.2	3701.5	2629.3	3168.8
1.600	146.80	146.80	28.53	41.21	152545.4	100214.4	5347.2	3701.5	2629.3	3168.8
1.700	146.80	146.80	28.53	41.21	152545.4	100214.4	5347.2	3701.5	2629.3	3168.8
1.800	146.80	146.80	28.53	41.21	152545.4	100214.4	5347.2	3701.5	2629.3	3168.8
1.900	123.70	123.70	26.77	41.81	122245.0	72325.6	4566.0	2923.7	1894.8	2378.0
2.000	123.70	123.70	26.77	41.81	122245.0	72325.6	4566.0	2923.7	1894.8	2378.0

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: HL93

Gamma	DC		DW		(2-Lane) LL 1.75		(1-Lane) LL 1.75	
	1.25		1.25					
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o		
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								
1.100	2045.8	425.3	752.62 R	0.00	633.83	0.00	752.62 R	633.83
0.00								
1.200	3653.6	756.1	1330.62 R	0.00	1121.27	0.00	1330.62 R	1121.27
0.00								
1.300	4807.7	992.4	1734.01 R	0.00	1462.32	0.00	1734.01 R	1462.32
0.00								
1.400	5500.1	1134.2	1973.83 R	0.00	1665.29	0.00	1973.83 R	1665.29
0.00								
1.500	5730.9	1181.5	2044.56 R	0.00	1726.02	0.00	2044.56 R	1726.02
0.00								
1.600	5500.1	1134.2	1973.83 R	0.00	1665.29	0.00	1973.83 R	1665.29
0.00								
1.700	4807.7	992.4	1734.01 R	0.00	1462.32	0.00	1734.01 R	1462.32
0.00								
1.800	3653.6	756.1	1330.62 R	0.00	1121.27	0.00	1330.62 R	1121.27
0.00								
1.900	2045.8	425.3	752.62 R	0.00	633.83	0.00	752.62 R	633.83
0.00								
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00

0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV

Rating Live Load: HL93

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12567.8	-12567.8B	13420.3	13420.3	-18367.9	-18367.9
1.400	19220.4C	19220.4	-12567.8	-12567.8B	12586.1	12586.1	-19202.2	-19202.2
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12567.8	-12567.8B	12586.1	12586.1	-19202.2	-19202.2
1.700	19220.4C	19220.4	-12567.8	-12567.8B	13420.3	13420.3	-18367.9	-18367.9
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV

Rating Live Load: HL93

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor	bottom +bend		
1.000	999.00	999.00		999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	0.00	999.0 (1-Lane)
1.100	17.87	999.00		17.87	0.00	643.4 (2-Lane)
1.100	17.87	999.00		17.87	0.00	643.4 (1-Lane)
1.200	11.13	999.00		11.13	0.00	400.7 (2-Lane)
1.200	11.13	999.00		11.13	0.00	400.7 (1-Lane)
1.300	7.74	999.00		7.74	0.00	278.6 (2-Lane)
1.300	7.74	999.00		7.74	0.00	278.6 (1-Lane)
1.400	6.38	999.00		6.38	0.00	229.6 (2-Lane)
1.400	6.38	999.00		6.38	0.00	229.6 (1-Lane)
1.500	6.02	999.00		6.02	0.00	216.7 (2-Lane)
1.500	6.02	999.00		6.02	0.00	216.7 (1-Lane)
1.600	6.38	999.00		6.38	0.00	229.6 (2-Lane)
1.600	6.38	999.00		6.38	0.00	229.6 (1-Lane)

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1.700	7.74	999.00	7.74	999.00	0.00	278.6 (2-Lane)
1.700	7.74	999.00	7.74	999.00	0.00	278.6 (1-Lane)
1.800	11.13	999.00	11.13	999.00	0.00	400.7 (2-Lane)
1.800	11.13	999.00	11.13	999.00	0.00	400.7 (1-Lane)
1.900	17.87	999.00	17.87	999.00	0.00	643.4 (2-Lane)
1.900	17.87	999.00	17.87	999.00	0.00	643.4 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: HL93

Gamma	DC	DW	(2-Lane)				(1-Lane)		
	1.25	1.25	LL	LL	LL	LL	LL		
			1.75	1.75	1.75	1.75	1.75	1.75	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	Live Load	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	141.4	29.5	56.67	0.00	47.70	0.00	56.67	0.00	47.70
1.100 0.00	114.2	23.6	48.93	0.00	40.92	0.00	48.93	0.00	40.92
1.200 0.00	86.5	17.7	41.60	0.00	34.54	0.00	41.60	0.00	34.54
1.300 0.00	57.7	11.8	34.69	0.00	28.58	0.00	34.69	0.00	28.58
1.400 0.00	28.8	5.9	28.18	0.00	23.02	0.00	28.18	0.00	23.02
1.500 0.00	0.0	0.0	22.08	0.00	17.88	0.00	22.08	0.00	17.88
1.600 0.00	-28.8	-5.9	-28.18	0.00	-23.02	0.00	-28.18	0.00	-23.02
1.700 0.00	-57.7	-11.8	-34.69	0.00	-28.58	0.00	-34.69	0.00	-28.58
1.800 0.00	-86.5	-17.7	-41.60	0.00	-34.54	0.00	-41.60	0.00	-34.54
1.900 0.00	-114.2	-23.6	-48.93	0.00	-40.92	0.00	-48.93	0.00	-40.92
2.000 0.00	-141.4	-29.5	-56.67	0.00	-47.70	0.00	-56.67	0.00	-47.70

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: HL93

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: HL93

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	14.34	0.00	516.2 (2-Lane)
1.000	999.00	14.34	0.00	516.2 (1-Lane)
1.100	426.83	14.71	0.00	529.6 (2-Lane)
1.100	426.83	14.71	0.00	529.6 (1-Lane)
1.200	101.01	10.19	0.00	366.8 (2-Lane)
1.200	101.01	10.19	0.00	366.8 (1-Lane)
1.300	53.72	13.22	0.00	476.0 (2-Lane)
1.300	53.72	13.22	0.00	476.0 (1-Lane)
1.400	34.32	17.51	0.00	630.2 (2-Lane)
1.400	34.32	17.51	0.00	630.2 (1-Lane)
1.500	23.91	23.91	0.00	860.8 (2-Lane)
1.500	23.91	23.91	0.00	860.8 (1-Lane)
1.600	17.51	34.32	0.00	630.2 (2-Lane)
1.600	17.51	34.32	0.00	630.2 (1-Lane)
1.700	13.22	53.72	0.00	476.0 (2-Lane)
1.700	13.22	53.72	0.00	476.0 (1-Lane)
1.800	10.19	101.01	0.00	366.8 (2-Lane)
1.800	10.19	101.01	0.00	366.8 (1-Lane)
1.900	14.71	392.29	0.00	529.6 (2-Lane)
1.900	14.71	392.29	0.00	529.6 (1-Lane)
2.000	14.34	999.00	0.00	516.2 (2-Lane)

2.000 14.34 999.00 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
0.00 516.2 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load: HL93

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.100	1636.6	340.3	559.09 R	0.00	470.85	559.09 R
0.00						
1.200	2922.9	604.9	988.46 R	0.00	832.95	988.46 R
0.00						
1.300	3846.1	794.0	1288.12 R	0.00	1086.30	1288.12 R
0.00						
1.400	4400.1	907.4	1466.27 R	0.00	1237.07	1466.27 R
0.00						
1.500	4584.7	945.2	1518.82 R	0.00	1282.19	1518.82 R
0.00						
1.600	4400.1	907.4	1466.27 R	0.00	1237.07	1466.27 R
0.00						
1.700	3846.1	794.0	1288.12 R	0.00	1086.30	1288.12 R
0.00						
1.800	2922.9	604.9	988.46 R	0.00	832.95	988.46 R
0.00						
1.900	1636.6	340.3	559.09 R	0.00	470.85	559.09 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load:

Rating Type: HL93  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6

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1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV

Rating Live Load: HL93

Service

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	61.54	999.00	18.29	999.00	0.00	658.6 (2-Lane)
1.100	61.54	999.00	18.29	999.00	0.00	658.6 (1-Lane)
1.200	33.00	999.00	11.83	999.00	0.00	425.7 (2-Lane)
1.200	33.00	999.00	11.83	999.00	0.00	425.7 (1-Lane)
1.300	21.74	999.00	7.99	999.00	0.00	287.8 (2-Lane)
1.300	21.74	999.00	7.99	999.00	0.00	287.8 (1-Lane)
1.400	17.21	999.00	6.45	999.00	0.00	232.3 (2-Lane)
1.400	17.21	999.00	6.45	999.00	0.00	232.3 (1-Lane)
1.500	16.01	999.00	6.05	999.00	0.00	217.6 (2-Lane)
1.500	16.01	999.00	6.05	999.00	0.00	217.6 (1-Lane)
1.600	17.21	999.00	6.45	999.00	0.00	232.3 (2-Lane)
1.600	17.21	999.00	6.45	999.00	0.00	232.3 (1-Lane)
1.700	21.74	999.00	7.99	999.00	0.00	287.8 (2-Lane)
1.700	21.74	999.00	7.99	999.00	0.00	287.8 (1-Lane)
1.800	33.00	999.00	11.83	999.00	0.00	425.7 (2-Lane)
1.800	33.00	999.00	11.83	999.00	0.00	425.7 (1-Lane)
1.900	61.54	999.00	18.29	999.00	0.00	658.6 (2-Lane)
1.900	61.54	999.00	18.29	999.00	0.00	658.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV

Rating Live Load: HS20

(2-Lane)

(1-Lane)



Gamma	DC 1.25	DW 1.25	LL 1.75				LL 1.75			
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.100	2045.8	425.3	478.75 R	0.00	359.96	0.00	478.75 R	0.00	359.96	
0.00										
1.200	3653.6	756.1	843.74 R	0.00	634.39	0.00	843.74 R	0.00	634.39	
0.00										
1.300	4807.7	992.4	1094.98 R	0.00	823.29	0.00	1094.98 R	0.00	823.29	
0.00										
1.400	5500.1	1134.2	1243.51 R	0.00	934.97	0.00	1243.51 R	0.00	934.97	
0.00										
1.500	5730.9	1181.5	1283.81 R	0.00	965.27	0.00	1283.81 R	0.00	965.27	
0.00										
1.600	5500.1	1134.2	1243.51 R	0.00	934.97	0.00	1243.51 R	0.00	934.97	
0.00										
1.700	4807.7	992.4	1094.98 R	0.00	823.29	0.00	1094.98 R	0.00	823.29	
0.00										
1.800	3653.6	756.1	843.74 R	0.00	634.39	0.00	843.74 R	0.00	634.39	
0.00										
1.900	2045.8	425.3	478.75 R	0.00	359.96	0.00	478.75 R	0.00	359.96	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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#### STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: HS20

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12567.8	-12567.8B	13420.3	13420.3	-18367.9	-18367.9
1.400	19220.4C	19220.4	-12567.8	-12567.8B	12586.1	12586.1	-19202.2	-19202.2
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12567.8	-12567.8B	12586.1	12586.1	-19202.2	-19202.2
1.700	19220.4C	19220.4	-12567.8	-12567.8B	13420.3	13420.3	-18367.9	-18367.9
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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#### MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: HS20

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.100	28.09	999.00	28.09	999.00	999.00	999.0 (2-Lane)
1.100	28.09	999.00	28.09	999.00	999.00	999.0 (1-Lane)
1.200	17.55	999.00	17.55	999.00	351.07	631.9 (2-Lane)
1.200	17.55	999.00	17.55	999.00	351.07	631.9 (1-Lane)
1.300	12.26	999.00	12.26	999.00	245.12	441.2 (2-Lane)
1.300	12.26	999.00	12.26	999.00	245.12	441.2 (1-Lane)
1.400	10.12	999.00	10.12	999.00	202.43	364.4 (2-Lane)
1.400	10.12	999.00	10.12	999.00	202.43	364.4 (1-Lane)
1.500	9.59	999.00	9.59	999.00	191.74	345.1 (2-Lane)
1.500	9.59	999.00	9.59	999.00	191.74	345.1 (1-Lane)
1.600	10.12	999.00	10.12	999.00	202.43	364.4 (2-Lane)
1.600	10.12	999.00	10.12	999.00	202.43	364.4 (1-Lane)
1.700	12.26	999.00	12.26	999.00	245.13	441.2 (2-Lane)
1.700	12.26	999.00	12.26	999.00	245.13	441.2 (1-Lane)
1.800	17.55	999.00	17.55	999.00	351.07	631.9 (2-Lane)
1.800	17.55	999.00	17.55	999.00	351.07	631.9 (1-Lane)
1.900	28.09	999.00	28.09	999.00	999.00	999.0 (2-Lane)
1.900	28.09	999.00	28.09	999.00	999.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: HS20

Gamma	DC	DW	(2-Lane)				(1-Lane)		
	1.25	1.25	LL	LL	LL	LL	LL	LL	
			1.75	1.75	1.75	1.75	1.75	1.75	
Span	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
w/o impact		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	141.4	29.5	36.14	0.00	27.17	0.00	36.14	0.00	27.17
0.00									
1.100	114.2	23.6	32.30	0.00	24.29	0.00	32.30	0.00	24.29
0.00									
1.200	86.5	17.7	28.46	0.00	21.40	0.00	28.46	0.00	21.40
0.00									
1.300	57.7	11.8	24.63	0.00	18.52	0.00	24.63	0.00	18.52
0.00									
1.400	28.8	5.9	20.79	0.00	15.63	0.00	20.79	0.00	15.63
0.00									
1.500	0.0	0.0	16.95	0.00	12.74	0.00	16.95	0.00	12.74

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0.00									
1.600	-28.8	-5.9	-20.79	0.00	-15.63	0.00	-20.79	0.00	-15.63
0.00									
1.700	-57.7	-11.8	-24.63	0.00	-18.52	0.00	-24.63	0.00	-18.52
0.00									
1.800	-86.5	-17.7	-28.46	0.00	-21.40	0.00	-28.46	0.00	-21.40
0.00									
1.900	-114.2	-23.6	-32.30	0.00	-24.29	0.00	-32.30	0.00	-24.29
0.00									
2.000	-141.4	-29.5	-36.14	0.00	-27.17	0.00	-36.14	0.00	-27.17
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: HS20

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: HS20

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	22.49	449.73	809.5 (2-Lane)

1.000	999.00	22.49	449.73	809.5 (1-Lane)
1.100	518.51	22.29	445.72	802.3 (2-Lane)
1.100	518.51	22.29	445.72	802.3 (1-Lane)
1.200	116.27	14.89	297.82	536.1 (2-Lane)
1.200	116.27	14.89	297.82	536.1 (1-Lane)
1.300	64.42	18.62	372.44	670.4 (2-Lane)
1.300	64.42	18.62	372.44	670.4 (1-Lane)
1.400	42.92	23.73	474.62	854.3 (2-Lane)
1.400	42.92	23.73	474.62	854.3 (1-Lane)
1.500	31.15	31.15	999.00	999.0 (2-Lane)
1.500	31.15	31.15	999.00	999.0 (1-Lane)
1.600	23.73	42.92	474.62	854.3 (2-Lane)
1.600	23.73	42.92	474.62	854.3 (1-Lane)
1.700	18.62	64.42	372.44	670.4 (2-Lane)
1.700	18.62	64.42	372.44	670.4 (1-Lane)
1.800	14.89	116.27	297.82	536.1 (2-Lane)
1.800	14.89	116.27	297.82	536.1 (1-Lane)
1.900	22.29	518.51	445.72	802.3 (2-Lane)
1.900	22.29	518.51	445.72	802.3 (1-Lane)
2.000	22.49	999.00	449.73	809.5 (2-Lane)
2.000	22.49	999.00	449.73	809.5 (1-Lane)

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# SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load: HS20

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30					
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.100	1636.6	340.3	355.64 R	0.00	267.40	0.00	355.64 R	0.00	267.40	
0.00										
1.200	2922.9	604.9	626.78 R	0.00	471.26	0.00	626.78 R	0.00	471.26	
0.00										
1.300	3846.1	794.0	813.41 R	0.00	611.59	0.00	813.41 R	0.00	611.59	
0.00										
1.400	4400.1	907.4	923.75 R	0.00	694.55	0.00	923.75 R	0.00	694.55	
0.00										
1.500	4584.7	945.2	953.68 R	0.00	717.06	0.00	953.68 R	0.00	717.06	
0.00										
1.600	4400.1	907.4	923.75 R	0.00	694.55	0.00	923.75 R	0.00	694.55	
0.00										
1.700	3846.1	794.0	813.41 R	0.00	611.59	0.00	813.41 R	0.00	611.59	
0.00										
1.800	2922.9	604.9	626.78 R	0.00	471.26	0.00	626.78 R	0.00	471.26	
0.00										
1.900	1636.6	340.3	355.64 R	0.00	267.40	0.00	355.64 R	0.00	267.40	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load:

Rating Type: HS20

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load: HS20

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.100	96.74	999.00	28.76	999.00	999.00	999.0 (2-Lane)
1.100	96.74	999.00	28.76	999.00	999.00	999.0 (1-Lane)
1.200	52.04	999.00	18.65	999.00	373.01	671.4 (2-Lane)
1.200	52.04	999.00	18.65	999.00	373.01	671.4 (1-Lane)
1.300	34.43	999.00	12.66	999.00	253.16	455.7 (2-Lane)
1.300	34.43	999.00	12.66	999.00	253.16	455.7 (1-Lane)
1.400	27.32	999.00	10.24	999.00	204.82	368.7 (2-Lane)
1.400	27.32	999.00	10.24	999.00	204.82	368.7 (1-Lane)
1.500	25.50	999.00	9.63	999.00	192.55	346.6 (2-Lane)
1.500	25.50	999.00	9.63	999.00	192.55	346.6 (1-Lane)
1.600	27.32	999.00	10.24	999.00	204.82	368.7 (2-Lane)

1.600	27.32	999.00	10.24	999.00	204.82	368.7 (1-Lane)
1.700	34.43	999.00	12.66	999.00	253.16	455.7 (2-Lane)
1.700	34.43	999.00	12.66	999.00	253.16	455.7 (1-Lane)
1.800	52.04	999.00	18.65	999.00	373.01	671.4 (2-Lane)
1.800	52.04	999.00	18.65	999.00	373.01	671.4 (1-Lane)
1.900	96.74	999.00	28.76	999.00	999.00	999.0 (2-Lane)
1.900	96.74	999.00	28.76	999.00	999.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75			
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
1.100 0.00	2045.8	425.3	337.14 R	0.00	253.49	0.00	337.14 R	0.00	253.49	
1.200 0.00	3653.6	756.1	595.27 R	0.00	447.57	0.00	595.27 R	0.00	447.57	
1.300 0.00	4807.7	992.4	774.41 R	0.00	582.27	0.00	774.41 R	0.00	582.27	
1.400 0.00	5500.1	1134.2	880.48 R	0.00	662.01	0.00	880.48 R	0.00	662.01	
1.500 0.00	5730.9	1181.5	911.49 R	0.00	685.33	0.00	911.49 R	0.00	685.33	
1.600 0.00	5500.1	1134.2	880.48 R	0.00	662.01	0.00	880.48 R	0.00	662.01	
1.700 0.00	4807.7	992.4	774.41 R	0.00	582.27	0.00	774.41 R	0.00	582.27	
1.800 0.00	3653.6	756.1	595.27 R	0.00	447.57	0.00	595.27 R	0.00	447.57	
1.900 0.00	2045.8	425.3	337.14 R	0.00	253.49	0.00	337.14 R	0.00	253.49	
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: 3

Span Moment Resistance Available Resistance for LL+I

	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12564.2	-12564.2B	13420.3	13420.3	-18364.3	-18364.3
1.400	19220.4C	19220.4	-12564.2	-12564.2B	12586.1	12586.1	-19198.5	-19198.5
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12564.2	-12564.2B	12586.1	12586.1	-19198.5	-19198.5
1.700	19220.4C	19220.4	-12564.2	-12564.2B	13420.3	13420.3	-18364.3	-18364.3
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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# MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: 3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor	bottom +bend		
1.000	999.00	999.00		999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	0.00	999.0 (1-Lane)
1.100	39.90	999.00		39.90	0.00	999.0 (2-Lane)
1.100	39.90	999.00		39.90	0.00	999.0 (1-Lane)
1.200	24.88	999.00		24.88	0.00	622.0 (2-Lane)
1.200	24.88	999.00		24.88	0.00	622.0 (1-Lane)
1.300	17.33	999.00		17.33	0.00	433.2 (2-Lane)
1.300	17.33	999.00		17.33	0.00	433.2 (1-Lane)
1.400	14.30	999.00		14.30	0.00	357.4 (2-Lane)
1.400	14.30	999.00		14.30	0.00	357.4 (1-Lane)
1.500	13.50	999.00		13.50	0.00	337.6 (2-Lane)
1.500	13.50	999.00		13.50	0.00	337.6 (1-Lane)
1.600	14.30	999.00		14.30	0.00	357.4 (2-Lane)
1.600	14.30	999.00		14.30	0.00	357.4 (1-Lane)
1.700	17.33	999.00		17.33	0.00	433.2 (2-Lane)
1.700	17.33	999.00		17.33	0.00	433.2 (1-Lane)
1.800	24.88	999.00		24.88	0.00	622.0 (2-Lane)
1.800	24.88	999.00		24.88	0.00	622.0 (1-Lane)
1.900	39.90	999.00		39.90	0.00	999.0 (2-Lane)
1.900	39.90	999.00		39.90	0.00	999.0 (1-Lane)
2.000	999.00	999.00		999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	0.00	999.0 (1-Lane)

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# SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	141.4	29.5	25.41	0.00	19.11	0.00	25.41	0.00	19.11
1.100 0.00	114.2	23.6	22.75	0.00	17.10	0.00	22.75	0.00	17.10
1.200 0.00	86.5	17.7	20.08	0.00	15.10	0.00	20.08	0.00	15.10
1.300 0.00	57.7	11.8	17.42	0.00	13.10	0.00	17.42	0.00	13.10
1.400 0.00	28.8	5.9	14.75	0.00	11.09	0.00	14.75	0.00	11.09
1.500 0.00	0.0	0.0	12.09	0.00	9.09	0.00	12.09	0.00	9.09
1.600 0.00	-28.8	-5.9	-14.75	0.00	-11.09	0.00	-14.75	0.00	-11.09
1.700 0.00	-57.7	-11.8	-17.42	0.00	-13.10	0.00	-17.42	0.00	-13.10
1.800 0.00	-86.5	-17.7	-20.08	0.00	-15.10	0.00	-20.08	0.00	-15.10
1.900 0.00	-114.2	-23.6	-22.75	0.00	-17.10	0.00	-22.75	0.00	-17.10
2.000 0.00	-141.4	-29.5	-25.41	0.00	-19.11	0.00	-25.41	0.00	-19.11

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)



1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV

Rating Live Load: 3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	31.98	0.00	799.5 (2-Lane)
1.000	999.00	31.98	0.00	799.5 (1-Lane)
1.100	627.69	31.65	0.00	791.2 (2-Lane)
1.100	627.69	31.65	0.00	791.2 (1-Lane)
1.200	154.53	21.11	0.00	527.7 (2-Lane)
1.200	154.53	21.11	0.00	527.7 (1-Lane)
1.300	88.44	26.33	0.00	658.3 (2-Lane)
1.300	88.44	26.33	0.00	658.3 (1-Lane)
1.400	59.74	33.44	0.00	836.1 (2-Lane)
1.400	59.74	33.44	0.00	836.1 (1-Lane)
1.500	43.69	43.69	0.00	999.0 (2-Lane)
1.500	43.69	43.69	0.00	999.0 (1-Lane)
1.600	33.44	59.74	0.00	836.1 (2-Lane)
1.600	33.44	59.74	0.00	836.1 (1-Lane)
1.700	26.33	88.44	0.00	658.3 (2-Lane)
1.700	26.33	88.44	0.00	658.3 (1-Lane)
1.800	21.11	154.53	0.00	527.7 (2-Lane)
1.800	21.11	154.53	0.00	527.7 (1-Lane)
1.900	31.65	627.69	0.00	791.2 (2-Lane)
1.900	31.65	627.69	0.00	791.2 (1-Lane)
2.000	31.98	999.00	0.00	799.5 (2-Lane)
2.000	31.98	999.00	0.00	799.5 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV

Rating Live Load: 3

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
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1.00

1.00

1.30

Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.100 0.00	1636.6	340.3	250.44 R	0.00	188.30	0.00	250.44 R	0.00	188.30
1.200 0.00	2922.9	604.9	442.20 R	0.00	332.48	0.00	442.20 R	0.00	332.48
1.300 0.00	3846.1	794.0	575.28 R	0.00	432.54	0.00	575.28 R	0.00	432.54
1.400 0.00	4400.1	907.4	654.07 R	0.00	491.78	0.00	654.07 R	0.00	491.78
1.500 0.00	4584.7	945.2	677.11 R	0.00	509.10	0.00	677.11 R	0.00	509.10
1.600 0.00	4400.1	907.4	654.07 R	0.00	491.78	0.00	654.07 R	0.00	491.78
1.700 0.00	3846.1	794.0	575.28 R	0.00	432.54	0.00	575.28 R	0.00	432.54
1.800 0.00	2922.9	604.9	442.20 R	0.00	332.48	0.00	442.20 R	0.00	332.48
1.900 0.00	1636.6	340.3	250.44 R	0.00	188.30	0.00	250.44 R	0.00	188.30
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 28  
SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load:Rating Type: 3  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	137.38	999.00	40.84	999.00	0.00	999.0 (2-Lane)
1.100	137.38	999.00	40.84	999.00	0.00	999.0 (1-Lane)
1.200	73.76	999.00	26.43	999.00	0.00	660.9 (2-Lane)
1.200	73.76	999.00	26.43	999.00	0.00	660.9 (1-Lane)
1.300	48.68	999.00	17.90	999.00	0.00	447.5 (2-Lane)
1.300	48.68	999.00	17.90	999.00	0.00	447.5 (1-Lane)
1.400	38.59	999.00	14.46	999.00	0.00	361.6 (2-Lane)
1.400	38.59	999.00	14.46	999.00	0.00	361.6 (1-Lane)
1.500	35.91	999.00	13.56	999.00	0.00	339.0 (2-Lane)
1.500	35.91	999.00	13.56	999.00	0.00	339.0 (1-Lane)
1.600	38.59	999.00	14.46	999.00	0.00	361.6 (2-Lane)
1.600	38.59	999.00	14.46	999.00	0.00	361.6 (1-Lane)
1.700	48.68	999.00	17.90	999.00	0.00	447.5 (2-Lane)
1.700	48.68	999.00	17.90	999.00	0.00	447.5 (1-Lane)
1.800	73.76	999.00	26.43	999.00	0.00	660.9 (2-Lane)
1.800	73.76	999.00	26.43	999.00	0.00	660.9 (1-Lane)
1.900	137.38	999.00	40.84	999.00	0.00	999.0 (2-Lane)
1.900	137.38	999.00	40.84	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: 3S2

Gamma	DC		DW		(2-Lane) LL 1.75		(1-Lane) LL 1.75	
	1.25		1.25					
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								
1.100	2045.8	425.3	494.18 R	0.00	371.56	0.00	494.18 R	0.00
0.00								
1.200	3653.6	756.1	861.96 R	0.00	648.09	0.00	861.96 R	0.00
0.00								
1.300	4807.7	992.4	1130.59 R	0.00	850.06	0.00	1130.59 R	0.00
0.00								
1.400	5500.1	1134.2	1282.29 R	0.00	964.13	0.00	1282.29 R	0.00
0.00								

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1.500	5730.9	1181.5	1317.46 R	0.00	990.57	0.00	1317.46 R	0.00	990.57
0.00									
1.600	5500.1	1134.2	1282.29 R	0.00	964.13	0.00	1282.29 R	0.00	964.13
0.00									
1.700	4807.7	992.4	1130.59 R	0.00	850.06	0.00	1130.59 R	0.00	850.06
0.00									
1.800	3653.6	756.1	861.96 R	0.00	648.09	0.00	861.96 R	0.00	648.09
0.00									
1.900	2045.8	425.3	494.18 R	0.00	371.56	0.00	494.18 R	0.00	371.56
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12560.2	-12560.2B	13420.3	13420.3	-18360.3	-18360.3
1.400	19220.4C	19220.4	-12560.2	-12560.2B	12586.1	12586.1	-19194.5	-19194.5
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12560.2	-12560.2B	12586.1	12586.1	-19194.5	-19194.5
1.700	19220.4C	19220.4	-12560.2	-12560.2B	13420.3	13420.3	-18360.3	-18360.3
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	27.22	999.00	27.22	999.00	0.00	999.0 (2-Lane)
1.100	27.22	999.00	27.22	999.00	0.00	999.0 (1-Lane)
1.200	17.18	999.00	17.18	999.00	0.00	687.3 (2-Lane)
1.200	17.18	999.00	17.18	999.00	0.00	687.3 (1-Lane)

1.300	11.87	999.00	11.87	999.00	0.00	474.8 (2-Lane)
1.300	11.87	999.00	11.87	999.00	0.00	474.8 (1-Lane)
1.400	9.81	999.00	9.81	999.00	0.00	392.6 (2-Lane)
1.400	9.81	999.00	9.81	999.00	0.00	392.6 (1-Lane)
1.500	9.34	999.00	9.34	999.00	0.00	373.7 (2-Lane)
1.500	9.34	999.00	9.34	999.00	0.00	373.7 (1-Lane)
1.600	9.81	999.00	9.81	999.00	0.00	392.6 (2-Lane)
1.600	9.81	999.00	9.81	999.00	0.00	392.6 (1-Lane)
1.700	11.87	999.00	11.87	999.00	0.00	474.8 (2-Lane)
1.700	11.87	999.00	11.87	999.00	0.00	474.8 (1-Lane)
1.800	17.18	999.00	17.18	999.00	0.00	687.3 (2-Lane)
1.800	17.18	999.00	17.18	999.00	0.00	687.3 (1-Lane)
1.900	27.22	999.00	27.22	999.00	0.00	999.0 (2-Lane)
1.900	27.22	999.00	27.22	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	141.4	29.5	37.61	28.28	37.61	28.28
0.00						
1.100	114.2	23.6	33.34	25.07	33.34	25.07
0.00						
1.200	86.5	17.7	29.08	21.86	29.08	21.86
0.00						
1.300	57.7	11.8	24.81	18.66	24.81	18.66
0.00						
1.400	28.8	5.9	20.55	15.45	20.55	15.45
0.00						
1.500	0.0	0.0	16.29	12.25	16.29	12.25
0.00						
1.600	-28.8	-5.9	-20.55	-15.45	-20.55	-15.45
0.00						
1.700	-57.7	-11.8	-24.81	-18.66	-24.81	-18.66
0.00						
1.800	-86.5	-17.7	-29.08	-21.86	-29.08	-21.86
0.00						
1.900	-114.2	-23.6	-33.34	-25.07	-33.34	-25.07
0.00						
2.000	-141.4	-29.5	-37.61	-28.28	-37.61	-28.28
0.00						

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
7777777\_20120905cy01\_01of01

Member I. D. G01  
Rating Type: I-INV  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 35  
STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01  
Rating Type: I-INV  
Rating Live Load: 3S2

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	21.61	0.00	864.4 (2-Lane)
1.000	999.00	21.61	0.00	864.4 (1-Lane)
1.100	627.69	21.59	0.00	863.6 (2-Lane)
1.100	627.69	21.59	0.00	863.6 (1-Lane)
1.200	164.10	14.58	0.00	583.0 (2-Lane)
1.200	164.10	14.58	0.00	583.0 (1-Lane)
1.300	77.02	18.48	0.00	739.2 (2-Lane)
1.300	77.02	18.48	0.00	739.2 (1-Lane)
1.400	46.81	24.01	0.00	960.2 (2-Lane)
1.400	46.81	24.01	0.00	960.2 (1-Lane)
1.500	32.42	32.42	0.00	999.0 (2-Lane)
1.500	32.42	32.42	0.00	999.0 (1-Lane)
1.600	24.01	46.81	0.00	960.2 (2-Lane)
1.600	24.01	46.81	0.00	960.2 (1-Lane)

1.700	18.48	77.02	0.00	739.2 (2-Lane)
1.700	18.48	77.02	0.00	739.2 (1-Lane)
1.800	14.58	164.10	0.00	583.0 (2-Lane)
1.800	14.58	164.10	0.00	583.0 (1-Lane)
1.900	21.59	627.69	0.00	863.6 (2-Lane)
1.900	21.59	627.69	0.00	863.6 (1-Lane)
2.000	21.61	999.00	0.00	864.4 (2-Lane)
2.000	21.61	999.00	0.00	864.4 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
0.00						
1.100	1636.6	340.3	367.11 R	0.00	367.11 R	0.00
0.00						
1.200	2922.9	604.9	640.32 R	0.00	640.32 R	0.00
0.00						
1.300	3846.1	794.0	839.86 R	0.00	839.86 R	0.00
0.00						
1.400	4400.1	907.4	952.56 R	0.00	952.56 R	0.00
0.00						
1.500	4584.7	945.2	978.68 R	0.00	978.68 R	0.00
0.00						
1.600	4400.1	907.4	952.56 R	0.00	952.56 R	0.00
0.00						
1.700	3846.1	794.0	839.86 R	0.00	839.86 R	0.00
0.00						
1.800	2922.9	604.9	640.32 R	0.00	640.32 R	0.00
0.00						
1.900	1636.6	340.3	367.10 R	0.00	367.10 R	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
0.00						

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 36

## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load:

Rating Type: 3S2  
Rating Live Load: Service Resistance

Available Resistance for LL+I

	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor	bottom +bend	fiber -bend	
1.000	999.00	999.00		999.00	999.00	0.00 999.0 (2-Lane)
1.000	999.00	999.00		999.00	999.00	0.00 999.0 (1-Lane)
1.100	93.72	999.00		27.86	999.00	0.00 999.0 (2-Lane)
1.100	93.72	999.00		27.86	999.00	0.00 999.0 (1-Lane)
1.200	50.94	999.00		18.26	999.00	0.00 730.3 (2-Lane)
1.200	50.94	999.00		18.26	999.00	0.00 730.3 (1-Lane)
1.300	33.35	999.00		12.26	999.00	0.00 490.4 (2-Lane)
1.300	33.35	999.00		12.26	999.00	0.00 490.4 (1-Lane)
1.400	26.50	999.00		9.93	999.00	0.00 397.3 (2-Lane)
1.400	26.50	999.00		9.93	999.00	0.00 397.3 (1-Lane)
1.500	24.84	999.00		9.38	999.00	0.00 375.3 (2-Lane)
1.500	24.84	999.00		9.38	999.00	0.00 375.3 (1-Lane)
1.600	26.50	999.00		9.93	999.00	0.00 397.3 (2-Lane)
1.600	26.50	999.00		9.93	999.00	0.00 397.3 (1-Lane)
1.700	33.35	999.00		12.26	999.00	0.00 490.4 (2-Lane)
1.700	33.35	999.00		12.26	999.00	0.00 490.4 (1-Lane)
1.800	50.94	999.00		18.26	999.00	0.00 730.3 (2-Lane)
1.800	50.94	999.00		18.26	999.00	0.00 730.3 (1-Lane)
1.900	93.72	999.00		27.86	999.00	0.00 999.0 (2-Lane)
1.900	93.72	999.00		27.86	999.00	0.00 999.0 (1-Lane)
2.000	999.00	999.00		999.00	999.00	0.00 999.0 (2-Lane)
2.000	999.00	999.00		999.00	999.00	0.00 999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 38

## MOMENT REPORT



Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	2045.8	425.3	474.44 R	0.00	356.72	0.00
0.00						
1.200	3653.6	756.1	826.44 R	0.00	621.38	0.00
0.00						
1.300	4807.7	992.4	1063.87 R	0.00	799.91	0.00
0.00						
1.400	5500.1	1134.2	1206.50 R	0.00	907.14	0.00
0.00						
1.500	5730.9	1181.5	1254.30 R	0.00	943.08	0.00
0.00						
1.600	5500.1	1134.2	1206.50 R	0.00	907.14	0.00
0.00						
1.700	4807.7	992.4	1063.87 R	0.00	799.91	0.00
0.00						
1.800	3653.6	756.1	826.44 R	0.00	621.38	0.00
0.00						
1.900	2045.8	425.3	474.44 R	0.00	356.72	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 39

## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12560.9	-12560.9B	13420.3	13420.3	-18361.0	-18361.0
1.400	19220.4C	19220.4	-12560.9	-12560.9B	12586.1	12586.1	-19195.2	-19195.2
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12560.9	-12560.9B	12586.1	12586.1	-19195.2	-19195.2
1.700	19220.4C	19220.4	-12560.9	-12560.9B	13420.3	13420.3	-18361.0	-18361.0
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	28.35	999.00	28.35	999.00	0.00	999.0 (2-Lane)
1.100	28.35	999.00	28.35	999.00	0.00	999.0 (1-Lane)
1.200	17.92	999.00	17.92	999.00	0.00	716.8 (2-Lane)
1.200	17.92	999.00	17.92	999.00	0.00	716.8 (1-Lane)
1.300	12.61	999.00	12.61	999.00	0.00	504.6 (2-Lane)
1.300	12.61	999.00	12.61	999.00	0.00	504.6 (1-Lane)
1.400	10.43	999.00	10.43	999.00	0.00	417.3 (2-Lane)
1.400	10.43	999.00	10.43	999.00	0.00	417.3 (1-Lane)
1.500	9.81	999.00	9.81	999.00	0.00	392.5 (2-Lane)
1.500	9.81	999.00	9.81	999.00	0.00	392.5 (1-Lane)
1.600	10.43	999.00	10.43	999.00	0.00	417.3 (2-Lane)
1.600	10.43	999.00	10.43	999.00	0.00	417.3 (1-Lane)
1.700	12.61	999.00	12.61	999.00	0.00	504.6 (2-Lane)
1.700	12.61	999.00	12.61	999.00	0.00	504.6 (1-Lane)
1.800	17.92	999.00	17.92	999.00	0.00	716.8 (2-Lane)
1.800	17.92	999.00	17.92	999.00	0.00	716.8 (1-Lane)
1.900	28.35	999.00	28.35	999.00	0.00	999.0 (2-Lane)
1.900	28.35	999.00	28.35	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 41

SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: 3-3

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	1.75	LL	1.75
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.000	141.4	29.5	36.27	0.00	27.27	0.00	36.27	0.00	27.27
0.00									
1.100	114.2	23.6	32.01	0.00	24.07	0.00	32.01	0.00	24.07
0.00									
1.200	86.5	17.7	27.75	0.00	20.86	0.00	27.75	0.00	20.86
0.00									
1.300	57.7	11.8	23.48	0.00	17.66	0.00	23.48	0.00	17.66
0.00									
1.400	28.8	5.9	19.22	0.00	14.45	0.00	19.22	0.00	14.45
0.00									
1.500	0.0	0.0	14.95	0.00	11.24	0.00	14.95	0.00	11.24
0.00									
1.600	-28.8	-5.9	-19.22	0.00	-14.45	0.00	-19.22	0.00	-14.45
0.00									
1.700	-57.7	-11.8	-23.48	0.00	-17.66	0.00	-23.48	0.00	-17.66
0.00									
1.800	-86.5	-17.7	-27.75	0.00	-20.86	0.00	-27.75	0.00	-20.86
0.00									
1.900	-114.2	-23.6	-32.01	0.00	-24.07	0.00	-32.01	0.00	-24.07
0.00									
2.000	-141.4	-29.5	-36.27	0.00	-27.27	0.00	-36.27	0.00	-27.27
0.00									

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#### STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV

Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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#### STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV

Rating Live Load: 3-3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	22.40	0.00	896.1 (2-Lane)
1.000	999.00	22.40	0.00	896.1 (1-Lane)
1.100	762.20	22.49	0.00	899.5 (2-Lane)
1.100	762.20	22.49	0.00	899.5 (1-Lane)
1.200	183.87	15.28	0.00	611.0 (2-Lane)
1.200	183.87	15.28	0.00	611.0 (1-Lane)
1.300	89.65	19.53	0.00	781.2 (2-Lane)
1.300	89.65	19.53	0.00	781.2 (1-Lane)
1.400	52.64	25.67	0.00	999.0 (2-Lane)
1.400	52.64	25.67	0.00	999.0 (1-Lane)
1.500	35.31	35.31	0.00	999.0 (2-Lane)
1.500	35.31	35.31	0.00	999.0 (1-Lane)
1.600	25.67	52.64	0.00	999.0 (2-Lane)
1.600	25.67	52.64	0.00	999.0 (1-Lane)
1.700	19.53	89.65	0.00	781.2 (2-Lane)
1.700	19.53	89.65	0.00	781.2 (1-Lane)
1.800	15.28	183.87	0.00	611.0 (2-Lane)
1.800	15.28	183.87	0.00	611.0 (1-Lane)
1.900	22.49	762.20	0.00	899.5 (2-Lane)
1.900	22.49	762.20	0.00	899.5 (1-Lane)
2.000	22.40	999.00	0.00	896.1 (2-Lane)
2.000	22.40	999.00	0.00	896.1 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV

Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.100 0.00	1636.6	340.3	352.44 R	0.00	264.99	0.00	352.44 R	0.00	264.99
1.200 0.00	2922.9	604.9	613.92 R	0.00	461.60	0.00	613.92 R	0.00	461.60
1.300 0.00	3846.1	794.0	790.31 R	0.00	594.22	0.00	790.31 R	0.00	594.22
1.400 0.00	4400.1	907.4	896.25 R	0.00	673.88	0.00	896.25 R	0.00	673.88
1.500	4584.7	945.2	931.76 R	0.00	700.58	0.00	931.76 R	0.00	700.58

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0.00									
1.600	4400.1	907.4	896.25 R	0.00	673.88	0.00	896.25 R	0.00	673.88
0.00									
1.700	3846.1	794.0	790.31 R	0.00	594.22	0.00	790.31 R	0.00	594.22
0.00									
1.800	2922.9	604.9	613.92 R	0.00	461.60	0.00	613.92 R	0.00	461.60
0.00									
1.900	1636.6	340.3	352.44 R	0.00	264.99	0.00	352.44 R	0.00	264.99
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV

Rating Live Load:

Rating Type: 3-3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV

Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	97.62	999.00	29.02	999.00	0.00	999.0 (2-Lane)
1.100	97.62	999.00	29.02	999.00	0.00	999.0 (1-Lane)
1.200	53.13	999.00	19.04	999.00	0.00	761.6 (2-Lane)
1.200	53.13	999.00	19.04	999.00	0.00	761.6 (1-Lane)

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1.300	35.44	999.00	13.03	999.00	0.00	521.1 (2-Lane)
1.300	35.44	999.00	13.03	999.00	0.00	521.1 (1-Lane)
1.400	28.16	999.00	10.56	999.00	0.00	422.2 (2-Lane)
1.400	28.16	999.00	10.56	999.00	0.00	422.2 (1-Lane)
1.500	26.10	999.00	9.85	999.00	0.00	394.2 (2-Lane)
1.500	26.10	999.00	9.85	999.00	0.00	394.2 (1-Lane)
1.600	28.16	999.00	10.56	999.00	0.00	422.2 (2-Lane)
1.600	28.16	999.00	10.56	999.00	0.00	422.2 (1-Lane)
1.700	35.44	999.00	13.03	999.00	0.00	521.1 (2-Lane)
1.700	35.44	999.00	13.03	999.00	0.00	521.1 (1-Lane)
1.800	53.13	999.00	19.04	999.00	0.00	761.6 (2-Lane)
1.800	53.13	999.00	19.04	999.00	0.00	761.6 (1-Lane)
1.900	97.62	999.00	29.02	999.00	0.00	999.0 (2-Lane)
1.900	97.62	999.00	29.02	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU4

Gamma	DC		(2-Lane)				(1-Lane)		
	1.25	DW 1.25	LL 1.75		LL 1.75		LL 1.75		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.100	2045.8	425.3	366.76 R	0.00	275.76	0.00	366.76 R	0.00	275.76
0.00									
1.200	3653.6	756.1	648.20 R	0.00	487.37	0.00	648.20 R	0.00	487.37
0.00									
1.300	4807.7	992.4	844.32 R	0.00	634.83	0.00	844.32 R	0.00	634.83
0.00									
1.400	5500.1	1134.2	964.21 R	0.00	724.97	0.00	964.21 R	0.00	724.97
0.00									
1.500	5730.9	1181.5	1000.36 R	0.00	752.15	0.00	1000.36 R	0.00	752.15
0.00									
1.600	5500.1	1134.2	964.21 R	0.00	724.97	0.00	964.21 R	0.00	724.97
0.00									
1.700	4807.7	992.4	844.32 R	0.00	634.83	0.00	844.32 R	0.00	634.83
0.00									
1.800	3653.6	756.1	648.20 R	0.00	487.37	0.00	648.20 R	0.00	487.37
0.00									
1.900	2045.8	425.3	366.76 R	0.00	275.76	0.00	366.76 R	0.00	275.76
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU4

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12566.5	-12566.5B	13420.3	13420.3	-18366.6	-18366.6
1.400	19220.4C	19220.4	-12566.5	-12566.5B	12586.1	12586.1	-19200.8	-19200.8
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12566.5	-12566.5B	12586.1	12586.1	-19200.8	-19200.8
1.700	19220.4C	19220.4	-12566.5	-12566.5B	13420.3	13420.3	-18366.6	-18366.6
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU4

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating Factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	36.67	999.00	36.67	999.00	0.00	999.0 (2-Lane)
1.100	36.67	999.00	36.67	999.00	0.00	999.0 (1-Lane)
1.200	22.85	999.00	22.85	999.00	0.00	616.9 (2-Lane)
1.200	22.85	999.00	22.85	999.00	0.00	616.9 (1-Lane)
1.300	15.90	999.00	15.90	999.00	0.00	429.2 (2-Lane)
1.300	15.90	999.00	15.90	999.00	0.00	429.2 (1-Lane)
1.400	13.05	999.00	13.05	999.00	0.00	352.4 (2-Lane)
1.400	13.05	999.00	13.05	999.00	0.00	352.4 (1-Lane)
1.500	12.30	999.00	12.30	999.00	0.00	332.2 (2-Lane)
1.500	12.30	999.00	12.30	999.00	0.00	332.2 (1-Lane)
1.600	13.05	999.00	13.05	999.00	0.00	352.4 (2-Lane)
1.600	13.05	999.00	13.05	999.00	0.00	352.4 (1-Lane)
1.700	15.90	999.00	15.90	999.00	0.00	429.2 (2-Lane)
1.700	15.90	999.00	15.90	999.00	0.00	429.2 (1-Lane)
1.800	22.85	999.00	22.85	999.00	0.00	616.9 (2-Lane)
1.800	22.85	999.00	22.85	999.00	0.00	616.9 (1-Lane)
1.900	36.67	999.00	36.67	999.00	0.00	999.0 (2-Lane)

1.900	36.67	999.00	36.67	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU4

Span w/o impact	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
			Truck	Lane	Truck	Lane
1.000	141.4	29.5	27.62	0.00	20.77	0.00
1.100	114.2	23.6	24.75	0.00	18.61	0.00
1.200	86.5	17.7	21.87	0.00	16.44	0.00
1.300	57.7	11.8	18.99	0.00	14.28	0.00
1.400	28.8	5.9	16.11	0.00	12.11	0.00
1.500	0.0	0.0	13.23	0.00	9.95	0.00
1.600	-28.8	-5.9	-16.11	0.00	-12.11	0.00
1.700	-57.7	-11.8	-18.99	0.00	-14.28	0.00
1.800	-86.5	-17.7	-21.87	0.00	-16.44	0.00
1.900	-114.2	-23.6	-24.75	0.00	-18.61	0.00
2.000	-141.4	-29.5	-27.62	0.00	-20.77	0.00

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)



1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU4

#### Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	29.42	0.00	794.3 (2-Lane)
1.000	999.00	29.42	0.00	794.3 (1-Lane)
1.100	553.26	29.09	0.00	785.5 (2-Lane)
1.100	553.26	29.09	0.00	785.5 (1-Lane)
1.200	137.52	19.38	0.00	523.3 (2-Lane)
1.200	137.52	19.38	0.00	523.3 (1-Lane)
1.300	79.93	24.15	0.00	652.1 (2-Lane)
1.300	79.93	24.15	0.00	652.1 (1-Lane)
1.400	54.35	30.62	0.00	826.8 (2-Lane)
1.400	54.35	30.62	0.00	826.8 (1-Lane)
1.500	39.91	39.91	0.00	999.0 (2-Lane)
1.500	39.91	39.91	0.00	999.0 (1-Lane)
1.600	30.62	54.35	0.00	826.8 (2-Lane)
1.600	30.62	54.35	0.00	826.8 (1-Lane)
1.700	24.15	79.93	0.00	652.1 (2-Lane)
1.700	24.15	79.93	0.00	652.1 (1-Lane)
1.800	19.38	137.52	0.00	523.3 (2-Lane)
1.800	19.38	137.52	0.00	523.3 (1-Lane)
1.900	29.09	553.26	0.00	785.5 (2-Lane)
1.900	29.09	553.26	0.00	785.5 (1-Lane)
2.000	29.42	999.00	0.00	794.3 (2-Lane)
2.000	29.42	999.00	0.00	794.3 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30			
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
1.100 0.00	1636.6	340.3	272.45 R	0.00	204.85	0.00	272.45 R	0.00	204.85	
1.200 0.00	2922.9	604.9	481.52 R	0.00	362.05	0.00	481.52 R	0.00	362.05	
1.300 0.00	3846.1	794.0	627.21 R	0.00	471.59	0.00	627.21 R	0.00	471.59	
1.400 0.00	4400.1	907.4	716.27 R	0.00	538.55	0.00	716.27 R	0.00	538.55	
1.500 0.00	4584.7	945.2	743.12 R	0.00	558.74	0.00	743.12 R	0.00	558.74	
1.600 0.00	4400.1	907.4	716.27 R	0.00	538.55	0.00	716.27 R	0.00	538.55	
1.700 0.00	3846.1	794.0	627.21 R	0.00	471.59	0.00	627.21 R	0.00	471.59	
1.800 0.00	2922.9	604.9	481.52 R	0.00	362.05	0.00	481.52 R	0.00	362.05	
1.900 0.00	1636.6	340.3	272.45 R	0.00	204.85	0.00	272.45 R	0.00	204.85	
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load: SU4

Rating Type: SU4

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 53

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
Member I. D. G01  
Rating Type: II-INV  
Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	126.28	999.00	37.54	999.00	0.00	999.0 (2-Lane)
1.100	126.28	999.00	37.54	999.00	0.00	999.0 (1-Lane)
1.200	67.74	999.00	24.28	999.00	0.00	655.5 (2-Lane)
1.200	67.74	999.00	24.28	999.00	0.00	655.5 (1-Lane)
1.300	44.65	999.00	16.42	999.00	0.00	443.2 (2-Lane)
1.300	44.65	999.00	16.42	999.00	0.00	443.2 (1-Lane)
1.400	35.24	999.00	13.21	999.00	0.00	356.6 (2-Lane)
1.400	35.24	999.00	13.21	999.00	0.00	356.6 (1-Lane)
1.500	32.72	999.00	12.35	999.00	0.00	333.6 (2-Lane)
1.500	32.72	999.00	12.35	999.00	0.00	333.6 (1-Lane)
1.600	35.24	999.00	13.21	999.00	0.00	356.6 (2-Lane)
1.600	35.24	999.00	13.21	999.00	0.00	356.6 (1-Lane)
1.700	44.65	999.00	16.42	999.00	0.00	443.2 (2-Lane)
1.700	44.65	999.00	16.42	999.00	0.00	443.2 (1-Lane)
1.800	67.74	999.00	24.28	999.00	0.00	655.5 (2-Lane)
1.800	67.74	999.00	24.28	999.00	0.00	655.5 (1-Lane)
1.900	126.28	999.00	37.54	999.00	0.00	999.0 (2-Lane)
1.900	126.28	999.00	37.54	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
Member I. D. G01  
Rating Type: I-INV  
Rating Live Load: SU5

Gamma	DC		DW		(2-Lane) LL 1.75		(1-Lane) LL 1.75	
	1.25		1.25					
Span impact Lane	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane

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1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.100	2045.8	425.3	416.53 R	0.00	313.18	0.00	416.53 R	0.00	313.18
0.00									
1.200	3653.6	756.1	735.11 R	0.00	552.71	0.00	735.11 R	0.00	552.71
0.00									
1.300	4807.7	992.4	958.88 R	0.00	720.97	0.00	958.88 R	0.00	720.97
0.00									
1.400	5500.1	1134.2	1093.78 R	0.00	822.39	0.00	1093.78 R	0.00	822.39
0.00									
1.500	5730.9	1181.5	1130.72 R	0.00	850.17	0.00	1130.72 R	0.00	850.17
0.00									
1.600	5500.1	1134.2	1093.78 R	0.00	822.39	0.00	1093.78 R	0.00	822.39
0.00									
1.700	4807.7	992.4	958.88 R	0.00	720.97	0.00	958.88 R	0.00	720.97
0.00									
1.800	3653.6	756.1	735.11 R	0.00	552.71	0.00	735.11 R	0.00	552.71
0.00									
1.900	2045.8	425.3	416.53 R	0.00	313.18	0.00	416.53 R	0.00	313.18
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 55  
STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU5

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12565.1	-12565.1B	13420.3	13420.3	-18365.2	-18365.2
1.400	19220.4C	19220.4	-12565.1	-12565.1B	12586.1	12586.1	-19199.4	-19199.4
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12565.1	-12565.1B	12586.1	12586.1	-19199.4	-19199.4
1.700	19220.4C	19220.4	-12565.1	-12565.1B	13420.3	13420.3	-18365.2	-18365.2
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	-bend		

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1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	32.29	999.00	32.29	999.00	0.00	999.0 (2-Lane)
1.100	32.29	999.00	32.29	999.00	0.00	999.0 (1-Lane)
1.200	20.15	999.00	20.15	999.00	0.00	624.6 (2-Lane)
1.200	20.15	999.00	20.15	999.00	0.00	624.6 (1-Lane)
1.300	14.00	999.00	14.00	999.00	0.00	433.9 (2-Lane)
1.300	14.00	999.00	14.00	999.00	0.00	433.9 (1-Lane)
1.400	11.51	999.00	11.51	999.00	0.00	356.7 (2-Lane)
1.400	11.51	999.00	11.51	999.00	0.00	356.7 (1-Lane)
1.500	10.89	999.00	10.89	999.00	0.00	337.4 (2-Lane)
1.500	10.89	999.00	10.89	999.00	0.00	337.4 (1-Lane)
1.600	11.51	999.00	11.51	999.00	0.00	356.7 (2-Lane)
1.600	11.51	999.00	11.51	999.00	0.00	356.7 (1-Lane)
1.700	14.00	999.00	14.00	999.00	0.00	433.9 (2-Lane)
1.700	14.00	999.00	14.00	999.00	0.00	433.9 (1-Lane)
1.800	20.15	999.00	20.15	999.00	0.00	624.6 (2-Lane)
1.800	20.15	999.00	20.15	999.00	0.00	624.6 (1-Lane)
1.900	32.29	999.00	32.29	999.00	0.00	999.0 (2-Lane)
1.900	32.29	999.00	32.29	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	141.4	29.5	31.41	0.00	23.61	0.00
0.00						
1.100	114.2	23.6	28.10	0.00	21.13	0.00
0.00						
1.200	86.5	17.7	24.80	0.00	18.65	0.00
0.00						
1.300	57.7	11.8	21.49	0.00	16.16	0.00
0.00						
1.400	28.8	5.9	18.19	0.00	13.68	0.00
0.00						
1.500	0.0	0.0	14.88	0.00	11.19	0.00
0.00						
1.600	-28.8	-5.9	-18.19	0.00	-13.68	0.00
0.00						
1.700	-57.7	-11.8	-21.49	0.00	-16.16	0.00
0.00						
1.800	-86.5	-17.7	-24.80	0.00	-18.65	0.00
0.00						
1.900	-114.2	-23.6	-28.10	0.00	-21.13	0.00

0.00									
2.000	-141.4	-29.5	-31.41	0.00	-23.61	0.00	-31.41	0.00	-23.61
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU5

#### Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	25.87	0.00	802.1 (2-Lane)
1.000	999.00	25.87	0.00	802.1 (1-Lane)
1.100	522.26	25.61	0.00	794.1 (2-Lane)
1.100	522.26	25.61	0.00	794.1 (1-Lane)
1.200	127.19	17.09	0.00	529.8 (2-Lane)
1.200	127.19	17.09	0.00	529.8 (1-Lane)

1.300	72.20	21.33	0.00	661.4 (2-Lane)
1.300	72.20	21.33	0.00	661.4 (1-Lane)
1.400	48.60	27.12	0.00	840.8 (2-Lane)
1.400	48.60	27.12	0.00	840.8 (1-Lane)
1.500	35.48	35.48	0.00	999.0 (2-Lane)
1.500	35.48	35.48	0.00	999.0 (1-Lane)
1.600	27.12	48.60	0.00	840.8 (2-Lane)
1.600	27.12	48.60	0.00	840.8 (1-Lane)
1.700	21.33	72.20	0.00	661.4 (2-Lane)
1.700	21.33	72.20	0.00	661.4 (1-Lane)
1.800	17.09	127.19	0.00	529.8 (2-Lane)
1.800	17.09	127.19	0.00	529.8 (1-Lane)
1.900	25.61	522.26	0.00	794.1 (2-Lane)
1.900	25.61	522.26	0.00	794.1 (1-Lane)
2.000	25.87	999.00	0.00	802.1 (2-Lane)
2.000	25.87	999.00	0.00	802.1 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 60  
SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load: SU5

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30					
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load w/o impact Truck
Lane			Lane	Lane	Lane	Lane	Lane	Lane	Lane	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.100	1636.6	340.3	309.42 R	0.00	232.65	0.00	309.42 R	0.00	232.65	0.00
0.00										
1.200	2922.9	604.9	546.08 R	0.00	410.59	0.00	546.08 R	0.00	410.59	0.00
0.00										
1.300	3846.1	794.0	712.31 R	0.00	535.57	0.00	712.31 R	0.00	535.57	0.00
0.00										
1.400	4400.1	907.4	812.52 R	0.00	610.92	0.00	812.52 R	0.00	610.92	0.00
0.00										
1.500	4584.7	945.2	839.96 R	0.00	631.55	0.00	839.96 R	0.00	631.55	0.00
0.00										
1.600	4400.1	907.4	812.52 R	0.00	610.92	0.00	812.52 R	0.00	610.92	0.00
0.00										
1.700	3846.1	794.0	712.31 R	0.00	535.57	0.00	712.31 R	0.00	535.57	0.00
0.00										
1.800	2922.9	604.9	546.08 R	0.00	410.59	0.00	546.08 R	0.00	410.59	0.00
0.00										
1.900	1636.6	340.3	309.42 R	0.00	232.65	0.00	309.42 R	0.00	232.65	0.00
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 60  
SERVICE RESISTANCE REPORT

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 Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01  
 Rating Type: II-INV  
 Rating Live Load:

Rating Type: SU5  
 Rating Live Load:  
 Span

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 61

# SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01  
 Rating Type: II-INV  
 Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	111.19	999.00	33.06	999.00	0.00	999.0 (2-Lane)
1.100	111.19	999.00	33.06	999.00	0.00	999.0 (1-Lane)
1.200	59.73	999.00	21.41	999.00	0.00	663.6 (2-Lane)
1.200	59.73	999.00	21.41	999.00	0.00	663.6 (1-Lane)
1.300	39.31	999.00	14.45	999.00	0.00	448.1 (2-Lane)
1.300	39.31	999.00	14.45	999.00	0.00	448.1 (1-Lane)
1.400	31.06	999.00	11.64	999.00	0.00	360.9 (2-Lane)
1.400	31.06	999.00	11.64	999.00	0.00	360.9 (1-Lane)
1.500	28.95	999.00	10.93	999.00	0.00	338.9 (2-Lane)
1.500	28.95	999.00	10.93	999.00	0.00	338.9 (1-Lane)
1.600	31.06	999.00	11.64	999.00	0.00	360.9 (2-Lane)
1.600	31.06	999.00	11.64	999.00	0.00	360.9 (1-Lane)
1.700	39.31	999.00	14.45	999.00	0.00	448.1 (2-Lane)
1.700	39.31	999.00	14.45	999.00	0.00	448.1 (1-Lane)
1.800	59.73	999.00	21.41	999.00	0.00	663.6 (2-Lane)
1.800	59.73	999.00	21.41	999.00	0.00	663.6 (1-Lane)



1.900	111.19	999.00	33.06	999.00	0.00	999.0 (2-Lane)
1.900	111.19	999.00	33.06	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00 0.00
0.00						
1.100	2045.8	425.3	458.26 R 0.00	344.56 0.00	458.26 R 0.00	344.56 0.00
0.00						
1.200	3653.6	756.1	818.36 R 0.00	615.31 0.00	818.36 R 0.00	615.31 0.00
0.00						
1.300	4807.7	992.4	1070.72 R 0.00	805.06 0.00	1070.72 R 0.00	805.06 0.00
0.00						
1.400	5500.1	1134.2	1218.81 R 0.00	916.40 0.00	1218.81 R 0.00	916.40 0.00
0.00						
1.500	5730.9	1181.5	1265.27 R 0.00	951.33 0.00	1265.27 R 0.00	951.33 0.00
0.00						
1.600	5500.1	1134.2	1218.81 R 0.00	916.40 0.00	1218.81 R 0.00	916.40 0.00
0.00						
1.700	4807.7	992.4	1070.72 R 0.00	805.05 0.00	1070.72 R 0.00	805.05 0.00
0.00						
1.800	3653.6	756.1	818.36 R 0.00	615.31 0.00	818.36 R 0.00	615.31 0.00
0.00						
1.900	2045.8	425.3	458.26 R 0.00	344.56 0.00	458.26 R 0.00	344.56 0.00
0.00						
2.000	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00 0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU6

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12564.5	-12564.5B	13420.3	13420.3	-18364.6	-18364.6

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1.400	19220.4C	19220.4	-12564.5	-12564.5B	12586.1	12586.1	-19198.8	-19198.8
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12564.5	-12564.5B	12586.1	12586.1	-19198.8	-19198.8
1.700	19220.4C	19220.4	-12564.5	-12564.5B	13420.3	13420.3	-18364.6	-18364.6
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor fiber -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	29.35	999.00	29.35	999.00	0.00	999.0 (2-Lane)
1.100	29.35	999.00	29.35	999.00	0.00	999.0 (1-Lane)
1.200	18.10	999.00	18.10	999.00	0.00	628.9 (2-Lane)
1.200	18.10	999.00	18.10	999.00	0.00	628.9 (1-Lane)
1.300	12.53	999.00	12.53	999.00	0.00	435.6 (2-Lane)
1.300	12.53	999.00	12.53	999.00	0.00	435.6 (1-Lane)
1.400	10.33	999.00	10.33	999.00	0.00	358.8 (2-Lane)
1.400	10.33	999.00	10.33	999.00	0.00	358.8 (1-Lane)
1.500	9.73	999.00	9.73	999.00	0.00	338.0 (2-Lane)
1.500	9.73	999.00	9.73	999.00	0.00	338.0 (1-Lane)
1.600	10.33	999.00	10.33	999.00	0.00	358.8 (2-Lane)
1.600	10.33	999.00	10.33	999.00	0.00	358.8 (1-Lane)
1.700	12.53	999.00	12.53	999.00	0.00	435.6 (2-Lane)
1.700	12.53	999.00	12.53	999.00	0.00	435.6 (1-Lane)
1.800	18.10	999.00	18.10	999.00	0.00	628.9 (2-Lane)
1.800	18.10	999.00	18.10	999.00	0.00	628.9 (1-Lane)
1.900	29.35	999.00	29.35	999.00	0.00	999.0 (2-Lane)
1.900	29.35	999.00	29.35	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000 0.00	141.4	29.5	34.62	0.00	26.03	0.00
1.100 0.00	114.2	23.6	30.92	0.00	23.25	0.00
1.200 0.00	86.5	17.7	27.21	0.00	20.46	0.00
1.300 0.00	57.7	11.8	23.51	0.00	17.68	0.00
1.400 0.00	28.8	5.9	19.81	0.00	14.89	0.00
1.500 0.00	0.0	0.0	16.10	0.00	12.11	0.00
1.600 0.00	-28.8	-5.9	-19.81	0.00	-14.89	0.00
1.700 0.00	-57.7	-11.8	-23.51	0.00	-17.68	0.00
1.800 0.00	-86.5	-17.7	-27.21	0.00	-20.46	0.00
1.900 0.00	-114.2	-23.6	-30.92	0.00	-23.25	0.00
2.000 0.00	-141.4	-29.5	-34.62	0.00	-26.03	0.00

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance (-)	Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU6

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	23.47	0.00	815.6 (2-Lane)
1.000	999.00	23.47	0.00	815.6 (1-Lane)
1.100	597.30	23.28	0.00	809.1 (2-Lane)
1.100	597.30	23.28	0.00	809.1 (1-Lane)
1.200	126.75	15.57	0.00	541.2 (2-Lane)
1.200	126.75	15.57	0.00	541.2 (1-Lane)
1.300	68.74	19.51	0.00	677.8 (2-Lane)
1.300	68.74	19.51	0.00	677.8 (1-Lane)
1.400	45.40	24.91	0.00	865.6 (2-Lane)
1.400	45.40	24.91	0.00	865.6 (1-Lane)
1.500	32.80	32.80	0.00	999.0 (2-Lane)
1.500	32.80	32.80	0.00	999.0 (1-Lane)
1.600	24.91	45.40	0.00	865.6 (2-Lane)
1.600	24.91	45.40	0.00	865.6 (1-Lane)
1.700	19.51	68.74	0.00	677.8 (2-Lane)
1.700	19.51	68.74	0.00	677.8 (1-Lane)
1.800	15.57	126.75	0.00	541.2 (2-Lane)
1.800	15.57	126.75	0.00	541.2 (1-Lane)
1.900	23.28	597.30	0.00	809.1 (2-Lane)
1.900	23.28	597.30	0.00	809.1 (1-Lane)
2.000	23.47	999.00	0.00	815.6 (2-Lane)
2.000	23.47	999.00	0.00	815.6 (1-Lane)

## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane

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1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.100	1636.6	340.3	340.42 R	0.00	255.96	0.00	340.42 R	0.00	255.96
0.00									
1.200	2922.9	604.9	607.92 R	0.00	457.09	0.00	607.92 R	0.00	457.09
0.00									
1.300	3846.1	794.0	795.39 R	0.00	598.04	0.00	795.39 R	0.00	598.04
0.00									
1.400	4400.1	907.4	905.40 R	0.00	680.75	0.00	905.40 R	0.00	680.75
0.00									
1.500	4584.7	945.2	939.92 R	0.00	706.70	0.00	939.92 R	0.00	706.70
0.00									
1.600	4400.1	907.4	905.40 R	0.00	680.75	0.00	905.40 R	0.00	680.75
0.00									
1.700	3846.1	794.0	795.39 R	0.00	598.04	0.00	795.39 R	0.00	598.04
0.00									
1.800	2922.9	604.9	607.92 R	0.00	457.09	0.00	607.92 R	0.00	457.09
0.00									
1.900	1636.6	340.3	340.42 R	0.00	255.96	0.00	340.42 R	0.00	255.96
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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#### SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV

Rating Live Load:

Rating Type: SU6

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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#### SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV

Rating Live Load: SU6

Span	Service		Rating Value	Load Resistance
	Rating top fiber	Factor bottom fiber		

	+bend	-bend	+bend	-bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	101.07	999.00	30.05	999.00	0.00	999.0 (2-Lane)
1.100	101.07	999.00	30.05	999.00	0.00	999.0 (1-Lane)
1.200	53.65	999.00	19.23	999.00	0.00	668.2 (2-Lane)
1.200	53.65	999.00	19.23	999.00	0.00	668.2 (1-Lane)
1.300	35.21	999.00	12.94	999.00	0.00	449.8 (2-Lane)
1.300	35.21	999.00	12.94	999.00	0.00	449.8 (1-Lane)
1.400	27.88	999.00	10.45	999.00	0.00	363.1 (2-Lane)
1.400	27.88	999.00	10.45	999.00	0.00	363.1 (1-Lane)
1.500	25.87	999.00	9.77	999.00	0.00	339.5 (2-Lane)
1.500	25.87	999.00	9.77	999.00	0.00	339.5 (1-Lane)
1.600	27.88	999.00	10.45	999.00	0.00	363.1 (2-Lane)
1.600	27.88	999.00	10.45	999.00	0.00	363.1 (1-Lane)
1.700	35.21	999.00	12.94	999.00	0.00	449.8 (2-Lane)
1.700	35.21	999.00	12.94	999.00	0.00	449.8 (1-Lane)
1.800	53.65	999.00	19.23	999.00	0.00	668.2 (2-Lane)
1.800	53.65	999.00	19.23	999.00	0.00	668.2 (1-Lane)
1.900	101.07	999.00	30.05	999.00	0.00	999.0 (2-Lane)
1.900	101.07	999.00	30.05	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU7

	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.100	2045.8	425.3	501.42 R	0.00	377.01	0.00 R
0.00						
1.200	3653.6	756.1	895.20 R	0.00	673.08	0.00 R
0.00						
1.300	4807.7	992.4	1181.33 R	0.00	888.22	0.00 R
0.00						
1.400	5500.1	1134.2	1346.01 R	0.00	1012.04	0.00 R
0.00						
1.500	5730.9	1181.5	1399.58 R	0.00	1052.32	0.00 R
0.00						
1.600	5500.1	1134.2	1346.01 R	0.00	1012.04	0.00 R
0.00						
1.700	4807.7	992.4	1181.33 R	0.00	888.22	0.00 R
0.00						
1.800	3653.6	756.1	895.20 R	0.00	673.08	0.00 R
0.00						

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1.900	2045.8	425.3	501.42 R	0.00	377.01	0.00	501.42 R	0.00	377.01
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV

Rating Live Load: SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12565.9	-12565.9B	13420.3	13420.3	-18366.0	-18366.0
1.400	19220.4C	19220.4	-12565.9	-12565.9B	12586.1	12586.1	-19200.2	-19200.2
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12565.9	-12565.9B	12586.1	12586.1	-19200.2	-19200.2
1.700	19220.4C	19220.4	-12565.9	-12565.9B	13420.3	13420.3	-18366.0	-18366.0
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV

Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	26.82	999.00	26.82	999.00	0.00	999.0 (2-Lane)
1.100	26.82	999.00	26.82	999.00	0.00	999.0 (1-Lane)
1.200	16.55	999.00	16.55	999.00	0.00	641.1 (2-Lane)
1.200	16.55	999.00	16.55	999.00	0.00	641.1 (1-Lane)
1.300	11.36	999.00	11.36	999.00	0.00	440.2 (2-Lane)
1.300	11.36	999.00	11.36	999.00	0.00	440.2 (1-Lane)
1.400	9.35	999.00	9.35	999.00	0.00	362.3 (2-Lane)
1.400	9.35	999.00	9.35	999.00	0.00	362.3 (1-Lane)
1.500	8.79	999.00	8.79	999.00	0.00	340.8 (2-Lane)
1.500	8.79	999.00	8.79	999.00	0.00	340.8 (1-Lane)

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1.600	9.35	999.00	9.35	999.00	0.00	362.3 (2-Lane)
1.600	9.35	999.00	9.35	999.00	0.00	362.3 (1-Lane)
1.700	11.36	999.00	11.36	999.00	0.00	440.2 (2-Lane)
1.700	11.36	999.00	11.36	999.00	0.00	440.2 (1-Lane)
1.800	16.55	999.00	16.55	999.00	0.00	641.1 (2-Lane)
1.800	16.55	999.00	16.55	999.00	0.00	641.1 (1-Lane)
1.900	26.82	999.00	26.82	999.00	0.00	999.0 (2-Lane)
1.900	26.82	999.00	26.82	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000 0.00	141.4	29.5	37.96	0.00	28.54	0.00
1.100 0.00	114.2	23.6	33.83	0.00	25.44	0.00
1.200 0.00	86.5	17.7	29.70	0.00	22.33	0.00
1.300 0.00	57.7	11.8	25.57	0.00	19.23	0.00
1.400 0.00	28.8	5.9	21.44	0.00	16.12	0.00
1.500 0.00	0.0	0.0	17.31	0.00	13.01	0.00
1.600 0.00	-28.8	-5.9	-21.44	0.00	-16.12	0.00
1.700 0.00	-57.7	-11.8	-25.57	0.00	-19.23	0.00
1.800 0.00	-86.5	-17.7	-29.70	0.00	-22.33	0.00
1.900 0.00	-114.2	-23.6	-33.83	0.00	-25.44	0.00
2.000 0.00	-141.4	-29.5	-37.96	0.00	-28.54	0.00

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU7



Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-INV  
Rating Live Load: SU7

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	21.41	0.00	829.5 (2-Lane)
1.000	999.00	21.41	0.00	829.5 (1-Lane)
1.100	697.64	21.28	0.00	824.5 (2-Lane)
1.100	697.64	21.28	0.00	824.5 (1-Lane)
1.200	128.62	14.27	0.00	553.0 (2-Lane)
1.200	128.62	14.27	0.00	553.0 (1-Lane)
1.300	66.05	17.93	0.00	695.0 (2-Lane)
1.300	66.05	17.93	0.00	695.0 (1-Lane)
1.400	42.71	23.01	0.00	891.7 (2-Lane)
1.400	42.71	23.01	0.00	891.7 (1-Lane)
1.500	30.51	30.51	0.00	999.0 (2-Lane)
1.500	30.51	30.51	0.00	999.0 (1-Lane)
1.600	23.01	42.71	0.00	891.7 (2-Lane)
1.600	23.01	42.71	0.00	891.7 (1-Lane)
1.700	17.93	66.05	0.00	695.0 (2-Lane)
1.700	17.93	66.05	0.00	695.0 (1-Lane)
1.800	14.27	128.62	0.00	553.0 (2-Lane)
1.800	14.27	128.62	0.00	553.0 (1-Lane)
1.900	21.28	697.64	0.00	824.5 (2-Lane)

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1.900	21.28	697.64	0.00	824.5 (1-Lane)
2.000	21.41	999.00	0.00	829.5 (2-Lane)
2.000	21.41	999.00	0.00	829.5 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30					
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.100	1636.6	340.3	372.49 R	0.00	280.06	0.00	372.49 R	0.00	280.06	
0.00										
1.200	2922.9	604.9	665.01 R	0.00	500.00	0.00	665.01 R	0.00	500.00	
0.00										
1.300	3846.1	794.0	877.56 R	0.00	659.82	0.00	877.56 R	0.00	659.82	
0.00										
1.400	4400.1	907.4	999.89 R	0.00	751.80	0.00	999.89 R	0.00	751.80	
0.00										
1.500	4584.7	945.2	1039.69 R	0.00	781.72	0.00	1039.69 R	0.00	781.72	
0.00										
1.600	4400.1	907.4	999.89 R	0.00	751.80	0.00	999.89 R	0.00	751.80	
0.00										
1.700	3846.1	794.0	877.56 R	0.00	659.82	0.00	877.56 R	0.00	659.82	
0.00										
1.800	2922.9	604.9	665.01 R	0.00	500.00	0.00	665.01 R	0.00	500.00	
0.00										
1.900	1636.6	340.3	372.48 R	0.00	280.06	0.00	372.48 R	0.00	280.06	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load: SU7

Rating Type: SU7  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1

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1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-INV  
Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor fiber -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	92.37	999.00	27.46	999.00	0.00	999.0 (2-Lane)
1.100	92.37	999.00	27.46	999.00	0.00	999.0 (1-Lane)
1.200	49.05	999.00	17.58	999.00	0.00	681.2 (2-Lane)
1.200	49.05	999.00	17.58	999.00	0.00	681.2 (1-Lane)
1.300	31.91	999.00	11.73	999.00	0.00	454.6 (2-Lane)
1.300	31.91	999.00	11.73	999.00	0.00	454.6 (1-Lane)
1.400	25.24	999.00	9.46	999.00	0.00	366.6 (2-Lane)
1.400	25.24	999.00	9.46	999.00	0.00	366.6 (1-Lane)
1.500	23.39	999.00	8.83	999.00	0.00	342.2 (2-Lane)
1.500	23.39	999.00	8.83	999.00	0.00	342.2 (1-Lane)
1.600	25.24	999.00	9.46	999.00	0.00	366.6 (2-Lane)
1.600	25.24	999.00	9.46	999.00	0.00	366.6 (1-Lane)
1.700	31.91	999.00	11.73	999.00	0.00	454.6 (2-Lane)
1.700	31.91	999.00	11.73	999.00	0.00	454.6 (1-Lane)
1.800	49.05	999.00	17.58	999.00	0.00	681.2 (2-Lane)
1.800	49.05	999.00	17.58	999.00	0.00	681.2 (1-Lane)
1.900	92.37	999.00	27.46	999.00	0.00	999.0 (2-Lane)
1.900	92.37	999.00	27.46	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER

Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35			
			Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Span impact	Dead Load	Superimposed Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	Lane
Lane										
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.100	2045.8	425.3	580.59 R	0.00	488.96	0.00	580.59 R	0.00	488.96	0.00
0.00										
1.200	3653.6	756.1	1026.48 R	0.00	864.98	0.00	1026.48 R	0.00	864.98	0.00
0.00										
1.300	4807.7	992.4	1337.66 R	0.00	1128.08	0.00	1337.66 R	0.00	1128.08	0.00
0.00										
1.400	5500.1	1134.2	1522.67 R	0.00	1284.65	0.00	1522.67 R	0.00	1284.65	0.00
0.00										
1.500	5730.9	1181.5	1577.23 R	0.00	1331.50	0.00	1577.23 R	0.00	1331.50	0.00
0.00										
1.600	5500.1	1134.2	1522.67 R	0.00	1284.65	0.00	1522.67 R	0.00	1284.65	0.00
0.00										
1.700	4807.7	992.4	1337.66 R	0.00	1128.08	0.00	1337.66 R	0.00	1128.08	0.00
0.00										
1.800	3653.6	756.1	1026.48 R	0.00	864.98	0.00	1026.48 R	0.00	864.98	0.00
0.00										
1.900	2045.8	425.3	580.59 R	0.00	488.96	0.00	580.59 R	0.00	488.96	0.00
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER

Rating Live Load: HL93

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12568.0	-12568.0B	13420.3	13420.3	-18368.1	-18368.1
1.400	19220.4C	19220.4	-12568.0	-12568.0B	12586.1	12586.1	-19202.3	-19202.3
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12568.0	-12568.0B	12586.1	12586.1	-19202.3	-19202.3
1.700	19220.4C	19220.4	-12568.0	-12568.0B	13420.3	13420.3	-18368.1	-18368.1
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER

Rating Live Load: HL93

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	23.17	999.00	23.17	999.00	0.00	834.0 (2-Lane)
1.100	23.17	999.00	23.17	999.00	0.00	834.0 (1-Lane)
1.200	14.43	999.00	14.43	999.00	0.00	519.4 (2-Lane)
1.200	14.43	999.00	14.43	999.00	0.00	519.4 (1-Lane)
1.300	10.03	999.00	10.03	999.00	0.00	361.2 (2-Lane)
1.300	10.03	999.00	10.03	999.00	0.00	361.2 (1-Lane)
1.400	8.27	999.00	8.27	999.00	0.00	297.6 (2-Lane)
1.400	8.27	999.00	8.27	999.00	0.00	297.6 (1-Lane)
1.500	7.80	999.00	7.80	999.00	0.00	280.9 (2-Lane)
1.500	7.80	999.00	7.80	999.00	0.00	280.9 (1-Lane)
1.600	8.27	999.00	8.27	999.00	0.00	297.6 (2-Lane)
1.600	8.27	999.00	8.27	999.00	0.00	297.6 (1-Lane)
1.700	10.03	999.00	10.03	999.00	0.00	361.2 (2-Lane)
1.700	10.03	999.00	10.03	999.00	0.00	361.2 (1-Lane)
1.800	14.43	999.00	14.43	999.00	0.00	519.4 (2-Lane)
1.800	14.43	999.00	14.43	999.00	0.00	519.4 (1-Lane)
1.900	23.17	999.00	23.17	999.00	0.00	834.0 (2-Lane)
1.900	23.17	999.00	23.17	999.00	0.00	834.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER

Rating Live Load: HL93

Gamma	DC	DW	(2-Lane)				(1-Lane)		
	1.25	1.25	LL	LL	LL	LL	LL	LL	
			1.35	1.35	1.35	1.35	1.35	1.35	
Span	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
w/o impact									
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	141.4	29.5	43.72	0.00	36.80	0.00	43.72	0.00	36.80
0.00									
1.100	114.2	23.6	37.75	0.00	31.56	0.00	37.75	0.00	31.56
0.00									
1.200	86.5	17.7	32.09	0.00	26.65	0.00	32.09	0.00	26.65
0.00									
1.300	57.7	11.8	26.76	0.00	22.04	0.00	26.76	0.00	22.04
0.00									

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.400	28.8	5.9	21.74	0.00	17.76	0.00	21.74	0.00	17.76
0.00									
1.500	0.0	0.0	17.04	0.00	13.79	0.00	17.04	0.00	13.79
0.00									
1.600	-28.8	-5.9	-21.74	0.00	-17.76	0.00	-21.74	0.00	-17.76
0.00									
1.700	-57.7	-11.8	-26.76	0.00	-22.04	0.00	-26.76	0.00	-22.04
0.00									
1.800	-86.5	-17.7	-32.09	0.00	-26.65	0.00	-32.09	0.00	-26.65
0.00									
1.900	-114.2	-23.6	-37.75	0.00	-31.56	0.00	-37.75	0.00	-31.56
0.00									
2.000	-141.4	-29.5	-43.72	0.00	-36.80	0.00	-43.72	0.00	-36.80
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: HL93

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: HL93

Shear			
Span	Rating (-)	Factor (+)	Load Resistance

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
(tons)

1.000	999.00	18.59	0.00	669.2 (2-Lane)
1.000	999.00	18.59	0.00	669.2 (1-Lane)
1.100	553.30	19.07	0.00	686.5 (2-Lane)
1.100	553.30	19.07	0.00	686.5 (1-Lane)
1.200	130.95	13.21	0.00	475.4 (2-Lane)
1.200	130.95	13.21	0.00	475.4 (1-Lane)
1.300	69.64	17.14	0.00	617.0 (2-Lane)
1.300	69.64	17.14	0.00	617.0 (1-Lane)
1.400	44.49	22.69	0.00	817.0 (2-Lane)
1.400	44.49	22.69	0.00	817.0 (1-Lane)
1.500	31.00	31.00	0.00	999.0 (2-Lane)
1.500	31.00	31.00	0.00	999.0 (1-Lane)
1.600	22.69	44.49	0.00	817.0 (2-Lane)
1.600	22.69	44.49	0.00	817.0 (1-Lane)
1.700	17.14	69.64	0.00	617.0 (2-Lane)
1.700	17.14	69.64	0.00	617.0 (1-Lane)
1.800	13.21	130.95	0.00	475.4 (2-Lane)
1.800	13.21	130.95	0.00	475.4 (1-Lane)
1.900	19.07	508.53	0.00	686.5 (2-Lane)
1.900	19.07	508.53	0.00	686.5 (1-Lane)
2.000	18.59	999.00	0.00	669.2 (2-Lane)
2.000	18.59	999.00	0.00	669.2 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 84

SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPE  
Rating Live Load: HL93

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00					
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o impact Truck
Lane										
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.100	1636.6	340.3	430.07 R	0.00	362.19	0.00	430.07 R	0.00	362.19	0.00
0.00										
1.200	2922.9	604.9	760.36 R	0.00	640.73	0.00	760.36 R	0.00	640.73	0.00
0.00										
1.300	3846.1	794.0	990.86 R	0.00	835.61	0.00	990.86 R	0.00	835.61	0.00
0.00										
1.400	4400.1	907.4	1127.90 R	0.00	951.59	0.00	1127.90 R	0.00	951.59	0.00
0.00										
1.500	4584.7	945.2	1168.32 R	0.00	986.30	0.00	1168.32 R	0.00	986.30	0.00
0.00										
1.600	4400.1	907.4	1127.90 R	0.00	951.59	0.00	1127.90 R	0.00	951.59	0.00
0.00										
1.700	3846.1	794.0	990.86 R	0.00	835.61	0.00	990.86 R	0.00	835.61	0.00
0.00										
1.800	2922.9	604.9	760.36 R	0.00	640.73	0.00	760.36 R	0.00	640.73	0.00
0.00										
1.900	1636.6	340.3	430.07 R	0.00	362.19	0.00	430.07 R	0.00	362.19	0.00

0.00  
2.000 0.0 0.0 0.00 R 0.00 0.00 0.00 0.00 R 0.00 0.00  
0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER  
Rating Live Load:

Rating Type: HL93

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER  
Rating Live Load: HL93

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	80.00	999.00	23.78	999.00	0.00	856.2 (2-Lane)
1.100	80.00	999.00	23.78	999.00	0.00	856.2 (1-Lane)
1.200	42.90	999.00	15.37	999.00	0.00	553.5 (2-Lane)
1.200	42.90	999.00	15.37	999.00	0.00	553.5 (1-Lane)
1.300	28.26	999.00	10.39	999.00	0.00	374.1 (2-Lane)
1.300	28.26	999.00	10.39	999.00	0.00	374.1 (1-Lane)
1.400	22.38	999.00	8.39	999.00	0.00	301.9 (2-Lane)
1.400	22.38	999.00	8.39	999.00	0.00	301.9 (1-Lane)
1.500	20.81	999.00	7.86	999.00	0.00	282.9 (2-Lane)



1.500	20.81	999.00	7.86	999.00	0.00	282.9 (1-Lane)
1.600	22.38	999.00	8.39	999.00	0.00	301.9 (2-Lane)
1.600	22.38	999.00	8.39	999.00	0.00	301.9 (1-Lane)
1.700	28.26	999.00	10.39	999.00	0.00	374.1 (2-Lane)
1.700	28.26	999.00	10.39	999.00	0.00	374.1 (1-Lane)
1.800	42.90	999.00	15.37	999.00	0.00	553.5 (2-Lane)
1.800	42.90	999.00	15.37	999.00	0.00	553.5 (1-Lane)
1.900	80.00	999.00	23.78	999.00	0.00	856.2 (2-Lane)
1.900	80.00	999.00	23.78	999.00	0.00	856.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER

Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	2045.8	425.3	369.32 R	0.00	277.68	0.00
0.00						
1.200	3653.6	756.1	650.89 R	0.00	489.39	0.00
0.00						
1.300	4807.7	992.4	844.70 R	0.00	635.11	0.00
0.00						
1.400	5500.1	1134.2	959.28 R	0.00	721.26	0.00
0.00						
1.500	5730.9	1181.5	990.36 R	0.00	744.64	0.00
0.00						
1.600	5500.1	1134.2	959.28 R	0.00	721.26	0.00
0.00						
1.700	4807.7	992.4	844.70 R	0.00	635.11	0.00
0.00						
1.800	3653.6	756.1	650.89 R	0.00	489.39	0.00
0.00						
1.900	2045.8	425.3	369.32 R	0.00	277.68	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER

Rating Live Load: HS20

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12568.0	-12568.0B	13420.3	13420.3	-18368.1	-18368.1
1.400	19220.4C	19220.4	-12568.0	-12568.0B	12586.1	12586.1	-19202.3	-19202.3
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12568.0	-12568.0B	12586.1	12586.1	-19202.3	-19202.3
1.700	19220.4C	19220.4	-12568.0	-12568.0B	13420.3	13420.3	-18368.1	-18368.1
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: HS20

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor	bottom +bend		
1.000	999.00	999.00		999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	999.00	999.0 (1-Lane)
1.100	36.42	999.00		36.42	999.00	999.0 (2-Lane)
1.100	36.42	999.00		36.42	999.00	999.0 (1-Lane)
1.200	22.75	999.00		22.75	455.09	819.2 (2-Lane)
1.200	22.75	999.00		22.75	455.09	819.2 (1-Lane)
1.300	15.89	999.00		15.89	317.75	572.0 (2-Lane)
1.300	15.89	999.00		15.89	317.75	572.0 (1-Lane)
1.400	13.12	999.00		13.12	262.41	472.3 (2-Lane)
1.400	13.12	999.00		13.12	262.41	472.3 (1-Lane)
1.500	12.43	999.00		12.43	248.55	447.4 (2-Lane)
1.500	12.43	999.00		12.43	248.55	447.4 (1-Lane)
1.600	13.12	999.00		13.12	262.41	472.3 (2-Lane)
1.600	13.12	999.00		13.12	262.41	472.3 (1-Lane)
1.700	15.89	999.00		15.89	317.75	572.0 (2-Lane)
1.700	15.89	999.00		15.89	317.75	572.0 (1-Lane)
1.800	22.75	999.00		22.75	455.09	819.2 (2-Lane)
1.800	22.75	999.00		22.75	455.09	819.2 (1-Lane)
1.900	36.42	999.00		36.42	999.00	999.0 (2-Lane)
1.900	36.42	999.00		36.42	999.00	999.0 (1-Lane)
2.000	999.00	999.00		999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	999.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Lane	Live Load w/o impact Truck	Lane	Live Load w/impact Truck	Lane	Live Load Truck
Lane									
1.000 0.00	141.4	29.5	27.88	0.00	20.96	0.00	27.88	0.00	20.96
1.100 0.00	114.2	23.6	24.92	0.00	18.74	0.00	24.92	0.00	18.74
1.200 0.00	86.5	17.7	21.96	0.00	16.51	0.00	21.96	0.00	16.51
1.300 0.00	57.7	11.8	19.00	0.00	14.28	0.00	19.00	0.00	14.28
1.400 0.00	28.8	5.9	16.04	0.00	12.06	0.00	16.04	0.00	12.06
1.500 0.00	0.0	0.0	13.08	0.00	9.83	0.00	13.08	0.00	9.83
1.600 0.00	-28.8	-5.9	-16.04	0.00	-12.06	0.00	-16.04	0.00	-12.06
1.700 0.00	-57.7	-11.8	-19.00	0.00	-14.28	0.00	-19.00	0.00	-14.28
1.800 0.00	-86.5	-17.7	-21.96	0.00	-16.51	0.00	-21.96	0.00	-16.51
1.900 0.00	-114.2	-23.6	-24.92	0.00	-18.74	0.00	-24.92	0.00	-18.74
2.000 0.00	-141.4	-29.5	-27.88	0.00	-20.96	0.00	-27.88	0.00	-20.96

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: HS20

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)

1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: HS20

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	29.15	999.00	999.0 (2-Lane)
1.000	999.00	29.15	999.00	999.0 (1-Lane)
1.100	672.15	28.89	999.00	999.0 (2-Lane)
1.100	672.15	28.89	999.00	999.0 (1-Lane)
1.200	150.72	19.30	386.06	694.9 (2-Lane)
1.200	150.72	19.30	386.06	694.9 (1-Lane)
1.300	83.51	24.14	482.79	869.0 (2-Lane)
1.300	83.51	24.14	482.79	869.0 (1-Lane)
1.400	55.63	30.76	999.00	999.0 (2-Lane)
1.400	55.63	30.76	999.00	999.0 (1-Lane)
1.500	40.38	40.38	999.00	999.0 (2-Lane)
1.500	40.38	40.38	999.00	999.0 (1-Lane)
1.600	30.76	55.63	999.00	999.0 (2-Lane)
1.600	30.76	55.63	999.00	999.0 (1-Lane)
1.700	24.14	83.51	482.79	869.0 (2-Lane)
1.700	24.14	83.51	482.79	869.0 (1-Lane)
1.800	19.30	150.72	386.06	694.9 (2-Lane)
1.800	19.30	150.72	386.06	694.9 (1-Lane)
1.900	28.89	672.15	999.00	999.0 (2-Lane)
1.900	28.89	672.15	999.00	999.0 (1-Lane)
2.000	29.15	999.00	999.00	999.0 (2-Lane)
2.000	29.15	999.00	999.00	999.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPE  
Rating Live Load: HS20

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Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	1636.6	340.3	273.57 R	0.00	205.69	0.00
0.00						
1.200	2922.9	604.9	482.14 R	0.00	362.51	0.00
0.00						
1.300	3846.1	794.0	625.70 R	0.00	470.45	0.00
0.00						
1.400	4400.1	907.4	710.58 R	0.00	534.27	0.00
0.00						
1.500	4584.7	945.2	733.60 R	0.00	551.58	0.00
0.00						
1.600	4400.1	907.4	710.58 R	0.00	534.27	0.00
0.00						
1.700	3846.1	794.0	625.70 R	0.00	470.45	0.00
0.00						
1.800	2922.9	604.9	482.14 R	0.00	362.51	0.00
0.00						
1.900	1636.6	340.3	273.57 R	0.00	205.69	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 92

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER  
Rating Live Load:

Rating Type: HS20

Rating Live Load:  
Span

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type:  
Rating Live Load:

II-OPER  
HS20

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.100	125.76	999.00	37.39	999.00	999.00	999.0 (2-Lane)
1.100	125.76	999.00	37.39	999.00	999.00	999.0 (1-Lane)
1.200	67.65	999.00	24.25	999.00	484.92	872.9 (2-Lane)
1.200	67.65	999.00	24.25	999.00	484.92	872.9 (1-Lane)
1.300	44.76	999.00	16.46	999.00	329.11	592.4 (2-Lane)
1.300	44.76	999.00	16.46	999.00	329.11	592.4 (1-Lane)
1.400	35.52	999.00	13.31	999.00	266.27	479.3 (2-Lane)
1.400	35.52	999.00	13.31	999.00	266.27	479.3 (1-Lane)
1.500	33.15	999.00	12.52	999.00	250.31	450.6 (2-Lane)
1.500	33.15	999.00	12.52	999.00	250.31	450.6 (1-Lane)
1.600	35.52	999.00	13.31	999.00	266.27	479.3 (2-Lane)
1.600	35.52	999.00	13.31	999.00	266.27	479.3 (1-Lane)
1.700	44.76	999.00	16.46	999.00	329.11	592.4 (2-Lane)
1.700	44.76	999.00	16.46	999.00	329.11	592.4 (1-Lane)
1.800	67.65	999.00	24.25	999.00	484.92	872.9 (2-Lane)
1.800	67.65	999.00	24.25	999.00	484.92	872.9 (1-Lane)
1.900	125.76	999.00	37.39	999.00	999.00	999.0 (2-Lane)
1.900	125.76	999.00	37.39	999.00	999.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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# MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: 3

Gamma	DC		DW		(2-Lane) LL 1.35		(1-Lane) LL 1.35	
	1.25		1.25					
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o		
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck Lane		
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								
1.100	2045.8	425.3	260.08 R	0.00	195.55	0.00	260.08 R	0.00
0.00								
1.200	3653.6	756.1	459.21 R	0.00	345.27	0.00	459.21 R	0.00
0.00								
1.300	4807.7	992.4	597.40 R	0.00	449.18	0.00	597.40 R	0.00

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0.00									
1.400	5500.1	1134.2	679.22 R	0.00	510.70	0.00	679.22 R	0.00	510.70
0.00									
1.500	5730.9	1181.5	703.15 R	0.00	528.68	0.00	703.15 R	0.00	528.68
0.00									
1.600	5500.1	1134.2	679.22 R	0.00	510.70	0.00	679.22 R	0.00	510.70
0.00									
1.700	4807.7	992.4	597.40 R	0.00	449.18	0.00	597.40 R	0.00	449.18
0.00									
1.800	3653.6	756.1	459.21 R	0.00	345.27	0.00	459.21 R	0.00	345.27
0.00									
1.900	2045.8	425.3	260.08 R	0.00	195.55	0.00	260.08 R	0.00	195.55
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: 3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12565.1	-12565.1B	13420.3	13420.3	-18365.2	-18365.2
1.400	19220.4C	19220.4	-12565.1	-12565.1B	12586.1	12586.1	-19199.5	-19199.5
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12565.1	-12565.1B	12586.1	12586.1	-19199.5	-19199.5
1.700	19220.4C	19220.4	-12565.1	-12565.1B	13420.3	13420.3	-18365.2	-18365.2
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: 3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	51.72	999.00	51.72	999.00	0.00	999.0 (2-Lane)
1.100	51.72	999.00	51.72	999.00	0.00	999.0 (1-Lane)

1.200	32.25	999.00	32.25	999.00	0.00	806.3 (2-Lane)
1.200	32.25	999.00	32.25	999.00	0.00	806.3 (1-Lane)
1.300	22.46	999.00	22.46	999.00	0.00	561.6 (2-Lane)
1.300	22.46	999.00	22.46	999.00	0.00	561.6 (1-Lane)
1.400	18.53	999.00	18.53	999.00	0.00	463.3 (2-Lane)
1.400	18.53	999.00	18.53	999.00	0.00	463.3 (1-Lane)
1.500	17.50	999.00	17.50	999.00	0.00	437.6 (2-Lane)
1.500	17.50	999.00	17.50	999.00	0.00	437.6 (1-Lane)
1.600	18.53	999.00	18.53	999.00	0.00	463.3 (2-Lane)
1.600	18.53	999.00	18.53	999.00	0.00	463.3 (1-Lane)
1.700	22.46	999.00	22.46	999.00	0.00	561.6 (2-Lane)
1.700	22.46	999.00	22.46	999.00	0.00	561.6 (1-Lane)
1.800	32.25	999.00	32.25	999.00	0.00	806.3 (2-Lane)
1.800	32.25	999.00	32.25	999.00	0.00	806.3 (1-Lane)
1.900	51.72	999.00	51.72	999.00	0.00	999.0 (2-Lane)
1.900	51.72	999.00	51.72	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	141.4	29.5	19.60	14.74	19.60	14.74
0.00			0.00	0.00	0.00	
1.100	114.2	23.6	17.55	13.19	17.55	13.19
0.00			0.00	0.00	0.00	
1.200	86.5	17.7	15.49	11.65	15.49	11.65
0.00			0.00	0.00	0.00	
1.300	57.7	11.8	13.44	10.10	13.44	10.10
0.00			0.00	0.00	0.00	
1.400	28.8	5.9	11.38	8.56	11.38	8.56
0.00			0.00	0.00	0.00	
1.500	0.0	0.0	9.32	7.01	9.32	7.01
0.00			0.00	0.00	0.00	
1.600	-28.8	-5.9	-11.38	-8.56	-11.38	-8.56
0.00			0.00	0.00	0.00	
1.700	-57.7	-11.8	-13.44	-10.10	-13.44	-10.10
0.00			0.00	0.00	0.00	
1.800	-86.5	-17.7	-15.49	-11.65	-15.49	-11.65
0.00			0.00	0.00	0.00	
1.900	-114.2	-23.6	-17.55	-13.19	-17.55	-13.19
0.00			0.00	0.00	0.00	
2.000	-141.4	-29.5	-19.60	-14.74	-19.60	-14.74
0.00			0.00	0.00	0.00	

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## STRENGTH SHEAR RESISTANCE REPORT



Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: 3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	41.46	0.00	999.0 (2-Lane)
1.000	999.00	41.46	0.00	999.0 (1-Lane)
1.100	813.67	41.02	0.00	999.0 (2-Lane)
1.100	813.67	41.02	0.00	999.0 (1-Lane)
1.200	200.32	27.36	0.00	684.0 (2-Lane)
1.200	200.32	27.36	0.00	684.0 (1-Lane)
1.300	114.64	34.13	0.00	853.3 (2-Lane)
1.300	114.64	34.13	0.00	853.3 (1-Lane)
1.400	77.43	43.35	0.00	999.0 (2-Lane)
1.400	77.43	43.35	0.00	999.0 (1-Lane)
1.500	56.63	56.63	0.00	999.0 (2-Lane)
1.500	56.63	56.63	0.00	999.0 (1-Lane)

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1.600	43.35	77.43	0.00	999.0 (2-Lane)
1.600	43.35	77.43	0.00	999.0 (1-Lane)
1.700	34.13	114.64	0.00	853.3 (2-Lane)
1.700	34.13	114.64	0.00	853.3 (1-Lane)
1.800	27.36	200.32	0.00	684.0 (2-Lane)
1.800	27.36	200.32	0.00	684.0 (1-Lane)
1.900	41.02	813.67	0.00	999.0 (2-Lane)
1.900	41.02	813.67	0.00	999.0 (1-Lane)
2.000	41.46	999.00	0.00	999.0 (2-Lane)
2.000	41.46	999.00	0.00	999.0 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPE  
Rating Live Load: 3

Span impact Lane	Dead Load	Superimposed Dead Load	(2-Lane)		(1-Lane)		Live Load w/impact Truck	Lane	Live Load w/o impact Truck	Lane	Live Load w/impact Truck	Lane	Live Load w/o Truck
			DC 1.00	DW 1.00	LL 1.00	LL 1.00							
1.000	0.0	0.0					0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00													
1.100	1636.6	340.3					192.65 R	0.00	144.85	0.00	192.65 R	0.00	144.85
0.00													
1.200	2922.9	604.9					340.16 R	0.00	255.76	0.00	340.16 R	0.00	255.76
0.00													
1.300	3846.1	794.0					442.52 R	0.00	332.72	0.00	442.52 R	0.00	332.72
0.00													
1.400	4400.1	907.4					503.13 R	0.00	378.29	0.00	503.13 R	0.00	378.29
0.00													
1.500	4584.7	945.2					520.85 R	0.00	391.62	0.00	520.85 R	0.00	391.62
0.00													
1.600	4400.1	907.4					503.13 R	0.00	378.29	0.00	503.13 R	0.00	378.29
0.00													
1.700	3846.1	794.0					442.52 R	0.00	332.72	0.00	442.52 R	0.00	332.72
0.00													
1.800	2922.9	604.9					340.16 R	0.00	255.76	0.00	340.16 R	0.00	255.76
0.00													
1.900	1636.6	340.3					192.65 R	0.00	144.85	0.00	192.65 R	0.00	144.85
0.00													
2.000	0.0	0.0					0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00													

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER  
Rating Live Load:

Rating Type: 3  
 Rating Live Load:  
 Span

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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 SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER  
 Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	Factor bottom fiber +bend	Factor bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	178.59	999.00	53.09	999.00	0.00	999.0 (2-Lane)
1.100	178.59	999.00	53.09	999.00	0.00	999.0 (1-Lane)
1.200	95.89	999.00	34.37	999.00	0.00	859.2 (2-Lane)
1.200	95.89	999.00	34.37	999.00	0.00	859.2 (1-Lane)
1.300	63.28	999.00	23.27	999.00	0.00	581.7 (2-Lane)
1.300	63.28	999.00	23.27	999.00	0.00	581.7 (1-Lane)
1.400	50.16	999.00	18.80	999.00	0.00	470.1 (2-Lane)
1.400	50.16	999.00	18.80	999.00	0.00	470.1 (1-Lane)
1.500	46.68	999.00	17.63	999.00	0.00	440.7 (2-Lane)
1.500	46.68	999.00	17.63	999.00	0.00	440.7 (1-Lane)
1.600	50.16	999.00	18.80	999.00	0.00	470.1 (2-Lane)
1.600	50.16	999.00	18.80	999.00	0.00	470.1 (1-Lane)
1.700	63.28	999.00	23.27	999.00	0.00	581.7 (2-Lane)
1.700	63.28	999.00	23.27	999.00	0.00	581.7 (1-Lane)
1.800	95.89	999.00	34.37	999.00	0.00	859.2 (2-Lane)
1.800	95.89	999.00	34.37	999.00	0.00	859.2 (1-Lane)
1.900	178.59	999.00	53.09	999.00	0.00	999.0 (2-Lane)
1.900	178.59	999.00	53.09	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	2045.8	425.3	381.22 R	0.00	286.64	0.00
0.00						
1.200	3653.6	756.1	664.94 R	0.00	499.96	0.00
0.00						
1.300	4807.7	992.4	872.17 R	0.00	655.76	0.00
0.00						
1.400	5500.1	1134.2	989.19 R	0.00	743.75	0.00
0.00						
1.500	5730.9	1181.5	1016.32 R	0.00	764.15	0.00
0.00						
1.600	5500.1	1134.2	989.19 R	0.00	743.75	0.00
0.00						
1.700	4807.7	992.4	872.17 R	0.00	655.76	0.00
0.00						
1.800	3653.6	756.1	664.94 R	0.00	499.96	0.00
0.00						
1.900	2045.8	425.3	381.22 R	0.00	286.63	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Top	Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12562.0	-12562.0B	13420.3	13420.3	-18362.0	-18362.0
1.400	19220.4C	19220.4	-12562.0	-12562.0B	12586.1	12586.1	-19196.3	-19196.3
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12562.0	-12562.0B	12586.1	12586.1	-19196.3	-19196.3
1.700	19220.4C	19220.4	-12562.0	-12562.0B	13420.3	13420.3	-18362.0	-18362.0
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	35.28	999.00	35.28	999.00	0.00	999.0 (2-Lane)
1.100	35.28	999.00	35.28	999.00	0.00	999.0 (1-Lane)
1.200	22.27	999.00	22.27	999.00	0.00	890.9 (2-Lane)
1.200	22.27	999.00	22.27	999.00	0.00	890.9 (1-Lane)
1.300	15.39	999.00	15.39	999.00	0.00	615.5 (2-Lane)
1.300	15.39	999.00	15.39	999.00	0.00	615.5 (1-Lane)
1.400	12.72	999.00	12.72	999.00	0.00	508.9 (2-Lane)
1.400	12.72	999.00	12.72	999.00	0.00	508.9 (1-Lane)
1.500	12.11	999.00	12.11	999.00	0.00	484.4 (2-Lane)
1.500	12.11	999.00	12.11	999.00	0.00	484.4 (1-Lane)
1.600	12.72	999.00	12.72	999.00	0.00	508.9 (2-Lane)
1.600	12.72	999.00	12.72	999.00	0.00	508.9 (1-Lane)
1.700	15.39	999.00	15.39	999.00	0.00	615.5 (2-Lane)
1.700	15.39	999.00	15.39	999.00	0.00	615.5 (1-Lane)
1.800	22.27	999.00	22.27	999.00	0.00	890.9 (2-Lane)
1.800	22.27	999.00	22.27	999.00	0.00	890.9 (1-Lane)
1.900	35.28	999.00	35.28	999.00	0.00	999.0 (2-Lane)
1.900	35.28	999.00	35.28	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: 3S2

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	LL	LL	LL
	1.25	1.25	1.35		1.35	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load

Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	141.4	29.5	29.01	0.00	21.81	0.00	29.01	0.00	21.81
1.100 0.00	114.2	23.6	25.72	0.00	19.34	0.00	25.72	0.00	19.34
1.200 0.00	86.5	17.7	22.43	0.00	16.87	0.00	22.43	0.00	16.87
1.300 0.00	57.7	11.8	19.14	0.00	14.39	0.00	19.14	0.00	14.39
1.400 0.00	28.8	5.9	15.85	0.00	11.92	0.00	15.85	0.00	11.92
1.500 0.00	0.0	0.0	12.56	0.00	9.45	0.00	12.56	0.00	9.45
1.600 0.00	-28.8	-5.9	-15.85	0.00	-11.92	0.00	-15.85	0.00	-11.92
1.700 0.00	-57.7	-11.8	-19.14	0.00	-14.39	0.00	-19.14	0.00	-14.39
1.800 0.00	-86.5	-17.7	-22.43	0.00	-16.87	0.00	-22.43	0.00	-16.87
1.900 0.00	-114.2	-23.6	-25.72	0.00	-19.34	0.00	-25.72	0.00	-19.34
2.000 0.00	-141.4	-29.5	-29.01	0.00	-21.81	0.00	-29.01	0.00	-21.81

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D.

G01

Rating Type:

I-OPER

Rating Live Load:

3S2

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	28.01	0.00	999.0 (2-Lane)
1.000	999.00	28.01	0.00	999.0 (1-Lane)
1.100	813.67	27.99	0.00	999.0 (2-Lane)
1.100	813.67	27.99	0.00	999.0 (1-Lane)
1.200	212.72	18.90	0.00	755.8 (2-Lane)
1.200	212.72	18.90	0.00	755.8 (1-Lane)
1.300	99.84	23.96	0.00	958.3 (2-Lane)
1.300	99.84	23.96	0.00	958.3 (1-Lane)
1.400	60.68	31.12	0.00	999.0 (2-Lane)
1.400	60.68	31.12	0.00	999.0 (1-Lane)
1.500	42.03	42.03	0.00	999.0 (2-Lane)
1.500	42.03	42.03	0.00	999.0 (1-Lane)
1.600	31.12	60.68	0.00	999.0 (2-Lane)
1.600	31.12	60.68	0.00	999.0 (1-Lane)
1.700	23.96	99.84	0.00	958.3 (2-Lane)
1.700	23.96	99.84	0.00	958.3 (1-Lane)
1.800	18.90	212.72	0.00	755.8 (2-Lane)
1.800	18.90	212.72	0.00	755.8 (1-Lane)
1.900	27.99	813.67	0.00	999.0 (2-Lane)
1.900	27.99	813.67	0.00	999.0 (1-Lane)
2.000	28.01	999.00	0.00	999.0 (2-Lane)
2.000	28.01	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 108

## SERVICE MOMENT REPORT

Structure I. D.

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Member I. D.

G01

Rating Type:

II-OPE

Rating Live Load:

3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.100	1636.6	340.3	282.39 R	0.00	212.32	0.00 R
0.00						
1.200	2922.9	604.9	492.55 R	0.00	370.34	0.00 R
0.00						
1.300	3846.1	794.0	646.05 R	0.00	485.75	0.00 R
0.00						

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1.400	4400.1	907.4	732.74 R	0.00	550.93	0.00	732.74 R	0.00	550.93
0.00									
1.500	4584.7	945.2	752.83 R	0.00	566.04	0.00	752.83 R	0.00	566.04
0.00									
1.600	4400.1	907.4	732.74 R	0.00	550.93	0.00	732.74 R	0.00	550.93
0.00									
1.700	3846.1	794.0	646.05 R	0.00	485.75	0.00	646.05 R	0.00	485.75
0.00									
1.800	2922.9	604.9	492.55 R	0.00	370.34	0.00	492.55 R	0.00	370.34
0.00									
1.900	1636.6	340.3	282.39 R	0.00	212.32	0.00	282.39 R	0.00	212.32
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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#### SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER

Rating Live Load:

Rating Type: 3S2

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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#### SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER

Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	121.84	999.00	36.22	999.00	0.00	999.0 (2-Lane)
1.100	121.84	999.00	36.22	999.00	0.00	999.0 (1-Lane)



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1.200	66.22	999.00	23.73	999.00	0.00	949.3 (2-Lane)
1.200	66.22	999.00	23.73	999.00	0.00	949.3 (1-Lane)
1.300	43.35	999.00	15.94	999.00	0.00	637.5 (2-Lane)
1.300	43.35	999.00	15.94	999.00	0.00	637.5 (1-Lane)
1.400	34.44	999.00	12.91	999.00	0.00	516.4 (2-Lane)
1.400	34.44	999.00	12.91	999.00	0.00	516.4 (1-Lane)
1.500	32.30	999.00	12.20	999.00	0.00	487.8 (2-Lane)
1.500	32.30	999.00	12.20	999.00	0.00	487.8 (1-Lane)
1.600	34.44	999.00	12.91	999.00	0.00	516.4 (2-Lane)
1.600	34.44	999.00	12.91	999.00	0.00	516.4 (1-Lane)
1.700	43.35	999.00	15.94	999.00	0.00	637.5 (2-Lane)
1.700	43.35	999.00	15.94	999.00	0.00	637.5 (1-Lane)
1.800	66.22	999.00	23.73	999.00	0.00	949.3 (2-Lane)
1.800	66.22	999.00	23.73	999.00	0.00	949.3 (1-Lane)
1.900	121.84	999.00	36.22	999.00	0.00	999.0 (2-Lane)
1.900	121.84	999.00	36.22	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane		Live Load w/o impact Truck Lane	
Lane			Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	2045.8	425.3	366.00 R	0.00	275.19	0.00
0.00						
1.200	3653.6	756.1	637.54 R	0.00	479.35	0.00
0.00						
1.300	4807.7	992.4	820.70 R	0.00	617.07	0.00
0.00						
1.400	5500.1	1134.2	930.73 R	0.00	699.79	0.00
0.00						
1.500	5730.9	1181.5	967.60 R	0.00	727.52	0.00
0.00						
1.600	5500.1	1134.2	930.73 R	0.00	699.79	0.00
0.00						
1.700	4807.7	992.4	820.70 R	0.00	617.07	0.00
0.00						
1.800	3653.6	756.1	637.54 R	0.00	479.35	0.00
0.00						
1.900	2045.8	425.3	366.00 R	0.00	275.19	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER

Rating Live Load: 3-3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12562.5	-12562.5B	13420.3	13420.3	-18362.6	-18362.6
1.400	19220.4C	19220.4	-12562.5	-12562.5B	12586.1	12586.1	-19196.8	-19196.8
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12562.5	-12562.5B	12586.1	12586.1	-19196.8	-19196.8
1.700	19220.4C	19220.4	-12562.5	-12562.5B	13420.3	13420.3	-18362.6	-18362.6
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER

Rating Live Load: 3-3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating Factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	36.75	999.00	36.75	999.00	0.00	999.0 (2-Lane)
1.100	36.75	999.00	36.75	999.00	0.00	999.0 (1-Lane)
1.200	23.23	999.00	23.23	999.00	0.00	929.2 (2-Lane)
1.200	23.23	999.00	23.23	999.00	0.00	929.2 (1-Lane)
1.300	16.35	999.00	16.35	999.00	0.00	654.1 (2-Lane)
1.300	16.35	999.00	16.35	999.00	0.00	654.1 (1-Lane)
1.400	13.52	999.00	13.52	999.00	0.00	540.9 (2-Lane)
1.400	13.52	999.00	13.52	999.00	0.00	540.9 (1-Lane)
1.500	12.72	999.00	12.72	999.00	0.00	508.8 (2-Lane)
1.500	12.72	999.00	12.72	999.00	0.00	508.8 (1-Lane)
1.600	13.52	999.00	13.52	999.00	0.00	540.9 (2-Lane)
1.600	13.52	999.00	13.52	999.00	0.00	540.9 (1-Lane)
1.700	16.35	999.00	16.35	999.00	0.00	654.1 (2-Lane)
1.700	16.35	999.00	16.35	999.00	0.00	654.1 (1-Lane)
1.800	23.23	999.00	23.23	999.00	0.00	929.2 (2-Lane)

1.800	23.23	999.00	23.23	999.00	0.00	929.2 (1-Lane)
1.900	36.75	999.00	36.75	999.00	0.00	999.0 (2-Lane)
1.900	36.75	999.00	36.75	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: 3-3

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	LL	LL	LL
	1.25	1.25	1.35		1.35	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	141.4	29.5	27.98	0.00	27.98	0.00
0.00						
1.100	114.2	23.6	24.69	0.00	24.69	0.00
0.00						
1.200	86.5	17.7	21.40	0.00	21.40	0.00
0.00						
1.300	57.7	11.8	18.12	0.00	18.12	0.00
0.00						
1.400	28.8	5.9	14.83	0.00	14.83	0.00
0.00						
1.500	0.0	0.0	11.54	0.00	11.54	0.00
0.00						
1.600	-28.8	-5.9	-14.83	0.00	-14.83	0.00
0.00						
1.700	-57.7	-11.8	-18.12	0.00	-18.12	0.00
0.00						
1.800	-86.5	-17.7	-21.40	0.00	-21.40	0.00
0.00						
1.900	-114.2	-23.6	-24.69	0.00	-24.69	0.00
0.00						
2.000	-141.4	-29.5	-27.98	0.00	-27.98	0.00
0.00						

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)

1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: 3-3

#### Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	29.04	0.00	999.0 (2-Lane)
1.000	999.00	29.04	0.00	999.0 (1-Lane)
1.100	988.03	29.15	0.00	999.0 (2-Lane)
1.100	988.03	29.15	0.00	999.0 (1-Lane)
1.200	238.36	19.80	0.00	792.1 (2-Lane)
1.200	238.36	19.80	0.00	792.1 (1-Lane)
1.300	116.21	25.32	0.00	999.0 (2-Lane)
1.300	116.21	25.32	0.00	999.0 (1-Lane)
1.400	68.24	33.28	0.00	999.0 (2-Lane)
1.400	68.24	33.28	0.00	999.0 (1-Lane)
1.500	45.77	45.77	0.00	999.0 (2-Lane)
1.500	45.77	45.77	0.00	999.0 (1-Lane)
1.600	33.28	68.24	0.00	999.0 (2-Lane)
1.600	33.28	68.24	0.00	999.0 (1-Lane)
1.700	25.32	116.21	0.00	999.0 (2-Lane)
1.700	25.32	116.21	0.00	999.0 (1-Lane)
1.800	19.80	238.36	0.00	792.1 (2-Lane)
1.800	19.80	238.36	0.00	792.1 (1-Lane)
1.900	29.15	988.03	0.00	999.0 (2-Lane)
1.900	29.15	988.03	0.00	999.0 (1-Lane)
2.000	29.04	999.00	0.00	999.0 (2-Lane)
2.000	29.04	999.00	0.00	999.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPE  
Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00 0.00
0.00						
1.100	1636.6	340.3	271.11 R 0.00	203.84 0.00	271.11 R 0.00	203.84
0.00						
1.200	2922.9	604.9	472.25 R 0.00	355.07 0.00	472.25 R 0.00	355.07
0.00						
1.300	3846.1	794.0	607.93 R 0.00	457.09 0.00	607.93 R 0.00	457.09
0.00						
1.400	4400.1	907.4	689.43 R 0.00	518.37 0.00	689.43 R 0.00	518.37
0.00						
1.500	4584.7	945.2	716.74 R 0.00	538.90 0.00	716.74 R 0.00	538.90
0.00						
1.600	4400.1	907.4	689.43 R 0.00	518.37 0.00	689.43 R 0.00	518.37
0.00						
1.700	3846.1	794.0	607.93 R 0.00	457.09 0.00	607.93 R 0.00	457.09
0.00						
1.800	2922.9	604.9	472.25 R 0.00	355.07 0.00	472.25 R 0.00	355.07
0.00						
1.900	1636.6	340.3	271.11 R 0.00	203.84 0.00	271.11 R 0.00	203.84
0.00						
2.000	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00 0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER  
Rating Live Load:

Rating Type: 3-3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER  
Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	126.91	999.00	37.73	999.00	0.00	999.0 (2-Lane)
1.100	126.91	999.00	37.73	999.00	0.00	999.0 (1-Lane)
1.200	69.07	999.00	24.75	999.00	0.00	999.0 (2-Lane)
1.200	69.07	999.00	24.75	999.00	0.00	999.0 (1-Lane)
1.300	46.07	999.00	16.94	999.00	0.00	677.5 (2-Lane)
1.300	46.07	999.00	16.94	999.00	0.00	677.5 (1-Lane)
1.400	36.61	999.00	13.72	999.00	0.00	548.9 (2-Lane)
1.400	36.61	999.00	13.72	999.00	0.00	548.9 (1-Lane)
1.500	33.92	999.00	12.81	999.00	0.00	512.4 (2-Lane)
1.500	33.92	999.00	12.81	999.00	0.00	512.4 (1-Lane)
1.600	36.61	999.00	13.72	999.00	0.00	548.9 (2-Lane)
1.600	36.61	999.00	13.72	999.00	0.00	548.9 (1-Lane)
1.700	46.07	999.00	16.94	999.00	0.00	677.5 (2-Lane)
1.700	46.07	999.00	16.94	999.00	0.00	677.5 (1-Lane)
1.800	69.07	999.00	24.75	999.00	0.00	999.0 (2-Lane)
1.800	69.07	999.00	24.75	999.00	0.00	999.0 (1-Lane)
1.900	126.91	999.00	37.73	999.00	0.00	999.0 (2-Lane)
1.900	126.91	999.00	37.73	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU4

Gamma	DC		(2-Lane)		(1-Lane)	
	1.25	DW 1.25	LL 1.35	LL 1.35	LL 1.35	LL 1.35
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o

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impact

Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.100	2045.8	425.3	282.93 R	0.00	212.73	0.00	282.93 R	0.00	212.73
0.00									
1.200	3653.6	756.1	500.04 R	0.00	375.97	0.00	500.04 R	0.00	375.97
0.00									
1.300	4807.7	992.4	651.34 R	0.00	489.73	0.00	651.34 R	0.00	489.73
0.00									
1.400	5500.1	1134.2	743.82 R	0.00	559.26	0.00	743.82 R	0.00	559.26
0.00									
1.500	5730.9	1181.5	771.70 R	0.00	580.23	0.00	771.70 R	0.00	580.23
0.00									
1.600	5500.1	1134.2	743.82 R	0.00	559.26	0.00	743.82 R	0.00	559.26
0.00									
1.700	4807.7	992.4	651.34 R	0.00	489.73	0.00	651.34 R	0.00	489.73
0.00									
1.800	3653.6	756.1	500.04 R	0.00	375.97	0.00	500.04 R	0.00	375.97
0.00									
1.900	2045.8	425.3	282.93 R	0.00	212.73	0.00	282.93 R	0.00	212.73
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU4

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Top	Negative Bending Bott.	Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12566.9	-12566.9B	13420.3	13420.3	-18367.0	-18367.0
1.400	19220.4C	19220.4	-12566.9	-12566.9B	12586.1	12586.1	-19201.3	-19201.3
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12566.9	-12566.9B	12586.1	12586.1	-19201.3	-19201.3
1.700	19220.4C	19220.4	-12566.9	-12566.9B	13420.3	13420.3	-18367.0	-18367.0
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU4

Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	47.54	999.00	47.54	999.00	0.00	999.0 (2-Lane)
1.100	47.54	999.00	47.54	999.00	0.00	999.0 (1-Lane)
1.200	29.62	999.00	29.62	999.00	0.00	799.7 (2-Lane)
1.200	29.62	999.00	29.62	999.00	0.00	799.7 (1-Lane)
1.300	20.60	999.00	20.60	999.00	0.00	556.3 (2-Lane)
1.300	20.60	999.00	20.60	999.00	0.00	556.3 (1-Lane)
1.400	16.92	999.00	16.92	999.00	0.00	456.9 (2-Lane)
1.400	16.92	999.00	16.92	999.00	0.00	456.9 (1-Lane)
1.500	15.95	999.00	15.95	999.00	0.00	430.6 (2-Lane)
1.500	15.95	999.00	15.95	999.00	0.00	430.6 (1-Lane)
1.600	16.92	999.00	16.92	999.00	0.00	456.9 (2-Lane)
1.600	16.92	999.00	16.92	999.00	0.00	456.9 (1-Lane)
1.700	20.60	999.00	20.60	999.00	0.00	556.3 (2-Lane)
1.700	20.60	999.00	20.60	999.00	0.00	556.3 (1-Lane)
1.800	29.62	999.00	29.62	999.00	0.00	799.7 (2-Lane)
1.800	29.62	999.00	29.62	999.00	0.00	799.7 (1-Lane)
1.900	47.54	999.00	47.54	999.00	0.00	999.0 (2-Lane)
1.900	47.54	999.00	47.54	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 121

## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	141.4	29.5	21.31	0.00	16.02	0.00	21.31	0.00	16.02
1.100 0.00	114.2	23.6	19.09	0.00	14.35	0.00	19.09	0.00	14.35
1.200 0.00	86.5	17.7	16.87	0.00	12.68	0.00	16.87	0.00	12.68
1.300 0.00	57.7	11.8	14.65	0.00	11.01	0.00	14.65	0.00	11.01
1.400 0.00	28.8	5.9	12.43	0.00	9.34	0.00	12.43	0.00	9.34
1.500 0.00	0.0	0.0	10.21	0.00	7.68	0.00	10.21	0.00	7.68
1.600 0.00	-28.8	-5.9	-12.43	0.00	-9.34	0.00	-12.43	0.00	-9.34
1.700 0.00	-57.7	-11.8	-14.65	0.00	-11.01	0.00	-14.65	0.00	-11.01



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1.800	-86.5	-17.7	-16.87	0.00	-12.68	0.00	-16.87	0.00	-12.68
0.00									
1.900	-114.2	-23.6	-19.09	0.00	-14.35	0.00	-19.09	0.00	-14.35
0.00									
2.000	-141.4	-29.5	-21.31	0.00	-16.02	0.00	-21.31	0.00	-16.02
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 123

STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU4

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	38.13	0.00	999.0 (2-Lane)
1.000	999.00	38.13	0.00	999.0 (1-Lane)
1.100	717.19	37.71	0.00	999.0 (2-Lane)
1.100	717.19	37.71	0.00	999.0 (1-Lane)

1.200	178.26	25.13	0.00	678.4 (2-Lane)
1.200	178.26	25.13	0.00	678.4 (1-Lane)
1.300	103.61	31.31	0.00	845.3 (2-Lane)
1.300	103.61	31.31	0.00	845.3 (1-Lane)
1.400	70.46	39.69	0.00	999.0 (2-Lane)
1.400	70.46	39.69	0.00	999.0 (1-Lane)
1.500	51.73	51.73	0.00	999.0 (2-Lane)
1.500	51.73	51.73	0.00	999.0 (1-Lane)
1.600	39.69	70.46	0.00	999.0 (2-Lane)
1.600	39.69	70.46	0.00	999.0 (1-Lane)
1.700	31.31	103.61	0.00	845.3 (2-Lane)
1.700	31.31	103.61	0.00	845.3 (1-Lane)
1.800	25.13	178.26	0.00	678.4 (2-Lane)
1.800	25.13	178.26	0.00	678.4 (1-Lane)
1.900	37.71	717.19	0.00	999.0 (2-Lane)
1.900	37.71	717.19	0.00	999.0 (1-Lane)
2.000	38.13	999.00	0.00	999.0 (2-Lane)
2.000	38.13	999.00	0.00	999.0 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPE  
Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	1636.6	340.3	209.58 R	0.00	157.58	0.00
0.00						
1.200	2922.9	604.9	370.40 R	0.00	278.50	0.00
0.00						
1.300	3846.1	794.0	482.47 R	0.00	362.76	0.00
0.00						
1.400	4400.1	907.4	550.98 R	0.00	414.27	0.00
0.00						
1.500	4584.7	945.2	571.63 R	0.00	429.80	0.00
0.00						
1.600	4400.1	907.4	550.98 R	0.00	414.27	0.00
0.00						
1.700	3846.1	794.0	482.47 R	0.00	362.76	0.00
0.00						
1.800	2922.9	604.9	370.40 R	0.00	278.50	0.00
0.00						
1.900	1636.6	340.3	209.58 R	0.00	157.58	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER  
Rating Live Load:Rating Type: SU4  
Rating Live Load:  
Span

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER  
Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	164.17	999.00	48.80	999.00	0.00	999.0 (2-Lane)
1.100	164.17	999.00	48.80	999.00	0.00	999.0 (1-Lane)
1.200	88.06	999.00	31.56	999.00	0.00	852.1 (2-Lane)
1.200	88.06	999.00	31.56	999.00	0.00	852.1 (1-Lane)
1.300	58.04	999.00	21.34	999.00	0.00	576.2 (2-Lane)
1.300	58.04	999.00	21.34	999.00	0.00	576.2 (1-Lane)
1.400	45.81	999.00	17.17	999.00	0.00	463.6 (2-Lane)
1.400	45.81	999.00	17.17	999.00	0.00	463.6 (1-Lane)
1.500	42.54	999.00	16.06	999.00	0.00	433.7 (2-Lane)
1.500	42.54	999.00	16.06	999.00	0.00	433.7 (1-Lane)
1.600	45.81	999.00	17.17	999.00	0.00	463.6 (2-Lane)
1.600	45.81	999.00	17.17	999.00	0.00	463.6 (1-Lane)
1.700	58.04	999.00	21.34	999.00	0.00	576.2 (2-Lane)
1.700	58.04	999.00	21.34	999.00	0.00	576.2 (1-Lane)

1.800	88.06	999.00	31.56	999.00	0.00	852.1 (2-Lane)
1.800	88.06	999.00	31.56	999.00	0.00	852.1 (1-Lane)
1.900	164.17	999.00	48.80	999.00	0.00	999.0 (2-Lane)
1.900	164.17	999.00	48.80	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00 0.00
0.00						
1.100	2045.8	425.3	321.33 R 0.00	241.60 0.00	321.33 R 0.00	241.60
0.00						
1.200	3653.6	756.1	567.08 R 0.00	426.38 0.00	567.08 R 0.00	426.38
0.00						
1.300	4807.7	992.4	739.71 R 0.00	556.17 0.00	739.71 R 0.00	556.17
0.00						
1.400	5500.1	1134.2	843.77 R 0.00	634.42 0.00	843.77 R 0.00	634.42
0.00						
1.500	5730.9	1181.5	872.27 R 0.00	655.84 0.00	872.27 R 0.00	655.84
0.00						
1.600	5500.1	1134.2	843.77 R 0.00	634.42 0.00	843.77 R 0.00	634.42
0.00						
1.700	4807.7	992.4	739.71 R 0.00	556.17 0.00	739.71 R 0.00	556.17
0.00						
1.800	3653.6	756.1	567.08 R 0.00	426.38 0.00	567.08 R 0.00	426.38
0.00						
1.900	2045.8	425.3	321.33 R 0.00	241.60 0.00	321.33 R 0.00	241.60
0.00						
2.000	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00
0.00						

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12565.9	-12565.9B	13420.3	13420.3	-18366.0	-18366.0
1.400	19220.4C	19220.4	-12565.9	-12565.9B	12586.1	12586.1	-19200.2	-19200.2
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12565.9	-12565.9B	12586.1	12586.1	-19200.2	-19200.2
1.700	19220.4C	19220.4	-12565.9	-12565.9B	13420.3	13420.3	-18366.0	-18366.0
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	41.86	999.00	41.86	999.00	0.00	999.0 (2-Lane)
1.100	41.86	999.00	41.86	999.00	0.00	999.0 (1-Lane)
1.200	26.12	999.00	26.12	999.00	0.00	809.6 (2-Lane)
1.200	26.12	999.00	26.12	999.00	0.00	809.6 (1-Lane)
1.300	18.14	999.00	18.14	999.00	0.00	562.4 (2-Lane)
1.300	18.14	999.00	18.14	999.00	0.00	562.4 (1-Lane)
1.400	14.92	999.00	14.92	999.00	0.00	462.4 (2-Lane)
1.400	14.92	999.00	14.92	999.00	0.00	462.4 (1-Lane)
1.500	14.11	999.00	14.11	999.00	0.00	437.4 (2-Lane)
1.500	14.11	999.00	14.11	999.00	0.00	437.4 (1-Lane)
1.600	14.92	999.00	14.92	999.00	0.00	462.4 (2-Lane)
1.600	14.92	999.00	14.92	999.00	0.00	462.4 (1-Lane)
1.700	18.14	999.00	18.14	999.00	0.00	562.4 (2-Lane)
1.700	18.14	999.00	18.14	999.00	0.00	562.4 (1-Lane)
1.800	26.12	999.00	26.12	999.00	0.00	809.6 (2-Lane)
1.800	26.12	999.00	26.12	999.00	0.00	809.6 (1-Lane)
1.900	41.86	999.00	41.86	999.00	0.00	999.0 (2-Lane)
1.900	41.86	999.00	41.86	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Lane	Live Load Lane
1.000 0.00	141.4	29.5	24.23	0.00	18.22	0.00
1.100 0.00	114.2	23.6	21.68	0.00	16.30	0.00
1.200 0.00	86.5	17.7	19.13	0.00	14.38	0.00
1.300 0.00	57.7	11.8	16.58	0.00	12.47	0.00
1.400 0.00	28.8	5.9	14.03	0.00	10.55	0.00
1.500 0.00	0.0	0.0	11.48	0.00	8.63	0.00
1.600 0.00	-28.8	-5.9	-14.03	0.00	-10.55	0.00
1.700 0.00	-57.7	-11.8	-16.58	0.00	-12.47	0.00
1.800 0.00	-86.5	-17.7	-19.13	0.00	-14.38	0.00
1.900 0.00	-114.2	-23.6	-21.68	0.00	-16.30	0.00
2.000 0.00	-141.4	-29.5	-24.23	0.00	-18.22	0.00

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance (-)	Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)

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2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU5

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	33.54	0.00	999.0 (2-Lane)
1.000	999.00	33.54	0.00	999.0 (1-Lane)
1.100	677.01	33.21	0.00	999.0 (2-Lane)
1.100	677.01	33.21	0.00	999.0 (1-Lane)
1.200	164.87	22.16	0.00	686.8 (2-Lane)
1.200	164.87	22.16	0.00	686.8 (1-Lane)
1.300	93.60	27.66	0.00	857.4 (2-Lane)
1.300	93.60	27.66	0.00	857.4 (1-Lane)
1.400	63.00	35.16	0.00	999.0 (2-Lane)
1.400	63.00	35.16	0.00	999.0 (1-Lane)
1.500	45.99	45.99	0.00	999.0 (2-Lane)
1.500	45.99	45.99	0.00	999.0 (1-Lane)
1.600	35.16	63.00	0.00	999.0 (2-Lane)
1.600	35.16	63.00	0.00	999.0 (1-Lane)
1.700	27.66	93.60	0.00	857.4 (2-Lane)
1.700	27.66	93.60	0.00	857.4 (1-Lane)
1.800	22.16	164.87	0.00	686.8 (2-Lane)
1.800	22.16	164.87	0.00	686.8 (1-Lane)
1.900	33.21	677.01	0.00	999.0 (2-Lane)
1.900	33.21	677.01	0.00	999.0 (1-Lane)
2.000	33.54	999.00	0.00	999.0 (2-Lane)
2.000	33.54	999.00	0.00	999.0 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPE  
Rating Live Load: SU5

Gamma	DC	DW	(2-Lane)	(1-Lane)
	1.00	1.00	LL 1.00	LL 1.00

Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
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Lane	Dead	Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.100	1636.6	340.3	238.02 R	0.00	178.96	0.00	238.02 R	0.00	178.96
0.00									
1.200	2922.9	604.9	420.06 R	0.00	315.84	0.00	420.06 R	0.00	315.84
0.00									
1.300	3846.1	794.0	547.93 R	0.00	411.98	0.00	547.93 R	0.00	411.98
0.00									
1.400	4400.1	907.4	625.02 R	0.00	469.94	0.00	625.02 R	0.00	469.94
0.00									
1.500	4584.7	945.2	646.13 R	0.00	485.81	0.00	646.13 R	0.00	485.81
0.00									
1.600	4400.1	907.4	625.02 R	0.00	469.94	0.00	625.02 R	0.00	469.94
0.00									
1.700	3846.1	794.0	547.93 R	0.00	411.98	0.00	547.93 R	0.00	411.98
0.00									
1.800	2922.9	604.9	420.06 R	0.00	315.84	0.00	420.06 R	0.00	315.84
0.00									
1.900	1636.6	340.3	238.02 R	0.00	178.96	0.00	238.02 R	0.00	178.96
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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#### SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER

Rating Live Load:

Rating Type: SU5

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive	Bending	Negative	Bending	Positive	Bending	Negative	Bending
	Top	Bott.	Top	Bott.	Top	Bott.	Top	Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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#### SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER

Rating Live Load: SU5

Service



Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	144.55	999.00	42.97	999.00	0.00	999.0 (2-Lane)
1.100	144.55	999.00	42.97	999.00	0.00	999.0 (1-Lane)
1.200	77.65	999.00	27.83	999.00	0.00	862.7 (2-Lane)
1.200	77.65	999.00	27.83	999.00	0.00	862.7 (1-Lane)
1.300	51.11	999.00	18.79	999.00	0.00	582.5 (2-Lane)
1.300	51.11	999.00	18.79	999.00	0.00	582.5 (1-Lane)
1.400	40.38	999.00	15.14	999.00	0.00	469.2 (2-Lane)
1.400	40.38	999.00	15.14	999.00	0.00	469.2 (1-Lane)
1.500	37.63	999.00	14.21	999.00	0.00	440.5 (2-Lane)
1.500	37.63	999.00	14.21	999.00	0.00	440.5 (1-Lane)
1.600	40.38	999.00	15.14	999.00	0.00	469.2 (2-Lane)
1.600	40.38	999.00	15.14	999.00	0.00	469.2 (1-Lane)
1.700	51.11	999.00	18.79	999.00	0.00	582.5 (2-Lane)
1.700	51.11	999.00	18.79	999.00	0.00	582.5 (1-Lane)
1.800	77.65	999.00	27.83	999.00	0.00	862.7 (2-Lane)
1.800	77.65	999.00	27.83	999.00	0.00	862.7 (1-Lane)
1.900	144.55	999.00	42.97	999.00	0.00	999.0 (2-Lane)
1.900	144.55	999.00	42.97	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.100	2045.8	425.3	353.52 R	0.00	265.80	0.00 R
0.00						
1.200	3653.6	756.1	631.31 R	0.00	474.67	0.00 R
0.00						
1.300	4807.7	992.4	825.99 R	0.00	621.04	0.00 R
0.00						
1.400	5500.1	1134.2	940.22 R	0.00	706.93	0.00 R
0.00						
1.500	5730.9	1181.5	976.07 R	0.00	733.88	0.00 R
0.00						
1.600	5500.1	1134.2	940.22 R	0.00	706.93	0.00 R
0.00						
1.700	4807.7	992.4	825.99 R	0.00	621.04	0.00 R

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0.00									
1.800	3653.6	756.1	631.31 R	0.00	474.67	0.00	631.31 R	0.00	474.67
0.00									
1.900	2045.8	425.3	353.52 R	0.00	265.80	0.00	353.52 R	0.00	265.80
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU6

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12565.3	-12565.3B	13420.3	13420.3	-18365.4	-18365.4
1.400	19220.4C	19220.4	-12565.3	-12565.3B	12586.1	12586.1	-19199.7	-19199.7
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12565.3	-12565.3B	12586.1	12586.1	-19199.7	-19199.7
1.700	19220.4C	19220.4	-12565.3	-12565.3B	13420.3	13420.3	-18365.4	-18365.4
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	38.05	999.00	38.05	999.00	0.00	999.0 (2-Lane)
1.100	38.05	999.00	38.05	999.00	0.00	999.0 (1-Lane)
1.200	23.46	999.00	23.46	999.00	0.00	815.2 (2-Lane)
1.200	23.46	999.00	23.46	999.00	0.00	815.2 (1-Lane)
1.300	16.25	999.00	16.25	999.00	0.00	564.6 (2-Lane)
1.300	16.25	999.00	16.25	999.00	0.00	564.6 (1-Lane)
1.400	13.39	999.00	13.39	999.00	0.00	465.2 (2-Lane)
1.400	13.39	999.00	13.39	999.00	0.00	465.2 (1-Lane)

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1.500	12.61	999.00	12.61	999.00	0.00	438.2 (2-Lane)
1.500	12.61	999.00	12.61	999.00	0.00	438.2 (1-Lane)
1.600	13.39	999.00	13.39	999.00	0.00	465.2 (2-Lane)
1.600	13.39	999.00	13.39	999.00	0.00	465.2 (1-Lane)
1.700	16.25	999.00	16.25	999.00	0.00	564.6 (2-Lane)
1.700	16.25	999.00	16.25	999.00	0.00	564.6 (1-Lane)
1.800	23.46	999.00	23.46	999.00	0.00	815.2 (2-Lane)
1.800	23.46	999.00	23.46	999.00	0.00	815.2 (1-Lane)
1.900	38.05	999.00	38.05	999.00	0.00	999.0 (2-Lane)
1.900	38.05	999.00	38.05	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	141.4	29.5	26.71	0.00	20.08	0.00	26.71	0.00	20.08
1.100 0.00	114.2	23.6	23.85	0.00	17.93	0.00	23.85	0.00	17.93
1.200 0.00	86.5	17.7	20.99	0.00	15.78	0.00	20.99	0.00	15.78
1.300 0.00	57.7	11.8	18.14	0.00	13.64	0.00	18.14	0.00	13.64
1.400 0.00	28.8	5.9	15.28	0.00	11.49	0.00	15.28	0.00	11.49
1.500 0.00	0.0	0.0	12.42	0.00	9.34	0.00	12.42	0.00	9.34
1.600 0.00	-28.8	-5.9	-15.28	0.00	-11.49	0.00	-15.28	0.00	-11.49
1.700 0.00	-57.7	-11.8	-18.14	0.00	-13.64	0.00	-18.14	0.00	-13.64
1.800 0.00	-86.5	-17.7	-20.99	0.00	-15.78	0.00	-20.99	0.00	-15.78
1.900 0.00	-114.2	-23.6	-23.85	0.00	-17.93	0.00	-23.85	0.00	-17.93
2.000 0.00	-141.4	-29.5	-26.71	0.00	-20.08	0.00	-26.71	0.00	-20.08

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER

Rating Live Load: SU6

Span	Shear Resistance vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER

Rating Live Load: SU6

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	30.42	0.00	999.0 (2-Lane)
1.000	999.00	30.42	0.00	999.0 (1-Lane)
1.100	774.28	30.18	0.00	999.0 (2-Lane)
1.100	774.28	30.18	0.00	999.0 (1-Lane)
1.200	164.30	20.19	0.00	701.6 (2-Lane)
1.200	164.30	20.19	0.00	701.6 (1-Lane)
1.300	89.11	25.28	0.00	878.7 (2-Lane)
1.300	89.11	25.28	0.00	878.7 (1-Lane)
1.400	58.85	32.29	0.00	999.0 (2-Lane)
1.400	58.85	32.29	0.00	999.0 (1-Lane)
1.500	42.51	42.51	0.00	999.0 (2-Lane)
1.500	42.51	42.51	0.00	999.0 (1-Lane)
1.600	32.29	58.85	0.00	999.0 (2-Lane)
1.600	32.29	58.85	0.00	999.0 (1-Lane)
1.700	25.28	89.11	0.00	878.7 (2-Lane)
1.700	25.28	89.11	0.00	878.7 (1-Lane)
1.800	20.19	164.30	0.00	701.6 (2-Lane)

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1.800	20.19	164.30	0.00	701.6 (1-Lane)
1.900	30.18	774.28	0.00	999.0 (2-Lane)
1.900	30.18	774.28	0.00	999.0 (1-Lane)
2.000	30.42	999.00	0.00	999.0 (2-Lane)
2.000	30.42	999.00	0.00	999.0 (1-Lane)

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# SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPE  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	1636.6	340.3	261.86 R	0.00	196.89	0.00
0.00						
1.200	2922.9	604.9	467.63 R	0.00	351.60	0.00
0.00						
1.300	3846.1	794.0	611.84 R	0.00	460.03	0.00
0.00						
1.400	4400.1	907.4	696.46 R	0.00	523.65	0.00
0.00						
1.500	4584.7	945.2	723.01 R	0.00	543.62	0.00
0.00						
1.600	4400.1	907.4	696.46 R	0.00	523.65	0.00
0.00						
1.700	3846.1	794.0	611.84 R	0.00	460.03	0.00
0.00						
1.800	2922.9	604.9	467.63 R	0.00	351.60	0.00
0.00						
1.900	1636.6	340.3	261.86 R	0.00	196.89	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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# SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU6  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
Member I. D. G01  
Rating Type: II-OPER  
Rating Live Load: SU6

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	131.39	999.00	39.06	999.00	0.00	999.0 (2-Lane)
1.100	131.39	999.00	39.06	999.00	0.00	999.0 (1-Lane)
1.200	69.75	999.00	25.00	999.00	0.00	868.7 (2-Lane)
1.200	69.75	999.00	25.00	999.00	0.00	868.7 (1-Lane)
1.300	45.77	999.00	16.83	999.00	0.00	584.8 (2-Lane)
1.300	45.77	999.00	16.83	999.00	0.00	584.8 (1-Lane)
1.400	36.24	999.00	13.58	999.00	0.00	472.0 (2-Lane)
1.400	36.24	999.00	13.58	999.00	0.00	472.0 (1-Lane)
1.500	33.63	999.00	12.70	999.00	0.00	441.3 (2-Lane)
1.500	33.63	999.00	12.70	999.00	0.00	441.3 (1-Lane)
1.600	36.24	999.00	13.58	999.00	0.00	472.0 (2-Lane)
1.600	36.24	999.00	13.58	999.00	0.00	472.0 (1-Lane)
1.700	45.77	999.00	16.83	999.00	0.00	584.8 (2-Lane)
1.700	45.77	999.00	16.83	999.00	0.00	584.8 (1-Lane)
1.800	69.75	999.00	25.00	999.00	0.00	868.7 (2-Lane)
1.800	69.75	999.00	25.00	999.00	0.00	868.7 (1-Lane)
1.900	131.39	999.00	39.06	999.00	0.00	999.0 (2-Lane)
1.900	131.39	999.00	39.06	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01  
 Rating Type: I-OPER  
 Rating Live Load: SU7

Gamma	DC		DW		(2-Lane)		(1-Lane)	
	1.25		1.25		LL 1.35		LL 1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								
1.100	2045.8	425.3	386.81 R	0.00	290.84	0.00	386.81 R	0.00
0.00								
1.200	3653.6	756.1	690.58 R	0.00	519.24	0.00	690.58 R	0.00
0.00								
1.300	4807.7	992.4	911.32 R	0.00	685.20	0.00	911.32 R	0.00
0.00								
1.400	5500.1	1134.2	1038.35 R	0.00	780.71	0.00	1038.35 R	0.00
0.00								
1.500	5730.9	1181.5	1079.68 R	0.00	811.79	0.00	1079.68 R	0.00
0.00								
1.600	5500.1	1134.2	1038.35 R	0.00	780.71	0.00	1038.35 R	0.00
0.00								
1.700	4807.7	992.4	911.32 R	0.00	685.20	0.00	911.32 R	0.00
0.00								
1.800	3653.6	756.1	690.58 R	0.00	519.24	0.00	690.58 R	0.00
0.00								
1.900	2045.8	425.3	386.81 R	0.00	290.84	0.00	386.81 R	0.00
0.00								
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								

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 STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01  
 Rating Type: I-OPER  
 Rating Live Load: SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12566.5	-12566.5B	13420.3	13420.3	-18366.6	-18366.6
1.400	19220.4C	19220.4	-12566.5	-12566.5B	12586.1	12586.1	-19200.8	-19200.8
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12566.5	-12566.5B	12586.1	12586.1	-19200.8	-19200.8
1.700	19220.4C	19220.4	-12566.5	-12566.5B	13420.3	13420.3	-18366.6	-18366.6
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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 MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D.

G01

Rating Type:

I-OPER

Rating Live Load:

SU7

## Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	34.77	999.00	34.77	999.00	0.00	999.0 (2-Lane)
1.100	34.77	999.00	34.77	999.00	0.00	999.0 (1-Lane)
1.200	21.45	999.00	21.45	999.00	0.00	831.1 (2-Lane)
1.200	21.45	999.00	21.45	999.00	0.00	831.1 (1-Lane)
1.300	14.73	999.00	14.73	999.00	0.00	570.6 (2-Lane)
1.300	14.73	999.00	14.73	999.00	0.00	570.6 (1-Lane)
1.400	12.12	999.00	12.12	999.00	0.00	469.7 (2-Lane)
1.400	12.12	999.00	12.12	999.00	0.00	469.7 (1-Lane)
1.500	11.40	999.00	11.40	999.00	0.00	441.7 (2-Lane)
1.500	11.40	999.00	11.40	999.00	0.00	441.7 (1-Lane)
1.600	12.12	999.00	12.12	999.00	0.00	469.7 (2-Lane)
1.600	12.12	999.00	12.12	999.00	0.00	469.7 (1-Lane)
1.700	14.73	999.00	14.73	999.00	0.00	570.6 (2-Lane)
1.700	14.73	999.00	14.73	999.00	0.00	570.6 (1-Lane)
1.800	21.45	999.00	21.45	999.00	0.00	831.1 (2-Lane)
1.800	21.45	999.00	21.45	999.00	0.00	831.1 (1-Lane)
1.900	34.77	999.00	34.77	999.00	0.00	999.0 (2-Lane)
1.900	34.77	999.00	34.77	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D.

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Member I. D.

G01

Rating Type:

I-OPER

Rating Live Load:

SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact		Live Load w/impact	Live Load	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Truck
1.000	141.4	29.5	29.28	0.00	22.02	0.00	29.28	0.00
0.00								
1.100	114.2	23.6	26.10	0.00	19.62	0.00	26.10	0.00
0.00								
1.200	86.5	17.7	22.91	0.00	17.23	0.00	22.91	0.00



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0.00									
1.300	57.7	11.8	19.72	0.00	14.83	0.00	19.72	0.00	14.83
0.00									
1.400	28.8	5.9	16.54	0.00	12.43	0.00	16.54	0.00	12.43
0.00									
1.500	0.0	0.0	13.35	0.00	10.04	0.00	13.35	0.00	10.04
0.00									
1.600	-28.8	-5.9	-16.54	0.00	-12.43	0.00	-16.54	0.00	-12.43
0.00									
1.700	-57.7	-11.8	-19.72	0.00	-14.83	0.00	-19.72	0.00	-14.83
0.00									
1.800	-86.5	-17.7	-22.91	0.00	-17.23	0.00	-22.91	0.00	-17.23
0.00									
1.900	-114.2	-23.6	-26.10	0.00	-19.62	0.00	-26.10	0.00	-19.62
0.00									
2.000	-141.4	-29.5	-29.28	0.00	-22.02	0.00	-29.28	0.00	-22.02
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-OPER  
Rating Live Load: SU7

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	27.75	0.00	999.0 (2-Lane)
1.000	999.00	27.75	0.00	999.0 (1-Lane)
1.100	904.35	27.58	0.00	999.0 (2-Lane)
1.100	904.35	27.58	0.00	999.0 (1-Lane)
1.200	166.74	18.50	0.00	716.8 (2-Lane)
1.200	166.74	18.50	0.00	716.8 (1-Lane)
1.300	85.62	23.25	0.00	900.9 (2-Lane)
1.300	85.62	23.25	0.00	900.9 (1-Lane)
1.400	55.37	29.83	0.00	999.0 (2-Lane)
1.400	55.37	29.83	0.00	999.0 (1-Lane)
1.500	39.55	39.55	0.00	999.0 (2-Lane)
1.500	39.55	39.55	0.00	999.0 (1-Lane)
1.600	29.83	55.37	0.00	999.0 (2-Lane)
1.600	29.83	55.37	0.00	999.0 (1-Lane)
1.700	23.25	85.62	0.00	900.9 (2-Lane)
1.700	23.25	85.62	0.00	900.9 (1-Lane)
1.800	18.50	166.74	0.00	716.8 (2-Lane)
1.800	18.50	166.74	0.00	716.8 (1-Lane)
1.900	27.58	904.35	0.00	999.0 (2-Lane)
1.900	27.58	904.35	0.00	999.0 (1-Lane)
2.000	27.75	999.00	0.00	999.0 (2-Lane)
2.000	27.75	999.00	0.00	999.0 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPE  
Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load w/o Truck
Lane			Lane	Lane	Lane	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	1636.6	340.3	286.53 R	0.00	215.43	0.00
0.00						
1.200	2922.9	604.9	511.54 R	0.00	384.62	0.00
0.00						
1.300	3846.1	794.0	675.05 R	0.00	507.56	0.00
0.00						
1.400	4400.1	907.4	769.15 R	0.00	578.31	0.00
0.00						
1.500	4584.7	945.2	799.76 R	0.00	601.32	0.00
0.00						
1.600	4400.1	907.4	769.15 R	0.00	578.31	0.00
0.00						
1.700	3846.1	794.0	675.05 R	0.00	507.56	0.00
0.00						

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1.800	2922.9	604.9	511.54 R	0.00	384.62	0.00	511.54 R	0.00	384.62
0.00									
1.900	1636.6	340.3	286.53 R	0.00	215.43	0.00	286.53 R	0.00	215.43
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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# SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER

Rating Live Load:

Rating Type: SU7

Rating Live Load:

Span	Service Resistance		Available Resistance for LL+I	
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	47.5	47.5
1.100	47.5	47.5	36.2	37.8
1.200	47.5	47.5	32.8	34.5
1.300	47.5	47.5	28.2	30.4
1.400	47.5	47.5	25.4	27.9
1.500	47.5	47.5	24.5	27.1
1.600	47.5	47.5	25.4	27.9
1.700	47.5	47.5	28.2	30.4
1.800	47.5	47.5	32.8	34.5
1.900	47.5	47.5	36.2	37.8
2.000	47.5	47.5	47.5	47.5

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# SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-OPER

Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	120.08	999.00	35.70	999.00	0.00	999.0 (2-Lane)
1.100	120.08	999.00	35.70	999.00	0.00	999.0 (1-Lane)
1.200	63.76	999.00	22.85	999.00	0.00	885.5 (2-Lane)
1.200	63.76	999.00	22.85	999.00	0.00	885.5 (1-Lane)
1.300	41.49	999.00	15.25	999.00	0.00	591.0 (2-Lane)
1.300	41.49	999.00	15.25	999.00	0.00	591.0 (1-Lane)
1.400	32.81	999.00	12.30	999.00	0.00	476.6 (2-Lane)

1.400	32.81	999.00	12.30	999.00	0.00	476.6 (1-Lane)
1.500	30.40	999.00	11.48	999.00	0.00	444.9 (2-Lane)
1.500	30.40	999.00	11.48	999.00	0.00	444.9 (1-Lane)
1.600	32.81	999.00	12.30	999.00	0.00	476.6 (2-Lane)
1.600	32.81	999.00	12.30	999.00	0.00	476.6 (1-Lane)
1.700	41.49	999.00	15.25	999.00	0.00	591.0 (2-Lane)
1.700	41.49	999.00	15.25	999.00	0.00	591.0 (1-Lane)
1.800	63.76	999.00	22.85	999.00	0.00	885.5 (2-Lane)
1.800	63.76	999.00	22.85	999.00	0.00	885.5 (1-Lane)
1.900	120.08	999.00	35.70	999.00	0.00	999.0 (2-Lane)
1.900	120.08	999.00	35.70	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.100	2045.8	425.3	280.37 R	210.80	280.37 R	210.80
1.200	3653.6	756.1	495.04 R	372.21	495.04 R	372.21
1.300	4807.7	992.4	644.02 R	484.22	644.02 R	484.22
1.400	5500.1	1134.2	732.22 R	550.54	732.22 R	550.54
1.500	5730.9	1181.5	758.01 R	569.93	758.01 R	569.93
1.600	5500.1	1134.2	732.22 R	550.54	732.22 R	550.54
1.700	4807.7	992.4	644.02 R	484.22	644.02 R	484.22
1.800	3653.6	756.1	495.04 R	372.21	495.04 R	372.21
1.900	2045.8	425.3	280.37 R	210.80	280.37 R	210.80
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: 3

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12564.9	-12564.9B	13420.3	13420.3	-18365.0	-18365.0
1.400	19220.4C	19220.4	-12564.9	-12564.9B	12586.1	12586.1	-19199.2	-19199.2
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12564.9	-12564.9B	12586.1	12586.1	-19199.2	-19199.2
1.700	19220.4C	19220.4	-12564.9	-12564.9B	13420.3	13420.3	-18365.0	-18365.0
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: 3

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	47.97	999.00	47.97	999.00	0.00	999.0 (2-Lane)
1.100	47.97	999.00	47.97	999.00	0.00	999.0 (1-Lane)
1.200	29.92	999.00	29.92	999.00	0.00	748.0 (2-Lane)
1.200	29.92	999.00	29.92	999.00	0.00	748.0 (1-Lane)
1.300	20.84	999.00	20.84	999.00	0.00	521.0 (2-Lane)
1.300	20.84	999.00	20.84	999.00	0.00	521.0 (1-Lane)
1.400	17.19	999.00	17.19	999.00	0.00	429.7 (2-Lane)
1.400	17.19	999.00	17.19	999.00	0.00	429.7 (1-Lane)
1.500	16.24	999.00	16.24	999.00	0.00	405.9 (2-Lane)
1.500	16.24	999.00	16.24	999.00	0.00	405.9 (1-Lane)
1.600	17.19	999.00	17.19	999.00	0.00	429.7 (2-Lane)
1.600	17.19	999.00	17.19	999.00	0.00	429.7 (1-Lane)
1.700	20.84	999.00	20.84	999.00	0.00	521.0 (2-Lane)
1.700	20.84	999.00	20.84	999.00	0.00	521.0 (1-Lane)
1.800	29.92	999.00	29.92	999.00	0.00	748.0 (2-Lane)
1.800	29.92	999.00	29.92	999.00	0.00	748.0 (1-Lane)
1.900	47.97	999.00	47.97	999.00	0.00	999.0 (2-Lane)
1.900	47.97	999.00	47.97	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Lane	Live Load Truck
1.000	141.4	29.5	21.13	15.89	21.13	15.89
1.100	114.2	23.6	18.92	14.22	18.92	14.22
1.200	86.5	17.7	16.70	12.56	16.70	12.56
1.300	57.7	11.8	14.48	10.89	14.48	10.89
1.400	28.8	5.9	12.27	9.22	12.27	9.22
1.500	0.0	0.0	10.05	7.56	10.05	7.56
1.600	-28.8	-5.9	-12.27	-9.22	-12.27	-9.22
1.700	-57.7	-11.8	-14.48	-10.89	-14.48	-10.89
1.800	-86.5	-17.7	-16.70	-12.56	-16.70	-12.56
1.900	-114.2	-23.6	-18.92	-14.22	-18.92	-14.22
2.000	-141.4	-29.5	-21.13	-15.89	-21.13	-15.89

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D.

G01

Rating Type:

I-LEGL

Rating Live Load:

3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	38.45	0.00	961.4 (2-Lane)
1.000	999.00	38.45	0.00	961.4 (1-Lane)
1.100	754.78	38.06	0.00	951.4 (2-Lane)
1.100	754.78	38.06	0.00	951.4 (1-Lane)
1.200	185.82	25.38	0.00	634.5 (2-Lane)
1.200	185.82	25.38	0.00	634.5 (1-Lane)
1.300	106.35	31.66	0.00	791.5 (2-Lane)
1.300	106.35	31.66	0.00	791.5 (1-Lane)
1.400	71.83	40.21	0.00	999.0 (2-Lane)
1.400	71.83	40.21	0.00	999.0 (1-Lane)
1.500	52.54	52.54	0.00	999.0 (2-Lane)
1.500	52.54	52.54	0.00	999.0 (1-Lane)
1.600	40.21	71.83	0.00	999.0 (2-Lane)
1.600	40.21	71.83	0.00	999.0 (1-Lane)
1.700	31.66	106.35	0.00	791.5 (2-Lane)
1.700	31.66	106.35	0.00	791.5 (1-Lane)
1.800	25.38	185.82	0.00	634.5 (2-Lane)
1.800	25.38	185.82	0.00	634.5 (1-Lane)
1.900	38.06	754.78	0.00	951.4 (2-Lane)
1.900	38.06	754.78	0.00	951.4 (1-Lane)
2.000	38.45	999.00	0.00	961.4 (2-Lane)
2.000	38.45	999.00	0.00	961.4 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D.

7777777\_20120905cy01\_01of01

Member I. D.

G01

Rating Type:

II-LEG

Rating Live Load:

3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.100	2045.8	425.3	250.44 R	188.30	250.44 R	188.30
1.200	3653.6	756.1	442.20 R	332.48	442.20 R	332.48
1.300	4807.7	992.4	575.28 R	432.54	575.28 R	432.54
1.400	5500.1	1134.2	654.07 R	491.78	654.07 R	491.78
1.500	5730.9	1181.5	677.11 R	509.10	677.11 R	509.10
1.600	5500.1	1134.2	654.07 R	491.78	654.07 R	491.78
1.700	4807.7	992.4	575.28 R	432.54	575.28 R	432.54

1.800	3653.6	756.1	7777777_20120905cy01_01of01_FlexuralRpt.txt	332.48	442.20 R	332.48
1.900	2045.8	425.3	442.20 R	188.30	250.44 R	188.30
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEGL

Rating Live Load:

Rating Type: 3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEGL

Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	137.38	999.00	40.84	999.00	0.00	999.0 (2-Lane)
1.100	137.38	999.00	40.84	999.00	0.00	999.0 (1-Lane)
1.200	73.76	999.00	26.43	999.00	0.00	660.9 (2-Lane)
1.200	73.76	999.00	26.43	999.00	0.00	660.9 (1-Lane)
1.300	48.68	999.00	17.90	999.00	0.00	447.5 (2-Lane)
1.300	48.68	999.00	17.90	999.00	0.00	447.5 (1-Lane)
1.400	38.59	999.00	14.46	999.00	0.00	361.6 (2-Lane)
1.400	38.59	999.00	14.46	999.00	0.00	361.6 (1-Lane)
1.500	35.91	999.00	13.56	999.00	0.00	339.0 (2-Lane)



1.500	35.91	999.00	13.56	999.00	0.00	339.0 (1-Lane)
1.600	38.59	999.00	14.46	999.00	0.00	361.6 (2-Lane)
1.600	38.59	999.00	14.46	999.00	0.00	361.6 (1-Lane)
1.700	48.68	999.00	17.90	999.00	0.00	447.5 (2-Lane)
1.700	48.68	999.00	17.90	999.00	0.00	447.5 (1-Lane)
1.800	73.76	999.00	26.43	999.00	0.00	660.9 (2-Lane)
1.800	73.76	999.00	26.43	999.00	0.00	660.9 (1-Lane)
1.900	137.38	999.00	40.84	999.00	0.00	999.0 (2-Lane)
1.900	137.38	999.00	40.84	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: 3S2

Gamma	DC	DW	(2-Lane)		(1-Lane)			
	1.25	1.25	LL	LL	LL	LL		
			1.45	1.45		1.45		
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o		
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00
1.100	2045.8	425.3	410.97 R		309.00	410.97 R		309.00
1.200	3653.6	756.1	716.83 R		538.97	716.83 R		538.97
1.300	4807.7	992.4	940.22 R		706.93	940.22 R		706.93
1.400	5500.1	1134.2	1066.37 R		801.79	1066.37 R		801.79
1.500	5730.9	1181.5	1095.62 R		823.78	1095.62 R		823.78
1.600	5500.1	1134.2	1066.37 R		801.79	1066.37 R		801.79
1.700	4807.7	992.4	940.22 R		706.93	940.22 R		706.93
1.800	3653.6	756.1	716.83 R		538.97	716.83 R		538.97
1.900	2045.8	425.3	410.97 R		309.00	410.97 R		309.00
2.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12561.5	-12561.5B	13420.3	13420.3	-18361.6	-18361.6

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

1.400	19220.4C	19220.4	-12561.5	-12561.5B	12586.1	12586.1	-19195.8	-19195.8
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12561.5	-12561.5B	12586.1	12586.1	-19195.8	-19195.8
1.700	19220.4C	19220.4	-12561.5	-12561.5B	13420.3	13420.3	-18361.6	-18361.6
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor fiber -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	32.73	999.00	32.73	999.00	0.00	999.0 (2-Lane)
1.100	32.73	999.00	32.73	999.00	0.00	999.0 (1-Lane)
1.200	20.66	999.00	20.66	999.00	0.00	826.5 (2-Lane)
1.200	20.66	999.00	20.66	999.00	0.00	826.5 (1-Lane)
1.300	14.27	999.00	14.27	999.00	0.00	570.9 (2-Lane)
1.300	14.27	999.00	14.27	999.00	0.00	570.9 (1-Lane)
1.400	11.80	999.00	11.80	999.00	0.00	472.1 (2-Lane)
1.400	11.80	999.00	11.80	999.00	0.00	472.1 (1-Lane)
1.500	11.23	999.00	11.23	999.00	0.00	449.4 (2-Lane)
1.500	11.23	999.00	11.23	999.00	0.00	449.4 (1-Lane)
1.600	11.80	999.00	11.80	999.00	0.00	472.1 (2-Lane)
1.600	11.80	999.00	11.80	999.00	0.00	472.1 (1-Lane)
1.700	14.27	999.00	14.27	999.00	0.00	570.9 (2-Lane)
1.700	14.27	999.00	14.27	999.00	0.00	570.9 (1-Lane)
1.800	20.66	999.00	20.66	999.00	0.00	826.5 (2-Lane)
1.800	20.66	999.00	20.66	999.00	0.00	826.5 (1-Lane)
1.900	32.73	999.00	32.73	999.00	0.00	999.0 (2-Lane)
1.900	32.73	999.00	32.73	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 161

SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: 3S2

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load
Lane		Dead Load	Truck	Lane	Truck	Truck
1.000	141.4	29.5	31.27		23.51	31.27
1.100	114.2	23.6	27.73		20.85	27.73
1.200	86.5	17.7	24.18		18.18	24.18
1.300	57.7	11.8	20.64		15.52	20.64
1.400	28.8	5.9	17.09		12.85	17.09
1.500	0.0	0.0	13.54		10.18	13.54
1.600	-28.8	-5.9	-17.09		-12.85	-17.09
1.700	-57.7	-11.8	-20.64		-15.52	-20.64
1.800	-86.5	-17.7	-24.18		-18.18	-24.18
1.900	-114.2	-23.6	-27.73		-20.85	-27.73
2.000	-141.4	-29.5	-31.27		-23.51	-31.27

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 162

STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL

Rating Live Load: 3S2

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	25.99	0.00	999.0 (2-Lane)
1.000	999.00	25.99	0.00	999.0 (1-Lane)
1.100	754.78	25.96	0.00	999.0 (2-Lane)
1.100	754.78	25.96	0.00	999.0 (1-Lane)
1.200	197.32	17.53	0.00	701.1 (2-Lane)
1.200	197.32	17.53	0.00	701.1 (1-Lane)
1.300	92.61	22.22	0.00	888.9 (2-Lane)
1.300	92.61	22.22	0.00	888.9 (1-Lane)
1.400	56.29	28.87	0.00	999.0 (2-Lane)
1.400	56.29	28.87	0.00	999.0 (1-Lane)
1.500	38.99	38.99	0.00	999.0 (2-Lane)
1.500	38.99	38.99	0.00	999.0 (1-Lane)
1.600	28.87	56.29	0.00	999.0 (2-Lane)
1.600	28.87	56.29	0.00	999.0 (1-Lane)
1.700	22.22	92.61	0.00	888.9 (2-Lane)
1.700	22.22	92.61	0.00	888.9 (1-Lane)
1.800	17.53	197.32	0.00	701.1 (2-Lane)
1.800	17.53	197.32	0.00	701.1 (1-Lane)
1.900	25.96	754.78	0.00	999.0 (2-Lane)
1.900	25.96	754.78	0.00	999.0 (1-Lane)
2.000	25.99	999.00	0.00	999.0 (2-Lane)
2.000	25.99	999.00	0.00	999.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEG

Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R		0.00	0.00 R
1.100	2045.8	425.3	367.11 R		276.02	367.11 R
1.200	3653.6	756.1	640.32 R		481.44	640.32 R
1.300	4807.7	992.4	839.86 R		631.48	839.86 R
1.400	5500.1	1134.2	952.56 R		716.21	952.56 R
1.500	5730.9	1181.5	978.68 R		735.85	978.68 R
1.600	5500.1	1134.2	952.56 R		716.21	952.56 R
1.700	4807.7	992.4	839.86 R		631.48	839.86 R
1.800	3653.6	756.1	640.32 R		481.44	640.32 R
1.900	2045.8	425.3	367.10 R		276.02	367.10 R
2.000	0.0	0.0	0.00 R		0.00	0.00 R

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEGL  
Rating Live Load:

Rating Type: 3S2  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEGL  
Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	93.72	999.00	27.86	999.00	0.00	999.0 (2-Lane)
1.100	93.72	999.00	27.86	999.00	0.00	999.0 (1-Lane)
1.200	50.94	999.00	18.26	999.00	0.00	730.3 (2-Lane)
1.200	50.94	999.00	18.26	999.00	0.00	730.3 (1-Lane)
1.300	33.35	999.00	12.26	999.00	0.00	490.4 (2-Lane)
1.300	33.35	999.00	12.26	999.00	0.00	490.4 (1-Lane)
1.400	26.50	999.00	9.93	999.00	0.00	397.3 (2-Lane)
1.400	26.50	999.00	9.93	999.00	0.00	397.3 (1-Lane)
1.500	24.84	999.00	9.38	999.00	0.00	375.3 (2-Lane)
1.500	24.84	999.00	9.38	999.00	0.00	375.3 (1-Lane)
1.600	26.50	999.00	9.93	999.00	0.00	397.3 (2-Lane)

1.600	26.50	999.00	9.93	999.00	0.00	397.3 (1-Lane)
1.700	33.35	999.00	12.26	999.00	0.00	490.4 (2-Lane)
1.700	33.35	999.00	12.26	999.00	0.00	490.4 (1-Lane)
1.800	50.94	999.00	18.26	999.00	0.00	730.3 (2-Lane)
1.800	50.94	999.00	18.26	999.00	0.00	730.3 (1-Lane)
1.900	93.72	999.00	27.86	999.00	0.00	999.0 (2-Lane)
1.900	93.72	999.00	27.86	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: 3-3

Gamma	DC	DW	(2-Lane)				(1-Lane)			
	1.25	1.25	LL		LL		LL			
			1.45		1.45		1.45			
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R		0.00	0.00 R				0.00
1.100	2045.8	425.3	394.56 R		296.66	394.56 R				296.66
1.200	3653.6	756.1	687.28 R		516.75	687.28 R				516.75
1.300	4807.7	992.4	884.74 R		665.22	884.74 R				665.22
1.400	5500.1	1134.2	1003.35 R		754.39	1003.35 R				754.39
1.500	5730.9	1181.5	1043.10 R		784.29	1043.10 R				784.29
1.600	5500.1	1134.2	1003.35 R		754.39	1003.35 R				754.39
1.700	4807.7	992.4	884.74 R		665.22	884.74 R				665.22
1.800	3653.6	756.1	687.28 R		516.75	687.28 R				516.75
1.900	2045.8	425.3	394.56 R		296.66	394.56 R				296.66
2.000	0.0	0.0	0.00 R		0.00	0.00 R				0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: 3-3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12562.1	-12562.1B	13420.3	13420.3	-18362.2	-18362.2
1.400	19220.4C	19220.4	-12562.1	-12562.1B	12586.1	12586.1	-19196.4	-19196.4
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12562.1	-12562.1B	12586.1	12586.1	-19196.4	-19196.4

1.700	19220.4C	19220.4	-12562.1	-12562.1B	13420.3	13420.3	-18362.2	-18362.2
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL

Rating Live Load: 3-3

## Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	Rating fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	34.09	999.00	34.09	999.00	0.00	999.0 (2-Lane)
1.100	34.09	999.00	34.09	999.00	0.00	999.0 (1-Lane)
1.200	21.55	999.00	21.55	999.00	0.00	862.0 (2-Lane)
1.200	21.55	999.00	21.55	999.00	0.00	862.0 (1-Lane)
1.300	15.17	999.00	15.17	999.00	0.00	606.7 (2-Lane)
1.300	15.17	999.00	15.17	999.00	0.00	606.7 (1-Lane)
1.400	12.54	999.00	12.54	999.00	0.00	501.8 (2-Lane)
1.400	12.54	999.00	12.54	999.00	0.00	501.8 (1-Lane)
1.500	11.80	999.00	11.80	999.00	0.00	472.0 (2-Lane)
1.500	11.80	999.00	11.80	999.00	0.00	472.0 (1-Lane)
1.600	12.54	999.00	12.54	999.00	0.00	501.8 (2-Lane)
1.600	12.54	999.00	12.54	999.00	0.00	501.8 (1-Lane)
1.700	15.17	999.00	15.17	999.00	0.00	606.7 (2-Lane)
1.700	15.17	999.00	15.17	999.00	0.00	606.7 (1-Lane)
1.800	21.55	999.00	21.55	999.00	0.00	862.0 (2-Lane)
1.800	21.55	999.00	21.55	999.00	0.00	862.0 (1-Lane)
1.900	34.09	999.00	34.09	999.00	0.00	999.0 (2-Lane)
1.900	34.09	999.00	34.09	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL

Rating Live Load: 3-3

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
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1.25

1.25

1.45

Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	Lane
1.000	141.4	29.5	30.17	22.68	30.17	22.68
1.100	114.2	23.6	26.62	20.02	26.62	20.02
1.200	86.5	17.7	23.07	17.35	23.07	17.35
1.300	57.7	11.8	19.53	14.68	19.53	14.68
1.400	28.8	5.9	15.98	12.02	15.98	12.02
1.500	0.0	0.0	12.44	9.35	12.44	9.35
1.600	-28.8	-5.9	-15.98	-12.02	-15.98	-12.02
1.700	-57.7	-11.8	-19.53	-14.68	-19.53	-14.68
1.800	-86.5	-17.7	-23.07	-17.35	-23.07	-17.35
1.900	-114.2	-23.6	-26.62	-20.02	-26.62	-20.02
2.000	-141.4	-29.5	-30.17	-22.68	-30.17	-22.68

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
Member I. D. G01  
Rating Type: I-LEGL  
Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 171  
STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
Member I. D. G01  
Rating Type: I-LEGL  
Rating Live Load: 3-3



## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	26.94	0.00	999.0 (2-Lane)
1.000	999.00	26.94	0.00	999.0 (1-Lane)
1.100	916.52	27.04	0.00	999.0 (2-Lane)
1.100	916.52	27.04	0.00	999.0 (1-Lane)
1.200	221.10	18.37	0.00	734.7 (2-Lane)
1.200	221.10	18.37	0.00	734.7 (1-Lane)
1.300	107.80	23.48	0.00	939.3 (2-Lane)
1.300	107.80	23.48	0.00	939.3 (1-Lane)
1.400	63.30	30.87	0.00	999.0 (2-Lane)
1.400	63.30	30.87	0.00	999.0 (1-Lane)
1.500	42.46	42.46	0.00	999.0 (2-Lane)
1.500	42.46	42.46	0.00	999.0 (1-Lane)
1.600	30.87	63.30	0.00	999.0 (2-Lane)
1.600	30.87	63.30	0.00	999.0 (1-Lane)
1.700	23.48	107.80	0.00	939.3 (2-Lane)
1.700	23.48	107.80	0.00	939.3 (1-Lane)
1.800	18.37	221.10	0.00	734.7 (2-Lane)
1.800	18.37	221.10	0.00	734.7 (1-Lane)
1.900	27.04	916.52	0.00	999.0 (2-Lane)
1.900	27.04	916.52	0.00	999.0 (1-Lane)
2.000	26.94	999.00	0.00	999.0 (2-Lane)
2.000	26.94	999.00	0.00	999.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEG  
Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.100	2045.8	425.3	352.44 R	264.99	352.44 R	264.99
1.200	3653.6	756.1	613.92 R	461.60	613.92 R	461.60
1.300	4807.7	992.4	790.31 R	594.22	790.31 R	594.22
1.400	5500.1	1134.2	896.25 R	673.88	896.25 R	673.88
1.500	5730.9	1181.5	931.76 R	700.58	931.76 R	700.58
1.600	5500.1	1134.2	896.25 R	673.88	896.25 R	673.88
1.700	4807.7	992.4	790.31 R	594.22	790.31 R	594.22
1.800	3653.6	756.1	613.92 R	461.60	613.92 R	461.60
1.900	2045.8	425.3	352.44 R	264.99	352.44 R	264.99
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 172

## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEGL  
Rating Live Load:Rating Type: 3-3  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEGL  
Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	97.62	999.00	29.02	999.00	0.00	999.0 (2-Lane)
1.100	97.62	999.00	29.02	999.00	0.00	999.0 (1-Lane)
1.200	53.13	999.00	19.04	999.00	0.00	761.6 (2-Lane)
1.200	53.13	999.00	19.04	999.00	0.00	761.6 (1-Lane)
1.300	35.44	999.00	13.03	999.00	0.00	521.1 (2-Lane)
1.300	35.44	999.00	13.03	999.00	0.00	521.1 (1-Lane)
1.400	28.16	999.00	10.56	999.00	0.00	422.2 (2-Lane)
1.400	28.16	999.00	10.56	999.00	0.00	422.2 (1-Lane)
1.500	26.10	999.00	9.85	999.00	0.00	394.2 (2-Lane)
1.500	26.10	999.00	9.85	999.00	0.00	394.2 (1-Lane)
1.600	28.16	999.00	10.56	999.00	0.00	422.2 (2-Lane)
1.600	28.16	999.00	10.56	999.00	0.00	422.2 (1-Lane)
1.700	35.44	999.00	13.03	999.00	0.00	521.1 (2-Lane)

1.700	35.44	999.00	13.03	999.00	0.00	521.1 (1-Lane)
1.800	53.13	999.00	19.04	999.00	0.00	761.6 (2-Lane)
1.800	53.13	999.00	19.04	999.00	0.00	761.6 (1-Lane)
1.900	97.62	999.00	29.02	999.00	0.00	999.0 (2-Lane)
1.900	97.62	999.00	29.02	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20			(1-Lane) LL 1.20		
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o		
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R		0.00	0.00 R	0.00	
1.100	2045.8	425.3	252.61 R		189.93	252.61 R	189.93	
1.200	3653.6	756.1	446.46 R		335.68	446.46 R	335.68	
1.300	4807.7	992.4	581.54 R		437.25	581.54 R	437.25	
1.400	5500.1	1134.2	664.11 R		499.33	664.11 R	499.33	
1.500	5730.9	1181.5	689.01 R		518.05	689.01 R	518.05	
1.600	5500.1	1134.2	664.11 R		499.33	664.11 R	499.33	
1.700	4807.7	992.4	581.54 R		437.25	581.54 R	437.25	
1.800	3653.6	756.1	446.46 R		335.68	446.46 R	335.68	
1.900	2045.8	425.3	252.61 R		189.93	252.61 R	189.93	
2.000	0.0	0.0	0.00 R		0.00	0.00 R	0.00	

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU4

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12567.1	-12567.1B	13420.3	13420.3	-18367.2	-18367.2
1.400	19220.4C	19220.4	-12567.1	-12567.1B	12586.1	12586.1	-19201.4	-19201.4
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12567.1	-12567.1B	12586.1	12586.1	-19201.4	-19201.4
1.700	19220.4C	19220.4	-12567.1	-12567.1B	13420.3	13420.3	-18367.2	-18367.2
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5

2.000 15921.1C 15921.1 -9908.4 -9908.4B 15921.1 15921.1 -9908.4 -9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU4

## Moment

Span	top +bend	Rating fiber -bend	Factor	bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)
1.100	53.24	999.00		53.24	999.00	0.00	999.0 (2-Lane)
1.100	53.24	999.00		53.24	999.00	0.00	999.0 (1-Lane)
1.200	33.17	999.00		33.17	999.00	0.00	895.7 (2-Lane)
1.200	33.17	999.00		33.17	999.00	0.00	895.7 (1-Lane)
1.300	23.08	999.00		23.08	999.00	0.00	623.1 (2-Lane)
1.300	23.08	999.00		23.08	999.00	0.00	623.1 (1-Lane)
1.400	18.95	999.00		18.95	999.00	0.00	511.7 (2-Lane)
1.400	18.95	999.00		18.95	999.00	0.00	511.7 (1-Lane)
1.500	17.86	999.00		17.86	999.00	0.00	482.3 (2-Lane)
1.500	17.86	999.00		17.86	999.00	0.00	482.3 (1-Lane)
1.600	18.95	999.00		18.95	999.00	0.00	511.7 (2-Lane)
1.600	18.95	999.00		18.95	999.00	0.00	511.7 (1-Lane)
1.700	23.08	999.00		23.08	999.00	0.00	623.1 (2-Lane)
1.700	23.08	999.00		23.08	999.00	0.00	623.1 (1-Lane)
1.800	33.17	999.00		33.17	999.00	0.00	895.7 (2-Lane)
1.800	33.17	999.00		33.17	999.00	0.00	895.7 (1-Lane)
1.900	53.24	999.00		53.24	999.00	0.00	999.0 (2-Lane)
1.900	53.24	999.00		53.24	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU4

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
	1.25	1.25	1.20	1.20

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Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load	Live Load w/impact	Live Load	
w/o impact									
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	141.4	29.5	19.03		14.31		19.03		14.31
1.100	114.2	23.6	17.04		12.81		17.04		12.81
1.200	86.5	17.7	15.06		11.32		15.06		11.32
1.300	57.7	11.8	13.08		9.83		13.08		9.83
1.400	28.8	5.9	11.10		8.34		11.10		8.34
1.500	0.0	0.0	9.11		6.85		9.11		6.85
1.600	-28.8	-5.9	-11.10		-8.34		-11.10		-8.34
1.700	-57.7	-11.8	-13.08		-9.83		-13.08		-9.83
1.800	-86.5	-17.7	-15.06		-11.32		-15.06		-11.32
1.900	-114.2	-23.6	-17.04		-12.81		-17.04		-12.81
2.000	-141.4	-29.5	-19.03		-14.31		-19.03		-14.31

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL

Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL

Rating Live Load: SU4

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	42.71	0.00	999.0 (2-Lane)
1.000	999.00	42.71	0.00	999.0 (1-Lane)
1.100	803.27	42.24	0.00	999.0 (2-Lane)
1.100	803.27	42.24	0.00	999.0 (1-Lane)
1.200	199.66	28.14	0.00	759.8 (2-Lane)
1.200	199.66	28.14	0.00	759.8 (1-Lane)
1.300	116.04	35.06	0.00	946.7 (2-Lane)
1.300	116.04	35.06	0.00	946.7 (1-Lane)
1.400	78.92	44.46	0.00	999.0 (2-Lane)
1.400	78.92	44.46	0.00	999.0 (1-Lane)
1.500	57.94	57.94	0.00	999.0 (2-Lane)
1.500	57.94	57.94	0.00	999.0 (1-Lane)
1.600	44.46	78.92	0.00	999.0 (2-Lane)
1.600	44.46	78.92	0.00	999.0 (1-Lane)
1.700	35.06	116.04	0.00	946.7 (2-Lane)
1.700	35.06	116.04	0.00	946.7 (1-Lane)
1.800	28.14	199.66	0.00	759.8 (2-Lane)
1.800	28.14	199.66	0.00	759.8 (1-Lane)
1.900	42.24	803.27	0.00	999.0 (2-Lane)
1.900	42.24	803.27	0.00	999.0 (1-Lane)
2.000	42.71	999.00	0.00	999.0 (2-Lane)
2.000	42.71	999.00	0.00	999.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEG  
Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.100	2045.8	425.3	272.45 R	204.85	272.45 R	204.85
1.200	3653.6	756.1	481.52 R	362.05	481.52 R	362.05
1.300	4807.7	992.4	627.21 R	471.59	627.21 R	471.59
1.400	5500.1	1134.2	716.27 R	538.55	716.27 R	538.55
1.500	5730.9	1181.5	743.12 R	558.74	743.12 R	558.74
1.600	5500.1	1134.2	716.27 R	538.55	716.27 R	538.55
1.700	4807.7	992.4	627.21 R	471.59	627.21 R	471.59
1.800	3653.6	756.1	481.52 R	362.05	481.52 R	362.05
1.900	2045.8	425.3	272.45 R	204.85	272.45 R	204.85
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEGL  
Rating Live Load:Rating Type: SU4  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEGL  
Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	126.28	999.00	37.54	999.00	0.00	999.0 (2-Lane)
1.100	126.28	999.00	37.54	999.00	0.00	999.0 (1-Lane)
1.200	67.74	999.00	24.28	999.00	0.00	655.5 (2-Lane)
1.200	67.74	999.00	24.28	999.00	0.00	655.5 (1-Lane)
1.300	44.65	999.00	16.42	999.00	0.00	443.2 (2-Lane)
1.300	44.65	999.00	16.42	999.00	0.00	443.2 (1-Lane)
1.400	35.24	999.00	13.21	999.00	0.00	356.6 (2-Lane)
1.400	35.24	999.00	13.21	999.00	0.00	356.6 (1-Lane)
1.500	32.72	999.00	12.35	999.00	0.00	333.6 (2-Lane)
1.500	32.72	999.00	12.35	999.00	0.00	333.6 (1-Lane)
1.600	35.24	999.00	13.21	999.00	0.00	356.6 (2-Lane)
1.600	35.24	999.00	13.21	999.00	0.00	356.6 (1-Lane)
1.700	44.65	999.00	16.42	999.00	0.00	443.2 (2-Lane)
1.700	44.65	999.00	16.42	999.00	0.00	443.2 (1-Lane)
1.800	67.74	999.00	24.28	999.00	0.00	655.5 (2-Lane)

1.800	67.74	999.00	24.28	999.00	0.00	655.5 (1-Lane)
1.900	126.28	999.00	37.54	999.00	0.00	999.0 (2-Lane)
1.900	126.28	999.00	37.54	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU5

Gamma			(2-Lane)				(1-Lane)	
	DC 1.25	DW 1.25	LL 1.20	LL 1.20	LL 1.20	LL 1.20	LL 1.20	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o		
	Lane	Dead Load	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00		
1.100	2045.8	425.3	286.89 R	215.71	286.89 R	215.71		
1.200	3653.6	756.1	506.31 R	380.69	506.31 R	380.69		
1.300	4807.7	992.4	660.44 R	496.57	660.44 R	496.57		
1.400	5500.1	1134.2	753.35 R	566.43	753.35 R	566.43		
1.500	5730.9	1181.5	778.80 R	585.56	778.80 R	585.56		
1.600	5500.1	1134.2	753.35 R	566.43	753.35 R	566.43		
1.700	4807.7	992.4	660.44 R	496.57	660.44 R	496.57		
1.800	3653.6	756.1	506.31 R	380.69	506.31 R	380.69		
1.900	2045.8	425.3	286.89 R	215.71	286.89 R	215.71		
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00		

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU5

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12566.1	-12566.1B	13420.3	13420.3	-18366.2	-18366.2
1.400	19220.4C	19220.4	-12566.1	-12566.1B	12586.1	12586.1	-19200.5	-19200.5
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12566.1	-12566.1B	12586.1	12586.1	-19200.5	-19200.5
1.700	19220.4C	19220.4	-12566.1	-12566.1B	13420.3	13420.3	-18366.2	-18366.2
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4



MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor fiber -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	46.88	999.00	46.88	999.00	0.00	999.0 (2-Lane)
1.100	46.88	999.00	46.88	999.00	0.00	999.0 (1-Lane)
1.200	29.25	999.00	29.25	999.00	0.00	906.8 (2-Lane)
1.200	29.25	999.00	29.25	999.00	0.00	906.8 (1-Lane)
1.300	20.32	999.00	20.32	999.00	0.00	629.9 (2-Lane)
1.300	20.32	999.00	20.32	999.00	0.00	629.9 (1-Lane)
1.400	16.71	999.00	16.71	999.00	0.00	517.9 (2-Lane)
1.400	16.71	999.00	16.71	999.00	0.00	517.9 (1-Lane)
1.500	15.80	999.00	15.80	999.00	0.00	489.9 (2-Lane)
1.500	15.80	999.00	15.80	999.00	0.00	489.9 (1-Lane)
1.600	16.71	999.00	16.71	999.00	0.00	517.9 (2-Lane)
1.600	16.71	999.00	16.71	999.00	0.00	517.9 (1-Lane)
1.700	20.32	999.00	20.32	999.00	0.00	629.9 (2-Lane)
1.700	20.32	999.00	20.32	999.00	0.00	629.9 (1-Lane)
1.800	29.25	999.00	29.25	999.00	0.00	906.8 (2-Lane)
1.800	29.25	999.00	29.25	999.00	0.00	906.8 (1-Lane)
1.900	46.88	999.00	46.88	999.00	0.00	999.0 (2-Lane)
1.900	46.88	999.00	46.88	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU5

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	LL	LL	LL
	1.25	1.25	1.20		1.20	
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load
w/o impact		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck

## Lane

1.000	141.4	29.5	21.63	16.27	21.63	16.27
1.100	114.2	23.6	19.36	14.55	19.36	14.55
1.200	86.5	17.7	17.08	12.84	17.08	12.84
1.300	57.7	11.8	14.80	11.13	14.80	11.13
1.400	28.8	5.9	12.53	9.42	12.53	9.42
1.500	0.0	0.0	10.25	7.71	10.25	7.71
1.600	-28.8	-5.9	-12.53	-9.42	-12.53	-9.42
1.700	-57.7	-11.8	-14.80	-11.13	-14.80	-11.13
1.800	-86.5	-17.7	-17.08	-12.84	-17.08	-12.84
1.900	-114.2	-23.6	-19.36	-14.55	-19.36	-14.55
2.000	-141.4	-29.5	-21.63	-16.27	-21.63	-16.27

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL

Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL

Rating Live Load: SU5

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
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1.000	999.00	37.57	0.00	999.0 (2-Lane)
1.000	999.00	37.57	0.00	999.0 (1-Lane)
1.100	758.26	37.19	0.00	999.0 (2-Lane)
1.100	758.26	37.19	0.00	999.0 (1-Lane)
1.200	184.66	24.82	0.00	769.3 (2-Lane)
1.200	184.66	24.82	0.00	769.3 (1-Lane)
1.300	104.83	30.98	0.00	960.3 (2-Lane)
1.300	104.83	30.98	0.00	960.3 (1-Lane)
1.400	70.56	39.38	0.00	999.0 (2-Lane)
1.400	70.56	39.38	0.00	999.0 (1-Lane)
1.500	51.51	51.51	0.00	999.0 (2-Lane)
1.500	51.51	51.51	0.00	999.0 (1-Lane)
1.600	39.38	70.56	0.00	999.0 (2-Lane)
1.600	39.38	70.56	0.00	999.0 (1-Lane)
1.700	30.98	104.83	0.00	960.3 (2-Lane)
1.700	30.98	104.83	0.00	960.3 (1-Lane)
1.800	24.82	184.66	0.00	769.3 (2-Lane)
1.800	24.82	184.66	0.00	769.3 (1-Lane)
1.900	37.19	758.26	0.00	999.0 (2-Lane)
1.900	37.19	758.26	0.00	999.0 (1-Lane)
2.000	37.57	999.00	0.00	999.0 (2-Lane)
2.000	37.57	999.00	0.00	999.0 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEG

Rating Live Load: SU5

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.100	2045.8	425.3	309.42 R	232.65	309.42 R	232.65
1.200	3653.6	756.1	546.08 R	410.59	546.08 R	410.59
1.300	4807.7	992.4	712.31 R	535.57	712.31 R	535.57
1.400	5500.1	1134.2	812.52 R	610.92	812.52 R	610.92
1.500	5730.9	1181.5	839.96 R	631.55	839.96 R	631.55
1.600	5500.1	1134.2	812.52 R	610.92	812.52 R	610.92
1.700	4807.7	992.4	712.31 R	535.57	712.31 R	535.57
1.800	3653.6	756.1	546.08 R	410.59	546.08 R	410.59
1.900	2045.8	425.3	309.42 R	232.65	309.42 R	232.65
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01  
 Rating Type: II-LEGL  
 Rating Live Load:

Rating Type: SU5  
 Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01  
 Rating Type: II-LEGL  
 Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	111.19	999.00	33.06	999.00	0.00	999.0 (2-Lane)
1.100	111.19	999.00	33.06	999.00	0.00	999.0 (1-Lane)
1.200	59.73	999.00	21.41	999.00	0.00	663.6 (2-Lane)
1.200	59.73	999.00	21.41	999.00	0.00	663.6 (1-Lane)
1.300	39.31	999.00	14.45	999.00	0.00	448.1 (2-Lane)
1.300	39.31	999.00	14.45	999.00	0.00	448.1 (1-Lane)
1.400	31.06	999.00	11.64	999.00	0.00	360.9 (2-Lane)
1.400	31.06	999.00	11.64	999.00	0.00	360.9 (1-Lane)
1.500	28.95	999.00	10.93	999.00	0.00	338.9 (2-Lane)
1.500	28.95	999.00	10.93	999.00	0.00	338.9 (1-Lane)
1.600	31.06	999.00	11.64	999.00	0.00	360.9 (2-Lane)
1.600	31.06	999.00	11.64	999.00	0.00	360.9 (1-Lane)
1.700	39.31	999.00	14.45	999.00	0.00	448.1 (2-Lane)
1.700	39.31	999.00	14.45	999.00	0.00	448.1 (1-Lane)
1.800	59.73	999.00	21.41	999.00	0.00	663.6 (2-Lane)
1.800	59.73	999.00	21.41	999.00	0.00	663.6 (1-Lane)
1.900	111.19	999.00	33.06	999.00	0.00	999.0 (2-Lane)

1.900	111.19	999.00	33.06	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R		0.00	0.00 R	0.00
1.100	2045.8	425.3	315.63 R		237.32	315.63 R	237.32
1.200	3653.6	756.1	563.66 R		423.80	563.66 R	423.80
1.300	4807.7	992.4	737.47 R		554.49	737.47 R	554.49
1.400	5500.1	1134.2	839.47 R		631.18	839.47 R	631.18
1.500	5730.9	1181.5	871.47 R		655.24	871.47 R	655.24
1.600	5500.1	1134.2	839.47 R		631.18	839.47 R	631.18
1.700	4807.7	992.4	737.47 R		554.49	737.47 R	554.49
1.800	3653.6	756.1	563.66 R		423.80	563.66 R	423.80
1.900	2045.8	425.3	315.63 R		237.32	315.63 R	237.32
2.000	0.0	0.0	0.00 R		0.00	0.00 R	0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU6

Span	Positive Top	Moment Resistance		Bending Bott.	Available Resistance for LL+I			
		Bending Bott.	Negative Top		Positive Bending Top	Bending Bott.	Negative Bending Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12565.7	-12565.7B	13420.3	13420.3	-18365.8	-18365.8
1.400	19220.4C	19220.4	-12565.7	-12565.7B	12586.1	12586.1	-19200.0	-19200.0
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12565.7	-12565.7B	12586.1	12586.1	-19200.0	-19200.0
1.700	19220.4C	19220.4	-12565.7	-12565.7B	13420.3	13420.3	-18365.8	-18365.8
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	42.61	999.00	42.61	999.00	0.00	999.0 (2-Lane)
1.100	42.61	999.00	42.61	999.00	0.00	999.0 (1-Lane)
1.200	26.28	999.00	26.28	999.00	0.00	913.1 (2-Lane)
1.200	26.28	999.00	26.28	999.00	0.00	913.1 (1-Lane)
1.300	18.20	999.00	18.20	999.00	0.00	632.4 (2-Lane)
1.300	18.20	999.00	18.20	999.00	0.00	632.4 (1-Lane)
1.400	14.99	999.00	14.99	999.00	0.00	521.0 (2-Lane)
1.400	14.99	999.00	14.99	999.00	0.00	521.0 (1-Lane)
1.500	14.12	999.00	14.12	999.00	0.00	490.8 (2-Lane)
1.500	14.12	999.00	14.12	999.00	0.00	490.8 (1-Lane)
1.600	14.99	999.00	14.99	999.00	0.00	521.0 (2-Lane)
1.600	14.99	999.00	14.99	999.00	0.00	521.0 (1-Lane)
1.700	18.20	999.00	18.20	999.00	0.00	632.4 (2-Lane)
1.700	18.20	999.00	18.20	999.00	0.00	632.4 (1-Lane)
1.800	26.28	999.00	26.28	999.00	0.00	913.1 (2-Lane)
1.800	26.28	999.00	26.28	999.00	0.00	913.1 (1-Lane)
1.900	42.61	999.00	42.61	999.00	0.00	999.0 (2-Lane)
1.900	42.61	999.00	42.61	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
w/o impact		Dead Load	Truck	Lane	Truck	Lane
Lane						
1.000	141.4	29.5	23.85		17.93	23.85
						17.93

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1.100	114.2	23.6	21.30	16.01	21.30	16.01
1.200	86.5	17.7	18.74	14.09	18.74	14.09
1.300	57.7	11.8	16.19	12.18	16.19	12.18
1.400	28.8	5.9	13.64	10.26	13.64	10.26
1.500	0.0	0.0	11.09	8.34	11.09	8.34
1.600	-28.8	-5.9	-13.64	-10.26	-13.64	-10.26
1.700	-57.7	-11.8	-16.19	-12.18	-16.19	-12.18
1.800	-86.5	-17.7	-18.74	-14.09	-18.74	-14.09
1.900	-114.2	-23.6	-21.30	-16.01	-21.30	-16.01
2.000	-141.4	-29.5	-23.85	-17.93	-23.85	-17.93

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL

Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL

Rating Live Load: SU6

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	34.08	0.00	999.0 (2-Lane)
1.000	999.00	34.08	0.00	999.0 (1-Lane)

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1.100	867.21	33.80	0.00	999.0 (2-Lane)
1.100	867.21	33.80	0.00	999.0 (1-Lane)
1.200	184.02	22.61	0.00	785.8 (2-Lane)
1.200	184.02	22.61	0.00	785.8 (1-Lane)
1.300	99.80	28.32	0.00	984.1 (2-Lane)
1.300	99.80	28.32	0.00	984.1 (1-Lane)
1.400	65.91	36.16	0.00	999.0 (2-Lane)
1.400	65.91	36.16	0.00	999.0 (1-Lane)
1.500	47.62	47.62	0.00	999.0 (2-Lane)
1.500	47.62	47.62	0.00	999.0 (1-Lane)
1.600	36.16	65.91	0.00	999.0 (2-Lane)
1.600	36.16	65.91	0.00	999.0 (1-Lane)
1.700	28.32	99.80	0.00	984.1 (2-Lane)
1.700	28.32	99.80	0.00	984.1 (1-Lane)
1.800	22.61	184.02	0.00	785.8 (2-Lane)
1.800	22.61	184.02	0.00	785.8 (1-Lane)
1.900	33.80	867.21	0.00	999.0 (2-Lane)
1.900	33.80	867.21	0.00	999.0 (1-Lane)
2.000	34.08	999.00	0.00	999.0 (2-Lane)
2.000	34.08	999.00	0.00	999.0 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEG  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.100	2045.8	425.3	340.42 R	255.96	340.42 R	255.96
1.200	3653.6	756.1	607.92 R	457.09	607.92 R	457.09
1.300	4807.7	992.4	795.39 R	598.04	795.39 R	598.04
1.400	5500.1	1134.2	905.40 R	680.75	905.40 R	680.75
1.500	5730.9	1181.5	939.92 R	706.70	939.92 R	706.70
1.600	5500.1	1134.2	905.40 R	680.75	905.40 R	680.75
1.700	4807.7	992.4	795.39 R	598.04	795.39 R	598.04
1.800	3653.6	756.1	607.92 R	457.09	607.92 R	457.09
1.900	2045.8	425.3	340.42 R	255.96	340.42 R	255.96
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01



Rating Type: II-LEGL  
Rating Live Load:

Rating Type: SU6  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEGL  
Rating Live Load: SU6

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor fiber -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	101.07	999.00	30.05	999.00	0.00	999.0 (2-Lane)
1.100	101.07	999.00	30.05	999.00	0.00	999.0 (1-Lane)
1.200	53.65	999.00	19.23	999.00	0.00	668.2 (2-Lane)
1.200	53.65	999.00	19.23	999.00	0.00	668.2 (1-Lane)
1.300	35.21	999.00	12.94	999.00	0.00	449.8 (2-Lane)
1.300	35.21	999.00	12.94	999.00	0.00	449.8 (1-Lane)
1.400	27.88	999.00	10.45	999.00	0.00	363.1 (2-Lane)
1.400	27.88	999.00	10.45	999.00	0.00	363.1 (1-Lane)
1.500	25.87	999.00	9.77	999.00	0.00	339.5 (2-Lane)
1.500	25.87	999.00	9.77	999.00	0.00	339.5 (1-Lane)
1.600	27.88	999.00	10.45	999.00	0.00	363.1 (2-Lane)
1.600	27.88	999.00	10.45	999.00	0.00	363.1 (1-Lane)
1.700	35.21	999.00	12.94	999.00	0.00	449.8 (2-Lane)
1.700	35.21	999.00	12.94	999.00	0.00	449.8 (1-Lane)
1.800	53.65	999.00	19.23	999.00	0.00	668.2 (2-Lane)
1.800	53.65	999.00	19.23	999.00	0.00	668.2 (1-Lane)
1.900	101.07	999.00	30.05	999.00	0.00	999.0 (2-Lane)
1.900	101.07	999.00	30.05	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)

2.000 999.00 999.00 999.00 999.00 0.00 999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
		Dead Load	Truck	Lane	Truck	Lane
Lane						
1.000	0.0	0.0	0.00 R		0.00	0.00 R
1.100	2045.8	425.3	345.36 R		259.67	345.36 R
1.200	3653.6	756.1	616.58 R		463.59	616.58 R
1.300	4807.7	992.4	813.66 R		611.77	813.66 R
1.400	5500.1	1134.2	927.08 R		697.05	927.08 R
1.500	5730.9	1181.5	963.98 R		724.80	963.98 R
1.600	5500.1	1134.2	927.08 R		697.05	927.08 R
1.700	4807.7	992.4	813.66 R		611.77	813.66 R
1.800	3653.6	756.1	616.58 R		463.59	616.58 R
1.900	2045.8	425.3	345.36 R		259.67	345.36 R
2.000	0.0	0.0	0.00 R		0.00	0.00 R

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-11559.2	-11559.2B	14810.7	14810.7	-15968.9	-15968.9
1.300	19220.4C	19220.4	-12566.7	-12566.7B	13420.3	13420.3	-18366.8	-18366.8
1.400	19220.4C	19220.4	-12566.7	-12566.7B	12586.1	12586.1	-19201.0	-19201.0
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12566.7	-12566.7B	12586.1	12586.1	-19201.0	-19201.0
1.700	19220.4C	19220.4	-12566.7	-12566.7B	13420.3	13420.3	-18366.8	-18366.8
1.800	19220.4C	19220.4	-11559.2	-11559.2B	14810.7	14810.7	-15968.9	-15968.9
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01  
 Rating Type: I-LEGL  
 Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	38.94	999.00	38.94	999.00	0.00	999.0 (2-Lane)
1.100	38.94	999.00	38.94	999.00	0.00	999.0 (1-Lane)
1.200	24.02	999.00	24.02	999.00	0.00	930.8 (2-Lane)
1.200	24.02	999.00	24.02	999.00	0.00	930.8 (1-Lane)
1.300	16.49	999.00	16.49	999.00	0.00	639.1 (2-Lane)
1.300	16.49	999.00	16.49	999.00	0.00	639.1 (1-Lane)
1.400	13.58	999.00	13.58	999.00	0.00	526.1 (2-Lane)
1.400	13.58	999.00	13.58	999.00	0.00	526.1 (1-Lane)
1.500	12.77	999.00	12.77	999.00	0.00	494.8 (2-Lane)
1.500	12.77	999.00	12.77	999.00	0.00	494.8 (1-Lane)
1.600	13.58	999.00	13.58	999.00	0.00	526.1 (2-Lane)
1.600	13.58	999.00	13.58	999.00	0.00	526.1 (1-Lane)
1.700	16.49	999.00	16.49	999.00	0.00	639.1 (2-Lane)
1.700	16.49	999.00	16.49	999.00	0.00	639.1 (1-Lane)
1.800	24.02	999.00	24.02	999.00	0.00	930.8 (2-Lane)
1.800	24.02	999.00	24.02	999.00	0.00	930.8 (1-Lane)
1.900	38.94	999.00	38.94	999.00	0.00	999.0 (2-Lane)
1.900	38.94	999.00	38.94	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
 Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
w/o impact		Dead Load	Truck	Lane	Truck	Lane
Lane						
1.000	141.4	29.5	26.15		19.66	26.15
1.100	114.2	23.6	23.30		17.52	23.30
1.200	86.5	17.7	20.46		15.38	20.46
1.300	57.7	11.8	17.61		13.24	17.61

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1.400	28.8	5.9	14.77	11.10	14.77	11.10
1.500	0.0	0.0	11.92	8.96	11.92	8.96
1.600	-28.8	-5.9	-14.77	-11.10	-14.77	-11.10
1.700	-57.7	-11.8	-17.61	-13.24	-17.61	-13.24
1.800	-86.5	-17.7	-20.46	-15.38	-20.46	-15.38
1.900	-114.2	-23.6	-23.30	-17.52	-23.30	-17.52
2.000	-141.4	-29.5	-26.15	-19.66	-26.15	-19.66

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: I-LEGL  
Rating Live Load: SU7

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	31.08	0.00	999.0 (2-Lane)
1.000	999.00	31.08	0.00	999.0 (1-Lane)
1.100	999.00	30.89	0.00	999.0 (2-Lane)
1.100	999.00	30.89	0.00	999.0 (1-Lane)

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1.200	186.75	20.72	0.00	802.9 (2-Lane)
1.200	186.75	20.72	0.00	802.9 (1-Lane)
1.300	95.90	26.04	0.00	999.0 (2-Lane)
1.300	95.90	26.04	0.00	999.0 (1-Lane)
1.400	62.01	33.41	0.00	999.0 (2-Lane)
1.400	62.01	33.41	0.00	999.0 (1-Lane)
1.500	44.30	44.30	0.00	999.0 (2-Lane)
1.500	44.30	44.30	0.00	999.0 (1-Lane)
1.600	33.41	62.01	0.00	999.0 (2-Lane)
1.600	33.41	62.01	0.00	999.0 (1-Lane)
1.700	26.04	95.90	0.00	999.0 (2-Lane)
1.700	26.04	95.90	0.00	999.0 (1-Lane)
1.800	20.72	186.75	0.00	802.9 (2-Lane)
1.800	20.72	186.75	0.00	802.9 (1-Lane)
1.900	30.89	999.00	0.00	999.0 (2-Lane)
1.900	30.89	999.00	0.00	999.0 (1-Lane)
2.000	31.08	999.00	0.00	999.0 (2-Lane)
2.000	31.08	999.00	0.00	999.0 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEG  
Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.100	2045.8	425.3	372.49 R	280.06	372.49 R	280.06
1.200	3653.6	756.1	665.01 R	500.00	665.01 R	500.00
1.300	4807.7	992.4	877.56 R	659.82	877.56 R	659.82
1.400	5500.1	1134.2	999.89 R	751.80	999.89 R	751.80
1.500	5730.9	1181.5	1039.69 R	781.72	1039.69 R	781.72
1.600	5500.1	1134.2	999.89 R	751.80	999.89 R	751.80
1.700	4807.7	992.4	877.56 R	659.82	877.56 R	659.82
1.800	3653.6	756.1	665.01 R	500.00	665.01 R	500.00
1.900	2045.8	425.3	372.48 R	280.06	372.48 R	280.06
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEGL  
Rating Live Load:

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Rating Type: SU7

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G01

Rating Type: II-LEGL

Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	92.37	999.00	27.46	999.00	0.00	999.0 (2-Lane)
1.100	92.37	999.00	27.46	999.00	0.00	999.0 (1-Lane)
1.200	49.05	999.00	17.58	999.00	0.00	681.2 (2-Lane)
1.200	49.05	999.00	17.58	999.00	0.00	681.2 (1-Lane)
1.300	31.91	999.00	11.73	999.00	0.00	454.6 (2-Lane)
1.300	31.91	999.00	11.73	999.00	0.00	454.6 (1-Lane)
1.400	25.24	999.00	9.46	999.00	0.00	366.6 (2-Lane)
1.400	25.24	999.00	9.46	999.00	0.00	366.6 (1-Lane)
1.500	23.39	999.00	8.83	999.00	0.00	342.2 (2-Lane)
1.500	23.39	999.00	8.83	999.00	0.00	342.2 (1-Lane)
1.600	25.24	999.00	9.46	999.00	0.00	366.6 (2-Lane)
1.600	25.24	999.00	9.46	999.00	0.00	366.6 (1-Lane)
1.700	31.91	999.00	11.73	999.00	0.00	454.6 (2-Lane)
1.700	31.91	999.00	11.73	999.00	0.00	454.6 (1-Lane)
1.800	49.05	999.00	17.58	999.00	0.00	681.2 (2-Lane)
1.800	49.05	999.00	17.58	999.00	0.00	681.2 (1-Lane)
1.900	92.37	999.00	27.46	999.00	0.00	999.0 (2-Lane)
1.900	92.37	999.00	27.46	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## BRIDGE / MEMBER DATA

Bridge ID 7777777\_20120905cy01\_01of01

NBI ID 7777-777

Feature Intersected Road

Material of Construction CSC  
 Year of Construction 2012  
 Roadway width 0.000  
 Number of Spans 1

Live Load Distribution Factor 1.67

Condition Factor: 1.000  
 System Factor: 1.000  
 ADTT: 300

Shear Live Load Dist. Factor 1.911

## LRFD LLDF Moment

	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
1-lane DF	0.444	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
2-lane DF	0.669	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

## LRFD LLDF Shear

	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
1-lane DF	0.786	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
2-lane DF	0.969	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Comments:

Member ID G02 01-IG002  
 Symmetry:

Span Length: Span 1 160.100 Span 2 0.000 Span 3 0.000 Span 4 0.000 Span 5 0.000

Range Length -- Non-Composite:

Span No.	Range No.	Range Length	Section Left	Section Right	Section Variation	Hinge No. 1	Location No. 2
1	1	30.000	1	0		0.0	0.0
1	2	100.100	2	0		0.0	0.0
1	3	30.000	1	0		0.0	0.0

Range Length -- Composite:

Span No. Range No. Range Length Composite Code

1 1 160.100 C

Superimposed Dead Load:

Span Load Dist. from Distributed Load (lbs/ft) Concentrated  
 No. Type Left Supp. Left Right Length Load (kips)

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1	W	0.000	295.0	295.0	160.100	0.0
1	Z	0.000	127.0	127.0	160.100	0.0

NOTE: All distances are shown in decimal feet, moments are shown in foot-kips, and shears are shown in kips. Section and section properties are shown as: in., in.\*\*2, in.\*\*3, and in.\*\*4.

