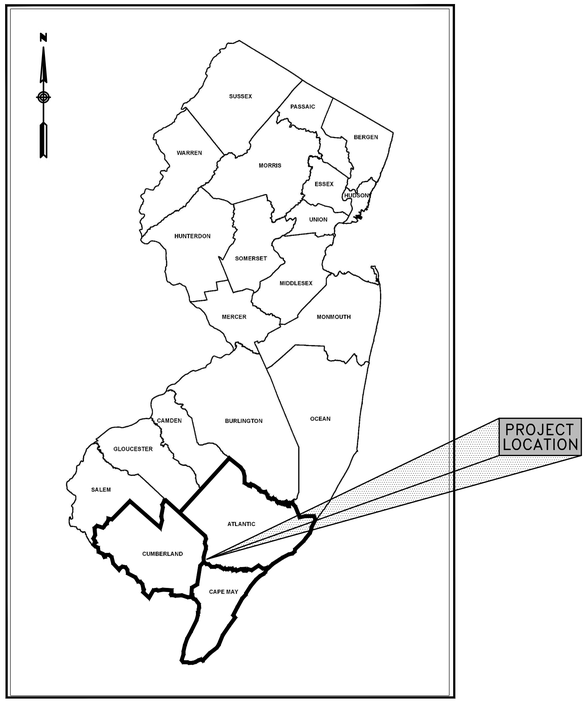
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

South Jersey Gas

CUMBERLAND, ATLANTIC
& CAPE MAY COUNTIES, NJ

AUGUST 23, 2013
REVISED: NOVEMBER 17, 2014



NEW JERSEY STATE MAP
NOT TO SCALE

DENNIS M.WALSH, P.E.
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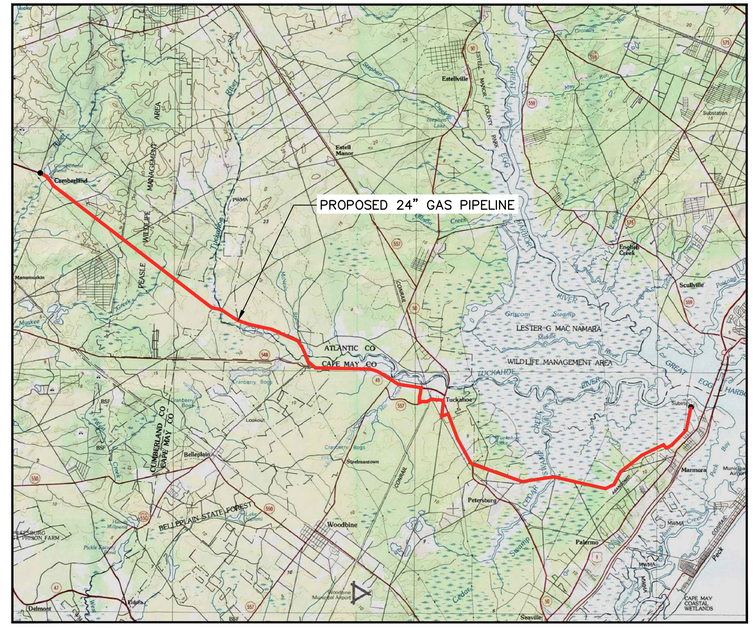

SOURCE: ESRI MAPS

LOCATION MAP
NOT TO SCALE

G-01

ABBREVIATIONS

&	AND	GALV.	GALVANIZED	±	PLUS OR MINUS
A.G.	ABOVE GROUND	GRND	GROUND	PE	PROFESSIONAL ENGINEER
ADS	ADVANCED DRAINAGE SYSTEM			PLS	PROFESSIONAL LAND SURVEYOR
ALUM.	ALUMINUM	H	HEIGHT	PSI	PER SQUARE INCH
		HDD	HORIZONTAL DIRECTION DRILL	PSIG	PER SQUARE INCH GAUGE PRESSURE
B	BORING	HWY	HIGHWAY	PVC	POLYVINYL CHLORIDE
BIT.	BITUMINOUS			PMA	PINELAND MANAGEMENT AREA
BK	BOOK	IN	INCH	R.O.W.	RIGHT-OF-WAY
BM	BENCHMARK	INV.	INVERT	R/W	RIGHT-OF-WAY
				RCP	REINFORCED CONCRETE PIPE
CK.	CHECKED	J&B	JACK & BORE	REINF.	REINFORCED
CONC	CONCRETE			REQ'D	REQUIRED
		LF	LINEAR FEET	RET	RETAINING
D.I.	DUCTILE IRON			RLS	REGISTERED LAND SURVEYOR
DES.	DESIGNED	MAX.	MAXIMUM	ROV	REMOTE OPERATED VALVE
DIA.	DIAMETER	MH	MANHOLE	RT	ROUTE
DR.	DRAWN	MIN.	MINIMUM	RTE	ROUTE
		MJ	MECHANICAL JOINT	S	SLOPE
E	EAST	MON	MONUMENT	S.S.	STAINLESS STEEL
EL.	ELEVATION	MPH	MILES PER HOUR	SCH	SCHEDULE
ELEC.	ELECTRICAL			SDR	STANDARD DIMENSION RATIO
EMBED.	EMBEDMENT	NO.	NUMBER	SF	SQUARE FEET
EOP	EDGE OF PAVEMENT	NR	NO REFUSAL	STA.	STATION
EX.	EXISTING	N.T.S.	NOT TO SCALE		
				TYP.	TYPICAL
FF	FINISH FLOOR	O.C.E.W.	ON CENTER EACH WAY	UC	UNDERGROUND CABLE
FIN.	FINISH	O.D.	OUTSIDE DIAMETER		
FL.	FLOOR	OH	OVERHEAD	W	WATER
FT	FOOT/FEET	OE	OVERHEAD ELECTRIC	W	WEST
				WV	WATER VALVE

LEGEND

EXISTING:

CONTOURS
GAS LINE
UNDER DRAIN PIPE
FLOOR DRAIN PIPE
UNDERGROUND TELEPHONE
OVERHEAD POWER LINE
EXISTING FENCE
EDGE OF PAVEMENT
TREE LINE
BRUSH LINE
PROPERTY LINE
CURB
CREEK / STREAM
STORM DRAIN PIPE
GUARDRAIL
CULVERT
WETLANDS
STATE MAPPED WETLAND
WILD AND SCENIC RIVER BOUNDARY
RIPARIAN BUFFER
WETLAND BUFFER
PINELANDS MANAGEMENT AREA BOUNDARY
SOIL BORINGS

SANITARY SEWER MANHOLE
SANITARY SEWER SERVICE CLEANOUT
STORM DRAIN MANHOLE
CATCH BASIN
CURB INLET
DROP INLET
STORM DRAIN MANHOLE
STREET SIGN
TRAFFIC SIGNAL BOX
TRAFFIC SIGNAL POLE
UTILITY POLE W/GUY
UTILITY POLE
LIGHTPOST
GUY ANCHOR
GAS METER BOX
GAS VENT
GAS VAULT
GAS TEST STATION
PETROLEUM VALVE
GAS FILL CAP
GAS METER
GAS VALVE
UTILITY MARKER
WATER GATE
CURB STOP
HYDRANT
SIGN
MAILBOX
FLAGPOLE
TREE

PROPOSED:

24" GAS PIPE
TRECHLESS PIPE (HDD OR JACK & BORE)
GAS PIPE
ABANDON EXISTING GAS PIPE
GAS VALVE
LIMIT OF DISTURBANCE
SILT FENCE
4' HIGH ORANGE PROTECTIVE BARRIER FENCE
CHAIN LINK FENCE
JERSEY BARRIERS
PIPE LAYDOWN AREA HDD STAGING / DRILLING AREA
JACK AND BORE SENDING AND RECEIVING PITS
POTENTIAL STORAGE AREA
TEMPORARY CONSTRUCTION EASEMENT
PERMANENT OCCUPATION AREA
TREES TO BE CLEARED
TREE TO BE REMOVED
TREELINE

DESIGN CONDITIONS:

DESIGN PRESSURE:	700 P.S.I.G.
DESIGN TEMPERATURE:	100°
DESIGN FACTOR:	0.40
MEDIUM:	NATURAL GAS
MAOP:	700 P.S.I.G

CATHODIC PROTECTION:

1. SEE SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL.
2. ALL CATHODIC PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH ARK ENGINEERING & TECHNICAL SERVICE, INC. REPORT TITLED "AC INTERFERENCE ANALYSIS & MITIGATION SYSTEM DESIGN, SOUTH JERSEY GAS COMPANY, PROPOSED 24" B.L. ENGLAND PIPELINE", DATED: 9/3/2014.

LSRP NOTE:

THIS PROJECT WILL BE COMPLETED IN ACCORDANCE WITH NJDEP'S LINEAR CONSTRUCTION TECHNICAL GUIDANCE DOCUMENT AND NJs TECHNICAL REQUIREMENT FOR SITE REMEDIATION TO ENSURE THAT CONTAMINATED MATERIALS ENCOUNTERED DURING THE PROJECT ARE MANAGED IN A MANNER THAT IS PROTECTIVE OF HUMAN HEALTH, SAFETY AND THE ENVIRONMENT.

WETLAND NOTES:

1. WETLAND AND WATER BODY LIMITS HAVE BEEN DELINEATED BY WOODARD & CURRAN AND TRIDENT ENVIRONMENTAL CONSULTANTS BETWEEN AUGUST 2012 AND DECEMBER 2012. WETLANDS AND WATER BODIES WERE SURVEYED BY VARGO ASSOCIATES BETWEEN AUGUST 2012 AND JANUARY 2013.
2. SEE DETAIL SHEET D-03 FOR TYPICAL PIPELINE CROSS-SECTION ADJACENT TO WETLANDS.

GENERAL NOTES:

1. CONTRACTOR SHALL MAINTAIN 4'-0" MINIMUM COVER ON PROPOSED GAS PIPELINE UNLESS OTHERWISE NOTED.
2. ALL OFFSETS SHOULD USE LONG RADIUS (LR) SEGMENTABLE STEEL BENDS.
3. THE PROPOSED 24" GAS MAIN STARTING POINT IS AT STATION 9+86.
4. THESE DRAWINGS WERE PREPARED FOR SOUTH JERSEY GAS (SJG) SOLELY FOR THEIR USE, AS WELL AS ITS CONTRACTORS AND/OR ITS AGENTS, IN CONSTRUCTING THE PROPOSED PIPELINES AND APPURTENANCES. ANY USE OR RELIANCE THEREON BY OTHER PARTIES IS DONE SO AT THEIR SOLE RISK AND LIABILITY.
5. CONSTRUCTION TO BE PERFORMED AS SHOWN ON THESE DRAWINGS SHALL BE IN COMPLIANCE WITH TITLE 49 OF THE CODE OF FEDERAL REGULATIONS, PART 192; TITLE 14 , PART 7 OF THE NJ ADMINISTRATIVE CODE AND SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL.
6. ALL WELDING TO BE IN COMPLIANCE WITH THE 20TH EDITION OF API 1104 AND 1107 AS REFERENCED BY CFR 49 PART 192 OF THE FEDERAL REGULATIONS, TITLE 14, PART 7 OF THE NJ ADMINISTRATIVE CODE AND SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL.
7. CONTRACTOR SHALL COAT AND/OR WRAP ALL UNDERGROUND STEEL PIPING AND FITTINGS IN ACCORDANCE WITH SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL.
8. ALL SEGMENTS OF PIPING SHALL BE CLEANED DAILY WITH A SWAB PRIOR TO WELDING. ALL OPEN ENDS ON WELDED SECTIONS SHALL BE CLOSED DAILY USING END CAPS AND AT THE END OF WORK SHIFTS. NO SECTIONS OF WELDED PIPE SHALL BE LEFT OPEN OVERNIGHT.
9. ALL SECTIONS OF STEEL PIPING SHALL BE INSPECTED PRIOR TO AND DURING THE LOWERING-IN WITH AN APPROVED HOLIDAY DETECTOR AND IN ACCORDANCE WITH SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL.
10. ALL BURIED MATERIAL SHALL BE PADDED TO A MINIMUM DEPTH OF 12" OVER THE PIPE USING BACKFILL MATERIAL FREE OF STUMPS, ROCKS, LARGE LUMPS OR OTHER HARD OBJECTS THAT MAY DAMAGE THE PIPE AS PER SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL AND APPROVED BY SOUTH JERSEY GAS.
11. CONTRACTOR SHALL USE PIPE COATED WITH POWERCRETE, OR SJG APPROVED EQUIVALENT, FOR HDD AND JACKING INSTALLATIONS.
12. ALL EXISTING UTILITIES NOTED ON DRAWINGS ARE APPROXIMATE LOCATIONS ONLY AND SHALL BE LOCATED AND MARKED PRIOR TO START OF CONSTRUCTION.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING & SUPPORTING EXISTING UTILITIES & STRUCTURES.
14. FABRICATE PER FIELD CONDITIONS & VERIFY ALL DIMENSIONS IN FIELD.
15. INSTALL GAS MAIN WITH MIN OF 18 INCHES VERTICAL & A MIN OF 5 FT HORIZONTAL SUBSTRUCTURE CLEARANCE AS REQUIRED BY SJG. ANY DEVIATIONS FROM THESE CLEARANCES MUST BE APPROVED BY SJG PRIOR TO INSTALLATION.
16. ALL TRENCH EXCAVATION AND PROTECTION SHALL BE IN ACCORDANCE WITH OSHA SPECIFICATIONS & SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL. CONTRACTOR SHALL SUBMIT A DETAILED CONSTRUCTION SHEETING/SHORING AND DEWATERING PLAN FOR ALL TRENCHING OPERATIONS AND ALL EXCAVATIONS INDICATED IN THE DRAWINGS ONE MONTH PRIOR TO CONSTRUCTION.
17. CONTRACTOR MUST COMPLY WITH ONE CALL REQUIREMENTS AS REQUIRED BY LAW.
18. THE PIPE ROUTE SHOWN MAY BE ALTERED DUE TO ACTUAL FIELD CONDITIONS. SOME FITTINGS MAY BE ADDED/ELIMINATED AT THE DIRECTION OF SJG.
19. CONTRACTOR SHALL REPLACE/ RESTORE ANY AND ALL FEATURES, SUCH AS MAILBOXES, SIGNS, ETC., THAT ARE DISTURBED DURING CONSTRUCTION, IN KIND.
20. WELDS TO BE 100% X-RAYED. CONTRACTOR WILL COORDINATE SCHEDULING WITH SJG INSPECTOR AND SJG X-RAY CONTRACTOR.
21. CONTRACTOR SHALL SUPPLY ALL CONCRETE, REINFORCING RODS, ROCKSHIELD, NEOPRENE AND NECESSARY FORMING MATERIALS.
22. ALL WELDS TO FITTINGS WITH 0.500"W.T. AND GREATER OR 24" NOM. PIPE SIZE AND LARGER SHALL BE PREHEATED TO COMPLY WITH 824.3 AND B24.4, ANSI B31.8 AROUND THE ENTIRE CIRCUMFERENCE OF THE WELD FOR A DISTANCE OF 3" BOTH SIDES OF THE WELD. PREHEATED AREA TO BE TESTED WITH A 250°F TEMPERATURE INDICATING CRAYON, SUCH AS "TEMPILSTICK", FOR PROPER TEMPERATURE JUST PRIOR TO STRIKING ARC. ALL WELDS TO FITTINGS WITH AN AMBIENT TEMPERATURE UNDER 40°F SHALL BE PREHEATED AS DESCRIBED ABOVE.
23. PRIOR TO INSTALLING WELDOLETS, THREADOLETS AND SOCKOLETS 2" AND SMALLER, PREHEAT AN APPROXIMATELY ONE SQUARE FOOT AROUND THE OPENING TO A MINIMUM OF 250°F. TEST THE PREHEATED AREA WITH A 250°F INDICATION CRAYON (TEMPLESTICK) FOR PROPER TEMPERATURE.
24. A CONTRACTION TYPE INSERTION RING SHALL BE INSTALLED IN ALL SOCKETWELD PIPING JOINTS FOR OBTAINING THE PROPER GAP REQUIRED BY ANSI B16.1 PRIOR TO WELDING. INSERTION RINGS SHALL BE PROVIDED BY CONTRACTOR.
25. ALL TRAFFIC CONTROL REFERENCES ARE AS PER THE MAINTENANCE AND PROTECTION OF TRAFFIC (MPTs) DRAWINGS TCP 01-22 PREPARED BY CHERRY WEBER AND ASSOCIATES, FREEHOLD NJ, ARE FOR THE EXCLUSIVE USE OF SOUTH JERSEY GAS AND THEIR CONTRACTORS DURING THE CONSTRUCTION OF THIS PROJECT.
26. ALL FITTINGS AND BENDS LESS THAN 45 DEGREES SUBJECT TO FINAL FIELD CONDITIONS AND FIT.
27. ALL LOCATIONS WHERE THE PROPOSED 24" PIPE WILL BE INSTALLED 18" OR LESS FROM ANY FOREIGN SUBSTRUCTURE(S), THE CONTRACTOR SHALL INSTALL A NEOPRENE WRAP FOR PROTECTION AROUND THE CARRIER PIPE AS INDICATED IN DETAIL DRAWING D-1C.
28. ALL AST DRAWING REFERENCES ARE FOUND IN SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL.
29. ALL FIELD COLD BENDS OF 24" PIPE SHALL BE MADE TO A MINIMUM RADIUS OF 60 FEET, PER SECTION 841.231 OF ASME B31.8.
30. CONTRACTOR SHALL NOT CLEAR, GRUB, AND/OR REMOVE ANY WOODY VEGETATION FROM ANY RIGHT OF WAYS DURING THE PERIOD OF MARCH 15TH TO JULY 31ST IN THE CAFRA JURISDICTION.
31. FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE. THE PURPOSE OF THE CONSTRUCTION FENCE IS TO ACT AS AN OBVIOUS BARRIER TO IDENTIFY THE LIMIT OF DISTURBANCE.
32. CONTRACTOR TO COORDINATE ACCESS DURING CONSTRUCTION WITH PROPERTY OWNER TO ENSURE MINIMAL INCONVENIENCE.
33. THE LOD (LIMIT OF DISTURBANCE IS THE LIMIT OF EXPECTED RESTORATION AND NOT THE AVAILABLE WORKSPACE WHICH IS DEPICTED MORE CLEARLY ON THE MPT PLANS.
34. CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE EXISTING NJDOT PROJECT UNDER CONTRACT DURING THE WORK AND PRIOR TO FINAL PAVING.
35. CONTRACTOR TO COORDINATE WITH THE NJDOT ON FINAL PREPARATION FOR FINAL PAVEMENT BY THE NJDOT.