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#### SECTION DATA

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Span	Height (in.)	Web Depth (in.)	Web Thk. (in.)	Effective width (in.)	Slab Thk. (in.)	Fy (ksi)
1.000	68.58	66.00	0.63	110.3	9.0	50.
1.010	68.58	66.00	0.63	110.3	9.0	50.
1.100	68.58	66.00	0.63	110.3	9.0	50.
1.200	69.74	66.00	0.63	110.3	9.0	50.
1.300	69.74	66.00	0.63	110.3	9.0	50.
1.400	69.74	66.00	0.63	110.3	9.0	50.
1.500	69.74	66.00	0.63	110.3	9.0	50.
1.600	69.74	66.00	0.63	110.3	9.0	50.
1.700	69.74	66.00	0.63	110.3	9.0	50.
1.800	69.74	66.00	0.63	110.3	9.0	50.
1.900	68.58	66.00	0.63	110.3	9.0	50.
2.000	68.58	66.00	0.63	110.3	9.0	50.

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#### SECTION STRENGTH

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Span	Section Area		Neutral Axis		Moment of Inertia		Section Modulus			
	Gross	Net	Top	Bott.	+Bend	-Bend	+Bend Top	Bott.	-Bend Top	Bott.
1.000	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.010	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.100	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.200	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.300	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.400	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.500	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.600	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.700	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.800	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.900	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
2.000	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0

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#### SECTION STRENGTH (N=N)

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Span	Section Area		Neutral Axis		Moment of Inertia		Section Modulus			
	Gross	Net	Top	Bott.	+Bend	-Bend	+Bend Top	Bott.	-Bend Top	Bott.
1.000	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
1.010	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0



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1.100	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
1.200	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.300	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.400	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.500	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.600	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.700	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.800	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.900	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
2.000	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0

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SECTION STRENGTH (N=3N)

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Span	Section Gross	Area Net	Neutral Top	Axis Bott.	Moment +Bend	of Inertia -Bend	Section Modulus			
							+Bend Top	Bott.	-Bend Top	Bott.
1.000	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
1.010	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
1.100	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
1.200	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.300	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.400	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.500	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.600	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.700	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.800	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.900	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
2.000	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 210

MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	262.30 R	0.00	220.80	0.00
0.00						
1.100	2417.7	425.3	2375.02 R	0.00	2000.16	0.00
0.00						
1.200	4314.7	756.1	4199.00 R	0.00	3538.36	0.00
0.00						
1.300	5675.4	992.4	5471.94 R	0.00	4614.60	0.00
0.00						
1.400	6491.9	1134.2	6228.74 R	0.00	5255.09	0.00
0.00						
1.500	6764.0	1181.5	6451.94 R	0.00	5446.74	0.00
0.00						
1.600	6491.9	1134.2	6228.74 R	0.00	5255.09	0.00
0.00						

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1.700	5675.4	992.4	5471.94 R	0.00	4614.60	0.00	3631.60 R	0.00	3062.60
0.00									
1.800	4314.7	756.1	4199.00 R	0.00	3538.36	0.00	2786.78 R	0.00	2348.33
0.00									
1.900	2417.7	425.3	2375.01 R	0.00	2000.16	0.00	1576.24 R	0.00	1327.46
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: HL93

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.4	-12222.4B	11797.6	11797.6	-20167.9	-20167.9
1.600	19743.0C	19743.0	-11839.3	-11839.3B	12117.0	12117.0	-19465.4	-19465.4
1.700	19743.0C	19743.0	-11839.3	-11839.3B	13075.2	13075.2	-18507.2	-18507.2
1.800	19743.0C	19743.0	-13020.4	-13020.4B	14672.1	14672.1	-18091.3	-18091.3
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: HL93

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	61.46	999.00	61.46	999.00	0.00	999.0 (2-Lane)
1.010	92.61	999.00	92.61	999.00	0.00	999.0 (1-Lane)
1.100	5.71	999.00	5.71	999.00	0.00	205.6 (2-Lane)
1.100	8.61	999.00	8.61	999.00	0.00	309.8 (1-Lane)
1.200	3.49	999.00	3.49	999.00	0.00	125.8 (2-Lane)
1.200	5.26	999.00	5.26	999.00	0.00	189.5 (1-Lane)

1.300	2.39	999.00	2.39	999.00	0.00	86.0 (2-Lane)
1.300	3.60	999.00	3.60	999.00	0.00	129.6 (1-Lane)
1.400	1.95	999.00	1.95	999.00	0.00	70.0 (2-Lane)
1.400	2.93	999.00	2.93	999.00	0.00	105.5 (1-Lane)
1.500	1.83	999.00	1.83	999.00	0.00	65.8 (2-Lane)
1.500	2.76	999.00	2.76	999.00	0.00	99.2 (1-Lane)
1.600	1.95	999.00	1.95	999.00	0.00	70.0 (2-Lane)
1.600	2.93	999.00	2.93	999.00	0.00	105.5 (1-Lane)
1.700	2.39	999.00	2.39	999.00	0.00	86.0 (2-Lane)
1.700	3.60	999.00	3.60	999.00	0.00	129.6 (1-Lane)
1.800	3.49	999.00	3.49	999.00	0.00	125.8 (2-Lane)
1.800	5.26	999.00	5.26	999.00	0.00	189.5 (1-Lane)
1.900	5.71	999.00	5.71	999.00	0.00	205.6 (2-Lane)
1.900	8.61	999.00	8.61	999.00	0.00	309.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	239.79	0.00	201.85	0.00
0.00						
1.010	164.0	28.9	236.44	0.00	198.90	0.00
0.00						
1.100	134.8	23.6	207.05	0.00	173.14	0.00
0.00						
1.200	102.0	17.7	176.04	0.00	146.16	0.00
0.00						
1.300	68.0	11.8	146.77	0.00	120.92	0.00
0.00						
1.400	34.0	5.9	119.24	0.00	97.41	0.00
0.00						
1.500	0.0	0.0	93.44	0.00	75.65	0.00
0.00						
1.600	-34.0	-5.9	-119.24	0.00	-97.41	0.00
0.00						
1.700	-68.0	-11.8	-146.77	0.00	-120.92	0.00
0.00						
1.800	-102.0	-17.7	-176.04	0.00	-146.16	0.00
0.00						
1.900	-134.8	-23.6	-207.05	0.00	-173.14	0.00
0.00						
2.000	-167.2	-29.5	-239.79	0.00	-201.85	0.00
0.00						

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: HL93

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: HL93

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	3.28	0.00	118.1 (2-Lane)
1.000	999.00	4.05	0.00	145.6 (1-Lane)
1.010	999.00	3.34	0.00	120.4 (2-Lane)
1.010	999.00	4.12	0.00	148.4 (1-Lane)
1.100	102.96	3.38	0.00	121.6 (2-Lane)
1.100	126.94	4.16	0.00	149.9 (1-Lane)
1.200	24.46	2.32	0.00	83.5 (2-Lane)
1.200	30.15	2.86	0.00	103.0 (1-Lane)
1.300	12.91	3.05	0.00	109.9 (2-Lane)
1.300	15.92	3.77	0.00	135.5 (1-Lane)
1.400	8.19	4.09	0.00	147.4 (2-Lane)

1.400	10.09	5.05	0.00	181.7 (1-Lane)
1.500	5.65	5.65	0.00	203.4 (2-Lane)
1.500	6.97	6.97	0.00	250.8 (1-Lane)
1.600	4.09	8.19	0.00	147.4 (2-Lane)
1.600	5.05	10.09	0.00	181.7 (1-Lane)
1.700	3.05	12.91	0.00	109.9 (2-Lane)
1.700	3.77	15.92	0.00	135.5 (1-Lane)
1.800	2.32	24.46	0.00	83.5 (2-Lane)
1.800	2.86	30.15	0.00	103.0 (1-Lane)
1.900	3.38	94.63	0.00	121.6 (2-Lane)
1.900	4.16	116.67	0.00	149.9 (1-Lane)
2.000	3.28	999.00	0.00	118.1 (2-Lane)
2.000	4.05	999.00	0.00	145.6 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load: HL93

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30					
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	194.85 R	0.00	164.03	0.00	129.32 R	0.00	108.86	
0.00										
1.100	1934.1	340.3	1764.30 R	0.00	1485.83	0.00	1170.92 R	0.00	986.11	
0.00										
1.200	3451.8	604.9	3119.25 R	0.00	2628.50	0.00	2070.18 R	0.00	1744.47	
0.00										
1.300	4540.4	794.0	4064.87 R	0.00	3427.99	0.00	2697.76 R	0.00	2275.08	
0.00										
1.400	5193.5	907.4	4627.06 R	0.00	3903.78	0.00	3070.88 R	0.00	2590.85	
0.00										
1.500	5411.2	945.2	4792.87 R	0.00	4046.15	0.00	3180.92 R	0.00	2685.34	
0.00										
1.600	5193.5	907.4	4627.06 R	0.00	3903.78	0.00	3070.88 R	0.00	2590.85	
0.00										
1.700	4540.4	794.0	4064.87 R	0.00	3427.98	0.00	2697.76 R	0.00	2275.08	
0.00										
1.800	3451.8	604.9	3119.25 R	0.00	2628.50	0.00	2070.18 R	0.00	1744.47	
0.00										
1.900	1934.1	340.3	1764.30 R	0.00	1485.83	0.00	1170.92 R	0.00	986.11	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02  
 Rating Type: II-INV  
 Rating Live Load:

Rating Type: HL93  
 Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02  
 Rating Type: II-INV  
 Rating Live Load: HL93

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	280.49	999.00	65.28	999.00	0.00	999.0 (2-Lane)
1.010	422.63	999.00	98.36	999.00	0.00	999.0 (1-Lane)
1.100	23.12	999.00	5.66	999.00	0.00	203.6 (2-Lane)
1.100	34.83	999.00	8.52	999.00	0.00	306.7 (1-Lane)
1.200	11.83	999.00	3.59	999.00	0.00	129.1 (2-Lane)
1.200	17.82	999.00	5.40	999.00	0.00	194.5 (1-Lane)
1.300	7.49	999.00	2.35	999.00	0.00	84.7 (2-Lane)
1.300	11.28	999.00	3.54	999.00	0.00	127.6 (1-Lane)
1.400	5.74	999.00	1.86	999.00	0.00	66.8 (2-Lane)
1.400	8.65	999.00	2.80	999.00	0.00	100.6 (1-Lane)
1.500	5.27	999.00	1.72	999.00	0.00	62.0 (2-Lane)
1.500	7.94	999.00	2.60	999.00	0.00	93.5 (1-Lane)
1.600	5.74	999.00	1.86	999.00	0.00	66.8 (2-Lane)
1.600	8.65	999.00	2.80	999.00	0.00	100.6 (1-Lane)
1.700	7.49	999.00	2.35	999.00	0.00	84.7 (2-Lane)
1.700	11.28	999.00	3.54	999.00	0.00	127.6 (1-Lane)
1.800	11.83	999.00	3.59	999.00	0.00	129.1 (2-Lane)

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1.800	17.82	999.00	5.40	999.00	0.00	194.5 (1-Lane)
1.900	23.12	999.00	5.66	999.00	0.00	203.6 (2-Lane)
1.900	34.83	999.00	8.52	999.00	0.00	306.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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# MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV

Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75					
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane		Live Load w/o impact Truck Lane		Live Load w/impact Truck Lane		Live Load w/o Truck	
Lane										
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	241.8	46.8	167.23 R	0.00	125.74	0.00	110.99 R	0.00	83.45	
0.00										
1.100	2417.7	425.3	1510.77 R	0.00	1135.92	0.00	1002.66 R	0.00	753.88	
0.00										
1.200	4314.7	756.1	2662.56 R	0.00	2001.93	0.00	1767.08 R	0.00	1328.63	
0.00										
1.300	5675.4	992.4	3455.37 R	0.00	2598.03	0.00	2293.25 R	0.00	1724.25	
0.00										
1.400	6491.9	1134.2	3924.09 R	0.00	2950.44	0.00	2604.33 R	0.00	1958.14	
0.00										
1.500	6764.0	1181.5	4051.26 R	0.00	3046.06	0.00	2688.73 R	0.00	2021.60	
0.00										
1.600	6491.9	1134.2	3924.09 R	0.00	2950.44	0.00	2604.33 R	0.00	1958.14	
0.00										
1.700	5675.4	992.4	3455.37 R	0.00	2598.03	0.00	2293.25 R	0.00	1724.25	
0.00										
1.800	4314.7	756.1	2662.56 R	0.00	2001.93	0.00	1767.08 R	0.00	1328.63	
0.00										
1.900	2417.7	425.3	1510.77 R	0.00	1135.92	0.00	1002.66 R	0.00	753.88	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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# STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV

Rating Live Load: HS20

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Top	Bending Bott.	Negative Top	Bending Bott.

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1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.4	-12222.4B	11797.6	11797.6	-20167.9	-20167.9
1.600	19743.0C	19743.0	-11839.3	-11839.3B	12117.0	12117.0	-19465.4	-19465.4
1.700	19743.0C	19743.0	-11839.3	-11839.3B	13075.2	13075.2	-18507.2	-18507.2
1.800	19743.0C	19743.0	-13020.4	-13020.4B	14672.1	14672.1	-18091.3	-18091.3
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: HS20

Moment

Span	top +bend	Rating fiber -bend	Factor	bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00		999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	999.00	999.00	999.0 (1-Lane)
1.010	96.40	999.00		96.40	999.00	999.00	999.0 (2-Lane)
1.010	145.25	999.00		145.25	999.00	999.00	999.0 (1-Lane)
1.100	8.98	999.00		8.98	999.00	179.60	323.3 (2-Lane)
1.100	13.53	999.00		13.53	999.00	270.61	487.1 (1-Lane)
1.200	5.51	999.00		5.51	999.00	110.21	198.4 (2-Lane)
1.200	8.30	999.00		8.30	999.00	166.06	298.9 (1-Lane)
1.300	3.78	999.00		3.78	999.00	75.68	136.2 (2-Lane)
1.300	5.70	999.00		5.70	999.00	114.03	205.3 (1-Lane)
1.400	3.09	999.00		3.09	999.00	61.76	111.2 (2-Lane)
1.400	4.65	999.00		4.65	999.00	93.05	167.5 (1-Lane)
1.500	2.91	999.00		2.91	999.00	58.24	104.8 (2-Lane)
1.500	4.39	999.00		4.39	999.00	87.76	158.0 (1-Lane)
1.600	3.09	999.00		3.09	999.00	61.76	111.2 (2-Lane)
1.600	4.65	999.00		4.65	999.00	93.05	167.5 (1-Lane)
1.700	3.78	999.00		3.78	999.00	75.68	136.2 (2-Lane)
1.700	5.70	999.00		5.70	999.00	114.03	205.3 (1-Lane)
1.800	5.51	999.00		5.51	999.00	110.21	198.4 (2-Lane)
1.800	8.30	999.00		8.30	999.00	166.06	298.9 (1-Lane)
1.900	8.98	999.00		8.98	999.00	179.60	323.3 (2-Lane)
1.900	13.53	999.00		13.53	999.00	270.61	487.1 (1-Lane)
2.000	999.00	999.00		999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	999.00	999.00	999.0 (1-Lane)

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SHEAR REPORT



Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	152.92	0.00	114.98	0.00	124.04	0.00	93.26
1.010 0.00	164.0	28.9	151.29	0.00	113.76	0.00	122.72	0.00	92.27
1.100 0.00	134.8	23.6	136.68	0.00	102.77	0.00	110.87	0.00	83.36
1.200 0.00	102.0	17.7	120.44	0.00	90.56	0.00	97.70	0.00	73.46
1.300 0.00	68.0	11.8	104.20	0.00	78.35	0.00	84.52	0.00	63.55
1.400 0.00	34.0	5.9	87.96	0.00	66.14	0.00	71.35	0.00	53.65
1.500 0.00	0.0	0.0	71.73	0.00	53.93	0.00	58.18	0.00	43.74
1.600 0.00	-34.0	-5.9	-87.96	0.00	-66.14	0.00	-71.35	0.00	-53.65
1.700 0.00	-68.0	-11.8	-104.20	0.00	-78.35	0.00	-84.52	0.00	-63.55
1.800 0.00	-102.0	-17.7	-120.44	0.00	-90.56	0.00	-97.70	0.00	-73.46
1.900 0.00	-134.8	-23.6	-136.68	0.00	-102.77	0.00	-110.87	0.00	-83.36
2.000 0.00	-167.2	-29.5	-152.92	0.00	-114.98	0.00	-124.04	0.00	-93.26

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: HS20

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)

1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV

Rating Live Load: HS20

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.14	102.91	185.2 (2-Lane)
1.000	999.00	6.34	126.87	228.4 (1-Lane)
1.010	999.00	5.23	104.52	188.1 (2-Lane)
1.010	999.00	6.44	128.85	231.9 (1-Lane)
1.100	125.08	5.12	102.31	184.2 (2-Lane)
1.100	154.20	6.31	126.14	227.0 (1-Lane)
1.200	28.15	3.39	67.81	122.1 (2-Lane)
1.200	34.71	4.18	83.60	150.5 (1-Lane)
1.300	15.49	4.30	86.04	154.9 (2-Lane)
1.300	19.09	5.30	106.07	190.9 (1-Lane)
1.400	10.24	5.55	110.99	199.8 (2-Lane)
1.400	12.62	6.84	136.83	246.3 (1-Lane)
1.500	7.36	7.36	147.24	265.0 (2-Lane)
1.500	9.08	9.08	181.53	326.7 (1-Lane)
1.600	5.55	10.24	110.99	199.8 (2-Lane)
1.600	6.84	12.62	136.83	246.3 (1-Lane)
1.700	4.30	15.49	86.04	154.9 (2-Lane)
1.700	5.30	19.09	106.07	190.9 (1-Lane)
1.800	3.39	28.15	67.81	122.1 (2-Lane)
1.800	4.18	34.71	83.60	150.5 (1-Lane)
1.900	5.12	125.08	102.31	184.2 (2-Lane)
1.900	6.31	154.20	126.14	227.0 (1-Lane)
2.000	5.14	999.00	102.91	185.2 (2-Lane)
2.000	6.34	999.00	126.87	228.4 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 224

## SERVICE MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D.

G02

Rating Type:

II-INV

Rating Live Load:

HS20

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	193.4	37.4	124.23 R	0.00	93.41	0.00	82.45 R	0.00	61.99
1.100 0.00	1934.1	340.3	1122.29 R	0.00	843.82	0.00	744.84 R	0.00	560.03
1.200 0.00	3451.8	604.9	1977.90 R	0.00	1487.15	0.00	1312.69 R	0.00	986.98
1.300 0.00	4540.4	794.0	2566.85 R	0.00	1929.96	0.00	1703.56 R	0.00	1280.87
1.400 0.00	5193.5	907.4	2915.03 R	0.00	2191.76	0.00	1934.64 R	0.00	1454.62
1.500 0.00	5411.2	945.2	3009.50 R	0.00	2262.79	0.00	1997.34 R	0.00	1501.76
1.600 0.00	5193.5	907.4	2915.03 R	0.00	2191.76	0.00	1934.64 R	0.00	1454.62
1.700 0.00	4540.4	794.0	2566.85 R	0.00	1929.96	0.00	1703.56 R	0.00	1280.87
1.800 0.00	3451.8	604.9	1977.90 R	0.00	1487.15	0.00	1312.69 R	0.00	986.98
1.900 0.00	1934.1	340.3	1122.29 R	0.00	843.82	0.00	744.84 R	0.00	560.03
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 224

## SERVICE RESISTANCE REPORT

Structure I. D.

7777777\_20120905cy01\_01of01

Member I. D.

G02

Rating Type:

II-INV

Rating Live Load:

Rating Type:

HS20

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 225

## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load: HS20

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	439.95	999.00	102.39	999.00	999.00	999.0 (2-Lane)
1.010	662.89	999.00	154.28	999.00	999.00	999.0 (1-Lane)
1.100	36.34	999.00	8.89	999.00	177.79	320.0 (2-Lane)
1.100	54.75	999.00	13.39	999.00	267.88	482.2 (1-Lane)
1.200	18.65	999.00	5.66	999.00	113.09	203.6 (2-Lane)
1.200	28.10	999.00	8.52	999.00	170.40	306.7 (1-Lane)
1.300	11.86	999.00	3.72	999.00	74.48	134.1 (2-Lane)
1.300	17.86	999.00	5.61	999.00	112.22	202.0 (1-Lane)
1.400	9.11	999.00	2.94	999.00	58.89	106.0 (2-Lane)
1.400	13.73	999.00	4.44	999.00	88.73	159.7 (1-Lane)
1.500	8.39	999.00	2.74	999.00	54.88	98.8 (2-Lane)
1.500	12.65	999.00	4.13	999.00	82.69	148.8 (1-Lane)
1.600	9.11	999.00	2.94	999.00	58.89	106.0 (2-Lane)
1.600	13.73	999.00	4.44	999.00	88.73	159.7 (1-Lane)
1.700	11.86	999.00	3.72	999.00	74.48	134.1 (2-Lane)
1.700	17.86	999.00	5.61	999.00	112.22	202.0 (1-Lane)
1.800	18.65	999.00	5.66	999.00	113.09	203.6 (2-Lane)
1.800	28.10	999.00	8.52	999.00	170.40	306.7 (1-Lane)
1.900	36.34	999.00	8.89	999.00	177.79	320.0 (2-Lane)
1.900	54.75	999.00	13.39	999.00	267.89	482.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: 3

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	1.75	LL	1.75
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o

7777777_20120905cy01_01of01_FlexuralRpt.txt									
Lane	Dead Load		Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	117.61 R	0.00	88.43	0.00	78.05 R	0.00	58.69
0.00									
1.100	2417.7	425.3	1063.89 R	0.00	799.92	0.00	706.08 R	0.00	530.89
0.00									
1.200	4314.7	756.1	1878.48 R	0.00	1412.39	0.00	1246.71 R	0.00	937.37
0.00									
1.300	5675.4	992.4	2443.79 R	0.00	1837.43	0.00	1621.89 R	0.00	1219.46
0.00									
1.400	6491.9	1134.2	2778.49 R	0.00	2089.09	0.00	1844.02 R	0.00	1386.48
0.00									
1.500	6764.0	1181.5	2876.35 R	0.00	2162.67	0.00	1908.97 R	0.00	1435.31
0.00									
1.600	6491.9	1134.2	2778.49 R	0.00	2089.09	0.00	1844.02 R	0.00	1386.48
0.00									
1.700	5675.4	992.4	2443.79 R	0.00	1837.43	0.00	1621.89 R	0.00	1219.46
0.00									
1.800	4314.7	756.1	1878.48 R	0.00	1412.39	0.00	1246.71 R	0.00	937.37
0.00									
1.900	2417.7	425.3	1063.89 R	0.00	799.91	0.00	706.08 R	0.00	530.89
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 227  
STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: 3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12210.2	-12210.2B	11797.6	11797.6	-20155.7	-20155.7
1.600	19743.0C	19743.0	-11831.3	-11831.3B	12117.0	12117.0	-19457.4	-19457.4
1.700	19743.0C	19743.0	-11831.3	-11831.3B	13075.2	13075.2	-18499.2	-18499.2
1.800	19743.0C	19743.0	-13007.0	-13007.0B	14672.1	14672.1	-18077.9	-18077.9
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 228  
MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: 3

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	137.07	999.00	137.07	999.00	0.00	999.0 (2-Lane)
1.010	206.54	999.00	206.54	999.00	0.00	999.0 (1-Lane)
1.100	12.75	999.00	12.75	999.00	0.00	318.8 (2-Lane)
1.100	19.21	999.00	19.21	999.00	0.00	480.3 (1-Lane)
1.200	7.81	999.00	7.81	999.00	0.00	195.3 (2-Lane)
1.200	11.77	999.00	11.77	999.00	0.00	294.2 (1-Lane)
1.300	5.35	999.00	5.35	999.00	0.00	133.8 (2-Lane)
1.300	8.06	999.00	8.06	999.00	0.00	201.5 (1-Lane)
1.400	4.36	999.00	4.36	999.00	0.00	109.0 (2-Lane)
1.400	6.57	999.00	6.57	999.00	0.00	164.3 (1-Lane)
1.500	4.10	999.00	4.10	999.00	0.00	102.5 (2-Lane)
1.500	6.18	999.00	6.18	999.00	0.00	154.5 (1-Lane)
1.600	4.36	999.00	4.36	999.00	0.00	109.0 (2-Lane)
1.600	6.57	999.00	6.57	999.00	0.00	164.3 (1-Lane)
1.700	5.35	999.00	5.35	999.00	0.00	133.8 (2-Lane)
1.700	8.06	999.00	8.06	999.00	0.00	201.5 (1-Lane)
1.800	7.81	999.00	7.81	999.00	0.00	195.3 (2-Lane)
1.800	11.77	999.00	11.77	999.00	0.00	294.2 (1-Lane)
1.900	12.75	999.00	12.75	999.00	0.00	318.8 (2-Lane)
1.900	19.21	999.00	19.21	999.00	0.00	480.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 229

SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV

Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	107.53	0.00	80.85	0.00	87.22	0.00	65.58
0.00									
1.010	164.0	28.9	106.40	0.00	80.00	0.00	86.31	0.00	64.89
0.00									
1.100	134.8	23.6	96.25	0.00	72.37	0.00	78.07	0.00	58.70
0.00									
1.200	102.0	17.7	84.97	0.00	63.89	0.00	68.93	0.00	51.82
0.00									
1.300	68.0	11.8	73.70	0.00	55.41	0.00	59.78	0.00	44.95
0.00									
1.400	34.0	5.9	62.42	0.00	46.93	0.00	50.63	0.00	38.07

0.00									
1.500	0.0	0.0	51.14	0.00	38.45	0.00	41.48	0.00	31.19
0.00									
1.600	-34.0	-5.9	-62.42	0.00	-46.93	0.00	-50.63	0.00	-38.07
0.00									
1.700	-68.0	-11.8	-73.70	0.00	-55.41	0.00	-59.78	0.00	-44.95
0.00									
1.800	-102.0	-17.7	-84.97	0.00	-63.89	0.00	-68.93	0.00	-51.82
0.00									
1.900	-134.8	-23.6	-96.25	0.00	-72.37	0.00	-78.07	0.00	-58.70
0.00									
2.000	-167.2	-29.5	-107.53	0.00	-80.85	0.00	-87.22	0.00	-65.58
0.00									

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV

Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 231

## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV

Rating Live Load: 3

## Shear

Span Rating Factor Rating Load

	(-)	(+)		
1.000	999.00	7.32	0.00	182.9 (2-Lane)
1.000	999.00	9.02	0.00	225.5 (1-Lane)
1.010	999.00	7.43	0.00	185.8 (2-Lane)
1.010	999.00	9.16	0.00	229.0 (1-Lane)
1.100	151.42	7.26	0.00	181.6 (2-Lane)
1.100	186.67	8.96	0.00	223.9 (1-Lane)
1.200	37.42	4.81	0.00	120.1 (2-Lane)
1.200	46.13	5.93	0.00	148.1 (1-Lane)
1.300	21.26	6.08	0.00	152.1 (2-Lane)
1.300	26.21	7.50	0.00	187.5 (1-Lane)
1.400	14.25	7.82	0.00	195.5 (2-Lane)
1.400	17.56	9.64	0.00	241.0 (1-Lane)
1.500	10.32	10.32	0.00	258.1 (2-Lane)
1.500	12.73	12.73	0.00	318.2 (1-Lane)
1.600	7.82	14.25	0.00	195.5 (2-Lane)
1.600	9.64	17.56	0.00	241.0 (1-Lane)
1.700	6.08	21.26	0.00	152.1 (2-Lane)
1.700	7.50	26.21	0.00	187.5 (1-Lane)
1.800	4.81	37.42	0.00	120.1 (2-Lane)
1.800	5.93	46.13	0.00	148.1 (1-Lane)
1.900	7.26	151.42	0.00	181.6 (2-Lane)
1.900	8.96	186.67	0.00	223.9 (1-Lane)
2.000	7.32	999.00	0.00	182.9 (2-Lane)
2.000	9.02	999.00	0.00	225.5 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 232  
SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
Member I. D. G02  
Rating Type: II-INV  
Rating Live Load: 3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	193.4	37.4	87.36 R	0.00	65.69	0.00	57.98 R	0.00	43.60
1.100 0.00	1934.1	340.3	790.32 R	0.00	594.22	0.00	524.51 R	0.00	394.37
1.200 0.00	3451.8	604.9	1395.44 R	0.00	1049.21	0.00	926.12 R	0.00	696.33
1.300 0.00	4540.4	794.0	1815.38 R	0.00	1364.95	0.00	1204.83 R	0.00	905.89
1.400 0.00	5193.5	907.4	2064.02 R	0.00	1551.89	0.00	1369.84 R	0.00	1029.96
1.500 0.00	5411.2	945.2	2136.72 R	0.00	1606.55	0.00	1418.09 R	0.00	1066.23
1.600	5193.5	907.4	2064.02 R	0.00	1551.89	0.00	1369.84 R	0.00	1029.96



7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

0.00									
1.700	4540.4	794.0	1815.38 R	0.00	1364.95	0.00	1204.83 R	0.00	905.89
0.00									
1.800	3451.8	604.9	1395.44 R	0.00	1049.21	0.00	926.12 R	0.00	696.33
0.00									
1.900	1934.1	340.3	790.32 R	0.00	594.22	0.00	524.51 R	0.00	394.37
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load:

Rating Type: 3  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	625.58	999.00	145.60	999.00	0.00	999.0 (2-Lane)
1.010	942.60	999.00	219.38	999.00	0.00	999.0 (1-Lane)
1.100	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.100	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)

1.200	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.200	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.300	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.300	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.400	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.400	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.500	11.82	999.00	3.87	999.00	0.00	96.6 (2-Lane)
1.500	17.81	999.00	5.82	999.00	0.00	145.6 (1-Lane)
1.600	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.600	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.700	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.700	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.800	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.800	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.900	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.900	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	241.8	46.8	173.90 R	0.00	130.75	0.00
0.00						
1.100	2417.7	425.3	1559.46 R	0.00	1172.53	0.00
0.00						
1.200	4314.7	756.1	2720.06 R	0.00	2045.16	0.00
0.00						
1.300	5675.4	992.4	3567.75 R	0.00	2682.52	0.00
0.00						
1.400	6491.9	1134.2	4046.46 R	0.00	3042.45	0.00
0.00						
1.500	6764.0	1181.5	4157.45 R	0.00	3125.90	0.00
0.00						
1.600	6491.9	1134.2	4046.46 R	0.00	3042.45	0.00
0.00						
1.700	5675.4	992.4	3567.75 R	0.00	2682.52	0.00
0.00						
1.800	4314.7	756.1	2720.06 R	0.00	2045.16	0.00
0.00						
1.900	2417.7	425.3	1559.46 R	0.00	1172.53	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12192.1	-12192.1B	11797.6	11797.6	-20137.6	-20137.6
1.600	19743.0C	19743.0	-11817.3	-11817.3B	12117.0	12117.0	-19443.3	-19443.3
1.700	19743.0C	19743.0	-11817.3	-11817.3B	13075.2	13075.2	-18485.1	-18485.1
1.800	19743.0C	19743.0	-13007.5	-13007.5B	14672.1	14672.1	-18078.3	-18078.3
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	92.70	999.00	92.70	999.00	0.00	999.0 (2-Lane)
1.010	139.68	999.00	139.68	999.00	0.00	999.0 (1-Lane)
1.100	8.70	999.00	8.70	999.00	0.00	348.0 (2-Lane)
1.100	13.11	999.00	13.11	999.00	0.00	524.3 (1-Lane)
1.200	5.39	999.00	5.39	999.00	0.00	215.8 (2-Lane)
1.200	8.13	999.00	8.13	999.00	0.00	325.1 (1-Lane)
1.300	3.66	999.00	3.66	999.00	0.00	146.6 (2-Lane)
1.300	5.52	999.00	5.52	999.00	0.00	220.9 (1-Lane)
1.400	2.99	999.00	2.99	999.00	0.00	119.8 (2-Lane)
1.400	4.51	999.00	4.51	999.00	0.00	180.5 (1-Lane)
1.500	2.84	999.00	2.84	999.00	0.00	113.5 (2-Lane)
1.500	4.28	999.00	4.28	999.00	0.00	171.0 (1-Lane)
1.600	2.99	999.00	2.99	999.00	0.00	119.8 (2-Lane)
1.600	4.51	999.00	4.51	999.00	0.00	180.5 (1-Lane)

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1.700	3.66	999.00	3.66	999.00	0.00	146.6 (2-Lane)
1.700	5.52	999.00	5.52	999.00	0.00	220.9 (1-Lane)
1.800	5.39	999.00	5.39	999.00	0.00	215.8 (2-Lane)
1.800	8.13	999.00	8.13	999.00	0.00	325.1 (1-Lane)
1.900	8.70	999.00	8.70	999.00	0.00	348.0 (2-Lane)
1.900	13.11	999.00	13.11	999.00	0.00	524.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	159.13	0.00	119.65	0.00	129.08	0.00	97.05
1.010 0.00	164.0	28.9	157.32	0.00	118.29	0.00	127.61	0.00	95.95
1.100 0.00	134.8	23.6	141.09	0.00	106.08	0.00	114.44	0.00	86.05
1.200 0.00	102.0	17.7	123.04	0.00	92.51	0.00	99.81	0.00	75.04
1.300 0.00	68.0	11.8	105.00	0.00	78.95	0.00	85.17	0.00	64.04
1.400 0.00	34.0	5.9	86.96	0.00	65.38	0.00	70.53	0.00	53.03
1.500 0.00	0.0	0.0	68.91	0.00	51.82	0.00	55.90	0.00	42.03
1.600 0.00	-34.0	-5.9	-86.96	0.00	-65.38	0.00	-70.53	0.00	-53.03
1.700 0.00	-68.0	-11.8	-105.00	0.00	-78.95	0.00	-85.17	0.00	-64.04
1.800 0.00	-102.0	-17.7	-123.04	0.00	-92.51	0.00	-99.81	0.00	-75.04
1.900 0.00	-134.8	-23.6	-141.09	0.00	-106.08	0.00	-114.44	0.00	-86.05
2.000 0.00	-167.2	-29.5	-159.13	0.00	-119.65	0.00	-129.08	0.00	-97.05

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: 3S2

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	4.95	0.00	197.8 (2-Lane)
1.000	999.00	6.10	0.00	243.8 (1-Lane)
1.010	999.00	5.03	0.00	201.0 (2-Lane)
1.010	999.00	6.20	0.00	247.8 (1-Lane)
1.100	151.42	4.96	0.00	198.2 (2-Lane)
1.100	186.67	6.11	0.00	244.4 (1-Lane)
1.200	39.73	3.32	0.00	132.8 (2-Lane)
1.200	48.98	4.09	0.00	163.7 (1-Lane)
1.300	18.52	4.27	0.00	170.8 (2-Lane)
1.300	22.83	5.26	0.00	210.5 (1-Lane)
1.400	11.16	5.61	0.00	224.6 (2-Lane)
1.400	13.76	6.92	0.00	276.8 (1-Lane)
1.500	7.66	7.66	0.00	306.5 (2-Lane)
1.500	9.45	9.45	0.00	377.9 (1-Lane)
1.600	5.61	11.16	0.00	224.6 (2-Lane)
1.600	6.92	13.76	0.00	276.8 (1-Lane)
1.700	4.27	18.52	0.00	170.8 (2-Lane)
1.700	5.26	22.83	0.00	210.5 (1-Lane)

1.800	3.32	39.73	0.00	132.8 (2-Lane)
1.800	4.09	48.98	0.00	163.7 (1-Lane)
1.900	4.96	151.42	0.00	198.2 (2-Lane)
1.900	6.11	186.67	0.00	244.4 (1-Lane)
2.000	4.95	999.00	0.00	197.8 (2-Lane)
2.000	6.10	999.00	0.00	243.8 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	129.18 R	0.00	97.13	85.73 R
0.00						
1.100	1934.1	340.3	1158.46 R	0.00	871.02	768.84 R
0.00						
1.200	3451.8	604.9	2020.62 R	0.00	1519.26	1341.04 R
0.00						
1.300	4540.4	794.0	2650.33 R	0.00	1992.73	1758.96 R
0.00						
1.400	5193.5	907.4	3005.94 R	0.00	2260.11	1994.98 R
0.00						
1.500	5411.2	945.2	3088.39 R	0.00	2322.10	2049.69 R
0.00						
1.600	5193.5	907.4	3005.94 R	0.00	2260.11	1994.98 R
0.00						
1.700	4540.4	794.0	2650.33 R	0.00	1992.73	1758.96 R
0.00						
1.800	3451.8	604.9	2020.62 R	0.00	1519.26	1341.04 R
0.00						
1.900	1934.1	340.3	1158.46 R	0.00	871.02	768.84 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load:

Rating Type: 3S2  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.

1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	423.08	999.00	98.47	999.00	0.00	999.0 (2-Lane)
1.010	637.48	999.00	148.37	999.00	0.00	999.0 (1-Lane)
1.100	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.100	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
1.200	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.200	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.300	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.300	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.400	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.400	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.500	8.18	999.00	2.67	999.00	0.00	107.0 (2-Lane)
1.500	12.32	999.00	4.03	999.00	0.00	161.2 (1-Lane)
1.600	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.600	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.700	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.700	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.800	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.800	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.900	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.900	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	167.67 R	0.00	126.07	0.00
0.00						
1.100	2417.7	425.3	1497.18 R	0.00	1125.70	0.00
0.00						
1.200	4314.7	756.1	2607.95 R	0.00	1960.87	0.00
0.00						
1.300	5675.4	992.4	3357.23 R	0.00	2524.23	0.00
0.00						
1.400	6491.9	1134.2	3807.29 R	0.00	2862.62	0.00
0.00						
1.500	6764.0	1181.5	3958.14 R	0.00	2976.05	0.00
0.00						
1.600	6491.9	1134.2	3807.29 R	0.00	2862.62	0.00
0.00						
1.700	5675.4	992.4	3357.23 R	0.00	2524.23	0.00
0.00						
1.800	4314.7	756.1	2607.95 R	0.00	1960.87	0.00
0.00						
1.900	2417.7	425.3	1497.18 R	0.00	1125.70	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12209.5	-12209.5B	11797.6	11797.6	-20155.0	-20155.0
1.600	19743.0C	19743.0	-11834.3	-11834.3B	12117.0	12117.0	-19460.3	-19460.3
1.700	19743.0C	19743.0	-11834.3	-11834.3B	13075.2	13075.2	-18502.1	-18502.1
1.800	19743.0C	19743.0	-12987.6	-12987.6B	14672.1	14672.1	-18058.5	-18058.5
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4



2.000 16409.4C 16409.4 -9908.4 -9908.4B 16409.4 16409.4 -9908.4 -9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: 3-3

## Moment

Span	top +bend	Rating fiber -bend	Factor	bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)
1.010	96.15	999.00		96.15	999.00	0.00	999.0 (2-Lane)
1.010	144.87	999.00		144.87	999.00	0.00	999.0 (1-Lane)
1.100	9.06	999.00		9.06	999.00	0.00	362.5 (2-Lane)
1.100	13.65	999.00		13.65	999.00	0.00	546.1 (1-Lane)
1.200	5.63	999.00		5.63	999.00	0.00	225.0 (2-Lane)
1.200	8.48	999.00		8.48	999.00	0.00	339.1 (1-Lane)
1.300	3.89	999.00		3.89	999.00	0.00	155.8 (2-Lane)
1.300	5.87	999.00		5.87	999.00	0.00	234.7 (1-Lane)
1.400	3.18	999.00		3.18	999.00	0.00	127.3 (2-Lane)
1.400	4.80	999.00		4.80	999.00	0.00	191.8 (1-Lane)
1.500	2.98	999.00		2.98	999.00	0.00	119.2 (2-Lane)
1.500	4.49	999.00		4.49	999.00	0.00	179.6 (1-Lane)
1.600	3.18	999.00		3.18	999.00	0.00	127.3 (2-Lane)
1.600	4.80	999.00		4.80	999.00	0.00	191.8 (1-Lane)
1.700	3.89	999.00		3.89	999.00	0.00	155.8 (2-Lane)
1.700	5.87	999.00		5.87	999.00	0.00	234.7 (1-Lane)
1.800	5.63	999.00		5.63	999.00	0.00	225.0 (2-Lane)
1.800	8.48	999.00		8.48	999.00	0.00	339.1 (1-Lane)
1.900	9.06	999.00		9.06	999.00	0.00	362.5 (2-Lane)
1.900	13.65	999.00		13.65	999.00	0.00	546.1 (1-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: 3-3

Gamma DC DW (2-Lane) (1-Lane)  
LL LL

1.25

1.25

1.75

Span w/o impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	153.49	0.00	115.41	0.00
0.00						
1.010	164.0	28.9	151.69	0.00	114.05	0.00
0.00						
1.100	134.8	23.6	135.45	0.00	101.84	0.00
0.00						
1.200	102.0	17.7	117.41	0.00	88.28	0.00
0.00						
1.300	68.0	11.8	99.36	0.00	74.71	0.00
0.00						
1.400	34.0	5.9	81.32	0.00	61.14	0.00
0.00						
1.500	0.0	0.0	63.28	0.00	47.58	0.00
0.00						
1.600	-34.0	-5.9	-81.32	0.00	-61.14	0.00
0.00						
1.700	-68.0	-11.8	-99.36	0.00	-74.71	0.00
0.00						
1.800	-102.0	-17.7	-117.41	0.00	-88.28	0.00
0.00						
1.900	-134.8	-23.6	-135.45	0.00	-101.84	0.00
0.00						
2.000	-167.2	-29.5	-153.49	0.00	-115.41	0.00
0.00						

□

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: 3-3

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.13	0.00	205.0 (2-Lane)
1.000	999.00	6.32	0.00	252.8 (1-Lane)
1.010	999.00	5.21	0.00	208.5 (2-Lane)
1.010	999.00	6.43	0.00	257.0 (1-Lane)
1.100	183.86	5.16	0.00	206.5 (2-Lane)
1.100	226.67	6.36	0.00	254.6 (1-Lane)
1.200	44.52	3.48	0.00	139.1 (2-Lane)
1.200	54.88	4.29	0.00	171.5 (1-Lane)
1.300	21.55	4.51	0.00	180.5 (2-Lane)
1.300	26.57	5.56	0.00	222.5 (1-Lane)
1.400	12.56	6.00	0.00	240.1 (2-Lane)
1.400	15.48	7.40	0.00	296.0 (1-Lane)
1.500	8.35	8.35	0.00	333.8 (2-Lane)
1.500	10.29	10.29	0.00	411.5 (1-Lane)
1.600	6.00	12.56	0.00	240.1 (2-Lane)
1.600	7.40	15.48	0.00	296.0 (1-Lane)
1.700	4.51	21.55	0.00	180.5 (2-Lane)
1.700	5.56	26.57	0.00	222.5 (1-Lane)
1.800	3.48	44.52	0.00	139.1 (2-Lane)
1.800	4.29	54.88	0.00	171.5 (1-Lane)
1.900	5.16	183.86	0.00	206.5 (2-Lane)
1.900	6.36	226.67	0.00	254.6 (1-Lane)
2.000	5.13	999.00	0.00	205.0 (2-Lane)
2.000	6.32	999.00	0.00	252.8 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 248

SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load: 3-3

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
	1.00	1.00	1.30	1.30

Span Dead Load Superimposed Live Load w/impact Live Load w/o impact Live Load w/impact Live Load w/o

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

impact

Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	124.55 R	0.00	93.65	0.00	82.66 R	0.00	62.15
0.00									
1.100	1934.1	340.3	1112.19 R	0.00	836.23	0.00	738.14 R	0.00	554.99
0.00									
1.200	3451.8	604.9	1937.34 R	0.00	1456.64	0.00	1285.77 R	0.00	966.74
0.00									
1.300	4540.4	794.0	2493.94 R	0.00	1875.14	0.00	1655.17 R	0.00	1244.49
0.00									
1.400	5193.5	907.4	2828.27 R	0.00	2126.52	0.00	1877.06 R	0.00	1411.32
0.00									
1.500	5411.2	945.2	2940.33 R	0.00	2210.78	0.00	1951.43 R	0.00	1467.24
0.00									
1.600	5193.5	907.4	2828.27 R	0.00	2126.52	0.00	1877.06 R	0.00	1411.32
0.00									
1.700	4540.4	794.0	2493.94 R	0.00	1875.14	0.00	1655.17 R	0.00	1244.49
0.00									
1.800	3451.8	604.9	1937.34 R	0.00	1456.64	0.00	1285.77 R	0.00	966.74
0.00									
1.900	1934.1	340.3	1112.19 R	0.00	836.23	0.00	738.14 R	0.00	554.99
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load:

Rating Type: 3-3  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load: 3-3

Span	Rating		Factor		Rating Value	Load Resistance (tons)
	top fiber +bend	fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	438.80	999.00	102.13	999.00	0.00	999.0 (2-Lane)
1.010	661.17	999.00	153.88	999.00	0.00	999.0 (1-Lane)
1.100	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.100	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
1.200	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.200	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.300	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.300	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.400	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.400	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.500	8.59	999.00	2.81	999.00	0.00	112.3 (2-Lane)
1.500	12.95	999.00	4.23	999.00	0.00	169.3 (1-Lane)
1.600	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.600	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.700	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.700	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.800	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.800	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.900	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.900	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

**Structure I. D.** 7777777\_20120905cy01\_01of01

**Member I. D.** **G02**

Rating Type: I-INV  
Rating Live Load: SU4

Gamma	(2-Lane)				(1-Lane)				
	DC 1.25	DW 1.25	LL 1.75		LL 1.75		LL 1.75		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	241.8	46.8	127.85 R	0.00	96.13	0.00	84.85 R	0.00	63.80
1.100 0.00	2417.7	425.3	1157.37 R	0.00	870.20	0.00	768.12 R	0.00	577.53
1.200 0.00	4314.7	756.1	2045.50 R	0.00	1537.97	0.00	1357.55 R	0.00	1020.72

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.300	5675.4	992.4	2664.40 R	0.00	2003.31	0.00	1768.30 R	0.00	1329.55
0.00									
1.400	6491.9	1134.2	3042.72 R	0.00	2287.76	0.00	2019.38 R	0.00	1518.33
0.00									
1.500	6764.0	1181.5	3156.78 R	0.00	2373.52	0.00	2095.08 R	0.00	1575.25
0.00									
1.600	6491.9	1134.2	3042.72 R	0.00	2287.76	0.00	2019.38 R	0.00	1518.33
0.00									
1.700	5675.4	992.4	2664.40 R	0.00	2003.31	0.00	1768.30 R	0.00	1329.55
0.00									
1.800	4314.7	756.1	2045.50 R	0.00	1537.97	0.00	1357.55 R	0.00	1020.72
0.00									
1.900	2417.7	425.3	1157.37 R	0.00	870.20	0.00	768.12 R	0.00	577.53
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: SU4

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12217.0	-12217.0B	11797.6	11797.6	-20162.4	-20162.4
1.600	19743.0C	19743.0	-11834.5	-11834.5B	12117.0	12117.0	-19460.6	-19460.6
1.700	19743.0C	19743.0	-11834.5	-11834.5B	13075.2	13075.2	-18502.4	-18502.4
1.800	19743.0C	19743.0	-13013.0	-13013.0B	14672.1	14672.1	-18083.9	-18083.9
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: SU4

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	126.09	999.00	126.09	999.00	0.00	999.0 (2-Lane)

1.010	189.99	999.00	189.99	999.00	0.00	999.0 (1-Lane)
1.100	11.72	999.00	11.72	999.00	0.00	316.5 (2-Lane)
1.100	17.66	999.00	17.66	999.00	0.00	476.9 (1-Lane)
1.200	7.17	999.00	7.17	999.00	0.00	193.7 (2-Lane)
1.200	10.81	999.00	10.81	999.00	0.00	291.8 (1-Lane)
1.300	4.91	999.00	4.91	999.00	0.00	132.5 (2-Lane)
1.300	7.39	999.00	7.39	999.00	0.00	199.6 (1-Lane)
1.400	3.98	999.00	3.98	999.00	0.00	107.5 (2-Lane)
1.400	6.00	999.00	6.00	999.00	0.00	162.0 (1-Lane)
1.500	3.74	999.00	3.74	999.00	0.00	100.9 (2-Lane)
1.500	5.63	999.00	5.63	999.00	0.00	152.0 (1-Lane)
1.600	3.98	999.00	3.98	999.00	0.00	107.5 (2-Lane)
1.600	6.00	999.00	6.00	999.00	0.00	162.0 (1-Lane)
1.700	4.91	999.00	4.91	999.00	0.00	132.5 (2-Lane)
1.700	7.39	999.00	7.39	999.00	0.00	199.6 (1-Lane)
1.800	7.17	999.00	7.17	999.00	0.00	193.7 (2-Lane)
1.800	10.81	999.00	10.81	999.00	0.00	291.8 (1-Lane)
1.900	11.72	999.00	11.72	999.00	0.00	316.5 (2-Lane)
1.900	17.66	999.00	17.66	999.00	0.00	476.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	116.89	0.00	87.88	0.00	94.81	0.00	71.29
0.00									
1.010	164.0	28.9	115.67	0.00	86.97	0.00	93.82	0.00	70.54
0.00									
1.100	134.8	23.6	104.71	0.00	78.73	0.00	84.93	0.00	63.86
0.00									
1.200	102.0	17.7	92.53	0.00	69.57	0.00	75.05	0.00	56.43
0.00									
1.300	68.0	11.8	80.35	0.00	60.41	0.00	65.18	0.00	49.00
0.00									
1.400	34.0	5.9	68.17	0.00	51.26	0.00	55.30	0.00	41.58
0.00									
1.500	0.0	0.0	55.99	0.00	42.10	0.00	45.42	0.00	34.15
0.00									
1.600	-34.0	-5.9	-68.17	0.00	-51.26	0.00	-55.30	0.00	-41.58
0.00									
1.700	-68.0	-11.8	-80.35	0.00	-60.41	0.00	-65.18	0.00	-49.00
0.00									
1.800	-102.0	-17.7	-92.53	0.00	-69.57	0.00	-75.05	0.00	-56.43
0.00									
1.900	-134.8	-23.6	-104.71	0.00	-78.73	0.00	-84.93	0.00	-63.86
0.00									

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 2.000 -167.2 -29.5 -116.89 0.00 -87.88 0.00 -94.81 0.00 -71.29  
 0.00

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 STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G02  
 Rating Type: I-INV  
 Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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 STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G02  
 Rating Type: I-INV  
 Rating Live Load: SU4

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.73	0.00	181.8 (2-Lane)
1.000	999.00	8.30	0.00	224.1 (1-Lane)
1.010	999.00	6.84	0.00	184.6 (2-Lane)
1.010	999.00	8.43	0.00	227.5 (1-Lane)
1.100	133.46	6.68	0.00	180.3 (2-Lane)
1.100	164.54	8.23	0.00	222.3 (1-Lane)



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1.200	33.29	4.41	0.00	119.2 (2-Lane)
1.200	41.05	5.44	0.00	146.9 (1-Lane)
1.300	19.22	5.58	0.00	150.6 (2-Lane)
1.300	23.69	6.88	0.00	185.7 (1-Lane)
1.400	12.96	7.16	0.00	193.3 (2-Lane)
1.400	15.98	8.83	0.00	238.4 (1-Lane)
1.500	9.43	9.43	0.00	254.6 (2-Lane)
1.500	11.63	11.63	0.00	313.9 (1-Lane)
1.600	7.16	12.96	0.00	193.3 (2-Lane)
1.600	8.83	15.98	0.00	238.4 (1-Lane)
1.700	5.58	19.22	0.00	150.6 (2-Lane)
1.700	6.88	23.69	0.00	185.7 (1-Lane)
1.800	4.41	33.29	0.00	119.2 (2-Lane)
1.800	5.44	41.05	0.00	146.9 (1-Lane)
1.900	6.68	133.46	0.00	180.3 (2-Lane)
1.900	8.23	164.54	0.00	222.3 (1-Lane)
2.000	6.73	999.00	0.00	181.8 (2-Lane)
2.000	8.30	999.00	0.00	224.1 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30		
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	94.98 R	0.00	71.41	0.00	63.03 R	0.00	47.39
0.00									
1.100	1934.1	340.3	859.76 R	0.00	646.44	0.00	570.60 R	0.00	429.02
0.00									
1.200	3451.8	604.9	1519.52 R	0.00	1142.49	0.00	1008.47 R	0.00	758.25
0.00									
1.300	4540.4	794.0	1979.27 R	0.00	1488.17	0.00	1313.60 R	0.00	987.67
0.00									
1.400	5193.5	907.4	2260.31 R	0.00	1699.48	0.00	1500.11 R	0.00	1127.90
0.00									
1.500	5411.2	945.2	2345.04 R	0.00	1763.19	0.00	1556.35 R	0.00	1170.19
0.00									
1.600	5193.5	907.4	2260.31 R	0.00	1699.48	0.00	1500.11 R	0.00	1127.90
0.00									
1.700	4540.4	794.0	1979.27 R	0.00	1488.17	0.00	1313.60 R	0.00	987.67
0.00									
1.800	3451.8	604.9	1519.52 R	0.00	1142.49	0.00	1008.47 R	0.00	758.25
0.00									
1.900	1934.1	340.3	859.76 R	0.00	646.44	0.00	570.60 R	0.00	429.02
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02  
Rating Type: II-INV  
Rating Live Load:

Rating Type: SU4  
Rating Live Load:  
Span

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02  
Rating Type: II-INV  
Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	575.45	999.00	133.93	999.00	0.00	999.0 (2-Lane)
1.010	867.06	999.00	201.80	999.00	0.00	999.0 (1-Lane)
1.100	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.100	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
1.200	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.200	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.300	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.300	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.400	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.400	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.500	10.77	999.00	3.52	999.00	0.00	95.1 (2-Lane)
1.500	16.23	999.00	5.31	999.00	0.00	143.3 (1-Lane)

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1.600	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.600	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.700	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.700	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.800	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.800	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.900	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.900	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	241.8	46.8	145.35 R	0.00	109.29	0.00	96.47 R	0.00	72.53
1.100 0.00	2417.7	425.3	1314.44 R	0.00	988.30	0.00	872.36 R	0.00	655.91
1.200 0.00	4314.7	756.1	2319.75 R	0.00	1744.17	0.00	1539.57 R	0.00	1157.57
1.300 0.00	5675.4	992.4	3025.91 R	0.00	2275.12	0.00	2008.23 R	0.00	1509.95
1.400 0.00	6491.9	1134.2	3451.60 R	0.00	2595.19	0.00	2290.75 R	0.00	1722.37
1.500 0.00	6764.0	1181.5	3568.17 R	0.00	2682.83	0.00	2368.11 R	0.00	1780.53
1.600 0.00	6491.9	1134.2	3451.60 R	0.00	2595.19	0.00	2290.75 R	0.00	1722.37
1.700 0.00	5675.4	992.4	3025.91 R	0.00	2275.12	0.00	2008.23 R	0.00	1509.95
1.800 0.00	4314.7	756.1	2319.75 R	0.00	1744.17	0.00	1539.57 R	0.00	1157.57
1.900 0.00	2417.7	425.3	1314.44 R	0.00	988.30	0.00	872.36 R	0.00	655.91
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: SU5

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12210.3	-12210.3B	11797.6	11797.6	-20155.8	-20155.8
1.600	19743.0C	19743.0	-11829.0	-11829.0B	12117.0	12117.0	-19455.1	-19455.1
1.700	19743.0C	19743.0	-11829.0	-11829.0B	13075.2	13075.2	-18496.9	-18496.9
1.800	19743.0C	19743.0	-13011.8	-13011.8B	14672.1	14672.1	-18082.7	-18082.7
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	110.91	999.00	110.91	999.00	0.00	999.0 (2-Lane)
1.010	167.11	999.00	167.11	999.00	0.00	999.0 (1-Lane)
1.100	10.32	999.00	10.32	999.00	0.00	320.0 (2-Lane)
1.100	15.55	999.00	15.55	999.00	0.00	482.1 (1-Lane)
1.200	6.32	999.00	6.32	999.00	0.00	196.1 (2-Lane)
1.200	9.53	999.00	9.53	999.00	0.00	295.4 (1-Lane)
1.300	4.32	999.00	4.32	999.00	0.00	134.0 (2-Lane)
1.300	6.51	999.00	6.51	999.00	0.00	201.8 (1-Lane)
1.400	3.51	999.00	3.51	999.00	0.00	108.8 (2-Lane)
1.400	5.29	999.00	5.29	999.00	0.00	164.0 (1-Lane)
1.500	3.31	999.00	3.31	999.00	0.00	102.5 (2-Lane)
1.500	4.98	999.00	4.98	999.00	0.00	154.4 (1-Lane)
1.600	3.51	999.00	3.51	999.00	0.00	108.8 (2-Lane)
1.600	5.29	999.00	5.29	999.00	0.00	164.0 (1-Lane)
1.700	4.32	999.00	4.32	999.00	0.00	134.0 (2-Lane)
1.700	6.51	999.00	6.51	999.00	0.00	201.8 (1-Lane)
1.800	6.32	999.00	6.32	999.00	0.00	196.1 (2-Lane)
1.800	9.53	999.00	9.53	999.00	0.00	295.4 (1-Lane)
1.900	10.32	999.00	10.32	999.00	0.00	320.0 (2-Lane)
1.900	15.55	999.00	15.55	999.00	0.00	482.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)

2.000 999.00 999.00 999.00 999.00 0.00 999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV

Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load Truck
1.000 0.00	167.2	29.5	132.90 0.00	99.93 0.00	107.80 0.00	81.05
1.010 0.00	164.0	28.9	131.50 0.00	98.87 0.00	106.67 0.00	80.20
1.100 0.00	134.8	23.6	118.92 0.00	89.41 0.00	96.46 0.00	72.53
1.200 0.00	102.0	17.7	104.93 0.00	78.90 0.00	85.12 0.00	64.00
1.300 0.00	68.0	11.8	90.95 0.00	68.38 0.00	73.77 0.00	55.47
1.400 0.00	34.0	5.9	76.97 0.00	57.87 0.00	62.43 0.00	46.94
1.500 0.00	0.0	0.0	62.98 0.00	47.36 0.00	51.09 0.00	38.41
1.600 0.00	-34.0	-5.9	-76.97 0.00	-57.87 0.00	-62.43 0.00	-46.94
1.700 0.00	-68.0	-11.8	-90.95 0.00	-68.38 0.00	-73.77 0.00	-55.47
1.800 0.00	-102.0	-17.7	-104.93 0.00	-78.90 0.00	-85.12 0.00	-64.00
1.900 0.00	-134.8	-23.6	-118.92 0.00	-89.41 0.00	-96.46 0.00	-72.53
2.000 0.00	-167.2	-29.5	-132.90 0.00	-99.93 0.00	-107.80 0.00	-81.05

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV

Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)

1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: SU5

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.92	0.00	183.5 (2-Lane)
1.000	999.00	7.30	0.00	226.3 (1-Lane)
1.010	999.00	6.01	0.00	186.4 (2-Lane)
1.010	999.00	7.41	0.00	229.8 (1-Lane)
1.100	125.99	5.88	0.00	182.3 (2-Lane)
1.100	155.32	7.25	0.00	224.7 (1-Lane)
1.200	30.79	3.89	0.00	120.6 (2-Lane)
1.200	37.96	4.80	0.00	148.7 (1-Lane)
1.300	17.36	4.93	0.00	152.8 (2-Lane)
1.300	21.40	6.08	0.00	188.4 (1-Lane)
1.400	11.59	6.34	0.00	196.6 (2-Lane)
1.400	14.29	7.82	0.00	242.4 (1-Lane)
1.500	8.38	8.38	0.00	259.9 (2-Lane)
1.500	10.34	10.34	0.00	320.4 (1-Lane)
1.600	6.34	11.59	0.00	196.6 (2-Lane)
1.600	7.82	14.29	0.00	242.4 (1-Lane)
1.700	4.93	17.36	0.00	152.8 (2-Lane)
1.700	6.08	21.40	0.00	188.4 (1-Lane)
1.800	3.89	30.79	0.00	120.6 (2-Lane)
1.800	4.80	37.96	0.00	148.7 (1-Lane)
1.900	5.88	125.98	0.00	182.3 (2-Lane)
1.900	7.25	155.32	0.00	224.7 (1-Lane)
2.000	5.92	999.00	0.00	183.5 (2-Lane)
2.000	7.30	999.00	0.00	226.3 (1-Lane)

SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load: SU5

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	107.98 R	0.00	81.19	0.00
0.00						
1.100	1934.1	340.3	976.44 R	0.00	734.16	0.00
0.00						
1.200	3451.8	604.9	1723.24 R	0.00	1295.67	0.00
0.00						
1.300	4540.4	794.0	2247.82 R	0.00	1690.09	0.00
0.00						
1.400	5193.5	907.4	2564.05 R	0.00	1927.85	0.00
0.00						
1.500	5411.2	945.2	2650.64 R	0.00	1992.96	0.00
0.00						
1.600	5193.5	907.4	2564.05 R	0.00	1927.85	0.00
0.00						
1.700	4540.4	794.0	2247.82 R	0.00	1690.09	0.00
0.00						
1.800	3451.8	604.9	1723.24 R	0.00	1295.67	0.00
0.00						
1.900	1934.1	340.3	976.44 R	0.00	734.16	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load: SU5

Rating Type: SU5  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7

1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load: SU5

## Service

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	506.16	999.00	117.80	999.00	0.00	999.0 (2-Lane)
1.010	762.66	999.00	177.50	999.00	0.00	999.0 (1-Lane)
1.100	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.100	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
1.200	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.200	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.300	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.300	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.400	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.400	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.500	9.53	999.00	3.12	999.00	0.00	96.6 (2-Lane)
1.500	14.36	999.00	4.69	999.00	0.00	145.5 (1-Lane)
1.600	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.600	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.700	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.700	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.800	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.800	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.900	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.900	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: SU6



7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	160.20 R	0.00	120.45	0.00
0.00						
1.100	2417.7	425.3	1446.12 R	0.00	1087.31	0.00
0.00						
1.200	4314.7	756.1	2582.47 R	0.00	1941.70	0.00
0.00						
1.300	5675.4	992.4	3378.84 R	0.00	2540.48	0.00
0.00						
1.400	6491.9	1134.2	3846.14 R	0.00	2891.83	0.00
0.00						
1.500	6764.0	1181.5	3992.77 R	0.00	3002.08	0.00
0.00						
1.600	6491.9	1134.2	3846.14 R	0.00	2891.83	0.00
0.00						
1.700	5675.4	992.4	3378.84 R	0.00	2540.48	0.00
0.00						
1.800	4314.7	756.1	2582.47 R	0.00	1941.70	0.00
0.00						
1.900	2417.7	425.3	1446.12 R	0.00	1087.30	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: SU6

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12212.4	-12212.4B	11797.6	11797.6	-20157.8	-20157.8
1.600	19743.0C	19743.0	-11833.4	-11833.4B	12117.0	12117.0	-19459.5	-19459.5
1.700	19743.0C	19743.0	-11833.4	-11833.4B	13075.2	13075.2	-18501.3	-18501.3
1.800	19743.0C	19743.0	-13011.0	-13011.0B	14672.1	14672.1	-18081.8	-18081.8
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
 Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	100.63	999.00	100.63	999.00	0.00	999.0 (2-Lane)
1.010	151.62	999.00	151.62	999.00	0.00	999.0 (1-Lane)
1.100	9.38	999.00	9.38	999.00	0.00	326.0 (2-Lane)
1.100	14.14	999.00	14.14	999.00	0.00	491.2 (1-Lane)
1.200	5.68	999.00	5.68	999.00	0.00	197.4 (2-Lane)
1.200	8.56	999.00	8.56	999.00	0.00	297.5 (1-Lane)
1.300	3.87	999.00	3.87	999.00	0.00	134.5 (2-Lane)
1.300	5.83	999.00	5.83	999.00	0.00	202.6 (1-Lane)
1.400	3.15	999.00	3.15	999.00	0.00	109.5 (2-Lane)
1.400	4.75	999.00	4.75	999.00	0.00	165.0 (1-Lane)
1.500	2.95	999.00	2.95	999.00	0.00	102.7 (2-Lane)
1.500	4.45	999.00	4.45	999.00	0.00	154.7 (1-Lane)
1.600	3.15	999.00	3.15	999.00	0.00	109.5 (2-Lane)
1.600	4.75	999.00	4.75	999.00	0.00	165.0 (1-Lane)
1.700	3.87	999.00	3.87	999.00	0.00	134.5 (2-Lane)
1.700	5.83	999.00	5.83	999.00	0.00	202.6 (1-Lane)
1.800	5.68	999.00	5.68	999.00	0.00	197.4 (2-Lane)
1.800	8.56	999.00	8.56	999.00	0.00	297.5 (1-Lane)
1.900	9.38	999.00	9.38	999.00	0.00	326.0 (2-Lane)
1.900	14.14	999.00	14.14	999.00	0.00	491.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
 Rating Live Load: SU6

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	LL	LL	LL
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
			Truck	Lane	Truck	Lane
1.000	167.2	29.5	146.51	0.00	110.15	0.00
1.010	164.0	28.9	144.94	0.00	108.98	0.00
1.100	167.2	29.5	146.51	0.00	118.84	0.00
1.100	164.0	28.9	144.94	0.00	117.57	0.00
1.200	167.2	29.5	146.51	0.00	110.15	0.00
1.200	164.0	28.9	144.94	0.00	108.98	0.00
1.300	167.2	29.5	146.51	0.00	118.84	0.00
1.300	164.0	28.9	144.94	0.00	117.57	0.00
1.400	167.2	29.5	146.51	0.00	110.15	0.00
1.400	164.0	28.9	144.94	0.00	108.98	0.00
1.500	167.2	29.5	146.51	0.00	118.84	0.00
1.500	164.0	28.9	144.94	0.00	117.57	0.00
1.600	167.2	29.5	146.51	0.00	110.15	0.00
1.600	164.0	28.9	144.94	0.00	108.98	0.00
1.700	167.2	29.5	146.51	0.00	118.84	0.00
1.700	164.0	28.9	144.94	0.00	117.57	0.00
1.800	167.2	29.5	146.51	0.00	110.15	0.00
1.800	164.0	28.9	144.94	0.00	108.98	0.00
1.900	167.2	29.5	146.51	0.00	118.84	0.00
1.900	164.0	28.9	144.94	0.00	117.57	0.00
2.000	167.2	29.5	146.51	0.00	110.15	0.00
2.000	164.0	28.9	144.94	0.00	108.98	0.00

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0.00									
1.100	134.8	23.6	130.83	0.00	98.37	0.00	106.12	0.00	79.79
0.00									
1.200	102.0	17.7	115.16	0.00	86.58	0.00	93.41	0.00	70.23
0.00									
1.300	68.0	11.8	99.48	0.00	74.80	0.00	80.69	0.00	60.67
0.00									
1.400	34.0	5.9	83.81	0.00	63.01	0.00	67.98	0.00	51.11
0.00									
1.500	0.0	0.0	68.13	0.00	51.23	0.00	55.26	0.00	41.55
0.00									
1.600	-34.0	-5.9	-83.81	0.00	-63.01	0.00	-67.98	0.00	-51.11
0.00									
1.700	-68.0	-11.8	-99.48	0.00	-74.80	0.00	-80.69	0.00	-60.67
0.00									
1.800	-102.0	-17.7	-115.16	0.00	-86.58	0.00	-93.41	0.00	-70.23
0.00									
1.900	-134.8	-23.6	-130.83	0.00	-98.37	0.00	-106.12	0.00	-79.79
0.00									
2.000	-167.2	-29.5	-146.51	0.00	-110.15	0.00	-118.84	0.00	-89.35
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.37	0.00	186.6 (2-Lane)
1.000	999.00	6.62	0.00	230.1 (1-Lane)
1.010	999.00	5.45	0.00	189.6 (2-Lane)
1.010	999.00	6.72	0.00	233.7 (1-Lane)
1.100	144.09	5.34	0.00	185.7 (2-Lane)
1.100	177.63	6.59	0.00	229.0 (1-Lane)
1.200	30.69	3.55	0.00	123.2 (2-Lane)
1.200	37.83	4.37	0.00	151.9 (1-Lane)
1.300	16.53	4.51	0.00	156.6 (2-Lane)
1.300	20.37	5.55	0.00	193.0 (1-Lane)
1.400	10.83	5.82	0.00	202.4 (2-Lane)
1.400	13.35	7.18	0.00	249.5 (1-Lane)
1.500	7.75	7.75	0.00	269.3 (2-Lane)
1.500	9.56	9.56	0.00	332.0 (1-Lane)
1.600	5.82	10.83	0.00	202.4 (2-Lane)
1.600	7.18	13.35	0.00	249.5 (1-Lane)
1.700	4.51	16.53	0.00	156.6 (2-Lane)
1.700	5.55	20.37	0.00	193.0 (1-Lane)
1.800	3.55	30.69	0.00	123.2 (2-Lane)
1.800	4.37	37.83	0.00	151.9 (1-Lane)
1.900	5.34	144.09	0.00	185.7 (2-Lane)
1.900	6.59	177.63	0.00	229.0 (1-Lane)
2.000	5.37	999.00	0.00	186.6 (2-Lane)
2.000	6.62	999.00	0.00	230.1 (1-Lane)

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## SERVICE MOMENT REPORT

**Structure I. D.** 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	193.4	37.4	119.01 R	0.00	89.48	0.00	78.98 R	0.00	59.39
1.100 0.00	1934.1	340.3	1074.26 R	0.00	807.71	0.00	712.96 R	0.00	536.06
1.200	3451.8	604.9	1918.40 R	0.00	1442.41	0.00	1273.20 R	0.00	957.29

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0.00									
1.300	4540.4	794.0	2509.99 R	0.00	1887.21	0.00	1665.83 R	0.00	1252.50
0.00									
1.400	5193.5	907.4	2857.13 R	0.00	2148.22	0.00	1896.21 R	0.00	1425.72
0.00									
1.500	5411.2	945.2	2966.06 R	0.00	2230.12	0.00	1968.50 R	0.00	1480.08
0.00									
1.600	5193.5	907.4	2857.13 R	0.00	2148.22	0.00	1896.21 R	0.00	1425.72
0.00									
1.700	4540.4	794.0	2509.99 R	0.00	1887.21	0.00	1665.83 R	0.00	1252.50
0.00									
1.800	3451.8	604.9	1918.40 R	0.00	1442.41	0.00	1273.20 R	0.00	957.29
0.00									
1.900	1934.1	340.3	1074.26 R	0.00	807.71	0.00	712.96 R	0.00	536.06
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load:

Rating Type: SU6  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load: SU6

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)

1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	459.24	999.00	106.88	999.00	0.00	999.0 (2-Lane)
1.010	691.96	999.00	161.05	999.00	0.00	999.0 (1-Lane)
1.100	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.100	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
1.200	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.200	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.300	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.300	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.400	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.400	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.500	8.52	999.00	2.78	999.00	0.00	96.7 (2-Lane)
1.500	12.83	999.00	4.20	999.00	0.00	145.8 (1-Lane)
1.600	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.600	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.700	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.700	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.800	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.800	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.900	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.900	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o Lane
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	175.62 R	0.00	132.04	0.00
0.00						
1.100	2417.7	425.3	1582.32 R	0.00	1189.71	0.00
0.00						
1.200	4314.7	756.1	2824.95 R	0.00	2124.02	0.00
0.00						
1.300	5675.4	992.4	3727.89 R	0.00	2802.93	0.00
0.00						
1.400	6491.9	1134.2	4247.54 R	0.00	3193.64	0.00
0.00						
1.500	6764.0	1181.5	4416.61 R	0.00	3320.76	0.00
0.00						
1.600	6491.9	1134.2	4247.54 R	0.00	3193.64	0.00
0.00						
1.700	5675.4	992.4	3727.89 R	0.00	2802.92	0.00
0.00						
1.800	4314.7	756.1	2824.95 R	0.00	2124.02	0.00

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0.00									
1.900	2417.7	425.3	1582.32 R	0.00	1189.71	0.00	1050.15 R	0.00	789.58
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV

Rating Live Load: SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12215.4	-12215.4B	11797.6	11797.6	-20160.9	-20160.9
1.600	19743.0C	19743.0	-11835.7	-11835.7B	12117.0	12117.0	-19461.8	-19461.8
1.700	19743.0C	19743.0	-11835.7	-11835.7B	13075.2	13075.2	-18503.6	-18503.6
1.800	19743.0C	19743.0	-13021.6	-13021.6B	14672.1	14672.1	-18092.4	-18092.4
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV

Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	91.79	999.00	91.79	999.00	0.00	999.0 (2-Lane)
1.010	138.31	999.00	138.31	999.00	0.00	999.0 (1-Lane)
1.100	8.57	999.00	8.57	999.00	0.00	332.2 (2-Lane)
1.100	12.92	999.00	12.92	999.00	0.00	500.6 (1-Lane)
1.200	5.19	999.00	5.19	999.00	0.00	201.3 (2-Lane)
1.200	7.83	999.00	7.83	999.00	0.00	303.2 (1-Lane)
1.300	3.51	999.00	3.51	999.00	0.00	135.9 (2-Lane)
1.300	5.28	999.00	5.28	999.00	0.00	204.8 (1-Lane)

1.400	2.85	999.00	2.85	999.00	0.00	110.5 (2-Lane)
1.400	4.30	999.00	4.30	999.00	0.00	166.6 (1-Lane)
1.500	2.67	999.00	2.67	999.00	0.00	103.5 (2-Lane)
1.500	4.03	999.00	4.03	999.00	0.00	156.0 (1-Lane)
1.600	2.85	999.00	2.85	999.00	0.00	110.5 (2-Lane)
1.600	4.30	999.00	4.30	999.00	0.00	166.6 (1-Lane)
1.700	3.51	999.00	3.51	999.00	0.00	135.9 (2-Lane)
1.700	5.28	999.00	5.28	999.00	0.00	204.8 (1-Lane)
1.800	5.19	999.00	5.19	999.00	0.00	201.3 (2-Lane)
1.800	7.83	999.00	7.83	999.00	0.00	303.2 (1-Lane)
1.900	8.57	999.00	8.57	999.00	0.00	332.2 (2-Lane)
1.900	12.92	999.00	12.92	999.00	0.00	500.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-INV  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	160.63	0.00	120.78	0.00
0.00						
1.010	164.0	28.9	158.88	0.00	119.46	0.00
0.00						
1.100	134.8	23.6	143.15	0.00	107.63	0.00
0.00						
1.200	102.0	17.7	125.67	0.00	94.49	0.00
0.00						
1.300	68.0	11.8	108.19	0.00	81.35	0.00
0.00						
1.400	34.0	5.9	90.72	0.00	68.21	0.00
0.00						
1.500	0.0	0.0	73.24	0.00	55.07	0.00
0.00						
1.600	-34.0	-5.9	-90.72	0.00	-68.21	0.00
0.00						
1.700	-68.0	-11.8	-108.19	0.00	-81.35	0.00
0.00						
1.800	-102.0	-17.7	-125.67	0.00	-94.49	0.00
0.00						
1.900	-134.8	-23.6	-143.15	0.00	-107.63	0.00
0.00						
2.000	-167.2	-29.5	-160.63	0.00	-120.78	0.00
0.00						

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01



Member I. D. G02  
 Rating Type: I-INV  
 Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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 STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02  
 Rating Type: I-INV  
 Rating Live Load: SU7

Shear				
Span	Rating (-)	Factor (+)	Rating value	Load Resistance (tons)
1.000	999.00	4.90	0.00	189.8 (2-Lane)
1.000	999.00	6.04	0.00	234.0 (1-Lane)
1.010	999.00	4.98	0.00	192.8 (2-Lane)
1.010	999.00	6.14	0.00	237.7 (1-Lane)
1.100	168.29	4.88	0.00	189.3 (2-Lane)
1.100	207.47	6.02	0.00	233.3 (1-Lane)
1.200	31.14	3.25	0.00	125.9 (2-Lane)
1.200	38.39	4.01	0.00	155.2 (1-Lane)
1.300	15.88	4.14	0.00	160.5 (2-Lane)
1.300	19.58	5.11	0.00	197.9 (1-Lane)
1.400	10.19	5.38	0.00	208.5 (2-Lane)
1.400	12.56	6.63	0.00	257.1 (1-Lane)
1.500	7.21	7.21	0.00	279.4 (2-Lane)

1.500	8.89	8.89	0.00	344.4 (1-Lane)
1.600	5.38	10.19	0.00	208.5 (2-Lane)
1.600	6.63	12.56	0.00	257.1 (1-Lane)
1.700	4.14	15.88	0.00	160.5 (2-Lane)
1.700	5.11	19.58	0.00	197.9 (1-Lane)
1.800	3.25	31.14	0.00	125.9 (2-Lane)
1.800	4.01	38.39	0.00	155.2 (1-Lane)
1.900	4.88	168.29	0.00	189.3 (2-Lane)
1.900	6.02	207.47	0.00	233.3 (1-Lane)
2.000	4.90	999.00	0.00	189.8 (2-Lane)
2.000	6.04	999.00	0.00	234.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV  
Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	130.46 R	0.00	98.09	0.00
0.00						
1.100	1934.1	340.3	1175.44 R	0.00	883.79	0.00
0.00						
1.200	3451.8	604.9	2098.53 R	0.00	1577.84	0.00
0.00						
1.300	4540.4	794.0	2769.29 R	0.00	2082.17	0.00
0.00						
1.400	5193.5	907.4	3155.32 R	0.00	2372.42	0.00
0.00						
1.500	5411.2	945.2	3280.91 R	0.00	2466.85	0.00
0.00						
1.600	5193.5	907.4	3155.32 R	0.00	2372.42	0.00
0.00						
1.700	4540.4	794.0	2769.29 R	0.00	2082.17	0.00
0.00						
1.800	3451.8	604.9	2098.53 R	0.00	1577.84	0.00
0.00						
1.900	1934.1	340.3	1175.44 R	0.00	883.79	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 280

## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV

Rating Live Load:

Rating Type: SU7

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-INV

Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	418.93	999.00	97.50	999.00	0.00	999.0 (2-Lane)
1.010	631.22	999.00	146.91	999.00	0.00	999.0 (1-Lane)
1.100	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.100	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
1.200	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.200	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.300	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.300	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.400	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.400	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.500	7.70	999.00	2.52	999.00	0.00	97.5 (2-Lane)
1.500	11.60	999.00	3.79	999.00	0.00	147.0 (1-Lane)
1.600	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.600	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.700	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.700	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.800	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.800	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.900	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)

1.900	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35				
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	202.34 R	0.00	170.33	0.00	134.29 R	0.00	113.05
0.00									
1.100	2417.7	425.3	1832.15 R	0.00	1542.98	0.00	1215.96 R	0.00	1024.04
0.00									
1.200	4314.7	756.1	3239.23 R	0.00	2729.59	0.00	2149.80 R	0.00	1811.57
0.00									
1.300	5675.4	992.4	4221.21 R	0.00	3559.83	0.00	2801.52 R	0.00	2362.58
0.00									
1.400	6491.9	1134.2	4805.03 R	0.00	4053.93	0.00	3188.99 R	0.00	2690.50
0.00									
1.500	6764.0	1181.5	4977.21 R	0.00	4201.77	0.00	3303.26 R	0.00	2788.62
0.00									
1.600	6491.9	1134.2	4805.03 R	0.00	4053.93	0.00	3188.99 R	0.00	2690.50
0.00									
1.700	5675.4	992.4	4221.21 R	0.00	3559.83	0.00	2801.52 R	0.00	2362.58
0.00									
1.800	4314.7	756.1	3239.23 R	0.00	2729.59	0.00	2149.80 R	0.00	1811.57
0.00									
1.900	2417.7	425.3	1832.15 R	0.00	1542.98	0.00	1215.96 R	0.00	1024.04
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: HL93

Span	Positive Top	Moment Resistance		Bending Bott.	Available Resistance for LL+I			
		Bending Bott.	Negative Top		Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4

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1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.6	-12222.6B	11797.6	11797.6	-20168.1	-20168.1
1.600	19743.0C	19743.0	-11839.4	-11839.4B	12117.0	12117.0	-19465.5	-19465.5
1.700	19743.0C	19743.0	-11839.4	-11839.4B	13075.2	13075.2	-18507.3	-18507.3
1.800	19743.0C	19743.0	-13020.9	-13020.9B	14672.1	14672.1	-18091.8	-18091.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: HL93

Moment

Span	top +bend	Rating fiber -bend	Factor	bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)
1.010	79.67	999.00		79.67	999.00	0.00	999.0 (2-Lane)
1.010	120.04	999.00		120.04	999.00	0.00	999.0 (1-Lane)
1.100	7.41	999.00		7.41	999.00	0.00	266.6 (2-Lane)
1.100	11.16	999.00		11.16	999.00	0.00	401.6 (1-Lane)
1.200	4.53	999.00		4.53	999.00	0.00	163.1 (2-Lane)
1.200	6.82	999.00		6.82	999.00	0.00	245.7 (1-Lane)
1.300	3.10	999.00		3.10	999.00	0.00	111.5 (2-Lane)
1.300	4.67	999.00		4.67	999.00	0.00	168.0 (1-Lane)
1.400	2.52	999.00		2.52	999.00	0.00	90.8 (2-Lane)
1.400	3.80	999.00		3.80	999.00	0.00	136.8 (1-Lane)
1.500	2.37	999.00		2.37	999.00	0.00	85.3 (2-Lane)
1.500	3.57	999.00		3.57	999.00	0.00	128.6 (1-Lane)
1.600	2.52	999.00		2.52	999.00	0.00	90.8 (2-Lane)
1.600	3.80	999.00		3.80	999.00	0.00	136.8 (1-Lane)
1.700	3.10	999.00		3.10	999.00	0.00	111.5 (2-Lane)
1.700	4.67	999.00		4.67	999.00	0.00	168.0 (1-Lane)
1.800	4.53	999.00		4.53	999.00	0.00	163.1 (2-Lane)
1.800	6.82	999.00		6.82	999.00	0.00	245.7 (1-Lane)
1.900	7.41	999.00		7.41	999.00	0.00	266.6 (2-Lane)
1.900	11.16	999.00		11.16	999.00	0.00	401.6 (1-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02  
 Rating Type: I-OPER  
 Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35					
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Lane	Live Load w/o impact Truck	Lane	Live Load w/impact Truck	Lane	Live Load Truck	
Lane										
1.000	167.2	29.5	184.98	0.00	155.71	0.00	150.05	0.00	126.31	
0.00										
1.010	164.0	28.9	182.40	0.00	153.44	0.00	147.95	0.00	124.46	
0.00										
1.100	134.8	23.6	159.72	0.00	133.56	0.00	129.56	0.00	108.34	
0.00										
1.200	102.0	17.7	135.80	0.00	112.75	0.00	110.16	0.00	91.46	
0.00										
1.300	68.0	11.8	113.22	0.00	93.28	0.00	91.84	0.00	75.66	
0.00										
1.400	34.0	5.9	91.99	0.00	75.15	0.00	74.61	0.00	60.96	
0.00										
1.500	0.0	0.0	72.09	0.00	58.36	0.00	58.47	0.00	47.34	
0.00										
1.600	-34.0	-5.9	-91.99	0.00	-75.15	0.00	-74.61	0.00	-60.96	
0.00										
1.700	-68.0	-11.8	-113.22	0.00	-93.28	0.00	-91.84	0.00	-75.66	
0.00										
1.800	-102.0	-17.7	-135.80	0.00	-112.75	0.00	-110.16	0.00	-91.46	
0.00										
1.900	-134.8	-23.6	-159.72	0.00	-133.56	0.00	-129.56	0.00	-108.34	
0.00										
2.000	-167.2	-29.5	-184.98	0.00	-155.71	0.00	-150.05	0.00	-126.31	
0.00										

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 STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02  
 Rating Type: I-OPER  
 Rating Live Load: HL93

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)

1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: HL93

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	4.25	0.00	153.1 (2-Lane)
1.000	999.00	5.24	0.00	188.8 (1-Lane)
1.010	999.00	4.34	0.00	156.1 (2-Lane)
1.010	999.00	5.34	0.00	192.4 (1-Lane)
1.100	133.47	4.38	0.00	157.6 (2-Lane)
1.100	164.55	5.40	0.00	194.3 (1-Lane)
1.200	31.70	3.01	0.00	108.3 (2-Lane)
1.200	39.08	3.71	0.00	133.5 (1-Lane)
1.300	16.74	3.96	0.00	142.5 (2-Lane)
1.300	20.64	4.88	0.00	175.7 (1-Lane)
1.400	10.61	5.31	0.00	191.1 (2-Lane)
1.400	13.08	6.54	0.00	235.5 (1-Lane)
1.500	7.32	7.32	0.00	263.7 (2-Lane)
1.500	9.03	9.03	0.00	325.1 (1-Lane)
1.600	5.31	10.61	0.00	191.1 (2-Lane)
1.600	6.54	13.08	0.00	235.5 (1-Lane)
1.700	3.96	16.74	0.00	142.5 (2-Lane)
1.700	4.88	20.64	0.00	175.7 (1-Lane)
1.800	3.01	31.70	0.00	108.3 (2-Lane)
1.800	3.71	39.08	0.00	133.5 (1-Lane)
1.900	4.38	122.67	0.00	157.6 (2-Lane)
1.900	5.40	151.23	0.00	194.3 (1-Lane)
2.000	4.25	999.00	0.00	153.1 (2-Lane)
2.000	5.24	999.00	0.00	188.8 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPE

Rating Live Load: HL93

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00				(1-Lane) LL 1.00			
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	149.88 R	0.00	126.17	0.00	99.47 R	0.00	83.74	
0.00										
1.100	1934.1	340.3	1357.15 R	0.00	1142.95	0.00	900.71 R	0.00	758.55	
0.00										
1.200	3451.8	604.9	2399.43 R	0.00	2021.92	0.00	1592.44 R	0.00	1341.90	
0.00										
1.300	4540.4	794.0	3126.83 R	0.00	2636.91	0.00	2075.20 R	0.00	1750.06	
0.00										
1.400	5193.5	907.4	3559.28 R	0.00	3002.91	0.00	2362.21 R	0.00	1992.96	
0.00										
1.500	5411.2	945.2	3686.82 R	0.00	3112.42	0.00	2446.86 R	0.00	2065.64	
0.00										
1.600	5193.5	907.4	3559.28 R	0.00	3002.91	0.00	2362.21 R	0.00	1992.96	
0.00										
1.700	4540.4	794.0	3126.83 R	0.00	2636.91	0.00	2075.20 R	0.00	1750.06	
0.00										
1.800	3451.8	604.9	2399.43 R	0.00	2021.92	0.00	1592.44 R	0.00	1341.90	
0.00										
1.900	1934.1	340.3	1357.15 R	0.00	1142.95	0.00	900.71 R	0.00	758.55	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER

Rating Live Load:

Rating Type: HL93

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 289

SERVICE RESISTANCE RATING REPORT



7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
 Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G02  
 Rating Type: II-OPER  
 Rating Live Load: HL93

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	364.64	999.00	84.87	999.00	0.00	999.0 (2-Lane)
1.010	549.42	999.00	127.87	999.00	0.00	999.0 (1-Lane)
1.100	30.05	999.00	7.35	999.00	0.00	264.6 (2-Lane)
1.100	45.28	999.00	11.08	999.00	0.00	398.7 (1-Lane)
1.200	15.38	999.00	4.66	999.00	0.00	167.8 (2-Lane)
1.200	23.17	999.00	7.02	999.00	0.00	252.8 (1-Lane)
1.300	9.73	999.00	3.06	999.00	0.00	110.0 (2-Lane)
1.300	14.66	999.00	4.61	999.00	0.00	165.8 (1-Lane)
1.400	7.46	999.00	2.41	999.00	0.00	86.8 (2-Lane)
1.400	11.24	999.00	3.63	999.00	0.00	130.8 (1-Lane)
1.500	6.85	999.00	2.24	999.00	0.00	80.6 (2-Lane)
1.500	10.32	999.00	3.38	999.00	0.00	121.5 (1-Lane)
1.600	7.46	999.00	2.41	999.00	0.00	86.8 (2-Lane)
1.600	11.24	999.00	3.63	999.00	0.00	130.8 (1-Lane)
1.700	9.73	999.00	3.06	999.00	0.00	110.0 (2-Lane)
1.700	14.66	999.00	4.61	999.00	0.00	165.8 (1-Lane)
1.800	15.38	999.00	4.66	999.00	0.00	167.8 (2-Lane)
1.800	23.17	999.00	7.02	999.00	0.00	252.8 (1-Lane)
1.900	30.05	999.00	7.35	999.00	0.00	264.6 (2-Lane)
1.900	45.28	999.00	11.08	999.00	0.00	398.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 290  
 MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G02  
 Rating Type: I-OPER  
 Rating Live Load: HS20

Gamma	DC		DW		(2-Lane)		(1-Lane)	
	1.25		1.25		LL 1.35		LL 1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck Lane	Truck Lane	Truck Lane

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	129.01 R	0.00	97.00	0.00	85.62 R	0.00	64.38
0.00									
1.100	2417.7	425.3	1165.45 R	0.00	876.28	0.00	773.48 R	0.00	581.57
0.00									
1.200	4314.7	756.1	2053.98 R	0.00	1544.34	0.00	1363.18 R	0.00	1024.95
0.00									
1.300	5675.4	992.4	2665.57 R	0.00	2004.19	0.00	1769.08 R	0.00	1330.14
0.00									
1.400	6491.9	1134.2	3027.15 R	0.00	2276.05	0.00	2009.05 R	0.00	1510.56
0.00									
1.500	6764.0	1181.5	3125.25 R	0.00	2349.82	0.00	2074.16 R	0.00	1559.52
0.00									
1.600	6491.9	1134.2	3027.15 R	0.00	2276.05	0.00	2009.05 R	0.00	1510.56
0.00									
1.700	5675.4	992.4	2665.57 R	0.00	2004.19	0.00	1769.08 R	0.00	1330.14
0.00									
1.800	4314.7	756.1	2053.98 R	0.00	1544.34	0.00	1363.18 R	0.00	1024.95
0.00									
1.900	2417.7	425.3	1165.45 R	0.00	876.28	0.00	773.48 R	0.00	581.57
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 291

STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: HS20

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.6	-12222.6B	11797.6	11797.6	-20168.1	-20168.1
1.600	19743.0C	19743.0	-11839.4	-11839.4B	12117.0	12117.0	-19465.5	-19465.5
1.700	19743.0C	19743.0	-11839.4	-11839.4B	13075.2	13075.2	-18507.3	-18507.3
1.800	19743.0C	19743.0	-13020.9	-13020.9B	14672.1	14672.1	-18091.8	-18091.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: HS20

Moment			
Span	Rating	Factor	Load

7777777_20120905cy01_01of01_FlexuralRpt.txt						
	top fiber +bend	fiber -bend	bottom fiber +bend	fiber -bend	Value	Resistance (tons)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	124.96	999.00	124.96	999.00	999.00	999.0 (2-Lane)
1.010	188.29	999.00	188.29	999.00	999.00	999.0 (1-Lane)
1.100	11.64	999.00	11.64	999.00	232.81	419.1 (2-Lane)
1.100	17.54	999.00	17.54	999.00	350.79	631.4 (1-Lane)
1.200	7.14	999.00	7.14	999.00	142.87	257.2 (2-Lane)
1.200	10.76	999.00	10.76	999.00	215.26	387.5 (1-Lane)
1.300	4.91	999.00	4.91	999.00	98.10	176.6 (2-Lane)
1.300	7.39	999.00	7.39	999.00	147.82	266.1 (1-Lane)
1.400	4.00	999.00	4.00	999.00	80.06	144.1 (2-Lane)
1.400	6.03	999.00	6.03	999.00	120.62	217.1 (1-Lane)
1.500	3.78	999.00	3.78	999.00	75.50	135.9 (2-Lane)
1.500	5.69	999.00	5.69	999.00	113.76	204.8 (1-Lane)
1.600	4.00	999.00	4.00	999.00	80.06	144.1 (2-Lane)
1.600	6.03	999.00	6.03	999.00	120.62	217.1 (1-Lane)
1.700	4.91	999.00	4.91	999.00	98.10	176.6 (2-Lane)
1.700	7.39	999.00	7.39	999.00	147.82	266.1 (1-Lane)
1.800	7.14	999.00	7.14	999.00	142.87	257.2 (2-Lane)
1.800	10.76	999.00	10.76	999.00	215.26	387.5 (1-Lane)
1.900	11.64	999.00	11.64	999.00	232.81	419.1 (2-Lane)
1.900	17.54	999.00	17.54	999.00	350.79	631.4 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 293

# SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	117.97	0.00	88.70	0.00
0.00					95.69	0.00
1.010	164.0	28.9	116.71	0.00	87.75	0.00
0.00					94.67	0.00
1.100	134.8	23.6	105.44	0.00	79.28	0.00
0.00					85.53	0.00
1.200	102.0	17.7	92.91	0.00	69.86	0.00
0.00					75.37	0.00
1.300	68.0	11.8	80.39	0.00	60.44	0.00
0.00					65.20	0.00
1.400	34.0	5.9	67.86	0.00	51.02	0.00
0.00					55.04	0.00
1.500	0.0	0.0	55.33	0.00	41.60	0.00
0.00					44.88	0.00

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.600	-34.0	-5.9	-67.86	0.00	-51.02	0.00	-55.04	0.00	-41.39
0.00									
1.700	-68.0	-11.8	-80.39	0.00	-60.44	0.00	-65.20	0.00	-49.03
0.00									
1.800	-102.0	-17.7	-92.91	0.00	-69.86	0.00	-75.37	0.00	-56.67
0.00									
1.900	-134.8	-23.6	-105.44	0.00	-79.28	0.00	-85.53	0.00	-64.31
0.00									
2.000	-167.2	-29.5	-117.97	0.00	-88.70	0.00	-95.69	0.00	-71.95
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 294

STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER

Rating Live Load: HS20

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 295

STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER

Rating Live Load: HS20

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)

1.000	999.00	6.67	133.40	240.1 (2-Lane)
1.000	999.00	8.22	164.46	296.0 (1-Lane)
1.010	999.00	6.77	135.49	243.9 (2-Lane)
1.010	999.00	8.35	167.03	300.7 (1-Lane)
1.100	162.14	6.63	132.63	238.7 (2-Lane)
1.100	199.89	8.18	163.51	294.3 (1-Lane)
1.200	36.49	4.39	87.90	158.2 (2-Lane)
1.200	44.99	5.42	108.37	195.1 (1-Lane)
1.300	20.08	5.58	111.53	200.8 (2-Lane)
1.300	24.75	6.88	137.49	247.5 (1-Lane)
1.400	13.27	7.19	143.88	259.0 (2-Lane)
1.400	16.36	8.87	177.37	319.3 (1-Lane)
1.500	9.54	9.54	190.87	343.6 (2-Lane)
1.500	11.77	11.77	235.31	423.6 (1-Lane)
1.600	7.19	13.27	143.88	259.0 (2-Lane)
1.600	8.87	16.36	177.37	319.3 (1-Lane)
1.700	5.58	20.08	111.53	200.8 (2-Lane)
1.700	6.88	24.75	137.49	247.5 (1-Lane)
1.800	4.39	36.49	87.90	158.2 (2-Lane)
1.800	5.42	44.99	108.37	195.1 (1-Lane)
1.900	6.63	162.14	132.63	238.7 (2-Lane)
1.900	8.18	199.89	163.51	294.3 (1-Lane)
2.000	6.67	999.00	133.40	240.1 (2-Lane)
2.000	8.22	999.00	164.46	296.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 296

## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPE  
Rating Live Load: HS20

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00					
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	95.56 R	0.00	71.85	0.00	63.42 R	0.00	47.69	
0.00										
1.100	1934.1	340.3	863.30 R	0.00	649.10	0.00	572.95 R	0.00	430.79	
0.00										
1.200	3451.8	604.9	1521.46 R	0.00	1143.96	0.00	1009.76 R	0.00	759.22	
0.00										
1.300	4540.4	794.0	1974.50 R	0.00	1484.59	0.00	1310.43 R	0.00	985.29	
0.00										
1.400	5193.5	907.4	2242.33 R	0.00	1685.97	0.00	1488.19 R	0.00	1118.94	
0.00										
1.500	5411.2	945.2	2315.00 R	0.00	1740.60	0.00	1536.42 R	0.00	1155.20	
0.00										
1.600	5193.5	907.4	2242.33 R	0.00	1685.97	0.00	1488.19 R	0.00	1118.94	
0.00										
1.700	4540.4	794.0	1974.50 R	0.00	1484.59	0.00	1310.43 R	0.00	985.29	
0.00										

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

1.800	3451.8	604.9	1521.46 R	0.00	1143.96	0.00	1009.76 R	0.00	759.22
0.00									
1.900	1934.1	340.3	863.30 R	0.00	649.10	0.00	572.95 R	0.00	430.79
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 296

# SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER  
Rating Live Load:

Rating Type: HS20

Rating Live Load:

Span	Service Resistance		Available Resistance for LL+I					
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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# SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER  
Rating Live Load: HS20

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	571.93	999.00	133.11	999.00	999.00	999.0 (2-Lane)
1.010	861.76	999.00	200.57	999.00	999.00	999.0 (1-Lane)
1.100	47.24	999.00	11.56	999.00	231.13	416.0 (2-Lane)
1.100	71.18	999.00	17.41	999.00	348.25	626.9 (1-Lane)
1.200	24.25	999.00	7.35	999.00	147.02	264.6 (2-Lane)
1.200	36.54	999.00	11.08	999.00	221.52	398.7 (1-Lane)

1.300	15.41	999.00	4.84	999.00	96.82	174.3 (2-Lane)
1.300	23.22	999.00	7.29	999.00	145.88	262.6 (1-Lane)
1.400	11.84	999.00	3.83	999.00	76.55	137.8 (2-Lane)
1.400	17.84	999.00	5.77	999.00	115.35	207.6 (1-Lane)
1.500	10.91	999.00	3.57	999.00	71.34	128.4 (2-Lane)
1.500	16.44	999.00	5.38	999.00	107.49	193.5 (1-Lane)
1.600	11.84	999.00	3.83	999.00	76.55	137.8 (2-Lane)
1.600	17.84	999.00	5.77	999.00	115.35	207.6 (1-Lane)
1.700	15.41	999.00	4.84	999.00	96.82	174.3 (2-Lane)
1.700	23.22	999.00	7.29	999.00	145.88	262.6 (1-Lane)
1.800	24.25	999.00	7.35	999.00	147.02	264.6 (2-Lane)
1.800	36.54	999.00	11.08	999.00	221.52	398.7 (1-Lane)
1.900	47.24	999.00	11.56	999.00	231.13	416.0 (2-Lane)
1.900	71.18	999.00	17.41	999.00	348.25	626.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o Lane
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	241.8	46.8	90.73 R	0.00	68.21	60.21 R
0.00						
1.100	2417.7	425.3	820.71 R	0.00	617.08	544.69 R
0.00						
1.200	4314.7	756.1	1449.12 R	0.00	1089.56	961.74 R
0.00						
1.300	5675.4	992.4	1885.21 R	0.00	1417.45	1251.17 R
0.00						
1.400	6491.9	1134.2	2143.40 R	0.00	1611.58	1422.53 R
0.00						
1.500	6764.0	1181.5	2218.90 R	0.00	1668.34	1472.63 R
0.00						
1.600	6491.9	1134.2	2143.40 R	0.00	1611.58	1422.53 R
0.00						
1.700	5675.4	992.4	1885.21 R	0.00	1417.45	1251.17 R
0.00						
1.800	4314.7	756.1	1449.12 R	0.00	1089.56	961.74 R
0.00						
1.900	2417.7	425.3	820.71 R	0.00	617.08	544.69 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER

Rating Live Load: 3

Span	Positive Top	Moment Bending Bott.	Resistance Negative Top	Bending Bott.	Positive Top	Available Bending Bott.	Resistance Negative Top	Available Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12212.6	-12212.6B	11797.6	11797.6	-20158.1	-20158.1
1.600	19743.0C	19743.0	-11832.8	-11832.8B	12117.0	12117.0	-19458.9	-19458.9
1.700	19743.0C	19743.0	-11832.8	-11832.8B	13075.2	13075.2	-18500.7	-18500.7
1.800	19743.0C	19743.0	-13009.9	-13009.9B	14672.1	14672.1	-18080.8	-18080.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER

Rating Live Load: 3

Span	top +bend	Rating Factor fiber -bend	bottom +bend	Rating Factor fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	177.69	999.00	177.69	999.00	0.00	999.0 (2-Lane)
1.010	267.73	999.00	267.73	999.00	0.00	999.0 (1-Lane)
1.100	16.53	999.00	16.53	999.00	0.00	413.2 (2-Lane)
1.100	24.91	999.00	24.91	999.00	0.00	622.7 (1-Lane)
1.200	10.12	999.00	10.12	999.00	0.00	253.1 (2-Lane)
1.200	15.26	999.00	15.26	999.00	0.00	381.4 (1-Lane)
1.300	6.94	999.00	6.94	999.00	0.00	173.4 (2-Lane)
1.300	10.45	999.00	10.45	999.00	0.00	261.3 (1-Lane)
1.400	5.65	999.00	5.65	999.00	0.00	141.3 (2-Lane)
1.400	8.52	999.00	8.52	999.00	0.00	212.9 (1-Lane)
1.500	5.32	999.00	5.32	999.00	0.00	132.9 (2-Lane)
1.500	8.01	999.00	8.01	999.00	0.00	200.3 (1-Lane)
1.600	5.65	999.00	5.65	999.00	0.00	141.3 (2-Lane)
1.600	8.52	999.00	8.52	999.00	0.00	212.9 (1-Lane)
1.700	6.94	999.00	6.94	999.00	0.00	173.4 (2-Lane)
1.700	10.45	999.00	10.45	999.00	0.00	261.3 (1-Lane)



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1.800	10.12	999.00	10.12	999.00	0.00	253.1 (2-Lane)
1.800	15.26	999.00	15.26	999.00	0.00	381.4 (1-Lane)
1.900	16.53	999.00	16.53	999.00	0.00	413.2 (2-Lane)
1.900	24.91	999.00	24.91	999.00	0.00	622.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	82.95	0.00	62.37	0.00
0.00						
1.010	164.0	28.9	82.08	0.00	61.71	0.00
0.00						
1.100	134.8	23.6	74.25	0.00	55.83	0.00
0.00						
1.200	102.0	17.7	65.55	0.00	49.29	0.00
0.00						
1.300	68.0	11.8	56.85	0.00	42.75	0.00
0.00						
1.400	34.0	5.9	48.15	0.00	36.20	0.00
0.00						
1.500	0.0	0.0	39.45	0.00	29.66	0.00
0.00						
1.600	-34.0	-5.9	-48.15	0.00	-36.20	0.00
0.00						
1.700	-68.0	-11.8	-56.85	0.00	-42.75	0.00
0.00						
1.800	-102.0	-17.7	-65.55	0.00	-49.29	0.00
0.00						
1.900	-134.8	-23.6	-74.25	0.00	-55.83	0.00
0.00						
2.000	-167.2	-29.5	-82.95	0.00	-62.37	0.00
0.00						

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: 3

Span Shear Resistance Available Resistance for LL+I

Vn

1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: 3

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	9.49	0.00	237.1 (2-Lane)
1.000	999.00	11.69	0.00	292.4 (1-Lane)
1.010	999.00	9.63	0.00	240.8 (2-Lane)
1.010	999.00	11.88	0.00	296.9 (1-Lane)
1.100	196.28	9.42	0.00	235.4 (2-Lane)
1.100	241.98	11.61	0.00	290.2 (1-Lane)
1.200	48.50	6.23	0.00	155.7 (2-Lane)
1.200	59.79	7.68	0.00	192.0 (1-Lane)
1.300	27.56	7.89	0.00	197.1 (2-Lane)
1.300	33.98	9.72	0.00	243.0 (1-Lane)
1.400	18.47	10.14	0.00	253.4 (2-Lane)
1.400	22.77	12.50	0.00	312.5 (1-Lane)
1.500	13.38	13.38	0.00	334.6 (2-Lane)
1.500	16.50	16.50	0.00	412.5 (1-Lane)
1.600	10.14	18.47	0.00	253.4 (2-Lane)
1.600	12.50	22.77	0.00	312.5 (1-Lane)
1.700	7.89	27.56	0.00	197.1 (2-Lane)
1.700	9.72	33.98	0.00	243.0 (1-Lane)
1.800	6.23	48.50	0.00	155.7 (2-Lane)
1.800	7.68	59.79	0.00	192.0 (1-Lane)

1.900	9.42	196.28	0.00	235.4 (2-Lane)
1.900	11.61	241.98	0.00	290.2 (1-Lane)
2.000	9.49	999.00	0.00	237.1 (2-Lane)
2.000	11.69	999.00	0.00	292.4 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPE  
Rating Live Load: 3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o Lane
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	67.20 R	0.00	50.53	44.60 R
0.00						
1.100	1934.1	340.3	607.94 R	0.00	457.09	403.47 R
0.00						
1.200	3451.8	604.9	1073.42 R	0.00	807.08	712.40 R
0.00						
1.300	4540.4	794.0	1396.45 R	0.00	1049.96	926.79 R
0.00						
1.400	5193.5	907.4	1587.71 R	0.00	1193.76	1053.72 R
0.00						
1.500	5411.2	945.2	1643.63 R	0.00	1235.81	1090.84 R
0.00						
1.600	5193.5	907.4	1587.71 R	0.00	1193.76	1053.72 R
0.00						
1.700	4540.4	794.0	1396.45 R	0.00	1049.96	926.79 R
0.00						
1.800	3451.8	604.9	1073.42 R	0.00	807.08	712.40 R
0.00						
1.900	1934.1	340.3	607.94 R	0.00	457.09	403.47 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER  
Rating Live Load: 3

Rating Type: 3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER  
Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	813.25	999.00	189.28	999.00	0.00	999.0 (2-Lane)
1.010	999.00	999.00	285.19	999.00	0.00	999.0 (1-Lane)
1.100	67.08	999.00	16.41	999.00	0.00	410.3 (2-Lane)
1.100	101.08	999.00	24.73	999.00	0.00	618.2 (1-Lane)
1.200	34.37	999.00	10.42	999.00	0.00	260.5 (2-Lane)
1.200	51.79	999.00	15.70	999.00	0.00	392.5 (1-Lane)
1.300	21.79	999.00	6.84	999.00	0.00	171.1 (2-Lane)
1.300	32.83	999.00	10.31	999.00	0.00	257.8 (1-Lane)
1.400	16.73	999.00	5.41	999.00	0.00	135.1 (2-Lane)
1.400	25.20	999.00	8.15	999.00	0.00	203.6 (1-Lane)
1.500	15.37	999.00	5.02	999.00	0.00	125.6 (2-Lane)
1.500	23.16	999.00	7.57	999.00	0.00	189.3 (1-Lane)
1.600	16.73	999.00	5.41	999.00	0.00	135.1 (2-Lane)
1.600	25.20	999.00	8.15	999.00	0.00	203.6 (1-Lane)
1.700	21.79	999.00	6.84	999.00	0.00	171.1 (2-Lane)
1.700	32.83	999.00	10.31	999.00	0.00	257.8 (1-Lane)
1.800	34.37	999.00	10.42	999.00	0.00	260.5 (2-Lane)
1.800	51.79	999.00	15.70	999.00	0.00	392.5 (1-Lane)
1.900	67.08	999.00	16.41	999.00	0.00	410.3 (2-Lane)
1.900	101.08	999.00	24.73	999.00	0.00	618.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	134.15 R	0.00	100.86	0.00
0.00						
1.100	2417.7	425.3	1203.02 R	0.00	904.52	0.00
0.00						
1.200	4314.7	756.1	2098.33 R	0.00	1577.70	0.00
0.00						
1.300	5675.4	992.4	2752.26 R	0.00	2069.37	0.00
0.00						
1.400	6491.9	1134.2	3121.56 R	0.00	2347.03	0.00
0.00						
1.500	6764.0	1181.5	3207.18 R	0.00	2411.41	0.00
0.00						
1.600	6491.9	1134.2	3121.56 R	0.00	2347.03	0.00
0.00						
1.700	5675.4	992.4	2752.26 R	0.00	2069.37	0.00
0.00						
1.800	4314.7	756.1	2098.33 R	0.00	1577.69	0.00
0.00						
1.900	2417.7	425.3	1203.01 R	0.00	904.52	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12197.1	-12197.1B	11797.6	11797.6	-20142.6	-20142.6
1.600	19743.0C	19743.0	-11820.8	-11820.8B	12117.0	12117.0	-19446.9	-19446.9
1.700	19743.0C	19743.0	-11820.8	-11820.8B	13075.2	13075.2	-18488.7	-18488.7
1.800	19743.0C	19743.0	-13010.0	-13010.0B	14672.1	14672.1	-18080.9	-18080.9
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	-bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	120.17	999.00	120.17	999.00	0.00	999.0 (2-Lane)
1.010	181.07	999.00	181.07	999.00	0.00	999.0 (1-Lane)
1.100	11.28	999.00	11.28	999.00	0.00	451.1 (2-Lane)
1.100	16.99	999.00	16.99	999.00	0.00	679.7 (1-Lane)
1.200	6.99	999.00	6.99	999.00	0.00	279.7 (2-Lane)
1.200	10.54	999.00	10.54	999.00	0.00	421.4 (1-Lane)
1.300	4.75	999.00	4.75	999.00	0.00	190.0 (2-Lane)
1.300	7.16	999.00	7.16	999.00	0.00	286.3 (1-Lane)
1.400	3.88	999.00	3.88	999.00	0.00	155.3 (2-Lane)
1.400	5.85	999.00	5.85	999.00	0.00	234.0 (1-Lane)
1.500	3.68	999.00	3.68	999.00	0.00	147.1 (2-Lane)
1.500	5.54	999.00	5.54	999.00	0.00	221.7 (1-Lane)
1.600	3.88	999.00	3.88	999.00	0.00	155.3 (2-Lane)
1.600	5.85	999.00	5.85	999.00	0.00	234.0 (1-Lane)
1.700	4.75	999.00	4.75	999.00	0.00	190.0 (2-Lane)
1.700	7.16	999.00	7.16	999.00	0.00	286.3 (1-Lane)
1.800	6.99	999.00	6.99	999.00	0.00	279.7 (2-Lane)
1.800	10.54	999.00	10.54	999.00	0.00	421.4 (1-Lane)
1.900	11.28	999.00	11.28	999.00	0.00	451.1 (2-Lane)
1.900	16.99	999.00	16.99	999.00	0.00	679.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: 3S2

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
	1.25	1.25	1.35	1.35

7777777_20120905cy01_01of01_FlexuralRpt.txt									
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load	
w/o impact		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	167.2	29.5	122.76	0.00	92.30	0.00	99.57	0.00	74.87
0.00									
1.010	164.0	28.9	121.36	0.00	91.25	0.00	98.44	0.00	74.02
0.00									
1.100	134.8	23.6	108.84	0.00	81.83	0.00	88.28	0.00	66.38
0.00									
1.200	102.0	17.7	94.92	0.00	71.37	0.00	76.99	0.00	57.89
0.00									
1.300	68.0	11.8	81.00	0.00	60.90	0.00	65.70	0.00	49.40
0.00									
1.400	34.0	5.9	67.08	0.00	50.44	0.00	54.41	0.00	40.91
0.00									
1.500	0.0	0.0	53.16	0.00	39.97	0.00	43.12	0.00	32.42
0.00									
1.600	-34.0	-5.9	-67.08	0.00	-50.44	0.00	-54.41	0.00	-40.91
0.00									
1.700	-68.0	-11.8	-81.00	0.00	-60.90	0.00	-65.70	0.00	-49.40
0.00									
1.800	-102.0	-17.7	-94.92	0.00	-71.37	0.00	-76.99	0.00	-57.89
0.00									
1.900	-134.8	-23.6	-108.84	0.00	-81.83	0.00	-88.28	0.00	-66.38
0.00									
2.000	-167.2	-29.5	-122.76	0.00	-92.30	0.00	-99.57	0.00	-74.87
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER

Rating Live Load: 3S2

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.41	0.00	256.4 (2-Lane)
1.000	999.00	7.90	0.00	316.1 (1-Lane)
1.010	999.00	6.51	0.00	260.6 (2-Lane)
1.010	999.00	8.03	0.00	321.3 (1-Lane)
1.100	196.28	6.42	0.00	257.0 (2-Lane)
1.100	241.98	7.92	0.00	316.8 (1-Lane)
1.200	51.50	4.30	0.00	172.1 (2-Lane)
1.200	63.49	5.30	0.00	212.2 (1-Lane)
1.300	24.00	5.53	0.00	221.4 (2-Lane)
1.300	29.59	6.82	0.00	272.9 (1-Lane)
1.400	14.47	7.28	0.00	291.1 (2-Lane)
1.400	17.84	8.97	0.00	358.9 (1-Lane)
1.500	9.93	9.93	0.00	397.3 (2-Lane)
1.500	12.25	12.25	0.00	489.8 (1-Lane)
1.600	7.28	14.47	0.00	291.1 (2-Lane)
1.600	8.97	17.84	0.00	358.9 (1-Lane)
1.700	5.53	24.00	0.00	221.4 (2-Lane)
1.700	6.82	29.59	0.00	272.9 (1-Lane)
1.800	4.30	51.50	0.00	172.1 (2-Lane)
1.800	5.30	63.49	0.00	212.2 (1-Lane)
1.900	6.42	196.28	0.00	257.0 (2-Lane)
1.900	7.92	241.98	0.00	316.8 (1-Lane)
2.000	6.41	999.00	0.00	256.4 (2-Lane)
2.000	7.90	999.00	0.00	316.1 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPE

Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact Lane	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
		Dead Load	Truck	Lane	Truck	Lane



7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	99.37 R	0.00	74.71	0.00	65.95 R	0.00	49.59
0.00									
1.100	1934.1	340.3	891.12 R	0.00	670.02	0.00	591.42 R	0.00	444.67
0.00									
1.200	3451.8	604.9	1554.32 R	0.00	1168.66	0.00	1031.57 R	0.00	775.61
0.00									
1.300	4540.4	794.0	2038.71 R	0.00	1532.87	0.00	1353.05 R	0.00	1017.33
0.00									
1.400	5193.5	907.4	2312.26 R	0.00	1738.54	0.00	1534.60 R	0.00	1153.83
0.00									
1.500	5411.2	945.2	2375.69 R	0.00	1786.23	0.00	1576.69 R	0.00	1185.48
0.00									
1.600	5193.5	907.4	2312.26 R	0.00	1738.54	0.00	1534.60 R	0.00	1153.83
0.00									
1.700	4540.4	794.0	2038.71 R	0.00	1532.87	0.00	1353.05 R	0.00	1017.33
0.00									
1.800	3451.8	604.9	1554.32 R	0.00	1168.66	0.00	1031.57 R	0.00	775.61
0.00									
1.900	1934.1	340.3	891.12 R	0.00	670.02	0.00	591.42 R	0.00	444.67
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER  
Rating Live Load:

Rating Type: 3S2  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER  
Rating Live Load: 3S2

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
Service

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	550.01	999.00	128.01	999.00	0.00	999.0 (2-Lane)
1.010	828.73	999.00	192.88	999.00	0.00	999.0 (1-Lane)
1.100	45.77	999.00	11.19	999.00	0.00	447.8 (2-Lane)
1.100	68.96	999.00	16.87	999.00	0.00	674.8 (1-Lane)
1.200	23.74	999.00	7.20	999.00	0.00	287.8 (2-Lane)
1.200	35.76	999.00	10.84	999.00	0.00	433.7 (1-Lane)
1.300	14.93	999.00	4.69	999.00	0.00	187.5 (2-Lane)
1.300	22.49	999.00	7.06	999.00	0.00	282.6 (1-Lane)
1.400	11.48	999.00	3.71	999.00	0.00	148.5 (2-Lane)
1.400	17.30	999.00	5.59	999.00	0.00	223.7 (1-Lane)
1.500	10.63	999.00	3.48	999.00	0.00	139.0 (2-Lane)
1.500	16.02	999.00	5.24	999.00	0.00	209.5 (1-Lane)
1.600	11.48	999.00	3.71	999.00	0.00	148.5 (2-Lane)
1.600	17.30	999.00	5.59	999.00	0.00	223.7 (1-Lane)
1.700	14.93	999.00	4.69	999.00	0.00	187.5 (2-Lane)
1.700	22.49	999.00	7.06	999.00	0.00	282.6 (1-Lane)
1.800	23.74	999.00	7.20	999.00	0.00	287.8 (2-Lane)
1.800	35.76	999.00	10.84	999.00	0.00	433.7 (1-Lane)
1.900	45.77	999.00	11.19	999.00	0.00	447.8 (2-Lane)
1.900	68.96	999.00	16.87	999.00	0.00	674.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	241.8	46.8	129.34 R	0.00	97.25	0.00	85.84 R	0.00	64.54
1.100 0.00	2417.7	425.3	1154.97 R	0.00	868.40	0.00	766.53 R	0.00	576.34
1.200 0.00	4314.7	756.1	2011.85 R	0.00	1512.67	0.00	1335.22 R	0.00	1003.92
1.300 0.00	5675.4	992.4	2589.86 R	0.00	1947.26	0.00	1718.83 R	0.00	1292.35
1.400	6491.9	1134.2	2937.05 R	0.00	2208.31	0.00	1949.26 R	0.00	1465.61

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

0.00									
1.500	6764.0	1181.5	3053.42 R	0.00	2295.81	0.00	2026.49 R	0.00	1523.67
0.00									
1.600	6491.9	1134.2	2937.05 R	0.00	2208.31	0.00	1949.25 R	0.00	1465.60
0.00									
1.700	5675.4	992.4	2589.86 R	0.00	1947.26	0.00	1718.83 R	0.00	1292.35
0.00									
1.800	4314.7	756.1	2011.85 R	0.00	1512.67	0.00	1335.22 R	0.00	1003.92
0.00									
1.900	2417.7	425.3	1154.97 R	0.00	868.40	0.00	766.53 R	0.00	576.33
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER

Rating Live Load: 3-3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12211.8	-12211.8B	11797.6	11797.6	-20157.2	-20157.2
1.600	19743.0C	19743.0	-11835.2	-11835.2B	12117.0	12117.0	-19461.2	-19461.2
1.700	19743.0C	19743.0	-11835.2	-11835.2B	13075.2	13075.2	-18503.0	-18503.0
1.800	19743.0C	19743.0	-12993.4	-12993.4B	14672.1	14672.1	-18064.3	-18064.3
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER

Rating Live Load: 3-3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	124.64	999.00	124.64	999.00	0.00	999.0 (2-Lane)
1.010	187.80	999.00	187.80	999.00	0.00	999.0 (1-Lane)
1.100	11.75	999.00	11.75	999.00	0.00	469.8 (2-Lane)

1.100	17.70	999.00	17.70	999.00	0.00	707.9 (1-Lane)
1.200	7.29	999.00	7.29	999.00	0.00	291.7 (2-Lane)
1.200	10.99	999.00	10.99	999.00	0.00	439.5 (1-Lane)
1.300	5.05	999.00	5.05	999.00	0.00	201.9 (2-Lane)
1.300	7.61	999.00	7.61	999.00	0.00	304.3 (1-Lane)
1.400	4.13	999.00	4.13	999.00	0.00	165.0 (2-Lane)
1.400	6.22	999.00	6.22	999.00	0.00	248.6 (1-Lane)
1.500	3.86	999.00	3.86	999.00	0.00	154.5 (2-Lane)
1.500	5.82	999.00	5.82	999.00	0.00	232.9 (1-Lane)
1.600	4.13	999.00	4.13	999.00	0.00	165.0 (2-Lane)
1.600	6.22	999.00	6.22	999.00	0.00	248.6 (1-Lane)
1.700	5.05	999.00	5.05	999.00	0.00	201.9 (2-Lane)
1.700	7.61	999.00	7.61	999.00	0.00	304.3 (1-Lane)
1.800	7.29	999.00	7.29	999.00	0.00	291.7 (2-Lane)
1.800	10.99	999.00	10.99	999.00	0.00	439.5 (1-Lane)
1.900	11.75	999.00	11.75	999.00	0.00	469.8 (2-Lane)
1.900	17.70	999.00	17.70	999.00	0.00	707.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	118.41	0.00	89.03	0.00	96.05	0.00	72.22
1.010 0.00	164.0	28.9	117.02	0.00	87.98	0.00	94.92	0.00	71.37
1.100 0.00	134.8	23.6	104.49	0.00	78.56	0.00	84.76	0.00	63.73
1.200 0.00	102.0	17.7	90.57	0.00	68.10	0.00	73.47	0.00	55.24
1.300 0.00	68.0	11.8	76.65	0.00	57.63	0.00	62.18	0.00	46.75
1.400 0.00	34.0	5.9	62.73	0.00	47.17	0.00	50.89	0.00	38.26
1.500 0.00	0.0	0.0	48.82	0.00	36.70	0.00	39.60	0.00	29.77
1.600 0.00	-34.0	-5.9	-62.73	0.00	-47.17	0.00	-50.89	0.00	-38.26
1.700 0.00	-68.0	-11.8	-76.65	0.00	-57.63	0.00	-62.18	0.00	-46.75
1.800 0.00	-102.0	-17.7	-90.57	0.00	-68.10	0.00	-73.47	0.00	-55.24
1.900 0.00	-134.8	-23.6	-104.49	0.00	-78.56	0.00	-84.76	0.00	-63.73
2.000 0.00	-167.2	-29.5	-118.41	0.00	-89.03	0.00	-96.05	0.00	-72.22

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: 3-3

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.64	0.00	265.8 (2-Lane)
1.000	999.00	8.19	0.00	327.7 (1-Lane)
1.010	999.00	6.76	0.00	270.3 (2-Lane)
1.010	999.00	8.33	0.00	333.2 (1-Lane)
1.100	238.34	6.69	0.00	267.7 (2-Lane)
1.100	293.83	8.25	0.00	330.0 (1-Lane)
1.200	57.71	4.51	0.00	180.3 (2-Lane)
1.200	71.15	5.56	0.00	222.3 (1-Lane)

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1.300	27.94	5.85	0.00	233.9 (2-Lane)
1.300	34.44	7.21	0.00	288.4 (1-Lane)
1.400	16.27	7.78	0.00	311.3 (2-Lane)
1.400	20.07	9.59	0.00	383.7 (1-Lane)
1.500	10.82	10.82	0.00	432.7 (2-Lane)
1.500	13.34	13.34	0.00	533.4 (1-Lane)
1.600	7.78	16.27	0.00	311.3 (2-Lane)
1.600	9.59	20.07	0.00	383.7 (1-Lane)
1.700	5.85	27.94	0.00	233.9 (2-Lane)
1.700	7.21	34.44	0.00	288.4 (1-Lane)
1.800	4.51	57.71	0.00	180.3 (2-Lane)
1.800	5.56	71.15	0.00	222.3 (1-Lane)
1.900	6.69	238.34	0.00	267.7 (2-Lane)
1.900	8.25	293.83	0.00	330.0 (1-Lane)
2.000	6.64	999.00	0.00	265.8 (2-Lane)
2.000	8.19	999.00	0.00	327.7 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPE  
Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00				(1-Lane) LL 1.00		
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	95.81 R	0.00	72.04	0.00	63.59 R	0.00	47.81
0.00									
1.100	1934.1	340.3	855.53 R	0.00	643.26	0.00	567.80 R	0.00	426.91
0.00									
1.200	3451.8	604.9	1490.26 R	0.00	1120.49	0.00	989.05 R	0.00	743.65
0.00									
1.300	4540.4	794.0	1918.42 R	0.00	1442.42	0.00	1273.21 R	0.00	957.30
0.00									
1.400	5193.5	907.4	2175.59 R	0.00	1635.79	0.00	1443.89 R	0.00	1085.63
0.00									
1.500	5411.2	945.2	2261.80 R	0.00	1700.60	0.00	1501.10 R	0.00	1128.65
0.00									
1.600	5193.5	907.4	2175.59 R	0.00	1635.79	0.00	1443.89 R	0.00	1085.63
0.00									
1.700	4540.4	794.0	1918.42 R	0.00	1442.42	0.00	1273.21 R	0.00	957.30
0.00									
1.800	3451.8	604.9	1490.26 R	0.00	1120.49	0.00	989.05 R	0.00	743.65
0.00									
1.900	1934.1	340.3	855.53 R	0.00	643.26	0.00	567.80 R	0.00	426.91
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER

Rating Live Load:

Rating Type: 3-3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER

Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating Factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	570.44	999.00	132.76	999.00	0.00	999.0 (2-Lane)
1.010	859.52	999.00	200.04	999.00	0.00	999.0 (1-Lane)
1.100	47.67	999.00	11.66	999.00	0.00	466.4 (2-Lane)
1.100	71.83	999.00	17.57	999.00	0.00	702.8 (1-Lane)
1.200	24.76	999.00	7.51	999.00	0.00	300.2 (2-Lane)
1.200	37.30	999.00	11.31	999.00	0.00	452.3 (1-Lane)
1.300	15.86	999.00	4.98	999.00	0.00	199.3 (2-Lane)
1.300	23.90	999.00	7.51	999.00	0.00	300.3 (1-Lane)
1.400	12.21	999.00	3.94	999.00	0.00	157.8 (2-Lane)
1.400	18.39	999.00	5.94	999.00	0.00	237.8 (1-Lane)
1.500	11.17	999.00	3.65	999.00	0.00	146.0 (2-Lane)
1.500	16.83	999.00	5.50	999.00	0.00	220.0 (1-Lane)
1.600	12.21	999.00	3.94	999.00	0.00	157.8 (2-Lane)
1.600	18.39	999.00	5.94	999.00	0.00	237.8 (1-Lane)

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1.700	15.86	999.00	4.98	999.00	0.00	199.3 (2-Lane)
1.700	23.90	999.00	7.51	999.00	0.00	300.3 (1-Lane)
1.800	24.76	999.00	7.51	999.00	0.00	300.2 (2-Lane)
1.800	37.30	999.00	11.31	999.00	0.00	452.3 (1-Lane)
1.900	47.67	999.00	11.66	999.00	0.00	466.4 (2-Lane)
1.900	71.83	999.00	17.57	999.00	0.00	702.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	241.8	46.8	98.63 R	0.00	74.16	0.00	65.46 R	0.00	49.22
1.100 0.00	2417.7	425.3	892.83 R	0.00	671.30	0.00	592.55 R	0.00	445.53
1.200 0.00	4314.7	756.1	1577.96 R	0.00	1186.44	0.00	1047.26 R	0.00	787.41
1.300 0.00	5675.4	992.4	2055.40 R	0.00	1545.41	0.00	1364.12 R	0.00	1025.65
1.400 0.00	6491.9	1134.2	2347.24 R	0.00	1764.84	0.00	1557.81 R	0.00	1171.29
1.500 0.00	6764.0	1181.5	2435.23 R	0.00	1831.00	0.00	1616.21 R	0.00	1215.19
1.600 0.00	6491.9	1134.2	2347.24 R	0.00	1764.84	0.00	1557.81 R	0.00	1171.29
1.700 0.00	5675.4	992.4	2055.40 R	0.00	1545.41	0.00	1364.12 R	0.00	1025.65
1.800 0.00	4314.7	756.1	1577.96 R	0.00	1186.44	0.00	1047.26 R	0.00	787.41
1.900 0.00	2417.7	425.3	892.83 R	0.00	671.30	0.00	592.55 R	0.00	445.53
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU4



Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12218.1	-12218.1B	11797.6	11797.6	-20163.6	-20163.6
1.600	19743.0C	19743.0	-11835.4	-11835.4B	12117.0	12117.0	-19461.5	-19461.5
1.700	19743.0C	19743.0	-11835.4	-11835.4B	13075.2	13075.2	-18503.3	-18503.3
1.800	19743.0C	19743.0	-13014.8	-13014.8B	14672.1	14672.1	-18085.7	-18085.7
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU4

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	163.45	999.00	163.45	999.00	0.00	999.0 (2-Lane)
1.010	246.28	999.00	246.28	999.00	0.00	999.0 (1-Lane)
1.100	15.19	999.00	15.19	999.00	0.00	410.3 (2-Lane)
1.100	22.90	999.00	22.90	999.00	0.00	618.2 (1-Lane)
1.200	9.30	999.00	9.30	999.00	0.00	251.1 (2-Lane)
1.200	14.01	999.00	14.01	999.00	0.00	378.3 (1-Lane)
1.300	6.36	999.00	6.36	999.00	0.00	171.8 (2-Lane)
1.300	9.59	999.00	9.59	999.00	0.00	258.8 (1-Lane)
1.400	5.16	999.00	5.16	999.00	0.00	139.4 (2-Lane)
1.400	7.78	999.00	7.78	999.00	0.00	210.0 (1-Lane)
1.500	4.84	999.00	4.84	999.00	0.00	130.8 (2-Lane)
1.500	7.30	999.00	7.30	999.00	0.00	197.1 (1-Lane)
1.600	5.16	999.00	5.16	999.00	0.00	139.4 (2-Lane)
1.600	7.78	999.00	7.78	999.00	0.00	210.0 (1-Lane)
1.700	6.36	999.00	6.36	999.00	0.00	171.8 (2-Lane)
1.700	9.59	999.00	9.59	999.00	0.00	258.8 (1-Lane)
1.800	9.30	999.00	9.30	999.00	0.00	251.1 (2-Lane)
1.800	14.01	999.00	14.01	999.00	0.00	378.3 (1-Lane)
1.900	15.19	999.00	15.19	999.00	0.00	410.3 (2-Lane)
1.900	22.90	999.00	22.90	999.00	0.00	618.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	90.17	0.00	67.80	0.00	73.14	0.00	54.99
1.010 0.00	164.0	28.9	89.23	0.00	67.09	0.00	72.38	0.00	54.42
1.100 0.00	134.8	23.6	80.77	0.00	60.73	0.00	65.52	0.00	49.26
1.200 0.00	102.0	17.7	71.38	0.00	53.67	0.00	57.90	0.00	43.53
1.300 0.00	68.0	11.8	61.98	0.00	46.60	0.00	50.28	0.00	37.80
1.400 0.00	34.0	5.9	52.59	0.00	39.54	0.00	42.66	0.00	32.07
1.500 0.00	0.0	0.0	43.19	0.00	32.48	0.00	35.04	0.00	26.34
1.600 0.00	-34.0	-5.9	-52.59	0.00	-39.54	0.00	-42.66	0.00	-32.07
1.700 0.00	-68.0	-11.8	-61.98	0.00	-46.60	0.00	-50.28	0.00	-37.80
1.800 0.00	-102.0	-17.7	-71.38	0.00	-53.67	0.00	-57.90	0.00	-43.53
1.900 0.00	-134.8	-23.6	-80.77	0.00	-60.73	0.00	-65.52	0.00	-49.26
2.000 0.00	-167.2	-29.5	-90.17	0.00	-67.80	0.00	-73.14	0.00	-54.99

## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)

1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER

Rating Live Load: SU4

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	8.73	0.00	235.6 (2-Lane)
1.000	999.00	10.76	0.00	290.5 (1-Lane)
1.010	999.00	8.86	0.00	239.2 (2-Lane)
1.010	999.00	10.92	0.00	294.9 (1-Lane)
1.100	173.01	8.66	0.00	233.7 (2-Lane)
1.100	213.29	10.67	0.00	288.1 (1-Lane)
1.200	43.16	5.72	0.00	154.5 (2-Lane)
1.200	53.21	7.05	0.00	190.4 (1-Lane)
1.300	24.91	7.23	0.00	195.3 (2-Lane)
1.300	30.71	8.92	0.00	240.7 (1-Lane)
1.400	16.80	9.28	0.00	250.6 (2-Lane)
1.400	20.72	11.44	0.00	309.0 (1-Lane)
1.500	12.23	12.23	0.00	330.1 (2-Lane)
1.500	15.07	15.07	0.00	406.9 (1-Lane)
1.600	9.28	16.80	0.00	250.6 (2-Lane)
1.600	11.44	20.72	0.00	309.0 (1-Lane)
1.700	7.23	24.91	0.00	195.3 (2-Lane)
1.700	8.92	30.71	0.00	240.7 (1-Lane)
1.800	5.72	43.16	0.00	154.5 (2-Lane)
1.800	7.05	53.21	0.00	190.4 (1-Lane)
1.900	8.66	173.01	0.00	233.7 (2-Lane)
1.900	10.67	213.29	0.00	288.1 (1-Lane)
2.000	8.73	999.00	0.00	235.6 (2-Lane)
2.000	10.76	999.00	0.00	290.5 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPE  
Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	73.06 R	0.00	54.93	0.00
0.00						
1.100	1934.1	340.3	661.35 R	0.00	497.26	0.00
0.00						
1.200	3451.8	604.9	1168.86 R	0.00	878.84	0.00
0.00						
1.300	4540.4	794.0	1522.52 R	0.00	1144.75	0.00
0.00						
1.400	5193.5	907.4	1738.70 R	0.00	1307.29	0.00
0.00						
1.500	5411.2	945.2	1803.88 R	0.00	1356.30	0.00
0.00						
1.600	5193.5	907.4	1738.70 R	0.00	1307.29	0.00
0.00						
1.700	4540.4	794.0	1522.52 R	0.00	1144.75	0.00
0.00						
1.800	3451.8	604.9	1168.86 R	0.00	878.84	0.00
0.00						
1.900	1934.1	340.3	661.35 R	0.00	497.26	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER  
Rating Live Load:Rating Type: SU4  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER  
Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	748.08	999.00	174.11	999.00	0.00	999.0 (2-Lane)
1.010	999.00	999.00	262.34	999.00	0.00	999.0 (1-Lane)
1.100	61.67	999.00	15.09	999.00	0.00	407.3 (2-Lane)
1.100	92.92	999.00	22.73	999.00	0.00	613.7 (1-Lane)
1.200	31.56	999.00	9.57	999.00	0.00	258.3 (2-Lane)
1.200	47.56	999.00	14.42	999.00	0.00	389.3 (1-Lane)
1.300	19.99	999.00	6.28	999.00	0.00	169.5 (2-Lane)
1.300	30.12	999.00	9.46	999.00	0.00	255.4 (1-Lane)
1.400	15.27	999.00	4.94	999.00	0.00	133.3 (2-Lane)
1.400	23.01	999.00	7.44	999.00	0.00	200.8 (1-Lane)
1.500	14.01	999.00	4.58	999.00	0.00	123.6 (2-Lane)
1.500	21.10	999.00	6.90	999.00	0.00	186.2 (1-Lane)
1.600	15.27	999.00	4.94	999.00	0.00	133.3 (2-Lane)
1.600	23.01	999.00	7.44	999.00	0.00	200.8 (1-Lane)
1.700	19.99	999.00	6.28	999.00	0.00	169.5 (2-Lane)
1.700	30.12	999.00	9.46	999.00	0.00	255.4 (1-Lane)
1.800	31.56	999.00	9.57	999.00	0.00	258.3 (2-Lane)
1.800	47.56	999.00	14.42	999.00	0.00	389.3 (1-Lane)
1.900	61.67	999.00	15.09	999.00	0.00	407.3 (2-Lane)
1.900	92.92	999.00	22.73	999.00	0.00	613.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU5

Gamma DC DW (2-Lane) LL (1-Lane) LL

1.25

1.25

1.35

Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	112.13 R	0.00	84.31	0.00	74.42 R	0.00	55.95
0.00									
1.100	2417.7	425.3	1013.99 R	0.00	762.40	0.00	672.96 R	0.00	505.99
0.00									
1.200	4314.7	756.1	1789.52 R	0.00	1345.51	0.00	1187.67 R	0.00	892.98
0.00									
1.300	5675.4	992.4	2334.27 R	0.00	1755.09	0.00	1549.20 R	0.00	1164.82
0.00									
1.400	6491.9	1134.2	2662.66 R	0.00	2002.00	0.00	1767.15 R	0.00	1328.68
0.00									
1.500	6764.0	1181.5	2752.59 R	0.00	2069.61	0.00	1826.83 R	0.00	1373.56
0.00									
1.600	6491.9	1134.2	2662.66 R	0.00	2002.00	0.00	1767.15 R	0.00	1328.68
0.00									
1.700	5675.4	992.4	2334.27 R	0.00	1755.09	0.00	1549.20 R	0.00	1164.82
0.00									
1.800	4314.7	756.1	1789.52 R	0.00	1345.51	0.00	1187.67 R	0.00	892.98
0.00									
1.900	2417.7	425.3	1013.99 R	0.00	762.40	0.00	672.96 R	0.00	505.99
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12212.5	-12212.5B	11797.6	11797.6	-20158.0	-20158.0
1.600	19743.0C	19743.0	-11830.8	-11830.8B	12117.0	12117.0	-19456.9	-19456.9
1.700	19743.0C	19743.0	-11830.8	-11830.8B	13075.2	13075.2	-18498.7	-18498.7
1.800	19743.0C	19743.0	-13013.8	-13013.8B	14672.1	14672.1	-18084.7	-18084.7
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	143.77	999.00	143.77	999.00	0.00	999.0 (2-Lane)
1.010	216.62	999.00	216.62	999.00	0.00	999.0 (1-Lane)
1.100	13.38	999.00	13.38	999.00	0.00	414.8 (2-Lane)
1.100	20.16	999.00	20.16	999.00	0.00	624.9 (1-Lane)
1.200	8.20	999.00	8.20	999.00	0.00	254.2 (2-Lane)
1.200	12.35	999.00	12.35	999.00	0.00	383.0 (1-Lane)
1.300	5.60	999.00	5.60	999.00	0.00	173.6 (2-Lane)
1.300	8.44	999.00	8.44	999.00	0.00	261.6 (1-Lane)
1.400	4.55	999.00	4.55	999.00	0.00	141.1 (2-Lane)
1.400	6.86	999.00	6.86	999.00	0.00	212.6 (1-Lane)
1.500	4.29	999.00	4.29	999.00	0.00	132.9 (2-Lane)
1.500	6.46	999.00	6.46	999.00	0.00	200.2 (1-Lane)
1.600	4.55	999.00	4.55	999.00	0.00	141.1 (2-Lane)
1.600	6.86	999.00	6.86	999.00	0.00	212.6 (1-Lane)
1.700	5.60	999.00	5.60	999.00	0.00	173.6 (2-Lane)
1.700	8.44	999.00	8.44	999.00	0.00	261.6 (1-Lane)
1.800	8.20	999.00	8.20	999.00	0.00	254.2 (2-Lane)
1.800	12.35	999.00	12.35	999.00	0.00	383.0 (1-Lane)
1.900	13.38	999.00	13.38	999.00	0.00	414.8 (2-Lane)
1.900	20.16	999.00	20.16	999.00	0.00	624.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 333

## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load
w/o impact		Dead Load	Truck	Truck	Lane	Truck
Lane			Lane	Lane		
1.000	167.2	29.5	102.52	77.09	83.16	62.53
0.00			0.00	0.00	0.00	
1.010	164.0	28.9	101.44	76.27	82.29	61.87
0.00			0.00	0.00	0.00	
1.100	134.8	23.6	91.74	68.97	74.41	55.95
0.00			0.00	0.00	0.00	

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1.200	102.0	17.7	80.95	0.00	60.86	0.00	65.66	0.00	49.37
0.00									
1.300	68.0	11.8	70.16	0.00	52.75	0.00	56.91	0.00	42.79
0.00									
1.400	34.0	5.9	59.38	0.00	44.64	0.00	48.16	0.00	36.21
0.00									
1.500	0.0	0.0	48.59	0.00	36.53	0.00	39.41	0.00	29.63
0.00									
1.600	-34.0	-5.9	-59.38	0.00	-44.64	0.00	-48.16	0.00	-36.21
0.00									
1.700	-68.0	-11.8	-70.16	0.00	-52.75	0.00	-56.91	0.00	-42.79
0.00									
1.800	-102.0	-17.7	-80.95	0.00	-60.86	0.00	-65.66	0.00	-49.37
0.00									
1.900	-134.8	-23.6	-91.74	0.00	-68.97	0.00	-74.41	0.00	-55.95
0.00									
2.000	-167.2	-29.5	-102.52	0.00	-77.09	0.00	-83.16	0.00	-62.53
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER

Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER

Rating Live Load: SU5



## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.68	0.00	237.9 (2-Lane)
1.000	999.00	9.46	0.00	293.3 (1-Lane)
1.010	999.00	7.79	0.00	241.6 (2-Lane)
1.010	999.00	9.61	0.00	297.9 (1-Lane)
1.100	163.31	7.62	0.00	236.3 (2-Lane)
1.100	201.34	9.40	0.00	291.3 (1-Lane)
1.200	39.92	5.05	0.00	156.4 (2-Lane)
1.200	49.21	6.22	0.00	192.8 (1-Lane)
1.300	22.50	6.39	0.00	198.1 (2-Lane)
1.300	27.74	7.88	0.00	244.2 (1-Lane)
1.400	15.02	8.22	0.00	254.9 (2-Lane)
1.400	18.52	10.14	0.00	314.2 (1-Lane)
1.500	10.87	10.87	0.00	336.9 (2-Lane)
1.500	13.40	13.40	0.00	415.3 (1-Lane)
1.600	8.22	15.02	0.00	254.9 (2-Lane)
1.600	10.14	18.52	0.00	314.2 (1-Lane)
1.700	6.39	22.50	0.00	198.1 (2-Lane)
1.700	7.88	27.74	0.00	244.2 (1-Lane)
1.800	5.05	39.92	0.00	156.4 (2-Lane)
1.800	6.22	49.21	0.00	192.8 (1-Lane)
1.900	7.62	163.31	0.00	236.3 (2-Lane)
1.900	9.40	201.34	0.00	291.3 (1-Lane)
2.000	7.68	999.00	0.00	237.9 (2-Lane)
2.000	9.46	999.00	0.00	293.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPE  
Rating Live Load: SU5

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	193.4	37.4	83.06 R	0.00	62.45	55.12 R
0.00						
1.100	1934.1	340.3	751.11 R	0.00	564.74	498.49 R
0.00						
1.200	3451.8	604.9	1325.57 R	0.00	996.67	879.75 R
0.00						
1.300	4540.4	794.0	1729.09 R	0.00	1300.07	1147.56 R
0.00						

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1.400	5193.5	907.4	1972.34 R	0.00	1482.96	0.00	1309.00 R	0.00	984.21
0.00									
1.500	5411.2	945.2	2038.95 R	0.00	1533.05	0.00	1353.21 R	0.00	1017.45
0.00									
1.600	5193.5	907.4	1972.34 R	0.00	1482.96	0.00	1309.00 R	0.00	984.21
0.00									
1.700	4540.4	794.0	1729.09 R	0.00	1300.07	0.00	1147.56 R	0.00	862.83
0.00									
1.800	3451.8	604.9	1325.57 R	0.00	996.67	0.00	879.75 R	0.00	661.47
0.00									
1.900	1934.1	340.3	751.11 R	0.00	564.74	0.00	498.49 R	0.00	374.81
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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#### SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER

Rating Live Load:

Rating Type: SU5

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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#### SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER

Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	658.01	999.00	153.14	999.00	0.00	999.0 (2-Lane)

1.010	999.00	999.00	230.75	999.00	0.00	999.0 (1-Lane)
1.100	54.30	999.00	13.28	999.00	0.00	411.8 (2-Lane)
1.100	81.81	999.00	20.01	999.00	0.00	620.4 (1-Lane)
1.200	27.83	999.00	8.44	999.00	0.00	261.6 (2-Lane)
1.200	41.94	999.00	12.71	999.00	0.00	394.1 (1-Lane)
1.300	17.60	999.00	5.53	999.00	0.00	171.4 (2-Lane)
1.300	26.52	999.00	8.33	999.00	0.00	258.2 (1-Lane)
1.400	13.46	999.00	4.35	999.00	0.00	134.9 (2-Lane)
1.400	20.29	999.00	6.56	999.00	0.00	203.3 (1-Lane)
1.500	12.39	999.00	4.05	999.00	0.00	125.6 (2-Lane)
1.500	18.67	999.00	6.10	999.00	0.00	189.2 (1-Lane)
1.600	13.46	999.00	4.35	999.00	0.00	134.9 (2-Lane)
1.600	20.29	999.00	6.56	999.00	0.00	203.3 (1-Lane)
1.700	17.60	999.00	5.53	999.00	0.00	171.4 (2-Lane)
1.700	26.52	999.00	8.33	999.00	0.00	258.2 (1-Lane)
1.800	27.83	999.00	8.44	999.00	0.00	261.6 (2-Lane)
1.800	41.94	999.00	12.71	999.00	0.00	394.1 (1-Lane)
1.900	54.30	999.00	13.28	999.00	0.00	411.8 (2-Lane)
1.900	81.81	999.00	20.01	999.00	0.00	620.4 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	241.8	46.8	123.59 R	0.00	92.92	0.00	82.02 R	0.00	61.67
1.100 0.00	2417.7	425.3	1115.58 R	0.00	838.78	0.00	740.38 R	0.00	556.68
1.200 0.00	4314.7	756.1	1992.19 R	0.00	1497.89	0.00	1322.17 R	0.00	994.11
1.300 0.00	5675.4	992.4	2606.53 R	0.00	1959.80	0.00	1729.90 R	0.00	1300.67
1.400 0.00	6491.9	1134.2	2967.02 R	0.00	2230.84	0.00	1969.14 R	0.00	1480.56
1.500 0.00	6764.0	1181.5	3080.14 R	0.00	2315.89	0.00	2044.22 R	0.00	1537.00
1.600 0.00	6491.9	1134.2	2967.02 R	0.00	2230.84	0.00	1969.14 R	0.00	1480.56
1.700 0.00	5675.4	992.4	2606.53 R	0.00	1959.80	0.00	1729.90 R	0.00	1300.67
1.800 0.00	4314.7	756.1	1992.19 R	0.00	1497.89	0.00	1322.17 R	0.00	994.11
1.900 0.00	2417.7	425.3	1115.57 R	0.00	838.78	0.00	740.38 R	0.00	556.68

2.000 0.0 0.0 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt 0.00 R 0.00 0.00 0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU6

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12214.2	-12214.2B	11797.6	11797.6	-20159.7	-20159.7
1.600	19743.0C	19743.0	-11834.4	-11834.4B	12117.0	12117.0	-19460.5	-19460.5
1.700	19743.0C	19743.0	-11834.4	-11834.4B	13075.2	13075.2	-18502.3	-18502.3
1.800	19743.0C	19743.0	-13013.0	-13013.0B	14672.1	14672.1	-18083.9	-18083.9
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	130.44	999.00	130.44	999.00	0.00	999.0 (2-Lane)
1.010	196.54	999.00	196.54	999.00	0.00	999.0 (1-Lane)
1.100	12.16	999.00	12.16	999.00	0.00	422.6 (2-Lane)
1.100	18.32	999.00	18.32	999.00	0.00	636.7 (1-Lane)
1.200	7.36	999.00	7.36	999.00	0.00	255.9 (2-Lane)
1.200	11.10	999.00	11.10	999.00	0.00	385.6 (1-Lane)
1.300	5.02	999.00	5.02	999.00	0.00	174.3 (2-Lane)
1.300	7.56	999.00	7.56	999.00	0.00	262.7 (1-Lane)
1.400	4.08	999.00	4.08	999.00	0.00	141.9 (2-Lane)
1.400	6.15	999.00	6.15	999.00	0.00	213.8 (1-Lane)

1.500	3.83	999.00	3.83	999.00	0.00	133.1 (2-Lane)
1.500	5.77	999.00	5.77	999.00	0.00	200.5 (1-Lane)
1.600	4.08	999.00	4.08	999.00	0.00	141.9 (2-Lane)
1.600	6.15	999.00	6.15	999.00	0.00	213.8 (1-Lane)
1.700	5.02	999.00	5.02	999.00	0.00	174.3 (2-Lane)
1.700	7.56	999.00	7.56	999.00	0.00	262.7 (1-Lane)
1.800	7.36	999.00	7.36	999.00	0.00	255.9 (2-Lane)
1.800	11.10	999.00	11.10	999.00	0.00	385.6 (1-Lane)
1.900	12.16	999.00	12.16	999.00	0.00	422.6 (2-Lane)
1.900	18.32	999.00	18.32	999.00	0.00	636.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	113.02	0.00	84.98	0.00	91.67	0.00	68.93
1.010 0.00	164.0	28.9	111.81	0.00	84.07	0.00	90.69	0.00	68.19
1.100 0.00	134.8	23.6	100.93	0.00	75.88	0.00	81.87	0.00	61.55
1.200 0.00	102.0	17.7	88.83	0.00	66.79	0.00	72.06	0.00	54.18
1.300 0.00	68.0	11.8	76.74	0.00	57.70	0.00	62.25	0.00	46.80
1.400 0.00	34.0	5.9	64.65	0.00	48.61	0.00	52.44	0.00	39.43
1.500 0.00	0.0	0.0	52.56	0.00	39.52	0.00	42.63	0.00	32.05
1.600 0.00	-34.0	-5.9	-64.65	0.00	-48.61	0.00	-52.44	0.00	-39.43
1.700 0.00	-68.0	-11.8	-76.74	0.00	-57.70	0.00	-62.25	0.00	-46.80
1.800 0.00	-102.0	-17.7	-88.83	0.00	-66.79	0.00	-72.06	0.00	-54.18
1.900 0.00	-134.8	-23.6	-100.93	0.00	-75.88	0.00	-81.87	0.00	-61.55
2.000 0.00	-167.2	-29.5	-113.02	0.00	-84.98	0.00	-91.67	0.00	-68.93

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
 Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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# STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
 Rating Live Load: SU6

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.96	0.00	241.9 (2-Lane)
1.000	999.00	8.58	0.00	298.3 (1-Lane)
1.010	999.00	7.07	0.00	245.7 (2-Lane)
1.010	999.00	8.72	0.00	302.9 (1-Lane)
1.100	186.78	6.93	0.00	240.7 (2-Lane)
1.100	230.26	8.54	0.00	296.8 (1-Lane)
1.200	39.78	4.60	0.00	159.7 (2-Lane)
1.200	49.04	5.67	0.00	196.9 (1-Lane)
1.300	21.42	5.84	0.00	203.0 (2-Lane)
1.300	26.41	7.20	0.00	250.2 (1-Lane)
1.400	14.03	7.55	0.00	262.4 (2-Lane)
1.400	17.30	9.31	0.00	323.5 (1-Lane)
1.500	10.05	10.05	0.00	349.1 (2-Lane)
1.500	12.39	12.39	0.00	430.4 (1-Lane)
1.600	7.55	14.03	0.00	262.4 (2-Lane)

1.600	9.31	17.30	0.00	323.5 (1-Lane)
1.700	5.84	21.42	0.00	203.0 (2-Lane)
1.700	7.20	26.41	0.00	250.2 (1-Lane)
1.800	4.60	39.78	0.00	159.7 (2-Lane)
1.800	5.67	49.04	0.00	196.9 (1-Lane)
1.900	6.93	186.78	0.00	240.7 (2-Lane)
1.900	8.54	230.26	0.00	296.8 (1-Lane)
2.000	6.96	999.00	0.00	241.9 (2-Lane)
2.000	8.58	999.00	0.00	298.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPE  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00					
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	91.55 R	0.00	68.83	0.00	60.76 R	0.00	45.68	
0.00										
1.100	1934.1	340.3	826.35 R	0.00	621.32	0.00	548.43 R	0.00	412.35	
0.00										
1.200	3451.8	604.9	1475.69 R	0.00	1109.54	0.00	979.38 R	0.00	736.38	
0.00										
1.300	4540.4	794.0	1930.77 R	0.00	1451.70	0.00	1281.40 R	0.00	963.46	
0.00										
1.400	5193.5	907.4	2197.79 R	0.00	1652.48	0.00	1458.62 R	0.00	1096.71	
0.00										
1.500	5411.2	945.2	2281.58 R	0.00	1715.47	0.00	1514.23 R	0.00	1138.52	
0.00										
1.600	5193.5	907.4	2197.79 R	0.00	1652.48	0.00	1458.62 R	0.00	1096.71	
0.00										
1.700	4540.4	794.0	1930.77 R	0.00	1451.70	0.00	1281.40 R	0.00	963.46	
0.00										
1.800	3451.8	604.9	1475.69 R	0.00	1109.54	0.00	979.38 R	0.00	736.38	
0.00										
1.900	1934.1	340.3	826.35 R	0.00	621.32	0.00	548.43 R	0.00	412.35	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU6

Rating Live Load:  
Span

Service Resistance

Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
-------------------------	---------------------------	-------------------------	---------------------------

Available Resistance for LL+I			
Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.

1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER  
Rating Live Load: SU6

## Service

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	597.01	999.00	138.95	999.00	0.00	999.0 (2-Lane)
1.010	899.55	999.00	209.36	999.00	0.00	999.0 (1-Lane)
1.100	49.35	999.00	12.07	999.00	0.00	419.5 (2-Lane)
1.100	74.36	999.00	18.19	999.00	0.00	632.1 (1-Lane)
1.200	25.00	999.00	7.58	999.00	0.00	263.4 (2-Lane)
1.200	37.67	999.00	11.42	999.00	0.00	396.8 (1-Lane)
1.300	15.76	999.00	4.95	999.00	0.00	172.0 (2-Lane)
1.300	23.75	999.00	7.46	999.00	0.00	259.2 (1-Lane)
1.400	12.08	999.00	3.90	999.00	0.00	135.7 (2-Lane)
1.400	18.20	999.00	5.88	999.00	0.00	204.5 (1-Lane)
1.500	11.07	999.00	3.62	999.00	0.00	125.8 (2-Lane)
1.500	16.68	999.00	5.45	999.00	0.00	189.5 (1-Lane)
1.600	12.08	999.00	3.90	999.00	0.00	135.7 (2-Lane)
1.600	18.20	999.00	5.88	999.00	0.00	204.5 (1-Lane)
1.700	15.76	999.00	4.95	999.00	0.00	172.0 (2-Lane)
1.700	23.75	999.00	7.46	999.00	0.00	259.2 (1-Lane)
1.800	25.00	999.00	7.58	999.00	0.00	263.4 (2-Lane)
1.800	37.67	999.00	11.42	999.00	0.00	396.8 (1-Lane)
1.900	49.35	999.00	12.07	999.00	0.00	419.5 (2-Lane)
1.900	74.36	999.00	18.19	999.00	0.00	632.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)



2.000 999.00 999.00 999.00 999.00 0.00 999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	241.8	46.8	135.48 R	0.00	101.86	0.00	89.91 R	0.00	67.60
1.100 0.00	2417.7	425.3	1220.65 R	0.00	917.78	0.00	810.11 R	0.00	609.11
1.200 0.00	4314.7	756.1	2179.25 R	0.00	1638.53	0.00	1446.32 R	0.00	1087.46
1.300 0.00	5675.4	992.4	2875.80 R	0.00	2162.26	0.00	1908.60 R	0.00	1435.04
1.400 0.00	6491.9	1134.2	3276.68 R	0.00	2463.67	0.00	2174.66 R	0.00	1635.08
1.500 0.00	6764.0	1181.5	3407.10 R	0.00	2561.73	0.00	2261.21 R	0.00	1700.16
1.600 0.00	6491.9	1134.2	3276.68 R	0.00	2463.67	0.00	2174.66 R	0.00	1635.08
1.700 0.00	5675.4	992.4	2875.80 R	0.00	2162.26	0.00	1908.60 R	0.00	1435.04
1.800 0.00	4314.7	756.1	2179.25 R	0.00	1638.53	0.00	1446.32 R	0.00	1087.46
1.900 0.00	2417.7	425.3	1220.65 R	0.00	917.78	0.00	810.11 R	0.00	609.11
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6

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1.500	19743.0C	19743.0	-12216.7	-12216.78	11797.6	11797.6	-20162.2	-20162.2
1.600	19743.0C	19743.0	-11836.3	-11836.38	12117.0	12117.0	-19462.4	-19462.4
1.700	19743.0C	19743.0	-11836.3	-11836.38	13075.2	13075.2	-18504.2	-18504.2
1.800	19743.0C	19743.0	-13021.9	-13021.98	14672.1	14672.1	-18092.8	-18092.8
1.900	16409.4C	16409.4	-9894.4	-9894.48	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.48	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER

Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	118.99	999.00	118.99	999.00	0.00	999.0 (2-Lane)
1.010	179.29	999.00	179.29	999.00	0.00	999.0 (1-Lane)
1.100	11.11	999.00	11.11	999.00	0.00	430.7 (2-Lane)
1.100	16.75	999.00	16.75	999.00	0.00	648.9 (1-Lane)
1.200	6.73	999.00	6.73	999.00	0.00	260.9 (2-Lane)
1.200	10.14	999.00	10.14	999.00	0.00	393.1 (1-Lane)
1.300	4.55	999.00	4.55	999.00	0.00	176.2 (2-Lane)
1.300	6.85	999.00	6.85	999.00	0.00	265.5 (1-Lane)
1.400	3.70	999.00	3.70	999.00	0.00	143.3 (2-Lane)
1.400	5.57	999.00	5.57	999.00	0.00	215.9 (1-Lane)
1.500	3.46	999.00	3.46	999.00	0.00	134.2 (2-Lane)
1.500	5.22	999.00	5.22	999.00	0.00	202.2 (1-Lane)
1.600	3.70	999.00	3.70	999.00	0.00	143.3 (2-Lane)
1.600	5.57	999.00	5.57	999.00	0.00	215.9 (1-Lane)
1.700	4.55	999.00	4.55	999.00	0.00	176.2 (2-Lane)
1.700	6.85	999.00	6.85	999.00	0.00	265.5 (1-Lane)
1.800	6.73	999.00	6.73	999.00	0.00	260.9 (2-Lane)
1.800	10.14	999.00	10.14	999.00	0.00	393.1 (1-Lane)
1.900	11.11	999.00	11.11	999.00	0.00	430.7 (2-Lane)
1.900	16.75	999.00	16.75	999.00	0.00	648.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type:  
Rating Live Load:

I-OPER  
SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	123.92	0.00	93.17	0.00
0.00						
1.010	164.0	28.9	122.57	0.00	92.16	0.00
0.00						
1.100	134.8	23.6	110.43	0.00	83.03	0.00
0.00						
1.200	102.0	17.7	96.95	0.00	72.89	0.00
0.00						
1.300	68.0	11.8	83.46	0.00	62.76	0.00
0.00						
1.400	34.0	5.9	69.98	0.00	52.62	0.00
0.00						
1.500	0.0	0.0	56.50	0.00	42.48	0.00
0.00						
1.600	-34.0	-5.9	-69.98	0.00	-52.62	0.00
0.00						
1.700	-68.0	-11.8	-83.46	0.00	-62.76	0.00
0.00						
1.800	-102.0	-17.7	-96.95	0.00	-72.89	0.00
0.00						
1.900	-134.8	-23.6	-110.43	0.00	-83.03	0.00
0.00						
2.000	-167.2	-29.5	-123.92	0.00	-93.17	0.00
0.00						

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER  
Rating Live Load: SU7

Span	Shear Resistance vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)

1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-OPER

Rating Live Load: SU7

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.35	0.00	246.1 (2-Lane)
1.000	999.00	7.83	0.00	303.3 (1-Lane)
1.010	999.00	6.45	0.00	250.0 (2-Lane)
1.010	999.00	7.95	0.00	308.2 (1-Lane)
1.100	218.16	6.33	0.00	245.4 (2-Lane)
1.100	268.95	7.81	0.00	302.5 (1-Lane)
1.200	40.37	4.21	0.00	163.2 (2-Lane)
1.200	49.77	5.19	0.00	201.2 (1-Lane)
1.300	20.58	5.37	0.00	208.1 (2-Lane)
1.300	25.38	6.62	0.00	256.6 (1-Lane)
1.400	13.20	6.98	0.00	270.3 (2-Lane)
1.400	16.28	8.60	0.00	333.2 (1-Lane)
1.500	9.35	9.35	0.00	362.2 (2-Lane)
1.500	11.52	11.52	0.00	446.5 (1-Lane)
1.600	6.98	13.20	0.00	270.3 (2-Lane)
1.600	8.60	16.28	0.00	333.2 (1-Lane)
1.700	5.37	20.58	0.00	208.1 (2-Lane)
1.700	6.62	25.38	0.00	256.6 (1-Lane)
1.800	4.21	40.37	0.00	163.2 (2-Lane)
1.800	5.19	49.77	0.00	201.2 (1-Lane)
1.900	6.33	218.16	0.00	245.4 (2-Lane)
1.900	7.81	268.95	0.00	302.5 (1-Lane)
2.000	6.35	999.00	0.00	246.1 (2-Lane)
2.000	7.83	999.00	0.00	303.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPE

Rating Live Load: SU7

(2-Lane)

(1-Lane)

Gamma	DC 1.00	DW 1.00	LL 1.00				LL 1.00			
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	100.35 R	0.00	75.45	0.00	66.60 R	0.00	50.08	
0.00										
1.100	1934.1	340.3	904.18 R	0.00	679.84	0.00	600.09 R	0.00	451.19	
0.00										
1.200	3451.8	604.9	1614.26 R	0.00	1213.73	0.00	1071.35 R	0.00	805.52	
0.00										
1.300	4540.4	794.0	2130.22 R	0.00	1601.67	0.00	1413.78 R	0.00	1062.99	
0.00										
1.400	5193.5	907.4	2427.17 R	0.00	1824.94	0.00	1610.86 R	0.00	1211.17	
0.00										
1.500	5411.2	945.2	2523.78 R	0.00	1897.58	0.00	1674.97 R	0.00	1259.38	
0.00										
1.600	5193.5	907.4	2427.17 R	0.00	1824.94	0.00	1610.86 R	0.00	1211.17	
0.00										
1.700	4540.4	794.0	2130.22 R	0.00	1601.67	0.00	1413.78 R	0.00	1062.99	
0.00										
1.800	3451.8	604.9	1614.26 R	0.00	1213.73	0.00	1071.35 R	0.00	805.52	
0.00										
1.900	1934.1	340.3	904.18 R	0.00	679.84	0.00	600.08 R	0.00	451.19	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU7

Rating Live Load:  
Span

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-OPER  
 Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	544.61	999.00	126.75	999.00	0.00	999.0 (2-Lane)
1.010	820.59	999.00	190.98	999.00	0.00	999.0 (1-Lane)
1.100	45.10	999.00	11.03	999.00	0.00	427.6 (2-Lane)
1.100	67.96	999.00	16.62	999.00	0.00	644.2 (1-Lane)
1.200	22.85	999.00	6.93	999.00	0.00	268.5 (2-Lane)
1.200	34.44	999.00	10.44	999.00	0.00	404.5 (1-Lane)
1.300	14.29	999.00	4.49	999.00	0.00	173.9 (2-Lane)
1.300	21.52	999.00	6.76	999.00	0.00	262.0 (1-Lane)
1.400	10.94	999.00	3.54	999.00	0.00	137.0 (2-Lane)
1.400	16.49	999.00	5.33	999.00	0.00	206.5 (1-Lane)
1.500	10.01	999.00	3.27	999.00	0.00	126.8 (2-Lane)
1.500	15.08	999.00	4.93	999.00	0.00	191.0 (1-Lane)
1.600	10.94	999.00	3.54	999.00	0.00	137.0 (2-Lane)
1.600	16.49	999.00	5.33	999.00	0.00	206.5 (1-Lane)
1.700	14.29	999.00	4.49	999.00	0.00	173.9 (2-Lane)
1.700	21.52	999.00	6.76	999.00	0.00	262.0 (1-Lane)
1.800	22.85	999.00	6.93	999.00	0.00	268.5 (2-Lane)
1.800	34.44	999.00	10.44	999.00	0.00	404.5 (1-Lane)
1.900	45.10	999.00	11.03	999.00	0.00	427.6 (2-Lane)
1.900	67.96	999.00	16.62	999.00	0.00	644.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
 Rating Live Load: 3

Gamma	DC		DW		(2-Lane) LL		(1-Lane) LL	
	1.25		1.25		1.45		1.45	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00
1.010	241.8	46.8	97.80 R		73.54	64.91 R		48.80
1.100	2417.7	425.3	884.75 R		665.22	587.19 R		441.49

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1.200	4314.7	756.1	1562.18 R	1174.57	1036.78 R	779.54
1.300	5675.4	992.4	2032.30 R	1528.05	1348.79 R	1014.13
1.400	6491.9	1134.2	2310.64 R	1737.32	1533.52 R	1153.02
1.500	6764.0	1181.5	2392.03 R	1798.52	1587.53 R	1193.63
1.600	6491.9	1134.2	2310.64 R	1737.32	1533.52 R	1153.02
1.700	5675.4	992.4	2032.30 R	1528.05	1348.79 R	1014.13
1.800	4314.7	756.1	1562.18 R	1174.57	1036.78 R	779.54
1.900	2417.7	425.3	884.75 R	665.22	587.19 R	441.49
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: 3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12211.9	-12211.9B	11797.6	11797.6	-20157.4	-20157.4
1.600	19743.0C	19743.0	-11832.4	-11832.4B	12117.0	12117.0	-19458.4	-19458.4
1.700	19743.0C	19743.0	-11832.4	-11832.4B	13075.2	13075.2	-18500.3	-18500.3
1.800	19743.0C	19743.0	-13009.1	-13009.1B	14672.1	14672.1	-18080.0	-18080.0
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: 3

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	164.83	999.00	164.83	999.00	0.00	999.0 (2-Lane)
1.010	248.35	999.00	248.35	999.00	0.00	999.0 (1-Lane)
1.100	15.33	999.00	15.33	999.00	0.00	383.3 (2-Lane)
1.100	23.10	999.00	23.10	999.00	0.00	577.6 (1-Lane)
1.200	9.39	999.00	9.39	999.00	0.00	234.8 (2-Lane)
1.200	14.15	999.00	14.15	999.00	0.00	353.8 (1-Lane)

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1.300	6.43	999.00	6.43	999.00	0.00	160.8 (2-Lane)
1.300	9.69	999.00	9.69	999.00	0.00	242.3 (1-Lane)
1.400	5.24	999.00	5.24	999.00	0.00	131.1 (2-Lane)
1.400	7.90	999.00	7.90	999.00	0.00	197.5 (1-Lane)
1.500	4.93	999.00	4.93	999.00	0.00	123.3 (2-Lane)
1.500	7.43	999.00	7.43	999.00	0.00	185.8 (1-Lane)
1.600	5.24	999.00	5.24	999.00	0.00	131.1 (2-Lane)
1.600	7.90	999.00	7.90	999.00	0.00	197.5 (1-Lane)
1.700	6.43	999.00	6.43	999.00	0.00	160.8 (2-Lane)
1.700	9.69	999.00	9.69	999.00	0.00	242.3 (1-Lane)
1.800	9.39	999.00	9.39	999.00	0.00	234.8 (2-Lane)
1.800	14.15	999.00	14.15	999.00	0.00	353.8 (1-Lane)
1.900	15.33	999.00	15.33	999.00	0.00	383.3 (2-Lane)
1.900	23.10	999.00	23.10	999.00	0.00	577.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL

Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	89.42	67.23	72.53	54.54
1.010	164.0	28.9	88.48	66.53	71.77	53.96
1.100	134.8	23.6	80.04	60.18	64.93	48.82
1.200	102.0	17.7	70.67	53.13	57.32	43.10
1.300	68.0	11.8	61.29	46.08	49.71	37.38
1.400	34.0	5.9	51.91	39.03	42.11	31.66
1.500	0.0	0.0	42.53	31.98	34.50	25.94
1.600	-34.0	-5.9	-51.91	-39.03	-42.11	-31.66
1.700	-68.0	-11.8	-61.29	-46.08	-49.71	-37.38
1.800	-102.0	-17.7	-70.67	-53.13	-57.32	-43.10
1.900	-134.8	-23.6	-80.04	-60.18	-64.93	-48.82
2.000	-167.2	-29.5	-89.42	-67.23	-72.53	-54.54

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL

Rating Live Load: 3



Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL

Rating Live Load: 3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	8.80	0.00	220.0 (2-Lane)
1.000	999.00	10.85	0.00	271.2 (1-Lane)
1.010	999.00	8.94	0.00	223.4 (2-Lane)
1.010	999.00	11.02	0.00	275.4 (1-Lane)
1.100	182.07	8.73	0.00	218.4 (2-Lane)
1.100	224.47	10.77	0.00	269.2 (1-Lane)
1.200	44.99	5.78	0.00	144.5 (2-Lane)
1.200	55.47	7.12	0.00	178.1 (1-Lane)
1.300	25.57	7.31	0.00	182.9 (2-Lane)
1.300	31.52	9.02	0.00	225.4 (1-Lane)
1.400	17.13	9.40	0.00	235.1 (2-Lane)
1.400	21.12	11.59	0.00	289.8 (1-Lane)
1.500	12.42	12.42	0.00	310.4 (2-Lane)
1.500	15.31	15.31	0.00	382.7 (1-Lane)
1.600	9.40	17.13	0.00	235.1 (2-Lane)
1.600	11.59	21.12	0.00	289.8 (1-Lane)
1.700	7.31	25.57	0.00	182.9 (2-Lane)
1.700	9.02	31.52	0.00	225.4 (1-Lane)

1.800	5.78	44.99	0.00	144.5 (2-Lane)
1.800	7.12	55.47	0.00	178.1 (1-Lane)
1.900	8.73	182.07	0.00	218.4 (2-Lane)
1.900	10.77	224.47	0.00	269.2 (1-Lane)
2.000	8.80	999.00	0.00	220.0 (2-Lane)
2.000	10.85	999.00	0.00	271.2 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEG  
Rating Live Load: 3

Gamma	DC		DW		(2-Lane) LL		(1-Lane) LL	
	1.00		1.00		1.30		1.30	
Span	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	
impact		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
Lane								
1.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00
1.010	241.8	46.8	87.36 R		65.69	57.98 R		43.60
1.100	2417.7	425.3	790.32 R		594.22	524.51 R		394.37
1.200	4314.7	756.1	1395.44 R		1049.21	926.12 R		696.33
1.300	5675.4	992.4	1815.38 R		1364.95	1204.83 R		905.89
1.400	6491.9	1134.2	2064.02 R		1551.89	1369.84 R		1029.96
1.500	6764.0	1181.5	2136.72 R		1606.55	1418.09 R		1066.23
1.600	6491.9	1134.2	2064.02 R		1551.89	1369.84 R		1029.96
1.700	5675.4	992.4	1815.38 R		1364.95	1204.83 R		905.89
1.800	4314.7	756.1	1395.44 R		1049.21	926.12 R		696.33
1.900	2417.7	425.3	790.32 R		594.22	524.51 R		394.37
2.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEGL  
Rating Live Load: 3

Rating Type: 3  
Rating Live Load: 3

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9

1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEGL  
Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	625.58	999.00	145.60	999.00	0.00	999.0 (2-Lane)
1.010	942.60	999.00	219.38	999.00	0.00	999.0 (1-Lane)
1.100	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.100	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
1.200	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.200	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.300	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.300	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.400	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.400	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.500	11.82	999.00	3.87	999.00	0.00	96.6 (2-Lane)
1.500	17.81	999.00	5.82	999.00	0.00	145.6 (1-Lane)
1.600	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.600	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.700	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.700	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.800	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.800	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.900	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.900	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: 3S2

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(2-Lane)  
LL  
1.45

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45					
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R		0.00	0.00 R			0.00	
1.010	241.8	46.8	144.61 R		108.73	95.98 R			72.16	
1.100	2417.7	425.3	1296.88 R		975.10	860.71 R			647.15	
1.200	4314.7	756.1	2262.06 R		1700.79	1501.28 R			1128.78	
1.300	5675.4	992.4	2967.01 R		2230.83	1969.14 R			1480.55	
1.400	6491.9	1134.2	3365.12 R		2530.16	2233.35 R			1679.21	
1.500	6764.0	1181.5	3457.42 R		2599.56	2294.61 R			1725.27	
1.600	6491.9	1134.2	3365.12 R		2530.16	2233.35 R			1679.21	
1.700	5675.4	992.4	2967.01 R		2230.83	1969.13 R			1480.55	
1.800	4314.7	756.1	2262.06 R		1700.79	1501.28 R			1128.78	
1.900	2417.7	425.3	1296.88 R		975.10	860.71 R			647.15	
2.000	0.0	0.0	0.00 R		0.00	0.00 R			0.00	

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top Bott.	Negative Bending Top Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4 -9908.4 -9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8 -10196.9 -10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4 -12737.4 -12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1 -18274.4 -18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2 -19871.4 -19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0 -20829.6 -20829.6
1.500	19743.0C	19743.0	-12195.7	-12195.7B	11797.6	11797.6 -20141.2 -20141.2
1.600	19743.0C	19743.0	-11819.8	-11819.8B	12117.0	12117.0 -19445.9 -19445.9
1.700	19743.0C	19743.0	-11819.8	-11819.8B	13075.2	13075.2 -18487.7 -18487.7
1.800	19743.0C	19743.0	-13009.3	-13009.3B	14672.1	14672.1 -18080.2 -18080.2
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4 -12737.4 -12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4 -9908.4 -9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	top fiber +bend	Rating Factor -bend	bottom fiber +bend	Rating Value -bend	Load Resistance (tons)
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1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	111.47	999.00	111.47	999.00	0.00	999.0 (2-Lane)
1.010	167.96	999.00	167.96	999.00	0.00	999.0 (1-Lane)
1.100	10.46	999.00	10.46	999.00	0.00	418.4 (2-Lane)
1.100	15.76	999.00	15.76	999.00	0.00	630.5 (1-Lane)
1.200	6.49	999.00	6.49	999.00	0.00	259.4 (2-Lane)
1.200	9.77	999.00	9.77	999.00	0.00	390.9 (1-Lane)
1.300	4.41	999.00	4.41	999.00	0.00	176.3 (2-Lane)
1.300	6.64	999.00	6.64	999.00	0.00	265.6 (1-Lane)
1.400	3.60	999.00	3.60	999.00	0.00	144.0 (2-Lane)
1.400	5.43	999.00	5.43	999.00	0.00	217.0 (1-Lane)
1.500	3.41	999.00	3.41	999.00	0.00	136.5 (2-Lane)
1.500	5.14	999.00	5.14	999.00	0.00	205.7 (1-Lane)
1.600	3.60	999.00	3.60	999.00	0.00	144.0 (2-Lane)
1.600	5.43	999.00	5.43	999.00	0.00	217.0 (1-Lane)
1.700	4.41	999.00	4.41	999.00	0.00	176.3 (2-Lane)
1.700	6.64	999.00	6.64	999.00	0.00	265.6 (1-Lane)
1.800	6.49	999.00	6.49	999.00	0.00	259.4 (2-Lane)
1.800	9.77	999.00	9.77	999.00	0.00	390.9 (1-Lane)
1.900	10.46	999.00	10.46	999.00	0.00	418.4 (2-Lane)
1.900	15.76	999.00	15.76	999.00	0.00	630.5 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	132.33	99.50	107.34	80.71
1.010	164.0	28.9	130.83	98.37	106.13	79.79
1.100	134.8	23.6	117.33	88.22	95.17	71.56
1.200	102.0	17.7	102.32	76.94	83.00	62.41
1.300	68.0	11.8	87.32	65.65	70.83	53.25
1.400	34.0	5.9	72.32	54.37	58.66	44.10
1.500	0.0	0.0	57.31	43.09	46.49	34.95
1.600	-34.0	-5.9	-72.32	-54.37	-58.66	-44.10
1.700	-68.0	-11.8	-87.32	-65.65	-70.83	-53.25
1.800	-102.0	-17.7	-102.32	-76.94	-83.00	-62.41
1.900	-134.8	-23.6	-117.33	-88.22	-95.17	-71.56
2.000	-167.2	-29.5	-132.33	-99.50	-107.34	-80.71

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 366

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL

Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 367

STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL

Rating Live Load: 3S2

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.95	0.00	237.8 (2-Lane)
1.000	999.00	7.33	0.00	293.2 (1-Lane)
1.010	999.00	6.04	0.00	241.7 (2-Lane)
1.010	999.00	7.45	0.00	298.0 (1-Lane)
1.100	182.07	5.96	0.00	238.4 (2-Lane)
1.100	224.47	7.35	0.00	293.9 (1-Lane)
1.200	47.78	3.99	0.00	159.6 (2-Lane)
1.200	58.90	4.92	0.00	196.8 (1-Lane)
1.300	22.26	5.13	0.00	205.3 (2-Lane)
1.300	27.45	6.33	0.00	253.2 (1-Lane)

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1.400	13.43	6.75	0.00	270.0 (2-Lane)
1.400	16.55	8.32	0.00	332.9 (1-Lane)
1.500	9.21	9.21	0.00	368.6 (2-Lane)
1.500	11.36	11.36	0.00	454.4 (1-Lane)
1.600	6.75	13.43	0.00	270.0 (2-Lane)
1.600	8.32	16.55	0.00	332.9 (1-Lane)
1.700	5.13	22.26	0.00	205.3 (2-Lane)
1.700	6.33	27.45	0.00	253.2 (1-Lane)
1.800	3.99	47.78	0.00	159.6 (2-Lane)
1.800	4.92	58.90	0.00	196.8 (1-Lane)
1.900	5.96	182.07	0.00	238.4 (2-Lane)
1.900	7.35	224.47	0.00	293.9 (1-Lane)
2.000	5.95	999.00	0.00	237.8 (2-Lane)
2.000	7.33	999.00	0.00	293.2 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 368

SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEG  
Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	129.18 R	97.13	85.73 R	64.46
1.100	2417.7	425.3	1158.46 R	871.02	768.84 R	578.08
1.200	4314.7	756.1	2020.62 R	1519.26	1341.04 R	1008.30
1.300	5675.4	992.4	2650.33 R	1992.73	1758.96 R	1322.53
1.400	6491.9	1134.2	3005.94 R	2260.11	1994.98 R	1499.98
1.500	6764.0	1181.5	3088.39 R	2322.10	2049.69 R	1541.12
1.600	6491.9	1134.2	3005.94 R	2260.11	1994.98 R	1499.98
1.700	5675.4	992.4	2650.33 R	1992.73	1758.96 R	1322.53
1.800	4314.7	756.1	2020.62 R	1519.26	1341.04 R	1008.30
1.900	2417.7	425.3	1158.46 R	871.02	768.84 R	578.08
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEGL  
Rating Live Load:

Rating Type: 3S2

Rating Live Load:  
Span Service Resistance  
Positive Bending Negative Bending

Available Resistance for LL+I  
Positive Bending Negative Bending

	Top	Bott.	Top	Bott.	Top	Bott.	Top	Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEGL  
Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	423.08	999.00	98.47	999.00	0.00	999.0 (2-Lane)
1.010	637.48	999.00	148.37	999.00	0.00	999.0 (1-Lane)
1.100	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.100	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
1.200	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.200	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.300	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.300	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.400	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.400	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.500	8.18	999.00	2.67	999.00	0.00	107.0 (2-Lane)
1.500	12.32	999.00	4.03	999.00	0.00	161.2 (1-Lane)
1.600	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.600	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.700	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.700	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.800	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.800	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.900	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.900	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)



MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: 3-3

Gamma	DC	DW	(2-Lane)		(1-Lane)	
	1.25	1.25	LL	LL	LL	LL
			1.45		1.45	
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
impact						
Lane		Dead Load	Truck	Lane	Truck	Lane
						Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	139.44 R	104.84	92.54 R	69.58
1.100	2417.7	425.3	1245.08 R	936.15	826.33 R	621.30
1.200	4314.7	756.1	2168.82 R	1630.69	1439.40 R	1082.25
1.300	5675.4	992.4	2791.94 R	2099.20	1852.94 R	1393.19
1.400	6491.9	1134.2	3166.22 R	2380.61	2101.35 R	1579.96
1.500	6764.0	1181.5	3291.67 R	2474.94	2184.60 R	1642.56
1.600	6491.9	1134.2	3166.22 R	2380.61	2101.35 R	1579.96
1.700	5675.4	992.4	2791.94 R	2099.20	1852.94 R	1393.19
1.800	4314.7	756.1	2168.82 R	1630.69	1439.40 R	1082.25
1.900	2417.7	425.3	1245.08 R	936.15	826.33 R	621.30
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: 3-3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12211.1	-12211.1B	11797.6	11797.6	-20156.6	-20156.6
1.600	19743.0C	19743.0	-11834.9	-11834.9B	12117.0	12117.0	-19461.0	-19461.0
1.700	19743.0C	19743.0	-11834.9	-11834.9B	13075.2	13075.2	-18502.8	-18502.8
1.800	19743.0C	19743.0	-12991.8	-12991.8B	14672.1	14672.1	-18062.6	-18062.6
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
 Rating Live Load: 3-3

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	115.61	999.00	115.61	999.00	0.00	999.0 (2-Lane)
1.010	174.20	999.00	174.20	999.00	0.00	999.0 (1-Lane)
1.100	10.90	999.00	10.90	999.00	0.00	435.8 (2-Lane)
1.100	16.42	999.00	16.42	999.00	0.00	656.7 (1-Lane)
1.200	6.76	999.00	6.76	999.00	0.00	270.6 (2-Lane)
1.200	10.19	999.00	10.19	999.00	0.00	407.7 (1-Lane)
1.300	4.68	999.00	4.68	999.00	0.00	187.3 (2-Lane)
1.300	7.06	999.00	7.06	999.00	0.00	282.3 (1-Lane)
1.400	3.83	999.00	3.83	999.00	0.00	153.1 (2-Lane)
1.400	5.77	999.00	5.77	999.00	0.00	230.7 (1-Lane)
1.500	3.58	999.00	3.58	999.00	0.00	143.4 (2-Lane)
1.500	5.40	999.00	5.40	999.00	0.00	216.0 (1-Lane)
1.600	3.83	999.00	3.83	999.00	0.00	153.1 (2-Lane)
1.600	5.77	999.00	5.77	999.00	0.00	230.7 (1-Lane)
1.700	4.68	999.00	4.68	999.00	0.00	187.3 (2-Lane)
1.700	7.06	999.00	7.06	999.00	0.00	282.3 (1-Lane)
1.800	6.76	999.00	6.76	999.00	0.00	270.6 (2-Lane)
1.800	10.19	999.00	10.19	999.00	0.00	407.7 (1-Lane)
1.900	10.90	999.00	10.90	999.00	0.00	435.8 (2-Lane)
1.900	16.42	999.00	16.42	999.00	0.00	656.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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# SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
 Rating Live Load: 3-3

Gamma	DC		DW		(2-Lane) LL 1.45		(1-Lane) LL 1.45	
	1.25		1.25					
Span w/o impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load		
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Truck
1.000	167.2	29.5	127.65		95.98		103.54	77.85
1.010	164.0	28.9	126.15		94.85		102.32	76.94
1.100	134.8	23.6	112.64		84.69		91.37	68.70

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1.200	102.0	17.7	97.64	73.41	79.20	59.55
1.300	68.0	11.8	82.63	62.13	67.03	50.40
1.400	34.0	5.9	67.63	50.85	54.86	41.25
1.500	0.0	0.0	52.62	39.57	42.69	32.09
1.600	-34.0	-5.9	-67.63	-50.85	-54.86	-41.25
1.700	-68.0	-11.8	-82.63	-62.13	-67.03	-50.40
1.800	-102.0	-17.7	-97.64	-73.41	-79.20	-59.55
1.900	-134.8	-23.6	-112.64	-84.69	-91.37	-68.70
2.000	-167.2	-29.5	-127.65	-95.98	-103.54	-77.85

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL

Rating Live Load: 3-3

Span	Shear Resistance vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL

Rating Live Load: 3-3

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.16	0.00	246.6 (2-Lane)

1.000	999.00	7.60	0.00	304.0 (1-Lane)
1.010	999.00	6.27	0.00	250.7 (2-Lane)
1.010	999.00	7.73	0.00	309.1 (1-Lane)
1.100	221.09	6.21	0.00	248.3 (2-Lane)
1.100	272.57	7.65	0.00	306.1 (1-Lane)
1.200	53.53	4.18	0.00	167.3 (2-Lane)
1.200	66.00	5.16	0.00	206.2 (1-Lane)
1.300	25.92	5.43	0.00	217.0 (2-Lane)
1.300	31.95	6.69	0.00	267.5 (1-Lane)
1.400	15.10	7.22	0.00	288.7 (2-Lane)
1.400	18.61	8.90	0.00	356.0 (1-Lane)
1.500	10.03	10.03	0.00	401.4 (2-Lane)
1.500	12.37	12.37	0.00	494.8 (1-Lane)
1.600	7.22	15.10	0.00	288.7 (2-Lane)
1.600	8.90	18.61	0.00	356.0 (1-Lane)
1.700	5.43	25.92	0.00	217.0 (2-Lane)
1.700	6.69	31.95	0.00	267.5 (1-Lane)
1.800	4.18	53.53	0.00	167.3 (2-Lane)
1.800	5.16	66.00	0.00	206.2 (1-Lane)
1.900	6.21	221.09	0.00	248.3 (2-Lane)
1.900	7.65	272.57	0.00	306.1 (1-Lane)
2.000	6.16	999.00	0.00	246.6 (2-Lane)
2.000	7.60	999.00	0.00	304.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEG  
Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	124.55 R	93.65	82.66 R	62.15
1.100	2417.7	425.3	1112.19 R	836.23	738.14 R	554.99
1.200	4314.7	756.1	1937.34 R	1456.64	1285.77 R	966.74
1.300	5675.4	992.4	2493.94 R	1875.14	1655.17 R	1244.49
1.400	6491.9	1134.2	2828.27 R	2126.52	1877.06 R	1411.32
1.500	6764.0	1181.5	2940.33 R	2210.78	1951.43 R	1467.24
1.600	6491.9	1134.2	2828.27 R	2126.52	1877.06 R	1411.32
1.700	5675.4	992.4	2493.94 R	1875.14	1655.17 R	1244.49
1.800	4314.7	756.1	1937.34 R	1456.64	1285.77 R	966.74
1.900	2417.7	425.3	1112.19 R	836.23	738.14 R	554.99
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEGL

Rating Live Load:

Rating Type: 3-3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEGL

Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	438.80	999.00	102.13	999.00	0.00	999.0 (2-Lane)
1.010	661.17	999.00	153.88	999.00	0.00	999.0 (1-Lane)
1.100	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.100	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
1.200	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.200	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.300	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.300	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.400	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.400	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.500	8.59	999.00	2.81	999.00	0.00	112.3 (2-Lane)
1.500	12.95	999.00	4.23	999.00	0.00	169.3 (1-Lane)
1.600	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.600	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.700	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)

1.700	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.800	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.800	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.900	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.900	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20				(1-Lane) LL 1.20		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R		0.00	0.00 R			0.00
1.010	241.8	46.8	88.06 R		66.21	58.44 R			43.94
1.100	2417.7	425.3	797.15 R		599.36	529.05 R			397.78
1.200	4314.7	756.1	1408.87 R		1059.30	935.03 R			703.03
1.300	5675.4	992.4	1835.14 R		1379.80	1217.94 R			915.74
1.400	6491.9	1134.2	2095.71 R		1575.72	1390.87 R			1045.77
1.500	6764.0	1181.5	2174.27 R		1634.79	1443.01 R			1084.97
1.600	6491.9	1134.2	2095.71 R		1575.72	1390.87 R			1045.77
1.700	5675.4	992.4	1835.14 R		1379.80	1217.94 R			915.74
1.800	4314.7	756.1	1408.87 R		1059.30	935.03 R			703.03
1.900	2417.7	425.3	797.15 R		599.36	529.05 R			397.78
2.000	0.0	0.0	0.00 R		0.00	0.00 R			0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU4

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12218.6	-12218.6B	11797.6	11797.6	-20164.1	-20164.1
1.600	19743.0C	19743.0	-11835.8	-11835.8B	12117.0	12117.0	-19461.8	-19461.8
1.700	19743.0C	19743.0	-11835.8	-11835.8B	13075.2	13075.2	-18503.7	-18503.7

1.800	19743.0C	19743.0	-13015.6	-13015.6B	14672.1	14672.1	-18086.5	-18086.5
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL

Rating Live Load: SU4

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor fiber -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	183.07	999.00	183.07	999.00	0.00	999.0 (2-Lane)
1.010	275.84	999.00	275.84	999.00	0.00	999.0 (1-Lane)
1.100	17.02	999.00	17.02	999.00	0.00	459.5 (2-Lane)
1.100	25.64	999.00	25.64	999.00	0.00	692.4 (1-Lane)
1.200	10.41	999.00	10.41	999.00	0.00	281.2 (2-Lane)
1.200	15.69	999.00	15.69	999.00	0.00	423.7 (1-Lane)
1.300	7.12	999.00	7.12	999.00	0.00	192.4 (2-Lane)
1.300	10.73	999.00	10.73	999.00	0.00	289.9 (1-Lane)
1.400	5.78	999.00	5.78	999.00	0.00	156.1 (2-Lane)
1.400	8.71	999.00	8.71	999.00	0.00	235.2 (1-Lane)
1.500	5.43	999.00	5.43	999.00	0.00	146.5 (2-Lane)
1.500	8.18	999.00	8.18	999.00	0.00	220.7 (1-Lane)
1.600	5.78	999.00	5.78	999.00	0.00	156.1 (2-Lane)
1.600	8.71	999.00	8.71	999.00	0.00	235.2 (1-Lane)
1.700	7.12	999.00	7.12	999.00	0.00	192.4 (2-Lane)
1.700	10.73	999.00	10.73	999.00	0.00	289.9 (1-Lane)
1.800	10.41	999.00	10.41	999.00	0.00	281.2 (2-Lane)
1.800	15.69	999.00	15.69	999.00	0.00	423.7 (1-Lane)
1.900	17.02	999.00	17.02	999.00	0.00	459.5 (2-Lane)
1.900	25.64	999.00	25.64	999.00	0.00	692.4 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL

Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load Truck
1.000	167.2	29.5	80.51	60.53	65.30	49.10
1.010	164.0	28.9	79.67	59.90	64.62	48.59
1.100	134.8	23.6	72.12	54.22	58.50	43.98
1.200	102.0	17.7	63.73	47.92	51.69	38.87
1.300	68.0	11.8	55.34	41.61	44.89	33.75
1.400	34.0	5.9	46.95	35.30	38.09	28.64
1.500	0.0	0.0	38.57	29.00	31.28	23.52
1.600	-34.0	-5.9	-46.95	-35.30	-38.09	-28.64
1.700	-68.0	-11.8	-55.34	-41.61	-44.89	-33.75
1.800	-102.0	-17.7	-63.73	-47.92	-51.69	-38.87
1.900	-134.8	-23.6	-72.12	-54.22	-58.50	-43.98
2.000	-167.2	-29.5	-80.51	-60.53	-65.30	-49.10

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02



Rating Type: I-LEGL  
 Rating Live Load: SU4

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	9.77	0.00	263.9 (2-Lane)
1.000	999.00	12.05	0.00	325.3 (1-Lane)
1.010	999.00	9.92	0.00	268.0 (2-Lane)
1.010	999.00	12.23	0.00	330.3 (1-Lane)
1.100	193.77	9.69	0.00	261.8 (2-Lane)
1.100	238.89	11.95	0.00	322.7 (1-Lane)
1.200	48.34	6.41	0.00	173.0 (2-Lane)
1.200	59.59	7.90	0.00	213.3 (1-Lane)
1.300	27.90	8.10	0.00	218.7 (2-Lane)
1.300	34.39	9.99	0.00	269.6 (1-Lane)
1.400	18.82	10.40	0.00	280.7 (2-Lane)
1.400	23.20	12.82	0.00	346.1 (1-Lane)
1.500	13.69	13.69	0.00	369.7 (2-Lane)
1.500	16.88	16.88	0.00	455.8 (1-Lane)
1.600	10.40	18.82	0.00	280.7 (2-Lane)
1.600	12.82	23.20	0.00	346.1 (1-Lane)
1.700	8.10	27.90	0.00	218.7 (2-Lane)
1.700	9.99	34.39	0.00	269.6 (1-Lane)
1.800	6.41	48.34	0.00	173.0 (2-Lane)
1.800	7.90	59.59	0.00	213.3 (1-Lane)
1.900	9.69	193.77	0.00	261.8 (2-Lane)
1.900	11.95	238.89	0.00	322.7 (1-Lane)
2.000	9.77	999.00	0.00	263.9 (2-Lane)
2.000	12.05	999.00	0.00	325.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEG  
 Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	94.98 R	71.41	63.03 R	47.39
1.100	2417.7	425.3	859.76 R	646.44	570.60 R	429.02
1.200	4314.7	756.1	1519.52 R	1142.49	1008.47 R	758.25
1.300	5675.4	992.4	1979.27 R	1488.17	1313.60 R	987.67
1.400	6491.9	1134.2	2260.31 R	1699.48	1500.11 R	1127.90

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1.500	6764.0	1181.5	2345.04 R	1763.19	1556.35 R	1170.19
1.600	6491.9	1134.2	2260.31 R	1699.48	1500.11 R	1127.90
1.700	5675.4	992.4	1979.27 R	1488.17	1313.60 R	987.67
1.800	4314.7	756.1	1519.52 R	1142.49	1008.47 R	758.25
1.900	2417.7	425.3	859.76 R	646.44	570.60 R	429.02
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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#### SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEGL

Rating Live Load:

Rating Type: SU4

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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#### SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEGL

Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	575.45	999.00	133.93	999.00	0.00	999.0 (2-Lane)
1.010	867.06	999.00	201.80	999.00	0.00	999.0 (1-Lane)
1.100	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.100	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
1.200	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.200	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)

1.300	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.300	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.400	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.400	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.500	10.77	999.00	3.52	999.00	0.00	95.1 (2-Lane)
1.500	16.23	999.00	5.31	999.00	0.00	143.3 (1-Lane)
1.600	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.600	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.700	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.700	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.800	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.800	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.900	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.900	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	100.11 R	75.27	66.44 R	49.96
1.100	2417.7	425.3	905.33 R	680.70	600.85 R	451.77
1.200	4314.7	756.1	1597.76 R	1201.32	1060.40 R	797.29
1.300	5675.4	992.4	2084.13 R	1567.02	1383.19 R	1039.99
1.400	6491.9	1134.2	2377.33 R	1787.47	1577.78 R	1186.30
1.500	6764.0	1181.5	2457.62 R	1847.83	1631.07 R	1226.36
1.600	6491.9	1134.2	2377.33 R	1787.47	1577.78 R	1186.30
1.700	5675.4	992.4	2084.13 R	1567.02	1383.19 R	1039.99
1.800	4314.7	756.1	1597.76 R	1201.32	1060.40 R	797.29
1.900	2417.7	425.3	905.33 R	680.70	600.85 R	451.77
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU5

Span Moment Resistance Available Resistance for LL+I

	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12213.4	-12213.4B	11797.6	11797.6	-20158.9	-20158.9
1.600	19743.0C	19743.0	-11831.5	-11831.5B	12117.0	12117.0	-19457.6	-19457.6
1.700	19743.0C	19743.0	-11831.5	-11831.5B	13075.2	13075.2	-18499.4	-18499.4
1.800	19743.0C	19743.0	-13014.6	-13014.6B	14672.1	14672.1	-18085.5	-18085.5
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	161.02	999.00	161.02	999.00	0.00	999.0 (2-Lane)
1.010	242.62	999.00	242.62	999.00	0.00	999.0 (1-Lane)
1.100	14.98	999.00	14.98	999.00	0.00	464.5 (2-Lane)
1.100	22.58	999.00	22.58	999.00	0.00	699.9 (1-Lane)
1.200	9.18	999.00	9.18	999.00	0.00	284.7 (2-Lane)
1.200	13.84	999.00	13.84	999.00	0.00	428.9 (1-Lane)
1.300	6.27	999.00	6.27	999.00	0.00	194.5 (2-Lane)
1.300	9.45	999.00	9.45	999.00	0.00	293.0 (1-Lane)
1.400	5.10	999.00	5.10	999.00	0.00	158.0 (2-Lane)
1.400	7.68	999.00	7.68	999.00	0.00	238.1 (1-Lane)
1.500	4.80	999.00	4.80	999.00	0.00	148.8 (2-Lane)
1.500	7.23	999.00	7.23	999.00	0.00	224.2 (1-Lane)
1.600	5.10	999.00	5.10	999.00	0.00	158.0 (2-Lane)
1.600	7.68	999.00	7.68	999.00	0.00	238.1 (1-Lane)
1.700	6.27	999.00	6.27	999.00	0.00	194.5 (2-Lane)
1.700	9.45	999.00	9.45	999.00	0.00	293.0 (1-Lane)
1.800	9.18	999.00	9.18	999.00	0.00	284.7 (2-Lane)
1.800	13.84	999.00	13.84	999.00	0.00	428.9 (1-Lane)
1.900	14.98	999.00	14.98	999.00	0.00	464.5 (2-Lane)
1.900	22.58	999.00	22.58	999.00	0.00	699.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	Lane
1.000	167.2	29.5	91.54	68.82	74.25	55.83
1.010	164.0	28.9	90.57	68.10	73.47	55.24
1.100	134.8	23.6	81.91	61.58	66.44	49.95
1.200	102.0	17.7	72.27	54.34	58.63	44.08
1.300	68.0	11.8	62.64	47.10	50.81	38.21
1.400	34.0	5.9	53.01	39.86	43.00	32.33
1.500	0.0	0.0	43.38	32.62	35.19	26.46
1.600	-34.0	-5.9	-53.01	-39.86	-43.00	-32.33
1.700	-68.0	-11.8	-62.64	-47.10	-50.81	-38.21
1.800	-102.0	-17.7	-72.27	-54.34	-58.63	-44.08
1.900	-134.8	-23.6	-81.91	-61.58	-66.44	-49.95
2.000	-167.2	-29.5	-91.54	-68.82	-74.25	-55.83

STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)

1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL

Rating Live Load: SU5

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	8.60	0.00	266.5 (2-Lane)
1.000	999.00	10.60	0.00	328.5 (1-Lane)
1.010	999.00	8.73	0.00	270.6 (2-Lane)
1.010	999.00	10.76	0.00	333.6 (1-Lane)
1.100	182.91	8.54	0.00	264.6 (2-Lane)
1.100	225.50	10.52	0.00	326.3 (1-Lane)
1.200	44.71	5.65	0.00	175.2 (2-Lane)
1.200	55.12	6.97	0.00	215.9 (1-Lane)
1.300	25.20	7.16	0.00	221.8 (2-Lane)
1.300	31.07	8.82	0.00	273.5 (1-Lane)
1.400	16.83	9.21	0.00	285.5 (2-Lane)
1.400	20.75	11.35	0.00	351.9 (1-Lane)
1.500	12.17	12.17	0.00	377.3 (2-Lane)
1.500	15.01	15.01	0.00	465.2 (1-Lane)
1.600	9.21	16.83	0.00	285.5 (2-Lane)
1.600	11.35	20.75	0.00	351.9 (1-Lane)
1.700	7.16	25.20	0.00	221.8 (2-Lane)
1.700	8.82	31.07	0.00	273.5 (1-Lane)
1.800	5.65	44.71	0.00	175.2 (2-Lane)
1.800	6.97	55.12	0.00	215.9 (1-Lane)
1.900	8.54	182.91	0.00	264.6 (2-Lane)
1.900	10.52	225.50	0.00	326.3 (1-Lane)
2.000	8.60	999.00	0.00	266.5 (2-Lane)
2.000	10.60	999.00	0.00	328.5 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEG

Rating Live Load: SU5

Gamma	DC	DW	(2-Lane)	(1-Lane)
	1.00	1.00	LL	LL
			1.30	1.30

Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	0.0	0.0	0.00 R		0.00	0.00 R			0.00
1.010	241.8	46.8	107.98 R		81.19	71.66 R			53.88
1.100	2417.7	425.3	976.44 R		734.16	648.04 R			487.25
1.200	4314.7	756.1	1723.24 R		1295.67	1143.68 R			859.91
1.300	5675.4	992.4	2247.82 R		1690.09	1491.83 R			1121.67
1.400	6491.9	1134.2	2564.05 R		1927.85	1701.70 R			1279.47
1.500	6764.0	1181.5	2650.64 R		1992.96	1759.17 R			1322.68
1.600	6491.9	1134.2	2564.05 R		1927.85	1701.70 R			1279.47
1.700	5675.4	992.4	2247.82 R		1690.09	1491.83 R			1121.67
1.800	4314.7	756.1	1723.24 R		1295.67	1143.68 R			859.91
1.900	2417.7	425.3	976.44 R		734.16	648.04 R			487.25
2.000	0.0	0.0	0.00 R		0.00	0.00 R			0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEGL

Rating Live Load:

Rating Type: SU5

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEGL

Rating Live Load: SU5

## Service

Span	Rating	Factor	Rating	Load
	top fiber	bottom fiber	Value	Resistance
	+bend	-bend		(tons)

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1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	506.16	999.00	117.80	999.00	0.00	999.0 (2-Lane)
1.010	762.66	999.00	177.50	999.00	0.00	999.0 (1-Lane)
1.100	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.100	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
1.200	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.200	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.300	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.300	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.400	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.400	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.500	9.53	999.00	3.12	999.00	0.00	96.6 (2-Lane)
1.500	14.36	999.00	4.69	999.00	0.00	145.5 (1-Lane)
1.600	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.600	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.700	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.700	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.800	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.800	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.900	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.900	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R		0.00	0.00 R
1.010	241.8	46.8	110.34 R		82.96	73.23 R
1.100	2417.7	425.3	996.03 R		748.90	661.04 R
1.200	4314.7	756.1	1778.70 R		1337.37	1180.49 R
1.300	5675.4	992.4	2327.22 R		1749.79	1544.52 R
1.400	6491.9	1134.2	2649.07 R		1991.79	1758.13 R
1.500	6764.0	1181.5	2750.07 R		2067.72	1825.16 R
1.600	6491.9	1134.2	2649.07 R		1991.79	1758.13 R
1.700	5675.4	992.4	2327.22 R		1749.79	1544.52 R
1.800	4314.7	756.1	1778.70 R		1337.37	1180.49 R
1.900	2417.7	425.3	996.03 R		748.89	661.04 R
2.000	0.0	0.0	0.00 R		0.00	0.00 R

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STRENGTH MOMENT RESISTANCE REPORT



Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU6

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12214.9	-12214.9B	11797.6	11797.6	-20160.4	-20160.4
1.600	19743.0C	19743.0	-11834.9	-11834.9B	12117.0	12117.0	-19460.9	-19460.9
1.700	19743.0C	19743.0	-11834.9	-11834.9B	13075.2	13075.2	-18502.7	-18502.7
1.800	19743.0C	19743.0	-13013.8	-13013.8B	14672.1	14672.1	-18084.7	-18084.7
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU6

## Moment

Span	Rating Factor				Rating Value	Load Resistance (tons)
	top +bend	fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	146.10	999.00	146.10	999.00	0.00	999.0 (2-Lane)
1.010	220.13	999.00	220.13	999.00	0.00	999.0 (1-Lane)
1.100	13.62	999.00	13.62	999.00	0.00	473.3 (2-Lane)
1.100	20.52	999.00	20.52	999.00	0.00	713.2 (1-Lane)
1.200	8.25	999.00	8.25	999.00	0.00	286.6 (2-Lane)
1.200	12.43	999.00	12.43	999.00	0.00	431.9 (1-Lane)
1.300	5.62	999.00	5.62	999.00	0.00	195.2 (2-Lane)
1.300	8.47	999.00	8.47	999.00	0.00	294.2 (1-Lane)
1.400	4.57	999.00	4.57	999.00	0.00	158.9 (2-Lane)
1.400	6.89	999.00	6.89	999.00	0.00	239.5 (1-Lane)
1.500	4.29	999.00	4.29	999.00	0.00	149.1 (2-Lane)
1.500	6.46	999.00	6.46	999.00	0.00	224.6 (1-Lane)
1.600	4.57	999.00	4.57	999.00	0.00	158.9 (2-Lane)
1.600	6.89	999.00	6.89	999.00	0.00	239.5 (1-Lane)
1.700	5.62	999.00	5.62	999.00	0.00	195.2 (2-Lane)

1.700	8.47	999.00	8.47	999.00	0.00	294.2 (1-Lane)
1.800	8.25	999.00	8.25	999.00	0.00	286.6 (2-Lane)
1.800	12.43	999.00	12.43	999.00	0.00	431.9 (1-Lane)
1.900	13.62	999.00	13.62	999.00	0.00	473.3 (2-Lane)
1.900	20.52	999.00	20.52	999.00	0.00	713.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	100.91	75.87	81.85	61.54
1.010	164.0	28.9	99.83	75.06	80.97	60.88
1.100	134.8	23.6	90.11	67.75	73.09	54.96
1.200	102.0	17.7	79.32	59.64	64.34	48.37
1.300	68.0	11.8	68.52	51.52	55.58	41.79
1.400	34.0	5.9	57.72	43.40	46.82	35.20
1.500	0.0	0.0	46.93	35.28	38.06	28.62
1.600	-34.0	-5.9	-57.72	-43.40	-46.82	-35.20
1.700	-68.0	-11.8	-68.52	-51.52	-55.58	-41.79
1.800	-102.0	-17.7	-79.32	-59.64	-64.34	-48.37
1.900	-134.8	-23.6	-90.11	-67.75	-73.09	-54.96
2.000	-167.2	-29.5	-100.91	-75.87	-81.85	-61.54

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)

1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL

Rating Live Load: SU6

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.80	0.00	271.0 (2-Lane)
1.000	999.00	9.61	0.00	334.1 (1-Lane)
1.010	999.00	7.92	0.00	275.2 (2-Lane)
1.010	999.00	9.76	0.00	339.3 (1-Lane)
1.100	209.20	7.76	0.00	269.6 (2-Lane)
1.100	257.90	9.57	0.00	332.4 (1-Lane)
1.200	44.56	5.15	0.00	178.9 (2-Lane)
1.200	54.93	6.35	0.00	220.6 (1-Lane)
1.300	23.99	6.54	0.00	227.3 (2-Lane)
1.300	29.58	8.06	0.00	280.3 (1-Lane)
1.400	15.72	8.46	0.00	293.9 (2-Lane)
1.400	19.38	10.43	0.00	362.3 (1-Lane)
1.500	11.25	11.25	0.00	391.0 (2-Lane)
1.500	13.87	13.87	0.00	482.1 (1-Lane)
1.600	8.46	15.72	0.00	293.9 (2-Lane)
1.600	10.43	19.38	0.00	362.3 (1-Lane)
1.700	6.54	23.99	0.00	227.3 (2-Lane)
1.700	8.06	29.58	0.00	280.3 (1-Lane)
1.800	5.15	44.56	0.00	178.9 (2-Lane)
1.800	6.35	54.93	0.00	220.6 (1-Lane)
1.900	7.76	209.20	0.00	269.6 (2-Lane)
1.900	9.57	257.90	0.00	332.4 (1-Lane)
2.000	7.80	999.00	0.00	271.0 (2-Lane)
2.000	9.61	999.00	0.00	334.1 (1-Lane)

## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEG  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	119.01 R	89.48	78.98 R	59.39
1.100	2417.7	425.3	1074.26 R	807.71	712.96 R	536.06
1.200	4314.7	756.1	1918.40 R	1442.41	1273.20 R	957.29
1.300	5675.4	992.4	2509.99 R	1887.21	1665.83 R	1252.50
1.400	6491.9	1134.2	2857.13 R	2148.22	1896.21 R	1425.72
1.500	6764.0	1181.5	2966.06 R	2230.12	1968.50 R	1480.08
1.600	6491.9	1134.2	2857.13 R	2148.22	1896.21 R	1425.72
1.700	5675.4	992.4	2509.99 R	1887.21	1665.83 R	1252.50
1.800	4314.7	756.1	1918.40 R	1442.41	1273.20 R	957.29
1.900	2417.7	425.3	1074.26 R	807.71	712.96 R	536.06
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEGL  
Rating Live Load:Rating Type: SU6  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type:  
Rating Live Load:

II-LEGL  
SU6

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	459.24	999.00	106.88	999.00	0.00	999.0 (2-Lane)
1.010	691.96	999.00	161.05	999.00	0.00	999.0 (1-Lane)
1.100	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.100	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
1.200	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.200	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.300	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.300	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.400	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.400	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.500	8.52	999.00	2.78	999.00	0.00	96.7 (2-Lane)
1.500	12.83	999.00	4.20	999.00	0.00	145.8 (1-Lane)
1.600	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.600	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.700	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.700	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.800	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.800	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.900	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.900	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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# MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU7

Gamma	DC		DW		(2-Lane) LL 1.20		(1-Lane) LL 1.20	
	1.25		1.25					
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o		
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck Lane		
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00		
1.010	241.8	46.8	120.96 R	90.95	80.28 R	60.36		
1.100	2417.7	425.3	1089.84 R	819.43	723.30 R	543.84		
1.200	4314.7	756.1	1945.72 R	1462.95	1291.33 R	970.92		

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1.300	5675.4	992.4	2567.63 R	1930.55	1704.08 R	1281.26
1.400	6491.9	1134.2	2925.55 R	2199.66	1941.62 R	1459.86
1.500	6764.0	1181.5	3041.99 R	2287.21	2018.90 R	1517.97
1.600	6491.9	1134.2	2925.55 R	2199.66	1941.62 R	1459.86
1.700	5675.4	992.4	2567.63 R	1930.55	1704.08 R	1281.26
1.800	4314.7	756.1	1945.72 R	1462.95	1291.33 R	970.92
1.900	2417.7	425.3	1089.84 R	819.43	723.30 R	543.84
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12217.2	-12217.2B	11797.6	11797.6	-20162.7	-20162.7
1.600	19743.0C	19743.0	-11836.6	-11836.6B	12117.0	12117.0	-19462.7	-19462.7
1.700	19743.0C	19743.0	-11836.6	-11836.6B	13075.2	13075.2	-18504.5	-18504.5
1.800	19743.0C	19743.0	-13022.0	-13022.0B	14672.1	14672.1	-18092.9	-18092.9
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	133.27	999.00	133.27	999.00	0.00	999.0 (2-Lane)
1.010	200.81	999.00	200.81	999.00	0.00	999.0 (1-Lane)
1.100	12.45	999.00	12.45	999.00	0.00	482.4 (2-Lane)
1.100	18.76	999.00	18.76	999.00	0.00	726.8 (1-Lane)
1.200	7.54	999.00	7.54	999.00	0.00	292.2 (2-Lane)
1.200	11.36	999.00	11.36	999.00	0.00	440.3 (1-Lane)

1.300	5.09	999.00	5.09	999.00	0.00	197.3 (2-Lane)
1.300	7.67	999.00	7.67	999.00	0.00	297.3 (1-Lane)
1.400	4.14	999.00	4.14	999.00	0.00	160.5 (2-Lane)
1.400	6.24	999.00	6.24	999.00	0.00	241.8 (1-Lane)
1.500	3.88	999.00	3.88	999.00	0.00	150.3 (2-Lane)
1.500	5.84	999.00	5.84	999.00	0.00	226.4 (1-Lane)
1.600	4.14	999.00	4.14	999.00	0.00	160.5 (2-Lane)
1.600	6.24	999.00	6.24	999.00	0.00	241.8 (1-Lane)
1.700	5.09	999.00	5.09	999.00	0.00	197.3 (2-Lane)
1.700	7.67	999.00	7.67	999.00	0.00	297.3 (1-Lane)
1.800	7.54	999.00	7.54	999.00	0.00	292.2 (2-Lane)
1.800	11.36	999.00	11.36	999.00	0.00	440.3 (1-Lane)
1.900	12.45	999.00	12.45	999.00	0.00	482.4 (2-Lane)
1.900	18.76	999.00	18.76	999.00	0.00	726.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	110.64	83.19	89.74	67.48
1.010	164.0	28.9	109.43	82.28	88.77	66.74
1.100	134.8	23.6	98.60	74.13	79.98	60.13
1.200	102.0	17.7	86.56	65.08	70.21	52.79
1.300	68.0	11.8	74.52	56.03	60.45	45.45
1.400	34.0	5.9	62.48	46.98	50.68	38.11
1.500	0.0	0.0	50.44	37.93	40.92	30.76
1.600	-34.0	-5.9	-62.48	-46.98	-50.68	-38.11
1.700	-68.0	-11.8	-74.52	-56.03	-60.45	-45.45
1.800	-102.0	-17.7	-86.56	-65.08	-70.21	-52.79
1.900	-134.8	-23.6	-98.60	-74.13	-79.98	-60.13
2.000	-167.2	-29.5	-110.64	-83.19	-89.74	-67.48

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL  
Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: I-LEGL

Rating Live Load: SU7

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.11	0.00	275.6 (2-Lane)
1.000	999.00	8.77	0.00	339.7 (1-Lane)
1.010	999.00	7.22	0.00	280.0 (2-Lane)
1.010	999.00	8.91	0.00	345.2 (1-Lane)
1.100	244.34	7.09	0.00	274.8 (2-Lane)
1.100	301.23	8.74	0.00	338.8 (1-Lane)
1.200	45.21	4.72	0.00	182.8 (2-Lane)
1.200	55.74	5.82	0.00	225.4 (1-Lane)
1.300	23.06	6.01	0.00	233.1 (2-Lane)
1.300	28.42	7.42	0.00	287.4 (1-Lane)
1.400	14.79	7.81	0.00	302.7 (2-Lane)
1.400	18.23	9.63	0.00	373.2 (1-Lane)
1.500	10.47	10.47	0.00	405.7 (2-Lane)
1.500	12.91	12.91	0.00	500.1 (1-Lane)
1.600	7.81	14.79	0.00	302.7 (2-Lane)
1.600	9.63	18.23	0.00	373.2 (1-Lane)
1.700	6.01	23.06	0.00	233.1 (2-Lane)
1.700	7.42	28.42	0.00	287.4 (1-Lane)
1.800	4.72	45.21	0.00	182.8 (2-Lane)



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1.800	5.82	55.74	0.00	225.4 (1-Lane)
1.900	7.09	244.34	0.00	274.8 (2-Lane)
1.900	8.74	301.23	0.00	338.8 (1-Lane)
2.000	7.11	999.00	0.00	275.6 (2-Lane)
2.000	8.77	999.00	0.00	339.7 (1-Lane)

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# SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEG  
Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30	(1-Lane) LL 1.30
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Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	130.46 R	98.09	86.58 R	65.10
1.100	2417.7	425.3	1175.44 R	883.79	780.11 R	586.55
1.200	4314.7	756.1	2098.53 R	1577.84	1392.75 R	1047.18
1.300	5675.4	992.4	2769.29 R	2082.17	1837.91 R	1381.89
1.400	6491.9	1134.2	3155.32 R	2372.42	2094.11 R	1574.52
1.500	6764.0	1181.5	3280.91 R	2466.85	2177.47 R	1637.19
1.600	6491.9	1134.2	3155.32 R	2372.42	2094.11 R	1574.52
1.700	5675.4	992.4	2769.29 R	2082.17	1837.91 R	1381.89
1.800	4314.7	756.1	2098.53 R	1577.84	1392.75 R	1047.18
1.900	2417.7	425.3	1175.44 R	883.79	780.11 R	586.55
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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# SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEGL  
Rating Live Load:

Rating Type: SU7  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0

2.000 47.5 47.5 -47.5 -47.5 47.5 47.5 -47.5 -47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G02

Rating Type: II-LEGL  
Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	418.93	999.00	97.50	999.00	0.00	999.0 (2-Lane)
1.010	631.22	999.00	146.91	999.00	0.00	999.0 (1-Lane)
1.100	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.100	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
1.200	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.200	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.300	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.300	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.400	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.400	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.500	7.70	999.00	2.52	999.00	0.00	97.5 (2-Lane)
1.500	11.60	999.00	3.79	999.00	0.00	147.0 (1-Lane)
1.600	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.600	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.700	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.700	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.800	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.800	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.900	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.900	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## BRIDGE / MEMBER DATA

Bridge ID 7777777\_20120905cy01\_01of01

NBI ID 7777-777

Feature Intersected Road

Material of Construction CSC

Year of Construction 2012  
 Roadway Width 0.000  
 Number of Spans 1

Live Load Distribution Factor 1.67

Condition Factor: 1.000  
 System Factor: 1.000  
 ADTT: 300

Shear Live Load Dist. Factor 1.911  
 LRFD LLDF Moment

	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
1-lane DF	0.444	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
2-lane DF	0.669	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

LRFD LLDF Shear

	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
1-lane DF	0.786	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
2-lane DF	0.969	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Comments:

Member ID G03 01-IG003  
 Symmetry:

Span Length: Span 1 160.100 Span 2 0.000 Span 3 0.000 Span 4 0.000 Span 5 0.000

Range Length -- Non-Composite:

Span No.	Range No.	Range Length	Section Left	Section Right	Section Variation	Hinge No. 1	Location No. 2
1	1	30.000	1	0		0.0	0.0
1	2	100.100	2	0		0.0	0.0
1	3	30.000	1	0		0.0	0.0

Range Length -- Composite:

Span No.	Range No.	Range Length	Composite Code
1	1	160.100	C

Superimposed Dead Load:

Span No.	Load Type	Dist. from Left Supp.	Distributed Load (lbs/ft)		Concentrated Load (kips)
			Left	Right	
1	W	0.000	295.0	295.0	0.0
1	Z	0.000	127.0	127.0	0.0

NOTE: All distances are shown in decimal feet, moments are shown in foot-kips, and shears are shown in kips. Section and section properties are shown as: in., in.\*\*2, in.\*\*3, and in.\*\*4.

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SECTION DATA

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D.

G03

Span	Height	Web Depth	Web Thk.	Effective width	Slab Thk.	Fy
	(in.)	(in.)	(in.)	(in.)	(in.)	(ksi)
1.000	68.58	66.00	0.63	110.3	9.0	50.
1.010	68.58	66.00	0.63	110.3	9.0	50.
1.100	68.58	66.00	0.63	110.3	9.0	50.
1.200	69.74	66.00	0.63	110.3	9.0	50.
1.300	69.74	66.00	0.63	110.3	9.0	50.
1.400	69.74	66.00	0.63	110.3	9.0	50.
1.500	69.74	66.00	0.63	110.3	9.0	50.
1.600	69.74	66.00	0.63	110.3	9.0	50.
1.700	69.74	66.00	0.63	110.3	9.0	50.
1.800	69.74	66.00	0.63	110.3	9.0	50.
1.900	68.58	66.00	0.63	110.3	9.0	50.
2.000	68.58	66.00	0.63	110.3	9.0	50.

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## SECTION STRENGTH

Structure I. D.

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Member I. D.

G03

Span	Section Gross	Area Net	Neutral Axis		Moment of Inertia		Section Modulus			
			Top	Bott.	+Bend	-Bend	+Bend Top	Bott.	-Bend Top	Bott.
1.000	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.010	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.100	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.200	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.300	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.400	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.500	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.600	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.700	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.800	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.900	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
2.000	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0

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## SECTION STRENGTH (N=N)

Structure I. D.

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Member I. D.

G03

Span	Section Gross	Area Net	Neutral Axis		Moment of Inertia		Section Modulus			
			Top	Bott.	+Bend	-Bend	+Bend Top	Bott.	-Bend Top	Bott.
1.000	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
1.010	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
1.100	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
1.200	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.300	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.400	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.500	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.600	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.700	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.800	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.900	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
2.000	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0

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## SECTION STRENGTH (N=3N)

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Span	Section Gross	Area Net	Neutral Top	Axis Bott.	Moment of +Bend	Inertia -Bend	Section Modulus			
							+Bend Top	+Bend Bott.	-Bend Top	-Bend Bott.
1.000	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
1.010	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
1.100	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
1.200	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.300	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.400	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.500	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.600	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.700	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.800	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.900	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
2.000	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: HL93

Gamma	DC		DW		(2-Lane) LL 1.75		(1-Lane) LL 1.75		
	1.25	1.25							
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	262.30 R	0.00	220.80	0.00	174.08 R	0.00	146.54
0.00									
1.100	2417.7	425.3	2375.02 R	0.00	2000.16	0.00	1576.24 R	0.00	1327.46
0.00									
1.200	4314.7	756.1	4199.00 R	0.00	3538.36	0.00	2786.78 R	0.00	2348.33
0.00									
1.300	5675.4	992.4	5471.94 R	0.00	4614.60	0.00	3631.60 R	0.00	3062.60
0.00									
1.400	6491.9	1134.2	6228.74 R	0.00	5255.09	0.00	4133.87 R	0.00	3487.68
0.00									
1.500	6764.0	1181.5	6451.94 R	0.00	5446.74	0.00	4282.00 R	0.00	3614.87
0.00									
1.600	6491.9	1134.2	6228.74 R	0.00	5255.09	0.00	4133.87 R	0.00	3487.68
0.00									
1.700	5675.4	992.4	5471.94 R	0.00	4614.60	0.00	3631.60 R	0.00	3062.60
0.00									
1.800	4314.7	756.1	4199.00 R	0.00	3538.36	0.00	2786.78 R	0.00	2348.33
0.00									
1.900	2417.7	425.3	2375.01 R	0.00	2000.16	0.00	1576.24 R	0.00	1327.46
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: HL93

Span	Positive Top	Moment Bending Bott.	Resistance Negative Top	Bending Bott.	Positive Top	Available Resistance for LL+I Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.4	-12222.4B	11797.6	11797.6	-20167.9	-20167.9
1.600	19743.0C	19743.0	-11839.3	-11839.3B	12117.0	12117.0	-19465.4	-19465.4
1.700	19743.0C	19743.0	-11839.3	-11839.3B	13075.2	13075.2	-18507.2	-18507.2
1.800	19743.0C	19743.0	-13020.4	-13020.4B	14672.1	14672.1	-18091.3	-18091.3
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: HL93

Span	top +bend	Rating fiber -bend	Moment Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	61.46	999.00	61.46	999.00	0.00	999.0 (2-Lane)
1.010	92.61	999.00	92.61	999.00	0.00	999.0 (1-Lane)
1.100	5.71	999.00	5.71	999.00	0.00	205.6 (2-Lane)
1.100	8.61	999.00	8.61	999.00	0.00	309.8 (1-Lane)
1.200	3.49	999.00	3.49	999.00	0.00	125.8 (2-Lane)
1.200	5.26	999.00	5.26	999.00	0.00	189.5 (1-Lane)
1.300	2.39	999.00	2.39	999.00	0.00	86.0 (2-Lane)
1.300	3.60	999.00	3.60	999.00	0.00	129.6 (1-Lane)
1.400	1.95	999.00	1.95	999.00	0.00	70.0 (2-Lane)
1.400	2.93	999.00	2.93	999.00	0.00	105.5 (1-Lane)
1.500	1.83	999.00	1.83	999.00	0.00	65.8 (2-Lane)
1.500	2.76	999.00	2.76	999.00	0.00	99.2 (1-Lane)
1.600	1.95	999.00	1.95	999.00	0.00	70.0 (2-Lane)
1.600	2.93	999.00	2.93	999.00	0.00	105.5 (1-Lane)
1.700	2.39	999.00	2.39	999.00	0.00	86.0 (2-Lane)
1.700	3.60	999.00	3.60	999.00	0.00	129.6 (1-Lane)

1.800	3.49	999.00	3.49	999.00	0.00	125.8 (2-Lane)
1.800	5.26	999.00	5.26	999.00	0.00	189.5 (1-Lane)
1.900	5.71	999.00	5.71	999.00	0.00	205.6 (2-Lane)
1.900	8.61	999.00	8.61	999.00	0.00	309.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	239.79	0.00	201.85	0.00	194.51	0.00	163.73
1.010 0.00	164.0	28.9	236.44	0.00	198.90	0.00	191.79	0.00	161.34
1.100 0.00	134.8	23.6	207.05	0.00	173.14	0.00	167.95	0.00	140.44
1.200 0.00	102.0	17.7	176.04	0.00	146.16	0.00	142.80	0.00	118.56
1.300 0.00	68.0	11.8	146.77	0.00	120.92	0.00	119.05	0.00	98.08
1.400 0.00	34.0	5.9	119.24	0.00	97.41	0.00	96.72	0.00	79.02
1.500 0.00	0.0	0.0	93.44	0.00	75.65	0.00	75.80	0.00	61.36
1.600 0.00	-34.0	-5.9	-119.24	0.00	-97.41	0.00	-96.72	0.00	-79.02
1.700 0.00	-68.0	-11.8	-146.77	0.00	-120.92	0.00	-119.05	0.00	-98.08
1.800 0.00	-102.0	-17.7	-176.04	0.00	-146.16	0.00	-142.80	0.00	-118.56
1.900 0.00	-134.8	-23.6	-207.05	0.00	-173.14	0.00	-167.95	0.00	-140.44
2.000 0.00	-167.2	-29.5	-239.79	0.00	-201.85	0.00	-194.51	0.00	-163.73

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: HL93

Span Shear Resistance Available Resistance for LL+I  
Vn (-) (+)

1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: HL93

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	3.28	0.00	118.1 (2-Lane)
1.000	999.00	4.05	0.00	145.6 (1-Lane)
1.010	999.00	3.34	0.00	120.4 (2-Lane)
1.010	999.00	4.12	0.00	148.4 (1-Lane)
1.100	102.96	3.38	0.00	121.6 (2-Lane)
1.100	126.94	4.16	0.00	149.9 (1-Lane)
1.200	24.46	2.32	0.00	83.5 (2-Lane)
1.200	30.15	2.86	0.00	103.0 (1-Lane)
1.300	12.91	3.05	0.00	109.9 (2-Lane)
1.300	15.92	3.77	0.00	135.5 (1-Lane)
1.400	8.19	4.09	0.00	147.4 (2-Lane)
1.400	10.09	5.05	0.00	181.7 (1-Lane)
1.500	5.65	5.65	0.00	203.4 (2-Lane)
1.500	6.97	6.97	0.00	250.8 (1-Lane)
1.600	4.09	8.19	0.00	147.4 (2-Lane)
1.600	5.05	10.09	0.00	181.7 (1-Lane)
1.700	3.05	12.91	0.00	109.9 (2-Lane)
1.700	3.77	15.92	0.00	135.5 (1-Lane)
1.800	2.32	24.46	0.00	83.5 (2-Lane)
1.800	2.86	30.15	0.00	103.0 (1-Lane)
1.900	3.38	94.63	0.00	121.6 (2-Lane)



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1.900	4.16	116.67	0.00	149.9 (1-Lane)
2.000	3.28	999.00	0.00	118.1 (2-Lane)
2.000	4.05	999.00	0.00	145.6 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: HL93

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30					
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	194.85 R	0.00	164.03	0.00	129.32 R	0.00	108.86	
0.00										
1.100	1934.1	340.3	1764.30 R	0.00	1485.83	0.00	1170.92 R	0.00	986.11	
0.00										
1.200	3451.8	604.9	3119.25 R	0.00	2628.50	0.00	2070.18 R	0.00	1744.47	
0.00										
1.300	4540.4	794.0	4064.87 R	0.00	3427.99	0.00	2697.76 R	0.00	2275.08	
0.00										
1.400	5193.5	907.4	4627.06 R	0.00	3903.78	0.00	3070.88 R	0.00	2590.85	
0.00										
1.500	5411.2	945.2	4792.87 R	0.00	4046.15	0.00	3180.92 R	0.00	2685.34	
0.00										
1.600	5193.5	907.4	4627.06 R	0.00	3903.78	0.00	3070.88 R	0.00	2590.85	
0.00										
1.700	4540.4	794.0	4064.87 R	0.00	3427.98	0.00	2697.76 R	0.00	2275.08	
0.00										
1.800	3451.8	604.9	3119.25 R	0.00	2628.50	0.00	2070.18 R	0.00	1744.47	
0.00										
1.900	1934.1	340.3	1764.30 R	0.00	1485.83	0.00	1170.92 R	0.00	986.11	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load:

Rating Type: HL93  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV

Rating Live Load: HL93

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	280.49	999.00	65.28	999.00	0.00	999.0 (2-Lane)
1.010	422.63	999.00	98.36	999.00	0.00	999.0 (1-Lane)
1.100	23.12	999.00	5.66	999.00	0.00	203.6 (2-Lane)
1.100	34.83	999.00	8.52	999.00	0.00	306.7 (1-Lane)
1.200	11.83	999.00	3.59	999.00	0.00	129.1 (2-Lane)
1.200	17.82	999.00	5.40	999.00	0.00	194.5 (1-Lane)
1.300	7.49	999.00	2.35	999.00	0.00	84.7 (2-Lane)
1.300	11.28	999.00	3.54	999.00	0.00	127.6 (1-Lane)
1.400	5.74	999.00	1.86	999.00	0.00	66.8 (2-Lane)
1.400	8.65	999.00	2.80	999.00	0.00	100.6 (1-Lane)
1.500	5.27	999.00	1.72	999.00	0.00	62.0 (2-Lane)
1.500	7.94	999.00	2.60	999.00	0.00	93.5 (1-Lane)
1.600	5.74	999.00	1.86	999.00	0.00	66.8 (2-Lane)
1.600	8.65	999.00	2.80	999.00	0.00	100.6 (1-Lane)
1.700	7.49	999.00	2.35	999.00	0.00	84.7 (2-Lane)
1.700	11.28	999.00	3.54	999.00	0.00	127.6 (1-Lane)
1.800	11.83	999.00	3.59	999.00	0.00	129.1 (2-Lane)
1.800	17.82	999.00	5.40	999.00	0.00	194.5 (1-Lane)
1.900	23.12	999.00	5.66	999.00	0.00	203.6 (2-Lane)
1.900	34.83	999.00	8.52	999.00	0.00	306.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	167.23 R	0.00	125.74	0.00
0.00						
1.100	2417.7	425.3	1510.77 R	0.00	1135.92	0.00
0.00						
1.200	4314.7	756.1	2662.56 R	0.00	2001.93	0.00
0.00						
1.300	5675.4	992.4	3455.37 R	0.00	2598.03	0.00
0.00						
1.400	6491.9	1134.2	3924.09 R	0.00	2950.44	0.00
0.00						
1.500	6764.0	1181.5	4051.26 R	0.00	3046.06	0.00
0.00						
1.600	6491.9	1134.2	3924.09 R	0.00	2950.44	0.00
0.00						
1.700	5675.4	992.4	3455.37 R	0.00	2598.03	0.00
0.00						
1.800	4314.7	756.1	2662.56 R	0.00	2001.93	0.00
0.00						
1.900	2417.7	425.3	1510.77 R	0.00	1135.92	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: HS20

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.4	-12222.4B	11797.6	11797.6	-20167.9	-20167.9
1.600	19743.0C	19743.0	-11839.3	-11839.3B	12117.0	12117.0	-19465.4	-19465.4
1.700	19743.0C	19743.0	-11839.3	-11839.3B	13075.2	13075.2	-18507.2	-18507.2
1.800	19743.0C	19743.0	-13020.4	-13020.4B	14672.1	14672.1	-18091.3	-18091.3
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV

Rating Live Load: HS20

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	96.40	999.00	96.40	999.00	999.00	999.0 (2-Lane)
1.010	145.25	999.00	145.25	999.00	999.00	999.0 (1-Lane)
1.100	8.98	999.00	8.98	999.00	179.60	323.3 (2-Lane)
1.100	13.53	999.00	13.53	999.00	270.61	487.1 (1-Lane)
1.200	5.51	999.00	5.51	999.00	110.21	198.4 (2-Lane)
1.200	8.30	999.00	8.30	999.00	166.06	298.9 (1-Lane)
1.300	3.78	999.00	3.78	999.00	75.68	136.2 (2-Lane)
1.300	5.70	999.00	5.70	999.00	114.03	205.3 (1-Lane)
1.400	3.09	999.00	3.09	999.00	61.76	111.2 (2-Lane)
1.400	4.65	999.00	4.65	999.00	93.05	167.5 (1-Lane)
1.500	2.91	999.00	2.91	999.00	58.24	104.8 (2-Lane)
1.500	4.39	999.00	4.39	999.00	87.76	158.0 (1-Lane)
1.600	3.09	999.00	3.09	999.00	61.76	111.2 (2-Lane)
1.600	4.65	999.00	4.65	999.00	93.05	167.5 (1-Lane)
1.700	3.78	999.00	3.78	999.00	75.68	136.2 (2-Lane)
1.700	5.70	999.00	5.70	999.00	114.03	205.3 (1-Lane)
1.800	5.51	999.00	5.51	999.00	110.21	198.4 (2-Lane)
1.800	8.30	999.00	8.30	999.00	166.06	298.9 (1-Lane)
1.900	8.98	999.00	8.98	999.00	179.60	323.3 (2-Lane)
1.900	13.53	999.00	13.53	999.00	270.61	487.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV

Rating Live Load: HS20

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	1.75	LL	1.75
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load

w/o impact

Lane	Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	152.92	0.00	114.98	0.00	124.04	0.00
0.00								
1.010	164.0	28.9	151.29	0.00	113.76	0.00	122.72	0.00
0.00								
1.100	134.8	23.6	136.68	0.00	102.77	0.00	110.87	0.00
0.00								
1.200	102.0	17.7	120.44	0.00	90.56	0.00	97.70	0.00
0.00								
1.300	68.0	11.8	104.20	0.00	78.35	0.00	84.52	0.00
0.00								
1.400	34.0	5.9	87.96	0.00	66.14	0.00	71.35	0.00
0.00								
1.500	0.0	0.0	71.73	0.00	53.93	0.00	58.18	0.00
0.00								
1.600	-34.0	-5.9	-87.96	0.00	-66.14	0.00	-71.35	0.00
0.00								
1.700	-68.0	-11.8	-104.20	0.00	-78.35	0.00	-84.52	0.00
0.00								
1.800	-102.0	-17.7	-120.44	0.00	-90.56	0.00	-97.70	0.00
0.00								
1.900	-134.8	-23.6	-136.68	0.00	-102.77	0.00	-110.87	0.00
0.00								
2.000	-167.2	-29.5	-152.92	0.00	-114.98	0.00	-124.04	0.00
0.00								

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: HS20

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: HS20

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.14	102.91	185.2 (2-Lane)
1.000	999.00	6.34	126.87	228.4 (1-Lane)
1.010	999.00	5.23	104.52	188.1 (2-Lane)
1.010	999.00	6.44	128.85	231.9 (1-Lane)
1.100	125.08	5.12	102.31	184.2 (2-Lane)
1.100	154.20	6.31	126.14	227.0 (1-Lane)
1.200	28.15	3.39	67.81	122.1 (2-Lane)
1.200	34.71	4.18	83.60	150.5 (1-Lane)
1.300	15.49	4.30	86.04	154.9 (2-Lane)
1.300	19.09	5.30	106.07	190.9 (1-Lane)
1.400	10.24	5.55	110.99	199.8 (2-Lane)
1.400	12.62	6.84	136.83	246.3 (1-Lane)
1.500	7.36	7.36	147.24	265.0 (2-Lane)
1.500	9.08	9.08	181.53	326.7 (1-Lane)
1.600	5.55	10.24	110.99	199.8 (2-Lane)
1.600	6.84	12.62	136.83	246.3 (1-Lane)
1.700	4.30	15.49	86.04	154.9 (2-Lane)
1.700	5.30	19.09	106.07	190.9 (1-Lane)
1.800	3.39	28.15	67.81	122.1 (2-Lane)
1.800	4.18	34.71	83.60	150.5 (1-Lane)
1.900	5.12	125.08	102.31	184.2 (2-Lane)
1.900	6.31	154.20	126.14	227.0 (1-Lane)
2.000	5.14	999.00	102.91	185.2 (2-Lane)
2.000	6.34	999.00	126.87	228.4 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 428

SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: HS20

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	124.23 R	0.00	93.41	0.00	82.45 R	0.00	61.99
0.00									
1.100	1934.1	340.3	1122.29 R	0.00	843.82	0.00	744.84 R	0.00	560.03
0.00									
1.200	3451.8	604.9	1977.90 R	0.00	1487.15	0.00	1312.69 R	0.00	986.98
0.00									
1.300	4540.4	794.0	2566.85 R	0.00	1929.96	0.00	1703.56 R	0.00	1280.87
0.00									
1.400	5193.5	907.4	2915.03 R	0.00	2191.76	0.00	1934.64 R	0.00	1454.62
0.00									
1.500	5411.2	945.2	3009.50 R	0.00	2262.79	0.00	1997.34 R	0.00	1501.76
0.00									
1.600	5193.5	907.4	2915.03 R	0.00	2191.76	0.00	1934.64 R	0.00	1454.62
0.00									
1.700	4540.4	794.0	2566.85 R	0.00	1929.96	0.00	1703.56 R	0.00	1280.87
0.00									
1.800	3451.8	604.9	1977.90 R	0.00	1487.15	0.00	1312.69 R	0.00	986.98
0.00									
1.900	1934.1	340.3	1122.29 R	0.00	843.82	0.00	744.84 R	0.00	560.03
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 428

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load:

Rating Type: HS20

Rating Live Load:  
Span

	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: HS20

Service

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	439.95	999.00	102.39	999.00	999.00	999.0 (2-Lane)
1.010	662.89	999.00	154.28	999.00	999.00	999.0 (1-Lane)
1.100	36.34	999.00	8.89	999.00	177.79	320.0 (2-Lane)
1.100	54.75	999.00	13.39	999.00	267.88	482.2 (1-Lane)
1.200	18.65	999.00	5.66	999.00	113.09	203.6 (2-Lane)
1.200	28.10	999.00	8.52	999.00	170.40	306.7 (1-Lane)
1.300	11.86	999.00	3.72	999.00	74.48	134.1 (2-Lane)
1.300	17.86	999.00	5.61	999.00	112.22	202.0 (1-Lane)
1.400	9.11	999.00	2.94	999.00	58.89	106.0 (2-Lane)
1.400	13.73	999.00	4.44	999.00	88.73	159.7 (1-Lane)
1.500	8.39	999.00	2.74	999.00	54.88	98.8 (2-Lane)
1.500	12.65	999.00	4.13	999.00	82.69	148.8 (1-Lane)
1.600	9.11	999.00	2.94	999.00	58.89	106.0 (2-Lane)
1.600	13.73	999.00	4.44	999.00	88.73	159.7 (1-Lane)
1.700	11.86	999.00	3.72	999.00	74.48	134.1 (2-Lane)
1.700	17.86	999.00	5.61	999.00	112.22	202.0 (1-Lane)
1.800	18.65	999.00	5.66	999.00	113.09	203.6 (2-Lane)
1.800	28.10	999.00	8.52	999.00	170.40	306.7 (1-Lane)
1.900	36.34	999.00	8.89	999.00	177.79	320.0 (2-Lane)
1.900	54.75	999.00	13.39	999.00	267.89	482.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	241.8	46.8	117.61 R	0.00	88.43	0.00
0.00						
1.100	2417.7	425.3	1063.89 R	0.00	799.92	0.00
0.00						
1.200	4314.7	756.1	1878.48 R	0.00	1412.39	0.00
0.00						
1.300	5675.4	992.4	2443.79 R	0.00	1837.43	0.00
0.00						
1.400	6491.9	1134.2	2778.49 R	0.00	2089.09	0.00
0.00						



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1.500	6764.0	1181.5	2876.35 R	0.00	2162.67	0.00	1908.97 R	0.00	1435.31
0.00									
1.600	6491.9	1134.2	2778.49 R	0.00	2089.09	0.00	1844.02 R	0.00	1386.48
0.00									
1.700	5675.4	992.4	2443.79 R	0.00	1837.43	0.00	1621.89 R	0.00	1219.46
0.00									
1.800	4314.7	756.1	1878.48 R	0.00	1412.39	0.00	1246.71 R	0.00	937.37
0.00									
1.900	2417.7	425.3	1063.89 R	0.00	799.91	0.00	706.08 R	0.00	530.89
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12210.2	-12210.2B	11797.6	11797.6	-20155.7	-20155.7
1.600	19743.0C	19743.0	-11831.3	-11831.3B	12117.0	12117.0	-19457.4	-19457.4
1.700	19743.0C	19743.0	-11831.3	-11831.3B	13075.2	13075.2	-18499.2	-18499.2
1.800	19743.0C	19743.0	-13007.0	-13007.0B	14672.1	14672.1	-18077.9	-18077.9
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	137.07	999.00	137.07	999.00	0.00	999.0 (2-Lane)
1.010	206.54	999.00	206.54	999.00	0.00	999.0 (1-Lane)
1.100	12.75	999.00	12.75	999.00	0.00	318.8 (2-Lane)
1.100	19.21	999.00	19.21	999.00	0.00	480.3 (1-Lane)

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1.200	7.81	999.00	7.81	999.00	0.00	195.3 (2-Lane)
1.200	11.77	999.00	11.77	999.00	0.00	294.2 (1-Lane)
1.300	5.35	999.00	5.35	999.00	0.00	133.8 (2-Lane)
1.300	8.06	999.00	8.06	999.00	0.00	201.5 (1-Lane)
1.400	4.36	999.00	4.36	999.00	0.00	109.0 (2-Lane)
1.400	6.57	999.00	6.57	999.00	0.00	164.3 (1-Lane)
1.500	4.10	999.00	4.10	999.00	0.00	102.5 (2-Lane)
1.500	6.18	999.00	6.18	999.00	0.00	154.5 (1-Lane)
1.600	4.36	999.00	4.36	999.00	0.00	109.0 (2-Lane)
1.600	6.57	999.00	6.57	999.00	0.00	164.3 (1-Lane)
1.700	5.35	999.00	5.35	999.00	0.00	133.8 (2-Lane)
1.700	8.06	999.00	8.06	999.00	0.00	201.5 (1-Lane)
1.800	7.81	999.00	7.81	999.00	0.00	195.3 (2-Lane)
1.800	11.77	999.00	11.77	999.00	0.00	294.2 (1-Lane)
1.900	12.75	999.00	12.75	999.00	0.00	318.8 (2-Lane)
1.900	19.21	999.00	19.21	999.00	0.00	480.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact	
Lane			Truck	Lane	Truck	Lane
1.000	167.2	29.5	107.53	0.00	80.85	0.00
0.00						
1.010	164.0	28.9	106.40	0.00	80.00	0.00
0.00						
1.100	134.8	23.6	96.25	0.00	72.37	0.00
0.00						
1.200	102.0	17.7	84.97	0.00	63.89	0.00
0.00						
1.300	68.0	11.8	73.70	0.00	55.41	0.00
0.00						
1.400	34.0	5.9	62.42	0.00	46.93	0.00
0.00						
1.500	0.0	0.0	51.14	0.00	38.45	0.00
0.00						
1.600	-34.0	-5.9	-62.42	0.00	-46.93	0.00
0.00						
1.700	-68.0	-11.8	-73.70	0.00	-55.41	0.00
0.00						
1.800	-102.0	-17.7	-84.97	0.00	-63.89	0.00
0.00						
1.900	-134.8	-23.6	-96.25	0.00	-72.37	0.00
0.00						
2.000	-167.2	-29.5	-107.53	0.00	-80.85	0.00
0.00						

STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV

Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV

Rating Live Load: 3

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.32	0.00	182.9 (2-Lane)
1.000	999.00	9.02	0.00	225.5 (1-Lane)
1.010	999.00	7.43	0.00	185.8 (2-Lane)
1.010	999.00	9.16	0.00	229.0 (1-Lane)
1.100	151.42	7.26	0.00	181.6 (2-Lane)
1.100	186.67	8.96	0.00	223.9 (1-Lane)
1.200	37.42	4.81	0.00	120.1 (2-Lane)
1.200	46.13	5.93	0.00	148.1 (1-Lane)

1.300	21.26	6.08	0.00	152.1 (2-Lane)
1.300	26.21	7.50	0.00	187.5 (1-Lane)
1.400	14.25	7.82	0.00	195.5 (2-Lane)
1.400	17.56	9.64	0.00	241.0 (1-Lane)
1.500	10.32	10.32	0.00	258.1 (2-Lane)
1.500	12.73	12.73	0.00	318.2 (1-Lane)
1.600	7.82	14.25	0.00	195.5 (2-Lane)
1.600	9.64	17.56	0.00	241.0 (1-Lane)
1.700	6.08	21.26	0.00	152.1 (2-Lane)
1.700	7.50	26.21	0.00	187.5 (1-Lane)
1.800	4.81	37.42	0.00	120.1 (2-Lane)
1.800	5.93	46.13	0.00	148.1 (1-Lane)
1.900	7.26	151.42	0.00	181.6 (2-Lane)
1.900	8.96	186.67	0.00	223.9 (1-Lane)
2.000	7.32	999.00	0.00	182.9 (2-Lane)
2.000	9.02	999.00	0.00	225.5 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: 3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30					
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	87.36 R	0.00	65.69	0.00	57.98 R	0.00	43.60	
0.00										
1.100	1934.1	340.3	790.32 R	0.00	594.22	0.00	524.51 R	0.00	394.37	
0.00										
1.200	3451.8	604.9	1395.44 R	0.00	1049.21	0.00	926.12 R	0.00	696.33	
0.00										
1.300	4540.4	794.0	1815.38 R	0.00	1364.95	0.00	1204.83 R	0.00	905.89	
0.00										
1.400	5193.5	907.4	2064.02 R	0.00	1551.89	0.00	1369.84 R	0.00	1029.96	
0.00										
1.500	5411.2	945.2	2136.72 R	0.00	1606.55	0.00	1418.09 R	0.00	1066.23	
0.00										
1.600	5193.5	907.4	2064.02 R	0.00	1551.89	0.00	1369.84 R	0.00	1029.96	
0.00										
1.700	4540.4	794.0	1815.38 R	0.00	1364.95	0.00	1204.83 R	0.00	905.89	
0.00										
1.800	3451.8	604.9	1395.44 R	0.00	1049.21	0.00	926.12 R	0.00	696.33	
0.00										
1.900	1934.1	340.3	790.32 R	0.00	594.22	0.00	524.51 R	0.00	394.37	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load:

Rating Type: 3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	625.58	999.00	145.60	999.00	0.00	999.0 (2-Lane)
1.010	942.60	999.00	219.38	999.00	0.00	999.0 (1-Lane)
1.100	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.100	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
1.200	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.200	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.300	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.300	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.400	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.400	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.500	11.82	999.00	3.87	999.00	0.00	96.6 (2-Lane)
1.500	17.81	999.00	5.82	999.00	0.00	145.6 (1-Lane)
1.600	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.600	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)

1.700	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.700	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.800	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.800	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.900	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.900	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	173.90 R	0.00	130.75	0.00
0.00						
1.100	2417.7	425.3	1559.46 R	0.00	1172.53	0.00
0.00						
1.200	4314.7	756.1	2720.06 R	0.00	2045.16	0.00
0.00						
1.300	5675.4	992.4	3567.75 R	0.00	2682.52	0.00
0.00						
1.400	6491.9	1134.2	4046.46 R	0.00	3042.45	0.00
0.00						
1.500	6764.0	1181.5	4157.45 R	0.00	3125.90	0.00
0.00						
1.600	6491.9	1134.2	4046.46 R	0.00	3042.45	0.00
0.00						
1.700	5675.4	992.4	3567.75 R	0.00	2682.52	0.00
0.00						
1.800	4314.7	756.1	2720.06 R	0.00	2045.16	0.00
0.00						
1.900	2417.7	425.3	1559.46 R	0.00	1172.53	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3S2

Span Moment Resistance Available Resistance for LL+I

	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12192.1	-12192.1B	11797.6	11797.6	-20137.6	-20137.6
1.600	19743.0C	19743.0	-11817.3	-11817.3B	12117.0	12117.0	-19443.3	-19443.3
1.700	19743.0C	19743.0	-11817.3	-11817.3B	13075.2	13075.2	-18485.1	-18485.1
1.800	19743.0C	19743.0	-13007.5	-13007.5B	14672.1	14672.1	-18078.3	-18078.3
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3S2

## Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	92.70	999.00	92.70	999.00	0.00	999.0 (2-Lane)
1.010	139.68	999.00	139.68	999.00	0.00	999.0 (1-Lane)
1.100	8.70	999.00	8.70	999.00	0.00	348.0 (2-Lane)
1.100	13.11	999.00	13.11	999.00	0.00	524.3 (1-Lane)
1.200	5.39	999.00	5.39	999.00	0.00	215.8 (2-Lane)
1.200	8.13	999.00	8.13	999.00	0.00	325.1 (1-Lane)
1.300	3.66	999.00	3.66	999.00	0.00	146.6 (2-Lane)
1.300	5.52	999.00	5.52	999.00	0.00	220.9 (1-Lane)
1.400	2.99	999.00	2.99	999.00	0.00	119.8 (2-Lane)
1.400	4.51	999.00	4.51	999.00	0.00	180.5 (1-Lane)
1.500	2.84	999.00	2.84	999.00	0.00	113.5 (2-Lane)
1.500	4.28	999.00	4.28	999.00	0.00	171.0 (1-Lane)
1.600	2.99	999.00	2.99	999.00	0.00	119.8 (2-Lane)
1.600	4.51	999.00	4.51	999.00	0.00	180.5 (1-Lane)
1.700	3.66	999.00	3.66	999.00	0.00	146.6 (2-Lane)
1.700	5.52	999.00	5.52	999.00	0.00	220.9 (1-Lane)
1.800	5.39	999.00	5.39	999.00	0.00	215.8 (2-Lane)
1.800	8.13	999.00	8.13	999.00	0.00	325.1 (1-Lane)
1.900	8.70	999.00	8.70	999.00	0.00	348.0 (2-Lane)
1.900	13.11	999.00	13.11	999.00	0.00	524.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	Lane
1.000 0.00	167.2	29.5	159.13	0.00	119.65	0.00
1.010 0.00	164.0	28.9	157.32	0.00	118.29	0.00
1.100 0.00	134.8	23.6	141.09	0.00	106.08	0.00
1.200 0.00	102.0	17.7	123.04	0.00	92.51	0.00
1.300 0.00	68.0	11.8	105.00	0.00	78.95	0.00
1.400 0.00	34.0	5.9	86.96	0.00	65.38	0.00
1.500 0.00	0.0	0.0	68.91	0.00	51.82	0.00
1.600 0.00	-34.0	-5.9	-86.96	0.00	-65.38	0.00
1.700 0.00	-68.0	-11.8	-105.00	0.00	-78.95	0.00
1.800 0.00	-102.0	-17.7	-123.04	0.00	-92.51	0.00
1.900 0.00	-134.8	-23.6	-141.09	0.00	-106.08	0.00
2.000 0.00	-167.2	-29.5	-159.13	0.00	-119.65	0.00

STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)



1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3S2

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	4.95	0.00	197.8 (2-Lane)
1.000	999.00	6.10	0.00	243.8 (1-Lane)
1.010	999.00	5.03	0.00	201.0 (2-Lane)
1.010	999.00	6.20	0.00	247.8 (1-Lane)
1.100	151.42	4.96	0.00	198.2 (2-Lane)
1.100	186.67	6.11	0.00	244.4 (1-Lane)
1.200	39.73	3.32	0.00	132.8 (2-Lane)
1.200	48.98	4.09	0.00	163.7 (1-Lane)
1.300	18.52	4.27	0.00	170.8 (2-Lane)
1.300	22.83	5.26	0.00	210.5 (1-Lane)
1.400	11.16	5.61	0.00	224.6 (2-Lane)
1.400	13.76	6.92	0.00	276.8 (1-Lane)
1.500	7.66	7.66	0.00	306.5 (2-Lane)
1.500	9.45	9.45	0.00	377.9 (1-Lane)
1.600	5.61	11.16	0.00	224.6 (2-Lane)
1.600	6.92	13.76	0.00	276.8 (1-Lane)
1.700	4.27	18.52	0.00	170.8 (2-Lane)
1.700	5.26	22.83	0.00	210.5 (1-Lane)
1.800	3.32	39.73	0.00	132.8 (2-Lane)
1.800	4.09	48.98	0.00	163.7 (1-Lane)
1.900	4.96	151.42	0.00	198.2 (2-Lane)
1.900	6.11	186.67	0.00	244.4 (1-Lane)
2.000	4.95	999.00	0.00	197.8 (2-Lane)
2.000	6.10	999.00	0.00	243.8 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	193.4	37.4	129.18 R	0.00	97.13	0.00	85.73 R	0.00	64.46
1.100 0.00	1934.1	340.3	1158.46 R	0.00	871.02	0.00	768.84 R	0.00	578.08
1.200 0.00	3451.8	604.9	2020.62 R	0.00	1519.26	0.00	1341.04 R	0.00	1008.30
1.300 0.00	4540.4	794.0	2650.33 R	0.00	1992.73	0.00	1758.96 R	0.00	1322.53
1.400 0.00	5193.5	907.4	3005.94 R	0.00	2260.11	0.00	1994.98 R	0.00	1499.98
1.500 0.00	5411.2	945.2	3088.39 R	0.00	2322.10	0.00	2049.69 R	0.00	1541.12
1.600 0.00	5193.5	907.4	3005.94 R	0.00	2260.11	0.00	1994.98 R	0.00	1499.98
1.700 0.00	4540.4	794.0	2650.33 R	0.00	1992.73	0.00	1758.96 R	0.00	1322.53
1.800 0.00	3451.8	604.9	2020.62 R	0.00	1519.26	0.00	1341.04 R	0.00	1008.30
1.900 0.00	1934.1	340.3	1158.46 R	0.00	871.02	0.00	768.84 R	0.00	578.08
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load:Rating Type: 3S2  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	423.08	999.00	98.47	999.00	0.00	999.0 (2-Lane)
1.010	637.48	999.00	148.37	999.00	0.00	999.0 (1-Lane)
1.100	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.100	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
1.200	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.200	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.300	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.300	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.400	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.400	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.500	8.18	999.00	2.67	999.00	0.00	107.0 (2-Lane)
1.500	12.32	999.00	4.03	999.00	0.00	161.2 (1-Lane)
1.600	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.600	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.700	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.700	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.800	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.800	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.900	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.900	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3-3

Gamma	DC	DW	(2-Lane)	(1-Lane)
			LL 1.75	LL 1.75
	1.25	1.25		

Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	167.67 R	0.00	126.07	0.00	111.28 R	0.00	83.67
0.00									
1.100	2417.7	425.3	1497.18 R	0.00	1125.70	0.00	993.64 R	0.00	747.10
0.00									
1.200	4314.7	756.1	2607.95 R	0.00	1960.87	0.00	1730.84 R	0.00	1301.38
0.00									
1.300	5675.4	992.4	3357.23 R	0.00	2524.23	0.00	2228.11 R	0.00	1675.27
0.00									
1.400	6491.9	1134.2	3807.29 R	0.00	2862.62	0.00	2526.81 R	0.00	1899.86
0.00									
1.500	6764.0	1181.5	3958.14 R	0.00	2976.05	0.00	2626.93 R	0.00	1975.13
0.00									
1.600	6491.9	1134.2	3807.29 R	0.00	2862.62	0.00	2526.81 R	0.00	1899.86
0.00									
1.700	5675.4	992.4	3357.23 R	0.00	2524.23	0.00	2228.11 R	0.00	1675.27
0.00									
1.800	4314.7	756.1	2607.95 R	0.00	1960.87	0.00	1730.84 R	0.00	1301.38
0.00									
1.900	2417.7	425.3	1497.18 R	0.00	1125.70	0.00	993.64 R	0.00	747.10
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12209.5	-12209.5B	11797.6	11797.6	-20155.0	-20155.0
1.600	19743.0C	19743.0	-11834.3	-11834.3B	12117.0	12117.0	-19460.3	-19460.3
1.700	19743.0C	19743.0	-11834.3	-11834.3B	13075.2	13075.2	-18502.1	-18502.1
1.800	19743.0C	19743.0	-12987.6	-12987.6B	14672.1	14672.1	-18058.5	-18058.5
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	96.15	999.00	96.15	999.00	0.00	999.0 (2-Lane)
1.010	144.87	999.00	144.87	999.00	0.00	999.0 (1-Lane)
1.100	9.06	999.00	9.06	999.00	0.00	362.5 (2-Lane)
1.100	13.65	999.00	13.65	999.00	0.00	546.1 (1-Lane)
1.200	5.63	999.00	5.63	999.00	0.00	225.0 (2-Lane)
1.200	8.48	999.00	8.48	999.00	0.00	339.1 (1-Lane)
1.300	3.89	999.00	3.89	999.00	0.00	155.8 (2-Lane)
1.300	5.87	999.00	5.87	999.00	0.00	234.7 (1-Lane)
1.400	3.18	999.00	3.18	999.00	0.00	127.3 (2-Lane)
1.400	4.80	999.00	4.80	999.00	0.00	191.8 (1-Lane)
1.500	2.98	999.00	2.98	999.00	0.00	119.2 (2-Lane)
1.500	4.49	999.00	4.49	999.00	0.00	179.6 (1-Lane)
1.600	3.18	999.00	3.18	999.00	0.00	127.3 (2-Lane)
1.600	4.80	999.00	4.80	999.00	0.00	191.8 (1-Lane)
1.700	3.89	999.00	3.89	999.00	0.00	155.8 (2-Lane)
1.700	5.87	999.00	5.87	999.00	0.00	234.7 (1-Lane)
1.800	5.63	999.00	5.63	999.00	0.00	225.0 (2-Lane)
1.800	8.48	999.00	8.48	999.00	0.00	339.1 (1-Lane)
1.900	9.06	999.00	9.06	999.00	0.00	362.5 (2-Lane)
1.900	13.65	999.00	13.65	999.00	0.00	546.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3-3

Gamma	DC	DW	(2-Lane)				(1-Lane)		
	1.25	1.25	LL	LL	LL	LL	LL	LL	
			1.75	1.75	1.75	1.75	1.75	1.75	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
			Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
Lane									
1.000	167.2	29.5	153.49	0.00	115.41	0.00	124.51	0.00	93.61
0.00									
1.010	164.0	28.9	151.69	0.00	114.05	0.00	123.04	0.00	92.51
0.00									
1.100	134.8	23.6	135.45	0.00	101.84	0.00	109.87	0.00	82.61
0.00									
1.200	102.0	17.7	117.41	0.00	88.28	0.00	95.23	0.00	71.61

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0.00									
1.300	68.0	11.8	99.36	0.00	74.71	0.00	80.60	0.00	60.60
0.00									
1.400	34.0	5.9	81.32	0.00	61.14	0.00	65.96	0.00	49.60
0.00									
1.500	0.0	0.0	63.28	0.00	47.58	0.00	51.33	0.00	38.59
0.00									
1.600	-34.0	-5.9	-81.32	0.00	-61.14	0.00	-65.96	0.00	-49.60
0.00									
1.700	-68.0	-11.8	-99.36	0.00	-74.71	0.00	-80.60	0.00	-60.60
0.00									
1.800	-102.0	-17.7	-117.41	0.00	-88.28	0.00	-95.23	0.00	-71.61
0.00									
1.900	-134.8	-23.6	-135.45	0.00	-101.84	0.00	-109.87	0.00	-82.61
0.00									
2.000	-167.2	-29.5	-153.49	0.00	-115.41	0.00	-124.51	0.00	-93.61
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: 3-3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.13	0.00	205.0 (2-Lane)
1.000	999.00	6.32	0.00	252.8 (1-Lane)
1.010	999.00	5.21	0.00	208.5 (2-Lane)
1.010	999.00	6.43	0.00	257.0 (1-Lane)
1.100	183.86	5.16	0.00	206.5 (2-Lane)
1.100	226.67	6.36	0.00	254.6 (1-Lane)
1.200	44.52	3.48	0.00	139.1 (2-Lane)
1.200	54.88	4.29	0.00	171.5 (1-Lane)
1.300	21.55	4.51	0.00	180.5 (2-Lane)
1.300	26.57	5.56	0.00	222.5 (1-Lane)
1.400	12.56	6.00	0.00	240.1 (2-Lane)
1.400	15.48	7.40	0.00	296.0 (1-Lane)
1.500	8.35	8.35	0.00	333.8 (2-Lane)
1.500	10.29	10.29	0.00	411.5 (1-Lane)
1.600	6.00	12.56	0.00	240.1 (2-Lane)
1.600	7.40	15.48	0.00	296.0 (1-Lane)
1.700	4.51	21.55	0.00	180.5 (2-Lane)
1.700	5.56	26.57	0.00	222.5 (1-Lane)
1.800	3.48	44.52	0.00	139.1 (2-Lane)
1.800	4.29	54.88	0.00	171.5 (1-Lane)
1.900	5.16	183.86	0.00	206.5 (2-Lane)
1.900	6.36	226.67	0.00	254.6 (1-Lane)
2.000	5.13	999.00	0.00	205.0 (2-Lane)
2.000	6.32	999.00	0.00	252.8 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV

Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	193.4	37.4	124.55 R	0.00	93.65	82.66 R
0.00						
1.100	1934.1	340.3	1112.19 R	0.00	836.23	738.14 R
0.00						
1.200	3451.8	604.9	1937.34 R	0.00	1456.64	1285.77 R
0.00						
1.300	4540.4	794.0	2493.94 R	0.00	1875.14	1655.17 R
0.00						
1.400	5193.5	907.4	2828.27 R	0.00	2126.52	1877.06 R

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0.00									
1.500	5411.2	945.2	2940.33 R	0.00	2210.78	0.00	1951.43 R	0.00	1467.24
0.00									
1.600	5193.5	907.4	2828.27 R	0.00	2126.52	0.00	1877.06 R	0.00	1411.32
0.00									
1.700	4540.4	794.0	2493.94 R	0.00	1875.14	0.00	1655.17 R	0.00	1244.49
0.00									
1.800	3451.8	604.9	1937.34 R	0.00	1456.64	0.00	1285.77 R	0.00	966.74
0.00									
1.900	1934.1	340.3	1112.19 R	0.00	836.23	0.00	738.14 R	0.00	554.99
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV

Rating Live Load:

Rating Type: 3-3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV

Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	438.80	999.00	102.13	999.00	0.00	999.0 (2-Lane)
1.010	661.17	999.00	153.88	999.00	0.00	999.0 (1-Lane)



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1.100	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.100	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
1.200	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.200	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.300	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.300	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.400	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.400	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.500	8.59	999.00	2.81	999.00	0.00	112.3 (2-Lane)
1.500	12.95	999.00	4.23	999.00	0.00	169.3 (1-Lane)
1.600	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.600	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.700	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.700	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.800	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.800	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.900	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.900	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	127.85 R	0.00	96.13	0.00
0.00						
1.100	2417.7	425.3	1157.37 R	0.00	870.20	0.00
0.00						
1.200	4314.7	756.1	2045.50 R	0.00	1537.97	0.00
0.00						
1.300	5675.4	992.4	2664.40 R	0.00	2003.31	0.00
0.00						
1.400	6491.9	1134.2	3042.72 R	0.00	2287.76	0.00
0.00						
1.500	6764.0	1181.5	3156.78 R	0.00	2373.52	0.00
0.00						
1.600	6491.9	1134.2	3042.72 R	0.00	2287.76	0.00
0.00						
1.700	5675.4	992.4	2664.40 R	0.00	2003.31	0.00
0.00						
1.800	4314.7	756.1	2045.50 R	0.00	1537.97	0.00
0.00						
1.900	2417.7	425.3	1157.37 R	0.00	870.20	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00

0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU4

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12217.0	-12217.0B	11797.6	11797.6	-20162.4	-20162.4
1.600	19743.0C	19743.0	-11834.5	-11834.5B	12117.0	12117.0	-19460.6	-19460.6
1.700	19743.0C	19743.0	-11834.5	-11834.5B	13075.2	13075.2	-18502.4	-18502.4
1.800	19743.0C	19743.0	-13013.0	-13013.0B	14672.1	14672.1	-18083.9	-18083.9
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU4

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	126.09	999.00	126.09	999.00	0.00	999.0 (2-Lane)
1.010	189.99	999.00	189.99	999.00	0.00	999.0 (1-Lane)
1.100	11.72	999.00	11.72	999.00	0.00	316.5 (2-Lane)
1.100	17.66	999.00	17.66	999.00	0.00	476.9 (1-Lane)
1.200	7.17	999.00	7.17	999.00	0.00	193.7 (2-Lane)
1.200	10.81	999.00	10.81	999.00	0.00	291.8 (1-Lane)
1.300	4.91	999.00	4.91	999.00	0.00	132.5 (2-Lane)
1.300	7.39	999.00	7.39	999.00	0.00	199.6 (1-Lane)
1.400	3.98	999.00	3.98	999.00	0.00	107.5 (2-Lane)
1.400	6.00	999.00	6.00	999.00	0.00	162.0 (1-Lane)
1.500	3.74	999.00	3.74	999.00	0.00	100.9 (2-Lane)

1.500	5.63	999.00	5.63	999.00	0.00	152.0 (1-Lane)
1.600	3.98	999.00	3.98	999.00	0.00	107.5 (2-Lane)
1.600	6.00	999.00	6.00	999.00	0.00	162.0 (1-Lane)
1.700	4.91	999.00	4.91	999.00	0.00	132.5 (2-Lane)
1.700	7.39	999.00	7.39	999.00	0.00	199.6 (1-Lane)
1.800	7.17	999.00	7.17	999.00	0.00	193.7 (2-Lane)
1.800	10.81	999.00	10.81	999.00	0.00	291.8 (1-Lane)
1.900	11.72	999.00	11.72	999.00	0.00	316.5 (2-Lane)
1.900	17.66	999.00	17.66	999.00	0.00	476.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV

Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	116.89	0.00	87.88	0.00	94.81	0.00	71.29
1.010 0.00	164.0	28.9	115.67	0.00	86.97	0.00	93.82	0.00	70.54
1.100 0.00	134.8	23.6	104.71	0.00	78.73	0.00	84.93	0.00	63.86
1.200 0.00	102.0	17.7	92.53	0.00	69.57	0.00	75.05	0.00	56.43
1.300 0.00	68.0	11.8	80.35	0.00	60.41	0.00	65.18	0.00	49.00
1.400 0.00	34.0	5.9	68.17	0.00	51.26	0.00	55.30	0.00	41.58
1.500 0.00	0.0	0.0	55.99	0.00	42.10	0.00	45.42	0.00	34.15
1.600 0.00	-34.0	-5.9	-68.17	0.00	-51.26	0.00	-55.30	0.00	-41.58
1.700 0.00	-68.0	-11.8	-80.35	0.00	-60.41	0.00	-65.18	0.00	-49.00
1.800 0.00	-102.0	-17.7	-92.53	0.00	-69.57	0.00	-75.05	0.00	-56.43
1.900 0.00	-134.8	-23.6	-104.71	0.00	-78.73	0.00	-84.93	0.00	-63.86
2.000 0.00	-167.2	-29.5	-116.89	0.00	-87.88	0.00	-94.81	0.00	-71.29

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV

Rating Live Load: SU4

Span	Shear Resistance vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV

Rating Live Load: SU4

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.73	0.00	181.8 (2-Lane)
1.000	999.00	8.30	0.00	224.1 (1-Lane)
1.010	999.00	6.84	0.00	184.6 (2-Lane)
1.010	999.00	8.43	0.00	227.5 (1-Lane)
1.100	133.46	6.68	0.00	180.3 (2-Lane)
1.100	164.54	8.23	0.00	222.3 (1-Lane)
1.200	33.29	4.41	0.00	119.2 (2-Lane)
1.200	41.05	5.44	0.00	146.9 (1-Lane)
1.300	19.22	5.58	0.00	150.6 (2-Lane)
1.300	23.69	6.88	0.00	185.7 (1-Lane)
1.400	12.96	7.16	0.00	193.3 (2-Lane)
1.400	15.98	8.83	0.00	238.4 (1-Lane)
1.500	9.43	9.43	0.00	254.6 (2-Lane)
1.500	11.63	11.63	0.00	313.9 (1-Lane)
1.600	7.16	12.96	0.00	193.3 (2-Lane)
1.600	8.83	15.98	0.00	238.4 (1-Lane)

1.700	5.58	19.22	0.00	150.6 (2-Lane)
1.700	6.88	23.69	0.00	185.7 (1-Lane)
1.800	4.41	33.29	0.00	119.2 (2-Lane)
1.800	5.44	41.05	0.00	146.9 (1-Lane)
1.900	6.68	133.46	0.00	180.3 (2-Lane)
1.900	8.23	164.54	0.00	222.3 (1-Lane)
2.000	6.73	999.00	0.00	181.8 (2-Lane)
2.000	8.30	999.00	0.00	224.1 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	193.4	37.4	94.98 R	0.00	71.41	0.00	63.03 R	0.00	47.39
1.100 0.00	1934.1	340.3	859.76 R	0.00	646.44	0.00	570.60 R	0.00	429.02
1.200 0.00	3451.8	604.9	1519.52 R	0.00	1142.49	0.00	1008.47 R	0.00	758.25
1.300 0.00	4540.4	794.0	1979.27 R	0.00	1488.17	0.00	1313.60 R	0.00	987.67
1.400 0.00	5193.5	907.4	2260.31 R	0.00	1699.48	0.00	1500.11 R	0.00	1127.90
1.500 0.00	5411.2	945.2	2345.04 R	0.00	1763.19	0.00	1556.35 R	0.00	1170.19
1.600 0.00	5193.5	907.4	2260.31 R	0.00	1699.48	0.00	1500.11 R	0.00	1127.90
1.700 0.00	4540.4	794.0	1979.27 R	0.00	1488.17	0.00	1313.60 R	0.00	987.67
1.800 0.00	3451.8	604.9	1519.52 R	0.00	1142.49	0.00	1008.47 R	0.00	758.25
1.900 0.00	1934.1	340.3	859.76 R	0.00	646.44	0.00	570.60 R	0.00	429.02
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: SU4

Rating Type: SU4

## Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating Factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	575.45	999.00	133.93	999.00	0.00	999.0 (2-Lane)
1.010	867.06	999.00	201.80	999.00	0.00	999.0 (1-Lane)
1.100	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.100	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
1.200	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.200	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.300	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.300	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.400	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.400	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.500	10.77	999.00	3.52	999.00	0.00	95.1 (2-Lane)
1.500	16.23	999.00	5.31	999.00	0.00	143.3 (1-Lane)
1.600	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.600	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.700	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.700	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.800	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.800	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.900	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.900	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75					
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/o impact	Live Load w/o impact
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	241.8	46.8	145.35 R	0.00	109.29	0.00	96.47 R	0.00	72.53	0.00
0.00										
1.100	2417.7	425.3	1314.44 R	0.00	988.30	0.00	872.36 R	0.00	655.91	0.00
0.00										
1.200	4314.7	756.1	2319.75 R	0.00	1744.17	0.00	1539.57 R	0.00	1157.57	0.00
0.00										
1.300	5675.4	992.4	3025.91 R	0.00	2275.12	0.00	2008.23 R	0.00	1509.95	0.00
0.00										
1.400	6491.9	1134.2	3451.60 R	0.00	2595.19	0.00	2290.75 R	0.00	1722.37	0.00
0.00										
1.500	6764.0	1181.5	3568.17 R	0.00	2682.83	0.00	2368.11 R	0.00	1780.53	0.00
0.00										
1.600	6491.9	1134.2	3451.60 R	0.00	2595.19	0.00	2290.75 R	0.00	1722.37	0.00
0.00										
1.700	5675.4	992.4	3025.91 R	0.00	2275.12	0.00	2008.23 R	0.00	1509.95	0.00
0.00										
1.800	4314.7	756.1	2319.75 R	0.00	1744.17	0.00	1539.57 R	0.00	1157.57	0.00
0.00										
1.900	2417.7	425.3	1314.44 R	0.00	988.30	0.00	872.36 R	0.00	655.91	0.00
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU5

Span	Positive Top	Moment Bending Bott.	Resistance Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Available Resistance for LL+I Negative Bending Bott.	Available Resistance for LL+I Positive Bending Top	Available Resistance for LL+I Negative Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12210.3	-12210.3B	11797.6	11797.6	-20155.8	-20155.8

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1.600	19743.0C	19743.0	-11829.0	-11829.0B	12117.0	12117.0	-19455.1	-19455.1
1.700	19743.0C	19743.0	-11829.0	-11829.0B	13075.2	13075.2	-18496.9	-18496.9
1.800	19743.0C	19743.0	-13011.8	-13011.8B	14672.1	14672.1	-18082.7	-18082.7
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU5

Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	110.91	999.00	110.91	999.00	0.00	999.0 (2-Lane)
1.010	167.11	999.00	167.11	999.00	0.00	999.0 (1-Lane)
1.100	10.32	999.00	10.32	999.00	0.00	320.0 (2-Lane)
1.100	15.55	999.00	15.55	999.00	0.00	482.1 (1-Lane)
1.200	6.32	999.00	6.32	999.00	0.00	196.1 (2-Lane)
1.200	9.53	999.00	9.53	999.00	0.00	295.4 (1-Lane)
1.300	4.32	999.00	4.32	999.00	0.00	134.0 (2-Lane)
1.300	6.51	999.00	6.51	999.00	0.00	201.8 (1-Lane)
1.400	3.51	999.00	3.51	999.00	0.00	108.8 (2-Lane)
1.400	5.29	999.00	5.29	999.00	0.00	164.0 (1-Lane)
1.500	3.31	999.00	3.31	999.00	0.00	102.5 (2-Lane)
1.500	4.98	999.00	4.98	999.00	0.00	154.4 (1-Lane)
1.600	3.51	999.00	3.51	999.00	0.00	108.8 (2-Lane)
1.600	5.29	999.00	5.29	999.00	0.00	164.0 (1-Lane)
1.700	4.32	999.00	4.32	999.00	0.00	134.0 (2-Lane)
1.700	6.51	999.00	6.51	999.00	0.00	201.8 (1-Lane)
1.800	6.32	999.00	6.32	999.00	0.00	196.1 (2-Lane)
1.800	9.53	999.00	9.53	999.00	0.00	295.4 (1-Lane)
1.900	10.32	999.00	10.32	999.00	0.00	320.0 (2-Lane)
1.900	15.55	999.00	15.55	999.00	0.00	482.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV



Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	132.90	0.00	99.93	0.00	107.80	0.00	81.05
1.010 0.00	164.0	28.9	131.50	0.00	98.87	0.00	106.67	0.00	80.20
1.100 0.00	134.8	23.6	118.92	0.00	89.41	0.00	96.46	0.00	72.53
1.200 0.00	102.0	17.7	104.93	0.00	78.90	0.00	85.12	0.00	64.00
1.300 0.00	68.0	11.8	90.95	0.00	68.38	0.00	73.77	0.00	55.47
1.400 0.00	34.0	5.9	76.97	0.00	57.87	0.00	62.43	0.00	46.94
1.500 0.00	0.0	0.0	62.98	0.00	47.36	0.00	51.09	0.00	38.41
1.600 0.00	-34.0	-5.9	-76.97	0.00	-57.87	0.00	-62.43	0.00	-46.94
1.700 0.00	-68.0	-11.8	-90.95	0.00	-68.38	0.00	-73.77	0.00	-55.47
1.800 0.00	-102.0	-17.7	-104.93	0.00	-78.90	0.00	-85.12	0.00	-64.00
1.900 0.00	-134.8	-23.6	-118.92	0.00	-89.41	0.00	-96.46	0.00	-72.53
2.000 0.00	-167.2	-29.5	-132.90	0.00	-99.93	0.00	-107.80	0.00	-81.05

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)

1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV

Rating Live Load: SU5

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.92	0.00	183.5 (2-Lane)
1.000	999.00	7.30	0.00	226.3 (1-Lane)
1.010	999.00	6.01	0.00	186.4 (2-Lane)
1.010	999.00	7.41	0.00	229.8 (1-Lane)
1.100	125.99	5.88	0.00	182.3 (2-Lane)
1.100	155.32	7.25	0.00	224.7 (1-Lane)
1.200	30.79	3.89	0.00	120.6 (2-Lane)
1.200	37.96	4.80	0.00	148.7 (1-Lane)
1.300	17.36	4.93	0.00	152.8 (2-Lane)
1.300	21.40	6.08	0.00	188.4 (1-Lane)
1.400	11.59	6.34	0.00	196.6 (2-Lane)
1.400	14.29	7.82	0.00	242.4 (1-Lane)
1.500	8.38	8.38	0.00	259.9 (2-Lane)
1.500	10.34	10.34	0.00	320.4 (1-Lane)
1.600	6.34	11.59	0.00	196.6 (2-Lane)
1.600	7.82	14.29	0.00	242.4 (1-Lane)
1.700	4.93	17.36	0.00	152.8 (2-Lane)
1.700	6.08	21.40	0.00	188.4 (1-Lane)
1.800	3.89	30.79	0.00	120.6 (2-Lane)
1.800	4.80	37.96	0.00	148.7 (1-Lane)
1.900	5.88	125.98	0.00	182.3 (2-Lane)
1.900	7.25	155.32	0.00	224.7 (1-Lane)
2.000	5.92	999.00	0.00	183.5 (2-Lane)
2.000	7.30	999.00	0.00	226.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 468

## SERVICE MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV

Rating Live Load: SU5

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
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1.00

1.00

1.30

Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	107.98 R	0.00	81.19	0.00	71.66 R	0.00	53.88
0.00									
1.100	1934.1	340.3	976.44 R	0.00	734.16	0.00	648.04 R	0.00	487.25
0.00									
1.200	3451.8	604.9	1723.24 R	0.00	1295.67	0.00	1143.68 R	0.00	859.91
0.00									
1.300	4540.4	794.0	2247.82 R	0.00	1690.09	0.00	1491.83 R	0.00	1121.67
0.00									
1.400	5193.5	907.4	2564.05 R	0.00	1927.85	0.00	1701.70 R	0.00	1279.47
0.00									
1.500	5411.2	945.2	2650.64 R	0.00	1992.96	0.00	1759.17 R	0.00	1322.68
0.00									
1.600	5193.5	907.4	2564.05 R	0.00	1927.85	0.00	1701.70 R	0.00	1279.47
0.00									
1.700	4540.4	794.0	2247.82 R	0.00	1690.09	0.00	1491.83 R	0.00	1121.67
0.00									
1.800	3451.8	604.9	1723.24 R	0.00	1295.67	0.00	1143.68 R	0.00	859.91
0.00									
1.900	1934.1	340.3	976.44 R	0.00	734.16	0.00	648.04 R	0.00	487.25
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 468

## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load:

Rating Type: SU5

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 469

## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	506.16	999.00	117.80	999.00	0.00	999.0 (2-Lane)
1.010	762.66	999.00	177.50	999.00	0.00	999.0 (1-Lane)
1.100	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.100	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
1.200	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.200	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.300	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.300	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.400	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.400	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.500	9.53	999.00	3.12	999.00	0.00	96.6 (2-Lane)
1.500	14.36	999.00	4.69	999.00	0.00	145.5 (1-Lane)
1.600	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.600	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.700	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.700	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.800	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.800	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.900	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.900	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU6

[illegible]

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.100	2417.7	425.3	1446.12 R	0.00	1087.31	0.00	959.75 R	0.00	721.62
0.00									
1.200	4314.7	756.1	2582.47 R	0.00	1941.70	0.00	1713.92 R	0.00	1288.66
0.00									
1.300	5675.4	992.4	3378.84 R	0.00	2540.48	0.00	2242.46 R	0.00	1686.06
0.00									
1.400	6491.9	1134.2	3846.14 R	0.00	2891.83	0.00	2552.59 R	0.00	1919.24
0.00									
1.500	6764.0	1181.5	3992.77 R	0.00	3002.08	0.00	2649.91 R	0.00	1992.41
0.00									
1.600	6491.9	1134.2	3846.14 R	0.00	2891.83	0.00	2552.59 R	0.00	1919.24
0.00									
1.700	5675.4	992.4	3378.84 R	0.00	2540.48	0.00	2242.46 R	0.00	1686.06
0.00									
1.800	4314.7	756.1	2582.47 R	0.00	1941.70	0.00	1713.92 R	0.00	1288.66
0.00									
1.900	2417.7	425.3	1446.12 R	0.00	1087.30	0.00	959.75 R	0.00	721.62
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 471

STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU6

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12212.4	-12212.4B	11797.6	11797.6	-20157.8	-20157.8
1.600	19743.0C	19743.0	-11833.4	-11833.4B	12117.0	12117.0	-19459.5	-19459.5
1.700	19743.0C	19743.0	-11833.4	-11833.4B	13075.2	13075.2	-18501.3	-18501.3
1.800	19743.0C	19743.0	-13011.0	-13011.0B	14672.1	14672.1	-18081.8	-18081.8
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	-bend		

1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	100.63	999.00	100.63	999.00	0.00	999.0 (2-Lane)
1.010	151.62	999.00	151.62	999.00	0.00	999.0 (1-Lane)
1.100	9.38	999.00	9.38	999.00	0.00	326.0 (2-Lane)
1.100	14.14	999.00	14.14	999.00	0.00	491.2 (1-Lane)
1.200	5.68	999.00	5.68	999.00	0.00	197.4 (2-Lane)
1.200	8.56	999.00	8.56	999.00	0.00	297.5 (1-Lane)
1.300	3.87	999.00	3.87	999.00	0.00	134.5 (2-Lane)
1.300	5.83	999.00	5.83	999.00	0.00	202.6 (1-Lane)
1.400	3.15	999.00	3.15	999.00	0.00	109.5 (2-Lane)
1.400	4.75	999.00	4.75	999.00	0.00	165.0 (1-Lane)
1.500	2.95	999.00	2.95	999.00	0.00	102.7 (2-Lane)
1.500	4.45	999.00	4.45	999.00	0.00	154.7 (1-Lane)
1.600	3.15	999.00	3.15	999.00	0.00	109.5 (2-Lane)
1.600	4.75	999.00	4.75	999.00	0.00	165.0 (1-Lane)
1.700	3.87	999.00	3.87	999.00	0.00	134.5 (2-Lane)
1.700	5.83	999.00	5.83	999.00	0.00	202.6 (1-Lane)
1.800	5.68	999.00	5.68	999.00	0.00	197.4 (2-Lane)
1.800	8.56	999.00	8.56	999.00	0.00	297.5 (1-Lane)
1.900	9.38	999.00	9.38	999.00	0.00	326.0 (2-Lane)
1.900	14.14	999.00	14.14	999.00	0.00	491.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 473

## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	Lane
1.000	167.2	29.5	146.51	110.15	118.84	89.35
0.00			0.00	0.00	0.00	
1.010	164.0	28.9	144.94	108.98	117.57	88.40
0.00			0.00	0.00	0.00	
1.100	134.8	23.6	130.83	98.37	106.12	79.79
0.00			0.00	0.00	0.00	
1.200	102.0	17.7	115.16	86.58	93.41	70.23
0.00			0.00	0.00	0.00	
1.300	68.0	11.8	99.48	74.80	80.69	60.67
0.00			0.00	0.00	0.00	
1.400	34.0	5.9	83.81	63.01	67.98	51.11
0.00			0.00	0.00	0.00	
1.500	0.0	0.0	68.13	51.23	55.26	41.55
0.00			0.00	0.00	0.00	
1.600	-34.0	-5.9	-83.81	-63.01	-67.98	-51.11
0.00			0.00	0.00	0.00	
1.700	-68.0	-11.8	-99.48	-74.80	-80.69	-60.67
0.00			0.00	0.00	0.00	

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

1.800	-102.0	-17.7	-115.16	0.00	-86.58	0.00	-93.41	0.00	-70.23
0.00									
1.900	-134.8	-23.6	-130.83	0.00	-98.37	0.00	-106.12	0.00	-79.79
0.00									
2.000	-167.2	-29.5	-146.51	0.00	-110.15	0.00	-118.84	0.00	-89.35
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 474

# STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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# STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU6

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.37	0.00	186.6 (2-Lane)
1.000	999.00	6.62	0.00	230.1 (1-Lane)
1.010	999.00	5.45	0.00	189.6 (2-Lane)

1.010	999.00	6.72	0.00	233.7 (1-Lane)
1.100	144.09	5.34	0.00	185.7 (2-Lane)
1.100	177.63	6.59	0.00	229.0 (1-Lane)
1.200	30.69	3.55	0.00	123.2 (2-Lane)
1.200	37.83	4.37	0.00	151.9 (1-Lane)
1.300	16.53	4.51	0.00	156.6 (2-Lane)
1.300	20.37	5.55	0.00	193.0 (1-Lane)
1.400	10.83	5.82	0.00	202.4 (2-Lane)
1.400	13.35	7.18	0.00	249.5 (1-Lane)
1.500	7.75	7.75	0.00	269.3 (2-Lane)
1.500	9.56	9.56	0.00	332.0 (1-Lane)
1.600	5.82	10.83	0.00	202.4 (2-Lane)
1.600	7.18	13.35	0.00	249.5 (1-Lane)
1.700	4.51	16.53	0.00	156.6 (2-Lane)
1.700	5.55	20.37	0.00	193.0 (1-Lane)
1.800	3.55	30.69	0.00	123.2 (2-Lane)
1.800	4.37	37.83	0.00	151.9 (1-Lane)
1.900	5.34	144.09	0.00	185.7 (2-Lane)
1.900	6.59	177.63	0.00	229.0 (1-Lane)
2.000	5.37	999.00	0.00	186.6 (2-Lane)
2.000	6.62	999.00	0.00	230.1 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 476

## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30					
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o impact Truck
Lane										
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	119.01 R	0.00	89.48	0.00	78.98 R	0.00	59.39	
0.00										
1.100	1934.1	340.3	1074.26 R	0.00	807.71	0.00	712.96 R	0.00	536.06	
0.00										
1.200	3451.8	604.9	1918.40 R	0.00	1442.41	0.00	1273.20 R	0.00	957.29	
0.00										
1.300	4540.4	794.0	2509.99 R	0.00	1887.21	0.00	1665.83 R	0.00	1252.50	
0.00										
1.400	5193.5	907.4	2857.13 R	0.00	2148.22	0.00	1896.21 R	0.00	1425.72	
0.00										
1.500	5411.2	945.2	2966.06 R	0.00	2230.12	0.00	1968.50 R	0.00	1480.08	
0.00										
1.600	5193.5	907.4	2857.13 R	0.00	2148.22	0.00	1896.21 R	0.00	1425.72	
0.00										
1.700	4540.4	794.0	2509.99 R	0.00	1887.21	0.00	1665.83 R	0.00	1252.50	
0.00										
1.800	3451.8	604.9	1918.40 R	0.00	1442.41	0.00	1273.20 R	0.00	957.29	
0.00										
1.900	1934.1	340.3	1074.26 R	0.00	807.71	0.00	712.96 R	0.00	536.06	
0.00										



2.000 0.0 0.0 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt 0.00 R 0.00 0.00 0.00

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load:

Rating Type: SU6  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: SU6

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	Rating fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	459.24	999.00	106.88	999.00	0.00	999.0 (2-Lane)
1.010	691.96	999.00	161.05	999.00	0.00	999.0 (1-Lane)
1.100	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.100	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
1.200	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.200	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.300	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.300	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.400	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)

1.400	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.500	8.52	999.00	2.78	999.00	0.00	96.7 (2-Lane)
1.500	12.83	999.00	4.20	999.00	0.00	145.8 (1-Lane)
1.600	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.600	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.700	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.700	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.800	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.800	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.900	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.900	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane		Live Load w/o impact Truck Lane	
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	175.62 R	0.00	132.04	116.55 R
0.00						
1.100	2417.7	425.3	1582.32 R	0.00	1189.71	1050.15 R
0.00						
1.200	4314.7	756.1	2824.95 R	0.00	2124.02	1874.85 R
0.00						
1.300	5675.4	992.4	3727.89 R	0.00	2802.93	2474.12 R
0.00						
1.400	6491.9	1134.2	4247.54 R	0.00	3193.64	2819.00 R
0.00						
1.500	6764.0	1181.5	4416.61 R	0.00	3320.76	2931.20 R
0.00						
1.600	6491.9	1134.2	4247.54 R	0.00	3193.64	2819.00 R
0.00						
1.700	5675.4	992.4	3727.89 R	0.00	2802.92	2474.12 R
0.00						
1.800	4314.7	756.1	2824.95 R	0.00	2124.02	1874.85 R
0.00						
1.900	2417.7	425.3	1582.32 R	0.00	1189.71	1050.15 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03  
 Rating Type: I-INV  
 Rating Live Load: SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12215.4	-12215.4B	11797.6	11797.6	-20160.9	-20160.9
1.600	19743.0C	19743.0	-11835.7	-11835.7B	12117.0	12117.0	-19461.8	-19461.8
1.700	19743.0C	19743.0	-11835.7	-11835.7B	13075.2	13075.2	-18503.6	-18503.6
1.800	19743.0C	19743.0	-13021.6	-13021.6B	14672.1	14672.1	-18092.4	-18092.4
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G03  
 Rating Type: I-INV  
 Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	91.79	999.00	91.79	999.00	0.00	999.0 (2-Lane)
1.010	138.31	999.00	138.31	999.00	0.00	999.0 (1-Lane)
1.100	8.57	999.00	8.57	999.00	0.00	332.2 (2-Lane)
1.100	12.92	999.00	12.92	999.00	0.00	500.6 (1-Lane)
1.200	5.19	999.00	5.19	999.00	0.00	201.3 (2-Lane)
1.200	7.83	999.00	7.83	999.00	0.00	303.2 (1-Lane)
1.300	3.51	999.00	3.51	999.00	0.00	135.9 (2-Lane)
1.300	5.28	999.00	5.28	999.00	0.00	204.8 (1-Lane)
1.400	2.85	999.00	2.85	999.00	0.00	110.5 (2-Lane)
1.400	4.30	999.00	4.30	999.00	0.00	166.6 (1-Lane)
1.500	2.67	999.00	2.67	999.00	0.00	103.5 (2-Lane)
1.500	4.03	999.00	4.03	999.00	0.00	156.0 (1-Lane)
1.600	2.85	999.00	2.85	999.00	0.00	110.5 (2-Lane)
1.600	4.30	999.00	4.30	999.00	0.00	166.6 (1-Lane)
1.700	3.51	999.00	3.51	999.00	0.00	135.9 (2-Lane)
1.700	5.28	999.00	5.28	999.00	0.00	204.8 (1-Lane)
1.800	5.19	999.00	5.19	999.00	0.00	201.3 (2-Lane)
1.800	7.83	999.00	7.83	999.00	0.00	303.2 (1-Lane)

1.900	8.57	999.00	8.57	999.00	0.00	332.2 (2-Lane)
1.900	12.92	999.00	12.92	999.00	0.00	500.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	160.63	0.00	120.78	0.00	130.30	0.00	97.97
1.010 0.00	164.0	28.9	158.88	0.00	119.46	0.00	128.88	0.00	96.90
1.100 0.00	134.8	23.6	143.15	0.00	107.63	0.00	116.12	0.00	87.31
1.200 0.00	102.0	17.7	125.67	0.00	94.49	0.00	101.94	0.00	76.65
1.300 0.00	68.0	11.8	108.19	0.00	81.35	0.00	87.76	0.00	65.99
1.400 0.00	34.0	5.9	90.72	0.00	68.21	0.00	73.58	0.00	55.33
1.500 0.00	0.0	0.0	73.24	0.00	55.07	0.00	59.41	0.00	44.67
1.600 0.00	-34.0	-5.9	-90.72	0.00	-68.21	0.00	-73.58	0.00	-55.33
1.700 0.00	-68.0	-11.8	-108.19	0.00	-81.35	0.00	-87.76	0.00	-65.99
1.800 0.00	-102.0	-17.7	-125.67	0.00	-94.49	0.00	-101.94	0.00	-76.65
1.900 0.00	-134.8	-23.6	-143.15	0.00	-107.63	0.00	-116.12	0.00	-87.31
2.000 0.00	-167.2	-29.5	-160.63	0.00	-120.78	0.00	-130.30	0.00	-97.97

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV  
Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)

1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-INV

Rating Live Load: SU7

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	4.90	0.00	189.8 (2-Lane)
1.000	999.00	6.04	0.00	234.0 (1-Lane)
1.010	999.00	4.98	0.00	192.8 (2-Lane)
1.010	999.00	6.14	0.00	237.7 (1-Lane)
1.100	168.29	4.88	0.00	189.3 (2-Lane)
1.100	207.47	6.02	0.00	233.3 (1-Lane)
1.200	31.14	3.25	0.00	125.9 (2-Lane)
1.200	38.39	4.01	0.00	155.2 (1-Lane)
1.300	15.88	4.14	0.00	160.5 (2-Lane)
1.300	19.58	5.11	0.00	197.9 (1-Lane)
1.400	10.19	5.38	0.00	208.5 (2-Lane)
1.400	12.56	6.63	0.00	257.1 (1-Lane)
1.500	7.21	7.21	0.00	279.4 (2-Lane)
1.500	8.89	8.89	0.00	344.4 (1-Lane)
1.600	5.38	10.19	0.00	208.5 (2-Lane)
1.600	6.63	12.56	0.00	257.1 (1-Lane)
1.700	4.14	15.88	0.00	160.5 (2-Lane)
1.700	5.11	19.58	0.00	197.9 (1-Lane)
1.800	3.25	31.14	0.00	125.9 (2-Lane)
1.800	4.01	38.39	0.00	155.2 (1-Lane)
1.900	4.88	168.29	0.00	189.3 (2-Lane)
1.900	6.02	207.47	0.00	233.3 (1-Lane)
2.000	4.90	999.00	0.00	189.8 (2-Lane)

2.000 6.04 999.00 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
0.00 234.0 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30					
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										
1.010	193.4	37.4	130.46 R	0.00	98.09	0.00	86.58 R	0.00	65.10	
0.00										
1.100	1934.1	340.3	1175.44 R	0.00	883.79	0.00	780.11 R	0.00	586.55	
0.00										
1.200	3451.8	604.9	2098.53 R	0.00	1577.84	0.00	1392.75 R	0.00	1047.18	
0.00										
1.300	4540.4	794.0	2769.29 R	0.00	2082.17	0.00	1837.91 R	0.00	1381.89	
0.00										
1.400	5193.5	907.4	3155.32 R	0.00	2372.42	0.00	2094.11 R	0.00	1574.52	
0.00										
1.500	5411.2	945.2	3280.91 R	0.00	2466.85	0.00	2177.47 R	0.00	1637.19	
0.00										
1.600	5193.5	907.4	3155.32 R	0.00	2372.42	0.00	2094.11 R	0.00	1574.52	
0.00										
1.700	4540.4	794.0	2769.29 R	0.00	2082.17	0.00	1837.91 R	0.00	1381.89	
0.00										
1.800	3451.8	604.9	2098.53 R	0.00	1577.84	0.00	1392.75 R	0.00	1047.18	
0.00										
1.900	1934.1	340.3	1175.44 R	0.00	883.79	0.00	780.11 R	0.00	586.55	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 484

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: SU7

Rating Type: SU7  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive	Bending	Negative	Bending	Positive	Bending	Negative	Bending
	Top	Bott.	Top	Bott.	Top	Bott.	Top	Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7

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1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-INV  
Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	418.93	999.00	97.50	999.00	0.00	999.0 (2-Lane)
1.010	631.22	999.00	146.91	999.00	0.00	999.0 (1-Lane)
1.100	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.100	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
1.200	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.200	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.300	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.300	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.400	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.400	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.500	7.70	999.00	2.52	999.00	0.00	97.5 (2-Lane)
1.500	11.60	999.00	3.79	999.00	0.00	147.0 (1-Lane)
1.600	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.600	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.700	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.700	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.800	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.800	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.900	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.900	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D.

G03

Rating Type:

I-OPER

Rating Live Load:

HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35			
			Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Span impact	Dead Load	Superimposed	Truck	Lane	Truck	Lane	Truck	Lane	Truck	Lane
Lane		Dead Load								
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	241.8	46.8	202.34 R	0.00	170.33	0.00	134.29 R	0.00	113.05	0.00
0.00										
1.100	2417.7	425.3	1832.15 R	0.00	1542.98	0.00	1215.96 R	0.00	1024.04	0.00
0.00										
1.200	4314.7	756.1	3239.23 R	0.00	2729.59	0.00	2149.80 R	0.00	1811.57	0.00
0.00										
1.300	5675.4	992.4	4221.21 R	0.00	3559.83	0.00	2801.52 R	0.00	2362.58	0.00
0.00										
1.400	6491.9	1134.2	4805.03 R	0.00	4053.93	0.00	3188.99 R	0.00	2690.50	0.00
0.00										
1.500	6764.0	1181.5	4977.21 R	0.00	4201.77	0.00	3303.26 R	0.00	2788.62	0.00
0.00										
1.600	6491.9	1134.2	4805.03 R	0.00	4053.93	0.00	3188.99 R	0.00	2690.50	0.00
0.00										
1.700	5675.4	992.4	4221.21 R	0.00	3559.83	0.00	2801.52 R	0.00	2362.58	0.00
0.00										
1.800	4314.7	756.1	3239.23 R	0.00	2729.59	0.00	2149.80 R	0.00	1811.57	0.00
0.00										
1.900	2417.7	425.3	1832.15 R	0.00	1542.98	0.00	1215.96 R	0.00	1024.04	0.00
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D.

G03

Rating Type:

I-OPER

Rating Live Load:

HL93

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.6	-12222.6B	11797.6	11797.6	-20168.1	-20168.1
1.600	19743.0C	19743.0	-11839.4	-11839.4B	12117.0	12117.0	-19465.5	-19465.5
1.700	19743.0C	19743.0	-11839.4	-11839.4B	13075.2	13075.2	-18507.3	-18507.3
1.800	19743.0C	19743.0	-13020.9	-13020.9B	14672.1	14672.1	-18091.8	-18091.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT



Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: HL93

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	79.67	999.00	79.67	999.00	0.00	999.0 (2-Lane)
1.010	120.04	999.00	120.04	999.00	0.00	999.0 (1-Lane)
1.100	7.41	999.00	7.41	999.00	0.00	266.6 (2-Lane)
1.100	11.16	999.00	11.16	999.00	0.00	401.6 (1-Lane)
1.200	4.53	999.00	4.53	999.00	0.00	163.1 (2-Lane)
1.200	6.82	999.00	6.82	999.00	0.00	245.7 (1-Lane)
1.300	3.10	999.00	3.10	999.00	0.00	111.5 (2-Lane)
1.300	4.67	999.00	4.67	999.00	0.00	168.0 (1-Lane)
1.400	2.52	999.00	2.52	999.00	0.00	90.8 (2-Lane)
1.400	3.80	999.00	3.80	999.00	0.00	136.8 (1-Lane)
1.500	2.37	999.00	2.37	999.00	0.00	85.3 (2-Lane)
1.500	3.57	999.00	3.57	999.00	0.00	128.6 (1-Lane)
1.600	2.52	999.00	2.52	999.00	0.00	90.8 (2-Lane)
1.600	3.80	999.00	3.80	999.00	0.00	136.8 (1-Lane)
1.700	3.10	999.00	3.10	999.00	0.00	111.5 (2-Lane)
1.700	4.67	999.00	4.67	999.00	0.00	168.0 (1-Lane)
1.800	4.53	999.00	4.53	999.00	0.00	163.1 (2-Lane)
1.800	6.82	999.00	6.82	999.00	0.00	245.7 (1-Lane)
1.900	7.41	999.00	7.41	999.00	0.00	266.6 (2-Lane)
1.900	11.16	999.00	11.16	999.00	0.00	401.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: HL93

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	1.35	LL	1.35
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	

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1.000	167.2	29.5	184.98	0.00	155.71	0.00	150.05	0.00	126.31
0.00									
1.010	164.0	28.9	182.40	0.00	153.44	0.00	147.95	0.00	124.46
0.00									
1.100	134.8	23.6	159.72	0.00	133.56	0.00	129.56	0.00	108.34
0.00									
1.200	102.0	17.7	135.80	0.00	112.75	0.00	110.16	0.00	91.46
0.00									
1.300	68.0	11.8	113.22	0.00	93.28	0.00	91.84	0.00	75.66
0.00									
1.400	34.0	5.9	91.99	0.00	75.15	0.00	74.61	0.00	60.96
0.00									
1.500	0.0	0.0	72.09	0.00	58.36	0.00	58.47	0.00	47.34
0.00									
1.600	-34.0	-5.9	-91.99	0.00	-75.15	0.00	-74.61	0.00	-60.96
0.00									
1.700	-68.0	-11.8	-113.22	0.00	-93.28	0.00	-91.84	0.00	-75.66
0.00									
1.800	-102.0	-17.7	-135.80	0.00	-112.75	0.00	-110.16	0.00	-91.46
0.00									
1.900	-134.8	-23.6	-159.72	0.00	-133.56	0.00	-129.56	0.00	-108.34
0.00									
2.000	-167.2	-29.5	-184.98	0.00	-155.71	0.00	-150.05	0.00	-126.31
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: HL93

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

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 Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G03  
 Rating Type: I-OPER  
 Rating Live Load: HL93

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	4.25	0.00	153.1 (2-Lane)
1.000	999.00	5.24	0.00	188.8 (1-Lane)
1.010	999.00	4.34	0.00	156.1 (2-Lane)
1.010	999.00	5.34	0.00	192.4 (1-Lane)
1.100	133.47	4.38	0.00	157.6 (2-Lane)
1.100	164.55	5.40	0.00	194.3 (1-Lane)
1.200	31.70	3.01	0.00	108.3 (2-Lane)
1.200	39.08	3.71	0.00	133.5 (1-Lane)
1.300	16.74	3.96	0.00	142.5 (2-Lane)
1.300	20.64	4.88	0.00	175.7 (1-Lane)
1.400	10.61	5.31	0.00	191.1 (2-Lane)
1.400	13.08	6.54	0.00	235.5 (1-Lane)
1.500	7.32	7.32	0.00	263.7 (2-Lane)
1.500	9.03	9.03	0.00	325.1 (1-Lane)
1.600	5.31	10.61	0.00	191.1 (2-Lane)
1.600	6.54	13.08	0.00	235.5 (1-Lane)
1.700	3.96	16.74	0.00	142.5 (2-Lane)
1.700	4.88	20.64	0.00	175.7 (1-Lane)
1.800	3.01	31.70	0.00	108.3 (2-Lane)
1.800	3.71	39.08	0.00	133.5 (1-Lane)
1.900	4.38	122.67	0.00	157.6 (2-Lane)
1.900	5.40	151.23	0.00	194.3 (1-Lane)
2.000	4.25	999.00	0.00	153.1 (2-Lane)
2.000	5.24	999.00	0.00	188.8 (1-Lane)

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 SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G03  
 Rating Type: II-OPE  
 Rating Live Load: HL93

Gamma	DC	DW	(2-Lane)				(1-Lane)		
	1.00	1.00	LL 1.00		LL 1.00		LL 1.00		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	149.88 R	0.00	126.17	0.00	99.47 R	0.00	83.74

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0.00									
1.100	1934.1	340.3	1357.15 R	0.00	1142.95	0.00	900.71 R	0.00	758.55
0.00									
1.200	3451.8	604.9	2399.43 R	0.00	2021.92	0.00	1592.44 R	0.00	1341.90
0.00									
1.300	4540.4	794.0	3126.83 R	0.00	2636.91	0.00	2075.20 R	0.00	1750.06
0.00									
1.400	5193.5	907.4	3559.28 R	0.00	3002.91	0.00	2362.21 R	0.00	1992.96
0.00									
1.500	5411.2	945.2	3686.82 R	0.00	3112.42	0.00	2446.86 R	0.00	2065.64
0.00									
1.600	5193.5	907.4	3559.28 R	0.00	3002.91	0.00	2362.21 R	0.00	1992.96
0.00									
1.700	4540.4	794.0	3126.83 R	0.00	2636.91	0.00	2075.20 R	0.00	1750.06
0.00									
1.800	3451.8	604.9	2399.43 R	0.00	2021.92	0.00	1592.44 R	0.00	1341.90
0.00									
1.900	1934.1	340.3	1357.15 R	0.00	1142.95	0.00	900.71 R	0.00	758.55
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPER

Rating Live Load:

Rating Type: HL93

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPER

Rating Live Load: HL93

Span	Service		Rating Value	Load Resistance
	Rating top fiber	Factor bottom fiber		

	+bend	-bend	+bend	-bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	364.64	999.00	84.87	999.00	0.00	999.0 (2-Lane)
1.010	549.42	999.00	127.87	999.00	0.00	999.0 (1-Lane)
1.100	30.05	999.00	7.35	999.00	0.00	264.6 (2-Lane)
1.100	45.28	999.00	11.08	999.00	0.00	398.7 (1-Lane)
1.200	15.38	999.00	4.66	999.00	0.00	167.8 (2-Lane)
1.200	23.17	999.00	7.02	999.00	0.00	252.8 (1-Lane)
1.300	9.73	999.00	3.06	999.00	0.00	110.0 (2-Lane)
1.300	14.66	999.00	4.61	999.00	0.00	165.8 (1-Lane)
1.400	7.46	999.00	2.41	999.00	0.00	86.8 (2-Lane)
1.400	11.24	999.00	3.63	999.00	0.00	130.8 (1-Lane)
1.500	6.85	999.00	2.24	999.00	0.00	80.6 (2-Lane)
1.500	10.32	999.00	3.38	999.00	0.00	121.5 (1-Lane)
1.600	7.46	999.00	2.41	999.00	0.00	86.8 (2-Lane)
1.600	11.24	999.00	3.63	999.00	0.00	130.8 (1-Lane)
1.700	9.73	999.00	3.06	999.00	0.00	110.0 (2-Lane)
1.700	14.66	999.00	4.61	999.00	0.00	165.8 (1-Lane)
1.800	15.38	999.00	4.66	999.00	0.00	167.8 (2-Lane)
1.800	23.17	999.00	7.02	999.00	0.00	252.8 (1-Lane)
1.900	30.05	999.00	7.35	999.00	0.00	264.6 (2-Lane)
1.900	45.28	999.00	11.08	999.00	0.00	398.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	241.8	46.8	129.01 R	0.00	97.00	85.62 R
0.00						
1.100	2417.7	425.3	1165.45 R	0.00	876.28	773.48 R
0.00						
1.200	4314.7	756.1	2053.98 R	0.00	1544.34	1363.18 R
0.00						
1.300	5675.4	992.4	2665.57 R	0.00	2004.19	1769.08 R
0.00						
1.400	6491.9	1134.2	3027.15 R	0.00	2276.05	2009.05 R
0.00						
1.500	6764.0	1181.5	3125.25 R	0.00	2349.82	2074.16 R
0.00						
1.600	6491.9	1134.2	3027.15 R	0.00	2276.05	2009.05 R

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0.00									
1.700	5675.4	992.4	2665.57 R	0.00	2004.19	0.00	1769.08 R	0.00	1330.14
0.00									
1.800	4314.7	756.1	2053.98 R	0.00	1544.34	0.00	1363.18 R	0.00	1024.95
0.00									
1.900	2417.7	425.3	1165.45 R	0.00	876.28	0.00	773.48 R	0.00	581.57
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: HS20

Span	Positive Top	Moment Bending Bott.	Resistance Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Top	Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.6	-12222.6B	11797.6	11797.6	-20168.1	-20168.1
1.600	19743.0C	19743.0	-11839.4	-11839.4B	12117.0	12117.0	-19465.5	-19465.5
1.700	19743.0C	19743.0	-11839.4	-11839.4B	13075.2	13075.2	-18507.3	-18507.3
1.800	19743.0C	19743.0	-13020.9	-13020.9B	14672.1	14672.1	-18091.8	-18091.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: HS20

Span	top +bend	Rating fiber -bend	Moment Factor bottom fiber +bend	-bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	124.96	999.00	124.96	999.00	999.00	999.0 (2-Lane)
1.010	188.29	999.00	188.29	999.00	999.00	999.0 (1-Lane)
1.100	11.64	999.00	11.64	999.00	232.81	419.1 (2-Lane)
1.100	17.54	999.00	17.54	999.00	350.79	631.4 (1-Lane)
1.200	7.14	999.00	7.14	999.00	142.87	257.2 (2-Lane)
1.200	10.76	999.00	10.76	999.00	215.26	387.5 (1-Lane)

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1.300	4.91	999.00	4.91	999.00	98.10	176.6 (2-Lane)
1.300	7.39	999.00	7.39	999.00	147.82	266.1 (1-Lane)
1.400	4.00	999.00	4.00	999.00	80.06	144.1 (2-Lane)
1.400	6.03	999.00	6.03	999.00	120.62	217.1 (1-Lane)
1.500	3.78	999.00	3.78	999.00	75.50	135.9 (2-Lane)
1.500	5.69	999.00	5.69	999.00	113.76	204.8 (1-Lane)
1.600	4.00	999.00	4.00	999.00	80.06	144.1 (2-Lane)
1.600	6.03	999.00	6.03	999.00	120.62	217.1 (1-Lane)
1.700	4.91	999.00	4.91	999.00	98.10	176.6 (2-Lane)
1.700	7.39	999.00	7.39	999.00	147.82	266.1 (1-Lane)
1.800	7.14	999.00	7.14	999.00	142.87	257.2 (2-Lane)
1.800	10.76	999.00	10.76	999.00	215.26	387.5 (1-Lane)
1.900	11.64	999.00	11.64	999.00	232.81	419.1 (2-Lane)
1.900	17.54	999.00	17.54	999.00	350.79	631.4 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	117.97	0.00	88.70	0.00	95.69	0.00	71.95
1.010 0.00	164.0	28.9	116.71	0.00	87.75	0.00	94.67	0.00	71.18
1.100 0.00	134.8	23.6	105.44	0.00	79.28	0.00	85.53	0.00	64.31
1.200 0.00	102.0	17.7	92.91	0.00	69.86	0.00	75.37	0.00	56.67
1.300 0.00	68.0	11.8	80.39	0.00	60.44	0.00	65.20	0.00	49.03
1.400 0.00	34.0	5.9	67.86	0.00	51.02	0.00	55.04	0.00	41.39
1.500 0.00	0.0	0.0	55.33	0.00	41.60	0.00	44.88	0.00	33.75
1.600 0.00	-34.0	-5.9	-67.86	0.00	-51.02	0.00	-55.04	0.00	-41.39
1.700 0.00	-68.0	-11.8	-80.39	0.00	-60.44	0.00	-65.20	0.00	-49.03
1.800 0.00	-102.0	-17.7	-92.91	0.00	-69.86	0.00	-75.37	0.00	-56.67
1.900 0.00	-134.8	-23.6	-105.44	0.00	-79.28	0.00	-85.53	0.00	-64.31
2.000 0.00	-167.2	-29.5	-117.97	0.00	-88.70	0.00	-95.69	0.00	-71.95

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: HS20

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: HS20

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.67	133.40	240.1 (2-Lane)
1.000	999.00	8.22	164.46	296.0 (1-Lane)
1.010	999.00	6.77	135.49	243.9 (2-Lane)
1.010	999.00	8.35	167.03	300.7 (1-Lane)
1.100	162.14	6.63	132.63	238.7 (2-Lane)
1.100	199.89	8.18	163.51	294.3 (1-Lane)
1.200	36.49	4.39	87.90	158.2 (2-Lane)
1.200	44.99	5.42	108.37	195.1 (1-Lane)
1.300	20.08	5.58	111.53	200.8 (2-Lane)
1.300	24.75	6.88	137.49	247.5 (1-Lane)



1.400	13.27	7.19	143.88	259.0 (2-Lane)
1.400	16.36	8.87	177.37	319.3 (1-Lane)
1.500	9.54	9.54	190.87	343.6 (2-Lane)
1.500	11.77	11.77	235.31	423.6 (1-Lane)
1.600	7.19	13.27	143.88	259.0 (2-Lane)
1.600	8.87	16.36	177.37	319.3 (1-Lane)
1.700	5.58	20.08	111.53	200.8 (2-Lane)
1.700	6.88	24.75	137.49	247.5 (1-Lane)
1.800	4.39	36.49	87.90	158.2 (2-Lane)
1.800	5.42	44.99	108.37	195.1 (1-Lane)
1.900	6.63	162.14	132.63	238.7 (2-Lane)
1.900	8.18	199.89	163.51	294.3 (1-Lane)
2.000	6.67	999.00	133.40	240.1 (2-Lane)
2.000	8.22	999.00	164.46	296.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPE  
Rating Live Load: HS20

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00				(1-Lane) LL 1.00		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	193.4	37.4	95.56 R	0.00	71.85	0.00	63.42 R	0.00	47.69
1.100 0.00	1934.1	340.3	863.30 R	0.00	649.10	0.00	572.95 R	0.00	430.79
1.200 0.00	3451.8	604.9	1521.46 R	0.00	1143.96	0.00	1009.76 R	0.00	759.22
1.300 0.00	4540.4	794.0	1974.50 R	0.00	1484.59	0.00	1310.43 R	0.00	985.29
1.400 0.00	5193.5	907.4	2242.33 R	0.00	1685.97	0.00	1488.19 R	0.00	1118.94
1.500 0.00	5411.2	945.2	2315.00 R	0.00	1740.60	0.00	1536.42 R	0.00	1155.20
1.600 0.00	5193.5	907.4	2242.33 R	0.00	1685.97	0.00	1488.19 R	0.00	1118.94
1.700 0.00	4540.4	794.0	1974.50 R	0.00	1484.59	0.00	1310.43 R	0.00	985.29
1.800 0.00	3451.8	604.9	1521.46 R	0.00	1143.96	0.00	1009.76 R	0.00	759.22
1.900 0.00	1934.1	340.3	863.30 R	0.00	649.10	0.00	572.95 R	0.00	430.79
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03  
 Rating Type: II-OPER  
 Rating Live Load:

Rating Type: HS20  
 Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03  
 Rating Type: II-OPER  
 Rating Live Load: HS20

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	571.93	999.00	133.11	999.00	999.00	999.0 (2-Lane)
1.010	861.76	999.00	200.57	999.00	999.00	999.0 (1-Lane)
1.100	47.24	999.00	11.56	999.00	231.13	416.0 (2-Lane)
1.100	71.18	999.00	17.41	999.00	348.25	626.9 (1-Lane)
1.200	24.25	999.00	7.35	999.00	147.02	264.6 (2-Lane)
1.200	36.54	999.00	11.08	999.00	221.52	398.7 (1-Lane)
1.300	15.41	999.00	4.84	999.00	96.82	174.3 (2-Lane)
1.300	23.22	999.00	7.29	999.00	145.88	262.6 (1-Lane)
1.400	11.84	999.00	3.83	999.00	76.55	137.8 (2-Lane)
1.400	17.84	999.00	5.77	999.00	115.35	207.6 (1-Lane)
1.500	10.91	999.00	3.57	999.00	71.34	128.4 (2-Lane)
1.500	16.44	999.00	5.38	999.00	107.49	193.5 (1-Lane)
1.600	11.84	999.00	3.83	999.00	76.55	137.8 (2-Lane)
1.600	17.84	999.00	5.77	999.00	115.35	207.6 (1-Lane)
1.700	15.41	999.00	4.84	999.00	96.82	174.3 (2-Lane)
1.700	23.22	999.00	7.29	999.00	145.88	262.6 (1-Lane)

1.800	24.25	999.00	7.35	999.00	147.02	264.6 (2-Lane)
1.800	36.54	999.00	11.08	999.00	221.52	398.7 (1-Lane)
1.900	47.24	999.00	11.56	999.00	231.13	416.0 (2-Lane)
1.900	71.18	999.00	17.41	999.00	348.25	626.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3

Gamma	(2-Lane)				(1-Lane)					
	DC 1.25	DW 1.25	LL 1.35		LL 1.35					
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										
1.010	241.8	46.8	90.73 R	0.00	68.21	0.00	60.21 R	0.00	45.27	
0.00										
1.100	2417.7	425.3	820.71 R	0.00	617.08	0.00	544.69 R	0.00	409.54	
0.00										
1.200	4314.7	756.1	1449.12 R	0.00	1089.56	0.00	961.74 R	0.00	723.12	
0.00										
1.300	5675.4	992.4	1885.21 R	0.00	1417.45	0.00	1251.17 R	0.00	940.73	
0.00										
1.400	6491.9	1134.2	2143.40 R	0.00	1611.58	0.00	1422.53 R	0.00	1069.57	
0.00										
1.500	6764.0	1181.5	2218.90 R	0.00	1668.34	0.00	1472.63 R	0.00	1107.24	
0.00										
1.600	6491.9	1134.2	2143.40 R	0.00	1611.58	0.00	1422.53 R	0.00	1069.57	
0.00										
1.700	5675.4	992.4	1885.21 R	0.00	1417.45	0.00	1251.17 R	0.00	940.73	
0.00										
1.800	4314.7	756.1	1449.12 R	0.00	1089.56	0.00	961.74 R	0.00	723.12	
0.00										
1.900	2417.7	425.3	820.71 R	0.00	617.08	0.00	544.69 R	0.00	409.54	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.

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1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12212.6	-12212.6B	11797.6	11797.6	-20158.1	-20158.1
1.600	19743.0C	19743.0	-11832.8	-11832.8B	12117.0	12117.0	-19458.9	-19458.9
1.700	19743.0C	19743.0	-11832.8	-11832.8B	13075.2	13075.2	-18500.7	-18500.7
1.800	19743.0C	19743.0	-13009.9	-13009.9B	14672.1	14672.1	-18080.8	-18080.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3

Moment

Span	top +bend	Rating fiber -bend	Factor	bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)
1.010	177.69	999.00		177.69	999.00	0.00	999.0 (2-Lane)
1.010	267.73	999.00		267.73	999.00	0.00	999.0 (1-Lane)
1.100	16.53	999.00		16.53	999.00	0.00	413.2 (2-Lane)
1.100	24.91	999.00		24.91	999.00	0.00	622.7 (1-Lane)
1.200	10.12	999.00		10.12	999.00	0.00	253.1 (2-Lane)
1.200	15.26	999.00		15.26	999.00	0.00	381.4 (1-Lane)
1.300	6.94	999.00		6.94	999.00	0.00	173.4 (2-Lane)
1.300	10.45	999.00		10.45	999.00	0.00	261.3 (1-Lane)
1.400	5.65	999.00		5.65	999.00	0.00	141.3 (2-Lane)
1.400	8.52	999.00		8.52	999.00	0.00	212.9 (1-Lane)
1.500	5.32	999.00		5.32	999.00	0.00	132.9 (2-Lane)
1.500	8.01	999.00		8.01	999.00	0.00	200.3 (1-Lane)
1.600	5.65	999.00		5.65	999.00	0.00	141.3 (2-Lane)
1.600	8.52	999.00		8.52	999.00	0.00	212.9 (1-Lane)
1.700	6.94	999.00		6.94	999.00	0.00	173.4 (2-Lane)
1.700	10.45	999.00		10.45	999.00	0.00	261.3 (1-Lane)
1.800	10.12	999.00		10.12	999.00	0.00	253.1 (2-Lane)
1.800	15.26	999.00		15.26	999.00	0.00	381.4 (1-Lane)
1.900	16.53	999.00		16.53	999.00	0.00	413.2 (2-Lane)
1.900	24.91	999.00		24.91	999.00	0.00	622.7 (1-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load Truck
1.000 0.00	167.2	29.5	82.95	0.00	62.37	50.59
1.010 0.00	164.0	28.9	82.08	0.00	61.71	50.06
1.100 0.00	134.8	23.6	74.25	0.00	55.83	45.28
1.200 0.00	102.0	17.7	65.55	0.00	49.29	39.98
1.300 0.00	68.0	11.8	56.85	0.00	42.75	34.67
1.400 0.00	34.0	5.9	48.15	0.00	36.20	29.37
1.500 0.00	0.0	0.0	39.45	0.00	29.66	24.06
1.600 0.00	-34.0	-5.9	-48.15	0.00	-36.20	-29.37
1.700 0.00	-68.0	-11.8	-56.85	0.00	-42.75	-34.67
1.800 0.00	-102.0	-17.7	-65.55	0.00	-49.29	-39.98
1.900 0.00	-134.8	-23.6	-74.25	0.00	-55.83	-45.28
2.000 0.00	-167.2	-29.5	-82.95	0.00	-62.37	-50.59

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)

1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

□

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	9.49	0.00	237.1 (2-Lane)
1.000	999.00	11.69	0.00	292.4 (1-Lane)
1.010	999.00	9.63	0.00	240.8 (2-Lane)
1.010	999.00	11.88	0.00	296.9 (1-Lane)
1.100	196.28	9.42	0.00	235.4 (2-Lane)
1.100	241.98	11.61	0.00	290.2 (1-Lane)
1.200	48.50	6.23	0.00	155.7 (2-Lane)
1.200	59.79	7.68	0.00	192.0 (1-Lane)
1.300	27.56	7.89	0.00	197.1 (2-Lane)
1.300	33.98	9.72	0.00	243.0 (1-Lane)
1.400	18.47	10.14	0.00	253.4 (2-Lane)
1.400	22.77	12.50	0.00	312.5 (1-Lane)
1.500	13.38	13.38	0.00	334.6 (2-Lane)
1.500	16.50	16.50	0.00	412.5 (1-Lane)
1.600	10.14	18.47	0.00	253.4 (2-Lane)
1.600	12.50	22.77	0.00	312.5 (1-Lane)
1.700	7.89	27.56	0.00	197.1 (2-Lane)
1.700	9.72	33.98	0.00	243.0 (1-Lane)
1.800	6.23	48.50	0.00	155.7 (2-Lane)
1.800	7.68	59.79	0.00	192.0 (1-Lane)
1.900	9.42	196.28	0.00	235.4 (2-Lane)
1.900	11.61	241.98	0.00	290.2 (1-Lane)
2.000	9.49	999.00	0.00	237.1 (2-Lane)
2.000	11.69	999.00	0.00	292.4 (1-Lane)

□

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## SERVICE MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G03  
 Rating Type: II-OPE  
 Rating Live Load: 3

Gamma	DC	DW	(2-Lane)				(1-Lane)		
	1.00	1.00	LL		LL		LL		
			1.00		1.00		1.00		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	67.20 R	0.00	50.53	0.00	44.60 R	0.00	33.54
0.00									
1.100	1934.1	340.3	607.94 R	0.00	457.09	0.00	403.47 R	0.00	303.36
0.00									
1.200	3451.8	604.9	1073.42 R	0.00	807.08	0.00	712.40 R	0.00	535.64
0.00									
1.300	4540.4	794.0	1396.45 R	0.00	1049.96	0.00	926.79 R	0.00	696.84
0.00									
1.400	5193.5	907.4	1587.71 R	0.00	1193.76	0.00	1053.72 R	0.00	792.27
0.00									
1.500	5411.2	945.2	1643.63 R	0.00	1235.81	0.00	1090.84 R	0.00	820.18
0.00									
1.600	5193.5	907.4	1587.71 R	0.00	1193.76	0.00	1053.72 R	0.00	792.27
0.00									
1.700	4540.4	794.0	1396.45 R	0.00	1049.96	0.00	926.79 R	0.00	696.84
0.00									
1.800	3451.8	604.9	1073.42 R	0.00	807.08	0.00	712.40 R	0.00	535.64
0.00									
1.900	1934.1	340.3	607.94 R	0.00	457.09	0.00	403.47 R	0.00	303.36
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03  
 Rating Type: II-OPER  
 Rating Live Load:

Rating Type: 3  
 Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPER  
Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	813.25	999.00	189.28	999.00	0.00	999.0 (2-Lane)
1.010	999.00	999.00	285.19	999.00	0.00	999.0 (1-Lane)
1.100	67.08	999.00	16.41	999.00	0.00	410.3 (2-Lane)
1.100	101.08	999.00	24.73	999.00	0.00	618.2 (1-Lane)
1.200	34.37	999.00	10.42	999.00	0.00	260.5 (2-Lane)
1.200	51.79	999.00	15.70	999.00	0.00	392.5 (1-Lane)
1.300	21.79	999.00	6.84	999.00	0.00	171.1 (2-Lane)
1.300	32.83	999.00	10.31	999.00	0.00	257.8 (1-Lane)
1.400	16.73	999.00	5.41	999.00	0.00	135.1 (2-Lane)
1.400	25.20	999.00	8.15	999.00	0.00	203.6 (1-Lane)
1.500	15.37	999.00	5.02	999.00	0.00	125.6 (2-Lane)
1.500	23.16	999.00	7.57	999.00	0.00	189.3 (1-Lane)
1.600	16.73	999.00	5.41	999.00	0.00	135.1 (2-Lane)
1.600	25.20	999.00	8.15	999.00	0.00	203.6 (1-Lane)
1.700	21.79	999.00	6.84	999.00	0.00	171.1 (2-Lane)
1.700	32.83	999.00	10.31	999.00	0.00	257.8 (1-Lane)
1.800	34.37	999.00	10.42	999.00	0.00	260.5 (2-Lane)
1.800	51.79	999.00	15.70	999.00	0.00	392.5 (1-Lane)
1.900	67.08	999.00	16.41	999.00	0.00	410.3 (2-Lane)
1.900	101.08	999.00	24.73	999.00	0.00	618.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3S2

Gamma	DC		(2-Lane)		(1-Lane)	
	1.25	DW 1.25	LL 1.35	LL 1.35	LL 1.35	LL 1.35
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o



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impact

Lane	Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								
1.010	241.8	46.8	134.15 R	0.00	100.86	0.00	89.03 R	0.00
0.00								
1.100	2417.7	425.3	1203.02 R	0.00	904.52	0.00	798.41 R	0.00
0.00								
1.200	4314.7	756.1	2098.33 R	0.00	1577.70	0.00	1392.62 R	0.00
0.00								
1.300	5675.4	992.4	2752.26 R	0.00	2069.37	0.00	1826.61 R	0.00
0.00								
1.400	6491.9	1134.2	3121.56 R	0.00	2347.03	0.00	2071.71 R	0.00
0.00								
1.500	6764.0	1181.5	3207.18 R	0.00	2411.41	0.00	2128.53 R	0.00
0.00								
1.600	6491.9	1134.2	3121.56 R	0.00	2347.03	0.00	2071.71 R	0.00
0.00								
1.700	5675.4	992.4	2752.26 R	0.00	2069.37	0.00	1826.61 R	0.00
0.00								
1.800	4314.7	756.1	2098.33 R	0.00	1577.69	0.00	1392.62 R	0.00
0.00								
1.900	2417.7	425.3	1203.01 R	0.00	904.52	0.00	798.41 R	0.00
0.00								
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12197.1	-12197.1B	11797.6	11797.6	-20142.6	-20142.6
1.600	19743.0C	19743.0	-11820.8	-11820.8B	12117.0	12117.0	-19446.9	-19446.9
1.700	19743.0C	19743.0	-11820.8	-11820.8B	13075.2	13075.2	-18488.7	-18488.7
1.800	19743.0C	19743.0	-13010.0	-13010.0B	14672.1	14672.1	-18080.9	-18080.9
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3S2

## Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	120.17	999.00	120.17	999.00	0.00	999.0 (2-Lane)
1.010	181.07	999.00	181.07	999.00	0.00	999.0 (1-Lane)
1.100	11.28	999.00	11.28	999.00	0.00	451.1 (2-Lane)
1.100	16.99	999.00	16.99	999.00	0.00	679.7 (1-Lane)
1.200	6.99	999.00	6.99	999.00	0.00	279.7 (2-Lane)
1.200	10.54	999.00	10.54	999.00	0.00	421.4 (1-Lane)
1.300	4.75	999.00	4.75	999.00	0.00	190.0 (2-Lane)
1.300	7.16	999.00	7.16	999.00	0.00	286.3 (1-Lane)
1.400	3.88	999.00	3.88	999.00	0.00	155.3 (2-Lane)
1.400	5.85	999.00	5.85	999.00	0.00	234.0 (1-Lane)
1.500	3.68	999.00	3.68	999.00	0.00	147.1 (2-Lane)
1.500	5.54	999.00	5.54	999.00	0.00	221.7 (1-Lane)
1.600	3.88	999.00	3.88	999.00	0.00	155.3 (2-Lane)
1.600	5.85	999.00	5.85	999.00	0.00	234.0 (1-Lane)
1.700	4.75	999.00	4.75	999.00	0.00	190.0 (2-Lane)
1.700	7.16	999.00	7.16	999.00	0.00	286.3 (1-Lane)
1.800	6.99	999.00	6.99	999.00	0.00	279.7 (2-Lane)
1.800	10.54	999.00	10.54	999.00	0.00	421.4 (1-Lane)
1.900	11.28	999.00	11.28	999.00	0.00	451.1 (2-Lane)
1.900	16.99	999.00	16.99	999.00	0.00	679.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
w/o impact		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	167.2	29.5	122.76	0.00	92.30	0.00	99.57	0.00	74.87
0.00									
1.010	164.0	28.9	121.36	0.00	91.25	0.00	98.44	0.00	74.02
0.00									
1.100	134.8	23.6	108.84	0.00	81.83	0.00	88.28	0.00	66.38
0.00									
1.200	102.0	17.7	94.92	0.00	71.37	0.00	76.99	0.00	57.89
0.00									
1.300	68.0	11.8	81.00	0.00	60.90	0.00	65.70	0.00	49.40
0.00									

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1.400	34.0	5.9	67.08	0.00	50.44	0.00	54.41	0.00	40.91
0.00									
1.500	0.0	0.0	53.16	0.00	39.97	0.00	43.12	0.00	32.42
0.00									
1.600	-34.0	-5.9	-67.08	0.00	-50.44	0.00	-54.41	0.00	-40.91
0.00									
1.700	-68.0	-11.8	-81.00	0.00	-60.90	0.00	-65.70	0.00	-49.40
0.00									
1.800	-102.0	-17.7	-94.92	0.00	-71.37	0.00	-76.99	0.00	-57.89
0.00									
1.900	-134.8	-23.6	-108.84	0.00	-81.83	0.00	-88.28	0.00	-66.38
0.00									
2.000	-167.2	-29.5	-122.76	0.00	-92.30	0.00	-99.57	0.00	-74.87
0.00									

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#### STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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#### STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3S2

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.41	0.00	256.4 (2-Lane)
1.000	999.00	7.90	0.00	316.1 (1-Lane)
1.010	999.00	6.51	0.00	260.6 (2-Lane)
1.010	999.00	8.03	0.00	321.3 (1-Lane)
1.100	196.28	6.42	0.00	257.0 (2-Lane)
1.100	241.98	7.92	0.00	316.8 (1-Lane)
1.200	51.50	4.30	0.00	172.1 (2-Lane)
1.200	63.49	5.30	0.00	212.2 (1-Lane)
1.300	24.00	5.53	0.00	221.4 (2-Lane)
1.300	29.59	6.82	0.00	272.9 (1-Lane)
1.400	14.47	7.28	0.00	291.1 (2-Lane)
1.400	17.84	8.97	0.00	358.9 (1-Lane)
1.500	9.93	9.93	0.00	397.3 (2-Lane)
1.500	12.25	12.25	0.00	489.8 (1-Lane)
1.600	7.28	14.47	0.00	291.1 (2-Lane)
1.600	8.97	17.84	0.00	358.9 (1-Lane)
1.700	5.53	24.00	0.00	221.4 (2-Lane)
1.700	6.82	29.59	0.00	272.9 (1-Lane)
1.800	4.30	51.50	0.00	172.1 (2-Lane)
1.800	5.30	63.49	0.00	212.2 (1-Lane)
1.900	6.42	196.28	0.00	257.0 (2-Lane)
1.900	7.92	241.98	0.00	316.8 (1-Lane)
2.000	6.41	999.00	0.00	256.4 (2-Lane)
2.000	7.90	999.00	0.00	316.1 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPE  
Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
0.00						
1.010	193.4	37.4	99.37 R	0.00	65.95 R	0.00
0.00						
1.100	1934.1	340.3	891.12 R	0.00	591.42 R	0.00
0.00						
1.200	3451.8	604.9	1554.32 R	0.00	1031.57 R	0.00
0.00						
1.300	4540.4	794.0	2038.71 R	0.00	1353.05 R	0.00
0.00						
1.400	5193.5	907.4	2312.26 R	0.00	1534.60 R	0.00
0.00						
1.500	5411.2	945.2	2375.69 R	0.00	1576.69 R	0.00
0.00						

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1.600	5193.5	907.4	2312.26 R	0.00	1738.54	0.00	1534.60 R	0.00	1153.83
0.00									
1.700	4540.4	794.0	2038.71 R	0.00	1532.87	0.00	1353.05 R	0.00	1017.33
0.00									
1.800	3451.8	604.9	1554.32 R	0.00	1168.66	0.00	1031.57 R	0.00	775.61
0.00									
1.900	1934.1	340.3	891.12 R	0.00	670.02	0.00	591.42 R	0.00	444.67
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPER  
Rating Live Load:

Rating Type: 3S2  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPER  
Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	550.01	999.00	128.01	999.00	0.00	999.0 (2-Lane)
1.010	828.73	999.00	192.88	999.00	0.00	999.0 (1-Lane)
1.100	45.77	999.00	11.19	999.00	0.00	447.8 (2-Lane)
1.100	68.96	999.00	16.87	999.00	0.00	674.8 (1-Lane)

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1.200	23.74	999.00	7.20	999.00	0.00	287.8 (2-Lane)
1.200	35.76	999.00	10.84	999.00	0.00	433.7 (1-Lane)
1.300	14.93	999.00	4.69	999.00	0.00	187.5 (2-Lane)
1.300	22.49	999.00	7.06	999.00	0.00	282.6 (1-Lane)
1.400	11.48	999.00	3.71	999.00	0.00	148.5 (2-Lane)
1.400	17.30	999.00	5.59	999.00	0.00	223.7 (1-Lane)
1.500	10.63	999.00	3.48	999.00	0.00	139.0 (2-Lane)
1.500	16.02	999.00	5.24	999.00	0.00	209.5 (1-Lane)
1.600	11.48	999.00	3.71	999.00	0.00	148.5 (2-Lane)
1.600	17.30	999.00	5.59	999.00	0.00	223.7 (1-Lane)
1.700	14.93	999.00	4.69	999.00	0.00	187.5 (2-Lane)
1.700	22.49	999.00	7.06	999.00	0.00	282.6 (1-Lane)
1.800	23.74	999.00	7.20	999.00	0.00	287.8 (2-Lane)
1.800	35.76	999.00	10.84	999.00	0.00	433.7 (1-Lane)
1.900	45.77	999.00	11.19	999.00	0.00	447.8 (2-Lane)
1.900	68.96	999.00	16.87	999.00	0.00	674.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane		Live Load w/o impact Truck Lane	
Lane			Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	241.8	46.8	129.34 R	0.00	97.25	85.84 R
0.00						
1.100	2417.7	425.3	1154.97 R	0.00	868.40	766.53 R
0.00						
1.200	4314.7	756.1	2011.85 R	0.00	1512.67	1335.22 R
0.00						
1.300	5675.4	992.4	2589.86 R	0.00	1947.26	1718.83 R
0.00						
1.400	6491.9	1134.2	2937.05 R	0.00	2208.31	1949.26 R
0.00						
1.500	6764.0	1181.5	3053.42 R	0.00	2295.81	2026.49 R
0.00						
1.600	6491.9	1134.2	2937.05 R	0.00	2208.31	1949.25 R
0.00						
1.700	5675.4	992.4	2589.86 R	0.00	1947.26	1718.83 R
0.00						
1.800	4314.7	756.1	2011.85 R	0.00	1512.67	1335.22 R
0.00						
1.900	2417.7	425.3	1154.97 R	0.00	868.40	766.53 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3-3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12211.8	-12211.8B	11797.6	11797.6	-20157.2	-20157.2
1.600	19743.0C	19743.0	-11835.2	-11835.2B	12117.0	12117.0	-19461.2	-19461.2
1.700	19743.0C	19743.0	-11835.2	-11835.2B	13075.2	13075.2	-18503.0	-18503.0
1.800	19743.0C	19743.0	-12993.4	-12993.4B	14672.1	14672.1	-18064.3	-18064.3
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3-3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating Factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	124.64	999.00	124.64	999.00	0.00	999.0 (2-Lane)
1.010	187.80	999.00	187.80	999.00	0.00	999.0 (1-Lane)
1.100	11.75	999.00	11.75	999.00	0.00	469.8 (2-Lane)
1.100	17.70	999.00	17.70	999.00	0.00	707.9 (1-Lane)
1.200	7.29	999.00	7.29	999.00	0.00	291.7 (2-Lane)
1.200	10.99	999.00	10.99	999.00	0.00	439.5 (1-Lane)
1.300	5.05	999.00	5.05	999.00	0.00	201.9 (2-Lane)
1.300	7.61	999.00	7.61	999.00	0.00	304.3 (1-Lane)
1.400	4.13	999.00	4.13	999.00	0.00	165.0 (2-Lane)
1.400	6.22	999.00	6.22	999.00	0.00	248.6 (1-Lane)
1.500	3.86	999.00	3.86	999.00	0.00	154.5 (2-Lane)
1.500	5.82	999.00	5.82	999.00	0.00	232.9 (1-Lane)
1.600	4.13	999.00	4.13	999.00	0.00	165.0 (2-Lane)

1.600	6.22	999.00	6.22	999.00	0.00	248.6 (1-Lane)
1.700	5.05	999.00	5.05	999.00	0.00	201.9 (2-Lane)
1.700	7.61	999.00	7.61	999.00	0.00	304.3 (1-Lane)
1.800	7.29	999.00	7.29	999.00	0.00	291.7 (2-Lane)
1.800	10.99	999.00	10.99	999.00	0.00	439.5 (1-Lane)
1.900	11.75	999.00	11.75	999.00	0.00	469.8 (2-Lane)
1.900	17.70	999.00	17.70	999.00	0.00	707.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Lane	Live Load w/o impact Truck	Lane	Live Load w/impact Truck	Lane	Live Load Truck
Lane									
1.000 0.00	167.2	29.5	118.41	0.00	89.03	0.00	96.05	0.00	72.22
1.010 0.00	164.0	28.9	117.02	0.00	87.98	0.00	94.92	0.00	71.37
1.100 0.00	134.8	23.6	104.49	0.00	78.56	0.00	84.76	0.00	63.73
1.200 0.00	102.0	17.7	90.57	0.00	68.10	0.00	73.47	0.00	55.24
1.300 0.00	68.0	11.8	76.65	0.00	57.63	0.00	62.18	0.00	46.75
1.400 0.00	34.0	5.9	62.73	0.00	47.17	0.00	50.89	0.00	38.26
1.500 0.00	0.0	0.0	48.82	0.00	36.70	0.00	39.60	0.00	29.77
1.600 0.00	-34.0	-5.9	-62.73	0.00	-47.17	0.00	-50.89	0.00	-38.26
1.700 0.00	-68.0	-11.8	-76.65	0.00	-57.63	0.00	-62.18	0.00	-46.75
1.800 0.00	-102.0	-17.7	-90.57	0.00	-68.10	0.00	-73.47	0.00	-55.24
1.900 0.00	-134.8	-23.6	-104.49	0.00	-78.56	0.00	-84.76	0.00	-63.73
2.000 0.00	-167.2	-29.5	-118.41	0.00	-89.03	0.00	-96.05	0.00	-72.22

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: 3-3



Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER

Rating Live Load: 3-3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.64	0.00	265.8 (2-Lane)
1.000	999.00	8.19	0.00	327.7 (1-Lane)
1.010	999.00	6.76	0.00	270.3 (2-Lane)
1.010	999.00	8.33	0.00	333.2 (1-Lane)
1.100	238.34	6.69	0.00	267.7 (2-Lane)
1.100	293.83	8.25	0.00	330.0 (1-Lane)
1.200	57.71	4.51	0.00	180.3 (2-Lane)
1.200	71.15	5.56	0.00	222.3 (1-Lane)
1.300	27.94	5.85	0.00	233.9 (2-Lane)
1.300	34.44	7.21	0.00	288.4 (1-Lane)
1.400	16.27	7.78	0.00	311.3 (2-Lane)
1.400	20.07	9.59	0.00	383.7 (1-Lane)
1.500	10.82	10.82	0.00	432.7 (2-Lane)
1.500	13.34	13.34	0.00	533.4 (1-Lane)
1.600	7.78	16.27	0.00	311.3 (2-Lane)
1.600	9.59	20.07	0.00	383.7 (1-Lane)
1.700	5.85	27.94	0.00	233.9 (2-Lane)
1.700	7.21	34.44	0.00	288.4 (1-Lane)

1.800	4.51	57.71	0.00	180.3 (2-Lane)
1.800	5.56	71.15	0.00	222.3 (1-Lane)
1.900	6.69	238.34	0.00	267.7 (2-Lane)
1.900	8.25	293.83	0.00	330.0 (1-Lane)
2.000	6.64	999.00	0.00	265.8 (2-Lane)
2.000	8.19	999.00	0.00	327.7 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPE  
Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
0.00						
1.010	193.4	37.4	95.81 R	0.00	63.59 R	0.00
0.00						
1.100	1934.1	340.3	855.53 R	0.00	567.80 R	0.00
0.00						
1.200	3451.8	604.9	1490.26 R	0.00	989.05 R	0.00
0.00						
1.300	4540.4	794.0	1918.42 R	0.00	1273.21 R	0.00
0.00						
1.400	5193.5	907.4	2175.59 R	0.00	1443.89 R	0.00
0.00						
1.500	5411.2	945.2	2261.80 R	0.00	1501.10 R	0.00
0.00						
1.600	5193.5	907.4	2175.59 R	0.00	1443.89 R	0.00
0.00						
1.700	4540.4	794.0	1918.42 R	0.00	1273.21 R	0.00
0.00						
1.800	3451.8	604.9	1490.26 R	0.00	989.05 R	0.00
0.00						
1.900	1934.1	340.3	855.53 R	0.00	567.80 R	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPER  
Rating Live Load:

Rating Type: 3-3

Rating Live Load:  
Span Service Resistance  
Positive Bending Negative BendingAvailable Resistance for LL+I  
Positive Bending Negative Bending

	Top	Bott.	Top	Bott.	Top	Bott.	Top	Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPER  
Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	570.44	999.00	132.76	999.00	0.00	999.0 (2-Lane)
1.010	859.52	999.00	200.04	999.00	0.00	999.0 (1-Lane)
1.100	47.67	999.00	11.66	999.00	0.00	466.4 (2-Lane)
1.100	71.83	999.00	17.57	999.00	0.00	702.8 (1-Lane)
1.200	24.76	999.00	7.51	999.00	0.00	300.2 (2-Lane)
1.200	37.30	999.00	11.31	999.00	0.00	452.3 (1-Lane)
1.300	15.86	999.00	4.98	999.00	0.00	199.3 (2-Lane)
1.300	23.90	999.00	7.51	999.00	0.00	300.3 (1-Lane)
1.400	12.21	999.00	3.94	999.00	0.00	157.8 (2-Lane)
1.400	18.39	999.00	5.94	999.00	0.00	237.8 (1-Lane)
1.500	11.17	999.00	3.65	999.00	0.00	146.0 (2-Lane)
1.500	16.83	999.00	5.50	999.00	0.00	220.0 (1-Lane)
1.600	12.21	999.00	3.94	999.00	0.00	157.8 (2-Lane)
1.600	18.39	999.00	5.94	999.00	0.00	237.8 (1-Lane)
1.700	15.86	999.00	4.98	999.00	0.00	199.3 (2-Lane)
1.700	23.90	999.00	7.51	999.00	0.00	300.3 (1-Lane)
1.800	24.76	999.00	7.51	999.00	0.00	300.2 (2-Lane)
1.800	37.30	999.00	11.31	999.00	0.00	452.3 (1-Lane)
1.900	47.67	999.00	11.66	999.00	0.00	466.4 (2-Lane)
1.900	71.83	999.00	17.57	999.00	0.00	702.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	98.63 R	0.00	74.16	0.00
0.00						
1.100	2417.7	425.3	892.83 R	0.00	671.30	0.00
0.00						
1.200	4314.7	756.1	1577.96 R	0.00	1186.44	0.00
0.00						
1.300	5675.4	992.4	2055.40 R	0.00	1545.41	0.00
0.00						
1.400	6491.9	1134.2	2347.24 R	0.00	1764.84	0.00
0.00						
1.500	6764.0	1181.5	2435.23 R	0.00	1831.00	0.00
0.00						
1.600	6491.9	1134.2	2347.24 R	0.00	1764.84	0.00
0.00						
1.700	5675.4	992.4	2055.40 R	0.00	1545.41	0.00
0.00						
1.800	4314.7	756.1	1577.96 R	0.00	1186.44	0.00
0.00						
1.900	2417.7	425.3	892.83 R	0.00	671.30	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU4

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Top	Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12218.1	-12218.1B	11797.6	11797.6	-20163.6	-20163.6
1.600	19743.0C	19743.0	-11835.4	-11835.4B	12117.0	12117.0	-19461.5	-19461.5
1.700	19743.0C	19743.0	-11835.4	-11835.4B	13075.2	13075.2	-18503.3	-18503.3
1.800	19743.0C	19743.0	-13014.8	-13014.8B	14672.1	14672.1	-18085.7	-18085.7

1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU4

## Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	163.45	999.00	163.45	999.00	0.00	999.0 (2-Lane)
1.010	246.28	999.00	246.28	999.00	0.00	999.0 (1-Lane)
1.100	15.19	999.00	15.19	999.00	0.00	410.3 (2-Lane)
1.100	22.90	999.00	22.90	999.00	0.00	618.2 (1-Lane)
1.200	9.30	999.00	9.30	999.00	0.00	251.1 (2-Lane)
1.200	14.01	999.00	14.01	999.00	0.00	378.3 (1-Lane)
1.300	6.36	999.00	6.36	999.00	0.00	171.8 (2-Lane)
1.300	9.59	999.00	9.59	999.00	0.00	258.8 (1-Lane)
1.400	5.16	999.00	5.16	999.00	0.00	139.4 (2-Lane)
1.400	7.78	999.00	7.78	999.00	0.00	210.0 (1-Lane)
1.500	4.84	999.00	4.84	999.00	0.00	130.8 (2-Lane)
1.500	7.30	999.00	7.30	999.00	0.00	197.1 (1-Lane)
1.600	5.16	999.00	5.16	999.00	0.00	139.4 (2-Lane)
1.600	7.78	999.00	7.78	999.00	0.00	210.0 (1-Lane)
1.700	6.36	999.00	6.36	999.00	0.00	171.8 (2-Lane)
1.700	9.59	999.00	9.59	999.00	0.00	258.8 (1-Lane)
1.800	9.30	999.00	9.30	999.00	0.00	251.1 (2-Lane)
1.800	14.01	999.00	14.01	999.00	0.00	378.3 (1-Lane)
1.900	15.19	999.00	15.19	999.00	0.00	410.3 (2-Lane)
1.900	22.90	999.00	22.90	999.00	0.00	618.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU4

(2-Lane)

(1-Lane)

Gamma	DC 1.25	DW 1.25	LL 1.35				LL 1.35		
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	90.17	0.00	67.80	0.00	73.14	0.00	54.99
1.010 0.00	164.0	28.9	89.23	0.00	67.09	0.00	72.38	0.00	54.42
1.100 0.00	134.8	23.6	80.77	0.00	60.73	0.00	65.52	0.00	49.26
1.200 0.00	102.0	17.7	71.38	0.00	53.67	0.00	57.90	0.00	43.53
1.300 0.00	68.0	11.8	61.98	0.00	46.60	0.00	50.28	0.00	37.80
1.400 0.00	34.0	5.9	52.59	0.00	39.54	0.00	42.66	0.00	32.07
1.500 0.00	0.0	0.0	43.19	0.00	32.48	0.00	35.04	0.00	26.34
1.600 0.00	-34.0	-5.9	-52.59	0.00	-39.54	0.00	-42.66	0.00	-32.07
1.700 0.00	-68.0	-11.8	-61.98	0.00	-46.60	0.00	-50.28	0.00	-37.80
1.800 0.00	-102.0	-17.7	-71.38	0.00	-53.67	0.00	-57.90	0.00	-43.53
1.900 0.00	-134.8	-23.6	-80.77	0.00	-60.73	0.00	-65.52	0.00	-49.26
2.000 0.00	-167.2	-29.5	-90.17	0.00	-67.80	0.00	-73.14	0.00	-54.99

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)

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Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	73.06 R	0.00	54.93	0.00
0.00						
1.100	1934.1	340.3	661.35 R	0.00	497.26	0.00
0.00						
1.200	3451.8	604.9	1168.86 R	0.00	878.84	0.00
0.00						
1.300	4540.4	794.0	1522.52 R	0.00	1144.75	0.00
0.00						
1.400	5193.5	907.4	1738.70 R	0.00	1307.29	0.00
0.00						
1.500	5411.2	945.2	1803.88 R	0.00	1356.30	0.00
0.00						
1.600	5193.5	907.4	1738.70 R	0.00	1307.29	0.00
0.00						
1.700	4540.4	794.0	1522.52 R	0.00	1144.75	0.00
0.00						
1.800	3451.8	604.9	1168.86 R	0.00	878.84	0.00
0.00						
1.900	1934.1	340.3	661.35 R	0.00	497.26	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPER

Rating Live Load:

Rating Type: SU4

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPER

Rating Live Load: SU4



Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	748.08	999.00	174.11	999.00	0.00	999.0 (2-Lane)
1.010	999.00	999.00	262.34	999.00	0.00	999.0 (1-Lane)
1.100	61.67	999.00	15.09	999.00	0.00	407.3 (2-Lane)
1.100	92.92	999.00	22.73	999.00	0.00	613.7 (1-Lane)
1.200	31.56	999.00	9.57	999.00	0.00	258.3 (2-Lane)
1.200	47.56	999.00	14.42	999.00	0.00	389.3 (1-Lane)
1.300	19.99	999.00	6.28	999.00	0.00	169.5 (2-Lane)
1.300	30.12	999.00	9.46	999.00	0.00	255.4 (1-Lane)
1.400	15.27	999.00	4.94	999.00	0.00	133.3 (2-Lane)
1.400	23.01	999.00	7.44	999.00	0.00	200.8 (1-Lane)
1.500	14.01	999.00	4.58	999.00	0.00	123.6 (2-Lane)
1.500	21.10	999.00	6.90	999.00	0.00	186.2 (1-Lane)
1.600	15.27	999.00	4.94	999.00	0.00	133.3 (2-Lane)
1.600	23.01	999.00	7.44	999.00	0.00	200.8 (1-Lane)
1.700	19.99	999.00	6.28	999.00	0.00	169.5 (2-Lane)
1.700	30.12	999.00	9.46	999.00	0.00	255.4 (1-Lane)
1.800	31.56	999.00	9.57	999.00	0.00	258.3 (2-Lane)
1.800	47.56	999.00	14.42	999.00	0.00	389.3 (1-Lane)
1.900	61.67	999.00	15.09	999.00	0.00	407.3 (2-Lane)
1.900	92.92	999.00	22.73	999.00	0.00	613.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU5

Gamma	DC		DW		(2-Lane) LL		(1-Lane) LL	
	1.25		1.25		1.35		1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								
1.010	241.8	46.8	112.13 R	0.00	84.31	0.00	74.42 R	0.00
0.00								
1.100	2417.7	425.3	1013.99 R	0.00	762.40	0.00	672.96 R	0.00
0.00								
1.200	4314.7	756.1	1789.52 R	0.00	1345.51	0.00	1187.67 R	0.00

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0.00									
1.300	5675.4	992.4	2334.27 R	0.00	1755.09	0.00	1549.20 R	0.00	1164.82
0.00									
1.400	6491.9	1134.2	2662.66 R	0.00	2002.00	0.00	1767.15 R	0.00	1328.68
0.00									
1.500	6764.0	1181.5	2752.59 R	0.00	2069.61	0.00	1826.83 R	0.00	1373.56
0.00									
1.600	6491.9	1134.2	2662.66 R	0.00	2002.00	0.00	1767.15 R	0.00	1328.68
0.00									
1.700	5675.4	992.4	2334.27 R	0.00	1755.09	0.00	1549.20 R	0.00	1164.82
0.00									
1.800	4314.7	756.1	1789.52 R	0.00	1345.51	0.00	1187.67 R	0.00	892.98
0.00									
1.900	2417.7	425.3	1013.99 R	0.00	762.40	0.00	672.96 R	0.00	505.99
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12212.5	-12212.5B	11797.6	11797.6	-20158.0	-20158.0
1.600	19743.0C	19743.0	-11830.8	-11830.8B	12117.0	12117.0	-19456.9	-19456.9
1.700	19743.0C	19743.0	-11830.8	-11830.8B	13075.2	13075.2	-18498.7	-18498.7
1.800	19743.0C	19743.0	-13013.8	-13013.8B	14672.1	14672.1	-18084.7	-18084.7
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

1.010	143.77	999.00	143.77	999.00	0.00	999.0 (2-Lane)
1.010	216.62	999.00	216.62	999.00	0.00	999.0 (1-Lane)
1.100	13.38	999.00	13.38	999.00	0.00	414.8 (2-Lane)
1.100	20.16	999.00	20.16	999.00	0.00	624.9 (1-Lane)
1.200	8.20	999.00	8.20	999.00	0.00	254.2 (2-Lane)
1.200	12.35	999.00	12.35	999.00	0.00	383.0 (1-Lane)
1.300	5.60	999.00	5.60	999.00	0.00	173.6 (2-Lane)
1.300	8.44	999.00	8.44	999.00	0.00	261.6 (1-Lane)
1.400	4.55	999.00	4.55	999.00	0.00	141.1 (2-Lane)
1.400	6.86	999.00	6.86	999.00	0.00	212.6 (1-Lane)
1.500	4.29	999.00	4.29	999.00	0.00	132.9 (2-Lane)
1.500	6.46	999.00	6.46	999.00	0.00	200.2 (1-Lane)
1.600	4.55	999.00	4.55	999.00	0.00	141.1 (2-Lane)
1.600	6.86	999.00	6.86	999.00	0.00	212.6 (1-Lane)
1.700	5.60	999.00	5.60	999.00	0.00	173.6 (2-Lane)
1.700	8.44	999.00	8.44	999.00	0.00	261.6 (1-Lane)
1.800	8.20	999.00	8.20	999.00	0.00	254.2 (2-Lane)
1.800	12.35	999.00	12.35	999.00	0.00	383.0 (1-Lane)
1.900	13.38	999.00	13.38	999.00	0.00	414.8 (2-Lane)
1.900	20.16	999.00	20.16	999.00	0.00	624.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	102.52	77.09	83.16	62.53
0.00			0.00	0.00	0.00	
1.010	164.0	28.9	101.44	76.27	82.29	61.87
0.00			0.00	0.00	0.00	
1.100	134.8	23.6	91.74	68.97	74.41	55.95
0.00			0.00	0.00	0.00	
1.200	102.0	17.7	80.95	60.86	65.66	49.37
0.00			0.00	0.00	0.00	
1.300	68.0	11.8	70.16	52.75	56.91	42.79
0.00			0.00	0.00	0.00	
1.400	34.0	5.9	59.38	44.64	48.16	36.21
0.00			0.00	0.00	0.00	
1.500	0.0	0.0	48.59	36.53	39.41	29.63
0.00			0.00	0.00	0.00	
1.600	-34.0	-5.9	-59.38	-44.64	-48.16	-36.21
0.00			0.00	0.00	0.00	
1.700	-68.0	-11.8	-70.16	-52.75	-56.91	-42.79
0.00			0.00	0.00	0.00	
1.800	-102.0	-17.7	-80.95	-60.86	-65.66	-49.37
0.00			0.00	0.00	0.00	
1.900	-134.8	-23.6	-91.74	-68.97	-74.41	-55.95

0.00									
2.000	-167.2	-29.5	-102.52	0.00	-77.09	0.00	-83.16	0.00	-62.53
0.00									

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU5

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.68	0.00	237.9 (2-Lane)
1.000	999.00	9.46	0.00	293.3 (1-Lane)
1.010	999.00	7.79	0.00	241.6 (2-Lane)
1.010	999.00	9.61	0.00	297.9 (1-Lane)
1.100	163.31	7.62	0.00	236.3 (2-Lane)

1.100	201.34	9.40	0.00	291.3 (1-Lane)
1.200	39.92	5.05	0.00	156.4 (2-Lane)
1.200	49.21	6.22	0.00	192.8 (1-Lane)
1.300	22.50	6.39	0.00	198.1 (2-Lane)
1.300	27.74	7.88	0.00	244.2 (1-Lane)
1.400	15.02	8.22	0.00	254.9 (2-Lane)
1.400	18.52	10.14	0.00	314.2 (1-Lane)
1.500	10.87	10.87	0.00	336.9 (2-Lane)
1.500	13.40	13.40	0.00	415.3 (1-Lane)
1.600	8.22	15.02	0.00	254.9 (2-Lane)
1.600	10.14	18.52	0.00	314.2 (1-Lane)
1.700	6.39	22.50	0.00	198.1 (2-Lane)
1.700	7.88	27.74	0.00	244.2 (1-Lane)
1.800	5.05	39.92	0.00	156.4 (2-Lane)
1.800	6.22	49.21	0.00	192.8 (1-Lane)
1.900	7.62	163.31	0.00	236.3 (2-Lane)
1.900	9.40	201.34	0.00	291.3 (1-Lane)
2.000	7.68	999.00	0.00	237.9 (2-Lane)
2.000	9.46	999.00	0.00	293.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPE  
Rating Live Load: SU5

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00					
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	83.06 R	0.00	62.45	0.00	55.12 R	0.00	41.45	
0.00										
1.100	1934.1	340.3	751.11 R	0.00	564.74	0.00	498.49 R	0.00	374.81	
0.00										
1.200	3451.8	604.9	1325.57 R	0.00	996.67	0.00	879.75 R	0.00	661.47	
0.00										
1.300	4540.4	794.0	1729.09 R	0.00	1300.07	0.00	1147.56 R	0.00	862.83	
0.00										
1.400	5193.5	907.4	1972.34 R	0.00	1482.96	0.00	1309.00 R	0.00	984.21	
0.00										
1.500	5411.2	945.2	2038.95 R	0.00	1533.05	0.00	1353.21 R	0.00	1017.45	
0.00										
1.600	5193.5	907.4	1972.34 R	0.00	1482.96	0.00	1309.00 R	0.00	984.21	
0.00										
1.700	4540.4	794.0	1729.09 R	0.00	1300.07	0.00	1147.56 R	0.00	862.83	
0.00										
1.800	3451.8	604.9	1325.57 R	0.00	996.67	0.00	879.75 R	0.00	661.47	
0.00										
1.900	1934.1	340.3	751.11 R	0.00	564.74	0.00	498.49 R	0.00	374.81	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 540

## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPER

Rating Live Load:

Rating Type: SU5

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 541

## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPER

Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	658.01	999.00	153.14	999.00	0.00	999.0 (2-Lane)
1.010	999.00	999.00	230.75	999.00	0.00	999.0 (1-Lane)
1.100	54.30	999.00	13.28	999.00	0.00	411.8 (2-Lane)
1.100	81.81	999.00	20.01	999.00	0.00	620.4 (1-Lane)
1.200	27.83	999.00	8.44	999.00	0.00	261.6 (2-Lane)
1.200	41.94	999.00	12.71	999.00	0.00	394.1 (1-Lane)
1.300	17.60	999.00	5.53	999.00	0.00	171.4 (2-Lane)
1.300	26.52	999.00	8.33	999.00	0.00	258.2 (1-Lane)
1.400	13.46	999.00	4.35	999.00	0.00	134.9 (2-Lane)
1.400	20.29	999.00	6.56	999.00	0.00	203.3 (1-Lane)
1.500	12.39	999.00	4.05	999.00	0.00	125.6 (2-Lane)

1.500	18.67	999.00	6.10	999.00	0.00	189.2 (1-Lane)
1.600	13.46	999.00	4.35	999.00	0.00	134.9 (2-Lane)
1.600	20.29	999.00	6.56	999.00	0.00	203.3 (1-Lane)
1.700	17.60	999.00	5.53	999.00	0.00	171.4 (2-Lane)
1.700	26.52	999.00	8.33	999.00	0.00	258.2 (1-Lane)
1.800	27.83	999.00	8.44	999.00	0.00	261.6 (2-Lane)
1.800	41.94	999.00	12.71	999.00	0.00	394.1 (1-Lane)
1.900	54.30	999.00	13.28	999.00	0.00	411.8 (2-Lane)
1.900	81.81	999.00	20.01	999.00	0.00	620.4 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	123.59 R	0.00	92.92	0.00
0.00						
1.100	2417.7	425.3	1115.58 R	0.00	838.78	0.00
0.00						
1.200	4314.7	756.1	1992.19 R	0.00	1497.89	0.00
0.00						
1.300	5675.4	992.4	2606.53 R	0.00	1959.80	0.00
0.00						
1.400	6491.9	1134.2	2967.02 R	0.00	2230.84	0.00
0.00						
1.500	6764.0	1181.5	3080.14 R	0.00	2315.89	0.00
0.00						
1.600	6491.9	1134.2	2967.02 R	0.00	2230.84	0.00
0.00						
1.700	5675.4	992.4	2606.53 R	0.00	1959.80	0.00
0.00						
1.800	4314.7	756.1	1992.19 R	0.00	1497.89	0.00
0.00						
1.900	2417.7	425.3	1115.57 R	0.00	838.78	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER

Rating Live Load: SU6

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12214.2	-12214.2B	11797.6	11797.6	-20159.7	-20159.7
1.600	19743.0C	19743.0	-11834.4	-11834.4B	12117.0	12117.0	-19460.5	-19460.5
1.700	19743.0C	19743.0	-11834.4	-11834.4B	13075.2	13075.2	-18502.3	-18502.3
1.800	19743.0C	19743.0	-13013.0	-13013.0B	14672.1	14672.1	-18083.9	-18083.9
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	130.44	999.00	130.44	999.00	0.00	999.0 (2-Lane)
1.010	196.54	999.00	196.54	999.00	0.00	999.0 (1-Lane)
1.100	12.16	999.00	12.16	999.00	0.00	422.6 (2-Lane)
1.100	18.32	999.00	18.32	999.00	0.00	636.7 (1-Lane)
1.200	7.36	999.00	7.36	999.00	0.00	255.9 (2-Lane)
1.200	11.10	999.00	11.10	999.00	0.00	385.6 (1-Lane)
1.300	5.02	999.00	5.02	999.00	0.00	174.3 (2-Lane)
1.300	7.56	999.00	7.56	999.00	0.00	262.7 (1-Lane)
1.400	4.08	999.00	4.08	999.00	0.00	141.9 (2-Lane)
1.400	6.15	999.00	6.15	999.00	0.00	213.8 (1-Lane)
1.500	3.83	999.00	3.83	999.00	0.00	133.1 (2-Lane)
1.500	5.77	999.00	5.77	999.00	0.00	200.5 (1-Lane)
1.600	4.08	999.00	4.08	999.00	0.00	141.9 (2-Lane)
1.600	6.15	999.00	6.15	999.00	0.00	213.8 (1-Lane)
1.700	5.02	999.00	5.02	999.00	0.00	174.3 (2-Lane)
1.700	7.56	999.00	7.56	999.00	0.00	262.7 (1-Lane)
1.800	7.36	999.00	7.36	999.00	0.00	255.9 (2-Lane)
1.800	11.10	999.00	11.10	999.00	0.00	385.6 (1-Lane)
1.900	12.16	999.00	12.16	999.00	0.00	422.6 (2-Lane)
1.900	18.32	999.00	18.32	999.00	0.00	636.7 (1-Lane)



2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	113.02	0.00	84.98	0.00	91.67	0.00	68.93
1.010 0.00	164.0	28.9	111.81	0.00	84.07	0.00	90.69	0.00	68.19
1.100 0.00	134.8	23.6	100.93	0.00	75.88	0.00	81.87	0.00	61.55
1.200 0.00	102.0	17.7	88.83	0.00	66.79	0.00	72.06	0.00	54.18
1.300 0.00	68.0	11.8	76.74	0.00	57.70	0.00	62.25	0.00	46.80
1.400 0.00	34.0	5.9	64.65	0.00	48.61	0.00	52.44	0.00	39.43
1.500 0.00	0.0	0.0	52.56	0.00	39.52	0.00	42.63	0.00	32.05
1.600 0.00	-34.0	-5.9	-64.65	0.00	-48.61	0.00	-52.44	0.00	-39.43
1.700 0.00	-68.0	-11.8	-76.74	0.00	-57.70	0.00	-62.25	0.00	-46.80
1.800 0.00	-102.0	-17.7	-88.83	0.00	-66.79	0.00	-72.06	0.00	-54.18
1.900 0.00	-134.8	-23.6	-100.93	0.00	-75.88	0.00	-81.87	0.00	-61.55
2.000 0.00	-167.2	-29.5	-113.02	0.00	-84.98	0.00	-91.67	0.00	-68.93

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)

1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER

Rating Live Load: SU6

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.96	0.00	241.9 (2-Lane)
1.000	999.00	8.58	0.00	298.3 (1-Lane)
1.010	999.00	7.07	0.00	245.7 (2-Lane)
1.010	999.00	8.72	0.00	302.9 (1-Lane)
1.100	186.78	6.93	0.00	240.7 (2-Lane)
1.100	230.26	8.54	0.00	296.8 (1-Lane)
1.200	39.78	4.60	0.00	159.7 (2-Lane)
1.200	49.04	5.67	0.00	196.9 (1-Lane)
1.300	21.42	5.84	0.00	203.0 (2-Lane)
1.300	26.41	7.20	0.00	250.2 (1-Lane)
1.400	14.03	7.55	0.00	262.4 (2-Lane)
1.400	17.30	9.31	0.00	323.5 (1-Lane)
1.500	10.05	10.05	0.00	349.1 (2-Lane)
1.500	12.39	12.39	0.00	430.4 (1-Lane)
1.600	7.55	14.03	0.00	262.4 (2-Lane)
1.600	9.31	17.30	0.00	323.5 (1-Lane)
1.700	5.84	21.42	0.00	203.0 (2-Lane)
1.700	7.20	26.41	0.00	250.2 (1-Lane)
1.800	4.60	39.78	0.00	159.7 (2-Lane)
1.800	5.67	49.04	0.00	196.9 (1-Lane)
1.900	6.93	186.78	0.00	240.7 (2-Lane)
1.900	8.54	230.26	0.00	296.8 (1-Lane)
2.000	6.96	999.00	0.00	241.9 (2-Lane)
2.000	8.58	999.00	0.00	298.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPE  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	91.55 R	0.00	68.83	0.00
0.00						
1.100	1934.1	340.3	826.35 R	0.00	621.32	0.00
0.00						
1.200	3451.8	604.9	1475.69 R	0.00	1109.54	0.00
0.00						
1.300	4540.4	794.0	1930.77 R	0.00	1451.70	0.00
0.00						
1.400	5193.5	907.4	2197.79 R	0.00	1652.48	0.00
0.00						
1.500	5411.2	945.2	2281.58 R	0.00	1715.47	0.00
0.00						
1.600	5193.5	907.4	2197.79 R	0.00	1652.48	0.00
0.00						
1.700	4540.4	794.0	1930.77 R	0.00	1451.70	0.00
0.00						
1.800	3451.8	604.9	1475.69 R	0.00	1109.54	0.00
0.00						
1.900	1934.1	340.3	826.35 R	0.00	621.32	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU6  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6

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1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPER

Rating Live Load: SU6

Service

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	597.01	999.00	138.95	999.00	0.00	999.0 (2-Lane)
1.010	899.55	999.00	209.36	999.00	0.00	999.0 (1-Lane)
1.100	49.35	999.00	12.07	999.00	0.00	419.5 (2-Lane)
1.100	74.36	999.00	18.19	999.00	0.00	632.1 (1-Lane)
1.200	25.00	999.00	7.58	999.00	0.00	263.4 (2-Lane)
1.200	37.67	999.00	11.42	999.00	0.00	396.8 (1-Lane)
1.300	15.76	999.00	4.95	999.00	0.00	172.0 (2-Lane)
1.300	23.75	999.00	7.46	999.00	0.00	259.2 (1-Lane)
1.400	12.08	999.00	3.90	999.00	0.00	135.7 (2-Lane)
1.400	18.20	999.00	5.88	999.00	0.00	204.5 (1-Lane)
1.500	11.07	999.00	3.62	999.00	0.00	125.8 (2-Lane)
1.500	16.68	999.00	5.45	999.00	0.00	189.5 (1-Lane)
1.600	12.08	999.00	3.90	999.00	0.00	135.7 (2-Lane)
1.600	18.20	999.00	5.88	999.00	0.00	204.5 (1-Lane)
1.700	15.76	999.00	4.95	999.00	0.00	172.0 (2-Lane)
1.700	23.75	999.00	7.46	999.00	0.00	259.2 (1-Lane)
1.800	25.00	999.00	7.58	999.00	0.00	263.4 (2-Lane)
1.800	37.67	999.00	11.42	999.00	0.00	396.8 (1-Lane)
1.900	49.35	999.00	12.07	999.00	0.00	419.5 (2-Lane)
1.900	74.36	999.00	18.19	999.00	0.00	632.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER

Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact	
Lane			Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	241.8	46.8	135.48 R	0.00	101.86	89.91 R
0.00						
1.100	2417.7	425.3	1220.65 R	0.00	917.78	810.11 R
0.00						
1.200	4314.7	756.1	2179.25 R	0.00	1638.53	1446.32 R
0.00						
1.300	5675.4	992.4	2875.80 R	0.00	2162.26	1908.60 R
0.00						
1.400	6491.9	1134.2	3276.68 R	0.00	2463.67	2174.66 R
0.00						
1.500	6764.0	1181.5	3407.10 R	0.00	2561.73	2261.21 R
0.00						
1.600	6491.9	1134.2	3276.68 R	0.00	2463.67	2174.66 R
0.00						
1.700	5675.4	992.4	2875.80 R	0.00	2162.26	1908.60 R
0.00						
1.800	4314.7	756.1	2179.25 R	0.00	1638.53	1446.32 R
0.00						
1.900	2417.7	425.3	1220.65 R	0.00	917.78	810.11 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 551  
STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU7

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Top	Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12216.7	-12216.7B	11797.6	11797.6	-20162.2	-20162.2
1.600	19743.0C	19743.0	-11836.3	-11836.3B	12117.0	12117.0	-19462.4	-19462.4
1.700	19743.0C	19743.0	-11836.3	-11836.3B	13075.2	13075.2	-18504.2	-18504.2
1.800	19743.0C	19743.0	-13021.9	-13021.9B	14672.1	14672.1	-18092.8	-18092.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 552  
MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D.