TRENCHLESS INSTALLATION NOTES:

1. JACK AND BORE RAILROAD CROSSINGS INSTALLATIONS SHALL BE IN COMPLIANCE WITH "SPECIFICATIONS FOR PIPELINE OCCUPANCY AND REQUIRED TRAINING OF CONSOLIDATED RAIL CORPORATION PROPERTY" CE-8 DATED 5/1/95.
2. ALL HDD CURVE DATA APPROXIMATE FOR DRILLING PURPOSES. FINAL CURVED DETAILS BASED ON INSTALLATION AND AS-BUILT DRAWING GENERATED BY CONTRACTOR.
3. HORIZONTAL DIRECTIONAL DRILLING (HDD) DESIGN AND INSTALLATIONS BASED ON INSTALLATION OF PIPELINES BY HORIZONTAL DIRECTIONAL DRILLING ENGINEERING DESIGN GUIDE BY PIPELINE RESEARCH COUNCIL INTERNATIONAL (PRCI), INC., APRIL 15, 1995; AND GOOD HDD PRACTICES GUIDELINES, THIRD EDITION, 2008, ISSUED BY THE HDD CONSORTIUM AND BENNETT/ARIARATNAM.
4. DESIGN OF HDD INSTALLATIONS BASED ON BEST PRACTICES AND DESIGN CRITERIA OF PRCI AND USING PIPELINE TOOLBOX HDD SOFTWARE TO CALCULATE STRESS LEVELS DURING PULLBACK. RECOMMENDED BENDING RADII ARE MINIMUM FOOTAGES, UNLESS OTHERWISE NOTED.
5. DRILLING/STAGING AREAS AND PIPELINE LAYDOWN AREAS ARE DELINEATED BASED ON ENVIRONMENTAL DISTURBANCE AND RIGHT OF WAY RESTRICTIONS. THE CONTRACTOR SHALL USE BEST EFFORTS IN DETERMINING THE OPTIMUM MEANS AND METHODS TO ACCOMPLISH THE COMPLETE INSTALLATION OF EACH HDD CROSSING.
6. CONTRACTOR TO SUBMIT DRILLING AND BREAKOUT PLANS FOR ALL HDD INSTALLATIONS ALONG WITH CONTINGENCY OPERATIONAL PLANS AND COMMUNICATION PROTOCOLS IN THE EVENT OF A INADVERTENT RETURNS. CONTRACTOR TO SUBMIT PLANS FOR APPROVAL BY PINELANDS 45 DAYS PRIOR TO MOBILIZATION OF DRILLING EQUIPMENT.
7. CONTRACTOR SHOULD REFER TO CHERRY WEBER & ASSOCIATES BORING LOGS AND GEOTECHNICAL REPORT "24 INCH-BL ENGLAND PIPELINE SUPPLY PROJECT" CUMBERLAND, ATLANTIC, & CAPE MAY COUNTIES, NEW JERSEY, DATED JULY 10, 2013, REVISED SEPTEMBER 4, 2014. DISTRIBUTED BY SJG RESOURCES FOR FURTHER INFORMATION ON HDD INSTALLATIONS.
8. ALL REFERENCES TO AND LOCATIONS OF SUBSURFACE UTILITIES IN THE DRAWINGS HEREIN ARE BASED ON THE BEST AVAILABLE INFORMATION. PRIOR TO COMMENCING ANY EXCAVATING WORK, CONTRACTOR SHALL USE BEST EFFORTS INCLUDING ANY AND ALL PRECAUTIONS TO IDENTIFY AND LOCATE SUBSURFACE UTILITY CROSSINGS INCLUDING BUT NOT LIMITED TO HAND EXCAVATED TEST HOLES. CONTRACTOR(S) IS /ARE DIRECTED TO CALL NEW JERSEY ONE CALL SYSTEM FOR MARK OUTS IN ACCORDANCE WITH SJG'S CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL.
9. HDD AND TRENCHLESS INSTALLATIONS SHALL CONFORM TO ALL FEDERAL, STATE, LOCAL GOVERNING BODIES HAVING JURISDICTION INCLUDING BUT NOT LIMITED TO DOT CODE PART 192, SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL, CONSOLIDATED RAIL CORPORATION SPECIFICATION FOR PIPELINE OCCUPANCY NSCE-8, NEW JERSEY DEP, ENVIRONMENTAL PROTECTION DIVISION REQUIREMENTS AND US ARMY CORP OF ENGINEERS.
10. SHEETING AND SHORING PLANS AS REQUIRED BY OSHA SHALL BE SIGNED & SEALED BY A NEW JERSEY P.E. AND SUBJECT TO REVIEW AND APPROVAL BY SJG AND THE NJDOT PAVEMENT DESIGN AND TECHNICAL MANAGEMENT DEPARTMENT.

SURVEY NOTES:

1. THIS BASE MAP WAS PREPARED BY VARGO ASSOCIATES BETWEEN AUGUST 2012 AND JANUARY 2013.
2. HORIZONTAL DATUM IS REFERENCED TO THE NEW JERSEY STATE PLANE COORDINATE SYSTEM NAD'83. VERTICAL DATUM IS REFERENCED TO NAVD'88. HORIZONTAL AND VERTICAL DATUMS ARE BASED ON AN OPUS SOLUTION PREPARED BY NGS AND REFERENCED TO THE FOLLOWING CORS BASE STATIONS:
   (a) NJGT R STOCKTON COLLEGE CORS ARP (Pid: DL 1896)
   (b) NJCM MIDDLE TOWNSHIP CORS ARP (Pid: DI 3828)
   (c) DNRC DOVER DNRC CORS ARP (Pid : JU2857)
3. TOPOGRAPHIC FEATURES BASED ON AERIAL MAPPING PREPARED BY PRO MAPS INC. DATE OF PHOTOGRAMMETRIC FLIGHTS: SEPTEMBER 2010 TO OCTOBER 2012.

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REV.	DESCRIPTION	DATE
3	REVISED GENERAL NOTES	9/4/14
2	MOVED SHEET INDEX TO G-03	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_G-02 N&L CS.dwg

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: NONE

NOTES AND LEGEND

G-02

\\portland\projects\225616 sjg - england power plant\wip\Drawings_redesign\225616_G-02 N&L CS.DWG, May 18, 2015 - 1:19pm

DWG NO.	DRAWING NAME
G-01	COVER SHEET
G-02	NOTES AND LEGEND
G-03	SHEET INDEX
G-04	KEY PLAN
LD-1	LAYDOWN AREA PLAN FOR HDD-R1 - CUMBERLAND POND
AS-1	ALIGNMENT SHEET 1
AS-2	ALIGNMENT SHEET 2
AS-3	ALIGNMENT SHEET 3
AS-4	ALIGNMENT SHEET 4
AS-5	ALIGNMENT SHEET 5
AS-6	ALIGNMENT SHEET 6
AS-7	ALIGNMENT SHEET 7
AS-8	ALIGNMENT SHEET 8
AS-9	ALIGNMENT SHEET 9
AS-10	ALIGNMENT SHEET 10
AS-11	ALIGNMENT SHEET 11
AS-12	ALIGNMENT SHEET 12
AS-13	ALIGNMENT SHEET 13
AS-14	ALIGNMENT SHEET 14
AS-15	ALIGNMENT SHEET 15
AS-16	ALIGNMENT SHEET 16
AS-17	ALIGNMENT SHEET 17
AS-18	ALIGNMENT SHEET 18
AS-19	ALIGNMENT SHEET 19
AS-20	ALIGNMENT SHEET 20
AS-21	ALIGNMENT SHEET 21
AS-22	ALIGNMENT SHEET 22
AS-23	ALIGNMENT SHEET 23
AS-24	ALIGNMENT SHEET 24
AS-25	ALIGNMENT SHEET 25
AS-26	ALIGNMENT SHEET 26
AS-27	ALIGNMENT SHEET 27
AS-28	ALIGNMENT SHEET 28
AS-29	ALIGNMENT SHEET 29
AS-30	ALIGNMENT SHEET 30
AS-31	ALIGNMENT SHEET 31
AS-32	ALIGNMENT SHEET 32
AS-33	ALIGNMENT SHEET 33
AS-34	ALIGNMENT SHEET 34
AS-35	ALIGNMENT SHEET 35
AS-36	ALIGNMENT SHEET 36
AS-37	ALIGNMENT SHEET 37
AS-38	ALIGNMENT SHEET 38
AS-39	ALIGNMENT SHEET 39
AS-40	ALIGNMENT SHEET 40
AS-41	ALIGNMENT SHEET 41
AS-42	ALIGNMENT SHEET 42
AS-43	ALIGNMENT SHEET 43
AS-44	ALIGNMENT SHEET 44
AS-45	ALIGNMENT SHEET 45
AS-46	ALIGNMENT SHEET 46
AS-47	ALIGNMENT SHEET 47
AS-48	ALIGNMENT SHEET 48
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AS-50	ALIGNMENT SHEET 50
AS-51	ALIGNMENT SHEET 51
AS-52	ALIGNMENT SHEET 52
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AS-56	ALIGNMENT SHEET 56
AS-57	ALIGNMENT SHEET 57
AS-58	ALIGNMENT SHEET 58
AS-59	ALIGNMENT SHEET 59
AS-60	ALIGNMENT SHEET 60
AS-61	ALIGNMENT SHEET 61
AS-62	ALIGNMENT SHEET 62
AS-63	ALIGNMENT SHEET 63
AS-64	ALIGNMENT SHEET 64
AS-65	ALIGNMENT SHEET 65

DWG NO.	DRAWING NAME
AS-66	ALIGNMENT SHEET 66
AS-67	ALIGNMENT SHEET 67
AS-68	ALIGNMENT SHEET 68
AS-69	ALIGNMENT SHEET 69
AS-70	ALIGNMENT SHEET 70
AS-71	ALIGNMENT SHEET 71
AS-72	ALIGNMENT SHEET 72
AS-73	ALIGNMENT SHEET 73
AS-74	ALIGNMENT SHEET 74
AS-75	ALIGNMENT SHEET 75
AS-76	ALIGNMENT SHEET 76
AS-77	ALIGNMENT SHEET 77
AS-78	ALIGNMENT SHEET 78
AS-79	ALIGNMENT SHEET 79
AS-80	ALIGNMENT SHEET 80
AS-81	ALIGNMENT SHEET 81
AS-82	ALIGNMENT SHEET 82
SA-1	POTENTIAL STORAGE AREA 3
SA-2	POTENTIAL STORAGE AREA 5
SA-3	POTENTIAL STORAGE AREA 6 & 7
SA-4	POTENTIAL STORAGE AREA 8
SA-5	POTENTIAL STORAGE AREA 9,10, & 11
SA-6	POTENTIAL STORAGE AREA 15
D-1A	TYPICAL PAVEMENT RESTORATION DETAIL SHEET 1A
D-1B	TYP PAVEMENT RESTORATION AND DETAIL SHEET 1B
D-1C	TYPICAL PAVEMENT RESTORATION AND DETAIL SHEET 1C
D-02	DETAILS
D-03	DETAILS
D-04A	ROUTE 49 ROV DETAILS
D-04B	TUCKAHOE ROAD ROV DETAILS
D-05	BELOW GROUND VALVE
D-06	SITE PLAN DETAILS
D-07	DETAILS
HDD-R1	CUMBERLAND POND - HDD
HDD-R2	HDD-R2 AT STATION 220+50
HDD-R3	HDD-R3 AT STATION 230+74
HDD-R4	HDD-R4 AT STATION 251+67
HDD-R5	HDD-R5 AT STATION 284+60
HDD-R6	HDD-R6 AT STATION 303+23
HDD-R7	TUCKAHOE RIVER @ FIRST AVENUE HDD
HDD-R8.1	HDD-R8.1 & HDD-R8.2 AT STATION 336+24
HDD-R8.2	HDD-R8.1 & HDD-R8.2 AT STATION 336+24
HDD-R9	HDD-R9 AT STATION 353+20
HDD-R10	HDD-R10 AT STATION 384+50
HDD-R11	HDD-R11 AT STATION 403+20
HDD-R12	TUCKAHOE RIVER @ HEAD OF RIVER ROAD - HDD
HDD-R13	HDD-R13 AT STATION 491+54
HDD-R14	HDD-R14 AT STATION 506+17
HDD-R15	HDD-R15 AT STATION 516+47
HDD-R16	HDD-R16 AT STATION 553+75
HDD-R17	HDD-R17 AT STATION 575+39
HDD-R18	MILL CREEK - HDD
HDD-R19	HDD-R19 AT STATION 625+09
HDD-R20	HDD-R20 AT STATION 633+39
HDD-R21	HDD-R21 AT STATION 679+09
HDD-R22	HDD-R22 AT STATION 698+00
HDD-S1.1	CEDAR SWAMP CREEK - HDD
HDD-S1.2	CEDAR SWAMP CREEK - HDD
HDD-S2.1	HDD-S2.1 AT STATION 948+26
HDD-S2.2	HDD-S2.2 AT STATION 948+26
HDD-S3	HDD-S3 AT STATION 1024+32
HDD-S4	HDD-S4 AT STATION 1043+06
HDD-S5	HDD-S5 AT STATION 1057+52
HDD-S6.1	ALTANTIC CITY ELECTRIC - HDD
HDD-S6.2	ATLANTIC CITY ELECTRIC - HDD
HDD-S7	HDD-S7 AT STATION 1153+93
HDD-1.0 ALT	TYPICAL HDD CROSSING ALTERNATE DESIGN
J&Bs-1	JACK & BORE DETAILS
J&Bs-2	JACK & BORE DETAILS
C-01	PLAN & PROFILE 24" STEEL GAS MAIN READING AVE & MT PLEASANT-TUCKAHOE RD

DWG NO.	DRAWING NAME
C-100	CUMBERLAND POND PIGGING STATION SITE PLAN - MAURICE RIVER TOWNSHIP CUMBERLAND COUNTY
M-100	CUMBERLAND POND PIGGING STATION ENLARGED PLAN
M-101	CUMBERLAND POND PIGGING STATION SECTIONS
M-102	CUMBERLAND POND PIGGING STATION SECTIONS & DETAILS
C-200	MT. PLEASANT-TUCKAHOE RD. INTERCONNECT STATION SITE
M-200	MT. PLEASANT-TUCKAHOE RD. INTERCONNECT STATION ENLARGED PLAN & SECTIONS
M-201	MT. PLEASANT-TUCKAHOE RD. INTERCONNECT STATION SITE SECTIONS AND DETAILS
M-202	MT. PLEASANT-TUCKAHOE RD. INTERCONNECT STATION SITE SECTIONS AND DETAILS
C-300	BL ENGLAND METERING STATION SITE PLAN UPPER TOWNSHIP CAPE MAY COUNTY
C-301	BL ENGLAND METERING STATION DEMOLITION PLAN - UPPER TOWNSHIP CAPE MAY COUNTY
M-300	BL ENGLAND METERING STATION LAYOUT ENLARGED PLAN
M-301	BL ENGLAND METERING STATION SECTIONS ENLARGED PLAN
M-302	BL ENGLAND METERING STATION SECTIONS ENLARGED PLAN
C-AGV-1	RT49 ROV SITE PLAN UPPER TOWNSHIP CAPE MAY COUNTY
C-AGV-2	TUCKAHOE ROV SITE UPPER TOWNSHIP CAPE MAY COUNTY
BL-1	BL ENGLAND CONSTRUCTION ACCESS SITE PLAN
S-001	STRUCTURAL EQUIPMENT PAD PLAN, DETAILS & NOTES

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DENNIS M. WALSH, P.E.
NJ LIC.NO. GE46534