G03

Rating Type:

I-OPER

Rating Live Load:

SU7

## Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	118.99	999.00	118.99	999.00	0.00	999.0 (2-Lane)
1.010	179.29	999.00	179.29	999.00	0.00	999.0 (1-Lane)
1.100	11.11	999.00	11.11	999.00	0.00	430.7 (2-Lane)
1.100	16.75	999.00	16.75	999.00	0.00	648.9 (1-Lane)
1.200	6.73	999.00	6.73	999.00	0.00	260.9 (2-Lane)
1.200	10.14	999.00	10.14	999.00	0.00	393.1 (1-Lane)
1.300	4.55	999.00	4.55	999.00	0.00	176.2 (2-Lane)
1.300	6.85	999.00	6.85	999.00	0.00	265.5 (1-Lane)
1.400	3.70	999.00	3.70	999.00	0.00	143.3 (2-Lane)
1.400	5.57	999.00	5.57	999.00	0.00	215.9 (1-Lane)
1.500	3.46	999.00	3.46	999.00	0.00	134.2 (2-Lane)
1.500	5.22	999.00	5.22	999.00	0.00	202.2 (1-Lane)
1.600	3.70	999.00	3.70	999.00	0.00	143.3 (2-Lane)
1.600	5.57	999.00	5.57	999.00	0.00	215.9 (1-Lane)
1.700	4.55	999.00	4.55	999.00	0.00	176.2 (2-Lane)
1.700	6.85	999.00	6.85	999.00	0.00	265.5 (1-Lane)
1.800	6.73	999.00	6.73	999.00	0.00	260.9 (2-Lane)
1.800	10.14	999.00	10.14	999.00	0.00	393.1 (1-Lane)
1.900	11.11	999.00	11.11	999.00	0.00	430.7 (2-Lane)
1.900	16.75	999.00	16.75	999.00	0.00	648.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 553

## SHEAR REPORT

Structure I. D.

7777777\_20120905cy01\_01of01

Member I. D.

G03

Rating Type:

I-OPER

Rating Live Load:

SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	123.92	0.00	93.17	0.00	100.51	0.00	75.57

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.010	164.0	28.9	122.57	0.00	92.16	0.00	99.42	0.00	74.75
0.00									
1.100	134.8	23.6	110.43	0.00	83.03	0.00	89.58	0.00	67.35
0.00									
1.200	102.0	17.7	96.95	0.00	72.89	0.00	78.64	0.00	59.13
0.00									
1.300	68.0	11.8	83.46	0.00	62.76	0.00	67.70	0.00	50.90
0.00									
1.400	34.0	5.9	69.98	0.00	52.62	0.00	56.76	0.00	42.68
0.00									
1.500	0.0	0.0	56.50	0.00	42.48	0.00	45.83	0.00	34.46
0.00									
1.600	-34.0	-5.9	-69.98	0.00	-52.62	0.00	-56.76	0.00	-42.68
0.00									
1.700	-68.0	-11.8	-83.46	0.00	-62.76	0.00	-67.70	0.00	-50.90
0.00									
1.800	-102.0	-17.7	-96.95	0.00	-72.89	0.00	-78.64	0.00	-59.13
0.00									
1.900	-134.8	-23.6	-110.43	0.00	-83.03	0.00	-89.58	0.00	-67.35
0.00									
2.000	-167.2	-29.5	-123.92	0.00	-93.17	0.00	-100.51	0.00	-75.57
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 554

#### STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 555

#### STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-OPER  
 Rating Live Load: SU7

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.35	0.00	246.1 (2-Lane)
1.000	999.00	7.83	0.00	303.3 (1-Lane)
1.010	999.00	6.45	0.00	250.0 (2-Lane)
1.010	999.00	7.95	0.00	308.2 (1-Lane)
1.100	218.16	6.33	0.00	245.4 (2-Lane)
1.100	268.95	7.81	0.00	302.5 (1-Lane)
1.200	40.37	4.21	0.00	163.2 (2-Lane)
1.200	49.77	5.19	0.00	201.2 (1-Lane)
1.300	20.58	5.37	0.00	208.1 (2-Lane)
1.300	25.38	6.62	0.00	256.6 (1-Lane)
1.400	13.20	6.98	0.00	270.3 (2-Lane)
1.400	16.28	8.60	0.00	333.2 (1-Lane)
1.500	9.35	9.35	0.00	362.2 (2-Lane)
1.500	11.52	11.52	0.00	446.5 (1-Lane)
1.600	6.98	13.20	0.00	270.3 (2-Lane)
1.600	8.60	16.28	0.00	333.2 (1-Lane)
1.700	5.37	20.58	0.00	208.1 (2-Lane)
1.700	6.62	25.38	0.00	256.6 (1-Lane)
1.800	4.21	40.37	0.00	163.2 (2-Lane)
1.800	5.19	49.77	0.00	201.2 (1-Lane)
1.900	6.33	218.16	0.00	245.4 (2-Lane)
1.900	7.81	268.95	0.00	302.5 (1-Lane)
2.000	6.35	999.00	0.00	246.1 (2-Lane)
2.000	7.83	999.00	0.00	303.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 556

## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPE  
 Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00				(1-Lane) LL 1.00		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	100.35 R	0.00	75.45	0.00	66.60 R	0.00	50.08
0.00									
1.100	1934.1	340.3	904.18 R	0.00	679.84	0.00	600.09 R	0.00	451.19
0.00									



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1.200	3451.8	604.9	1614.26 R	0.00	1213.73	0.00	1071.35 R	0.00	805.52
0.00									
1.300	4540.4	794.0	2130.22 R	0.00	1601.67	0.00	1413.78 R	0.00	1062.99
0.00									
1.400	5193.5	907.4	2427.17 R	0.00	1824.94	0.00	1610.86 R	0.00	1211.17
0.00									
1.500	5411.2	945.2	2523.78 R	0.00	1897.58	0.00	1674.97 R	0.00	1259.38
0.00									
1.600	5193.5	907.4	2427.17 R	0.00	1824.94	0.00	1610.86 R	0.00	1211.17
0.00									
1.700	4540.4	794.0	2130.22 R	0.00	1601.67	0.00	1413.78 R	0.00	1062.99
0.00									
1.800	3451.8	604.9	1614.26 R	0.00	1213.73	0.00	1071.35 R	0.00	805.52
0.00									
1.900	1934.1	340.3	904.18 R	0.00	679.84	0.00	600.08 R	0.00	451.19
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 556

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU7  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-OPER  
Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	-bend		

1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	544.61	999.00	126.75	999.00	0.00	999.0 (2-Lane)
1.010	820.59	999.00	190.98	999.00	0.00	999.0 (1-Lane)
1.100	45.10	999.00	11.03	999.00	0.00	427.6 (2-Lane)
1.100	67.96	999.00	16.62	999.00	0.00	644.2 (1-Lane)
1.200	22.85	999.00	6.93	999.00	0.00	268.5 (2-Lane)
1.200	34.44	999.00	10.44	999.00	0.00	404.5 (1-Lane)
1.300	14.29	999.00	4.49	999.00	0.00	173.9 (2-Lane)
1.300	21.52	999.00	6.76	999.00	0.00	262.0 (1-Lane)
1.400	10.94	999.00	3.54	999.00	0.00	137.0 (2-Lane)
1.400	16.49	999.00	5.33	999.00	0.00	206.5 (1-Lane)
1.500	10.01	999.00	3.27	999.00	0.00	126.8 (2-Lane)
1.500	15.08	999.00	4.93	999.00	0.00	191.0 (1-Lane)
1.600	10.94	999.00	3.54	999.00	0.00	137.0 (2-Lane)
1.600	16.49	999.00	5.33	999.00	0.00	206.5 (1-Lane)
1.700	14.29	999.00	4.49	999.00	0.00	173.9 (2-Lane)
1.700	21.52	999.00	6.76	999.00	0.00	262.0 (1-Lane)
1.800	22.85	999.00	6.93	999.00	0.00	268.5 (2-Lane)
1.800	34.44	999.00	10.44	999.00	0.00	404.5 (1-Lane)
1.900	45.10	999.00	11.03	999.00	0.00	427.6 (2-Lane)
1.900	67.96	999.00	16.62	999.00	0.00	644.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	97.80 R	73.54	64.91 R	48.80
1.100	2417.7	425.3	884.75 R	665.22	587.19 R	441.49
1.200	4314.7	756.1	1562.18 R	1174.57	1036.78 R	779.54
1.300	5675.4	992.4	2032.30 R	1528.05	1348.79 R	1014.13
1.400	6491.9	1134.2	2310.64 R	1737.32	1533.52 R	1153.02
1.500	6764.0	1181.5	2392.03 R	1798.52	1587.53 R	1193.63
1.600	6491.9	1134.2	2310.64 R	1737.32	1533.52 R	1153.02
1.700	5675.4	992.4	2032.30 R	1528.05	1348.79 R	1014.13
1.800	4314.7	756.1	1562.18 R	1174.57	1036.78 R	779.54
1.900	2417.7	425.3	884.75 R	665.22	587.19 R	441.49
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 559

## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL

Rating Live Load: 3

Span	Positive Top	Moment Bending Bott.	Resistance Negative Top	Bending Bott.	Positive Top	Available Bending Bott.	Resistance Negative Top	Available Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12211.9	-12211.9B	11797.6	11797.6	-20157.4	-20157.4
1.600	19743.0C	19743.0	-11832.4	-11832.4B	12117.0	12117.0	-19458.4	-19458.4
1.700	19743.0C	19743.0	-11832.4	-11832.4B	13075.2	13075.2	-18500.3	-18500.3
1.800	19743.0C	19743.0	-13009.1	-13009.1B	14672.1	14672.1	-18080.0	-18080.0
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 560

## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL

Rating Live Load: 3

Span	top +bend	Rating Factor fiber -bend	bottom +bend	Rating Factor fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	164.83	999.00	164.83	999.00	0.00	999.0 (2-Lane)
1.010	248.35	999.00	248.35	999.00	0.00	999.0 (1-Lane)
1.100	15.33	999.00	15.33	999.00	0.00	383.3 (2-Lane)
1.100	23.10	999.00	23.10	999.00	0.00	577.6 (1-Lane)
1.200	9.39	999.00	9.39	999.00	0.00	234.8 (2-Lane)
1.200	14.15	999.00	14.15	999.00	0.00	353.8 (1-Lane)
1.300	6.43	999.00	6.43	999.00	0.00	160.8 (2-Lane)
1.300	9.69	999.00	9.69	999.00	0.00	242.3 (1-Lane)
1.400	5.24	999.00	5.24	999.00	0.00	131.1 (2-Lane)
1.400	7.90	999.00	7.90	999.00	0.00	197.5 (1-Lane)
1.500	4.93	999.00	4.93	999.00	0.00	123.3 (2-Lane)
1.500	7.43	999.00	7.43	999.00	0.00	185.8 (1-Lane)
1.600	5.24	999.00	5.24	999.00	0.00	131.1 (2-Lane)
1.600	7.90	999.00	7.90	999.00	0.00	197.5 (1-Lane)
1.700	6.43	999.00	6.43	999.00	0.00	160.8 (2-Lane)
1.700	9.69	999.00	9.69	999.00	0.00	242.3 (1-Lane)

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1.800	9.39	999.00	9.39	999.00	0.00	234.8 (2-Lane)
1.800	14.15	999.00	14.15	999.00	0.00	353.8 (1-Lane)
1.900	15.33	999.00	15.33	999.00	0.00	383.3 (2-Lane)
1.900	23.10	999.00	23.10	999.00	0.00	577.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL

Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	89.42	67.23	72.53	54.54
1.010	164.0	28.9	88.48	66.53	71.77	53.96
1.100	134.8	23.6	80.04	60.18	64.93	48.82
1.200	102.0	17.7	70.67	53.13	57.32	43.10
1.300	68.0	11.8	61.29	46.08	49.71	37.38
1.400	34.0	5.9	51.91	39.03	42.11	31.66
1.500	0.0	0.0	42.53	31.98	34.50	25.94
1.600	-34.0	-5.9	-51.91	-39.03	-42.11	-31.66
1.700	-68.0	-11.8	-61.29	-46.08	-49.71	-37.38
1.800	-102.0	-17.7	-70.67	-53.13	-57.32	-43.10
1.900	-134.8	-23.6	-80.04	-60.18	-64.93	-48.82
2.000	-167.2	-29.5	-89.42	-67.23	-72.53	-54.54

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL

Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)

1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL

Rating Live Load: 3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	8.80	0.00	220.0 (2-Lane)
1.000	999.00	10.85	0.00	271.2 (1-Lane)
1.010	999.00	8.94	0.00	223.4 (2-Lane)
1.010	999.00	11.02	0.00	275.4 (1-Lane)
1.100	182.07	8.73	0.00	218.4 (2-Lane)
1.100	224.47	10.77	0.00	269.2 (1-Lane)
1.200	44.99	5.78	0.00	144.5 (2-Lane)
1.200	55.47	7.12	0.00	178.1 (1-Lane)
1.300	25.57	7.31	0.00	182.9 (2-Lane)
1.300	31.52	9.02	0.00	225.4 (1-Lane)
1.400	17.13	9.40	0.00	235.1 (2-Lane)
1.400	21.12	11.59	0.00	289.8 (1-Lane)
1.500	12.42	12.42	0.00	310.4 (2-Lane)
1.500	15.31	15.31	0.00	382.7 (1-Lane)
1.600	9.40	17.13	0.00	235.1 (2-Lane)
1.600	11.59	21.12	0.00	289.8 (1-Lane)
1.700	7.31	25.57	0.00	182.9 (2-Lane)
1.700	9.02	31.52	0.00	225.4 (1-Lane)
1.800	5.78	44.99	0.00	144.5 (2-Lane)
1.800	7.12	55.47	0.00	178.1 (1-Lane)
1.900	8.73	182.07	0.00	218.4 (2-Lane)
1.900	10.77	224.47	0.00	269.2 (1-Lane)
2.000	8.80	999.00	0.00	220.0 (2-Lane)
2.000	10.85	999.00	0.00	271.2 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEG  
Rating Live Load: 3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	87.36 R	65.69	57.98 R	43.60
1.100	2417.7	425.3	790.32 R	594.22	524.51 R	394.37
1.200	4314.7	756.1	1395.44 R	1049.21	926.12 R	696.33
1.300	5675.4	992.4	1815.38 R	1364.95	1204.83 R	905.89
1.400	6491.9	1134.2	2064.02 R	1551.89	1369.84 R	1029.96
1.500	6764.0	1181.5	2136.72 R	1606.55	1418.09 R	1066.23
1.600	6491.9	1134.2	2064.02 R	1551.89	1369.84 R	1029.96
1.700	5675.4	992.4	1815.38 R	1364.95	1204.83 R	905.89
1.800	4314.7	756.1	1395.44 R	1049.21	926.12 R	696.33
1.900	2417.7	425.3	790.32 R	594.22	524.51 R	394.37
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEGL  
Rating Live Load:Rating Type: 3  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEGL

Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	625.58	999.00	145.60	999.00	0.00	999.0 (2-Lane)
1.010	942.60	999.00	219.38	999.00	0.00	999.0 (1-Lane)
1.100	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.100	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
1.200	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.200	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.300	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.300	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.400	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.400	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.500	11.82	999.00	3.87	999.00	0.00	96.6 (2-Lane)
1.500	17.81	999.00	5.82	999.00	0.00	145.6 (1-Lane)
1.600	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.600	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.700	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.700	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.800	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.800	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.900	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.900	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: 3S2

Gamma	DC		DW		(2-Lane) LL		(1-Lane) LL	
	1.25		1.25		1.45		1.45	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00
1.010	241.8	46.8	144.61 R		108.73	95.98 R		72.16
1.100	2417.7	425.3	1296.88 R		975.10	860.71 R		647.15
1.200	4314.7	756.1	2262.06 R		1700.79	1501.28 R		1128.78
1.300	5675.4	992.4	2967.01 R		2230.83	1969.14 R		1480.55

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1.400	6491.9	1134.2	3365.12 R	2530.16	2233.35 R	1679.21
1.500	6764.0	1181.5	3457.42 R	2599.56	2294.61 R	1725.27
1.600	6491.9	1134.2	3365.12 R	2530.16	2233.35 R	1679.21
1.700	5675.4	992.4	2967.01 R	2230.83	1969.13 R	1480.55
1.800	4314.7	756.1	2262.06 R	1700.79	1501.28 R	1128.78
1.900	2417.7	425.3	1296.88 R	975.10	860.71 R	647.15
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12195.7	-12195.7B	11797.6	11797.6	-20141.2	-20141.2
1.600	19743.0C	19743.0	-11819.8	-11819.8B	12117.0	12117.0	-19445.9	-19445.9
1.700	19743.0C	19743.0	-11819.8	-11819.8B	13075.2	13075.2	-18487.7	-18487.7
1.800	19743.0C	19743.0	-13009.3	-13009.3B	14672.1	14672.1	-18080.2	-18080.2
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	111.47	999.00	111.47	999.00	0.00	999.0 (2-Lane)
1.010	167.96	999.00	167.96	999.00	0.00	999.0 (1-Lane)
1.100	10.46	999.00	10.46	999.00	0.00	418.4 (2-Lane)
1.100	15.76	999.00	15.76	999.00	0.00	630.5 (1-Lane)
1.200	6.49	999.00	6.49	999.00	0.00	259.4 (2-Lane)
1.200	9.77	999.00	9.77	999.00	0.00	390.9 (1-Lane)
1.300	4.41	999.00	4.41	999.00	0.00	176.3 (2-Lane)



1.300	6.64	999.00	6.64	999.00	0.00	265.6 (1-Lane)
1.400	3.60	999.00	3.60	999.00	0.00	144.0 (2-Lane)
1.400	5.43	999.00	5.43	999.00	0.00	217.0 (1-Lane)
1.500	3.41	999.00	3.41	999.00	0.00	136.5 (2-Lane)
1.500	5.14	999.00	5.14	999.00	0.00	205.7 (1-Lane)
1.600	3.60	999.00	3.60	999.00	0.00	144.0 (2-Lane)
1.600	5.43	999.00	5.43	999.00	0.00	217.0 (1-Lane)
1.700	4.41	999.00	4.41	999.00	0.00	176.3 (2-Lane)
1.700	6.64	999.00	6.64	999.00	0.00	265.6 (1-Lane)
1.800	6.49	999.00	6.49	999.00	0.00	259.4 (2-Lane)
1.800	9.77	999.00	9.77	999.00	0.00	390.9 (1-Lane)
1.900	10.46	999.00	10.46	999.00	0.00	418.4 (2-Lane)
1.900	15.76	999.00	15.76	999.00	0.00	630.5 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load Truck
1.000	167.2	29.5	132.33	99.50	107.34	80.71
1.010	164.0	28.9	130.83	98.37	106.13	79.79
1.100	134.8	23.6	117.33	88.22	95.17	71.56
1.200	102.0	17.7	102.32	76.94	83.00	62.41
1.300	68.0	11.8	87.32	65.65	70.83	53.25
1.400	34.0	5.9	72.32	54.37	58.66	44.10
1.500	0.0	0.0	57.31	43.09	46.49	34.95
1.600	-34.0	-5.9	-72.32	-54.37	-58.66	-44.10
1.700	-68.0	-11.8	-87.32	-65.65	-70.83	-53.25
1.800	-102.0	-17.7	-102.32	-76.94	-83.00	-62.41
1.900	-134.8	-23.6	-117.33	-88.22	-95.17	-71.56
2.000	-167.2	-29.5	-132.33	-99.50	-107.34	-80.71

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL

Rating Live Load: 3S2

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.95	0.00	237.8 (2-Lane)
1.000	999.00	7.33	0.00	293.2 (1-Lane)
1.010	999.00	6.04	0.00	241.7 (2-Lane)
1.010	999.00	7.45	0.00	298.0 (1-Lane)
1.100	182.07	5.96	0.00	238.4 (2-Lane)
1.100	224.47	7.35	0.00	293.9 (1-Lane)
1.200	47.78	3.99	0.00	159.6 (2-Lane)
1.200	58.90	4.92	0.00	196.8 (1-Lane)
1.300	22.26	5.13	0.00	205.3 (2-Lane)
1.300	27.45	6.33	0.00	253.2 (1-Lane)
1.400	13.43	6.75	0.00	270.0 (2-Lane)
1.400	16.55	8.32	0.00	332.9 (1-Lane)
1.500	9.21	9.21	0.00	368.6 (2-Lane)
1.500	11.36	11.36	0.00	454.4 (1-Lane)
1.600	6.75	13.43	0.00	270.0 (2-Lane)
1.600	8.32	16.55	0.00	332.9 (1-Lane)
1.700	5.13	22.26	0.00	205.3 (2-Lane)
1.700	6.33	27.45	0.00	253.2 (1-Lane)
1.800	3.99	47.78	0.00	159.6 (2-Lane)
1.800	4.92	58.90	0.00	196.8 (1-Lane)

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1.900	5.96	182.07	0.00	238.4 (2-Lane)
1.900	7.35	224.47	0.00	293.9 (1-Lane)
2.000	5.95	999.00	0.00	237.8 (2-Lane)
2.000	7.33	999.00	0.00	293.2 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEG  
Rating Live Load: 3S2

Gamma	DC	DW	(2-Lane)		(1-Lane)	
	1.00	1.00	LL	LL	LL	LL
			1.30			1.30
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	129.18 R	97.13	85.73 R	64.46
1.100	2417.7	425.3	1158.46 R	871.02	768.84 R	578.08
1.200	4314.7	756.1	2020.62 R	1519.26	1341.04 R	1008.30
1.300	5675.4	992.4	2650.33 R	1992.73	1758.96 R	1322.53
1.400	6491.9	1134.2	3005.94 R	2260.11	1994.98 R	1499.98
1.500	6764.0	1181.5	3088.39 R	2322.10	2049.69 R	1541.12
1.600	6491.9	1134.2	3005.94 R	2260.11	1994.98 R	1499.98
1.700	5675.4	992.4	2650.33 R	1992.73	1758.96 R	1322.53
1.800	4314.7	756.1	2020.62 R	1519.26	1341.04 R	1008.30
1.900	2417.7	425.3	1158.46 R	871.02	768.84 R	578.08
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 572

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEGL  
Rating Live Load:

Rating Type: 3S2  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEGL  
Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	423.08	999.00	98.47	999.00	0.00	999.0 (2-Lane)
1.010	637.48	999.00	148.37	999.00	0.00	999.0 (1-Lane)
1.100	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.100	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
1.200	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.200	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.300	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.300	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.400	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.400	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.500	8.18	999.00	2.67	999.00	0.00	107.0 (2-Lane)
1.500	12.32	999.00	4.03	999.00	0.00	161.2 (1-Lane)
1.600	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.600	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.700	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.700	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.800	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.800	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.900	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.900	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: 3-3

Gamma DC DW (2-Lane) LL (1-Lane) LL

1.25

1.25

1.45

1.45

Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00			0.00
1.010	241.8	46.8	139.44 R	104.84	92.54 R	69.58			
1.100	2417.7	425.3	1245.08 R	936.15	826.33 R	621.30			
1.200	4314.7	756.1	2168.82 R	1630.69	1439.40 R	1082.25			
1.300	5675.4	992.4	2791.94 R	2099.20	1852.94 R	1393.19			
1.400	6491.9	1134.2	3166.22 R	2380.61	2101.35 R	1579.96			
1.500	6764.0	1181.5	3291.67 R	2474.94	2184.60 R	1642.56			
1.600	6491.9	1134.2	3166.22 R	2380.61	2101.35 R	1579.96			
1.700	5675.4	992.4	2791.94 R	2099.20	1852.94 R	1393.19			
1.800	4314.7	756.1	2168.82 R	1630.69	1439.40 R	1082.25			
1.900	2417.7	425.3	1245.08 R	936.15	826.33 R	621.30			
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00			

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: 3-3

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12211.1	-12211.1B	11797.6	11797.6	-20156.6	-20156.6
1.600	19743.0C	19743.0	-11834.9	-11834.9B	12117.0	12117.0	-19461.0	-19461.0
1.700	19743.0C	19743.0	-11834.9	-11834.9B	13075.2	13075.2	-18502.8	-18502.8
1.800	19743.0C	19743.0	-12991.8	-12991.8B	14672.1	14672.1	-18062.6	-18062.6
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: 3-3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		

1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	115.61	999.00	115.61	999.00	0.00	999.0 (2-Lane)
1.010	174.20	999.00	174.20	999.00	0.00	999.0 (1-Lane)
1.100	10.90	999.00	10.90	999.00	0.00	435.8 (2-Lane)
1.100	16.42	999.00	16.42	999.00	0.00	656.7 (1-Lane)
1.200	6.76	999.00	6.76	999.00	0.00	270.6 (2-Lane)
1.200	10.19	999.00	10.19	999.00	0.00	407.7 (1-Lane)
1.300	4.68	999.00	4.68	999.00	0.00	187.3 (2-Lane)
1.300	7.06	999.00	7.06	999.00	0.00	282.3 (1-Lane)
1.400	3.83	999.00	3.83	999.00	0.00	153.1 (2-Lane)
1.400	5.77	999.00	5.77	999.00	0.00	230.7 (1-Lane)
1.500	3.58	999.00	3.58	999.00	0.00	143.4 (2-Lane)
1.500	5.40	999.00	5.40	999.00	0.00	216.0 (1-Lane)
1.600	3.83	999.00	3.83	999.00	0.00	153.1 (2-Lane)
1.600	5.77	999.00	5.77	999.00	0.00	230.7 (1-Lane)
1.700	4.68	999.00	4.68	999.00	0.00	187.3 (2-Lane)
1.700	7.06	999.00	7.06	999.00	0.00	282.3 (1-Lane)
1.800	6.76	999.00	6.76	999.00	0.00	270.6 (2-Lane)
1.800	10.19	999.00	10.19	999.00	0.00	407.7 (1-Lane)
1.900	10.90	999.00	10.90	999.00	0.00	435.8 (2-Lane)
1.900	16.42	999.00	16.42	999.00	0.00	656.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

**SHEAR REPORT**

Rating Type: I-LEGL  
Rating Live Load: 3-3

## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: 3-3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.16	0.00	246.6 (2-Lane)
1.000	999.00	7.60	0.00	304.0 (1-Lane)
1.010	999.00	6.27	0.00	250.7 (2-Lane)
1.010	999.00	7.73	0.00	309.1 (1-Lane)
1.100	221.09	6.21	0.00	248.3 (2-Lane)
1.100	272.57	7.65	0.00	306.1 (1-Lane)
1.200	53.53	4.18	0.00	167.3 (2-Lane)
1.200	66.00	5.16	0.00	206.2 (1-Lane)
1.300	25.92	5.43	0.00	217.0 (2-Lane)
1.300	31.95	6.69	0.00	267.5 (1-Lane)
1.400	15.10	7.22	0.00	288.7 (2-Lane)

1.400	18.61	8.90	0.00	356.0 (1-Lane)
1.500	10.03	10.03	0.00	401.4 (2-Lane)
1.500	12.37	12.37	0.00	494.8 (1-Lane)
1.600	7.22	15.10	0.00	288.7 (2-Lane)
1.600	8.90	18.61	0.00	356.0 (1-Lane)
1.700	5.43	25.92	0.00	217.0 (2-Lane)
1.700	6.69	31.95	0.00	267.5 (1-Lane)
1.800	4.18	53.53	0.00	167.3 (2-Lane)
1.800	5.16	66.00	0.00	206.2 (1-Lane)
1.900	6.21	221.09	0.00	248.3 (2-Lane)
1.900	7.65	272.57	0.00	306.1 (1-Lane)
2.000	6.16	999.00	0.00	246.6 (2-Lane)
2.000	7.60	999.00	0.00	304.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEG  
Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	124.55 R	93.65	82.66 R	62.15
1.100	2417.7	425.3	1112.19 R	836.23	738.14 R	554.99
1.200	4314.7	756.1	1937.34 R	1456.64	1285.77 R	966.74
1.300	5675.4	992.4	2493.94 R	1875.14	1655.17 R	1244.49
1.400	6491.9	1134.2	2828.27 R	2126.52	1877.06 R	1411.32
1.500	6764.0	1181.5	2940.33 R	2210.78	1951.43 R	1467.24
1.600	6491.9	1134.2	2828.27 R	2126.52	1877.06 R	1411.32
1.700	5675.4	992.4	2493.94 R	1875.14	1655.17 R	1244.49
1.800	4314.7	756.1	1937.34 R	1456.64	1285.77 R	966.74
1.900	2417.7	425.3	1112.19 R	836.23	738.14 R	554.99
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEGL  
Rating Live Load:

Rating Type: 3-3

Rating Live Load:

Span	Service Resistance		Available Resistance for LL+I	
	Positive Bending	Negative Bending	Positive Bending	Negative Bending
	Top	Bott.	Top	Bott.



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1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEGL

Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor fiber -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	438.80	999.00	102.13	999.00	0.00	999.0 (2-Lane)
1.010	661.17	999.00	153.88	999.00	0.00	999.0 (1-Lane)
1.100	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.100	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
1.200	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.200	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.300	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.300	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.400	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.400	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.500	8.59	999.00	2.81	999.00	0.00	112.3 (2-Lane)
1.500	12.95	999.00	4.23	999.00	0.00	169.3 (1-Lane)
1.600	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.600	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.700	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.700	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.800	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.800	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.900	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.900	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 582

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL

Rating Live Load: SU4

Gamma	DC	DW	(2-Lane)		(1-Lane)	
	1.25	1.25	LL	LL	LL	LL
			1.20		1.20	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	88.06 R	66.21	58.44 R	43.94
1.100	2417.7	425.3	797.15 R	599.36	529.05 R	397.78
1.200	4314.7	756.1	1408.87 R	1059.30	935.03 R	703.03
1.300	5675.4	992.4	1835.14 R	1379.80	1217.94 R	915.74
1.400	6491.9	1134.2	2095.71 R	1575.72	1390.87 R	1045.77
1.500	6764.0	1181.5	2174.27 R	1634.79	1443.01 R	1084.97
1.600	6491.9	1134.2	2095.71 R	1575.72	1390.87 R	1045.77
1.700	5675.4	992.4	1835.14 R	1379.80	1217.94 R	915.74
1.800	4314.7	756.1	1408.87 R	1059.30	935.03 R	703.03
1.900	2417.7	425.3	797.15 R	599.36	529.05 R	397.78
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL

Rating Live Load: SU4

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12218.6	-12218.6B	11797.6	11797.6	-20164.1	-20164.1
1.600	19743.0C	19743.0	-11835.8	-11835.8B	12117.0	12117.0	-19461.8	-19461.8
1.700	19743.0C	19743.0	-11835.8	-11835.8B	13075.2	13075.2	-18503.7	-18503.7
1.800	19743.0C	19743.0	-13015.6	-13015.6B	14672.1	14672.1	-18086.5	-18086.5
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL

Rating Live Load: SU4

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	183.07	999.00	183.07	999.00	0.00	999.0 (2-Lane)
1.010	275.84	999.00	275.84	999.00	0.00	999.0 (1-Lane)
1.100	17.02	999.00	17.02	999.00	0.00	459.5 (2-Lane)
1.100	25.64	999.00	25.64	999.00	0.00	692.4 (1-Lane)
1.200	10.41	999.00	10.41	999.00	0.00	281.2 (2-Lane)
1.200	15.69	999.00	15.69	999.00	0.00	423.7 (1-Lane)
1.300	7.12	999.00	7.12	999.00	0.00	192.4 (2-Lane)
1.300	10.73	999.00	10.73	999.00	0.00	289.9 (1-Lane)
1.400	5.78	999.00	5.78	999.00	0.00	156.1 (2-Lane)
1.400	8.71	999.00	8.71	999.00	0.00	235.2 (1-Lane)
1.500	5.43	999.00	5.43	999.00	0.00	146.5 (2-Lane)
1.500	8.18	999.00	8.18	999.00	0.00	220.7 (1-Lane)
1.600	5.78	999.00	5.78	999.00	0.00	156.1 (2-Lane)
1.600	8.71	999.00	8.71	999.00	0.00	235.2 (1-Lane)
1.700	7.12	999.00	7.12	999.00	0.00	192.4 (2-Lane)
1.700	10.73	999.00	10.73	999.00	0.00	289.9 (1-Lane)
1.800	10.41	999.00	10.41	999.00	0.00	281.2 (2-Lane)
1.800	15.69	999.00	15.69	999.00	0.00	423.7 (1-Lane)
1.900	17.02	999.00	17.02	999.00	0.00	459.5 (2-Lane)
1.900	25.64	999.00	25.64	999.00	0.00	692.4 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: SU4

Gamma		DC 1.25	DW 1.25	(2-Lane) LL 1.20				(1-Lane) LL 1.20	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact		Live Load w/impact		Live Load	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	80.51		60.53		65.30		49.10
1.010	164.0	28.9	79.67		59.90		64.62		48.59
1.100	134.8	23.6	72.12		54.22		58.50		43.98
1.200	102.0	17.7	63.73		47.92		51.69		38.87
1.300	68.0	11.8	55.34		41.61		44.89		33.75

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1.400	34.0	5.9	46.95	35.30	38.09	28.64
1.500	0.0	0.0	38.57	29.00	31.28	23.52
1.600	-34.0	-5.9	-46.95	-35.30	-38.09	-28.64
1.700	-68.0	-11.8	-55.34	-41.61	-44.89	-33.75
1.800	-102.0	-17.7	-63.73	-47.92	-51.69	-38.87
1.900	-134.8	-23.6	-72.12	-54.22	-58.50	-43.98
2.000	-167.2	-29.5	-80.51	-60.53	-65.30	-49.10

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#### STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL

Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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#### STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL

Rating Live Load: SU4

#### Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	9.77	0.00	263.9 (2-Lane)
1.000	999.00	12.05	0.00	325.3 (1-Lane)

1.010	999.00	9.92	0.00	268.0 (2-Lane)
1.010	999.00	12.23	0.00	330.3 (1-Lane)
1.100	193.77	9.69	0.00	261.8 (2-Lane)
1.100	238.89	11.95	0.00	322.7 (1-Lane)
1.200	48.34	6.41	0.00	173.0 (2-Lane)
1.200	59.59	7.90	0.00	213.3 (1-Lane)
1.300	27.90	8.10	0.00	218.7 (2-Lane)
1.300	34.39	9.99	0.00	269.6 (1-Lane)
1.400	18.82	10.40	0.00	280.7 (2-Lane)
1.400	23.20	12.82	0.00	346.1 (1-Lane)
1.500	13.69	13.69	0.00	369.7 (2-Lane)
1.500	16.88	16.88	0.00	455.8 (1-Lane)
1.600	10.40	18.82	0.00	280.7 (2-Lane)
1.600	12.82	23.20	0.00	346.1 (1-Lane)
1.700	8.10	27.90	0.00	218.7 (2-Lane)
1.700	9.99	34.39	0.00	269.6 (1-Lane)
1.800	6.41	48.34	0.00	173.0 (2-Lane)
1.800	7.90	59.59	0.00	213.3 (1-Lane)
1.900	9.69	193.77	0.00	261.8 (2-Lane)
1.900	11.95	238.89	0.00	322.7 (1-Lane)
2.000	9.77	999.00	0.00	263.9 (2-Lane)
2.000	12.05	999.00	0.00	325.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEG  
Rating Live Load: SU4

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
	1.00	1.00	1.30	1.30

Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	94.98 R	71.41	63.03 R	47.39
1.100	2417.7	425.3	859.76 R	646.44	570.60 R	429.02
1.200	4314.7	756.1	1519.52 R	1142.49	1008.47 R	758.25
1.300	5675.4	992.4	1979.27 R	1488.17	1313.60 R	987.67
1.400	6491.9	1134.2	2260.31 R	1699.48	1500.11 R	1127.90
1.500	6764.0	1181.5	2345.04 R	1763.19	1556.35 R	1170.19
1.600	6491.9	1134.2	2260.31 R	1699.48	1500.11 R	1127.90
1.700	5675.4	992.4	1979.27 R	1488.17	1313.60 R	987.67
1.800	4314.7	756.1	1519.52 R	1142.49	1008.47 R	758.25
1.900	2417.7	425.3	859.76 R	646.44	570.60 R	429.02
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 588

## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEGL  
Rating Live Load:

Rating Type: SU4

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEGL  
Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	575.45	999.00	133.93	999.00	0.00	999.0 (2-Lane)
1.010	867.06	999.00	201.80	999.00	0.00	999.0 (1-Lane)
1.100	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.100	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
1.200	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.200	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.300	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.300	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.400	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.400	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.500	10.77	999.00	3.52	999.00	0.00	95.1 (2-Lane)
1.500	16.23	999.00	5.31	999.00	0.00	143.3 (1-Lane)
1.600	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.600	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.700	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.700	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)

1.800	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.800	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.900	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.900	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: SU5

Gamma	(2-Lane)				(1-Lane)	
	DC 1.25	DW 1.25	LL 1.20		LL 1.20	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	100.11 R	75.27	66.44 R	49.96
1.100	2417.7	425.3	905.33 R	680.70	600.85 R	451.77
1.200	4314.7	756.1	1597.76 R	1201.32	1060.40 R	797.29
1.300	5675.4	992.4	2084.13 R	1567.02	1383.19 R	1039.99
1.400	6491.9	1134.2	2377.33 R	1787.47	1577.78 R	1186.30
1.500	6764.0	1181.5	2457.62 R	1847.83	1631.07 R	1226.36
1.600	6491.9	1134.2	2377.33 R	1787.47	1577.78 R	1186.30
1.700	5675.4	992.4	2084.13 R	1567.02	1383.19 R	1039.99
1.800	4314.7	756.1	1597.76 R	1201.32	1060.40 R	797.29
1.900	2417.7	425.3	905.33 R	680.70	600.85 R	451.77
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: SU5

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12213.4	-12213.4B	11797.6	11797.6	-20158.9	-20158.9
1.600	19743.0C	19743.0	-11831.5	-11831.5B	12117.0	12117.0	-19457.6	-19457.6
1.700	19743.0C	19743.0	-11831.5	-11831.5B	13075.2	13075.2	-18499.4	-18499.4
1.800	19743.0C	19743.0	-13014.6	-13014.6B	14672.1	14672.1	-18085.5	-18085.5
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4

2.000 16409.4C 16409.4 -9908.4 -9908.4B 16409.4 16409.4 -9908.4 -9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: SU5

## Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	161.02	999.00	161.02	999.00	0.00	999.0 (2-Lane)
1.010	242.62	999.00	242.62	999.00	0.00	999.0 (1-Lane)
1.100	14.98	999.00	14.98	999.00	0.00	464.5 (2-Lane)
1.100	22.58	999.00	22.58	999.00	0.00	699.9 (1-Lane)
1.200	9.18	999.00	9.18	999.00	0.00	284.7 (2-Lane)
1.200	13.84	999.00	13.84	999.00	0.00	428.9 (1-Lane)
1.300	6.27	999.00	6.27	999.00	0.00	194.5 (2-Lane)
1.300	9.45	999.00	9.45	999.00	0.00	293.0 (1-Lane)
1.400	5.10	999.00	5.10	999.00	0.00	158.0 (2-Lane)
1.400	7.68	999.00	7.68	999.00	0.00	238.1 (1-Lane)
1.500	4.80	999.00	4.80	999.00	0.00	148.8 (2-Lane)
1.500	7.23	999.00	7.23	999.00	0.00	224.2 (1-Lane)
1.600	5.10	999.00	5.10	999.00	0.00	158.0 (2-Lane)
1.600	7.68	999.00	7.68	999.00	0.00	238.1 (1-Lane)
1.700	6.27	999.00	6.27	999.00	0.00	194.5 (2-Lane)
1.700	9.45	999.00	9.45	999.00	0.00	293.0 (1-Lane)
1.800	9.18	999.00	9.18	999.00	0.00	284.7 (2-Lane)
1.800	13.84	999.00	13.84	999.00	0.00	428.9 (1-Lane)
1.900	14.98	999.00	14.98	999.00	0.00	464.5 (2-Lane)
1.900	22.58	999.00	22.58	999.00	0.00	699.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: SU5

Gamma DC DW (2-Lane) (1-Lane)  
LL LL



1.25

1.25

1.20

Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	Lane
1.000	167.2	29.5	91.54	68.82	74.25	55.83
1.010	164.0	28.9	90.57	68.10	73.47	55.24
1.100	134.8	23.6	81.91	61.58	66.44	49.95
1.200	102.0	17.7	72.27	54.34	58.63	44.08
1.300	68.0	11.8	62.64	47.10	50.81	38.21
1.400	34.0	5.9	53.01	39.86	43.00	32.33
1.500	0.0	0.0	43.38	32.62	35.19	26.46
1.600	-34.0	-5.9	-53.01	-39.86	-43.00	-32.33
1.700	-68.0	-11.8	-62.64	-47.10	-50.81	-38.21
1.800	-102.0	-17.7	-72.27	-54.34	-58.63	-44.08
1.900	-134.8	-23.6	-81.91	-61.58	-66.44	-49.95
2.000	-167.2	-29.5	-91.54	-68.82	-74.25	-55.83

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL

Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL

Rating Live Load: SU5

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	8.60	0.00	266.5 (2-Lane)
1.000	999.00	10.60	0.00	328.5 (1-Lane)
1.010	999.00	8.73	0.00	270.6 (2-Lane)
1.010	999.00	10.76	0.00	333.6 (1-Lane)
1.100	182.91	8.54	0.00	264.6 (2-Lane)
1.100	225.50	10.52	0.00	326.3 (1-Lane)
1.200	44.71	5.65	0.00	175.2 (2-Lane)
1.200	55.12	6.97	0.00	215.9 (1-Lane)
1.300	25.20	7.16	0.00	221.8 (2-Lane)
1.300	31.07	8.82	0.00	273.5 (1-Lane)
1.400	16.83	9.21	0.00	285.5 (2-Lane)
1.400	20.75	11.35	0.00	351.9 (1-Lane)
1.500	12.17	12.17	0.00	377.3 (2-Lane)
1.500	15.01	15.01	0.00	465.2 (1-Lane)
1.600	9.21	16.83	0.00	285.5 (2-Lane)
1.600	11.35	20.75	0.00	351.9 (1-Lane)
1.700	7.16	25.20	0.00	221.8 (2-Lane)
1.700	8.82	31.07	0.00	273.5 (1-Lane)
1.800	5.65	44.71	0.00	175.2 (2-Lane)
1.800	6.97	55.12	0.00	215.9 (1-Lane)
1.900	8.54	182.91	0.00	264.6 (2-Lane)
1.900	10.52	225.50	0.00	326.3 (1-Lane)
2.000	8.60	999.00	0.00	266.5 (2-Lane)
2.000	10.60	999.00	0.00	328.5 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEG

Rating Live Load: SU5

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	107.98 R	81.19	71.66 R	53.88
1.100	2417.7	425.3	976.44 R	734.16	648.04 R	487.25
1.200	4314.7	756.1	1723.24 R	1295.67	1143.68 R	859.91
1.300	5675.4	992.4	2247.82 R	1690.09	1491.83 R	1121.67
1.400	6491.9	1134.2	2564.05 R	1927.85	1701.70 R	1279.47
1.500	6764.0	1181.5	2650.64 R	1992.96	1759.17 R	1322.68
1.600	6491.9	1134.2	2564.05 R	1927.85	1701.70 R	1279.47

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1.700	5675.4	992.4	2247.82 R	1690.09	1491.83 R	1121.67
1.800	4314.7	756.1	1723.24 R	1295.67	1143.68 R	859.91
1.900	2417.7	425.3	976.44 R	734.16	648.04 R	487.25
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 596

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEGL

Rating Live Load:

Rating Type: SU5

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEGL

Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	506.16	999.00	117.80	999.00	0.00	999.0 (2-Lane)
1.010	762.66	999.00	177.50	999.00	0.00	999.0 (1-Lane)
1.100	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.100	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
1.200	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.200	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.300	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.300	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)

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1.400	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.400	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.500	9.53	999.00	3.12	999.00	0.00	96.6 (2-Lane)
1.500	14.36	999.00	4.69	999.00	0.00	145.5 (1-Lane)
1.600	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.600	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.700	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.700	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.800	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.800	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.900	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.900	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: SU6

Gamma	DC		DW		(2-Lane) LL 1.20		(1-Lane) LL 1.20	
	1.25		1.25					
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00
1.010	241.8	46.8	110.34 R		82.96	73.23 R		55.06
1.100	2417.7	425.3	996.03 R		748.90	661.04 R		497.02
1.200	4314.7	756.1	1778.70 R		1337.37	1180.49 R		887.58
1.300	5675.4	992.4	2327.22 R		1749.79	1544.52 R		1161.29
1.400	6491.9	1134.2	2649.07 R		1991.79	1758.13 R		1321.90
1.500	6764.0	1181.5	2750.07 R		2067.72	1825.16 R		1372.30
1.600	6491.9	1134.2	2649.07 R		1991.79	1758.13 R		1321.90
1.700	5675.4	992.4	2327.22 R		1749.79	1544.52 R		1161.29
1.800	4314.7	756.1	1778.70 R		1337.37	1180.49 R		887.58
1.900	2417.7	425.3	996.03 R		748.89	661.04 R		497.02
2.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: SU6

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.

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1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12214.9	-12214.9B	11797.6	11797.6	-20160.4	-20160.4
1.600	19743.0C	19743.0	-11834.9	-11834.9B	12117.0	12117.0	-19460.9	-19460.9
1.700	19743.0C	19743.0	-11834.9	-11834.9B	13075.2	13075.2	-18502.7	-18502.7
1.800	19743.0C	19743.0	-13013.8	-13013.8B	14672.1	14672.1	-18084.7	-18084.7
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL

Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor fiber -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	146.10	999.00	146.10	999.00	0.00	999.0 (2-Lane)
1.010	220.13	999.00	220.13	999.00	0.00	999.0 (1-Lane)
1.100	13.62	999.00	13.62	999.00	0.00	473.3 (2-Lane)
1.100	20.52	999.00	20.52	999.00	0.00	713.2 (1-Lane)
1.200	8.25	999.00	8.25	999.00	0.00	286.6 (2-Lane)
1.200	12.43	999.00	12.43	999.00	0.00	431.9 (1-Lane)
1.300	5.62	999.00	5.62	999.00	0.00	195.2 (2-Lane)
1.300	8.47	999.00	8.47	999.00	0.00	294.2 (1-Lane)
1.400	4.57	999.00	4.57	999.00	0.00	158.9 (2-Lane)
1.400	6.89	999.00	6.89	999.00	0.00	239.5 (1-Lane)
1.500	4.29	999.00	4.29	999.00	0.00	149.1 (2-Lane)
1.500	6.46	999.00	6.46	999.00	0.00	224.6 (1-Lane)
1.600	4.57	999.00	4.57	999.00	0.00	158.9 (2-Lane)
1.600	6.89	999.00	6.89	999.00	0.00	239.5 (1-Lane)
1.700	5.62	999.00	5.62	999.00	0.00	195.2 (2-Lane)
1.700	8.47	999.00	8.47	999.00	0.00	294.2 (1-Lane)
1.800	8.25	999.00	8.25	999.00	0.00	286.6 (2-Lane)
1.800	12.43	999.00	12.43	999.00	0.00	431.9 (1-Lane)
1.900	13.62	999.00	13.62	999.00	0.00	473.3 (2-Lane)
1.900	20.52	999.00	20.52	999.00	0.00	713.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	100.91	75.87	81.85	61.54
1.010	164.0	28.9	99.83	75.06	80.97	60.88
1.100	134.8	23.6	90.11	67.75	73.09	54.96
1.200	102.0	17.7	79.32	59.64	64.34	48.37
1.300	68.0	11.8	68.52	51.52	55.58	41.79
1.400	34.0	5.9	57.72	43.40	46.82	35.20
1.500	0.0	0.0	46.93	35.28	38.06	28.62
1.600	-34.0	-5.9	-57.72	-43.40	-46.82	-35.20
1.700	-68.0	-11.8	-68.52	-51.52	-55.58	-41.79
1.800	-102.0	-17.7	-79.32	-59.64	-64.34	-48.37
1.900	-134.8	-23.6	-90.11	-67.75	-73.09	-54.96
2.000	-167.2	-29.5	-100.91	-75.87	-81.85	-61.54

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)

2.000                      983.6                      7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
 -786.8                      1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D.                      7777777\_20120905cy01\_01of01

Member I. D.                      G03

Rating Type:                      I-LEGL  
 Rating Live Load:                      SU6

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.80	0.00	271.0 (2-Lane)
1.000	999.00	9.61	0.00	334.1 (1-Lane)
1.010	999.00	7.92	0.00	275.2 (2-Lane)
1.010	999.00	9.76	0.00	339.3 (1-Lane)
1.100	209.20	7.76	0.00	269.6 (2-Lane)
1.100	257.90	9.57	0.00	332.4 (1-Lane)
1.200	44.56	5.15	0.00	178.9 (2-Lane)
1.200	54.93	6.35	0.00	220.6 (1-Lane)
1.300	23.99	6.54	0.00	227.3 (2-Lane)
1.300	29.58	8.06	0.00	280.3 (1-Lane)
1.400	15.72	8.46	0.00	293.9 (2-Lane)
1.400	19.38	10.43	0.00	362.3 (1-Lane)
1.500	11.25	11.25	0.00	391.0 (2-Lane)
1.500	13.87	13.87	0.00	482.1 (1-Lane)
1.600	8.46	15.72	0.00	293.9 (2-Lane)
1.600	10.43	19.38	0.00	362.3 (1-Lane)
1.700	6.54	23.99	0.00	227.3 (2-Lane)
1.700	8.06	29.58	0.00	280.3 (1-Lane)
1.800	5.15	44.56	0.00	178.9 (2-Lane)
1.800	6.35	54.93	0.00	220.6 (1-Lane)
1.900	7.76	209.20	0.00	269.6 (2-Lane)
1.900	9.57	257.90	0.00	332.4 (1-Lane)
2.000	7.80	999.00	0.00	271.0 (2-Lane)
2.000	9.61	999.00	0.00	334.1 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D.                      7777777\_20120905cy01\_01of01

Member I. D.                      G03

Rating Type:                      II-LEG  
 Rating Live Load:                      SU6

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
	1.00	1.00	1.30	1.30

Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	119.01 R	89.48	78.98 R	59.39
1.100	2417.7	425.3	1074.26 R	807.71	712.96 R	536.06
1.200	4314.7	756.1	1918.40 R	1442.41	1273.20 R	957.29
1.300	5675.4	992.4	2509.99 R	1887.21	1665.83 R	1252.50
1.400	6491.9	1134.2	2857.13 R	2148.22	1896.21 R	1425.72
1.500	6764.0	1181.5	2966.06 R	2230.12	1968.50 R	1480.08
1.600	6491.9	1134.2	2857.13 R	2148.22	1896.21 R	1425.72
1.700	5675.4	992.4	2509.99 R	1887.21	1665.83 R	1252.50
1.800	4314.7	756.1	1918.40 R	1442.41	1273.20 R	957.29
1.900	2417.7	425.3	1074.26 R	807.71	712.96 R	536.06
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEGL

Rating Live Load:

Rating Type: SU6

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEGL

Rating Live Load: SU6

## Service

Span	Rating Factor				Rating Value	Load Resistance (tons)
	top +bend	fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)



1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	459.24	999.00	106.88	999.00	0.00	999.0 (2-Lane)
1.010	691.96	999.00	161.05	999.00	0.00	999.0 (1-Lane)
1.100	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.100	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
1.200	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.200	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.300	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.300	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.400	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.400	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.500	8.52	999.00	2.78	999.00	0.00	96.7 (2-Lane)
1.500	12.83	999.00	4.20	999.00	0.00	145.8 (1-Lane)
1.600	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.600	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.700	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.700	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.800	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.800	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.900	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.900	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	120.96 R	90.95	80.28 R	60.36
1.100	2417.7	425.3	1089.84 R	819.43	723.30 R	543.84
1.200	4314.7	756.1	1945.72 R	1462.95	1291.33 R	970.92
1.300	5675.4	992.4	2567.63 R	1930.55	1704.08 R	1281.26
1.400	6491.9	1134.2	2925.55 R	2199.66	1941.62 R	1459.86
1.500	6764.0	1181.5	3041.99 R	2287.21	2018.90 R	1517.97
1.600	6491.9	1134.2	2925.55 R	2199.66	1941.62 R	1459.86
1.700	5675.4	992.4	2567.63 R	1930.55	1704.08 R	1281.26
1.800	4314.7	756.1	1945.72 R	1462.95	1291.33 R	970.92
1.900	2417.7	425.3	1089.84 R	819.43	723.30 R	543.84
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12217.2	-12217.2B	11797.6	11797.6	-20162.7	-20162.7
1.600	19743.0C	19743.0	-11836.6	-11836.6B	12117.0	12117.0	-19462.7	-19462.7
1.700	19743.0C	19743.0	-11836.6	-11836.6B	13075.2	13075.2	-18504.5	-18504.5
1.800	19743.0C	19743.0	-13022.0	-13022.0B	14672.1	14672.1	-18092.9	-18092.9
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	133.27	999.00	133.27	999.00	0.00	999.0 (2-Lane)
1.010	200.81	999.00	200.81	999.00	0.00	999.0 (1-Lane)
1.100	12.45	999.00	12.45	999.00	0.00	482.4 (2-Lane)
1.100	18.76	999.00	18.76	999.00	0.00	726.8 (1-Lane)
1.200	7.54	999.00	7.54	999.00	0.00	292.2 (2-Lane)
1.200	11.36	999.00	11.36	999.00	0.00	440.3 (1-Lane)
1.300	5.09	999.00	5.09	999.00	0.00	197.3 (2-Lane)
1.300	7.67	999.00	7.67	999.00	0.00	297.3 (1-Lane)
1.400	4.14	999.00	4.14	999.00	0.00	160.5 (2-Lane)
1.400	6.24	999.00	6.24	999.00	0.00	241.8 (1-Lane)
1.500	3.88	999.00	3.88	999.00	0.00	150.3 (2-Lane)
1.500	5.84	999.00	5.84	999.00	0.00	226.4 (1-Lane)
1.600	4.14	999.00	4.14	999.00	0.00	160.5 (2-Lane)
1.600	6.24	999.00	6.24	999.00	0.00	241.8 (1-Lane)
1.700	5.09	999.00	5.09	999.00	0.00	197.3 (2-Lane)
1.700	7.67	999.00	7.67	999.00	0.00	297.3 (1-Lane)

1.800	7.54	999.00	7.54	999.00	0.00	292.2 (2-Lane)
1.800	11.36	999.00	11.36	999.00	0.00	440.3 (1-Lane)
1.900	12.45	999.00	12.45	999.00	0.00	482.4 (2-Lane)
1.900	18.76	999.00	18.76	999.00	0.00	726.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	110.64	83.19	89.74	67.48
1.010	164.0	28.9	109.43	82.28	88.77	66.74
1.100	134.8	23.6	98.60	74.13	79.98	60.13
1.200	102.0	17.7	86.56	65.08	70.21	52.79
1.300	68.0	11.8	74.52	56.03	60.45	45.45
1.400	34.0	5.9	62.48	46.98	50.68	38.11
1.500	0.0	0.0	50.44	37.93	40.92	30.76
1.600	-34.0	-5.9	-62.48	-46.98	-50.68	-38.11
1.700	-68.0	-11.8	-74.52	-56.03	-60.45	-45.45
1.800	-102.0	-17.7	-86.56	-65.08	-70.21	-52.79
1.900	-134.8	-23.6	-98.60	-74.13	-79.98	-60.13
2.000	-167.2	-29.5	-110.64	-83.19	-89.74	-67.48

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL  
Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)

1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

□

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: I-LEGL

Rating Live Load: SU7

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.11	0.00	275.6 (2-Lane)
1.000	999.00	8.77	0.00	339.7 (1-Lane)
1.010	999.00	7.22	0.00	280.0 (2-Lane)
1.010	999.00	8.91	0.00	345.2 (1-Lane)
1.100	244.34	7.09	0.00	274.8 (2-Lane)
1.100	301.23	8.74	0.00	338.8 (1-Lane)
1.200	45.21	4.72	0.00	182.8 (2-Lane)
1.200	55.74	5.82	0.00	225.4 (1-Lane)
1.300	23.06	6.01	0.00	233.1 (2-Lane)
1.300	28.42	7.42	0.00	287.4 (1-Lane)
1.400	14.79	7.81	0.00	302.7 (2-Lane)
1.400	18.23	9.63	0.00	373.2 (1-Lane)
1.500	10.47	10.47	0.00	405.7 (2-Lane)
1.500	12.91	12.91	0.00	500.1 (1-Lane)
1.600	7.81	14.79	0.00	302.7 (2-Lane)
1.600	9.63	18.23	0.00	373.2 (1-Lane)
1.700	6.01	23.06	0.00	233.1 (2-Lane)
1.700	7.42	28.42	0.00	287.4 (1-Lane)
1.800	4.72	45.21	0.00	182.8 (2-Lane)
1.800	5.82	55.74	0.00	225.4 (1-Lane)
1.900	7.09	244.34	0.00	274.8 (2-Lane)
1.900	8.74	301.23	0.00	338.8 (1-Lane)
2.000	7.11	999.00	0.00	275.6 (2-Lane)
2.000	8.77	999.00	0.00	339.7 (1-Lane)

□

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEG  
Rating Live Load: SU7

Gamma	DC		DW		(2-Lane) LL		(1-Lane) LL	
	1.00		1.00		1.30		1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00	0.00	0.00
1.010	241.8	46.8	130.46 R	98.09	86.58 R	65.10	586.55	1047.18
1.100	2417.7	425.3	1175.44 R	883.79	780.11 R	586.55	1381.89	1574.52
1.200	4314.7	756.1	2098.53 R	1577.84	1392.75 R	1047.18	1637.19	1574.52
1.300	5675.4	992.4	2769.29 R	2082.17	1837.91 R	1381.89	1574.52	1574.52
1.400	6491.9	1134.2	3155.32 R	2372.42	2094.11 R	1574.52	1574.52	1574.52
1.500	6764.0	1181.5	3280.91 R	2466.85	2177.47 R	1637.19	1574.52	1574.52
1.600	6491.9	1134.2	3155.32 R	2372.42	2094.11 R	1574.52	1574.52	1574.52
1.700	5675.4	992.4	2769.29 R	2082.17	1837.91 R	1381.89	1574.52	1574.52
1.800	4314.7	756.1	2098.53 R	1577.84	1392.75 R	1047.18	1574.52	1574.52
1.900	2417.7	425.3	1175.44 R	883.79	780.11 R	586.55	1574.52	1574.52
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00	1574.52	1574.52

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEGL  
Rating Live Load:Rating Type: SU7  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G03

Rating Type: II-LEGL  
Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	418.93	999.00	97.50	999.00	0.00	999.0 (2-Lane)
1.010	631.22	999.00	146.91	999.00	0.00	999.0 (1-Lane)
1.100	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.100	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
1.200	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.200	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.300	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.300	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.400	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.400	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.500	7.70	999.00	2.52	999.00	0.00	97.5 (2-Lane)
1.500	11.60	999.00	3.79	999.00	0.00	147.0 (1-Lane)
1.600	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.600	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.700	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.700	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.800	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.800	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.900	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.900	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## BRIDGE / MEMBER DATA

Bridge ID 7777777\_20120905cy01\_01of01

NBI ID 7777-777

Feature Intersected Road

Material of Construction CSC  
 Year of Construction 2012  
 Roadway width 0.000  
 Number of Spans 1

Live Load Distribution Factor 1.67

Condition Factor: 1.000  
 System Factor: 1.000  
 ADTT: 300

Shear Live Load Dist. Factor 1.911  
 LRFD LLDF Moment

	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
1-lane DF	0.444	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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1-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		Span 1			Span 2			Span 3	
	R1	R2	R3	R1	R2	R3	R1	R2	R3
2-lane DF	0.669	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

LRFD LLDF Shear									
		Span 1			Span 2			Span 3	
	R1	R2	R3	R1	R2	R3	R1	R2	R3
1-lane DF	0.786	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		Span 1			Span 2			Span 3	
	R1	R2	R3	R1	R2	R3	R1	R2	R3
2-lane DF	0.969	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Comments:

Member ID G04 01-IG004  
Symmetry:

Span Length: Span 1 160.100 Span 2 0.000 Span 3 0.000 Span 4 0.000 Span 5 0.000

Range Length -- Non-Composite:							
Span No.	Range No.	Range Length	Section Left	Section Right	Section Variation	Hinge Location No. 1	Hinge Location No. 2
1	1	30.000	1	0		0.0	0.0
1	2	100.100	2	0		0.0	0.0
1	3	30.000	1	0		0.0	0.0

Range Length -- Composite:			
Span No.	Range No.	Range Length	Composite Code
1	1	160.100	C

Superimposed Dead Load:						
Span No.	Load Type	Dist. from Left Supp.	Distributed Load (lbs/ft)		Length	Concentrated Load (kips)
1	W	0.000	295.0	295.0	160.100	0.0
1	Z	0.000	127.0	127.0	160.100	0.0

NOTE: All distances are shown in decimal feet, moments are shown in foot-kips, and shears are shown in kips. Section and section properties are shown as: in., in.\*\*2, in.\*\*3, and in.\*\*4.

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#### SECTION DATA

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Span	Height	Web Depth	Web Thk.	Effective width	Slab Thk.	Fy
(in.)	(in.)	(in.)	(in.)	(in.)	(in.)	(ksi)
1.000	68.58	66.00	0.63	110.3	9.0	50.
1.010	68.58	66.00	0.63	110.3	9.0	50.
1.100	68.58	66.00	0.63	110.3	9.0	50.
1.200	69.74	66.00	0.63	110.3	9.0	50.
1.300	69.74	66.00	0.63	110.3	9.0	50.
1.400	69.74	66.00	0.63	110.3	9.0	50.
1.500	69.74	66.00	0.63	110.3	9.0	50.
1.600	69.74	66.00	0.63	110.3	9.0	50.
1.700	69.74	66.00	0.63	110.3	9.0	50.

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1.800	69.74	66.00	0.63	110.3	9.0	50.
1.900	68.58	66.00	0.63	110.3	9.0	50.
2.000	68.58	66.00	0.63	110.3	9.0	50.

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SECTION STRENGTH

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Span	Section Gross	Area Net	Neutral Top	Axis Bott.	Moment +Bend	of Inertia -Bend	Section Modulus			
							+Bend Top	Bott.	-Bend Top	Bott.
1.000	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.010	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.100	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.200	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.300	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.400	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.500	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.600	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.700	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.800	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.900	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
2.000	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0

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SECTION STRENGTH (N=N)

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Span	Section Gross	Area Net	Neutral Top	Axis Bott.	Moment +Bend	of Inertia -Bend	Section Modulus			
							+Bend Top	Bott.	-Bend Top	Bott.
1.000	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
1.010	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
1.100	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
1.200	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.300	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.400	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.500	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.600	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.700	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.800	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.900	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
2.000	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0

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SECTION STRENGTH (N=3N)

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Span	Section Gross	Area Net	Neutral Top	Axis Bott.	Moment +Bend	of Inertia -Bend	Section Modulus			
							+Bend Top	Bott.	-Bend Top	Bott.
1.000	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
1.010	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
1.100	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
1.200	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8



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1.300	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.400	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.500	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.600	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.700	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.800	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.900	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
2.000	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: HL93

Gamma	DC		DW		(2-Lane) LL		(1-Lane) LL			
	1.25		1.25		1.75		1.75			
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										
1.010	241.8	46.8	262.30 R	0.00	220.80	0.00	174.08 R	0.00	146.54	
0.00										
1.100	2417.7	425.3	2375.02 R	0.00	2000.16	0.00	1576.24 R	0.00	1327.46	
0.00										
1.200	4314.7	756.1	4199.00 R	0.00	3538.36	0.00	2786.78 R	0.00	2348.33	
0.00										
1.300	5675.4	992.4	5471.94 R	0.00	4614.60	0.00	3631.60 R	0.00	3062.60	
0.00										
1.400	6491.9	1134.2	6228.74 R	0.00	5255.09	0.00	4133.87 R	0.00	3487.68	
0.00										
1.500	6764.0	1181.5	6451.94 R	0.00	5446.74	0.00	4282.00 R	0.00	3614.87	
0.00										
1.600	6491.9	1134.2	6228.74 R	0.00	5255.09	0.00	4133.87 R	0.00	3487.68	
0.00										
1.700	5675.4	992.4	5471.94 R	0.00	4614.60	0.00	3631.60 R	0.00	3062.60	
0.00										
1.800	4314.7	756.1	4199.00 R	0.00	3538.36	0.00	2786.78 R	0.00	2348.33	
0.00										
1.900	2417.7	425.3	2375.01 R	0.00	2000.16	0.00	1576.24 R	0.00	1327.46	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: HL93

Span	Moment Resistance		Available Resistance for LL+I					
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.

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1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.4	-12222.4B	11797.6	11797.6	-20167.9	-20167.9
1.600	19743.0C	19743.0	-11839.3	-11839.3B	12117.0	12117.0	-19465.4	-19465.4
1.700	19743.0C	19743.0	-11839.3	-11839.3B	13075.2	13075.2	-18507.2	-18507.2
1.800	19743.0C	19743.0	-13020.4	-13020.4B	14672.1	14672.1	-18091.3	-18091.3
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: HL93

Moment

Span	top +bend	Rating fiber -bend	Factor	bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)
1.010	61.46	999.00		61.46	999.00	0.00	999.0 (2-Lane)
1.010	92.61	999.00		92.61	999.00	0.00	999.0 (1-Lane)
1.100	5.71	999.00		5.71	999.00	0.00	205.6 (2-Lane)
1.100	8.61	999.00		8.61	999.00	0.00	309.8 (1-Lane)
1.200	3.49	999.00		3.49	999.00	0.00	125.8 (2-Lane)
1.200	5.26	999.00		5.26	999.00	0.00	189.5 (1-Lane)
1.300	2.39	999.00		2.39	999.00	0.00	86.0 (2-Lane)
1.300	3.60	999.00		3.60	999.00	0.00	129.6 (1-Lane)
1.400	1.95	999.00		1.95	999.00	0.00	70.0 (2-Lane)
1.400	2.93	999.00		2.93	999.00	0.00	105.5 (1-Lane)
1.500	1.83	999.00		1.83	999.00	0.00	65.8 (2-Lane)
1.500	2.76	999.00		2.76	999.00	0.00	99.2 (1-Lane)
1.600	1.95	999.00		1.95	999.00	0.00	70.0 (2-Lane)
1.600	2.93	999.00		2.93	999.00	0.00	105.5 (1-Lane)
1.700	2.39	999.00		2.39	999.00	0.00	86.0 (2-Lane)
1.700	3.60	999.00		3.60	999.00	0.00	129.6 (1-Lane)
1.800	3.49	999.00		3.49	999.00	0.00	125.8 (2-Lane)
1.800	5.26	999.00		5.26	999.00	0.00	189.5 (1-Lane)
1.900	5.71	999.00		5.71	999.00	0.00	205.6 (2-Lane)
1.900	8.61	999.00		8.61	999.00	0.00	309.8 (1-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	239.79	0.00	201.85	0.00	194.51	0.00	163.73
1.010 0.00	164.0	28.9	236.44	0.00	198.90	0.00	191.79	0.00	161.34
1.100 0.00	134.8	23.6	207.05	0.00	173.14	0.00	167.95	0.00	140.44
1.200 0.00	102.0	17.7	176.04	0.00	146.16	0.00	142.80	0.00	118.56
1.300 0.00	68.0	11.8	146.77	0.00	120.92	0.00	119.05	0.00	98.08
1.400 0.00	34.0	5.9	119.24	0.00	97.41	0.00	96.72	0.00	79.02
1.500 0.00	0.0	0.0	93.44	0.00	75.65	0.00	75.80	0.00	61.36
1.600 0.00	-34.0	-5.9	-119.24	0.00	-97.41	0.00	-96.72	0.00	-79.02
1.700 0.00	-68.0	-11.8	-146.77	0.00	-120.92	0.00	-119.05	0.00	-98.08
1.800 0.00	-102.0	-17.7	-176.04	0.00	-146.16	0.00	-142.80	0.00	-118.56
1.900 0.00	-134.8	-23.6	-207.05	0.00	-173.14	0.00	-167.95	0.00	-140.44
2.000 0.00	-167.2	-29.5	-239.79	0.00	-201.85	0.00	-194.51	0.00	-163.73

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: HL93

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)

1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV

Rating Live Load: HL93

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	3.28	0.00	118.1 (2-Lane)
1.000	999.00	4.05	0.00	145.6 (1-Lane)
1.010	999.00	3.34	0.00	120.4 (2-Lane)
1.010	999.00	4.12	0.00	148.4 (1-Lane)
1.100	102.96	3.38	0.00	121.6 (2-Lane)
1.100	126.94	4.16	0.00	149.9 (1-Lane)
1.200	24.46	2.32	0.00	83.5 (2-Lane)
1.200	30.15	2.86	0.00	103.0 (1-Lane)
1.300	12.91	3.05	0.00	109.9 (2-Lane)
1.300	15.92	3.77	0.00	135.5 (1-Lane)
1.400	8.19	4.09	0.00	147.4 (2-Lane)
1.400	10.09	5.05	0.00	181.7 (1-Lane)
1.500	5.65	5.65	0.00	203.4 (2-Lane)
1.500	6.97	6.97	0.00	250.8 (1-Lane)
1.600	4.09	8.19	0.00	147.4 (2-Lane)
1.600	5.05	10.09	0.00	181.7 (1-Lane)
1.700	3.05	12.91	0.00	109.9 (2-Lane)
1.700	3.77	15.92	0.00	135.5 (1-Lane)
1.800	2.32	24.46	0.00	83.5 (2-Lane)
1.800	2.86	30.15	0.00	103.0 (1-Lane)
1.900	3.38	94.63	0.00	121.6 (2-Lane)
1.900	4.16	116.67	0.00	149.9 (1-Lane)
2.000	3.28	999.00	0.00	118.1 (2-Lane)
2.000	4.05	999.00	0.00	145.6 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D.

G04

Rating Type:

II-INV

Rating Live Load:

HL93

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	193.4	37.4	194.85 R	0.00	164.03	0.00	129.32 R	0.00	108.86
1.100 0.00	1934.1	340.3	1764.30 R	0.00	1485.83	0.00	1170.92 R	0.00	986.11
1.200 0.00	3451.8	604.9	3119.25 R	0.00	2628.50	0.00	2070.18 R	0.00	1744.47
1.300 0.00	4540.4	794.0	4064.87 R	0.00	3427.99	0.00	2697.76 R	0.00	2275.08
1.400 0.00	5193.5	907.4	4627.06 R	0.00	3903.78	0.00	3070.88 R	0.00	2590.85
1.500 0.00	5411.2	945.2	4792.87 R	0.00	4046.15	0.00	3180.92 R	0.00	2685.34
1.600 0.00	5193.5	907.4	4627.06 R	0.00	3903.78	0.00	3070.88 R	0.00	2590.85
1.700 0.00	4540.4	794.0	4064.87 R	0.00	3427.98	0.00	2697.76 R	0.00	2275.08
1.800 0.00	3451.8	604.9	3119.25 R	0.00	2628.50	0.00	2070.18 R	0.00	1744.47
1.900 0.00	1934.1	340.3	1764.30 R	0.00	1485.83	0.00	1170.92 R	0.00	986.11
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 624

## SERVICE RESISTANCE REPORT

Structure I. D.

7777777\_20120905cy01\_01of01

Member I. D.

G04

Rating Type:

II-INV

Rating Live Load:

Rating Type:

HL93

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 625

## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: HL93

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	280.49	999.00	65.28	999.00	0.00	999.0 (2-Lane)
1.010	422.63	999.00	98.36	999.00	0.00	999.0 (1-Lane)
1.100	23.12	999.00	5.66	999.00	0.00	203.6 (2-Lane)
1.100	34.83	999.00	8.52	999.00	0.00	306.7 (1-Lane)
1.200	11.83	999.00	3.59	999.00	0.00	129.1 (2-Lane)
1.200	17.82	999.00	5.40	999.00	0.00	194.5 (1-Lane)
1.300	7.49	999.00	2.35	999.00	0.00	84.7 (2-Lane)
1.300	11.28	999.00	3.54	999.00	0.00	127.6 (1-Lane)
1.400	5.74	999.00	1.86	999.00	0.00	66.8 (2-Lane)
1.400	8.65	999.00	2.80	999.00	0.00	100.6 (1-Lane)
1.500	5.27	999.00	1.72	999.00	0.00	62.0 (2-Lane)
1.500	7.94	999.00	2.60	999.00	0.00	93.5 (1-Lane)
1.600	5.74	999.00	1.86	999.00	0.00	66.8 (2-Lane)
1.600	8.65	999.00	2.80	999.00	0.00	100.6 (1-Lane)
1.700	7.49	999.00	2.35	999.00	0.00	84.7 (2-Lane)
1.700	11.28	999.00	3.54	999.00	0.00	127.6 (1-Lane)
1.800	11.83	999.00	3.59	999.00	0.00	129.1 (2-Lane)
1.800	17.82	999.00	5.40	999.00	0.00	194.5 (1-Lane)
1.900	23.12	999.00	5.66	999.00	0.00	203.6 (2-Lane)
1.900	34.83	999.00	8.52	999.00	0.00	306.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: HS20

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	LL	LL	LL
	1.25	1.25	1.75		1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o

7777777_20120905cy01_01of01_FlexuralRpt.txt									
Lane	Dead Load		Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	167.23 R	0.00	125.74	0.00	110.99 R	0.00	83.45
0.00									
1.100	2417.7	425.3	1510.77 R	0.00	1135.92	0.00	1002.66 R	0.00	753.88
0.00									
1.200	4314.7	756.1	2662.56 R	0.00	2001.93	0.00	1767.08 R	0.00	1328.63
0.00									
1.300	5675.4	992.4	3455.37 R	0.00	2598.03	0.00	2293.25 R	0.00	1724.25
0.00									
1.400	6491.9	1134.2	3924.09 R	0.00	2950.44	0.00	2604.33 R	0.00	1958.14
0.00									
1.500	6764.0	1181.5	4051.26 R	0.00	3046.06	0.00	2688.73 R	0.00	2021.60
0.00									
1.600	6491.9	1134.2	3924.09 R	0.00	2950.44	0.00	2604.33 R	0.00	1958.14
0.00									
1.700	5675.4	992.4	3455.37 R	0.00	2598.03	0.00	2293.25 R	0.00	1724.25
0.00									
1.800	4314.7	756.1	2662.56 R	0.00	2001.93	0.00	1767.08 R	0.00	1328.63
0.00									
1.900	2417.7	425.3	1510.77 R	0.00	1135.92	0.00	1002.66 R	0.00	753.88
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 627

STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: HS20

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.4	-12222.4B	11797.6	11797.6	-20167.9	-20167.9
1.600	19743.0C	19743.0	-11839.3	-11839.3B	12117.0	12117.0	-19465.4	-19465.4
1.700	19743.0C	19743.0	-11839.3	-11839.3B	13075.2	13075.2	-18507.2	-18507.2
1.800	19743.0C	19743.0	-13020.4	-13020.4B	14672.1	14672.1	-18091.3	-18091.3
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: HS20

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	96.40	999.00	96.40	999.00	999.00	999.0 (2-Lane)
1.010	145.25	999.00	145.25	999.00	999.00	999.0 (1-Lane)
1.100	8.98	999.00	8.98	999.00	179.60	323.3 (2-Lane)
1.100	13.53	999.00	13.53	999.00	270.61	487.1 (1-Lane)
1.200	5.51	999.00	5.51	999.00	110.21	198.4 (2-Lane)
1.200	8.30	999.00	8.30	999.00	166.06	298.9 (1-Lane)
1.300	3.78	999.00	3.78	999.00	75.68	136.2 (2-Lane)
1.300	5.70	999.00	5.70	999.00	114.03	205.3 (1-Lane)
1.400	3.09	999.00	3.09	999.00	61.76	111.2 (2-Lane)
1.400	4.65	999.00	4.65	999.00	93.05	167.5 (1-Lane)
1.500	2.91	999.00	2.91	999.00	58.24	104.8 (2-Lane)
1.500	4.39	999.00	4.39	999.00	87.76	158.0 (1-Lane)
1.600	3.09	999.00	3.09	999.00	61.76	111.2 (2-Lane)
1.600	4.65	999.00	4.65	999.00	93.05	167.5 (1-Lane)
1.700	3.78	999.00	3.78	999.00	75.68	136.2 (2-Lane)
1.700	5.70	999.00	5.70	999.00	114.03	205.3 (1-Lane)
1.800	5.51	999.00	5.51	999.00	110.21	198.4 (2-Lane)
1.800	8.30	999.00	8.30	999.00	166.06	298.9 (1-Lane)
1.900	8.98	999.00	8.98	999.00	179.60	323.3 (2-Lane)
1.900	13.53	999.00	13.53	999.00	270.61	487.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	152.92	0.00	114.98	0.00	124.04	0.00	93.26
0.00									
1.010	164.0	28.9	151.29	0.00	113.76	0.00	122.72	0.00	92.27
0.00									
1.100	134.8	23.6	136.68	0.00	102.77	0.00	110.87	0.00	83.36
0.00									
1.200	102.0	17.7	120.44	0.00	90.56	0.00	97.70	0.00	73.46
0.00									
1.300	68.0	11.8	104.20	0.00	78.35	0.00	84.52	0.00	63.55
0.00									
1.400	34.0	5.9	87.96	0.00	66.14	0.00	71.35	0.00	53.65



0.00									
1.500	0.0	0.0	71.73	0.00	53.93	0.00	58.18	0.00	43.74
0.00									
1.600	-34.0	-5.9	-87.96	0.00	-66.14	0.00	-71.35	0.00	-53.65
0.00									
1.700	-68.0	-11.8	-104.20	0.00	-78.35	0.00	-84.52	0.00	-63.55
0.00									
1.800	-102.0	-17.7	-120.44	0.00	-90.56	0.00	-97.70	0.00	-73.46
0.00									
1.900	-134.8	-23.6	-136.68	0.00	-102.77	0.00	-110.87	0.00	-83.36
0.00									
2.000	-167.2	-29.5	-152.92	0.00	-114.98	0.00	-124.04	0.00	-93.26
0.00									

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV

Rating Live Load: HS20

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV

Rating Live Load: HS20

## Shear

Span Rating Factor Rating Load

	(-)	(+)		
1.000	999.00	5.14	102.91	185.2 (2-Lane)
1.000	999.00	6.34	126.87	228.4 (1-Lane)
1.010	999.00	5.23	104.52	188.1 (2-Lane)
1.010	999.00	6.44	128.85	231.9 (1-Lane)
1.100	125.08	5.12	102.31	184.2 (2-Lane)
1.100	154.20	6.31	126.14	227.0 (1-Lane)
1.200	28.15	3.39	67.81	122.1 (2-Lane)
1.200	34.71	4.18	83.60	150.5 (1-Lane)
1.300	15.49	4.30	86.04	154.9 (2-Lane)
1.300	19.09	5.30	106.07	190.9 (1-Lane)
1.400	10.24	5.55	110.99	199.8 (2-Lane)
1.400	12.62	6.84	136.83	246.3 (1-Lane)
1.500	7.36	7.36	147.24	265.0 (2-Lane)
1.500	9.08	9.08	181.53	326.7 (1-Lane)
1.600	5.55	10.24	110.99	199.8 (2-Lane)
1.600	6.84	12.62	136.83	246.3 (1-Lane)
1.700	4.30	15.49	86.04	154.9 (2-Lane)
1.700	5.30	19.09	106.07	190.9 (1-Lane)
1.800	3.39	28.15	67.81	122.1 (2-Lane)
1.800	4.18	34.71	83.60	150.5 (1-Lane)
1.900	5.12	125.08	102.31	184.2 (2-Lane)
1.900	6.31	154.20	126.14	227.0 (1-Lane)
2.000	5.14	999.00	102.91	185.2 (2-Lane)
2.000	6.34	999.00	126.87	228.4 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 632  
SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: HS20

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	124.23 R	0.00	93.41	82.45 R
0.00						
1.100	1934.1	340.3	1122.29 R	0.00	843.82	744.84 R
0.00						
1.200	3451.8	604.9	1977.90 R	0.00	1487.15	1312.69 R
0.00						
1.300	4540.4	794.0	2566.85 R	0.00	1929.96	1703.56 R
0.00						
1.400	5193.5	907.4	2915.03 R	0.00	2191.76	1934.64 R
0.00						
1.500	5411.2	945.2	3009.50 R	0.00	2262.79	1997.34 R
0.00						
1.600	5193.5	907.4	2915.03 R	0.00	2191.76	1934.64 R

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0.00									
1.700	4540.4	794.0	2566.85 R	0.00	1929.96	0.00	1703.56 R	0.00	1280.87
0.00									
1.800	3451.8	604.9	1977.90 R	0.00	1487.15	0.00	1312.69 R	0.00	986.98
0.00									
1.900	1934.1	340.3	1122.29 R	0.00	843.82	0.00	744.84 R	0.00	560.03
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load:

Rating Type: HS20

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: HS20

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	439.95	999.00	102.39	999.00	999.00	999.0 (2-Lane)
1.010	662.89	999.00	154.28	999.00	999.00	999.0 (1-Lane)
1.100	36.34	999.00	8.89	999.00	177.79	320.0 (2-Lane)
1.100	54.75	999.00	13.39	999.00	267.88	482.2 (1-Lane)

1.200	18.65	999.00	5.66	999.00	113.09	203.6 (2-Lane)
1.200	28.10	999.00	8.52	999.00	170.40	306.7 (1-Lane)
1.300	11.86	999.00	3.72	999.00	74.48	134.1 (2-Lane)
1.300	17.86	999.00	5.61	999.00	112.22	202.0 (1-Lane)
1.400	9.11	999.00	2.94	999.00	58.89	106.0 (2-Lane)
1.400	13.73	999.00	4.44	999.00	88.73	159.7 (1-Lane)
1.500	8.39	999.00	2.74	999.00	54.88	98.8 (2-Lane)
1.500	12.65	999.00	4.13	999.00	82.69	148.8 (1-Lane)
1.600	9.11	999.00	2.94	999.00	58.89	106.0 (2-Lane)
1.600	13.73	999.00	4.44	999.00	88.73	159.7 (1-Lane)
1.700	11.86	999.00	3.72	999.00	74.48	134.1 (2-Lane)
1.700	17.86	999.00	5.61	999.00	112.22	202.0 (1-Lane)
1.800	18.65	999.00	5.66	999.00	113.09	203.6 (2-Lane)
1.800	28.10	999.00	8.52	999.00	170.40	306.7 (1-Lane)
1.900	36.34	999.00	8.89	999.00	177.79	320.0 (2-Lane)
1.900	54.75	999.00	13.39	999.00	267.89	482.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	117.61 R	0.00	88.43	0.00
0.00						
1.100	2417.7	425.3	1063.89 R	0.00	799.92	0.00
0.00						
1.200	4314.7	756.1	1878.48 R	0.00	1412.39	0.00
0.00						
1.300	5675.4	992.4	2443.79 R	0.00	1837.43	0.00
0.00						
1.400	6491.9	1134.2	2778.49 R	0.00	2089.09	0.00
0.00						
1.500	6764.0	1181.5	2876.35 R	0.00	2162.67	0.00
0.00						
1.600	6491.9	1134.2	2778.49 R	0.00	2089.09	0.00
0.00						
1.700	5675.4	992.4	2443.79 R	0.00	1837.43	0.00
0.00						
1.800	4314.7	756.1	1878.48 R	0.00	1412.39	0.00
0.00						
1.900	2417.7	425.3	1063.89 R	0.00	799.91	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: 3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12210.2	-12210.2B	11797.6	11797.6	-20155.7	-20155.7
1.600	19743.0C	19743.0	-11831.3	-11831.3B	12117.0	12117.0	-19457.4	-19457.4
1.700	19743.0C	19743.0	-11831.3	-11831.3B	13075.2	13075.2	-18499.2	-18499.2
1.800	19743.0C	19743.0	-13007.0	-13007.0B	14672.1	14672.1	-18077.9	-18077.9
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: 3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	137.07	999.00	137.07	999.00	0.00	999.0 (2-Lane)
1.010	206.54	999.00	206.54	999.00	0.00	999.0 (1-Lane)
1.100	12.75	999.00	12.75	999.00	0.00	318.8 (2-Lane)
1.100	19.21	999.00	19.21	999.00	0.00	480.3 (1-Lane)
1.200	7.81	999.00	7.81	999.00	0.00	195.3 (2-Lane)
1.200	11.77	999.00	11.77	999.00	0.00	294.2 (1-Lane)
1.300	5.35	999.00	5.35	999.00	0.00	133.8 (2-Lane)
1.300	8.06	999.00	8.06	999.00	0.00	201.5 (1-Lane)
1.400	4.36	999.00	4.36	999.00	0.00	109.0 (2-Lane)
1.400	6.57	999.00	6.57	999.00	0.00	164.3 (1-Lane)
1.500	4.10	999.00	4.10	999.00	0.00	102.5 (2-Lane)
1.500	6.18	999.00	6.18	999.00	0.00	154.5 (1-Lane)
1.600	4.36	999.00	4.36	999.00	0.00	109.0 (2-Lane)
1.600	6.57	999.00	6.57	999.00	0.00	164.3 (1-Lane)

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1.700	5.35	999.00	5.35	999.00	0.00	133.8 (2-Lane)
1.700	8.06	999.00	8.06	999.00	0.00	201.5 (1-Lane)
1.800	7.81	999.00	7.81	999.00	0.00	195.3 (2-Lane)
1.800	11.77	999.00	11.77	999.00	0.00	294.2 (1-Lane)
1.900	12.75	999.00	12.75	999.00	0.00	318.8 (2-Lane)
1.900	19.21	999.00	19.21	999.00	0.00	480.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV

Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	107.53	0.00	80.85	0.00	87.22	0.00	65.58
1.010 0.00	164.0	28.9	106.40	0.00	80.00	0.00	86.31	0.00	64.89
1.100 0.00	134.8	23.6	96.25	0.00	72.37	0.00	78.07	0.00	58.70
1.200 0.00	102.0	17.7	84.97	0.00	63.89	0.00	68.93	0.00	51.82
1.300 0.00	68.0	11.8	73.70	0.00	55.41	0.00	59.78	0.00	44.95
1.400 0.00	34.0	5.9	62.42	0.00	46.93	0.00	50.63	0.00	38.07
1.500 0.00	0.0	0.0	51.14	0.00	38.45	0.00	41.48	0.00	31.19
1.600 0.00	-34.0	-5.9	-62.42	0.00	-46.93	0.00	-50.63	0.00	-38.07
1.700 0.00	-68.0	-11.8	-73.70	0.00	-55.41	0.00	-59.78	0.00	-44.95
1.800 0.00	-102.0	-17.7	-84.97	0.00	-63.89	0.00	-68.93	0.00	-51.82
1.900 0.00	-134.8	-23.6	-96.25	0.00	-72.37	0.00	-78.07	0.00	-58.70
2.000 0.00	-167.2	-29.5	-107.53	0.00	-80.85	0.00	-87.22	0.00	-65.58

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV

Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: 3

#### Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.32	0.00	182.9 (2-Lane)
1.000	999.00	9.02	0.00	225.5 (1-Lane)
1.010	999.00	7.43	0.00	185.8 (2-Lane)
1.010	999.00	9.16	0.00	229.0 (1-Lane)
1.100	151.42	7.26	0.00	181.6 (2-Lane)
1.100	186.67	8.96	0.00	223.9 (1-Lane)
1.200	37.42	4.81	0.00	120.1 (2-Lane)
1.200	46.13	5.93	0.00	148.1 (1-Lane)
1.300	21.26	6.08	0.00	152.1 (2-Lane)
1.300	26.21	7.50	0.00	187.5 (1-Lane)
1.400	14.25	7.82	0.00	195.5 (2-Lane)
1.400	17.56	9.64	0.00	241.0 (1-Lane)
1.500	10.32	10.32	0.00	258.1 (2-Lane)
1.500	12.73	12.73	0.00	318.2 (1-Lane)
1.600	7.82	14.25	0.00	195.5 (2-Lane)
1.600	9.64	17.56	0.00	241.0 (1-Lane)
1.700	6.08	21.26	0.00	152.1 (2-Lane)
1.700	7.50	26.21	0.00	187.5 (1-Lane)

1.800	4.81	37.42	0.00	120.1 (2-Lane)
1.800	5.93	46.13	0.00	148.1 (1-Lane)
1.900	7.26	151.42	0.00	181.6 (2-Lane)
1.900	8.96	186.67	0.00	223.9 (1-Lane)
2.000	7.32	999.00	0.00	182.9 (2-Lane)
2.000	9.02	999.00	0.00	225.5 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: 3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00 0.00
0.00						
1.010	193.4	37.4	87.36 R 0.00	65.69 0.00	57.98 R 0.00	43.60
0.00						
1.100	1934.1	340.3	790.32 R 0.00	594.22 0.00	524.51 R 0.00	394.37
0.00						
1.200	3451.8	604.9	1395.44 R 0.00	1049.21 0.00	926.12 R 0.00	696.33
0.00						
1.300	4540.4	794.0	1815.38 R 0.00	1364.95 0.00	1204.83 R 0.00	905.89
0.00						
1.400	5193.5	907.4	2064.02 R 0.00	1551.89 0.00	1369.84 R 0.00	1029.96
0.00						
1.500	5411.2	945.2	2136.72 R 0.00	1606.55 0.00	1418.09 R 0.00	1066.23
0.00						
1.600	5193.5	907.4	2064.02 R 0.00	1551.89 0.00	1369.84 R 0.00	1029.96
0.00						
1.700	4540.4	794.0	1815.38 R 0.00	1364.95 0.00	1204.83 R 0.00	905.89
0.00						
1.800	3451.8	604.9	1395.44 R 0.00	1049.21 0.00	926.12 R 0.00	696.33
0.00						
1.900	1934.1	340.3	790.32 R 0.00	594.22 0.00	524.51 R 0.00	394.37
0.00						
2.000	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00 0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: 3

Rating Type: 3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending	Negative Bending	Positive Bending	Negative Bending	Positive Bending	Negative Bending	Positive Bending	Negative Bending
	Top	Bott.	Top	Bott.	Top	Bott.	Top	Bott.



1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	625.58	999.00	145.60	999.00	0.00	999.0 (2-Lane)
1.010	942.60	999.00	219.38	999.00	0.00	999.0 (1-Lane)
1.100	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.100	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
1.200	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.200	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.300	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.300	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.400	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.400	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.500	11.82	999.00	3.87	999.00	0.00	96.6 (2-Lane)
1.500	17.81	999.00	5.82	999.00	0.00	145.6 (1-Lane)
1.600	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.600	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.700	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.700	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.800	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.800	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.900	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.900	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	173.90 R	0.00	130.75	0.00
0.00						
1.100	2417.7	425.3	1559.46 R	0.00	1172.53	0.00
0.00						
1.200	4314.7	756.1	2720.06 R	0.00	2045.16	0.00
0.00						
1.300	5675.4	992.4	3567.75 R	0.00	2682.52	0.00
0.00						
1.400	6491.9	1134.2	4046.46 R	0.00	3042.45	0.00
0.00						
1.500	6764.0	1181.5	4157.45 R	0.00	3125.90	0.00
0.00						
1.600	6491.9	1134.2	4046.46 R	0.00	3042.45	0.00
0.00						
1.700	5675.4	992.4	3567.75 R	0.00	2682.52	0.00
0.00						
1.800	4314.7	756.1	2720.06 R	0.00	2045.16	0.00
0.00						
1.900	2417.7	425.3	1559.46 R	0.00	1172.53	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12192.1	-12192.1B	11797.6	11797.6	-20137.6	-20137.6
1.600	19743.0C	19743.0	-11817.3	-11817.3B	12117.0	12117.0	-19443.3	-19443.3
1.700	19743.0C	19743.0	-11817.3	-11817.3B	13075.2	13075.2	-18485.1	-18485.1
1.800	19743.0C	19743.0	-13007.5	-13007.5B	14672.1	14672.1	-18078.3	-18078.3
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4

2.000 16409.4C 16409.4 -9908.4 -9908.4B 16409.4 16409.4 -9908.4 -9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: 3S2

## Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	92.70	999.00	92.70	999.00	0.00	999.0 (2-Lane)
1.010	139.68	999.00	139.68	999.00	0.00	999.0 (1-Lane)
1.100	8.70	999.00	8.70	999.00	0.00	348.0 (2-Lane)
1.100	13.11	999.00	13.11	999.00	0.00	524.3 (1-Lane)
1.200	5.39	999.00	5.39	999.00	0.00	215.8 (2-Lane)
1.200	8.13	999.00	8.13	999.00	0.00	325.1 (1-Lane)
1.300	3.66	999.00	3.66	999.00	0.00	146.6 (2-Lane)
1.300	5.52	999.00	5.52	999.00	0.00	220.9 (1-Lane)
1.400	2.99	999.00	2.99	999.00	0.00	119.8 (2-Lane)
1.400	4.51	999.00	4.51	999.00	0.00	180.5 (1-Lane)
1.500	2.84	999.00	2.84	999.00	0.00	113.5 (2-Lane)
1.500	4.28	999.00	4.28	999.00	0.00	171.0 (1-Lane)
1.600	2.99	999.00	2.99	999.00	0.00	119.8 (2-Lane)
1.600	4.51	999.00	4.51	999.00	0.00	180.5 (1-Lane)
1.700	3.66	999.00	3.66	999.00	0.00	146.6 (2-Lane)
1.700	5.52	999.00	5.52	999.00	0.00	220.9 (1-Lane)
1.800	5.39	999.00	5.39	999.00	0.00	215.8 (2-Lane)
1.800	8.13	999.00	8.13	999.00	0.00	325.1 (1-Lane)
1.900	8.70	999.00	8.70	999.00	0.00	348.0 (2-Lane)
1.900	13.11	999.00	13.11	999.00	0.00	524.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: 3S2

Gamma DC DW (2-Lane) (1-Lane)  
LL LL

1.25

1.25

1.75

Span w/o impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	159.13	0.00	119.65	0.00
0.00						
1.010	164.0	28.9	157.32	0.00	118.29	0.00
0.00						
1.100	134.8	23.6	141.09	0.00	106.08	0.00
0.00						
1.200	102.0	17.7	123.04	0.00	92.51	0.00
0.00						
1.300	68.0	11.8	105.00	0.00	78.95	0.00
0.00						
1.400	34.0	5.9	86.96	0.00	65.38	0.00
0.00						
1.500	0.0	0.0	68.91	0.00	51.82	0.00
0.00						
1.600	-34.0	-5.9	-86.96	0.00	-65.38	0.00
0.00						
1.700	-68.0	-11.8	-105.00	0.00	-78.95	0.00
0.00						
1.800	-102.0	-17.7	-123.04	0.00	-92.51	0.00
0.00						
1.900	-134.8	-23.6	-141.09	0.00	-106.08	0.00
0.00						
2.000	-167.2	-29.5	-159.13	0.00	-119.65	0.00
0.00						

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: 3S2

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	4.95	0.00	197.8 (2-Lane)
1.000	999.00	6.10	0.00	243.8 (1-Lane)
1.010	999.00	5.03	0.00	201.0 (2-Lane)
1.010	999.00	6.20	0.00	247.8 (1-Lane)
1.100	151.42	4.96	0.00	198.2 (2-Lane)
1.100	186.67	6.11	0.00	244.4 (1-Lane)
1.200	39.73	3.32	0.00	132.8 (2-Lane)
1.200	48.98	4.09	0.00	163.7 (1-Lane)
1.300	18.52	4.27	0.00	170.8 (2-Lane)
1.300	22.83	5.26	0.00	210.5 (1-Lane)
1.400	11.16	5.61	0.00	224.6 (2-Lane)
1.400	13.76	6.92	0.00	276.8 (1-Lane)
1.500	7.66	7.66	0.00	306.5 (2-Lane)
1.500	9.45	9.45	0.00	377.9 (1-Lane)
1.600	5.61	11.16	0.00	224.6 (2-Lane)
1.600	6.92	13.76	0.00	276.8 (1-Lane)
1.700	4.27	18.52	0.00	170.8 (2-Lane)
1.700	5.26	22.83	0.00	210.5 (1-Lane)
1.800	3.32	39.73	0.00	132.8 (2-Lane)
1.800	4.09	48.98	0.00	163.7 (1-Lane)
1.900	4.96	151.42	0.00	198.2 (2-Lane)
1.900	6.11	186.67	0.00	244.4 (1-Lane)
2.000	4.95	999.00	0.00	197.8 (2-Lane)
2.000	6.10	999.00	0.00	243.8 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: 3S2

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
	1.00	1.00	1.30	1.30

Span Dead Load Superimposed Live Load w/impact Live Load w/o impact Live Load w/impact Live Load w/o

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impact

Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	129.18 R	0.00	97.13	0.00	85.73 R	0.00	64.46
0.00									
1.100	1934.1	340.3	1158.46 R	0.00	871.02	0.00	768.84 R	0.00	578.08
0.00									
1.200	3451.8	604.9	2020.62 R	0.00	1519.26	0.00	1341.04 R	0.00	1008.30
0.00									
1.300	4540.4	794.0	2650.33 R	0.00	1992.73	0.00	1758.96 R	0.00	1322.53
0.00									
1.400	5193.5	907.4	3005.94 R	0.00	2260.11	0.00	1994.98 R	0.00	1499.98
0.00									
1.500	5411.2	945.2	3088.39 R	0.00	2322.10	0.00	2049.69 R	0.00	1541.12
0.00									
1.600	5193.5	907.4	3005.94 R	0.00	2260.11	0.00	1994.98 R	0.00	1499.98
0.00									
1.700	4540.4	794.0	2650.33 R	0.00	1992.73	0.00	1758.96 R	0.00	1322.53
0.00									
1.800	3451.8	604.9	2020.62 R	0.00	1519.26	0.00	1341.04 R	0.00	1008.30
0.00									
1.900	1934.1	340.3	1158.46 R	0.00	871.02	0.00	768.84 R	0.00	578.08
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 648

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load:

Rating Type: 3S2  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: 3S2

Span	Rating		Factor		Rating Value	Load Resistance (tons)
	top fiber +bend	fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	423.08	999.00	98.47	999.00	0.00	999.0 (2-Lane)
1.010	637.48	999.00	148.37	999.00	0.00	999.0 (1-Lane)
1.100	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.100	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
1.200	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.200	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.300	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.300	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.400	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.400	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.500	8.18	999.00	2.67	999.00	0.00	107.0 (2-Lane)
1.500	12.32	999.00	4.03	999.00	0.00	161.2 (1-Lane)
1.600	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.600	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.700	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.700	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.800	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.800	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.900	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.900	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

**Structure I. D.** 7777777\_20120905cy01\_01of01

**Member I. D.** **G04**

Rating Type: I-INV  
Rating Live Load: 3-3

Gamma	(2-Lane)				(1-Lane)				
	DC 1.25	DW 1.25	LL 1.75		LL 1.75				
Span impact Lane	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	241.8	46.8	167.67 R	0.00	126.07	0.00	111.28 R	0.00	83.67
1.100 0.00	2417.7	425.3	1497.18 R	0.00	1125.70	0.00	993.64 R	0.00	747.10
1.200 0.00	4314.7	756.1	2607.95 R	0.00	1960.87	0.00	1730.84 R	0.00	1301.38

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1.300	5675.4	992.4	3357.23 R	0.00	2524.23	0.00	2228.11 R	0.00	1675.27
0.00									
1.400	6491.9	1134.2	3807.29 R	0.00	2862.62	0.00	2526.81 R	0.00	1899.86
0.00									
1.500	6764.0	1181.5	3958.14 R	0.00	2976.05	0.00	2626.93 R	0.00	1975.13
0.00									
1.600	6491.9	1134.2	3807.29 R	0.00	2862.62	0.00	2526.81 R	0.00	1899.86
0.00									
1.700	5675.4	992.4	3357.23 R	0.00	2524.23	0.00	2228.11 R	0.00	1675.27
0.00									
1.800	4314.7	756.1	2607.95 R	0.00	1960.87	0.00	1730.84 R	0.00	1301.38
0.00									
1.900	2417.7	425.3	1497.18 R	0.00	1125.70	0.00	993.64 R	0.00	747.10
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12209.5	-12209.5B	11797.6	11797.6	-20155.0	-20155.0
1.600	19743.0C	19743.0	-11834.3	-11834.3B	12117.0	12117.0	-19460.3	-19460.3
1.700	19743.0C	19743.0	-11834.3	-11834.3B	13075.2	13075.2	-18502.1	-18502.1
1.800	19743.0C	19743.0	-12987.6	-12987.6B	14672.1	14672.1	-18058.5	-18058.5
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	96.15	999.00	96.15	999.00	0.00	999.0 (2-Lane)



1.010	144.87	999.00	144.87	999.00	0.00	999.0 (1-Lane)
1.100	9.06	999.00	9.06	999.00	0.00	362.5 (2-Lane)
1.100	13.65	999.00	13.65	999.00	0.00	546.1 (1-Lane)
1.200	5.63	999.00	5.63	999.00	0.00	225.0 (2-Lane)
1.200	8.48	999.00	8.48	999.00	0.00	339.1 (1-Lane)
1.300	3.89	999.00	3.89	999.00	0.00	155.8 (2-Lane)
1.300	5.87	999.00	5.87	999.00	0.00	234.7 (1-Lane)
1.400	3.18	999.00	3.18	999.00	0.00	127.3 (2-Lane)
1.400	4.80	999.00	4.80	999.00	0.00	191.8 (1-Lane)
1.500	2.98	999.00	2.98	999.00	0.00	119.2 (2-Lane)
1.500	4.49	999.00	4.49	999.00	0.00	179.6 (1-Lane)
1.600	3.18	999.00	3.18	999.00	0.00	127.3 (2-Lane)
1.600	4.80	999.00	4.80	999.00	0.00	191.8 (1-Lane)
1.700	3.89	999.00	3.89	999.00	0.00	155.8 (2-Lane)
1.700	5.87	999.00	5.87	999.00	0.00	234.7 (1-Lane)
1.800	5.63	999.00	5.63	999.00	0.00	225.0 (2-Lane)
1.800	8.48	999.00	8.48	999.00	0.00	339.1 (1-Lane)
1.900	9.06	999.00	9.06	999.00	0.00	362.5 (2-Lane)
1.900	13.65	999.00	13.65	999.00	0.00	546.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	153.49	0.00	115.41	0.00
0.00						
1.010	164.0	28.9	151.69	0.00	114.05	0.00
0.00						
1.100	134.8	23.6	135.45	0.00	101.84	0.00
0.00						
1.200	102.0	17.7	117.41	0.00	88.28	0.00
0.00						
1.300	68.0	11.8	99.36	0.00	74.71	0.00
0.00						
1.400	34.0	5.9	81.32	0.00	61.14	0.00
0.00						
1.500	0.0	0.0	63.28	0.00	47.58	0.00
0.00						
1.600	-34.0	-5.9	-81.32	0.00	-61.14	0.00
0.00						
1.700	-68.0	-11.8	-99.36	0.00	-74.71	0.00
0.00						
1.800	-102.0	-17.7	-117.41	0.00	-88.28	0.00
0.00						
1.900	-134.8	-23.6	-135.45	0.00	-101.84	0.00
0.00						

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 2.000 -167.2 -29.5 -153.49 0.00 -115.41 0.00 -124.51 0.00 -93.61  
 0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 654  
 STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G04  
 Rating Type: I-INV  
 Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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 STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G04  
 Rating Type: I-INV  
 Rating Live Load: 3-3

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.13	0.00	205.0 (2-Lane)
1.000	999.00	6.32	0.00	252.8 (1-Lane)
1.010	999.00	5.21	0.00	208.5 (2-Lane)
1.010	999.00	6.43	0.00	257.0 (1-Lane)
1.100	183.86	5.16	0.00	206.5 (2-Lane)
1.100	226.67	6.36	0.00	254.6 (1-Lane)

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1.200	44.52	3.48	0.00	139.1 (2-Lane)
1.200	54.88	4.29	0.00	171.5 (1-Lane)
1.300	21.55	4.51	0.00	180.5 (2-Lane)
1.300	26.57	5.56	0.00	222.5 (1-Lane)
1.400	12.56	6.00	0.00	240.1 (2-Lane)
1.400	15.48	7.40	0.00	296.0 (1-Lane)
1.500	8.35	8.35	0.00	333.8 (2-Lane)
1.500	10.29	10.29	0.00	411.5 (1-Lane)
1.600	6.00	12.56	0.00	240.1 (2-Lane)
1.600	7.40	15.48	0.00	296.0 (1-Lane)
1.700	4.51	21.55	0.00	180.5 (2-Lane)
1.700	5.56	26.57	0.00	222.5 (1-Lane)
1.800	3.48	44.52	0.00	139.1 (2-Lane)
1.800	4.29	54.88	0.00	171.5 (1-Lane)
1.900	5.16	183.86	0.00	206.5 (2-Lane)
1.900	6.36	226.67	0.00	254.6 (1-Lane)
2.000	5.13	999.00	0.00	205.0 (2-Lane)
2.000	6.32	999.00	0.00	252.8 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	124.55 R	0.00	93.65	0.00
0.00						
1.100	1934.1	340.3	1112.19 R	0.00	836.23	0.00
0.00						
1.200	3451.8	604.9	1937.34 R	0.00	1456.64	0.00
0.00						
1.300	4540.4	794.0	2493.94 R	0.00	1875.14	0.00
0.00						
1.400	5193.5	907.4	2828.27 R	0.00	2126.52	0.00
0.00						
1.500	5411.2	945.2	2940.33 R	0.00	2210.78	0.00
0.00						
1.600	5193.5	907.4	2828.27 R	0.00	2126.52	0.00
0.00						
1.700	4540.4	794.0	2493.94 R	0.00	1875.14	0.00
0.00						
1.800	3451.8	604.9	1937.34 R	0.00	1456.64	0.00
0.00						
1.900	1934.1	340.3	1112.19 R	0.00	836.23	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load:

Rating Type: 3-3  
Rating Live Load:  
Span

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor	bottom +bend		
1.000	999.00	999.00		999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	0.00	999.0 (1-Lane)
1.010	438.80	999.00		102.13	0.00	999.0 (2-Lane)
1.010	661.17	999.00		153.88	0.00	999.0 (1-Lane)
1.100	36.67	999.00		8.97	0.00	358.8 (2-Lane)
1.100	55.25	999.00		13.52	0.00	540.6 (1-Lane)
1.200	19.04	999.00		5.77	0.00	230.9 (2-Lane)
1.200	28.69	999.00		8.70	0.00	347.9 (1-Lane)
1.300	12.20	999.00		3.83	0.00	153.3 (2-Lane)
1.300	18.39	999.00		5.78	0.00	231.0 (1-Lane)
1.400	9.39	999.00		3.04	0.00	121.4 (2-Lane)
1.400	14.15	999.00		4.57	0.00	182.9 (1-Lane)
1.500	8.59	999.00		2.81	0.00	112.3 (2-Lane)
1.500	12.95	999.00		4.23	0.00	169.3 (1-Lane)

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1.600	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.600	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.700	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.700	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.800	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.800	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.900	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.900	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: SU4

Gamma	DC	DW	(2-Lane)				(1-Lane)		
	1.25	1.25	LL		LL		LL		LL
			1.75		1.75		1.75		1.75
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
			Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
Lane									
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	127.85 R	0.00	96.13	0.00	84.85 R	0.00	63.80
0.00									
1.100	2417.7	425.3	1157.37 R	0.00	870.20	0.00	768.12 R	0.00	577.53
0.00									
1.200	4314.7	756.1	2045.50 R	0.00	1537.97	0.00	1357.55 R	0.00	1020.72
0.00									
1.300	5675.4	992.4	2664.40 R	0.00	2003.31	0.00	1768.30 R	0.00	1329.55
0.00									
1.400	6491.9	1134.2	3042.72 R	0.00	2287.76	0.00	2019.38 R	0.00	1518.33
0.00									
1.500	6764.0	1181.5	3156.78 R	0.00	2373.52	0.00	2095.08 R	0.00	1575.25
0.00									
1.600	6491.9	1134.2	3042.72 R	0.00	2287.76	0.00	2019.38 R	0.00	1518.33
0.00									
1.700	5675.4	992.4	2664.40 R	0.00	2003.31	0.00	1768.30 R	0.00	1329.55
0.00									
1.800	4314.7	756.1	2045.50 R	0.00	1537.97	0.00	1357.55 R	0.00	1020.72
0.00									
1.900	2417.7	425.3	1157.37 R	0.00	870.20	0.00	768.12 R	0.00	577.53
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: SU4

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12217.0	-12217.0B	11797.6	11797.6	-20162.4	-20162.4
1.600	19743.0C	19743.0	-11834.5	-11834.5B	12117.0	12117.0	-19460.6	-19460.6
1.700	19743.0C	19743.0	-11834.5	-11834.5B	13075.2	13075.2	-18502.4	-18502.4
1.800	19743.0C	19743.0	-13013.0	-13013.0B	14672.1	14672.1	-18083.9	-18083.9
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: SU4

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	126.09	999.00	126.09	999.00	0.00	999.0 (2-Lane)
1.010	189.99	999.00	189.99	999.00	0.00	999.0 (1-Lane)
1.100	11.72	999.00	11.72	999.00	0.00	316.5 (2-Lane)
1.100	17.66	999.00	17.66	999.00	0.00	476.9 (1-Lane)
1.200	7.17	999.00	7.17	999.00	0.00	193.7 (2-Lane)
1.200	10.81	999.00	10.81	999.00	0.00	291.8 (1-Lane)
1.300	4.91	999.00	4.91	999.00	0.00	132.5 (2-Lane)
1.300	7.39	999.00	7.39	999.00	0.00	199.6 (1-Lane)
1.400	3.98	999.00	3.98	999.00	0.00	107.5 (2-Lane)
1.400	6.00	999.00	6.00	999.00	0.00	162.0 (1-Lane)
1.500	3.74	999.00	3.74	999.00	0.00	100.9 (2-Lane)
1.500	5.63	999.00	5.63	999.00	0.00	152.0 (1-Lane)
1.600	3.98	999.00	3.98	999.00	0.00	107.5 (2-Lane)
1.600	6.00	999.00	6.00	999.00	0.00	162.0 (1-Lane)
1.700	4.91	999.00	4.91	999.00	0.00	132.5 (2-Lane)
1.700	7.39	999.00	7.39	999.00	0.00	199.6 (1-Lane)
1.800	7.17	999.00	7.17	999.00	0.00	193.7 (2-Lane)
1.800	10.81	999.00	10.81	999.00	0.00	291.8 (1-Lane)
1.900	11.72	999.00	11.72	999.00	0.00	316.5 (2-Lane)
1.900	17.66	999.00	17.66	999.00	0.00	476.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)

2.000 999.00 999.00 999.00 999.00 0.00 999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV

Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load Truck
1.000 0.00	167.2	29.5	116.89 0.00	87.88 0.00	94.81 0.00	71.29
1.010 0.00	164.0	28.9	115.67 0.00	86.97 0.00	93.82 0.00	70.54
1.100 0.00	134.8	23.6	104.71 0.00	78.73 0.00	84.93 0.00	63.86
1.200 0.00	102.0	17.7	92.53 0.00	69.57 0.00	75.05 0.00	56.43
1.300 0.00	68.0	11.8	80.35 0.00	60.41 0.00	65.18 0.00	49.00
1.400 0.00	34.0	5.9	68.17 0.00	51.26 0.00	55.30 0.00	41.58
1.500 0.00	0.0	0.0	55.99 0.00	42.10 0.00	45.42 0.00	34.15
1.600 0.00	-34.0	-5.9	-68.17 0.00	-51.26 0.00	-55.30 0.00	-41.58
1.700 0.00	-68.0	-11.8	-80.35 0.00	-60.41 0.00	-65.18 0.00	-49.00
1.800 0.00	-102.0	-17.7	-92.53 0.00	-69.57 0.00	-75.05 0.00	-56.43
1.900 0.00	-134.8	-23.6	-104.71 0.00	-78.73 0.00	-84.93 0.00	-63.86
2.000 0.00	-167.2	-29.5	-116.89 0.00	-87.88 0.00	-94.81 0.00	-71.29

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV

Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)

1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: SU4

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.73	0.00	181.8 (2-Lane)
1.000	999.00	8.30	0.00	224.1 (1-Lane)
1.010	999.00	6.84	0.00	184.6 (2-Lane)
1.010	999.00	8.43	0.00	227.5 (1-Lane)
1.100	133.46	6.68	0.00	180.3 (2-Lane)
1.100	164.54	8.23	0.00	222.3 (1-Lane)
1.200	33.29	4.41	0.00	119.2 (2-Lane)
1.200	41.05	5.44	0.00	146.9 (1-Lane)
1.300	19.22	5.58	0.00	150.6 (2-Lane)
1.300	23.69	6.88	0.00	185.7 (1-Lane)
1.400	12.96	7.16	0.00	193.3 (2-Lane)
1.400	15.98	8.83	0.00	238.4 (1-Lane)
1.500	9.43	9.43	0.00	254.6 (2-Lane)
1.500	11.63	11.63	0.00	313.9 (1-Lane)
1.600	7.16	12.96	0.00	193.3 (2-Lane)
1.600	8.83	15.98	0.00	238.4 (1-Lane)
1.700	5.58	19.22	0.00	150.6 (2-Lane)
1.700	6.88	23.69	0.00	185.7 (1-Lane)
1.800	4.41	33.29	0.00	119.2 (2-Lane)
1.800	5.44	41.05	0.00	146.9 (1-Lane)
1.900	6.68	133.46	0.00	180.3 (2-Lane)
1.900	8.23	164.54	0.00	222.3 (1-Lane)
2.000	6.73	999.00	0.00	181.8 (2-Lane)
2.000	8.30	999.00	0.00	224.1 (1-Lane)



SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	94.98 R	0.00	71.41	0.00
0.00						
1.100	1934.1	340.3	859.76 R	0.00	646.44	0.00
0.00						
1.200	3451.8	604.9	1519.52 R	0.00	1142.49	0.00
0.00						
1.300	4540.4	794.0	1979.27 R	0.00	1488.17	0.00
0.00						
1.400	5193.5	907.4	2260.31 R	0.00	1699.48	0.00
0.00						
1.500	5411.2	945.2	2345.04 R	0.00	1763.19	0.00
0.00						
1.600	5193.5	907.4	2260.31 R	0.00	1699.48	0.00
0.00						
1.700	4540.4	794.0	1979.27 R	0.00	1488.17	0.00
0.00						
1.800	3451.8	604.9	1519.52 R	0.00	1142.49	0.00
0.00						
1.900	1934.1	340.3	859.76 R	0.00	646.44	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: SU4

Rating Type: SU4  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7

1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: SU4

## Service

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	575.45	999.00	133.93	999.00	0.00	999.0 (2-Lane)
1.010	867.06	999.00	201.80	999.00	0.00	999.0 (1-Lane)
1.100	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.100	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
1.200	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.200	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.300	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.300	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.400	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.400	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.500	10.77	999.00	3.52	999.00	0.00	95.1 (2-Lane)
1.500	16.23	999.00	5.31	999.00	0.00	143.3 (1-Lane)
1.600	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.600	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.700	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.700	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.800	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.800	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.900	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.900	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: SU5

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Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	145.35 R	0.00	109.29	0.00
0.00						
1.100	2417.7	425.3	1314.44 R	0.00	988.30	0.00
0.00						
1.200	4314.7	756.1	2319.75 R	0.00	1744.17	0.00
0.00						
1.300	5675.4	992.4	3025.91 R	0.00	2275.12	0.00
0.00						
1.400	6491.9	1134.2	3451.60 R	0.00	2595.19	0.00
0.00						
1.500	6764.0	1181.5	3568.17 R	0.00	2682.83	0.00
0.00						
1.600	6491.9	1134.2	3451.60 R	0.00	2595.19	0.00
0.00						
1.700	5675.4	992.4	3025.91 R	0.00	2275.12	0.00
0.00						
1.800	4314.7	756.1	2319.75 R	0.00	1744.17	0.00
0.00						
1.900	2417.7	425.3	1314.44 R	0.00	988.30	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: SU5

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Top	Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12210.3	-12210.3B	11797.6	11797.6	-20155.8	-20155.8
1.600	19743.0C	19743.0	-11829.0	-11829.0B	12117.0	12117.0	-19455.1	-19455.1
1.700	19743.0C	19743.0	-11829.0	-11829.0B	13075.2	13075.2	-18496.9	-18496.9
1.800	19743.0C	19743.0	-13011.8	-13011.8B	14672.1	14672.1	-18082.7	-18082.7
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

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0.00									
1.100	134.8	23.6	118.92	0.00	89.41	0.00	96.46	0.00	72.53
0.00									
1.200	102.0	17.7	104.93	0.00	78.90	0.00	85.12	0.00	64.00
0.00									
1.300	68.0	11.8	90.95	0.00	68.38	0.00	73.77	0.00	55.47
0.00									
1.400	34.0	5.9	76.97	0.00	57.87	0.00	62.43	0.00	46.94
0.00									
1.500	0.0	0.0	62.98	0.00	47.36	0.00	51.09	0.00	38.41
0.00									
1.600	-34.0	-5.9	-76.97	0.00	-57.87	0.00	-62.43	0.00	-46.94
0.00									
1.700	-68.0	-11.8	-90.95	0.00	-68.38	0.00	-73.77	0.00	-55.47
0.00									
1.800	-102.0	-17.7	-104.93	0.00	-78.90	0.00	-85.12	0.00	-64.00
0.00									
1.900	-134.8	-23.6	-118.92	0.00	-89.41	0.00	-96.46	0.00	-72.53
0.00									
2.000	-167.2	-29.5	-132.90	0.00	-99.93	0.00	-107.80	0.00	-81.05
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: SU5

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.92	0.00	183.5 (2-Lane)
1.000	999.00	7.30	0.00	226.3 (1-Lane)
1.010	999.00	6.01	0.00	186.4 (2-Lane)
1.010	999.00	7.41	0.00	229.8 (1-Lane)
1.100	125.99	5.88	0.00	182.3 (2-Lane)
1.100	155.32	7.25	0.00	224.7 (1-Lane)
1.200	30.79	3.89	0.00	120.6 (2-Lane)
1.200	37.96	4.80	0.00	148.7 (1-Lane)
1.300	17.36	4.93	0.00	152.8 (2-Lane)
1.300	21.40	6.08	0.00	188.4 (1-Lane)
1.400	11.59	6.34	0.00	196.6 (2-Lane)
1.400	14.29	7.82	0.00	242.4 (1-Lane)
1.500	8.38	8.38	0.00	259.9 (2-Lane)
1.500	10.34	10.34	0.00	320.4 (1-Lane)
1.600	6.34	11.59	0.00	196.6 (2-Lane)
1.600	7.82	14.29	0.00	242.4 (1-Lane)
1.700	4.93	17.36	0.00	152.8 (2-Lane)
1.700	6.08	21.40	0.00	188.4 (1-Lane)
1.800	3.89	30.79	0.00	120.6 (2-Lane)
1.800	4.80	37.96	0.00	148.7 (1-Lane)
1.900	5.88	125.98	0.00	182.3 (2-Lane)
1.900	7.25	155.32	0.00	224.7 (1-Lane)
2.000	5.92	999.00	0.00	183.5 (2-Lane)
2.000	7.30	999.00	0.00	226.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: SU5

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	193.4	37.4	107.98 R	0.00	81.19	71.66 R
0.00						
1.100	1934.1	340.3	976.44 R	0.00	734.16	648.04 R
0.00						
1.200	3451.8	604.9	1723.24 R	0.00	1295.67	1143.68 R

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0.00									
1.300	4540.4	794.0	2247.82 R	0.00	1690.09	0.00	1491.83 R	0.00	1121.67
0.00									
1.400	5193.5	907.4	2564.05 R	0.00	1927.85	0.00	1701.70 R	0.00	1279.47
0.00									
1.500	5411.2	945.2	2650.64 R	0.00	1992.96	0.00	1759.17 R	0.00	1322.68
0.00									
1.600	5193.5	907.4	2564.05 R	0.00	1927.85	0.00	1701.70 R	0.00	1279.47
0.00									
1.700	4540.4	794.0	2247.82 R	0.00	1690.09	0.00	1491.83 R	0.00	1121.67
0.00									
1.800	3451.8	604.9	1723.24 R	0.00	1295.67	0.00	1143.68 R	0.00	859.91
0.00									
1.900	1934.1	340.3	976.44 R	0.00	734.16	0.00	648.04 R	0.00	487.25
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load:

Rating Type: SU5  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)

1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	506.16	999.00	117.80	999.00	0.00	999.0 (2-Lane)
1.010	762.66	999.00	177.50	999.00	0.00	999.0 (1-Lane)
1.100	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.100	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
1.200	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.200	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.300	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.300	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.400	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.400	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.500	9.53	999.00	3.12	999.00	0.00	96.6 (2-Lane)
1.500	14.36	999.00	4.69	999.00	0.00	145.5 (1-Lane)
1.600	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.600	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.700	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.700	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.800	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.800	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.900	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.900	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load w/o Truck
Lane			Lane	Lane	Lane	
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
0.00						
1.010	241.8	46.8	160.20 R	0.00	120.45 R	0.00
0.00						
1.100	2417.7	425.3	1446.12 R	0.00	1087.31 R	0.00
0.00						
1.200	4314.7	756.1	2582.47 R	0.00	1941.70 R	0.00
0.00						
1.300	5675.4	992.4	3378.84 R	0.00	2540.48 R	0.00
0.00						
1.400	6491.9	1134.2	3846.14 R	0.00	2891.83 R	0.00
0.00						
1.500	6764.0	1181.5	3992.77 R	0.00	3002.08 R	0.00
0.00						
1.600	6491.9	1134.2	3846.14 R	0.00	2891.83 R	0.00
0.00						
1.700	5675.4	992.4	3378.84 R	0.00	2540.48 R	0.00
0.00						
1.800	4314.7	756.1	2582.47 R	0.00	1941.70 R	0.00



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0.00									
1.900	2417.7	425.3	1446.12 R	0.00	1087.30	0.00	959.75 R	0.00	721.62
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV

Rating Live Load: SU6

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12212.4	-12212.4B	11797.6	11797.6	-20157.8	-20157.8
1.600	19743.0C	19743.0	-11833.4	-11833.4B	12117.0	12117.0	-19459.5	-19459.5
1.700	19743.0C	19743.0	-11833.4	-11833.4B	13075.2	13075.2	-18501.3	-18501.3
1.800	19743.0C	19743.0	-13011.0	-13011.0B	14672.1	14672.1	-18081.8	-18081.8
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV

Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	100.63	999.00	100.63	999.00	0.00	999.0 (2-Lane)
1.010	151.62	999.00	151.62	999.00	0.00	999.0 (1-Lane)
1.100	9.38	999.00	9.38	999.00	0.00	326.0 (2-Lane)
1.100	14.14	999.00	14.14	999.00	0.00	491.2 (1-Lane)
1.200	5.68	999.00	5.68	999.00	0.00	197.4 (2-Lane)
1.200	8.56	999.00	8.56	999.00	0.00	297.5 (1-Lane)
1.300	3.87	999.00	3.87	999.00	0.00	134.5 (2-Lane)
1.300	5.83	999.00	5.83	999.00	0.00	202.6 (1-Lane)

1.400	3.15	999.00	3.15	999.00	0.00	109.5 (2-Lane)
1.400	4.75	999.00	4.75	999.00	0.00	165.0 (1-Lane)
1.500	2.95	999.00	2.95	999.00	0.00	102.7 (2-Lane)
1.500	4.45	999.00	4.45	999.00	0.00	154.7 (1-Lane)
1.600	3.15	999.00	3.15	999.00	0.00	109.5 (2-Lane)
1.600	4.75	999.00	4.75	999.00	0.00	165.0 (1-Lane)
1.700	3.87	999.00	3.87	999.00	0.00	134.5 (2-Lane)
1.700	5.83	999.00	5.83	999.00	0.00	202.6 (1-Lane)
1.800	5.68	999.00	5.68	999.00	0.00	197.4 (2-Lane)
1.800	8.56	999.00	8.56	999.00	0.00	297.5 (1-Lane)
1.900	9.38	999.00	9.38	999.00	0.00	326.0 (2-Lane)
1.900	14.14	999.00	14.14	999.00	0.00	491.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	146.51	0.00	110.15	0.00	118.84	0.00	89.35
1.010 0.00	164.0	28.9	144.94	0.00	108.98	0.00	117.57	0.00	88.40
1.100 0.00	134.8	23.6	130.83	0.00	98.37	0.00	106.12	0.00	79.79
1.200 0.00	102.0	17.7	115.16	0.00	86.58	0.00	93.41	0.00	70.23
1.300 0.00	68.0	11.8	99.48	0.00	74.80	0.00	80.69	0.00	60.67
1.400 0.00	34.0	5.9	83.81	0.00	63.01	0.00	67.98	0.00	51.11
1.500 0.00	0.0	0.0	68.13	0.00	51.23	0.00	55.26	0.00	41.55
1.600 0.00	-34.0	-5.9	-83.81	0.00	-63.01	0.00	-67.98	0.00	-51.11
1.700 0.00	-68.0	-11.8	-99.48	0.00	-74.80	0.00	-80.69	0.00	-60.67
1.800 0.00	-102.0	-17.7	-115.16	0.00	-86.58	0.00	-93.41	0.00	-70.23
1.900 0.00	-134.8	-23.6	-130.83	0.00	-98.37	0.00	-106.12	0.00	-79.79
2.000 0.00	-167.2	-29.5	-146.51	0.00	-110.15	0.00	-118.84	0.00	-89.35

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04  
 Rating Type: I-INV  
 Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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 STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04  
 Rating Type: I-INV  
 Rating Live Load: SU6

Shear				
Span	Rating (-)	Factor (+)	Rating value	Load Resistance (tons)
1.000	999.00	5.37	0.00	186.6 (2-Lane)
1.000	999.00	6.62	0.00	230.1 (1-Lane)
1.010	999.00	5.45	0.00	189.6 (2-Lane)
1.010	999.00	6.72	0.00	233.7 (1-Lane)
1.100	144.09	5.34	0.00	185.7 (2-Lane)
1.100	177.63	6.59	0.00	229.0 (1-Lane)
1.200	30.69	3.55	0.00	123.2 (2-Lane)
1.200	37.83	4.37	0.00	151.9 (1-Lane)
1.300	16.53	4.51	0.00	156.6 (2-Lane)
1.300	20.37	5.55	0.00	193.0 (1-Lane)
1.400	10.83	5.82	0.00	202.4 (2-Lane)
1.400	13.35	7.18	0.00	249.5 (1-Lane)
1.500	7.75	7.75	0.00	269.3 (2-Lane)

1.500	9.56	9.56	0.00	332.0 (1-Lane)
1.600	5.82	10.83	0.00	202.4 (2-Lane)
1.600	7.18	13.35	0.00	249.5 (1-Lane)
1.700	4.51	16.53	0.00	156.6 (2-Lane)
1.700	5.55	20.37	0.00	193.0 (1-Lane)
1.800	3.55	30.69	0.00	123.2 (2-Lane)
1.800	4.37	37.83	0.00	151.9 (1-Lane)
1.900	5.34	144.09	0.00	185.7 (2-Lane)
1.900	6.59	177.63	0.00	229.0 (1-Lane)
2.000	5.37	999.00	0.00	186.6 (2-Lane)
2.000	6.62	999.00	0.00	230.1 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	119.01 R	0.00	89.48	0.00
0.00						
1.100	1934.1	340.3	1074.26 R	0.00	807.71	0.00
0.00						
1.200	3451.8	604.9	1918.40 R	0.00	1442.41	0.00
0.00						
1.300	4540.4	794.0	2509.99 R	0.00	1887.21	0.00
0.00						
1.400	5193.5	907.4	2857.13 R	0.00	2148.22	0.00
0.00						
1.500	5411.2	945.2	2966.06 R	0.00	2230.12	0.00
0.00						
1.600	5193.5	907.4	2857.13 R	0.00	2148.22	0.00
0.00						
1.700	4540.4	794.0	2509.99 R	0.00	1887.21	0.00
0.00						
1.800	3451.8	604.9	1918.40 R	0.00	1442.41	0.00
0.00						
1.900	1934.1	340.3	1074.26 R	0.00	807.71	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV

Rating Live Load:

Rating Type: SU6

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV

Rating Live Load: SU6

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	459.24	999.00	106.88	999.00	0.00	999.0 (2-Lane)
1.010	691.96	999.00	161.05	999.00	0.00	999.0 (1-Lane)
1.100	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.100	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
1.200	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.200	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.300	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.300	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.400	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.400	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.500	8.52	999.00	2.78	999.00	0.00	96.7 (2-Lane)
1.500	12.83	999.00	4.20	999.00	0.00	145.8 (1-Lane)
1.600	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.600	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.700	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.700	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.800	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.800	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.900	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
1.900 57.20 999.00 13.99 999.00 0.00 486.3 (1-Lane)  
2.000 999.00 999.00 999.00 999.00 0.00 999.0 (2-Lane)  
2.000 999.00 999.00 999.00 999.00 0.00 999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	175.62 R	0.00	132.04	0.00
0.00						
1.100	2417.7	425.3	1582.32 R	0.00	1189.71	0.00
0.00						
1.200	4314.7	756.1	2824.95 R	0.00	2124.02	0.00
0.00						
1.300	5675.4	992.4	3727.89 R	0.00	2802.93	0.00
0.00						
1.400	6491.9	1134.2	4247.54 R	0.00	3193.64	0.00
0.00						
1.500	6764.0	1181.5	4416.61 R	0.00	3320.76	0.00
0.00						
1.600	6491.9	1134.2	4247.54 R	0.00	3193.64	0.00
0.00						
1.700	5675.4	992.4	3727.89 R	0.00	2802.92	0.00
0.00						
1.800	4314.7	756.1	2824.95 R	0.00	2124.02	0.00
0.00						
1.900	2417.7	425.3	1582.32 R	0.00	1189.71	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: SU7

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4

## 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12215.4	-12215.4B	11797.6	11797.6	-20160.9	-20160.9
1.600	19743.0C	19743.0	-11835.7	-11835.7B	12117.0	12117.0	-19461.8	-19461.8
1.700	19743.0C	19743.0	-11835.7	-11835.7B	13075.2	13075.2	-18503.6	-18503.6
1.800	19743.0C	19743.0	-13021.6	-13021.6B	14672.1	14672.1	-18092.4	-18092.4
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV  
Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	-bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	91.79	999.00	91.79	999.00	0.00	999.0 (2-Lane)
1.010	138.31	999.00	138.31	999.00	0.00	999.0 (1-Lane)
1.100	8.57	999.00	8.57	999.00	0.00	332.2 (2-Lane)
1.100	12.92	999.00	12.92	999.00	0.00	500.6 (1-Lane)
1.200	5.19	999.00	5.19	999.00	0.00	201.3 (2-Lane)
1.200	7.83	999.00	7.83	999.00	0.00	303.2 (1-Lane)
1.300	3.51	999.00	3.51	999.00	0.00	135.9 (2-Lane)
1.300	5.28	999.00	5.28	999.00	0.00	204.8 (1-Lane)
1.400	2.85	999.00	2.85	999.00	0.00	110.5 (2-Lane)
1.400	4.30	999.00	4.30	999.00	0.00	166.6 (1-Lane)
1.500	2.67	999.00	2.67	999.00	0.00	103.5 (2-Lane)
1.500	4.03	999.00	4.03	999.00	0.00	156.0 (1-Lane)
1.600	2.85	999.00	2.85	999.00	0.00	110.5 (2-Lane)
1.600	4.30	999.00	4.30	999.00	0.00	166.6 (1-Lane)
1.700	3.51	999.00	3.51	999.00	0.00	135.9 (2-Lane)
1.700	5.28	999.00	5.28	999.00	0.00	204.8 (1-Lane)
1.800	5.19	999.00	5.19	999.00	0.00	201.3 (2-Lane)
1.800	7.83	999.00	7.83	999.00	0.00	303.2 (1-Lane)
1.900	8.57	999.00	8.57	999.00	0.00	332.2 (2-Lane)
1.900	12.92	999.00	12.92	999.00	0.00	500.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04  
 Rating Type: I-INV  
 Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75					
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Lane	Live Load w/o impact Truck	Lane	Live Load w/impact Truck	Lane	Live Load Truck	
Lane										
1.000 0.00	167.2	29.5	160.63	0.00	120.78	0.00	130.30	0.00	97.97	
1.010 0.00	164.0	28.9	158.88	0.00	119.46	0.00	128.88	0.00	96.90	
1.100 0.00	134.8	23.6	143.15	0.00	107.63	0.00	116.12	0.00	87.31	
1.200 0.00	102.0	17.7	125.67	0.00	94.49	0.00	101.94	0.00	76.65	
1.300 0.00	68.0	11.8	108.19	0.00	81.35	0.00	87.76	0.00	65.99	
1.400 0.00	34.0	5.9	90.72	0.00	68.21	0.00	73.58	0.00	55.33	
1.500 0.00	0.0	0.0	73.24	0.00	55.07	0.00	59.41	0.00	44.67	
1.600 0.00	-34.0	-5.9	-90.72	0.00	-68.21	0.00	-73.58	0.00	-55.33	
1.700 0.00	-68.0	-11.8	-108.19	0.00	-81.35	0.00	-87.76	0.00	-65.99	
1.800 0.00	-102.0	-17.7	-125.67	0.00	-94.49	0.00	-101.94	0.00	-76.65	
1.900 0.00	-134.8	-23.6	-143.15	0.00	-107.63	0.00	-116.12	0.00	-87.31	
2.000 0.00	-167.2	-29.5	-160.63	0.00	-120.78	0.00	-130.30	0.00	-97.97	

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 STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04  
 Rating Type: I-INV  
 Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)



1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 687

## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-INV

Rating Live Load: SU7

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	4.90	0.00	189.8 (2-Lane)
1.000	999.00	6.04	0.00	234.0 (1-Lane)
1.010	999.00	4.98	0.00	192.8 (2-Lane)
1.010	999.00	6.14	0.00	237.7 (1-Lane)
1.100	168.29	4.88	0.00	189.3 (2-Lane)
1.100	207.47	6.02	0.00	233.3 (1-Lane)
1.200	31.14	3.25	0.00	125.9 (2-Lane)
1.200	38.39	4.01	0.00	155.2 (1-Lane)
1.300	15.88	4.14	0.00	160.5 (2-Lane)
1.300	19.58	5.11	0.00	197.9 (1-Lane)
1.400	10.19	5.38	0.00	208.5 (2-Lane)
1.400	12.56	6.63	0.00	257.1 (1-Lane)
1.500	7.21	7.21	0.00	279.4 (2-Lane)
1.500	8.89	8.89	0.00	344.4 (1-Lane)
1.600	5.38	10.19	0.00	208.5 (2-Lane)
1.600	6.63	12.56	0.00	257.1 (1-Lane)
1.700	4.14	15.88	0.00	160.5 (2-Lane)
1.700	5.11	19.58	0.00	197.9 (1-Lane)
1.800	3.25	31.14	0.00	125.9 (2-Lane)
1.800	4.01	38.39	0.00	155.2 (1-Lane)
1.900	4.88	168.29	0.00	189.3 (2-Lane)
1.900	6.02	207.47	0.00	233.3 (1-Lane)
2.000	4.90	999.00	0.00	189.8 (2-Lane)
2.000	6.04	999.00	0.00	234.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 688

## SERVICE MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV

Rating Live Load: SU7

Gamma	DC		DW		(2-Lane)		(1-Lane)		LL
	1.00	1.00	1.30		1.30		1.30		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	130.46 R	0.00	98.09	0.00	86.58 R	0.00	65.10
0.00									
1.100	1934.1	340.3	1175.44 R	0.00	883.79	0.00	780.11 R	0.00	586.55
0.00									
1.200	3451.8	604.9	2098.53 R	0.00	1577.84	0.00	1392.75 R	0.00	1047.18
0.00									
1.300	4540.4	794.0	2769.29 R	0.00	2082.17	0.00	1837.91 R	0.00	1381.89
0.00									
1.400	5193.5	907.4	3155.32 R	0.00	2372.42	0.00	2094.11 R	0.00	1574.52
0.00									
1.500	5411.2	945.2	3280.91 R	0.00	2466.85	0.00	2177.47 R	0.00	1637.19
0.00									
1.600	5193.5	907.4	3155.32 R	0.00	2372.42	0.00	2094.11 R	0.00	1574.52
0.00									
1.700	4540.4	794.0	2769.29 R	0.00	2082.17	0.00	1837.91 R	0.00	1381.89
0.00									
1.800	3451.8	604.9	2098.53 R	0.00	1577.84	0.00	1392.75 R	0.00	1047.18
0.00									
1.900	1934.1	340.3	1175.44 R	0.00	883.79	0.00	780.11 R	0.00	586.55
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 688

## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-INV

Rating Live Load:

Rating Type: SU7

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Member I. D. G04  
 Rating Type: II-INV  
 Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	418.93	999.00	97.50	999.00	0.00	999.0 (2-Lane)
1.010	631.22	999.00	146.91	999.00	0.00	999.0 (1-Lane)
1.100	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.100	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
1.200	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.200	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.300	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.300	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.400	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.400	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.500	7.70	999.00	2.52	999.00	0.00	97.5 (2-Lane)
1.500	11.60	999.00	3.79	999.00	0.00	147.0 (1-Lane)
1.600	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.600	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.700	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.700	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.800	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.800	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.900	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.900	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 690  
 MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G04  
 Rating Type: I-OPER  
 Rating Live Load: HL93

Gamma	DC		DW		(2-Lane)		(1-Lane)	
	1.25		1.25		LL 1.35		LL 1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck Lane	Truck Lane	Truck Lane

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	202.34 R	0.00	170.33	0.00	134.29 R	0.00	113.05
0.00									
1.100	2417.7	425.3	1832.15 R	0.00	1542.98	0.00	1215.96 R	0.00	1024.04
0.00									
1.200	4314.7	756.1	3239.23 R	0.00	2729.59	0.00	2149.80 R	0.00	1811.57
0.00									
1.300	5675.4	992.4	4221.21 R	0.00	3559.83	0.00	2801.52 R	0.00	2362.58
0.00									
1.400	6491.9	1134.2	4805.03 R	0.00	4053.93	0.00	3188.99 R	0.00	2690.50
0.00									
1.500	6764.0	1181.5	4977.21 R	0.00	4201.77	0.00	3303.26 R	0.00	2788.62
0.00									
1.600	6491.9	1134.2	4805.03 R	0.00	4053.93	0.00	3188.99 R	0.00	2690.50
0.00									
1.700	5675.4	992.4	4221.21 R	0.00	3559.83	0.00	2801.52 R	0.00	2362.58
0.00									
1.800	4314.7	756.1	3239.23 R	0.00	2729.59	0.00	2149.80 R	0.00	1811.57
0.00									
1.900	2417.7	425.3	1832.15 R	0.00	1542.98	0.00	1215.96 R	0.00	1024.04
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 691

STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: HL93

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.6	-12222.6B	11797.6	11797.6	-20168.1	-20168.1
1.600	19743.0C	19743.0	-11839.4	-11839.4B	12117.0	12117.0	-19465.5	-19465.5
1.700	19743.0C	19743.0	-11839.4	-11839.4B	13075.2	13075.2	-18507.3	-18507.3
1.800	19743.0C	19743.0	-13020.9	-13020.9B	14672.1	14672.1	-18091.8	-18091.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 692

MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: HL93

Moment			
Span	Rating	Factor	Load

	top fiber +bend	fiber -bend	bottom fiber +bend	fiber -bend	Value	Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	79.67	999.00	79.67	999.00	0.00	999.0 (2-Lane)
1.010	120.04	999.00	120.04	999.00	0.00	999.0 (1-Lane)
1.100	7.41	999.00	7.41	999.00	0.00	266.6 (2-Lane)
1.100	11.16	999.00	11.16	999.00	0.00	401.6 (1-Lane)
1.200	4.53	999.00	4.53	999.00	0.00	163.1 (2-Lane)
1.200	6.82	999.00	6.82	999.00	0.00	245.7 (1-Lane)
1.300	3.10	999.00	3.10	999.00	0.00	111.5 (2-Lane)
1.300	4.67	999.00	4.67	999.00	0.00	168.0 (1-Lane)
1.400	2.52	999.00	2.52	999.00	0.00	90.8 (2-Lane)
1.400	3.80	999.00	3.80	999.00	0.00	136.8 (1-Lane)
1.500	2.37	999.00	2.37	999.00	0.00	85.3 (2-Lane)
1.500	3.57	999.00	3.57	999.00	0.00	128.6 (1-Lane)
1.600	2.52	999.00	2.52	999.00	0.00	90.8 (2-Lane)
1.600	3.80	999.00	3.80	999.00	0.00	136.8 (1-Lane)
1.700	3.10	999.00	3.10	999.00	0.00	111.5 (2-Lane)
1.700	4.67	999.00	4.67	999.00	0.00	168.0 (1-Lane)
1.800	4.53	999.00	4.53	999.00	0.00	163.1 (2-Lane)
1.800	6.82	999.00	6.82	999.00	0.00	245.7 (1-Lane)
1.900	7.41	999.00	7.41	999.00	0.00	266.6 (2-Lane)
1.900	11.16	999.00	11.16	999.00	0.00	401.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 693

## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	184.98	0.00	155.71	0.00	150.05	0.00	126.31
1.010 0.00	164.0	28.9	182.40	0.00	153.44	0.00	147.95	0.00	124.46
1.100 0.00	134.8	23.6	159.72	0.00	133.56	0.00	129.56	0.00	108.34
1.200 0.00	102.0	17.7	135.80	0.00	112.75	0.00	110.16	0.00	91.46
1.300 0.00	68.0	11.8	113.22	0.00	93.28	0.00	91.84	0.00	75.66
1.400 0.00	34.0	5.9	91.99	0.00	75.15	0.00	74.61	0.00	60.96
1.500 0.00	0.0	0.0	72.09	0.00	58.36	0.00	58.47	0.00	47.34

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.600	-34.0	-5.9	-91.99	0.00	-75.15	0.00	-74.61	0.00	-60.96
0.00									
1.700	-68.0	-11.8	-113.22	0.00	-93.28	0.00	-91.84	0.00	-75.66
0.00									
1.800	-102.0	-17.7	-135.80	0.00	-112.75	0.00	-110.16	0.00	-91.46
0.00									
1.900	-134.8	-23.6	-159.72	0.00	-133.56	0.00	-129.56	0.00	-108.34
0.00									
2.000	-167.2	-29.5	-184.98	0.00	-155.71	0.00	-150.05	0.00	-126.31
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 694

STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER

Rating Live Load: HL93

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 695

STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER

Rating Live Load: HL93

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)

1.000	999.00	4.25	0.00	153.1 (2-Lane)
1.000	999.00	5.24	0.00	188.8 (1-Lane)
1.010	999.00	4.34	0.00	156.1 (2-Lane)
1.010	999.00	5.34	0.00	192.4 (1-Lane)
1.100	133.47	4.38	0.00	157.6 (2-Lane)
1.100	164.55	5.40	0.00	194.3 (1-Lane)
1.200	31.70	3.01	0.00	108.3 (2-Lane)
1.200	39.08	3.71	0.00	133.5 (1-Lane)
1.300	16.74	3.96	0.00	142.5 (2-Lane)
1.300	20.64	4.88	0.00	175.7 (1-Lane)
1.400	10.61	5.31	0.00	191.1 (2-Lane)
1.400	13.08	6.54	0.00	235.5 (1-Lane)
1.500	7.32	7.32	0.00	263.7 (2-Lane)
1.500	9.03	9.03	0.00	325.1 (1-Lane)
1.600	5.31	10.61	0.00	191.1 (2-Lane)
1.600	6.54	13.08	0.00	235.5 (1-Lane)
1.700	3.96	16.74	0.00	142.5 (2-Lane)
1.700	4.88	20.64	0.00	175.7 (1-Lane)
1.800	3.01	31.70	0.00	108.3 (2-Lane)
1.800	3.71	39.08	0.00	133.5 (1-Lane)
1.900	4.38	122.67	0.00	157.6 (2-Lane)
1.900	5.40	151.23	0.00	194.3 (1-Lane)
2.000	4.25	999.00	0.00	153.1 (2-Lane)
2.000	5.24	999.00	0.00	188.8 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPE  
Rating Live Load: HL93

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	193.4	37.4	149.88 R	0.00	126.17	99.47 R
0.00						
1.100	1934.1	340.3	1357.15 R	0.00	1142.95	900.71 R
0.00						
1.200	3451.8	604.9	2399.43 R	0.00	2021.92	1592.44 R
0.00						
1.300	4540.4	794.0	3126.83 R	0.00	2636.91	2075.20 R
0.00						
1.400	5193.5	907.4	3559.28 R	0.00	3002.91	2362.21 R
0.00						
1.500	5411.2	945.2	3686.82 R	0.00	3112.42	2446.86 R
0.00						
1.600	5193.5	907.4	3559.28 R	0.00	3002.91	2362.21 R
0.00						
1.700	4540.4	794.0	3126.83 R	0.00	2636.91	2075.20 R
0.00						

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1.800	3451.8	604.9	2399.43 R	0.00	2021.92	0.00	1592.44 R	0.00	1341.90
0.00									
1.900	1934.1	340.3	1357.15 R	0.00	1142.95	0.00	900.71 R	0.00	758.55
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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# SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER  
Rating Live Load:

Rating Type: HL93

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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# SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER  
Rating Live Load: HL93

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	364.64	999.00	84.87	999.00	0.00	999.0 (2-Lane)
1.010	549.42	999.00	127.87	999.00	0.00	999.0 (1-Lane)
1.100	30.05	999.00	7.35	999.00	0.00	264.6 (2-Lane)
1.100	45.28	999.00	11.08	999.00	0.00	398.7 (1-Lane)
1.200	15.38	999.00	4.66	999.00	0.00	167.8 (2-Lane)
1.200	23.17	999.00	7.02	999.00	0.00	252.8 (1-Lane)



1.300	9.73	999.00	3.06	999.00	0.00	110.0 (2-Lane)
1.300	14.66	999.00	4.61	999.00	0.00	165.8 (1-Lane)
1.400	7.46	999.00	2.41	999.00	0.00	86.8 (2-Lane)
1.400	11.24	999.00	3.63	999.00	0.00	130.8 (1-Lane)
1.500	6.85	999.00	2.24	999.00	0.00	80.6 (2-Lane)
1.500	10.32	999.00	3.38	999.00	0.00	121.5 (1-Lane)
1.600	7.46	999.00	2.41	999.00	0.00	86.8 (2-Lane)
1.600	11.24	999.00	3.63	999.00	0.00	130.8 (1-Lane)
1.700	9.73	999.00	3.06	999.00	0.00	110.0 (2-Lane)
1.700	14.66	999.00	4.61	999.00	0.00	165.8 (1-Lane)
1.800	15.38	999.00	4.66	999.00	0.00	167.8 (2-Lane)
1.800	23.17	999.00	7.02	999.00	0.00	252.8 (1-Lane)
1.900	30.05	999.00	7.35	999.00	0.00	264.6 (2-Lane)
1.900	45.28	999.00	11.08	999.00	0.00	398.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o Lane
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	241.8	46.8	129.01 R	0.00	97.00	85.62 R
0.00						
1.100	2417.7	425.3	1165.45 R	0.00	876.28	773.48 R
0.00						
1.200	4314.7	756.1	2053.98 R	0.00	1544.34	1363.18 R
0.00						
1.300	5675.4	992.4	2665.57 R	0.00	2004.19	1769.08 R
0.00						
1.400	6491.9	1134.2	3027.15 R	0.00	2276.05	2009.05 R
0.00						
1.500	6764.0	1181.5	3125.25 R	0.00	2349.82	2074.16 R
0.00						
1.600	6491.9	1134.2	3027.15 R	0.00	2276.05	2009.05 R
0.00						
1.700	5675.4	992.4	2665.57 R	0.00	2004.19	1769.08 R
0.00						
1.800	4314.7	756.1	2053.98 R	0.00	1544.34	1363.18 R
0.00						
1.900	2417.7	425.3	1165.45 R	0.00	876.28	773.48 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: HS20

Span	Positive Top	Moment Bending Bott.	Resistance Negative Top	Bending Bott.	Positive Top	Available Bending Bott.	Resistance Negative Top	Available Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.6	-12222.6B	11797.6	11797.6	-20168.1	-20168.1
1.600	19743.0C	19743.0	-11839.4	-11839.4B	12117.0	12117.0	-19465.5	-19465.5
1.700	19743.0C	19743.0	-11839.4	-11839.4B	13075.2	13075.2	-18507.3	-18507.3
1.800	19743.0C	19743.0	-13020.9	-13020.9B	14672.1	14672.1	-18091.8	-18091.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: HS20

Span	top +bend	Rating Factor fiber -bend	bottom +bend	Rating Factor fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	124.96	999.00	124.96	999.00	999.00	999.0 (2-Lane)
1.010	188.29	999.00	188.29	999.00	999.00	999.0 (1-Lane)
1.100	11.64	999.00	11.64	999.00	232.81	419.1 (2-Lane)
1.100	17.54	999.00	17.54	999.00	350.79	631.4 (1-Lane)
1.200	7.14	999.00	7.14	999.00	142.87	257.2 (2-Lane)
1.200	10.76	999.00	10.76	999.00	215.26	387.5 (1-Lane)
1.300	4.91	999.00	4.91	999.00	98.10	176.6 (2-Lane)
1.300	7.39	999.00	7.39	999.00	147.82	266.1 (1-Lane)
1.400	4.00	999.00	4.00	999.00	80.06	144.1 (2-Lane)
1.400	6.03	999.00	6.03	999.00	120.62	217.1 (1-Lane)
1.500	3.78	999.00	3.78	999.00	75.50	135.9 (2-Lane)
1.500	5.69	999.00	5.69	999.00	113.76	204.8 (1-Lane)
1.600	4.00	999.00	4.00	999.00	80.06	144.1 (2-Lane)
1.600	6.03	999.00	6.03	999.00	120.62	217.1 (1-Lane)
1.700	4.91	999.00	4.91	999.00	98.10	176.6 (2-Lane)
1.700	7.39	999.00	7.39	999.00	147.82	266.1 (1-Lane)

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1.800	7.14	999.00	7.14	999.00	142.87	257.2 (2-Lane)
1.800	10.76	999.00	10.76	999.00	215.26	387.5 (1-Lane)
1.900	11.64	999.00	11.64	999.00	232.81	419.1 (2-Lane)
1.900	17.54	999.00	17.54	999.00	350.79	631.4 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	117.97	0.00	88.70	0.00
0.00						
1.010	164.0	28.9	116.71	0.00	87.75	0.00
0.00						
1.100	134.8	23.6	105.44	0.00	79.28	0.00
0.00						
1.200	102.0	17.7	92.91	0.00	69.86	0.00
0.00						
1.300	68.0	11.8	80.39	0.00	60.44	0.00
0.00						
1.400	34.0	5.9	67.86	0.00	51.02	0.00
0.00						
1.500	0.0	0.0	55.33	0.00	41.60	0.00
0.00						
1.600	-34.0	-5.9	-67.86	0.00	-51.02	0.00
0.00						
1.700	-68.0	-11.8	-80.39	0.00	-60.44	0.00
0.00						
1.800	-102.0	-17.7	-92.91	0.00	-69.86	0.00
0.00						
1.900	-134.8	-23.6	-105.44	0.00	-79.28	0.00
0.00						
2.000	-167.2	-29.5	-117.97	0.00	-88.70	0.00
0.00						

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: HS20

Span Shear Resistance Available Resistance for LL+I

Vn

1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: HS20

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.67	133.40	240.1 (2-Lane)
1.000	999.00	8.22	164.46	296.0 (1-Lane)
1.010	999.00	6.77	135.49	243.9 (2-Lane)
1.010	999.00	8.35	167.03	300.7 (1-Lane)
1.100	162.14	6.63	132.63	238.7 (2-Lane)
1.100	199.89	8.18	163.51	294.3 (1-Lane)
1.200	36.49	4.39	87.90	158.2 (2-Lane)
1.200	44.99	5.42	108.37	195.1 (1-Lane)
1.300	20.08	5.58	111.53	200.8 (2-Lane)
1.300	24.75	6.88	137.49	247.5 (1-Lane)
1.400	13.27	7.19	143.88	259.0 (2-Lane)
1.400	16.36	8.87	177.37	319.3 (1-Lane)
1.500	9.54	9.54	190.87	343.6 (2-Lane)
1.500	11.77	11.77	235.31	423.6 (1-Lane)
1.600	7.19	13.27	143.88	259.0 (2-Lane)
1.600	8.87	16.36	177.37	319.3 (1-Lane)
1.700	5.58	20.08	111.53	200.8 (2-Lane)
1.700	6.88	24.75	137.49	247.5 (1-Lane)
1.800	4.39	36.49	87.90	158.2 (2-Lane)
1.800	5.42	44.99	108.37	195.1 (1-Lane)

1.900	6.63	162.14	132.63	238.7 (2-Lane)
1.900	8.18	199.89	163.51	294.3 (1-Lane)
2.000	6.67	999.00	133.40	240.1 (2-Lane)
2.000	8.22	999.00	164.46	296.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPE  
Rating Live Load: HS20

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o Lane
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	95.56 R	0.00	71.85	63.42 R
0.00						
1.100	1934.1	340.3	863.30 R	0.00	649.10	572.95 R
0.00						
1.200	3451.8	604.9	1521.46 R	0.00	1143.96	1009.76 R
0.00						
1.300	4540.4	794.0	1974.50 R	0.00	1484.59	1310.43 R
0.00						
1.400	5193.5	907.4	2242.33 R	0.00	1685.97	1488.19 R
0.00						
1.500	5411.2	945.2	2315.00 R	0.00	1740.60	1536.42 R
0.00						
1.600	5193.5	907.4	2242.33 R	0.00	1685.97	1488.19 R
0.00						
1.700	4540.4	794.0	1974.50 R	0.00	1484.59	1310.43 R
0.00						
1.800	3451.8	604.9	1521.46 R	0.00	1143.96	1009.76 R
0.00						
1.900	1934.1	340.3	863.30 R	0.00	649.10	572.95 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 704

## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER  
Rating Live Load:Rating Type: HS20  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER  
Rating Live Load: HS20

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	571.93	999.00	133.11	999.00	999.00	999.0 (2-Lane)
1.010	861.76	999.00	200.57	999.00	999.00	999.0 (1-Lane)
1.100	47.24	999.00	11.56	999.00	231.13	416.0 (2-Lane)
1.100	71.18	999.00	17.41	999.00	348.25	626.9 (1-Lane)
1.200	24.25	999.00	7.35	999.00	147.02	264.6 (2-Lane)
1.200	36.54	999.00	11.08	999.00	221.52	398.7 (1-Lane)
1.300	15.41	999.00	4.84	999.00	96.82	174.3 (2-Lane)
1.300	23.22	999.00	7.29	999.00	145.88	262.6 (1-Lane)
1.400	11.84	999.00	3.83	999.00	76.55	137.8 (2-Lane)
1.400	17.84	999.00	5.77	999.00	115.35	207.6 (1-Lane)
1.500	10.91	999.00	3.57	999.00	71.34	128.4 (2-Lane)
1.500	16.44	999.00	5.38	999.00	107.49	193.5 (1-Lane)
1.600	11.84	999.00	3.83	999.00	76.55	137.8 (2-Lane)
1.600	17.84	999.00	5.77	999.00	115.35	207.6 (1-Lane)
1.700	15.41	999.00	4.84	999.00	96.82	174.3 (2-Lane)
1.700	23.22	999.00	7.29	999.00	145.88	262.6 (1-Lane)
1.800	24.25	999.00	7.35	999.00	147.02	264.6 (2-Lane)
1.800	36.54	999.00	11.08	999.00	221.52	398.7 (1-Lane)
1.900	47.24	999.00	11.56	999.00	231.13	416.0 (2-Lane)
1.900	71.18	999.00	17.41	999.00	348.25	626.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	90.73 R	0.00	68.21	0.00
0.00						
1.100	2417.7	425.3	820.71 R	0.00	617.08	0.00
0.00						
1.200	4314.7	756.1	1449.12 R	0.00	1089.56	0.00
0.00						
1.300	5675.4	992.4	1885.21 R	0.00	1417.45	0.00
0.00						
1.400	6491.9	1134.2	2143.40 R	0.00	1611.58	0.00
0.00						
1.500	6764.0	1181.5	2218.90 R	0.00	1668.34	0.00
0.00						
1.600	6491.9	1134.2	2143.40 R	0.00	1611.58	0.00
0.00						
1.700	5675.4	992.4	1885.21 R	0.00	1417.45	0.00
0.00						
1.800	4314.7	756.1	1449.12 R	0.00	1089.56	0.00
0.00						
1.900	2417.7	425.3	820.71 R	0.00	617.08	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 707

## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12212.6	-12212.6B	11797.6	11797.6	-20158.1	-20158.1
1.600	19743.0C	19743.0	-11832.8	-11832.8B	12117.0	12117.0	-19458.9	-19458.9
1.700	19743.0C	19743.0	-11832.8	-11832.8B	13075.2	13075.2	-18500.7	-18500.7
1.800	19743.0C	19743.0	-13009.9	-13009.9B	14672.1	14672.1	-18080.8	-18080.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	-bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	177.69	999.00	177.69	999.00	0.00	999.0 (2-Lane)
1.010	267.73	999.00	267.73	999.00	0.00	999.0 (1-Lane)
1.100	16.53	999.00	16.53	999.00	0.00	413.2 (2-Lane)
1.100	24.91	999.00	24.91	999.00	0.00	622.7 (1-Lane)
1.200	10.12	999.00	10.12	999.00	0.00	253.1 (2-Lane)
1.200	15.26	999.00	15.26	999.00	0.00	381.4 (1-Lane)
1.300	6.94	999.00	6.94	999.00	0.00	173.4 (2-Lane)
1.300	10.45	999.00	10.45	999.00	0.00	261.3 (1-Lane)
1.400	5.65	999.00	5.65	999.00	0.00	141.3 (2-Lane)
1.400	8.52	999.00	8.52	999.00	0.00	212.9 (1-Lane)
1.500	5.32	999.00	5.32	999.00	0.00	132.9 (2-Lane)
1.500	8.01	999.00	8.01	999.00	0.00	200.3 (1-Lane)
1.600	5.65	999.00	5.65	999.00	0.00	141.3 (2-Lane)
1.600	8.52	999.00	8.52	999.00	0.00	212.9 (1-Lane)
1.700	6.94	999.00	6.94	999.00	0.00	173.4 (2-Lane)
1.700	10.45	999.00	10.45	999.00	0.00	261.3 (1-Lane)
1.800	10.12	999.00	10.12	999.00	0.00	253.1 (2-Lane)
1.800	15.26	999.00	15.26	999.00	0.00	381.4 (1-Lane)
1.900	16.53	999.00	16.53	999.00	0.00	413.2 (2-Lane)
1.900	24.91	999.00	24.91	999.00	0.00	622.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
	1.25	1.25	1.35	1.35



7777777_20120905cy01_01of01_FlexuralRpt.txt									
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load	
w/o impact		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	167.2	29.5	82.95	0.00	62.37	0.00	67.28	0.00	50.59
0.00									
1.010	164.0	28.9	82.08	0.00	61.71	0.00	66.58	0.00	50.06
0.00									
1.100	134.8	23.6	74.25	0.00	55.83	0.00	60.23	0.00	45.28
0.00									
1.200	102.0	17.7	65.55	0.00	49.29	0.00	53.17	0.00	39.98
0.00									
1.300	68.0	11.8	56.85	0.00	42.75	0.00	46.12	0.00	34.67
0.00									
1.400	34.0	5.9	48.15	0.00	36.20	0.00	39.06	0.00	29.37
0.00									
1.500	0.0	0.0	39.45	0.00	29.66	0.00	32.00	0.00	24.06
0.00									
1.600	-34.0	-5.9	-48.15	0.00	-36.20	0.00	-39.06	0.00	-29.37
0.00									
1.700	-68.0	-11.8	-56.85	0.00	-42.75	0.00	-46.12	0.00	-34.67
0.00									
1.800	-102.0	-17.7	-65.55	0.00	-49.29	0.00	-53.17	0.00	-39.98
0.00									
1.900	-134.8	-23.6	-74.25	0.00	-55.83	0.00	-60.23	0.00	-45.28
0.00									
2.000	-167.2	-29.5	-82.95	0.00	-62.37	0.00	-67.28	0.00	-50.59
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER

Rating Live Load: 3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	9.49	0.00	237.1 (2-Lane)
1.000	999.00	11.69	0.00	292.4 (1-Lane)
1.010	999.00	9.63	0.00	240.8 (2-Lane)
1.010	999.00	11.88	0.00	296.9 (1-Lane)
1.100	196.28	9.42	0.00	235.4 (2-Lane)
1.100	241.98	11.61	0.00	290.2 (1-Lane)
1.200	48.50	6.23	0.00	155.7 (2-Lane)
1.200	59.79	7.68	0.00	192.0 (1-Lane)
1.300	27.56	7.89	0.00	197.1 (2-Lane)
1.300	33.98	9.72	0.00	243.0 (1-Lane)
1.400	18.47	10.14	0.00	253.4 (2-Lane)
1.400	22.77	12.50	0.00	312.5 (1-Lane)
1.500	13.38	13.38	0.00	334.6 (2-Lane)
1.500	16.50	16.50	0.00	412.5 (1-Lane)
1.600	10.14	18.47	0.00	253.4 (2-Lane)
1.600	12.50	22.77	0.00	312.5 (1-Lane)
1.700	7.89	27.56	0.00	197.1 (2-Lane)
1.700	9.72	33.98	0.00	243.0 (1-Lane)
1.800	6.23	48.50	0.00	155.7 (2-Lane)
1.800	7.68	59.79	0.00	192.0 (1-Lane)
1.900	9.42	196.28	0.00	235.4 (2-Lane)
1.900	11.61	241.98	0.00	290.2 (1-Lane)
2.000	9.49	999.00	0.00	237.1 (2-Lane)
2.000	11.69	999.00	0.00	292.4 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 712

## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPE

Rating Live Load: 3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	67.20 R	0.00	50.53	0.00	44.60 R	0.00	33.54
0.00									
1.100	1934.1	340.3	607.94 R	0.00	457.09	0.00	403.47 R	0.00	303.36
0.00									
1.200	3451.8	604.9	1073.42 R	0.00	807.08	0.00	712.40 R	0.00	535.64
0.00									
1.300	4540.4	794.0	1396.45 R	0.00	1049.96	0.00	926.79 R	0.00	696.84
0.00									
1.400	5193.5	907.4	1587.71 R	0.00	1193.76	0.00	1053.72 R	0.00	792.27
0.00									
1.500	5411.2	945.2	1643.63 R	0.00	1235.81	0.00	1090.84 R	0.00	820.18
0.00									
1.600	5193.5	907.4	1587.71 R	0.00	1193.76	0.00	1053.72 R	0.00	792.27
0.00									
1.700	4540.4	794.0	1396.45 R	0.00	1049.96	0.00	926.79 R	0.00	696.84
0.00									
1.800	3451.8	604.9	1073.42 R	0.00	807.08	0.00	712.40 R	0.00	535.64
0.00									
1.900	1934.1	340.3	607.94 R	0.00	457.09	0.00	403.47 R	0.00	303.36
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER

Rating Live Load:

Rating Type: 3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER

Rating Live Load: 3

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
Service

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	813.25	999.00	189.28	999.00	0.00	999.0 (2-Lane)
1.010	999.00	999.00	285.19	999.00	0.00	999.0 (1-Lane)
1.100	67.08	999.00	16.41	999.00	0.00	410.3 (2-Lane)
1.100	101.08	999.00	24.73	999.00	0.00	618.2 (1-Lane)
1.200	34.37	999.00	10.42	999.00	0.00	260.5 (2-Lane)
1.200	51.79	999.00	15.70	999.00	0.00	392.5 (1-Lane)
1.300	21.79	999.00	6.84	999.00	0.00	171.1 (2-Lane)
1.300	32.83	999.00	10.31	999.00	0.00	257.8 (1-Lane)
1.400	16.73	999.00	5.41	999.00	0.00	135.1 (2-Lane)
1.400	25.20	999.00	8.15	999.00	0.00	203.6 (1-Lane)
1.500	15.37	999.00	5.02	999.00	0.00	125.6 (2-Lane)
1.500	23.16	999.00	7.57	999.00	0.00	189.3 (1-Lane)
1.600	16.73	999.00	5.41	999.00	0.00	135.1 (2-Lane)
1.600	25.20	999.00	8.15	999.00	0.00	203.6 (1-Lane)
1.700	21.79	999.00	6.84	999.00	0.00	171.1 (2-Lane)
1.700	32.83	999.00	10.31	999.00	0.00	257.8 (1-Lane)
1.800	34.37	999.00	10.42	999.00	0.00	260.5 (2-Lane)
1.800	51.79	999.00	15.70	999.00	0.00	392.5 (1-Lane)
1.900	67.08	999.00	16.41	999.00	0.00	410.3 (2-Lane)
1.900	101.08	999.00	24.73	999.00	0.00	618.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER

Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	241.8	46.8	134.15 R	0.00	100.86	0.00	89.03 R	0.00	66.94
1.100 0.00	2417.7	425.3	1203.02 R	0.00	904.52	0.00	798.41 R	0.00	600.31
1.200 0.00	4314.7	756.1	2098.33 R	0.00	1577.70	0.00	1392.62 R	0.00	1047.08
1.300 0.00	5675.4	992.4	2752.26 R	0.00	2069.37	0.00	1826.61 R	0.00	1373.39
1.400	6491.9	1134.2	3121.56 R	0.00	2347.03	0.00	2071.71 R	0.00	1557.67

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0.00									
1.500	6764.0	1181.5	3207.18 R	0.00	2411.41	0.00	2128.53 R	0.00	1600.40
0.00									
1.600	6491.9	1134.2	3121.56 R	0.00	2347.03	0.00	2071.71 R	0.00	1557.67
0.00									
1.700	5675.4	992.4	2752.26 R	0.00	2069.37	0.00	1826.61 R	0.00	1373.39
0.00									
1.800	4314.7	756.1	2098.33 R	0.00	1577.69	0.00	1392.62 R	0.00	1047.08
0.00									
1.900	2417.7	425.3	1203.01 R	0.00	904.52	0.00	798.41 R	0.00	600.31
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12197.1	-12197.1B	11797.6	11797.6	-20142.6	-20142.6
1.600	19743.0C	19743.0	-11820.8	-11820.8B	12117.0	12117.0	-19446.9	-19446.9
1.700	19743.0C	19743.0	-11820.8	-11820.8B	13075.2	13075.2	-18488.7	-18488.7
1.800	19743.0C	19743.0	-13010.0	-13010.0B	14672.1	14672.1	-18080.9	-18080.9
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	120.17	999.00	120.17	999.00	0.00	999.0 (2-Lane)
1.010	181.07	999.00	181.07	999.00	0.00	999.0 (1-Lane)
1.100	11.28	999.00	11.28	999.00	0.00	451.1 (2-Lane)

1.100	16.99	999.00	16.99	999.00	0.00	679.7 (1-Lane)
1.200	6.99	999.00	6.99	999.00	0.00	279.7 (2-Lane)
1.200	10.54	999.00	10.54	999.00	0.00	421.4 (1-Lane)
1.300	4.75	999.00	4.75	999.00	0.00	190.0 (2-Lane)
1.300	7.16	999.00	7.16	999.00	0.00	286.3 (1-Lane)
1.400	3.88	999.00	3.88	999.00	0.00	155.3 (2-Lane)
1.400	5.85	999.00	5.85	999.00	0.00	234.0 (1-Lane)
1.500	3.68	999.00	3.68	999.00	0.00	147.1 (2-Lane)
1.500	5.54	999.00	5.54	999.00	0.00	221.7 (1-Lane)
1.600	3.88	999.00	3.88	999.00	0.00	155.3 (2-Lane)
1.600	5.85	999.00	5.85	999.00	0.00	234.0 (1-Lane)
1.700	4.75	999.00	4.75	999.00	0.00	190.0 (2-Lane)
1.700	7.16	999.00	7.16	999.00	0.00	286.3 (1-Lane)
1.800	6.99	999.00	6.99	999.00	0.00	279.7 (2-Lane)
1.800	10.54	999.00	10.54	999.00	0.00	421.4 (1-Lane)
1.900	11.28	999.00	11.28	999.00	0.00	451.1 (2-Lane)
1.900	16.99	999.00	16.99	999.00	0.00	679.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	122.76	0.00	92.30	0.00	99.57	0.00	74.87
1.010 0.00	164.0	28.9	121.36	0.00	91.25	0.00	98.44	0.00	74.02
1.100 0.00	134.8	23.6	108.84	0.00	81.83	0.00	88.28	0.00	66.38
1.200 0.00	102.0	17.7	94.92	0.00	71.37	0.00	76.99	0.00	57.89
1.300 0.00	68.0	11.8	81.00	0.00	60.90	0.00	65.70	0.00	49.40
1.400 0.00	34.0	5.9	67.08	0.00	50.44	0.00	54.41	0.00	40.91
1.500 0.00	0.0	0.0	53.16	0.00	39.97	0.00	43.12	0.00	32.42
1.600 0.00	-34.0	-5.9	-67.08	0.00	-50.44	0.00	-54.41	0.00	-40.91
1.700 0.00	-68.0	-11.8	-81.00	0.00	-60.90	0.00	-65.70	0.00	-49.40
1.800 0.00	-102.0	-17.7	-94.92	0.00	-71.37	0.00	-76.99	0.00	-57.89
1.900 0.00	-134.8	-23.6	-108.84	0.00	-81.83	0.00	-88.28	0.00	-66.38
2.000 0.00	-167.2	-29.5	-122.76	0.00	-92.30	0.00	-99.57	0.00	-74.87

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3S2

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.41	0.00	256.4 (2-Lane)
1.000	999.00	7.90	0.00	316.1 (1-Lane)
1.010	999.00	6.51	0.00	260.6 (2-Lane)
1.010	999.00	8.03	0.00	321.3 (1-Lane)
1.100	196.28	6.42	0.00	257.0 (2-Lane)
1.100	241.98	7.92	0.00	316.8 (1-Lane)
1.200	51.50	4.30	0.00	172.1 (2-Lane)
1.200	63.49	5.30	0.00	212.2 (1-Lane)

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1.300	24.00	5.53	0.00	221.4 (2-Lane)
1.300	29.59	6.82	0.00	272.9 (1-Lane)
1.400	14.47	7.28	0.00	291.1 (2-Lane)
1.400	17.84	8.97	0.00	358.9 (1-Lane)
1.500	9.93	9.93	0.00	397.3 (2-Lane)
1.500	12.25	12.25	0.00	489.8 (1-Lane)
1.600	7.28	14.47	0.00	291.1 (2-Lane)
1.600	8.97	17.84	0.00	358.9 (1-Lane)
1.700	5.53	24.00	0.00	221.4 (2-Lane)
1.700	6.82	29.59	0.00	272.9 (1-Lane)
1.800	4.30	51.50	0.00	172.1 (2-Lane)
1.800	5.30	63.49	0.00	212.2 (1-Lane)
1.900	6.42	196.28	0.00	257.0 (2-Lane)
1.900	7.92	241.98	0.00	316.8 (1-Lane)
2.000	6.41	999.00	0.00	256.4 (2-Lane)
2.000	7.90	999.00	0.00	316.1 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPE  
Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00				(1-Lane) LL 1.00		
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	99.37 R	0.00	74.71	0.00	65.95 R	0.00	49.59
0.00									
1.100	1934.1	340.3	891.12 R	0.00	670.02	0.00	591.42 R	0.00	444.67
0.00									
1.200	3451.8	604.9	1554.32 R	0.00	1168.66	0.00	1031.57 R	0.00	775.61
0.00									
1.300	4540.4	794.0	2038.71 R	0.00	1532.87	0.00	1353.05 R	0.00	1017.33
0.00									
1.400	5193.5	907.4	2312.26 R	0.00	1738.54	0.00	1534.60 R	0.00	1153.83
0.00									
1.500	5411.2	945.2	2375.69 R	0.00	1786.23	0.00	1576.69 R	0.00	1185.48
0.00									
1.600	5193.5	907.4	2312.26 R	0.00	1738.54	0.00	1534.60 R	0.00	1153.83
0.00									
1.700	4540.4	794.0	2038.71 R	0.00	1532.87	0.00	1353.05 R	0.00	1017.33
0.00									
1.800	3451.8	604.9	1554.32 R	0.00	1168.66	0.00	1031.57 R	0.00	775.61
0.00									
1.900	1934.1	340.3	891.12 R	0.00	670.02	0.00	591.42 R	0.00	444.67
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT



Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER

Rating Live Load:

Rating Type: 3S2

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER

Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating Factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	550.01	999.00	128.01	999.00	0.00	999.0 (2-Lane)
1.010	828.73	999.00	192.88	999.00	0.00	999.0 (1-Lane)
1.100	45.77	999.00	11.19	999.00	0.00	447.8 (2-Lane)
1.100	68.96	999.00	16.87	999.00	0.00	674.8 (1-Lane)
1.200	23.74	999.00	7.20	999.00	0.00	287.8 (2-Lane)
1.200	35.76	999.00	10.84	999.00	0.00	433.7 (1-Lane)
1.300	14.93	999.00	4.69	999.00	0.00	187.5 (2-Lane)
1.300	22.49	999.00	7.06	999.00	0.00	282.6 (1-Lane)
1.400	11.48	999.00	3.71	999.00	0.00	148.5 (2-Lane)
1.400	17.30	999.00	5.59	999.00	0.00	223.7 (1-Lane)
1.500	10.63	999.00	3.48	999.00	0.00	139.0 (2-Lane)
1.500	16.02	999.00	5.24	999.00	0.00	209.5 (1-Lane)
1.600	11.48	999.00	3.71	999.00	0.00	148.5 (2-Lane)
1.600	17.30	999.00	5.59	999.00	0.00	223.7 (1-Lane)

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1.700	14.93	999.00	4.69	999.00	0.00	187.5 (2-Lane)
1.700	22.49	999.00	7.06	999.00	0.00	282.6 (1-Lane)
1.800	23.74	999.00	7.20	999.00	0.00	287.8 (2-Lane)
1.800	35.76	999.00	10.84	999.00	0.00	433.7 (1-Lane)
1.900	45.77	999.00	11.19	999.00	0.00	447.8 (2-Lane)
1.900	68.96	999.00	16.87	999.00	0.00	674.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3-3

Gamma	DC	DW	(2-Lane)				(1-Lane)		
	1.25	1.25	LL		LL		LL		
			1.35		1.35		1.35		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	129.34 R	0.00	97.25	0.00	85.84 R	0.00	64.54
0.00									
1.100	2417.7	425.3	1154.97 R	0.00	868.40	0.00	766.53 R	0.00	576.34
0.00									
1.200	4314.7	756.1	2011.85 R	0.00	1512.67	0.00	1335.22 R	0.00	1003.92
0.00									
1.300	5675.4	992.4	2589.86 R	0.00	1947.26	0.00	1718.83 R	0.00	1292.35
0.00									
1.400	6491.9	1134.2	2937.05 R	0.00	2208.31	0.00	1949.26 R	0.00	1465.61
0.00									
1.500	6764.0	1181.5	3053.42 R	0.00	2295.81	0.00	2026.49 R	0.00	1523.67
0.00									
1.600	6491.9	1134.2	2937.05 R	0.00	2208.31	0.00	1949.25 R	0.00	1465.60
0.00									
1.700	5675.4	992.4	2589.86 R	0.00	1947.26	0.00	1718.83 R	0.00	1292.35
0.00									
1.800	4314.7	756.1	2011.85 R	0.00	1512.67	0.00	1335.22 R	0.00	1003.92
0.00									
1.900	2417.7	425.3	1154.97 R	0.00	868.40	0.00	766.53 R	0.00	576.33
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3-3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12211.8	-12211.8B	11797.6	11797.6	-20157.2	-20157.2
1.600	19743.0C	19743.0	-11835.2	-11835.2B	12117.0	12117.0	-19461.2	-19461.2
1.700	19743.0C	19743.0	-11835.2	-11835.2B	13075.2	13075.2	-18503.0	-18503.0
1.800	19743.0C	19743.0	-12993.4	-12993.4B	14672.1	14672.1	-18064.3	-18064.3
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3-3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	124.64	999.00	124.64	999.00	0.00	999.0 (2-Lane)
1.010	187.80	999.00	187.80	999.00	0.00	999.0 (1-Lane)
1.100	11.75	999.00	11.75	999.00	0.00	469.8 (2-Lane)
1.100	17.70	999.00	17.70	999.00	0.00	707.9 (1-Lane)
1.200	7.29	999.00	7.29	999.00	0.00	291.7 (2-Lane)
1.200	10.99	999.00	10.99	999.00	0.00	439.5 (1-Lane)
1.300	5.05	999.00	5.05	999.00	0.00	201.9 (2-Lane)
1.300	7.61	999.00	7.61	999.00	0.00	304.3 (1-Lane)
1.400	4.13	999.00	4.13	999.00	0.00	165.0 (2-Lane)
1.400	6.22	999.00	6.22	999.00	0.00	248.6 (1-Lane)
1.500	3.86	999.00	3.86	999.00	0.00	154.5 (2-Lane)
1.500	5.82	999.00	5.82	999.00	0.00	232.9 (1-Lane)
1.600	4.13	999.00	4.13	999.00	0.00	165.0 (2-Lane)
1.600	6.22	999.00	6.22	999.00	0.00	248.6 (1-Lane)
1.700	5.05	999.00	5.05	999.00	0.00	201.9 (2-Lane)
1.700	7.61	999.00	7.61	999.00	0.00	304.3 (1-Lane)
1.800	7.29	999.00	7.29	999.00	0.00	291.7 (2-Lane)
1.800	10.99	999.00	10.99	999.00	0.00	439.5 (1-Lane)
1.900	11.75	999.00	11.75	999.00	0.00	469.8 (2-Lane)
1.900	17.70	999.00	17.70	999.00	0.00	707.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	118.41	0.00	89.03	0.00	96.05	0.00	72.22
1.010 0.00	164.0	28.9	117.02	0.00	87.98	0.00	94.92	0.00	71.37
1.100 0.00	134.8	23.6	104.49	0.00	78.56	0.00	84.76	0.00	63.73
1.200 0.00	102.0	17.7	90.57	0.00	68.10	0.00	73.47	0.00	55.24
1.300 0.00	68.0	11.8	76.65	0.00	57.63	0.00	62.18	0.00	46.75
1.400 0.00	34.0	5.9	62.73	0.00	47.17	0.00	50.89	0.00	38.26
1.500 0.00	0.0	0.0	48.82	0.00	36.70	0.00	39.60	0.00	29.77
1.600 0.00	-34.0	-5.9	-62.73	0.00	-47.17	0.00	-50.89	0.00	-38.26
1.700 0.00	-68.0	-11.8	-76.65	0.00	-57.63	0.00	-62.18	0.00	-46.75
1.800 0.00	-102.0	-17.7	-90.57	0.00	-68.10	0.00	-73.47	0.00	-55.24
1.900 0.00	-134.8	-23.6	-104.49	0.00	-78.56	0.00	-84.76	0.00	-63.73
2.000 0.00	-167.2	-29.5	-118.41	0.00	-89.03	0.00	-96.05	0.00	-72.22

## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)

1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: 3-3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.64	0.00	265.8 (2-Lane)
1.000	999.00	8.19	0.00	327.7 (1-Lane)
1.010	999.00	6.76	0.00	270.3 (2-Lane)
1.010	999.00	8.33	0.00	333.2 (1-Lane)
1.100	238.34	6.69	0.00	267.7 (2-Lane)
1.100	293.83	8.25	0.00	330.0 (1-Lane)
1.200	57.71	4.51	0.00	180.3 (2-Lane)
1.200	71.15	5.56	0.00	222.3 (1-Lane)
1.300	27.94	5.85	0.00	233.9 (2-Lane)
1.300	34.44	7.21	0.00	288.4 (1-Lane)
1.400	16.27	7.78	0.00	311.3 (2-Lane)
1.400	20.07	9.59	0.00	383.7 (1-Lane)
1.500	10.82	10.82	0.00	432.7 (2-Lane)
1.500	13.34	13.34	0.00	533.4 (1-Lane)
1.600	7.78	16.27	0.00	311.3 (2-Lane)
1.600	9.59	20.07	0.00	383.7 (1-Lane)
1.700	5.85	27.94	0.00	233.9 (2-Lane)
1.700	7.21	34.44	0.00	288.4 (1-Lane)
1.800	4.51	57.71	0.00	180.3 (2-Lane)
1.800	5.56	71.15	0.00	222.3 (1-Lane)
1.900	6.69	238.34	0.00	267.7 (2-Lane)
1.900	8.25	293.83	0.00	330.0 (1-Lane)
2.000	6.64	999.00	0.00	265.8 (2-Lane)
2.000	8.19	999.00	0.00	327.7 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPE  
Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	95.81 R	0.00	72.04	0.00
0.00						
1.100	1934.1	340.3	855.53 R	0.00	643.26	0.00
0.00						
1.200	3451.8	604.9	1490.26 R	0.00	1120.49	0.00
0.00						
1.300	4540.4	794.0	1918.42 R	0.00	1442.42	0.00
0.00						
1.400	5193.5	907.4	2175.59 R	0.00	1635.79	0.00
0.00						
1.500	5411.2	945.2	2261.80 R	0.00	1700.60	0.00
0.00						
1.600	5193.5	907.4	2175.59 R	0.00	1635.79	0.00
0.00						
1.700	4540.4	794.0	1918.42 R	0.00	1442.42	0.00
0.00						
1.800	3451.8	604.9	1490.26 R	0.00	1120.49	0.00
0.00						
1.900	1934.1	340.3	855.53 R	0.00	643.26	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER  
Rating Live Load:

Rating Type: 3-3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER  
Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	570.44	999.00	132.76	999.00	0.00	999.0 (2-Lane)
1.010	859.52	999.00	200.04	999.00	0.00	999.0 (1-Lane)
1.100	47.67	999.00	11.66	999.00	0.00	466.4 (2-Lane)
1.100	71.83	999.00	17.57	999.00	0.00	702.8 (1-Lane)
1.200	24.76	999.00	7.51	999.00	0.00	300.2 (2-Lane)
1.200	37.30	999.00	11.31	999.00	0.00	452.3 (1-Lane)
1.300	15.86	999.00	4.98	999.00	0.00	199.3 (2-Lane)
1.300	23.90	999.00	7.51	999.00	0.00	300.3 (1-Lane)
1.400	12.21	999.00	3.94	999.00	0.00	157.8 (2-Lane)
1.400	18.39	999.00	5.94	999.00	0.00	237.8 (1-Lane)
1.500	11.17	999.00	3.65	999.00	0.00	146.0 (2-Lane)
1.500	16.83	999.00	5.50	999.00	0.00	220.0 (1-Lane)
1.600	12.21	999.00	3.94	999.00	0.00	157.8 (2-Lane)
1.600	18.39	999.00	5.94	999.00	0.00	237.8 (1-Lane)
1.700	15.86	999.00	4.98	999.00	0.00	199.3 (2-Lane)
1.700	23.90	999.00	7.51	999.00	0.00	300.3 (1-Lane)
1.800	24.76	999.00	7.51	999.00	0.00	300.2 (2-Lane)
1.800	37.30	999.00	11.31	999.00	0.00	452.3 (1-Lane)
1.900	47.67	999.00	11.66	999.00	0.00	466.4 (2-Lane)
1.900	71.83	999.00	17.57	999.00	0.00	702.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU4

Gamma DC DW (2-Lane) LL (1-Lane) LL

1.25

1.25

1.35

Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	98.63 R	0.00	74.16	0.00	65.46 R	0.00	49.22
0.00									
1.100	2417.7	425.3	892.83 R	0.00	671.30	0.00	592.55 R	0.00	445.53
0.00									
1.200	4314.7	756.1	1577.96 R	0.00	1186.44	0.00	1047.26 R	0.00	787.41
0.00									
1.300	5675.4	992.4	2055.40 R	0.00	1545.41	0.00	1364.12 R	0.00	1025.65
0.00									
1.400	6491.9	1134.2	2347.24 R	0.00	1764.84	0.00	1557.81 R	0.00	1171.29
0.00									
1.500	6764.0	1181.5	2435.23 R	0.00	1831.00	0.00	1616.21 R	0.00	1215.19
0.00									
1.600	6491.9	1134.2	2347.24 R	0.00	1764.84	0.00	1557.81 R	0.00	1171.29
0.00									
1.700	5675.4	992.4	2055.40 R	0.00	1545.41	0.00	1364.12 R	0.00	1025.65
0.00									
1.800	4314.7	756.1	1577.96 R	0.00	1186.44	0.00	1047.26 R	0.00	787.41
0.00									
1.900	2417.7	425.3	892.83 R	0.00	671.30	0.00	592.55 R	0.00	445.53
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU4

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12218.1	-12218.1B	11797.6	11797.6	-20163.6	-20163.6
1.600	19743.0C	19743.0	-11835.4	-11835.4B	12117.0	12117.0	-19461.5	-19461.5
1.700	19743.0C	19743.0	-11835.4	-11835.4B	13075.2	13075.2	-18503.3	-18503.3
1.800	19743.0C	19743.0	-13014.8	-13014.8B	14672.1	14672.1	-18085.7	-18085.7
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU4



Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	163.45	999.00	163.45	999.00	0.00	999.0 (2-Lane)
1.010	246.28	999.00	246.28	999.00	0.00	999.0 (1-Lane)
1.100	15.19	999.00	15.19	999.00	0.00	410.3 (2-Lane)
1.100	22.90	999.00	22.90	999.00	0.00	618.2 (1-Lane)
1.200	9.30	999.00	9.30	999.00	0.00	251.1 (2-Lane)
1.200	14.01	999.00	14.01	999.00	0.00	378.3 (1-Lane)
1.300	6.36	999.00	6.36	999.00	0.00	171.8 (2-Lane)
1.300	9.59	999.00	9.59	999.00	0.00	258.8 (1-Lane)
1.400	5.16	999.00	5.16	999.00	0.00	139.4 (2-Lane)
1.400	7.78	999.00	7.78	999.00	0.00	210.0 (1-Lane)
1.500	4.84	999.00	4.84	999.00	0.00	130.8 (2-Lane)
1.500	7.30	999.00	7.30	999.00	0.00	197.1 (1-Lane)
1.600	5.16	999.00	5.16	999.00	0.00	139.4 (2-Lane)
1.600	7.78	999.00	7.78	999.00	0.00	210.0 (1-Lane)
1.700	6.36	999.00	6.36	999.00	0.00	171.8 (2-Lane)
1.700	9.59	999.00	9.59	999.00	0.00	258.8 (1-Lane)
1.800	9.30	999.00	9.30	999.00	0.00	251.1 (2-Lane)
1.800	14.01	999.00	14.01	999.00	0.00	378.3 (1-Lane)
1.900	15.19	999.00	15.19	999.00	0.00	410.3 (2-Lane)
1.900	22.90	999.00	22.90	999.00	0.00	618.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU4

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	LL	LL	LL
	1.25	1.25	1.35	1.35		
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load
w/o impact		Dead Load	Truck	Lane	Truck	Truck
Lane						
1.000	167.2	29.5	90.17	0.00	67.80	73.14
0.00					0.00	0.00
1.010	164.0	28.9	89.23	0.00	67.09	72.38
0.00					0.00	0.00
1.100	134.8	23.6	80.77	0.00	60.73	65.52
0.00					0.00	0.00

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1.200	102.0	17.7	71.38	0.00	53.67	0.00	57.90	0.00	43.53
0.00									
1.300	68.0	11.8	61.98	0.00	46.60	0.00	50.28	0.00	37.80
0.00									
1.400	34.0	5.9	52.59	0.00	39.54	0.00	42.66	0.00	32.07
0.00									
1.500	0.0	0.0	43.19	0.00	32.48	0.00	35.04	0.00	26.34
0.00									
1.600	-34.0	-5.9	-52.59	0.00	-39.54	0.00	-42.66	0.00	-32.07
0.00									
1.700	-68.0	-11.8	-61.98	0.00	-46.60	0.00	-50.28	0.00	-37.80
0.00									
1.800	-102.0	-17.7	-71.38	0.00	-53.67	0.00	-57.90	0.00	-43.53
0.00									
1.900	-134.8	-23.6	-80.77	0.00	-60.73	0.00	-65.52	0.00	-49.26
0.00									
2.000	-167.2	-29.5	-90.17	0.00	-67.80	0.00	-73.14	0.00	-54.99
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 734

STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER

Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 735

STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER

Rating Live Load: SU4

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	8.73	0.00	235.6 (2-Lane)
1.000	999.00	10.76	0.00	290.5 (1-Lane)
1.010	999.00	8.86	0.00	239.2 (2-Lane)
1.010	999.00	10.92	0.00	294.9 (1-Lane)
1.100	173.01	8.66	0.00	233.7 (2-Lane)
1.100	213.29	10.67	0.00	288.1 (1-Lane)
1.200	43.16	5.72	0.00	154.5 (2-Lane)
1.200	53.21	7.05	0.00	190.4 (1-Lane)
1.300	24.91	7.23	0.00	195.3 (2-Lane)
1.300	30.71	8.92	0.00	240.7 (1-Lane)
1.400	16.80	9.28	0.00	250.6 (2-Lane)
1.400	20.72	11.44	0.00	309.0 (1-Lane)
1.500	12.23	12.23	0.00	330.1 (2-Lane)
1.500	15.07	15.07	0.00	406.9 (1-Lane)
1.600	9.28	16.80	0.00	250.6 (2-Lane)
1.600	11.44	20.72	0.00	309.0 (1-Lane)
1.700	7.23	24.91	0.00	195.3 (2-Lane)
1.700	8.92	30.71	0.00	240.7 (1-Lane)
1.800	5.72	43.16	0.00	154.5 (2-Lane)
1.800	7.05	53.21	0.00	190.4 (1-Lane)
1.900	8.66	173.01	0.00	233.7 (2-Lane)
1.900	10.67	213.29	0.00	288.1 (1-Lane)
2.000	8.73	999.00	0.00	235.6 (2-Lane)
2.000	10.76	999.00	0.00	290.5 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPE  
Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	193.4	37.4	73.06 R	0.00	54.93	48.49 R
0.00						
1.100	1934.1	340.3	661.35 R	0.00	497.26	438.93 R
0.00						
1.200	3451.8	604.9	1168.86 R	0.00	878.84	775.74 R
0.00						
1.300	4540.4	794.0	1522.52 R	0.00	1144.75	1010.46 R
0.00						

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.400	5193.5	907.4	1738.70 R	0.00	1307.29	0.00	1153.93 R	0.00	867.62
0.00									
1.500	5411.2	945.2	1803.88 R	0.00	1356.30	0.00	1197.19 R	0.00	900.14
0.00									
1.600	5193.5	907.4	1738.70 R	0.00	1307.29	0.00	1153.93 R	0.00	867.62
0.00									
1.700	4540.4	794.0	1522.52 R	0.00	1144.75	0.00	1010.46 R	0.00	759.74
0.00									
1.800	3451.8	604.9	1168.86 R	0.00	878.84	0.00	775.74 R	0.00	583.27
0.00									
1.900	1934.1	340.3	661.35 R	0.00	497.26	0.00	438.93 R	0.00	330.02
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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#### SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER

Rating Live Load:

Rating Type: SU4

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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#### SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER

Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	748.08	999.00	174.11	999.00	0.00	999.0 (2-Lane)

1.010	999.00	999.00	262.34	999.00	0.00	999.0 (1-Lane)
1.100	61.67	999.00	15.09	999.00	0.00	407.3 (2-Lane)
1.100	92.92	999.00	22.73	999.00	0.00	613.7 (1-Lane)
1.200	31.56	999.00	9.57	999.00	0.00	258.3 (2-Lane)
1.200	47.56	999.00	14.42	999.00	0.00	389.3 (1-Lane)
1.300	19.99	999.00	6.28	999.00	0.00	169.5 (2-Lane)
1.300	30.12	999.00	9.46	999.00	0.00	255.4 (1-Lane)
1.400	15.27	999.00	4.94	999.00	0.00	133.3 (2-Lane)
1.400	23.01	999.00	7.44	999.00	0.00	200.8 (1-Lane)
1.500	14.01	999.00	4.58	999.00	0.00	123.6 (2-Lane)
1.500	21.10	999.00	6.90	999.00	0.00	186.2 (1-Lane)
1.600	15.27	999.00	4.94	999.00	0.00	133.3 (2-Lane)
1.600	23.01	999.00	7.44	999.00	0.00	200.8 (1-Lane)
1.700	19.99	999.00	6.28	999.00	0.00	169.5 (2-Lane)
1.700	30.12	999.00	9.46	999.00	0.00	255.4 (1-Lane)
1.800	31.56	999.00	9.57	999.00	0.00	258.3 (2-Lane)
1.800	47.56	999.00	14.42	999.00	0.00	389.3 (1-Lane)
1.900	61.67	999.00	15.09	999.00	0.00	407.3 (2-Lane)
1.900	92.92	999.00	22.73	999.00	0.00	613.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU5

Gamma	DC		(2-Lane)				(1-Lane)		
	1.25	DW 1.25	LL 1.35		LL 1.35		LL 1.35		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	112.13 R	0.00	84.31	0.00	74.42 R	0.00	55.95
0.00									
1.100	2417.7	425.3	1013.99 R	0.00	762.40	0.00	672.96 R	0.00	505.99
0.00									
1.200	4314.7	756.1	1789.52 R	0.00	1345.51	0.00	1187.67 R	0.00	892.98
0.00									
1.300	5675.4	992.4	2334.27 R	0.00	1755.09	0.00	1549.20 R	0.00	1164.82
0.00									
1.400	6491.9	1134.2	2662.66 R	0.00	2002.00	0.00	1767.15 R	0.00	1328.68
0.00									
1.500	6764.0	1181.5	2752.59 R	0.00	2069.61	0.00	1826.83 R	0.00	1373.56
0.00									
1.600	6491.9	1134.2	2662.66 R	0.00	2002.00	0.00	1767.15 R	0.00	1328.68
0.00									
1.700	5675.4	992.4	2334.27 R	0.00	1755.09	0.00	1549.20 R	0.00	1164.82
0.00									
1.800	4314.7	756.1	1789.52 R	0.00	1345.51	0.00	1187.67 R	0.00	892.98
0.00									
1.900	2417.7	425.3	1013.99 R	0.00	762.40	0.00	672.96 R	0.00	505.99
0.00									

2.000 0.0 0.0 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt 0.00 R 0.00 0.00 0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12212.5	-12212.5B	11797.6	11797.6	-20158.0	-20158.0
1.600	19743.0C	19743.0	-11830.8	-11830.8B	12117.0	12117.0	-19456.9	-19456.9
1.700	19743.0C	19743.0	-11830.8	-11830.8B	13075.2	13075.2	-18498.7	-18498.7
1.800	19743.0C	19743.0	-13013.8	-13013.8B	14672.1	14672.1	-18084.7	-18084.7
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	143.77	999.00	143.77	999.00	0.00	999.0 (2-Lane)
1.010	216.62	999.00	216.62	999.00	0.00	999.0 (1-Lane)
1.100	13.38	999.00	13.38	999.00	0.00	414.8 (2-Lane)
1.100	20.16	999.00	20.16	999.00	0.00	624.9 (1-Lane)
1.200	8.20	999.00	8.20	999.00	0.00	254.2 (2-Lane)
1.200	12.35	999.00	12.35	999.00	0.00	383.0 (1-Lane)
1.300	5.60	999.00	5.60	999.00	0.00	173.6 (2-Lane)
1.300	8.44	999.00	8.44	999.00	0.00	261.6 (1-Lane)
1.400	4.55	999.00	4.55	999.00	0.00	141.1 (2-Lane)
1.400	6.86	999.00	6.86	999.00	0.00	212.6 (1-Lane)

1.500	4.29	999.00	4.29	999.00	0.00	132.9 (2-Lane)
1.500	6.46	999.00	6.46	999.00	0.00	200.2 (1-Lane)
1.600	4.55	999.00	4.55	999.00	0.00	141.1 (2-Lane)
1.600	6.86	999.00	6.86	999.00	0.00	212.6 (1-Lane)
1.700	5.60	999.00	5.60	999.00	0.00	173.6 (2-Lane)
1.700	8.44	999.00	8.44	999.00	0.00	261.6 (1-Lane)
1.800	8.20	999.00	8.20	999.00	0.00	254.2 (2-Lane)
1.800	12.35	999.00	12.35	999.00	0.00	383.0 (1-Lane)
1.900	13.38	999.00	13.38	999.00	0.00	414.8 (2-Lane)
1.900	20.16	999.00	20.16	999.00	0.00	624.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	102.52	0.00	77.09	0.00	83.16	0.00	62.53
1.010 0.00	164.0	28.9	101.44	0.00	76.27	0.00	82.29	0.00	61.87
1.100 0.00	134.8	23.6	91.74	0.00	68.97	0.00	74.41	0.00	55.95
1.200 0.00	102.0	17.7	80.95	0.00	60.86	0.00	65.66	0.00	49.37
1.300 0.00	68.0	11.8	70.16	0.00	52.75	0.00	56.91	0.00	42.79
1.400 0.00	34.0	5.9	59.38	0.00	44.64	0.00	48.16	0.00	36.21
1.500 0.00	0.0	0.0	48.59	0.00	36.53	0.00	39.41	0.00	29.63
1.600 0.00	-34.0	-5.9	-59.38	0.00	-44.64	0.00	-48.16	0.00	-36.21
1.700 0.00	-68.0	-11.8	-70.16	0.00	-52.75	0.00	-56.91	0.00	-42.79
1.800 0.00	-102.0	-17.7	-80.95	0.00	-60.86	0.00	-65.66	0.00	-49.37
1.900 0.00	-134.8	-23.6	-91.74	0.00	-68.97	0.00	-74.41	0.00	-55.95
2.000 0.00	-167.2	-29.5	-102.52	0.00	-77.09	0.00	-83.16	0.00	-62.53

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
 Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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# STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
 Rating Live Load: SU5

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.68	0.00	237.9 (2-Lane)
1.000	999.00	9.46	0.00	293.3 (1-Lane)
1.010	999.00	7.79	0.00	241.6 (2-Lane)
1.010	999.00	9.61	0.00	297.9 (1-Lane)
1.100	163.31	7.62	0.00	236.3 (2-Lane)
1.100	201.34	9.40	0.00	291.3 (1-Lane)
1.200	39.92	5.05	0.00	156.4 (2-Lane)
1.200	49.21	6.22	0.00	192.8 (1-Lane)
1.300	22.50	6.39	0.00	198.1 (2-Lane)
1.300	27.74	7.88	0.00	244.2 (1-Lane)
1.400	15.02	8.22	0.00	254.9 (2-Lane)
1.400	18.52	10.14	0.00	314.2 (1-Lane)
1.500	10.87	10.87	0.00	336.9 (2-Lane)
1.500	13.40	13.40	0.00	415.3 (1-Lane)
1.600	8.22	15.02	0.00	254.9 (2-Lane)



1.600	10.14	18.52	0.00	314.2 (1-Lane)
1.700	6.39	22.50	0.00	198.1 (2-Lane)
1.700	7.88	27.74	0.00	244.2 (1-Lane)
1.800	5.05	39.92	0.00	156.4 (2-Lane)
1.800	6.22	49.21	0.00	192.8 (1-Lane)
1.900	7.62	163.31	0.00	236.3 (2-Lane)
1.900	9.40	201.34	0.00	291.3 (1-Lane)
2.000	7.68	999.00	0.00	237.9 (2-Lane)
2.000	9.46	999.00	0.00	293.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPE  
Rating Live Load: SU5

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	83.06 R	0.00	62.45	0.00
0.00						
1.100	1934.1	340.3	751.11 R	0.00	564.74	0.00
0.00						
1.200	3451.8	604.9	1325.57 R	0.00	996.67	0.00
0.00						
1.300	4540.4	794.0	1729.09 R	0.00	1300.07	0.00
0.00						
1.400	5193.5	907.4	1972.34 R	0.00	1482.96	0.00
0.00						
1.500	5411.2	945.2	2038.95 R	0.00	1533.05	0.00
0.00						
1.600	5193.5	907.4	1972.34 R	0.00	1482.96	0.00
0.00						
1.700	4540.4	794.0	1729.09 R	0.00	1300.07	0.00
0.00						
1.800	3451.8	604.9	1325.57 R	0.00	996.67	0.00
0.00						
1.900	1934.1	340.3	751.11 R	0.00	564.74	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 744

## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU5

Rating Live Load:  
Span

Service Resistance

Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
-------------------------	---------------------------	-------------------------	---------------------------

Available Resistance for LL+I			
Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.