REV	DESCRIPTION	DATE
1	ADDED SHEET C-01 TO THE SHEET INDEX	07/7/14

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: JBC | 225616_G-03-SHEET INDEX*.dwg

SHEET INDEX

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: NONE

G-03

\\portland\projects\225616 sjg - england power plant\wip\Drawings_redesign\225616_G-03-SHEET INDEX.dwg, May 18, 2015 - 1:19pm



POTENTIAL STORAGE AREAS

PLAN
SCALE: 1"=3000'

SOURCE: 2011 NATIONAL GEOGRAPHIC SOCIETY, I-CUBED
TUCKAHOE, MARMORA, DENNISVILLE & SEA ISLE CITY
15 MINUTE USGS TOPOGRAPHIC QUADRANGLES

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NJ. LIC.NO. GE46534

REV	DESCRIPTION	DATE
2	UPDATED KEY PLAN	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_G-04-KEY CS.dwg

KEY PLAN

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

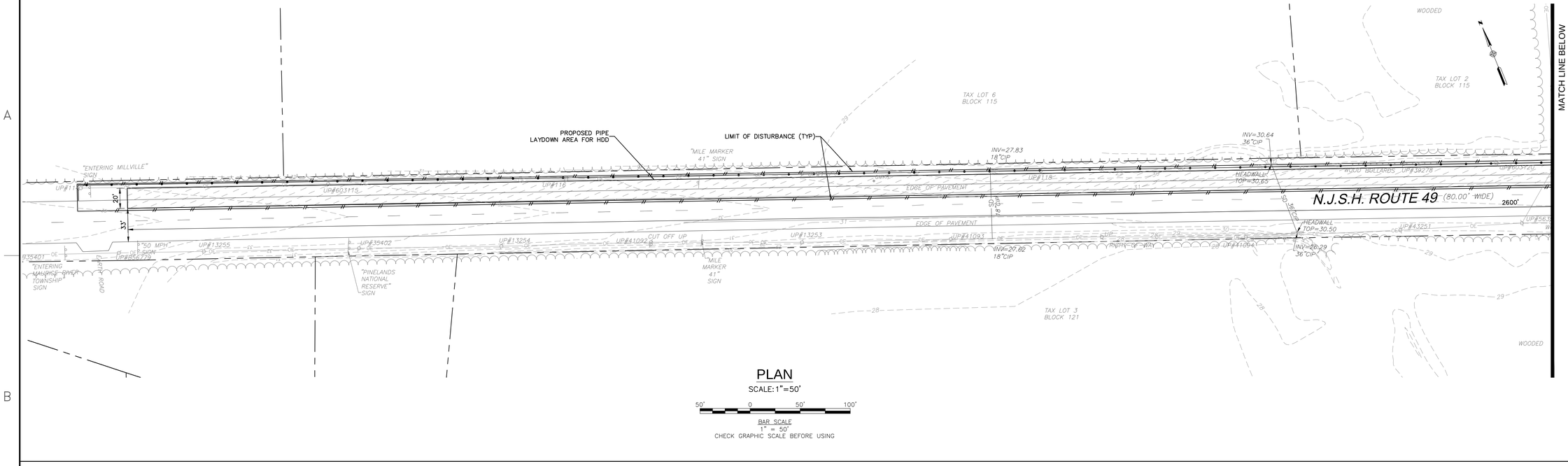
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: 1" = 3000'

G-04

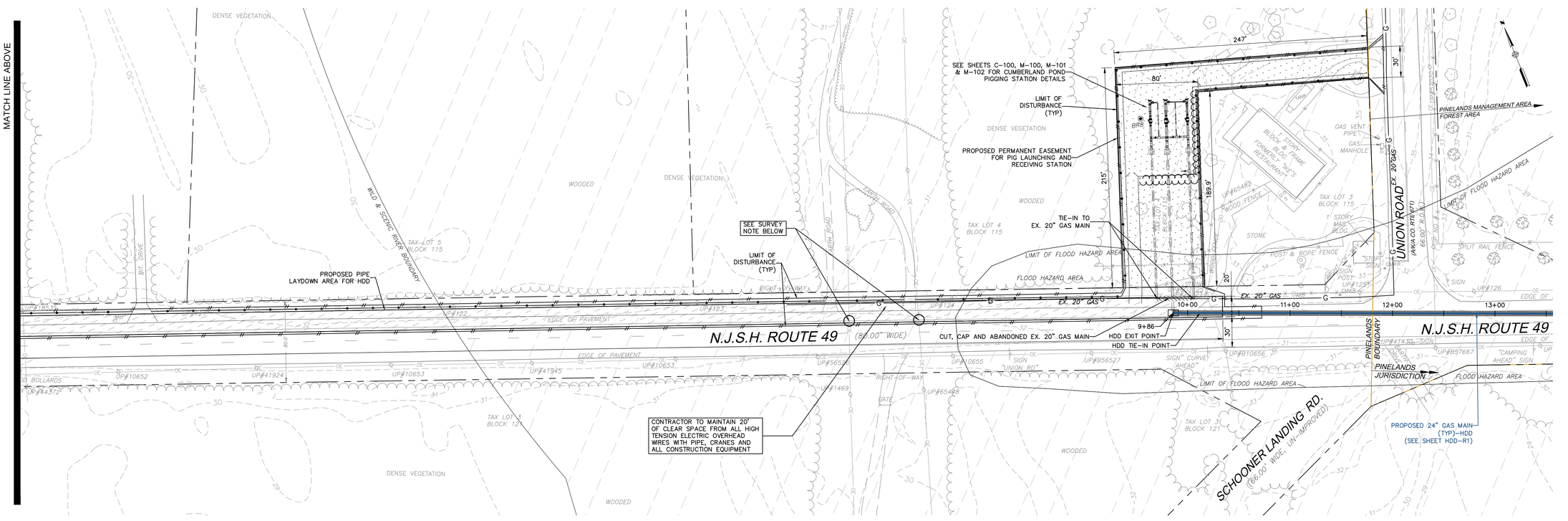
\\portland\projects\225616 sjg - england power plant\wip\Drawings_redesign\225616_G-04-KEY CS.dwg, May 18, 2015 - 1:19pm

24x36 SHEET
1:1



PLAN
SCALE: 1"=50'

50' 0 50' 100'
BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PLAN
SCALE: 1"=50'

50' 0 50' 100'
BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING

SURVEY NOTE:

CLEARANCE MEASUREMENTS IN THE TWO AREAS CIRCLED ON LD-1 FROM GRADE AT ROADWAY SHOULDER WHITE PAINT LINE TO WIRES WERE TAKEN BY A LICENSED SURVEYOR ON 12/19/2013 AT APPROXIMATE 50 DEGREES F. EAST POLE LINE – THE LOWEST LINE IS A SINGLE WIRE, CLEARANCE IS APPROXIMATELY 43 FEET. WEST POLE LINE – A SINGLE WIRE, HEIGHT DISTANCE IS APPROXIMATELY 26 FEET, THE THREE WIRES IN PARALLEL ABOVE THE SINGLE WIRE, CLEARANCE IS APPROXIMATELY 34 FEET FROM GRADE.
CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN PROPER AND REQUIRED CLEARANCES DURING THE HDD OPERATIONS. THE WIRE ELEVATIONS MAY CHANGE DEPENDENT ON THE TIME OF YEAR AND THE AMBIENT TEMPERATURES DURING THE PULLBACK. CONTRACTOR SHALL COORDINATE WITH ELECTRIC COMPANIES (ATLANTIC CITY ELECTRIC) AND VERIFY WIRE ELEVATIONS AND CLEARANCES PRIOR TO A SAFE PULLBACK OF THE PIPELINE.