1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER  
Rating Live Load: SU5

## Service

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	658.01	999.00	153.14	999.00	0.00	999.0 (2-Lane)
1.010	999.00	999.00	230.75	999.00	0.00	999.0 (1-Lane)
1.100	54.30	999.00	13.28	999.00	0.00	411.8 (2-Lane)
1.100	81.81	999.00	20.01	999.00	0.00	620.4 (1-Lane)
1.200	27.83	999.00	8.44	999.00	0.00	261.6 (2-Lane)
1.200	41.94	999.00	12.71	999.00	0.00	394.1 (1-Lane)
1.300	17.60	999.00	5.53	999.00	0.00	171.4 (2-Lane)
1.300	26.52	999.00	8.33	999.00	0.00	258.2 (1-Lane)
1.400	13.46	999.00	4.35	999.00	0.00	134.9 (2-Lane)
1.400	20.29	999.00	6.56	999.00	0.00	203.3 (1-Lane)
1.500	12.39	999.00	4.05	999.00	0.00	125.6 (2-Lane)
1.500	18.67	999.00	6.10	999.00	0.00	189.2 (1-Lane)
1.600	13.46	999.00	4.35	999.00	0.00	134.9 (2-Lane)
1.600	20.29	999.00	6.56	999.00	0.00	203.3 (1-Lane)
1.700	17.60	999.00	5.53	999.00	0.00	171.4 (2-Lane)
1.700	26.52	999.00	8.33	999.00	0.00	258.2 (1-Lane)
1.800	27.83	999.00	8.44	999.00	0.00	261.6 (2-Lane)
1.800	41.94	999.00	12.71	999.00	0.00	394.1 (1-Lane)
1.900	54.30	999.00	13.28	999.00	0.00	411.8 (2-Lane)
1.900	81.81	999.00	20.01	999.00	0.00	620.4 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)

2.000 999.00 999.00 999.00 999.00 0.00 999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	241.8	46.8	123.59 R	0.00	92.92	0.00	82.02 R	0.00	61.67
1.100 0.00	2417.7	425.3	1115.58 R	0.00	838.78	0.00	740.38 R	0.00	556.68
1.200 0.00	4314.7	756.1	1992.19 R	0.00	1497.89	0.00	1322.17 R	0.00	994.11
1.300 0.00	5675.4	992.4	2606.53 R	0.00	1959.80	0.00	1729.90 R	0.00	1300.67
1.400 0.00	6491.9	1134.2	2967.02 R	0.00	2230.84	0.00	1969.14 R	0.00	1480.56
1.500 0.00	6764.0	1181.5	3080.14 R	0.00	2315.89	0.00	2044.22 R	0.00	1537.00
1.600 0.00	6491.9	1134.2	2967.02 R	0.00	2230.84	0.00	1969.14 R	0.00	1480.56
1.700 0.00	5675.4	992.4	2606.53 R	0.00	1959.80	0.00	1729.90 R	0.00	1300.67
1.800 0.00	4314.7	756.1	1992.19 R	0.00	1497.89	0.00	1322.17 R	0.00	994.11
1.900 0.00	2417.7	425.3	1115.57 R	0.00	838.78	0.00	740.38 R	0.00	556.68
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU6

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6

1.500	19743.0C	19743.0	-12214.2	-12214.2B	11797.6	11797.6	-20159.7	-20159.7
1.600	19743.0C	19743.0	-11834.4	-11834.4B	12117.0	12117.0	-19460.5	-19460.5
1.700	19743.0C	19743.0	-11834.4	-11834.4B	13075.2	13075.2	-18502.3	-18502.3
1.800	19743.0C	19743.0	-13013.0	-13013.0B	14672.1	14672.1	-18083.9	-18083.9
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER

Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	130.44	999.00	130.44	999.00	0.00	999.0 (2-Lane)
1.010	196.54	999.00	196.54	999.00	0.00	999.0 (1-Lane)
1.100	12.16	999.00	12.16	999.00	0.00	422.6 (2-Lane)
1.100	18.32	999.00	18.32	999.00	0.00	636.7 (1-Lane)
1.200	7.36	999.00	7.36	999.00	0.00	255.9 (2-Lane)
1.200	11.10	999.00	11.10	999.00	0.00	385.6 (1-Lane)
1.300	5.02	999.00	5.02	999.00	0.00	174.3 (2-Lane)
1.300	7.56	999.00	7.56	999.00	0.00	262.7 (1-Lane)
1.400	4.08	999.00	4.08	999.00	0.00	141.9 (2-Lane)
1.400	6.15	999.00	6.15	999.00	0.00	213.8 (1-Lane)
1.500	3.83	999.00	3.83	999.00	0.00	133.1 (2-Lane)
1.500	5.77	999.00	5.77	999.00	0.00	200.5 (1-Lane)
1.600	4.08	999.00	4.08	999.00	0.00	141.9 (2-Lane)
1.600	6.15	999.00	6.15	999.00	0.00	213.8 (1-Lane)
1.700	5.02	999.00	5.02	999.00	0.00	174.3 (2-Lane)
1.700	7.56	999.00	7.56	999.00	0.00	262.7 (1-Lane)
1.800	7.36	999.00	7.36	999.00	0.00	255.9 (2-Lane)
1.800	11.10	999.00	11.10	999.00	0.00	385.6 (1-Lane)
1.900	12.16	999.00	12.16	999.00	0.00	422.6 (2-Lane)
1.900	18.32	999.00	18.32	999.00	0.00	636.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type:  
Rating Live Load:

I-OPER  
SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	113.02	0.00	84.98	68.93
0.00						
1.010	164.0	28.9	111.81	0.00	84.07	68.19
0.00						
1.100	134.8	23.6	100.93	0.00	75.88	61.55
0.00						
1.200	102.0	17.7	88.83	0.00	66.79	54.18
0.00						
1.300	68.0	11.8	76.74	0.00	57.70	46.80
0.00						
1.400	34.0	5.9	64.65	0.00	48.61	39.43
0.00						
1.500	0.0	0.0	52.56	0.00	39.52	32.05
0.00						
1.600	-34.0	-5.9	-64.65	0.00	-48.61	-39.43
0.00						
1.700	-68.0	-11.8	-76.74	0.00	-57.70	-46.80
0.00						
1.800	-102.0	-17.7	-88.83	0.00	-66.79	-54.18
0.00						
1.900	-134.8	-23.6	-100.93	0.00	-75.88	-61.55
0.00						
2.000	-167.2	-29.5	-113.02	0.00	-84.98	-68.93
0.00						

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU6

Span	Shear Resistance vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)

1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER

Rating Live Load: SU6

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.96	0.00	241.9 (2-Lane)
1.000	999.00	8.58	0.00	298.3 (1-Lane)
1.010	999.00	7.07	0.00	245.7 (2-Lane)
1.010	999.00	8.72	0.00	302.9 (1-Lane)
1.100	186.78	6.93	0.00	240.7 (2-Lane)
1.100	230.26	8.54	0.00	296.8 (1-Lane)
1.200	39.78	4.60	0.00	159.7 (2-Lane)
1.200	49.04	5.67	0.00	196.9 (1-Lane)
1.300	21.42	5.84	0.00	203.0 (2-Lane)
1.300	26.41	7.20	0.00	250.2 (1-Lane)
1.400	14.03	7.55	0.00	262.4 (2-Lane)
1.400	17.30	9.31	0.00	323.5 (1-Lane)
1.500	10.05	10.05	0.00	349.1 (2-Lane)
1.500	12.39	12.39	0.00	430.4 (1-Lane)
1.600	7.55	14.03	0.00	262.4 (2-Lane)
1.600	9.31	17.30	0.00	323.5 (1-Lane)
1.700	5.84	21.42	0.00	203.0 (2-Lane)
1.700	7.20	26.41	0.00	250.2 (1-Lane)
1.800	4.60	39.78	0.00	159.7 (2-Lane)
1.800	5.67	49.04	0.00	196.9 (1-Lane)
1.900	6.93	186.78	0.00	240.7 (2-Lane)
1.900	8.54	230.26	0.00	296.8 (1-Lane)
2.000	6.96	999.00	0.00	241.9 (2-Lane)
2.000	8.58	999.00	0.00	298.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPE

Rating Live Load: SU6

(2-Lane)

(1-Lane)

Gamma	DC 1.00	DW 1.00	LL 1.00				LL 1.00			
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	91.55 R	0.00	68.83	0.00	60.76 R	0.00	45.68	
0.00										
1.100	1934.1	340.3	826.35 R	0.00	621.32	0.00	548.43 R	0.00	412.35	
0.00										
1.200	3451.8	604.9	1475.69 R	0.00	1109.54	0.00	979.38 R	0.00	736.38	
0.00										
1.300	4540.4	794.0	1930.77 R	0.00	1451.70	0.00	1281.40 R	0.00	963.46	
0.00										
1.400	5193.5	907.4	2197.79 R	0.00	1652.48	0.00	1458.62 R	0.00	1096.71	
0.00										
1.500	5411.2	945.2	2281.58 R	0.00	1715.47	0.00	1514.23 R	0.00	1138.52	
0.00										
1.600	5193.5	907.4	2197.79 R	0.00	1652.48	0.00	1458.62 R	0.00	1096.71	
0.00										
1.700	4540.4	794.0	1930.77 R	0.00	1451.70	0.00	1281.40 R	0.00	963.46	
0.00										
1.800	3451.8	604.9	1475.69 R	0.00	1109.54	0.00	979.38 R	0.00	736.38	
0.00										
1.900	1934.1	340.3	826.35 R	0.00	621.32	0.00	548.43 R	0.00	412.35	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU6

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER  
 Rating Live Load: SU6

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	597.01	999.00	138.95	999.00	0.00	999.0 (2-Lane)
1.010	899.55	999.00	209.36	999.00	0.00	999.0 (1-Lane)
1.100	49.35	999.00	12.07	999.00	0.00	419.5 (2-Lane)
1.100	74.36	999.00	18.19	999.00	0.00	632.1 (1-Lane)
1.200	25.00	999.00	7.58	999.00	0.00	263.4 (2-Lane)
1.200	37.67	999.00	11.42	999.00	0.00	396.8 (1-Lane)
1.300	15.76	999.00	4.95	999.00	0.00	172.0 (2-Lane)
1.300	23.75	999.00	7.46	999.00	0.00	259.2 (1-Lane)
1.400	12.08	999.00	3.90	999.00	0.00	135.7 (2-Lane)
1.400	18.20	999.00	5.88	999.00	0.00	204.5 (1-Lane)
1.500	11.07	999.00	3.62	999.00	0.00	125.8 (2-Lane)
1.500	16.68	999.00	5.45	999.00	0.00	189.5 (1-Lane)
1.600	12.08	999.00	3.90	999.00	0.00	135.7 (2-Lane)
1.600	18.20	999.00	5.88	999.00	0.00	204.5 (1-Lane)
1.700	15.76	999.00	4.95	999.00	0.00	172.0 (2-Lane)
1.700	23.75	999.00	7.46	999.00	0.00	259.2 (1-Lane)
1.800	25.00	999.00	7.58	999.00	0.00	263.4 (2-Lane)
1.800	37.67	999.00	11.42	999.00	0.00	396.8 (1-Lane)
1.900	49.35	999.00	12.07	999.00	0.00	419.5 (2-Lane)
1.900	74.36	999.00	18.19	999.00	0.00	632.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
 Rating Live Load: SU7

Gamma	DC		DW		(2-Lane) LL 1.35		(1-Lane) LL 1.35	
	1.25		1.25					
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								
1.010	241.8	46.8	135.48 R	0.00	101.86	0.00	89.91 R	0.00



## 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

0.00									
1.100	2417.7	425.3	1220.65 R	0.00	917.78	0.00	810.11 R	0.00	609.11
0.00									
1.200	4314.7	756.1	2179.25 R	0.00	1638.53	0.00	1446.32 R	0.00	1087.46
0.00									
1.300	5675.4	992.4	2875.80 R	0.00	2162.26	0.00	1908.60 R	0.00	1435.04
0.00									
1.400	6491.9	1134.2	3276.68 R	0.00	2463.67	0.00	2174.66 R	0.00	1635.08
0.00									
1.500	6764.0	1181.5	3407.10 R	0.00	2561.73	0.00	2261.21 R	0.00	1700.16
0.00									
1.600	6491.9	1134.2	3276.68 R	0.00	2463.67	0.00	2174.66 R	0.00	1635.08
0.00									
1.700	5675.4	992.4	2875.80 R	0.00	2162.26	0.00	1908.60 R	0.00	1435.04
0.00									
1.800	4314.7	756.1	2179.25 R	0.00	1638.53	0.00	1446.32 R	0.00	1087.46
0.00									
1.900	2417.7	425.3	1220.65 R	0.00	917.78	0.00	810.11 R	0.00	609.11
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12216.7	-12216.7B	11797.6	11797.6	-20162.2	-20162.2
1.600	19743.0C	19743.0	-11836.3	-11836.3B	12117.0	12117.0	-19462.4	-19462.4
1.700	19743.0C	19743.0	-11836.3	-11836.3B	13075.2	13075.2	-18504.2	-18504.2
1.800	19743.0C	19743.0	-13021.9	-13021.9B	14672.1	14672.1	-18092.8	-18092.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU7

## Moment

Span	Rating Factor				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating -bend	Factor bottom fiber +bend	-bend		

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1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	118.99	999.00	118.99	999.00	0.00	999.0 (2-Lane)
1.010	179.29	999.00	179.29	999.00	0.00	999.0 (1-Lane)
1.100	11.11	999.00	11.11	999.00	0.00	430.7 (2-Lane)
1.100	16.75	999.00	16.75	999.00	0.00	648.9 (1-Lane)
1.200	6.73	999.00	6.73	999.00	0.00	260.9 (2-Lane)
1.200	10.14	999.00	10.14	999.00	0.00	393.1 (1-Lane)
1.300	4.55	999.00	4.55	999.00	0.00	176.2 (2-Lane)
1.300	6.85	999.00	6.85	999.00	0.00	265.5 (1-Lane)
1.400	3.70	999.00	3.70	999.00	0.00	143.3 (2-Lane)
1.400	5.57	999.00	5.57	999.00	0.00	215.9 (1-Lane)
1.500	3.46	999.00	3.46	999.00	0.00	134.2 (2-Lane)
1.500	5.22	999.00	5.22	999.00	0.00	202.2 (1-Lane)
1.600	3.70	999.00	3.70	999.00	0.00	143.3 (2-Lane)
1.600	5.57	999.00	5.57	999.00	0.00	215.9 (1-Lane)
1.700	4.55	999.00	4.55	999.00	0.00	176.2 (2-Lane)
1.700	6.85	999.00	6.85	999.00	0.00	265.5 (1-Lane)
1.800	6.73	999.00	6.73	999.00	0.00	260.9 (2-Lane)
1.800	10.14	999.00	10.14	999.00	0.00	393.1 (1-Lane)
1.900	11.11	999.00	11.11	999.00	0.00	430.7 (2-Lane)
1.900	16.75	999.00	16.75	999.00	0.00	648.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	123.92	0.00	93.17	0.00	100.51	0.00	75.57
0.00									
1.010	164.0	28.9	122.57	0.00	92.16	0.00	99.42	0.00	74.75
0.00									
1.100	134.8	23.6	110.43	0.00	83.03	0.00	89.58	0.00	67.35
0.00									
1.200	102.0	17.7	96.95	0.00	72.89	0.00	78.64	0.00	59.13
0.00									
1.300	68.0	11.8	83.46	0.00	62.76	0.00	67.70	0.00	50.90
0.00									
1.400	34.0	5.9	69.98	0.00	52.62	0.00	56.76	0.00	42.68
0.00									
1.500	0.0	0.0	56.50	0.00	42.48	0.00	45.83	0.00	34.46
0.00									
1.600	-34.0	-5.9	-69.98	0.00	-52.62	0.00	-56.76	0.00	-42.68
0.00									
1.700	-68.0	-11.8	-83.46	0.00	-62.76	0.00	-67.70	0.00	-50.90

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0.00									
1.800	-102.0	-17.7	-96.95	0.00	-72.89	0.00	-78.64	0.00	-59.13
0.00									
1.900	-134.8	-23.6	-110.43	0.00	-83.03	0.00	-89.58	0.00	-67.35
0.00									
2.000	-167.2	-29.5	-123.92	0.00	-93.17	0.00	-100.51	0.00	-75.57
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-OPER  
Rating Live Load: SU7

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.35	0.00	246.1 (2-Lane)
1.000	999.00	7.83	0.00	303.3 (1-Lane)

1.010	999.00	6.45	0.00	250.0 (2-Lane)
1.010	999.00	7.95	0.00	308.2 (1-Lane)
1.100	218.16	6.33	0.00	245.4 (2-Lane)
1.100	268.95	7.81	0.00	302.5 (1-Lane)
1.200	40.37	4.21	0.00	163.2 (2-Lane)
1.200	49.77	5.19	0.00	201.2 (1-Lane)
1.300	20.58	5.37	0.00	208.1 (2-Lane)
1.300	25.38	6.62	0.00	256.6 (1-Lane)
1.400	13.20	6.98	0.00	270.3 (2-Lane)
1.400	16.28	8.60	0.00	333.2 (1-Lane)
1.500	9.35	9.35	0.00	362.2 (2-Lane)
1.500	11.52	11.52	0.00	446.5 (1-Lane)
1.600	6.98	13.20	0.00	270.3 (2-Lane)
1.600	8.60	16.28	0.00	333.2 (1-Lane)
1.700	5.37	20.58	0.00	208.1 (2-Lane)
1.700	6.62	25.38	0.00	256.6 (1-Lane)
1.800	4.21	40.37	0.00	163.2 (2-Lane)
1.800	5.19	49.77	0.00	201.2 (1-Lane)
1.900	6.33	218.16	0.00	245.4 (2-Lane)
1.900	7.81	268.95	0.00	302.5 (1-Lane)
2.000	6.35	999.00	0.00	246.1 (2-Lane)
2.000	7.83	999.00	0.00	303.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 760

## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPE  
Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	100.35 R	0.00	75.45	0.00
0.00						
1.100	1934.1	340.3	904.18 R	0.00	679.84	0.00
0.00						
1.200	3451.8	604.9	1614.26 R	0.00	1213.73	0.00
0.00						
1.300	4540.4	794.0	2130.22 R	0.00	1601.67	0.00
0.00						
1.400	5193.5	907.4	2427.17 R	0.00	1824.94	0.00
0.00						
1.500	5411.2	945.2	2523.78 R	0.00	1897.58	0.00
0.00						
1.600	5193.5	907.4	2427.17 R	0.00	1824.94	0.00
0.00						
1.700	4540.4	794.0	2130.22 R	0.00	1601.67	0.00
0.00						
1.800	3451.8	604.9	1614.26 R	0.00	1213.73	0.00
0.00						
1.900	1934.1	340.3	904.18 R	0.00	679.84	0.00

0.00  
2.000 0.0 0.0 0.00 R 0.00 0.00 0.00 0.00 R 0.00 0.00  
0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU7

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-OPER  
Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	544.61	999.00	126.75	999.00	0.00	999.0 (2-Lane)
1.010	820.59	999.00	190.98	999.00	0.00	999.0 (1-Lane)
1.100	45.10	999.00	11.03	999.00	0.00	427.6 (2-Lane)
1.100	67.96	999.00	16.62	999.00	0.00	644.2 (1-Lane)
1.200	22.85	999.00	6.93	999.00	0.00	268.5 (2-Lane)
1.200	34.44	999.00	10.44	999.00	0.00	404.5 (1-Lane)
1.300	14.29	999.00	4.49	999.00	0.00	173.9 (2-Lane)
1.300	21.52	999.00	6.76	999.00	0.00	262.0 (1-Lane)

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1.400	10.94	999.00	3.54	999.00	0.00	137.0 (2-Lane)
1.400	16.49	999.00	5.33	999.00	0.00	206.5 (1-Lane)
1.500	10.01	999.00	3.27	999.00	0.00	126.8 (2-Lane)
1.500	15.08	999.00	4.93	999.00	0.00	191.0 (1-Lane)
1.600	10.94	999.00	3.54	999.00	0.00	137.0 (2-Lane)
1.600	16.49	999.00	5.33	999.00	0.00	206.5 (1-Lane)
1.700	14.29	999.00	4.49	999.00	0.00	173.9 (2-Lane)
1.700	21.52	999.00	6.76	999.00	0.00	262.0 (1-Lane)
1.800	22.85	999.00	6.93	999.00	0.00	268.5 (2-Lane)
1.800	34.44	999.00	10.44	999.00	0.00	404.5 (1-Lane)
1.900	45.10	999.00	11.03	999.00	0.00	427.6 (2-Lane)
1.900	67.96	999.00	16.62	999.00	0.00	644.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	97.80 R	73.54	64.91 R	48.80
1.100	2417.7	425.3	884.75 R	665.22	587.19 R	441.49
1.200	4314.7	756.1	1562.18 R	1174.57	1036.78 R	779.54
1.300	5675.4	992.4	2032.30 R	1528.05	1348.79 R	1014.13
1.400	6491.9	1134.2	2310.64 R	1737.32	1533.52 R	1153.02
1.500	6764.0	1181.5	2392.03 R	1798.52	1587.53 R	1193.63
1.600	6491.9	1134.2	2310.64 R	1737.32	1533.52 R	1153.02
1.700	5675.4	992.4	2032.30 R	1528.05	1348.79 R	1014.13
1.800	4314.7	756.1	1562.18 R	1174.57	1036.78 R	779.54
1.900	2417.7	425.3	884.75 R	665.22	587.19 R	441.49
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: 3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.

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1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12211.9	-12211.9B	11797.6	11797.6	-20157.4	-20157.4
1.600	19743.0C	19743.0	-11832.4	-11832.4B	12117.0	12117.0	-19458.4	-19458.4
1.700	19743.0C	19743.0	-11832.4	-11832.4B	13075.2	13075.2	-18500.3	-18500.3
1.800	19743.0C	19743.0	-13009.1	-13009.1B	14672.1	14672.1	-18080.0	-18080.0
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: 3

Moment

Span	top +bend	Rating fiber -bend	Factor	bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)
1.010	164.83	999.00		164.83	999.00	0.00	999.0 (2-Lane)
1.010	248.35	999.00		248.35	999.00	0.00	999.0 (1-Lane)
1.100	15.33	999.00		15.33	999.00	0.00	383.3 (2-Lane)
1.100	23.10	999.00		23.10	999.00	0.00	577.6 (1-Lane)
1.200	9.39	999.00		9.39	999.00	0.00	234.8 (2-Lane)
1.200	14.15	999.00		14.15	999.00	0.00	353.8 (1-Lane)
1.300	6.43	999.00		6.43	999.00	0.00	160.8 (2-Lane)
1.300	9.69	999.00		9.69	999.00	0.00	242.3 (1-Lane)
1.400	5.24	999.00		5.24	999.00	0.00	131.1 (2-Lane)
1.400	7.90	999.00		7.90	999.00	0.00	197.5 (1-Lane)
1.500	4.93	999.00		4.93	999.00	0.00	123.3 (2-Lane)
1.500	7.43	999.00		7.43	999.00	0.00	185.8 (1-Lane)
1.600	5.24	999.00		5.24	999.00	0.00	131.1 (2-Lane)
1.600	7.90	999.00		7.90	999.00	0.00	197.5 (1-Lane)
1.700	6.43	999.00		6.43	999.00	0.00	160.8 (2-Lane)
1.700	9.69	999.00		9.69	999.00	0.00	242.3 (1-Lane)
1.800	9.39	999.00		9.39	999.00	0.00	234.8 (2-Lane)
1.800	14.15	999.00		14.15	999.00	0.00	353.8 (1-Lane)
1.900	15.33	999.00		15.33	999.00	0.00	383.3 (2-Lane)
1.900	23.10	999.00		23.10	999.00	0.00	577.6 (1-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load
Lane		Dead Load	Truck	Lane	Truck	Truck
1.000	167.2	29.5	89.42		67.23	72.53
1.010	164.0	28.9	88.48		66.53	71.77
1.100	134.8	23.6	80.04		60.18	64.93
1.200	102.0	17.7	70.67		53.13	57.32
1.300	68.0	11.8	61.29		46.08	49.71
1.400	34.0	5.9	51.91		39.03	42.11
1.500	0.0	0.0	42.53		31.98	34.50
1.600	-34.0	-5.9	-51.91		-39.03	-42.11
1.700	-68.0	-11.8	-61.29		-46.08	-49.71
1.800	-102.0	-17.7	-70.67		-53.13	-57.32
1.900	-134.8	-23.6	-80.04		-60.18	-64.93
2.000	-167.2	-29.5	-89.42		-67.23	-72.53

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)



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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: 3

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	8.80	0.00	220.0 (2-Lane)
1.000	999.00	10.85	0.00	271.2 (1-Lane)
1.010	999.00	8.94	0.00	223.4 (2-Lane)
1.010	999.00	11.02	0.00	275.4 (1-Lane)
1.100	182.07	8.73	0.00	218.4 (2-Lane)
1.100	224.47	10.77	0.00	269.2 (1-Lane)
1.200	44.99	5.78	0.00	144.5 (2-Lane)
1.200	55.47	7.12	0.00	178.1 (1-Lane)
1.300	25.57	7.31	0.00	182.9 (2-Lane)
1.300	31.52	9.02	0.00	225.4 (1-Lane)
1.400	17.13	9.40	0.00	235.1 (2-Lane)
1.400	21.12	11.59	0.00	289.8 (1-Lane)
1.500	12.42	12.42	0.00	310.4 (2-Lane)
1.500	15.31	15.31	0.00	382.7 (1-Lane)
1.600	9.40	17.13	0.00	235.1 (2-Lane)
1.600	11.59	21.12	0.00	289.8 (1-Lane)
1.700	7.31	25.57	0.00	182.9 (2-Lane)
1.700	9.02	31.52	0.00	225.4 (1-Lane)
1.800	5.78	44.99	0.00	144.5 (2-Lane)
1.800	7.12	55.47	0.00	178.1 (1-Lane)
1.900	8.73	182.07	0.00	218.4 (2-Lane)
1.900	10.77	224.47	0.00	269.2 (1-Lane)
2.000	8.80	999.00	0.00	220.0 (2-Lane)
2.000	10.85	999.00	0.00	271.2 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEG  
Rating Live Load: 3

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
	1.00	1.00	1.30	1.30

Span Dead Load Superimposed Live Load w/impact Live Load w/o impact Live Load w/impact Live Load w/o

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impact

Lane	Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00	0.00	0.00
1.010	241.8	46.8	87.36 R	65.69	57.98 R	43.60		
1.100	2417.7	425.3	790.32 R	594.22	524.51 R	394.37		
1.200	4314.7	756.1	1395.44 R	1049.21	926.12 R	696.33		
1.300	5675.4	992.4	1815.38 R	1364.95	1204.83 R	905.89		
1.400	6491.9	1134.2	2064.02 R	1551.89	1369.84 R	1029.96		
1.500	6764.0	1181.5	2136.72 R	1606.55	1418.09 R	1066.23		
1.600	6491.9	1134.2	2064.02 R	1551.89	1369.84 R	1029.96		
1.700	5675.4	992.4	1815.38 R	1364.95	1204.83 R	905.89		
1.800	4314.7	756.1	1395.44 R	1049.21	926.12 R	696.33		
1.900	2417.7	425.3	790.32 R	594.22	524.51 R	394.37		
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00		

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEGL

Rating Live Load:

Rating Type: 3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEGL

Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	-bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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1.010	625.58	999.00	145.60	999.00	0.00	999.0 (2-Lane)
1.010	942.60	999.00	219.38	999.00	0.00	999.0 (1-Lane)
1.100	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.100	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
1.200	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.200	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.300	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.300	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.400	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.400	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.500	11.82	999.00	3.87	999.00	0.00	96.6 (2-Lane)
1.500	17.81	999.00	5.82	999.00	0.00	145.6 (1-Lane)
1.600	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.600	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.700	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.700	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.800	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.800	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.900	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.900	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	144.61 R	108.73	95.98 R	72.16
1.100	2417.7	425.3	1296.88 R	975.10	860.71 R	647.15
1.200	4314.7	756.1	2262.06 R	1700.79	1501.28 R	1128.78
1.300	5675.4	992.4	2967.01 R	2230.83	1969.14 R	1480.55
1.400	6491.9	1134.2	3365.12 R	2530.16	2233.35 R	1679.21
1.500	6764.0	1181.5	3457.42 R	2599.56	2294.61 R	1725.27
1.600	6491.9	1134.2	3365.12 R	2530.16	2233.35 R	1679.21
1.700	5675.4	992.4	2967.01 R	2230.83	1969.13 R	1480.55
1.800	4314.7	756.1	2262.06 R	1700.79	1501.28 R	1128.78
1.900	2417.7	425.3	1296.88 R	975.10	860.71 R	647.15
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12195.7	-12195.7B	11797.6	11797.6	-20141.2	-20141.2
1.600	19743.0C	19743.0	-11819.8	-11819.8B	12117.0	12117.0	-19445.9	-19445.9
1.700	19743.0C	19743.0	-11819.8	-11819.8B	13075.2	13075.2	-18487.7	-18487.7
1.800	19743.0C	19743.0	-13009.3	-13009.3B	14672.1	14672.1	-18080.2	-18080.2
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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#### MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	111.47	999.00	111.47	999.00	0.00	999.0 (2-Lane)
1.010	167.96	999.00	167.96	999.00	0.00	999.0 (1-Lane)
1.100	10.46	999.00	10.46	999.00	0.00	418.4 (2-Lane)
1.100	15.76	999.00	15.76	999.00	0.00	630.5 (1-Lane)
1.200	6.49	999.00	6.49	999.00	0.00	259.4 (2-Lane)
1.200	9.77	999.00	9.77	999.00	0.00	390.9 (1-Lane)
1.300	4.41	999.00	4.41	999.00	0.00	176.3 (2-Lane)
1.300	6.64	999.00	6.64	999.00	0.00	265.6 (1-Lane)
1.400	3.60	999.00	3.60	999.00	0.00	144.0 (2-Lane)
1.400	5.43	999.00	5.43	999.00	0.00	217.0 (1-Lane)
1.500	3.41	999.00	3.41	999.00	0.00	136.5 (2-Lane)
1.500	5.14	999.00	5.14	999.00	0.00	205.7 (1-Lane)
1.600	3.60	999.00	3.60	999.00	0.00	144.0 (2-Lane)
1.600	5.43	999.00	5.43	999.00	0.00	217.0 (1-Lane)
1.700	4.41	999.00	4.41	999.00	0.00	176.3 (2-Lane)
1.700	6.64	999.00	6.64	999.00	0.00	265.6 (1-Lane)
1.800	6.49	999.00	6.49	999.00	0.00	259.4 (2-Lane)

1.800	9.77	999.00	9.77	999.00	0.00	390.9 (1-Lane)
1.900	10.46	999.00	10.46	999.00	0.00	418.4 (2-Lane)
1.900	15.76	999.00	15.76	999.00	0.00	630.5 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: 3S2

Gamma	DC	DW	(2-Lane)		(1-Lane)	
	1.25	1.25	LL	LL	LL	LL
			1.45	1.45	1.45	1.45
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load
Lane			Truck Lane	Truck Lane	Truck Lane	Truck
1.000	167.2	29.5	132.33	99.50	107.34	80.71
1.010	164.0	28.9	130.83	98.37	106.13	79.79
1.100	134.8	23.6	117.33	88.22	95.17	71.56
1.200	102.0	17.7	102.32	76.94	83.00	62.41
1.300	68.0	11.8	87.32	65.65	70.83	53.25
1.400	34.0	5.9	72.32	54.37	58.66	44.10
1.500	0.0	0.0	57.31	43.09	46.49	34.95
1.600	-34.0	-5.9	-72.32	-54.37	-58.66	-44.10
1.700	-68.0	-11.8	-87.32	-65.65	-70.83	-53.25
1.800	-102.0	-17.7	-102.32	-76.94	-83.00	-62.41
1.900	-134.8	-23.6	-117.33	-88.22	-95.17	-71.56
2.000	-167.2	-29.5	-132.33	-99.50	-107.34	-80.71

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)

1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: 3S2

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.95	0.00	237.8 (2-Lane)
1.000	999.00	7.33	0.00	293.2 (1-Lane)
1.010	999.00	6.04	0.00	241.7 (2-Lane)
1.010	999.00	7.45	0.00	298.0 (1-Lane)
1.100	182.07	5.96	0.00	238.4 (2-Lane)
1.100	224.47	7.35	0.00	293.9 (1-Lane)
1.200	47.78	3.99	0.00	159.6 (2-Lane)
1.200	58.90	4.92	0.00	196.8 (1-Lane)
1.300	22.26	5.13	0.00	205.3 (2-Lane)
1.300	27.45	6.33	0.00	253.2 (1-Lane)
1.400	13.43	6.75	0.00	270.0 (2-Lane)
1.400	16.55	8.32	0.00	332.9 (1-Lane)
1.500	9.21	9.21	0.00	368.6 (2-Lane)
1.500	11.36	11.36	0.00	454.4 (1-Lane)
1.600	6.75	13.43	0.00	270.0 (2-Lane)
1.600	8.32	16.55	0.00	332.9 (1-Lane)
1.700	5.13	22.26	0.00	205.3 (2-Lane)
1.700	6.33	27.45	0.00	253.2 (1-Lane)
1.800	3.99	47.78	0.00	159.6 (2-Lane)
1.800	4.92	58.90	0.00	196.8 (1-Lane)
1.900	5.96	182.07	0.00	238.4 (2-Lane)
1.900	7.35	224.47	0.00	293.9 (1-Lane)
2.000	5.95	999.00	0.00	237.8 (2-Lane)
2.000	7.33	999.00	0.00	293.2 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09

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## SERVICE MOMENT REPORT

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 Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04  
 Rating Type: II-LEG  
 Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	129.18 R	97.13	85.73 R	64.46
1.100	2417.7	425.3	1158.46 R	871.02	768.84 R	578.08
1.200	4314.7	756.1	2020.62 R	1519.26	1341.04 R	1008.30
1.300	5675.4	992.4	2650.33 R	1992.73	1758.96 R	1322.53
1.400	6491.9	1134.2	3005.94 R	2260.11	1994.98 R	1499.98
1.500	6764.0	1181.5	3088.39 R	2322.10	2049.69 R	1541.12
1.600	6491.9	1134.2	3005.94 R	2260.11	1994.98 R	1499.98
1.700	5675.4	992.4	2650.33 R	1992.73	1758.96 R	1322.53
1.800	4314.7	756.1	2020.62 R	1519.26	1341.04 R	1008.30
1.900	2417.7	425.3	1158.46 R	871.02	768.84 R	578.08
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 776  
 SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04  
 Rating Type: II-LEGL  
 Rating Live Load:

Rating Type: 3S2  
 Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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 SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04  
 Rating Type: II-LEGL  
 Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	423.08	999.00	98.47	999.00	0.00	999.0 (2-Lane)
1.010	637.48	999.00	148.37	999.00	0.00	999.0 (1-Lane)
1.100	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.100	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
1.200	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.200	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.300	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.300	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.400	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.400	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.500	8.18	999.00	2.67	999.00	0.00	107.0 (2-Lane)
1.500	12.32	999.00	4.03	999.00	0.00	161.2 (1-Lane)
1.600	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.600	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.700	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.700	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.800	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.800	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.900	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.900	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: 3-3

Gamma	DC		(2-Lane)		(1-Lane)	
	1.25	DW 1.25	LL 1.45	LL 1.45	LL 1.45	LL 1.45
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	139.44 R	104.84	92.54 R	69.58
1.100	2417.7	425.3	1245.08 R	936.15	826.33 R	621.30
1.200	4314.7	756.1	2168.82 R	1630.69	1439.40 R	1082.25
1.300	5675.4	992.4	2791.94 R	2099.20	1852.94 R	1393.19
1.400	6491.9	1134.2	3166.22 R	2380.61	2101.35 R	1579.96
1.500	6764.0	1181.5	3291.67 R	2474.94	2184.60 R	1642.56



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1.600	6491.9	1134.2	3166.22 R	2380.61	2101.35 R	1579.96
1.700	5675.4	992.4	2791.94 R	2099.20	1852.94 R	1393.19
1.800	4314.7	756.1	2168.82 R	1630.69	1439.40 R	1082.25
1.900	2417.7	425.3	1245.08 R	936.15	826.33 R	621.30
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL

Rating Live Load: 3-3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12211.1	-12211.1B	11797.6	11797.6	-20156.6	-20156.6
1.600	19743.0C	19743.0	-11834.9	-11834.9B	12117.0	12117.0	-19461.0	-19461.0
1.700	19743.0C	19743.0	-11834.9	-11834.9B	13075.2	13075.2	-18502.8	-18502.8
1.800	19743.0C	19743.0	-12991.8	-12991.8B	14672.1	14672.1	-18062.6	-18062.6
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL

Rating Live Load: 3-3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	115.61	999.00	115.61	999.00	0.00	999.0 (2-Lane)
1.010	174.20	999.00	174.20	999.00	0.00	999.0 (1-Lane)
1.100	10.90	999.00	10.90	999.00	0.00	435.8 (2-Lane)
1.100	16.42	999.00	16.42	999.00	0.00	656.7 (1-Lane)
1.200	6.76	999.00	6.76	999.00	0.00	270.6 (2-Lane)
1.200	10.19	999.00	10.19	999.00	0.00	407.7 (1-Lane)
1.300	4.68	999.00	4.68	999.00	0.00	187.3 (2-Lane)
1.300	7.06	999.00	7.06	999.00	0.00	282.3 (1-Lane)

1.400	3.83	999.00	3.83	999.00	0.00	153.1 (2-Lane)
1.400	5.77	999.00	5.77	999.00	0.00	230.7 (1-Lane)
1.500	3.58	999.00	3.58	999.00	0.00	143.4 (2-Lane)
1.500	5.40	999.00	5.40	999.00	0.00	216.0 (1-Lane)
1.600	3.83	999.00	3.83	999.00	0.00	153.1 (2-Lane)
1.600	5.77	999.00	5.77	999.00	0.00	230.7 (1-Lane)
1.700	4.68	999.00	4.68	999.00	0.00	187.3 (2-Lane)
1.700	7.06	999.00	7.06	999.00	0.00	282.3 (1-Lane)
1.800	6.76	999.00	6.76	999.00	0.00	270.6 (2-Lane)
1.800	10.19	999.00	10.19	999.00	0.00	407.7 (1-Lane)
1.900	10.90	999.00	10.90	999.00	0.00	435.8 (2-Lane)
1.900	16.42	999.00	16.42	999.00	0.00	656.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	127.65	95.98	103.54	77.85
1.010	164.0	28.9	126.15	94.85	102.32	76.94
1.100	134.8	23.6	112.64	84.69	91.37	68.70
1.200	102.0	17.7	97.64	73.41	79.20	59.55
1.300	68.0	11.8	82.63	62.13	67.03	50.40
1.400	34.0	5.9	67.63	50.85	54.86	41.25
1.500	0.0	0.0	52.62	39.57	42.69	32.09
1.600	-34.0	-5.9	-67.63	-50.85	-54.86	-41.25
1.700	-68.0	-11.8	-82.63	-62.13	-67.03	-50.40
1.800	-102.0	-17.7	-97.64	-73.41	-79.20	-59.55
1.900	-134.8	-23.6	-112.64	-84.69	-91.37	-68.70
2.000	-167.2	-29.5	-127.65	-95.98	-103.54	-77.85

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: 3-3

Span Shear Resistance Available Resistance for LL+I  
Vn (-) (+)

1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL

Rating Live Load: 3-3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.16	0.00	246.6 (2-Lane)
1.000	999.00	7.60	0.00	304.0 (1-Lane)
1.010	999.00	6.27	0.00	250.7 (2-Lane)
1.010	999.00	7.73	0.00	309.1 (1-Lane)
1.100	221.09	6.21	0.00	248.3 (2-Lane)
1.100	272.57	7.65	0.00	306.1 (1-Lane)
1.200	53.53	4.18	0.00	167.3 (2-Lane)
1.200	66.00	5.16	0.00	206.2 (1-Lane)
1.300	25.92	5.43	0.00	217.0 (2-Lane)
1.300	31.95	6.69	0.00	267.5 (1-Lane)
1.400	15.10	7.22	0.00	288.7 (2-Lane)
1.400	18.61	8.90	0.00	356.0 (1-Lane)
1.500	10.03	10.03	0.00	401.4 (2-Lane)
1.500	12.37	12.37	0.00	494.8 (1-Lane)
1.600	7.22	15.10	0.00	288.7 (2-Lane)
1.600	8.90	18.61	0.00	356.0 (1-Lane)
1.700	5.43	25.92	0.00	217.0 (2-Lane)
1.700	6.69	31.95	0.00	267.5 (1-Lane)
1.800	4.18	53.53	0.00	167.3 (2-Lane)
1.800	5.16	66.00	0.00	206.2 (1-Lane)
1.900	6.21	221.09	0.00	248.3 (2-Lane)

1.900	7.65	272.57	0.00	306.1 (1-Lane)
2.000	6.16	999.00	0.00	246.6 (2-Lane)
2.000	7.60	999.00	0.00	304.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEG  
Rating Live Load: 3-3

Gamma	DC	DW	(2-Lane)		(1-Lane)	
	1.00	1.00	LL	LL	LL	LL
			1.30		1.30	

  

Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00	
1.010	241.8	46.8	124.55 R		93.65	82.66 R		62.15	
1.100	2417.7	425.3	1112.19 R		836.23	738.14 R		554.99	
1.200	4314.7	756.1	1937.34 R		1456.64	1285.77 R		966.74	
1.300	5675.4	992.4	2493.94 R		1875.14	1655.17 R		1244.49	
1.400	6491.9	1134.2	2828.27 R		2126.52	1877.06 R		1411.32	
1.500	6764.0	1181.5	2940.33 R		2210.78	1951.43 R		1467.24	
1.600	6491.9	1134.2	2828.27 R		2126.52	1877.06 R		1411.32	
1.700	5675.4	992.4	2493.94 R		1875.14	1655.17 R		1244.49	
1.800	4314.7	756.1	1937.34 R		1456.64	1285.77 R		966.74	
1.900	2417.7	425.3	1112.19 R		836.23	738.14 R		554.99	
2.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00	

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEGL  
Rating Live Load:

Rating Type: 3-3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEGL  
Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	438.80	999.00	102.13	999.00	0.00	999.0 (2-Lane)
1.010	661.17	999.00	153.88	999.00	0.00	999.0 (1-Lane)
1.100	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.100	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
1.200	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.200	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.300	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.300	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.400	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.400	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.500	8.59	999.00	2.81	999.00	0.00	112.3 (2-Lane)
1.500	12.95	999.00	4.23	999.00	0.00	169.3 (1-Lane)
1.600	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.600	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.700	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.700	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.800	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.800	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.900	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.900	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU4

Gamma	(2-Lane)		(1-Lane)
	DC	DW	
	1.25	1.25	1.20

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Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	0.0	0.0	0.00 R		0.00	0.00 R			0.00
1.010	241.8	46.8	88.06 R		66.21	58.44 R			43.94
1.100	2417.7	425.3	797.15 R		599.36	529.05 R			397.78
1.200	4314.7	756.1	1408.87 R		1059.30	935.03 R			703.03
1.300	5675.4	992.4	1835.14 R		1379.80	1217.94 R			915.74
1.400	6491.9	1134.2	2095.71 R		1575.72	1390.87 R			1045.77
1.500	6764.0	1181.5	2174.27 R		1634.79	1443.01 R			1084.97
1.600	6491.9	1134.2	2095.71 R		1575.72	1390.87 R			1045.77
1.700	5675.4	992.4	1835.14 R		1379.80	1217.94 R			915.74
1.800	4314.7	756.1	1408.87 R		1059.30	935.03 R			703.03
1.900	2417.7	425.3	797.15 R		599.36	529.05 R			397.78
2.000	0.0	0.0	0.00 R		0.00	0.00 R			0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU4

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12218.6	-12218.6B	11797.6	11797.6	-20164.1	-20164.1
1.600	19743.0C	19743.0	-11835.8	-11835.8B	12117.0	12117.0	-19461.8	-19461.8
1.700	19743.0C	19743.0	-11835.8	-11835.8B	13075.2	13075.2	-18503.7	-18503.7
1.800	19743.0C	19743.0	-13015.6	-13015.6B	14672.1	14672.1	-18086.5	-18086.5
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU4

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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1.010	183.07	999.00	183.07	999.00	0.00	999.0 (2-Lane)
1.010	275.84	999.00	275.84	999.00	0.00	999.0 (1-Lane)
1.100	17.02	999.00	17.02	999.00	0.00	459.5 (2-Lane)
1.100	25.64	999.00	25.64	999.00	0.00	692.4 (1-Lane)
1.200	10.41	999.00	10.41	999.00	0.00	281.2 (2-Lane)
1.200	15.69	999.00	15.69	999.00	0.00	423.7 (1-Lane)
1.300	7.12	999.00	7.12	999.00	0.00	192.4 (2-Lane)
1.300	10.73	999.00	10.73	999.00	0.00	289.9 (1-Lane)
1.400	5.78	999.00	5.78	999.00	0.00	156.1 (2-Lane)
1.400	8.71	999.00	8.71	999.00	0.00	235.2 (1-Lane)
1.500	5.43	999.00	5.43	999.00	0.00	146.5 (2-Lane)
1.500	8.18	999.00	8.18	999.00	0.00	220.7 (1-Lane)
1.600	5.78	999.00	5.78	999.00	0.00	156.1 (2-Lane)
1.600	8.71	999.00	8.71	999.00	0.00	235.2 (1-Lane)
1.700	7.12	999.00	7.12	999.00	0.00	192.4 (2-Lane)
1.700	10.73	999.00	10.73	999.00	0.00	289.9 (1-Lane)
1.800	10.41	999.00	10.41	999.00	0.00	281.2 (2-Lane)
1.800	15.69	999.00	15.69	999.00	0.00	423.7 (1-Lane)
1.900	17.02	999.00	17.02	999.00	0.00	459.5 (2-Lane)
1.900	25.64	999.00	25.64	999.00	0.00	692.4 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

**Structure I. D.** 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20				(1-Lane) LL 1.20		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	80.51		60.53		65.30		49.10
1.010	164.0	28.9	79.67		59.90		64.62		48.59
1.100	134.8	23.6	72.12		54.22		58.50		43.98
1.200	102.0	17.7	63.73		47.92		51.69		38.87
1.300	68.0	11.8	55.34		41.61		44.89		33.75
1.400	34.0	5.9	46.95		35.30		38.09		28.64
1.500	0.0	0.0	38.57		29.00		31.28		23.52
1.600	-34.0	-5.9	-46.95		-35.30		-38.09		-28.64
1.700	-68.0	-11.8	-55.34		-41.61		-44.89		-33.75
1.800	-102.0	-17.7	-63.73		-47.92		-51.69		-38.87
1.900	-134.8	-23.6	-72.12		-54.22		-58.50		-43.98
2.000	-167.2	-29.5	-80.51		-60.53		-65.30		-49.10

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## STRENGTH SHEAR RESISTANCE REPORT

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 Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G04  
 Rating Type: I-LEGL  
 Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 791  
 STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G04  
 Rating Type: I-LEGL  
 Rating Live Load: SU4

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	9.77	0.00	263.9 (2-Lane)
1.000	999.00	12.05	0.00	325.3 (1-Lane)
1.010	999.00	9.92	0.00	268.0 (2-Lane)
1.010	999.00	12.23	0.00	330.3 (1-Lane)
1.100	193.77	9.69	0.00	261.8 (2-Lane)
1.100	238.89	11.95	0.00	322.7 (1-Lane)
1.200	48.34	6.41	0.00	173.0 (2-Lane)
1.200	59.59	7.90	0.00	213.3 (1-Lane)
1.300	27.90	8.10	0.00	218.7 (2-Lane)
1.300	34.39	9.99	0.00	269.6 (1-Lane)
1.400	18.82	10.40	0.00	280.7 (2-Lane)
1.400	23.20	12.82	0.00	346.1 (1-Lane)



1.500	13.69	13.69	0.00	369.7 (2-Lane)
1.500	16.88	16.88	0.00	455.8 (1-Lane)
1.600	10.40	18.82	0.00	280.7 (2-Lane)
1.600	12.82	23.20	0.00	346.1 (1-Lane)
1.700	8.10	27.90	0.00	218.7 (2-Lane)
1.700	9.99	34.39	0.00	269.6 (1-Lane)
1.800	6.41	48.34	0.00	173.0 (2-Lane)
1.800	7.90	59.59	0.00	213.3 (1-Lane)
1.900	9.69	193.77	0.00	261.8 (2-Lane)
1.900	11.95	238.89	0.00	322.7 (1-Lane)
2.000	9.77	999.00	0.00	263.9 (2-Lane)
2.000	12.05	999.00	0.00	325.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEG  
Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	94.98 R	71.41	63.03 R	47.39
1.100	2417.7	425.3	859.76 R	646.44	570.60 R	429.02
1.200	4314.7	756.1	1519.52 R	1142.49	1008.47 R	758.25
1.300	5675.4	992.4	1979.27 R	1488.17	1313.60 R	987.67
1.400	6491.9	1134.2	2260.31 R	1699.48	1500.11 R	1127.90
1.500	6764.0	1181.5	2345.04 R	1763.19	1556.35 R	1170.19
1.600	6491.9	1134.2	2260.31 R	1699.48	1500.11 R	1127.90
1.700	5675.4	992.4	1979.27 R	1488.17	1313.60 R	987.67
1.800	4314.7	756.1	1519.52 R	1142.49	1008.47 R	758.25
1.900	2417.7	425.3	859.76 R	646.44	570.60 R	429.02
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 792

## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEGL  
Rating Live Load:

Rating Type: SU4  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending	Negative Bending	Positive Bending	Negative Bending	Positive Bending	Negative Bending	Positive Bending	Negative Bending
	Top	Bott.	Top	Bott.	Top	Bott.	Top	Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEGL  
Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	-bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	575.45	999.00	133.93	999.00	0.00	999.0 (2-Lane)
1.010	867.06	999.00	201.80	999.00	0.00	999.0 (1-Lane)
1.100	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.100	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
1.200	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.200	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.300	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.300	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.400	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.400	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.500	10.77	999.00	3.52	999.00	0.00	95.1 (2-Lane)
1.500	16.23	999.00	5.31	999.00	0.00	143.3 (1-Lane)
1.600	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.600	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.700	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.700	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.800	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.800	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.900	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.900	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	100.11 R	75.27	66.44 R	49.96
1.100	2417.7	425.3	905.33 R	680.70	600.85 R	451.77
1.200	4314.7	756.1	1597.76 R	1201.32	1060.40 R	797.29
1.300	5675.4	992.4	2084.13 R	1567.02	1383.19 R	1039.99
1.400	6491.9	1134.2	2377.33 R	1787.47	1577.78 R	1186.30
1.500	6764.0	1181.5	2457.62 R	1847.83	1631.07 R	1226.36
1.600	6491.9	1134.2	2377.33 R	1787.47	1577.78 R	1186.30
1.700	5675.4	992.4	2084.13 R	1567.02	1383.19 R	1039.99
1.800	4314.7	756.1	1597.76 R	1201.32	1060.40 R	797.29
1.900	2417.7	425.3	905.33 R	680.70	600.85 R	451.77
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU5

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12213.4	-12213.4B	11797.6	11797.6	-20158.9	-20158.9
1.600	19743.0C	19743.0	-11831.5	-11831.5B	12117.0	12117.0	-19457.6	-19457.6
1.700	19743.0C	19743.0	-11831.5	-11831.5B	13075.2	13075.2	-18499.4	-18499.4
1.800	19743.0C	19743.0	-13014.6	-13014.6B	14672.1	14672.1	-18085.5	-18085.5
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	161.02	999.00	161.02	999.00	0.00	999.0 (2-Lane)
1.010	242.62	999.00	242.62	999.00	0.00	999.0 (1-Lane)
1.100	14.98	999.00	14.98	999.00	0.00	464.5 (2-Lane)
1.100	22.58	999.00	22.58	999.00	0.00	699.9 (1-Lane)
1.200	9.18	999.00	9.18	999.00	0.00	284.7 (2-Lane)
1.200	13.84	999.00	13.84	999.00	0.00	428.9 (1-Lane)
1.300	6.27	999.00	6.27	999.00	0.00	194.5 (2-Lane)
1.300	9.45	999.00	9.45	999.00	0.00	293.0 (1-Lane)
1.400	5.10	999.00	5.10	999.00	0.00	158.0 (2-Lane)
1.400	7.68	999.00	7.68	999.00	0.00	238.1 (1-Lane)
1.500	4.80	999.00	4.80	999.00	0.00	148.8 (2-Lane)
1.500	7.23	999.00	7.23	999.00	0.00	224.2 (1-Lane)
1.600	5.10	999.00	5.10	999.00	0.00	158.0 (2-Lane)
1.600	7.68	999.00	7.68	999.00	0.00	238.1 (1-Lane)
1.700	6.27	999.00	6.27	999.00	0.00	194.5 (2-Lane)
1.700	9.45	999.00	9.45	999.00	0.00	293.0 (1-Lane)
1.800	9.18	999.00	9.18	999.00	0.00	284.7 (2-Lane)
1.800	13.84	999.00	13.84	999.00	0.00	428.9 (1-Lane)
1.900	14.98	999.00	14.98	999.00	0.00	464.5 (2-Lane)
1.900	22.58	999.00	22.58	999.00	0.00	699.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU5

Gamma	DC		DW		(2-Lane) LL 1.20		(1-Lane) LL 1.20	
	1.25		1.25					
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load		
w/o impact		Dead Load	Truck	Truck	Truck	Truck		
Lane			Lane	Lane	Lane	Lane		
1.000	167.2	29.5	91.54	68.82	74.25	55.83		
1.010	164.0	28.9	90.57	68.10	73.47	55.24		
1.100	134.8	23.6	81.91	61.58	66.44	49.95		
1.200	102.0	17.7	72.27	54.34	58.63	44.08		
1.300	68.0	11.8	62.64	47.10	50.81	38.21		
1.400	34.0	5.9	53.01	39.86	43.00	32.33		
1.500	0.0	0.0	43.38	32.62	35.19	26.46		

1.600	-34.0	-5.9	-53.01	-39.86	-43.00	-32.33
1.700	-68.0	-11.8	-62.64	-47.10	-50.81	-38.21
1.800	-102.0	-17.7	-72.27	-54.34	-58.63	-44.08
1.900	-134.8	-23.6	-81.91	-61.58	-66.44	-49.95
2.000	-167.2	-29.5	-91.54	-68.82	-74.25	-55.83

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL

Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL

Rating Live Load: SU5

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	8.60	0.00	266.5 (2-Lane)
1.000	999.00	10.60	0.00	328.5 (1-Lane)
1.010	999.00	8.73	0.00	270.6 (2-Lane)
1.010	999.00	10.76	0.00	333.6 (1-Lane)

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1.100	182.91	8.54	0.00	264.6 (2-Lane)
1.100	225.50	10.52	0.00	326.3 (1-Lane)
1.200	44.71	5.65	0.00	175.2 (2-Lane)
1.200	55.12	6.97	0.00	215.9 (1-Lane)
1.300	25.20	7.16	0.00	221.8 (2-Lane)
1.300	31.07	8.82	0.00	273.5 (1-Lane)
1.400	16.83	9.21	0.00	285.5 (2-Lane)
1.400	20.75	11.35	0.00	351.9 (1-Lane)
1.500	12.17	12.17	0.00	377.3 (2-Lane)
1.500	15.01	15.01	0.00	465.2 (1-Lane)
1.600	9.21	16.83	0.00	285.5 (2-Lane)
1.600	11.35	20.75	0.00	351.9 (1-Lane)
1.700	7.16	25.20	0.00	221.8 (2-Lane)
1.700	8.82	31.07	0.00	273.5 (1-Lane)
1.800	5.65	44.71	0.00	175.2 (2-Lane)
1.800	6.97	55.12	0.00	215.9 (1-Lane)
1.900	8.54	182.91	0.00	264.6 (2-Lane)
1.900	10.52	225.50	0.00	326.3 (1-Lane)
2.000	8.60	999.00	0.00	266.5 (2-Lane)
2.000	10.60	999.00	0.00	328.5 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEG  
Rating Live Load: SU5

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	107.98 R	81.19	71.66 R	53.88
1.100	2417.7	425.3	976.44 R	734.16	648.04 R	487.25
1.200	4314.7	756.1	1723.24 R	1295.67	1143.68 R	859.91
1.300	5675.4	992.4	2247.82 R	1690.09	1491.83 R	1121.67
1.400	6491.9	1134.2	2564.05 R	1927.85	1701.70 R	1279.47
1.500	6764.0	1181.5	2650.64 R	1992.96	1759.17 R	1322.68
1.600	6491.9	1134.2	2564.05 R	1927.85	1701.70 R	1279.47
1.700	5675.4	992.4	2247.82 R	1690.09	1491.83 R	1121.67
1.800	4314.7	756.1	1723.24 R	1295.67	1143.68 R	859.91
1.900	2417.7	425.3	976.44 R	734.16	648.04 R	487.25
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEGL  
Rating Live Load:

Rating Type: SU5  
Rating Live Load:  
Span

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEGL  
Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating factor -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	506.16	999.00	117.80	999.00	0.00	999.0 (2-Lane)
1.010	762.66	999.00	177.50	999.00	0.00	999.0 (1-Lane)
1.100	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.100	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
1.200	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.200	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.300	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.300	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.400	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.400	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.500	9.53	999.00	3.12	999.00	0.00	96.6 (2-Lane)
1.500	14.36	999.00	4.69	999.00	0.00	145.5 (1-Lane)
1.600	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.600	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.700	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.700	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.800	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.800	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)

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1.900	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.900	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU6

Gamma	DC	DW	(2-Lane)		(1-Lane)	
	1.25	1.25	LL	LL	LL	LL
			1.20		1.20	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	110.34 R	82.96	73.23 R	55.06
1.100	2417.7	425.3	996.03 R	748.90	661.04 R	497.02
1.200	4314.7	756.1	1778.70 R	1337.37	1180.49 R	887.58
1.300	5675.4	992.4	2327.22 R	1749.79	1544.52 R	1161.29
1.400	6491.9	1134.2	2649.07 R	1991.79	1758.13 R	1321.90
1.500	6764.0	1181.5	2750.07 R	2067.72	1825.16 R	1372.30
1.600	6491.9	1134.2	2649.07 R	1991.79	1758.13 R	1321.90
1.700	5675.4	992.4	2327.22 R	1749.79	1544.52 R	1161.29
1.800	4314.7	756.1	1778.70 R	1337.37	1180.49 R	887.58
1.900	2417.7	425.3	996.03 R	748.89	661.04 R	497.02
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU6

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12214.9	-12214.9B	11797.6	11797.6	-20160.4	-20160.4
1.600	19743.0C	19743.0	-11834.9	-11834.9B	12117.0	12117.0	-19460.9	-19460.9
1.700	19743.0C	19743.0	-11834.9	-11834.9B	13075.2	13075.2	-18502.7	-18502.7
1.800	19743.0C	19743.0	-13013.8	-13013.8B	14672.1	14672.1	-18084.7	-18084.7
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4



## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	146.10	999.00	146.10	999.00	0.00	999.0 (2-Lane)
1.010	220.13	999.00	220.13	999.00	0.00	999.0 (1-Lane)
1.100	13.62	999.00	13.62	999.00	0.00	473.3 (2-Lane)
1.100	20.52	999.00	20.52	999.00	0.00	713.2 (1-Lane)
1.200	8.25	999.00	8.25	999.00	0.00	286.6 (2-Lane)
1.200	12.43	999.00	12.43	999.00	0.00	431.9 (1-Lane)
1.300	5.62	999.00	5.62	999.00	0.00	195.2 (2-Lane)
1.300	8.47	999.00	8.47	999.00	0.00	294.2 (1-Lane)
1.400	4.57	999.00	4.57	999.00	0.00	158.9 (2-Lane)
1.400	6.89	999.00	6.89	999.00	0.00	239.5 (1-Lane)
1.500	4.29	999.00	4.29	999.00	0.00	149.1 (2-Lane)
1.500	6.46	999.00	6.46	999.00	0.00	224.6 (1-Lane)
1.600	4.57	999.00	4.57	999.00	0.00	158.9 (2-Lane)
1.600	6.89	999.00	6.89	999.00	0.00	239.5 (1-Lane)
1.700	5.62	999.00	5.62	999.00	0.00	195.2 (2-Lane)
1.700	8.47	999.00	8.47	999.00	0.00	294.2 (1-Lane)
1.800	8.25	999.00	8.25	999.00	0.00	286.6 (2-Lane)
1.800	12.43	999.00	12.43	999.00	0.00	431.9 (1-Lane)
1.900	13.62	999.00	13.62	999.00	0.00	473.3 (2-Lane)
1.900	20.52	999.00	20.52	999.00	0.00	713.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU6

Gamma			(2-Lane)	(1-Lane)
	DC	DW	LL	LL
	1.25	1.25	1.20	1.20

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Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	100.91		75.87		81.85		61.54
1.010	164.0	28.9	99.83		75.06		80.97		60.88
1.100	134.8	23.6	90.11		67.75		73.09		54.96
1.200	102.0	17.7	79.32		59.64		64.34		48.37
1.300	68.0	11.8	68.52		51.52		55.58		41.79
1.400	34.0	5.9	57.72		43.40		46.82		35.20
1.500	0.0	0.0	46.93		35.28		38.06		28.62
1.600	-34.0	-5.9	-57.72		-43.40		-46.82		-35.20
1.700	-68.0	-11.8	-68.52		-51.52		-55.58		-41.79
1.800	-102.0	-17.7	-79.32		-59.64		-64.34		-48.37
1.900	-134.8	-23.6	-90.11		-67.75		-73.09		-54.96
2.000	-167.2	-29.5	-100.91		-75.87		-81.85		-61.54

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU6

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.80	0.00	271.0 (2-Lane)
1.000	999.00	9.61	0.00	334.1 (1-Lane)
1.010	999.00	7.92	0.00	275.2 (2-Lane)
1.010	999.00	9.76	0.00	339.3 (1-Lane)
1.100	209.20	7.76	0.00	269.6 (2-Lane)
1.100	257.90	9.57	0.00	332.4 (1-Lane)
1.200	44.56	5.15	0.00	178.9 (2-Lane)
1.200	54.93	6.35	0.00	220.6 (1-Lane)
1.300	23.99	6.54	0.00	227.3 (2-Lane)
1.300	29.58	8.06	0.00	280.3 (1-Lane)
1.400	15.72	8.46	0.00	293.9 (2-Lane)
1.400	19.38	10.43	0.00	362.3 (1-Lane)
1.500	11.25	11.25	0.00	391.0 (2-Lane)
1.500	13.87	13.87	0.00	482.1 (1-Lane)
1.600	8.46	15.72	0.00	293.9 (2-Lane)
1.600	10.43	19.38	0.00	362.3 (1-Lane)
1.700	6.54	23.99	0.00	227.3 (2-Lane)
1.700	8.06	29.58	0.00	280.3 (1-Lane)
1.800	5.15	44.56	0.00	178.9 (2-Lane)
1.800	6.35	54.93	0.00	220.6 (1-Lane)
1.900	7.76	209.20	0.00	269.6 (2-Lane)
1.900	9.57	257.90	0.00	332.4 (1-Lane)
2.000	7.80	999.00	0.00	271.0 (2-Lane)
2.000	9.61	999.00	0.00	334.1 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEG  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	119.01 R	89.48	78.98 R	59.39
1.100	2417.7	425.3	1074.26 R	807.71	712.96 R	536.06
1.200	4314.7	756.1	1918.40 R	1442.41	1273.20 R	957.29
1.300	5675.4	992.4	2509.99 R	1887.21	1665.83 R	1252.50
1.400	6491.9	1134.2	2857.13 R	2148.22	1896.21 R	1425.72
1.500	6764.0	1181.5	2966.06 R	2230.12	1968.50 R	1480.08
1.600	6491.9	1134.2	2857.13 R	2148.22	1896.21 R	1425.72
1.700	5675.4	992.4	2509.99 R	1887.21	1665.83 R	1252.50
1.800	4314.7	756.1	1918.40 R	1442.41	1273.20 R	957.29

1.900 2417.7 425.3 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt 807.71 712.96 R 536.06  
 2.000 0.0 0.0 1074.26 R 0.00 0.00 R 0.00

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEGL

Rating Live Load:

Rating Type: SU6

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEGL

Rating Live Load: SU6

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	459.24	999.00	106.88	999.00	0.00	999.0 (2-Lane)
1.010	691.96	999.00	161.05	999.00	0.00	999.0 (1-Lane)
1.100	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.100	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
1.200	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.200	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.300	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.300	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.400	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)

1.400	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.500	8.52	999.00	2.78	999.00	0.00	96.7 (2-Lane)
1.500	12.83	999.00	4.20	999.00	0.00	145.8 (1-Lane)
1.600	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.600	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.700	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.700	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.800	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.800	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.900	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.900	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU7

Gamma	DC		DW		(2-Lane) LL		(1-Lane) LL	
	1.25		1.25		1.20		1.20	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00
1.010	241.8	46.8	120.96 R		90.95	80.28 R		60.36
1.100	2417.7	425.3	1089.84 R		819.43	723.30 R		543.84
1.200	4314.7	756.1	1945.72 R		1462.95	1291.33 R		970.92
1.300	5675.4	992.4	2567.63 R		1930.55	1704.08 R		1281.26
1.400	6491.9	1134.2	2925.55 R		2199.66	1941.62 R		1459.86
1.500	6764.0	1181.5	3041.99 R		2287.21	2018.90 R		1517.97
1.600	6491.9	1134.2	2925.55 R		2199.66	1941.62 R		1459.86
1.700	5675.4	992.4	2567.63 R		1930.55	1704.08 R		1281.26
1.800	4314.7	756.1	1945.72 R		1462.95	1291.33 R		970.92
1.900	2417.7	425.3	1089.84 R		819.43	723.30 R		543.84
2.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.

## 777777\_20120905cy01\_01of01\_FlexuralRpt.txt

1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12217.2	-12217.2B	11797.6	11797.6	-20162.7	-20162.7
1.600	19743.0C	19743.0	-11836.6	-11836.6B	12117.0	12117.0	-19462.7	-19462.7
1.700	19743.0C	19743.0	-11836.6	-11836.6B	13075.2	13075.2	-18504.5	-18504.5
1.800	19743.0C	19743.0	-13022.0	-13022.0B	14672.1	14672.1	-18092.9	-18092.9
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL

Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	133.27	999.00	133.27	999.00	0.00	999.0 (2-Lane)
1.010	200.81	999.00	200.81	999.00	0.00	999.0 (1-Lane)
1.100	12.45	999.00	12.45	999.00	0.00	482.4 (2-Lane)
1.100	18.76	999.00	18.76	999.00	0.00	726.8 (1-Lane)
1.200	7.54	999.00	7.54	999.00	0.00	292.2 (2-Lane)
1.200	11.36	999.00	11.36	999.00	0.00	440.3 (1-Lane)
1.300	5.09	999.00	5.09	999.00	0.00	197.3 (2-Lane)
1.300	7.67	999.00	7.67	999.00	0.00	297.3 (1-Lane)
1.400	4.14	999.00	4.14	999.00	0.00	160.5 (2-Lane)
1.400	6.24	999.00	6.24	999.00	0.00	241.8 (1-Lane)
1.500	3.88	999.00	3.88	999.00	0.00	150.3 (2-Lane)
1.500	5.84	999.00	5.84	999.00	0.00	226.4 (1-Lane)
1.600	4.14	999.00	4.14	999.00	0.00	160.5 (2-Lane)
1.600	6.24	999.00	6.24	999.00	0.00	241.8 (1-Lane)
1.700	5.09	999.00	5.09	999.00	0.00	197.3 (2-Lane)
1.700	7.67	999.00	7.67	999.00	0.00	297.3 (1-Lane)
1.800	7.54	999.00	7.54	999.00	0.00	292.2 (2-Lane)
1.800	11.36	999.00	11.36	999.00	0.00	440.3 (1-Lane)
1.900	12.45	999.00	12.45	999.00	0.00	482.4 (2-Lane)
1.900	18.76	999.00	18.76	999.00	0.00	726.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	110.64	83.19	89.74	67.48
1.010	164.0	28.9	109.43	82.28	88.77	66.74
1.100	134.8	23.6	98.60	74.13	79.98	60.13
1.200	102.0	17.7	86.56	65.08	70.21	52.79
1.300	68.0	11.8	74.52	56.03	60.45	45.45
1.400	34.0	5.9	62.48	46.98	50.68	38.11
1.500	0.0	0.0	50.44	37.93	40.92	30.76
1.600	-34.0	-5.9	-62.48	-46.98	-50.68	-38.11
1.700	-68.0	-11.8	-74.52	-56.03	-60.45	-45.45
1.800	-102.0	-17.7	-86.56	-65.08	-70.21	-52.79
1.900	-134.8	-23.6	-98.60	-74.13	-79.98	-60.13
2.000	-167.2	-29.5	-110.64	-83.19	-89.74	-67.48

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: I-LEGL  
Rating Live Load: SU7

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.11	0.00	275.6 (2-Lane)
1.000	999.00	8.77	0.00	339.7 (1-Lane)
1.010	999.00	7.22	0.00	280.0 (2-Lane)
1.010	999.00	8.91	0.00	345.2 (1-Lane)
1.100	244.34	7.09	0.00	274.8 (2-Lane)
1.100	301.23	8.74	0.00	338.8 (1-Lane)
1.200	45.21	4.72	0.00	182.8 (2-Lane)
1.200	55.74	5.82	0.00	225.4 (1-Lane)
1.300	23.06	6.01	0.00	233.1 (2-Lane)
1.300	28.42	7.42	0.00	287.4 (1-Lane)
1.400	14.79	7.81	0.00	302.7 (2-Lane)
1.400	18.23	9.63	0.00	373.2 (1-Lane)
1.500	10.47	10.47	0.00	405.7 (2-Lane)
1.500	12.91	12.91	0.00	500.1 (1-Lane)
1.600	7.81	14.79	0.00	302.7 (2-Lane)
1.600	9.63	18.23	0.00	373.2 (1-Lane)
1.700	6.01	23.06	0.00	233.1 (2-Lane)
1.700	7.42	28.42	0.00	287.4 (1-Lane)
1.800	4.72	45.21	0.00	182.8 (2-Lane)
1.800	5.82	55.74	0.00	225.4 (1-Lane)
1.900	7.09	244.34	0.00	274.8 (2-Lane)
1.900	8.74	301.23	0.00	338.8 (1-Lane)
2.000	7.11	999.00	0.00	275.6 (2-Lane)
2.000	8.77	999.00	0.00	339.7 (1-Lane)

## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEG  
Rating Live Load: SU7

Gamma	DC	DW	(2-Lane) LL 1.30	(1-Lane) LL 1.30
	1.00	1.00		

Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
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Lane	Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00	0.00	0.00
1.010	241.8	46.8	130.46 R	98.09	86.58 R	65.10		
1.100	2417.7	425.3	1175.44 R	883.79	780.11 R	586.55		
1.200	4314.7	756.1	2098.53 R	1577.84	1392.75 R	1047.18		
1.300	5675.4	992.4	2769.29 R	2082.17	1837.91 R	1381.89		
1.400	6491.9	1134.2	3155.32 R	2372.42	2094.11 R	1574.52		
1.500	6764.0	1181.5	3280.91 R	2466.85	2177.47 R	1637.19		
1.600	6491.9	1134.2	3155.32 R	2372.42	2094.11 R	1574.52		
1.700	5675.4	992.4	2769.29 R	2082.17	1837.91 R	1381.89		
1.800	4314.7	756.1	2098.53 R	1577.84	1392.75 R	1047.18		
1.900	2417.7	425.3	1175.44 R	883.79	780.11 R	586.55		
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00		

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEGL  
Rating Live Load:

Rating Type: SU7  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G04

Rating Type: II-LEGL  
Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

1.010	418.93	999.00	97.50	999.00	0.00	999.0 (2-Lane)
1.010	631.22	999.00	146.91	999.00	0.00	999.0 (1-Lane)
1.100	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.100	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
1.200	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.200	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.300	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.300	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.400	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.400	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.500	7.70	999.00	2.52	999.00	0.00	97.5 (2-Lane)
1.500	11.60	999.00	3.79	999.00	0.00	147.0 (1-Lane)
1.600	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.600	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.700	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.700	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.800	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.800	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.900	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.900	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## BRIDGE / MEMBER DATA

Bridge ID 7777777\_20120905cy01\_01of01  
 NBI ID 7777-777  
 Feature Intersected Road

Material of Construction CSC  
 Year of Construction 2012  
 Roadway width 0.000  
 Number of Spans 1

Live Load Distribution Factor 1.67

Condition Factor: 1.000  
 System Factor: 1.000  
 ADTT: 300

Shear Live Load Dist. Factor 1.911  
 LRFD LLDF Moment

	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
1-lane DF	0.444	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
2-lane DF	0.669	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
1-lane DF	0.786	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
2-lane DF	0.969	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

## Comments:

Member ID		G05	01-IG005				
Symmetry:							
Span Length:		Span 1 160.100	Span 2 0.000	Span 3 0.000	Span 4 0.000	Span 5 0.000	
Range	Length	-- Non-Composite:					
Span	Range	Range	Section	Section	Section	Hinge	Location
No.	No.	Length	Left	Right	Variation	No. 1	No. 2
1	1	30.000	1	0		0.0	0.0
1	2	100.100	2	0		0.0	0.0
1	3	30.000	1	0		0.0	0.0

Range	Length	-- Composite:	
Span	Range	Range	Composite
No.	No.	Length	Code
1	1	160.100	C

Superimposed Dead Load:						
Span	Load	Dist. from	Distributed Load (lbs/ft)		Concentrated	
No.	Type	Left Supp.	Left	Right	Length	Load (kips)
1	W	0.000	295.0	295.0	160.100	0.0
1	Z	0.000	127.0	127.0	160.100	0.0

NOTE: All distances are shown in decimal feet, moments are shown in foot-kips, and shears are shown in kips. Section and section properties are shown as: in., in.\*\*2, in.\*\*3, and in.\*\*4.

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## SECTION DATA

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D.		G05				
Span	Height	Web Depth	Web Thk.	Effective	Slab	Fy
	(in.)	(in.)	(in.)	width	Thk.	(ksi)
				(in.)	(in.)	
1.000	68.58	66.00	0.63	110.3	9.0	50.
1.010	68.58	66.00	0.63	110.3	9.0	50.
1.100	68.58	66.00	0.63	110.3	9.0	50.
1.200	69.74	66.00	0.63	110.3	9.0	50.
1.300	69.74	66.00	0.63	110.3	9.0	50.
1.400	69.74	66.00	0.63	110.3	9.0	50.
1.500	69.74	66.00	0.63	110.3	9.0	50.
1.600	69.74	66.00	0.63	110.3	9.0	50.
1.700	69.74	66.00	0.63	110.3	9.0	50.
1.800	69.74	66.00	0.63	110.3	9.0	50.
1.900	68.58	66.00	0.63	110.3	9.0	50.
2.000	68.58	66.00	0.63	110.3	9.0	50.

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## SECTION STRENGTH

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

7777777_20120905cy01_01of01_FlexuralRpt.txt										
Span	Section Gross	Area Net	Neutral Top	Axis Bott.	Moment of Inertia		Section Modulus			
					+Bend	-Bend	+Bend		-Bend	
							Top	Bott.	Top	Bott.
1.000	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.010	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.100	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.200	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.300	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.400	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.500	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.600	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.700	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.800	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.900	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
2.000	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0

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#### SECTION STRENGTH (N=N)

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Span	Section Gross	Area Net	Neutral Top	Axis Bott.	Moment of Inertia		Section Modulus			
					+Bend	-Bend	+Bend		-Bend	
							Top	Bott.	Top	Bott.
1.000	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
1.010	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
1.100	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
1.200	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.300	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.400	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.500	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.600	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.700	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.800	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.900	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
2.000	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0

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#### SECTION STRENGTH (N=3N)

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Span	Section Gross	Area Net	Neutral Top	Axis Bott.	Moment of Inertia		Section Modulus			
					+Bend	-Bend	+Bend		-Bend	
							Top	Bott.	Top	Bott.
1.000	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
1.010	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
1.100	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
1.200	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.300	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.400	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.500	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.600	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.700	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.800	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.900	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
2.000	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0

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#### MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	241.8	46.8	262.30 R	0.00	220.80	0.00	174.08 R	0.00	146.54
1.100 0.00	2417.7	425.3	2375.02 R	0.00	2000.16	0.00	1576.24 R	0.00	1327.46
1.200 0.00	4314.7	756.1	4199.00 R	0.00	3538.36	0.00	2786.78 R	0.00	2348.33
1.300 0.00	5675.4	992.4	5471.94 R	0.00	4614.60	0.00	3631.60 R	0.00	3062.60
1.400 0.00	6491.9	1134.2	6228.74 R	0.00	5255.09	0.00	4133.87 R	0.00	3487.68
1.500 0.00	6764.0	1181.5	6451.94 R	0.00	5446.74	0.00	4282.00 R	0.00	3614.87
1.600 0.00	6491.9	1134.2	6228.74 R	0.00	5255.09	0.00	4133.87 R	0.00	3487.68
1.700 0.00	5675.4	992.4	5471.94 R	0.00	4614.60	0.00	3631.60 R	0.00	3062.60
1.800 0.00	4314.7	756.1	4199.00 R	0.00	3538.36	0.00	2786.78 R	0.00	2348.33
1.900 0.00	2417.7	425.3	2375.01 R	0.00	2000.16	0.00	1576.24 R	0.00	1327.46
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: HL93

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.4	-12222.4B	11797.6	11797.6	-20167.9	-20167.9
1.600	19743.0C	19743.0	-11839.3	-11839.3B	12117.0	12117.0	-19465.4	-19465.4
1.700	19743.0C	19743.0	-11839.3	-11839.3B	13075.2	13075.2	-18507.2	-18507.2
1.800	19743.0C	19743.0	-13020.4	-13020.4B	14672.1	14672.1	-18091.3	-18091.3
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: HL93

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	61.46	999.00	61.46	999.00	0.00	999.0 (2-Lane)
1.010	92.61	999.00	92.61	999.00	0.00	999.0 (1-Lane)
1.100	5.71	999.00	5.71	999.00	0.00	205.6 (2-Lane)
1.100	8.61	999.00	8.61	999.00	0.00	309.8 (1-Lane)
1.200	3.49	999.00	3.49	999.00	0.00	125.8 (2-Lane)
1.200	5.26	999.00	5.26	999.00	0.00	189.5 (1-Lane)
1.300	2.39	999.00	2.39	999.00	0.00	86.0 (2-Lane)
1.300	3.60	999.00	3.60	999.00	0.00	129.6 (1-Lane)
1.400	1.95	999.00	1.95	999.00	0.00	70.0 (2-Lane)
1.400	2.93	999.00	2.93	999.00	0.00	105.5 (1-Lane)
1.500	1.83	999.00	1.83	999.00	0.00	65.8 (2-Lane)
1.500	2.76	999.00	2.76	999.00	0.00	99.2 (1-Lane)
1.600	1.95	999.00	1.95	999.00	0.00	70.0 (2-Lane)
1.600	2.93	999.00	2.93	999.00	0.00	105.5 (1-Lane)
1.700	2.39	999.00	2.39	999.00	0.00	86.0 (2-Lane)
1.700	3.60	999.00	3.60	999.00	0.00	129.6 (1-Lane)
1.800	3.49	999.00	3.49	999.00	0.00	125.8 (2-Lane)
1.800	5.26	999.00	5.26	999.00	0.00	189.5 (1-Lane)
1.900	5.71	999.00	5.71	999.00	0.00	205.6 (2-Lane)
1.900	8.61	999.00	8.61	999.00	0.00	309.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: HL93

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	1.75	LL	1.75
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load

w/o impact

Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	239.79	0.00	201.85	0.00	194.51	0.00	163.73
0.00									
1.010	164.0	28.9	236.44	0.00	198.90	0.00	191.79	0.00	161.34
0.00									
1.100	134.8	23.6	207.05	0.00	173.14	0.00	167.95	0.00	140.44
0.00									
1.200	102.0	17.7	176.04	0.00	146.16	0.00	142.80	0.00	118.56
0.00									
1.300	68.0	11.8	146.77	0.00	120.92	0.00	119.05	0.00	98.08
0.00									
1.400	34.0	5.9	119.24	0.00	97.41	0.00	96.72	0.00	79.02
0.00									
1.500	0.0	0.0	93.44	0.00	75.65	0.00	75.80	0.00	61.36
0.00									
1.600	-34.0	-5.9	-119.24	0.00	-97.41	0.00	-96.72	0.00	-79.02
0.00									
1.700	-68.0	-11.8	-146.77	0.00	-120.92	0.00	-119.05	0.00	-98.08
0.00									
1.800	-102.0	-17.7	-176.04	0.00	-146.16	0.00	-142.80	0.00	-118.56
0.00									
1.900	-134.8	-23.6	-207.05	0.00	-173.14	0.00	-167.95	0.00	-140.44
0.00									
2.000	-167.2	-29.5	-239.79	0.00	-201.85	0.00	-194.51	0.00	-163.73
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: HL93

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: HL93

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	3.28	0.00	118.1 (2-Lane)
1.000	999.00	4.05	0.00	145.6 (1-Lane)
1.010	999.00	3.34	0.00	120.4 (2-Lane)
1.010	999.00	4.12	0.00	148.4 (1-Lane)
1.100	102.96	3.38	0.00	121.6 (2-Lane)
1.100	126.94	4.16	0.00	149.9 (1-Lane)
1.200	24.46	2.32	0.00	83.5 (2-Lane)
1.200	30.15	2.86	0.00	103.0 (1-Lane)
1.300	12.91	3.05	0.00	109.9 (2-Lane)
1.300	15.92	3.77	0.00	135.5 (1-Lane)
1.400	8.19	4.09	0.00	147.4 (2-Lane)
1.400	10.09	5.05	0.00	181.7 (1-Lane)
1.500	5.65	5.65	0.00	203.4 (2-Lane)
1.500	6.97	6.97	0.00	250.8 (1-Lane)
1.600	4.09	8.19	0.00	147.4 (2-Lane)
1.600	5.05	10.09	0.00	181.7 (1-Lane)
1.700	3.05	12.91	0.00	109.9 (2-Lane)
1.700	3.77	15.92	0.00	135.5 (1-Lane)
1.800	2.32	24.46	0.00	83.5 (2-Lane)
1.800	2.86	30.15	0.00	103.0 (1-Lane)
1.900	3.38	94.63	0.00	121.6 (2-Lane)
1.900	4.16	116.67	0.00	149.9 (1-Lane)
2.000	3.28	999.00	0.00	118.1 (2-Lane)
2.000	4.05	999.00	0.00	145.6 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 828

SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: HL93

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane



7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	194.85 R	0.00	164.03	0.00	129.32 R	0.00	108.86
0.00									
1.100	1934.1	340.3	1764.30 R	0.00	1485.83	0.00	1170.92 R	0.00	986.11
0.00									
1.200	3451.8	604.9	3119.25 R	0.00	2628.50	0.00	2070.18 R	0.00	1744.47
0.00									
1.300	4540.4	794.0	4064.87 R	0.00	3427.99	0.00	2697.76 R	0.00	2275.08
0.00									
1.400	5193.5	907.4	4627.06 R	0.00	3903.78	0.00	3070.88 R	0.00	2590.85
0.00									
1.500	5411.2	945.2	4792.87 R	0.00	4046.15	0.00	3180.92 R	0.00	2685.34
0.00									
1.600	5193.5	907.4	4627.06 R	0.00	3903.78	0.00	3070.88 R	0.00	2590.85
0.00									
1.700	4540.4	794.0	4064.87 R	0.00	3427.98	0.00	2697.76 R	0.00	2275.08
0.00									
1.800	3451.8	604.9	3119.25 R	0.00	2628.50	0.00	2070.18 R	0.00	1744.47
0.00									
1.900	1934.1	340.3	1764.30 R	0.00	1485.83	0.00	1170.92 R	0.00	986.11
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 828

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load:

Rating Type: HL93

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 829

SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: HL93

Service

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	280.49	999.00	65.28	999.00	0.00	999.0 (2-Lane)
1.010	422.63	999.00	98.36	999.00	0.00	999.0 (1-Lane)
1.100	23.12	999.00	5.66	999.00	0.00	203.6 (2-Lane)
1.100	34.83	999.00	8.52	999.00	0.00	306.7 (1-Lane)
1.200	11.83	999.00	3.59	999.00	0.00	129.1 (2-Lane)
1.200	17.82	999.00	5.40	999.00	0.00	194.5 (1-Lane)
1.300	7.49	999.00	2.35	999.00	0.00	84.7 (2-Lane)
1.300	11.28	999.00	3.54	999.00	0.00	127.6 (1-Lane)
1.400	5.74	999.00	1.86	999.00	0.00	66.8 (2-Lane)
1.400	8.65	999.00	2.80	999.00	0.00	100.6 (1-Lane)
1.500	5.27	999.00	1.72	999.00	0.00	62.0 (2-Lane)
1.500	7.94	999.00	2.60	999.00	0.00	93.5 (1-Lane)
1.600	5.74	999.00	1.86	999.00	0.00	66.8 (2-Lane)
1.600	8.65	999.00	2.80	999.00	0.00	100.6 (1-Lane)
1.700	7.49	999.00	2.35	999.00	0.00	84.7 (2-Lane)
1.700	11.28	999.00	3.54	999.00	0.00	127.6 (1-Lane)
1.800	11.83	999.00	3.59	999.00	0.00	129.1 (2-Lane)
1.800	17.82	999.00	5.40	999.00	0.00	194.5 (1-Lane)
1.900	23.12	999.00	5.66	999.00	0.00	203.6 (2-Lane)
1.900	34.83	999.00	8.52	999.00	0.00	306.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	241.8	46.8	167.23 R	0.00	125.74	110.99 R
0.00						
1.100	2417.7	425.3	1510.77 R	0.00	1135.92	1002.66 R
0.00						
1.200	4314.7	756.1	2662.56 R	0.00	2001.93	1767.08 R
0.00						
1.300	5675.4	992.4	3455.37 R	0.00	2598.03	2293.25 R
0.00						
1.400	6491.9	1134.2	3924.09 R	0.00	2950.44	2604.33 R
0.00						
1.500						
0.00						
1.600						
0.00						
1.700						
0.00						
1.800						
0.00						
1.900						
0.00						
2.000						
0.00						

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.500	6764.0	1181.5	4051.26 R	0.00	3046.06	0.00	2688.73 R	0.00	2021.60
0.00									
1.600	6491.9	1134.2	3924.09 R	0.00	2950.44	0.00	2604.33 R	0.00	1958.14
0.00									
1.700	5675.4	992.4	3455.37 R	0.00	2598.03	0.00	2293.25 R	0.00	1724.25
0.00									
1.800	4314.7	756.1	2662.56 R	0.00	2001.93	0.00	1767.08 R	0.00	1328.63
0.00									
1.900	2417.7	425.3	1510.77 R	0.00	1135.92	0.00	1002.66 R	0.00	753.88
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 831

STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: HS20

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.4	-12222.4B	11797.6	11797.6	-20167.9	-20167.9
1.600	19743.0C	19743.0	-11839.3	-11839.3B	12117.0	12117.0	-19465.4	-19465.4
1.700	19743.0C	19743.0	-11839.3	-11839.3B	13075.2	13075.2	-18507.2	-18507.2
1.800	19743.0C	19743.0	-13020.4	-13020.4B	14672.1	14672.1	-18091.3	-18091.3
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: HS20

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	96.40	999.00	96.40	999.00	999.00	999.0 (2-Lane)
1.010	145.25	999.00	145.25	999.00	999.00	999.0 (1-Lane)
1.100	8.98	999.00	8.98	999.00	179.60	323.3 (2-Lane)
1.100	13.53	999.00	13.53	999.00	270.61	487.1 (1-Lane)

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

1.200	5.51	999.00	5.51	999.00	110.21	198.4 (2-Lane)
1.200	8.30	999.00	8.30	999.00	166.06	298.9 (1-Lane)
1.300	3.78	999.00	3.78	999.00	75.68	136.2 (2-Lane)
1.300	5.70	999.00	5.70	999.00	114.03	205.3 (1-Lane)
1.400	3.09	999.00	3.09	999.00	61.76	111.2 (2-Lane)
1.400	4.65	999.00	4.65	999.00	93.05	167.5 (1-Lane)
1.500	2.91	999.00	2.91	999.00	58.24	104.8 (2-Lane)
1.500	4.39	999.00	4.39	999.00	87.76	158.0 (1-Lane)
1.600	3.09	999.00	3.09	999.00	61.76	111.2 (2-Lane)
1.600	4.65	999.00	4.65	999.00	93.05	167.5 (1-Lane)
1.700	3.78	999.00	3.78	999.00	75.68	136.2 (2-Lane)
1.700	5.70	999.00	5.70	999.00	114.03	205.3 (1-Lane)
1.800	5.51	999.00	5.51	999.00	110.21	198.4 (2-Lane)
1.800	8.30	999.00	8.30	999.00	166.06	298.9 (1-Lane)
1.900	8.98	999.00	8.98	999.00	179.60	323.3 (2-Lane)
1.900	13.53	999.00	13.53	999.00	270.61	487.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact	
Lane			Truck	Lane	Truck	Lane
1.000	167.2	29.5	152.92	0.00	114.98	0.00
0.00						
1.010	164.0	28.9	151.29	0.00	113.76	0.00
0.00						
1.100	134.8	23.6	136.68	0.00	102.77	0.00
0.00						
1.200	102.0	17.7	120.44	0.00	90.56	0.00
0.00						
1.300	68.0	11.8	104.20	0.00	78.35	0.00
0.00						
1.400	34.0	5.9	87.96	0.00	66.14	0.00
0.00						
1.500	0.0	0.0	71.73	0.00	53.93	0.00
0.00						
1.600	-34.0	-5.9	-87.96	0.00	-66.14	0.00
0.00						
1.700	-68.0	-11.8	-104.20	0.00	-78.35	0.00
0.00						
1.800	-102.0	-17.7	-120.44	0.00	-90.56	0.00
0.00						
1.900	-134.8	-23.6	-136.68	0.00	-102.77	0.00
0.00						
2.000	-167.2	-29.5	-152.92	0.00	-114.98	0.00
0.00						

STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: HS20

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: HS20

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.14	102.91	185.2 (2-Lane)
1.000	999.00	6.34	126.87	228.4 (1-Lane)
1.010	999.00	5.23	104.52	188.1 (2-Lane)
1.010	999.00	6.44	128.85	231.9 (1-Lane)
1.100	125.08	5.12	102.31	184.2 (2-Lane)
1.100	154.20	6.31	126.14	227.0 (1-Lane)
1.200	28.15	3.39	67.81	122.1 (2-Lane)
1.200	34.71	4.18	83.60	150.5 (1-Lane)

1.300	15.49	4.30	86.04	154.9 (2-Lane)
1.300	19.09	5.30	106.07	190.9 (1-Lane)
1.400	10.24	5.55	110.99	199.8 (2-Lane)
1.400	12.62	6.84	136.83	246.3 (1-Lane)
1.500	7.36	7.36	147.24	265.0 (2-Lane)
1.500	9.08	9.08	181.53	326.7 (1-Lane)
1.600	5.55	10.24	110.99	199.8 (2-Lane)
1.600	6.84	12.62	136.83	246.3 (1-Lane)
1.700	4.30	15.49	86.04	154.9 (2-Lane)
1.700	5.30	19.09	106.07	190.9 (1-Lane)
1.800	3.39	28.15	67.81	122.1 (2-Lane)
1.800	4.18	34.71	83.60	150.5 (1-Lane)
1.900	5.12	125.08	102.31	184.2 (2-Lane)
1.900	6.31	154.20	126.14	227.0 (1-Lane)
2.000	5.14	999.00	102.91	185.2 (2-Lane)
2.000	6.34	999.00	126.87	228.4 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: HS20

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30					
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	124.23 R	0.00	93.41	0.00	82.45 R	0.00	61.99	
0.00										
1.100	1934.1	340.3	1122.29 R	0.00	843.82	0.00	744.84 R	0.00	560.03	
0.00										
1.200	3451.8	604.9	1977.90 R	0.00	1487.15	0.00	1312.69 R	0.00	986.98	
0.00										
1.300	4540.4	794.0	2566.85 R	0.00	1929.96	0.00	1703.56 R	0.00	1280.87	
0.00										
1.400	5193.5	907.4	2915.03 R	0.00	2191.76	0.00	1934.64 R	0.00	1454.62	
0.00										
1.500	5411.2	945.2	3009.50 R	0.00	2262.79	0.00	1997.34 R	0.00	1501.76	
0.00										
1.600	5193.5	907.4	2915.03 R	0.00	2191.76	0.00	1934.64 R	0.00	1454.62	
0.00										
1.700	4540.4	794.0	2566.85 R	0.00	1929.96	0.00	1703.56 R	0.00	1280.87	
0.00										
1.800	3451.8	604.9	1977.90 R	0.00	1487.15	0.00	1312.69 R	0.00	986.98	
0.00										
1.900	1934.1	340.3	1122.29 R	0.00	843.82	0.00	744.84 R	0.00	560.03	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 836

## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load:

Rating Type: HS20

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: HS20

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	439.95	999.00	102.39	999.00	999.00	999.0 (2-Lane)
1.010	662.89	999.00	154.28	999.00	999.00	999.0 (1-Lane)
1.100	36.34	999.00	8.89	999.00	177.79	320.0 (2-Lane)
1.100	54.75	999.00	13.39	999.00	267.88	482.2 (1-Lane)
1.200	18.65	999.00	5.66	999.00	113.09	203.6 (2-Lane)
1.200	28.10	999.00	8.52	999.00	170.40	306.7 (1-Lane)
1.300	11.86	999.00	3.72	999.00	74.48	134.1 (2-Lane)
1.300	17.86	999.00	5.61	999.00	112.22	202.0 (1-Lane)
1.400	9.11	999.00	2.94	999.00	58.89	106.0 (2-Lane)
1.400	13.73	999.00	4.44	999.00	88.73	159.7 (1-Lane)
1.500	8.39	999.00	2.74	999.00	54.88	98.8 (2-Lane)
1.500	12.65	999.00	4.13	999.00	82.69	148.8 (1-Lane)
1.600	9.11	999.00	2.94	999.00	58.89	106.0 (2-Lane)
1.600	13.73	999.00	4.44	999.00	88.73	159.7 (1-Lane)

1.700	11.86	999.00	3.72	999.00	74.48	134.1 (2-Lane)
1.700	17.86	999.00	5.61	999.00	112.22	202.0 (1-Lane)
1.800	18.65	999.00	5.66	999.00	113.09	203.6 (2-Lane)
1.800	28.10	999.00	8.52	999.00	170.40	306.7 (1-Lane)
1.900	36.34	999.00	8.89	999.00	177.79	320.0 (2-Lane)
1.900	54.75	999.00	13.39	999.00	267.89	482.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	117.61 R	0.00	88.43	0.00
0.00						
1.100	2417.7	425.3	1063.89 R	0.00	799.92	0.00
0.00						
1.200	4314.7	756.1	1878.48 R	0.00	1412.39	0.00
0.00						
1.300	5675.4	992.4	2443.79 R	0.00	1837.43	0.00
0.00						
1.400	6491.9	1134.2	2778.49 R	0.00	2089.09	0.00
0.00						
1.500	6764.0	1181.5	2876.35 R	0.00	2162.67	0.00
0.00						
1.600	6491.9	1134.2	2778.49 R	0.00	2089.09	0.00
0.00						
1.700	5675.4	992.4	2443.79 R	0.00	1837.43	0.00
0.00						
1.800	4314.7	756.1	1878.48 R	0.00	1412.39	0.00
0.00						
1.900	2417.7	425.3	1063.89 R	0.00	799.91	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: 3

Span Moment Resistance Available Resistance for LL+I



	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12210.2	-12210.2B	11797.6	11797.6	-20155.7	-20155.7
1.600	19743.0C	19743.0	-11831.3	-11831.3B	12117.0	12117.0	-19457.4	-19457.4
1.700	19743.0C	19743.0	-11831.3	-11831.3B	13075.2	13075.2	-18499.2	-18499.2
1.800	19743.0C	19743.0	-13007.0	-13007.0B	14672.1	14672.1	-18077.9	-18077.9
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: 3

## Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	137.07	999.00	137.07	999.00	0.00	999.0 (2-Lane)
1.010	206.54	999.00	206.54	999.00	0.00	999.0 (1-Lane)
1.100	12.75	999.00	12.75	999.00	0.00	318.8 (2-Lane)
1.100	19.21	999.00	19.21	999.00	0.00	480.3 (1-Lane)
1.200	7.81	999.00	7.81	999.00	0.00	195.3 (2-Lane)
1.200	11.77	999.00	11.77	999.00	0.00	294.2 (1-Lane)
1.300	5.35	999.00	5.35	999.00	0.00	133.8 (2-Lane)
1.300	8.06	999.00	8.06	999.00	0.00	201.5 (1-Lane)
1.400	4.36	999.00	4.36	999.00	0.00	109.0 (2-Lane)
1.400	6.57	999.00	6.57	999.00	0.00	164.3 (1-Lane)
1.500	4.10	999.00	4.10	999.00	0.00	102.5 (2-Lane)
1.500	6.18	999.00	6.18	999.00	0.00	154.5 (1-Lane)
1.600	4.36	999.00	4.36	999.00	0.00	109.0 (2-Lane)
1.600	6.57	999.00	6.57	999.00	0.00	164.3 (1-Lane)
1.700	5.35	999.00	5.35	999.00	0.00	133.8 (2-Lane)
1.700	8.06	999.00	8.06	999.00	0.00	201.5 (1-Lane)
1.800	7.81	999.00	7.81	999.00	0.00	195.3 (2-Lane)
1.800	11.77	999.00	11.77	999.00	0.00	294.2 (1-Lane)
1.900	12.75	999.00	12.75	999.00	0.00	318.8 (2-Lane)
1.900	19.21	999.00	19.21	999.00	0.00	480.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	Lane
1.000 0.00	167.2	29.5	107.53	0.00	87.22	65.58
1.010 0.00	164.0	28.9	106.40	0.00	86.31	64.89
1.100 0.00	134.8	23.6	96.25	0.00	78.07	58.70
1.200 0.00	102.0	17.7	84.97	0.00	68.93	51.82
1.300 0.00	68.0	11.8	73.70	0.00	59.78	44.95
1.400 0.00	34.0	5.9	62.42	0.00	50.63	38.07
1.500 0.00	0.0	0.0	51.14	0.00	41.48	31.19
1.600 0.00	-34.0	-5.9	-62.42	0.00	-50.63	-38.07
1.700 0.00	-68.0	-11.8	-73.70	0.00	-59.78	-44.95
1.800 0.00	-102.0	-17.7	-84.97	0.00	-68.93	-51.82
1.900 0.00	-134.8	-23.6	-96.25	0.00	-78.07	-58.70
2.000 0.00	-167.2	-29.5	-107.53	0.00	-87.22	-65.58

STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)

1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: 3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.32	0.00	182.9 (2-Lane)
1.000	999.00	9.02	0.00	225.5 (1-Lane)
1.010	999.00	7.43	0.00	185.8 (2-Lane)
1.010	999.00	9.16	0.00	229.0 (1-Lane)
1.100	151.42	7.26	0.00	181.6 (2-Lane)
1.100	186.67	8.96	0.00	223.9 (1-Lane)
1.200	37.42	4.81	0.00	120.1 (2-Lane)
1.200	46.13	5.93	0.00	148.1 (1-Lane)
1.300	21.26	6.08	0.00	152.1 (2-Lane)
1.300	26.21	7.50	0.00	187.5 (1-Lane)
1.400	14.25	7.82	0.00	195.5 (2-Lane)
1.400	17.56	9.64	0.00	241.0 (1-Lane)
1.500	10.32	10.32	0.00	258.1 (2-Lane)
1.500	12.73	12.73	0.00	318.2 (1-Lane)
1.600	7.82	14.25	0.00	195.5 (2-Lane)
1.600	9.64	17.56	0.00	241.0 (1-Lane)
1.700	6.08	21.26	0.00	152.1 (2-Lane)
1.700	7.50	26.21	0.00	187.5 (1-Lane)
1.800	4.81	37.42	0.00	120.1 (2-Lane)
1.800	5.93	46.13	0.00	148.1 (1-Lane)
1.900	7.26	151.42	0.00	181.6 (2-Lane)
1.900	8.96	186.67	0.00	223.9 (1-Lane)
2.000	7.32	999.00	0.00	182.9 (2-Lane)
2.000	9.02	999.00	0.00	225.5 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: 3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	193.4	37.4	87.36 R	0.00	65.69	0.00	57.98 R	0.00	43.60
1.100 0.00	1934.1	340.3	790.32 R	0.00	594.22	0.00	524.51 R	0.00	394.37
1.200 0.00	3451.8	604.9	1395.44 R	0.00	1049.21	0.00	926.12 R	0.00	696.33
1.300 0.00	4540.4	794.0	1815.38 R	0.00	1364.95	0.00	1204.83 R	0.00	905.89
1.400 0.00	5193.5	907.4	2064.02 R	0.00	1551.89	0.00	1369.84 R	0.00	1029.96
1.500 0.00	5411.2	945.2	2136.72 R	0.00	1606.55	0.00	1418.09 R	0.00	1066.23
1.600 0.00	5193.5	907.4	2064.02 R	0.00	1551.89	0.00	1369.84 R	0.00	1029.96
1.700 0.00	4540.4	794.0	1815.38 R	0.00	1364.95	0.00	1204.83 R	0.00	905.89
1.800 0.00	3451.8	604.9	1395.44 R	0.00	1049.21	0.00	926.12 R	0.00	696.33
1.900 0.00	1934.1	340.3	790.32 R	0.00	594.22	0.00	524.51 R	0.00	394.37
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: 3Rating Type: 3  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	625.58	999.00	145.60	999.00	0.00	999.0 (2-Lane)
1.010	942.60	999.00	219.38	999.00	0.00	999.0 (1-Lane)
1.100	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.100	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
1.200	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.200	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.300	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.300	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.400	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.400	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.500	11.82	999.00	3.87	999.00	0.00	96.6 (2-Lane)
1.500	17.81	999.00	5.82	999.00	0.00	145.6 (1-Lane)
1.600	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.600	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.700	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.700	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.800	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.800	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.900	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.900	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75	(1-Lane) LL 1.75
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Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	173.90 R	0.00	130.75	0.00	115.41 R	0.00	86.77
0.00									
1.100	2417.7	425.3	1559.46 R	0.00	1172.53	0.00	1034.98 R	0.00	778.18
0.00									
1.200	4314.7	756.1	2720.06 R	0.00	2045.16	0.00	1805.24 R	0.00	1357.33
0.00									
1.300	5675.4	992.4	3567.75 R	0.00	2682.52	0.00	2367.83 R	0.00	1780.32
0.00									
1.400	6491.9	1134.2	4046.46 R	0.00	3042.45	0.00	2685.54 R	0.00	2019.21
0.00									
1.500	6764.0	1181.5	4157.45 R	0.00	3125.90	0.00	2759.20 R	0.00	2074.59
0.00									
1.600	6491.9	1134.2	4046.46 R	0.00	3042.45	0.00	2685.54 R	0.00	2019.21
0.00									
1.700	5675.4	992.4	3567.75 R	0.00	2682.52	0.00	2367.83 R	0.00	1780.32
0.00									
1.800	4314.7	756.1	2720.06 R	0.00	2045.16	0.00	1805.24 R	0.00	1357.33
0.00									
1.900	2417.7	425.3	1559.46 R	0.00	1172.53	0.00	1034.98 R	0.00	778.18
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12192.1	-12192.1B	11797.6	11797.6	-20137.6	-20137.6
1.600	19743.0C	19743.0	-11817.3	-11817.3B	12117.0	12117.0	-19443.3	-19443.3
1.700	19743.0C	19743.0	-11817.3	-11817.3B	13075.2	13075.2	-18485.1	-18485.1
1.800	19743.0C	19743.0	-13007.5	-13007.5B	14672.1	14672.1	-18078.3	-18078.3
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	92.70	999.00	92.70	999.00	0.00	999.0 (2-Lane)
1.010	139.68	999.00	139.68	999.00	0.00	999.0 (1-Lane)
1.100	8.70	999.00	8.70	999.00	0.00	348.0 (2-Lane)
1.100	13.11	999.00	13.11	999.00	0.00	524.3 (1-Lane)
1.200	5.39	999.00	5.39	999.00	0.00	215.8 (2-Lane)
1.200	8.13	999.00	8.13	999.00	0.00	325.1 (1-Lane)
1.300	3.66	999.00	3.66	999.00	0.00	146.6 (2-Lane)
1.300	5.52	999.00	5.52	999.00	0.00	220.9 (1-Lane)
1.400	2.99	999.00	2.99	999.00	0.00	119.8 (2-Lane)
1.400	4.51	999.00	4.51	999.00	0.00	180.5 (1-Lane)
1.500	2.84	999.00	2.84	999.00	0.00	113.5 (2-Lane)
1.500	4.28	999.00	4.28	999.00	0.00	171.0 (1-Lane)
1.600	2.99	999.00	2.99	999.00	0.00	119.8 (2-Lane)
1.600	4.51	999.00	4.51	999.00	0.00	180.5 (1-Lane)
1.700	3.66	999.00	3.66	999.00	0.00	146.6 (2-Lane)
1.700	5.52	999.00	5.52	999.00	0.00	220.9 (1-Lane)
1.800	5.39	999.00	5.39	999.00	0.00	215.8 (2-Lane)
1.800	8.13	999.00	8.13	999.00	0.00	325.1 (1-Lane)
1.900	8.70	999.00	8.70	999.00	0.00	348.0 (2-Lane)
1.900	13.11	999.00	13.11	999.00	0.00	524.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: 3S2

Gamma	DC	DW	(2-Lane)				(1-Lane)		
	1.25	1.25	LL	LL	LL	LL	LL	LL	
			1.75	1.75	1.75	1.75	1.75	1.75	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	167.2	29.5	159.13	0.00	119.65	0.00	129.08	0.00	97.05
0.00									
1.010	164.0	28.9	157.32	0.00	118.29	0.00	127.61	0.00	95.95
0.00									
1.100	134.8	23.6	141.09	0.00	106.08	0.00	114.44	0.00	86.05
0.00									
1.200	102.0	17.7	123.04	0.00	92.51	0.00	99.81	0.00	75.04

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0.00									
1.300	68.0	11.8	105.00	0.00	78.95	0.00	85.17	0.00	64.04
0.00									
1.400	34.0	5.9	86.96	0.00	65.38	0.00	70.53	0.00	53.03
0.00									
1.500	0.0	0.0	68.91	0.00	51.82	0.00	55.90	0.00	42.03
0.00									
1.600	-34.0	-5.9	-86.96	0.00	-65.38	0.00	-70.53	0.00	-53.03
0.00									
1.700	-68.0	-11.8	-105.00	0.00	-78.95	0.00	-85.17	0.00	-64.04
0.00									
1.800	-102.0	-17.7	-123.04	0.00	-92.51	0.00	-99.81	0.00	-75.04
0.00									
1.900	-134.8	-23.6	-141.09	0.00	-106.08	0.00	-114.44	0.00	-86.05
0.00									
2.000	-167.2	-29.5	-159.13	0.00	-119.65	0.00	-129.08	0.00	-97.05
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: 3S2



## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	4.95	0.00	197.8 (2-Lane)
1.000	999.00	6.10	0.00	243.8 (1-Lane)
1.010	999.00	5.03	0.00	201.0 (2-Lane)
1.010	999.00	6.20	0.00	247.8 (1-Lane)
1.100	151.42	4.96	0.00	198.2 (2-Lane)
1.100	186.67	6.11	0.00	244.4 (1-Lane)
1.200	39.73	3.32	0.00	132.8 (2-Lane)
1.200	48.98	4.09	0.00	163.7 (1-Lane)
1.300	18.52	4.27	0.00	170.8 (2-Lane)
1.300	22.83	5.26	0.00	210.5 (1-Lane)
1.400	11.16	5.61	0.00	224.6 (2-Lane)
1.400	13.76	6.92	0.00	276.8 (1-Lane)
1.500	7.66	7.66	0.00	306.5 (2-Lane)
1.500	9.45	9.45	0.00	377.9 (1-Lane)
1.600	5.61	11.16	0.00	224.6 (2-Lane)
1.600	6.92	13.76	0.00	276.8 (1-Lane)
1.700	4.27	18.52	0.00	170.8 (2-Lane)
1.700	5.26	22.83	0.00	210.5 (1-Lane)
1.800	3.32	39.73	0.00	132.8 (2-Lane)
1.800	4.09	48.98	0.00	163.7 (1-Lane)
1.900	4.96	151.42	0.00	198.2 (2-Lane)
1.900	6.11	186.67	0.00	244.4 (1-Lane)
2.000	4.95	999.00	0.00	197.8 (2-Lane)
2.000	6.10	999.00	0.00	243.8 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	193.4	37.4	129.18 R	0.00	97.13	0.00	85.73 R	0.00	64.46
1.100 0.00	1934.1	340.3	1158.46 R	0.00	871.02	0.00	768.84 R	0.00	578.08
1.200 0.00	3451.8	604.9	2020.62 R	0.00	1519.26	0.00	1341.04 R	0.00	1008.30
1.300 0.00	4540.4	794.0	2650.33 R	0.00	1992.73	0.00	1758.96 R	0.00	1322.53
1.400	5193.5	907.4	3005.94 R	0.00	2260.11	0.00	1994.98 R	0.00	1499.98

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0.00									
1.500	5411.2	945.2	3088.39 R	0.00	2322.10	0.00	2049.69 R	0.00	1541.12
0.00									
1.600	5193.5	907.4	3005.94 R	0.00	2260.11	0.00	1994.98 R	0.00	1499.98
0.00									
1.700	4540.4	794.0	2650.33 R	0.00	1992.73	0.00	1758.96 R	0.00	1322.53
0.00									
1.800	3451.8	604.9	2020.62 R	0.00	1519.26	0.00	1341.04 R	0.00	1008.30
0.00									
1.900	1934.1	340.3	1158.46 R	0.00	871.02	0.00	768.84 R	0.00	578.08
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV

Rating Live Load:

Rating Type: 3S2

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV

Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	423.08	999.00	98.47	999.00	0.00	999.0 (2-Lane)
1.010	637.48	999.00	148.37	999.00	0.00	999.0 (1-Lane)

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1.100	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.100	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
1.200	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.200	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.300	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.300	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.400	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.400	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.500	8.18	999.00	2.67	999.00	0.00	107.0 (2-Lane)
1.500	12.32	999.00	4.03	999.00	0.00	161.2 (1-Lane)
1.600	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.600	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.700	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.700	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.800	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.800	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.900	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.900	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load w/o Truck
Lane			Lane	Lane	Lane	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	167.67 R	0.00	126.07	0.00
0.00						
1.100	2417.7	425.3	1497.18 R	0.00	1125.70	0.00
0.00						
1.200	4314.7	756.1	2607.95 R	0.00	1960.87	0.00
0.00						
1.300	5675.4	992.4	3357.23 R	0.00	2524.23	0.00
0.00						
1.400	6491.9	1134.2	3807.29 R	0.00	2862.62	0.00
0.00						
1.500	6764.0	1181.5	3958.14 R	0.00	2976.05	0.00
0.00						
1.600	6491.9	1134.2	3807.29 R	0.00	2862.62	0.00
0.00						
1.700	5675.4	992.4	3357.23 R	0.00	2524.23	0.00
0.00						
1.800	4314.7	756.1	2607.95 R	0.00	1960.87	0.00
0.00						
1.900	2417.7	425.3	1497.18 R	0.00	1125.70	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00

0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12209.5	-12209.5B	11797.6	11797.6	-20155.0	-20155.0
1.600	19743.0C	19743.0	-11834.3	-11834.3B	12117.0	12117.0	-19460.3	-19460.3
1.700	19743.0C	19743.0	-11834.3	-11834.3B	13075.2	13075.2	-18502.1	-18502.1
1.800	19743.0C	19743.0	-12987.6	-12987.6B	14672.1	14672.1	-18058.5	-18058.5
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	96.15	999.00	96.15	999.00	0.00	999.0 (2-Lane)
1.010	144.87	999.00	144.87	999.00	0.00	999.0 (1-Lane)
1.100	9.06	999.00	9.06	999.00	0.00	362.5 (2-Lane)
1.100	13.65	999.00	13.65	999.00	0.00	546.1 (1-Lane)
1.200	5.63	999.00	5.63	999.00	0.00	225.0 (2-Lane)
1.200	8.48	999.00	8.48	999.00	0.00	339.1 (1-Lane)
1.300	3.89	999.00	3.89	999.00	0.00	155.8 (2-Lane)
1.300	5.87	999.00	5.87	999.00	0.00	234.7 (1-Lane)
1.400	3.18	999.00	3.18	999.00	0.00	127.3 (2-Lane)
1.400	4.80	999.00	4.80	999.00	0.00	191.8 (1-Lane)
1.500	2.98	999.00	2.98	999.00	0.00	119.2 (2-Lane)

1.500	4.49	999.00	4.49	999.00	0.00	179.6 (1-Lane)
1.600	3.18	999.00	3.18	999.00	0.00	127.3 (2-Lane)
1.600	4.80	999.00	4.80	999.00	0.00	191.8 (1-Lane)
1.700	3.89	999.00	3.89	999.00	0.00	155.8 (2-Lane)
1.700	5.87	999.00	5.87	999.00	0.00	234.7 (1-Lane)
1.800	5.63	999.00	5.63	999.00	0.00	225.0 (2-Lane)
1.800	8.48	999.00	8.48	999.00	0.00	339.1 (1-Lane)
1.900	9.06	999.00	9.06	999.00	0.00	362.5 (2-Lane)
1.900	13.65	999.00	13.65	999.00	0.00	546.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV

Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	153.49	0.00	115.41	0.00	124.51	0.00	93.61
1.010 0.00	164.0	28.9	151.69	0.00	114.05	0.00	123.04	0.00	92.51
1.100 0.00	134.8	23.6	135.45	0.00	101.84	0.00	109.87	0.00	82.61
1.200 0.00	102.0	17.7	117.41	0.00	88.28	0.00	95.23	0.00	71.61
1.300 0.00	68.0	11.8	99.36	0.00	74.71	0.00	80.60	0.00	60.60
1.400 0.00	34.0	5.9	81.32	0.00	61.14	0.00	65.96	0.00	49.60
1.500 0.00	0.0	0.0	63.28	0.00	47.58	0.00	51.33	0.00	38.59
1.600 0.00	-34.0	-5.9	-81.32	0.00	-61.14	0.00	-65.96	0.00	-49.60
1.700 0.00	-68.0	-11.8	-99.36	0.00	-74.71	0.00	-80.60	0.00	-60.60
1.800 0.00	-102.0	-17.7	-117.41	0.00	-88.28	0.00	-95.23	0.00	-71.61
1.900 0.00	-134.8	-23.6	-135.45	0.00	-101.84	0.00	-109.87	0.00	-82.61
2.000 0.00	-167.2	-29.5	-153.49	0.00	-115.41	0.00	-124.51	0.00	-93.61

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV

Rating Live Load: 3-3

Span	Shear Resistance vn	Available Resistance for LL+I (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV

Rating Live Load: 3-3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.13	0.00	205.0 (2-Lane)
1.000	999.00	6.32	0.00	252.8 (1-Lane)
1.010	999.00	5.21	0.00	208.5 (2-Lane)
1.010	999.00	6.43	0.00	257.0 (1-Lane)
1.100	183.86	5.16	0.00	206.5 (2-Lane)
1.100	226.67	6.36	0.00	254.6 (1-Lane)
1.200	44.52	3.48	0.00	139.1 (2-Lane)
1.200	54.88	4.29	0.00	171.5 (1-Lane)
1.300	21.55	4.51	0.00	180.5 (2-Lane)
1.300	26.57	5.56	0.00	222.5 (1-Lane)
1.400	12.56	6.00	0.00	240.1 (2-Lane)
1.400	15.48	7.40	0.00	296.0 (1-Lane)
1.500	8.35	8.35	0.00	333.8 (2-Lane)
1.500	10.29	10.29	0.00	411.5 (1-Lane)
1.600	6.00	12.56	0.00	240.1 (2-Lane)
1.600	7.40	15.48	0.00	296.0 (1-Lane)

1.700	4.51	21.55	0.00	180.5 (2-Lane)
1.700	5.56	26.57	0.00	222.5 (1-Lane)
1.800	3.48	44.52	0.00	139.1 (2-Lane)
1.800	4.29	54.88	0.00	171.5 (1-Lane)
1.900	5.16	183.86	0.00	206.5 (2-Lane)
1.900	6.36	226.67	0.00	254.6 (1-Lane)
2.000	5.13	999.00	0.00	205.0 (2-Lane)
2.000	6.32	999.00	0.00	252.8 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	193.4	37.4	124.55 R	0.00	93.65	0.00	82.66 R	0.00	62.15
1.100 0.00	1934.1	340.3	1112.19 R	0.00	836.23	0.00	738.14 R	0.00	554.99
1.200 0.00	3451.8	604.9	1937.34 R	0.00	1456.64	0.00	1285.77 R	0.00	966.74
1.300 0.00	4540.4	794.0	2493.94 R	0.00	1875.14	0.00	1655.17 R	0.00	1244.49
1.400 0.00	5193.5	907.4	2828.27 R	0.00	2126.52	0.00	1877.06 R	0.00	1411.32
1.500 0.00	5411.2	945.2	2940.33 R	0.00	2210.78	0.00	1951.43 R	0.00	1467.24
1.600 0.00	5193.5	907.4	2828.27 R	0.00	2126.52	0.00	1877.06 R	0.00	1411.32
1.700 0.00	4540.4	794.0	2493.94 R	0.00	1875.14	0.00	1655.17 R	0.00	1244.49
1.800 0.00	3451.8	604.9	1937.34 R	0.00	1456.64	0.00	1285.77 R	0.00	966.74
1.900 0.00	1934.1	340.3	1112.19 R	0.00	836.23	0.00	738.14 R	0.00	554.99
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load:

Rating Type: 3-3

## Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	438.80	999.00	102.13	999.00	0.00	999.0 (2-Lane)
1.010	661.17	999.00	153.88	999.00	0.00	999.0 (1-Lane)
1.100	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.100	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
1.200	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.200	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.300	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.300	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.400	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.400	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.500	8.59	999.00	2.81	999.00	0.00	112.3 (2-Lane)
1.500	12.95	999.00	4.23	999.00	0.00	169.3 (1-Lane)
1.600	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.600	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.700	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.700	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.800	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.800	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.900	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.900	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)



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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75					
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	241.8	46.8	127.85 R	0.00	96.13	0.00	84.85 R	0.00	63.80	0.00
0.00										
1.100	2417.7	425.3	1157.37 R	0.00	870.20	0.00	768.12 R	0.00	577.53	0.00
0.00										
1.200	4314.7	756.1	2045.50 R	0.00	1537.97	0.00	1357.55 R	0.00	1020.72	0.00
0.00										
1.300	5675.4	992.4	2664.40 R	0.00	2003.31	0.00	1768.30 R	0.00	1329.55	0.00
0.00										
1.400	6491.9	1134.2	3042.72 R	0.00	2287.76	0.00	2019.38 R	0.00	1518.33	0.00
0.00										
1.500	6764.0	1181.5	3156.78 R	0.00	2373.52	0.00	2095.08 R	0.00	1575.25	0.00
0.00										
1.600	6491.9	1134.2	3042.72 R	0.00	2287.76	0.00	2019.38 R	0.00	1518.33	0.00
0.00										
1.700	5675.4	992.4	2664.40 R	0.00	2003.31	0.00	1768.30 R	0.00	1329.55	0.00
0.00										
1.800	4314.7	756.1	2045.50 R	0.00	1537.97	0.00	1357.55 R	0.00	1020.72	0.00
0.00										
1.900	2417.7	425.3	1157.37 R	0.00	870.20	0.00	768.12 R	0.00	577.53	0.00
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: SU4

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12217.0	-12217.0B	11797.6	11797.6	-20162.4	-20162.4

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1.600	19743.0C	19743.0	-11834.5	-11834.5B	12117.0	12117.0	-19460.6	-19460.6
1.700	19743.0C	19743.0	-11834.5	-11834.5B	13075.2	13075.2	-18502.4	-18502.4
1.800	19743.0C	19743.0	-13013.0	-13013.0B	14672.1	14672.1	-18083.9	-18083.9
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV

Rating Live Load: SU4

Moment

Span	top +bend	Rating fiber -bend	Factor	bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)
1.010	126.09	999.00		126.09	999.00	0.00	999.0 (2-Lane)
1.010	189.99	999.00		189.99	999.00	0.00	999.0 (1-Lane)
1.100	11.72	999.00		11.72	999.00	0.00	316.5 (2-Lane)
1.100	17.66	999.00		17.66	999.00	0.00	476.9 (1-Lane)
1.200	7.17	999.00		7.17	999.00	0.00	193.7 (2-Lane)
1.200	10.81	999.00		10.81	999.00	0.00	291.8 (1-Lane)
1.300	4.91	999.00		4.91	999.00	0.00	132.5 (2-Lane)
1.300	7.39	999.00		7.39	999.00	0.00	199.6 (1-Lane)
1.400	3.98	999.00		3.98	999.00	0.00	107.5 (2-Lane)
1.400	6.00	999.00		6.00	999.00	0.00	162.0 (1-Lane)
1.500	3.74	999.00		3.74	999.00	0.00	100.9 (2-Lane)
1.500	5.63	999.00		5.63	999.00	0.00	152.0 (1-Lane)
1.600	3.98	999.00		3.98	999.00	0.00	107.5 (2-Lane)
1.600	6.00	999.00		6.00	999.00	0.00	162.0 (1-Lane)
1.700	4.91	999.00		4.91	999.00	0.00	132.5 (2-Lane)
1.700	7.39	999.00		7.39	999.00	0.00	199.6 (1-Lane)
1.800	7.17	999.00		7.17	999.00	0.00	193.7 (2-Lane)
1.800	10.81	999.00		10.81	999.00	0.00	291.8 (1-Lane)
1.900	11.72	999.00		11.72	999.00	0.00	316.5 (2-Lane)
1.900	17.66	999.00		17.66	999.00	0.00	476.9 (1-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV

Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	116.89	0.00	87.88	0.00	94.81	0.00	71.29
1.010 0.00	164.0	28.9	115.67	0.00	86.97	0.00	93.82	0.00	70.54
1.100 0.00	134.8	23.6	104.71	0.00	78.73	0.00	84.93	0.00	63.86
1.200 0.00	102.0	17.7	92.53	0.00	69.57	0.00	75.05	0.00	56.43
1.300 0.00	68.0	11.8	80.35	0.00	60.41	0.00	65.18	0.00	49.00
1.400 0.00	34.0	5.9	68.17	0.00	51.26	0.00	55.30	0.00	41.58
1.500 0.00	0.0	0.0	55.99	0.00	42.10	0.00	45.42	0.00	34.15
1.600 0.00	-34.0	-5.9	-68.17	0.00	-51.26	0.00	-55.30	0.00	-41.58
1.700 0.00	-68.0	-11.8	-80.35	0.00	-60.41	0.00	-65.18	0.00	-49.00
1.800 0.00	-102.0	-17.7	-92.53	0.00	-69.57	0.00	-75.05	0.00	-56.43
1.900 0.00	-134.8	-23.6	-104.71	0.00	-78.73	0.00	-84.93	0.00	-63.86
2.000 0.00	-167.2	-29.5	-116.89	0.00	-87.88	0.00	-94.81	0.00	-71.29

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)

1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 867

## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV

Rating Live Load: SU4

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.73	0.00	181.8 (2-Lane)
1.000	999.00	8.30	0.00	224.1 (1-Lane)
1.010	999.00	6.84	0.00	184.6 (2-Lane)
1.010	999.00	8.43	0.00	227.5 (1-Lane)
1.100	133.46	6.68	0.00	180.3 (2-Lane)
1.100	164.54	8.23	0.00	222.3 (1-Lane)
1.200	33.29	4.41	0.00	119.2 (2-Lane)
1.200	41.05	5.44	0.00	146.9 (1-Lane)
1.300	19.22	5.58	0.00	150.6 (2-Lane)
1.300	23.69	6.88	0.00	185.7 (1-Lane)
1.400	12.96	7.16	0.00	193.3 (2-Lane)
1.400	15.98	8.83	0.00	238.4 (1-Lane)
1.500	9.43	9.43	0.00	254.6 (2-Lane)
1.500	11.63	11.63	0.00	313.9 (1-Lane)
1.600	7.16	12.96	0.00	193.3 (2-Lane)
1.600	8.83	15.98	0.00	238.4 (1-Lane)
1.700	5.58	19.22	0.00	150.6 (2-Lane)
1.700	6.88	23.69	0.00	185.7 (1-Lane)
1.800	4.41	33.29	0.00	119.2 (2-Lane)
1.800	5.44	41.05	0.00	146.9 (1-Lane)
1.900	6.68	133.46	0.00	180.3 (2-Lane)
1.900	8.23	164.54	0.00	222.3 (1-Lane)
2.000	6.73	999.00	0.00	181.8 (2-Lane)
2.000	8.30	999.00	0.00	224.1 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 868

## SERVICE MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV

Rating Live Load: SU4

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
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1.00

1.00

1.30

Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	94.98 R	0.00	71.41	0.00	63.03 R	0.00	47.39
0.00									
1.100	1934.1	340.3	859.76 R	0.00	646.44	0.00	570.60 R	0.00	429.02
0.00									
1.200	3451.8	604.9	1519.52 R	0.00	1142.49	0.00	1008.47 R	0.00	758.25
0.00									
1.300	4540.4	794.0	1979.27 R	0.00	1488.17	0.00	1313.60 R	0.00	987.67
0.00									
1.400	5193.5	907.4	2260.31 R	0.00	1699.48	0.00	1500.11 R	0.00	1127.90
0.00									
1.500	5411.2	945.2	2345.04 R	0.00	1763.19	0.00	1556.35 R	0.00	1170.19
0.00									
1.600	5193.5	907.4	2260.31 R	0.00	1699.48	0.00	1500.11 R	0.00	1127.90
0.00									
1.700	4540.4	794.0	1979.27 R	0.00	1488.17	0.00	1313.60 R	0.00	987.67
0.00									
1.800	3451.8	604.9	1519.52 R	0.00	1142.49	0.00	1008.47 R	0.00	758.25
0.00									
1.900	1934.1	340.3	859.76 R	0.00	646.44	0.00	570.60 R	0.00	429.02
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load:

Rating Type: SU4

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
 Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	575.45	999.00	133.93	999.00	0.00	999.0 (2-Lane)
1.010	867.06	999.00	201.80	999.00	0.00	999.0 (1-Lane)
1.100	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.100	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
1.200	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.200	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.300	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.300	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.400	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.400	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.500	10.77	999.00	3.52	999.00	0.00	95.1 (2-Lane)
1.500	16.23	999.00	5.31	999.00	0.00	143.3 (1-Lane)
1.600	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.600	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.700	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.700	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.800	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.800	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.900	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.900	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 870

## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
 Rating Live Load: SU5

Gamma	DC		DW		(2-Lane) LL 1.75		(1-Lane) LL 1.75	
	1.25		1.25					
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o		
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck Lane		
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								
1.010	241.8	46.8	145.35 R	0.00	109.29	0.00	96.47 R	0.00
0.00								72.53

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1.100	2417.7	425.3	1314.44 R	0.00	988.30	0.00	872.36 R	0.00	655.91
0.00									
1.200	4314.7	756.1	2319.75 R	0.00	1744.17	0.00	1539.57 R	0.00	1157.57
0.00									
1.300	5675.4	992.4	3025.91 R	0.00	2275.12	0.00	2008.23 R	0.00	1509.95
0.00									
1.400	6491.9	1134.2	3451.60 R	0.00	2595.19	0.00	2290.75 R	0.00	1722.37
0.00									
1.500	6764.0	1181.5	3568.17 R	0.00	2682.83	0.00	2368.11 R	0.00	1780.53
0.00									
1.600	6491.9	1134.2	3451.60 R	0.00	2595.19	0.00	2290.75 R	0.00	1722.37
0.00									
1.700	5675.4	992.4	3025.91 R	0.00	2275.12	0.00	2008.23 R	0.00	1509.95
0.00									
1.800	4314.7	756.1	2319.75 R	0.00	1744.17	0.00	1539.57 R	0.00	1157.57
0.00									
1.900	2417.7	425.3	1314.44 R	0.00	988.30	0.00	872.36 R	0.00	655.91
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: SU5

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12210.3	-12210.3B	11797.6	11797.6	-20155.8	-20155.8
1.600	19743.0C	19743.0	-11829.0	-11829.0B	12117.0	12117.0	-19455.1	-19455.1
1.700	19743.0C	19743.0	-11829.0	-11829.0B	13075.2	13075.2	-18496.9	-18496.9
1.800	19743.0C	19743.0	-13011.8	-13011.8B	14672.1	14672.1	-18082.7	-18082.7
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	-bend		

1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	110.91	999.00	110.91	999.00	0.00	999.0 (2-Lane)
1.010	167.11	999.00	167.11	999.00	0.00	999.0 (1-Lane)
1.100	10.32	999.00	10.32	999.00	0.00	320.0 (2-Lane)
1.100	15.55	999.00	15.55	999.00	0.00	482.1 (1-Lane)
1.200	6.32	999.00	6.32	999.00	0.00	196.1 (2-Lane)
1.200	9.53	999.00	9.53	999.00	0.00	295.4 (1-Lane)
1.300	4.32	999.00	4.32	999.00	0.00	134.0 (2-Lane)
1.300	6.51	999.00	6.51	999.00	0.00	201.8 (1-Lane)
1.400	3.51	999.00	3.51	999.00	0.00	108.8 (2-Lane)
1.400	5.29	999.00	5.29	999.00	0.00	164.0 (1-Lane)
1.500	3.31	999.00	3.31	999.00	0.00	102.5 (2-Lane)
1.500	4.98	999.00	4.98	999.00	0.00	154.4 (1-Lane)
1.600	3.51	999.00	3.51	999.00	0.00	108.8 (2-Lane)
1.600	5.29	999.00	5.29	999.00	0.00	164.0 (1-Lane)
1.700	4.32	999.00	4.32	999.00	0.00	134.0 (2-Lane)
1.700	6.51	999.00	6.51	999.00	0.00	201.8 (1-Lane)
1.800	6.32	999.00	6.32	999.00	0.00	196.1 (2-Lane)
1.800	9.53	999.00	9.53	999.00	0.00	295.4 (1-Lane)
1.900	10.32	999.00	10.32	999.00	0.00	320.0 (2-Lane)
1.900	15.55	999.00	15.55	999.00	0.00	482.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 873

## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	132.90	0.00	99.93	0.00	107.80	0.00	81.05
1.010 0.00	164.0	28.9	131.50	0.00	98.87	0.00	106.67	0.00	80.20
1.100 0.00	134.8	23.6	118.92	0.00	89.41	0.00	96.46	0.00	72.53
1.200 0.00	102.0	17.7	104.93	0.00	78.90	0.00	85.12	0.00	64.00
1.300 0.00	68.0	11.8	90.95	0.00	68.38	0.00	73.77	0.00	55.47
1.400 0.00	34.0	5.9	76.97	0.00	57.87	0.00	62.43	0.00	46.94
1.500 0.00	0.0	0.0	62.98	0.00	47.36	0.00	51.09	0.00	38.41
1.600 0.00	-34.0	-5.9	-76.97	0.00	-57.87	0.00	-62.43	0.00	-46.94
1.700 0.00	-68.0	-11.8	-90.95	0.00	-68.38	0.00	-73.77	0.00	-55.47



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1.800	-102.0	-17.7	-104.93	0.00	-78.90	0.00	-85.12	0.00	-64.00
0.00									
1.900	-134.8	-23.6	-118.92	0.00	-89.41	0.00	-96.46	0.00	-72.53
0.00									
2.000	-167.2	-29.5	-132.90	0.00	-99.93	0.00	-107.80	0.00	-81.05
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: SU5

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.92	0.00	183.5 (2-Lane)
1.000	999.00	7.30	0.00	226.3 (1-Lane)
1.010	999.00	6.01	0.00	186.4 (2-Lane)

1.010	999.00	7.41	0.00	229.8 (1-Lane)
1.100	125.99	5.88	0.00	182.3 (2-Lane)
1.100	155.32	7.25	0.00	224.7 (1-Lane)
1.200	30.79	3.89	0.00	120.6 (2-Lane)
1.200	37.96	4.80	0.00	148.7 (1-Lane)
1.300	17.36	4.93	0.00	152.8 (2-Lane)
1.300	21.40	6.08	0.00	188.4 (1-Lane)
1.400	11.59	6.34	0.00	196.6 (2-Lane)
1.400	14.29	7.82	0.00	242.4 (1-Lane)
1.500	8.38	8.38	0.00	259.9 (2-Lane)
1.500	10.34	10.34	0.00	320.4 (1-Lane)
1.600	6.34	11.59	0.00	196.6 (2-Lane)
1.600	7.82	14.29	0.00	242.4 (1-Lane)
1.700	4.93	17.36	0.00	152.8 (2-Lane)
1.700	6.08	21.40	0.00	188.4 (1-Lane)
1.800	3.89	30.79	0.00	120.6 (2-Lane)
1.800	4.80	37.96	0.00	148.7 (1-Lane)
1.900	5.88	125.98	0.00	182.3 (2-Lane)
1.900	7.25	155.32	0.00	224.7 (1-Lane)
2.000	5.92	999.00	0.00	183.5 (2-Lane)
2.000	7.30	999.00	0.00	226.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: SU5

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load w/o Truck
Lane			Lane	Lane	Lane	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
0.00						
1.010	193.4	37.4	107.98 R	0.00	81.19 R	0.00
0.00						
1.100	1934.1	340.3	976.44 R	0.00	734.16 R	0.00
0.00						
1.200	3451.8	604.9	1723.24 R	0.00	1295.67 R	0.00
0.00						
1.300	4540.4	794.0	2247.82 R	0.00	1690.09 R	0.00
0.00						
1.400	5193.5	907.4	2564.05 R	0.00	1927.85 R	0.00
0.00						
1.500	5411.2	945.2	2650.64 R	0.00	1992.96 R	0.00
0.00						
1.600	5193.5	907.4	2564.05 R	0.00	1927.85 R	0.00
0.00						
1.700	4540.4	794.0	2247.82 R	0.00	1690.09 R	0.00
0.00						
1.800	3451.8	604.9	1723.24 R	0.00	1295.67 R	0.00
0.00						
1.900	1934.1	340.3	976.44 R	0.00	734.16 R	0.00
0.00						

2.000 0.0 0.0 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt 0.00 R 0.00 0.00 0.00 0.00

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load:

Rating Type: SU5  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	top fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	506.16	999.00	117.80	999.00	0.00	999.0 (2-Lane)
1.010	762.66	999.00	177.50	999.00	0.00	999.0 (1-Lane)
1.100	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.100	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
1.200	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.200	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.300	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.300	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.400	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)

1.400	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.500	9.53	999.00	3.12	999.00	0.00	96.6 (2-Lane)
1.500	14.36	999.00	4.69	999.00	0.00	145.5 (1-Lane)
1.600	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.600	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.700	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.700	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.800	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.800	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.900	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.900	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane		Live Load w/o impact Truck Lane	
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	160.20 R	0.00	120.45	0.00
0.00						
1.100	2417.7	425.3	1446.12 R	0.00	1087.31	0.00
0.00						
1.200	4314.7	756.1	2582.47 R	0.00	1941.70	0.00
0.00						
1.300	5675.4	992.4	3378.84 R	0.00	2540.48	0.00
0.00						
1.400	6491.9	1134.2	3846.14 R	0.00	2891.83	0.00
0.00						
1.500	6764.0	1181.5	3992.77 R	0.00	3002.08	0.00
0.00						
1.600	6491.9	1134.2	3846.14 R	0.00	2891.83	0.00
0.00						
1.700	5675.4	992.4	3378.84 R	0.00	2540.48	0.00
0.00						
1.800	4314.7	756.1	2582.47 R	0.00	1941.70	0.00
0.00						
1.900	2417.7	425.3	1446.12 R	0.00	1087.30	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05  
 Rating Type: I-INV  
 Rating Live Load: SU6

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12212.4	-12212.4B	11797.6	11797.6	-20157.8	-20157.8
1.600	19743.0C	19743.0	-11833.4	-11833.4B	12117.0	12117.0	-19459.5	-19459.5
1.700	19743.0C	19743.0	-11833.4	-11833.4B	13075.2	13075.2	-18501.3	-18501.3
1.800	19743.0C	19743.0	-13011.0	-13011.0B	14672.1	14672.1	-18081.8	-18081.8
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G05  
 Rating Type: I-INV  
 Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	100.63	999.00	100.63	999.00	0.00	999.0 (2-Lane)
1.010	151.62	999.00	151.62	999.00	0.00	999.0 (1-Lane)
1.100	9.38	999.00	9.38	999.00	0.00	326.0 (2-Lane)
1.100	14.14	999.00	14.14	999.00	0.00	491.2 (1-Lane)
1.200	5.68	999.00	5.68	999.00	0.00	197.4 (2-Lane)
1.200	8.56	999.00	8.56	999.00	0.00	297.5 (1-Lane)
1.300	3.87	999.00	3.87	999.00	0.00	134.5 (2-Lane)
1.300	5.83	999.00	5.83	999.00	0.00	202.6 (1-Lane)
1.400	3.15	999.00	3.15	999.00	0.00	109.5 (2-Lane)
1.400	4.75	999.00	4.75	999.00	0.00	165.0 (1-Lane)
1.500	2.95	999.00	2.95	999.00	0.00	102.7 (2-Lane)
1.500	4.45	999.00	4.45	999.00	0.00	154.7 (1-Lane)
1.600	3.15	999.00	3.15	999.00	0.00	109.5 (2-Lane)
1.600	4.75	999.00	4.75	999.00	0.00	165.0 (1-Lane)
1.700	3.87	999.00	3.87	999.00	0.00	134.5 (2-Lane)
1.700	5.83	999.00	5.83	999.00	0.00	202.6 (1-Lane)
1.800	5.68	999.00	5.68	999.00	0.00	197.4 (2-Lane)
1.800	8.56	999.00	8.56	999.00	0.00	297.5 (1-Lane)

1.900	9.38	999.00	9.38	999.00	0.00	326.0 (2-Lane)
1.900	14.14	999.00	14.14	999.00	0.00	491.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	146.51	0.00	110.15	89.35
0.00						
1.010	164.0	28.9	144.94	0.00	108.98	88.40
0.00						
1.100	134.8	23.6	130.83	0.00	98.37	79.79
0.00						
1.200	102.0	17.7	115.16	0.00	86.58	70.23
0.00						
1.300	68.0	11.8	99.48	0.00	74.80	60.67
0.00						
1.400	34.0	5.9	83.81	0.00	63.01	51.11
0.00						
1.500	0.0	0.0	68.13	0.00	51.23	41.55
0.00						
1.600	-34.0	-5.9	-83.81	0.00	-63.01	-51.11
0.00						
1.700	-68.0	-11.8	-99.48	0.00	-74.80	-60.67
0.00						
1.800	-102.0	-17.7	-115.16	0.00	-86.58	-70.23
0.00						
1.900	-134.8	-23.6	-130.83	0.00	-98.37	-79.79
0.00						
2.000	-167.2	-29.5	-146.51	0.00	-110.15	-89.35
0.00						

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)

1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV

Rating Live Load: SU6

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.37	0.00	186.6 (2-Lane)
1.000	999.00	6.62	0.00	230.1 (1-Lane)
1.010	999.00	5.45	0.00	189.6 (2-Lane)
1.010	999.00	6.72	0.00	233.7 (1-Lane)
1.100	144.09	5.34	0.00	185.7 (2-Lane)
1.100	177.63	6.59	0.00	229.0 (1-Lane)
1.200	30.69	3.55	0.00	123.2 (2-Lane)
1.200	37.83	4.37	0.00	151.9 (1-Lane)
1.300	16.53	4.51	0.00	156.6 (2-Lane)
1.300	20.37	5.55	0.00	193.0 (1-Lane)
1.400	10.83	5.82	0.00	202.4 (2-Lane)
1.400	13.35	7.18	0.00	249.5 (1-Lane)
1.500	7.75	7.75	0.00	269.3 (2-Lane)
1.500	9.56	9.56	0.00	332.0 (1-Lane)
1.600	5.82	10.83	0.00	202.4 (2-Lane)
1.600	7.18	13.35	0.00	249.5 (1-Lane)
1.700	4.51	16.53	0.00	156.6 (2-Lane)
1.700	5.55	20.37	0.00	193.0 (1-Lane)
1.800	3.55	30.69	0.00	123.2 (2-Lane)
1.800	4.37	37.83	0.00	151.9 (1-Lane)
1.900	5.34	144.09	0.00	185.7 (2-Lane)
1.900	6.59	177.63	0.00	229.0 (1-Lane)
2.000	5.37	999.00	0.00	186.6 (2-Lane)

2.000 6.62 999.00 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
0.00 230.1 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30					
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										
1.010	193.4	37.4	119.01 R	0.00	89.48	0.00	78.98 R	0.00	59.39	
0.00										
1.100	1934.1	340.3	1074.26 R	0.00	807.71	0.00	712.96 R	0.00	536.06	
0.00										
1.200	3451.8	604.9	1918.40 R	0.00	1442.41	0.00	1273.20 R	0.00	957.29	
0.00										
1.300	4540.4	794.0	2509.99 R	0.00	1887.21	0.00	1665.83 R	0.00	1252.50	
0.00										
1.400	5193.5	907.4	2857.13 R	0.00	2148.22	0.00	1896.21 R	0.00	1425.72	
0.00										
1.500	5411.2	945.2	2966.06 R	0.00	2230.12	0.00	1968.50 R	0.00	1480.08	
0.00										
1.600	5193.5	907.4	2857.13 R	0.00	2148.22	0.00	1896.21 R	0.00	1425.72	
0.00										
1.700	4540.4	794.0	2509.99 R	0.00	1887.21	0.00	1665.83 R	0.00	1252.50	
0.00										
1.800	3451.8	604.9	1918.40 R	0.00	1442.41	0.00	1273.20 R	0.00	957.29	
0.00										
1.900	1934.1	340.3	1074.26 R	0.00	807.71	0.00	712.96 R	0.00	536.06	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 884

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: SU6

Rating Type: SU6  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7



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1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: SU6

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	459.24	999.00	106.88	999.00	0.00	999.0 (2-Lane)
1.010	691.96	999.00	161.05	999.00	0.00	999.0 (1-Lane)
1.100	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.100	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
1.200	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.200	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.300	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.300	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.400	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.400	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.500	8.52	999.00	2.78	999.00	0.00	96.7 (2-Lane)
1.500	12.83	999.00	4.20	999.00	0.00	145.8 (1-Lane)
1.600	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.600	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.700	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.700	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.800	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.800	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.900	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.900	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D.

G05

Rating Type:

I-INV

Rating Live Load:

SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75			
			Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Span impact	Dead Load	Superimposed	Truck	Lane	Truck	Lane	Truck	Lane	Truck	Lane
Lane		Dead Load								
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	241.8	46.8	175.62 R	0.00	132.04	0.00	116.55 R	0.00	87.64	0.00
0.00										
1.100	2417.7	425.3	1582.32 R	0.00	1189.71	0.00	1050.15 R	0.00	789.59	0.00
0.00										
1.200	4314.7	756.1	2824.95 R	0.00	2124.02	0.00	1874.85 R	0.00	1409.66	0.00
0.00										
1.300	5675.4	992.4	3727.89 R	0.00	2802.93	0.00	2474.12 R	0.00	1860.24	0.00
0.00										
1.400	6491.9	1134.2	4247.54 R	0.00	3193.64	0.00	2819.00 R	0.00	2119.55	0.00
0.00										
1.500	6764.0	1181.5	4416.61 R	0.00	3320.76	0.00	2931.20 R	0.00	2203.91	0.00
0.00										
1.600	6491.9	1134.2	4247.54 R	0.00	3193.64	0.00	2819.00 R	0.00	2119.55	0.00
0.00										
1.700	5675.4	992.4	3727.89 R	0.00	2802.92	0.00	2474.12 R	0.00	1860.24	0.00
0.00										
1.800	4314.7	756.1	2824.95 R	0.00	2124.02	0.00	1874.85 R	0.00	1409.66	0.00
0.00										
1.900	2417.7	425.3	1582.32 R	0.00	1189.71	0.00	1050.15 R	0.00	789.58	0.00
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D.

G05

Rating Type:

I-INV

Rating Live Load:

SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12215.4	-12215.4B	11797.6	11797.6	-20160.9	-20160.9
1.600	19743.0C	19743.0	-11835.7	-11835.7B	12117.0	12117.0	-19461.8	-19461.8
1.700	19743.0C	19743.0	-11835.7	-11835.7B	13075.2	13075.2	-18503.6	-18503.6
1.800	19743.0C	19743.0	-13021.6	-13021.6B	14672.1	14672.1	-18092.4	-18092.4
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	91.79	999.00	91.79	999.00	0.00	999.0 (2-Lane)
1.010	138.31	999.00	138.31	999.00	0.00	999.0 (1-Lane)
1.100	8.57	999.00	8.57	999.00	0.00	332.2 (2-Lane)
1.100	12.92	999.00	12.92	999.00	0.00	500.6 (1-Lane)
1.200	5.19	999.00	5.19	999.00	0.00	201.3 (2-Lane)
1.200	7.83	999.00	7.83	999.00	0.00	303.2 (1-Lane)
1.300	3.51	999.00	3.51	999.00	0.00	135.9 (2-Lane)
1.300	5.28	999.00	5.28	999.00	0.00	204.8 (1-Lane)
1.400	2.85	999.00	2.85	999.00	0.00	110.5 (2-Lane)
1.400	4.30	999.00	4.30	999.00	0.00	166.6 (1-Lane)
1.500	2.67	999.00	2.67	999.00	0.00	103.5 (2-Lane)
1.500	4.03	999.00	4.03	999.00	0.00	156.0 (1-Lane)
1.600	2.85	999.00	2.85	999.00	0.00	110.5 (2-Lane)
1.600	4.30	999.00	4.30	999.00	0.00	166.6 (1-Lane)
1.700	3.51	999.00	3.51	999.00	0.00	135.9 (2-Lane)
1.700	5.28	999.00	5.28	999.00	0.00	204.8 (1-Lane)
1.800	5.19	999.00	5.19	999.00	0.00	201.3 (2-Lane)
1.800	7.83	999.00	7.83	999.00	0.00	303.2 (1-Lane)
1.900	8.57	999.00	8.57	999.00	0.00	332.2 (2-Lane)
1.900	12.92	999.00	12.92	999.00	0.00	500.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: SU7

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	LL	LL	LL
	1.25	1.25	1.75		1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	

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1.000	167.2	29.5	160.63	0.00	120.78	0.00	130.30	0.00	97.97
0.00									
1.010	164.0	28.9	158.88	0.00	119.46	0.00	128.88	0.00	96.90
0.00									
1.100	134.8	23.6	143.15	0.00	107.63	0.00	116.12	0.00	87.31
0.00									
1.200	102.0	17.7	125.67	0.00	94.49	0.00	101.94	0.00	76.65
0.00									
1.300	68.0	11.8	108.19	0.00	81.35	0.00	87.76	0.00	65.99
0.00									
1.400	34.0	5.9	90.72	0.00	68.21	0.00	73.58	0.00	55.33
0.00									
1.500	0.0	0.0	73.24	0.00	55.07	0.00	59.41	0.00	44.67
0.00									
1.600	-34.0	-5.9	-90.72	0.00	-68.21	0.00	-73.58	0.00	-55.33
0.00									
1.700	-68.0	-11.8	-108.19	0.00	-81.35	0.00	-87.76	0.00	-65.99
0.00									
1.800	-102.0	-17.7	-125.67	0.00	-94.49	0.00	-101.94	0.00	-76.65
0.00									
1.900	-134.8	-23.6	-143.15	0.00	-107.63	0.00	-116.12	0.00	-87.31
0.00									
2.000	-167.2	-29.5	-160.63	0.00	-120.78	0.00	-130.30	0.00	-97.97
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-INV  
Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

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 Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G05  
 Rating Type: I-INV  
 Rating Live Load: SU7

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	4.90	0.00	189.8 (2-Lane)
1.000	999.00	6.04	0.00	234.0 (1-Lane)
1.010	999.00	4.98	0.00	192.8 (2-Lane)
1.010	999.00	6.14	0.00	237.7 (1-Lane)
1.100	168.29	4.88	0.00	189.3 (2-Lane)
1.100	207.47	6.02	0.00	233.3 (1-Lane)
1.200	31.14	3.25	0.00	125.9 (2-Lane)
1.200	38.39	4.01	0.00	155.2 (1-Lane)
1.300	15.88	4.14	0.00	160.5 (2-Lane)
1.300	19.58	5.11	0.00	197.9 (1-Lane)
1.400	10.19	5.38	0.00	208.5 (2-Lane)
1.400	12.56	6.63	0.00	257.1 (1-Lane)
1.500	7.21	7.21	0.00	279.4 (2-Lane)
1.500	8.89	8.89	0.00	344.4 (1-Lane)
1.600	5.38	10.19	0.00	208.5 (2-Lane)
1.600	6.63	12.56	0.00	257.1 (1-Lane)
1.700	4.14	15.88	0.00	160.5 (2-Lane)
1.700	5.11	19.58	0.00	197.9 (1-Lane)
1.800	3.25	31.14	0.00	125.9 (2-Lane)
1.800	4.01	38.39	0.00	155.2 (1-Lane)
1.900	4.88	168.29	0.00	189.3 (2-Lane)
1.900	6.02	207.47	0.00	233.3 (1-Lane)
2.000	4.90	999.00	0.00	189.8 (2-Lane)
2.000	6.04	999.00	0.00	234.0 (1-Lane)

Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G05  
 Rating Type: II-INV  
 Rating Live Load: SU7

Gamma	DC		DW		(2-Lane) LL 1.30		(1-Lane) LL 1.30	
	1.00		1.00					
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								
1.010	193.4	37.4	130.46 R	0.00	98.09	0.00	86.58 R	0.00
								65.10

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0.00									
1.100	1934.1	340.3	1175.44 R	0.00	883.79	0.00	780.11 R	0.00	586.55
0.00									
1.200	3451.8	604.9	2098.53 R	0.00	1577.84	0.00	1392.75 R	0.00	1047.18
0.00									
1.300	4540.4	794.0	2769.29 R	0.00	2082.17	0.00	1837.91 R	0.00	1381.89
0.00									
1.400	5193.5	907.4	3155.32 R	0.00	2372.42	0.00	2094.11 R	0.00	1574.52
0.00									
1.500	5411.2	945.2	3280.91 R	0.00	2466.85	0.00	2177.47 R	0.00	1637.19
0.00									
1.600	5193.5	907.4	3155.32 R	0.00	2372.42	0.00	2094.11 R	0.00	1574.52
0.00									
1.700	4540.4	794.0	2769.29 R	0.00	2082.17	0.00	1837.91 R	0.00	1381.89
0.00									
1.800	3451.8	604.9	2098.53 R	0.00	1577.84	0.00	1392.75 R	0.00	1047.18
0.00									
1.900	1934.1	340.3	1175.44 R	0.00	883.79	0.00	780.11 R	0.00	586.55
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load:

Rating Type: SU7

Rating Live Load:  
Span

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-INV  
Rating Live Load: SU7

Service

Span	Rating top fiber	Factor bottom fiber	Rating Value	Load Resistance
------	------------------	---------------------	--------------	-----------------

	+bend	-bend	+bend	-bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	418.93	999.00	97.50	999.00	0.00	999.0 (2-Lane)
1.010	631.22	999.00	146.91	999.00	0.00	999.0 (1-Lane)
1.100	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.100	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
1.200	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.200	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.300	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.300	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.400	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.400	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.500	7.70	999.00	2.52	999.00	0.00	97.5 (2-Lane)
1.500	11.60	999.00	3.79	999.00	0.00	147.0 (1-Lane)
1.600	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.600	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.700	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.700	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.800	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.800	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.900	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.900	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	241.8	46.8	202.34 R	0.00	170.33	134.29 R
0.00						
1.100	2417.7	425.3	1832.15 R	0.00	1542.98	1215.96 R
0.00						
1.200	4314.7	756.1	3239.23 R	0.00	2729.59	2149.80 R
0.00						
1.300	5675.4	992.4	4221.21 R	0.00	3559.83	2801.52 R
0.00						
1.400	6491.9	1134.2	4805.03 R	0.00	4053.93	3188.99 R
0.00						
1.500	6764.0	1181.5	4977.21 R	0.00	4201.77	3303.26 R
0.00						
1.600	6491.9	1134.2	4805.03 R	0.00	4053.93	3188.99 R

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0.00									
1.700	5675.4	992.4	4221.21 R	0.00	3559.83	0.00	2801.52 R	0.00	2362.58
0.00									
1.800	4314.7	756.1	3239.23 R	0.00	2729.59	0.00	2149.80 R	0.00	1811.57
0.00									
1.900	2417.7	425.3	1832.15 R	0.00	1542.98	0.00	1215.96 R	0.00	1024.04
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: HL93

Span	Positive Top	Moment Bending Bott.	Resistance Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Top	Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.6	-12222.6B	11797.6	11797.6	-20168.1	-20168.1
1.600	19743.0C	19743.0	-11839.4	-11839.4B	12117.0	12117.0	-19465.5	-19465.5
1.700	19743.0C	19743.0	-11839.4	-11839.4B	13075.2	13075.2	-18507.3	-18507.3
1.800	19743.0C	19743.0	-13020.9	-13020.9B	14672.1	14672.1	-18091.8	-18091.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: HL93

Span	top +bend	Rating fiber -bend	Moment Factor bottom fiber +bend	-bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	79.67	999.00	79.67	999.00	0.00	999.0 (2-Lane)
1.010	120.04	999.00	120.04	999.00	0.00	999.0 (1-Lane)
1.100	7.41	999.00	7.41	999.00	0.00	266.6 (2-Lane)
1.100	11.16	999.00	11.16	999.00	0.00	401.6 (1-Lane)
1.200	4.53	999.00	4.53	999.00	0.00	163.1 (2-Lane)
1.200	6.82	999.00	6.82	999.00	0.00	245.7 (1-Lane)



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1.300	3.10	999.00	3.10	999.00	0.00	111.5 (2-Lane)
1.300	4.67	999.00	4.67	999.00	0.00	168.0 (1-Lane)
1.400	2.52	999.00	2.52	999.00	0.00	90.8 (2-Lane)
1.400	3.80	999.00	3.80	999.00	0.00	136.8 (1-Lane)
1.500	2.37	999.00	2.37	999.00	0.00	85.3 (2-Lane)
1.500	3.57	999.00	3.57	999.00	0.00	128.6 (1-Lane)
1.600	2.52	999.00	2.52	999.00	0.00	90.8 (2-Lane)
1.600	3.80	999.00	3.80	999.00	0.00	136.8 (1-Lane)
1.700	3.10	999.00	3.10	999.00	0.00	111.5 (2-Lane)
1.700	4.67	999.00	4.67	999.00	0.00	168.0 (1-Lane)
1.800	4.53	999.00	4.53	999.00	0.00	163.1 (2-Lane)
1.800	6.82	999.00	6.82	999.00	0.00	245.7 (1-Lane)
1.900	7.41	999.00	7.41	999.00	0.00	266.6 (2-Lane)
1.900	11.16	999.00	11.16	999.00	0.00	401.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	184.98	0.00	155.71	0.00	150.05	0.00	126.31
1.010 0.00	164.0	28.9	182.40	0.00	153.44	0.00	147.95	0.00	124.46
1.100 0.00	134.8	23.6	159.72	0.00	133.56	0.00	129.56	0.00	108.34
1.200 0.00	102.0	17.7	135.80	0.00	112.75	0.00	110.16	0.00	91.46
1.300 0.00	68.0	11.8	113.22	0.00	93.28	0.00	91.84	0.00	75.66
1.400 0.00	34.0	5.9	91.99	0.00	75.15	0.00	74.61	0.00	60.96
1.500 0.00	0.0	0.0	72.09	0.00	58.36	0.00	58.47	0.00	47.34
1.600 0.00	-34.0	-5.9	-91.99	0.00	-75.15	0.00	-74.61	0.00	-60.96
1.700 0.00	-68.0	-11.8	-113.22	0.00	-93.28	0.00	-91.84	0.00	-75.66
1.800 0.00	-102.0	-17.7	-135.80	0.00	-112.75	0.00	-110.16	0.00	-91.46
1.900 0.00	-134.8	-23.6	-159.72	0.00	-133.56	0.00	-129.56	0.00	-108.34
2.000 0.00	-167.2	-29.5	-184.98	0.00	-155.71	0.00	-150.05	0.00	-126.31

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: HL93

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: HL93

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	4.25	0.00	153.1 (2-Lane)
1.000	999.00	5.24	0.00	188.8 (1-Lane)
1.010	999.00	4.34	0.00	156.1 (2-Lane)
1.010	999.00	5.34	0.00	192.4 (1-Lane)
1.100	133.47	4.38	0.00	157.6 (2-Lane)
1.100	164.55	5.40	0.00	194.3 (1-Lane)
1.200	31.70	3.01	0.00	108.3 (2-Lane)
1.200	39.08	3.71	0.00	133.5 (1-Lane)
1.300	16.74	3.96	0.00	142.5 (2-Lane)
1.300	20.64	4.88	0.00	175.7 (1-Lane)

1.400	10.61	5.31	0.00	191.1 (2-Lane)
1.400	13.08	6.54	0.00	235.5 (1-Lane)
1.500	7.32	7.32	0.00	263.7 (2-Lane)
1.500	9.03	9.03	0.00	325.1 (1-Lane)
1.600	5.31	10.61	0.00	191.1 (2-Lane)
1.600	6.54	13.08	0.00	235.5 (1-Lane)
1.700	3.96	16.74	0.00	142.5 (2-Lane)
1.700	4.88	20.64	0.00	175.7 (1-Lane)
1.800	3.01	31.70	0.00	108.3 (2-Lane)
1.800	3.71	39.08	0.00	133.5 (1-Lane)
1.900	4.38	122.67	0.00	157.6 (2-Lane)
1.900	5.40	151.23	0.00	194.3 (1-Lane)
2.000	4.25	999.00	0.00	153.1 (2-Lane)
2.000	5.24	999.00	0.00	188.8 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPE  
Rating Live Load: HL93

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	149.88 R	0.00	126.17	99.47 R
0.00						
1.100	1934.1	340.3	1357.15 R	0.00	1142.95	900.71 R
0.00						
1.200	3451.8	604.9	2399.43 R	0.00	2021.92	1592.44 R
0.00						
1.300	4540.4	794.0	3126.83 R	0.00	2636.91	2075.20 R
0.00						
1.400	5193.5	907.4	3559.28 R	0.00	3002.91	2362.21 R
0.00						
1.500	5411.2	945.2	3686.82 R	0.00	3112.42	2446.86 R
0.00						
1.600	5193.5	907.4	3559.28 R	0.00	3002.91	2362.21 R
0.00						
1.700	4540.4	794.0	3126.83 R	0.00	2636.91	2075.20 R
0.00						
1.800	3451.8	604.9	2399.43 R	0.00	2021.92	1592.44 R
0.00						
1.900	1934.1	340.3	1357.15 R	0.00	1142.95	900.71 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

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Member I. D. G05  
Rating Type: II-OPER  
Rating Live Load:

Rating Type: HL93  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05  
Rating Type: II-OPER  
Rating Live Load: HL93

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	364.64	999.00	84.87	999.00	0.00	999.0 (2-Lane)
1.010	549.42	999.00	127.87	999.00	0.00	999.0 (1-Lane)
1.100	30.05	999.00	7.35	999.00	0.00	264.6 (2-Lane)
1.100	45.28	999.00	11.08	999.00	0.00	398.7 (1-Lane)
1.200	15.38	999.00	4.66	999.00	0.00	167.8 (2-Lane)
1.200	23.17	999.00	7.02	999.00	0.00	252.8 (1-Lane)
1.300	9.73	999.00	3.06	999.00	0.00	110.0 (2-Lane)
1.300	14.66	999.00	4.61	999.00	0.00	165.8 (1-Lane)
1.400	7.46	999.00	2.41	999.00	0.00	86.8 (2-Lane)
1.400	11.24	999.00	3.63	999.00	0.00	130.8 (1-Lane)
1.500	6.85	999.00	2.24	999.00	0.00	80.6 (2-Lane)
1.500	10.32	999.00	3.38	999.00	0.00	121.5 (1-Lane)
1.600	7.46	999.00	2.41	999.00	0.00	86.8 (2-Lane)
1.600	11.24	999.00	3.63	999.00	0.00	130.8 (1-Lane)
1.700	9.73	999.00	3.06	999.00	0.00	110.0 (2-Lane)
1.700	14.66	999.00	4.61	999.00	0.00	165.8 (1-Lane)

1.800	15.38	999.00	4.66	999.00	0.00	167.8 (2-Lane)
1.800	23.17	999.00	7.02	999.00	0.00	252.8 (1-Lane)
1.900	30.05	999.00	7.35	999.00	0.00	264.6 (2-Lane)
1.900	45.28	999.00	11.08	999.00	0.00	398.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	129.01 R	0.00	97.00	85.62 R
0.00						
1.100	2417.7	425.3	1165.45 R	0.00	876.28	773.48 R
0.00						
1.200	4314.7	756.1	2053.98 R	0.00	1544.34	1363.18 R
0.00						
1.300	5675.4	992.4	2665.57 R	0.00	2004.19	1769.08 R
0.00						
1.400	6491.9	1134.2	3027.15 R	0.00	2276.05	2009.05 R
0.00						
1.500	6764.0	1181.5	3125.25 R	0.00	2349.82	2074.16 R
0.00						
1.600	6491.9	1134.2	3027.15 R	0.00	2276.05	2009.05 R
0.00						
1.700	5675.4	992.4	2665.57 R	0.00	2004.19	1769.08 R
0.00						
1.800	4314.7	756.1	2053.98 R	0.00	1544.34	1363.18 R
0.00						
1.900	2417.7	425.3	1165.45 R	0.00	876.28	773.48 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: HS20

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.
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1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.6	-12222.6B	11797.6	11797.6	-20168.1	-20168.1
1.600	19743.0C	19743.0	-11839.4	-11839.4B	12117.0	12117.0	-19465.5	-19465.5
1.700	19743.0C	19743.0	-11839.4	-11839.4B	13075.2	13075.2	-18507.3	-18507.3
1.800	19743.0C	19743.0	-13020.9	-13020.9B	14672.1	14672.1	-18091.8	-18091.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: HS20

Moment

Span	top +bend	Rating fiber -bend	Factor	bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00		999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	999.00	999.00	999.0 (1-Lane)
1.010	124.96	999.00		124.96	999.00	999.00	999.0 (2-Lane)
1.010	188.29	999.00		188.29	999.00	999.00	999.0 (1-Lane)
1.100	11.64	999.00		11.64	999.00	232.81	419.1 (2-Lane)
1.100	17.54	999.00		17.54	999.00	350.79	631.4 (1-Lane)
1.200	7.14	999.00		7.14	999.00	142.87	257.2 (2-Lane)
1.200	10.76	999.00		10.76	999.00	215.26	387.5 (1-Lane)
1.300	4.91	999.00		4.91	999.00	98.10	176.6 (2-Lane)
1.300	7.39	999.00		7.39	999.00	147.82	266.1 (1-Lane)
1.400	4.00	999.00		4.00	999.00	80.06	144.1 (2-Lane)
1.400	6.03	999.00		6.03	999.00	120.62	217.1 (1-Lane)
1.500	3.78	999.00		3.78	999.00	75.50	135.9 (2-Lane)
1.500	5.69	999.00		5.69	999.00	113.76	204.8 (1-Lane)
1.600	4.00	999.00		4.00	999.00	80.06	144.1 (2-Lane)
1.600	6.03	999.00		6.03	999.00	120.62	217.1 (1-Lane)
1.700	4.91	999.00		4.91	999.00	98.10	176.6 (2-Lane)
1.700	7.39	999.00		7.39	999.00	147.82	266.1 (1-Lane)
1.800	7.14	999.00		7.14	999.00	142.87	257.2 (2-Lane)
1.800	10.76	999.00		10.76	999.00	215.26	387.5 (1-Lane)
1.900	11.64	999.00		11.64	999.00	232.81	419.1 (2-Lane)
1.900	17.54	999.00		17.54	999.00	350.79	631.4 (1-Lane)
2.000	999.00	999.00		999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	999.00	999.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Lane	Live Load Lane
Lane						
1.000	167.2	29.5	117.97	0.00	88.70	0.00
0.00						
1.010	164.0	28.9	116.71	0.00	87.75	0.00
0.00						
1.100	134.8	23.6	105.44	0.00	79.28	0.00
0.00						
1.200	102.0	17.7	92.91	0.00	69.86	0.00
0.00						
1.300	68.0	11.8	80.39	0.00	60.44	0.00
0.00						
1.400	34.0	5.9	67.86	0.00	51.02	0.00
0.00						
1.500	0.0	0.0	55.33	0.00	41.60	0.00
0.00						
1.600	-34.0	-5.9	-67.86	0.00	-51.02	0.00
0.00						
1.700	-68.0	-11.8	-80.39	0.00	-60.44	0.00
0.00						
1.800	-102.0	-17.7	-92.91	0.00	-69.86	0.00
0.00						
1.900	-134.8	-23.6	-105.44	0.00	-79.28	0.00
0.00						
2.000	-167.2	-29.5	-117.97	0.00	-88.70	0.00
0.00						

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: HS20

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)

1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: HS20

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.67	133.40	240.1 (2-Lane)
1.000	999.00	8.22	164.46	296.0 (1-Lane)
1.010	999.00	6.77	135.49	243.9 (2-Lane)
1.010	999.00	8.35	167.03	300.7 (1-Lane)
1.100	162.14	6.63	132.63	238.7 (2-Lane)
1.100	199.89	8.18	163.51	294.3 (1-Lane)
1.200	36.49	4.39	87.90	158.2 (2-Lane)
1.200	44.99	5.42	108.37	195.1 (1-Lane)
1.300	20.08	5.58	111.53	200.8 (2-Lane)
1.300	24.75	6.88	137.49	247.5 (1-Lane)
1.400	13.27	7.19	143.88	259.0 (2-Lane)
1.400	16.36	8.87	177.37	319.3 (1-Lane)
1.500	9.54	9.54	190.87	343.6 (2-Lane)
1.500	11.77	11.77	235.31	423.6 (1-Lane)
1.600	7.19	13.27	143.88	259.0 (2-Lane)
1.600	8.87	16.36	177.37	319.3 (1-Lane)
1.700	5.58	20.08	111.53	200.8 (2-Lane)
1.700	6.88	24.75	137.49	247.5 (1-Lane)
1.800	4.39	36.49	87.90	158.2 (2-Lane)
1.800	5.42	44.99	108.37	195.1 (1-Lane)
1.900	6.63	162.14	132.63	238.7 (2-Lane)
1.900	8.18	199.89	163.51	294.3 (1-Lane)
2.000	6.67	999.00	133.40	240.1 (2-Lane)
2.000	8.22	999.00	164.46	296.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09

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## SERVICE MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01



Member I. D. G05  
Rating Type: II-OPE  
Rating Live Load: HS20

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load w/o Truck
Lane			Lane	Lane	Lane	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	95.56 R	0.00	71.85	0.00
0.00						
1.100	1934.1	340.3	863.30 R	0.00	649.10	0.00
0.00						
1.200	3451.8	604.9	1521.46 R	0.00	1143.96	0.00
0.00						
1.300	4540.4	794.0	1974.50 R	0.00	1484.59	0.00
0.00						
1.400	5193.5	907.4	2242.33 R	0.00	1685.97	0.00
0.00						
1.500	5411.2	945.2	2315.00 R	0.00	1740.60	0.00
0.00						
1.600	5193.5	907.4	2242.33 R	0.00	1685.97	0.00
0.00						
1.700	4540.4	794.0	1974.50 R	0.00	1484.59	0.00
0.00						
1.800	3451.8	604.9	1521.46 R	0.00	1143.96	0.00
0.00						
1.900	1934.1	340.3	863.30 R	0.00	649.10	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05  
Rating Type: II-OPER  
Rating Live Load:

Rating Type: HS20  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPER  
Rating Live Load: HS20

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	571.93	999.00	133.11	999.00	999.00	999.0 (2-Lane)
1.010	861.76	999.00	200.57	999.00	999.00	999.0 (1-Lane)
1.100	47.24	999.00	11.56	999.00	231.13	416.0 (2-Lane)
1.100	71.18	999.00	17.41	999.00	348.25	626.9 (1-Lane)
1.200	24.25	999.00	7.35	999.00	147.02	264.6 (2-Lane)
1.200	36.54	999.00	11.08	999.00	221.52	398.7 (1-Lane)
1.300	15.41	999.00	4.84	999.00	96.82	174.3 (2-Lane)
1.300	23.22	999.00	7.29	999.00	145.88	262.6 (1-Lane)
1.400	11.84	999.00	3.83	999.00	76.55	137.8 (2-Lane)
1.400	17.84	999.00	5.77	999.00	115.35	207.6 (1-Lane)
1.500	10.91	999.00	3.57	999.00	71.34	128.4 (2-Lane)
1.500	16.44	999.00	5.38	999.00	107.49	193.5 (1-Lane)
1.600	11.84	999.00	3.83	999.00	76.55	137.8 (2-Lane)
1.600	17.84	999.00	5.77	999.00	115.35	207.6 (1-Lane)
1.700	15.41	999.00	4.84	999.00	96.82	174.3 (2-Lane)
1.700	23.22	999.00	7.29	999.00	145.88	262.6 (1-Lane)
1.800	24.25	999.00	7.35	999.00	147.02	264.6 (2-Lane)
1.800	36.54	999.00	11.08	999.00	221.52	398.7 (1-Lane)
1.900	47.24	999.00	11.56	999.00	231.13	416.0 (2-Lane)
1.900	71.18	999.00	17.41	999.00	348.25	626.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: 3

Gamma	DC		(2-Lane)		(1-Lane)	
	1.25	DW 1.25	LL 1.35	LL 1.35	LL 1.35	LL 1.35
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o

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impact

Lane	Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								
1.010	241.8	46.8	90.73 R	0.00	68.21	0.00	60.21 R	0.00
0.00								
1.100	2417.7	425.3	820.71 R	0.00	617.08	0.00	544.69 R	0.00
0.00								
1.200	4314.7	756.1	1449.12 R	0.00	1089.56	0.00	961.74 R	0.00
0.00								
1.300	5675.4	992.4	1885.21 R	0.00	1417.45	0.00	1251.17 R	0.00
0.00								
1.400	6491.9	1134.2	2143.40 R	0.00	1611.58	0.00	1422.53 R	0.00
0.00								
1.500	6764.0	1181.5	2218.90 R	0.00	1668.34	0.00	1472.63 R	0.00
0.00								
1.600	6491.9	1134.2	2143.40 R	0.00	1611.58	0.00	1422.53 R	0.00
0.00								
1.700	5675.4	992.4	1885.21 R	0.00	1417.45	0.00	1251.17 R	0.00
0.00								
1.800	4314.7	756.1	1449.12 R	0.00	1089.56	0.00	961.74 R	0.00
0.00								
1.900	2417.7	425.3	820.71 R	0.00	617.08	0.00	544.69 R	0.00
0.00								
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: 3

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12212.6	-12212.6B	11797.6	11797.6	-20158.1	-20158.1
1.600	19743.0C	19743.0	-11832.8	-11832.8B	12117.0	12117.0	-19458.9	-19458.9
1.700	19743.0C	19743.0	-11832.8	-11832.8B	13075.2	13075.2	-18500.7	-18500.7
1.800	19743.0C	19743.0	-13009.9	-13009.9B	14672.1	14672.1	-18080.8	-18080.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: 3

## Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	177.69	999.00	177.69	999.00	0.00	999.0 (2-Lane)
1.010	267.73	999.00	267.73	999.00	0.00	999.0 (1-Lane)
1.100	16.53	999.00	16.53	999.00	0.00	413.2 (2-Lane)
1.100	24.91	999.00	24.91	999.00	0.00	622.7 (1-Lane)
1.200	10.12	999.00	10.12	999.00	0.00	253.1 (2-Lane)
1.200	15.26	999.00	15.26	999.00	0.00	381.4 (1-Lane)
1.300	6.94	999.00	6.94	999.00	0.00	173.4 (2-Lane)
1.300	10.45	999.00	10.45	999.00	0.00	261.3 (1-Lane)
1.400	5.65	999.00	5.65	999.00	0.00	141.3 (2-Lane)
1.400	8.52	999.00	8.52	999.00	0.00	212.9 (1-Lane)
1.500	5.32	999.00	5.32	999.00	0.00	132.9 (2-Lane)
1.500	8.01	999.00	8.01	999.00	0.00	200.3 (1-Lane)
1.600	5.65	999.00	5.65	999.00	0.00	141.3 (2-Lane)
1.600	8.52	999.00	8.52	999.00	0.00	212.9 (1-Lane)
1.700	6.94	999.00	6.94	999.00	0.00	173.4 (2-Lane)
1.700	10.45	999.00	10.45	999.00	0.00	261.3 (1-Lane)
1.800	10.12	999.00	10.12	999.00	0.00	253.1 (2-Lane)
1.800	15.26	999.00	15.26	999.00	0.00	381.4 (1-Lane)
1.900	16.53	999.00	16.53	999.00	0.00	413.2 (2-Lane)
1.900	24.91	999.00	24.91	999.00	0.00	622.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER

Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	82.95	0.00	62.37	0.00	67.28	0.00	50.59
1.010 0.00	164.0	28.9	82.08	0.00	61.71	0.00	66.58	0.00	50.06
1.100 0.00	134.8	23.6	74.25	0.00	55.83	0.00	60.23	0.00	45.28
1.200 0.00	102.0	17.7	65.55	0.00	49.29	0.00	53.17	0.00	39.98
1.300 0.00	68.0	11.8	56.85	0.00	42.75	0.00	46.12	0.00	34.67

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1.400	34.0	5.9	48.15	0.00	36.20	0.00	39.06	0.00	29.37
0.00									
1.500	0.0	0.0	39.45	0.00	29.66	0.00	32.00	0.00	24.06
0.00									
1.600	-34.0	-5.9	-48.15	0.00	-36.20	0.00	-39.06	0.00	-29.37
0.00									
1.700	-68.0	-11.8	-56.85	0.00	-42.75	0.00	-46.12	0.00	-34.67
0.00									
1.800	-102.0	-17.7	-65.55	0.00	-49.29	0.00	-53.17	0.00	-39.98
0.00									
1.900	-134.8	-23.6	-74.25	0.00	-55.83	0.00	-60.23	0.00	-45.28
0.00									
2.000	-167.2	-29.5	-82.95	0.00	-62.37	0.00	-67.28	0.00	-50.59
0.00									

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#### STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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#### STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: 3

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	9.49	0.00	237.1 (2-Lane)
1.000	999.00	11.69	0.00	292.4 (1-Lane)
1.010	999.00	9.63	0.00	240.8 (2-Lane)
1.010	999.00	11.88	0.00	296.9 (1-Lane)
1.100	196.28	9.42	0.00	235.4 (2-Lane)
1.100	241.98	11.61	0.00	290.2 (1-Lane)
1.200	48.50	6.23	0.00	155.7 (2-Lane)
1.200	59.79	7.68	0.00	192.0 (1-Lane)
1.300	27.56	7.89	0.00	197.1 (2-Lane)
1.300	33.98	9.72	0.00	243.0 (1-Lane)
1.400	18.47	10.14	0.00	253.4 (2-Lane)
1.400	22.77	12.50	0.00	312.5 (1-Lane)
1.500	13.38	13.38	0.00	334.6 (2-Lane)
1.500	16.50	16.50	0.00	412.5 (1-Lane)
1.600	10.14	18.47	0.00	253.4 (2-Lane)
1.600	12.50	22.77	0.00	312.5 (1-Lane)
1.700	7.89	27.56	0.00	197.1 (2-Lane)
1.700	9.72	33.98	0.00	243.0 (1-Lane)
1.800	6.23	48.50	0.00	155.7 (2-Lane)
1.800	7.68	59.79	0.00	192.0 (1-Lane)
1.900	9.42	196.28	0.00	235.4 (2-Lane)
1.900	11.61	241.98	0.00	290.2 (1-Lane)
2.000	9.49	999.00	0.00	237.1 (2-Lane)
2.000	11.69	999.00	0.00	292.4 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPE  
Rating Live Load: 3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	67.20 R	0.00	50.53	0.00
0.00						
1.100	1934.1	340.3	607.94 R	0.00	457.09	0.00
0.00						
1.200	3451.8	604.9	1073.42 R	0.00	807.08	0.00
0.00						
1.300	4540.4	794.0	1396.45 R	0.00	1049.96	0.00
0.00						
1.400	5193.5	907.4	1587.71 R	0.00	1193.76	0.00
0.00						
1.500	5411.2	945.2	1643.63 R	0.00	1235.81	0.00
0.00						

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1.600	5193.5	907.4	1587.71 R	0.00	1193.76	0.00	1053.72 R	0.00	792.27
0.00									
1.700	4540.4	794.0	1396.45 R	0.00	1049.96	0.00	926.79 R	0.00	696.84
0.00									
1.800	3451.8	604.9	1073.42 R	0.00	807.08	0.00	712.40 R	0.00	535.64
0.00									
1.900	1934.1	340.3	607.94 R	0.00	457.09	0.00	403.47 R	0.00	303.36
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 916

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPER  
Rating Live Load:

Rating Type: 3  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPER  
Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	813.25	999.00	189.28	999.00	0.00	999.0 (2-Lane)
1.010	999.00	999.00	285.19	999.00	0.00	999.0 (1-Lane)
1.100	67.08	999.00	16.41	999.00	0.00	410.3 (2-Lane)
1.100	101.08	999.00	24.73	999.00	0.00	618.2 (1-Lane)

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1.200	34.37	999.00	10.42	999.00	0.00	260.5 (2-Lane)
1.200	51.79	999.00	15.70	999.00	0.00	392.5 (1-Lane)
1.300	21.79	999.00	6.84	999.00	0.00	171.1 (2-Lane)
1.300	32.83	999.00	10.31	999.00	0.00	257.8 (1-Lane)
1.400	16.73	999.00	5.41	999.00	0.00	135.1 (2-Lane)
1.400	25.20	999.00	8.15	999.00	0.00	203.6 (1-Lane)
1.500	15.37	999.00	5.02	999.00	0.00	125.6 (2-Lane)
1.500	23.16	999.00	7.57	999.00	0.00	189.3 (1-Lane)
1.600	16.73	999.00	5.41	999.00	0.00	135.1 (2-Lane)
1.600	25.20	999.00	8.15	999.00	0.00	203.6 (1-Lane)
1.700	21.79	999.00	6.84	999.00	0.00	171.1 (2-Lane)
1.700	32.83	999.00	10.31	999.00	0.00	257.8 (1-Lane)
1.800	34.37	999.00	10.42	999.00	0.00	260.5 (2-Lane)
1.800	51.79	999.00	15.70	999.00	0.00	392.5 (1-Lane)
1.900	67.08	999.00	16.41	999.00	0.00	410.3 (2-Lane)
1.900	101.08	999.00	24.73	999.00	0.00	618.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane		Live Load w/o impact Truck Lane	
Lane			Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	241.8	46.8	134.15 R	0.00	100.86	89.03 R
0.00						
1.100	2417.7	425.3	1203.02 R	0.00	904.52	798.41 R
0.00						
1.200	4314.7	756.1	2098.33 R	0.00	1577.70	1392.62 R
0.00						
1.300	5675.4	992.4	2752.26 R	0.00	2069.37	1826.61 R
0.00						
1.400	6491.9	1134.2	3121.56 R	0.00	2347.03	2071.71 R
0.00						
1.500	6764.0	1181.5	3207.18 R	0.00	2411.41	2128.53 R
0.00						
1.600	6491.9	1134.2	3121.56 R	0.00	2347.03	2071.71 R
0.00						
1.700	5675.4	992.4	2752.26 R	0.00	2069.37	1826.61 R
0.00						
1.800	4314.7	756.1	2098.33 R	0.00	1577.69	1392.62 R
0.00						
1.900	2417.7	425.3	1203.01 R	0.00	904.52	798.41 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						



STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12197.1	-12197.1B	11797.6	11797.6	-20142.6	-20142.6
1.600	19743.0C	19743.0	-11820.8	-11820.8B	12117.0	12117.0	-19446.9	-19446.9
1.700	19743.0C	19743.0	-11820.8	-11820.8B	13075.2	13075.2	-18488.7	-18488.7
1.800	19743.0C	19743.0	-13010.0	-13010.0B	14672.1	14672.1	-18080.9	-18080.9
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	120.17	999.00	120.17	999.00	0.00	999.0 (2-Lane)
1.010	181.07	999.00	181.07	999.00	0.00	999.0 (1-Lane)
1.100	11.28	999.00	11.28	999.00	0.00	451.1 (2-Lane)
1.100	16.99	999.00	16.99	999.00	0.00	679.7 (1-Lane)
1.200	6.99	999.00	6.99	999.00	0.00	279.7 (2-Lane)
1.200	10.54	999.00	10.54	999.00	0.00	421.4 (1-Lane)
1.300	4.75	999.00	4.75	999.00	0.00	190.0 (2-Lane)
1.300	7.16	999.00	7.16	999.00	0.00	286.3 (1-Lane)
1.400	3.88	999.00	3.88	999.00	0.00	155.3 (2-Lane)
1.400	5.85	999.00	5.85	999.00	0.00	234.0 (1-Lane)
1.500	3.68	999.00	3.68	999.00	0.00	147.1 (2-Lane)
1.500	5.54	999.00	5.54	999.00	0.00	221.7 (1-Lane)
1.600	3.88	999.00	3.88	999.00	0.00	155.3 (2-Lane)

1.600	5.85	999.00	5.85	999.00	0.00	234.0 (1-Lane)
1.700	4.75	999.00	4.75	999.00	0.00	190.0 (2-Lane)
1.700	7.16	999.00	7.16	999.00	0.00	286.3 (1-Lane)
1.800	6.99	999.00	6.99	999.00	0.00	279.7 (2-Lane)
1.800	10.54	999.00	10.54	999.00	0.00	421.4 (1-Lane)
1.900	11.28	999.00	11.28	999.00	0.00	451.1 (2-Lane)
1.900	16.99	999.00	16.99	999.00	0.00	679.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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# SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER

Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	122.76	0.00	92.30	0.00	99.57	0.00	74.87
1.010 0.00	164.0	28.9	121.36	0.00	91.25	0.00	98.44	0.00	74.02
1.100 0.00	134.8	23.6	108.84	0.00	81.83	0.00	88.28	0.00	66.38
1.200 0.00	102.0	17.7	94.92	0.00	71.37	0.00	76.99	0.00	57.89
1.300 0.00	68.0	11.8	81.00	0.00	60.90	0.00	65.70	0.00	49.40
1.400 0.00	34.0	5.9	67.08	0.00	50.44	0.00	54.41	0.00	40.91
1.500 0.00	0.0	0.0	53.16	0.00	39.97	0.00	43.12	0.00	32.42
1.600 0.00	-34.0	-5.9	-67.08	0.00	-50.44	0.00	-54.41	0.00	-40.91
1.700 0.00	-68.0	-11.8	-81.00	0.00	-60.90	0.00	-65.70	0.00	-49.40
1.800 0.00	-102.0	-17.7	-94.92	0.00	-71.37	0.00	-76.99	0.00	-57.89
1.900 0.00	-134.8	-23.6	-108.84	0.00	-81.83	0.00	-88.28	0.00	-66.38
2.000 0.00	-167.2	-29.5	-122.76	0.00	-92.30	0.00	-99.57	0.00	-74.87

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# STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER

Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER

Rating Live Load: 3S2

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.41	0.00	256.4 (2-Lane)
1.000	999.00	7.90	0.00	316.1 (1-Lane)
1.010	999.00	6.51	0.00	260.6 (2-Lane)
1.010	999.00	8.03	0.00	321.3 (1-Lane)
1.100	196.28	6.42	0.00	257.0 (2-Lane)
1.100	241.98	7.92	0.00	316.8 (1-Lane)
1.200	51.50	4.30	0.00	172.1 (2-Lane)
1.200	63.49	5.30	0.00	212.2 (1-Lane)
1.300	24.00	5.53	0.00	221.4 (2-Lane)
1.300	29.59	6.82	0.00	272.9 (1-Lane)
1.400	14.47	7.28	0.00	291.1 (2-Lane)
1.400	17.84	8.97	0.00	358.9 (1-Lane)
1.500	9.93	9.93	0.00	397.3 (2-Lane)
1.500	12.25	12.25	0.00	489.8 (1-Lane)
1.600	7.28	14.47	0.00	291.1 (2-Lane)
1.600	8.97	17.84	0.00	358.9 (1-Lane)
1.700	5.53	24.00	0.00	221.4 (2-Lane)
1.700	6.82	29.59	0.00	272.9 (1-Lane)

1.800	4.30	51.50	0.00	172.1 (2-Lane)
1.800	5.30	63.49	0.00	212.2 (1-Lane)
1.900	6.42	196.28	0.00	257.0 (2-Lane)
1.900	7.92	241.98	0.00	316.8 (1-Lane)
2.000	6.41	999.00	0.00	256.4 (2-Lane)
2.000	7.90	999.00	0.00	316.1 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPE  
Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
0.00						
1.010	193.4	37.4	99.37 R	0.00	65.95 R	0.00
0.00						
1.100	1934.1	340.3	891.12 R	0.00	591.42 R	0.00
0.00						
1.200	3451.8	604.9	1554.32 R	0.00	1031.57 R	0.00
0.00						
1.300	4540.4	794.0	2038.71 R	0.00	1353.05 R	0.00
0.00						
1.400	5193.5	907.4	2312.26 R	0.00	1534.60 R	0.00
0.00						
1.500	5411.2	945.2	2375.69 R	0.00	1576.69 R	0.00
0.00						
1.600	5193.5	907.4	2312.26 R	0.00	1534.60 R	0.00
0.00						
1.700	4540.4	794.0	2038.71 R	0.00	1353.05 R	0.00
0.00						
1.800	3451.8	604.9	1554.32 R	0.00	1031.57 R	0.00
0.00						
1.900	1934.1	340.3	891.12 R	0.00	591.42 R	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPER  
Rating Live Load:

Rating Type: 3S2

Rating Live Load:  
Span Service Resistance  
Positive Bending Negative BendingAvailable Resistance for LL+I  
Positive Bending Negative Bending

	Top	Bott.	Top	Bott.	Top	Bott.	Top	Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPER  
Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	550.01	999.00	128.01	999.00	0.00	999.0 (2-Lane)
1.010	828.73	999.00	192.88	999.00	0.00	999.0 (1-Lane)
1.100	45.77	999.00	11.19	999.00	0.00	447.8 (2-Lane)
1.100	68.96	999.00	16.87	999.00	0.00	674.8 (1-Lane)
1.200	23.74	999.00	7.20	999.00	0.00	287.8 (2-Lane)
1.200	35.76	999.00	10.84	999.00	0.00	433.7 (1-Lane)
1.300	14.93	999.00	4.69	999.00	0.00	187.5 (2-Lane)
1.300	22.49	999.00	7.06	999.00	0.00	282.6 (1-Lane)
1.400	11.48	999.00	3.71	999.00	0.00	148.5 (2-Lane)
1.400	17.30	999.00	5.59	999.00	0.00	223.7 (1-Lane)
1.500	10.63	999.00	3.48	999.00	0.00	139.0 (2-Lane)
1.500	16.02	999.00	5.24	999.00	0.00	209.5 (1-Lane)
1.600	11.48	999.00	3.71	999.00	0.00	148.5 (2-Lane)
1.600	17.30	999.00	5.59	999.00	0.00	223.7 (1-Lane)
1.700	14.93	999.00	4.69	999.00	0.00	187.5 (2-Lane)
1.700	22.49	999.00	7.06	999.00	0.00	282.6 (1-Lane)
1.800	23.74	999.00	7.20	999.00	0.00	287.8 (2-Lane)
1.800	35.76	999.00	10.84	999.00	0.00	433.7 (1-Lane)
1.900	45.77	999.00	11.19	999.00	0.00	447.8 (2-Lane)
1.900	68.96	999.00	16.87	999.00	0.00	674.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	129.34 R	0.00	97.25	85.84 R
0.00						
1.100	2417.7	425.3	1154.97 R	0.00	868.40	766.53 R
0.00						
1.200	4314.7	756.1	2011.85 R	0.00	1512.67	1335.22 R
0.00						
1.300	5675.4	992.4	2589.86 R	0.00	1947.26	1718.83 R
0.00						
1.400	6491.9	1134.2	2937.05 R	0.00	2208.31	1949.26 R
0.00						
1.500	6764.0	1181.5	3053.42 R	0.00	2295.81	2026.49 R
0.00						
1.600	6491.9	1134.2	2937.05 R	0.00	2208.31	1949.25 R
0.00						
1.700	5675.4	992.4	2589.86 R	0.00	1947.26	1718.83 R
0.00						
1.800	4314.7	756.1	2011.85 R	0.00	1512.67	1335.22 R
0.00						
1.900	2417.7	425.3	1154.97 R	0.00	868.40	766.53 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: 3-3

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Top	Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12211.8	-12211.8B	11797.6	11797.6	-20157.2	-20157.2
1.600	19743.0C	19743.0	-11835.2	-11835.2B	12117.0	12117.0	-19461.2	-19461.2
1.700	19743.0C	19743.0	-11835.2	-11835.2B	13075.2	13075.2	-18503.0	-18503.0
1.800	19743.0C	19743.0	-12993.4	-12993.4B	14672.1	14672.1	-18064.3	-18064.3

1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: 3-3

## Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	124.64	999.00	124.64	999.00	0.00	999.0 (2-Lane)
1.010	187.80	999.00	187.80	999.00	0.00	999.0 (1-Lane)
1.100	11.75	999.00	11.75	999.00	0.00	469.8 (2-Lane)
1.100	17.70	999.00	17.70	999.00	0.00	707.9 (1-Lane)
1.200	7.29	999.00	7.29	999.00	0.00	291.7 (2-Lane)
1.200	10.99	999.00	10.99	999.00	0.00	439.5 (1-Lane)
1.300	5.05	999.00	5.05	999.00	0.00	201.9 (2-Lane)
1.300	7.61	999.00	7.61	999.00	0.00	304.3 (1-Lane)
1.400	4.13	999.00	4.13	999.00	0.00	165.0 (2-Lane)
1.400	6.22	999.00	6.22	999.00	0.00	248.6 (1-Lane)
1.500	3.86	999.00	3.86	999.00	0.00	154.5 (2-Lane)
1.500	5.82	999.00	5.82	999.00	0.00	232.9 (1-Lane)
1.600	4.13	999.00	4.13	999.00	0.00	165.0 (2-Lane)
1.600	6.22	999.00	6.22	999.00	0.00	248.6 (1-Lane)
1.700	5.05	999.00	5.05	999.00	0.00	201.9 (2-Lane)
1.700	7.61	999.00	7.61	999.00	0.00	304.3 (1-Lane)
1.800	7.29	999.00	7.29	999.00	0.00	291.7 (2-Lane)
1.800	10.99	999.00	10.99	999.00	0.00	439.5 (1-Lane)
1.900	11.75	999.00	11.75	999.00	0.00	469.8 (2-Lane)
1.900	17.70	999.00	17.70	999.00	0.00	707.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: 3-3

(2-Lane)

(1-Lane)

Gamma	DC 1.25	DW 1.25	LL 1.35	LL 1.35					
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	118.41	0.00	89.03	0.00	96.05	0.00	72.22
1.010 0.00	164.0	28.9	117.02	0.00	87.98	0.00	94.92	0.00	71.37
1.100 0.00	134.8	23.6	104.49	0.00	78.56	0.00	84.76	0.00	63.73
1.200 0.00	102.0	17.7	90.57	0.00	68.10	0.00	73.47	0.00	55.24
1.300 0.00	68.0	11.8	76.65	0.00	57.63	0.00	62.18	0.00	46.75
1.400 0.00	34.0	5.9	62.73	0.00	47.17	0.00	50.89	0.00	38.26
1.500 0.00	0.0	0.0	48.82	0.00	36.70	0.00	39.60	0.00	29.77
1.600 0.00	-34.0	-5.9	-62.73	0.00	-47.17	0.00	-50.89	0.00	-38.26
1.700 0.00	-68.0	-11.8	-76.65	0.00	-57.63	0.00	-62.18	0.00	-46.75
1.800 0.00	-102.0	-17.7	-90.57	0.00	-68.10	0.00	-73.47	0.00	-55.24
1.900 0.00	-134.8	-23.6	-104.49	0.00	-78.56	0.00	-84.76	0.00	-63.73
2.000 0.00	-167.2	-29.5	-118.41	0.00	-89.03	0.00	-96.05	0.00	-72.22

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)



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Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	95.81 R	0.00	72.04	63.59 R
0.00						
1.100	1934.1	340.3	855.53 R	0.00	643.26	567.80 R
0.00						
1.200	3451.8	604.9	1490.26 R	0.00	1120.49	989.05 R
0.00						
1.300	4540.4	794.0	1918.42 R	0.00	1442.42	1273.21 R
0.00						
1.400	5193.5	907.4	2175.59 R	0.00	1635.79	1443.89 R
0.00						
1.500	5411.2	945.2	2261.80 R	0.00	1700.60	1501.10 R
0.00						
1.600	5193.5	907.4	2175.59 R	0.00	1635.79	1443.89 R
0.00						
1.700	4540.4	794.0	1918.42 R	0.00	1442.42	1273.21 R
0.00						
1.800	3451.8	604.9	1490.26 R	0.00	1120.49	989.05 R
0.00						
1.900	1934.1	340.3	855.53 R	0.00	643.26	567.80 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPER

Rating Live Load:

Rating Type: 3-3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPER

Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	570.44	999.00	132.76	999.00	0.00	999.0 (2-Lane)
1.010	859.52	999.00	200.04	999.00	0.00	999.0 (1-Lane)
1.100	47.67	999.00	11.66	999.00	0.00	466.4 (2-Lane)
1.100	71.83	999.00	17.57	999.00	0.00	702.8 (1-Lane)
1.200	24.76	999.00	7.51	999.00	0.00	300.2 (2-Lane)
1.200	37.30	999.00	11.31	999.00	0.00	452.3 (1-Lane)
1.300	15.86	999.00	4.98	999.00	0.00	199.3 (2-Lane)
1.300	23.90	999.00	7.51	999.00	0.00	300.3 (1-Lane)
1.400	12.21	999.00	3.94	999.00	0.00	157.8 (2-Lane)
1.400	18.39	999.00	5.94	999.00	0.00	237.8 (1-Lane)
1.500	11.17	999.00	3.65	999.00	0.00	146.0 (2-Lane)
1.500	16.83	999.00	5.50	999.00	0.00	220.0 (1-Lane)
1.600	12.21	999.00	3.94	999.00	0.00	157.8 (2-Lane)
1.600	18.39	999.00	5.94	999.00	0.00	237.8 (1-Lane)
1.700	15.86	999.00	4.98	999.00	0.00	199.3 (2-Lane)
1.700	23.90	999.00	7.51	999.00	0.00	300.3 (1-Lane)
1.800	24.76	999.00	7.51	999.00	0.00	300.2 (2-Lane)
1.800	37.30	999.00	11.31	999.00	0.00	452.3 (1-Lane)
1.900	47.67	999.00	11.66	999.00	0.00	466.4 (2-Lane)
1.900	71.83	999.00	17.57	999.00	0.00	702.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU4

Gamma	DC		DW		(2-Lane) LL 1.35		(1-Lane) LL 1.35	
	1.25		1.25					
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o		
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								
1.010	241.8	46.8	98.63 R	0.00	74.16	0.00	65.46 R	0.00
0.00								
1.100	2417.7	425.3	892.83 R	0.00	671.30	0.00	592.55 R	0.00
0.00								
1.200	4314.7	756.1	1577.96 R	0.00	1186.44	0.00	1047.26 R	0.00

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0.00									
1.300	5675.4	992.4	2055.40 R	0.00	1545.41	0.00	1364.12 R	0.00	1025.65
0.00									
1.400	6491.9	1134.2	2347.24 R	0.00	1764.84	0.00	1557.81 R	0.00	1171.29
0.00									
1.500	6764.0	1181.5	2435.23 R	0.00	1831.00	0.00	1616.21 R	0.00	1215.19
0.00									
1.600	6491.9	1134.2	2347.24 R	0.00	1764.84	0.00	1557.81 R	0.00	1171.29
0.00									
1.700	5675.4	992.4	2055.40 R	0.00	1545.41	0.00	1364.12 R	0.00	1025.65
0.00									
1.800	4314.7	756.1	1577.96 R	0.00	1186.44	0.00	1047.26 R	0.00	787.41
0.00									
1.900	2417.7	425.3	892.83 R	0.00	671.30	0.00	592.55 R	0.00	445.53
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU4

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12218.1	-12218.1B	11797.6	11797.6	-20163.6	-20163.6
1.600	19743.0C	19743.0	-11835.4	-11835.4B	12117.0	12117.0	-19461.5	-19461.5
1.700	19743.0C	19743.0	-11835.4	-11835.4B	13075.2	13075.2	-18503.3	-18503.3
1.800	19743.0C	19743.0	-13014.8	-13014.8B	14672.1	14672.1	-18085.7	-18085.7
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU4

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

1.010	163.45	999.00	163.45	999.00	0.00	999.0 (2-Lane)
1.010	246.28	999.00	246.28	999.00	0.00	999.0 (1-Lane)
1.100	15.19	999.00	15.19	999.00	0.00	410.3 (2-Lane)
1.100	22.90	999.00	22.90	999.00	0.00	618.2 (1-Lane)
1.200	9.30	999.00	9.30	999.00	0.00	251.1 (2-Lane)
1.200	14.01	999.00	14.01	999.00	0.00	378.3 (1-Lane)
1.300	6.36	999.00	6.36	999.00	0.00	171.8 (2-Lane)
1.300	9.59	999.00	9.59	999.00	0.00	258.8 (1-Lane)
1.400	5.16	999.00	5.16	999.00	0.00	139.4 (2-Lane)
1.400	7.78	999.00	7.78	999.00	0.00	210.0 (1-Lane)
1.500	4.84	999.00	4.84	999.00	0.00	130.8 (2-Lane)
1.500	7.30	999.00	7.30	999.00	0.00	197.1 (1-Lane)
1.600	5.16	999.00	5.16	999.00	0.00	139.4 (2-Lane)
1.600	7.78	999.00	7.78	999.00	0.00	210.0 (1-Lane)
1.700	6.36	999.00	6.36	999.00	0.00	171.8 (2-Lane)
1.700	9.59	999.00	9.59	999.00	0.00	258.8 (1-Lane)
1.800	9.30	999.00	9.30	999.00	0.00	251.1 (2-Lane)
1.800	14.01	999.00	14.01	999.00	0.00	378.3 (1-Lane)
1.900	15.19	999.00	15.19	999.00	0.00	410.3 (2-Lane)
1.900	22.90	999.00	22.90	999.00	0.00	618.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load
Lane			Truck	Truck	Lane	Truck
1.000	167.2	29.5	90.17	67.80	0.00	54.99
0.00						
1.010	164.0	28.9	89.23	67.09	0.00	54.42
0.00						
1.100	134.8	23.6	80.77	60.73	0.00	49.26
0.00						
1.200	102.0	17.7	71.38	53.67	0.00	43.53
0.00						
1.300	68.0	11.8	61.98	46.60	0.00	37.80
0.00						
1.400	34.0	5.9	52.59	39.54	0.00	32.07
0.00						
1.500	0.0	0.0	43.19	32.48	0.00	26.34
0.00						
1.600	-34.0	-5.9	-52.59	-39.54	0.00	-32.07
0.00						
1.700	-68.0	-11.8	-61.98	-46.60	0.00	-37.80
0.00						
1.800	-102.0	-17.7	-71.38	-53.67	0.00	-43.53
0.00						
1.900	-134.8	-23.6	-80.77	-60.73	0.00	-49.26

0.00									
2.000	-167.2	-29.5	-90.17	0.00	-67.80	0.00	-73.14	0.00	-54.99
0.00									

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU4

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	8.73	0.00	235.6 (2-Lane)
1.000	999.00	10.76	0.00	290.5 (1-Lane)
1.010	999.00	8.86	0.00	239.2 (2-Lane)
1.010	999.00	10.92	0.00	294.9 (1-Lane)
1.100	173.01	8.66	0.00	233.7 (2-Lane)

1.100	213.29	10.67	0.00	288.1 (1-Lane)
1.200	43.16	5.72	0.00	154.5 (2-Lane)
1.200	53.21	7.05	0.00	190.4 (1-Lane)
1.300	24.91	7.23	0.00	195.3 (2-Lane)
1.300	30.71	8.92	0.00	240.7 (1-Lane)
1.400	16.80	9.28	0.00	250.6 (2-Lane)
1.400	20.72	11.44	0.00	309.0 (1-Lane)
1.500	12.23	12.23	0.00	330.1 (2-Lane)
1.500	15.07	15.07	0.00	406.9 (1-Lane)
1.600	9.28	16.80	0.00	250.6 (2-Lane)
1.600	11.44	20.72	0.00	309.0 (1-Lane)
1.700	7.23	24.91	0.00	195.3 (2-Lane)
1.700	8.92	30.71	0.00	240.7 (1-Lane)
1.800	5.72	43.16	0.00	154.5 (2-Lane)
1.800	7.05	53.21	0.00	190.4 (1-Lane)
1.900	8.66	173.01	0.00	233.7 (2-Lane)
1.900	10.67	213.29	0.00	288.1 (1-Lane)
2.000	8.73	999.00	0.00	235.6 (2-Lane)
2.000	10.76	999.00	0.00	290.5 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPE  
Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00					
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	73.06 R	0.00	54.93	0.00	48.49 R	0.00	36.46	
0.00										
1.100	1934.1	340.3	661.35 R	0.00	497.26	0.00	438.93 R	0.00	330.02	
0.00										
1.200	3451.8	604.9	1168.86 R	0.00	878.84	0.00	775.74 R	0.00	583.27	
0.00										
1.300	4540.4	794.0	1522.52 R	0.00	1144.75	0.00	1010.46 R	0.00	759.74	
0.00										
1.400	5193.5	907.4	1738.70 R	0.00	1307.29	0.00	1153.93 R	0.00	867.62	
0.00										
1.500	5411.2	945.2	1803.88 R	0.00	1356.30	0.00	1197.19 R	0.00	900.14	
0.00										
1.600	5193.5	907.4	1738.70 R	0.00	1307.29	0.00	1153.93 R	0.00	867.62	
0.00										
1.700	4540.4	794.0	1522.52 R	0.00	1144.75	0.00	1010.46 R	0.00	759.74	
0.00										
1.800	3451.8	604.9	1168.86 R	0.00	878.84	0.00	775.74 R	0.00	583.27	
0.00										
1.900	1934.1	340.3	661.35 R	0.00	497.26	0.00	438.93 R	0.00	330.02	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPER

Rating Live Load:

Rating Type: SU4

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Positive Bending Bott.	Negative Bending Top	Negative Bending Bott.	Positive Bending Top	Positive Bending Bott.	Negative Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPER

Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	748.08	999.00	174.11	999.00	0.00	999.0 (2-Lane)
1.010	999.00	999.00	262.34	999.00	0.00	999.0 (1-Lane)
1.100	61.67	999.00	15.09	999.00	0.00	407.3 (2-Lane)
1.100	92.92	999.00	22.73	999.00	0.00	613.7 (1-Lane)
1.200	31.56	999.00	9.57	999.00	0.00	258.3 (2-Lane)
1.200	47.56	999.00	14.42	999.00	0.00	389.3 (1-Lane)
1.300	19.99	999.00	6.28	999.00	0.00	169.5 (2-Lane)
1.300	30.12	999.00	9.46	999.00	0.00	255.4 (1-Lane)
1.400	15.27	999.00	4.94	999.00	0.00	133.3 (2-Lane)
1.400	23.01	999.00	7.44	999.00	0.00	200.8 (1-Lane)
1.500	14.01	999.00	4.58	999.00	0.00	123.6 (2-Lane)



1.500	21.10	999.00	6.90	999.00	0.00	186.2 (1-Lane)
1.600	15.27	999.00	4.94	999.00	0.00	133.3 (2-Lane)
1.600	23.01	999.00	7.44	999.00	0.00	200.8 (1-Lane)
1.700	19.99	999.00	6.28	999.00	0.00	169.5 (2-Lane)
1.700	30.12	999.00	9.46	999.00	0.00	255.4 (1-Lane)
1.800	31.56	999.00	9.57	999.00	0.00	258.3 (2-Lane)
1.800	47.56	999.00	14.42	999.00	0.00	389.3 (1-Lane)
1.900	61.67	999.00	15.09	999.00	0.00	407.3 (2-Lane)
1.900	92.92	999.00	22.73	999.00	0.00	613.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	112.13 R	0.00	84.31	0.00
0.00						
1.100	2417.7	425.3	1013.99 R	0.00	762.40	0.00
0.00						
1.200	4314.7	756.1	1789.52 R	0.00	1345.51	0.00
0.00						
1.300	5675.4	992.4	2334.27 R	0.00	1755.09	0.00
0.00						
1.400	6491.9	1134.2	2662.66 R	0.00	2002.00	0.00
0.00						
1.500	6764.0	1181.5	2752.59 R	0.00	2069.61	0.00
0.00						
1.600	6491.9	1134.2	2662.66 R	0.00	2002.00	0.00
0.00						
1.700	5675.4	992.4	2334.27 R	0.00	1755.09	0.00
0.00						
1.800	4314.7	756.1	1789.52 R	0.00	1345.51	0.00
0.00						
1.900	2417.7	425.3	1013.99 R	0.00	762.40	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER

Rating Live Load: SU5

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12212.5	-12212.5B	11797.6	11797.6	-20158.0	-20158.0
1.600	19743.0C	19743.0	-11830.8	-11830.8B	12117.0	12117.0	-19456.9	-19456.9
1.700	19743.0C	19743.0	-11830.8	-11830.8B	13075.2	13075.2	-18498.7	-18498.7
1.800	19743.0C	19743.0	-13013.8	-13013.8B	14672.1	14672.1	-18084.7	-18084.7
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	143.77	999.00	143.77	999.00	0.00	999.0 (2-Lane)
1.010	216.62	999.00	216.62	999.00	0.00	999.0 (1-Lane)
1.100	13.38	999.00	13.38	999.00	0.00	414.8 (2-Lane)
1.100	20.16	999.00	20.16	999.00	0.00	624.9 (1-Lane)
1.200	8.20	999.00	8.20	999.00	0.00	254.2 (2-Lane)
1.200	12.35	999.00	12.35	999.00	0.00	383.0 (1-Lane)
1.300	5.60	999.00	5.60	999.00	0.00	173.6 (2-Lane)
1.300	8.44	999.00	8.44	999.00	0.00	261.6 (1-Lane)
1.400	4.55	999.00	4.55	999.00	0.00	141.1 (2-Lane)
1.400	6.86	999.00	6.86	999.00	0.00	212.6 (1-Lane)
1.500	4.29	999.00	4.29	999.00	0.00	132.9 (2-Lane)
1.500	6.46	999.00	6.46	999.00	0.00	200.2 (1-Lane)
1.600	4.55	999.00	4.55	999.00	0.00	141.1 (2-Lane)
1.600	6.86	999.00	6.86	999.00	0.00	212.6 (1-Lane)
1.700	5.60	999.00	5.60	999.00	0.00	173.6 (2-Lane)
1.700	8.44	999.00	8.44	999.00	0.00	261.6 (1-Lane)
1.800	8.20	999.00	8.20	999.00	0.00	254.2 (2-Lane)
1.800	12.35	999.00	12.35	999.00	0.00	383.0 (1-Lane)
1.900	13.38	999.00	13.38	999.00	0.00	414.8 (2-Lane)
1.900	20.16	999.00	20.16	999.00	0.00	624.9 (1-Lane)

2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	102.52	0.00	77.09	0.00	83.16	0.00	62.53
1.010 0.00	164.0	28.9	101.44	0.00	76.27	0.00	82.29	0.00	61.87
1.100 0.00	134.8	23.6	91.74	0.00	68.97	0.00	74.41	0.00	55.95
1.200 0.00	102.0	17.7	80.95	0.00	60.86	0.00	65.66	0.00	49.37
1.300 0.00	68.0	11.8	70.16	0.00	52.75	0.00	56.91	0.00	42.79
1.400 0.00	34.0	5.9	59.38	0.00	44.64	0.00	48.16	0.00	36.21
1.500 0.00	0.0	0.0	48.59	0.00	36.53	0.00	39.41	0.00	29.63
1.600 0.00	-34.0	-5.9	-59.38	0.00	-44.64	0.00	-48.16	0.00	-36.21
1.700 0.00	-68.0	-11.8	-70.16	0.00	-52.75	0.00	-56.91	0.00	-42.79
1.800 0.00	-102.0	-17.7	-80.95	0.00	-60.86	0.00	-65.66	0.00	-49.37
1.900 0.00	-134.8	-23.6	-91.74	0.00	-68.97	0.00	-74.41	0.00	-55.95
2.000 0.00	-167.2	-29.5	-102.52	0.00	-77.09	0.00	-83.16	0.00	-62.53

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)

1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER

Rating Live Load: SU5

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.68	0.00	237.9 (2-Lane)
1.000	999.00	9.46	0.00	293.3 (1-Lane)
1.010	999.00	7.79	0.00	241.6 (2-Lane)
1.010	999.00	9.61	0.00	297.9 (1-Lane)
1.100	163.31	7.62	0.00	236.3 (2-Lane)
1.100	201.34	9.40	0.00	291.3 (1-Lane)
1.200	39.92	5.05	0.00	156.4 (2-Lane)
1.200	49.21	6.22	0.00	192.8 (1-Lane)
1.300	22.50	6.39	0.00	198.1 (2-Lane)
1.300	27.74	7.88	0.00	244.2 (1-Lane)
1.400	15.02	8.22	0.00	254.9 (2-Lane)
1.400	18.52	10.14	0.00	314.2 (1-Lane)
1.500	10.87	10.87	0.00	336.9 (2-Lane)
1.500	13.40	13.40	0.00	415.3 (1-Lane)
1.600	8.22	15.02	0.00	254.9 (2-Lane)
1.600	10.14	18.52	0.00	314.2 (1-Lane)
1.700	6.39	22.50	0.00	198.1 (2-Lane)
1.700	7.88	27.74	0.00	244.2 (1-Lane)
1.800	5.05	39.92	0.00	156.4 (2-Lane)
1.800	6.22	49.21	0.00	192.8 (1-Lane)
1.900	7.62	163.31	0.00	236.3 (2-Lane)
1.900	9.40	201.34	0.00	291.3 (1-Lane)
2.000	7.68	999.00	0.00	237.9 (2-Lane)
2.000	9.46	999.00	0.00	293.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPE  
Rating Live Load: SU5

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00 0.00
0.00						
1.010	193.4	37.4	83.06 R 0.00	62.45 0.00	55.12 R 0.00	41.45
0.00						
1.100	1934.1	340.3	751.11 R 0.00	564.74 0.00	498.49 R 0.00	374.81
0.00						
1.200	3451.8	604.9	1325.57 R 0.00	996.67 0.00	879.75 R 0.00	661.47
0.00						
1.300	4540.4	794.0	1729.09 R 0.00	1300.07 0.00	1147.56 R 0.00	862.83
0.00						
1.400	5193.5	907.4	1972.34 R 0.00	1482.96 0.00	1309.00 R 0.00	984.21
0.00						
1.500	5411.2	945.2	2038.95 R 0.00	1533.05 0.00	1353.21 R 0.00	1017.45
0.00						
1.600	5193.5	907.4	1972.34 R 0.00	1482.96 0.00	1309.00 R 0.00	984.21
0.00						
1.700	4540.4	794.0	1729.09 R 0.00	1300.07 0.00	1147.56 R 0.00	862.83
0.00						
1.800	3451.8	604.9	1325.57 R 0.00	996.67 0.00	879.75 R 0.00	661.47
0.00						
1.900	1934.1	340.3	751.11 R 0.00	564.74 0.00	498.49 R 0.00	374.81
0.00						
2.000	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU5  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6

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1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPER

Rating Live Load: SU5

Service

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	658.01	999.00	153.14	999.00	0.00	999.0 (2-Lane)
1.010	999.00	999.00	230.75	999.00	0.00	999.0 (1-Lane)
1.100	54.30	999.00	13.28	999.00	0.00	411.8 (2-Lane)
1.100	81.81	999.00	20.01	999.00	0.00	620.4 (1-Lane)
1.200	27.83	999.00	8.44	999.00	0.00	261.6 (2-Lane)
1.200	41.94	999.00	12.71	999.00	0.00	394.1 (1-Lane)
1.300	17.60	999.00	5.53	999.00	0.00	171.4 (2-Lane)
1.300	26.52	999.00	8.33	999.00	0.00	258.2 (1-Lane)
1.400	13.46	999.00	4.35	999.00	0.00	134.9 (2-Lane)
1.400	20.29	999.00	6.56	999.00	0.00	203.3 (1-Lane)
1.500	12.39	999.00	4.05	999.00	0.00	125.6 (2-Lane)
1.500	18.67	999.00	6.10	999.00	0.00	189.2 (1-Lane)
1.600	13.46	999.00	4.35	999.00	0.00	134.9 (2-Lane)
1.600	20.29	999.00	6.56	999.00	0.00	203.3 (1-Lane)
1.700	17.60	999.00	5.53	999.00	0.00	171.4 (2-Lane)
1.700	26.52	999.00	8.33	999.00	0.00	258.2 (1-Lane)
1.800	27.83	999.00	8.44	999.00	0.00	261.6 (2-Lane)
1.800	41.94	999.00	12.71	999.00	0.00	394.1 (1-Lane)
1.900	54.30	999.00	13.28	999.00	0.00	411.8 (2-Lane)
1.900	81.81	999.00	20.01	999.00	0.00	620.4 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 950

MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER

Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane		Live Load w/o impact Truck Lane	
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	241.8	46.8	123.59 R	0.00	92.92	82.02 R
0.00						
1.100	2417.7	425.3	1115.58 R	0.00	838.78	740.38 R
0.00						
1.200	4314.7	756.1	1992.19 R	0.00	1497.89	1322.17 R
0.00						
1.300	5675.4	992.4	2606.53 R	0.00	1959.80	1729.90 R
0.00						
1.400	6491.9	1134.2	2967.02 R	0.00	2230.84	1969.14 R
0.00						
1.500	6764.0	1181.5	3080.14 R	0.00	2315.89	2044.22 R
0.00						
1.600	6491.9	1134.2	2967.02 R	0.00	2230.84	1969.14 R
0.00						
1.700	5675.4	992.4	2606.53 R	0.00	1959.80	1729.90 R
0.00						
1.800	4314.7	756.1	1992.19 R	0.00	1497.89	1322.17 R
0.00						
1.900	2417.7	425.3	1115.57 R	0.00	838.78	740.38 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER

Rating Live Load: SU6

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Top	Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12214.2	-12214.2B	11797.6	11797.6	-20159.7	-20159.7
1.600	19743.0C	19743.0	-11834.4	-11834.4B	12117.0	12117.0	-19460.5	-19460.5
1.700	19743.0C	19743.0	-11834.4	-11834.4B	13075.2	13075.2	-18502.3	-18502.3
1.800	19743.0C	19743.0	-13013.0	-13013.0B	14672.1	14672.1	-18083.9	-18083.9
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 952  
MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D.

G05

Rating Type:

I-OPER

Rating Live Load:

SU6

## Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	130.44	999.00	130.44	999.00	0.00	999.0 (2-Lane)
1.010	196.54	999.00	196.54	999.00	0.00	999.0 (1-Lane)
1.100	12.16	999.00	12.16	999.00	0.00	422.6 (2-Lane)
1.100	18.32	999.00	18.32	999.00	0.00	636.7 (1-Lane)
1.200	7.36	999.00	7.36	999.00	0.00	255.9 (2-Lane)
1.200	11.10	999.00	11.10	999.00	0.00	385.6 (1-Lane)
1.300	5.02	999.00	5.02	999.00	0.00	174.3 (2-Lane)
1.300	7.56	999.00	7.56	999.00	0.00	262.7 (1-Lane)
1.400	4.08	999.00	4.08	999.00	0.00	141.9 (2-Lane)
1.400	6.15	999.00	6.15	999.00	0.00	213.8 (1-Lane)
1.500	3.83	999.00	3.83	999.00	0.00	133.1 (2-Lane)
1.500	5.77	999.00	5.77	999.00	0.00	200.5 (1-Lane)
1.600	4.08	999.00	4.08	999.00	0.00	141.9 (2-Lane)
1.600	6.15	999.00	6.15	999.00	0.00	213.8 (1-Lane)
1.700	5.02	999.00	5.02	999.00	0.00	174.3 (2-Lane)
1.700	7.56	999.00	7.56	999.00	0.00	262.7 (1-Lane)
1.800	7.36	999.00	7.36	999.00	0.00	255.9 (2-Lane)
1.800	11.10	999.00	11.10	999.00	0.00	385.6 (1-Lane)
1.900	12.16	999.00	12.16	999.00	0.00	422.6 (2-Lane)
1.900	18.32	999.00	18.32	999.00	0.00	636.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 953

## SHEAR REPORT

Structure I. D.

7777777\_20120905cy01\_01of01

Member I. D.

G05

Rating Type:

I-OPER

Rating Live Load:

SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	113.02	0.00	84.98	0.00	91.67	0.00	68.93



7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.010	164.0	28.9	111.81	0.00	84.07	0.00	90.69	0.00	68.19
0.00									
1.100	134.8	23.6	100.93	0.00	75.88	0.00	81.87	0.00	61.55
0.00									
1.200	102.0	17.7	88.83	0.00	66.79	0.00	72.06	0.00	54.18
0.00									
1.300	68.0	11.8	76.74	0.00	57.70	0.00	62.25	0.00	46.80
0.00									
1.400	34.0	5.9	64.65	0.00	48.61	0.00	52.44	0.00	39.43
0.00									
1.500	0.0	0.0	52.56	0.00	39.52	0.00	42.63	0.00	32.05
0.00									
1.600	-34.0	-5.9	-64.65	0.00	-48.61	0.00	-52.44	0.00	-39.43
0.00									
1.700	-68.0	-11.8	-76.74	0.00	-57.70	0.00	-62.25	0.00	-46.80
0.00									
1.800	-102.0	-17.7	-88.83	0.00	-66.79	0.00	-72.06	0.00	-54.18
0.00									
1.900	-134.8	-23.6	-100.93	0.00	-75.88	0.00	-81.87	0.00	-61.55
0.00									
2.000	-167.2	-29.5	-113.02	0.00	-84.98	0.00	-91.67	0.00	-68.93
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 954

#### STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 955

#### STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU6

		Shear			
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)	
1.000	999.00	6.96	0.00	241.9	(2-Lane)
1.000	999.00	8.58	0.00	298.3	(1-Lane)
1.010	999.00	7.07	0.00	245.7	(2-Lane)
1.010	999.00	8.72	0.00	302.9	(1-Lane)
1.100	186.78	6.93	0.00	240.7	(2-Lane)
1.100	230.26	8.54	0.00	296.8	(1-Lane)
1.200	39.78	4.60	0.00	159.7	(2-Lane)
1.200	49.04	5.67	0.00	196.9	(1-Lane)
1.300	21.42	5.84	0.00	203.0	(2-Lane)
1.300	26.41	7.20	0.00	250.2	(1-Lane)
1.400	14.03	7.55	0.00	262.4	(2-Lane)
1.400	17.30	9.31	0.00	323.5	(1-Lane)
1.500	10.05	10.05	0.00	349.1	(2-Lane)
1.500	12.39	12.39	0.00	430.4	(1-Lane)
1.600	7.55	14.03	0.00	262.4	(2-Lane)
1.600	9.31	17.30	0.00	323.5	(1-Lane)
1.700	5.84	21.42	0.00	203.0	(2-Lane)
1.700	7.20	26.41	0.00	250.2	(1-Lane)
1.800	4.60	39.78	0.00	159.7	(2-Lane)
1.800	5.67	49.04	0.00	196.9	(1-Lane)
1.900	6.93	186.78	0.00	240.7	(2-Lane)
1.900	8.54	230.26	0.00	296.8	(1-Lane)
2.000	6.96	999.00	0.00	241.9	(2-Lane)
2.000	8.58	999.00	0.00	298.3	(1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 956

## SERVICE MOMENT REPORT

**Structure I. D.** 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPE  
Rating Live Load: SU6

Gamma	(2-Lane)				(1-Lane)					
	DC 1.00	DW 1.00	LL 1.00		LL 1.00		LL 1.00			
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
			Truck	Lane	Truck	Lane	Truck	Lane	Truck	Lane
Lane										
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
1.010 0.00	193.4	37.4	91.55 R	0.00	68.83	0.00	60.76 R	0.00	45.68	
1.100 0.00	1934.1	340.3	826.35 R	0.00	621.32	0.00	548.43 R	0.00	412.35	

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.200	3451.8	604.9	1475.69 R	0.00	1109.54	0.00	979.38 R	0.00	736.38
0.00									
1.300	4540.4	794.0	1930.77 R	0.00	1451.70	0.00	1281.40 R	0.00	963.46
0.00									
1.400	5193.5	907.4	2197.79 R	0.00	1652.48	0.00	1458.62 R	0.00	1096.71
0.00									
1.500	5411.2	945.2	2281.58 R	0.00	1715.47	0.00	1514.23 R	0.00	1138.52
0.00									
1.600	5193.5	907.4	2197.79 R	0.00	1652.48	0.00	1458.62 R	0.00	1096.71
0.00									
1.700	4540.4	794.0	1930.77 R	0.00	1451.70	0.00	1281.40 R	0.00	963.46
0.00									
1.800	3451.8	604.9	1475.69 R	0.00	1109.54	0.00	979.38 R	0.00	736.38
0.00									
1.900	1934.1	340.3	826.35 R	0.00	621.32	0.00	548.43 R	0.00	412.35
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 956

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU6  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 957

SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPER  
Rating Live Load: SU6

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	-bend		

1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	597.01	999.00	138.95	999.00	0.00	999.0 (2-Lane)
1.010	899.55	999.00	209.36	999.00	0.00	999.0 (1-Lane)
1.100	49.35	999.00	12.07	999.00	0.00	419.5 (2-Lane)
1.100	74.36	999.00	18.19	999.00	0.00	632.1 (1-Lane)
1.200	25.00	999.00	7.58	999.00	0.00	263.4 (2-Lane)
1.200	37.67	999.00	11.42	999.00	0.00	396.8 (1-Lane)
1.300	15.76	999.00	4.95	999.00	0.00	172.0 (2-Lane)
1.300	23.75	999.00	7.46	999.00	0.00	259.2 (1-Lane)
1.400	12.08	999.00	3.90	999.00	0.00	135.7 (2-Lane)
1.400	18.20	999.00	5.88	999.00	0.00	204.5 (1-Lane)
1.500	11.07	999.00	3.62	999.00	0.00	125.8 (2-Lane)
1.500	16.68	999.00	5.45	999.00	0.00	189.5 (1-Lane)
1.600	12.08	999.00	3.90	999.00	0.00	135.7 (2-Lane)
1.600	18.20	999.00	5.88	999.00	0.00	204.5 (1-Lane)
1.700	15.76	999.00	4.95	999.00	0.00	172.0 (2-Lane)
1.700	23.75	999.00	7.46	999.00	0.00	259.2 (1-Lane)
1.800	25.00	999.00	7.58	999.00	0.00	263.4 (2-Lane)
1.800	37.67	999.00	11.42	999.00	0.00	396.8 (1-Lane)
1.900	49.35	999.00	12.07	999.00	0.00	419.5 (2-Lane)
1.900	74.36	999.00	18.19	999.00	0.00	632.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	241.8	46.8	135.48 R	0.00	101.86	89.91 R
0.00						
1.100	2417.7	425.3	1220.65 R	0.00	917.78	810.11 R
0.00						
1.200	4314.7	756.1	2179.25 R	0.00	1638.53	1446.32 R
0.00						
1.300	5675.4	992.4	2875.80 R	0.00	2162.26	1908.60 R
0.00						
1.400	6491.9	1134.2	3276.68 R	0.00	2463.67	2174.66 R
0.00						
1.500	6764.0	1181.5	3407.10 R	0.00	2561.73	2261.21 R
0.00						
1.600	6491.9	1134.2	3276.68 R	0.00	2463.67	2174.66 R
0.00						
1.700	5675.4	992.4	2875.80 R	0.00	2162.26	1908.60 R
0.00						

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1.800	4314.7	756.1	2179.25 R	0.00	1638.53	0.00	1446.32 R	0.00	1087.46
0.00									
1.900	2417.7	425.3	1220.65 R	0.00	917.78	0.00	810.11 R	0.00	609.11
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12216.7	-12216.7B	11797.6	11797.6	-20162.2	-20162.2
1.600	19743.0C	19743.0	-11836.3	-11836.3B	12117.0	12117.0	-19462.4	-19462.4
1.700	19743.0C	19743.0	-11836.3	-11836.3B	13075.2	13075.2	-18504.2	-18504.2
1.800	19743.0C	19743.0	-13021.9	-13021.9B	14672.1	14672.1	-18092.8	-18092.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	-bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	118.99	999.00	118.99	999.00	0.00	999.0 (2-Lane)
1.010	179.29	999.00	179.29	999.00	0.00	999.0 (1-Lane)
1.100	11.11	999.00	11.11	999.00	0.00	430.7 (2-Lane)
1.100	16.75	999.00	16.75	999.00	0.00	648.9 (1-Lane)
1.200	6.73	999.00	6.73	999.00	0.00	260.9 (2-Lane)
1.200	10.14	999.00	10.14	999.00	0.00	393.1 (1-Lane)
1.300	4.55	999.00	4.55	999.00	0.00	176.2 (2-Lane)
1.300	6.85	999.00	6.85	999.00	0.00	265.5 (1-Lane)

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1.400	3.70	999.00	3.70	999.00	0.00	143.3 (2-Lane)
1.400	5.57	999.00	5.57	999.00	0.00	215.9 (1-Lane)
1.500	3.46	999.00	3.46	999.00	0.00	134.2 (2-Lane)
1.500	5.22	999.00	5.22	999.00	0.00	202.2 (1-Lane)
1.600	3.70	999.00	3.70	999.00	0.00	143.3 (2-Lane)
1.600	5.57	999.00	5.57	999.00	0.00	215.9 (1-Lane)
1.700	4.55	999.00	4.55	999.00	0.00	176.2 (2-Lane)
1.700	6.85	999.00	6.85	999.00	0.00	265.5 (1-Lane)
1.800	6.73	999.00	6.73	999.00	0.00	260.9 (2-Lane)
1.800	10.14	999.00	10.14	999.00	0.00	393.1 (1-Lane)
1.900	11.11	999.00	11.11	999.00	0.00	430.7 (2-Lane)
1.900	16.75	999.00	16.75	999.00	0.00	648.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-OPER  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	123.92	0.00	93.17	0.00	100.51	0.00	75.57
1.010 0.00	164.0	28.9	122.57	0.00	92.16	0.00	99.42	0.00	74.75
1.100 0.00	134.8	23.6	110.43	0.00	83.03	0.00	89.58	0.00	67.35
1.200 0.00	102.0	17.7	96.95	0.00	72.89	0.00	78.64	0.00	59.13
1.300 0.00	68.0	11.8	83.46	0.00	62.76	0.00	67.70	0.00	50.90
1.400 0.00	34.0	5.9	69.98	0.00	52.62	0.00	56.76	0.00	42.68
1.500 0.00	0.0	0.0	56.50	0.00	42.48	0.00	45.83	0.00	34.46
1.600 0.00	-34.0	-5.9	-69.98	0.00	-52.62	0.00	-56.76	0.00	-42.68
1.700 0.00	-68.0	-11.8	-83.46	0.00	-62.76	0.00	-67.70	0.00	-50.90
1.800 0.00	-102.0	-17.7	-96.95	0.00	-72.89	0.00	-78.64	0.00	-59.13
1.900 0.00	-134.8	-23.6	-110.43	0.00	-83.03	0.00	-89.58	0.00	-67.35
2.000 0.00	-167.2	-29.5	-123.92	0.00	-93.17	0.00	-100.51	0.00	-75.57

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
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Member I. D. G05  
Rating Type: I-OPER  
Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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#### STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05  
Rating Type: I-OPER  
Rating Live Load: SU7

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.35	0.00	246.1 (2-Lane)
1.000	999.00	7.83	0.00	303.3 (1-Lane)
1.010	999.00	6.45	0.00	250.0 (2-Lane)
1.010	999.00	7.95	0.00	308.2 (1-Lane)
1.100	218.16	6.33	0.00	245.4 (2-Lane)
1.100	268.95	7.81	0.00	302.5 (1-Lane)
1.200	40.37	4.21	0.00	163.2 (2-Lane)
1.200	49.77	5.19	0.00	201.2 (1-Lane)
1.300	20.58	5.37	0.00	208.1 (2-Lane)
1.300	25.38	6.62	0.00	256.6 (1-Lane)
1.400	13.20	6.98	0.00	270.3 (2-Lane)
1.400	16.28	8.60	0.00	333.2 (1-Lane)

1.500	9.35	9.35	0.00	362.2 (2-Lane)
1.500	11.52	11.52	0.00	446.5 (1-Lane)
1.600	6.98	13.20	0.00	270.3 (2-Lane)
1.600	8.60	16.28	0.00	333.2 (1-Lane)
1.700	5.37	20.58	0.00	208.1 (2-Lane)
1.700	6.62	25.38	0.00	256.6 (1-Lane)
1.800	4.21	40.37	0.00	163.2 (2-Lane)
1.800	5.19	49.77	0.00	201.2 (1-Lane)
1.900	6.33	218.16	0.00	245.4 (2-Lane)
1.900	7.81	268.95	0.00	302.5 (1-Lane)
2.000	6.35	999.00	0.00	246.1 (2-Lane)
2.000	7.83	999.00	0.00	303.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPE  
Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	100.35 R	0.00	75.45	66.60 R
0.00						
1.100	1934.1	340.3	904.18 R	0.00	679.84	600.09 R
0.00						
1.200	3451.8	604.9	1614.26 R	0.00	1213.73	1071.35 R
0.00						
1.300	4540.4	794.0	2130.22 R	0.00	1601.67	1413.78 R
0.00						
1.400	5193.5	907.4	2427.17 R	0.00	1824.94	1610.86 R
0.00						
1.500	5411.2	945.2	2523.78 R	0.00	1897.58	1674.97 R
0.00						
1.600	5193.5	907.4	2427.17 R	0.00	1824.94	1610.86 R
0.00						
1.700	4540.4	794.0	2130.22 R	0.00	1601.67	1413.78 R
0.00						
1.800	3451.8	604.9	1614.26 R	0.00	1213.73	1071.35 R
0.00						
1.900	1934.1	340.3	904.18 R	0.00	679.84	600.08 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05



Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU7  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-OPER  
Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	544.61	999.00	126.75	999.00	0.00	999.0 (2-Lane)
1.010	820.59	999.00	190.98	999.00	0.00	999.0 (1-Lane)
1.100	45.10	999.00	11.03	999.00	0.00	427.6 (2-Lane)
1.100	67.96	999.00	16.62	999.00	0.00	644.2 (1-Lane)
1.200	22.85	999.00	6.93	999.00	0.00	268.5 (2-Lane)
1.200	34.44	999.00	10.44	999.00	0.00	404.5 (1-Lane)
1.300	14.29	999.00	4.49	999.00	0.00	173.9 (2-Lane)
1.300	21.52	999.00	6.76	999.00	0.00	262.0 (1-Lane)
1.400	10.94	999.00	3.54	999.00	0.00	137.0 (2-Lane)
1.400	16.49	999.00	5.33	999.00	0.00	206.5 (1-Lane)
1.500	10.01	999.00	3.27	999.00	0.00	126.8 (2-Lane)
1.500	15.08	999.00	4.93	999.00	0.00	191.0 (1-Lane)
1.600	10.94	999.00	3.54	999.00	0.00	137.0 (2-Lane)
1.600	16.49	999.00	5.33	999.00	0.00	206.5 (1-Lane)
1.700	14.29	999.00	4.49	999.00	0.00	173.9 (2-Lane)
1.700	21.52	999.00	6.76	999.00	0.00	262.0 (1-Lane)
1.800	22.85	999.00	6.93	999.00	0.00	268.5 (2-Lane)
1.800	34.44	999.00	10.44	999.00	0.00	404.5 (1-Lane)

1.900	45.10	999.00	11.03	999.00	0.00	427.6 (2-Lane)
1.900	67.96	999.00	16.62	999.00	0.00	644.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: 3

Gamma	(2-Lane)				(1-Lane)		
	DC 1.25	DW 1.25	LL 1.45	LL 1.45	LL 1.45	LL 1.45	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R		0.00	0.00 R	0.00
1.010	241.8	46.8	97.80 R		73.54	64.91 R	48.80
1.100	2417.7	425.3	884.75 R		665.22	587.19 R	441.49
1.200	4314.7	756.1	1562.18 R		1174.57	1036.78 R	779.54
1.300	5675.4	992.4	2032.30 R		1528.05	1348.79 R	1014.13
1.400	6491.9	1134.2	2310.64 R		1737.32	1533.52 R	1153.02
1.500	6764.0	1181.5	2392.03 R		1798.52	1587.53 R	1193.63
1.600	6491.9	1134.2	2310.64 R		1737.32	1533.52 R	1153.02
1.700	5675.4	992.4	2032.30 R		1528.05	1348.79 R	1014.13
1.800	4314.7	756.1	1562.18 R		1174.57	1036.78 R	779.54
1.900	2417.7	425.3	884.75 R		665.22	587.19 R	441.49
2.000	0.0	0.0	0.00 R		0.00	0.00 R	0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: 3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12211.9	-12211.9B	11797.6	11797.6	-20157.4	-20157.4
1.600	19743.0C	19743.0	-11832.4	-11832.4B	12117.0	12117.0	-19458.4	-19458.4
1.700	19743.0C	19743.0	-11832.4	-11832.4B	13075.2	13075.2	-18500.3	-18500.3
1.800	19743.0C	19743.0	-13009.1	-13009.1B	14672.1	14672.1	-18080.0	-18080.0
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: 3

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	-bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	164.83	999.00	164.83	999.00	0.00	999.0 (2-Lane)
1.010	248.35	999.00	248.35	999.00	0.00	999.0 (1-Lane)
1.100	15.33	999.00	15.33	999.00	0.00	383.3 (2-Lane)
1.100	23.10	999.00	23.10	999.00	0.00	577.6 (1-Lane)
1.200	9.39	999.00	9.39	999.00	0.00	234.8 (2-Lane)
1.200	14.15	999.00	14.15	999.00	0.00	353.8 (1-Lane)
1.300	6.43	999.00	6.43	999.00	0.00	160.8 (2-Lane)
1.300	9.69	999.00	9.69	999.00	0.00	242.3 (1-Lane)
1.400	5.24	999.00	5.24	999.00	0.00	131.1 (2-Lane)
1.400	7.90	999.00	7.90	999.00	0.00	197.5 (1-Lane)
1.500	4.93	999.00	4.93	999.00	0.00	123.3 (2-Lane)
1.500	7.43	999.00	7.43	999.00	0.00	185.8 (1-Lane)
1.600	5.24	999.00	5.24	999.00	0.00	131.1 (2-Lane)
1.600	7.90	999.00	7.90	999.00	0.00	197.5 (1-Lane)
1.700	6.43	999.00	6.43	999.00	0.00	160.8 (2-Lane)
1.700	9.69	999.00	9.69	999.00	0.00	242.3 (1-Lane)
1.800	9.39	999.00	9.39	999.00	0.00	234.8 (2-Lane)
1.800	14.15	999.00	14.15	999.00	0.00	353.8 (1-Lane)
1.900	15.33	999.00	15.33	999.00	0.00	383.3 (2-Lane)
1.900	23.10	999.00	23.10	999.00	0.00	577.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: 3

Gamma			(2-Lane)	(1-Lane)
	DC	DW	LL	LL
	1.25	1.25	1.45	1.45

7777777_20120905cy01_01of01_FlexuralRpt.txt									
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load	Live Load w/impact	Live Load	
w/o impact									
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	89.42		67.23		72.53		54.54
1.010	164.0	28.9	88.48		66.53		71.77		53.96
1.100	134.8	23.6	80.04		60.18		64.93		48.82
1.200	102.0	17.7	70.67		53.13		57.32		43.10
1.300	68.0	11.8	61.29		46.08		49.71		37.38
1.400	34.0	5.9	51.91		39.03		42.11		31.66
1.500	0.0	0.0	42.53		31.98		34.50		25.94
1.600	-34.0	-5.9	-51.91		-39.03		-42.11		-31.66
1.700	-68.0	-11.8	-61.29		-46.08		-49.71		-37.38
1.800	-102.0	-17.7	-70.67		-53.13		-57.32		-43.10
1.900	-134.8	-23.6	-80.04		-60.18		-64.93		-48.82
2.000	-167.2	-29.5	-89.42		-67.23		-72.53		-54.54

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL

Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL

Rating Live Load: 3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	8.80	0.00	220.0 (2-Lane)
1.000	999.00	10.85	0.00	271.2 (1-Lane)
1.010	999.00	8.94	0.00	223.4 (2-Lane)
1.010	999.00	11.02	0.00	275.4 (1-Lane)
1.100	182.07	8.73	0.00	218.4 (2-Lane)
1.100	224.47	10.77	0.00	269.2 (1-Lane)
1.200	44.99	5.78	0.00	144.5 (2-Lane)
1.200	55.47	7.12	0.00	178.1 (1-Lane)
1.300	25.57	7.31	0.00	182.9 (2-Lane)
1.300	31.52	9.02	0.00	225.4 (1-Lane)
1.400	17.13	9.40	0.00	235.1 (2-Lane)
1.400	21.12	11.59	0.00	289.8 (1-Lane)
1.500	12.42	12.42	0.00	310.4 (2-Lane)
1.500	15.31	15.31	0.00	382.7 (1-Lane)
1.600	9.40	17.13	0.00	235.1 (2-Lane)
1.600	11.59	21.12	0.00	289.8 (1-Lane)
1.700	7.31	25.57	0.00	182.9 (2-Lane)
1.700	9.02	31.52	0.00	225.4 (1-Lane)
1.800	5.78	44.99	0.00	144.5 (2-Lane)
1.800	7.12	55.47	0.00	178.1 (1-Lane)
1.900	8.73	182.07	0.00	218.4 (2-Lane)
1.900	10.77	224.47	0.00	269.2 (1-Lane)
2.000	8.80	999.00	0.00	220.0 (2-Lane)
2.000	10.85	999.00	0.00	271.2 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEG

Rating Live Load: 3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	87.36 R	65.69	57.98 R	43.60
1.100	2417.7	425.3	790.32 R	594.22	524.51 R	394.37
1.200	4314.7	756.1	1395.44 R	1049.21	926.12 R	696.33
1.300	5675.4	992.4	1815.38 R	1364.95	1204.83 R	905.89
1.400	6491.9	1134.2	2064.02 R	1551.89	1369.84 R	1029.96
1.500	6764.0	1181.5	2136.72 R	1606.55	1418.09 R	1066.23
1.600	6491.9	1134.2	2064.02 R	1551.89	1369.84 R	1029.96
1.700	5675.4	992.4	1815.38 R	1364.95	1204.83 R	905.89
1.800	4314.7	756.1	1395.44 R	1049.21	926.12 R	696.33
1.900	2417.7	425.3	790.32 R	594.22	524.51 R	394.37

2.000 0.0 0.0 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt 0.00 0.00 R 0.00 R 0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 972

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEGL

Rating Live Load:

Rating Type: 3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEGL

Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	625.58	999.00	145.60	999.00	0.00	999.0 (2-Lane)
1.010	942.60	999.00	219.38	999.00	0.00	999.0 (1-Lane)
1.100	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.100	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
1.200	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.200	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.300	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.300	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.400	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.400	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)

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1.500	11.82	999.00	3.87	999.00	0.00	96.6 (2-Lane)
1.500	17.81	999.00	5.82	999.00	0.00	145.6 (1-Lane)
1.600	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.600	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.700	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.700	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.800	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.800	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.900	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.900	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: 3S2

Gamma	DC		DW		(2-Lane)		(1-Lane)	
	1.25		1.25		LL 1.45		LL 1.45	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00
1.010	241.8	46.8	144.61 R		108.73	95.98 R		72.16
1.100	2417.7	425.3	1296.88 R		975.10	860.71 R		647.15
1.200	4314.7	756.1	2262.06 R		1700.79	1501.28 R		1128.78
1.300	5675.4	992.4	2967.01 R		2230.83	1969.14 R		1480.55
1.400	6491.9	1134.2	3365.12 R		2530.16	2233.35 R		1679.21
1.500	6764.0	1181.5	3457.42 R		2599.56	2294.61 R		1725.27
1.600	6491.9	1134.2	3365.12 R		2530.16	2233.35 R		1679.21
1.700	5675.4	992.4	2967.01 R		2230.83	1969.13 R		1480.55
1.800	4314.7	756.1	2262.06 R		1700.79	1501.28 R		1128.78
1.900	2417.7	425.3	1296.88 R		975.10	860.71 R		647.15
2.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12195.7	-12195.7B	11797.6	11797.6	-20141.2	-20141.2
1.600	19743.0C	19743.0	-11819.8	-11819.8B	12117.0	12117.0	-19445.9	-19445.9
1.700	19743.0C	19743.0	-11819.8	-11819.8B	13075.2	13075.2	-18487.7	-18487.7
1.800	19743.0C	19743.0	-13009.3	-13009.3B	14672.1	14672.1	-18080.2	-18080.2
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL

Rating Live Load: 3S2

Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	111.47	999.00	111.47	999.00	0.00	999.0 (2-Lane)
1.010	167.96	999.00	167.96	999.00	0.00	999.0 (1-Lane)
1.100	10.46	999.00	10.46	999.00	0.00	418.4 (2-Lane)
1.100	15.76	999.00	15.76	999.00	0.00	630.5 (1-Lane)
1.200	6.49	999.00	6.49	999.00	0.00	259.4 (2-Lane)
1.200	9.77	999.00	9.77	999.00	0.00	390.9 (1-Lane)
1.300	4.41	999.00	4.41	999.00	0.00	176.3 (2-Lane)
1.300	6.64	999.00	6.64	999.00	0.00	265.6 (1-Lane)
1.400	3.60	999.00	3.60	999.00	0.00	144.0 (2-Lane)
1.400	5.43	999.00	5.43	999.00	0.00	217.0 (1-Lane)
1.500	3.41	999.00	3.41	999.00	0.00	136.5 (2-Lane)
1.500	5.14	999.00	5.14	999.00	0.00	205.7 (1-Lane)
1.600	3.60	999.00	3.60	999.00	0.00	144.0 (2-Lane)
1.600	5.43	999.00	5.43	999.00	0.00	217.0 (1-Lane)
1.700	4.41	999.00	4.41	999.00	0.00	176.3 (2-Lane)
1.700	6.64	999.00	6.64	999.00	0.00	265.6 (1-Lane)
1.800	6.49	999.00	6.49	999.00	0.00	259.4 (2-Lane)
1.800	9.77	999.00	9.77	999.00	0.00	390.9 (1-Lane)
1.900	10.46	999.00	10.46	999.00	0.00	418.4 (2-Lane)
1.900	15.76	999.00	15.76	999.00	0.00	630.5 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT



Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	132.33	99.50	107.34	80.71
1.010	164.0	28.9	130.83	98.37	106.13	79.79
1.100	134.8	23.6	117.33	88.22	95.17	71.56
1.200	102.0	17.7	102.32	76.94	83.00	62.41
1.300	68.0	11.8	87.32	65.65	70.83	53.25
1.400	34.0	5.9	72.32	54.37	58.66	44.10
1.500	0.0	0.0	57.31	43.09	46.49	34.95
1.600	-34.0	-5.9	-72.32	-54.37	-58.66	-44.10
1.700	-68.0	-11.8	-87.32	-65.65	-70.83	-53.25
1.800	-102.0	-17.7	-102.32	-76.94	-83.00	-62.41
1.900	-134.8	-23.6	-117.33	-88.22	-95.17	-71.56
2.000	-167.2	-29.5	-132.33	-99.50	-107.34	-80.71

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL

Rating Live Load: 3S2

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.95	0.00	237.8 (2-Lane)
1.000	999.00	7.33	0.00	293.2 (1-Lane)
1.010	999.00	6.04	0.00	241.7 (2-Lane)
1.010	999.00	7.45	0.00	298.0 (1-Lane)
1.100	182.07	5.96	0.00	238.4 (2-Lane)
1.100	224.47	7.35	0.00	293.9 (1-Lane)
1.200	47.78	3.99	0.00	159.6 (2-Lane)
1.200	58.90	4.92	0.00	196.8 (1-Lane)
1.300	22.26	5.13	0.00	205.3 (2-Lane)
1.300	27.45	6.33	0.00	253.2 (1-Lane)
1.400	13.43	6.75	0.00	270.0 (2-Lane)
1.400	16.55	8.32	0.00	332.9 (1-Lane)
1.500	9.21	9.21	0.00	368.6 (2-Lane)
1.500	11.36	11.36	0.00	454.4 (1-Lane)
1.600	6.75	13.43	0.00	270.0 (2-Lane)
1.600	8.32	16.55	0.00	332.9 (1-Lane)
1.700	5.13	22.26	0.00	205.3 (2-Lane)
1.700	6.33	27.45	0.00	253.2 (1-Lane)
1.800	3.99	47.78	0.00	159.6 (2-Lane)
1.800	4.92	58.90	0.00	196.8 (1-Lane)
1.900	5.96	182.07	0.00	238.4 (2-Lane)
1.900	7.35	224.47	0.00	293.9 (1-Lane)
2.000	5.95	999.00	0.00	237.8 (2-Lane)
2.000	7.33	999.00	0.00	293.2 (1-Lane)

SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEG

Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck

Lane

1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	129.18 R	97.13	85.73 R	64.46
1.100	2417.7	425.3	1158.46 R	871.02	768.84 R	578.08
1.200	4314.7	756.1	2020.62 R	1519.26	1341.04 R	1008.30
1.300	5675.4	992.4	2650.33 R	1992.73	1758.96 R	1322.53
1.400	6491.9	1134.2	3005.94 R	2260.11	1994.98 R	1499.98
1.500	6764.0	1181.5	3088.39 R	2322.10	2049.69 R	1541.12
1.600	6491.9	1134.2	3005.94 R	2260.11	1994.98 R	1499.98
1.700	5675.4	992.4	2650.33 R	1992.73	1758.96 R	1322.53
1.800	4314.7	756.1	2020.62 R	1519.26	1341.04 R	1008.30
1.900	2417.7	425.3	1158.46 R	871.02	768.84 R	578.08
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEGL

Rating Live Load:

Rating Type: 3S2

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEGL

Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	423.08	999.00	98.47	999.00	0.00	999.0 (2-Lane)

1.010	637.48	999.00	148.37	999.00	0.00	999.0 (1-Lane)
1.100	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.100	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
1.200	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.200	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.300	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.300	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.400	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.400	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.500	8.18	999.00	2.67	999.00	0.00	107.0 (2-Lane)
1.500	12.32	999.00	4.03	999.00	0.00	161.2 (1-Lane)
1.600	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.600	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.700	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.700	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.800	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.800	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.900	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.900	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: 3-3

Gamma	DC		DW		(2-Lane) LL		(1-Lane) LL		
	1.25	1.25		1.45		1.45		1.45	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00	
1.010	241.8	46.8	139.44 R		104.84	92.54 R		69.58	
1.100	2417.7	425.3	1245.08 R		936.15	826.33 R		621.30	
1.200	4314.7	756.1	2168.82 R		1630.69	1439.40 R		1082.25	
1.300	5675.4	992.4	2791.94 R		2099.20	1852.94 R		1393.19	
1.400	6491.9	1134.2	3166.22 R		2380.61	2101.35 R		1579.96	
1.500	6764.0	1181.5	3291.67 R		2474.94	2184.60 R		1642.56	
1.600	6491.9	1134.2	3166.22 R		2380.61	2101.35 R		1579.96	
1.700	5675.4	992.4	2791.94 R		2099.20	1852.94 R		1393.19	
1.800	4314.7	756.1	2168.82 R		1630.69	1439.40 R		1082.25	
1.900	2417.7	425.3	1245.08 R		936.15	826.33 R		621.30	
2.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00	

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05  
 Rating Type: I-LEGL  
 Rating Live Load: 3-3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12211.1	-12211.1B	11797.6	11797.6	-20156.6	-20156.6
1.600	19743.0C	19743.0	-11834.9	-11834.9B	12117.0	12117.0	-19461.0	-19461.0
1.700	19743.0C	19743.0	-11834.9	-11834.9B	13075.2	13075.2	-18502.8	-18502.8
1.800	19743.0C	19743.0	-12991.8	-12991.8B	14672.1	14672.1	-18062.6	-18062.6
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G05  
 Rating Type: I-LEGL  
 Rating Live Load: 3-3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	115.61	999.00	115.61	999.00	0.00	999.0 (2-Lane)
1.010	174.20	999.00	174.20	999.00	0.00	999.0 (1-Lane)
1.100	10.90	999.00	10.90	999.00	0.00	435.8 (2-Lane)
1.100	16.42	999.00	16.42	999.00	0.00	656.7 (1-Lane)
1.200	6.76	999.00	6.76	999.00	0.00	270.6 (2-Lane)
1.200	10.19	999.00	10.19	999.00	0.00	407.7 (1-Lane)
1.300	4.68	999.00	4.68	999.00	0.00	187.3 (2-Lane)
1.300	7.06	999.00	7.06	999.00	0.00	282.3 (1-Lane)
1.400	3.83	999.00	3.83	999.00	0.00	153.1 (2-Lane)
1.400	5.77	999.00	5.77	999.00	0.00	230.7 (1-Lane)
1.500	3.58	999.00	3.58	999.00	0.00	143.4 (2-Lane)
1.500	5.40	999.00	5.40	999.00	0.00	216.0 (1-Lane)
1.600	3.83	999.00	3.83	999.00	0.00	153.1 (2-Lane)
1.600	5.77	999.00	5.77	999.00	0.00	230.7 (1-Lane)
1.700	4.68	999.00	4.68	999.00	0.00	187.3 (2-Lane)
1.700	7.06	999.00	7.06	999.00	0.00	282.3 (1-Lane)
1.800	6.76	999.00	6.76	999.00	0.00	270.6 (2-Lane)
1.800	10.19	999.00	10.19	999.00	0.00	407.7 (1-Lane)

1.900	10.90	999.00	10.90	999.00	0.00	435.8 (2-Lane)
1.900	16.42	999.00	16.42	999.00	0.00	656.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load Truck
Lane						
1.000	167.2	29.5	127.65	95.98	103.54	77.85
1.010	164.0	28.9	126.15	94.85	102.32	76.94
1.100	134.8	23.6	112.64	84.69	91.37	68.70
1.200	102.0	17.7	97.64	73.41	79.20	59.55
1.300	68.0	11.8	82.63	62.13	67.03	50.40
1.400	34.0	5.9	67.63	50.85	54.86	41.25
1.500	0.0	0.0	52.62	39.57	42.69	32.09
1.600	-34.0	-5.9	-67.63	-50.85	-54.86	-41.25
1.700	-68.0	-11.8	-82.63	-62.13	-67.03	-50.40
1.800	-102.0	-17.7	-97.64	-73.41	-79.20	-59.55
1.900	-134.8	-23.6	-112.64	-84.69	-91.37	-68.70
2.000	-167.2	-29.5	-127.65	-95.98	-103.54	-77.85

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)

1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL

Rating Live Load: 3-3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.16	0.00	246.6 (2-Lane)
1.000	999.00	7.60	0.00	304.0 (1-Lane)
1.010	999.00	6.27	0.00	250.7 (2-Lane)
1.010	999.00	7.73	0.00	309.1 (1-Lane)
1.100	221.09	6.21	0.00	248.3 (2-Lane)
1.100	272.57	7.65	0.00	306.1 (1-Lane)
1.200	53.53	4.18	0.00	167.3 (2-Lane)
1.200	66.00	5.16	0.00	206.2 (1-Lane)
1.300	25.92	5.43	0.00	217.0 (2-Lane)
1.300	31.95	6.69	0.00	267.5 (1-Lane)
1.400	15.10	7.22	0.00	288.7 (2-Lane)
1.400	18.61	8.90	0.00	356.0 (1-Lane)
1.500	10.03	10.03	0.00	401.4 (2-Lane)
1.500	12.37	12.37	0.00	494.8 (1-Lane)
1.600	7.22	15.10	0.00	288.7 (2-Lane)
1.600	8.90	18.61	0.00	356.0 (1-Lane)
1.700	5.43	25.92	0.00	217.0 (2-Lane)
1.700	6.69	31.95	0.00	267.5 (1-Lane)
1.800	4.18	53.53	0.00	167.3 (2-Lane)
1.800	5.16	66.00	0.00	206.2 (1-Lane)
1.900	6.21	221.09	0.00	248.3 (2-Lane)
1.900	7.65	272.57	0.00	306.1 (1-Lane)
2.000	6.16	999.00	0.00	246.6 (2-Lane)
2.000	7.60	999.00	0.00	304.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05  
 Rating Type: II-LEG  
 Rating Live Load: 3-3

Gamma	DC		DW		(2-Lane)		(1-Lane)	
	1.00		1.00		LL 1.30		LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00	0.00	0.00
1.010	241.8	46.8	124.55 R	93.65	82.66 R	62.15	62.15	62.15
1.100	2417.7	425.3	1112.19 R	836.23	738.14 R	554.99	554.99	554.99
1.200	4314.7	756.1	1937.34 R	1456.64	1285.77 R	966.74	966.74	966.74
1.300	5675.4	992.4	2493.94 R	1875.14	1655.17 R	1244.49	1244.49	1244.49
1.400	6491.9	1134.2	2828.27 R	2126.52	1877.06 R	1411.32	1411.32	1411.32
1.500	6764.0	1181.5	2940.33 R	2210.78	1951.43 R	1467.24	1467.24	1467.24
1.600	6491.9	1134.2	2828.27 R	2126.52	1877.06 R	1411.32	1411.32	1411.32
1.700	5675.4	992.4	2493.94 R	1875.14	1655.17 R	1244.49	1244.49	1244.49
1.800	4314.7	756.1	1937.34 R	1456.64	1285.77 R	966.74	966.74	966.74
1.900	2417.7	425.3	1112.19 R	836.23	738.14 R	554.99	554.99	554.99
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00	0.00	0.00

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 SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05  
 Rating Type: II-LEGL  
 Rating Live Load:

Rating Type: 3-3  
 Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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 SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05  
 Rating Type: II-LEGL  
 Rating Live Load: 3-3



Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	438.80	999.00	102.13	999.00	0.00	999.0 (2-Lane)
1.010	661.17	999.00	153.88	999.00	0.00	999.0 (1-Lane)
1.100	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.100	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
1.200	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.200	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.300	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.300	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.400	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.400	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.500	8.59	999.00	2.81	999.00	0.00	112.3 (2-Lane)
1.500	12.95	999.00	4.23	999.00	0.00	169.3 (1-Lane)
1.600	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.600	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.700	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.700	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.800	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.800	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.900	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.900	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: SU4

Gamma	DC		DW		(2-Lane) LL 1.20		(1-Lane) LL 1.20	
	1.25		1.25					
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00
1.010	241.8	46.8	88.06 R		66.21	58.44 R		43.94
1.100	2417.7	425.3	797.15 R		599.36	529.05 R		397.78
1.200	4314.7	756.1	1408.87 R		1059.30	935.03 R		703.03
1.300	5675.4	992.4	1835.14 R		1379.80	1217.94 R		915.74
1.400	6491.9	1134.2	2095.71 R		1575.72	1390.87 R		1045.77
1.500	6764.0	1181.5	2174.27 R		1634.79	1443.01 R		1084.97
1.600	6491.9	1134.2	2095.71 R		1575.72	1390.87 R		1045.77
1.700	5675.4	992.4	1835.14 R		1379.80	1217.94 R		915.74

1.800	4314.7	756.1	7777777_20120905cy01_01of01_FlexuralRpt.txt	1408.87 R	1059.30	935.03 R	703.03
1.900	2417.7	425.3		797.15 R	599.36	529.05 R	397.78
2.000	0.0	0.0		0.00 R	0.00	0.00 R	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL

Rating Live Load: SU4

Span	Positive Top	Moment Bending Bott.	Resistance Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Top	Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12218.6	-12218.6B	11797.6	11797.6	-20164.1	-20164.1
1.600	19743.0C	19743.0	-11835.8	-11835.8B	12117.0	12117.0	-19461.8	-19461.8
1.700	19743.0C	19743.0	-11835.8	-11835.8B	13075.2	13075.2	-18503.7	-18503.7
1.800	19743.0C	19743.0	-13015.6	-13015.6B	14672.1	14672.1	-18086.5	-18086.5
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL

Rating Live Load: SU4

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	183.07	999.00	183.07	999.00	0.00	999.0 (2-Lane)
1.010	275.84	999.00	275.84	999.00	0.00	999.0 (1-Lane)
1.100	17.02	999.00	17.02	999.00	0.00	459.5 (2-Lane)
1.100	25.64	999.00	25.64	999.00	0.00	692.4 (1-Lane)
1.200	10.41	999.00	10.41	999.00	0.00	281.2 (2-Lane)
1.200	15.69	999.00	15.69	999.00	0.00	423.7 (1-Lane)
1.300	7.12	999.00	7.12	999.00	0.00	192.4 (2-Lane)
1.300	10.73	999.00	10.73	999.00	0.00	289.9 (1-Lane)
1.400	5.78	999.00	5.78	999.00	0.00	156.1 (2-Lane)
1.400	8.71	999.00	8.71	999.00	0.00	235.2 (1-Lane)

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1.500	5.43	999.00	5.43	999.00	0.00	146.5 (2-Lane)
1.500	8.18	999.00	8.18	999.00	0.00	220.7 (1-Lane)
1.600	5.78	999.00	5.78	999.00	0.00	156.1 (2-Lane)
1.600	8.71	999.00	8.71	999.00	0.00	235.2 (1-Lane)
1.700	7.12	999.00	7.12	999.00	0.00	192.4 (2-Lane)
1.700	10.73	999.00	10.73	999.00	0.00	289.9 (1-Lane)
1.800	10.41	999.00	10.41	999.00	0.00	281.2 (2-Lane)
1.800	15.69	999.00	15.69	999.00	0.00	423.7 (1-Lane)
1.900	17.02	999.00	17.02	999.00	0.00	459.5 (2-Lane)
1.900	25.64	999.00	25.64	999.00	0.00	692.4 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	80.51	60.53	65.30	49.10
1.010	164.0	28.9	79.67	59.90	64.62	48.59
1.100	134.8	23.6	72.12	54.22	58.50	43.98
1.200	102.0	17.7	63.73	47.92	51.69	38.87
1.300	68.0	11.8	55.34	41.61	44.89	33.75
1.400	34.0	5.9	46.95	35.30	38.09	28.64
1.500	0.0	0.0	38.57	29.00	31.28	23.52
1.600	-34.0	-5.9	-46.95	-35.30	-38.09	-28.64
1.700	-68.0	-11.8	-55.34	-41.61	-44.89	-33.75
1.800	-102.0	-17.7	-63.73	-47.92	-51.69	-38.87
1.900	-134.8	-23.6	-72.12	-54.22	-58.50	-43.98
2.000	-167.2	-29.5	-80.51	-60.53	-65.30	-49.10

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
------	------------------------	--------------------------------------	-----

1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: SU4

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	9.77	0.00	263.9 (2-Lane)
1.000	999.00	12.05	0.00	325.3 (1-Lane)
1.010	999.00	9.92	0.00	268.0 (2-Lane)
1.010	999.00	12.23	0.00	330.3 (1-Lane)
1.100	193.77	9.69	0.00	261.8 (2-Lane)
1.100	238.89	11.95	0.00	322.7 (1-Lane)
1.200	48.34	6.41	0.00	173.0 (2-Lane)
1.200	59.59	7.90	0.00	213.3 (1-Lane)
1.300	27.90	8.10	0.00	218.7 (2-Lane)
1.300	34.39	9.99	0.00	269.6 (1-Lane)
1.400	18.82	10.40	0.00	280.7 (2-Lane)
1.400	23.20	12.82	0.00	346.1 (1-Lane)
1.500	13.69	13.69	0.00	369.7 (2-Lane)
1.500	16.88	16.88	0.00	455.8 (1-Lane)
1.600	10.40	18.82	0.00	280.7 (2-Lane)
1.600	12.82	23.20	0.00	346.1 (1-Lane)
1.700	8.10	27.90	0.00	218.7 (2-Lane)
1.700	9.99	34.39	0.00	269.6 (1-Lane)
1.800	6.41	48.34	0.00	173.0 (2-Lane)
1.800	7.90	59.59	0.00	213.3 (1-Lane)
1.900	9.69	193.77	0.00	261.8 (2-Lane)
1.900	11.95	238.89	0.00	322.7 (1-Lane)

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2.000	9.77	999.00	0.00	263.9 (2-Lane)
2.000	12.05	999.00	0.00	325.3 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEG  
Rating Live Load: SU4

Gamma	(2-Lane)				(1-Lane)	
	DC 1.00	DW 1.00	LL 1.30	LL 1.30	LL 1.30	LL 1.30
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
impact		Dead Load	Truck	Lane	Truck	Lane
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	94.98 R	71.41	63.03 R	47.39
1.100	2417.7	425.3	859.76 R	646.44	570.60 R	429.02
1.200	4314.7	756.1	1519.52 R	1142.49	1008.47 R	758.25
1.300	5675.4	992.4	1979.27 R	1488.17	1313.60 R	987.67
1.400	6491.9	1134.2	2260.31 R	1699.48	1500.11 R	1127.90
1.500	6764.0	1181.5	2345.04 R	1763.19	1556.35 R	1170.19
1.600	6491.9	1134.2	2260.31 R	1699.48	1500.11 R	1127.90
1.700	5675.4	992.4	1979.27 R	1488.17	1313.60 R	987.67
1.800	4314.7	756.1	1519.52 R	1142.49	1008.47 R	758.25
1.900	2417.7	425.3	859.76 R	646.44	570.60 R	429.02
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 996

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEGL  
Rating Live Load:

Rating Type: SU4  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEGL  
Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	575.45	999.00	133.93	999.00	0.00	999.0 (2-Lane)
1.010	867.06	999.00	201.80	999.00	0.00	999.0 (1-Lane)
1.100	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.100	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
1.200	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.200	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.300	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.300	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.400	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.400	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.500	10.77	999.00	3.52	999.00	0.00	95.1 (2-Lane)
1.500	16.23	999.00	5.31	999.00	0.00	143.3 (1-Lane)
1.600	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.600	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.700	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.700	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.800	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.800	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.900	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.900	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: SU5

Gamma	DC		(2-Lane)		(1-Lane)	
	1.25	DW 1.25	LL 1.20	LL 1.20	LL 1.20	LL 1.20
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o

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impact

Lane	Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00	0.00	0.00
1.010	241.8	46.8	100.11 R	75.27	66.44 R	49.96		
1.100	2417.7	425.3	905.33 R	680.70	600.85 R	451.77		
1.200	4314.7	756.1	1597.76 R	1201.32	1060.40 R	797.29		
1.300	5675.4	992.4	2084.13 R	1567.02	1383.19 R	1039.99		
1.400	6491.9	1134.2	2377.33 R	1787.47	1577.78 R	1186.30		
1.500	6764.0	1181.5	2457.62 R	1847.83	1631.07 R	1226.36		
1.600	6491.9	1134.2	2377.33 R	1787.47	1577.78 R	1186.30		
1.700	5675.4	992.4	2084.13 R	1567.02	1383.19 R	1039.99		
1.800	4314.7	756.1	1597.76 R	1201.32	1060.40 R	797.29		
1.900	2417.7	425.3	905.33 R	680.70	600.85 R	451.77		
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00		

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: SU5

Span	Positive Top	Moment Bending Bott.	Resistance Negative Top	Bending Bott.	Available Resistance for LL+I Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12213.4	-12213.4B	11797.6	11797.6	-20158.9	-20158.9
1.600	19743.0C	19743.0	-11831.5	-11831.5B	12117.0	12117.0	-19457.6	-19457.6
1.700	19743.0C	19743.0	-11831.5	-11831.5B	13075.2	13075.2	-18499.4	-18499.4
1.800	19743.0C	19743.0	-13014.6	-13014.6B	14672.1	14672.1	-18085.5	-18085.5
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: SU5

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	161.02	999.00	161.02	999.00	0.00	999.0 (2-Lane)

1.010	242.62	999.00	242.62	999.00	0.00	999.0 (1-Lane)
1.100	14.98	999.00	14.98	999.00	0.00	464.5 (2-Lane)
1.100	22.58	999.00	22.58	999.00	0.00	699.9 (1-Lane)
1.200	9.18	999.00	9.18	999.00	0.00	284.7 (2-Lane)
1.200	13.84	999.00	13.84	999.00	0.00	428.9 (1-Lane)
1.300	6.27	999.00	6.27	999.00	0.00	194.5 (2-Lane)
1.300	9.45	999.00	9.45	999.00	0.00	293.0 (1-Lane)
1.400	5.10	999.00	5.10	999.00	0.00	158.0 (2-Lane)
1.400	7.68	999.00	7.68	999.00	0.00	238.1 (1-Lane)
1.500	4.80	999.00	4.80	999.00	0.00	148.8 (2-Lane)
1.500	7.23	999.00	7.23	999.00	0.00	224.2 (1-Lane)
1.600	5.10	999.00	5.10	999.00	0.00	158.0 (2-Lane)
1.600	7.68	999.00	7.68	999.00	0.00	238.1 (1-Lane)
1.700	6.27	999.00	6.27	999.00	0.00	194.5 (2-Lane)
1.700	9.45	999.00	9.45	999.00	0.00	293.0 (1-Lane)
1.800	9.18	999.00	9.18	999.00	0.00	284.7 (2-Lane)
1.800	13.84	999.00	13.84	999.00	0.00	428.9 (1-Lane)
1.900	14.98	999.00	14.98	999.00	0.00	464.5 (2-Lane)
1.900	22.58	999.00	22.58	999.00	0.00	699.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	91.54	68.82	74.25	55.83
1.010	164.0	28.9	90.57	68.10	73.47	55.24
1.100	134.8	23.6	81.91	61.58	66.44	49.95
1.200	102.0	17.7	72.27	54.34	58.63	44.08
1.300	68.0	11.8	62.64	47.10	50.81	38.21
1.400	34.0	5.9	53.01	39.86	43.00	32.33
1.500	0.0	0.0	43.38	32.62	35.19	26.46
1.600	-34.0	-5.9	-53.01	-39.86	-43.00	-32.33
1.700	-68.0	-11.8	-62.64	-47.10	-50.81	-38.21
1.800	-102.0	-17.7	-72.27	-54.34	-58.63	-44.08
1.900	-134.8	-23.6	-81.91	-61.58	-66.44	-49.95
2.000	-167.2	-29.5	-91.54	-68.82	-74.25	-55.83

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01



Member I. D. G05  
 Rating Type: I-LEGL  
 Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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 STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05  
 Rating Type: I-LEGL  
 Rating Live Load: SU5

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	8.60	0.00	266.5 (2-Lane)
1.000	999.00	10.60	0.00	328.5 (1-Lane)
1.010	999.00	8.73	0.00	270.6 (2-Lane)
1.010	999.00	10.76	0.00	333.6 (1-Lane)
1.100	182.91	8.54	0.00	264.6 (2-Lane)
1.100	225.50	10.52	0.00	326.3 (1-Lane)
1.200	44.71	5.65	0.00	175.2 (2-Lane)
1.200	55.12	6.97	0.00	215.9 (1-Lane)
1.300	25.20	7.16	0.00	221.8 (2-Lane)
1.300	31.07	8.82	0.00	273.5 (1-Lane)
1.400	16.83	9.21	0.00	285.5 (2-Lane)
1.400	20.75	11.35	0.00	351.9 (1-Lane)
1.500	12.17	12.17	0.00	377.3 (2-Lane)
1.500	15.01	15.01	0.00	465.2 (1-Lane)

1.600	9.21	16.83	0.00	285.5 (2-Lane)
1.600	11.35	20.75	0.00	351.9 (1-Lane)
1.700	7.16	25.20	0.00	221.8 (2-Lane)
1.700	8.82	31.07	0.00	273.5 (1-Lane)
1.800	5.65	44.71	0.00	175.2 (2-Lane)
1.800	6.97	55.12	0.00	215.9 (1-Lane)
1.900	8.54	182.91	0.00	264.6 (2-Lane)
1.900	10.52	225.50	0.00	326.3 (1-Lane)
2.000	8.60	999.00	0.00	266.5 (2-Lane)
2.000	10.60	999.00	0.00	328.5 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEG  
Rating Live Load: SU5

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	107.98 R	81.19	71.66 R	53.88
1.100	2417.7	425.3	976.44 R	734.16	648.04 R	487.25
1.200	4314.7	756.1	1723.24 R	1295.67	1143.68 R	859.91
1.300	5675.4	992.4	2247.82 R	1690.09	1491.83 R	1121.67
1.400	6491.9	1134.2	2564.05 R	1927.85	1701.70 R	1279.47
1.500	6764.0	1181.5	2650.64 R	1992.96	1759.17 R	1322.68
1.600	6491.9	1134.2	2564.05 R	1927.85	1701.70 R	1279.47
1.700	5675.4	992.4	2247.82 R	1690.09	1491.83 R	1121.67
1.800	4314.7	756.1	1723.24 R	1295.67	1143.68 R	859.91
1.900	2417.7	425.3	976.44 R	734.16	648.04 R	487.25
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEGL  
Rating Live Load:

Rating Type: SU5  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0

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1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1005  
SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEGL  
Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	506.16	999.00	117.80	999.00	0.00	999.0 (2-Lane)
1.010	762.66	999.00	177.50	999.00	0.00	999.0 (1-Lane)
1.100	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.100	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
1.200	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.200	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.300	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.300	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.400	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.400	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.500	9.53	999.00	3.12	999.00	0.00	96.6 (2-Lane)
1.500	14.36	999.00	4.69	999.00	0.00	145.5 (1-Lane)
1.600	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.600	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.700	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.700	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.800	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.800	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.900	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.900	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1006  
MOMENT REPORT

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 Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05  
 Rating Type: I-LEGL  
 Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	110.34 R	82.96	73.23 R	55.06
1.100	2417.7	425.3	996.03 R	748.90	661.04 R	497.02
1.200	4314.7	756.1	1778.70 R	1337.37	1180.49 R	887.58
1.300	5675.4	992.4	2327.22 R	1749.79	1544.52 R	1161.29
1.400	6491.9	1134.2	2649.07 R	1991.79	1758.13 R	1321.90
1.500	6764.0	1181.5	2750.07 R	2067.72	1825.16 R	1372.30
1.600	6491.9	1134.2	2649.07 R	1991.79	1758.13 R	1321.90
1.700	5675.4	992.4	2327.22 R	1749.79	1544.52 R	1161.29
1.800	4314.7	756.1	1778.70 R	1337.37	1180.49 R	887.58
1.900	2417.7	425.3	996.03 R	748.89	661.04 R	497.02
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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 STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05  
 Rating Type: I-LEGL  
 Rating Live Load: SU6

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12214.9	-12214.9B	11797.6	11797.6	-20160.4	-20160.4
1.600	19743.0C	19743.0	-11834.9	-11834.9B	12117.0	12117.0	-19460.9	-19460.9
1.700	19743.0C	19743.0	-11834.9	-11834.9B	13075.2	13075.2	-18502.7	-18502.7
1.800	19743.0C	19743.0	-13013.8	-13013.8B	14672.1	14672.1	-18084.7	-18084.7
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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 MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05  
 Rating Type: I-LEGL  
 Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	146.10	999.00	146.10	999.00	0.00	999.0 (2-Lane)
1.010	220.13	999.00	220.13	999.00	0.00	999.0 (1-Lane)
1.100	13.62	999.00	13.62	999.00	0.00	473.3 (2-Lane)
1.100	20.52	999.00	20.52	999.00	0.00	713.2 (1-Lane)
1.200	8.25	999.00	8.25	999.00	0.00	286.6 (2-Lane)
1.200	12.43	999.00	12.43	999.00	0.00	431.9 (1-Lane)
1.300	5.62	999.00	5.62	999.00	0.00	195.2 (2-Lane)
1.300	8.47	999.00	8.47	999.00	0.00	294.2 (1-Lane)
1.400	4.57	999.00	4.57	999.00	0.00	158.9 (2-Lane)
1.400	6.89	999.00	6.89	999.00	0.00	239.5 (1-Lane)
1.500	4.29	999.00	4.29	999.00	0.00	149.1 (2-Lane)
1.500	6.46	999.00	6.46	999.00	0.00	224.6 (1-Lane)
1.600	4.57	999.00	4.57	999.00	0.00	158.9 (2-Lane)
1.600	6.89	999.00	6.89	999.00	0.00	239.5 (1-Lane)
1.700	5.62	999.00	5.62	999.00	0.00	195.2 (2-Lane)
1.700	8.47	999.00	8.47	999.00	0.00	294.2 (1-Lane)
1.800	8.25	999.00	8.25	999.00	0.00	286.6 (2-Lane)
1.800	12.43	999.00	12.43	999.00	0.00	431.9 (1-Lane)
1.900	13.62	999.00	13.62	999.00	0.00	473.3 (2-Lane)
1.900	20.52	999.00	20.52	999.00	0.00	713.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: SU6

Gamma	DC		DW		(2-Lane) LL 1.20		(1-Lane) LL 1.20	
	1.25		1.25					
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load		
w/o impact		Dead Load	Truck	Truck	Lane	Truck	Lane	Truck
Lane								
1.000	167.2	29.5	100.91	75.87		81.85		61.54
1.010	164.0	28.9	99.83	75.06		80.97		60.88
1.100	134.8	23.6	90.11	67.75		73.09		54.96
1.200	102.0	17.7	79.32	59.64		64.34		48.37
1.300	68.0	11.8	68.52	51.52		55.58		41.79
1.400	34.0	5.9	57.72	43.40		46.82		35.20
1.500	0.0	0.0	46.93	35.28		38.06		28.62
1.600	-34.0	-5.9	-57.72	-43.40		-46.82		-35.20
1.700	-68.0	-11.8	-68.52	-51.52		-55.58		-41.79

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1.800	-102.0	-17.7	-79.32	-59.64	-64.34
1.900	-134.8	-23.6	-90.11	-67.75	-73.09
2.000	-167.2	-29.5	-100.91	-75.87	-81.85
					-48.37
					-54.96
					-61.54

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: SU6

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.80	0.00	271.0 (2-Lane)
1.000	999.00	9.61	0.00	334.1 (1-Lane)
1.010	999.00	7.92	0.00	275.2 (2-Lane)
1.010	999.00	9.76	0.00	339.3 (1-Lane)
1.100	209.20	7.76	0.00	269.6 (2-Lane)

1.100	257.90	9.57	0.00	332.4 (1-Lane)
1.200	44.56	5.15	0.00	178.9 (2-Lane)
1.200	54.93	6.35	0.00	220.6 (1-Lane)
1.300	23.99	6.54	0.00	227.3 (2-Lane)
1.300	29.58	8.06	0.00	280.3 (1-Lane)
1.400	15.72	8.46	0.00	293.9 (2-Lane)
1.400	19.38	10.43	0.00	362.3 (1-Lane)
1.500	11.25	11.25	0.00	391.0 (2-Lane)
1.500	13.87	13.87	0.00	482.1 (1-Lane)
1.600	8.46	15.72	0.00	293.9 (2-Lane)
1.600	10.43	19.38	0.00	362.3 (1-Lane)
1.700	6.54	23.99	0.00	227.3 (2-Lane)
1.700	8.06	29.58	0.00	280.3 (1-Lane)
1.800	5.15	44.56	0.00	178.9 (2-Lane)
1.800	6.35	54.93	0.00	220.6 (1-Lane)
1.900	7.76	209.20	0.00	269.6 (2-Lane)
1.900	9.57	257.90	0.00	332.4 (1-Lane)
2.000	7.80	999.00	0.00	271.0 (2-Lane)
2.000	9.61	999.00	0.00	334.1 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEG  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	119.01 R	89.48	78.98 R	59.39
1.100	2417.7	425.3	1074.26 R	807.71	712.96 R	536.06
1.200	4314.7	756.1	1918.40 R	1442.41	1273.20 R	957.29
1.300	5675.4	992.4	2509.99 R	1887.21	1665.83 R	1252.50
1.400	6491.9	1134.2	2857.13 R	2148.22	1896.21 R	1425.72
1.500	6764.0	1181.5	2966.06 R	2230.12	1968.50 R	1480.08
1.600	6491.9	1134.2	2857.13 R	2148.22	1896.21 R	1425.72
1.700	5675.4	992.4	2509.99 R	1887.21	1665.83 R	1252.50
1.800	4314.7	756.1	1918.40 R	1442.41	1273.20 R	957.29
1.900	2417.7	425.3	1074.26 R	807.71	712.96 R	536.06
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1012

## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEGL

Rating Live Load:

Rating Type: SU6

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEGL

Rating Live Load: SU6

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	459.24	999.00	106.88	999.00	0.00	999.0 (2-Lane)
1.010	691.96	999.00	161.05	999.00	0.00	999.0 (1-Lane)
1.100	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.100	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
1.200	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.200	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.300	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.300	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.400	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.400	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.500	8.52	999.00	2.78	999.00	0.00	96.7 (2-Lane)
1.500	12.83	999.00	4.20	999.00	0.00	145.8 (1-Lane)
1.600	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.600	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.700	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.700	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.800	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.800	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.900	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)



1.900	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	120.96 R	90.95	80.28 R	60.36
1.100	2417.7	425.3	1089.84 R	819.43	723.30 R	543.84
1.200	4314.7	756.1	1945.72 R	1462.95	1291.33 R	970.92
1.300	5675.4	992.4	2567.63 R	1930.55	1704.08 R	1281.26
1.400	6491.9	1134.2	2925.55 R	2199.66	1941.62 R	1459.86
1.500	6764.0	1181.5	3041.99 R	2287.21	2018.90 R	1517.97
1.600	6491.9	1134.2	2925.55 R	2199.66	1941.62 R	1459.86
1.700	5675.4	992.4	2567.63 R	1930.55	1704.08 R	1281.26
1.800	4314.7	756.1	1945.72 R	1462.95	1291.33 R	970.92
1.900	2417.7	425.3	1089.84 R	819.43	723.30 R	543.84
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1015

## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL  
Rating Live Load: SU7

Span	Positive Top	Moment Resistance		Bending Bott.	Available Resistance for LL+I			
		Bending Bott.	Negative Top		Positive Bending Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12217.2	-12217.2B	11797.6	11797.6	-20162.7	-20162.7
1.600	19743.0C	19743.0	-11836.6	-11836.6B	12117.0	12117.0	-19462.7	-19462.7
1.700	19743.0C	19743.0	-11836.6	-11836.6B	13075.2	13075.2	-18504.5	-18504.5
1.800	19743.0C	19743.0	-13022.0	-13022.0B	14672.1	14672.1	-18092.9	-18092.9
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL

Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	133.27	999.00	133.27	999.00	0.00	999.0 (2-Lane)
1.010	200.81	999.00	200.81	999.00	0.00	999.0 (1-Lane)
1.100	12.45	999.00	12.45	999.00	0.00	482.4 (2-Lane)
1.100	18.76	999.00	18.76	999.00	0.00	726.8 (1-Lane)
1.200	7.54	999.00	7.54	999.00	0.00	292.2 (2-Lane)
1.200	11.36	999.00	11.36	999.00	0.00	440.3 (1-Lane)
1.300	5.09	999.00	5.09	999.00	0.00	197.3 (2-Lane)
1.300	7.67	999.00	7.67	999.00	0.00	297.3 (1-Lane)
1.400	4.14	999.00	4.14	999.00	0.00	160.5 (2-Lane)
1.400	6.24	999.00	6.24	999.00	0.00	241.8 (1-Lane)
1.500	3.88	999.00	3.88	999.00	0.00	150.3 (2-Lane)
1.500	5.84	999.00	5.84	999.00	0.00	226.4 (1-Lane)
1.600	4.14	999.00	4.14	999.00	0.00	160.5 (2-Lane)
1.600	6.24	999.00	6.24	999.00	0.00	241.8 (1-Lane)
1.700	5.09	999.00	5.09	999.00	0.00	197.3 (2-Lane)
1.700	7.67	999.00	7.67	999.00	0.00	297.3 (1-Lane)
1.800	7.54	999.00	7.54	999.00	0.00	292.2 (2-Lane)
1.800	11.36	999.00	11.36	999.00	0.00	440.3 (1-Lane)
1.900	12.45	999.00	12.45	999.00	0.00	482.4 (2-Lane)
1.900	18.76	999.00	18.76	999.00	0.00	726.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL

Rating Live Load: SU7

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	1.20	LL	1.20
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load

w/o impact

Lane	Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	110.64	83.19		89.74		67.48
1.010	164.0	28.9	109.43	82.28		88.77		66.74
1.100	134.8	23.6	98.60	74.13		79.98		60.13
1.200	102.0	17.7	86.56	65.08		70.21		52.79
1.300	68.0	11.8	74.52	56.03		60.45		45.45
1.400	34.0	5.9	62.48	46.98		50.68		38.11
1.500	0.0	0.0	50.44	37.93		40.92		30.76
1.600	-34.0	-5.9	-62.48	-46.98		-50.68		-38.11
1.700	-68.0	-11.8	-74.52	-56.03		-60.45		-45.45
1.800	-102.0	-17.7	-86.56	-65.08		-70.21		-52.79
1.900	-134.8	-23.6	-98.60	-74.13		-79.98		-60.13
2.000	-167.2	-29.5	-110.64	-83.19		-89.74		-67.48

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL

Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: I-LEGL

Rating Live Load: SU7

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.11	0.00	275.6 (2-Lane)
1.000	999.00	8.77	0.00	339.7 (1-Lane)
1.010	999.00	7.22	0.00	280.0 (2-Lane)
1.010	999.00	8.91	0.00	345.2 (1-Lane)
1.100	244.34	7.09	0.00	274.8 (2-Lane)
1.100	301.23	8.74	0.00	338.8 (1-Lane)
1.200	45.21	4.72	0.00	182.8 (2-Lane)
1.200	55.74	5.82	0.00	225.4 (1-Lane)
1.300	23.06	6.01	0.00	233.1 (2-Lane)
1.300	28.42	7.42	0.00	287.4 (1-Lane)
1.400	14.79	7.81	0.00	302.7 (2-Lane)
1.400	18.23	9.63	0.00	373.2 (1-Lane)
1.500	10.47	10.47	0.00	405.7 (2-Lane)
1.500	12.91	12.91	0.00	500.1 (1-Lane)
1.600	7.81	14.79	0.00	302.7 (2-Lane)
1.600	9.63	18.23	0.00	373.2 (1-Lane)
1.700	6.01	23.06	0.00	233.1 (2-Lane)
1.700	7.42	28.42	0.00	287.4 (1-Lane)
1.800	4.72	45.21	0.00	182.8 (2-Lane)
1.800	5.82	55.74	0.00	225.4 (1-Lane)
1.900	7.09	244.34	0.00	274.8 (2-Lane)
1.900	8.74	301.23	0.00	338.8 (1-Lane)
2.000	7.11	999.00	0.00	275.6 (2-Lane)
2.000	8.77	999.00	0.00	339.7 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEG  
Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	130.46 R	98.09	86.58 R	65.10
1.100	2417.7	425.3	1175.44 R	883.79	780.11 R	586.55
1.200	4314.7	756.1	2098.53 R	1577.84	1392.75 R	1047.18
1.300	5675.4	992.4	2769.29 R	2082.17	1837.91 R	1381.89
1.400	6491.9	1134.2	3155.32 R	2372.42	2094.11 R	1574.52
1.500	6764.0	1181.5	3280.91 R	2466.85	2177.47 R	1637.19
1.600	6491.9	1134.2	3155.32 R	2372.42	2094.11 R	1574.52
1.700	5675.4	992.4	2769.29 R	2082.17	1837.91 R	1381.89
1.800	4314.7	756.1	2098.53 R	1577.84	1392.75 R	1047.18
1.900	2417.7	425.3	1175.44 R	883.79	780.11 R	586.55
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEGL  
Rating Live Load:Rating Type: SU7  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G05

Rating Type: II-LEGL  
Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	418.93	999.00	97.50	999.00	0.00	999.0 (2-Lane)
1.010	631.22	999.00	146.91	999.00	0.00	999.0 (1-Lane)
1.100	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.100	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
1.200	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.200	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.300	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.300	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.400	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.400	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)

1.500	7.70	999.00	2.52	999.00	0.00	97.5 (2-Lane)
1.500	11.60	999.00	3.79	999.00	0.00	147.0 (1-Lane)
1.600	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.600	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.700	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.700	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.800	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.800	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.900	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.900	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## BRIDGE / MEMBER DATA

Bridge ID 7777777\_20120905cy01\_01of01

NBI ID 7777-777

Feature Intersected Road

Material of Construction CSC  
 Year of Construction 2012  
 Roadway Width 0.000  
 Number of Spans 1

Live Load Distribution Factor 1.67

Condition Factor: 1.000  
 System Factor: 1.000  
 ADTT: 300

Shear Live Load Dist. Factor 1.911  
 LRFD LLDF Moment

	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
1-lane DF	0.444	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
2-lane DF	0.669	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
1-lane DF	0.786	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
2-lane DF	0.969	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Comments:

Member ID G06 01-IG006  
 Symmetry:

Span Length: Span 1 160.100 Span 2 0.000 Span 3 0.000 Span 4 0.000 Span 5 0.000

Range Length -- Non-Composite:  
 Span Range Section Section Hinge Location  
 No. No. Length Left Right Variation No. 1 No. 2

1	1	30.000	1	0	0.0	0.0
1	2	100.100	2	0	0.0	0.0
1	3	30.000	1	0	0.0	0.0

Range Span No.	Length Range No.	-- Composite: Range Length	Composite Code
1	1	160.100	C

Span No.	Superimposed Load Type	Dead Load: Dist. from Left Supp.	Distributed Load (lbs/ft)			Concentrated Load (kips)
			Left	Right	Length	
1	W	0.000	295.0	295.0	160.100	0.0
1	Z	0.000	127.0	127.0	160.100	0.0

NOTE: All distances are shown in decimal feet, moments are shown in foot-kips, and shears are shown in kips. Section and section properties are shown as: in., in.\*\*2, in.\*\*3, and in.\*\*4.

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## SECTION DATA

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Span	Height	Web Depth	Web Thk.	Effective width	Slab Thk.	Fy
	(in.)	(in.)	(in.)	(in.)	(in.)	(ksi)
1.000	68.58	66.00	0.63	110.3	9.0	50.
1.010	68.58	66.00	0.63	110.3	9.0	50.
1.100	68.58	66.00	0.63	110.3	9.0	50.
1.200	69.74	66.00	0.63	110.3	9.0	50.
1.300	69.74	66.00	0.63	110.3	9.0	50.
1.400	69.74	66.00	0.63	110.3	9.0	50.
1.500	69.74	66.00	0.63	110.3	9.0	50.
1.600	69.74	66.00	0.63	110.3	9.0	50.
1.700	69.74	66.00	0.63	110.3	9.0	50.
1.800	69.74	66.00	0.63	110.3	9.0	50.
1.900	68.58	66.00	0.63	110.3	9.0	50.
2.000	68.58	66.00	0.63	110.3	9.0	50.

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## SECTION STRENGTH

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Span	Section Gross	Area Net	Neutral Axis Top	Axis Bott.	Moment of Inertia +Bend	Inertia -Bend	Section Modulus			
							+Bend Top	Bott.	-Bend Top	Bott.
1.000	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.010	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.100	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.200	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.300	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.400	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.500	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.600	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.700	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.800	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.900	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
 2.000 93.50 93.50 38.17 30.41 72325.6 72325.6 1894.8 2378.0 1894.8 2378.0

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SECTION STRENGTH (N=N)

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Span	Section Gross	Area Net	Neutral Top	Axis Bott.	Moment of +Bend	Inertia -Bend	Section Modulus			
							+Bend		-Bend	
							Top	Bott.	Top	Bott.
1.000	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
1.010	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
1.100	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
1.200	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.300	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.400	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.500	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.600	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.700	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.800	226.90	226.90	15.46	54.28	224146.8	100214.4	14499.6	4129.4	2629.3	3168.8
1.900	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0
2.000	203.80	203.80	12.91	55.68	183267.9	72325.6	14199.2	3291.6	1894.8	2378.0

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SECTION STRENGTH (N=3N)

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Span	Section Gross	Area Net	Neutral Top	Axis Bott.	Moment of +Bend	Inertia -Bend	Section Modulus			
							+Bend		-Bend	
							Top	Bott.	Top	Bott.
1.000	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
1.010	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
1.100	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
1.200	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.300	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.400	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.500	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.600	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.700	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.800	153.37	153.37	26.94	42.80	161207.8	100214.4	5983.3	3766.8	2629.3	3168.8
1.900	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0
2.000	130.27	130.27	24.99	43.59	130047.5	72325.6	5203.1	2983.4	1894.8	2378.0

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
 Rating Live Load: HL93

Gamma	(2-Lane)		(1-Lane)	
	DC	DW	LL	LL
	1.25	1.25	1.75	1.75
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact
			Live Load w/impact	Live Load w/o



7777777_20120905cy01_01of01_FlexuralRpt.txt									
Lane	Dead Load		Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	262.30 R	0.00	220.80	0.00	174.08 R	0.00	146.54
0.00									
1.100	2417.7	425.3	2375.02 R	0.00	2000.16	0.00	1576.24 R	0.00	1327.46
0.00									
1.200	4314.7	756.1	4199.00 R	0.00	3538.36	0.00	2786.78 R	0.00	2348.33
0.00									
1.300	5675.4	992.4	5471.94 R	0.00	4614.60	0.00	3631.60 R	0.00	3062.60
0.00									
1.400	6491.9	1134.2	6228.74 R	0.00	5255.09	0.00	4133.87 R	0.00	3487.68
0.00									
1.500	6764.0	1181.5	6451.94 R	0.00	5446.74	0.00	4282.00 R	0.00	3614.87
0.00									
1.600	6491.9	1134.2	6228.74 R	0.00	5255.09	0.00	4133.87 R	0.00	3487.68
0.00									
1.700	5675.4	992.4	5471.94 R	0.00	4614.60	0.00	3631.60 R	0.00	3062.60
0.00									
1.800	4314.7	756.1	4199.00 R	0.00	3538.36	0.00	2786.78 R	0.00	2348.33
0.00									
1.900	2417.7	425.3	2375.01 R	0.00	2000.16	0.00	1576.24 R	0.00	1327.46
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: HL93

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.4	-12222.4B	11797.6	11797.6	-20167.9	-20167.9
1.600	19743.0C	19743.0	-11839.3	-11839.3B	12117.0	12117.0	-19465.4	-19465.4
1.700	19743.0C	19743.0	-11839.3	-11839.3B	13075.2	13075.2	-18507.2	-18507.2
1.800	19743.0C	19743.0	-13020.4	-13020.4B	14672.1	14672.1	-18091.3	-18091.3
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: HL93

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	61.46	999.00	61.46	999.00	0.00	999.0 (2-Lane)
1.010	92.61	999.00	92.61	999.00	0.00	999.0 (1-Lane)
1.100	5.71	999.00	5.71	999.00	0.00	205.6 (2-Lane)
1.100	8.61	999.00	8.61	999.00	0.00	309.8 (1-Lane)
1.200	3.49	999.00	3.49	999.00	0.00	125.8 (2-Lane)
1.200	5.26	999.00	5.26	999.00	0.00	189.5 (1-Lane)
1.300	2.39	999.00	2.39	999.00	0.00	86.0 (2-Lane)
1.300	3.60	999.00	3.60	999.00	0.00	129.6 (1-Lane)
1.400	1.95	999.00	1.95	999.00	0.00	70.0 (2-Lane)
1.400	2.93	999.00	2.93	999.00	0.00	105.5 (1-Lane)
1.500	1.83	999.00	1.83	999.00	0.00	65.8 (2-Lane)
1.500	2.76	999.00	2.76	999.00	0.00	99.2 (1-Lane)
1.600	1.95	999.00	1.95	999.00	0.00	70.0 (2-Lane)
1.600	2.93	999.00	2.93	999.00	0.00	105.5 (1-Lane)
1.700	2.39	999.00	2.39	999.00	0.00	86.0 (2-Lane)
1.700	3.60	999.00	3.60	999.00	0.00	129.6 (1-Lane)
1.800	3.49	999.00	3.49	999.00	0.00	125.8 (2-Lane)
1.800	5.26	999.00	5.26	999.00	0.00	189.5 (1-Lane)
1.900	5.71	999.00	5.71	999.00	0.00	205.6 (2-Lane)
1.900	8.61	999.00	8.61	999.00	0.00	309.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	239.79	0.00	201.85	0.00	194.51	0.00	163.73
0.00									
1.010	164.0	28.9	236.44	0.00	198.90	0.00	191.79	0.00	161.34
0.00									
1.100	134.8	23.6	207.05	0.00	173.14	0.00	167.95	0.00	140.44
0.00									
1.200	102.0	17.7	176.04	0.00	146.16	0.00	142.80	0.00	118.56
0.00									
1.300	68.0	11.8	146.77	0.00	120.92	0.00	119.05	0.00	98.08
0.00									
1.400	34.0	5.9	119.24	0.00	97.41	0.00	96.72	0.00	79.02

0.00									
1.500	0.0	0.0	93.44	0.00	75.65	0.00	75.80	0.00	61.36
0.00									
1.600	-34.0	-5.9	-119.24	0.00	-97.41	0.00	-96.72	0.00	-79.02
0.00									
1.700	-68.0	-11.8	-146.77	0.00	-120.92	0.00	-119.05	0.00	-98.08
0.00									
1.800	-102.0	-17.7	-176.04	0.00	-146.16	0.00	-142.80	0.00	-118.56
0.00									
1.900	-134.8	-23.6	-207.05	0.00	-173.14	0.00	-167.95	0.00	-140.44
0.00									
2.000	-167.2	-29.5	-239.79	0.00	-201.85	0.00	-194.51	0.00	-163.73
0.00									

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV

Rating Live Load: HL93

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV

Rating Live Load: HL93

## Shear

Span Rating Factor Rating Load

	(-)	(+)		
1.000	999.00	3.28	0.00	118.1 (2-Lane)
1.000	999.00	4.05	0.00	145.6 (1-Lane)
1.010	999.00	3.34	0.00	120.4 (2-Lane)
1.010	999.00	4.12	0.00	148.4 (1-Lane)
1.100	102.96	3.38	0.00	121.6 (2-Lane)
1.100	126.94	4.16	0.00	149.9 (1-Lane)
1.200	24.46	2.32	0.00	83.5 (2-Lane)
1.200	30.15	2.86	0.00	103.0 (1-Lane)
1.300	12.91	3.05	0.00	109.9 (2-Lane)
1.300	15.92	3.77	0.00	135.5 (1-Lane)
1.400	8.19	4.09	0.00	147.4 (2-Lane)
1.400	10.09	5.05	0.00	181.7 (1-Lane)
1.500	5.65	5.65	0.00	203.4 (2-Lane)
1.500	6.97	6.97	0.00	250.8 (1-Lane)
1.600	4.09	8.19	0.00	147.4 (2-Lane)
1.600	5.05	10.09	0.00	181.7 (1-Lane)
1.700	3.05	12.91	0.00	109.9 (2-Lane)
1.700	3.77	15.92	0.00	135.5 (1-Lane)
1.800	2.32	24.46	0.00	83.5 (2-Lane)
1.800	2.86	30.15	0.00	103.0 (1-Lane)
1.900	3.38	94.63	0.00	121.6 (2-Lane)
1.900	4.16	116.67	0.00	149.9 (1-Lane)
2.000	3.28	999.00	0.00	118.1 (2-Lane)
2.000	4.05	999.00	0.00	145.6 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load: HL93

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	194.85 R	0.00	164.03	129.32 R
0.00						
1.100	1934.1	340.3	1764.30 R	0.00	1485.83	1170.92 R
0.00						
1.200	3451.8	604.9	3119.25 R	0.00	2628.50	2070.18 R
0.00						
1.300	4540.4	794.0	4064.87 R	0.00	3427.99	2697.76 R
0.00						
1.400	5193.5	907.4	4627.06 R	0.00	3903.78	3070.88 R
0.00						
1.500	5411.2	945.2	4792.87 R	0.00	4046.15	3180.92 R
0.00						
1.600	5193.5	907.4	4627.06 R	0.00	3903.78	3070.88 R

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0.00									
1.700	4540.4	794.0	4064.87 R	0.00	3427.98	0.00	2697.76 R	0.00	2275.08
0.00									
1.800	3451.8	604.9	3119.25 R	0.00	2628.50	0.00	2070.18 R	0.00	1744.47
0.00									
1.900	1934.1	340.3	1764.30 R	0.00	1485.83	0.00	1170.92 R	0.00	986.11
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load:

Rating Type: HL93  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load: HL93

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	280.49	999.00	65.28	999.00	0.00	999.0 (2-Lane)
1.010	422.63	999.00	98.36	999.00	0.00	999.0 (1-Lane)
1.100	23.12	999.00	5.66	999.00	0.00	203.6 (2-Lane)
1.100	34.83	999.00	8.52	999.00	0.00	306.7 (1-Lane)

1.200	11.83	999.00	3.59	999.00	0.00	129.1 (2-Lane)
1.200	17.82	999.00	5.40	999.00	0.00	194.5 (1-Lane)
1.300	7.49	999.00	2.35	999.00	0.00	84.7 (2-Lane)
1.300	11.28	999.00	3.54	999.00	0.00	127.6 (1-Lane)
1.400	5.74	999.00	1.86	999.00	0.00	66.8 (2-Lane)
1.400	8.65	999.00	2.80	999.00	0.00	100.6 (1-Lane)
1.500	5.27	999.00	1.72	999.00	0.00	62.0 (2-Lane)
1.500	7.94	999.00	2.60	999.00	0.00	93.5 (1-Lane)
1.600	5.74	999.00	1.86	999.00	0.00	66.8 (2-Lane)
1.600	8.65	999.00	2.80	999.00	0.00	100.6 (1-Lane)
1.700	7.49	999.00	2.35	999.00	0.00	84.7 (2-Lane)
1.700	11.28	999.00	3.54	999.00	0.00	127.6 (1-Lane)
1.800	11.83	999.00	3.59	999.00	0.00	129.1 (2-Lane)
1.800	17.82	999.00	5.40	999.00	0.00	194.5 (1-Lane)
1.900	23.12	999.00	5.66	999.00	0.00	203.6 (2-Lane)
1.900	34.83	999.00	8.52	999.00	0.00	306.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	241.8	46.8	167.23 R	0.00	125.74	110.99 R
0.00						
1.100	2417.7	425.3	1510.77 R	0.00	1135.92	1002.66 R
0.00						
1.200	4314.7	756.1	2662.56 R	0.00	2001.93	1767.08 R
0.00						
1.300	5675.4	992.4	3455.37 R	0.00	2598.03	2293.25 R
0.00						
1.400	6491.9	1134.2	3924.09 R	0.00	2950.44	2604.33 R
0.00						
1.500	6764.0	1181.5	4051.26 R	0.00	3046.06	2688.73 R
0.00						
1.600	6491.9	1134.2	3924.09 R	0.00	2950.44	2604.33 R
0.00						
1.700	5675.4	992.4	3455.37 R	0.00	2598.03	2293.25 R
0.00						
1.800	4314.7	756.1	2662.56 R	0.00	2001.93	1767.08 R
0.00						
1.900	2417.7	425.3	1510.77 R	0.00	1135.92	1002.66 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: HS20

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.4	-12222.4B	11797.6	11797.6	-20167.9	-20167.9
1.600	19743.0C	19743.0	-11839.3	-11839.3B	12117.0	12117.0	-19465.4	-19465.4
1.700	19743.0C	19743.0	-11839.3	-11839.3B	13075.2	13075.2	-18507.2	-18507.2
1.800	19743.0C	19743.0	-13020.4	-13020.4B	14672.1	14672.1	-18091.3	-18091.3
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: HS20

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	96.40	999.00	96.40	999.00	999.00	999.0 (2-Lane)
1.010	145.25	999.00	145.25	999.00	999.00	999.0 (1-Lane)
1.100	8.98	999.00	8.98	999.00	179.60	323.3 (2-Lane)
1.100	13.53	999.00	13.53	999.00	270.61	487.1 (1-Lane)
1.200	5.51	999.00	5.51	999.00	110.21	198.4 (2-Lane)
1.200	8.30	999.00	8.30	999.00	166.06	298.9 (1-Lane)
1.300	3.78	999.00	3.78	999.00	75.68	136.2 (2-Lane)
1.300	5.70	999.00	5.70	999.00	114.03	205.3 (1-Lane)
1.400	3.09	999.00	3.09	999.00	61.76	111.2 (2-Lane)
1.400	4.65	999.00	4.65	999.00	93.05	167.5 (1-Lane)
1.500	2.91	999.00	2.91	999.00	58.24	104.8 (2-Lane)
1.500	4.39	999.00	4.39	999.00	87.76	158.0 (1-Lane)
1.600	3.09	999.00	3.09	999.00	61.76	111.2 (2-Lane)
1.600	4.65	999.00	4.65	999.00	93.05	167.5 (1-Lane)

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1.700	3.78	999.00	3.78	999.00	75.68	136.2 (2-Lane)
1.700	5.70	999.00	5.70	999.00	114.03	205.3 (1-Lane)
1.800	5.51	999.00	5.51	999.00	110.21	198.4 (2-Lane)
1.800	8.30	999.00	8.30	999.00	166.06	298.9 (1-Lane)
1.900	8.98	999.00	8.98	999.00	179.60	323.3 (2-Lane)
1.900	13.53	999.00	13.53	999.00	270.61	487.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	152.92	0.00	114.98	0.00	124.04	0.00	93.26
1.010 0.00	164.0	28.9	151.29	0.00	113.76	0.00	122.72	0.00	92.27
1.100 0.00	134.8	23.6	136.68	0.00	102.77	0.00	110.87	0.00	83.36
1.200 0.00	102.0	17.7	120.44	0.00	90.56	0.00	97.70	0.00	73.46
1.300 0.00	68.0	11.8	104.20	0.00	78.35	0.00	84.52	0.00	63.55
1.400 0.00	34.0	5.9	87.96	0.00	66.14	0.00	71.35	0.00	53.65
1.500 0.00	0.0	0.0	71.73	0.00	53.93	0.00	58.18	0.00	43.74
1.600 0.00	-34.0	-5.9	-87.96	0.00	-66.14	0.00	-71.35	0.00	-53.65
1.700 0.00	-68.0	-11.8	-104.20	0.00	-78.35	0.00	-84.52	0.00	-63.55
1.800 0.00	-102.0	-17.7	-120.44	0.00	-90.56	0.00	-97.70	0.00	-73.46
1.900 0.00	-134.8	-23.6	-136.68	0.00	-102.77	0.00	-110.87	0.00	-83.36
2.000 0.00	-167.2	-29.5	-152.92	0.00	-114.98	0.00	-124.04	0.00	-93.26

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: HS20



Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: HS20

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.14	102.91	185.2 (2-Lane)
1.000	999.00	6.34	126.87	228.4 (1-Lane)
1.010	999.00	5.23	104.52	188.1 (2-Lane)
1.010	999.00	6.44	128.85	231.9 (1-Lane)
1.100	125.08	5.12	102.31	184.2 (2-Lane)
1.100	154.20	6.31	126.14	227.0 (1-Lane)
1.200	28.15	3.39	67.81	122.1 (2-Lane)
1.200	34.71	4.18	83.60	150.5 (1-Lane)
1.300	15.49	4.30	86.04	154.9 (2-Lane)
1.300	19.09	5.30	106.07	190.9 (1-Lane)
1.400	10.24	5.55	110.99	199.8 (2-Lane)
1.400	12.62	6.84	136.83	246.3 (1-Lane)
1.500	7.36	7.36	147.24	265.0 (2-Lane)
1.500	9.08	9.08	181.53	326.7 (1-Lane)
1.600	5.55	10.24	110.99	199.8 (2-Lane)
1.600	6.84	12.62	136.83	246.3 (1-Lane)
1.700	4.30	15.49	86.04	154.9 (2-Lane)
1.700	5.30	19.09	106.07	190.9 (1-Lane)

1.800	3.39	28.15	67.81	122.1 (2-Lane)
1.800	4.18	34.71	83.60	150.5 (1-Lane)
1.900	5.12	125.08	102.31	184.2 (2-Lane)
1.900	6.31	154.20	126.14	227.0 (1-Lane)
2.000	5.14	999.00	102.91	185.2 (2-Lane)
2.000	6.34	999.00	126.87	228.4 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load: HS20

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load w/o Truck
Lane			Lane	Lane	Lane	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	124.23 R	0.00	93.41	82.45 R
0.00						
1.100	1934.1	340.3	1122.29 R	0.00	843.82	744.84 R
0.00						
1.200	3451.8	604.9	1977.90 R	0.00	1487.15	1312.69 R
0.00						
1.300	4540.4	794.0	2566.85 R	0.00	1929.96	1703.56 R
0.00						
1.400	5193.5	907.4	2915.03 R	0.00	2191.76	1934.64 R
0.00						
1.500	5411.2	945.2	3009.50 R	0.00	2262.79	1997.34 R
0.00						
1.600	5193.5	907.4	2915.03 R	0.00	2191.76	1934.64 R
0.00						
1.700	4540.4	794.0	2566.85 R	0.00	1929.96	1703.56 R
0.00						
1.800	3451.8	604.9	1977.90 R	0.00	1487.15	1312.69 R
0.00						
1.900	1934.1	340.3	1122.29 R	0.00	843.82	744.84 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load:

Rating Type: HS20  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending	Negative Bending	Positive Bending	Negative Bending	Positive Bending	Negative Bending	Positive Bending	Negative Bending
	Top	Bott.	Top	Bott.	Top	Bott.	Top	Bott.

1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load: HS20

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	439.95	999.00	102.39	999.00	999.00	999.0 (2-Lane)
1.010	662.89	999.00	154.28	999.00	999.00	999.0 (1-Lane)
1.100	36.34	999.00	8.89	999.00	177.79	320.0 (2-Lane)
1.100	54.75	999.00	13.39	999.00	267.88	482.2 (1-Lane)
1.200	18.65	999.00	5.66	999.00	113.09	203.6 (2-Lane)
1.200	28.10	999.00	8.52	999.00	170.40	306.7 (1-Lane)
1.300	11.86	999.00	3.72	999.00	74.48	134.1 (2-Lane)
1.300	17.86	999.00	5.61	999.00	112.22	202.0 (1-Lane)
1.400	9.11	999.00	2.94	999.00	58.89	106.0 (2-Lane)
1.400	13.73	999.00	4.44	999.00	88.73	159.7 (1-Lane)
1.500	8.39	999.00	2.74	999.00	54.88	98.8 (2-Lane)
1.500	12.65	999.00	4.13	999.00	82.69	148.8 (1-Lane)
1.600	9.11	999.00	2.94	999.00	58.89	106.0 (2-Lane)
1.600	13.73	999.00	4.44	999.00	88.73	159.7 (1-Lane)
1.700	11.86	999.00	3.72	999.00	74.48	134.1 (2-Lane)
1.700	17.86	999.00	5.61	999.00	112.22	202.0 (1-Lane)
1.800	18.65	999.00	5.66	999.00	113.09	203.6 (2-Lane)
1.800	28.10	999.00	8.52	999.00	170.40	306.7 (1-Lane)
1.900	36.34	999.00	8.89	999.00	177.79	320.0 (2-Lane)
1.900	54.75	999.00	13.39	999.00	267.89	482.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	117.61 R	0.00	88.43	0.00
0.00						
1.100	2417.7	425.3	1063.89 R	0.00	799.92	0.00
0.00						
1.200	4314.7	756.1	1878.48 R	0.00	1412.39	0.00
0.00						
1.300	5675.4	992.4	2443.79 R	0.00	1837.43	0.00
0.00						
1.400	6491.9	1134.2	2778.49 R	0.00	2089.09	0.00
0.00						
1.500	6764.0	1181.5	2876.35 R	0.00	2162.67	0.00
0.00						
1.600	6491.9	1134.2	2778.49 R	0.00	2089.09	0.00
0.00						
1.700	5675.4	992.4	2443.79 R	0.00	1837.43	0.00
0.00						
1.800	4314.7	756.1	1878.48 R	0.00	1412.39	0.00
0.00						
1.900	2417.7	425.3	1063.89 R	0.00	799.91	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: 3

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12210.2	-12210.2B	11797.6	11797.6	-20155.7	-20155.7
1.600	19743.0C	19743.0	-11831.3	-11831.3B	12117.0	12117.0	-19457.4	-19457.4
1.700	19743.0C	19743.0	-11831.3	-11831.3B	13075.2	13075.2	-18499.2	-18499.2
1.800	19743.0C	19743.0	-13007.0	-13007.0B	14672.1	14672.1	-18077.9	-18077.9
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4

2.000 16409.4C 16409.4 -9908.4 -9908.4B 16409.4 16409.4 -9908.4 -9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: 3

## Moment

Span	top +bend	Rating fiber -bend	Factor	bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)
1.010	137.07	999.00		137.07	999.00	0.00	999.0 (2-Lane)
1.010	206.54	999.00		206.54	999.00	0.00	999.0 (1-Lane)
1.100	12.75	999.00		12.75	999.00	0.00	318.8 (2-Lane)
1.100	19.21	999.00		19.21	999.00	0.00	480.3 (1-Lane)
1.200	7.81	999.00		7.81	999.00	0.00	195.3 (2-Lane)
1.200	11.77	999.00		11.77	999.00	0.00	294.2 (1-Lane)
1.300	5.35	999.00		5.35	999.00	0.00	133.8 (2-Lane)
1.300	8.06	999.00		8.06	999.00	0.00	201.5 (1-Lane)
1.400	4.36	999.00		4.36	999.00	0.00	109.0 (2-Lane)
1.400	6.57	999.00		6.57	999.00	0.00	164.3 (1-Lane)
1.500	4.10	999.00		4.10	999.00	0.00	102.5 (2-Lane)
1.500	6.18	999.00		6.18	999.00	0.00	154.5 (1-Lane)
1.600	4.36	999.00		4.36	999.00	0.00	109.0 (2-Lane)
1.600	6.57	999.00		6.57	999.00	0.00	164.3 (1-Lane)
1.700	5.35	999.00		5.35	999.00	0.00	133.8 (2-Lane)
1.700	8.06	999.00		8.06	999.00	0.00	201.5 (1-Lane)
1.800	7.81	999.00		7.81	999.00	0.00	195.3 (2-Lane)
1.800	11.77	999.00		11.77	999.00	0.00	294.2 (1-Lane)
1.900	12.75	999.00		12.75	999.00	0.00	318.8 (2-Lane)
1.900	19.21	999.00		19.21	999.00	0.00	480.3 (1-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: 3

Gamma DC DW (2-Lane) (1-Lane)  
LL LL

1.25

1.25

1.75

1.75

Span w/o impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	107.53	0.00	80.85	0.00
0.00						
1.010	164.0	28.9	106.40	0.00	80.00	0.00
0.00						
1.100	134.8	23.6	96.25	0.00	72.37	0.00
0.00						
1.200	102.0	17.7	84.97	0.00	63.89	0.00
0.00						
1.300	68.0	11.8	73.70	0.00	55.41	0.00
0.00						
1.400	34.0	5.9	62.42	0.00	46.93	0.00
0.00						
1.500	0.0	0.0	51.14	0.00	38.45	0.00
0.00						
1.600	-34.0	-5.9	-62.42	0.00	-46.93	0.00
0.00						
1.700	-68.0	-11.8	-73.70	0.00	-55.41	0.00
0.00						
1.800	-102.0	-17.7	-84.97	0.00	-63.89	0.00
0.00						
1.900	-134.8	-23.6	-96.25	0.00	-72.37	0.00
0.00						
2.000	-167.2	-29.5	-107.53	0.00	-80.85	0.00
0.00						

□

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1047  
STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: 3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.32	0.00	182.9 (2-Lane)
1.000	999.00	9.02	0.00	225.5 (1-Lane)
1.010	999.00	7.43	0.00	185.8 (2-Lane)
1.010	999.00	9.16	0.00	229.0 (1-Lane)
1.100	151.42	7.26	0.00	181.6 (2-Lane)
1.100	186.67	8.96	0.00	223.9 (1-Lane)
1.200	37.42	4.81	0.00	120.1 (2-Lane)
1.200	46.13	5.93	0.00	148.1 (1-Lane)
1.300	21.26	6.08	0.00	152.1 (2-Lane)
1.300	26.21	7.50	0.00	187.5 (1-Lane)
1.400	14.25	7.82	0.00	195.5 (2-Lane)
1.400	17.56	9.64	0.00	241.0 (1-Lane)
1.500	10.32	10.32	0.00	258.1 (2-Lane)
1.500	12.73	12.73	0.00	318.2 (1-Lane)
1.600	7.82	14.25	0.00	195.5 (2-Lane)
1.600	9.64	17.56	0.00	241.0 (1-Lane)
1.700	6.08	21.26	0.00	152.1 (2-Lane)
1.700	7.50	26.21	0.00	187.5 (1-Lane)
1.800	4.81	37.42	0.00	120.1 (2-Lane)
1.800	5.93	46.13	0.00	148.1 (1-Lane)
1.900	7.26	151.42	0.00	181.6 (2-Lane)
1.900	8.96	186.67	0.00	223.9 (1-Lane)
2.000	7.32	999.00	0.00	182.9 (2-Lane)
2.000	9.02	999.00	0.00	225.5 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1048  
SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load: 3

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
	1.00	1.00	1.30	1.30

Span Dead Load Superimposed Live Load w/impact Live Load w/o impact Live Load w/impact Live Load w/o

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impact

Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	87.36 R	0.00	65.69	0.00	57.98 R	0.00	43.60
0.00									
1.100	1934.1	340.3	790.32 R	0.00	594.22	0.00	524.51 R	0.00	394.37
0.00									
1.200	3451.8	604.9	1395.44 R	0.00	1049.21	0.00	926.12 R	0.00	696.33
0.00									
1.300	4540.4	794.0	1815.38 R	0.00	1364.95	0.00	1204.83 R	0.00	905.89
0.00									
1.400	5193.5	907.4	2064.02 R	0.00	1551.89	0.00	1369.84 R	0.00	1029.96
0.00									
1.500	5411.2	945.2	2136.72 R	0.00	1606.55	0.00	1418.09 R	0.00	1066.23
0.00									
1.600	5193.5	907.4	2064.02 R	0.00	1551.89	0.00	1369.84 R	0.00	1029.96
0.00									
1.700	4540.4	794.0	1815.38 R	0.00	1364.95	0.00	1204.83 R	0.00	905.89
0.00									
1.800	3451.8	604.9	1395.44 R	0.00	1049.21	0.00	926.12 R	0.00	696.33
0.00									
1.900	1934.1	340.3	790.32 R	0.00	594.22	0.00	524.51 R	0.00	394.37
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1048

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV

Rating Live Load:

Rating Type: 3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV

Rating Live Load: 3



Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	625.58	999.00	145.60	999.00	0.00	999.0 (2-Lane)
1.010	942.60	999.00	219.38	999.00	0.00	999.0 (1-Lane)
1.100	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.100	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
1.200	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.200	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.300	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.300	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.400	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.400	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.500	11.82	999.00	3.87	999.00	0.00	96.6 (2-Lane)
1.500	17.81	999.00	5.82	999.00	0.00	145.6 (1-Lane)
1.600	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.600	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.700	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.700	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.800	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.800	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.900	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.900	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV

Rating Live Load: 3S2

Gamma	DC		DW		(2-Lane) LL		(1-Lane) LL	
	1.25		1.25		1.75		1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								
1.010	241.8	46.8	173.90 R	0.00	130.75	0.00	115.41 R	0.00
0.00								
1.100	2417.7	425.3	1559.46 R	0.00	1172.53	0.00	1034.98 R	0.00
0.00								
1.200	4314.7	756.1	2720.06 R	0.00	2045.16	0.00	1805.24 R	0.00
0.00								
1.200								
0.00								

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1.300	5675.4	992.4	3567.75 R	0.00	2682.52	0.00	2367.83 R	0.00	1780.32
0.00									
1.400	6491.9	1134.2	4046.46 R	0.00	3042.45	0.00	2685.54 R	0.00	2019.21
0.00									
1.500	6764.0	1181.5	4157.45 R	0.00	3125.90	0.00	2759.20 R	0.00	2074.59
0.00									
1.600	6491.9	1134.2	4046.46 R	0.00	3042.45	0.00	2685.54 R	0.00	2019.21
0.00									
1.700	5675.4	992.4	3567.75 R	0.00	2682.52	0.00	2367.83 R	0.00	1780.32
0.00									
1.800	4314.7	756.1	2720.06 R	0.00	2045.16	0.00	1805.24 R	0.00	1357.33
0.00									
1.900	2417.7	425.3	1559.46 R	0.00	1172.53	0.00	1034.98 R	0.00	778.18
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12192.1	-12192.1B	11797.6	11797.6	-20137.6	-20137.6
1.600	19743.0C	19743.0	-11817.3	-11817.3B	12117.0	12117.0	-19443.3	-19443.3
1.700	19743.0C	19743.0	-11817.3	-11817.3B	13075.2	13075.2	-18485.1	-18485.1
1.800	19743.0C	19743.0	-13007.5	-13007.5B	14672.1	14672.1	-18078.3	-18078.3
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	92.70	999.00	92.70	999.00	0.00	999.0 (2-Lane)

1.010	139.68	999.00	139.68	999.00	0.00	999.0 (1-Lane)
1.100	8.70	999.00	8.70	999.00	0.00	348.0 (2-Lane)
1.100	13.11	999.00	13.11	999.00	0.00	524.3 (1-Lane)
1.200	5.39	999.00	5.39	999.00	0.00	215.8 (2-Lane)
1.200	8.13	999.00	8.13	999.00	0.00	325.1 (1-Lane)
1.300	3.66	999.00	3.66	999.00	0.00	146.6 (2-Lane)
1.300	5.52	999.00	5.52	999.00	0.00	220.9 (1-Lane)
1.400	2.99	999.00	2.99	999.00	0.00	119.8 (2-Lane)
1.400	4.51	999.00	4.51	999.00	0.00	180.5 (1-Lane)
1.500	2.84	999.00	2.84	999.00	0.00	113.5 (2-Lane)
1.500	4.28	999.00	4.28	999.00	0.00	171.0 (1-Lane)
1.600	2.99	999.00	2.99	999.00	0.00	119.8 (2-Lane)
1.600	4.51	999.00	4.51	999.00	0.00	180.5 (1-Lane)
1.700	3.66	999.00	3.66	999.00	0.00	146.6 (2-Lane)
1.700	5.52	999.00	5.52	999.00	0.00	220.9 (1-Lane)
1.800	5.39	999.00	5.39	999.00	0.00	215.8 (2-Lane)
1.800	8.13	999.00	8.13	999.00	0.00	325.1 (1-Lane)
1.900	8.70	999.00	8.70	999.00	0.00	348.0 (2-Lane)
1.900	13.11	999.00	13.11	999.00	0.00	524.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1053

## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	159.13	0.00	119.65	0.00
0.00						
1.010	164.0	28.9	157.32	0.00	118.29	0.00
0.00						
1.100	134.8	23.6	141.09	0.00	106.08	0.00
0.00						
1.200	102.0	17.7	123.04	0.00	92.51	0.00
0.00						
1.300	68.0	11.8	105.00	0.00	78.95	0.00
0.00						
1.400	34.0	5.9	86.96	0.00	65.38	0.00
0.00						
1.500	0.0	0.0	68.91	0.00	51.82	0.00
0.00						
1.600	-34.0	-5.9	-86.96	0.00	-65.38	0.00
0.00						
1.700	-68.0	-11.8	-105.00	0.00	-78.95	0.00
0.00						
1.800	-102.0	-17.7	-123.04	0.00	-92.51	0.00
0.00						
1.900	-134.8	-23.6	-141.09	0.00	-106.08	0.00
0.00						

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 2.000 -167.2 -29.5 -159.13 0.00 -119.65 0.00 -129.08 0.00 -97.05  
 0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1054  
 STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G06  
 Rating Type: I-INV  
 Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1055  
 STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G06  
 Rating Type: I-INV  
 Rating Live Load: 3S2

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	4.95	0.00	197.8 (2-Lane)
1.000	999.00	6.10	0.00	243.8 (1-Lane)
1.010	999.00	5.03	0.00	201.0 (2-Lane)
1.010	999.00	6.20	0.00	247.8 (1-Lane)
1.100	151.42	4.96	0.00	198.2 (2-Lane)
1.100	186.67	6.11	0.00	244.4 (1-Lane)

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1.200	39.73	3.32	0.00	132.8 (2-Lane)
1.200	48.98	4.09	0.00	163.7 (1-Lane)
1.300	18.52	4.27	0.00	170.8 (2-Lane)
1.300	22.83	5.26	0.00	210.5 (1-Lane)
1.400	11.16	5.61	0.00	224.6 (2-Lane)
1.400	13.76	6.92	0.00	276.8 (1-Lane)
1.500	7.66	7.66	0.00	306.5 (2-Lane)
1.500	9.45	9.45	0.00	377.9 (1-Lane)
1.600	5.61	11.16	0.00	224.6 (2-Lane)
1.600	6.92	13.76	0.00	276.8 (1-Lane)
1.700	4.27	18.52	0.00	170.8 (2-Lane)
1.700	5.26	22.83	0.00	210.5 (1-Lane)
1.800	3.32	39.73	0.00	132.8 (2-Lane)
1.800	4.09	48.98	0.00	163.7 (1-Lane)
1.900	4.96	151.42	0.00	198.2 (2-Lane)
1.900	6.11	186.67	0.00	244.4 (1-Lane)
2.000	4.95	999.00	0.00	197.8 (2-Lane)
2.000	6.10	999.00	0.00	243.8 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1056

SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30					
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Lane	Live Load w/o impact Truck	Lane	Live Load w/impact Truck	Lane	Live Load w/o Truck	
Lane										
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										
1.010	193.4	37.4	129.18 R	0.00	97.13	0.00	85.73 R	0.00	64.46	
0.00										
1.100	1934.1	340.3	1158.46 R	0.00	871.02	0.00	768.84 R	0.00	578.08	
0.00										
1.200	3451.8	604.9	2020.62 R	0.00	1519.26	0.00	1341.04 R	0.00	1008.30	
0.00										
1.300	4540.4	794.0	2650.33 R	0.00	1992.73	0.00	1758.96 R	0.00	1322.53	
0.00										
1.400	5193.5	907.4	3005.94 R	0.00	2260.11	0.00	1994.98 R	0.00	1499.98	
0.00										
1.500	5411.2	945.2	3088.39 R	0.00	2322.10	0.00	2049.69 R	0.00	1541.12	
0.00										
1.600	5193.5	907.4	3005.94 R	0.00	2260.11	0.00	1994.98 R	0.00	1499.98	
0.00										
1.700	4540.4	794.0	2650.33 R	0.00	1992.73	0.00	1758.96 R	0.00	1322.53	
0.00										
1.800	3451.8	604.9	2020.62 R	0.00	1519.26	0.00	1341.04 R	0.00	1008.30	
0.00										
1.900	1934.1	340.3	1158.46 R	0.00	871.02	0.00	768.84 R	0.00	578.08	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06  
Rating Type: II-INV  
Rating Live Load:

Rating Type: 3S2  
Rating Live Load:  
Span

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06  
Rating Type: II-INV  
Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	423.08	999.00	98.47	999.00	0.00	999.0 (2-Lane)
1.010	637.48	999.00	148.37	999.00	0.00	999.0 (1-Lane)
1.100	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.100	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
1.200	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.200	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.300	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.300	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.400	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.400	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.500	8.18	999.00	2.67	999.00	0.00	107.0 (2-Lane)
1.500	12.32	999.00	4.03	999.00	0.00	161.2 (1-Lane)

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1.600	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.600	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.700	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.700	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.800	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.800	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.900	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.900	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: 3-3

Gamma	DC	DW	(2-Lane)				(1-Lane)		
	1.25	1.25	LL		LL		LL		LL
			1.75		1.75		1.75		1.75
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
			Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
Lane									
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	167.67 R	0.00	126.07	0.00	111.28 R	0.00	83.67
0.00									
1.100	2417.7	425.3	1497.18 R	0.00	1125.70	0.00	993.64 R	0.00	747.10
0.00									
1.200	4314.7	756.1	2607.95 R	0.00	1960.87	0.00	1730.84 R	0.00	1301.38
0.00									
1.300	5675.4	992.4	3357.23 R	0.00	2524.23	0.00	2228.11 R	0.00	1675.27
0.00									
1.400	6491.9	1134.2	3807.29 R	0.00	2862.62	0.00	2526.81 R	0.00	1899.86
0.00									
1.500	6764.0	1181.5	3958.14 R	0.00	2976.05	0.00	2626.93 R	0.00	1975.13
0.00									
1.600	6491.9	1134.2	3807.29 R	0.00	2862.62	0.00	2526.81 R	0.00	1899.86
0.00									
1.700	5675.4	992.4	3357.23 R	0.00	2524.23	0.00	2228.11 R	0.00	1675.27
0.00									
1.800	4314.7	756.1	2607.95 R	0.00	1960.87	0.00	1730.84 R	0.00	1301.38
0.00									
1.900	2417.7	425.3	1497.18 R	0.00	1125.70	0.00	993.64 R	0.00	747.10
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1059

STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12209.5	-12209.5B	11797.6	11797.6	-20155.0	-20155.0
1.600	19743.0C	19743.0	-11834.3	-11834.3B	12117.0	12117.0	-19460.3	-19460.3
1.700	19743.0C	19743.0	-11834.3	-11834.3B	13075.2	13075.2	-18502.1	-18502.1
1.800	19743.0C	19743.0	-12987.6	-12987.6B	14672.1	14672.1	-18058.5	-18058.5
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	96.15	999.00	96.15	999.00	0.00	999.0 (2-Lane)
1.010	144.87	999.00	144.87	999.00	0.00	999.0 (1-Lane)
1.100	9.06	999.00	9.06	999.00	0.00	362.5 (2-Lane)
1.100	13.65	999.00	13.65	999.00	0.00	546.1 (1-Lane)
1.200	5.63	999.00	5.63	999.00	0.00	225.0 (2-Lane)
1.200	8.48	999.00	8.48	999.00	0.00	339.1 (1-Lane)
1.300	3.89	999.00	3.89	999.00	0.00	155.8 (2-Lane)
1.300	5.87	999.00	5.87	999.00	0.00	234.7 (1-Lane)
1.400	3.18	999.00	3.18	999.00	0.00	127.3 (2-Lane)
1.400	4.80	999.00	4.80	999.00	0.00	191.8 (1-Lane)
1.500	2.98	999.00	2.98	999.00	0.00	119.2 (2-Lane)
1.500	4.49	999.00	4.49	999.00	0.00	179.6 (1-Lane)
1.600	3.18	999.00	3.18	999.00	0.00	127.3 (2-Lane)
1.600	4.80	999.00	4.80	999.00	0.00	191.8 (1-Lane)
1.700	3.89	999.00	3.89	999.00	0.00	155.8 (2-Lane)
1.700	5.87	999.00	5.87	999.00	0.00	234.7 (1-Lane)
1.800	5.63	999.00	5.63	999.00	0.00	225.0 (2-Lane)
1.800	8.48	999.00	8.48	999.00	0.00	339.1 (1-Lane)
1.900	9.06	999.00	9.06	999.00	0.00	362.5 (2-Lane)
1.900	13.65	999.00	13.65	999.00	0.00	546.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)



2.000 999.00 999.00 999.00 999.00 0.00 999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75				
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	153.49	0.00	115.41	0.00	124.51	0.00	93.61
0.00									
1.010	164.0	28.9	151.69	0.00	114.05	0.00	123.04	0.00	92.51
0.00									
1.100	134.8	23.6	135.45	0.00	101.84	0.00	109.87	0.00	82.61
0.00									
1.200	102.0	17.7	117.41	0.00	88.28	0.00	95.23	0.00	71.61
0.00									
1.300	68.0	11.8	99.36	0.00	74.71	0.00	80.60	0.00	60.60
0.00									
1.400	34.0	5.9	81.32	0.00	61.14	0.00	65.96	0.00	49.60
0.00									
1.500	0.0	0.0	63.28	0.00	47.58	0.00	51.33	0.00	38.59
0.00									
1.600	-34.0	-5.9	-81.32	0.00	-61.14	0.00	-65.96	0.00	-49.60
0.00									
1.700	-68.0	-11.8	-99.36	0.00	-74.71	0.00	-80.60	0.00	-60.60
0.00									
1.800	-102.0	-17.7	-117.41	0.00	-88.28	0.00	-95.23	0.00	-71.61
0.00									
1.900	-134.8	-23.6	-135.45	0.00	-101.84	0.00	-109.87	0.00	-82.61
0.00									
2.000	-167.2	-29.5	-153.49	0.00	-115.41	0.00	-124.51	0.00	-93.61
0.00									

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)

1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: 3-3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.13	0.00	205.0 (2-Lane)
1.000	999.00	6.32	0.00	252.8 (1-Lane)
1.010	999.00	5.21	0.00	208.5 (2-Lane)
1.010	999.00	6.43	0.00	257.0 (1-Lane)
1.100	183.86	5.16	0.00	206.5 (2-Lane)
1.100	226.67	6.36	0.00	254.6 (1-Lane)
1.200	44.52	3.48	0.00	139.1 (2-Lane)
1.200	54.88	4.29	0.00	171.5 (1-Lane)
1.300	21.55	4.51	0.00	180.5 (2-Lane)
1.300	26.57	5.56	0.00	222.5 (1-Lane)
1.400	12.56	6.00	0.00	240.1 (2-Lane)
1.400	15.48	7.40	0.00	296.0 (1-Lane)
1.500	8.35	8.35	0.00	333.8 (2-Lane)
1.500	10.29	10.29	0.00	411.5 (1-Lane)
1.600	6.00	12.56	0.00	240.1 (2-Lane)
1.600	7.40	15.48	0.00	296.0 (1-Lane)
1.700	4.51	21.55	0.00	180.5 (2-Lane)
1.700	5.56	26.57	0.00	222.5 (1-Lane)
1.800	3.48	44.52	0.00	139.1 (2-Lane)
1.800	4.29	54.88	0.00	171.5 (1-Lane)
1.900	5.16	183.86	0.00	206.5 (2-Lane)
1.900	6.36	226.67	0.00	254.6 (1-Lane)
2.000	5.13	999.00	0.00	205.0 (2-Lane)
2.000	6.32	999.00	0.00	252.8 (1-Lane)

SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	124.55 R	0.00	93.65	82.66 R
0.00						
1.100	1934.1	340.3	1112.19 R	0.00	836.23	738.14 R
0.00						
1.200	3451.8	604.9	1937.34 R	0.00	1456.64	1285.77 R
0.00						
1.300	4540.4	794.0	2493.94 R	0.00	1875.14	1655.17 R
0.00						
1.400	5193.5	907.4	2828.27 R	0.00	2126.52	1877.06 R
0.00						
1.500	5411.2	945.2	2940.33 R	0.00	2210.78	1951.43 R
0.00						
1.600	5193.5	907.4	2828.27 R	0.00	2126.52	1877.06 R
0.00						
1.700	4540.4	794.0	2493.94 R	0.00	1875.14	1655.17 R
0.00						
1.800	3451.8	604.9	1937.34 R	0.00	1456.64	1285.77 R
0.00						
1.900	1934.1	340.3	1112.19 R	0.00	836.23	738.14 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load: 3-3

Rating Type: 3-3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive	Bending	Negative	Bending	Positive	Bending	Negative	Bending
	Top	Bott.	Top	Bott.	Top	Bott.	Top	Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7

1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load: 3-3

## Service

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	438.80	999.00	102.13	999.00	0.00	999.0 (2-Lane)
1.010	661.17	999.00	153.88	999.00	0.00	999.0 (1-Lane)
1.100	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.100	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
1.200	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.200	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.300	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.300	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.400	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.400	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.500	8.59	999.00	2.81	999.00	0.00	112.3 (2-Lane)
1.500	12.95	999.00	4.23	999.00	0.00	169.3 (1-Lane)
1.600	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.600	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.700	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.700	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.800	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.800	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.900	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.900	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: SU4

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Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	127.85 R	0.00	96.13	84.85 R
0.00						
1.100	2417.7	425.3	1157.37 R	0.00	870.20	768.12 R
0.00						
1.200	4314.7	756.1	2045.50 R	0.00	1537.97	1357.55 R
0.00						
1.300	5675.4	992.4	2664.40 R	0.00	2003.31	1768.30 R
0.00						
1.400	6491.9	1134.2	3042.72 R	0.00	2287.76	2019.38 R
0.00						
1.500	6764.0	1181.5	3156.78 R	0.00	2373.52	2095.08 R
0.00						
1.600	6491.9	1134.2	3042.72 R	0.00	2287.76	2019.38 R
0.00						
1.700	5675.4	992.4	2664.40 R	0.00	2003.31	1768.30 R
0.00						
1.800	4314.7	756.1	2045.50 R	0.00	1537.97	1357.55 R
0.00						
1.900	2417.7	425.3	1157.37 R	0.00	870.20	768.12 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: SU4

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12217.0	-12217.0B	11797.6	11797.6	-20162.4	-20162.4
1.600	19743.0C	19743.0	-11834.5	-11834.5B	12117.0	12117.0	-19460.6	-19460.6
1.700	19743.0C	19743.0	-11834.5	-11834.5B	13075.2	13075.2	-18502.4	-18502.4
1.800	19743.0C	19743.0	-13013.0	-13013.0B	14672.1	14672.1	-18083.9	-18083.9
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

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0.00									
1.100	134.8	23.6	104.71	0.00	78.73	0.00	84.93	0.00	63.86
0.00									
1.200	102.0	17.7	92.53	0.00	69.57	0.00	75.05	0.00	56.43
0.00									
1.300	68.0	11.8	80.35	0.00	60.41	0.00	65.18	0.00	49.00
0.00									
1.400	34.0	5.9	68.17	0.00	51.26	0.00	55.30	0.00	41.58
0.00									
1.500	0.0	0.0	55.99	0.00	42.10	0.00	45.42	0.00	34.15
0.00									
1.600	-34.0	-5.9	-68.17	0.00	-51.26	0.00	-55.30	0.00	-41.58
0.00									
1.700	-68.0	-11.8	-80.35	0.00	-60.41	0.00	-65.18	0.00	-49.00
0.00									
1.800	-102.0	-17.7	-92.53	0.00	-69.57	0.00	-75.05	0.00	-56.43
0.00									
1.900	-134.8	-23.6	-104.71	0.00	-78.73	0.00	-84.93	0.00	-63.86
0.00									
2.000	-167.2	-29.5	-116.89	0.00	-87.88	0.00	-94.81	0.00	-71.29
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: SU4

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.73	0.00	181.8 (2-Lane)
1.000	999.00	8.30	0.00	224.1 (1-Lane)
1.010	999.00	6.84	0.00	184.6 (2-Lane)
1.010	999.00	8.43	0.00	227.5 (1-Lane)
1.100	133.46	6.68	0.00	180.3 (2-Lane)
1.100	164.54	8.23	0.00	222.3 (1-Lane)
1.200	33.29	4.41	0.00	119.2 (2-Lane)
1.200	41.05	5.44	0.00	146.9 (1-Lane)
1.300	19.22	5.58	0.00	150.6 (2-Lane)
1.300	23.69	6.88	0.00	185.7 (1-Lane)
1.400	12.96	7.16	0.00	193.3 (2-Lane)
1.400	15.98	8.83	0.00	238.4 (1-Lane)
1.500	9.43	9.43	0.00	254.6 (2-Lane)
1.500	11.63	11.63	0.00	313.9 (1-Lane)
1.600	7.16	12.96	0.00	193.3 (2-Lane)
1.600	8.83	15.98	0.00	238.4 (1-Lane)
1.700	5.58	19.22	0.00	150.6 (2-Lane)
1.700	6.88	23.69	0.00	185.7 (1-Lane)
1.800	4.41	33.29	0.00	119.2 (2-Lane)
1.800	5.44	41.05	0.00	146.9 (1-Lane)
1.900	6.68	133.46	0.00	180.3 (2-Lane)
1.900	8.23	164.54	0.00	222.3 (1-Lane)
2.000	6.73	999.00	0.00	181.8 (2-Lane)
2.000	8.30	999.00	0.00	224.1 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	193.4	37.4	94.98 R	0.00	71.41	63.03 R
0.00						
1.100	1934.1	340.3	859.76 R	0.00	646.44	570.60 R
0.00						
1.200	3451.8	604.9	1519.52 R	0.00	1142.49	1008.47 R



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0.00									
1.300	4540.4	794.0	1979.27 R	0.00	1488.17	0.00	1313.60 R	0.00	987.67
0.00									
1.400	5193.5	907.4	2260.31 R	0.00	1699.48	0.00	1500.11 R	0.00	1127.90
0.00									
1.500	5411.2	945.2	2345.04 R	0.00	1763.19	0.00	1556.35 R	0.00	1170.19
0.00									
1.600	5193.5	907.4	2260.31 R	0.00	1699.48	0.00	1500.11 R	0.00	1127.90
0.00									
1.700	4540.4	794.0	1979.27 R	0.00	1488.17	0.00	1313.60 R	0.00	987.67
0.00									
1.800	3451.8	604.9	1519.52 R	0.00	1142.49	0.00	1008.47 R	0.00	758.25
0.00									
1.900	1934.1	340.3	859.76 R	0.00	646.44	0.00	570.60 R	0.00	429.02
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load:

Rating Type: SU4  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)

1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	575.45	999.00	133.93	999.00	0.00	999.0 (2-Lane)
1.010	867.06	999.00	201.80	999.00	0.00	999.0 (1-Lane)
1.100	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.100	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
1.200	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.200	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.300	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.300	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.400	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.400	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.500	10.77	999.00	3.52	999.00	0.00	95.1 (2-Lane)
1.500	16.23	999.00	5.31	999.00	0.00	143.3 (1-Lane)
1.600	11.75	999.00	3.80	999.00	0.00	102.5 (2-Lane)
1.600	17.70	999.00	5.72	999.00	0.00	154.5 (1-Lane)
1.700	15.38	999.00	4.83	999.00	0.00	130.4 (2-Lane)
1.700	23.17	999.00	7.28	999.00	0.00	196.5 (1-Lane)
1.800	24.28	999.00	7.36	999.00	0.00	198.7 (2-Lane)
1.800	36.58	999.00	11.09	999.00	0.00	299.4 (1-Lane)
1.900	47.44	999.00	11.60	999.00	0.00	313.3 (2-Lane)
1.900	71.47	999.00	17.48	999.00	0.00	472.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o Lane
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	145.35 R	0.00	109.29	0.00
0.00						
1.100	2417.7	425.3	1314.44 R	0.00	988.30	0.00
0.00						
1.200	4314.7	756.1	2319.75 R	0.00	1744.17	0.00
0.00						
1.300	5675.4	992.4	3025.91 R	0.00	2275.12	0.00
0.00						
1.400	6491.9	1134.2	3451.60 R	0.00	2595.19	0.00
0.00						
1.500	6764.0	1181.5	3568.17 R	0.00	2682.83	0.00
0.00						
1.600	6491.9	1134.2	3451.60 R	0.00	2595.19	0.00
0.00						
1.700	5675.4	992.4	3025.91 R	0.00	2275.12	0.00
0.00						
1.800	4314.7	756.1	2319.75 R	0.00	1744.17	0.00

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0.00									
1.900	2417.7	425.3	1314.44 R	0.00	988.30	0.00	872.36 R	0.00	655.91
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV

Rating Live Load: SU5

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12210.3	-12210.3B	11797.6	11797.6	-20155.8	-20155.8
1.600	19743.0C	19743.0	-11829.0	-11829.0B	12117.0	12117.0	-19455.1	-19455.1
1.700	19743.0C	19743.0	-11829.0	-11829.0B	13075.2	13075.2	-18496.9	-18496.9
1.800	19743.0C	19743.0	-13011.8	-13011.8B	14672.1	14672.1	-18082.7	-18082.7
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV

Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	110.91	999.00	110.91	999.00	0.00	999.0 (2-Lane)
1.010	167.11	999.00	167.11	999.00	0.00	999.0 (1-Lane)
1.100	10.32	999.00	10.32	999.00	0.00	320.0 (2-Lane)
1.100	15.55	999.00	15.55	999.00	0.00	482.1 (1-Lane)
1.200	6.32	999.00	6.32	999.00	0.00	196.1 (2-Lane)
1.200	9.53	999.00	9.53	999.00	0.00	295.4 (1-Lane)
1.300	4.32	999.00	4.32	999.00	0.00	134.0 (2-Lane)
1.300	6.51	999.00	6.51	999.00	0.00	201.8 (1-Lane)

1.400	3.51	999.00	3.51	999.00	0.00	108.8 (2-Lane)
1.400	5.29	999.00	5.29	999.00	0.00	164.0 (1-Lane)
1.500	3.31	999.00	3.31	999.00	0.00	102.5 (2-Lane)
1.500	4.98	999.00	4.98	999.00	0.00	154.4 (1-Lane)
1.600	3.51	999.00	3.51	999.00	0.00	108.8 (2-Lane)
1.600	5.29	999.00	5.29	999.00	0.00	164.0 (1-Lane)
1.700	4.32	999.00	4.32	999.00	0.00	134.0 (2-Lane)
1.700	6.51	999.00	6.51	999.00	0.00	201.8 (1-Lane)
1.800	6.32	999.00	6.32	999.00	0.00	196.1 (2-Lane)
1.800	9.53	999.00	9.53	999.00	0.00	295.4 (1-Lane)
1.900	10.32	999.00	10.32	999.00	0.00	320.0 (2-Lane)
1.900	15.55	999.00	15.55	999.00	0.00	482.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	132.90	0.00	99.93	0.00	107.80	0.00	81.05
1.010 0.00	164.0	28.9	131.50	0.00	98.87	0.00	106.67	0.00	80.20
1.100 0.00	134.8	23.6	118.92	0.00	89.41	0.00	96.46	0.00	72.53
1.200 0.00	102.0	17.7	104.93	0.00	78.90	0.00	85.12	0.00	64.00
1.300 0.00	68.0	11.8	90.95	0.00	68.38	0.00	73.77	0.00	55.47
1.400 0.00	34.0	5.9	76.97	0.00	57.87	0.00	62.43	0.00	46.94
1.500 0.00	0.0	0.0	62.98	0.00	47.36	0.00	51.09	0.00	38.41
1.600 0.00	-34.0	-5.9	-76.97	0.00	-57.87	0.00	-62.43	0.00	-46.94
1.700 0.00	-68.0	-11.8	-90.95	0.00	-68.38	0.00	-73.77	0.00	-55.47
1.800 0.00	-102.0	-17.7	-104.93	0.00	-78.90	0.00	-85.12	0.00	-64.00
1.900 0.00	-134.8	-23.6	-118.92	0.00	-89.41	0.00	-96.46	0.00	-72.53
2.000 0.00	-167.2	-29.5	-132.90	0.00	-99.93	0.00	-107.80	0.00	-81.05

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06  
 Rating Type: I-INV  
 Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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 STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06  
 Rating Type: I-INV  
 Rating Live Load: SU5

Shear				
Span	Rating (-)	Factor (+)	Rating value	Load Resistance (tons)
1.000	999.00	5.92	0.00	183.5 (2-Lane)
1.000	999.00	7.30	0.00	226.3 (1-Lane)
1.010	999.00	6.01	0.00	186.4 (2-Lane)
1.010	999.00	7.41	0.00	229.8 (1-Lane)
1.100	125.99	5.88	0.00	182.3 (2-Lane)
1.100	155.32	7.25	0.00	224.7 (1-Lane)
1.200	30.79	3.89	0.00	120.6 (2-Lane)
1.200	37.96	4.80	0.00	148.7 (1-Lane)
1.300	17.36	4.93	0.00	152.8 (2-Lane)
1.300	21.40	6.08	0.00	188.4 (1-Lane)
1.400	11.59	6.34	0.00	196.6 (2-Lane)
1.400	14.29	7.82	0.00	242.4 (1-Lane)
1.500	8.38	8.38	0.00	259.9 (2-Lane)

1.500	10.34	10.34	0.00	320.4 (1-Lane)
1.600	6.34	11.59	0.00	196.6 (2-Lane)
1.600	7.82	14.29	0.00	242.4 (1-Lane)
1.700	4.93	17.36	0.00	152.8 (2-Lane)
1.700	6.08	21.40	0.00	188.4 (1-Lane)
1.800	3.89	30.79	0.00	120.6 (2-Lane)
1.800	4.80	37.96	0.00	148.7 (1-Lane)
1.900	5.88	125.98	0.00	182.3 (2-Lane)
1.900	7.25	155.32	0.00	224.7 (1-Lane)
2.000	5.92	999.00	0.00	183.5 (2-Lane)
2.000	7.30	999.00	0.00	226.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load: SU5

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	107.98 R	0.00	81.19	0.00
0.00						
1.100	1934.1	340.3	976.44 R	0.00	734.16	0.00
0.00						
1.200	3451.8	604.9	1723.24 R	0.00	1295.67	0.00
0.00						
1.300	4540.4	794.0	2247.82 R	0.00	1690.09	0.00
0.00						
1.400	5193.5	907.4	2564.05 R	0.00	1927.85	0.00
0.00						
1.500	5411.2	945.2	2650.64 R	0.00	1992.96	0.00
0.00						
1.600	5193.5	907.4	2564.05 R	0.00	1927.85	0.00
0.00						
1.700	4540.4	794.0	2247.82 R	0.00	1690.09	0.00
0.00						
1.800	3451.8	604.9	1723.24 R	0.00	1295.67	0.00
0.00						
1.900	1934.1	340.3	976.44 R	0.00	734.16	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV

Rating Live Load:

Rating Type: SU5

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV

Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	506.16	999.00	117.80	999.00	0.00	999.0 (2-Lane)
1.010	762.66	999.00	177.50	999.00	0.00	999.0 (1-Lane)
1.100	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.100	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
1.200	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.200	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.300	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.300	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.400	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.400	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.500	9.53	999.00	3.12	999.00	0.00	96.6 (2-Lane)
1.500	14.36	999.00	4.69	999.00	0.00	145.5 (1-Lane)
1.600	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.600	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.700	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.700	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.800	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.800	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.900	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)

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1.900 62.93 999.00 15.40 999.00 0.00 477.2 (1-Lane)  
2.000 999.00 999.00 999.00 999.00 0.00 999.0 (2-Lane)  
2.000 999.00 999.00 999.00 999.00 0.00 999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75					
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	241.8	46.8	160.20 R	0.00	120.45	0.00	106.32 R	0.00	79.94	
0.00										
1.100	2417.7	425.3	1446.12 R	0.00	1087.31	0.00	959.75 R	0.00	721.62	
0.00										
1.200	4314.7	756.1	2582.47 R	0.00	1941.70	0.00	1713.92 R	0.00	1288.66	
0.00										
1.300	5675.4	992.4	3378.84 R	0.00	2540.48	0.00	2242.46 R	0.00	1686.06	
0.00										
1.400	6491.9	1134.2	3846.14 R	0.00	2891.83	0.00	2552.59 R	0.00	1919.24	
0.00										
1.500	6764.0	1181.5	3992.77 R	0.00	3002.08	0.00	2649.91 R	0.00	1992.41	
0.00										
1.600	6491.9	1134.2	3846.14 R	0.00	2891.83	0.00	2552.59 R	0.00	1919.24	
0.00										
1.700	5675.4	992.4	3378.84 R	0.00	2540.48	0.00	2242.46 R	0.00	1686.06	
0.00										
1.800	4314.7	756.1	2582.47 R	0.00	1941.70	0.00	1713.92 R	0.00	1288.66	
0.00										
1.900	2417.7	425.3	1446.12 R	0.00	1087.30	0.00	959.75 R	0.00	721.62	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: SU6

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4



## 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12212.4	-12212.4B	11797.6	11797.6	-20157.8	-20157.8
1.600	19743.0C	19743.0	-11833.4	-11833.4B	12117.0	12117.0	-19459.5	-19459.5
1.700	19743.0C	19743.0	-11833.4	-11833.4B	13075.2	13075.2	-18501.3	-18501.3
1.800	19743.0C	19743.0	-13011.0	-13011.0B	14672.1	14672.1	-18081.8	-18081.8
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1084

## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: SU6

## Moment

Span	top +bend	Rating fiber -bend	Factor	bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)
1.010	100.63	999.00		100.63	999.00	0.00	999.0 (2-Lane)
1.010	151.62	999.00		151.62	999.00	0.00	999.0 (1-Lane)
1.100	9.38	999.00		9.38	999.00	0.00	326.0 (2-Lane)
1.100	14.14	999.00		14.14	999.00	0.00	491.2 (1-Lane)
1.200	5.68	999.00		5.68	999.00	0.00	197.4 (2-Lane)
1.200	8.56	999.00		8.56	999.00	0.00	297.5 (1-Lane)
1.300	3.87	999.00		3.87	999.00	0.00	134.5 (2-Lane)
1.300	5.83	999.00		5.83	999.00	0.00	202.6 (1-Lane)
1.400	3.15	999.00		3.15	999.00	0.00	109.5 (2-Lane)
1.400	4.75	999.00		4.75	999.00	0.00	165.0 (1-Lane)
1.500	2.95	999.00		2.95	999.00	0.00	102.7 (2-Lane)
1.500	4.45	999.00		4.45	999.00	0.00	154.7 (1-Lane)
1.600	3.15	999.00		3.15	999.00	0.00	109.5 (2-Lane)
1.600	4.75	999.00		4.75	999.00	0.00	165.0 (1-Lane)
1.700	3.87	999.00		3.87	999.00	0.00	134.5 (2-Lane)
1.700	5.83	999.00		5.83	999.00	0.00	202.6 (1-Lane)
1.800	5.68	999.00		5.68	999.00	0.00	197.4 (2-Lane)
1.800	8.56	999.00		8.56	999.00	0.00	297.5 (1-Lane)
1.900	9.38	999.00		9.38	999.00	0.00	326.0 (2-Lane)
1.900	14.14	999.00		14.14	999.00	0.00	491.2 (1-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06  
 Rating Type: I-INV  
 Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	146.51	0.00	110.15	89.35
0.00						
1.010	164.0	28.9	144.94	0.00	108.98	88.40
0.00						
1.100	134.8	23.6	130.83	0.00	98.37	79.79
0.00						
1.200	102.0	17.7	115.16	0.00	86.58	70.23
0.00						
1.300	68.0	11.8	99.48	0.00	74.80	60.67
0.00						
1.400	34.0	5.9	83.81	0.00	63.01	51.11
0.00						
1.500	0.0	0.0	68.13	0.00	51.23	41.55
0.00						
1.600	-34.0	-5.9	-83.81	0.00	-63.01	-51.11
0.00						
1.700	-68.0	-11.8	-99.48	0.00	-74.80	-60.67
0.00						
1.800	-102.0	-17.7	-115.16	0.00	-86.58	-70.23
0.00						
1.900	-134.8	-23.6	-130.83	0.00	-98.37	-79.79
0.00						
2.000	-167.2	-29.5	-146.51	0.00	-110.15	-89.35
0.00						

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1086  
 STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06  
 Rating Type: I-INV  
 Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)

1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1087

## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV

Rating Live Load: SU6

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.37	0.00	186.6 (2-Lane)
1.000	999.00	6.62	0.00	230.1 (1-Lane)
1.010	999.00	5.45	0.00	189.6 (2-Lane)
1.010	999.00	6.72	0.00	233.7 (1-Lane)
1.100	144.09	5.34	0.00	185.7 (2-Lane)
1.100	177.63	6.59	0.00	229.0 (1-Lane)
1.200	30.69	3.55	0.00	123.2 (2-Lane)
1.200	37.83	4.37	0.00	151.9 (1-Lane)
1.300	16.53	4.51	0.00	156.6 (2-Lane)
1.300	20.37	5.55	0.00	193.0 (1-Lane)
1.400	10.83	5.82	0.00	202.4 (2-Lane)
1.400	13.35	7.18	0.00	249.5 (1-Lane)
1.500	7.75	7.75	0.00	269.3 (2-Lane)
1.500	9.56	9.56	0.00	332.0 (1-Lane)
1.600	5.82	10.83	0.00	202.4 (2-Lane)
1.600	7.18	13.35	0.00	249.5 (1-Lane)
1.700	4.51	16.53	0.00	156.6 (2-Lane)
1.700	5.55	20.37	0.00	193.0 (1-Lane)
1.800	3.55	30.69	0.00	123.2 (2-Lane)
1.800	4.37	37.83	0.00	151.9 (1-Lane)
1.900	5.34	144.09	0.00	185.7 (2-Lane)
1.900	6.59	177.63	0.00	229.0 (1-Lane)
2.000	5.37	999.00	0.00	186.6 (2-Lane)
2.000	6.62	999.00	0.00	230.1 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1088