SEE AS SHEETS FOR PIPELINE ALIGNMENT TO B.L. ENGLAND

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DENNIS M. WALSH, P.E.
N.J. LIC. NO. GE46534

REV.	DESCRIPTION	DATE
2	ADDED WILD & SCENIC RIVER BOUNDARY	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_LD-1 CS.dwg

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24" B.L. ENGLAND GAS PIPELINE

LAYDOWN AREA PLAN FOR HDD-R1 – CUMBERLAND POND

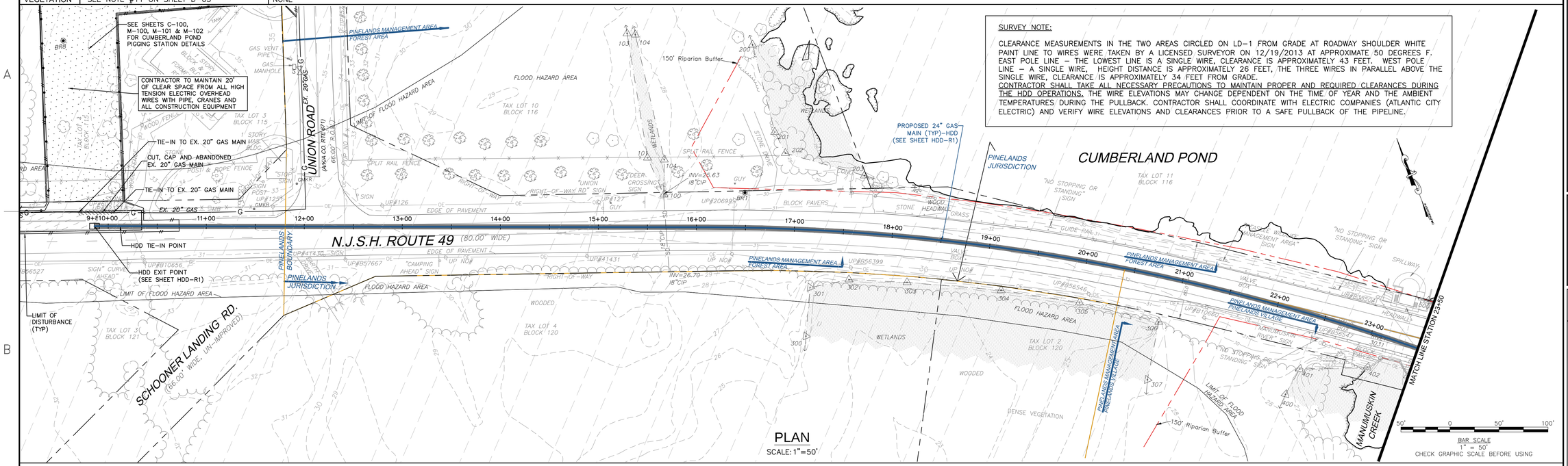
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: 1" = 50'

LD-1

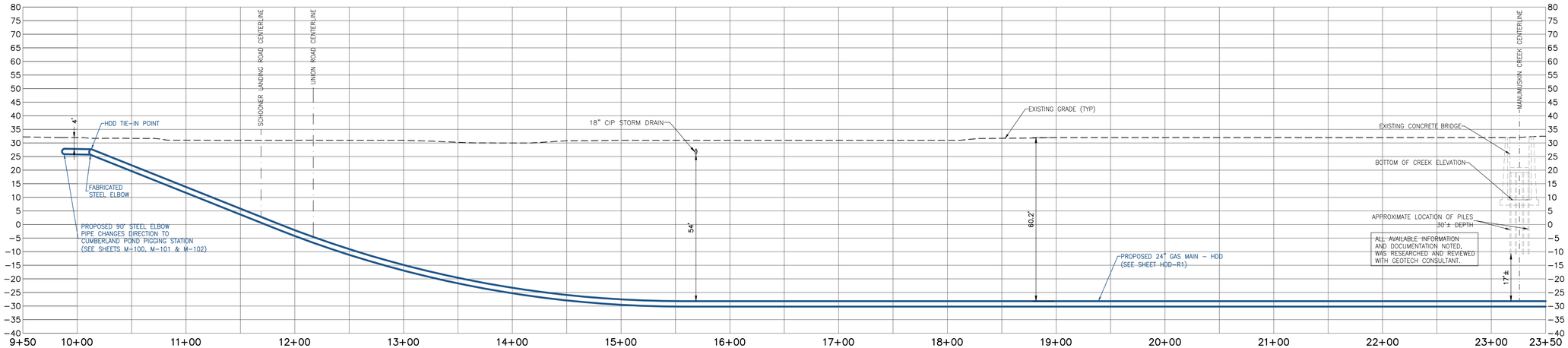
\\portland\projects1\225616 sig - england power plant\wip\Drawings_redesign\225616_LD-1 CS.dwg, May 18, 2015 – 1:20pm

24x36 SHEET
1:1

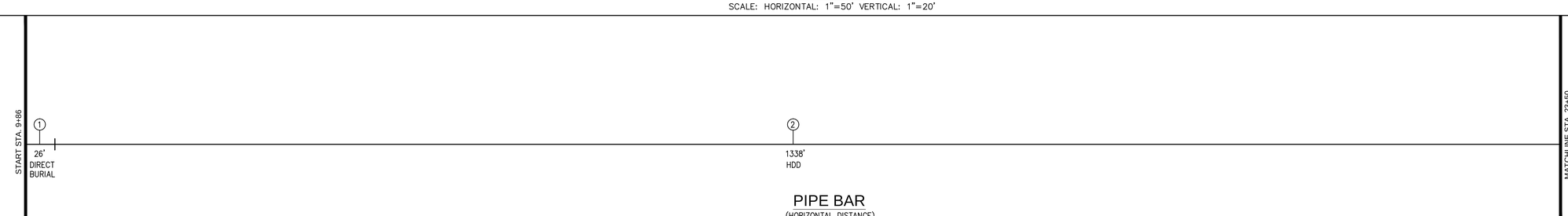
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY	
OWNERSHIP	STATE OF NEW JERSEY	
DISTANCE	26'	1,338'
RESTORATION	PAVEMENT–DETAILS # 1A/1B ON SHEET D–1A	NONE
VEGETATION	SEE NOTE #11 ON SHEET D–03	NONE



PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	26 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,338 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC. NO. GE46534

REV.	DESCRIPTION	DATE
2	ADDED WILD & SCENIC RIVER BOUNDARY	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_1–8 CS.dwg

ALIGNMENT SHEET 1

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

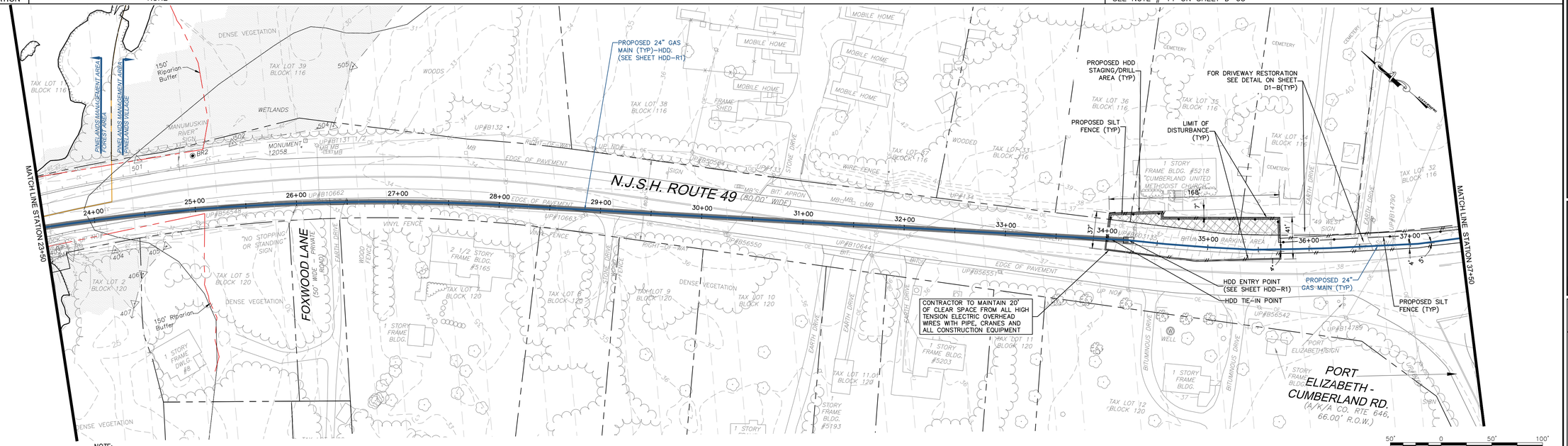
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-1

\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_1–8 CS.dwg, May 18, 2015 – 1:20pm

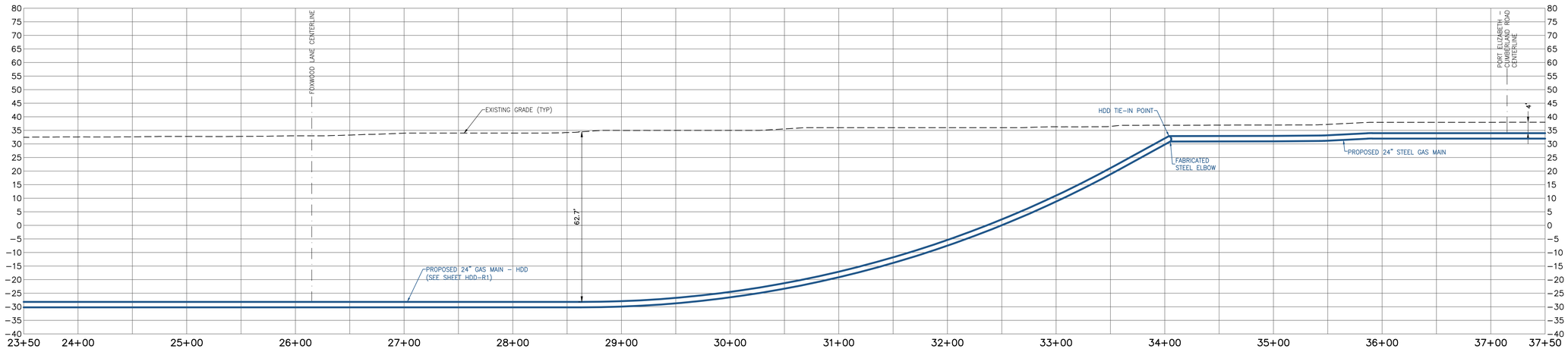
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY		
OWNERSHIP	STATE OF NEW JERSEY		
DISTANCE	1,054'	346'	
RESTORATION	NONE	GRASS– DETAIL 6 ON SHEET D–1B	
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D–03	



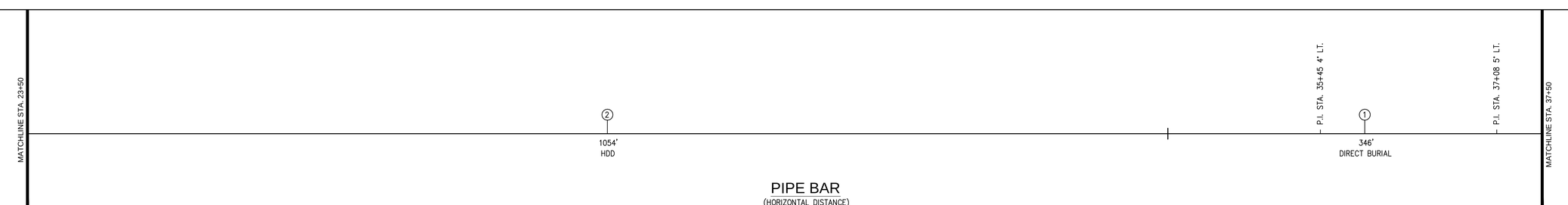
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	346 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,054 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC. NO. GE46534

REV	DESCRIPTION	DATE	CHECKED BY: DW
2	ADDED WILD & SCENIC RIVER BOUNDARY	7/1/14	
1	ISSUED FOR BID	12/20/13	DESIGNED BY: LS/JG
			DRAWN BY: GA/RJ

225616_AS_1–8 CS.dwg

ALIGNMENT SHEET 2

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

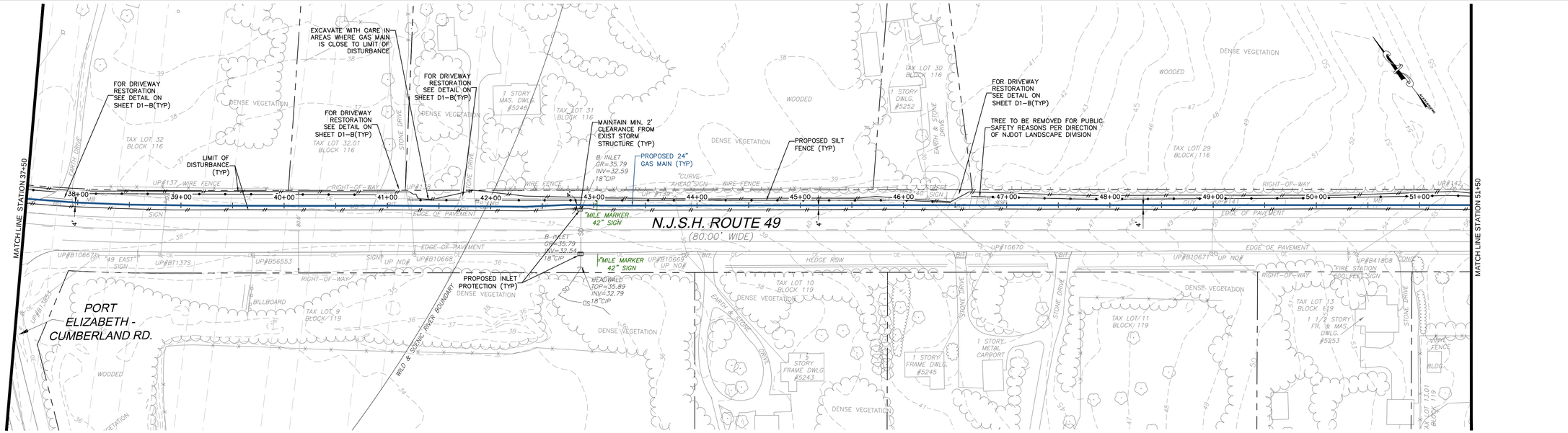
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-2

\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_1–8 CS.dwg, May 18, 2015 – 1:21pm

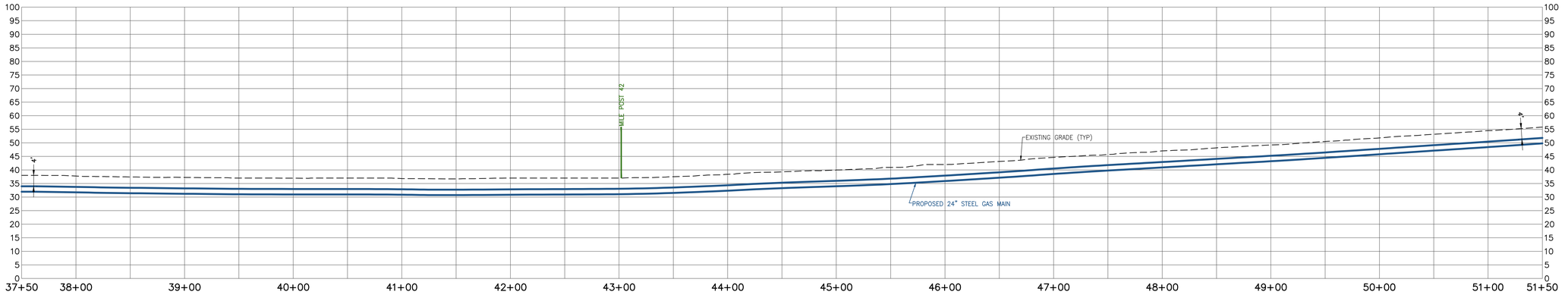
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,400'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B
VEGETATION	SEE NOTE # 11 ON SHEET D–03



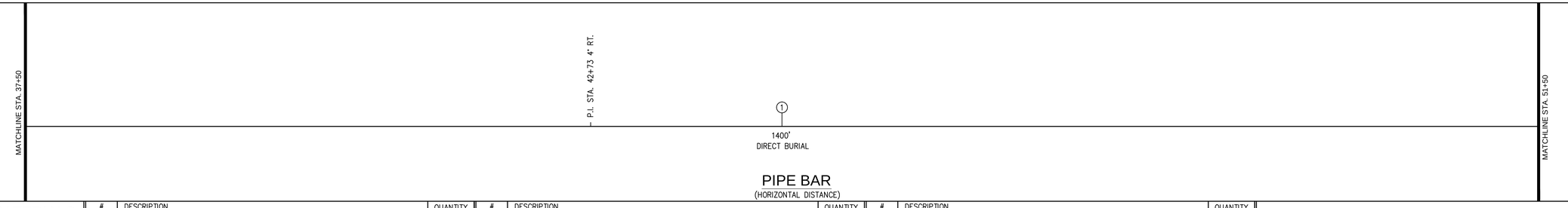
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,400 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	ADDED WILD & SCENIC RIVER BOUNDARY	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_1–8 CS.dwg