## SERVICE MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV

Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30			
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	119.01 R	0.00	89.48	0.00	78.98 R	0.00	59.39	
0.00										
1.100	1934.1	340.3	1074.26 R	0.00	807.71	0.00	712.96 R	0.00	536.06	
0.00										
1.200	3451.8	604.9	1918.40 R	0.00	1442.41	0.00	1273.20 R	0.00	957.29	
0.00										
1.300	4540.4	794.0	2509.99 R	0.00	1887.21	0.00	1665.83 R	0.00	1252.50	
0.00										
1.400	5193.5	907.4	2857.13 R	0.00	2148.22	0.00	1896.21 R	0.00	1425.72	
0.00										
1.500	5411.2	945.2	2966.06 R	0.00	2230.12	0.00	1968.50 R	0.00	1480.08	
0.00										
1.600	5193.5	907.4	2857.13 R	0.00	2148.22	0.00	1896.21 R	0.00	1425.72	
0.00										
1.700	4540.4	794.0	2509.99 R	0.00	1887.21	0.00	1665.83 R	0.00	1252.50	
0.00										
1.800	3451.8	604.9	1918.40 R	0.00	1442.41	0.00	1273.20 R	0.00	957.29	
0.00										
1.900	1934.1	340.3	1074.26 R	0.00	807.71	0.00	712.96 R	0.00	536.06	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1088  
SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV

Rating Live Load:

Rating Type: SU6

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1089  
SERVICE RESISTANCE RATING REPORT

Member I. D. G06  
 Rating Type: II-INV  
 Rating Live Load: SU6

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	-bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	459.24	999.00	106.88	999.00	0.00	999.0 (2-Lane)
1.010	691.96	999.00	161.05	999.00	0.00	999.0 (1-Lane)
1.100	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.100	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
1.200	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.200	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.300	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.300	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.400	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.400	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.500	8.52	999.00	2.78	999.00	0.00	96.7 (2-Lane)
1.500	12.83	999.00	4.20	999.00	0.00	145.8 (1-Lane)
1.600	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.600	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.700	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.700	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.800	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.800	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.900	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.900	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1090  
 MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G06  
 Rating Type: I-INV  
 Rating Live Load: SU7

Gamma	DC		DW		(2-Lane)		(1-Lane)	
	1.25		1.25		LL 1.75		LL 1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck Lane	Truck Lane	Truck Lane

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	175.62 R	0.00	132.04	0.00	116.55 R	0.00	87.64
0.00									
1.100	2417.7	425.3	1582.32 R	0.00	1189.71	0.00	1050.15 R	0.00	789.59
0.00									
1.200	4314.7	756.1	2824.95 R	0.00	2124.02	0.00	1874.85 R	0.00	1409.66
0.00									
1.300	5675.4	992.4	3727.89 R	0.00	2802.93	0.00	2474.12 R	0.00	1860.24
0.00									
1.400	6491.9	1134.2	4247.54 R	0.00	3193.64	0.00	2819.00 R	0.00	2119.55
0.00									
1.500	6764.0	1181.5	4416.61 R	0.00	3320.76	0.00	2931.20 R	0.00	2203.91
0.00									
1.600	6491.9	1134.2	4247.54 R	0.00	3193.64	0.00	2819.00 R	0.00	2119.55
0.00									
1.700	5675.4	992.4	3727.89 R	0.00	2802.92	0.00	2474.12 R	0.00	1860.24
0.00									
1.800	4314.7	756.1	2824.95 R	0.00	2124.02	0.00	1874.85 R	0.00	1409.66
0.00									
1.900	2417.7	425.3	1582.32 R	0.00	1189.71	0.00	1050.15 R	0.00	789.58
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1091  
STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12215.4	-12215.4B	11797.6	11797.6	-20160.9	-20160.9
1.600	19743.0C	19743.0	-11835.7	-11835.7B	12117.0	12117.0	-19461.8	-19461.8
1.700	19743.0C	19743.0	-11835.7	-11835.7B	13075.2	13075.2	-18503.6	-18503.6
1.800	19743.0C	19743.0	-13021.6	-13021.6B	14672.1	14672.1	-18092.4	-18092.4
1.900	16409.4C	16409.4	-9908.4	-9908.4B	13566.4	13566.4	-12751.4	-12751.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1092  
MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: SU7

Moment			
Span	Rating	Factor	Load

	top fiber +bend	fiber -bend	bottom fiber +bend	fiber -bend	Value	Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	91.79	999.00	91.79	999.00	0.00	999.0 (2-Lane)
1.010	138.31	999.00	138.31	999.00	0.00	999.0 (1-Lane)
1.100	8.57	999.00	8.57	999.00	0.00	332.2 (2-Lane)
1.100	12.92	999.00	12.92	999.00	0.00	500.6 (1-Lane)
1.200	5.19	999.00	5.19	999.00	0.00	201.3 (2-Lane)
1.200	7.83	999.00	7.83	999.00	0.00	303.2 (1-Lane)
1.300	3.51	999.00	3.51	999.00	0.00	135.9 (2-Lane)
1.300	5.28	999.00	5.28	999.00	0.00	204.8 (1-Lane)
1.400	2.85	999.00	2.85	999.00	0.00	110.5 (2-Lane)
1.400	4.30	999.00	4.30	999.00	0.00	166.6 (1-Lane)
1.500	2.67	999.00	2.67	999.00	0.00	103.5 (2-Lane)
1.500	4.03	999.00	4.03	999.00	0.00	156.0 (1-Lane)
1.600	2.85	999.00	2.85	999.00	0.00	110.5 (2-Lane)
1.600	4.30	999.00	4.30	999.00	0.00	166.6 (1-Lane)
1.700	3.51	999.00	3.51	999.00	0.00	135.9 (2-Lane)
1.700	5.28	999.00	5.28	999.00	0.00	204.8 (1-Lane)
1.800	5.19	999.00	5.19	999.00	0.00	201.3 (2-Lane)
1.800	7.83	999.00	7.83	999.00	0.00	303.2 (1-Lane)
1.900	8.57	999.00	8.57	999.00	0.00	332.2 (2-Lane)
1.900	12.92	999.00	12.92	999.00	0.00	500.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	160.63	0.00	120.78	0.00	130.30	0.00	97.97
1.010 0.00	164.0	28.9	158.88	0.00	119.46	0.00	128.88	0.00	96.90
1.100 0.00	134.8	23.6	143.15	0.00	107.63	0.00	116.12	0.00	87.31
1.200 0.00	102.0	17.7	125.67	0.00	94.49	0.00	101.94	0.00	76.65
1.300 0.00	68.0	11.8	108.19	0.00	81.35	0.00	87.76	0.00	65.99
1.400 0.00	34.0	5.9	90.72	0.00	68.21	0.00	73.58	0.00	55.33
1.500 0.00	0.0	0.0	73.24	0.00	55.07	0.00	59.41	0.00	44.67

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1.600	-34.0	-5.9	-90.72	0.00	-68.21	0.00	-73.58	0.00	-55.33
0.00									
1.700	-68.0	-11.8	-108.19	0.00	-81.35	0.00	-87.76	0.00	-65.99
0.00									
1.800	-102.0	-17.7	-125.67	0.00	-94.49	0.00	-101.94	0.00	-76.65
0.00									
1.900	-134.8	-23.6	-143.15	0.00	-107.63	0.00	-116.12	0.00	-87.31
0.00									
2.000	-167.2	-29.5	-160.63	0.00	-120.78	0.00	-130.30	0.00	-97.97
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV

Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-INV

Rating Live Load: SU7

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)



1.000	999.00	4.90	0.00	189.8 (2-Lane)
1.000	999.00	6.04	0.00	234.0 (1-Lane)
1.010	999.00	4.98	0.00	192.8 (2-Lane)
1.010	999.00	6.14	0.00	237.7 (1-Lane)
1.100	168.29	4.88	0.00	189.3 (2-Lane)
1.100	207.47	6.02	0.00	233.3 (1-Lane)
1.200	31.14	3.25	0.00	125.9 (2-Lane)
1.200	38.39	4.01	0.00	155.2 (1-Lane)
1.300	15.88	4.14	0.00	160.5 (2-Lane)
1.300	19.58	5.11	0.00	197.9 (1-Lane)
1.400	10.19	5.38	0.00	208.5 (2-Lane)
1.400	12.56	6.63	0.00	257.1 (1-Lane)
1.500	7.21	7.21	0.00	279.4 (2-Lane)
1.500	8.89	8.89	0.00	344.4 (1-Lane)
1.600	5.38	10.19	0.00	208.5 (2-Lane)
1.600	6.63	12.56	0.00	257.1 (1-Lane)
1.700	4.14	15.88	0.00	160.5 (2-Lane)
1.700	5.11	19.58	0.00	197.9 (1-Lane)
1.800	3.25	31.14	0.00	125.9 (2-Lane)
1.800	4.01	38.39	0.00	155.2 (1-Lane)
1.900	4.88	168.29	0.00	189.3 (2-Lane)
1.900	6.02	207.47	0.00	233.3 (1-Lane)
2.000	4.90	999.00	0.00	189.8 (2-Lane)
2.000	6.04	999.00	0.00	234.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	193.4	37.4	130.46 R	0.00	98.09	86.58 R
0.00						
1.100	1934.1	340.3	1175.44 R	0.00	883.79	780.11 R
0.00						
1.200	3451.8	604.9	2098.53 R	0.00	1577.84	1392.75 R
0.00						
1.300	4540.4	794.0	2769.29 R	0.00	2082.17	1837.91 R
0.00						
1.400	5193.5	907.4	3155.32 R	0.00	2372.42	2094.11 R
0.00						
1.500	5411.2	945.2	3280.91 R	0.00	2466.85	2177.47 R
0.00						
1.600	5193.5	907.4	3155.32 R	0.00	2372.42	2094.11 R
0.00						
1.700	4540.4	794.0	2769.29 R	0.00	2082.17	1837.91 R
0.00						

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1.800	3451.8	604.9	2098.53 R	0.00	1577.84	0.00	1392.75 R	0.00	1047.18
0.00									
1.900	1934.1	340.3	1175.44 R	0.00	883.79	0.00	780.11 R	0.00	586.55
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load:

Rating Type: SU7

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-INV  
Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	418.93	999.00	97.50	999.00	0.00	999.0 (2-Lane)
1.010	631.22	999.00	146.91	999.00	0.00	999.0 (1-Lane)
1.100	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.100	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
1.200	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.200	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)

1.300	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.300	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.400	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.400	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.500	7.70	999.00	2.52	999.00	0.00	97.5 (2-Lane)
1.500	11.60	999.00	3.79	999.00	0.00	147.0 (1-Lane)
1.600	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.600	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.700	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.700	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.800	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.800	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.900	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.900	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o Lane
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	202.34 R	0.00	170.33	0.00
0.00						
1.100	2417.7	425.3	1832.15 R	0.00	1542.98	0.00
0.00						
1.200	4314.7	756.1	3239.23 R	0.00	2729.59	0.00
0.00						
1.300	5675.4	992.4	4221.21 R	0.00	3559.83	0.00
0.00						
1.400	6491.9	1134.2	4805.03 R	0.00	4053.93	0.00
0.00						
1.500	6764.0	1181.5	4977.21 R	0.00	4201.77	0.00
0.00						
1.600	6491.9	1134.2	4805.03 R	0.00	4053.93	0.00
0.00						
1.700	5675.4	992.4	4221.21 R	0.00	3559.83	0.00
0.00						
1.800	4314.7	756.1	3239.23 R	0.00	2729.59	0.00
0.00						
1.900	2417.7	425.3	1832.15 R	0.00	1542.98	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: HL93

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.6	-12222.6B	11797.6	11797.6	-20168.1	-20168.1
1.600	19743.0C	19743.0	-11839.4	-11839.4B	12117.0	12117.0	-19465.5	-19465.5
1.700	19743.0C	19743.0	-11839.4	-11839.4B	13075.2	13075.2	-18507.3	-18507.3
1.800	19743.0C	19743.0	-13020.9	-13020.9B	14672.1	14672.1	-18091.8	-18091.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: HL93

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating Factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	79.67	999.00	79.67	999.00	0.00	999.0 (2-Lane)
1.010	120.04	999.00	120.04	999.00	0.00	999.0 (1-Lane)
1.100	7.41	999.00	7.41	999.00	0.00	266.6 (2-Lane)
1.100	11.16	999.00	11.16	999.00	0.00	401.6 (1-Lane)
1.200	4.53	999.00	4.53	999.00	0.00	163.1 (2-Lane)
1.200	6.82	999.00	6.82	999.00	0.00	245.7 (1-Lane)
1.300	3.10	999.00	3.10	999.00	0.00	111.5 (2-Lane)
1.300	4.67	999.00	4.67	999.00	0.00	168.0 (1-Lane)
1.400	2.52	999.00	2.52	999.00	0.00	90.8 (2-Lane)
1.400	3.80	999.00	3.80	999.00	0.00	136.8 (1-Lane)
1.500	2.37	999.00	2.37	999.00	0.00	85.3 (2-Lane)
1.500	3.57	999.00	3.57	999.00	0.00	128.6 (1-Lane)
1.600	2.52	999.00	2.52	999.00	0.00	90.8 (2-Lane)
1.600	3.80	999.00	3.80	999.00	0.00	136.8 (1-Lane)
1.700	3.10	999.00	3.10	999.00	0.00	111.5 (2-Lane)
1.700	4.67	999.00	4.67	999.00	0.00	168.0 (1-Lane)

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1.800	4.53	999.00	4.53	999.00	0.00	163.1 (2-Lane)
1.800	6.82	999.00	6.82	999.00	0.00	245.7 (1-Lane)
1.900	7.41	999.00	7.41	999.00	0.00	266.6 (2-Lane)
1.900	11.16	999.00	11.16	999.00	0.00	401.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	184.98	0.00	155.71	0.00
0.00						
1.010	164.0	28.9	182.40	0.00	153.44	0.00
0.00						
1.100	134.8	23.6	159.72	0.00	133.56	0.00
0.00						
1.200	102.0	17.7	135.80	0.00	112.75	0.00
0.00						
1.300	68.0	11.8	113.22	0.00	93.28	0.00
0.00						
1.400	34.0	5.9	91.99	0.00	75.15	0.00
0.00						
1.500	0.0	0.0	72.09	0.00	58.36	0.00
0.00						
1.600	-34.0	-5.9	-91.99	0.00	-75.15	0.00
0.00						
1.700	-68.0	-11.8	-113.22	0.00	-93.28	0.00
0.00						
1.800	-102.0	-17.7	-135.80	0.00	-112.75	0.00
0.00						
1.900	-134.8	-23.6	-159.72	0.00	-133.56	0.00
0.00						
2.000	-167.2	-29.5	-184.98	0.00	-155.71	0.00
0.00						

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1102  
STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: HL93

Span Shear Resistance Available Resistance for LL+I

Vn

1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1103  
 STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
 Rating Live Load: HL93

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	4.25	0.00	153.1 (2-Lane)
1.000	999.00	5.24	0.00	188.8 (1-Lane)
1.010	999.00	4.34	0.00	156.1 (2-Lane)
1.010	999.00	5.34	0.00	192.4 (1-Lane)
1.100	133.47	4.38	0.00	157.6 (2-Lane)
1.100	164.55	5.40	0.00	194.3 (1-Lane)
1.200	31.70	3.01	0.00	108.3 (2-Lane)
1.200	39.08	3.71	0.00	133.5 (1-Lane)
1.300	16.74	3.96	0.00	142.5 (2-Lane)
1.300	20.64	4.88	0.00	175.7 (1-Lane)
1.400	10.61	5.31	0.00	191.1 (2-Lane)
1.400	13.08	6.54	0.00	235.5 (1-Lane)
1.500	7.32	7.32	0.00	263.7 (2-Lane)
1.500	9.03	9.03	0.00	325.1 (1-Lane)
1.600	5.31	10.61	0.00	191.1 (2-Lane)
1.600	6.54	13.08	0.00	235.5 (1-Lane)
1.700	3.96	16.74	0.00	142.5 (2-Lane)
1.700	4.88	20.64	0.00	175.7 (1-Lane)
1.800	3.01	31.70	0.00	108.3 (2-Lane)
1.800	3.71	39.08	0.00	133.5 (1-Lane)

1.900	4.38	122.67	0.00	157.6 (2-Lane)
1.900	5.40	151.23	0.00	194.3 (1-Lane)
2.000	4.25	999.00	0.00	153.1 (2-Lane)
2.000	5.24	999.00	0.00	188.8 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1104

## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPE  
Rating Live Load: HL93

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00				
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Lane	Live Load w/o impact Truck	Lane	Live Load w/impact Truck	Lane	Live Load w/o Truck
Lane									
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	149.88 R	0.00	126.17	0.00	99.47 R	0.00	83.74
0.00									
1.100	1934.1	340.3	1357.15 R	0.00	1142.95	0.00	900.71 R	0.00	758.55
0.00									
1.200	3451.8	604.9	2399.43 R	0.00	2021.92	0.00	1592.44 R	0.00	1341.90
0.00									
1.300	4540.4	794.0	3126.83 R	0.00	2636.91	0.00	2075.20 R	0.00	1750.06
0.00									
1.400	5193.5	907.4	3559.28 R	0.00	3002.91	0.00	2362.21 R	0.00	1992.96
0.00									
1.500	5411.2	945.2	3686.82 R	0.00	3112.42	0.00	2446.86 R	0.00	2065.64
0.00									
1.600	5193.5	907.4	3559.28 R	0.00	3002.91	0.00	2362.21 R	0.00	1992.96
0.00									
1.700	4540.4	794.0	3126.83 R	0.00	2636.91	0.00	2075.20 R	0.00	1750.06
0.00									
1.800	3451.8	604.9	2399.43 R	0.00	2021.92	0.00	1592.44 R	0.00	1341.90
0.00									
1.900	1934.1	340.3	1357.15 R	0.00	1142.95	0.00	900.71 R	0.00	758.55
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1104

## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER  
Rating Live Load:Rating Type: HL93  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1105  
SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER  
Rating Live Load: HL93

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	-bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	364.64	999.00	84.87	999.00	0.00	999.0 (2-Lane)
1.010	549.42	999.00	127.87	999.00	0.00	999.0 (1-Lane)
1.100	30.05	999.00	7.35	999.00	0.00	264.6 (2-Lane)
1.100	45.28	999.00	11.08	999.00	0.00	398.7 (1-Lane)
1.200	15.38	999.00	4.66	999.00	0.00	167.8 (2-Lane)
1.200	23.17	999.00	7.02	999.00	0.00	252.8 (1-Lane)
1.300	9.73	999.00	3.06	999.00	0.00	110.0 (2-Lane)
1.300	14.66	999.00	4.61	999.00	0.00	165.8 (1-Lane)
1.400	7.46	999.00	2.41	999.00	0.00	86.8 (2-Lane)
1.400	11.24	999.00	3.63	999.00	0.00	130.8 (1-Lane)
1.500	6.85	999.00	2.24	999.00	0.00	80.6 (2-Lane)
1.500	10.32	999.00	3.38	999.00	0.00	121.5 (1-Lane)
1.600	7.46	999.00	2.41	999.00	0.00	86.8 (2-Lane)
1.600	11.24	999.00	3.63	999.00	0.00	130.8 (1-Lane)
1.700	9.73	999.00	3.06	999.00	0.00	110.0 (2-Lane)
1.700	14.66	999.00	4.61	999.00	0.00	165.8 (1-Lane)
1.800	15.38	999.00	4.66	999.00	0.00	167.8 (2-Lane)
1.800	23.17	999.00	7.02	999.00	0.00	252.8 (1-Lane)
1.900	30.05	999.00	7.35	999.00	0.00	264.6 (2-Lane)
1.900	45.28	999.00	11.08	999.00	0.00	398.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT



Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	129.01 R	0.00	97.00	85.62 R
0.00						
1.100	2417.7	425.3	1165.45 R	0.00	876.28	773.48 R
0.00						
1.200	4314.7	756.1	2053.98 R	0.00	1544.34	1363.18 R
0.00						
1.300	5675.4	992.4	2665.57 R	0.00	2004.19	1769.08 R
0.00						
1.400	6491.9	1134.2	3027.15 R	0.00	2276.05	2009.05 R
0.00						
1.500	6764.0	1181.5	3125.25 R	0.00	2349.82	2074.16 R
0.00						
1.600	6491.9	1134.2	3027.15 R	0.00	2276.05	2009.05 R
0.00						
1.700	5675.4	992.4	2665.57 R	0.00	2004.19	1769.08 R
0.00						
1.800	4314.7	756.1	2053.98 R	0.00	1544.34	1363.18 R
0.00						
1.900	2417.7	425.3	1165.45 R	0.00	876.28	773.48 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1107

## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: HS20

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12222.6	-12222.6B	11797.6	11797.6	-20168.1	-20168.1
1.600	19743.0C	19743.0	-11839.4	-11839.4B	12117.0	12117.0	-19465.5	-19465.5
1.700	19743.0C	19743.0	-11839.4	-11839.4B	13075.2	13075.2	-18507.3	-18507.3
1.800	19743.0C	19743.0	-13020.9	-13020.9B	14672.1	14672.1	-18091.8	-18091.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: HS20

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	-bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	124.96	999.00	124.96	999.00	999.00	999.0 (2-Lane)
1.010	188.29	999.00	188.29	999.00	999.00	999.0 (1-Lane)
1.100	11.64	999.00	11.64	999.00	232.81	419.1 (2-Lane)
1.100	17.54	999.00	17.54	999.00	350.79	631.4 (1-Lane)
1.200	7.14	999.00	7.14	999.00	142.87	257.2 (2-Lane)
1.200	10.76	999.00	10.76	999.00	215.26	387.5 (1-Lane)
1.300	4.91	999.00	4.91	999.00	98.10	176.6 (2-Lane)
1.300	7.39	999.00	7.39	999.00	147.82	266.1 (1-Lane)
1.400	4.00	999.00	4.00	999.00	80.06	144.1 (2-Lane)
1.400	6.03	999.00	6.03	999.00	120.62	217.1 (1-Lane)
1.500	3.78	999.00	3.78	999.00	75.50	135.9 (2-Lane)
1.500	5.69	999.00	5.69	999.00	113.76	204.8 (1-Lane)
1.600	4.00	999.00	4.00	999.00	80.06	144.1 (2-Lane)
1.600	6.03	999.00	6.03	999.00	120.62	217.1 (1-Lane)
1.700	4.91	999.00	4.91	999.00	98.10	176.6 (2-Lane)
1.700	7.39	999.00	7.39	999.00	147.82	266.1 (1-Lane)
1.800	7.14	999.00	7.14	999.00	142.87	257.2 (2-Lane)
1.800	10.76	999.00	10.76	999.00	215.26	387.5 (1-Lane)
1.900	11.64	999.00	11.64	999.00	232.81	419.1 (2-Lane)
1.900	17.54	999.00	17.54	999.00	350.79	631.4 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: HS20

Gamma	DC	DW	(2-Lane)	(1-Lane)
			LL	LL
	1.25	1.25	1.35	1.35

7777777_20120905cy01_01of01_FlexuralRpt.txt									
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load	
w/o impact		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	167.2	29.5	117.97	0.00	88.70	0.00	95.69	0.00	71.95
0.00									
1.010	164.0	28.9	116.71	0.00	87.75	0.00	94.67	0.00	71.18
0.00									
1.100	134.8	23.6	105.44	0.00	79.28	0.00	85.53	0.00	64.31
0.00									
1.200	102.0	17.7	92.91	0.00	69.86	0.00	75.37	0.00	56.67
0.00									
1.300	68.0	11.8	80.39	0.00	60.44	0.00	65.20	0.00	49.03
0.00									
1.400	34.0	5.9	67.86	0.00	51.02	0.00	55.04	0.00	41.39
0.00									
1.500	0.0	0.0	55.33	0.00	41.60	0.00	44.88	0.00	33.75
0.00									
1.600	-34.0	-5.9	-67.86	0.00	-51.02	0.00	-55.04	0.00	-41.39
0.00									
1.700	-68.0	-11.8	-80.39	0.00	-60.44	0.00	-65.20	0.00	-49.03
0.00									
1.800	-102.0	-17.7	-92.91	0.00	-69.86	0.00	-75.37	0.00	-56.67
0.00									
1.900	-134.8	-23.6	-105.44	0.00	-79.28	0.00	-85.53	0.00	-64.31
0.00									
2.000	-167.2	-29.5	-117.97	0.00	-88.70	0.00	-95.69	0.00	-71.95
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: HS20

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1111

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER

Rating Live Load: HS20

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.67	133.40	240.1 (2-Lane)
1.000	999.00	8.22	164.46	296.0 (1-Lane)
1.010	999.00	6.77	135.49	243.9 (2-Lane)
1.010	999.00	8.35	167.03	300.7 (1-Lane)
1.100	162.14	6.63	132.63	238.7 (2-Lane)
1.100	199.89	8.18	163.51	294.3 (1-Lane)
1.200	36.49	4.39	87.90	158.2 (2-Lane)
1.200	44.99	5.42	108.37	195.1 (1-Lane)
1.300	20.08	5.58	111.53	200.8 (2-Lane)
1.300	24.75	6.88	137.49	247.5 (1-Lane)
1.400	13.27	7.19	143.88	259.0 (2-Lane)
1.400	16.36	8.87	177.37	319.3 (1-Lane)
1.500	9.54	9.54	190.87	343.6 (2-Lane)
1.500	11.77	11.77	235.31	423.6 (1-Lane)
1.600	7.19	13.27	143.88	259.0 (2-Lane)
1.600	8.87	16.36	177.37	319.3 (1-Lane)
1.700	5.58	20.08	111.53	200.8 (2-Lane)
1.700	6.88	24.75	137.49	247.5 (1-Lane)
1.800	4.39	36.49	87.90	158.2 (2-Lane)
1.800	5.42	44.99	108.37	195.1 (1-Lane)
1.900	6.63	162.14	132.63	238.7 (2-Lane)
1.900	8.18	199.89	163.51	294.3 (1-Lane)
2.000	6.67	999.00	133.40	240.1 (2-Lane)
2.000	8.22	999.00	164.46	296.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPE

Rating Live Load: HS20

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane

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1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	193.4	37.4	95.56 R	0.00	71.85	0.00	63.42 R	0.00	47.69
0.00									
1.100	1934.1	340.3	863.30 R	0.00	649.10	0.00	572.95 R	0.00	430.79
0.00									
1.200	3451.8	604.9	1521.46 R	0.00	1143.96	0.00	1009.76 R	0.00	759.22
0.00									
1.300	4540.4	794.0	1974.50 R	0.00	1484.59	0.00	1310.43 R	0.00	985.29
0.00									
1.400	5193.5	907.4	2242.33 R	0.00	1685.97	0.00	1488.19 R	0.00	1118.94
0.00									
1.500	5411.2	945.2	2315.00 R	0.00	1740.60	0.00	1536.42 R	0.00	1155.20
0.00									
1.600	5193.5	907.4	2242.33 R	0.00	1685.97	0.00	1488.19 R	0.00	1118.94
0.00									
1.700	4540.4	794.0	1974.50 R	0.00	1484.59	0.00	1310.43 R	0.00	985.29
0.00									
1.800	3451.8	604.9	1521.46 R	0.00	1143.96	0.00	1009.76 R	0.00	759.22
0.00									
1.900	1934.1	340.3	863.30 R	0.00	649.10	0.00	572.95 R	0.00	430.79
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1112

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER

Rating Live Load:

Rating Type: HS20

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER

Rating Live Load: HS20

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Service

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.010	571.93	999.00	133.11	999.00	999.00	999.0 (2-Lane)
1.010	861.76	999.00	200.57	999.00	999.00	999.0 (1-Lane)
1.100	47.24	999.00	11.56	999.00	231.13	416.0 (2-Lane)
1.100	71.18	999.00	17.41	999.00	348.25	626.9 (1-Lane)
1.200	24.25	999.00	7.35	999.00	147.02	264.6 (2-Lane)
1.200	36.54	999.00	11.08	999.00	221.52	398.7 (1-Lane)
1.300	15.41	999.00	4.84	999.00	96.82	174.3 (2-Lane)
1.300	23.22	999.00	7.29	999.00	145.88	262.6 (1-Lane)
1.400	11.84	999.00	3.83	999.00	76.55	137.8 (2-Lane)
1.400	17.84	999.00	5.77	999.00	115.35	207.6 (1-Lane)
1.500	10.91	999.00	3.57	999.00	71.34	128.4 (2-Lane)
1.500	16.44	999.00	5.38	999.00	107.49	193.5 (1-Lane)
1.600	11.84	999.00	3.83	999.00	76.55	137.8 (2-Lane)
1.600	17.84	999.00	5.77	999.00	115.35	207.6 (1-Lane)
1.700	15.41	999.00	4.84	999.00	96.82	174.3 (2-Lane)
1.700	23.22	999.00	7.29	999.00	145.88	262.6 (1-Lane)
1.800	24.25	999.00	7.35	999.00	147.02	264.6 (2-Lane)
1.800	36.54	999.00	11.08	999.00	221.52	398.7 (1-Lane)
1.900	47.24	999.00	11.56	999.00	231.13	416.0 (2-Lane)
1.900	71.18	999.00	17.41	999.00	348.25	626.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	241.8	46.8	90.73 R	0.00	68.21	0.00	60.21 R	0.00	45.27
1.100 0.00	2417.7	425.3	820.71 R	0.00	617.08	0.00	544.69 R	0.00	409.54
1.200 0.00	4314.7	756.1	1449.12 R	0.00	1089.56	0.00	961.74 R	0.00	723.12
1.300 0.00	5675.4	992.4	1885.21 R	0.00	1417.45	0.00	1251.17 R	0.00	940.73
1.400	6491.9	1134.2	2143.40 R	0.00	1611.58	0.00	1422.53 R	0.00	1069.57

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0.00									
1.500	6764.0	1181.5	2218.90 R	0.00	1668.34	0.00	1472.63 R	0.00	1107.24
0.00									
1.600	6491.9	1134.2	2143.40 R	0.00	1611.58	0.00	1422.53 R	0.00	1069.57
0.00									
1.700	5675.4	992.4	1885.21 R	0.00	1417.45	0.00	1251.17 R	0.00	940.73
0.00									
1.800	4314.7	756.1	1449.12 R	0.00	1089.56	0.00	961.74 R	0.00	723.12
0.00									
1.900	2417.7	425.3	820.71 R	0.00	617.08	0.00	544.69 R	0.00	409.54
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER

Rating Live Load: 3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12212.6	-12212.6B	11797.6	11797.6	-20158.1	-20158.1
1.600	19743.0C	19743.0	-11832.8	-11832.8B	12117.0	12117.0	-19458.9	-19458.9
1.700	19743.0C	19743.0	-11832.8	-11832.8B	13075.2	13075.2	-18500.7	-18500.7
1.800	19743.0C	19743.0	-13009.9	-13009.9B	14672.1	14672.1	-18080.8	-18080.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER

Rating Live Load: 3

Moment

Span	Rating Factor				Rating Value	Load Resistance (tons)
	top +bend	fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	177.69	999.00	177.69	999.00	0.00	999.0 (2-Lane)
1.010	267.73	999.00	267.73	999.00	0.00	999.0 (1-Lane)
1.100	16.53	999.00	16.53	999.00	0.00	413.2 (2-Lane)

1.100	24.91	999.00	24.91	999.00	0.00	622.7 (1-Lane)
1.200	10.12	999.00	10.12	999.00	0.00	253.1 (2-Lane)
1.200	15.26	999.00	15.26	999.00	0.00	381.4 (1-Lane)
1.300	6.94	999.00	6.94	999.00	0.00	173.4 (2-Lane)
1.300	10.45	999.00	10.45	999.00	0.00	261.3 (1-Lane)
1.400	5.65	999.00	5.65	999.00	0.00	141.3 (2-Lane)
1.400	8.52	999.00	8.52	999.00	0.00	212.9 (1-Lane)
1.500	5.32	999.00	5.32	999.00	0.00	132.9 (2-Lane)
1.500	8.01	999.00	8.01	999.00	0.00	200.3 (1-Lane)
1.600	5.65	999.00	5.65	999.00	0.00	141.3 (2-Lane)
1.600	8.52	999.00	8.52	999.00	0.00	212.9 (1-Lane)
1.700	6.94	999.00	6.94	999.00	0.00	173.4 (2-Lane)
1.700	10.45	999.00	10.45	999.00	0.00	261.3 (1-Lane)
1.800	10.12	999.00	10.12	999.00	0.00	253.1 (2-Lane)
1.800	15.26	999.00	15.26	999.00	0.00	381.4 (1-Lane)
1.900	16.53	999.00	16.53	999.00	0.00	413.2 (2-Lane)
1.900	24.91	999.00	24.91	999.00	0.00	622.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	82.95	0.00	62.37	50.59
0.00						
1.010	164.0	28.9	82.08	0.00	61.71	50.06
0.00						
1.100	134.8	23.6	74.25	0.00	55.83	45.28
0.00						
1.200	102.0	17.7	65.55	0.00	49.29	39.98
0.00						
1.300	68.0	11.8	56.85	0.00	42.75	34.67
0.00						
1.400	34.0	5.9	48.15	0.00	36.20	29.37
0.00						
1.500	0.0	0.0	39.45	0.00	29.66	24.06
0.00						
1.600	-34.0	-5.9	-48.15	0.00	-36.20	-29.37
0.00						
1.700	-68.0	-11.8	-56.85	0.00	-42.75	-34.67
0.00						
1.800	-102.0	-17.7	-65.55	0.00	-49.29	-39.98
0.00						
1.900	-134.8	-23.6	-74.25	0.00	-55.83	-45.28
0.00						
2.000	-167.2	-29.5	-82.95	0.00	-62.37	-50.59
0.00						



## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: 3

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	9.49	0.00	237.1 (2-Lane)
1.000	999.00	11.69	0.00	292.4 (1-Lane)
1.010	999.00	9.63	0.00	240.8 (2-Lane)
1.010	999.00	11.88	0.00	296.9 (1-Lane)
1.100	196.28	9.42	0.00	235.4 (2-Lane)
1.100	241.98	11.61	0.00	290.2 (1-Lane)
1.200	48.50	6.23	0.00	155.7 (2-Lane)
1.200	59.79	7.68	0.00	192.0 (1-Lane)

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1.300	27.56	7.89	0.00	197.1 (2-Lane)
1.300	33.98	9.72	0.00	243.0 (1-Lane)
1.400	18.47	10.14	0.00	253.4 (2-Lane)
1.400	22.77	12.50	0.00	312.5 (1-Lane)
1.500	13.38	13.38	0.00	334.6 (2-Lane)
1.500	16.50	16.50	0.00	412.5 (1-Lane)
1.600	10.14	18.47	0.00	253.4 (2-Lane)
1.600	12.50	22.77	0.00	312.5 (1-Lane)
1.700	7.89	27.56	0.00	197.1 (2-Lane)
1.700	9.72	33.98	0.00	243.0 (1-Lane)
1.800	6.23	48.50	0.00	155.7 (2-Lane)
1.800	7.68	59.79	0.00	192.0 (1-Lane)
1.900	9.42	196.28	0.00	235.4 (2-Lane)
1.900	11.61	241.98	0.00	290.2 (1-Lane)
2.000	9.49	999.00	0.00	237.1 (2-Lane)
2.000	11.69	999.00	0.00	292.4 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPE  
Rating Live Load: 3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00				(1-Lane) LL 1.00			
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	67.20 R	0.00	50.53	0.00	44.60 R	0.00	33.54	
0.00										
1.100	1934.1	340.3	607.94 R	0.00	457.09	0.00	403.47 R	0.00	303.36	
0.00										
1.200	3451.8	604.9	1073.42 R	0.00	807.08	0.00	712.40 R	0.00	535.64	
0.00										
1.300	4540.4	794.0	1396.45 R	0.00	1049.96	0.00	926.79 R	0.00	696.84	
0.00										
1.400	5193.5	907.4	1587.71 R	0.00	1193.76	0.00	1053.72 R	0.00	792.27	
0.00										
1.500	5411.2	945.2	1643.63 R	0.00	1235.81	0.00	1090.84 R	0.00	820.18	
0.00										
1.600	5193.5	907.4	1587.71 R	0.00	1193.76	0.00	1053.72 R	0.00	792.27	
0.00										
1.700	4540.4	794.0	1396.45 R	0.00	1049.96	0.00	926.79 R	0.00	696.84	
0.00										
1.800	3451.8	604.9	1073.42 R	0.00	807.08	0.00	712.40 R	0.00	535.64	
0.00										
1.900	1934.1	340.3	607.94 R	0.00	457.09	0.00	403.47 R	0.00	303.36	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER

Rating Live Load:

Rating Type: 3

Rating Live Load:

Span

Service Resistance

Available Resistance for LL+I

Span	Positive Bending		Negative Bending		Positive Bending		Negative Bending	
	Top	Bott.	Top	Bott.	Top	Bott.	Top	Bott.

1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1121

## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER

Rating Live Load: 3

## Service

Span	Rating Factor		Load Resistance (tons)		Rating Value	Load Resistance (tons)
	top fiber +bend	bottom fiber -bend	top fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	813.25	999.00	189.28	999.00	0.00	999.0 (2-Lane)
1.010	999.00	999.00	285.19	999.00	0.00	999.0 (1-Lane)
1.100	67.08	999.00	16.41	999.00	0.00	410.3 (2-Lane)
1.100	101.08	999.00	24.73	999.00	0.00	618.2 (1-Lane)
1.200	34.37	999.00	10.42	999.00	0.00	260.5 (2-Lane)
1.200	51.79	999.00	15.70	999.00	0.00	392.5 (1-Lane)
1.300	21.79	999.00	6.84	999.00	0.00	171.1 (2-Lane)
1.300	32.83	999.00	10.31	999.00	0.00	257.8 (1-Lane)
1.400	16.73	999.00	5.41	999.00	0.00	135.1 (2-Lane)
1.400	25.20	999.00	8.15	999.00	0.00	203.6 (1-Lane)
1.500	15.37	999.00	5.02	999.00	0.00	125.6 (2-Lane)
1.500	23.16	999.00	7.57	999.00	0.00	189.3 (1-Lane)
1.600	16.73	999.00	5.41	999.00	0.00	135.1 (2-Lane)
1.600	25.20	999.00	8.15	999.00	0.00	203.6 (1-Lane)

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1.700	21.79	999.00	6.84	999.00	0.00	171.1 (2-Lane)
1.700	32.83	999.00	10.31	999.00	0.00	257.8 (1-Lane)
1.800	34.37	999.00	10.42	999.00	0.00	260.5 (2-Lane)
1.800	51.79	999.00	15.70	999.00	0.00	392.5 (1-Lane)
1.900	67.08	999.00	16.41	999.00	0.00	410.3 (2-Lane)
1.900	101.08	999.00	24.73	999.00	0.00	618.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: 3S2

Gamma	DC	DW	(2-Lane)				(1-Lane)		
	1.25	1.25	LL		LL		LL		
			1.35		1.35		1.35		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	134.15 R	0.00	100.86	0.00	89.03 R	0.00	66.94
0.00									
1.100	2417.7	425.3	1203.02 R	0.00	904.52	0.00	798.41 R	0.00	600.31
0.00									
1.200	4314.7	756.1	2098.33 R	0.00	1577.70	0.00	1392.62 R	0.00	1047.08
0.00									
1.300	5675.4	992.4	2752.26 R	0.00	2069.37	0.00	1826.61 R	0.00	1373.39
0.00									
1.400	6491.9	1134.2	3121.56 R	0.00	2347.03	0.00	2071.71 R	0.00	1557.67
0.00									
1.500	6764.0	1181.5	3207.18 R	0.00	2411.41	0.00	2128.53 R	0.00	1600.40
0.00									
1.600	6491.9	1134.2	3121.56 R	0.00	2347.03	0.00	2071.71 R	0.00	1557.67
0.00									
1.700	5675.4	992.4	2752.26 R	0.00	2069.37	0.00	1826.61 R	0.00	1373.39
0.00									
1.800	4314.7	756.1	2098.33 R	0.00	1577.69	0.00	1392.62 R	0.00	1047.08
0.00									
1.900	2417.7	425.3	1203.01 R	0.00	904.52	0.00	798.41 R	0.00	600.31
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12197.1	-12197.1B	11797.6	11797.6	-20142.6	-20142.6
1.600	19743.0C	19743.0	-11820.8	-11820.8B	12117.0	12117.0	-19446.9	-19446.9
1.700	19743.0C	19743.0	-11820.8	-11820.8B	13075.2	13075.2	-18488.7	-18488.7
1.800	19743.0C	19743.0	-13010.0	-13010.0B	14672.1	14672.1	-18080.9	-18080.9
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	120.17	999.00	120.17	999.00	0.00	999.0 (2-Lane)
1.010	181.07	999.00	181.07	999.00	0.00	999.0 (1-Lane)
1.100	11.28	999.00	11.28	999.00	0.00	451.1 (2-Lane)
1.100	16.99	999.00	16.99	999.00	0.00	679.7 (1-Lane)
1.200	6.99	999.00	6.99	999.00	0.00	279.7 (2-Lane)
1.200	10.54	999.00	10.54	999.00	0.00	421.4 (1-Lane)
1.300	4.75	999.00	4.75	999.00	0.00	190.0 (2-Lane)
1.300	7.16	999.00	7.16	999.00	0.00	286.3 (1-Lane)
1.400	3.88	999.00	3.88	999.00	0.00	155.3 (2-Lane)
1.400	5.85	999.00	5.85	999.00	0.00	234.0 (1-Lane)
1.500	3.68	999.00	3.68	999.00	0.00	147.1 (2-Lane)
1.500	5.54	999.00	5.54	999.00	0.00	221.7 (1-Lane)
1.600	3.88	999.00	3.88	999.00	0.00	155.3 (2-Lane)
1.600	5.85	999.00	5.85	999.00	0.00	234.0 (1-Lane)
1.700	4.75	999.00	4.75	999.00	0.00	190.0 (2-Lane)
1.700	7.16	999.00	7.16	999.00	0.00	286.3 (1-Lane)
1.800	6.99	999.00	6.99	999.00	0.00	279.7 (2-Lane)
1.800	10.54	999.00	10.54	999.00	0.00	421.4 (1-Lane)
1.900	11.28	999.00	11.28	999.00	0.00	451.1 (2-Lane)
1.900	16.99	999.00	16.99	999.00	0.00	679.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	122.76	0.00	92.30	74.87
0.00						
1.010	164.0	28.9	121.36	0.00	91.25	74.02
0.00						
1.100	134.8	23.6	108.84	0.00	81.83	66.38
0.00						
1.200	102.0	17.7	94.92	0.00	71.37	57.89
0.00						
1.300	68.0	11.8	81.00	0.00	60.90	49.40
0.00						
1.400	34.0	5.9	67.08	0.00	50.44	40.91
0.00						
1.500	0.0	0.0	53.16	0.00	39.97	32.42
0.00						
1.600	-34.0	-5.9	-67.08	0.00	-50.44	-40.91
0.00						
1.700	-68.0	-11.8	-81.00	0.00	-60.90	-49.40
0.00						
1.800	-102.0	-17.7	-94.92	0.00	-71.37	-57.89
0.00						
1.900	-134.8	-23.6	-108.84	0.00	-81.83	-66.38
0.00						
2.000	-167.2	-29.5	-122.76	0.00	-92.30	-74.87
0.00						

## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)

1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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# STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER

Rating Live Load: 3S2

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.41	0.00	256.4 (2-Lane)
1.000	999.00	7.90	0.00	316.1 (1-Lane)
1.010	999.00	6.51	0.00	260.6 (2-Lane)
1.010	999.00	8.03	0.00	321.3 (1-Lane)
1.100	196.28	6.42	0.00	257.0 (2-Lane)
1.100	241.98	7.92	0.00	316.8 (1-Lane)
1.200	51.50	4.30	0.00	172.1 (2-Lane)
1.200	63.49	5.30	0.00	212.2 (1-Lane)
1.300	24.00	5.53	0.00	221.4 (2-Lane)
1.300	29.59	6.82	0.00	272.9 (1-Lane)
1.400	14.47	7.28	0.00	291.1 (2-Lane)
1.400	17.84	8.97	0.00	358.9 (1-Lane)
1.500	9.93	9.93	0.00	397.3 (2-Lane)
1.500	12.25	12.25	0.00	489.8 (1-Lane)
1.600	7.28	14.47	0.00	291.1 (2-Lane)
1.600	8.97	17.84	0.00	358.9 (1-Lane)
1.700	5.53	24.00	0.00	221.4 (2-Lane)
1.700	6.82	29.59	0.00	272.9 (1-Lane)
1.800	4.30	51.50	0.00	172.1 (2-Lane)
1.800	5.30	63.49	0.00	212.2 (1-Lane)
1.900	6.42	196.28	0.00	257.0 (2-Lane)
1.900	7.92	241.98	0.00	316.8 (1-Lane)
2.000	6.41	999.00	0.00	256.4 (2-Lane)
2.000	7.90	999.00	0.00	316.1 (1-Lane)

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# SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPE  
Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	99.37 R	0.00	74.71	0.00
0.00						
1.100	1934.1	340.3	891.12 R	0.00	670.02	0.00
0.00						
1.200	3451.8	604.9	1554.32 R	0.00	1168.66	0.00
0.00						
1.300	4540.4	794.0	2038.71 R	0.00	1532.87	0.00
0.00						
1.400	5193.5	907.4	2312.26 R	0.00	1738.54	0.00
0.00						
1.500	5411.2	945.2	2375.69 R	0.00	1786.23	0.00
0.00						
1.600	5193.5	907.4	2312.26 R	0.00	1738.54	0.00
0.00						
1.700	4540.4	794.0	2038.71 R	0.00	1532.87	0.00
0.00						
1.800	3451.8	604.9	1554.32 R	0.00	1168.66	0.00
0.00						
1.900	1934.1	340.3	891.12 R	0.00	670.02	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER  
Rating Live Load:

Rating Type: 3S2

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5



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 SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER  
 Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	550.01	999.00	128.01	999.00	0.00	999.0 (2-Lane)
1.010	828.73	999.00	192.88	999.00	0.00	999.0 (1-Lane)
1.100	45.77	999.00	11.19	999.00	0.00	447.8 (2-Lane)
1.100	68.96	999.00	16.87	999.00	0.00	674.8 (1-Lane)
1.200	23.74	999.00	7.20	999.00	0.00	287.8 (2-Lane)
1.200	35.76	999.00	10.84	999.00	0.00	433.7 (1-Lane)
1.300	14.93	999.00	4.69	999.00	0.00	187.5 (2-Lane)
1.300	22.49	999.00	7.06	999.00	0.00	282.6 (1-Lane)
1.400	11.48	999.00	3.71	999.00	0.00	148.5 (2-Lane)
1.400	17.30	999.00	5.59	999.00	0.00	223.7 (1-Lane)
1.500	10.63	999.00	3.48	999.00	0.00	139.0 (2-Lane)
1.500	16.02	999.00	5.24	999.00	0.00	209.5 (1-Lane)
1.600	11.48	999.00	3.71	999.00	0.00	148.5 (2-Lane)
1.600	17.30	999.00	5.59	999.00	0.00	223.7 (1-Lane)
1.700	14.93	999.00	4.69	999.00	0.00	187.5 (2-Lane)
1.700	22.49	999.00	7.06	999.00	0.00	282.6 (1-Lane)
1.800	23.74	999.00	7.20	999.00	0.00	287.8 (2-Lane)
1.800	35.76	999.00	10.84	999.00	0.00	433.7 (1-Lane)
1.900	45.77	999.00	11.19	999.00	0.00	447.8 (2-Lane)
1.900	68.96	999.00	16.87	999.00	0.00	674.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1130  
 MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
 Rating Live Load: 3-3

Gamma DC DW (2-Lane) LL (1-Lane) LL

1.25

1.25

1.35

Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.010	241.8	46.8	129.34 R	0.00	97.25	0.00	85.84 R	0.00	64.54
0.00									
1.100	2417.7	425.3	1154.97 R	0.00	868.40	0.00	766.53 R	0.00	576.34
0.00									
1.200	4314.7	756.1	2011.85 R	0.00	1512.67	0.00	1335.22 R	0.00	1003.92
0.00									
1.300	5675.4	992.4	2589.86 R	0.00	1947.26	0.00	1718.83 R	0.00	1292.35
0.00									
1.400	6491.9	1134.2	2937.05 R	0.00	2208.31	0.00	1949.26 R	0.00	1465.61
0.00									
1.500	6764.0	1181.5	3053.42 R	0.00	2295.81	0.00	2026.49 R	0.00	1523.67
0.00									
1.600	6491.9	1134.2	2937.05 R	0.00	2208.31	0.00	1949.25 R	0.00	1465.60
0.00									
1.700	5675.4	992.4	2589.86 R	0.00	1947.26	0.00	1718.83 R	0.00	1292.35
0.00									
1.800	4314.7	756.1	2011.85 R	0.00	1512.67	0.00	1335.22 R	0.00	1003.92
0.00									
1.900	2417.7	425.3	1154.97 R	0.00	868.40	0.00	766.53 R	0.00	576.33
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: 3-3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12211.8	-12211.8B	11797.6	11797.6	-20157.2	-20157.2
1.600	19743.0C	19743.0	-11835.2	-11835.2B	12117.0	12117.0	-19461.2	-19461.2
1.700	19743.0C	19743.0	-11835.2	-11835.2B	13075.2	13075.2	-18503.0	-18503.0
1.800	19743.0C	19743.0	-12993.4	-12993.4B	14672.1	14672.1	-18064.3	-18064.3
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1132

MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: 3-3

Span	Rating		Factor		Rating Value	Load Resistance (tons)
	top fiber +bend	bottom fiber -bend	bottom fiber +bend	top fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	124.64	999.00	124.64	999.00	0.00	999.0 (2-Lane)
1.010	187.80	999.00	187.80	999.00	0.00	999.0 (1-Lane)
1.100	11.75	999.00	11.75	999.00	0.00	469.8 (2-Lane)
1.100	17.70	999.00	17.70	999.00	0.00	707.9 (1-Lane)
1.200	7.29	999.00	7.29	999.00	0.00	291.7 (2-Lane)
1.200	10.99	999.00	10.99	999.00	0.00	439.5 (1-Lane)
1.300	5.05	999.00	5.05	999.00	0.00	201.9 (2-Lane)
1.300	7.61	999.00	7.61	999.00	0.00	304.3 (1-Lane)
1.400	4.13	999.00	4.13	999.00	0.00	165.0 (2-Lane)
1.400	6.22	999.00	6.22	999.00	0.00	248.6 (1-Lane)
1.500	3.86	999.00	3.86	999.00	0.00	154.5 (2-Lane)
1.500	5.82	999.00	5.82	999.00	0.00	232.9 (1-Lane)
1.600	4.13	999.00	4.13	999.00	0.00	165.0 (2-Lane)
1.600	6.22	999.00	6.22	999.00	0.00	248.6 (1-Lane)
1.700	5.05	999.00	5.05	999.00	0.00	201.9 (2-Lane)
1.700	7.61	999.00	7.61	999.00	0.00	304.3 (1-Lane)
1.800	7.29	999.00	7.29	999.00	0.00	291.7 (2-Lane)
1.800	10.99	999.00	10.99	999.00	0.00	439.5 (1-Lane)
1.900	11.75	999.00	11.75	999.00	0.00	469.8 (2-Lane)
1.900	17.70	999.00	17.70	999.00	0.00	707.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

**Structure I. D.** 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: 3-3

Gamma	DC		DW		(2-Lane) LL 1.35		(1-Lane) LL 1.35		
	1.25	1.25	1.25	1.25	1.35	1.35	1.35	1.35	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	118.41	0.00	89.03	0.00	96.05	0.00	72.22
1.010 0.00	164.0	28.9	117.02	0.00	87.98	0.00	94.92	0.00	71.37
1.100 0.00	134.8	23.6	104.49	0.00	78.56	0.00	84.76	0.00	63.73

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.200	102.0	17.7	90.57	0.00	68.10	0.00	73.47	0.00	55.24
0.00									
1.300	68.0	11.8	76.65	0.00	57.63	0.00	62.18	0.00	46.75
0.00									
1.400	34.0	5.9	62.73	0.00	47.17	0.00	50.89	0.00	38.26
0.00									
1.500	0.0	0.0	48.82	0.00	36.70	0.00	39.60	0.00	29.77
0.00									
1.600	-34.0	-5.9	-62.73	0.00	-47.17	0.00	-50.89	0.00	-38.26
0.00									
1.700	-68.0	-11.8	-76.65	0.00	-57.63	0.00	-62.18	0.00	-46.75
0.00									
1.800	-102.0	-17.7	-90.57	0.00	-68.10	0.00	-73.47	0.00	-55.24
0.00									
1.900	-134.8	-23.6	-104.49	0.00	-78.56	0.00	-84.76	0.00	-63.73
0.00									
2.000	-167.2	-29.5	-118.41	0.00	-89.03	0.00	-96.05	0.00	-72.22
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
Member I. D. G06  
Rating Type: I-OPER  
Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1135  
STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
Member I. D. G06  
Rating Type: I-OPER  
Rating Live Load: 3-3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.64	0.00	265.8 (2-Lane)
1.000	999.00	8.19	0.00	327.7 (1-Lane)
1.010	999.00	6.76	0.00	270.3 (2-Lane)
1.010	999.00	8.33	0.00	333.2 (1-Lane)
1.100	238.34	6.69	0.00	267.7 (2-Lane)
1.100	293.83	8.25	0.00	330.0 (1-Lane)
1.200	57.71	4.51	0.00	180.3 (2-Lane)
1.200	71.15	5.56	0.00	222.3 (1-Lane)
1.300	27.94	5.85	0.00	233.9 (2-Lane)
1.300	34.44	7.21	0.00	288.4 (1-Lane)
1.400	16.27	7.78	0.00	311.3 (2-Lane)
1.400	20.07	9.59	0.00	383.7 (1-Lane)
1.500	10.82	10.82	0.00	432.7 (2-Lane)
1.500	13.34	13.34	0.00	533.4 (1-Lane)
1.600	7.78	16.27	0.00	311.3 (2-Lane)
1.600	9.59	20.07	0.00	383.7 (1-Lane)
1.700	5.85	27.94	0.00	233.9 (2-Lane)
1.700	7.21	34.44	0.00	288.4 (1-Lane)
1.800	4.51	57.71	0.00	180.3 (2-Lane)
1.800	5.56	71.15	0.00	222.3 (1-Lane)
1.900	6.69	238.34	0.00	267.7 (2-Lane)
1.900	8.25	293.83	0.00	330.0 (1-Lane)
2.000	6.64	999.00	0.00	265.8 (2-Lane)
2.000	8.19	999.00	0.00	327.7 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPE  
Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.010	193.4	37.4	95.81 R	0.00	72.04	63.59 R
0.00						
1.100	1934.1	340.3	855.53 R	0.00	643.26	567.80 R
0.00						
1.200	3451.8	604.9	1490.26 R	0.00	1120.49	989.05 R
0.00						
1.300	4540.4	794.0	1918.42 R	0.00	1442.42	1273.21 R
0.00						

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.400	5193.5	907.4	2175.59 R	0.00	1635.79	0.00	1443.89 R	0.00	1085.63
0.00									
1.500	5411.2	945.2	2261.80 R	0.00	1700.60	0.00	1501.10 R	0.00	1128.65
0.00									
1.600	5193.5	907.4	2175.59 R	0.00	1635.79	0.00	1443.89 R	0.00	1085.63
0.00									
1.700	4540.4	794.0	1918.42 R	0.00	1442.42	0.00	1273.21 R	0.00	957.30
0.00									
1.800	3451.8	604.9	1490.26 R	0.00	1120.49	0.00	989.05 R	0.00	743.65
0.00									
1.900	1934.1	340.3	855.53 R	0.00	643.26	0.00	567.80 R	0.00	426.91
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1136

#### SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER

Rating Live Load:

Rating Type: 3-3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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#### SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER

Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	570.44	999.00	132.76	999.00	0.00	999.0 (2-Lane)

1.010	859.52	999.00	200.04	999.00	0.00	999.0 (1-Lane)
1.100	47.67	999.00	11.66	999.00	0.00	466.4 (2-Lane)
1.100	71.83	999.00	17.57	999.00	0.00	702.8 (1-Lane)
1.200	24.76	999.00	7.51	999.00	0.00	300.2 (2-Lane)
1.200	37.30	999.00	11.31	999.00	0.00	452.3 (1-Lane)
1.300	15.86	999.00	4.98	999.00	0.00	199.3 (2-Lane)
1.300	23.90	999.00	7.51	999.00	0.00	300.3 (1-Lane)
1.400	12.21	999.00	3.94	999.00	0.00	157.8 (2-Lane)
1.400	18.39	999.00	5.94	999.00	0.00	237.8 (1-Lane)
1.500	11.17	999.00	3.65	999.00	0.00	146.0 (2-Lane)
1.500	16.83	999.00	5.50	999.00	0.00	220.0 (1-Lane)
1.600	12.21	999.00	3.94	999.00	0.00	157.8 (2-Lane)
1.600	18.39	999.00	5.94	999.00	0.00	237.8 (1-Lane)
1.700	15.86	999.00	4.98	999.00	0.00	199.3 (2-Lane)
1.700	23.90	999.00	7.51	999.00	0.00	300.3 (1-Lane)
1.800	24.76	999.00	7.51	999.00	0.00	300.2 (2-Lane)
1.800	37.30	999.00	11.31	999.00	0.00	452.3 (1-Lane)
1.900	47.67	999.00	11.66	999.00	0.00	466.4 (2-Lane)
1.900	71.83	999.00	17.57	999.00	0.00	702.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1138

## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	241.8	46.8	98.63 R	0.00	74.16	0.00	65.46 R	0.00	49.22
1.100 0.00	2417.7	425.3	892.83 R	0.00	671.30	0.00	592.55 R	0.00	445.53
1.200 0.00	4314.7	756.1	1577.96 R	0.00	1186.44	0.00	1047.26 R	0.00	787.41
1.300 0.00	5675.4	992.4	2055.40 R	0.00	1545.41	0.00	1364.12 R	0.00	1025.65
1.400 0.00	6491.9	1134.2	2347.24 R	0.00	1764.84	0.00	1557.81 R	0.00	1171.29
1.500 0.00	6764.0	1181.5	2435.23 R	0.00	1831.00	0.00	1616.21 R	0.00	1215.19
1.600 0.00	6491.9	1134.2	2347.24 R	0.00	1764.84	0.00	1557.81 R	0.00	1171.29
1.700 0.00	5675.4	992.4	2055.40 R	0.00	1545.41	0.00	1364.12 R	0.00	1025.65
1.800 0.00	4314.7	756.1	1577.96 R	0.00	1186.44	0.00	1047.26 R	0.00	787.41
1.900 0.00	2417.7	425.3	892.83 R	0.00	671.30	0.00	592.55 R	0.00	445.53

2.000 0.0 0.0 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt 0.00 R 0.00 0.00 0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU4

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12218.1	-12218.1B	11797.6	11797.6	-20163.6	-20163.6
1.600	19743.0C	19743.0	-11835.4	-11835.4B	12117.0	12117.0	-19461.5	-19461.5
1.700	19743.0C	19743.0	-11835.4	-11835.4B	13075.2	13075.2	-18503.3	-18503.3
1.800	19743.0C	19743.0	-13014.8	-13014.8B	14672.1	14672.1	-18085.7	-18085.7
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU4

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	163.45	999.00	163.45	999.00	0.00	999.0 (2-Lane)
1.010	246.28	999.00	246.28	999.00	0.00	999.0 (1-Lane)
1.100	15.19	999.00	15.19	999.00	0.00	410.3 (2-Lane)
1.100	22.90	999.00	22.90	999.00	0.00	618.2 (1-Lane)
1.200	9.30	999.00	9.30	999.00	0.00	251.1 (2-Lane)
1.200	14.01	999.00	14.01	999.00	0.00	378.3 (1-Lane)
1.300	6.36	999.00	6.36	999.00	0.00	171.8 (2-Lane)
1.300	9.59	999.00	9.59	999.00	0.00	258.8 (1-Lane)
1.400	5.16	999.00	5.16	999.00	0.00	139.4 (2-Lane)
1.400	7.78	999.00	7.78	999.00	0.00	210.0 (1-Lane)



1.500	4.84	999.00	4.84	999.00	0.00	130.8 (2-Lane)
1.500	7.30	999.00	7.30	999.00	0.00	197.1 (1-Lane)
1.600	5.16	999.00	5.16	999.00	0.00	139.4 (2-Lane)
1.600	7.78	999.00	7.78	999.00	0.00	210.0 (1-Lane)
1.700	6.36	999.00	6.36	999.00	0.00	171.8 (2-Lane)
1.700	9.59	999.00	9.59	999.00	0.00	258.8 (1-Lane)
1.800	9.30	999.00	9.30	999.00	0.00	251.1 (2-Lane)
1.800	14.01	999.00	14.01	999.00	0.00	378.3 (1-Lane)
1.900	15.19	999.00	15.19	999.00	0.00	410.3 (2-Lane)
1.900	22.90	999.00	22.90	999.00	0.00	618.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	167.2	29.5	90.17	0.00	67.80	0.00	73.14	0.00	54.99
1.010 0.00	164.0	28.9	89.23	0.00	67.09	0.00	72.38	0.00	54.42
1.100 0.00	134.8	23.6	80.77	0.00	60.73	0.00	65.52	0.00	49.26
1.200 0.00	102.0	17.7	71.38	0.00	53.67	0.00	57.90	0.00	43.53
1.300 0.00	68.0	11.8	61.98	0.00	46.60	0.00	50.28	0.00	37.80
1.400 0.00	34.0	5.9	52.59	0.00	39.54	0.00	42.66	0.00	32.07
1.500 0.00	0.0	0.0	43.19	0.00	32.48	0.00	35.04	0.00	26.34
1.600 0.00	-34.0	-5.9	-52.59	0.00	-39.54	0.00	-42.66	0.00	-32.07
1.700 0.00	-68.0	-11.8	-61.98	0.00	-46.60	0.00	-50.28	0.00	-37.80
1.800 0.00	-102.0	-17.7	-71.38	0.00	-53.67	0.00	-57.90	0.00	-43.53
1.900 0.00	-134.8	-23.6	-80.77	0.00	-60.73	0.00	-65.52	0.00	-49.26
2.000 0.00	-167.2	-29.5	-90.17	0.00	-67.80	0.00	-73.14	0.00	-54.99

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
 Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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# STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
 Rating Live Load: SU4

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	8.73	0.00	235.6 (2-Lane)
1.000	999.00	10.76	0.00	290.5 (1-Lane)
1.010	999.00	8.86	0.00	239.2 (2-Lane)
1.010	999.00	10.92	0.00	294.9 (1-Lane)
1.100	173.01	8.66	0.00	233.7 (2-Lane)
1.100	213.29	10.67	0.00	288.1 (1-Lane)
1.200	43.16	5.72	0.00	154.5 (2-Lane)
1.200	53.21	7.05	0.00	190.4 (1-Lane)
1.300	24.91	7.23	0.00	195.3 (2-Lane)
1.300	30.71	8.92	0.00	240.7 (1-Lane)
1.400	16.80	9.28	0.00	250.6 (2-Lane)
1.400	20.72	11.44	0.00	309.0 (1-Lane)
1.500	12.23	12.23	0.00	330.1 (2-Lane)
1.500	15.07	15.07	0.00	406.9 (1-Lane)
1.600	9.28	16.80	0.00	250.6 (2-Lane)

1.600	11.44	20.72	0.00	309.0 (1-Lane)
1.700	7.23	24.91	0.00	195.3 (2-Lane)
1.700	8.92	30.71	0.00	240.7 (1-Lane)
1.800	5.72	43.16	0.00	154.5 (2-Lane)
1.800	7.05	53.21	0.00	190.4 (1-Lane)
1.900	8.66	173.01	0.00	233.7 (2-Lane)
1.900	10.67	213.29	0.00	288.1 (1-Lane)
2.000	8.73	999.00	0.00	235.6 (2-Lane)
2.000	10.76	999.00	0.00	290.5 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPE  
Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00					
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	73.06 R	0.00	54.93	0.00	48.49 R	0.00	36.46	
0.00										
1.100	1934.1	340.3	661.35 R	0.00	497.26	0.00	438.93 R	0.00	330.02	
0.00										
1.200	3451.8	604.9	1168.86 R	0.00	878.84	0.00	775.74 R	0.00	583.27	
0.00										
1.300	4540.4	794.0	1522.52 R	0.00	1144.75	0.00	1010.46 R	0.00	759.74	
0.00										
1.400	5193.5	907.4	1738.70 R	0.00	1307.29	0.00	1153.93 R	0.00	867.62	
0.00										
1.500	5411.2	945.2	1803.88 R	0.00	1356.30	0.00	1197.19 R	0.00	900.14	
0.00										
1.600	5193.5	907.4	1738.70 R	0.00	1307.29	0.00	1153.93 R	0.00	867.62	
0.00										
1.700	4540.4	794.0	1522.52 R	0.00	1144.75	0.00	1010.46 R	0.00	759.74	
0.00										
1.800	3451.8	604.9	1168.86 R	0.00	878.84	0.00	775.74 R	0.00	583.27	
0.00										
1.900	1934.1	340.3	661.35 R	0.00	497.26	0.00	438.93 R	0.00	330.02	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU4

Rating Live Load:  
Span

Service Resistance

Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
-------------------------	---------------------------	-------------------------	---------------------------

Available Resistance for LL+I			
Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.

1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER  
Rating Live Load: SU4

## Service

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	748.08	999.00	174.11	999.00	0.00	999.0 (2-Lane)
1.010	999.00	999.00	262.34	999.00	0.00	999.0 (1-Lane)
1.100	61.67	999.00	15.09	999.00	0.00	407.3 (2-Lane)
1.100	92.92	999.00	22.73	999.00	0.00	613.7 (1-Lane)
1.200	31.56	999.00	9.57	999.00	0.00	258.3 (2-Lane)
1.200	47.56	999.00	14.42	999.00	0.00	389.3 (1-Lane)
1.300	19.99	999.00	6.28	999.00	0.00	169.5 (2-Lane)
1.300	30.12	999.00	9.46	999.00	0.00	255.4 (1-Lane)
1.400	15.27	999.00	4.94	999.00	0.00	133.3 (2-Lane)
1.400	23.01	999.00	7.44	999.00	0.00	200.8 (1-Lane)
1.500	14.01	999.00	4.58	999.00	0.00	123.6 (2-Lane)
1.500	21.10	999.00	6.90	999.00	0.00	186.2 (1-Lane)
1.600	15.27	999.00	4.94	999.00	0.00	133.3 (2-Lane)
1.600	23.01	999.00	7.44	999.00	0.00	200.8 (1-Lane)
1.700	19.99	999.00	6.28	999.00	0.00	169.5 (2-Lane)
1.700	30.12	999.00	9.46	999.00	0.00	255.4 (1-Lane)
1.800	31.56	999.00	9.57	999.00	0.00	258.3 (2-Lane)
1.800	47.56	999.00	14.42	999.00	0.00	389.3 (1-Lane)
1.900	61.67	999.00	15.09	999.00	0.00	407.3 (2-Lane)
1.900	92.92	999.00	22.73	999.00	0.00	613.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)

2.000 999.00 999.00 999.00 999.00 0.00 999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.010 0.00	241.8	46.8	112.13 R	0.00	84.31	0.00	74.42 R	0.00	55.95
1.100 0.00	2417.7	425.3	1013.99 R	0.00	762.40	0.00	672.96 R	0.00	505.99
1.200 0.00	4314.7	756.1	1789.52 R	0.00	1345.51	0.00	1187.67 R	0.00	892.98
1.300 0.00	5675.4	992.4	2334.27 R	0.00	1755.09	0.00	1549.20 R	0.00	1164.82
1.400 0.00	6491.9	1134.2	2662.66 R	0.00	2002.00	0.00	1767.15 R	0.00	1328.68
1.500 0.00	6764.0	1181.5	2752.59 R	0.00	2069.61	0.00	1826.83 R	0.00	1373.56
1.600 0.00	6491.9	1134.2	2662.66 R	0.00	2002.00	0.00	1767.15 R	0.00	1328.68
1.700 0.00	5675.4	992.4	2334.27 R	0.00	1755.09	0.00	1549.20 R	0.00	1164.82
1.800 0.00	4314.7	756.1	1789.52 R	0.00	1345.51	0.00	1187.67 R	0.00	892.98
1.900 0.00	2417.7	425.3	1013.99 R	0.00	762.40	0.00	672.96 R	0.00	505.99
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6

## 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

1.500	19743.0C	19743.0	-12212.5	-12212.5B	11797.6	11797.6	-20158.0	-20158.0
1.600	19743.0C	19743.0	-11830.8	-11830.8B	12117.0	12117.0	-19456.9	-19456.9
1.700	19743.0C	19743.0	-11830.8	-11830.8B	13075.2	13075.2	-18498.7	-18498.7
1.800	19743.0C	19743.0	-13013.8	-13013.8B	14672.1	14672.1	-18084.7	-18084.7
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER

Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	143.77	999.00	143.77	999.00	0.00	999.0 (2-Lane)
1.010	216.62	999.00	216.62	999.00	0.00	999.0 (1-Lane)
1.100	13.38	999.00	13.38	999.00	0.00	414.8 (2-Lane)
1.100	20.16	999.00	20.16	999.00	0.00	624.9 (1-Lane)
1.200	8.20	999.00	8.20	999.00	0.00	254.2 (2-Lane)
1.200	12.35	999.00	12.35	999.00	0.00	383.0 (1-Lane)
1.300	5.60	999.00	5.60	999.00	0.00	173.6 (2-Lane)
1.300	8.44	999.00	8.44	999.00	0.00	261.6 (1-Lane)
1.400	4.55	999.00	4.55	999.00	0.00	141.1 (2-Lane)
1.400	6.86	999.00	6.86	999.00	0.00	212.6 (1-Lane)
1.500	4.29	999.00	4.29	999.00	0.00	132.9 (2-Lane)
1.500	6.46	999.00	6.46	999.00	0.00	200.2 (1-Lane)
1.600	4.55	999.00	4.55	999.00	0.00	141.1 (2-Lane)
1.600	6.86	999.00	6.86	999.00	0.00	212.6 (1-Lane)
1.700	5.60	999.00	5.60	999.00	0.00	173.6 (2-Lane)
1.700	8.44	999.00	8.44	999.00	0.00	261.6 (1-Lane)
1.800	8.20	999.00	8.20	999.00	0.00	254.2 (2-Lane)
1.800	12.35	999.00	12.35	999.00	0.00	383.0 (1-Lane)
1.900	13.38	999.00	13.38	999.00	0.00	414.8 (2-Lane)
1.900	20.16	999.00	20.16	999.00	0.00	624.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type:  
Rating Live Load:

I-OPER  
SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	102.52	0.00	77.09	62.53
0.00						
1.010	164.0	28.9	101.44	0.00	76.27	61.87
0.00						
1.100	134.8	23.6	91.74	0.00	68.97	55.95
0.00						
1.200	102.0	17.7	80.95	0.00	60.86	49.37
0.00						
1.300	68.0	11.8	70.16	0.00	52.75	42.79
0.00						
1.400	34.0	5.9	59.38	0.00	44.64	36.21
0.00						
1.500	0.0	0.0	48.59	0.00	36.53	29.63
0.00						
1.600	-34.0	-5.9	-59.38	0.00	-44.64	-36.21
0.00						
1.700	-68.0	-11.8	-70.16	0.00	-52.75	-42.79
0.00						
1.800	-102.0	-17.7	-80.95	0.00	-60.86	-49.37
0.00						
1.900	-134.8	-23.6	-91.74	0.00	-68.97	-55.95
0.00						
2.000	-167.2	-29.5	-102.52	0.00	-77.09	-62.53
0.00						

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Shear Resistance vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)

1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER

Rating Live Load: SU5

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.68	0.00	237.9 (2-Lane)
1.000	999.00	9.46	0.00	293.3 (1-Lane)
1.010	999.00	7.79	0.00	241.6 (2-Lane)
1.010	999.00	9.61	0.00	297.9 (1-Lane)
1.100	163.31	7.62	0.00	236.3 (2-Lane)
1.100	201.34	9.40	0.00	291.3 (1-Lane)
1.200	39.92	5.05	0.00	156.4 (2-Lane)
1.200	49.21	6.22	0.00	192.8 (1-Lane)
1.300	22.50	6.39	0.00	198.1 (2-Lane)
1.300	27.74	7.88	0.00	244.2 (1-Lane)
1.400	15.02	8.22	0.00	254.9 (2-Lane)
1.400	18.52	10.14	0.00	314.2 (1-Lane)
1.500	10.87	10.87	0.00	336.9 (2-Lane)
1.500	13.40	13.40	0.00	415.3 (1-Lane)
1.600	8.22	15.02	0.00	254.9 (2-Lane)
1.600	10.14	18.52	0.00	314.2 (1-Lane)
1.700	6.39	22.50	0.00	198.1 (2-Lane)
1.700	7.88	27.74	0.00	244.2 (1-Lane)
1.800	5.05	39.92	0.00	156.4 (2-Lane)
1.800	6.22	49.21	0.00	192.8 (1-Lane)
1.900	7.62	163.31	0.00	236.3 (2-Lane)
1.900	9.40	201.34	0.00	291.3 (1-Lane)
2.000	7.68	999.00	0.00	237.9 (2-Lane)
2.000	9.46	999.00	0.00	293.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPE

Rating Live Load: SU5

(2-Lane)

(1-Lane)



Gamma	DC 1.00	DW 1.00	LL 1.00				LL 1.00			
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.010	193.4	37.4	83.06 R	0.00	62.45	0.00	55.12 R	0.00	41.45	
0.00										
1.100	1934.1	340.3	751.11 R	0.00	564.74	0.00	498.49 R	0.00	374.81	
0.00										
1.200	3451.8	604.9	1325.57 R	0.00	996.67	0.00	879.75 R	0.00	661.47	
0.00										
1.300	4540.4	794.0	1729.09 R	0.00	1300.07	0.00	1147.56 R	0.00	862.83	
0.00										
1.400	5193.5	907.4	1972.34 R	0.00	1482.96	0.00	1309.00 R	0.00	984.21	
0.00										
1.500	5411.2	945.2	2038.95 R	0.00	1533.05	0.00	1353.21 R	0.00	1017.45	
0.00										
1.600	5193.5	907.4	1972.34 R	0.00	1482.96	0.00	1309.00 R	0.00	984.21	
0.00										
1.700	4540.4	794.0	1729.09 R	0.00	1300.07	0.00	1147.56 R	0.00	862.83	
0.00										
1.800	3451.8	604.9	1325.57 R	0.00	996.67	0.00	879.75 R	0.00	661.47	
0.00										
1.900	1934.1	340.3	751.11 R	0.00	564.74	0.00	498.49 R	0.00	374.81	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU5

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER  
Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	658.01	999.00	153.14	999.00	0.00	999.0 (2-Lane)
1.010	999.00	999.00	230.75	999.00	0.00	999.0 (1-Lane)
1.100	54.30	999.00	13.28	999.00	0.00	411.8 (2-Lane)
1.100	81.81	999.00	20.01	999.00	0.00	620.4 (1-Lane)
1.200	27.83	999.00	8.44	999.00	0.00	261.6 (2-Lane)
1.200	41.94	999.00	12.71	999.00	0.00	394.1 (1-Lane)
1.300	17.60	999.00	5.53	999.00	0.00	171.4 (2-Lane)
1.300	26.52	999.00	8.33	999.00	0.00	258.2 (1-Lane)
1.400	13.46	999.00	4.35	999.00	0.00	134.9 (2-Lane)
1.400	20.29	999.00	6.56	999.00	0.00	203.3 (1-Lane)
1.500	12.39	999.00	4.05	999.00	0.00	125.6 (2-Lane)
1.500	18.67	999.00	6.10	999.00	0.00	189.2 (1-Lane)
1.600	13.46	999.00	4.35	999.00	0.00	134.9 (2-Lane)
1.600	20.29	999.00	6.56	999.00	0.00	203.3 (1-Lane)
1.700	17.60	999.00	5.53	999.00	0.00	171.4 (2-Lane)
1.700	26.52	999.00	8.33	999.00	0.00	258.2 (1-Lane)
1.800	27.83	999.00	8.44	999.00	0.00	261.6 (2-Lane)
1.800	41.94	999.00	12.71	999.00	0.00	394.1 (1-Lane)
1.900	54.30	999.00	13.28	999.00	0.00	411.8 (2-Lane)
1.900	81.81	999.00	20.01	999.00	0.00	620.4 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1154

## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU6

Gamma	DC		(2-Lane)		(1-Lane)	
	1.25	DW 1.25	LL 1.35	LL 1.35	LL 1.35	LL 1.35
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	123.59 R	0.00	92.92	0.00
					82.02 R	0.00
						61.67

## 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

0.00									
1.100	2417.7	425.3	1115.58 R	0.00	838.78	0.00	740.38 R	0.00	556.68
0.00									
1.200	4314.7	756.1	1992.19 R	0.00	1497.89	0.00	1322.17 R	0.00	994.11
0.00									
1.300	5675.4	992.4	2606.53 R	0.00	1959.80	0.00	1729.90 R	0.00	1300.67
0.00									
1.400	6491.9	1134.2	2967.02 R	0.00	2230.84	0.00	1969.14 R	0.00	1480.56
0.00									
1.500	6764.0	1181.5	3080.14 R	0.00	2315.89	0.00	2044.22 R	0.00	1537.00
0.00									
1.600	6491.9	1134.2	2967.02 R	0.00	2230.84	0.00	1969.14 R	0.00	1480.56
0.00									
1.700	5675.4	992.4	2606.53 R	0.00	1959.80	0.00	1729.90 R	0.00	1300.67
0.00									
1.800	4314.7	756.1	1992.19 R	0.00	1497.89	0.00	1322.17 R	0.00	994.11
0.00									
1.900	2417.7	425.3	1115.57 R	0.00	838.78	0.00	740.38 R	0.00	556.68
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU6

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12214.2	-12214.2B	11797.6	11797.6	-20159.7	-20159.7
1.600	19743.0C	19743.0	-11834.4	-11834.4B	12117.0	12117.0	-19460.5	-19460.5
1.700	19743.0C	19743.0	-11834.4	-11834.4B	13075.2	13075.2	-18502.3	-18502.3
1.800	19743.0C	19743.0	-13013.0	-13013.0B	14672.1	14672.1	-18083.9	-18083.9
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1156  
MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU6

Moment					
Span	top +bend	Rating factor fiber -bend	bottom +bend	Rating factor fiber -bend	Load Resistance (tons)

1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	130.44	999.00	130.44	999.00	0.00	999.0 (2-Lane)
1.010	196.54	999.00	196.54	999.00	0.00	999.0 (1-Lane)
1.100	12.16	999.00	12.16	999.00	0.00	422.6 (2-Lane)
1.100	18.32	999.00	18.32	999.00	0.00	636.7 (1-Lane)
1.200	7.36	999.00	7.36	999.00	0.00	255.9 (2-Lane)
1.200	11.10	999.00	11.10	999.00	0.00	385.6 (1-Lane)
1.300	5.02	999.00	5.02	999.00	0.00	174.3 (2-Lane)
1.300	7.56	999.00	7.56	999.00	0.00	262.7 (1-Lane)
1.400	4.08	999.00	4.08	999.00	0.00	141.9 (2-Lane)
1.400	6.15	999.00	6.15	999.00	0.00	213.8 (1-Lane)
1.500	3.83	999.00	3.83	999.00	0.00	133.1 (2-Lane)
1.500	5.77	999.00	5.77	999.00	0.00	200.5 (1-Lane)
1.600	4.08	999.00	4.08	999.00	0.00	141.9 (2-Lane)
1.600	6.15	999.00	6.15	999.00	0.00	213.8 (1-Lane)
1.700	5.02	999.00	5.02	999.00	0.00	174.3 (2-Lane)
1.700	7.56	999.00	7.56	999.00	0.00	262.7 (1-Lane)
1.800	7.36	999.00	7.36	999.00	0.00	255.9 (2-Lane)
1.800	11.10	999.00	11.10	999.00	0.00	385.6 (1-Lane)
1.900	12.16	999.00	12.16	999.00	0.00	422.6 (2-Lane)
1.900	18.32	999.00	18.32	999.00	0.00	636.7 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	113.02	0.00	84.98	0.00	91.67	0.00	68.93
0.00									
1.010	164.0	28.9	111.81	0.00	84.07	0.00	90.69	0.00	68.19
0.00									
1.100	134.8	23.6	100.93	0.00	75.88	0.00	81.87	0.00	61.55
0.00									
1.200	102.0	17.7	88.83	0.00	66.79	0.00	72.06	0.00	54.18
0.00									
1.300	68.0	11.8	76.74	0.00	57.70	0.00	62.25	0.00	46.80
0.00									
1.400	34.0	5.9	64.65	0.00	48.61	0.00	52.44	0.00	39.43
0.00									
1.500	0.0	0.0	52.56	0.00	39.52	0.00	42.63	0.00	32.05
0.00									
1.600	-34.0	-5.9	-64.65	0.00	-48.61	0.00	-52.44	0.00	-39.43
0.00									
1.700	-68.0	-11.8	-76.74	0.00	-57.70	0.00	-62.25	0.00	-46.80

0.00									
1.800	-102.0	-17.7	-88.83	0.00	-66.79	0.00	-72.06	0.00	-54.18
0.00									
1.900	-134.8	-23.6	-100.93	0.00	-75.88	0.00	-81.87	0.00	-61.55
0.00									
2.000	-167.2	-29.5	-113.02	0.00	-84.98	0.00	-91.67	0.00	-68.93
0.00									

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU6

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.96	0.00	241.9 (2-Lane)
1.000	999.00	8.58	0.00	298.3 (1-Lane)

1.010	999.00	7.07	0.00	245.7 (2-Lane)
1.010	999.00	8.72	0.00	302.9 (1-Lane)
1.100	186.78	6.93	0.00	240.7 (2-Lane)
1.100	230.26	8.54	0.00	296.8 (1-Lane)
1.200	39.78	4.60	0.00	159.7 (2-Lane)
1.200	49.04	5.67	0.00	196.9 (1-Lane)
1.300	21.42	5.84	0.00	203.0 (2-Lane)
1.300	26.41	7.20	0.00	250.2 (1-Lane)
1.400	14.03	7.55	0.00	262.4 (2-Lane)
1.400	17.30	9.31	0.00	323.5 (1-Lane)
1.500	10.05	10.05	0.00	349.1 (2-Lane)
1.500	12.39	12.39	0.00	430.4 (1-Lane)
1.600	7.55	14.03	0.00	262.4 (2-Lane)
1.600	9.31	17.30	0.00	323.5 (1-Lane)
1.700	5.84	21.42	0.00	203.0 (2-Lane)
1.700	7.20	26.41	0.00	250.2 (1-Lane)
1.800	4.60	39.78	0.00	159.7 (2-Lane)
1.800	5.67	49.04	0.00	196.9 (1-Lane)
1.900	6.93	186.78	0.00	240.7 (2-Lane)
1.900	8.54	230.26	0.00	296.8 (1-Lane)
2.000	6.96	999.00	0.00	241.9 (2-Lane)
2.000	8.58	999.00	0.00	298.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPE  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o Lane
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	193.4	37.4	91.55 R	0.00	68.83	0.00
0.00						
1.100	1934.1	340.3	826.35 R	0.00	621.32	0.00
0.00						
1.200	3451.8	604.9	1475.69 R	0.00	1109.54	0.00
0.00						
1.300	4540.4	794.0	1930.77 R	0.00	1451.70	0.00
0.00						
1.400	5193.5	907.4	2197.79 R	0.00	1652.48	0.00
0.00						
1.500	5411.2	945.2	2281.58 R	0.00	1715.47	0.00
0.00						
1.600	5193.5	907.4	2197.79 R	0.00	1652.48	0.00
0.00						
1.700	4540.4	794.0	1930.77 R	0.00	1451.70	0.00
0.00						
1.800	3451.8	604.9	1475.69 R	0.00	1109.54	0.00
0.00						
1.900	1934.1	340.3	826.35 R	0.00	621.32	0.00

0.00  
2.000      0.0            0.0            0.00 R    0.00            0.00            0.00            0.00 R    0.00            0.00  
0.00

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## SERVICE RESISTANCE REPORT

Structure I. D.            7777777\_20120905cy01\_01of01

Member I. D.            G06

Rating Type:            II-OPER  
Rating Live Load:

Rating Type:            SU6  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D.            7777777\_20120905cy01\_01of01

Member I. D.            G06

Rating Type:            II-OPER  
Rating Live Load:      SU6

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	597.01	999.00	138.95	999.00	0.00	999.0 (2-Lane)
1.010	899.55	999.00	209.36	999.00	0.00	999.0 (1-Lane)
1.100	49.35	999.00	12.07	999.00	0.00	419.5 (2-Lane)
1.100	74.36	999.00	18.19	999.00	0.00	632.1 (1-Lane)
1.200	25.00	999.00	7.58	999.00	0.00	263.4 (2-Lane)
1.200	37.67	999.00	11.42	999.00	0.00	396.8 (1-Lane)
1.300	15.76	999.00	4.95	999.00	0.00	172.0 (2-Lane)
1.300	23.75	999.00	7.46	999.00	0.00	259.2 (1-Lane)

1.400	12.08	999.00	3.90	999.00	0.00	135.7 (2-Lane)
1.400	18.20	999.00	5.88	999.00	0.00	204.5 (1-Lane)
1.500	11.07	999.00	3.62	999.00	0.00	125.8 (2-Lane)
1.500	16.68	999.00	5.45	999.00	0.00	189.5 (1-Lane)
1.600	12.08	999.00	3.90	999.00	0.00	135.7 (2-Lane)
1.600	18.20	999.00	5.88	999.00	0.00	204.5 (1-Lane)
1.700	15.76	999.00	4.95	999.00	0.00	172.0 (2-Lane)
1.700	23.75	999.00	7.46	999.00	0.00	259.2 (1-Lane)
1.800	25.00	999.00	7.58	999.00	0.00	263.4 (2-Lane)
1.800	37.67	999.00	11.42	999.00	0.00	396.8 (1-Lane)
1.900	49.35	999.00	12.07	999.00	0.00	419.5 (2-Lane)
1.900	74.36	999.00	18.19	999.00	0.00	632.1 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.010	241.8	46.8	135.48 R	0.00	101.86	89.91 R
0.00						
1.100	2417.7	425.3	1220.65 R	0.00	917.78	810.11 R
0.00						
1.200	4314.7	756.1	2179.25 R	0.00	1638.53	1446.32 R
0.00						
1.300	5675.4	992.4	2875.80 R	0.00	2162.26	1908.60 R
0.00						
1.400	6491.9	1134.2	3276.68 R	0.00	2463.67	2174.66 R
0.00						
1.500	6764.0	1181.5	3407.10 R	0.00	2561.73	2261.21 R
0.00						
1.600	6491.9	1134.2	3276.68 R	0.00	2463.67	2174.66 R
0.00						
1.700	5675.4	992.4	2875.80 R	0.00	2162.26	1908.60 R
0.00						
1.800	4314.7	756.1	2179.25 R	0.00	1638.53	1446.32 R
0.00						
1.900	2417.7	425.3	1220.65 R	0.00	917.78	810.11 R
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01



Member I. D. G06  
 Rating Type: I-OPER  
 Rating Live Load: SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12216.7	-12216.7B	11797.6	11797.6	-20162.2	-20162.2
1.600	19743.0C	19743.0	-11836.3	-11836.3B	12117.0	12117.0	-19462.4	-19462.4
1.700	19743.0C	19743.0	-11836.3	-11836.3B	13075.2	13075.2	-18504.2	-18504.2
1.800	19743.0C	19743.0	-13021.9	-13021.9B	14672.1	14672.1	-18092.8	-18092.8
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
 Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	118.99	999.00	118.99	999.00	0.00	999.0 (2-Lane)
1.010	179.29	999.00	179.29	999.00	0.00	999.0 (1-Lane)
1.100	11.11	999.00	11.11	999.00	0.00	430.7 (2-Lane)
1.100	16.75	999.00	16.75	999.00	0.00	648.9 (1-Lane)
1.200	6.73	999.00	6.73	999.00	0.00	260.9 (2-Lane)
1.200	10.14	999.00	10.14	999.00	0.00	393.1 (1-Lane)
1.300	4.55	999.00	4.55	999.00	0.00	176.2 (2-Lane)
1.300	6.85	999.00	6.85	999.00	0.00	265.5 (1-Lane)
1.400	3.70	999.00	3.70	999.00	0.00	143.3 (2-Lane)
1.400	5.57	999.00	5.57	999.00	0.00	215.9 (1-Lane)
1.500	3.46	999.00	3.46	999.00	0.00	134.2 (2-Lane)
1.500	5.22	999.00	5.22	999.00	0.00	202.2 (1-Lane)
1.600	3.70	999.00	3.70	999.00	0.00	143.3 (2-Lane)
1.600	5.57	999.00	5.57	999.00	0.00	215.9 (1-Lane)
1.700	4.55	999.00	4.55	999.00	0.00	176.2 (2-Lane)
1.700	6.85	999.00	6.85	999.00	0.00	265.5 (1-Lane)
1.800	6.73	999.00	6.73	999.00	0.00	260.9 (2-Lane)
1.800	10.14	999.00	10.14	999.00	0.00	393.1 (1-Lane)

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1.900	11.11	999.00	11.11	999.00	0.00	430.7 (2-Lane)
1.900	16.75	999.00	16.75	999.00	0.00	648.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35	(1-Lane) LL 1.35					
Span w/o impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load			
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck			
1.000	167.2	29.5	123.92	0.00	93.17	0.00	100.51	0.00	75.57
0.00									
1.010	164.0	28.9	122.57	0.00	92.16	0.00	99.42	0.00	74.75
0.00									
1.100	134.8	23.6	110.43	0.00	83.03	0.00	89.58	0.00	67.35
0.00									
1.200	102.0	17.7	96.95	0.00	72.89	0.00	78.64	0.00	59.13
0.00									
1.300	68.0	11.8	83.46	0.00	62.76	0.00	67.70	0.00	50.90
0.00									
1.400	34.0	5.9	69.98	0.00	52.62	0.00	56.76	0.00	42.68
0.00									
1.500	0.0	0.0	56.50	0.00	42.48	0.00	45.83	0.00	34.46
0.00									
1.600	-34.0	-5.9	-69.98	0.00	-52.62	0.00	-56.76	0.00	-42.68
0.00									
1.700	-68.0	-11.8	-83.46	0.00	-62.76	0.00	-67.70	0.00	-50.90
0.00									
1.800	-102.0	-17.7	-96.95	0.00	-72.89	0.00	-78.64	0.00	-59.13
0.00									
1.900	-134.8	-23.6	-110.43	0.00	-83.03	0.00	-89.58	0.00	-67.35
0.00									
2.000	-167.2	-29.5	-123.92	0.00	-93.17	0.00	-100.51	0.00	-75.57
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
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1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-OPER  
Rating Live Load: SU7

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.35	0.00	246.1 (2-Lane)
1.000	999.00	7.83	0.00	303.3 (1-Lane)
1.010	999.00	6.45	0.00	250.0 (2-Lane)
1.010	999.00	7.95	0.00	308.2 (1-Lane)
1.100	218.16	6.33	0.00	245.4 (2-Lane)
1.100	268.95	7.81	0.00	302.5 (1-Lane)
1.200	40.37	4.21	0.00	163.2 (2-Lane)
1.200	49.77	5.19	0.00	201.2 (1-Lane)
1.300	20.58	5.37	0.00	208.1 (2-Lane)
1.300	25.38	6.62	0.00	256.6 (1-Lane)
1.400	13.20	6.98	0.00	270.3 (2-Lane)
1.400	16.28	8.60	0.00	333.2 (1-Lane)
1.500	9.35	9.35	0.00	362.2 (2-Lane)
1.500	11.52	11.52	0.00	446.5 (1-Lane)
1.600	6.98	13.20	0.00	270.3 (2-Lane)
1.600	8.60	16.28	0.00	333.2 (1-Lane)
1.700	5.37	20.58	0.00	208.1 (2-Lane)
1.700	6.62	25.38	0.00	256.6 (1-Lane)
1.800	4.21	40.37	0.00	163.2 (2-Lane)
1.800	5.19	49.77	0.00	201.2 (1-Lane)
1.900	6.33	218.16	0.00	245.4 (2-Lane)
1.900	7.81	268.95	0.00	302.5 (1-Lane)

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2.000	6.35	999.00	0.00	246.1 (2-Lane)
2.000	7.83	999.00	0.00	303.3 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPE  
Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00 0.00
0.00						
1.010	193.4	37.4	100.35 R 0.00	75.45 0.00	66.60 R 0.00	50.08
0.00						
1.100	1934.1	340.3	904.18 R 0.00	679.84 0.00	600.09 R 0.00	451.19
0.00						
1.200	3451.8	604.9	1614.26 R 0.00	1213.73 0.00	1071.35 R 0.00	805.52
0.00						
1.300	4540.4	794.0	2130.22 R 0.00	1601.67 0.00	1413.78 R 0.00	1062.99
0.00						
1.400	5193.5	907.4	2427.17 R 0.00	1824.94 0.00	1610.86 R 0.00	1211.17
0.00						
1.500	5411.2	945.2	2523.78 R 0.00	1897.58 0.00	1674.97 R 0.00	1259.38
0.00						
1.600	5193.5	907.4	2427.17 R 0.00	1824.94 0.00	1610.86 R 0.00	1211.17
0.00						
1.700	4540.4	794.0	2130.22 R 0.00	1601.67 0.00	1413.78 R 0.00	1062.99
0.00						
1.800	3451.8	604.9	1614.26 R 0.00	1213.73 0.00	1071.35 R 0.00	805.52
0.00						
1.900	1934.1	340.3	904.18 R 0.00	679.84 0.00	600.08 R 0.00	451.19
0.00						
2.000	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00 0.00
0.00						

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU7  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9

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1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-OPER  
Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	-bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	544.61	999.00	126.75	999.00	0.00	999.0 (2-Lane)
1.010	820.59	999.00	190.98	999.00	0.00	999.0 (1-Lane)
1.100	45.10	999.00	11.03	999.00	0.00	427.6 (2-Lane)
1.100	67.96	999.00	16.62	999.00	0.00	644.2 (1-Lane)
1.200	22.85	999.00	6.93	999.00	0.00	268.5 (2-Lane)
1.200	34.44	999.00	10.44	999.00	0.00	404.5 (1-Lane)
1.300	14.29	999.00	4.49	999.00	0.00	173.9 (2-Lane)
1.300	21.52	999.00	6.76	999.00	0.00	262.0 (1-Lane)
1.400	10.94	999.00	3.54	999.00	0.00	137.0 (2-Lane)
1.400	16.49	999.00	5.33	999.00	0.00	206.5 (1-Lane)
1.500	10.01	999.00	3.27	999.00	0.00	126.8 (2-Lane)
1.500	15.08	999.00	4.93	999.00	0.00	191.0 (1-Lane)
1.600	10.94	999.00	3.54	999.00	0.00	137.0 (2-Lane)
1.600	16.49	999.00	5.33	999.00	0.00	206.5 (1-Lane)
1.700	14.29	999.00	4.49	999.00	0.00	173.9 (2-Lane)
1.700	21.52	999.00	6.76	999.00	0.00	262.0 (1-Lane)
1.800	22.85	999.00	6.93	999.00	0.00	268.5 (2-Lane)
1.800	34.44	999.00	10.44	999.00	0.00	404.5 (1-Lane)
1.900	45.10	999.00	11.03	999.00	0.00	427.6 (2-Lane)
1.900	67.96	999.00	16.62	999.00	0.00	644.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06  
 Rating Type: I-LEGL  
 Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45				(1-Lane) LL 1.45	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o		
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck		
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00		
1.010	241.8	46.8	97.80 R	73.54	64.91 R	48.80		
1.100	2417.7	425.3	884.75 R	665.22	587.19 R	441.49		
1.200	4314.7	756.1	1562.18 R	1174.57	1036.78 R	779.54		
1.300	5675.4	992.4	2032.30 R	1528.05	1348.79 R	1014.13		
1.400	6491.9	1134.2	2310.64 R	1737.32	1533.52 R	1153.02		
1.500	6764.0	1181.5	2392.03 R	1798.52	1587.53 R	1193.63		
1.600	6491.9	1134.2	2310.64 R	1737.32	1533.52 R	1153.02		
1.700	5675.4	992.4	2032.30 R	1528.05	1348.79 R	1014.13		
1.800	4314.7	756.1	1562.18 R	1174.57	1036.78 R	779.54		
1.900	2417.7	425.3	884.75 R	665.22	587.19 R	441.49		
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00		

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06  
 Rating Type: I-LEGL  
 Rating Live Load: 3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12211.9	-12211.9B	11797.6	11797.6	-20157.4	-20157.4
1.600	19743.0C	19743.0	-11832.4	-11832.4B	12117.0	12117.0	-19458.4	-19458.4
1.700	19743.0C	19743.0	-11832.4	-11832.4B	13075.2	13075.2	-18500.3	-18500.3
1.800	19743.0C	19743.0	-13009.1	-13009.1B	14672.1	14672.1	-18080.0	-18080.0
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06  
 Rating Type: I-LEGL  
 Rating Live Load: 3

Span	Rating		Factor		Rating Value	Load Resistance (tons)
	top fiber +bend	fiber -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	164.83	999.00	164.83	999.00	0.00	999.0 (2-Lane)
1.010	248.35	999.00	248.35	999.00	0.00	999.0 (1-Lane)
1.100	15.33	999.00	15.33	999.00	0.00	383.3 (2-Lane)
1.100	23.10	999.00	23.10	999.00	0.00	577.6 (1-Lane)
1.200	9.39	999.00	9.39	999.00	0.00	234.8 (2-Lane)
1.200	14.15	999.00	14.15	999.00	0.00	353.8 (1-Lane)
1.300	6.43	999.00	6.43	999.00	0.00	160.8 (2-Lane)
1.300	9.69	999.00	9.69	999.00	0.00	242.3 (1-Lane)
1.400	5.24	999.00	5.24	999.00	0.00	131.1 (2-Lane)
1.400	7.90	999.00	7.90	999.00	0.00	197.5 (1-Lane)
1.500	4.93	999.00	4.93	999.00	0.00	123.3 (2-Lane)
1.500	7.43	999.00	7.43	999.00	0.00	185.8 (1-Lane)
1.600	5.24	999.00	5.24	999.00	0.00	131.1 (2-Lane)
1.600	7.90	999.00	7.90	999.00	0.00	197.5 (1-Lane)
1.700	6.43	999.00	6.43	999.00	0.00	160.8 (2-Lane)
1.700	9.69	999.00	9.69	999.00	0.00	242.3 (1-Lane)
1.800	9.39	999.00	9.39	999.00	0.00	234.8 (2-Lane)
1.800	14.15	999.00	14.15	999.00	0.00	353.8 (1-Lane)
1.900	15.33	999.00	15.33	999.00	0.00	383.3 (2-Lane)
1.900	23.10	999.00	23.10	999.00	0.00	577.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

**Member I. D.** **G06**

Rating Type: I-LEGL  
Rating Live Load: 3

			(2-Lane)	(1-Lane)
Gamma	DC	DW	LL	LL
	1.25	1.25	1.45	1.45

Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
	Lane	Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	89.42		67.23		72.53		54.54
1.010	164.0	28.9	88.48		66.53		71.77		53.96
1.100	134.8	23.6	80.04		60.18		64.93		48.82
1.200	102.0	17.7	70.67		53.13		57.32		43.10
1.300	68.0	11.8	61.29		46.08		49.71		37.38
1.400	34.0	5.9	51.91		39.03		42.11		31.66
1.500	0.0	0.0	42.53		31.98		34.50		25.94
1.600	-34.0	-5.9	-51.91		-39.03		-42.11		-31.66
1.700	-68.0	-11.8	-61.29		-46.08		-49.71		-37.38
1.800	-102.0	-17.7	-70.67		-53.13		-57.32		-43.10

1.900	-134.8	-23.6	-80.04	-60.18	-64.93	-48.82
2.000	-167.2	-29.5	-89.42	-67.23	-72.53	-54.54

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL

Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL

Rating Live Load: 3

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	8.80	0.00	220.0 (2-Lane)
1.000	999.00	10.85	0.00	271.2 (1-Lane)
1.010	999.00	8.94	0.00	223.4 (2-Lane)
1.010	999.00	11.02	0.00	275.4 (1-Lane)
1.100	182.07	8.73	0.00	218.4 (2-Lane)
1.100	224.47	10.77	0.00	269.2 (1-Lane)



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1.200	44.99	5.78	0.00	144.5 (2-Lane)
1.200	55.47	7.12	0.00	178.1 (1-Lane)
1.300	25.57	7.31	0.00	182.9 (2-Lane)
1.300	31.52	9.02	0.00	225.4 (1-Lane)
1.400	17.13	9.40	0.00	235.1 (2-Lane)
1.400	21.12	11.59	0.00	289.8 (1-Lane)
1.500	12.42	12.42	0.00	310.4 (2-Lane)
1.500	15.31	15.31	0.00	382.7 (1-Lane)
1.600	9.40	17.13	0.00	235.1 (2-Lane)
1.600	11.59	21.12	0.00	289.8 (1-Lane)
1.700	7.31	25.57	0.00	182.9 (2-Lane)
1.700	9.02	31.52	0.00	225.4 (1-Lane)
1.800	5.78	44.99	0.00	144.5 (2-Lane)
1.800	7.12	55.47	0.00	178.1 (1-Lane)
1.900	8.73	182.07	0.00	218.4 (2-Lane)
1.900	10.77	224.47	0.00	269.2 (1-Lane)
2.000	8.80	999.00	0.00	220.0 (2-Lane)
2.000	10.85	999.00	0.00	271.2 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEG  
Rating Live Load: 3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	87.36 R	65.69	57.98 R	43.60
1.100	2417.7	425.3	790.32 R	594.22	524.51 R	394.37
1.200	4314.7	756.1	1395.44 R	1049.21	926.12 R	696.33
1.300	5675.4	992.4	1815.38 R	1364.95	1204.83 R	905.89
1.400	6491.9	1134.2	2064.02 R	1551.89	1369.84 R	1029.96
1.500	6764.0	1181.5	2136.72 R	1606.55	1418.09 R	1066.23
1.600	6491.9	1134.2	2064.02 R	1551.89	1369.84 R	1029.96
1.700	5675.4	992.4	1815.38 R	1364.95	1204.83 R	905.89
1.800	4314.7	756.1	1395.44 R	1049.21	926.12 R	696.33
1.900	2417.7	425.3	790.32 R	594.22	524.51 R	394.37
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEGL  
Rating Live Load:

Rating Type:	3							
Rating Live Load:								
Span	Service Resistance				Available Resistance for LL+I			
	Positive	Bending	Negative	Bending	Positive	Bending	Negative	Bending
	Top	Bott.	Top	Bott.	Top	Bott.	Top	Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEGL  
Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	Factor bottom fiber +bend	Rating Factor bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	625.58	999.00	145.60	999.00	0.00	999.0 (2-Lane)
1.010	942.60	999.00	219.38	999.00	0.00	999.0 (1-Lane)
1.100	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.100	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)
1.200	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.200	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.300	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.300	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.400	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.400	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.500	11.82	999.00	3.87	999.00	0.00	96.6 (2-Lane)
1.500	17.81	999.00	5.82	999.00	0.00	145.6 (1-Lane)
1.600	12.87	999.00	4.16	999.00	0.00	104.0 (2-Lane)
1.600	19.39	999.00	6.27	999.00	0.00	156.6 (1-Lane)
1.700	16.76	999.00	5.26	999.00	0.00	131.6 (2-Lane)
1.700	25.26	999.00	7.93	999.00	0.00	198.3 (1-Lane)
1.800	26.44	999.00	8.02	999.00	0.00	200.4 (2-Lane)
1.800	39.83	999.00	12.08	999.00	0.00	301.9 (1-Lane)
1.900	51.60	999.00	12.62	999.00	0.00	315.6 (2-Lane)
1.900	77.75	999.00	19.02	999.00	0.00	475.5 (1-Lane)

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2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: 3S2

Gamma	DC	DW	(2-Lane)		(1-Lane)	
	1.25	1.25	LL	1.45	LL	1.45
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	144.61 R	108.73	95.98 R	72.16
1.100	2417.7	425.3	1296.88 R	975.10	860.71 R	647.15
1.200	4314.7	756.1	2262.06 R	1700.79	1501.28 R	1128.78
1.300	5675.4	992.4	2967.01 R	2230.83	1969.14 R	1480.55
1.400	6491.9	1134.2	3365.12 R	2530.16	2233.35 R	1679.21
1.500	6764.0	1181.5	3457.42 R	2599.56	2294.61 R	1725.27
1.600	6491.9	1134.2	3365.12 R	2530.16	2233.35 R	1679.21
1.700	5675.4	992.4	2967.01 R	2230.83	1969.13 R	1480.55
1.800	4314.7	756.1	2262.06 R	1700.79	1501.28 R	1128.78
1.900	2417.7	425.3	1296.88 R	975.10	860.71 R	647.15
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12195.7	-12195.7B	11797.6	11797.6	-20141.2	-20141.2
1.600	19743.0C	19743.0	-11819.8	-11819.8B	12117.0	12117.0	-19445.9	-19445.9
1.700	19743.0C	19743.0	-11819.8	-11819.8B	13075.2	13075.2	-18487.7	-18487.7
1.800	19743.0C	19743.0	-13009.3	-13009.3B	14672.1	14672.1	-18080.2	-18080.2
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	111.47	999.00	111.47	999.00	0.00	999.0 (2-Lane)
1.010	167.96	999.00	167.96	999.00	0.00	999.0 (1-Lane)
1.100	10.46	999.00	10.46	999.00	0.00	418.4 (2-Lane)
1.100	15.76	999.00	15.76	999.00	0.00	630.5 (1-Lane)
1.200	6.49	999.00	6.49	999.00	0.00	259.4 (2-Lane)
1.200	9.77	999.00	9.77	999.00	0.00	390.9 (1-Lane)
1.300	4.41	999.00	4.41	999.00	0.00	176.3 (2-Lane)
1.300	6.64	999.00	6.64	999.00	0.00	265.6 (1-Lane)
1.400	3.60	999.00	3.60	999.00	0.00	144.0 (2-Lane)
1.400	5.43	999.00	5.43	999.00	0.00	217.0 (1-Lane)
1.500	3.41	999.00	3.41	999.00	0.00	136.5 (2-Lane)
1.500	5.14	999.00	5.14	999.00	0.00	205.7 (1-Lane)
1.600	3.60	999.00	3.60	999.00	0.00	144.0 (2-Lane)
1.600	5.43	999.00	5.43	999.00	0.00	217.0 (1-Lane)
1.700	4.41	999.00	4.41	999.00	0.00	176.3 (2-Lane)
1.700	6.64	999.00	6.64	999.00	0.00	265.6 (1-Lane)
1.800	6.49	999.00	6.49	999.00	0.00	259.4 (2-Lane)
1.800	9.77	999.00	9.77	999.00	0.00	390.9 (1-Lane)
1.900	10.46	999.00	10.46	999.00	0.00	418.4 (2-Lane)
1.900	15.76	999.00	15.76	999.00	0.00	630.5 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: 3S2

Gamma	DC	DW	(2-Lane)	(1-Lane)
			LL 1.45	LL 1.45
Span w/o impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact
				Live Load w/impact
				Live Load

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Lane	Dead Load		Truck	Lane	Truck	Lane	Truck
1.000	167.2	29.5	132.33		99.50		107.34
1.010	164.0	28.9	130.83		98.37		106.13
1.100	134.8	23.6	117.33		88.22		95.17
1.200	102.0	17.7	102.32		76.94		83.00
1.300	68.0	11.8	87.32		65.65		70.83
1.400	34.0	5.9	72.32		54.37		58.66
1.500	0.0	0.0	57.31		43.09		46.49
1.600	-34.0	-5.9	-72.32		-54.37		-58.66
1.700	-68.0	-11.8	-87.32		-65.65		-70.83
1.800	-102.0	-17.7	-102.32		-76.94		-83.00
1.900	-134.8	-23.6	-117.33		-88.22		-95.17
2.000	-167.2	-29.5	-132.33		-99.50		-107.34

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#### STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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#### STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: 3S2

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	5.95	0.00	237.8 (2-Lane)
1.000	999.00	7.33	0.00	293.2 (1-Lane)
1.010	999.00	6.04	0.00	241.7 (2-Lane)
1.010	999.00	7.45	0.00	298.0 (1-Lane)
1.100	182.07	5.96	0.00	238.4 (2-Lane)
1.100	224.47	7.35	0.00	293.9 (1-Lane)
1.200	47.78	3.99	0.00	159.6 (2-Lane)
1.200	58.90	4.92	0.00	196.8 (1-Lane)
1.300	22.26	5.13	0.00	205.3 (2-Lane)
1.300	27.45	6.33	0.00	253.2 (1-Lane)
1.400	13.43	6.75	0.00	270.0 (2-Lane)
1.400	16.55	8.32	0.00	332.9 (1-Lane)
1.500	9.21	9.21	0.00	368.6 (2-Lane)
1.500	11.36	11.36	0.00	454.4 (1-Lane)
1.600	6.75	13.43	0.00	270.0 (2-Lane)
1.600	8.32	16.55	0.00	332.9 (1-Lane)
1.700	5.13	22.26	0.00	205.3 (2-Lane)
1.700	6.33	27.45	0.00	253.2 (1-Lane)
1.800	3.99	47.78	0.00	159.6 (2-Lane)
1.800	4.92	58.90	0.00	196.8 (1-Lane)
1.900	5.96	182.07	0.00	238.4 (2-Lane)
1.900	7.35	224.47	0.00	293.9 (1-Lane)
2.000	5.95	999.00	0.00	237.8 (2-Lane)
2.000	7.33	999.00	0.00	293.2 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEG  
Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30	(1-Lane) LL 1.30
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Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	129.18 R	97.13	85.73 R	64.46
1.100	2417.7	425.3	1158.46 R	871.02	768.84 R	578.08
1.200	4314.7	756.1	2020.62 R	1519.26	1341.04 R	1008.30
1.300	5675.4	992.4	2650.33 R	1992.73	1758.96 R	1322.53
1.400	6491.9	1134.2	3005.94 R	2260.11	1994.98 R	1499.98
1.500	6764.0	1181.5	3088.39 R	2322.10	2049.69 R	1541.12
1.600	6491.9	1134.2	3005.94 R	2260.11	1994.98 R	1499.98
1.700	5675.4	992.4	2650.33 R	1992.73	1758.96 R	1322.53
1.800	4314.7	756.1	2020.62 R	1519.26	1341.04 R	1008.30
1.900	2417.7	425.3	1158.46 R	871.02	768.84 R	578.08
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEGL

Rating Live Load:

Rating Type: 3S2

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Positive Bending Bott.	Negative Bending Top	Negative Bending Bott.	Positive Bending Top	Positive Bending Bott.	Negative Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEGL

Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	423.08	999.00	98.47	999.00	0.00	999.0 (2-Lane)
1.010	637.48	999.00	148.37	999.00	0.00	999.0 (1-Lane)
1.100	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.100	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
1.200	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.200	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.300	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.300	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.400	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.400	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.500	8.18	999.00	2.67	999.00	0.00	107.0 (2-Lane)

1.500	12.32	999.00	4.03	999.00	0.00	161.2 (1-Lane)
1.600	8.83	999.00	2.86	999.00	0.00	114.2 (2-Lane)
1.600	13.31	999.00	4.30	999.00	0.00	172.1 (1-Lane)
1.700	11.48	999.00	3.61	999.00	0.00	144.3 (2-Lane)
1.700	17.30	999.00	5.43	999.00	0.00	217.4 (1-Lane)
1.800	18.26	999.00	5.53	999.00	0.00	221.4 (2-Lane)
1.800	27.51	999.00	8.34	999.00	0.00	333.6 (1-Lane)
1.900	35.20	999.00	8.61	999.00	0.00	344.5 (2-Lane)
1.900	53.04	999.00	12.98	999.00	0.00	519.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL

Rating Live Load: 3-3

Gamma	DC	DW	(2-Lane)				(1-Lane)			
	1.25	1.25	LL		LL		LL			
			1.45		1.45		1.45			
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
			Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane										
1.000	0.0	0.0	0.00	R	0.00	0.00	R		0.00	
1.010	241.8	46.8	139.44	R	104.84	92.54	R		69.58	
1.100	2417.7	425.3	1245.08	R	936.15	826.33	R		621.30	
1.200	4314.7	756.1	2168.82	R	1630.69	1439.40	R		1082.25	
1.300	5675.4	992.4	2791.94	R	2099.20	1852.94	R		1393.19	
1.400	6491.9	1134.2	3166.22	R	2380.61	2101.35	R		1579.96	
1.500	6764.0	1181.5	3291.67	R	2474.94	2184.60	R		1642.56	
1.600	6491.9	1134.2	3166.22	R	2380.61	2101.35	R		1579.96	
1.700	5675.4	992.4	2791.94	R	2099.20	1852.94	R		1393.19	
1.800	4314.7	756.1	2168.82	R	1630.69	1439.40	R		1082.25	
1.900	2417.7	425.3	1245.08	R	936.15	826.33	R		621.30	
2.000	0.0	0.0	0.00	R	0.00	0.00	R		0.00	

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL

Rating Live Load: 3-3

Span	Moment Resistance		Available Resistance for LL+I	
	Positive Top	Negative Bott.	Positive Top	Negative Bott.
1.000	16409.4C	16409.4	16409.4	16409.4
1.010	16409.4C	16409.4	16120.8	16120.8
1.100	16409.4C	16409.4	13566.4	13566.4



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1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12211.1	-12211.1B	11797.6	11797.6	-20156.6	-20156.6
1.600	19743.0C	19743.0	-11834.9	-11834.9B	12117.0	12117.0	-19461.0	-19461.0
1.700	19743.0C	19743.0	-11834.9	-11834.9B	13075.2	13075.2	-18502.8	-18502.8
1.800	19743.0C	19743.0	-12991.8	-12991.8B	14672.1	14672.1	-18062.6	-18062.6
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: 3-3

Moment

Span	top +bend	Rating fiber -bend	Factor	bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)
1.010	115.61	999.00		115.61	999.00	0.00	999.0 (2-Lane)
1.010	174.20	999.00		174.20	999.00	0.00	999.0 (1-Lane)
1.100	10.90	999.00		10.90	999.00	0.00	435.8 (2-Lane)
1.100	16.42	999.00		16.42	999.00	0.00	656.7 (1-Lane)
1.200	6.76	999.00		6.76	999.00	0.00	270.6 (2-Lane)
1.200	10.19	999.00		10.19	999.00	0.00	407.7 (1-Lane)
1.300	4.68	999.00		4.68	999.00	0.00	187.3 (2-Lane)
1.300	7.06	999.00		7.06	999.00	0.00	282.3 (1-Lane)
1.400	3.83	999.00		3.83	999.00	0.00	153.1 (2-Lane)
1.400	5.77	999.00		5.77	999.00	0.00	230.7 (1-Lane)
1.500	3.58	999.00		3.58	999.00	0.00	143.4 (2-Lane)
1.500	5.40	999.00		5.40	999.00	0.00	216.0 (1-Lane)
1.600	3.83	999.00		3.83	999.00	0.00	153.1 (2-Lane)
1.600	5.77	999.00		5.77	999.00	0.00	230.7 (1-Lane)
1.700	4.68	999.00		4.68	999.00	0.00	187.3 (2-Lane)
1.700	7.06	999.00		7.06	999.00	0.00	282.3 (1-Lane)
1.800	6.76	999.00		6.76	999.00	0.00	270.6 (2-Lane)
1.800	10.19	999.00		10.19	999.00	0.00	407.7 (1-Lane)
1.900	10.90	999.00		10.90	999.00	0.00	435.8 (2-Lane)
1.900	16.42	999.00		16.42	999.00	0.00	656.7 (1-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06  
 Rating Type: I-LEGL  
 Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load Truck
Lane						
1.000	167.2	29.5	127.65	95.98	103.54	77.85
1.010	164.0	28.9	126.15	94.85	102.32	76.94
1.100	134.8	23.6	112.64	84.69	91.37	68.70
1.200	102.0	17.7	97.64	73.41	79.20	59.55
1.300	68.0	11.8	82.63	62.13	67.03	50.40
1.400	34.0	5.9	67.63	50.85	54.86	41.25
1.500	0.0	0.0	52.62	39.57	42.69	32.09
1.600	-34.0	-5.9	-67.63	-50.85	-54.86	-41.25
1.700	-68.0	-11.8	-82.63	-62.13	-67.03	-50.40
1.800	-102.0	-17.7	-97.64	-73.41	-79.20	-59.55
1.900	-134.8	-23.6	-112.64	-84.69	-91.37	-68.70
2.000	-167.2	-29.5	-127.65	-95.98	-103.54	-77.85

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 STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06  
 Rating Type: I-LEGL  
 Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: 3-3

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	6.16	0.00	246.6 (2-Lane)
1.000	999.00	7.60	0.00	304.0 (1-Lane)
1.010	999.00	6.27	0.00	250.7 (2-Lane)
1.010	999.00	7.73	0.00	309.1 (1-Lane)
1.100	221.09	6.21	0.00	248.3 (2-Lane)
1.100	272.57	7.65	0.00	306.1 (1-Lane)
1.200	53.53	4.18	0.00	167.3 (2-Lane)
1.200	66.00	5.16	0.00	206.2 (1-Lane)
1.300	25.92	5.43	0.00	217.0 (2-Lane)
1.300	31.95	6.69	0.00	267.5 (1-Lane)
1.400	15.10	7.22	0.00	288.7 (2-Lane)
1.400	18.61	8.90	0.00	356.0 (1-Lane)
1.500	10.03	10.03	0.00	401.4 (2-Lane)
1.500	12.37	12.37	0.00	494.8 (1-Lane)
1.600	7.22	15.10	0.00	288.7 (2-Lane)
1.600	8.90	18.61	0.00	356.0 (1-Lane)
1.700	5.43	25.92	0.00	217.0 (2-Lane)
1.700	6.69	31.95	0.00	267.5 (1-Lane)
1.800	4.18	53.53	0.00	167.3 (2-Lane)
1.800	5.16	66.00	0.00	206.2 (1-Lane)
1.900	6.21	221.09	0.00	248.3 (2-Lane)
1.900	7.65	272.57	0.00	306.1 (1-Lane)
2.000	6.16	999.00	0.00	246.6 (2-Lane)
2.000	7.60	999.00	0.00	304.0 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEG  
Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane)		(1-Lane)	
			LL 1.30		LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck

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1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	124.55 R	93.65	82.66 R	62.15
1.100	2417.7	425.3	1112.19 R	836.23	738.14 R	554.99
1.200	4314.7	756.1	1937.34 R	1456.64	1285.77 R	966.74
1.300	5675.4	992.4	2493.94 R	1875.14	1655.17 R	1244.49
1.400	6491.9	1134.2	2828.27 R	2126.52	1877.06 R	1411.32
1.500	6764.0	1181.5	2940.33 R	2210.78	1951.43 R	1467.24
1.600	6491.9	1134.2	2828.27 R	2126.52	1877.06 R	1411.32
1.700	5675.4	992.4	2493.94 R	1875.14	1655.17 R	1244.49
1.800	4314.7	756.1	1937.34 R	1456.64	1285.77 R	966.74
1.900	2417.7	425.3	1112.19 R	836.23	738.14 R	554.99
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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#### SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEGL  
Rating Live Load:

Rating Type: 3-3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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#### SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEGL  
Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	438.80	999.00	102.13	999.00	0.00	999.0 (2-Lane)
1.010	661.17	999.00	153.88	999.00	0.00	999.0 (1-Lane)

1.100	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.100	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
1.200	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.200	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.300	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.300	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.400	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.400	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.500	8.59	999.00	2.81	999.00	0.00	112.3 (2-Lane)
1.500	12.95	999.00	4.23	999.00	0.00	169.3 (1-Lane)
1.600	9.39	999.00	3.04	999.00	0.00	121.4 (2-Lane)
1.600	14.15	999.00	4.57	999.00	0.00	182.9 (1-Lane)
1.700	12.20	999.00	3.83	999.00	0.00	153.3 (2-Lane)
1.700	18.39	999.00	5.78	999.00	0.00	231.0 (1-Lane)
1.800	19.04	999.00	5.77	999.00	0.00	230.9 (2-Lane)
1.800	28.69	999.00	8.70	999.00	0.00	347.9 (1-Lane)
1.900	36.67	999.00	8.97	999.00	0.00	358.8 (2-Lane)
1.900	55.25	999.00	13.52	999.00	0.00	540.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	88.06 R	66.21	58.44 R	43.94
1.100	2417.7	425.3	797.15 R	599.36	529.05 R	397.78
1.200	4314.7	756.1	1408.87 R	1059.30	935.03 R	703.03
1.300	5675.4	992.4	1835.14 R	1379.80	1217.94 R	915.74
1.400	6491.9	1134.2	2095.71 R	1575.72	1390.87 R	1045.77
1.500	6764.0	1181.5	2174.27 R	1634.79	1443.01 R	1084.97
1.600	6491.9	1134.2	2095.71 R	1575.72	1390.87 R	1045.77
1.700	5675.4	992.4	1835.14 R	1379.80	1217.94 R	915.74
1.800	4314.7	756.1	1408.87 R	1059.30	935.03 R	703.03
1.900	2417.7	425.3	797.15 R	599.36	529.05 R	397.78
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
 Rating Live Load: SU4

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12218.6	-12218.6B	11797.6	11797.6	-20164.1	-20164.1
1.600	19743.0C	19743.0	-11835.8	-11835.8B	12117.0	12117.0	-19461.8	-19461.8
1.700	19743.0C	19743.0	-11835.8	-11835.8B	13075.2	13075.2	-18503.7	-18503.7
1.800	19743.0C	19743.0	-13015.6	-13015.6B	14672.1	14672.1	-18086.5	-18086.5
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
 Rating Live Load: SU4

## Moment

Span	Rating Factor		Rating Value		Load Resistance (tons)
	top +bend	bottom -bend	top +bend	bottom -bend	
1.000	999.00	999.00	999.00	999.00	0.00 999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00 999.0 (1-Lane)
1.010	183.07	999.00	183.07	999.00	0.00 999.0 (2-Lane)
1.010	275.84	999.00	275.84	999.00	0.00 999.0 (1-Lane)
1.100	17.02	999.00	17.02	999.00	0.00 459.5 (2-Lane)
1.100	25.64	999.00	25.64	999.00	0.00 692.4 (1-Lane)
1.200	10.41	999.00	10.41	999.00	0.00 281.2 (2-Lane)
1.200	15.69	999.00	15.69	999.00	0.00 423.7 (1-Lane)
1.300	7.12	999.00	7.12	999.00	0.00 192.4 (2-Lane)
1.300	10.73	999.00	10.73	999.00	0.00 289.9 (1-Lane)
1.400	5.78	999.00	5.78	999.00	0.00 156.1 (2-Lane)
1.400	8.71	999.00	8.71	999.00	0.00 235.2 (1-Lane)
1.500	5.43	999.00	5.43	999.00	0.00 146.5 (2-Lane)
1.500	8.18	999.00	8.18	999.00	0.00 220.7 (1-Lane)
1.600	5.78	999.00	5.78	999.00	0.00 156.1 (2-Lane)
1.600	8.71	999.00	8.71	999.00	0.00 235.2 (1-Lane)
1.700	7.12	999.00	7.12	999.00	0.00 192.4 (2-Lane)
1.700	10.73	999.00	10.73	999.00	0.00 289.9 (1-Lane)
1.800	10.41	999.00	10.41	999.00	0.00 281.2 (2-Lane)
1.800	15.69	999.00	15.69	999.00	0.00 423.7 (1-Lane)
1.900	17.02	999.00	17.02	999.00	0.00 459.5 (2-Lane)
1.900	25.64	999.00	25.64	999.00	0.00 692.4 (1-Lane)

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2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	80.51	60.53	65.30	49.10
1.010	164.0	28.9	79.67	59.90	64.62	48.59
1.100	134.8	23.6	72.12	54.22	58.50	43.98
1.200	102.0	17.7	63.73	47.92	51.69	38.87
1.300	68.0	11.8	55.34	41.61	44.89	33.75
1.400	34.0	5.9	46.95	35.30	38.09	28.64
1.500	0.0	0.0	38.57	29.00	31.28	23.52
1.600	-34.0	-5.9	-46.95	-35.30	-38.09	-28.64
1.700	-68.0	-11.8	-55.34	-41.61	-44.89	-33.75
1.800	-102.0	-17.7	-63.73	-47.92	-51.69	-38.87
1.900	-134.8	-23.6	-72.12	-54.22	-58.50	-43.98
2.000	-167.2	-29.5	-80.51	-60.53	-65.30	-49.10

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)

1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: SU4

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	9.77	0.00	263.9 (2-Lane)
1.000	999.00	12.05	0.00	325.3 (1-Lane)
1.010	999.00	9.92	0.00	268.0 (2-Lane)
1.010	999.00	12.23	0.00	330.3 (1-Lane)
1.100	193.77	9.69	0.00	261.8 (2-Lane)
1.100	238.89	11.95	0.00	322.7 (1-Lane)
1.200	48.34	6.41	0.00	173.0 (2-Lane)
1.200	59.59	7.90	0.00	213.3 (1-Lane)
1.300	27.90	8.10	0.00	218.7 (2-Lane)
1.300	34.39	9.99	0.00	269.6 (1-Lane)
1.400	18.82	10.40	0.00	280.7 (2-Lane)
1.400	23.20	12.82	0.00	346.1 (1-Lane)
1.500	13.69	13.69	0.00	369.7 (2-Lane)
1.500	16.88	16.88	0.00	455.8 (1-Lane)
1.600	10.40	18.82	0.00	280.7 (2-Lane)
1.600	12.82	23.20	0.00	346.1 (1-Lane)
1.700	8.10	27.90	0.00	218.7 (2-Lane)
1.700	9.99	34.39	0.00	269.6 (1-Lane)
1.800	6.41	48.34	0.00	173.0 (2-Lane)
1.800	7.90	59.59	0.00	213.3 (1-Lane)
1.900	9.69	193.77	0.00	261.8 (2-Lane)
1.900	11.95	238.89	0.00	322.7 (1-Lane)
2.000	9.77	999.00	0.00	263.9 (2-Lane)
2.000	12.05	999.00	0.00	325.3 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G06



Rating Type: II-LEG  
Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o		
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck		
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00		
1.010	241.8	46.8	94.98 R	71.41	63.03 R	47.39		
1.100	2417.7	425.3	859.76 R	646.44	570.60 R	429.02		
1.200	4314.7	756.1	1519.52 R	1142.49	1008.47 R	758.25		
1.300	5675.4	992.4	1979.27 R	1488.17	1313.60 R	987.67		
1.400	6491.9	1134.2	2260.31 R	1699.48	1500.11 R	1127.90		
1.500	6764.0	1181.5	2345.04 R	1763.19	1556.35 R	1170.19		
1.600	6491.9	1134.2	2260.31 R	1699.48	1500.11 R	1127.90		
1.700	5675.4	992.4	1979.27 R	1488.17	1313.60 R	987.67		
1.800	4314.7	756.1	1519.52 R	1142.49	1008.47 R	758.25		
1.900	2417.7	425.3	859.76 R	646.44	570.60 R	429.02		
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00		

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEGL  
Rating Live Load:

Rating Type: SU4  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEGL  
Rating Live Load: SU4

## MOMENT REPORT

Member I. D.	G06
Rating Type:	I-LEGL
Rating Live Load:	SU5

Gamma	DC	DW	(2-Lane)		(1-Lane)	
	1.25	1.25	LL	1.20	LL	1.20
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	100.11 R	75.27	66.44 R	49.96
1.100	2417.7	425.3	905.33 R	680.70	600.85 R	451.77
1.200	4314.7	756.1	1597.76 R	1201.32	1060.40 R	797.29
1.300	5675.4	992.4	2084.13 R	1567.02	1383.19 R	1039.99
1.400	6491.9	1134.2	2377.33 R	1787.47	1577.78 R	1186.30
1.500	6764.0	1181.5	2457.62 R	1847.83	1631.07 R	1226.36
1.600	6491.9	1134.2	2377.33 R	1787.47	1577.78 R	1186.30
1.700	5675.4	992.4	2084.13 R	1567.02	1383.19 R	1039.99
1.800	4314.7	756.1	1597.76 R	1201.32	1060.40 R	797.29
1.900	2417.7	425.3	905.33 R	680.70	600.85 R	451.77

2.000 0.0 0.0 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt 0.00 0.00 R 0.00 R 0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: SU5

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12213.4	-12213.4B	11797.6	11797.6	-20158.9	-20158.9
1.600	19743.0C	19743.0	-11831.5	-11831.5B	12117.0	12117.0	-19457.6	-19457.6
1.700	19743.0C	19743.0	-11831.5	-11831.5B	13075.2	13075.2	-18499.4	-18499.4
1.800	19743.0C	19743.0	-13014.6	-13014.6B	14672.1	14672.1	-18085.5	-18085.5
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	161.02	999.00	161.02	999.00	0.00	999.0 (2-Lane)
1.010	242.62	999.00	242.62	999.00	0.00	999.0 (1-Lane)
1.100	14.98	999.00	14.98	999.00	0.00	464.5 (2-Lane)
1.100	22.58	999.00	22.58	999.00	0.00	699.9 (1-Lane)
1.200	9.18	999.00	9.18	999.00	0.00	284.7 (2-Lane)
1.200	13.84	999.00	13.84	999.00	0.00	428.9 (1-Lane)
1.300	6.27	999.00	6.27	999.00	0.00	194.5 (2-Lane)
1.300	9.45	999.00	9.45	999.00	0.00	293.0 (1-Lane)
1.400	5.10	999.00	5.10	999.00	0.00	158.0 (2-Lane)
1.400	7.68	999.00	7.68	999.00	0.00	238.1 (1-Lane)
1.500	4.80	999.00	4.80	999.00	0.00	148.8 (2-Lane)

1.500	7.23	999.00	7.23	999.00	0.00	224.2 (1-Lane)
1.600	5.10	999.00	5.10	999.00	0.00	158.0 (2-Lane)
1.600	7.68	999.00	7.68	999.00	0.00	238.1 (1-Lane)
1.700	6.27	999.00	6.27	999.00	0.00	194.5 (2-Lane)
1.700	9.45	999.00	9.45	999.00	0.00	293.0 (1-Lane)
1.800	9.18	999.00	9.18	999.00	0.00	284.7 (2-Lane)
1.800	13.84	999.00	13.84	999.00	0.00	428.9 (1-Lane)
1.900	14.98	999.00	14.98	999.00	0.00	464.5 (2-Lane)
1.900	22.58	999.00	22.58	999.00	0.00	699.9 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL

Rating Live Load: SU5

Gamma	DC	DW	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
	1.25	1.25				
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load Truck
1.000	167.2	29.5	91.54	68.82	74.25	55.83
1.010	164.0	28.9	90.57	68.10	73.47	55.24
1.100	134.8	23.6	81.91	61.58	66.44	49.95
1.200	102.0	17.7	72.27	54.34	58.63	44.08
1.300	68.0	11.8	62.64	47.10	50.81	38.21
1.400	34.0	5.9	53.01	39.86	43.00	32.33
1.500	0.0	0.0	43.38	32.62	35.19	26.46
1.600	-34.0	-5.9	-53.01	-39.86	-43.00	-32.33
1.700	-68.0	-11.8	-62.64	-47.10	-50.81	-38.21
1.800	-102.0	-17.7	-72.27	-54.34	-58.63	-44.08
1.900	-134.8	-23.6	-81.91	-61.58	-66.44	-49.95
2.000	-167.2	-29.5	-91.54	-68.82	-74.25	-55.83

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL

Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance (-)	Resistance for LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)

1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL

Rating Live Load: SU5

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	8.60	0.00	266.5 (2-Lane)
1.000	999.00	10.60	0.00	328.5 (1-Lane)
1.010	999.00	8.73	0.00	270.6 (2-Lane)
1.010	999.00	10.76	0.00	333.6 (1-Lane)
1.100	182.91	8.54	0.00	264.6 (2-Lane)
1.100	225.50	10.52	0.00	326.3 (1-Lane)
1.200	44.71	5.65	0.00	175.2 (2-Lane)
1.200	55.12	6.97	0.00	215.9 (1-Lane)
1.300	25.20	7.16	0.00	221.8 (2-Lane)
1.300	31.07	8.82	0.00	273.5 (1-Lane)
1.400	16.83	9.21	0.00	285.5 (2-Lane)
1.400	20.75	11.35	0.00	351.9 (1-Lane)
1.500	12.17	12.17	0.00	377.3 (2-Lane)
1.500	15.01	15.01	0.00	465.2 (1-Lane)
1.600	9.21	16.83	0.00	285.5 (2-Lane)
1.600	11.35	20.75	0.00	351.9 (1-Lane)
1.700	7.16	25.20	0.00	221.8 (2-Lane)
1.700	8.82	31.07	0.00	273.5 (1-Lane)
1.800	5.65	44.71	0.00	175.2 (2-Lane)
1.800	6.97	55.12	0.00	215.9 (1-Lane)
1.900	8.54	182.91	0.00	264.6 (2-Lane)
1.900	10.52	225.50	0.00	326.3 (1-Lane)
2.000	8.60	999.00	0.00	266.5 (2-Lane)
2.000	10.60	999.00	0.00	328.5 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEG  
Rating Live Load: SU5

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	107.98 R	81.19	71.66 R	53.88
1.100	2417.7	425.3	976.44 R	734.16	648.04 R	487.25
1.200	4314.7	756.1	1723.24 R	1295.67	1143.68 R	859.91
1.300	5675.4	992.4	2247.82 R	1690.09	1491.83 R	1121.67
1.400	6491.9	1134.2	2564.05 R	1927.85	1701.70 R	1279.47
1.500	6764.0	1181.5	2650.64 R	1992.96	1759.17 R	1322.68
1.600	6491.9	1134.2	2564.05 R	1927.85	1701.70 R	1279.47
1.700	5675.4	992.4	2247.82 R	1690.09	1491.83 R	1121.67
1.800	4314.7	756.1	1723.24 R	1295.67	1143.68 R	859.91
1.900	2417.7	425.3	976.44 R	734.16	648.04 R	487.25
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEGL  
Rating Live Load: SU5Rating Type: SU5  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEGL  
Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	506.16	999.00	117.80	999.00	0.00	999.0 (2-Lane)
1.010	762.66	999.00	177.50	999.00	0.00	999.0 (1-Lane)
1.100	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.100	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
1.200	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.200	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.300	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.300	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.400	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.400	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.500	9.53	999.00	3.12	999.00	0.00	96.6 (2-Lane)
1.500	14.36	999.00	4.69	999.00	0.00	145.5 (1-Lane)
1.600	10.36	999.00	3.35	999.00	0.00	103.8 (2-Lane)
1.600	15.60	999.00	5.04	999.00	0.00	156.4 (1-Lane)
1.700	13.54	999.00	4.25	999.00	0.00	131.8 (2-Lane)
1.700	20.40	999.00	6.41	999.00	0.00	198.6 (1-Lane)
1.800	21.41	999.00	6.49	999.00	0.00	201.2 (2-Lane)
1.800	32.26	999.00	9.78	999.00	0.00	303.2 (1-Lane)
1.900	41.77	999.00	10.22	999.00	0.00	316.7 (2-Lane)
1.900	62.93	999.00	15.40	999.00	0.00	477.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck

Lane

1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	110.34 R	82.96	73.23 R	55.06
1.100	2417.7	425.3	996.03 R	748.90	661.04 R	497.02
1.200	4314.7	756.1	1778.70 R	1337.37	1180.49 R	887.58
1.300	5675.4	992.4	2327.22 R	1749.79	1544.52 R	1161.29
1.400	6491.9	1134.2	2649.07 R	1991.79	1758.13 R	1321.90
1.500	6764.0	1181.5	2750.07 R	2067.72	1825.16 R	1372.30
1.600	6491.9	1134.2	2649.07 R	1991.79	1758.13 R	1321.90
1.700	5675.4	992.4	2327.22 R	1749.79	1544.52 R	1161.29
1.800	4314.7	756.1	1778.70 R	1337.37	1180.49 R	887.58
1.900	2417.7	425.3	996.03 R	748.89	661.04 R	497.02
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL

Rating Live Load: SU6

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12214.9	-12214.9B	11797.6	11797.6	-20160.4	-20160.4
1.600	19743.0C	19743.0	-11834.9	-11834.9B	12117.0	12117.0	-19460.9	-19460.9
1.700	19743.0C	19743.0	-11834.9	-11834.9B	13075.2	13075.2	-18502.7	-18502.7
1.800	19743.0C	19743.0	-13013.8	-13013.8B	14672.1	14672.1	-18084.7	-18084.7
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL

Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	146.10	999.00	146.10	999.00	0.00	999.0 (2-Lane)
1.010	220.13	999.00	220.13	999.00	0.00	999.0 (1-Lane)



1.100	13.62	999.00	13.62	999.00	0.00	473.3 (2-Lane)
1.100	20.52	999.00	20.52	999.00	0.00	713.2 (1-Lane)
1.200	8.25	999.00	8.25	999.00	0.00	286.6 (2-Lane)
1.200	12.43	999.00	12.43	999.00	0.00	431.9 (1-Lane)
1.300	5.62	999.00	5.62	999.00	0.00	195.2 (2-Lane)
1.300	8.47	999.00	8.47	999.00	0.00	294.2 (1-Lane)
1.400	4.57	999.00	4.57	999.00	0.00	158.9 (2-Lane)
1.400	6.89	999.00	6.89	999.00	0.00	239.5 (1-Lane)
1.500	4.29	999.00	4.29	999.00	0.00	149.1 (2-Lane)
1.500	6.46	999.00	6.46	999.00	0.00	224.6 (1-Lane)
1.600	4.57	999.00	4.57	999.00	0.00	158.9 (2-Lane)
1.600	6.89	999.00	6.89	999.00	0.00	239.5 (1-Lane)
1.700	5.62	999.00	5.62	999.00	0.00	195.2 (2-Lane)
1.700	8.47	999.00	8.47	999.00	0.00	294.2 (1-Lane)
1.800	8.25	999.00	8.25	999.00	0.00	286.6 (2-Lane)
1.800	12.43	999.00	12.43	999.00	0.00	431.9 (1-Lane)
1.900	13.62	999.00	13.62	999.00	0.00	473.3 (2-Lane)
1.900	20.52	999.00	20.52	999.00	0.00	713.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	100.91	75.87	81.85	61.54
1.010	164.0	28.9	99.83	75.06	80.97	60.88
1.100	134.8	23.6	90.11	67.75	73.09	54.96
1.200	102.0	17.7	79.32	59.64	64.34	48.37
1.300	68.0	11.8	68.52	51.52	55.58	41.79
1.400	34.0	5.9	57.72	43.40	46.82	35.20
1.500	0.0	0.0	46.93	35.28	38.06	28.62
1.600	-34.0	-5.9	-57.72	-43.40	-46.82	-35.20
1.700	-68.0	-11.8	-68.52	-51.52	-55.58	-41.79
1.800	-102.0	-17.7	-79.32	-59.64	-64.34	-48.37
1.900	-134.8	-23.6	-90.11	-67.75	-73.09	-54.96
2.000	-167.2	-29.5	-100.91	-75.87	-81.85	-61.54

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
 Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
 Rating Live Load: SU6

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.80	0.00	271.0 (2-Lane)
1.000	999.00	9.61	0.00	334.1 (1-Lane)
1.010	999.00	7.92	0.00	275.2 (2-Lane)
1.010	999.00	9.76	0.00	339.3 (1-Lane)
1.100	209.20	7.76	0.00	269.6 (2-Lane)
1.100	257.90	9.57	0.00	332.4 (1-Lane)
1.200	44.56	5.15	0.00	178.9 (2-Lane)
1.200	54.93	6.35	0.00	220.6 (1-Lane)
1.300	23.99	6.54	0.00	227.3 (2-Lane)
1.300	29.58	8.06	0.00	280.3 (1-Lane)
1.400	15.72	8.46	0.00	293.9 (2-Lane)
1.400	19.38	10.43	0.00	362.3 (1-Lane)
1.500	11.25	11.25	0.00	391.0 (2-Lane)
1.500	13.87	13.87	0.00	482.1 (1-Lane)
1.600	8.46	15.72	0.00	293.9 (2-Lane)

1.600	10.43	19.38	0.00	362.3 (1-Lane)
1.700	6.54	23.99	0.00	227.3 (2-Lane)
1.700	8.06	29.58	0.00	280.3 (1-Lane)
1.800	5.15	44.56	0.00	178.9 (2-Lane)
1.800	6.35	54.93	0.00	220.6 (1-Lane)
1.900	7.76	209.20	0.00	269.6 (2-Lane)
1.900	9.57	257.90	0.00	332.4 (1-Lane)
2.000	7.80	999.00	0.00	271.0 (2-Lane)
2.000	9.61	999.00	0.00	334.1 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEG  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	119.01 R	89.48	78.98 R	59.39
1.100	2417.7	425.3	1074.26 R	807.71	712.96 R	536.06
1.200	4314.7	756.1	1918.40 R	1442.41	1273.20 R	957.29
1.300	5675.4	992.4	2509.99 R	1887.21	1665.83 R	1252.50
1.400	6491.9	1134.2	2857.13 R	2148.22	1896.21 R	1425.72
1.500	6764.0	1181.5	2966.06 R	2230.12	1968.50 R	1480.08
1.600	6491.9	1134.2	2857.13 R	2148.22	1896.21 R	1425.72
1.700	5675.4	992.4	2509.99 R	1887.21	1665.83 R	1252.50
1.800	4314.7	756.1	1918.40 R	1442.41	1273.20 R	957.29
1.900	2417.7	425.3	1074.26 R	807.71	712.96 R	536.06
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEGL  
Rating Live Load:

Rating Type: SU6  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7

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1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEGL  
Rating Live Load: SU6

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	459.24	999.00	106.88	999.00	0.00	999.0 (2-Lane)
1.010	691.96	999.00	161.05	999.00	0.00	999.0 (1-Lane)
1.100	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.100	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
1.200	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.200	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.300	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.300	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.400	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.400	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.500	8.52	999.00	2.78	999.00	0.00	96.7 (2-Lane)
1.500	12.83	999.00	4.20	999.00	0.00	145.8 (1-Lane)
1.600	9.29	999.00	3.00	999.00	0.00	104.4 (2-Lane)
1.600	14.00	999.00	4.53	999.00	0.00	157.3 (1-Lane)
1.700	12.12	999.00	3.81	999.00	0.00	132.3 (2-Lane)
1.700	18.27	999.00	5.74	999.00	0.00	199.4 (1-Lane)
1.800	19.23	999.00	5.83	999.00	0.00	202.6 (2-Lane)
1.800	28.98	999.00	8.78	999.00	0.00	305.3 (1-Lane)
1.900	37.96	999.00	9.29	999.00	0.00	322.7 (2-Lane)
1.900	57.20	999.00	13.99	999.00	0.00	486.3 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06  
 Rating Type: I-LEGL  
 Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20				(1-Lane) LL 1.20	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00	0.00	0.00
1.010	241.8	46.8	120.96 R	90.95	80.28 R	60.36	60.36	60.36
1.100	2417.7	425.3	1089.84 R	819.43	723.30 R	543.84	543.84	543.84
1.200	4314.7	756.1	1945.72 R	1462.95	1291.33 R	970.92	970.92	970.92
1.300	5675.4	992.4	2567.63 R	1930.55	1704.08 R	1281.26	1281.26	1281.26
1.400	6491.9	1134.2	2925.55 R	2199.66	1941.62 R	1459.86	1459.86	1459.86
1.500	6764.0	1181.5	3041.99 R	2287.21	2018.90 R	1517.97	1517.97	1517.97
1.600	6491.9	1134.2	2925.55 R	2199.66	1941.62 R	1459.86	1459.86	1459.86
1.700	5675.4	992.4	2567.63 R	1930.55	1704.08 R	1281.26	1281.26	1281.26
1.800	4314.7	756.1	1945.72 R	1462.95	1291.33 R	970.92	970.92	970.92
1.900	2417.7	425.3	1089.84 R	819.43	723.30 R	543.84	543.84	543.84
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00	0.00	0.00

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 STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06  
 Rating Type: I-LEGL  
 Rating Live Load: SU7

Span	Moment Resistance		Available Resistance for LL+I					
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4
1.010	16409.4C	16409.4	-9908.4	-9908.4B	16120.8	16120.8	-10196.9	-10196.9
1.100	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
1.200	19743.0C	19743.0	-13203.5	-13203.5B	14672.1	14672.1	-18274.4	-18274.4
1.300	19743.0C	19743.0	-13203.5	-13203.5B	13075.2	13075.2	-19871.4	-19871.4
1.400	19743.0C	19743.0	-13203.5	-13203.5B	12117.0	12117.0	-20829.6	-20829.6
1.500	19743.0C	19743.0	-12217.2	-12217.2B	11797.6	11797.6	-20162.7	-20162.7
1.600	19743.0C	19743.0	-11836.6	-11836.6B	12117.0	12117.0	-19462.7	-19462.7
1.700	19743.0C	19743.0	-11836.6	-11836.6B	13075.2	13075.2	-18504.5	-18504.5
1.800	19743.0C	19743.0	-13022.0	-13022.0B	14672.1	14672.1	-18092.9	-18092.9
1.900	16409.4C	16409.4	-9894.4	-9894.4B	13566.4	13566.4	-12737.4	-12737.4
2.000	16409.4C	16409.4	-9908.4	-9908.4B	16409.4	16409.4	-9908.4	-9908.4

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 MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06  
 Rating Type: I-LEGL  
 Rating Live Load: SU7

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Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	133.27	999.00	133.27	999.00	0.00	999.0 (2-Lane)
1.010	200.81	999.00	200.81	999.00	0.00	999.0 (1-Lane)
1.100	12.45	999.00	12.45	999.00	0.00	482.4 (2-Lane)
1.100	18.76	999.00	18.76	999.00	0.00	726.8 (1-Lane)
1.200	7.54	999.00	7.54	999.00	0.00	292.2 (2-Lane)
1.200	11.36	999.00	11.36	999.00	0.00	440.3 (1-Lane)
1.300	5.09	999.00	5.09	999.00	0.00	197.3 (2-Lane)
1.300	7.67	999.00	7.67	999.00	0.00	297.3 (1-Lane)
1.400	4.14	999.00	4.14	999.00	0.00	160.5 (2-Lane)
1.400	6.24	999.00	6.24	999.00	0.00	241.8 (1-Lane)
1.500	3.88	999.00	3.88	999.00	0.00	150.3 (2-Lane)
1.500	5.84	999.00	5.84	999.00	0.00	226.4 (1-Lane)
1.600	4.14	999.00	4.14	999.00	0.00	160.5 (2-Lane)
1.600	6.24	999.00	6.24	999.00	0.00	241.8 (1-Lane)
1.700	5.09	999.00	5.09	999.00	0.00	197.3 (2-Lane)
1.700	7.67	999.00	7.67	999.00	0.00	297.3 (1-Lane)
1.800	7.54	999.00	7.54	999.00	0.00	292.2 (2-Lane)
1.800	11.36	999.00	11.36	999.00	0.00	440.3 (1-Lane)
1.900	12.45	999.00	12.45	999.00	0.00	482.4 (2-Lane)
1.900	18.76	999.00	18.76	999.00	0.00	726.8 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: I-LEGL  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	167.2	29.5	110.64	83.19	89.74	67.48
1.010	164.0	28.9	109.43	82.28	88.77	66.74
1.100	134.8	23.6	98.60	74.13	79.98	60.13
1.200	102.0	17.7	86.56	65.08	70.21	52.79
1.300	68.0	11.8	74.52	56.03	60.45	45.45
1.400	34.0	5.9	62.48	46.98	50.68	38.11
1.500	0.0	0.0	50.44	37.93	40.92	30.76
1.600	-34.0	-5.9	-62.48	-46.98	-50.68	-38.11
1.700	-68.0	-11.8	-74.52	-56.03	-60.45	-45.45
1.800	-102.0	-17.7	-86.56	-65.08	-70.21	-52.79
1.900	-134.8	-23.6	-98.60	-74.13	-79.98	-60.13

2.000      -167.2      -29.5      -110.64      7777777\_20120905cy01\_01of01\_FlexuralRpt.txt      -83.19      -89.74      -67.48

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D.      7777777\_20120905cy01\_01of01

Member I. D.      G06

Rating Type:      I-LEGL

Rating Live Load:      SU7

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1180.3	786.8 (2-Lane)
1.000	983.6	-1180.3	786.8 (1-Lane)
1.010	983.6	-1176.5	790.7 (2-Lane)
1.010	983.6	-1176.5	790.7 (1-Lane)
1.100	857.6	-1016.0	699.2 (2-Lane)
1.100	857.6	-1016.0	699.2 (1-Lane)
1.200	528.1	-647.8	408.4 (2-Lane)
1.200	528.1	-647.8	408.4 (1-Lane)
1.300	528.1	-607.9	448.3 (2-Lane)
1.300	528.1	-607.9	448.3 (1-Lane)
1.400	528.1	-568.0	488.2 (2-Lane)
1.400	528.1	-568.0	488.2 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-488.2	568.0 (2-Lane)
1.600	528.1	-488.2	568.0 (1-Lane)
1.700	528.1	-448.3	607.9 (2-Lane)
1.700	528.1	-448.3	607.9 (1-Lane)
1.800	528.1	-408.4	647.8 (2-Lane)
1.800	528.1	-408.4	647.8 (1-Lane)
1.900	857.6	-699.2	1016.0 (2-Lane)
1.900	857.6	-699.2	1016.0 (1-Lane)
2.000	983.6	-786.8	1180.3 (2-Lane)
2.000	983.6	-786.8	1180.3 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09      PAGE 1223

STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D.      7777777\_20120905cy01\_01of01

Member I. D.      G06

Rating Type:      I-LEGL

Rating Live Load:      SU7

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	7.11	0.00	275.6 (2-Lane)
1.000	999.00	8.77	0.00	339.7 (1-Lane)
1.010	999.00	7.22	0.00	280.0 (2-Lane)
1.010	999.00	8.91	0.00	345.2 (1-Lane)
1.100	244.34	7.09	0.00	274.8 (2-Lane)
1.100	301.23	8.74	0.00	338.8 (1-Lane)

1.200	45.21	4.72	0.00	182.8 (2-Lane)
1.200	55.74	5.82	0.00	225.4 (1-Lane)
1.300	23.06	6.01	0.00	233.1 (2-Lane)
1.300	28.42	7.42	0.00	287.4 (1-Lane)
1.400	14.79	7.81	0.00	302.7 (2-Lane)
1.400	18.23	9.63	0.00	373.2 (1-Lane)
1.500	10.47	10.47	0.00	405.7 (2-Lane)
1.500	12.91	12.91	0.00	500.1 (1-Lane)
1.600	7.81	14.79	0.00	302.7 (2-Lane)
1.600	9.63	18.23	0.00	373.2 (1-Lane)
1.700	6.01	23.06	0.00	233.1 (2-Lane)
1.700	7.42	28.42	0.00	287.4 (1-Lane)
1.800	4.72	45.21	0.00	182.8 (2-Lane)
1.800	5.82	55.74	0.00	225.4 (1-Lane)
1.900	7.09	244.34	0.00	274.8 (2-Lane)
1.900	8.74	301.23	0.00	338.8 (1-Lane)
2.000	7.11	999.00	0.00	275.6 (2-Lane)
2.000	8.77	999.00	0.00	339.7 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEG  
Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.010	241.8	46.8	130.46 R	98.09	86.58 R	65.10
1.100	2417.7	425.3	1175.44 R	883.79	780.11 R	586.55
1.200	4314.7	756.1	2098.53 R	1577.84	1392.75 R	1047.18
1.300	5675.4	992.4	2769.29 R	2082.17	1837.91 R	1381.89
1.400	6491.9	1134.2	3155.32 R	2372.42	2094.11 R	1574.52
1.500	6764.0	1181.5	3280.91 R	2466.85	2177.47 R	1637.19
1.600	6491.9	1134.2	3155.32 R	2372.42	2094.11 R	1574.52
1.700	5675.4	992.4	2769.29 R	2082.17	1837.91 R	1381.89
1.800	4314.7	756.1	2098.53 R	1577.84	1392.75 R	1047.18
1.900	2417.7	425.3	1175.44 R	883.79	780.11 R	586.55
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEGL  
Rating Live Load:



Rating Type: SU7

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.010	47.5	47.5	-47.5	-47.5	46.2	46.4	-49.0	-48.7
1.100	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
1.200	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.300	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.400	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.500	47.5	47.5	-47.5	-47.5	20.9	24.0	-76.5	-71.6
1.600	47.5	47.5	-47.5	-47.5	22.0	24.9	-75.3	-70.6
1.700	47.5	47.5	-47.5	-47.5	25.2	27.8	-71.8	-67.7
1.800	47.5	47.5	-47.5	-47.5	30.5	32.5	-66.0	-62.9
1.900	47.5	47.5	-47.5	-47.5	34.5	36.4	-61.9	-59.0
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G06

Rating Type: II-LEGL

Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.010	418.93	999.00	97.50	999.00	0.00	999.0 (2-Lane)
1.010	631.22	999.00	146.91	999.00	0.00	999.0 (1-Lane)
1.100	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.100	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)
1.200	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.200	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.300	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.300	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.400	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.400	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.500	7.70	999.00	2.52	999.00	0.00	97.5 (2-Lane)
1.500	11.60	999.00	3.79	999.00	0.00	147.0 (1-Lane)
1.600	8.42	999.00	2.72	999.00	0.00	105.4 (2-Lane)
1.600	12.68	999.00	4.10	999.00	0.00	158.8 (1-Lane)
1.700	10.99	999.00	3.45	999.00	0.00	133.7 (2-Lane)
1.700	16.56	999.00	5.20	999.00	0.00	201.5 (1-Lane)
1.800	17.58	999.00	5.33	999.00	0.00	206.5 (2-Lane)
1.800	26.49	999.00	8.03	999.00	0.00	311.2 (1-Lane)
1.900	34.70	999.00	8.49	999.00	0.00	328.9 (2-Lane)
1.900	52.28	999.00	12.79	999.00	0.00	495.6 (1-Lane)

2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## BRIDGE / MEMBER DATA

Bridge ID 7777777\_20120905cy01\_01of01

NBI ID 7777-777

Feature Intersected Road

Material of Construction CSC  
 Year of Construction 2012  
 Roadway Width 0.000  
 Number of Spans 1  
 Live Load Distribution Factor 0.353  
 Condition Factor: 1.000  
 System Factor: 1.000  
 ADTT: 300

Shear Live Load Dist. Factor 0.353  
 LRFD LLDF Moment

	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
1-lane DF	0.212	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
2-lane DF	0.212	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

LRFD LLDF Shear

	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
1-lane DF	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Span 1			Span 2			Span 3		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
2-lane DF	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2-lane ft	160.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Comments:

Member ID G07 01-EG007  
 Symmetry:

Span Length: Span 1 160.100 Span 2 0.000 Span 3 0.000 Span 4 0.000 Span 5 0.000

Range Length -- Non-Composite:

Span No.	Range No.	Range Length	Section Left	Section Right	Section Variation	Hinge Location No. 1	Hinge Location No. 2
1	1	30.000	1	0		0.0	0.0
1	2	100.100	2	0		0.0	0.0
1	3	30.000	1	0		0.0	0.0

Range Length -- Composite:

Span No.	Range No.	Range Length	Composite Code
1	1	160.100	C

## 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

Superimposed Dead Load:		Dist. from Left Supp.	Distributed Load (lbs/ft)		Concentrated Load (kips)
Span No.	Load Type		Left	Right	
1	W	0.000	295.0	295.0	0.0
1	Z	0.000	64.0	64.0	0.0

NOTE: All distances are shown in decimal feet, moments are shown in foot-kips, and shears are shown in kips. Section and section properties are shown as: in., in.\*\*2, in.\*\*3, and in.\*\*4.

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## SECTION DATA

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Span	Height	Web Depth	Web Thk.	Effective width	Slab Thk.	Fy
	(in.)	(in.)	(in.)	(in.)	(in.)	(ksi)
1.000	68.58	66.00	0.63	90.6	9.0	50.
1.100	68.58	66.00	0.63	90.6	9.0	50.
1.200	69.74	66.00	0.63	90.6	9.0	50.
1.300	69.74	66.00	0.63	90.6	9.0	50.
1.400	69.74	66.00	0.63	90.6	9.0	50.
1.500	69.74	66.00	0.63	90.6	9.0	50.
1.600	69.74	66.00	0.63	90.6	9.0	50.
1.700	69.74	66.00	0.63	90.6	9.0	50.
1.800	69.74	66.00	0.63	90.6	9.0	50.
1.900	68.58	66.00	0.63	90.6	9.0	50.
2.000	68.58	66.00	0.63	90.6	9.0	50.

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## SECTION STRENGTH

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Span	Section Area		Neutral Axis		Moment of Inertia		Section Modulus			
	Gross	Net	Top	Bott.	+Bend	-Bend	+Bend Top	+Bend Bott.	-Bend Top	-Bend Bott.
1.000	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.100	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
1.200	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.300	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.400	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.500	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.600	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.700	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.800	116.60	116.60	38.12	31.62	100214.4	100214.4	2629.3	3168.8	2629.3	3168.8
1.900	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0
2.000	93.50	93.50	38.17	30.41	72325.6	72325.6	1894.8	2378.0	1894.8	2378.0

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## SECTION STRENGTH (N=N)

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Span	Section Area		Neutral Axis		Moment of Inertia		Section Modulus			
	Gross	Net	Top	Bott.	+Bend	-Bend	+Bend Top	+Bend Bott.	-Bend Top	-Bend Bott.

7777777_20120905cy01_01of01_FlexuralRpt.txt										
1.000	184.10	184.10	15.20	53.39	173141.1	72325.6	11392.3	3243.1	1894.8	2378.0
1.100	184.10	184.10	15.20	53.39	173141.1	72325.6	11392.3	3243.1	1894.8	2378.0
1.200	207.20	207.20	17.74	52.00	211630.5	100214.4	11932.0	4069.5	2629.3	3168.8
1.300	207.20	207.20	17.74	52.00	211630.5	100214.4	11932.0	4069.5	2629.3	3168.8
1.400	207.20	207.20	17.74	52.00	211630.5	100214.4	11932.0	4069.5	2629.3	3168.8
1.500	207.20	207.20	17.74	52.00	211630.5	100214.4	11932.0	4069.5	2629.3	3168.8
1.600	207.20	207.20	17.74	52.00	211630.5	100214.4	11932.0	4069.5	2629.3	3168.8
1.700	207.20	207.20	17.74	52.00	211630.5	100214.4	11932.0	4069.5	2629.3	3168.8
1.800	207.20	207.20	17.74	52.00	211630.5	100214.4	11932.0	4069.5	2629.3	3168.8
1.900	184.10	184.10	15.20	53.39	173141.1	72325.6	11392.3	3243.1	1894.8	2378.0
2.000	184.10	184.10	15.20	53.39	173141.1	72325.6	11392.3	3243.1	1894.8	2378.0

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SECTION STRENGTH (N=3N)

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Span	Section Area		Neutral Axis		Moment of Inertia		Section Modulus			
	Gross	Net	Top	Bott.	+Bend	-Bend	+Bend Top	-Bend Bott.	-Bend Top	+Bend Bott.
1.000	123.70	123.70	26.77	41.81	122245.0	72325.6	4566.0	2923.7	1894.8	2378.0
1.100	123.70	123.70	26.77	41.81	122245.0	72325.6	4566.0	2923.7	1894.8	2378.0
1.200	146.80	146.80	28.53	41.21	152545.4	100214.4	5347.2	3701.5	2629.3	3168.8
1.300	146.80	146.80	28.53	41.21	152545.4	100214.4	5347.2	3701.5	2629.3	3168.8
1.400	146.80	146.80	28.53	41.21	152545.4	100214.4	5347.2	3701.5	2629.3	3168.8
1.500	146.80	146.80	28.53	41.21	152545.4	100214.4	5347.2	3701.5	2629.3	3168.8
1.600	146.80	146.80	28.53	41.21	152545.4	100214.4	5347.2	3701.5	2629.3	3168.8
1.700	146.80	146.80	28.53	41.21	152545.4	100214.4	5347.2	3701.5	2629.3	3168.8
1.800	146.80	146.80	28.53	41.21	152545.4	100214.4	5347.2	3701.5	2629.3	3168.8
1.900	123.70	123.70	26.77	41.81	122245.0	72325.6	4566.0	2923.7	1894.8	2378.0
2.000	123.70	123.70	26.77	41.81	122245.0	72325.6	4566.0	2923.7	1894.8	2378.0

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: HL93

Gamma	DC		DW		(2-Lane) LL 1.75		(1-Lane) LL 1.75			
	1.25		1.25							
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/o impact	Live Load w/o impact
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.100	2045.8	425.3	752.62 R	0.00	633.83	0.00	752.62 R	0.00	633.83	0.00
0.00										
1.200	3653.6	756.1	1330.62 R	0.00	1121.27	0.00	1330.62 R	0.00	1121.27	0.00
0.00										
1.300	4807.7	992.4	1734.01 R	0.00	1462.32	0.00	1734.01 R	0.00	1462.32	0.00
0.00										
1.400	5500.1	1134.2	1973.83 R	0.00	1665.29	0.00	1973.83 R	0.00	1665.29	0.00
0.00										
1.500	5730.9	1181.5	2044.56 R	0.00	1726.02	0.00	2044.56 R	0.00	1726.02	0.00
0.00										
1.600	5500.1	1134.2	1973.83 R	0.00	1665.29	0.00	1973.83 R	0.00	1665.29	0.00
0.00										
1.700	4807.7	992.4	1734.01 R	0.00	1462.32	0.00	1734.01 R	0.00	1462.32	0.00
0.00										

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

1.800	3653.6	756.1	1330.62 R	0.00	1121.27	0.00	1330.62 R	0.00	1121.27
0.00									
1.900	2045.8	425.3	752.62 R	0.00	633.83	0.00	752.62 R	0.00	633.83
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: HL93

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12567.8	-12567.8B	13420.3	13420.3	-18367.9	-18367.9
1.400	19220.4C	19220.4	-12567.8	-12567.8B	12586.1	12586.1	-19202.2	-19202.2
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12567.8	-12567.8B	12586.1	12586.1	-19202.2	-19202.2
1.700	19220.4C	19220.4	-12567.8	-12567.8B	13420.3	13420.3	-18367.9	-18367.9
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: HL93

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	17.87	999.00	17.87	999.00	0.00	643.4 (2-Lane)
1.100	17.87	999.00	17.87	999.00	0.00	643.4 (1-Lane)
1.200	11.13	999.00	11.13	999.00	0.00	400.7 (2-Lane)
1.200	11.13	999.00	11.13	999.00	0.00	400.7 (1-Lane)
1.300	7.74	999.00	7.74	999.00	0.00	278.6 (2-Lane)
1.300	7.74	999.00	7.74	999.00	0.00	278.6 (1-Lane)
1.400	6.38	999.00	6.38	999.00	0.00	229.6 (2-Lane)
1.400	6.38	999.00	6.38	999.00	0.00	229.6 (1-Lane)

1.500	6.02	999.00	6.02	999.00	0.00	216.7 (2-Lane)
1.500	6.02	999.00	6.02	999.00	0.00	216.7 (1-Lane)
1.600	6.38	999.00	6.38	999.00	0.00	229.6 (2-Lane)
1.600	6.38	999.00	6.38	999.00	0.00	229.6 (1-Lane)
1.700	7.74	999.00	7.74	999.00	0.00	278.6 (2-Lane)
1.700	7.74	999.00	7.74	999.00	0.00	278.6 (1-Lane)
1.800	11.13	999.00	11.13	999.00	0.00	400.7 (2-Lane)
1.800	11.13	999.00	11.13	999.00	0.00	400.7 (1-Lane)
1.900	17.87	999.00	17.87	999.00	0.00	643.4 (2-Lane)
1.900	17.87	999.00	17.87	999.00	0.00	643.4 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	141.4	29.5	56.67	0.00	47.70	0.00	56.67	0.00	47.70
1.100 0.00	114.2	23.6	48.93	0.00	40.92	0.00	48.93	0.00	40.92
1.200 0.00	86.5	17.7	41.60	0.00	34.54	0.00	41.60	0.00	34.54
1.300 0.00	57.7	11.8	34.69	0.00	28.58	0.00	34.69	0.00	28.58
1.400 0.00	28.8	5.9	28.18	0.00	23.02	0.00	28.18	0.00	23.02
1.500 0.00	0.0	0.0	22.08	0.00	17.88	0.00	22.08	0.00	17.88
1.600 0.00	-28.8	-5.9	-28.18	0.00	-23.02	0.00	-28.18	0.00	-23.02
1.700 0.00	-57.7	-11.8	-34.69	0.00	-28.58	0.00	-34.69	0.00	-28.58
1.800 0.00	-86.5	-17.7	-41.60	0.00	-34.54	0.00	-41.60	0.00	-34.54
1.900 0.00	-114.2	-23.6	-48.93	0.00	-40.92	0.00	-48.93	0.00	-40.92
2.000 0.00	-141.4	-29.5	-56.67	0.00	-47.70	0.00	-56.67	0.00	-47.70

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: HL93

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV

Rating Live Load: HL93

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	14.34	0.00	516.2 (2-Lane)
1.000	999.00	14.34	0.00	516.2 (1-Lane)
1.100	426.83	14.71	0.00	529.6 (2-Lane)
1.100	426.83	14.71	0.00	529.6 (1-Lane)
1.200	101.01	10.19	0.00	366.8 (2-Lane)
1.200	101.01	10.19	0.00	366.8 (1-Lane)
1.300	53.72	13.22	0.00	476.0 (2-Lane)
1.300	53.72	13.22	0.00	476.0 (1-Lane)
1.400	34.32	17.51	0.00	630.2 (2-Lane)
1.400	34.32	17.51	0.00	630.2 (1-Lane)
1.500	23.91	23.91	0.00	860.8 (2-Lane)
1.500	23.91	23.91	0.00	860.8 (1-Lane)
1.600	17.51	34.32	0.00	630.2 (2-Lane)
1.600	17.51	34.32	0.00	630.2 (1-Lane)
1.700	13.22	53.72	0.00	476.0 (2-Lane)
1.700	13.22	53.72	0.00	476.0 (1-Lane)
1.800	10.19	101.01	0.00	366.8 (2-Lane)
1.800	10.19	101.01	0.00	366.8 (1-Lane)

1.900	14.71	392.29	0.00	529.6 (2-Lane)
1.900	14.71	392.29	0.00	529.6 (1-Lane)
2.000	14.34	999.00	0.00	516.2 (2-Lane)
2.000	14.34	999.00	0.00	516.2 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load: HL93

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.100	1636.6	340.3	559.09 R	0.00	470.85	0.00
0.00						
1.200	2922.9	604.9	988.46 R	0.00	832.95	0.00
0.00						
1.300	3846.1	794.0	1288.12 R	0.00	1086.30	0.00
0.00						
1.400	4400.1	907.4	1466.27 R	0.00	1237.07	0.00
0.00						
1.500	4584.7	945.2	1518.82 R	0.00	1282.19	0.00
0.00						
1.600	4400.1	907.4	1466.27 R	0.00	1237.07	0.00
0.00						
1.700	3846.1	794.0	1288.12 R	0.00	1086.30	0.00
0.00						
1.800	2922.9	604.9	988.46 R	0.00	832.95	0.00
0.00						
1.900	1636.6	340.3	559.09 R	0.00	470.85	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load: HL93

Rating Type: HL93

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5



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1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV

Rating Live Load: HL93

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	61.54	999.00	18.29	999.00	0.00	658.6 (2-Lane)
1.100	61.54	999.00	18.29	999.00	0.00	658.6 (1-Lane)
1.200	33.00	999.00	11.83	999.00	0.00	425.7 (2-Lane)
1.200	33.00	999.00	11.83	999.00	0.00	425.7 (1-Lane)
1.300	21.74	999.00	7.99	999.00	0.00	287.8 (2-Lane)
1.300	21.74	999.00	7.99	999.00	0.00	287.8 (1-Lane)
1.400	17.21	999.00	6.45	999.00	0.00	232.3 (2-Lane)
1.400	17.21	999.00	6.45	999.00	0.00	232.3 (1-Lane)
1.500	16.01	999.00	6.05	999.00	0.00	217.6 (2-Lane)
1.500	16.01	999.00	6.05	999.00	0.00	217.6 (1-Lane)
1.600	17.21	999.00	6.45	999.00	0.00	232.3 (2-Lane)
1.600	17.21	999.00	6.45	999.00	0.00	232.3 (1-Lane)
1.700	21.74	999.00	7.99	999.00	0.00	287.8 (2-Lane)
1.700	21.74	999.00	7.99	999.00	0.00	287.8 (1-Lane)
1.800	33.00	999.00	11.83	999.00	0.00	425.7 (2-Lane)
1.800	33.00	999.00	11.83	999.00	0.00	425.7 (1-Lane)
1.900	61.54	999.00	18.29	999.00	0.00	658.6 (2-Lane)
1.900	61.54	999.00	18.29	999.00	0.00	658.6 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: HS20

Gamma	DC		(2-Lane)		(1-Lane)	
	1.25	DW 1.25	LL 1.75	LL 1.75	LL 1.75	LL 1.75
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	2045.8	425.3	478.75 R	0.00	359.96	0.00
0.00						
1.200	3653.6	756.1	843.74 R	0.00	634.39	0.00
0.00						
1.300	4807.7	992.4	1094.98 R	0.00	823.29	0.00
0.00						
1.400	5500.1	1134.2	1243.51 R	0.00	934.97	0.00
0.00						
1.500	5730.9	1181.5	1283.81 R	0.00	965.27	0.00
0.00						
1.600	5500.1	1134.2	1243.51 R	0.00	934.97	0.00
0.00						
1.700	4807.7	992.4	1094.98 R	0.00	823.29	0.00
0.00						
1.800	3653.6	756.1	843.74 R	0.00	634.39	0.00
0.00						
1.900	2045.8	425.3	478.75 R	0.00	359.96	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: HS20

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12567.8	-12567.8B	13420.3	13420.3	-18367.9	-18367.9
1.400	19220.4C	19220.4	-12567.8	-12567.8B	12586.1	12586.1	-19202.2	-19202.2
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12567.8	-12567.8B	12586.1	12586.1	-19202.2	-19202.2
1.700	19220.4C	19220.4	-12567.8	-12567.8B	13420.3	13420.3	-18367.9	-18367.9
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
 Rating Live Load: HS20

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.100	28.09	999.00	28.09	999.00	999.00	999.0 (2-Lane)
1.100	28.09	999.00	28.09	999.00	999.00	999.0 (1-Lane)
1.200	17.55	999.00	17.55	999.00	351.07	631.9 (2-Lane)
1.200	17.55	999.00	17.55	999.00	351.07	631.9 (1-Lane)
1.300	12.26	999.00	12.26	999.00	245.12	441.2 (2-Lane)
1.300	12.26	999.00	12.26	999.00	245.12	441.2 (1-Lane)
1.400	10.12	999.00	10.12	999.00	202.43	364.4 (2-Lane)
1.400	10.12	999.00	10.12	999.00	202.43	364.4 (1-Lane)
1.500	9.59	999.00	9.59	999.00	191.74	345.1 (2-Lane)
1.500	9.59	999.00	9.59	999.00	191.74	345.1 (1-Lane)
1.600	10.12	999.00	10.12	999.00	202.43	364.4 (2-Lane)
1.600	10.12	999.00	10.12	999.00	202.43	364.4 (1-Lane)
1.700	12.26	999.00	12.26	999.00	245.13	441.2 (2-Lane)
1.700	12.26	999.00	12.26	999.00	245.13	441.2 (1-Lane)
1.800	17.55	999.00	17.55	999.00	351.07	631.9 (2-Lane)
1.800	17.55	999.00	17.55	999.00	351.07	631.9 (1-Lane)
1.900	28.09	999.00	28.09	999.00	999.00	999.0 (2-Lane)
1.900	28.09	999.00	28.09	999.00	999.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
 Rating Live Load: HS20

Gamma	DC	DW	(2-Lane)				(1-Lane)		
	1.25	1.25	LL	LL	LL	LL	LL	LL	
			1.75	1.75	1.75	1.75	1.75	1.75	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
			Truck	Lane	Truck	Lane	Truck	Lane	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	141.4	29.5	36.14	0.00	27.17	0.00	36.14	0.00	27.17
0.00									
1.100	114.2	23.6	32.30	0.00	24.29	0.00	32.30	0.00	24.29
0.00									
1.200	86.5	17.7	28.46	0.00	21.40	0.00	28.46	0.00	21.40
0.00									

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1.300	57.7	11.8	24.63	0.00	18.52	0.00	24.63	0.00	18.52
0.00									
1.400	28.8	5.9	20.79	0.00	15.63	0.00	20.79	0.00	15.63
0.00									
1.500	0.0	0.0	16.95	0.00	12.74	0.00	16.95	0.00	12.74
0.00									
1.600	-28.8	-5.9	-20.79	0.00	-15.63	0.00	-20.79	0.00	-15.63
0.00									
1.700	-57.7	-11.8	-24.63	0.00	-18.52	0.00	-24.63	0.00	-18.52
0.00									
1.800	-86.5	-17.7	-28.46	0.00	-21.40	0.00	-28.46	0.00	-21.40
0.00									
1.900	-114.2	-23.6	-32.30	0.00	-24.29	0.00	-32.30	0.00	-24.29
0.00									
2.000	-141.4	-29.5	-36.14	0.00	-27.17	0.00	-36.14	0.00	-27.17
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: HS20

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: HS20

Shear

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Rating Value Load Resistance (tons)

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	22.49	449.73	809.5 (2-Lane)
1.000	999.00	22.49	449.73	809.5 (1-Lane)
1.100	518.51	22.29	445.72	802.3 (2-Lane)
1.100	518.51	22.29	445.72	802.3 (1-Lane)
1.200	116.27	14.89	297.82	536.1 (2-Lane)
1.200	116.27	14.89	297.82	536.1 (1-Lane)
1.300	64.42	18.62	372.44	670.4 (2-Lane)
1.300	64.42	18.62	372.44	670.4 (1-Lane)
1.400	42.92	23.73	474.62	854.3 (2-Lane)
1.400	42.92	23.73	474.62	854.3 (1-Lane)
1.500	31.15	31.15	999.00	999.0 (2-Lane)
1.500	31.15	31.15	999.00	999.0 (1-Lane)
1.600	23.73	42.92	474.62	854.3 (2-Lane)
1.600	23.73	42.92	474.62	854.3 (1-Lane)
1.700	18.62	64.42	372.44	670.4 (2-Lane)
1.700	18.62	64.42	372.44	670.4 (1-Lane)
1.800	14.89	116.27	297.82	536.1 (2-Lane)
1.800	14.89	116.27	297.82	536.1 (1-Lane)
1.900	22.29	518.51	445.72	802.3 (2-Lane)
1.900	22.29	518.51	445.72	802.3 (1-Lane)
2.000	22.49	999.00	449.73	809.5 (2-Lane)
2.000	22.49	999.00	449.73	809.5 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load: HS20

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
0.00						
1.100	1636.6	340.3	355.64 R	0.00	355.64 R	0.00
0.00						
1.200	2922.9	604.9	626.78 R	0.00	626.78 R	0.00
0.00						
1.300	3846.1	794.0	813.41 R	0.00	813.41 R	0.00
0.00						
1.400	4400.1	907.4	923.75 R	0.00	923.75 R	0.00
0.00						
1.500	4584.7	945.2	953.68 R	0.00	953.68 R	0.00
0.00						
1.600	4400.1	907.4	923.75 R	0.00	923.75 R	0.00
0.00						
1.700	3846.1	794.0	813.41 R	0.00	813.41 R	0.00
0.00						
1.800	2922.9	604.9	626.78 R	0.00	626.78 R	0.00

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0.00									
1.900	1636.6	340.3	355.64 R	0.00	267.40	0.00	355.64 R	0.00	267.40
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV

Rating Live Load:

Rating Type: HS20

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV

Rating Live Load: HS20

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.100	96.74	999.00	28.76	999.00	999.00	999.0 (2-Lane)
1.100	96.74	999.00	28.76	999.00	999.00	999.0 (1-Lane)
1.200	52.04	999.00	18.65	999.00	373.01	671.4 (2-Lane)
1.200	52.04	999.00	18.65	999.00	373.01	671.4 (1-Lane)
1.300	34.43	999.00	12.66	999.00	253.16	455.7 (2-Lane)
1.300	34.43	999.00	12.66	999.00	253.16	455.7 (1-Lane)
1.400	27.32	999.00	10.24	999.00	204.82	368.7 (2-Lane)
1.400	27.32	999.00	10.24	999.00	204.82	368.7 (1-Lane)

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1.500	25.50	999.00	9.63	999.00	192.55	346.6 (2-Lane)
1.500	25.50	999.00	9.63	999.00	192.55	346.6 (1-Lane)
1.600	27.32	999.00	10.24	999.00	204.82	368.7 (2-Lane)
1.600	27.32	999.00	10.24	999.00	204.82	368.7 (1-Lane)
1.700	34.43	999.00	12.66	999.00	253.16	455.7 (2-Lane)
1.700	34.43	999.00	12.66	999.00	253.16	455.7 (1-Lane)
1.800	52.04	999.00	18.65	999.00	373.01	671.4 (2-Lane)
1.800	52.04	999.00	18.65	999.00	373.01	671.4 (1-Lane)
1.900	96.74	999.00	28.76	999.00	999.00	999.0 (2-Lane)
1.900	96.74	999.00	28.76	999.00	999.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000 0.00	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 0.00 R 0.00	0.00 0.00
1.100 0.00	2045.8	425.3	337.14 R 0.00	253.49 0.00	337.14 R 0.00	253.49
1.200 0.00	3653.6	756.1	595.27 R 0.00	447.57 0.00	595.27 R 0.00	447.57
1.300 0.00	4807.7	992.4	774.41 R 0.00	582.27 0.00	774.41 R 0.00	582.27
1.400 0.00	5500.1	1134.2	880.48 R 0.00	662.01 0.00	880.48 R 0.00	662.01
1.500 0.00	5730.9	1181.5	911.49 R 0.00	685.33 0.00	911.49 R 0.00	685.33
1.600 0.00	5500.1	1134.2	880.48 R 0.00	662.01 0.00	880.48 R 0.00	662.01
1.700 0.00	4807.7	992.4	774.41 R 0.00	582.27 0.00	774.41 R 0.00	582.27
1.800 0.00	3653.6	756.1	595.27 R 0.00	447.57 0.00	595.27 R 0.00	447.57
1.900 0.00	2045.8	425.3	337.14 R 0.00	253.49 0.00	337.14 R 0.00	253.49
2.000 0.00	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV

Rating Live Load: 3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12564.2	-12564.2B	13420.3	13420.3	-18364.3	-18364.3
1.400	19220.4C	19220.4	-12564.2	-12564.2B	12586.1	12586.1	-19198.5	-19198.5
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12564.2	-12564.2B	12586.1	12586.1	-19198.5	-19198.5
1.700	19220.4C	19220.4	-12564.2	-12564.2B	13420.3	13420.3	-18364.3	-18364.3
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV

Rating Live Load: 3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating Factor fiber -bend	bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	39.90	999.00	39.90	999.00	0.00	999.0 (2-Lane)
1.100	39.90	999.00	39.90	999.00	0.00	999.0 (1-Lane)
1.200	24.88	999.00	24.88	999.00	0.00	622.0 (2-Lane)
1.200	24.88	999.00	24.88	999.00	0.00	622.0 (1-Lane)
1.300	17.33	999.00	17.33	999.00	0.00	433.2 (2-Lane)
1.300	17.33	999.00	17.33	999.00	0.00	433.2 (1-Lane)
1.400	14.30	999.00	14.30	999.00	0.00	357.4 (2-Lane)
1.400	14.30	999.00	14.30	999.00	0.00	357.4 (1-Lane)
1.500	13.50	999.00	13.50	999.00	0.00	337.6 (2-Lane)
1.500	13.50	999.00	13.50	999.00	0.00	337.6 (1-Lane)
1.600	14.30	999.00	14.30	999.00	0.00	357.4 (2-Lane)
1.600	14.30	999.00	14.30	999.00	0.00	357.4 (1-Lane)
1.700	17.33	999.00	17.33	999.00	0.00	433.2 (2-Lane)
1.700	17.33	999.00	17.33	999.00	0.00	433.2 (1-Lane)
1.800	24.88	999.00	24.88	999.00	0.00	622.0 (2-Lane)
1.800	24.88	999.00	24.88	999.00	0.00	622.0 (1-Lane)
1.900	39.90	999.00	39.90	999.00	0.00	999.0 (2-Lane)
1.900	39.90	999.00	39.90	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)



## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	141.4	29.5	25.41	0.00	19.11	0.00	25.41	0.00	19.11
1.100 0.00	114.2	23.6	22.75	0.00	17.10	0.00	22.75	0.00	17.10
1.200 0.00	86.5	17.7	20.08	0.00	15.10	0.00	20.08	0.00	15.10
1.300 0.00	57.7	11.8	17.42	0.00	13.10	0.00	17.42	0.00	13.10
1.400 0.00	28.8	5.9	14.75	0.00	11.09	0.00	14.75	0.00	11.09
1.500 0.00	0.0	0.0	12.09	0.00	9.09	0.00	12.09	0.00	9.09
1.600 0.00	-28.8	-5.9	-14.75	0.00	-11.09	0.00	-14.75	0.00	-11.09
1.700 0.00	-57.7	-11.8	-17.42	0.00	-13.10	0.00	-17.42	0.00	-13.10
1.800 0.00	-86.5	-17.7	-20.08	0.00	-15.10	0.00	-20.08	0.00	-15.10
1.900 0.00	-114.2	-23.6	-22.75	0.00	-17.10	0.00	-22.75	0.00	-17.10
2.000 0.00	-141.4	-29.5	-25.41	0.00	-19.11	0.00	-25.41	0.00	-19.11

## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)

1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: 3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	31.98	0.00	799.5 (2-Lane)
1.000	999.00	31.98	0.00	799.5 (1-Lane)
1.100	627.69	31.65	0.00	791.2 (2-Lane)
1.100	627.69	31.65	0.00	791.2 (1-Lane)
1.200	154.53	21.11	0.00	527.7 (2-Lane)
1.200	154.53	21.11	0.00	527.7 (1-Lane)
1.300	88.44	26.33	0.00	658.3 (2-Lane)
1.300	88.44	26.33	0.00	658.3 (1-Lane)
1.400	59.74	33.44	0.00	836.1 (2-Lane)
1.400	59.74	33.44	0.00	836.1 (1-Lane)
1.500	43.69	43.69	0.00	999.0 (2-Lane)
1.500	43.69	43.69	0.00	999.0 (1-Lane)
1.600	33.44	59.74	0.00	836.1 (2-Lane)
1.600	33.44	59.74	0.00	836.1 (1-Lane)
1.700	26.33	88.44	0.00	658.3 (2-Lane)
1.700	26.33	88.44	0.00	658.3 (1-Lane)
1.800	21.11	154.53	0.00	527.7 (2-Lane)
1.800	21.11	154.53	0.00	527.7 (1-Lane)
1.900	31.65	627.69	0.00	791.2 (2-Lane)
1.900	31.65	627.69	0.00	791.2 (1-Lane)
2.000	31.98	999.00	0.00	799.5 (2-Lane)
2.000	31.98	999.00	0.00	799.5 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load: 3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30			
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.100	1636.6	340.3	250.44 R	0.00	188.30	0.00	250.44 R	0.00	188.30	
0.00										
1.200	2922.9	604.9	442.20 R	0.00	332.48	0.00	442.20 R	0.00	332.48	
0.00										
1.300	3846.1	794.0	575.28 R	0.00	432.54	0.00	575.28 R	0.00	432.54	
0.00										
1.400	4400.1	907.4	654.07 R	0.00	491.78	0.00	654.07 R	0.00	491.78	
0.00										
1.500	4584.7	945.2	677.11 R	0.00	509.10	0.00	677.11 R	0.00	509.10	
0.00										
1.600	4400.1	907.4	654.07 R	0.00	491.78	0.00	654.07 R	0.00	491.78	
0.00										
1.700	3846.1	794.0	575.28 R	0.00	432.54	0.00	575.28 R	0.00	432.54	
0.00										
1.800	2922.9	604.9	442.20 R	0.00	332.48	0.00	442.20 R	0.00	332.48	
0.00										
1.900	1636.6	340.3	250.44 R	0.00	188.30	0.00	250.44 R	0.00	188.30	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load:

Rating Type: 3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D.

G07

Rating Type:

II-INV

Rating Live Load:

3

## Service

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	137.38	999.00	40.84	999.00	0.00	999.0 (2-Lane)
1.100	137.38	999.00	40.84	999.00	0.00	999.0 (1-Lane)
1.200	73.76	999.00	26.43	999.00	0.00	660.9 (2-Lane)
1.200	73.76	999.00	26.43	999.00	0.00	660.9 (1-Lane)
1.300	48.68	999.00	17.90	999.00	0.00	447.5 (2-Lane)
1.300	48.68	999.00	17.90	999.00	0.00	447.5 (1-Lane)
1.400	38.59	999.00	14.46	999.00	0.00	361.6 (2-Lane)
1.400	38.59	999.00	14.46	999.00	0.00	361.6 (1-Lane)
1.500	35.91	999.00	13.56	999.00	0.00	339.0 (2-Lane)
1.500	35.91	999.00	13.56	999.00	0.00	339.0 (1-Lane)
1.600	38.59	999.00	14.46	999.00	0.00	361.6 (2-Lane)
1.600	38.59	999.00	14.46	999.00	0.00	361.6 (1-Lane)
1.700	48.68	999.00	17.90	999.00	0.00	447.5 (2-Lane)
1.700	48.68	999.00	17.90	999.00	0.00	447.5 (1-Lane)
1.800	73.76	999.00	26.43	999.00	0.00	660.9 (2-Lane)
1.800	73.76	999.00	26.43	999.00	0.00	660.9 (1-Lane)
1.900	137.38	999.00	40.84	999.00	0.00	999.0 (2-Lane)
1.900	137.38	999.00	40.84	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D.

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Member I. D.

G07

Rating Type:

I-INV

Rating Live Load:

3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00 R
0.00						
1.100	2045.8	425.3	494.18 R	0.00	371.56	0.00
0.00						
1.200	3653.6	756.1	861.96 R	0.00	648.09	0.00

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0.00									
1.300	4807.7	992.4	1130.59 R	0.00	850.06	0.00	1130.59 R	0.00	850.06
0.00									
1.400	5500.1	1134.2	1282.29 R	0.00	964.13	0.00	1282.29 R	0.00	964.13
0.00									
1.500	5730.9	1181.5	1317.46 R	0.00	990.57	0.00	1317.46 R	0.00	990.57
0.00									
1.600	5500.1	1134.2	1282.29 R	0.00	964.13	0.00	1282.29 R	0.00	964.13
0.00									
1.700	4807.7	992.4	1130.59 R	0.00	850.06	0.00	1130.59 R	0.00	850.06
0.00									
1.800	3653.6	756.1	861.96 R	0.00	648.09	0.00	861.96 R	0.00	648.09
0.00									
1.900	2045.8	425.3	494.18 R	0.00	371.56	0.00	494.18 R	0.00	371.56
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12560.2	-12560.2B	13420.3	13420.3	-18360.3	-18360.3
1.400	19220.4C	19220.4	-12560.2	-12560.2B	12586.1	12586.1	-19194.5	-19194.5
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12560.2	-12560.2B	12586.1	12586.1	-19194.5	-19194.5
1.700	19220.4C	19220.4	-12560.2	-12560.2B	13420.3	13420.3	-18360.3	-18360.3
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	27.22	999.00	27.22	999.00	0.00	999.0 (2-Lane)

1.100	27.22	999.00	27.22	999.00	0.00	999.0 (1-Lane)
1.200	17.18	999.00	17.18	999.00	0.00	687.3 (2-Lane)
1.200	17.18	999.00	17.18	999.00	0.00	687.3 (1-Lane)
1.300	11.87	999.00	11.87	999.00	0.00	474.8 (2-Lane)
1.300	11.87	999.00	11.87	999.00	0.00	474.8 (1-Lane)
1.400	9.81	999.00	9.81	999.00	0.00	392.6 (2-Lane)
1.400	9.81	999.00	9.81	999.00	0.00	392.6 (1-Lane)
1.500	9.34	999.00	9.34	999.00	0.00	373.7 (2-Lane)
1.500	9.34	999.00	9.34	999.00	0.00	373.7 (1-Lane)
1.600	9.81	999.00	9.81	999.00	0.00	392.6 (2-Lane)
1.600	9.81	999.00	9.81	999.00	0.00	392.6 (1-Lane)
1.700	11.87	999.00	11.87	999.00	0.00	474.8 (2-Lane)
1.700	11.87	999.00	11.87	999.00	0.00	474.8 (1-Lane)
1.800	17.18	999.00	17.18	999.00	0.00	687.3 (2-Lane)
1.800	17.18	999.00	17.18	999.00	0.00	687.3 (1-Lane)
1.900	27.22	999.00	27.22	999.00	0.00	999.0 (2-Lane)
1.900	27.22	999.00	27.22	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	141.4	29.5	37.61	0.00	28.28	0.00	37.61	0.00	28.28
1.100 0.00	114.2	23.6	33.34	0.00	25.07	0.00	33.34	0.00	25.07
1.200 0.00	86.5	17.7	29.08	0.00	21.86	0.00	29.08	0.00	21.86
1.300 0.00	57.7	11.8	24.81	0.00	18.66	0.00	24.81	0.00	18.66
1.400 0.00	28.8	5.9	20.55	0.00	15.45	0.00	20.55	0.00	15.45
1.500 0.00	0.0	0.0	16.29	0.00	12.25	0.00	16.29	0.00	12.25
1.600 0.00	-28.8	-5.9	-20.55	0.00	-15.45	0.00	-20.55	0.00	-15.45
1.700 0.00	-57.7	-11.8	-24.81	0.00	-18.66	0.00	-24.81	0.00	-18.66
1.800 0.00	-86.5	-17.7	-29.08	0.00	-21.86	0.00	-29.08	0.00	-21.86
1.900 0.00	-114.2	-23.6	-33.34	0.00	-25.07	0.00	-33.34	0.00	-25.07
2.000 0.00	-141.4	-29.5	-37.61	0.00	-28.28	0.00	-37.61	0.00	-28.28

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: 3S2

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	21.61	0.00	864.4 (2-Lane)
1.000	999.00	21.61	0.00	864.4 (1-Lane)
1.100	627.69	21.59	0.00	863.6 (2-Lane)
1.100	627.69	21.59	0.00	863.6 (1-Lane)
1.200	164.10	14.58	0.00	583.0 (2-Lane)
1.200	164.10	14.58	0.00	583.0 (1-Lane)
1.300	77.02	18.48	0.00	739.2 (2-Lane)
1.300	77.02	18.48	0.00	739.2 (1-Lane)
1.400	46.81	24.01	0.00	960.2 (2-Lane)
1.400	46.81	24.01	0.00	960.2 (1-Lane)

1.500	32.42	32.42	0.00	999.0 (2-Lane)
1.500	32.42	32.42	0.00	999.0 (1-Lane)
1.600	24.01	46.81	0.00	960.2 (2-Lane)
1.600	24.01	46.81	0.00	960.2 (1-Lane)
1.700	18.48	77.02	0.00	739.2 (2-Lane)
1.700	18.48	77.02	0.00	739.2 (1-Lane)
1.800	14.58	164.10	0.00	583.0 (2-Lane)
1.800	14.58	164.10	0.00	583.0 (1-Lane)
1.900	21.59	627.69	0.00	863.6 (2-Lane)
1.900	21.59	627.69	0.00	863.6 (1-Lane)
2.000	21.61	999.00	0.00	864.4 (2-Lane)
2.000	21.61	999.00	0.00	864.4 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load: 3S2

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load w/o Truck
Lane			Lane	Lane	Lane	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	1636.6	340.3	367.11 R	0.00	276.02	0.00
0.00						
1.200	2922.9	604.9	640.32 R	0.00	481.44	0.00
0.00						
1.300	3846.1	794.0	839.86 R	0.00	631.48	0.00
0.00						
1.400	4400.1	907.4	952.56 R	0.00	716.21	0.00
0.00						
1.500	4584.7	945.2	978.68 R	0.00	735.85	0.00
0.00						
1.600	4400.1	907.4	952.56 R	0.00	716.21	0.00
0.00						
1.700	3846.1	794.0	839.86 R	0.00	631.48	0.00
0.00						
1.800	2922.9	604.9	640.32 R	0.00	481.44	0.00
0.00						
1.900	1636.6	340.3	367.10 R	0.00	276.02	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load:



Rating Type: 3S2

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV

Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	93.72	999.00	27.86	999.00	0.00	999.0 (2-Lane)
1.100	93.72	999.00	27.86	999.00	0.00	999.0 (1-Lane)
1.200	50.94	999.00	18.26	999.00	0.00	730.3 (2-Lane)
1.200	50.94	999.00	18.26	999.00	0.00	730.3 (1-Lane)
1.300	33.35	999.00	12.26	999.00	0.00	490.4 (2-Lane)
1.300	33.35	999.00	12.26	999.00	0.00	490.4 (1-Lane)
1.400	26.50	999.00	9.93	999.00	0.00	397.3 (2-Lane)
1.400	26.50	999.00	9.93	999.00	0.00	397.3 (1-Lane)
1.500	24.84	999.00	9.38	999.00	0.00	375.3 (2-Lane)
1.500	24.84	999.00	9.38	999.00	0.00	375.3 (1-Lane)
1.600	26.50	999.00	9.93	999.00	0.00	397.3 (2-Lane)
1.600	26.50	999.00	9.93	999.00	0.00	397.3 (1-Lane)
1.700	33.35	999.00	12.26	999.00	0.00	490.4 (2-Lane)
1.700	33.35	999.00	12.26	999.00	0.00	490.4 (1-Lane)
1.800	50.94	999.00	18.26	999.00	0.00	730.3 (2-Lane)
1.800	50.94	999.00	18.26	999.00	0.00	730.3 (1-Lane)
1.900	93.72	999.00	27.86	999.00	0.00	999.0 (2-Lane)
1.900	93.72	999.00	27.86	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	2045.8	425.3	474.44 R	0.00	356.72	0.00
0.00						
1.200	3653.6	756.1	826.44 R	0.00	621.38	0.00
0.00						
1.300	4807.7	992.4	1063.87 R	0.00	799.91	0.00
0.00						
1.400	5500.1	1134.2	1206.50 R	0.00	907.14	0.00
0.00						
1.500	5730.9	1181.5	1254.30 R	0.00	943.08	0.00
0.00						
1.600	5500.1	1134.2	1206.50 R	0.00	907.14	0.00
0.00						
1.700	4807.7	992.4	1063.87 R	0.00	799.91	0.00
0.00						
1.800	3653.6	756.1	826.44 R	0.00	621.38	0.00
0.00						
1.900	2045.8	425.3	474.44 R	0.00	356.72	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12560.9	-12560.9B	13420.3	13420.3	-18361.0	-18361.0
1.400	19220.4C	19220.4	-12560.9	-12560.9B	12586.1	12586.1	-19195.2	-19195.2
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12560.9	-12560.9B	12586.1	12586.1	-19195.2	-19195.2
1.700	19220.4C	19220.4	-12560.9	-12560.9B	13420.3	13420.3	-18361.0	-18361.0
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5

2.000 15921.1C 15921.1 -9908.4 -9908.4B 15921.1 15921.1 -9908.4 -9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: 3-3

## Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	28.35	999.00	28.35	999.00	0.00	999.0 (2-Lane)
1.100	28.35	999.00	28.35	999.00	0.00	999.0 (1-Lane)
1.200	17.92	999.00	17.92	999.00	0.00	716.8 (2-Lane)
1.200	17.92	999.00	17.92	999.00	0.00	716.8 (1-Lane)
1.300	12.61	999.00	12.61	999.00	0.00	504.6 (2-Lane)
1.300	12.61	999.00	12.61	999.00	0.00	504.6 (1-Lane)
1.400	10.43	999.00	10.43	999.00	0.00	417.3 (2-Lane)
1.400	10.43	999.00	10.43	999.00	0.00	417.3 (1-Lane)
1.500	9.81	999.00	9.81	999.00	0.00	392.5 (2-Lane)
1.500	9.81	999.00	9.81	999.00	0.00	392.5 (1-Lane)
1.600	10.43	999.00	10.43	999.00	0.00	417.3 (2-Lane)
1.600	10.43	999.00	10.43	999.00	0.00	417.3 (1-Lane)
1.700	12.61	999.00	12.61	999.00	0.00	504.6 (2-Lane)
1.700	12.61	999.00	12.61	999.00	0.00	504.6 (1-Lane)
1.800	17.92	999.00	17.92	999.00	0.00	716.8 (2-Lane)
1.800	17.92	999.00	17.92	999.00	0.00	716.8 (1-Lane)
1.900	28.35	999.00	28.35	999.00	0.00	999.0 (2-Lane)
1.900	28.35	999.00	28.35	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: 3-3

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
	1.25	1.25	1.75	1.75

7777777_20120905cy01_01of01_FlexuralRpt.txt									
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o impact	Live Load
w/o impact		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	141.4	29.5	36.27	0.00	27.27	0.00	36.27	0.00	27.27
0.00									
1.100	114.2	23.6	32.01	0.00	24.07	0.00	32.01	0.00	24.07
0.00									
1.200	86.5	17.7	27.75	0.00	20.86	0.00	27.75	0.00	20.86
0.00									
1.300	57.7	11.8	23.48	0.00	17.66	0.00	23.48	0.00	17.66
0.00									
1.400	28.8	5.9	19.22	0.00	14.45	0.00	19.22	0.00	14.45
0.00									
1.500	0.0	0.0	14.95	0.00	11.24	0.00	14.95	0.00	11.24
0.00									
1.600	-28.8	-5.9	-19.22	0.00	-14.45	0.00	-19.22	0.00	-14.45
0.00									
1.700	-57.7	-11.8	-23.48	0.00	-17.66	0.00	-23.48	0.00	-17.66
0.00									
1.800	-86.5	-17.7	-27.75	0.00	-20.86	0.00	-27.75	0.00	-20.86
0.00									
1.900	-114.2	-23.6	-32.01	0.00	-24.07	0.00	-32.01	0.00	-24.07
0.00									
2.000	-141.4	-29.5	-36.27	0.00	-27.27	0.00	-36.27	0.00	-27.27
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D.

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

Member I. D.

G07

Rating Type:

I-INV

Rating Live Load:

3-3

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	22.40	0.00	896.1 (2-Lane)
1.000	999.00	22.40	0.00	896.1 (1-Lane)
1.100	762.20	22.49	0.00	899.5 (2-Lane)
1.100	762.20	22.49	0.00	899.5 (1-Lane)
1.200	183.87	15.28	0.00	611.0 (2-Lane)
1.200	183.87	15.28	0.00	611.0 (1-Lane)
1.300	89.65	19.53	0.00	781.2 (2-Lane)
1.300	89.65	19.53	0.00	781.2 (1-Lane)
1.400	52.64	25.67	0.00	999.0 (2-Lane)
1.400	52.64	25.67	0.00	999.0 (1-Lane)
1.500	35.31	35.31	0.00	999.0 (2-Lane)
1.500	35.31	35.31	0.00	999.0 (1-Lane)
1.600	25.67	52.64	0.00	999.0 (2-Lane)
1.600	25.67	52.64	0.00	999.0 (1-Lane)
1.700	19.53	89.65	0.00	781.2 (2-Lane)
1.700	19.53	89.65	0.00	781.2 (1-Lane)
1.800	15.28	183.87	0.00	611.0 (2-Lane)
1.800	15.28	183.87	0.00	611.0 (1-Lane)
1.900	22.49	762.20	0.00	899.5 (2-Lane)
1.900	22.49	762.20	0.00	899.5 (1-Lane)
2.000	22.40	999.00	0.00	896.1 (2-Lane)
2.000	22.40	999.00	0.00	896.1 (1-Lane)

Structure I. D.

7777777\_20120905cy01\_01of01

Member I. D.

G07

Rating Type:

II-INV

Rating Live Load:

3-3

Gamma	DC		DW		(2-Lane)		(1-Lane)	
	1.00		1.00		LL 1.30		LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								
1.100	1636.6	340.3	352.44 R	0.00	264.99	0.00	352.44 R	0.00
0.00								
1.200	2922.9	604.9	613.92 R	0.00	461.60	0.00	613.92 R	0.00
0.00								

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.300	3846.1	794.0	790.31 R	0.00	594.22	0.00	790.31 R	0.00	594.22
0.00									
1.400	4400.1	907.4	896.25 R	0.00	673.88	0.00	896.25 R	0.00	673.88
0.00									
1.500	4584.7	945.2	931.76 R	0.00	700.58	0.00	931.76 R	0.00	700.58
0.00									
1.600	4400.1	907.4	896.25 R	0.00	673.88	0.00	896.25 R	0.00	673.88
0.00									
1.700	3846.1	794.0	790.31 R	0.00	594.22	0.00	790.31 R	0.00	594.22
0.00									
1.800	2922.9	604.9	613.92 R	0.00	461.60	0.00	613.92 R	0.00	461.60
0.00									
1.900	1636.6	340.3	352.44 R	0.00	264.99	0.00	352.44 R	0.00	264.99
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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#### SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV

Rating Live Load:

Rating Type: 3-3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1269

#### SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV

Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

1.100	97.62	999.00	29.02	999.00	0.00	999.0 (2-Lane)
1.100	97.62	999.00	29.02	999.00	0.00	999.0 (1-Lane)
1.200	53.13	999.00	19.04	999.00	0.00	761.6 (2-Lane)
1.200	53.13	999.00	19.04	999.00	0.00	761.6 (1-Lane)
1.300	35.44	999.00	13.03	999.00	0.00	521.1 (2-Lane)
1.300	35.44	999.00	13.03	999.00	0.00	521.1 (1-Lane)
1.400	28.16	999.00	10.56	999.00	0.00	422.2 (2-Lane)
1.400	28.16	999.00	10.56	999.00	0.00	422.2 (1-Lane)
1.500	26.10	999.00	9.85	999.00	0.00	394.2 (2-Lane)
1.500	26.10	999.00	9.85	999.00	0.00	394.2 (1-Lane)
1.600	28.16	999.00	10.56	999.00	0.00	422.2 (2-Lane)
1.600	28.16	999.00	10.56	999.00	0.00	422.2 (1-Lane)
1.700	35.44	999.00	13.03	999.00	0.00	521.1 (2-Lane)
1.700	35.44	999.00	13.03	999.00	0.00	521.1 (1-Lane)
1.800	53.13	999.00	19.04	999.00	0.00	761.6 (2-Lane)
1.800	53.13	999.00	19.04	999.00	0.00	761.6 (1-Lane)
1.900	97.62	999.00	29.02	999.00	0.00	999.0 (2-Lane)
1.900	97.62	999.00	29.02	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck Lane	Truck Lane	Truck Lane	Truck
1.000 0.00	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00 0.00
1.100 0.00	2045.8	425.3	366.76 R 0.00	275.76 0.00	366.76 R 0.00	275.76 0.00
1.200 0.00	3653.6	756.1	648.20 R 0.00	487.37 0.00	648.20 R 0.00	487.37 0.00
1.300 0.00	4807.7	992.4	844.32 R 0.00	634.83 0.00	844.32 R 0.00	634.83 0.00
1.400 0.00	5500.1	1134.2	964.21 R 0.00	724.97 0.00	964.21 R 0.00	724.97 0.00
1.500 0.00	5730.9	1181.5	1000.36 R 0.00	752.15 0.00	1000.36 R 0.00	752.15 0.00
1.600 0.00	5500.1	1134.2	964.21 R 0.00	724.97 0.00	964.21 R 0.00	724.97 0.00
1.700 0.00	4807.7	992.4	844.32 R 0.00	634.83 0.00	844.32 R 0.00	634.83 0.00
1.800 0.00	3653.6	756.1	648.20 R 0.00	487.37 0.00	648.20 R 0.00	487.37 0.00
1.900 0.00	2045.8	425.3	366.76 R 0.00	275.76 0.00	366.76 R 0.00	275.76 0.00
2.000 0.00	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00 0.00

STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU4

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12566.5	-12566.5B	13420.3	13420.3	-18366.6	-18366.6
1.400	19220.4C	19220.4	-12566.5	-12566.5B	12586.1	12586.1	-19200.8	-19200.8
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12566.5	-12566.5B	12586.1	12586.1	-19200.8	-19200.8
1.700	19220.4C	19220.4	-12566.5	-12566.5B	13420.3	13420.3	-18366.6	-18366.6
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU4

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	36.67	999.00	36.67	999.00	0.00	999.0 (2-Lane)
1.100	36.67	999.00	36.67	999.00	0.00	999.0 (1-Lane)
1.200	22.85	999.00	22.85	999.00	0.00	616.9 (2-Lane)
1.200	22.85	999.00	22.85	999.00	0.00	616.9 (1-Lane)
1.300	15.90	999.00	15.90	999.00	0.00	429.2 (2-Lane)
1.300	15.90	999.00	15.90	999.00	0.00	429.2 (1-Lane)
1.400	13.05	999.00	13.05	999.00	0.00	352.4 (2-Lane)
1.400	13.05	999.00	13.05	999.00	0.00	352.4 (1-Lane)
1.500	12.30	999.00	12.30	999.00	0.00	332.2 (2-Lane)
1.500	12.30	999.00	12.30	999.00	0.00	332.2 (1-Lane)
1.600	13.05	999.00	13.05	999.00	0.00	352.4 (2-Lane)
1.600	13.05	999.00	13.05	999.00	0.00	352.4 (1-Lane)
1.700	15.90	999.00	15.90	999.00	0.00	429.2 (2-Lane)
1.700	15.90	999.00	15.90	999.00	0.00	429.2 (1-Lane)



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1.800	22.85	999.00	22.85	999.00	0.00	616.9 (2-Lane)
1.800	22.85	999.00	22.85	999.00	0.00	616.9 (1-Lane)
1.900	36.67	999.00	36.67	999.00	0.00	999.0 (2-Lane)
1.900	36.67	999.00	36.67	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	141.4	29.5	27.62	0.00	20.77	0.00
0.00						
1.100	114.2	23.6	24.75	0.00	18.61	0.00
0.00						
1.200	86.5	17.7	21.87	0.00	16.44	0.00
0.00						
1.300	57.7	11.8	18.99	0.00	14.28	0.00
0.00						
1.400	28.8	5.9	16.11	0.00	12.11	0.00
0.00						
1.500	0.0	0.0	13.23	0.00	9.95	0.00
0.00						
1.600	-28.8	-5.9	-16.11	0.00	-12.11	0.00
0.00						
1.700	-57.7	-11.8	-18.99	0.00	-14.28	0.00
0.00						
1.800	-86.5	-17.7	-21.87	0.00	-16.44	0.00
0.00						
1.900	-114.2	-23.6	-24.75	0.00	-18.61	0.00
0.00						
2.000	-141.4	-29.5	-27.62	0.00	-20.77	0.00
0.00						

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU4

Span Shear Resistance Available Resistance for LL+I  
Vn (-) (+)

1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

□

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV

Rating Live Load: SU4

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	29.42	0.00	794.3 (2-Lane)
1.000	999.00	29.42	0.00	794.3 (1-Lane)
1.100	553.26	29.09	0.00	785.5 (2-Lane)
1.100	553.26	29.09	0.00	785.5 (1-Lane)
1.200	137.52	19.38	0.00	523.3 (2-Lane)
1.200	137.52	19.38	0.00	523.3 (1-Lane)
1.300	79.93	24.15	0.00	652.1 (2-Lane)
1.300	79.93	24.15	0.00	652.1 (1-Lane)
1.400	54.35	30.62	0.00	826.8 (2-Lane)
1.400	54.35	30.62	0.00	826.8 (1-Lane)
1.500	39.91	39.91	0.00	999.0 (2-Lane)
1.500	39.91	39.91	0.00	999.0 (1-Lane)
1.600	30.62	54.35	0.00	826.8 (2-Lane)
1.600	30.62	54.35	0.00	826.8 (1-Lane)
1.700	24.15	79.93	0.00	652.1 (2-Lane)
1.700	24.15	79.93	0.00	652.1 (1-Lane)
1.800	19.38	137.52	0.00	523.3 (2-Lane)
1.800	19.38	137.52	0.00	523.3 (1-Lane)
1.900	29.09	553.26	0.00	785.5 (2-Lane)
1.900	29.09	553.26	0.00	785.5 (1-Lane)
2.000	29.42	999.00	0.00	794.3 (2-Lane)
2.000	29.42	999.00	0.00	794.3 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30					
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.100	1636.6	340.3	272.45 R	0.00	204.85	0.00	272.45 R	0.00	204.85	
0.00										
1.200	2922.9	604.9	481.52 R	0.00	362.05	0.00	481.52 R	0.00	362.05	
0.00										
1.300	3846.1	794.0	627.21 R	0.00	471.59	0.00	627.21 R	0.00	471.59	
0.00										
1.400	4400.1	907.4	716.27 R	0.00	538.55	0.00	716.27 R	0.00	538.55	
0.00										
1.500	4584.7	945.2	743.12 R	0.00	558.74	0.00	743.12 R	0.00	558.74	
0.00										
1.600	4400.1	907.4	716.27 R	0.00	538.55	0.00	716.27 R	0.00	538.55	
0.00										
1.700	3846.1	794.0	627.21 R	0.00	471.59	0.00	627.21 R	0.00	471.59	
0.00										
1.800	2922.9	604.9	481.52 R	0.00	362.05	0.00	481.52 R	0.00	362.05	
0.00										
1.900	1636.6	340.3	272.45 R	0.00	204.85	0.00	272.45 R	0.00	204.85	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load: SU4Rating Type: SU4  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5

2.000      47.5      47.5      -47.5      -47.5      47.5      47.5      -47.5      -47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV

Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	126.28	999.00	37.54	999.00	0.00	999.0 (2-Lane)
1.100	126.28	999.00	37.54	999.00	0.00	999.0 (1-Lane)
1.200	67.74	999.00	24.28	999.00	0.00	655.5 (2-Lane)
1.200	67.74	999.00	24.28	999.00	0.00	655.5 (1-Lane)
1.300	44.65	999.00	16.42	999.00	0.00	443.2 (2-Lane)
1.300	44.65	999.00	16.42	999.00	0.00	443.2 (1-Lane)
1.400	35.24	999.00	13.21	999.00	0.00	356.6 (2-Lane)
1.400	35.24	999.00	13.21	999.00	0.00	356.6 (1-Lane)
1.500	32.72	999.00	12.35	999.00	0.00	333.6 (2-Lane)
1.500	32.72	999.00	12.35	999.00	0.00	333.6 (1-Lane)
1.600	35.24	999.00	13.21	999.00	0.00	356.6 (2-Lane)
1.600	35.24	999.00	13.21	999.00	0.00	356.6 (1-Lane)
1.700	44.65	999.00	16.42	999.00	0.00	443.2 (2-Lane)
1.700	44.65	999.00	16.42	999.00	0.00	443.2 (1-Lane)
1.800	67.74	999.00	24.28	999.00	0.00	655.5 (2-Lane)
1.800	67.74	999.00	24.28	999.00	0.00	655.5 (1-Lane)
1.900	126.28	999.00	37.54	999.00	0.00	999.0 (2-Lane)
1.900	126.28	999.00	37.54	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV

Rating Live Load: SU5

Gamma			(2-Lane)	(1-Lane)
	DC	DW	LL	LL
	1.25	1.25	1.75	1.75

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Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.100	2045.8	425.3	416.53 R	0.00	313.18	0.00	416.53 R	0.00	313.18
0.00									
1.200	3653.6	756.1	735.11 R	0.00	552.71	0.00	735.11 R	0.00	552.71
0.00									
1.300	4807.7	992.4	958.88 R	0.00	720.97	0.00	958.88 R	0.00	720.97
0.00									
1.400	5500.1	1134.2	1093.78 R	0.00	822.39	0.00	1093.78 R	0.00	822.39
0.00									
1.500	5730.9	1181.5	1130.72 R	0.00	850.17	0.00	1130.72 R	0.00	850.17
0.00									
1.600	5500.1	1134.2	1093.78 R	0.00	822.39	0.00	1093.78 R	0.00	822.39
0.00									
1.700	4807.7	992.4	958.88 R	0.00	720.97	0.00	958.88 R	0.00	720.97
0.00									
1.800	3653.6	756.1	735.11 R	0.00	552.71	0.00	735.11 R	0.00	552.71
0.00									
1.900	2045.8	425.3	416.53 R	0.00	313.18	0.00	416.53 R	0.00	313.18
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU5

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12565.1	-12565.1B	13420.3	13420.3	-18365.2	-18365.2
1.400	19220.4C	19220.4	-12565.1	-12565.1B	12586.1	12586.1	-19199.4	-19199.4
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12565.1	-12565.1B	12586.1	12586.1	-19199.4	-19199.4
1.700	19220.4C	19220.4	-12565.1	-12565.1B	13420.3	13420.3	-18365.2	-18365.2
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU5

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Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	32.29	999.00	32.29	999.00	0.00	999.0 (2-Lane)
1.100	32.29	999.00	32.29	999.00	0.00	999.0 (1-Lane)
1.200	20.15	999.00	20.15	999.00	0.00	624.6 (2-Lane)
1.200	20.15	999.00	20.15	999.00	0.00	624.6 (1-Lane)
1.300	14.00	999.00	14.00	999.00	0.00	433.9 (2-Lane)
1.300	14.00	999.00	14.00	999.00	0.00	433.9 (1-Lane)
1.400	11.51	999.00	11.51	999.00	0.00	356.7 (2-Lane)
1.400	11.51	999.00	11.51	999.00	0.00	356.7 (1-Lane)
1.500	10.89	999.00	10.89	999.00	0.00	337.4 (2-Lane)
1.500	10.89	999.00	10.89	999.00	0.00	337.4 (1-Lane)
1.600	11.51	999.00	11.51	999.00	0.00	356.7 (2-Lane)
1.600	11.51	999.00	11.51	999.00	0.00	356.7 (1-Lane)
1.700	14.00	999.00	14.00	999.00	0.00	433.9 (2-Lane)
1.700	14.00	999.00	14.00	999.00	0.00	433.9 (1-Lane)
1.800	20.15	999.00	20.15	999.00	0.00	624.6 (2-Lane)
1.800	20.15	999.00	20.15	999.00	0.00	624.6 (1-Lane)
1.900	32.29	999.00	32.29	999.00	0.00	999.0 (2-Lane)
1.900	32.29	999.00	32.29	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	141.4	29.5	31.41	0.00	23.61	0.00	31.41	0.00	23.61
1.100 0.00	114.2	23.6	28.10	0.00	21.13	0.00	28.10	0.00	21.13
1.200 0.00	86.5	17.7	24.80	0.00	18.65	0.00	24.80	0.00	18.65
1.300 0.00	57.7	11.8	21.49	0.00	16.16	0.00	21.49	0.00	16.16
1.400 0.00	28.8	5.9	18.19	0.00	13.68	0.00	18.19	0.00	13.68
1.500 0.00	0.0	0.0	14.88	0.00	11.19	0.00	14.88	0.00	11.19
1.600 0.00	-28.8	-5.9	-18.19	0.00	-13.68	0.00	-18.19	0.00	-13.68

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.700	-57.7	-11.8	-21.49	0.00	-16.16	0.00	-21.49	0.00	-16.16
0.00									
1.800	-86.5	-17.7	-24.80	0.00	-18.65	0.00	-24.80	0.00	-18.65
0.00									
1.900	-114.2	-23.6	-28.10	0.00	-21.13	0.00	-28.10	0.00	-21.13
0.00									
2.000	-141.4	-29.5	-31.41	0.00	-23.61	0.00	-31.41	0.00	-23.61
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU5

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	25.87	0.00	802.1 (2-Lane)
1.000	999.00	25.87	0.00	802.1 (1-Lane)
1.100	522.26	25.61	0.00	794.1 (2-Lane)

1.100	522.26	25.61	0.00	794.1 (1-Lane)
1.200	127.19	17.09	0.00	529.8 (2-Lane)
1.200	127.19	17.09	0.00	529.8 (1-Lane)
1.300	72.20	21.33	0.00	661.4 (2-Lane)
1.300	72.20	21.33	0.00	661.4 (1-Lane)
1.400	48.60	27.12	0.00	840.8 (2-Lane)
1.400	48.60	27.12	0.00	840.8 (1-Lane)
1.500	35.48	35.48	0.00	999.0 (2-Lane)
1.500	35.48	35.48	0.00	999.0 (1-Lane)
1.600	27.12	48.60	0.00	840.8 (2-Lane)
1.600	27.12	48.60	0.00	840.8 (1-Lane)
1.700	21.33	72.20	0.00	661.4 (2-Lane)
1.700	21.33	72.20	0.00	661.4 (1-Lane)
1.800	17.09	127.19	0.00	529.8 (2-Lane)
1.800	17.09	127.19	0.00	529.8 (1-Lane)
1.900	25.61	522.26	0.00	794.1 (2-Lane)
1.900	25.61	522.26	0.00	794.1 (1-Lane)
2.000	25.87	999.00	0.00	802.1 (2-Lane)
2.000	25.87	999.00	0.00	802.1 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load: SU5

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30					
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Lane	Live Load w/o impact Truck	Lane	Live Load w/impact Truck	Lane	Live Load w/o Truck	
Lane										
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										
1.100	1636.6	340.3	309.42 R	0.00	232.65	0.00	309.42 R	0.00	232.65	
0.00										
1.200	2922.9	604.9	546.08 R	0.00	410.59	0.00	546.08 R	0.00	410.59	
0.00										
1.300	3846.1	794.0	712.31 R	0.00	535.57	0.00	712.31 R	0.00	535.57	
0.00										
1.400	4400.1	907.4	812.52 R	0.00	610.92	0.00	812.52 R	0.00	610.92	
0.00										
1.500	4584.7	945.2	839.96 R	0.00	631.55	0.00	839.96 R	0.00	631.55	
0.00										
1.600	4400.1	907.4	812.52 R	0.00	610.92	0.00	812.52 R	0.00	610.92	
0.00										
1.700	3846.1	794.0	712.31 R	0.00	535.57	0.00	712.31 R	0.00	535.57	
0.00										
1.800	2922.9	604.9	546.08 R	0.00	410.59	0.00	546.08 R	0.00	410.59	
0.00										
1.900	1636.6	340.3	309.42 R	0.00	232.65	0.00	309.42 R	0.00	232.65	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load:Rating Type: SU5  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	111.19	999.00	33.06	999.00	0.00	999.0 (2-Lane)
1.100	111.19	999.00	33.06	999.00	0.00	999.0 (1-Lane)
1.200	59.73	999.00	21.41	999.00	0.00	663.6 (2-Lane)
1.200	59.73	999.00	21.41	999.00	0.00	663.6 (1-Lane)
1.300	39.31	999.00	14.45	999.00	0.00	448.1 (2-Lane)
1.300	39.31	999.00	14.45	999.00	0.00	448.1 (1-Lane)
1.400	31.06	999.00	11.64	999.00	0.00	360.9 (2-Lane)
1.400	31.06	999.00	11.64	999.00	0.00	360.9 (1-Lane)
1.500	28.95	999.00	10.93	999.00	0.00	338.9 (2-Lane)
1.500	28.95	999.00	10.93	999.00	0.00	338.9 (1-Lane)
1.600	31.06	999.00	11.64	999.00	0.00	360.9 (2-Lane)
1.600	31.06	999.00	11.64	999.00	0.00	360.9 (1-Lane)
1.700	39.31	999.00	14.45	999.00	0.00	448.1 (2-Lane)

1.700	39.31	999.00	14.45	999.00	0.00	448.1 (1-Lane)
1.800	59.73	999.00	21.41	999.00	0.00	663.6 (2-Lane)
1.800	59.73	999.00	21.41	999.00	0.00	663.6 (1-Lane)
1.900	111.19	999.00	33.06	999.00	0.00	999.0 (2-Lane)
1.900	111.19	999.00	33.06	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.100 0.00	2045.8	425.3	458.26 R	0.00	344.56	0.00	458.26 R	0.00	344.56
1.200 0.00	3653.6	756.1	818.36 R	0.00	615.31	0.00	818.36 R	0.00	615.31
1.300 0.00	4807.7	992.4	1070.72 R	0.00	805.06	0.00	1070.72 R	0.00	805.06
1.400 0.00	5500.1	1134.2	1218.81 R	0.00	916.40	0.00	1218.81 R	0.00	916.40
1.500 0.00	5730.9	1181.5	1265.27 R	0.00	951.33	0.00	1265.27 R	0.00	951.33
1.600 0.00	5500.1	1134.2	1218.81 R	0.00	916.40	0.00	1218.81 R	0.00	916.40
1.700 0.00	4807.7	992.4	1070.72 R	0.00	805.05	0.00	1070.72 R	0.00	805.05
1.800 0.00	3653.6	756.1	818.36 R	0.00	615.31	0.00	818.36 R	0.00	615.31
1.900 0.00	2045.8	425.3	458.26 R	0.00	344.56	0.00	458.26 R	0.00	344.56
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1287

## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU6

Span	Moment Resistance		Available Resistance for LL+I	
	Positive Top	Bending Bott.	Positive Top	Bending Bott.

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt

1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12564.5	-12564.5B	13420.3	13420.3	-18364.6	-18364.6
1.400	19220.4C	19220.4	-12564.5	-12564.5B	12586.1	12586.1	-19198.8	-19198.8
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12564.5	-12564.5B	12586.1	12586.1	-19198.8	-19198.8
1.700	19220.4C	19220.4	-12564.5	-12564.5B	13420.3	13420.3	-18364.6	-18364.6
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor fiber -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	29.35	999.00	29.35	999.00	0.00	999.0 (2-Lane)
1.100	29.35	999.00	29.35	999.00	0.00	999.0 (1-Lane)
1.200	18.10	999.00	18.10	999.00	0.00	628.9 (2-Lane)
1.200	18.10	999.00	18.10	999.00	0.00	628.9 (1-Lane)
1.300	12.53	999.00	12.53	999.00	0.00	435.6 (2-Lane)
1.300	12.53	999.00	12.53	999.00	0.00	435.6 (1-Lane)
1.400	10.33	999.00	10.33	999.00	0.00	358.8 (2-Lane)
1.400	10.33	999.00	10.33	999.00	0.00	358.8 (1-Lane)
1.500	9.73	999.00	9.73	999.00	0.00	338.0 (2-Lane)
1.500	9.73	999.00	9.73	999.00	0.00	338.0 (1-Lane)
1.600	10.33	999.00	10.33	999.00	0.00	358.8 (2-Lane)
1.600	10.33	999.00	10.33	999.00	0.00	358.8 (1-Lane)
1.700	12.53	999.00	12.53	999.00	0.00	435.6 (2-Lane)
1.700	12.53	999.00	12.53	999.00	0.00	435.6 (1-Lane)
1.800	18.10	999.00	18.10	999.00	0.00	628.9 (2-Lane)
1.800	18.10	999.00	18.10	999.00	0.00	628.9 (1-Lane)
1.900	29.35	999.00	29.35	999.00	0.00	999.0 (2-Lane)
1.900	29.35	999.00	29.35	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07  
 Rating Type: I-INV  
 Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	141.4	29.5	34.62	0.00	26.03	0.00
0.00						
1.100	114.2	23.6	30.92	0.00	23.25	0.00
0.00						
1.200	86.5	17.7	27.21	0.00	20.46	0.00
0.00						
1.300	57.7	11.8	23.51	0.00	17.68	0.00
0.00						
1.400	28.8	5.9	19.81	0.00	14.89	0.00
0.00						
1.500	0.0	0.0	16.10	0.00	12.11	0.00
0.00						
1.600	-28.8	-5.9	-19.81	0.00	-14.89	0.00
0.00						
1.700	-57.7	-11.8	-23.51	0.00	-17.68	0.00
0.00						
1.800	-86.5	-17.7	-27.21	0.00	-20.46	0.00
0.00						
1.900	-114.2	-23.6	-30.92	0.00	-23.25	0.00
0.00						
2.000	-141.4	-29.5	-34.62	0.00	-26.03	0.00
0.00						

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 STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07  
 Rating Type: I-INV  
 Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)

1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV

Rating Live Load: SU6

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	23.47	0.00	815.6 (2-Lane)
1.000	999.00	23.47	0.00	815.6 (1-Lane)
1.100	597.30	23.28	0.00	809.1 (2-Lane)
1.100	597.30	23.28	0.00	809.1 (1-Lane)
1.200	126.75	15.57	0.00	541.2 (2-Lane)
1.200	126.75	15.57	0.00	541.2 (1-Lane)
1.300	68.74	19.51	0.00	677.8 (2-Lane)
1.300	68.74	19.51	0.00	677.8 (1-Lane)
1.400	45.40	24.91	0.00	865.6 (2-Lane)
1.400	45.40	24.91	0.00	865.6 (1-Lane)
1.500	32.80	32.80	0.00	999.0 (2-Lane)
1.500	32.80	32.80	0.00	999.0 (1-Lane)
1.600	24.91	45.40	0.00	865.6 (2-Lane)
1.600	24.91	45.40	0.00	865.6 (1-Lane)
1.700	19.51	68.74	0.00	677.8 (2-Lane)
1.700	19.51	68.74	0.00	677.8 (1-Lane)
1.800	15.57	126.75	0.00	541.2 (2-Lane)
1.800	15.57	126.75	0.00	541.2 (1-Lane)
1.900	23.28	597.30	0.00	809.1 (2-Lane)
1.900	23.28	597.30	0.00	809.1 (1-Lane)
2.000	23.47	999.00	0.00	815.6 (2-Lane)
2.000	23.47	999.00	0.00	815.6 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV

Rating Live Load: SU6

Gamma	DC	DW	(2-Lane)	(1-Lane)
	1.00	1.00	LL	LL
			1.30	1.30

7777777_20120905cy01_01of01_FlexuralRpt.txt									
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.100	1636.6	340.3	340.42 R	0.00	255.96	0.00	340.42 R	0.00	255.96
0.00									
1.200	2922.9	604.9	607.92 R	0.00	457.09	0.00	607.92 R	0.00	457.09
0.00									
1.300	3846.1	794.0	795.39 R	0.00	598.04	0.00	795.39 R	0.00	598.04
0.00									
1.400	4400.1	907.4	905.40 R	0.00	680.75	0.00	905.40 R	0.00	680.75
0.00									
1.500	4584.7	945.2	939.92 R	0.00	706.70	0.00	939.92 R	0.00	706.70
0.00									
1.600	4400.1	907.4	905.40 R	0.00	680.75	0.00	905.40 R	0.00	680.75
0.00									
1.700	3846.1	794.0	795.39 R	0.00	598.04	0.00	795.39 R	0.00	598.04
0.00									
1.800	2922.9	604.9	607.92 R	0.00	457.09	0.00	607.92 R	0.00	457.09
0.00									
1.900	1636.6	340.3	340.42 R	0.00	255.96	0.00	340.42 R	0.00	255.96
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load:

Rating Type: SU6  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load: SU6

## Service

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	101.07	999.00	30.05	999.00	0.00	999.0 (2-Lane)
1.100	101.07	999.00	30.05	999.00	0.00	999.0 (1-Lane)
1.200	53.65	999.00	19.23	999.00	0.00	668.2 (2-Lane)
1.200	53.65	999.00	19.23	999.00	0.00	668.2 (1-Lane)
1.300	35.21	999.00	12.94	999.00	0.00	449.8 (2-Lane)
1.300	35.21	999.00	12.94	999.00	0.00	449.8 (1-Lane)
1.400	27.88	999.00	10.45	999.00	0.00	363.1 (2-Lane)
1.400	27.88	999.00	10.45	999.00	0.00	363.1 (1-Lane)
1.500	25.87	999.00	9.77	999.00	0.00	339.5 (2-Lane)
1.500	25.87	999.00	9.77	999.00	0.00	339.5 (1-Lane)
1.600	27.88	999.00	10.45	999.00	0.00	363.1 (2-Lane)
1.600	27.88	999.00	10.45	999.00	0.00	363.1 (1-Lane)
1.700	35.21	999.00	12.94	999.00	0.00	449.8 (2-Lane)
1.700	35.21	999.00	12.94	999.00	0.00	449.8 (1-Lane)
1.800	53.65	999.00	19.23	999.00	0.00	668.2 (2-Lane)
1.800	53.65	999.00	19.23	999.00	0.00	668.2 (1-Lane)
1.900	101.07	999.00	30.05	999.00	0.00	999.0 (2-Lane)
1.900	101.07	999.00	30.05	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1294

## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75				(1-Lane) LL 1.75		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.100 0.00	2045.8	425.3	501.42 R	0.00	377.01	0.00	501.42 R	0.00	377.01
1.200 0.00	3653.6	756.1	895.20 R	0.00	673.08	0.00	895.20 R	0.00	673.08
1.300 0.00	4807.7	992.4	1181.33 R	0.00	888.22	0.00	1181.33 R	0.00	888.22
1.400 0.00	5500.1	1134.2	1346.01 R	0.00	1012.04	0.00	1346.01 R	0.00	1012.04
1.500 0.00	5730.9	1181.5	1399.58 R	0.00	1052.32	0.00	1399.58 R	0.00	1052.32
1.600	5500.1	1134.2	1346.01 R	0.00	1012.04	0.00	1346.01 R	0.00	1012.04

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0.00									
1.700	4807.7	992.4	1181.33 R	0.00	888.22	0.00	1181.33 R	0.00	888.22
0.00									
1.800	3653.6	756.1	895.20 R	0.00	673.08	0.00	895.20 R	0.00	673.08
0.00									
1.900	2045.8	425.3	501.42 R	0.00	377.01	0.00	501.42 R	0.00	377.01
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12565.9	-12565.9B	13420.3	13420.3	-18366.0	-18366.0
1.400	19220.4C	19220.4	-12565.9	-12565.9B	12586.1	12586.1	-19200.2	-19200.2
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12565.9	-12565.9B	12586.1	12586.1	-19200.2	-19200.2
1.700	19220.4C	19220.4	-12565.9	-12565.9B	13420.3	13420.3	-18366.0	-18366.0
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	26.82	999.00	26.82	999.00	0.00	999.0 (2-Lane)
1.100	26.82	999.00	26.82	999.00	0.00	999.0 (1-Lane)
1.200	16.55	999.00	16.55	999.00	0.00	641.1 (2-Lane)
1.200	16.55	999.00	16.55	999.00	0.00	641.1 (1-Lane)
1.300	11.36	999.00	11.36	999.00	0.00	440.2 (2-Lane)
1.300	11.36	999.00	11.36	999.00	0.00	440.2 (1-Lane)



1.400	9.35	999.00	9.35	999.00	0.00	362.3 (2-Lane)
1.400	9.35	999.00	9.35	999.00	0.00	362.3 (1-Lane)
1.500	8.79	999.00	8.79	999.00	0.00	340.8 (2-Lane)
1.500	8.79	999.00	8.79	999.00	0.00	340.8 (1-Lane)
1.600	9.35	999.00	9.35	999.00	0.00	362.3 (2-Lane)
1.600	9.35	999.00	9.35	999.00	0.00	362.3 (1-Lane)
1.700	11.36	999.00	11.36	999.00	0.00	440.2 (2-Lane)
1.700	11.36	999.00	11.36	999.00	0.00	440.2 (1-Lane)
1.800	16.55	999.00	16.55	999.00	0.00	641.1 (2-Lane)
1.800	16.55	999.00	16.55	999.00	0.00	641.1 (1-Lane)
1.900	26.82	999.00	26.82	999.00	0.00	999.0 (2-Lane)
1.900	26.82	999.00	26.82	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.75		(1-Lane) LL 1.75	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	141.4	29.5	37.96	0.00	37.96	0.00
0.00						
1.100	114.2	23.6	33.83	0.00	33.83	0.00
0.00						
1.200	86.5	17.7	29.70	0.00	29.70	0.00
0.00						
1.300	57.7	11.8	25.57	0.00	25.57	0.00
0.00						
1.400	28.8	5.9	21.44	0.00	21.44	0.00
0.00						
1.500	0.0	0.0	17.31	0.00	17.31	0.00
0.00						
1.600	-28.8	-5.9	-21.44	0.00	-21.44	0.00
0.00						
1.700	-57.7	-11.8	-25.57	0.00	-25.57	0.00
0.00						
1.800	-86.5	-17.7	-29.70	0.00	-29.70	0.00
0.00						
1.900	-114.2	-23.6	-33.83	0.00	-33.83	0.00
0.00						
2.000	-141.4	-29.5	-37.96	0.00	-37.96	0.00
0.00						

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
 Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-INV  
 Rating Live Load: SU7

Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	21.41	0.00	829.5 (2-Lane)
1.000	999.00	21.41	0.00	829.5 (1-Lane)
1.100	697.64	21.28	0.00	824.5 (2-Lane)
1.100	697.64	21.28	0.00	824.5 (1-Lane)
1.200	128.62	14.27	0.00	553.0 (2-Lane)
1.200	128.62	14.27	0.00	553.0 (1-Lane)
1.300	66.05	17.93	0.00	695.0 (2-Lane)
1.300	66.05	17.93	0.00	695.0 (1-Lane)
1.400	42.71	23.01	0.00	891.7 (2-Lane)
1.400	42.71	23.01	0.00	891.7 (1-Lane)
1.500	30.51	30.51	0.00	999.0 (2-Lane)
1.500	30.51	30.51	0.00	999.0 (1-Lane)
1.600	23.01	42.71	0.00	891.7 (2-Lane)
1.600	23.01	42.71	0.00	891.7 (1-Lane)
1.700	17.93	66.05	0.00	695.0 (2-Lane)
1.700	17.93	66.05	0.00	695.0 (1-Lane)

1.800	14.27	128.62	0.00	553.0 (2-Lane)
1.800	14.27	128.62	0.00	553.0 (1-Lane)
1.900	21.28	697.64	0.00	824.5 (2-Lane)
1.900	21.28	697.64	0.00	824.5 (1-Lane)
2.000	21.41	999.00	0.00	829.5 (2-Lane)
2.000	21.41	999.00	0.00	829.5 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30					
Span impact Lane	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.100	1636.6	340.3	372.49 R	0.00	280.06	0.00	372.49 R	0.00	280.06	280.06
0.00										
1.200	2922.9	604.9	665.01 R	0.00	500.00	0.00	665.01 R	0.00	500.00	500.00
0.00										
1.300	3846.1	794.0	877.56 R	0.00	659.82	0.00	877.56 R	0.00	659.82	659.82
0.00										
1.400	4400.1	907.4	999.89 R	0.00	751.80	0.00	999.89 R	0.00	751.80	751.80
0.00										
1.500	4584.7	945.2	1039.69 R	0.00	781.72	0.00	1039.69 R	0.00	781.72	781.72
0.00										
1.600	4400.1	907.4	999.89 R	0.00	751.80	0.00	999.89 R	0.00	751.80	751.80
0.00										
1.700	3846.1	794.0	877.56 R	0.00	659.82	0.00	877.56 R	0.00	659.82	659.82
0.00										
1.800	2922.9	604.9	665.01 R	0.00	500.00	0.00	665.01 R	0.00	500.00	500.00
0.00										
1.900	1636.6	340.3	372.48 R	0.00	280.06	0.00	372.48 R	0.00	280.06	280.06
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load: SU7

Rating Type: SU7

Rating Live Load:

Span	Service Resistance		Available Resistance for LL+I	
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.

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1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-INV  
Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	92.37	999.00	27.46	999.00	0.00	999.0 (2-Lane)
1.100	92.37	999.00	27.46	999.00	0.00	999.0 (1-Lane)
1.200	49.05	999.00	17.58	999.00	0.00	681.2 (2-Lane)
1.200	49.05	999.00	17.58	999.00	0.00	681.2 (1-Lane)
1.300	31.91	999.00	11.73	999.00	0.00	454.6 (2-Lane)
1.300	31.91	999.00	11.73	999.00	0.00	454.6 (1-Lane)
1.400	25.24	999.00	9.46	999.00	0.00	366.6 (2-Lane)
1.400	25.24	999.00	9.46	999.00	0.00	366.6 (1-Lane)
1.500	23.39	999.00	8.83	999.00	0.00	342.2 (2-Lane)
1.500	23.39	999.00	8.83	999.00	0.00	342.2 (1-Lane)
1.600	25.24	999.00	9.46	999.00	0.00	366.6 (2-Lane)
1.600	25.24	999.00	9.46	999.00	0.00	366.6 (1-Lane)
1.700	31.91	999.00	11.73	999.00	0.00	454.6 (2-Lane)
1.700	31.91	999.00	11.73	999.00	0.00	454.6 (1-Lane)
1.800	49.05	999.00	17.58	999.00	0.00	681.2 (2-Lane)
1.800	49.05	999.00	17.58	999.00	0.00	681.2 (1-Lane)
1.900	92.37	999.00	27.46	999.00	0.00	999.0 (2-Lane)
1.900	92.37	999.00	27.46	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

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 Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07  
 Rating Type: I-OPER  
 Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	2045.8	425.3	580.59 R	0.00	488.96	0.00
0.00						
1.200	3653.6	756.1	1026.48 R	0.00	864.98	0.00
0.00						
1.300	4807.7	992.4	1337.66 R	0.00	1128.08	0.00
0.00						
1.400	5500.1	1134.2	1522.67 R	0.00	1284.65	0.00
0.00						
1.500	5730.9	1181.5	1577.23 R	0.00	1331.50	0.00
0.00						
1.600	5500.1	1134.2	1522.67 R	0.00	1284.65	0.00
0.00						
1.700	4807.7	992.4	1337.66 R	0.00	1128.08	0.00
0.00						
1.800	3653.6	756.1	1026.48 R	0.00	864.98	0.00
0.00						
1.900	2045.8	425.3	580.59 R	0.00	488.96	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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 STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07  
 Rating Type: I-OPER  
 Rating Live Load: HL93

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12568.0	-12568.0B	13420.3	13420.3	-18368.1	-18368.1
1.400	19220.4C	19220.4	-12568.0	-12568.0B	12586.1	12586.1	-19202.3	-19202.3
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12568.0	-12568.0B	12586.1	12586.1	-19202.3	-19202.3
1.700	19220.4C	19220.4	-12568.0	-12568.0B	13420.3	13420.3	-18368.1	-18368.1
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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 MOMENT RESISTANCE RATING REPORT

Member I. D. G07  
 Rating Type: I-OPER  
 Rating Live Load: HL93

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	23.17	999.00	23.17	999.00	0.00	834.0 (2-Lane)
1.100	23.17	999.00	23.17	999.00	0.00	834.0 (1-Lane)
1.200	14.43	999.00	14.43	999.00	0.00	519.4 (2-Lane)
1.200	14.43	999.00	14.43	999.00	0.00	519.4 (1-Lane)
1.300	10.03	999.00	10.03	999.00	0.00	361.2 (2-Lane)
1.300	10.03	999.00	10.03	999.00	0.00	361.2 (1-Lane)
1.400	8.27	999.00	8.27	999.00	0.00	297.6 (2-Lane)
1.400	8.27	999.00	8.27	999.00	0.00	297.6 (1-Lane)
1.500	7.80	999.00	7.80	999.00	0.00	280.9 (2-Lane)
1.500	7.80	999.00	7.80	999.00	0.00	280.9 (1-Lane)
1.600	8.27	999.00	8.27	999.00	0.00	297.6 (2-Lane)
1.600	8.27	999.00	8.27	999.00	0.00	297.6 (1-Lane)
1.700	10.03	999.00	10.03	999.00	0.00	361.2 (2-Lane)
1.700	10.03	999.00	10.03	999.00	0.00	361.2 (1-Lane)
1.800	14.43	999.00	14.43	999.00	0.00	519.4 (2-Lane)
1.800	14.43	999.00	14.43	999.00	0.00	519.4 (1-Lane)
1.900	23.17	999.00	23.17	999.00	0.00	834.0 (2-Lane)
1.900	23.17	999.00	23.17	999.00	0.00	834.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07  
 Rating Type: I-OPER  
 Rating Live Load: HL93

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
w/o impact		Dead Load	Truck	Lane	Truck	Lane
Lane						
1.000	141.4	29.5	43.72	0.00	36.80	0.00
0.00						
1.100	114.2	23.6	37.75	0.00	31.56	0.00

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0.00									
1.200	86.5	17.7	32.09	0.00	26.65	0.00	32.09	0.00	26.65
0.00									
1.300	57.7	11.8	26.76	0.00	22.04	0.00	26.76	0.00	22.04
0.00									
1.400	28.8	5.9	21.74	0.00	17.76	0.00	21.74	0.00	17.76
0.00									
1.500	0.0	0.0	17.04	0.00	13.79	0.00	17.04	0.00	13.79
0.00									
1.600	-28.8	-5.9	-21.74	0.00	-17.76	0.00	-21.74	0.00	-17.76
0.00									
1.700	-57.7	-11.8	-26.76	0.00	-22.04	0.00	-26.76	0.00	-22.04
0.00									
1.800	-86.5	-17.7	-32.09	0.00	-26.65	0.00	-32.09	0.00	-26.65
0.00									
1.900	-114.2	-23.6	-37.75	0.00	-31.56	0.00	-37.75	0.00	-31.56
0.00									
2.000	-141.4	-29.5	-43.72	0.00	-36.80	0.00	-43.72	0.00	-36.80
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: HL93

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: HL93

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	18.59	0.00	669.2 (2-Lane)
1.000	999.00	18.59	0.00	669.2 (1-Lane)
1.100	553.30	19.07	0.00	686.5 (2-Lane)
1.100	553.30	19.07	0.00	686.5 (1-Lane)
1.200	130.95	13.21	0.00	475.4 (2-Lane)
1.200	130.95	13.21	0.00	475.4 (1-Lane)
1.300	69.64	17.14	0.00	617.0 (2-Lane)
1.300	69.64	17.14	0.00	617.0 (1-Lane)
1.400	44.49	22.69	0.00	817.0 (2-Lane)
1.400	44.49	22.69	0.00	817.0 (1-Lane)
1.500	31.00	31.00	0.00	999.0 (2-Lane)
1.500	31.00	31.00	0.00	999.0 (1-Lane)
1.600	22.69	44.49	0.00	817.0 (2-Lane)
1.600	22.69	44.49	0.00	817.0 (1-Lane)
1.700	17.14	69.64	0.00	617.0 (2-Lane)
1.700	17.14	69.64	0.00	617.0 (1-Lane)
1.800	13.21	130.95	0.00	475.4 (2-Lane)
1.800	13.21	130.95	0.00	475.4 (1-Lane)
1.900	19.07	508.53	0.00	686.5 (2-Lane)
1.900	19.07	508.53	0.00	686.5 (1-Lane)
2.000	18.59	999.00	0.00	669.2 (2-Lane)
2.000	18.59	999.00	0.00	669.2 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPE  
Rating Live Load: HL93

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	1636.6	340.3	430.07 R	0.00	362.19	0.00
0.00						
1.200	2922.9	604.9	760.36 R	0.00	640.73	0.00
0.00						
1.300	3846.1	794.0	990.86 R	0.00	835.61	0.00
0.00						
1.400	4400.1	907.4	1127.90 R	0.00	951.59	0.00
0.00						
1.500	4584.7	945.2	1168.32 R	0.00	986.30	0.00
0.00						
1.600	4400.1	907.4	1127.90 R	0.00	951.59	0.00
0.00						



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1.700	3846.1	794.0	990.86 R	0.00	835.61	0.00	990.86 R	0.00	835.61
0.00									
1.800	2922.9	604.9	760.36 R	0.00	640.73	0.00	760.36 R	0.00	640.73
0.00									
1.900	1636.6	340.3	430.07 R	0.00	362.19	0.00	430.07 R	0.00	362.19
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1308

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER  
Rating Live Load:

Rating Type: HL93  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER  
Rating Live Load: HL93

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	80.00	999.00	23.78	999.00	0.00	856.2 (2-Lane)
1.100	80.00	999.00	23.78	999.00	0.00	856.2 (1-Lane)
1.200	42.90	999.00	15.37	999.00	0.00	553.5 (2-Lane)
1.200	42.90	999.00	15.37	999.00	0.00	553.5 (1-Lane)
1.300	28.26	999.00	10.39	999.00	0.00	374.1 (2-Lane)
1.300	28.26	999.00	10.39	999.00	0.00	374.1 (1-Lane)

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1.400	22.38	999.00	8.39	999.00	0.00	301.9 (2-Lane)
1.400	22.38	999.00	8.39	999.00	0.00	301.9 (1-Lane)
1.500	20.81	999.00	7.86	999.00	0.00	282.9 (2-Lane)
1.500	20.81	999.00	7.86	999.00	0.00	282.9 (1-Lane)
1.600	22.38	999.00	8.39	999.00	0.00	301.9 (2-Lane)
1.600	22.38	999.00	8.39	999.00	0.00	301.9 (1-Lane)
1.700	28.26	999.00	10.39	999.00	0.00	374.1 (2-Lane)
1.700	28.26	999.00	10.39	999.00	0.00	374.1 (1-Lane)
1.800	42.90	999.00	15.37	999.00	0.00	553.5 (2-Lane)
1.800	42.90	999.00	15.37	999.00	0.00	553.5 (1-Lane)
1.900	80.00	999.00	23.78	999.00	0.00	856.2 (2-Lane)
1.900	80.00	999.00	23.78	999.00	0.00	856.2 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35			
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
1.100 0.00	2045.8	425.3	369.32 R	0.00	277.68	0.00	369.32 R	0.00	277.68	
1.200 0.00	3653.6	756.1	650.89 R	0.00	489.39	0.00	650.89 R	0.00	489.39	
1.300 0.00	4807.7	992.4	844.70 R	0.00	635.11	0.00	844.70 R	0.00	635.11	
1.400 0.00	5500.1	1134.2	959.28 R	0.00	721.26	0.00	959.28 R	0.00	721.26	
1.500 0.00	5730.9	1181.5	990.36 R	0.00	744.64	0.00	990.36 R	0.00	744.64	
1.600 0.00	5500.1	1134.2	959.28 R	0.00	721.26	0.00	959.28 R	0.00	721.26	
1.700 0.00	4807.7	992.4	844.70 R	0.00	635.11	0.00	844.70 R	0.00	635.11	
1.800 0.00	3653.6	756.1	650.89 R	0.00	489.39	0.00	650.89 R	0.00	489.39	
1.900 0.00	2045.8	425.3	369.32 R	0.00	277.68	0.00	369.32 R	0.00	277.68	
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07  
 Rating Type: I-OPER  
 Rating Live Load: HS20

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12568.0	-12568.0B	13420.3	13420.3	-18368.1	-18368.1
1.400	19220.4C	19220.4	-12568.0	-12568.0B	12586.1	12586.1	-19202.3	-19202.3
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12568.0	-12568.0B	12586.1	12586.1	-19202.3	-19202.3
1.700	19220.4C	19220.4	-12568.0	-12568.0B	13420.3	13420.3	-18368.1	-18368.1
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07  
 Rating Type: I-OPER  
 Rating Live Load: HS20

## Moment

Span	Rating Factor		Load Resistance (tons)	
	top +bend	bottom -bend	top +bend	bottom -bend
1.000	999.00	999.00	999.00	999.00
1.000	999.00	999.00	999.00	999.00
1.100	36.42	999.00	36.42	999.00
1.100	36.42	999.00	36.42	999.00
1.200	22.75	999.00	22.75	999.00
1.200	22.75	999.00	22.75	999.00
1.300	15.89	999.00	15.89	999.00
1.300	15.89	999.00	15.89	999.00
1.400	13.12	999.00	13.12	999.00
1.400	13.12	999.00	13.12	999.00
1.500	12.43	999.00	12.43	999.00
1.500	12.43	999.00	12.43	999.00
1.600	13.12	999.00	13.12	999.00
1.600	13.12	999.00	13.12	999.00
1.700	15.89	999.00	15.89	999.00
1.700	15.89	999.00	15.89	999.00
1.800	22.75	999.00	22.75	999.00
1.800	22.75	999.00	22.75	999.00
1.900	36.42	999.00	36.42	999.00
1.900	36.42	999.00	36.42	999.00
2.000	999.00	999.00	999.00	999.00

2.000 999.00 999.00 999.00 999.00 999.00 999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: HS20

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35				
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	141.4	29.5	27.88	0.00	20.96	0.00	27.88	0.00	20.96
1.100 0.00	114.2	23.6	24.92	0.00	18.74	0.00	24.92	0.00	18.74
1.200 0.00	86.5	17.7	21.96	0.00	16.51	0.00	21.96	0.00	16.51
1.300 0.00	57.7	11.8	19.00	0.00	14.28	0.00	19.00	0.00	14.28
1.400 0.00	28.8	5.9	16.04	0.00	12.06	0.00	16.04	0.00	12.06
1.500 0.00	0.0	0.0	13.08	0.00	9.83	0.00	13.08	0.00	9.83
1.600 0.00	-28.8	-5.9	-16.04	0.00	-12.06	0.00	-16.04	0.00	-12.06
1.700 0.00	-57.7	-11.8	-19.00	0.00	-14.28	0.00	-19.00	0.00	-14.28
1.800 0.00	-86.5	-17.7	-21.96	0.00	-16.51	0.00	-21.96	0.00	-16.51
1.900 0.00	-114.2	-23.6	-24.92	0.00	-18.74	0.00	-24.92	0.00	-18.74
2.000 0.00	-141.4	-29.5	-27.88	0.00	-20.96	0.00	-27.88	0.00	-20.96

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: HS20

Span	Shear Resistance Vn	Available Resistance for LL+I	
		(-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)

1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: HS20

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	29.15	999.00	999.0 (2-Lane)
1.000	999.00	29.15	999.00	999.0 (1-Lane)
1.100	672.15	28.89	999.00	999.0 (2-Lane)
1.100	672.15	28.89	999.00	999.0 (1-Lane)
1.200	150.72	19.30	386.06	694.9 (2-Lane)
1.200	150.72	19.30	386.06	694.9 (1-Lane)
1.300	83.51	24.14	482.79	869.0 (2-Lane)
1.300	83.51	24.14	482.79	869.0 (1-Lane)
1.400	55.63	30.76	999.00	999.0 (2-Lane)
1.400	55.63	30.76	999.00	999.0 (1-Lane)
1.500	40.38	40.38	999.00	999.0 (2-Lane)
1.500	40.38	40.38	999.00	999.0 (1-Lane)
1.600	30.76	55.63	999.00	999.0 (2-Lane)
1.600	30.76	55.63	999.00	999.0 (1-Lane)
1.700	24.14	83.51	482.79	869.0 (2-Lane)
1.700	24.14	83.51	482.79	869.0 (1-Lane)
1.800	19.30	150.72	386.06	694.9 (2-Lane)
1.800	19.30	150.72	386.06	694.9 (1-Lane)
1.900	28.89	672.15	999.00	999.0 (2-Lane)
1.900	28.89	672.15	999.00	999.0 (1-Lane)
2.000	29.15	999.00	999.00	999.0 (2-Lane)
2.000	29.15	999.00	999.00	999.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07  
 Rating Type: II-OPE  
 Rating Live Load: HS20

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00				(1-Lane) LL 1.00			
			Dead Load		Superimposed Dead Load		Live Load w/impact Truck Lane		Live Load w/o impact Truck Lane	
Span impact Lane	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane		Live Load w/o impact Truck Lane		Live Load w/impact Truck Lane		Live Load w/o Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.100	1636.6	340.3	273.57 R	0.00	205.69	0.00	273.57 R	0.00	205.69	
0.00										
1.200	2922.9	604.9	482.14 R	0.00	362.51	0.00	482.14 R	0.00	362.51	
0.00										
1.300	3846.1	794.0	625.70 R	0.00	470.45	0.00	625.70 R	0.00	470.45	
0.00										
1.400	4400.1	907.4	710.58 R	0.00	534.27	0.00	710.58 R	0.00	534.27	
0.00										
1.500	4584.7	945.2	733.60 R	0.00	551.58	0.00	733.60 R	0.00	551.58	
0.00										
1.600	4400.1	907.4	710.58 R	0.00	534.27	0.00	710.58 R	0.00	534.27	
0.00										
1.700	3846.1	794.0	625.70 R	0.00	470.45	0.00	625.70 R	0.00	470.45	
0.00										
1.800	2922.9	604.9	482.14 R	0.00	362.51	0.00	482.14 R	0.00	362.51	
0.00										
1.900	1636.6	340.3	273.57 R	0.00	205.69	0.00	273.57 R	0.00	205.69	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1316  
 SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07  
 Rating Type: II-OPER  
 Rating Live Load:

Rating Type: HS20  
 Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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 SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER  
Rating Live Load: HS20

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)
1.100	125.76	999.00	37.39	999.00	999.00	999.0 (2-Lane)
1.100	125.76	999.00	37.39	999.00	999.00	999.0 (1-Lane)
1.200	67.65	999.00	24.25	999.00	484.92	872.9 (2-Lane)
1.200	67.65	999.00	24.25	999.00	484.92	872.9 (1-Lane)
1.300	44.76	999.00	16.46	999.00	329.11	592.4 (2-Lane)
1.300	44.76	999.00	16.46	999.00	329.11	592.4 (1-Lane)
1.400	35.52	999.00	13.31	999.00	266.27	479.3 (2-Lane)
1.400	35.52	999.00	13.31	999.00	266.27	479.3 (1-Lane)
1.500	33.15	999.00	12.52	999.00	250.31	450.6 (2-Lane)
1.500	33.15	999.00	12.52	999.00	250.31	450.6 (1-Lane)
1.600	35.52	999.00	13.31	999.00	266.27	479.3 (2-Lane)
1.600	35.52	999.00	13.31	999.00	266.27	479.3 (1-Lane)
1.700	44.76	999.00	16.46	999.00	329.11	592.4 (2-Lane)
1.700	44.76	999.00	16.46	999.00	329.11	592.4 (1-Lane)
1.800	67.65	999.00	24.25	999.00	484.92	872.9 (2-Lane)
1.800	67.65	999.00	24.25	999.00	484.92	872.9 (1-Lane)
1.900	125.76	999.00	37.39	999.00	999.00	999.0 (2-Lane)
1.900	125.76	999.00	37.39	999.00	999.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	999.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: 3

Gamma	DC		DW		(2-Lane) LL		(1-Lane) LL	
	1.25		1.25		1.35		1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00
0.00								0.00

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.100	2045.8	425.3	260.08 R	0.00	195.55	0.00	260.08 R	0.00	195.55
0.00									
1.200	3653.6	756.1	459.21 R	0.00	345.27	0.00	459.21 R	0.00	345.27
0.00									
1.300	4807.7	992.4	597.40 R	0.00	449.18	0.00	597.40 R	0.00	449.18
0.00									
1.400	5500.1	1134.2	679.22 R	0.00	510.70	0.00	679.22 R	0.00	510.70
0.00									
1.500	5730.9	1181.5	703.15 R	0.00	528.68	0.00	703.15 R	0.00	528.68
0.00									
1.600	5500.1	1134.2	679.22 R	0.00	510.70	0.00	679.22 R	0.00	510.70
0.00									
1.700	4807.7	992.4	597.40 R	0.00	449.18	0.00	597.40 R	0.00	449.18
0.00									
1.800	3653.6	756.1	459.21 R	0.00	345.27	0.00	459.21 R	0.00	345.27
0.00									
1.900	2045.8	425.3	260.08 R	0.00	195.55	0.00	260.08 R	0.00	195.55
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER

Rating Live Load: 3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12565.1	-12565.1B	13420.3	13420.3	-18365.2	-18365.2
1.400	19220.4C	19220.4	-12565.1	-12565.1B	12586.1	12586.1	-19199.5	-19199.5
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12565.1	-12565.1B	12586.1	12586.1	-19199.5	-19199.5
1.700	19220.4C	19220.4	-12565.1	-12565.1B	13420.3	13420.3	-18365.2	-18365.2
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER

Rating Live Load: 3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)



1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	51.72	999.00	51.72	999.00	0.00	999.0 (2-Lane)
1.100	51.72	999.00	51.72	999.00	0.00	999.0 (1-Lane)
1.200	32.25	999.00	32.25	999.00	0.00	806.3 (2-Lane)
1.200	32.25	999.00	32.25	999.00	0.00	806.3 (1-Lane)
1.300	22.46	999.00	22.46	999.00	0.00	561.6 (2-Lane)
1.300	22.46	999.00	22.46	999.00	0.00	561.6 (1-Lane)
1.400	18.53	999.00	18.53	999.00	0.00	463.3 (2-Lane)
1.400	18.53	999.00	18.53	999.00	0.00	463.3 (1-Lane)
1.500	17.50	999.00	17.50	999.00	0.00	437.6 (2-Lane)
1.500	17.50	999.00	17.50	999.00	0.00	437.6 (1-Lane)
1.600	18.53	999.00	18.53	999.00	0.00	463.3 (2-Lane)
1.600	18.53	999.00	18.53	999.00	0.00	463.3 (1-Lane)
1.700	22.46	999.00	22.46	999.00	0.00	561.6 (2-Lane)
1.700	22.46	999.00	22.46	999.00	0.00	561.6 (1-Lane)
1.800	32.25	999.00	32.25	999.00	0.00	806.3 (2-Lane)
1.800	32.25	999.00	32.25	999.00	0.00	806.3 (1-Lane)
1.900	51.72	999.00	51.72	999.00	0.00	999.0 (2-Lane)
1.900	51.72	999.00	51.72	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	141.4	29.5	19.60	0.00	14.74	0.00	19.60	0.00	14.74
1.100 0.00	114.2	23.6	17.55	0.00	13.19	0.00	17.55	0.00	13.19
1.200 0.00	86.5	17.7	15.49	0.00	11.65	0.00	15.49	0.00	11.65
1.300 0.00	57.7	11.8	13.44	0.00	10.10	0.00	13.44	0.00	10.10
1.400 0.00	28.8	5.9	11.38	0.00	8.56	0.00	11.38	0.00	8.56
1.500 0.00	0.0	0.0	9.32	0.00	7.01	0.00	9.32	0.00	7.01
1.600 0.00	-28.8	-5.9	-11.38	0.00	-8.56	0.00	-11.38	0.00	-8.56
1.700 0.00	-57.7	-11.8	-13.44	0.00	-10.10	0.00	-13.44	0.00	-10.10
1.800 0.00	-86.5	-17.7	-15.49	0.00	-11.65	0.00	-15.49	0.00	-11.65
1.900 0.00	-114.2	-23.6	-17.55	0.00	-13.19	0.00	-17.55	0.00	-13.19
2.000 0.00	-141.4	-29.5	-19.60	0.00	-14.74	0.00	-19.60	0.00	-14.74

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: 3

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	41.46	0.00	999.0 (2-Lane)
1.000	999.00	41.46	0.00	999.0 (1-Lane)
1.100	813.67	41.02	0.00	999.0 (2-Lane)
1.100	813.67	41.02	0.00	999.0 (1-Lane)
1.200	200.32	27.36	0.00	684.0 (2-Lane)
1.200	200.32	27.36	0.00	684.0 (1-Lane)
1.300	114.64	34.13	0.00	853.3 (2-Lane)
1.300	114.64	34.13	0.00	853.3 (1-Lane)

1.400	77.43	43.35	0.00	999.0 (2-Lane)
1.400	77.43	43.35	0.00	999.0 (1-Lane)
1.500	56.63	56.63	0.00	999.0 (2-Lane)
1.500	56.63	56.63	0.00	999.0 (1-Lane)
1.600	43.35	77.43	0.00	999.0 (2-Lane)
1.600	43.35	77.43	0.00	999.0 (1-Lane)
1.700	34.13	114.64	0.00	853.3 (2-Lane)
1.700	34.13	114.64	0.00	853.3 (1-Lane)
1.800	27.36	200.32	0.00	684.0 (2-Lane)
1.800	27.36	200.32	0.00	684.0 (1-Lane)
1.900	41.02	813.67	0.00	999.0 (2-Lane)
1.900	41.02	813.67	0.00	999.0 (1-Lane)
2.000	41.46	999.00	0.00	999.0 (2-Lane)
2.000	41.46	999.00	0.00	999.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPE  
Rating Live Load: 3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	1636.6	340.3	192.65 R	0.00	144.85	0.00
0.00						
1.200	2922.9	604.9	340.16 R	0.00	255.76	0.00
0.00						
1.300	3846.1	794.0	442.52 R	0.00	332.72	0.00
0.00						
1.400	4400.1	907.4	503.13 R	0.00	378.29	0.00
0.00						
1.500	4584.7	945.2	520.85 R	0.00	391.62	0.00
0.00						
1.600	4400.1	907.4	503.13 R	0.00	378.29	0.00
0.00						
1.700	3846.1	794.0	442.52 R	0.00	332.72	0.00
0.00						
1.800	2922.9	604.9	340.16 R	0.00	255.76	0.00
0.00						
1.900	1636.6	340.3	192.65 R	0.00	144.85	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1324

## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER  
Rating Live Load:

Rating Type: 3  
Rating Live Load:  
Span

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER  
Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	178.59	999.00	53.09	999.00	0.00	999.0 (2-Lane)
1.100	178.59	999.00	53.09	999.00	0.00	999.0 (1-Lane)
1.200	95.89	999.00	34.37	999.00	0.00	859.2 (2-Lane)
1.200	95.89	999.00	34.37	999.00	0.00	859.2 (1-Lane)
1.300	63.28	999.00	23.27	999.00	0.00	581.7 (2-Lane)
1.300	63.28	999.00	23.27	999.00	0.00	581.7 (1-Lane)
1.400	50.16	999.00	18.80	999.00	0.00	470.1 (2-Lane)
1.400	50.16	999.00	18.80	999.00	0.00	470.1 (1-Lane)
1.500	46.68	999.00	17.63	999.00	0.00	440.7 (2-Lane)
1.500	46.68	999.00	17.63	999.00	0.00	440.7 (1-Lane)
1.600	50.16	999.00	18.80	999.00	0.00	470.1 (2-Lane)
1.600	50.16	999.00	18.80	999.00	0.00	470.1 (1-Lane)
1.700	63.28	999.00	23.27	999.00	0.00	581.7 (2-Lane)
1.700	63.28	999.00	23.27	999.00	0.00	581.7 (1-Lane)
1.800	95.89	999.00	34.37	999.00	0.00	859.2 (2-Lane)
1.800	95.89	999.00	34.37	999.00	0.00	859.2 (1-Lane)
1.900	178.59	999.00	53.09	999.00	0.00	999.0 (2-Lane)
1.900	178.59	999.00	53.09	999.00	0.00	999.0 (1-Lane)

2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00 0.00
0.00						
1.100	2045.8	425.3	381.22 R 0.00	286.64 0.00	381.22 R 0.00	286.64 0.00
0.00						
1.200	3653.6	756.1	664.94 R 0.00	499.96 0.00	664.94 R 0.00	499.96 0.00
0.00						
1.300	4807.7	992.4	872.17 R 0.00	655.76 0.00	872.17 R 0.00	655.76 0.00
0.00						
1.400	5500.1	1134.2	989.19 R 0.00	743.75 0.00	989.19 R 0.00	743.75 0.00
0.00						
1.500	5730.9	1181.5	1016.32 R 0.00	764.15 0.00	1016.32 R 0.00	764.15 0.00
0.00						
1.600	5500.1	1134.2	989.19 R 0.00	743.75 0.00	989.19 R 0.00	743.75 0.00
0.00						
1.700	4807.7	992.4	872.17 R 0.00	655.76 0.00	872.17 R 0.00	655.76 0.00
0.00						
1.800	3653.6	756.1	664.94 R 0.00	499.96 0.00	664.94 R 0.00	499.96 0.00
0.00						
1.900	2045.8	425.3	381.22 R 0.00	286.63 0.00	381.22 R 0.00	286.63 0.00
0.00						
2.000	0.0	0.0	0.00 R 0.00	0.00 0.00	0.00 R 0.00	0.00 0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I			
					Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12562.0	-12562.0B	13420.3	13420.3	-18362.0	-18362.0
1.400	19220.4C	19220.4	-12562.0	-12562.0B	12586.1	12586.1	-19196.3	-19196.3
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12562.0	-12562.0B	12586.1	12586.1	-19196.3	-19196.3

1.700	19220.4C	19220.4	-12562.0	-12562.0B	13420.3	13420.3	-18362.0	-18362.0
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: 3S2

## Moment

Span	top +bend	Rating fiber -bend	Factor bottom +bend	Rating fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	35.28	999.00	35.28	999.00	0.00	999.0 (2-Lane)
1.100	35.28	999.00	35.28	999.00	0.00	999.0 (1-Lane)
1.200	22.27	999.00	22.27	999.00	0.00	890.9 (2-Lane)
1.200	22.27	999.00	22.27	999.00	0.00	890.9 (1-Lane)
1.300	15.39	999.00	15.39	999.00	0.00	615.5 (2-Lane)
1.300	15.39	999.00	15.39	999.00	0.00	615.5 (1-Lane)
1.400	12.72	999.00	12.72	999.00	0.00	508.9 (2-Lane)
1.400	12.72	999.00	12.72	999.00	0.00	508.9 (1-Lane)
1.500	12.11	999.00	12.11	999.00	0.00	484.4 (2-Lane)
1.500	12.11	999.00	12.11	999.00	0.00	484.4 (1-Lane)
1.600	12.72	999.00	12.72	999.00	0.00	508.9 (2-Lane)
1.600	12.72	999.00	12.72	999.00	0.00	508.9 (1-Lane)
1.700	15.39	999.00	15.39	999.00	0.00	615.5 (2-Lane)
1.700	15.39	999.00	15.39	999.00	0.00	615.5 (1-Lane)
1.800	22.27	999.00	22.27	999.00	0.00	890.9 (2-Lane)
1.800	22.27	999.00	22.27	999.00	0.00	890.9 (1-Lane)
1.900	35.28	999.00	35.28	999.00	0.00	999.0 (2-Lane)
1.900	35.28	999.00	35.28	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: 3S2

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
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1.25

1.25

1.35

Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Lane	Live Load w/o impact Truck	Lane	Live Load w/impact Truck	Lane	Live Load Truck
Lane									
1.000 0.00	141.4	29.5	29.01	0.00	21.81	0.00	29.01	0.00	21.81
1.100 0.00	114.2	23.6	25.72	0.00	19.34	0.00	25.72	0.00	19.34
1.200 0.00	86.5	17.7	22.43	0.00	16.87	0.00	22.43	0.00	16.87
1.300 0.00	57.7	11.8	19.14	0.00	14.39	0.00	19.14	0.00	14.39
1.400 0.00	28.8	5.9	15.85	0.00	11.92	0.00	15.85	0.00	11.92
1.500 0.00	0.0	0.0	12.56	0.00	9.45	0.00	12.56	0.00	9.45
1.600 0.00	-28.8	-5.9	-15.85	0.00	-11.92	0.00	-15.85	0.00	-11.92
1.700 0.00	-57.7	-11.8	-19.14	0.00	-14.39	0.00	-19.14	0.00	-14.39
1.800 0.00	-86.5	-17.7	-22.43	0.00	-16.87	0.00	-22.43	0.00	-16.87
1.900 0.00	-114.2	-23.6	-25.72	0.00	-19.34	0.00	-25.72	0.00	-19.34
2.000 0.00	-141.4	-29.5	-29.01	0.00	-21.81	0.00	-29.01	0.00	-21.81

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER

Rating Live Load: 3S2

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	28.01	0.00	999.0 (2-Lane)
1.000	999.00	28.01	0.00	999.0 (1-Lane)
1.100	813.67	27.99	0.00	999.0 (2-Lane)
1.100	813.67	27.99	0.00	999.0 (1-Lane)
1.200	212.72	18.90	0.00	755.8 (2-Lane)
1.200	212.72	18.90	0.00	755.8 (1-Lane)
1.300	99.84	23.96	0.00	958.3 (2-Lane)
1.300	99.84	23.96	0.00	958.3 (1-Lane)
1.400	60.68	31.12	0.00	999.0 (2-Lane)
1.400	60.68	31.12	0.00	999.0 (1-Lane)
1.500	42.03	42.03	0.00	999.0 (2-Lane)
1.500	42.03	42.03	0.00	999.0 (1-Lane)
1.600	31.12	60.68	0.00	999.0 (2-Lane)
1.600	31.12	60.68	0.00	999.0 (1-Lane)
1.700	23.96	99.84	0.00	958.3 (2-Lane)
1.700	23.96	99.84	0.00	958.3 (1-Lane)
1.800	18.90	212.72	0.00	755.8 (2-Lane)
1.800	18.90	212.72	0.00	755.8 (1-Lane)
1.900	27.99	813.67	0.00	999.0 (2-Lane)
1.900	27.99	813.67	0.00	999.0 (1-Lane)
2.000	28.01	999.00	0.00	999.0 (2-Lane)
2.000	28.01	999.00	0.00	999.0 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPE

Rating Live Load: 3S2

Span impact Lane	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/o Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.100	1636.6	340.3	282.39 R	0.00	212.32	0.00	282.39 R	0.00	212.32



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0.00									
1.200	2922.9	604.9	492.55 R	0.00	370.34	0.00	492.55 R	0.00	370.34
0.00									
1.300	3846.1	794.0	646.05 R	0.00	485.75	0.00	646.05 R	0.00	485.75
0.00									
1.400	4400.1	907.4	732.74 R	0.00	550.93	0.00	732.74 R	0.00	550.93
0.00									
1.500	4584.7	945.2	752.83 R	0.00	566.04	0.00	752.83 R	0.00	566.04
0.00									
1.600	4400.1	907.4	732.74 R	0.00	550.93	0.00	732.74 R	0.00	550.93
0.00									
1.700	3846.1	794.0	646.05 R	0.00	485.75	0.00	646.05 R	0.00	485.75
0.00									
1.800	2922.9	604.9	492.55 R	0.00	370.34	0.00	492.55 R	0.00	370.34
0.00									
1.900	1636.6	340.3	282.39 R	0.00	212.32	0.00	282.39 R	0.00	212.32
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1332

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER

Rating Live Load:

Rating Type: 3S2

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER

Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	bottom fiber -bend		

1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	121.84	999.00	36.22	999.00	0.00	999.0 (2-Lane)
1.100	121.84	999.00	36.22	999.00	0.00	999.0 (1-Lane)
1.200	66.22	999.00	23.73	999.00	0.00	949.3 (2-Lane)
1.200	66.22	999.00	23.73	999.00	0.00	949.3 (1-Lane)
1.300	43.35	999.00	15.94	999.00	0.00	637.5 (2-Lane)
1.300	43.35	999.00	15.94	999.00	0.00	637.5 (1-Lane)
1.400	34.44	999.00	12.91	999.00	0.00	516.4 (2-Lane)
1.400	34.44	999.00	12.91	999.00	0.00	516.4 (1-Lane)
1.500	32.30	999.00	12.20	999.00	0.00	487.8 (2-Lane)
1.500	32.30	999.00	12.20	999.00	0.00	487.8 (1-Lane)
1.600	34.44	999.00	12.91	999.00	0.00	516.4 (2-Lane)
1.600	34.44	999.00	12.91	999.00	0.00	516.4 (1-Lane)
1.700	43.35	999.00	15.94	999.00	0.00	637.5 (2-Lane)
1.700	43.35	999.00	15.94	999.00	0.00	637.5 (1-Lane)
1.800	66.22	999.00	23.73	999.00	0.00	949.3 (2-Lane)
1.800	66.22	999.00	23.73	999.00	0.00	949.3 (1-Lane)
1.900	121.84	999.00	36.22	999.00	0.00	999.0 (2-Lane)
1.900	121.84	999.00	36.22	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Lane	Live Load w/impact Truck	Live Load w/o Lane
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	2045.8	425.3	366.00 R	0.00	275.19	0.00
0.00						
1.200	3653.6	756.1	637.54 R	0.00	479.35	0.00
0.00						
1.300	4807.7	992.4	820.70 R	0.00	617.07	0.00
0.00						
1.400	5500.1	1134.2	930.73 R	0.00	699.79	0.00
0.00						
1.500	5730.9	1181.5	967.60 R	0.00	727.52	0.00
0.00						
1.600	5500.1	1134.2	930.73 R	0.00	699.79	0.00
0.00						
1.700	4807.7	992.4	820.70 R	0.00	617.07	0.00
0.00						
1.800	3653.6	756.1	637.54 R	0.00	479.35	0.00
0.00						
1.900	2045.8	425.3	366.00 R	0.00	275.19	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00

0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: 3-3

Span	Positive Top	Moment Bending Bott.	Resistance Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Available Resistance for LL+I Negative Bending Bott.	Available Resistance for LL+I Positive Bending Top	Available Resistance for LL+I Negative Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12562.5	-12562.5B	13420.3	13420.3	-18362.6	-18362.6
1.400	19220.4C	19220.4	-12562.5	-12562.5B	12586.1	12586.1	-19196.8	-19196.8
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12562.5	-12562.5B	12586.1	12586.1	-19196.8	-19196.8
1.700	19220.4C	19220.4	-12562.5	-12562.5B	13420.3	13420.3	-18362.6	-18362.6
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: 3-3

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	36.75	999.00	36.75	999.00	0.00	999.0 (2-Lane)
1.100	36.75	999.00	36.75	999.00	0.00	999.0 (1-Lane)
1.200	23.23	999.00	23.23	999.00	0.00	929.2 (2-Lane)
1.200	23.23	999.00	23.23	999.00	0.00	929.2 (1-Lane)
1.300	16.35	999.00	16.35	999.00	0.00	654.1 (2-Lane)
1.300	16.35	999.00	16.35	999.00	0.00	654.1 (1-Lane)
1.400	13.52	999.00	13.52	999.00	0.00	540.9 (2-Lane)
1.400	13.52	999.00	13.52	999.00	0.00	540.9 (1-Lane)
1.500	12.72	999.00	12.72	999.00	0.00	508.8 (2-Lane)
1.500	12.72	999.00	12.72	999.00	0.00	508.8 (1-Lane)
1.600	13.52	999.00	13.52	999.00	0.00	540.9 (2-Lane)
1.600	13.52	999.00	13.52	999.00	0.00	540.9 (1-Lane)

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1.700	16.35	999.00	16.35	999.00	0.00	654.1 (2-Lane)
1.700	16.35	999.00	16.35	999.00	0.00	654.1 (1-Lane)
1.800	23.23	999.00	23.23	999.00	0.00	929.2 (2-Lane)
1.800	23.23	999.00	23.23	999.00	0.00	929.2 (1-Lane)
1.900	36.75	999.00	36.75	999.00	0.00	999.0 (2-Lane)
1.900	36.75	999.00	36.75	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: 3-3

Gamma	DC	DW	(2-Lane)				(1-Lane)		
	1.25	1.25	LL	LL	LL	LL	LL		
			1.35	1.35	1.35	1.35	1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	141.4	29.5	27.98	0.00	21.04	0.00	27.98	0.00	21.04
0.00									
1.100	114.2	23.6	24.69	0.00	18.57	0.00	24.69	0.00	18.57
0.00									
1.200	86.5	17.7	21.40	0.00	16.09	0.00	21.40	0.00	16.09
0.00									
1.300	57.7	11.8	18.12	0.00	13.62	0.00	18.12	0.00	13.62
0.00									
1.400	28.8	5.9	14.83	0.00	11.15	0.00	14.83	0.00	11.15
0.00									
1.500	0.0	0.0	11.54	0.00	8.67	0.00	11.54	0.00	8.67
0.00									
1.600	-28.8	-5.9	-14.83	0.00	-11.15	0.00	-14.83	0.00	-11.15
0.00									
1.700	-57.7	-11.8	-18.12	0.00	-13.62	0.00	-18.12	0.00	-13.62
0.00									
1.800	-86.5	-17.7	-21.40	0.00	-16.09	0.00	-21.40	0.00	-16.09
0.00									
1.900	-114.2	-23.6	-24.69	0.00	-18.57	0.00	-24.69	0.00	-18.57
0.00									
2.000	-141.4	-29.5	-27.98	0.00	-21.04	0.00	-27.98	0.00	-21.04
0.00									

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: 3-3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	29.04	0.00	999.0 (2-Lane)
1.000	999.00	29.04	0.00	999.0 (1-Lane)
1.100	988.03	29.15	0.00	999.0 (2-Lane)
1.100	988.03	29.15	0.00	999.0 (1-Lane)
1.200	238.36	19.80	0.00	792.1 (2-Lane)
1.200	238.36	19.80	0.00	792.1 (1-Lane)
1.300	116.21	25.32	0.00	999.0 (2-Lane)
1.300	116.21	25.32	0.00	999.0 (1-Lane)
1.400	68.24	33.28	0.00	999.0 (2-Lane)
1.400	68.24	33.28	0.00	999.0 (1-Lane)
1.500	45.77	45.77	0.00	999.0 (2-Lane)
1.500	45.77	45.77	0.00	999.0 (1-Lane)
1.600	33.28	68.24	0.00	999.0 (2-Lane)
1.600	33.28	68.24	0.00	999.0 (1-Lane)
1.700	25.32	116.21	0.00	999.0 (2-Lane)
1.700	25.32	116.21	0.00	999.0 (1-Lane)
1.800	19.80	238.36	0.00	792.1 (2-Lane)
1.800	19.80	238.36	0.00	792.1 (1-Lane)
1.900	29.15	988.03	0.00	999.0 (2-Lane)
1.900	29.15	988.03	0.00	999.0 (1-Lane)
2.000	29.04	999.00	0.00	999.0 (2-Lane)

2.000 29.04 999.00 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
0.00 999.0 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPE  
Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00				(1-Lane) LL 1.00		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.100 0.00	1636.6	340.3	271.11 R	0.00	203.84	0.00	271.11 R	0.00	203.84
1.200 0.00	2922.9	604.9	472.25 R	0.00	355.07	0.00	472.25 R	0.00	355.07
1.300 0.00	3846.1	794.0	607.93 R	0.00	457.09	0.00	607.93 R	0.00	457.09
1.400 0.00	4400.1	907.4	689.43 R	0.00	518.37	0.00	689.43 R	0.00	518.37
1.500 0.00	4584.7	945.2	716.74 R	0.00	538.90	0.00	716.74 R	0.00	538.90
1.600 0.00	4400.1	907.4	689.43 R	0.00	518.37	0.00	689.43 R	0.00	518.37
1.700 0.00	3846.1	794.0	607.93 R	0.00	457.09	0.00	607.93 R	0.00	457.09
1.800 0.00	2922.9	604.9	472.25 R	0.00	355.07	0.00	472.25 R	0.00	355.07
1.900 0.00	1636.6	340.3	271.11 R	0.00	203.84	0.00	271.11 R	0.00	203.84
2.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER  
Rating Live Load:

Rating Type: 3-3  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6

1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER

Rating Live Load: 3-3

## Service

Span	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	126.91	999.00	37.73	999.00	0.00	999.0 (2-Lane)
1.100	126.91	999.00	37.73	999.00	0.00	999.0 (1-Lane)
1.200	69.07	999.00	24.75	999.00	0.00	999.0 (2-Lane)
1.200	69.07	999.00	24.75	999.00	0.00	999.0 (1-Lane)
1.300	46.07	999.00	16.94	999.00	0.00	677.5 (2-Lane)
1.300	46.07	999.00	16.94	999.00	0.00	677.5 (1-Lane)
1.400	36.61	999.00	13.72	999.00	0.00	548.9 (2-Lane)
1.400	36.61	999.00	13.72	999.00	0.00	548.9 (1-Lane)
1.500	33.92	999.00	12.81	999.00	0.00	512.4 (2-Lane)
1.500	33.92	999.00	12.81	999.00	0.00	512.4 (1-Lane)
1.600	36.61	999.00	13.72	999.00	0.00	548.9 (2-Lane)
1.600	36.61	999.00	13.72	999.00	0.00	548.9 (1-Lane)
1.700	46.07	999.00	16.94	999.00	0.00	677.5 (2-Lane)
1.700	46.07	999.00	16.94	999.00	0.00	677.5 (1-Lane)
1.800	69.07	999.00	24.75	999.00	0.00	999.0 (2-Lane)
1.800	69.07	999.00	24.75	999.00	0.00	999.0 (1-Lane)
1.900	126.91	999.00	37.73	999.00	0.00	999.0 (2-Lane)
1.900	126.91	999.00	37.73	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER

Rating Live Load: SU4

(2-Lane)

(1-Lane)

Gamma	DC 1.25	DW 1.25	LL 1.35				LL 1.35			
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.100	2045.8	425.3	282.93 R	0.00	212.73	0.00	282.93 R	0.00	212.73	0.00
0.00										
1.200	3653.6	756.1	500.04 R	0.00	375.97	0.00	500.04 R	0.00	375.97	0.00
0.00										
1.300	4807.7	992.4	651.34 R	0.00	489.73	0.00	651.34 R	0.00	489.73	0.00
0.00										
1.400	5500.1	1134.2	743.82 R	0.00	559.26	0.00	743.82 R	0.00	559.26	0.00
0.00										
1.500	5730.9	1181.5	771.70 R	0.00	580.23	0.00	771.70 R	0.00	580.23	0.00
0.00										
1.600	5500.1	1134.2	743.82 R	0.00	559.26	0.00	743.82 R	0.00	559.26	0.00
0.00										
1.700	4807.7	992.4	651.34 R	0.00	489.73	0.00	651.34 R	0.00	489.73	0.00
0.00										
1.800	3653.6	756.1	500.04 R	0.00	375.97	0.00	500.04 R	0.00	375.97	0.00
0.00										
1.900	2045.8	425.3	282.93 R	0.00	212.73	0.00	282.93 R	0.00	212.73	0.00
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										

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#### STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU4

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12566.9	-12566.9B	13420.3	13420.3	-18367.0	-18367.0
1.400	19220.4C	19220.4	-12566.9	-12566.9B	12586.1	12586.1	-19201.3	-19201.3
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12566.9	-12566.9B	12586.1	12586.1	-19201.3	-19201.3
1.700	19220.4C	19220.4	-12566.9	-12566.9B	13420.3	13420.3	-18367.0	-18367.0
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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#### MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU4



Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	47.54	999.00	47.54	999.00	0.00	999.0 (2-Lane)
1.100	47.54	999.00	47.54	999.00	0.00	999.0 (1-Lane)
1.200	29.62	999.00	29.62	999.00	0.00	799.7 (2-Lane)
1.200	29.62	999.00	29.62	999.00	0.00	799.7 (1-Lane)
1.300	20.60	999.00	20.60	999.00	0.00	556.3 (2-Lane)
1.300	20.60	999.00	20.60	999.00	0.00	556.3 (1-Lane)
1.400	16.92	999.00	16.92	999.00	0.00	456.9 (2-Lane)
1.400	16.92	999.00	16.92	999.00	0.00	456.9 (1-Lane)
1.500	15.95	999.00	15.95	999.00	0.00	430.6 (2-Lane)
1.500	15.95	999.00	15.95	999.00	0.00	430.6 (1-Lane)
1.600	16.92	999.00	16.92	999.00	0.00	456.9 (2-Lane)
1.600	16.92	999.00	16.92	999.00	0.00	456.9 (1-Lane)
1.700	20.60	999.00	20.60	999.00	0.00	556.3 (2-Lane)
1.700	20.60	999.00	20.60	999.00	0.00	556.3 (1-Lane)
1.800	29.62	999.00	29.62	999.00	0.00	799.7 (2-Lane)
1.800	29.62	999.00	29.62	999.00	0.00	799.7 (1-Lane)
1.900	47.54	999.00	47.54	999.00	0.00	999.0 (2-Lane)
1.900	47.54	999.00	47.54	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU4

Gamma	DC	DW	(2-Lane)				(1-Lane)		
	1.25	1.25	LL	LL	LL	LL	LL	LL	
			1.35	1.35	1.35	1.35	1.35	1.35	
Span	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
w/o impact		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	141.4	29.5	21.31	0.00	16.02	0.00	21.31	0.00	16.02
0.00									
1.100	114.2	23.6	19.09	0.00	14.35	0.00	19.09	0.00	14.35
0.00									
1.200	86.5	17.7	16.87	0.00	12.68	0.00	16.87	0.00	12.68
0.00									
1.300	57.7	11.8	14.65	0.00	11.01	0.00	14.65	0.00	11.01
0.00									
1.400	28.8	5.9	12.43	0.00	9.34	0.00	12.43	0.00	9.34
0.00									
1.500	0.0	0.0	10.21	0.00	7.68	0.00	10.21	0.00	7.68

0.00									
1.600	-28.8	-5.9	-12.43	0.00	-9.34	0.00	-12.43	0.00	-9.34
0.00									
1.700	-57.7	-11.8	-14.65	0.00	-11.01	0.00	-14.65	0.00	-11.01
0.00									
1.800	-86.5	-17.7	-16.87	0.00	-12.68	0.00	-16.87	0.00	-12.68
0.00									
1.900	-114.2	-23.6	-19.09	0.00	-14.35	0.00	-19.09	0.00	-14.35
0.00									
2.000	-141.4	-29.5	-21.31	0.00	-16.02	0.00	-21.31	0.00	-16.02
0.00									

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for (-)	Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU4

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	38.13	0.00	999.0 (2-Lane)

1.000	999.00	38.13	0.00	999.0 (1-Lane)
1.100	717.19	37.71	0.00	999.0 (2-Lane)
1.100	717.19	37.71	0.00	999.0 (1-Lane)
1.200	178.26	25.13	0.00	678.4 (2-Lane)
1.200	178.26	25.13	0.00	678.4 (1-Lane)
1.300	103.61	31.31	0.00	845.3 (2-Lane)
1.300	103.61	31.31	0.00	845.3 (1-Lane)
1.400	70.46	39.69	0.00	999.0 (2-Lane)
1.400	70.46	39.69	0.00	999.0 (1-Lane)
1.500	51.73	51.73	0.00	999.0 (2-Lane)
1.500	51.73	51.73	0.00	999.0 (1-Lane)
1.600	39.69	70.46	0.00	999.0 (2-Lane)
1.600	39.69	70.46	0.00	999.0 (1-Lane)
1.700	31.31	103.61	0.00	845.3 (2-Lane)
1.700	31.31	103.61	0.00	845.3 (1-Lane)
1.800	25.13	178.26	0.00	678.4 (2-Lane)
1.800	25.13	178.26	0.00	678.4 (1-Lane)
1.900	37.71	717.19	0.00	999.0 (2-Lane)
1.900	37.71	717.19	0.00	999.0 (1-Lane)
2.000	38.13	999.00	0.00	999.0 (2-Lane)
2.000	38.13	999.00	0.00	999.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPE  
Rating Live Load: SU4

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00		(1-Lane) LL 1.00					
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o	
Lane			Truck	Lane	Truck	Lane	Truck	Lane	Truck	
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	0.00
0.00										
1.100	1636.6	340.3	209.58 R	0.00	157.58	0.00	209.58 R	0.00	157.58	
0.00										
1.200	2922.9	604.9	370.40 R	0.00	278.50	0.00	370.40 R	0.00	278.50	
0.00										
1.300	3846.1	794.0	482.47 R	0.00	362.76	0.00	482.47 R	0.00	362.76	
0.00										
1.400	4400.1	907.4	550.98 R	0.00	414.27	0.00	550.98 R	0.00	414.27	
0.00										
1.500	4584.7	945.2	571.63 R	0.00	429.80	0.00	571.63 R	0.00	429.80	
0.00										
1.600	4400.1	907.4	550.98 R	0.00	414.27	0.00	550.98 R	0.00	414.27	
0.00										
1.700	3846.1	794.0	482.47 R	0.00	362.76	0.00	482.47 R	0.00	362.76	
0.00										
1.800	2922.9	604.9	370.40 R	0.00	278.50	0.00	370.40 R	0.00	278.50	
0.00										
1.900	1636.6	340.3	209.58 R	0.00	157.58	0.00	209.58 R	0.00	157.58	
0.00										
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00	
0.00										

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU4  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER  
Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	164.17	999.00	48.80	999.00	0.00	999.0 (2-Lane)
1.100	164.17	999.00	48.80	999.00	0.00	999.0 (1-Lane)
1.200	88.06	999.00	31.56	999.00	0.00	852.1 (2-Lane)
1.200	88.06	999.00	31.56	999.00	0.00	852.1 (1-Lane)
1.300	58.04	999.00	21.34	999.00	0.00	576.2 (2-Lane)
1.300	58.04	999.00	21.34	999.00	0.00	576.2 (1-Lane)
1.400	45.81	999.00	17.17	999.00	0.00	463.6 (2-Lane)
1.400	45.81	999.00	17.17	999.00	0.00	463.6 (1-Lane)
1.500	42.54	999.00	16.06	999.00	0.00	433.7 (2-Lane)
1.500	42.54	999.00	16.06	999.00	0.00	433.7 (1-Lane)
1.600	45.81	999.00	17.17	999.00	0.00	463.6 (2-Lane)

1.600	45.81	999.00	17.17	999.00	0.00	463.6 (1-Lane)
1.700	58.04	999.00	21.34	999.00	0.00	576.2 (2-Lane)
1.700	58.04	999.00	21.34	999.00	0.00	576.2 (1-Lane)
1.800	88.06	999.00	31.56	999.00	0.00	852.1 (2-Lane)
1.800	88.06	999.00	31.56	999.00	0.00	852.1 (1-Lane)
1.900	164.17	999.00	48.80	999.00	0.00	999.0 (2-Lane)
1.900	164.17	999.00	48.80	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU5

Gamma	DC	DW	(2-Lane)				(1-Lane)		
	1.25	1.25	LL	LL	LL	LL	LL	LL	
			1.35	1.35	1.35	1.35	1.35	1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
			Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.100	2045.8	425.3	321.33 R	0.00	241.60	0.00	321.33 R	0.00	241.60
0.00									
1.200	3653.6	756.1	567.08 R	0.00	426.38	0.00	567.08 R	0.00	426.38
0.00									
1.300	4807.7	992.4	739.71 R	0.00	556.17	0.00	739.71 R	0.00	556.17
0.00									
1.400	5500.1	1134.2	843.77 R	0.00	634.42	0.00	843.77 R	0.00	634.42
0.00									
1.500	5730.9	1181.5	872.27 R	0.00	655.84	0.00	872.27 R	0.00	655.84
0.00									
1.600	5500.1	1134.2	843.77 R	0.00	634.42	0.00	843.77 R	0.00	634.42
0.00									
1.700	4807.7	992.4	739.71 R	0.00	556.17	0.00	739.71 R	0.00	556.17
0.00									
1.800	3653.6	756.1	567.08 R	0.00	426.38	0.00	567.08 R	0.00	426.38
0.00									
1.900	2045.8	425.3	321.33 R	0.00	241.60	0.00	321.33 R	0.00	241.60
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU5

Span Moment Resistance Available Resistance for LL+I

	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12565.9	-12565.9B	13420.3	13420.3	-18366.0	-18366.0
1.400	19220.4C	19220.4	-12565.9	-12565.9B	12586.1	12586.1	-19200.2	-19200.2
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12565.9	-12565.9B	12586.1	12586.1	-19200.2	-19200.2
1.700	19220.4C	19220.4	-12565.9	-12565.9B	13420.3	13420.3	-18366.0	-18366.0
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor	bottom +bend		
1.000	999.00	999.00		999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	0.00	999.0 (1-Lane)
1.100	41.86	999.00		41.86	0.00	999.0 (2-Lane)
1.100	41.86	999.00		41.86	0.00	999.0 (1-Lane)
1.200	26.12	999.00		26.12	0.00	809.6 (2-Lane)
1.200	26.12	999.00		26.12	0.00	809.6 (1-Lane)
1.300	18.14	999.00		18.14	0.00	562.4 (2-Lane)
1.300	18.14	999.00		18.14	0.00	562.4 (1-Lane)
1.400	14.92	999.00		14.92	0.00	462.4 (2-Lane)
1.400	14.92	999.00		14.92	0.00	462.4 (1-Lane)
1.500	14.11	999.00		14.11	0.00	437.4 (2-Lane)
1.500	14.11	999.00		14.11	0.00	437.4 (1-Lane)
1.600	14.92	999.00		14.92	0.00	462.4 (2-Lane)
1.600	14.92	999.00		14.92	0.00	462.4 (1-Lane)
1.700	18.14	999.00		18.14	0.00	562.4 (2-Lane)
1.700	18.14	999.00		18.14	0.00	562.4 (1-Lane)
1.800	26.12	999.00		26.12	0.00	809.6 (2-Lane)
1.800	26.12	999.00		26.12	0.00	809.6 (1-Lane)
1.900	41.86	999.00		41.86	0.00	999.0 (2-Lane)
1.900	41.86	999.00		41.86	0.00	999.0 (1-Lane)
2.000	999.00	999.00		999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU5

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35				(1-Lane) LL 1.35		
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	141.4	29.5	24.23	0.00	18.22	0.00	24.23	0.00	18.22
1.100 0.00	114.2	23.6	21.68	0.00	16.30	0.00	21.68	0.00	16.30
1.200 0.00	86.5	17.7	19.13	0.00	14.38	0.00	19.13	0.00	14.38
1.300 0.00	57.7	11.8	16.58	0.00	12.47	0.00	16.58	0.00	12.47
1.400 0.00	28.8	5.9	14.03	0.00	10.55	0.00	14.03	0.00	10.55
1.500 0.00	0.0	0.0	11.48	0.00	8.63	0.00	11.48	0.00	8.63
1.600 0.00	-28.8	-5.9	-14.03	0.00	-10.55	0.00	-14.03	0.00	-10.55
1.700 0.00	-57.7	-11.8	-16.58	0.00	-12.47	0.00	-16.58	0.00	-12.47
1.800 0.00	-86.5	-17.7	-19.13	0.00	-14.38	0.00	-19.13	0.00	-14.38
1.900 0.00	-114.2	-23.6	-21.68	0.00	-16.30	0.00	-21.68	0.00	-16.30
2.000 0.00	-141.4	-29.5	-24.23	0.00	-18.22	0.00	-24.23	0.00	-18.22

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU5

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)

1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1355

## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER

Rating Live Load: SU5

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	33.54	0.00	999.0 (2-Lane)
1.000	999.00	33.54	0.00	999.0 (1-Lane)
1.100	677.01	33.21	0.00	999.0 (2-Lane)
1.100	677.01	33.21	0.00	999.0 (1-Lane)
1.200	164.87	22.16	0.00	686.8 (2-Lane)
1.200	164.87	22.16	0.00	686.8 (1-Lane)
1.300	93.60	27.66	0.00	857.4 (2-Lane)
1.300	93.60	27.66	0.00	857.4 (1-Lane)
1.400	63.00	35.16	0.00	999.0 (2-Lane)
1.400	63.00	35.16	0.00	999.0 (1-Lane)
1.500	45.99	45.99	0.00	999.0 (2-Lane)
1.500	45.99	45.99	0.00	999.0 (1-Lane)
1.600	35.16	63.00	0.00	999.0 (2-Lane)
1.600	35.16	63.00	0.00	999.0 (1-Lane)
1.700	27.66	93.60	0.00	857.4 (2-Lane)
1.700	27.66	93.60	0.00	857.4 (1-Lane)
1.800	22.16	164.87	0.00	686.8 (2-Lane)
1.800	22.16	164.87	0.00	686.8 (1-Lane)
1.900	33.21	677.01	0.00	999.0 (2-Lane)
1.900	33.21	677.01	0.00	999.0 (1-Lane)
2.000	33.54	999.00	0.00	999.0 (2-Lane)
2.000	33.54	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1356

## SERVICE MOMENT REPORT

Structure I. D. 777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPE

Rating Live Load: SU5

Gamma	DC	DW	(2-Lane) LL	(1-Lane) LL
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1.00

1.00

1.00

Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.100	1636.6	340.3	238.02 R	0.00	178.96	0.00	238.02 R	0.00	178.96
0.00									
1.200	2922.9	604.9	420.06 R	0.00	315.84	0.00	420.06 R	0.00	315.84
0.00									
1.300	3846.1	794.0	547.93 R	0.00	411.98	0.00	547.93 R	0.00	411.98
0.00									
1.400	4400.1	907.4	625.02 R	0.00	469.94	0.00	625.02 R	0.00	469.94
0.00									
1.500	4584.7	945.2	646.13 R	0.00	485.81	0.00	646.13 R	0.00	485.81
0.00									
1.600	4400.1	907.4	625.02 R	0.00	469.94	0.00	625.02 R	0.00	469.94
0.00									
1.700	3846.1	794.0	547.93 R	0.00	411.98	0.00	547.93 R	0.00	411.98
0.00									
1.800	2922.9	604.9	420.06 R	0.00	315.84	0.00	420.06 R	0.00	315.84
0.00									
1.900	1636.6	340.3	238.02 R	0.00	178.96	0.00	238.02 R	0.00	178.96
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1356  
SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER  
Rating Live Load:Rating Type: SU5  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1357  
SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER  
Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	144.55	999.00	42.97	999.00	0.00	999.0 (2-Lane)
1.100	144.55	999.00	42.97	999.00	0.00	999.0 (1-Lane)
1.200	77.65	999.00	27.83	999.00	0.00	862.7 (2-Lane)
1.200	77.65	999.00	27.83	999.00	0.00	862.7 (1-Lane)
1.300	51.11	999.00	18.79	999.00	0.00	582.5 (2-Lane)
1.300	51.11	999.00	18.79	999.00	0.00	582.5 (1-Lane)
1.400	40.38	999.00	15.14	999.00	0.00	469.2 (2-Lane)
1.400	40.38	999.00	15.14	999.00	0.00	469.2 (1-Lane)
1.500	37.63	999.00	14.21	999.00	0.00	440.5 (2-Lane)
1.500	37.63	999.00	14.21	999.00	0.00	440.5 (1-Lane)
1.600	40.38	999.00	15.14	999.00	0.00	469.2 (2-Lane)
1.600	40.38	999.00	15.14	999.00	0.00	469.2 (1-Lane)
1.700	51.11	999.00	18.79	999.00	0.00	582.5 (2-Lane)
1.700	51.11	999.00	18.79	999.00	0.00	582.5 (1-Lane)
1.800	77.65	999.00	27.83	999.00	0.00	862.7 (2-Lane)
1.800	77.65	999.00	27.83	999.00	0.00	862.7 (1-Lane)
1.900	144.55	999.00	42.97	999.00	0.00	999.0 (2-Lane)
1.900	144.55	999.00	42.97	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1358

## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU6

Gamma	DC		(2-Lane)				(1-Lane)		
	1.25	DW 1.25	LL 1.35		LL 1.35				
Span impact Lane	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.100	2045.8	425.3	353.52 R	0.00	265.80	0.00	353.52 R	0.00	265.80
0.00									
1.200	3653.6	756.1	631.31 R	0.00	474.67	0.00	631.31 R	0.00	474.67
0.00									
1.300	4807.7	992.4	825.99 R	0.00	621.04	0.00	825.99 R	0.00	621.04
0.00									
1.400	5500.1	1134.2	940.22 R	0.00	706.93	0.00	940.22 R	0.00	706.93
0.00									

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.500	5730.9	1181.5	976.07 R	0.00	733.88	0.00	976.07 R	0.00	733.88
0.00									
1.600	5500.1	1134.2	940.22 R	0.00	706.93	0.00	940.22 R	0.00	706.93
0.00									
1.700	4807.7	992.4	825.99 R	0.00	621.04	0.00	825.99 R	0.00	621.04
0.00									
1.800	3653.6	756.1	631.31 R	0.00	474.67	0.00	631.31 R	0.00	474.67
0.00									
1.900	2045.8	425.3	353.52 R	0.00	265.80	0.00	353.52 R	0.00	265.80
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1359

STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU6

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12565.3	-12565.3B	13420.3	13420.3	-18365.4	-18365.4
1.400	19220.4C	19220.4	-12565.3	-12565.3B	12586.1	12586.1	-19199.7	-19199.7
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12565.3	-12565.3B	12586.1	12586.1	-19199.7	-19199.7
1.700	19220.4C	19220.4	-12565.3	-12565.3B	13420.3	13420.3	-18365.4	-18365.4
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1360

MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	38.05	999.00	38.05	999.00	0.00	999.0 (2-Lane)
1.100	38.05	999.00	38.05	999.00	0.00	999.0 (1-Lane)
1.200	23.46	999.00	23.46	999.00	0.00	815.2 (2-Lane)
1.200	23.46	999.00	23.46	999.00	0.00	815.2 (1-Lane)

1.300	16.25	999.00	16.25	999.00	0.00	564.6 (2-Lane)
1.300	16.25	999.00	16.25	999.00	0.00	564.6 (1-Lane)
1.400	13.39	999.00	13.39	999.00	0.00	465.2 (2-Lane)
1.400	13.39	999.00	13.39	999.00	0.00	465.2 (1-Lane)
1.500	12.61	999.00	12.61	999.00	0.00	438.2 (2-Lane)
1.500	12.61	999.00	12.61	999.00	0.00	438.2 (1-Lane)
1.600	13.39	999.00	13.39	999.00	0.00	465.2 (2-Lane)
1.600	13.39	999.00	13.39	999.00	0.00	465.2 (1-Lane)
1.700	16.25	999.00	16.25	999.00	0.00	564.6 (2-Lane)
1.700	16.25	999.00	16.25	999.00	0.00	564.6 (1-Lane)
1.800	23.46	999.00	23.46	999.00	0.00	815.2 (2-Lane)
1.800	23.46	999.00	23.46	999.00	0.00	815.2 (1-Lane)
1.900	38.05	999.00	38.05	999.00	0.00	999.0 (2-Lane)
1.900	38.05	999.00	38.05	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1361

## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU6

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	141.4	29.5	26.71	0.00	20.08	0.00
0.00						
1.100	114.2	23.6	23.85	0.00	17.93	0.00
0.00						
1.200	86.5	17.7	20.99	0.00	15.78	0.00
0.00						
1.300	57.7	11.8	18.14	0.00	13.64	0.00
0.00						
1.400	28.8	5.9	15.28	0.00	11.49	0.00
0.00						
1.500	0.0	0.0	12.42	0.00	9.34	0.00
0.00						
1.600	-28.8	-5.9	-15.28	0.00	-11.49	0.00
0.00						
1.700	-57.7	-11.8	-18.14	0.00	-13.64	0.00
0.00						
1.800	-86.5	-17.7	-20.99	0.00	-15.78	0.00
0.00						
1.900	-114.2	-23.6	-23.85	0.00	-17.93	0.00
0.00						
2.000	-141.4	-29.5	-26.71	0.00	-20.08	0.00
0.00						

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1362

## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
7777777\_20120905cy01\_01of01

Member I. D. G07  
Rating Type: I-OPER  
Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1363  
STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07  
Rating Type: I-OPER  
Rating Live Load: SU6

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	30.42	0.00	999.0 (2-Lane)
1.000	999.00	30.42	0.00	999.0 (1-Lane)
1.100	774.28	30.18	0.00	999.0 (2-Lane)
1.100	774.28	30.18	0.00	999.0 (1-Lane)
1.200	164.30	20.19	0.00	701.6 (2-Lane)
1.200	164.30	20.19	0.00	701.6 (1-Lane)
1.300	89.11	25.28	0.00	878.7 (2-Lane)
1.300	89.11	25.28	0.00	878.7 (1-Lane)
1.400	58.85	32.29	0.00	999.0 (2-Lane)
1.400	58.85	32.29	0.00	999.0 (1-Lane)
1.500	42.51	42.51	0.00	999.0 (2-Lane)
1.500	42.51	42.51	0.00	999.0 (1-Lane)
1.600	32.29	58.85	0.00	999.0 (2-Lane)
1.600	32.29	58.85	0.00	999.0 (1-Lane)

1.700	25.28	89.11	0.00	878.7 (2-Lane)
1.700	25.28	89.11	0.00	878.7 (1-Lane)
1.800	20.19	164.30	0.00	701.6 (2-Lane)
1.800	20.19	164.30	0.00	701.6 (1-Lane)
1.900	30.18	774.28	0.00	999.0 (2-Lane)
1.900	30.18	774.28	0.00	999.0 (1-Lane)
2.000	30.42	999.00	0.00	999.0 (2-Lane)
2.000	30.42	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1364

## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPE  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00			(1-Lane) LL 1.00			
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Lane	Live Load w/o impact Truck	Lane	Live Load w/impact Truck	Lane	Live Load w/o Truck
Lane									
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									
1.100	1636.6	340.3	261.86 R	0.00	196.89	0.00	261.86 R	0.00	196.89
0.00									
1.200	2922.9	604.9	467.63 R	0.00	351.60	0.00	467.63 R	0.00	351.60
0.00									
1.300	3846.1	794.0	611.84 R	0.00	460.03	0.00	611.84 R	0.00	460.03
0.00									
1.400	4400.1	907.4	696.46 R	0.00	523.65	0.00	696.46 R	0.00	523.65
0.00									
1.500	4584.7	945.2	723.01 R	0.00	543.62	0.00	723.01 R	0.00	543.62
0.00									
1.600	4400.1	907.4	696.46 R	0.00	523.65	0.00	696.46 R	0.00	523.65
0.00									
1.700	3846.1	794.0	611.84 R	0.00	460.03	0.00	611.84 R	0.00	460.03
0.00									
1.800	2922.9	604.9	467.63 R	0.00	351.60	0.00	467.63 R	0.00	351.60
0.00									
1.900	1636.6	340.3	261.86 R	0.00	196.89	0.00	261.86 R	0.00	196.89
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU6  
Rating Live Load: Service Resistance

Available Resistance for LL+I

	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
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1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER  
 Rating Live Load: SU6

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	131.39	999.00	39.06	999.00	0.00	999.0 (2-Lane)
1.100	131.39	999.00	39.06	999.00	0.00	999.0 (1-Lane)
1.200	69.75	999.00	25.00	999.00	0.00	868.7 (2-Lane)
1.200	69.75	999.00	25.00	999.00	0.00	868.7 (1-Lane)
1.300	45.77	999.00	16.83	999.00	0.00	584.8 (2-Lane)
1.300	45.77	999.00	16.83	999.00	0.00	584.8 (1-Lane)
1.400	36.24	999.00	13.58	999.00	0.00	472.0 (2-Lane)
1.400	36.24	999.00	13.58	999.00	0.00	472.0 (1-Lane)
1.500	33.63	999.00	12.70	999.00	0.00	441.3 (2-Lane)
1.500	33.63	999.00	12.70	999.00	0.00	441.3 (1-Lane)
1.600	36.24	999.00	13.58	999.00	0.00	472.0 (2-Lane)
1.600	36.24	999.00	13.58	999.00	0.00	472.0 (1-Lane)
1.700	45.77	999.00	16.83	999.00	0.00	584.8 (2-Lane)
1.700	45.77	999.00	16.83	999.00	0.00	584.8 (1-Lane)
1.800	69.75	999.00	25.00	999.00	0.00	868.7 (2-Lane)
1.800	69.75	999.00	25.00	999.00	0.00	868.7 (1-Lane)
1.900	131.39	999.00	39.06	999.00	0.00	999.0 (2-Lane)
1.900	131.39	999.00	39.06	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU7

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.35		(1-Lane) LL 1.35	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						
1.100	2045.8	425.3	386.81 R	0.00	290.84	0.00
0.00						
1.200	3653.6	756.1	690.58 R	0.00	519.24	0.00
0.00						
1.300	4807.7	992.4	911.32 R	0.00	685.20	0.00
0.00						
1.400	5500.1	1134.2	1038.35 R	0.00	780.71	0.00
0.00						
1.500	5730.9	1181.5	1079.68 R	0.00	811.79	0.00
0.00						
1.600	5500.1	1134.2	1038.35 R	0.00	780.71	0.00
0.00						
1.700	4807.7	992.4	911.32 R	0.00	685.20	0.00
0.00						
1.800	3653.6	756.1	690.58 R	0.00	519.24	0.00
0.00						
1.900	2045.8	425.3	386.81 R	0.00	290.84	0.00
0.00						
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00
0.00						

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## STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU7

Span	Positive Top	Moment Resistance Bending Bott.	Negative Top	Bending Bott.	Available Resistance for LL+I Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12566.5	-12566.5B	13420.3	13420.3	-18366.6	-18366.6
1.400	19220.4C	19220.4	-12566.5	-12566.5B	12586.1	12586.1	-19200.8	-19200.8
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12566.5	-12566.5B	12586.1	12586.1	-19200.8	-19200.8
1.700	19220.4C	19220.4	-12566.5	-12566.5B	13420.3	13420.3	-18366.6	-18366.6
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1368



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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	34.77	999.00	34.77	999.00	0.00	999.0 (2-Lane)
1.100	34.77	999.00	34.77	999.00	0.00	999.0 (1-Lane)
1.200	21.45	999.00	21.45	999.00	0.00	831.1 (2-Lane)
1.200	21.45	999.00	21.45	999.00	0.00	831.1 (1-Lane)
1.300	14.73	999.00	14.73	999.00	0.00	570.6 (2-Lane)
1.300	14.73	999.00	14.73	999.00	0.00	570.6 (1-Lane)
1.400	12.12	999.00	12.12	999.00	0.00	469.7 (2-Lane)
1.400	12.12	999.00	12.12	999.00	0.00	469.7 (1-Lane)
1.500	11.40	999.00	11.40	999.00	0.00	441.7 (2-Lane)
1.500	11.40	999.00	11.40	999.00	0.00	441.7 (1-Lane)
1.600	12.12	999.00	12.12	999.00	0.00	469.7 (2-Lane)
1.600	12.12	999.00	12.12	999.00	0.00	469.7 (1-Lane)
1.700	14.73	999.00	14.73	999.00	0.00	570.6 (2-Lane)
1.700	14.73	999.00	14.73	999.00	0.00	570.6 (1-Lane)
1.800	21.45	999.00	21.45	999.00	0.00	831.1 (2-Lane)
1.800	21.45	999.00	21.45	999.00	0.00	831.1 (1-Lane)
1.900	34.77	999.00	34.77	999.00	0.00	999.0 (2-Lane)
1.900	34.77	999.00	34.77	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU7

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	1.35	LL	1.35
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck

7777777_20120905cy01_01of01_FlexuralRpt.txt									
1.000	141.4	29.5	29.28	0.00	22.02	0.00	29.28	0.00	22.02
0.00									
1.100	114.2	23.6	26.10	0.00	19.62	0.00	26.10	0.00	19.62
0.00									
1.200	86.5	17.7	22.91	0.00	17.23	0.00	22.91	0.00	17.23
0.00									
1.300	57.7	11.8	19.72	0.00	14.83	0.00	19.72	0.00	14.83
0.00									
1.400	28.8	5.9	16.54	0.00	12.43	0.00	16.54	0.00	12.43
0.00									
1.500	0.0	0.0	13.35	0.00	10.04	0.00	13.35	0.00	10.04
0.00									
1.600	-28.8	-5.9	-16.54	0.00	-12.43	0.00	-16.54	0.00	-12.43
0.00									
1.700	-57.7	-11.8	-19.72	0.00	-14.83	0.00	-19.72	0.00	-14.83
0.00									
1.800	-86.5	-17.7	-22.91	0.00	-17.23	0.00	-22.91	0.00	-17.23
0.00									
1.900	-114.2	-23.6	-26.10	0.00	-19.62	0.00	-26.10	0.00	-19.62
0.00									
2.000	-141.4	-29.5	-29.28	0.00	-22.02	0.00	-29.28	0.00	-22.02
0.00									

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#### STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER  
Rating Live Load: SU7

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Available Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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#### STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-OPER

Rating Live Load: SU7

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	27.75	0.00	999.0 (2-Lane)
1.000	999.00	27.75	0.00	999.0 (1-Lane)
1.100	904.35	27.58	0.00	999.0 (2-Lane)
1.100	904.35	27.58	0.00	999.0 (1-Lane)
1.200	166.74	18.50	0.00	716.8 (2-Lane)
1.200	166.74	18.50	0.00	716.8 (1-Lane)
1.300	85.62	23.25	0.00	900.9 (2-Lane)
1.300	85.62	23.25	0.00	900.9 (1-Lane)
1.400	55.37	29.83	0.00	999.0 (2-Lane)
1.400	55.37	29.83	0.00	999.0 (1-Lane)
1.500	39.55	39.55	0.00	999.0 (2-Lane)
1.500	39.55	39.55	0.00	999.0 (1-Lane)
1.600	29.83	55.37	0.00	999.0 (2-Lane)
1.600	29.83	55.37	0.00	999.0 (1-Lane)
1.700	23.25	85.62	0.00	900.9 (2-Lane)
1.700	23.25	85.62	0.00	900.9 (1-Lane)
1.800	18.50	166.74	0.00	716.8 (2-Lane)
1.800	18.50	166.74	0.00	716.8 (1-Lane)
1.900	27.58	904.35	0.00	999.0 (2-Lane)
1.900	27.58	904.35	0.00	999.0 (1-Lane)
2.000	27.75	999.00	0.00	999.0 (2-Lane)
2.000	27.75	999.00	0.00	999.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPE

Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.00				(1-Lane) LL 1.00		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000 0.00	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
1.100 0.00	1636.6	340.3	286.53 R	0.00	215.43	0.00	286.53 R	0.00	215.43
1.200 0.00	2922.9	604.9	511.54 R	0.00	384.62	0.00	511.54 R	0.00	384.62
1.300 0.00	3846.1	794.0	675.05 R	0.00	507.56	0.00	675.05 R	0.00	507.56
1.400 0.00	4400.1	907.4	769.15 R	0.00	578.31	0.00	769.15 R	0.00	578.31
1.500	4584.7	945.2	799.76 R	0.00	601.32	0.00	799.76 R	0.00	601.32

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0.00									
1.600	4400.1	907.4	769.15 R	0.00	578.31	0.00	769.15 R	0.00	578.31
0.00									
1.700	3846.1	794.0	675.05 R	0.00	507.56	0.00	675.05 R	0.00	507.56
0.00									
1.800	2922.9	604.9	511.54 R	0.00	384.62	0.00	511.54 R	0.00	384.62
0.00									
1.900	1636.6	340.3	286.53 R	0.00	215.43	0.00	286.53 R	0.00	215.43
0.00									
2.000	0.0	0.0	0.00 R	0.00	0.00	0.00	0.00 R	0.00	0.00
0.00									

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER  
Rating Live Load:

Rating Type: SU7  
Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-OPER  
Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	120.08	999.00	35.70	999.00	0.00	999.0 (2-Lane)
1.100	120.08	999.00	35.70	999.00	0.00	999.0 (1-Lane)
1.200	63.76	999.00	22.85	999.00	0.00	885.5 (2-Lane)
1.200	63.76	999.00	22.85	999.00	0.00	885.5 (1-Lane)

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1.300	41.49	999.00	15.25	999.00	0.00	591.0 (2-Lane)
1.300	41.49	999.00	15.25	999.00	0.00	591.0 (1-Lane)
1.400	32.81	999.00	12.30	999.00	0.00	476.6 (2-Lane)
1.400	32.81	999.00	12.30	999.00	0.00	476.6 (1-Lane)
1.500	30.40	999.00	11.48	999.00	0.00	444.9 (2-Lane)
1.500	30.40	999.00	11.48	999.00	0.00	444.9 (1-Lane)
1.600	32.81	999.00	12.30	999.00	0.00	476.6 (2-Lane)
1.600	32.81	999.00	12.30	999.00	0.00	476.6 (1-Lane)
1.700	41.49	999.00	15.25	999.00	0.00	591.0 (2-Lane)
1.700	41.49	999.00	15.25	999.00	0.00	591.0 (1-Lane)
1.800	63.76	999.00	22.85	999.00	0.00	885.5 (2-Lane)
1.800	63.76	999.00	22.85	999.00	0.00	885.5 (1-Lane)
1.900	120.08	999.00	35.70	999.00	0.00	999.0 (2-Lane)
1.900	120.08	999.00	35.70	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load w/o Truck
Lane						
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.100	2045.8	425.3	280.37 R	210.80	280.37 R	210.80
1.200	3653.6	756.1	495.04 R	372.21	495.04 R	372.21
1.300	4807.7	992.4	644.02 R	484.22	644.02 R	484.22
1.400	5500.1	1134.2	732.22 R	550.54	732.22 R	550.54
1.500	5730.9	1181.5	758.01 R	569.93	758.01 R	569.93
1.600	5500.1	1134.2	732.22 R	550.54	732.22 R	550.54
1.700	4807.7	992.4	644.02 R	484.22	644.02 R	484.22
1.800	3653.6	756.1	495.04 R	372.21	495.04 R	372.21
1.900	2045.8	425.3	280.37 R	210.80	280.37 R	210.80
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: 3

Span Moment Resistance Available Resistance for LL+I

	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12564.9	-12564.9B	13420.3	13420.3	-18365.0	-18365.0
1.400	19220.4C	19220.4	-12564.9	-12564.9B	12586.1	12586.1	-19199.2	-19199.2
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12564.9	-12564.9B	12586.1	12586.1	-19199.2	-19199.2
1.700	19220.4C	19220.4	-12564.9	-12564.9B	13420.3	13420.3	-18365.0	-18365.0
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL

Rating Live Load: 3

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor	bottom +bend		
1.000	999.00	999.00		999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	0.00	999.0 (1-Lane)
1.100	47.97	999.00		47.97	0.00	999.0 (2-Lane)
1.100	47.97	999.00		47.97	0.00	999.0 (1-Lane)
1.200	29.92	999.00		29.92	0.00	748.0 (2-Lane)
1.200	29.92	999.00		29.92	0.00	748.0 (1-Lane)
1.300	20.84	999.00		20.84	0.00	521.0 (2-Lane)
1.300	20.84	999.00		20.84	0.00	521.0 (1-Lane)
1.400	17.19	999.00		17.19	0.00	429.7 (2-Lane)
1.400	17.19	999.00		17.19	0.00	429.7 (1-Lane)
1.500	16.24	999.00		16.24	0.00	405.9 (2-Lane)
1.500	16.24	999.00		16.24	0.00	405.9 (1-Lane)
1.600	17.19	999.00		17.19	0.00	429.7 (2-Lane)
1.600	17.19	999.00		17.19	0.00	429.7 (1-Lane)
1.700	20.84	999.00		20.84	0.00	521.0 (2-Lane)
1.700	20.84	999.00		20.84	0.00	521.0 (1-Lane)
1.800	29.92	999.00		29.92	0.00	748.0 (2-Lane)
1.800	29.92	999.00		29.92	0.00	748.0 (1-Lane)
1.900	47.97	999.00		47.97	0.00	999.0 (2-Lane)
1.900	47.97	999.00		47.97	0.00	999.0 (1-Lane)
2.000	999.00	999.00		999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: 3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load Truck
1.000	141.4	29.5	21.13	15.89	21.13	15.89
1.100	114.2	23.6	18.92	14.22	18.92	14.22
1.200	86.5	17.7	16.70	12.56	16.70	12.56
1.300	57.7	11.8	14.48	10.89	14.48	10.89
1.400	28.8	5.9	12.27	9.22	12.27	9.22
1.500	0.0	0.0	10.05	7.56	10.05	7.56
1.600	-28.8	-5.9	-12.27	-9.22	-12.27	-9.22
1.700	-57.7	-11.8	-14.48	-10.89	-14.48	-10.89
1.800	-86.5	-17.7	-16.70	-12.56	-16.70	-12.56
1.900	-114.2	-23.6	-18.92	-14.22	-18.92	-14.22
2.000	-141.4	-29.5	-21.13	-15.89	-21.13	-15.89

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: 3

Span	Shear Resistance Vn	Available Resistance (-)	Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: 3

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	38.45	0.00	961.4 (2-Lane)
1.000	999.00	38.45	0.00	961.4 (1-Lane)
1.100	754.78	38.06	0.00	951.4 (2-Lane)
1.100	754.78	38.06	0.00	951.4 (1-Lane)
1.200	185.82	25.38	0.00	634.5 (2-Lane)
1.200	185.82	25.38	0.00	634.5 (1-Lane)
1.300	106.35	31.66	0.00	791.5 (2-Lane)
1.300	106.35	31.66	0.00	791.5 (1-Lane)
1.400	71.83	40.21	0.00	999.0 (2-Lane)
1.400	71.83	40.21	0.00	999.0 (1-Lane)
1.500	52.54	52.54	0.00	999.0 (2-Lane)
1.500	52.54	52.54	0.00	999.0 (1-Lane)
1.600	40.21	71.83	0.00	999.0 (2-Lane)
1.600	40.21	71.83	0.00	999.0 (1-Lane)
1.700	31.66	106.35	0.00	791.5 (2-Lane)
1.700	31.66	106.35	0.00	791.5 (1-Lane)
1.800	25.38	185.82	0.00	634.5 (2-Lane)
1.800	25.38	185.82	0.00	634.5 (1-Lane)
1.900	38.06	754.78	0.00	951.4 (2-Lane)
1.900	38.06	754.78	0.00	951.4 (1-Lane)
2.000	38.45	999.00	0.00	961.4 (2-Lane)
2.000	38.45	999.00	0.00	961.4 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEG  
Rating Live Load: 3

Span impact Lane	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
				Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00	0.00
1.100	2045.8	425.3	250.44 R	188.30	250.44 R	188.30	188.30
1.200	3653.6	756.1	442.20 R	332.48	442.20 R	332.48	332.48



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1.300	4807.7	992.4	575.28 R	432.54	575.28 R	432.54
1.400	5500.1	1134.2	654.07 R	491.78	654.07 R	491.78
1.500	5730.9	1181.5	677.11 R	509.10	677.11 R	509.10
1.600	5500.1	1134.2	654.07 R	491.78	654.07 R	491.78
1.700	4807.7	992.4	575.28 R	432.54	575.28 R	432.54
1.800	3653.6	756.1	442.20 R	332.48	442.20 R	332.48
1.900	2045.8	425.3	250.44 R	188.30	250.44 R	188.30
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1380

# SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEGL

Rating Live Load:

Rating Type: 3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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# SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEGL

Rating Live Load: 3

Span	Service				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	137.38	999.00	40.84	999.00	0.00	999.0 (2-Lane)
1.100	137.38	999.00	40.84	999.00	0.00	999.0 (1-Lane)
1.200	73.76	999.00	26.43	999.00	0.00	660.9 (2-Lane)
1.200	73.76	999.00	26.43	999.00	0.00	660.9 (1-Lane)
1.300	48.68	999.00	17.90	999.00	0.00	447.5 (2-Lane)
1.300	48.68	999.00	17.90	999.00	0.00	447.5 (1-Lane)

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1.400	38.59	999.00	14.46	999.00	0.00	361.6 (2-Lane)
1.400	38.59	999.00	14.46	999.00	0.00	361.6 (1-Lane)
1.500	35.91	999.00	13.56	999.00	0.00	339.0 (2-Lane)
1.500	35.91	999.00	13.56	999.00	0.00	339.0 (1-Lane)
1.600	38.59	999.00	14.46	999.00	0.00	361.6 (2-Lane)
1.600	38.59	999.00	14.46	999.00	0.00	361.6 (1-Lane)
1.700	48.68	999.00	17.90	999.00	0.00	447.5 (2-Lane)
1.700	48.68	999.00	17.90	999.00	0.00	447.5 (1-Lane)
1.800	73.76	999.00	26.43	999.00	0.00	660.9 (2-Lane)
1.800	73.76	999.00	26.43	999.00	0.00	660.9 (1-Lane)
1.900	137.38	999.00	40.84	999.00	0.00	999.0 (2-Lane)
1.900	137.38	999.00	40.84	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: 3S2

Gamma	DC		DW		(2-Lane)		(1-Lane)	
	1.25		1.25		LL 1.45		LL 1.45	
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact	
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane
1.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00
1.100	2045.8	425.3	410.97 R		309.00	410.97 R		309.00
1.200	3653.6	756.1	716.83 R		538.97	716.83 R		538.97
1.300	4807.7	992.4	940.22 R		706.93	940.22 R		706.93
1.400	5500.1	1134.2	1066.37 R		801.79	1066.37 R		801.79
1.500	5730.9	1181.5	1095.62 R		823.78	1095.62 R		823.78
1.600	5500.1	1134.2	1066.37 R		801.79	1066.37 R		801.79
1.700	4807.7	992.4	940.22 R		706.93	940.22 R		706.93
1.800	3653.6	756.1	716.83 R		538.97	716.83 R		538.97
1.900	2045.8	425.3	410.97 R		309.00	410.97 R		309.00
2.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.

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1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12561.5	-12561.5B	13420.3	13420.3	-18361.6	-18361.6
1.400	19220.4C	19220.4	-12561.5	-12561.5B	12586.1	12586.1	-19195.8	-19195.8
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12561.5	-12561.5B	12586.1	12586.1	-19195.8	-19195.8
1.700	19220.4C	19220.4	-12561.5	-12561.5B	13420.3	13420.3	-18361.6	-18361.6
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: 3S2

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor fiber -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	32.73	999.00	32.73	999.00	0.00	999.0 (2-Lane)
1.100	32.73	999.00	32.73	999.00	0.00	999.0 (1-Lane)
1.200	20.66	999.00	20.66	999.00	0.00	826.5 (2-Lane)
1.200	20.66	999.00	20.66	999.00	0.00	826.5 (1-Lane)
1.300	14.27	999.00	14.27	999.00	0.00	570.9 (2-Lane)
1.300	14.27	999.00	14.27	999.00	0.00	570.9 (1-Lane)
1.400	11.80	999.00	11.80	999.00	0.00	472.1 (2-Lane)
1.400	11.80	999.00	11.80	999.00	0.00	472.1 (1-Lane)
1.500	11.23	999.00	11.23	999.00	0.00	449.4 (2-Lane)
1.500	11.23	999.00	11.23	999.00	0.00	449.4 (1-Lane)
1.600	11.80	999.00	11.80	999.00	0.00	472.1 (2-Lane)
1.600	11.80	999.00	11.80	999.00	0.00	472.1 (1-Lane)
1.700	14.27	999.00	14.27	999.00	0.00	570.9 (2-Lane)
1.700	14.27	999.00	14.27	999.00	0.00	570.9 (1-Lane)
1.800	20.66	999.00	20.66	999.00	0.00	826.5 (2-Lane)
1.800	20.66	999.00	20.66	999.00	0.00	826.5 (1-Lane)
1.900	32.73	999.00	32.73	999.00	0.00	999.0 (2-Lane)
1.900	32.73	999.00	32.73	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07  
 Rating Type: I-LEGL  
 Rating Live Load: 3S2

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck Lane	Live Load w/o impact Truck Lane	Live Load w/impact Truck Lane	Live Load Truck
Lane						
1.000	141.4	29.5	31.27	23.51	31.27	23.51
1.100	114.2	23.6	27.73	20.85	27.73	20.85
1.200	86.5	17.7	24.18	18.18	24.18	18.18
1.300	57.7	11.8	20.64	15.52	20.64	15.52
1.400	28.8	5.9	17.09	12.85	17.09	12.85
1.500	0.0	0.0	13.54	10.18	13.54	10.18
1.600	-28.8	-5.9	-17.09	-12.85	-17.09	-12.85
1.700	-57.7	-11.8	-20.64	-15.52	-20.64	-15.52
1.800	-86.5	-17.7	-24.18	-18.18	-24.18	-18.18
1.900	-114.2	-23.6	-27.73	-20.85	-27.73	-20.85
2.000	-141.4	-29.5	-31.27	-23.51	-31.27	-23.51

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 STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07  
 Rating Type: I-LEGL  
 Rating Live Load: 3S2

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	Resistance for LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1387  
 STRENGTH SHEAR RESISTANCE RATING REPORT

7777777\_20120905cy01\_01of01\_FlexuralRpt.txt  
 Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G07  
 Rating Type: I-LEGL  
 Rating Live Load: 3S2

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	25.99	0.00	999.0 (2-Lane)
1.000	999.00	25.99	0.00	999.0 (1-Lane)
1.100	754.78	25.96	0.00	999.0 (2-Lane)
1.100	754.78	25.96	0.00	999.0 (1-Lane)
1.200	197.32	17.53	0.00	701.1 (2-Lane)
1.200	197.32	17.53	0.00	701.1 (1-Lane)
1.300	92.61	22.22	0.00	888.9 (2-Lane)
1.300	92.61	22.22	0.00	888.9 (1-Lane)
1.400	56.29	28.87	0.00	999.0 (2-Lane)
1.400	56.29	28.87	0.00	999.0 (1-Lane)
1.500	38.99	38.99	0.00	999.0 (2-Lane)
1.500	38.99	38.99	0.00	999.0 (1-Lane)
1.600	28.87	56.29	0.00	999.0 (2-Lane)
1.600	28.87	56.29	0.00	999.0 (1-Lane)
1.700	22.22	92.61	0.00	888.9 (2-Lane)
1.700	22.22	92.61	0.00	888.9 (1-Lane)
1.800	17.53	197.32	0.00	701.1 (2-Lane)
1.800	17.53	197.32	0.00	701.1 (1-Lane)
1.900	25.96	754.78	0.00	999.0 (2-Lane)
1.900	25.96	754.78	0.00	999.0 (1-Lane)
2.000	25.99	999.00	0.00	999.0 (2-Lane)
2.000	25.99	999.00	0.00	999.0 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1388  
 SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
 Member I. D. G07  
 Rating Type: II-LEG  
 Rating Live Load: 3S2

Gamma	DC		(2-Lane)		(1-Lane)	
	1.00	DW 1.00	LL 1.30		LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Truck
1.000	0.0	0.0	0.00 R		0.00	0.00 R
1.100	2045.8	425.3	367.11 R		276.02	367.11 R
1.200	3653.6	756.1	640.32 R		481.44	640.32 R
1.300	4807.7	992.4	839.86 R		631.48	839.86 R
1.400	5500.1	1134.2	952.56 R		716.21	952.56 R
1.500	5730.9	1181.5	978.68 R		735.85	978.68 R

7777777_20120905cy01_01of01_FlexuralRpt.txt						
1.600	5500.1	1134.2	952.56 R	716.21	952.56 R	716.21
1.700	4807.7	992.4	839.86 R	631.48	839.86 R	631.48
1.800	3653.6	756.1	640.32 R	481.44	640.32 R	481.44
1.900	2045.8	425.3	367.10 R	276.02	367.10 R	276.02
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1388

SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEGL

Rating Live Load:

Rating Type: 3S2

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEGL

Rating Live Load: 3S2

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	93.72	999.00	27.86	999.00	0.00	999.0 (2-Lane)
1.100	93.72	999.00	27.86	999.00	0.00	999.0 (1-Lane)
1.200	50.94	999.00	18.26	999.00	0.00	730.3 (2-Lane)
1.200	50.94	999.00	18.26	999.00	0.00	730.3 (1-Lane)
1.300	33.35	999.00	12.26	999.00	0.00	490.4 (2-Lane)
1.300	33.35	999.00	12.26	999.00	0.00	490.4 (1-Lane)
1.400	26.50	999.00	9.93	999.00	0.00	397.3 (2-Lane)
1.400	26.50	999.00	9.93	999.00	0.00	397.3 (1-Lane)

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1.500	24.84	999.00	9.38	999.00	0.00	375.3 (2-Lane)
1.500	24.84	999.00	9.38	999.00	0.00	375.3 (1-Lane)
1.600	26.50	999.00	9.93	999.00	0.00	397.3 (2-Lane)
1.600	26.50	999.00	9.93	999.00	0.00	397.3 (1-Lane)
1.700	33.35	999.00	12.26	999.00	0.00	490.4 (2-Lane)
1.700	33.35	999.00	12.26	999.00	0.00	490.4 (1-Lane)
1.800	50.94	999.00	18.26	999.00	0.00	730.3 (2-Lane)
1.800	50.94	999.00	18.26	999.00	0.00	730.3 (1-Lane)
1.900	93.72	999.00	27.86	999.00	0.00	999.0 (2-Lane)
1.900	93.72	999.00	27.86	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: 3-3

Gamma			(2-Lane)				(1-Lane)		
	DC 1.25	DW 1.25	LL 1.45		LL 1.45		LL 1.45		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R		0.00		0.00 R		0.00
1.100	2045.8	425.3	394.56 R		296.66		394.56 R		296.66
1.200	3653.6	756.1	687.28 R		516.75		687.28 R		516.75
1.300	4807.7	992.4	884.74 R		665.22		884.74 R		665.22
1.400	5500.1	1134.2	1003.35 R		754.39		1003.35 R		754.39
1.500	5730.9	1181.5	1043.10 R		784.29		1043.10 R		784.29
1.600	5500.1	1134.2	1003.35 R		754.39		1003.35 R		754.39
1.700	4807.7	992.4	884.74 R		665.22		884.74 R		665.22
1.800	3653.6	756.1	687.28 R		516.75		687.28 R		516.75
1.900	2045.8	425.3	394.56 R		296.66		394.56 R		296.66
2.000	0.0	0.0	0.00 R		0.00		0.00 R		0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: 3-3

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5

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1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12562.1	-12562.1B	13420.3	13420.3	-18362.2	-18362.2
1.400	19220.4C	19220.4	-12562.1	-12562.1B	12586.1	12586.1	-19196.4	-19196.4
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12562.1	-12562.1B	12586.1	12586.1	-19196.4	-19196.4
1.700	19220.4C	19220.4	-12562.1	-12562.1B	13420.3	13420.3	-18362.2	-18362.2
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: 3-3

Moment

Span	top +bend	Rating fiber -bend	Factor	bottom +bend	fiber -bend	Rating Value	Load Resistance (tons)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)
1.100	34.09	999.00		34.09	999.00	0.00	999.0 (2-Lane)
1.100	34.09	999.00		34.09	999.00	0.00	999.0 (1-Lane)
1.200	21.55	999.00		21.55	999.00	0.00	862.0 (2-Lane)
1.200	21.55	999.00		21.55	999.00	0.00	862.0 (1-Lane)
1.300	15.17	999.00		15.17	999.00	0.00	606.7 (2-Lane)
1.300	15.17	999.00		15.17	999.00	0.00	606.7 (1-Lane)
1.400	12.54	999.00		12.54	999.00	0.00	501.8 (2-Lane)
1.400	12.54	999.00		12.54	999.00	0.00	501.8 (1-Lane)
1.500	11.80	999.00		11.80	999.00	0.00	472.0 (2-Lane)
1.500	11.80	999.00		11.80	999.00	0.00	472.0 (1-Lane)
1.600	12.54	999.00		12.54	999.00	0.00	501.8 (2-Lane)
1.600	12.54	999.00		12.54	999.00	0.00	501.8 (1-Lane)
1.700	15.17	999.00		15.17	999.00	0.00	606.7 (2-Lane)
1.700	15.17	999.00		15.17	999.00	0.00	606.7 (1-Lane)
1.800	21.55	999.00		21.55	999.00	0.00	862.0 (2-Lane)
1.800	21.55	999.00		21.55	999.00	0.00	862.0 (1-Lane)
1.900	34.09	999.00		34.09	999.00	0.00	999.0 (2-Lane)
1.900	34.09	999.00		34.09	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00		999.00	999.00	0.00	999.0 (1-Lane)

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SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07



Rating Type: I-LEGL  
Rating Live Load: 3-3

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.45		(1-Lane) LL 1.45	
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	
1.000	141.4	29.5	30.17	22.68	30.17	22.68
1.100	114.2	23.6	26.62	20.02	26.62	20.02
1.200	86.5	17.7	23.07	17.35	23.07	17.35
1.300	57.7	11.8	19.53	14.68	19.53	14.68
1.400	28.8	5.9	15.98	12.02	15.98	12.02
1.500	0.0	0.0	12.44	9.35	12.44	9.35
1.600	-28.8	-5.9	-15.98	-12.02	-15.98	-12.02
1.700	-57.7	-11.8	-19.53	-14.68	-19.53	-14.68
1.800	-86.5	-17.7	-23.07	-17.35	-23.07	-17.35
1.900	-114.2	-23.6	-26.62	-20.02	-26.62	-20.02
2.000	-141.4	-29.5	-30.17	-22.68	-30.17	-22.68

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: 3-3

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	(+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1395  
STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
 Rating Live Load: 3-3

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	26.94	0.00	999.0 (2-Lane)
1.000	999.00	26.94	0.00	999.0 (1-Lane)
1.100	916.52	27.04	0.00	999.0 (2-Lane)
1.100	916.52	27.04	0.00	999.0 (1-Lane)
1.200	221.10	18.37	0.00	734.7 (2-Lane)
1.200	221.10	18.37	0.00	734.7 (1-Lane)
1.300	107.80	23.48	0.00	939.3 (2-Lane)
1.300	107.80	23.48	0.00	939.3 (1-Lane)
1.400	63.30	30.87	0.00	999.0 (2-Lane)
1.400	63.30	30.87	0.00	999.0 (1-Lane)
1.500	42.46	42.46	0.00	999.0 (2-Lane)
1.500	42.46	42.46	0.00	999.0 (1-Lane)
1.600	30.87	63.30	0.00	999.0 (2-Lane)
1.600	30.87	63.30	0.00	999.0 (1-Lane)
1.700	23.48	107.80	0.00	939.3 (2-Lane)
1.700	23.48	107.80	0.00	939.3 (1-Lane)
1.800	18.37	221.10	0.00	734.7 (2-Lane)
1.800	18.37	221.10	0.00	734.7 (1-Lane)
1.900	27.04	916.52	0.00	999.0 (2-Lane)
1.900	27.04	916.52	0.00	999.0 (1-Lane)
2.000	26.94	999.00	0.00	999.0 (2-Lane)
2.000	26.94	999.00	0.00	999.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEG  
 Rating Live Load: 3-3

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.100	2045.8	425.3	352.44 R	264.99	352.44 R	264.99
1.200	3653.6	756.1	613.92 R	461.60	613.92 R	461.60
1.300	4807.7	992.4	790.31 R	594.22	790.31 R	594.22
1.400	5500.1	1134.2	896.25 R	673.88	896.25 R	673.88
1.500	5730.9	1181.5	931.76 R	700.58	931.76 R	700.58
1.600	5500.1	1134.2	896.25 R	673.88	896.25 R	673.88
1.700	4807.7	992.4	790.31 R	594.22	790.31 R	594.22
1.800	3653.6	756.1	613.92 R	461.60	613.92 R	461.60

1.900 2045.8 425.3 7777777\_20120905cy01\_01of01\_FlexuralRpt.txt 264.99 352.44 R 264.99  
 2.000 0.0 0.0 352.44 R 0.00 0.00 R 0.00

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEGL

Rating Live Load:

Rating Type: 3-3

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEGL

Rating Live Load: 3-3

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	97.62	999.00	29.02	999.00	0.00	999.0 (2-Lane)
1.100	97.62	999.00	29.02	999.00	0.00	999.0 (1-Lane)
1.200	53.13	999.00	19.04	999.00	0.00	761.6 (2-Lane)
1.200	53.13	999.00	19.04	999.00	0.00	761.6 (1-Lane)
1.300	35.44	999.00	13.03	999.00	0.00	521.1 (2-Lane)
1.300	35.44	999.00	13.03	999.00	0.00	521.1 (1-Lane)
1.400	28.16	999.00	10.56	999.00	0.00	422.2 (2-Lane)
1.400	28.16	999.00	10.56	999.00	0.00	422.2 (1-Lane)
1.500	26.10	999.00	9.85	999.00	0.00	394.2 (2-Lane)
1.500	26.10	999.00	9.85	999.00	0.00	394.2 (1-Lane)

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1.600	28.16	999.00	10.56	999.00	0.00	422.2 (2-Lane)
1.600	28.16	999.00	10.56	999.00	0.00	422.2 (1-Lane)
1.700	35.44	999.00	13.03	999.00	0.00	521.1 (2-Lane)
1.700	35.44	999.00	13.03	999.00	0.00	521.1 (1-Lane)
1.800	53.13	999.00	19.04	999.00	0.00	761.6 (2-Lane)
1.800	53.13	999.00	19.04	999.00	0.00	761.6 (1-Lane)
1.900	97.62	999.00	29.02	999.00	0.00	999.0 (2-Lane)
1.900	97.62	999.00	29.02	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	(2-Lane) LL 1.20		(1-Lane) LL 1.20	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.100	2045.8	425.3	252.61 R	189.93	252.61 R	189.93
1.200	3653.6	756.1	446.46 R	335.68	446.46 R	335.68
1.300	4807.7	992.4	581.54 R	437.25	581.54 R	437.25
1.400	5500.1	1134.2	664.11 R	499.33	664.11 R	499.33
1.500	5730.9	1181.5	689.01 R	518.05	689.01 R	518.05
1.600	5500.1	1134.2	664.11 R	499.33	664.11 R	499.33
1.700	4807.7	992.4	581.54 R	437.25	581.54 R	437.25
1.800	3653.6	756.1	446.46 R	335.68	446.46 R	335.68
1.900	2045.8	425.3	252.61 R	189.93	252.61 R	189.93
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU4

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12567.1	-12567.1B	13420.3	13420.3	-18367.2	-18367.2
1.400	19220.4C	19220.4	-12567.1	-12567.1B	12586.1	12586.1	-19201.4	-19201.4

1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12567.1	-12567.1B	12586.1	12586.1	-19201.4	-19201.4
1.700	19220.4C	19220.4	-12567.1	-12567.1B	13420.3	13420.3	-18367.2	-18367.2
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL

Rating Live Load: SU4

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	53.24	999.00	53.24	999.00	0.00	999.0 (2-Lane)
1.100	53.24	999.00	53.24	999.00	0.00	999.0 (1-Lane)
1.200	33.17	999.00	33.17	999.00	0.00	895.7 (2-Lane)
1.200	33.17	999.00	33.17	999.00	0.00	895.7 (1-Lane)
1.300	23.08	999.00	23.08	999.00	0.00	623.1 (2-Lane)
1.300	23.08	999.00	23.08	999.00	0.00	623.1 (1-Lane)
1.400	18.95	999.00	18.95	999.00	0.00	511.7 (2-Lane)
1.400	18.95	999.00	18.95	999.00	0.00	511.7 (1-Lane)
1.500	17.86	999.00	17.86	999.00	0.00	482.3 (2-Lane)
1.500	17.86	999.00	17.86	999.00	0.00	482.3 (1-Lane)
1.600	18.95	999.00	18.95	999.00	0.00	511.7 (2-Lane)
1.600	18.95	999.00	18.95	999.00	0.00	511.7 (1-Lane)
1.700	23.08	999.00	23.08	999.00	0.00	623.1 (2-Lane)
1.700	23.08	999.00	23.08	999.00	0.00	623.1 (1-Lane)
1.800	33.17	999.00	33.17	999.00	0.00	895.7 (2-Lane)
1.800	33.17	999.00	33.17	999.00	0.00	895.7 (1-Lane)
1.900	53.24	999.00	53.24	999.00	0.00	999.0 (2-Lane)
1.900	53.24	999.00	53.24	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL

Rating Live Load: SU4

Gamma	DC 1.25	DW 1.25	LL 1.20		(1-Lane) LL 1.20	
Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact	
Lane		Dead Load	Truck	Lane	Truck	Lane
1.000	141.4	29.5	19.03		14.31	19.03
1.100	114.2	23.6	17.04		12.81	17.04
1.200	86.5	17.7	15.06		11.32	15.06
1.300	57.7	11.8	13.08		9.83	13.08
1.400	28.8	5.9	11.10		8.34	11.10
1.500	0.0	0.0	9.11		6.85	9.11
1.600	-28.8	-5.9	-11.10		-8.34	-11.10
1.700	-57.7	-11.8	-13.08		-9.83	-13.08
1.800	-86.5	-17.7	-15.06		-11.32	-15.06
1.900	-114.2	-23.6	-17.04		-12.81	-17.04
2.000	-141.4	-29.5	-19.03		-14.31	-19.03

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
Member I. D. G07  
Rating Type: I-LEGL  
Rating Live Load: SU4

Span	Shear Resistance Vn	Available Resistance for LL+I (-)	LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1403  
STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01  
Member I. D. G07  
Rating Type: I-LEGL  
Rating Live Load: SU4

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	42.71	0.00	999.0 (2-Lane)
1.000	999.00	42.71	0.00	999.0 (1-Lane)
1.100	803.27	42.24	0.00	999.0 (2-Lane)
1.100	803.27	42.24	0.00	999.0 (1-Lane)
1.200	199.66	28.14	0.00	759.8 (2-Lane)
1.200	199.66	28.14	0.00	759.8 (1-Lane)
1.300	116.04	35.06	0.00	946.7 (2-Lane)
1.300	116.04	35.06	0.00	946.7 (1-Lane)
1.400	78.92	44.46	0.00	999.0 (2-Lane)
1.400	78.92	44.46	0.00	999.0 (1-Lane)
1.500	57.94	57.94	0.00	999.0 (2-Lane)
1.500	57.94	57.94	0.00	999.0 (1-Lane)
1.600	44.46	78.92	0.00	999.0 (2-Lane)
1.600	44.46	78.92	0.00	999.0 (1-Lane)
1.700	35.06	116.04	0.00	946.7 (2-Lane)
1.700	35.06	116.04	0.00	946.7 (1-Lane)
1.800	28.14	199.66	0.00	759.8 (2-Lane)
1.800	28.14	199.66	0.00	759.8 (1-Lane)
1.900	42.24	803.27	0.00	999.0 (2-Lane)
1.900	42.24	803.27	0.00	999.0 (1-Lane)
2.000	42.71	999.00	0.00	999.0 (2-Lane)
2.000	42.71	999.00	0.00	999.0 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEG  
Rating Live Load: SU4

Gamma	DC		DW		(2-Lane) LL		(1-Lane) LL		
	1.00	1.00		1.30		1.30		1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o			
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00	
1.100	2045.8	425.3	272.45 R		204.85	272.45 R		204.85	
1.200	3653.6	756.1	481.52 R		362.05	481.52 R		362.05	
1.300	4807.7	992.4	627.21 R		471.59	627.21 R		471.59	
1.400	5500.1	1134.2	716.27 R		538.55	716.27 R		538.55	
1.500	5730.9	1181.5	743.12 R		558.74	743.12 R		558.74	
1.600	5500.1	1134.2	716.27 R		538.55	716.27 R		538.55	
1.700	4807.7	992.4	627.21 R		471.59	627.21 R		471.59	
1.800	3653.6	756.1	481.52 R		362.05	481.52 R		362.05	
1.900	2045.8	425.3	272.45 R		204.85	272.45 R		204.85	
2.000	0.0	0.0	0.00 R		0.00	0.00 R		0.00	

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1404

## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEGL

Rating Live Load:

Rating Type: SU4

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

LOAD ANALYSIS AND RATING SYSTEM -- LRFD v5.00.06.09 PAGE 1405

## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEGL

Rating Live Load: SU4

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor fiber -bend	bottom fiber +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	126.28	999.00	37.54	999.00	0.00	999.0 (2-Lane)
1.100	126.28	999.00	37.54	999.00	0.00	999.0 (1-Lane)
1.200	67.74	999.00	24.28	999.00	0.00	655.5 (2-Lane)
1.200	67.74	999.00	24.28	999.00	0.00	655.5 (1-Lane)
1.300	44.65	999.00	16.42	999.00	0.00	443.2 (2-Lane)
1.300	44.65	999.00	16.42	999.00	0.00	443.2 (1-Lane)
1.400	35.24	999.00	13.21	999.00	0.00	356.6 (2-Lane)
1.400	35.24	999.00	13.21	999.00	0.00	356.6 (1-Lane)
1.500	32.72	999.00	12.35	999.00	0.00	333.6 (2-Lane)
1.500	32.72	999.00	12.35	999.00	0.00	333.6 (1-Lane)
1.600	35.24	999.00	13.21	999.00	0.00	356.6 (2-Lane)
1.600	35.24	999.00	13.21	999.00	0.00	356.6 (1-Lane)



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1.700	44.65	999.00	16.42	999.00	0.00	443.2 (2-Lane)
1.700	44.65	999.00	16.42	999.00	0.00	443.2 (1-Lane)
1.800	67.74	999.00	24.28	999.00	0.00	655.5 (2-Lane)
1.800	67.74	999.00	24.28	999.00	0.00	655.5 (1-Lane)
1.900	126.28	999.00	37.54	999.00	0.00	999.0 (2-Lane)
1.900	126.28	999.00	37.54	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU5

Gamma	DC	DW	(2-Lane)		(1-Lane)	
	1.25	1.25	LL	1.20	LL	1.20
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.100	2045.8	425.3	286.89 R	215.71	286.89 R	215.71
1.200	3653.6	756.1	506.31 R	380.69	506.31 R	380.69
1.300	4807.7	992.4	660.44 R	496.57	660.44 R	496.57
1.400	5500.1	1134.2	753.35 R	566.43	753.35 R	566.43
1.500	5730.9	1181.5	778.80 R	585.56	778.80 R	585.56
1.600	5500.1	1134.2	753.35 R	566.43	753.35 R	566.43
1.700	4807.7	992.4	660.44 R	496.57	660.44 R	496.57
1.800	3653.6	756.1	506.31 R	380.69	506.31 R	380.69
1.900	2045.8	425.3	286.89 R	215.71	286.89 R	215.71
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU5

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12566.1	-12566.1B	13420.3	13420.3	-18366.2	-18366.2
1.400	19220.4C	19220.4	-12566.1	-12566.1B	12586.1	12586.1	-19200.5	-19200.5
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12566.1	-12566.1B	12586.1	12586.1	-19200.5	-19200.5
1.700	19220.4C	19220.4	-12566.1	-12566.1B	13420.3	13420.3	-18366.2	-18366.2

1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL

Rating Live Load: SU5

Span	Moment				Rating Value	Load Resistance (tons)
	top +bend	Rating fiber -bend	Factor bottom +bend	fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	46.88	999.00	46.88	999.00	0.00	999.0 (2-Lane)
1.100	46.88	999.00	46.88	999.00	0.00	999.0 (1-Lane)
1.200	29.25	999.00	29.25	999.00	0.00	906.8 (2-Lane)
1.200	29.25	999.00	29.25	999.00	0.00	906.8 (1-Lane)
1.300	20.32	999.00	20.32	999.00	0.00	629.9 (2-Lane)
1.300	20.32	999.00	20.32	999.00	0.00	629.9 (1-Lane)
1.400	16.71	999.00	16.71	999.00	0.00	517.9 (2-Lane)
1.400	16.71	999.00	16.71	999.00	0.00	517.9 (1-Lane)
1.500	15.80	999.00	15.80	999.00	0.00	489.9 (2-Lane)
1.500	15.80	999.00	15.80	999.00	0.00	489.9 (1-Lane)
1.600	16.71	999.00	16.71	999.00	0.00	517.9 (2-Lane)
1.600	16.71	999.00	16.71	999.00	0.00	517.9 (1-Lane)
1.700	20.32	999.00	20.32	999.00	0.00	629.9 (2-Lane)
1.700	20.32	999.00	20.32	999.00	0.00	629.9 (1-Lane)
1.800	29.25	999.00	29.25	999.00	0.00	906.8 (2-Lane)
1.800	29.25	999.00	29.25	999.00	0.00	906.8 (1-Lane)
1.900	46.88	999.00	46.88	999.00	0.00	999.0 (2-Lane)
1.900	46.88	999.00	46.88	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL

Rating Live Load: SU5

Gamma	DC	DW	(2-Lane) LL 1.20	(1-Lane) LL 1.20
	1.25	1.25		

Span w/o impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load
		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
Lane									
1.000	141.4	29.5	21.63		16.27		21.63		16.27
1.100	114.2	23.6	19.36		14.55		19.36		14.55
1.200	86.5	17.7	17.08		12.84		17.08		12.84
1.300	57.7	11.8	14.80		11.13		14.80		11.13
1.400	28.8	5.9	12.53		9.42		12.53		9.42
1.500	0.0	0.0	10.25		7.71		10.25		7.71
1.600	-28.8	-5.9	-12.53		-9.42		-12.53		-9.42
1.700	-57.7	-11.8	-14.80		-11.13		-14.80		-11.13
1.800	-86.5	-17.7	-17.08		-12.84		-17.08		-12.84
1.900	-114.2	-23.6	-19.36		-14.55		-19.36		-14.55
2.000	-141.4	-29.5	-21.63		-16.27		-21.63		-16.27

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU5

Span	Shear Resistance vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU5

## Shear

Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)
1.000	999.00	37.57	0.00	999.0 (2-Lane)
1.000	999.00	37.57	0.00	999.0 (1-Lane)
1.100	758.26	37.19	0.00	999.0 (2-Lane)
1.100	758.26	37.19	0.00	999.0 (1-Lane)
1.200	184.66	24.82	0.00	769.3 (2-Lane)
1.200	184.66	24.82	0.00	769.3 (1-Lane)
1.300	104.83	30.98	0.00	960.3 (2-Lane)
1.300	104.83	30.98	0.00	960.3 (1-Lane)
1.400	70.56	39.38	0.00	999.0 (2-Lane)
1.400	70.56	39.38	0.00	999.0 (1-Lane)
1.500	51.51	51.51	0.00	999.0 (2-Lane)
1.500	51.51	51.51	0.00	999.0 (1-Lane)
1.600	39.38	70.56	0.00	999.0 (2-Lane)
1.600	39.38	70.56	0.00	999.0 (1-Lane)
1.700	30.98	104.83	0.00	960.3 (2-Lane)
1.700	30.98	104.83	0.00	960.3 (1-Lane)
1.800	24.82	184.66	0.00	769.3 (2-Lane)
1.800	24.82	184.66	0.00	769.3 (1-Lane)
1.900	37.19	758.26	0.00	999.0 (2-Lane)
1.900	37.19	758.26	0.00	999.0 (1-Lane)
2.000	37.57	999.00	0.00	999.0 (2-Lane)
2.000	37.57	999.00	0.00	999.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEG  
Rating Live Load: SU5

Gamma	DC		DW		(2-Lane) LL 1.30		(1-Lane) LL 1.30		
	1.00	1.00							
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R		0.00		0.00 R		0.00
1.100	2045.8	425.3	309.42 R		232.65		309.42 R		232.65
1.200	3653.6	756.1	546.08 R		410.59		546.08 R		410.59
1.300	4807.7	992.4	712.31 R		535.57		712.31 R		535.57
1.400	5500.1	1134.2	812.52 R		610.92		812.52 R		610.92
1.500	5730.9	1181.5	839.96 R		631.55		839.96 R		631.55
1.600	5500.1	1134.2	812.52 R		610.92		812.52 R		610.92
1.700	4807.7	992.4	712.31 R		535.57		712.31 R		535.57
1.800	3653.6	756.1	546.08 R		410.59		546.08 R		410.59
1.900	2045.8	425.3	309.42 R		232.65		309.42 R		232.65
2.000	0.0	0.0	0.00 R		0.00		0.00 R		0.00

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEGL

Rating Live Load:

Rating Type: SU5

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEGL

Rating Live Load: SU5

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	111.19	999.00	33.06	999.00	0.00	999.0 (2-Lane)
1.100	111.19	999.00	33.06	999.00	0.00	999.0 (1-Lane)
1.200	59.73	999.00	21.41	999.00	0.00	663.6 (2-Lane)
1.200	59.73	999.00	21.41	999.00	0.00	663.6 (1-Lane)
1.300	39.31	999.00	14.45	999.00	0.00	448.1 (2-Lane)
1.300	39.31	999.00	14.45	999.00	0.00	448.1 (1-Lane)
1.400	31.06	999.00	11.64	999.00	0.00	360.9 (2-Lane)
1.400	31.06	999.00	11.64	999.00	0.00	360.9 (1-Lane)
1.500	28.95	999.00	10.93	999.00	0.00	338.9 (2-Lane)
1.500	28.95	999.00	10.93	999.00	0.00	338.9 (1-Lane)
1.600	31.06	999.00	11.64	999.00	0.00	360.9 (2-Lane)
1.600	31.06	999.00	11.64	999.00	0.00	360.9 (1-Lane)
1.700	39.31	999.00	14.45	999.00	0.00	448.1 (2-Lane)
1.700	39.31	999.00	14.45	999.00	0.00	448.1 (1-Lane)

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1.800	59.73	999.00	21.41	999.00	0.00	663.6 (2-Lane)
1.800	59.73	999.00	21.41	999.00	0.00	663.6 (1-Lane)
1.900	111.19	999.00	33.06	999.00	0.00	999.0 (2-Lane)
1.900	111.19	999.00	33.06	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU6

Gamma	DC	DW	(2-Lane)		(1-Lane)	
	1.25	1.25	LL	1.20	LL	1.20
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.100	2045.8	425.3	315.63 R	237.32	315.63 R	237.32
1.200	3653.6	756.1	563.66 R	423.80	563.66 R	423.80
1.300	4807.7	992.4	737.47 R	554.49	737.47 R	554.49
1.400	5500.1	1134.2	839.47 R	631.18	839.47 R	631.18
1.500	5730.9	1181.5	871.47 R	655.24	871.47 R	655.24
1.600	5500.1	1134.2	839.47 R	631.18	839.47 R	631.18
1.700	4807.7	992.4	737.47 R	554.49	737.47 R	554.49
1.800	3653.6	756.1	563.66 R	423.80	563.66 R	423.80
1.900	2045.8	425.3	315.63 R	237.32	315.63 R	237.32
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU6

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.300	19220.4C	19220.4	-12565.7	-12565.7B	13420.3	13420.3	-18365.8	-18365.8
1.400	19220.4C	19220.4	-12565.7	-12565.7B	12586.1	12586.1	-19200.0	-19200.0
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12565.7	-12565.7B	12586.1	12586.1	-19200.0	-19200.0
1.700	19220.4C	19220.4	-12565.7	-12565.7B	13420.3	13420.3	-18365.8	-18365.8
1.800	19220.4C	19220.4	-13203.5	-13203.5B	14810.7	14810.7	-17613.2	-17613.2
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU6

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	42.61	999.00	42.61	999.00	0.00	999.0 (2-Lane)
1.100	42.61	999.00	42.61	999.00	0.00	999.0 (1-Lane)
1.200	26.28	999.00	26.28	999.00	0.00	913.1 (2-Lane)
1.200	26.28	999.00	26.28	999.00	0.00	913.1 (1-Lane)
1.300	18.20	999.00	18.20	999.00	0.00	632.4 (2-Lane)
1.300	18.20	999.00	18.20	999.00	0.00	632.4 (1-Lane)
1.400	14.99	999.00	14.99	999.00	0.00	521.0 (2-Lane)
1.400	14.99	999.00	14.99	999.00	0.00	521.0 (1-Lane)
1.500	14.12	999.00	14.12	999.00	0.00	490.8 (2-Lane)
1.500	14.12	999.00	14.12	999.00	0.00	490.8 (1-Lane)
1.600	14.99	999.00	14.99	999.00	0.00	521.0 (2-Lane)
1.600	14.99	999.00	14.99	999.00	0.00	521.0 (1-Lane)
1.700	18.20	999.00	18.20	999.00	0.00	632.4 (2-Lane)
1.700	18.20	999.00	18.20	999.00	0.00	632.4 (1-Lane)
1.800	26.28	999.00	26.28	999.00	0.00	913.1 (2-Lane)
1.800	26.28	999.00	26.28	999.00	0.00	913.1 (1-Lane)
1.900	42.61	999.00	42.61	999.00	0.00	999.0 (2-Lane)
1.900	42.61	999.00	42.61	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU6

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	1.20	LL	1.20
Span	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load

w/o impact

Lane	Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	141.4	29.5	23.85	17.93		23.85		17.93
1.100	114.2	23.6	21.30	16.01		21.30		16.01
1.200	86.5	17.7	18.74	14.09		18.74		14.09
1.300	57.7	11.8	16.19	12.18		16.19		12.18
1.400	28.8	5.9	13.64	10.26		13.64		10.26
1.500	0.0	0.0	11.09	8.34		11.09		8.34
1.600	-28.8	-5.9	-13.64	-10.26		-13.64		-10.26
1.700	-57.7	-11.8	-16.19	-12.18		-16.19		-12.18
1.800	-86.5	-17.7	-18.74	-14.09		-18.74		-14.09
1.900	-114.2	-23.6	-21.30	-16.01		-21.30		-16.01
2.000	-141.4	-29.5	-23.85	-17.93		-23.85		-17.93

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## STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU6

Span	Shear Resistance Vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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## STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU6

Shear			
Span	Rating Factor	Rating	Load



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Resistance  
(tons)

	(-)	(+)	Value	
1.000	999.00	34.08	0.00	999.0 (2-Lane)
1.000	999.00	34.08	0.00	999.0 (1-Lane)
1.100	867.21	33.80	0.00	999.0 (2-Lane)
1.100	867.21	33.80	0.00	999.0 (1-Lane)
1.200	184.02	22.61	0.00	785.8 (2-Lane)
1.200	184.02	22.61	0.00	785.8 (1-Lane)
1.300	99.80	28.32	0.00	984.1 (2-Lane)
1.300	99.80	28.32	0.00	984.1 (1-Lane)
1.400	65.91	36.16	0.00	999.0 (2-Lane)
1.400	65.91	36.16	0.00	999.0 (1-Lane)
1.500	47.62	47.62	0.00	999.0 (2-Lane)
1.500	47.62	47.62	0.00	999.0 (1-Lane)
1.600	36.16	65.91	0.00	999.0 (2-Lane)
1.600	36.16	65.91	0.00	999.0 (1-Lane)
1.700	28.32	99.80	0.00	984.1 (2-Lane)
1.700	28.32	99.80	0.00	984.1 (1-Lane)
1.800	22.61	184.02	0.00	785.8 (2-Lane)
1.800	22.61	184.02	0.00	785.8 (1-Lane)
1.900	33.80	867.21	0.00	999.0 (2-Lane)
1.900	33.80	867.21	0.00	999.0 (1-Lane)
2.000	34.08	999.00	0.00	999.0 (2-Lane)
2.000	34.08	999.00	0.00	999.0 (1-Lane)

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SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEG  
Rating Live Load: SU6

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30				(1-Lane) LL 1.30		
Span impact	Dead Load	Superimposed	Live Load w/impact		Live Load w/o impact		Live Load w/impact		Live Load w/o
Lane		Dead Load	Truck	Lane	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R		0.00	0.00 R			0.00
1.100	2045.8	425.3	340.42 R		255.96	340.42 R			255.96
1.200	3653.6	756.1	607.92 R		457.09	607.92 R			457.09
1.300	4807.7	992.4	795.39 R		598.04	795.39 R			598.04
1.400	5500.1	1134.2	905.40 R		680.75	905.40 R			680.75
1.500	5730.9	1181.5	939.92 R		706.70	939.92 R			706.70
1.600	5500.1	1134.2	905.40 R		680.75	905.40 R			680.75
1.700	4807.7	992.4	795.39 R		598.04	795.39 R			598.04
1.800	3653.6	756.1	607.92 R		457.09	607.92 R			457.09
1.900	2045.8	425.3	340.42 R		255.96	340.42 R			255.96
2.000	0.0	0.0	0.00 R		0.00	0.00 R			0.00

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SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEGL

Rating Live Load:

Rating Type: SU6

Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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## SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEGL

Rating Live Load: SU6

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	101.07	999.00	30.05	999.00	0.00	999.0 (2-Lane)
1.100	101.07	999.00	30.05	999.00	0.00	999.0 (1-Lane)
1.200	53.65	999.00	19.23	999.00	0.00	668.2 (2-Lane)
1.200	53.65	999.00	19.23	999.00	0.00	668.2 (1-Lane)
1.300	35.21	999.00	12.94	999.00	0.00	449.8 (2-Lane)
1.300	35.21	999.00	12.94	999.00	0.00	449.8 (1-Lane)
1.400	27.88	999.00	10.45	999.00	0.00	363.1 (2-Lane)
1.400	27.88	999.00	10.45	999.00	0.00	363.1 (1-Lane)
1.500	25.87	999.00	9.77	999.00	0.00	339.5 (2-Lane)
1.500	25.87	999.00	9.77	999.00	0.00	339.5 (1-Lane)
1.600	27.88	999.00	10.45	999.00	0.00	363.1 (2-Lane)
1.600	27.88	999.00	10.45	999.00	0.00	363.1 (1-Lane)
1.700	35.21	999.00	12.94	999.00	0.00	449.8 (2-Lane)
1.700	35.21	999.00	12.94	999.00	0.00	449.8 (1-Lane)
1.800	53.65	999.00	19.23	999.00	0.00	668.2 (2-Lane)
1.800	53.65	999.00	19.23	999.00	0.00	668.2 (1-Lane)

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1.900	101.07	999.00	30.05	999.00	0.00	999.0 (2-Lane)
1.900	101.07	999.00	30.05	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU7

Gamma	DC	DW	(2-Lane)		(1-Lane)	
	1.25	1.25	LL	LL	LL	LL
			1.20		1.20	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.100	2045.8	425.3	345.36 R	259.67	345.36 R	259.67
1.200	3653.6	756.1	616.58 R	463.59	616.58 R	463.59
1.300	4807.7	992.4	813.66 R	611.77	813.66 R	611.77
1.400	5500.1	1134.2	927.08 R	697.05	927.08 R	697.05
1.500	5730.9	1181.5	963.98 R	724.80	963.98 R	724.80
1.600	5500.1	1134.2	927.08 R	697.05	927.08 R	697.05
1.700	4807.7	992.4	813.66 R	611.77	813.66 R	611.77
1.800	3653.6	756.1	616.58 R	463.59	616.58 R	463.59
1.900	2045.8	425.3	345.36 R	259.67	345.36 R	259.67
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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STRENGTH MOMENT RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU7

Span	Moment Resistance				Available Resistance for LL+I			
	Positive Top	Bending Bott.	Negative Top	Bending Bott.	Positive Top	Bending Bott.	Negative Top	Bending Bott.
1.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4
1.100	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
1.200	19220.4C	19220.4	-11559.2	-11559.2B	14810.7	14810.7	-15968.9	-15968.9
1.300	19220.4C	19220.4	-12566.7	-12566.7B	13420.3	13420.3	-18366.8	-18366.8
1.400	19220.4C	19220.4	-12566.7	-12566.7B	12586.1	12586.1	-19201.0	-19201.0
1.500	19220.4C	19220.4	-11559.2	-11559.2B	12308.0	12308.0	-18471.6	-18471.6
1.600	19220.4C	19220.4	-12566.7	-12566.7B	12586.1	12586.1	-19201.0	-19201.0
1.700	19220.4C	19220.4	-12566.7	-12566.7B	13420.3	13420.3	-18366.8	-18366.8
1.800	19220.4C	19220.4	-11559.2	-11559.2B	14810.7	14810.7	-15968.9	-15968.9
1.900	15921.1C	15921.1	-9894.4	-9894.4B	13450.1	13450.1	-12365.5	-12365.5
2.000	15921.1C	15921.1	-9908.4	-9908.4B	15921.1	15921.1	-9908.4	-9908.4

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## MOMENT RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL

Rating Live Load: SU7

Span	Moment				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating fiber -bend	Factor bottom fiber +bend	bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	38.94	999.00	38.94	999.00	0.00	999.0 (2-Lane)
1.100	38.94	999.00	38.94	999.00	0.00	999.0 (1-Lane)
1.200	24.02	999.00	24.02	999.00	0.00	930.8 (2-Lane)
1.200	24.02	999.00	24.02	999.00	0.00	930.8 (1-Lane)
1.300	16.49	999.00	16.49	999.00	0.00	639.1 (2-Lane)
1.300	16.49	999.00	16.49	999.00	0.00	639.1 (1-Lane)
1.400	13.58	999.00	13.58	999.00	0.00	526.1 (2-Lane)
1.400	13.58	999.00	13.58	999.00	0.00	526.1 (1-Lane)
1.500	12.77	999.00	12.77	999.00	0.00	494.8 (2-Lane)
1.500	12.77	999.00	12.77	999.00	0.00	494.8 (1-Lane)
1.600	13.58	999.00	13.58	999.00	0.00	526.1 (2-Lane)
1.600	13.58	999.00	13.58	999.00	0.00	526.1 (1-Lane)
1.700	16.49	999.00	16.49	999.00	0.00	639.1 (2-Lane)
1.700	16.49	999.00	16.49	999.00	0.00	639.1 (1-Lane)
1.800	24.02	999.00	24.02	999.00	0.00	930.8 (2-Lane)
1.800	24.02	999.00	24.02	999.00	0.00	930.8 (1-Lane)
1.900	38.94	999.00	38.94	999.00	0.00	999.0 (2-Lane)
1.900	38.94	999.00	38.94	999.00	0.00	999.0 (1-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)

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## SHEAR REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL

Rating Live Load: SU7

Gamma	DC	DW	(2-Lane)		(1-Lane)	
			LL	1.20	LL	1.20
Span w/o impact	Dead Load	Superimposed Dead Load	Live Load w/impact Truck	Live Load w/o impact Truck	Live Load w/impact Truck	Live Load Truck
Lane			Lane	Lane	Lane	

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1.000	141.4	29.5	26.15	19.66	26.15	19.66
1.100	114.2	23.6	23.30	17.52	23.30	17.52
1.200	86.5	17.7	20.46	15.38	20.46	15.38
1.300	57.7	11.8	17.61	13.24	17.61	13.24
1.400	28.8	5.9	14.77	11.10	14.77	11.10
1.500	0.0	0.0	11.92	8.96	11.92	8.96
1.600	-28.8	-5.9	-14.77	-11.10	-14.77	-11.10
1.700	-57.7	-11.8	-17.61	-13.24	-17.61	-13.24
1.800	-86.5	-17.7	-20.46	-15.38	-20.46	-15.38
1.900	-114.2	-23.6	-23.30	-17.52	-23.30	-17.52
2.000	-141.4	-29.5	-26.15	-19.66	-26.15	-19.66

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STRENGTH SHEAR RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU7

Span	Shear Resistance vn	Available Resistance for (-)	LL+I (+)
1.000	983.6	-1154.5	812.6 (2-Lane)
1.000	983.6	-1154.5	812.6 (1-Lane)
1.100	857.6	-995.4	719.9 (2-Lane)
1.100	857.6	-995.4	719.9 (1-Lane)
1.200	528.1	-632.3	423.8 (2-Lane)
1.200	528.1	-632.3	423.8 (1-Lane)
1.300	528.1	-597.5	458.6 (2-Lane)
1.300	528.1	-597.5	458.6 (1-Lane)
1.400	528.1	-562.8	493.3 (2-Lane)
1.400	528.1	-562.8	493.3 (1-Lane)
1.500	528.1	-528.1	528.1 (2-Lane)
1.500	528.1	-528.1	528.1 (1-Lane)
1.600	528.1	-493.3	562.8 (2-Lane)
1.600	528.1	-493.3	562.8 (1-Lane)
1.700	528.1	-458.6	597.5 (2-Lane)
1.700	528.1	-458.6	597.5 (1-Lane)
1.800	528.1	-423.8	632.3 (2-Lane)
1.800	528.1	-423.8	632.3 (1-Lane)
1.900	857.6	-719.9	995.4 (2-Lane)
1.900	857.6	-719.9	995.4 (1-Lane)
2.000	983.6	-812.6	1154.5 (2-Lane)
2.000	983.6	-812.6	1154.5 (1-Lane)

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STRENGTH SHEAR RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: I-LEGL  
Rating Live Load: SU7

Shear				
Span	Rating (-)	Factor (+)	Rating Value	Load Resistance (tons)

1.000	999.00	31.08	0.00	999.0 (2-Lane)
1.000	999.00	31.08	0.00	999.0 (1-Lane)
1.100	999.00	30.89	0.00	999.0 (2-Lane)
1.100	999.00	30.89	0.00	999.0 (1-Lane)
1.200	186.75	20.72	0.00	802.9 (2-Lane)
1.200	186.75	20.72	0.00	802.9 (1-Lane)
1.300	95.90	26.04	0.00	999.0 (2-Lane)
1.300	95.90	26.04	0.00	999.0 (1-Lane)
1.400	62.01	33.41	0.00	999.0 (2-Lane)
1.400	62.01	33.41	0.00	999.0 (1-Lane)
1.500	44.30	44.30	0.00	999.0 (2-Lane)
1.500	44.30	44.30	0.00	999.0 (1-Lane)
1.600	33.41	62.01	0.00	999.0 (2-Lane)
1.600	33.41	62.01	0.00	999.0 (1-Lane)
1.700	26.04	95.90	0.00	999.0 (2-Lane)
1.700	26.04	95.90	0.00	999.0 (1-Lane)
1.800	20.72	186.75	0.00	802.9 (2-Lane)
1.800	20.72	186.75	0.00	802.9 (1-Lane)
1.900	30.89	999.00	0.00	999.0 (2-Lane)
1.900	30.89	999.00	0.00	999.0 (1-Lane)
2.000	31.08	999.00	0.00	999.0 (2-Lane)
2.000	31.08	999.00	0.00	999.0 (1-Lane)

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## SERVICE MOMENT REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07

Rating Type: II-LEG  
Rating Live Load: SU7

Gamma	DC 1.00	DW 1.00	(2-Lane) LL 1.30		(1-Lane) LL 1.30	
Span impact	Dead Load	Superimposed	Live Load w/impact	Live Load w/o impact	Live Load w/impact	Live Load w/o
Lane	Dead Load	Truck	Lane	Truck	Lane	Truck
1.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00
1.100	2045.8	425.3	372.49 R	280.06	372.49 R	280.06
1.200	3653.6	756.1	665.01 R	500.00	665.01 R	500.00
1.300	4807.7	992.4	877.56 R	659.82	877.56 R	659.82
1.400	5500.1	1134.2	999.89 R	751.80	999.89 R	751.80
1.500	5730.9	1181.5	1039.69 R	781.72	1039.69 R	781.72
1.600	5500.1	1134.2	999.89 R	751.80	999.89 R	751.80
1.700	4807.7	992.4	877.56 R	659.82	877.56 R	659.82
1.800	3653.6	756.1	665.01 R	500.00	665.01 R	500.00
1.900	2045.8	425.3	372.48 R	280.06	372.48 R	280.06
2.000	0.0	0.0	0.00 R	0.00	0.00 R	0.00

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## SERVICE RESISTANCE REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07  
 Rating Type: II-LEGL  
 Rating Live Load:

Rating Type: SU7  
 Rating Live Load:

Span	Service Resistance				Available Resistance for LL+I			
	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.	Positive Bending Top	Negative Bending Bott.
1.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5
1.100	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
1.200	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.300	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.400	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.500	47.5	47.5	-47.5	-47.5	24.5	27.1	-72.7	-68.4
1.600	47.5	47.5	-47.5	-47.5	25.4	27.9	-71.7	-67.6
1.700	47.5	47.5	-47.5	-47.5	28.2	30.4	-68.7	-65.1
1.800	47.5	47.5	-47.5	-47.5	32.8	34.5	-63.6	-60.9
1.900	47.5	47.5	-47.5	-47.5	36.2	37.8	-60.0	-57.5
2.000	47.5	47.5	-47.5	-47.5	47.5	47.5	-47.5	-47.5

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 SERVICE RESISTANCE RATING REPORT

Structure I. D. 7777777\_20120905cy01\_01of01

Member I. D. G07  
 Rating Type: II-LEGL  
 Rating Live Load: SU7

Span	Service				Rating Value	Load Resistance (tons)
	top fiber +bend	Rating Factor bottom fiber -bend	Factor bottom fiber +bend	Factor bottom fiber -bend		
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
1.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)
1.100	92.37	999.00	27.46	999.00	0.00	999.0 (2-Lane)
1.100	92.37	999.00	27.46	999.00	0.00	999.0 (1-Lane)
1.200	49.05	999.00	17.58	999.00	0.00	681.2 (2-Lane)
1.200	49.05	999.00	17.58	999.00	0.00	681.2 (1-Lane)
1.300	31.91	999.00	11.73	999.00	0.00	454.6 (2-Lane)
1.300	31.91	999.00	11.73	999.00	0.00	454.6 (1-Lane)
1.400	25.24	999.00	9.46	999.00	0.00	366.6 (2-Lane)
1.400	25.24	999.00	9.46	999.00	0.00	366.6 (1-Lane)
1.500	23.39	999.00	8.83	999.00	0.00	342.2 (2-Lane)
1.500	23.39	999.00	8.83	999.00	0.00	342.2 (1-Lane)
1.600	25.24	999.00	9.46	999.00	0.00	366.6 (2-Lane)
1.600	25.24	999.00	9.46	999.00	0.00	366.6 (1-Lane)
1.700	31.91	999.00	11.73	999.00	0.00	454.6 (2-Lane)
1.700	31.91	999.00	11.73	999.00	0.00	454.6 (1-Lane)
1.800	49.05	999.00	17.58	999.00	0.00	681.2 (2-Lane)
1.800	49.05	999.00	17.58	999.00	0.00	681.2 (1-Lane)
1.900	92.37	999.00	27.46	999.00	0.00	999.0 (2-Lane)
1.900	92.37	999.00	27.46	999.00	0.00	999.0 (1-Lane)

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2.000	999.00	999.00	999.00	999.00	0.00	999.0 (2-Lane)
2.000	999.00	999.00	999.00	999.00	0.00	999.0 (1-Lane)