ALIGNMENT SHEET 3

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

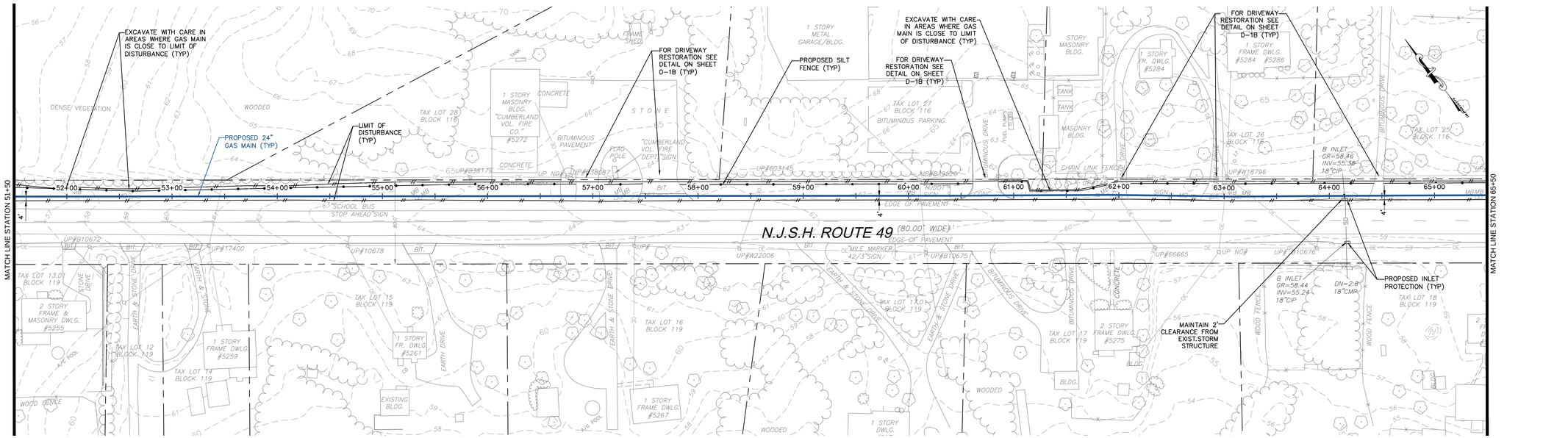
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-3

\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_1–8 CS.dwg, May 18, 2015 – 1:21pm

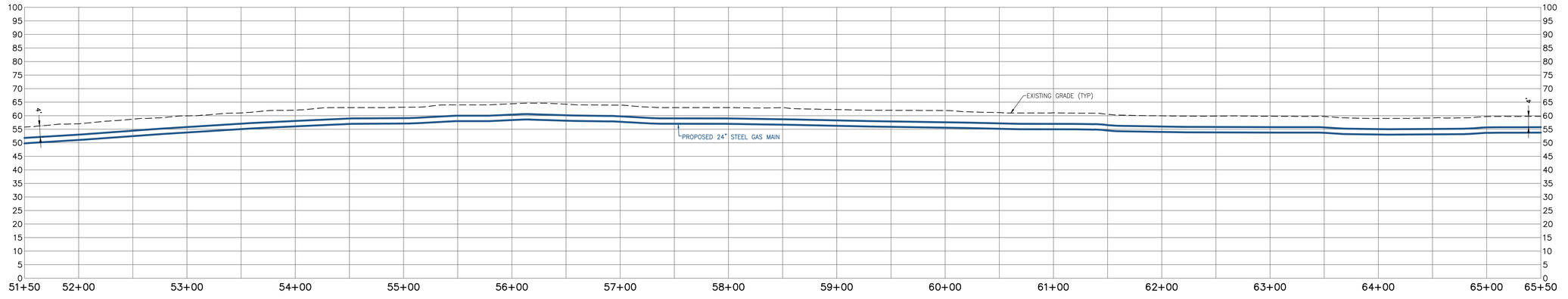
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,400'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B
VEGETATION	SEE NOTE # 11 ON SHEET D–03



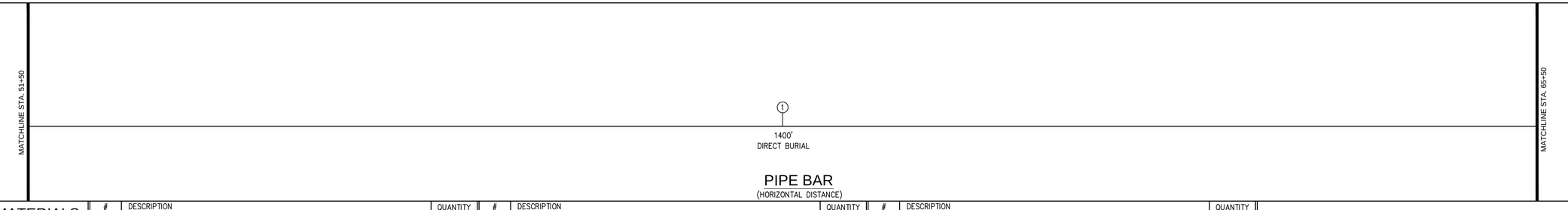
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,400 L.F.	②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.	③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
1	ISSUED FOR BID	12/09/13

DESIGNED BY: LS/JG
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_1–8 CS.dwg

ALIGNMENT SHEET 4

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

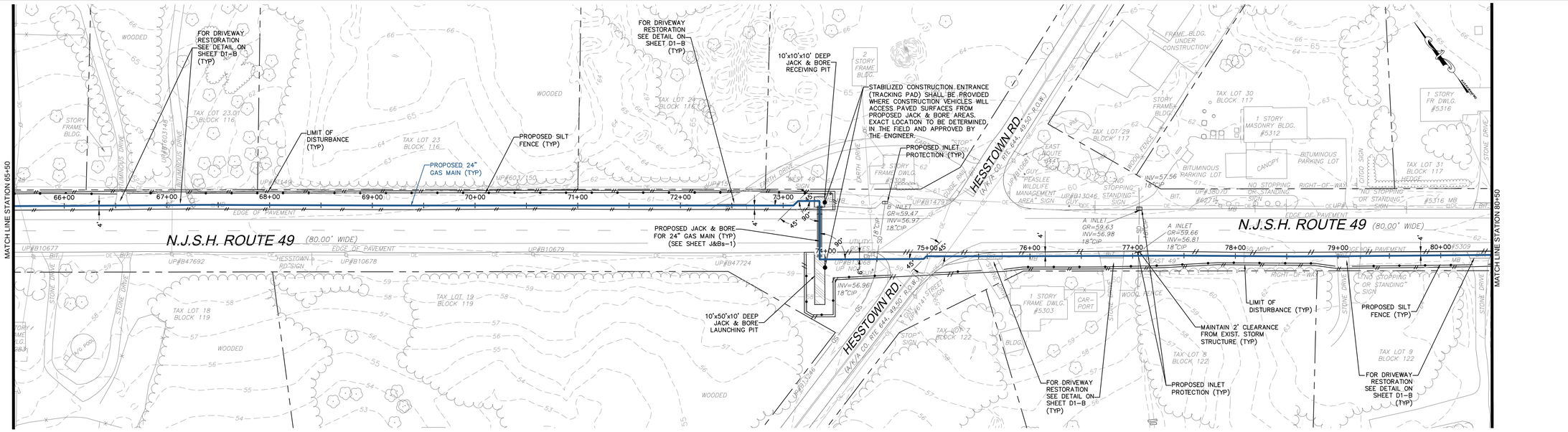
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-4

\\pctland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_1–8 CS.dwg, May 18, 2015 – 1:21pm

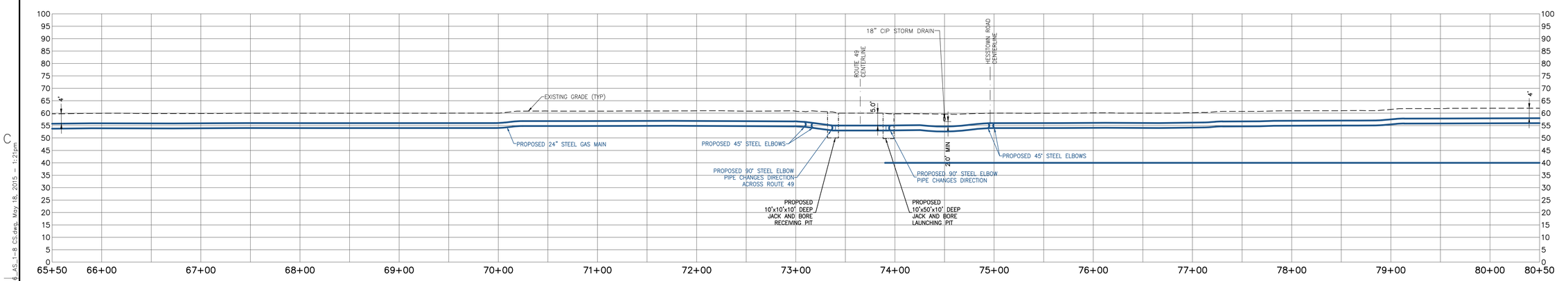
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY					
OWNERSHIP	STATE OF NEW JERSEY					
DISTANCE	791'	51'	71'	83'	504'	
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B	NONE	GRASS – DETAIL 6 ON SHEET D–1B	PAVEMENT – DETAIL 1A/1B ON SHEET D–1A	GRASS – DETAIL 6 ON SHEET D–1B	
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE	SEE NOTE # 11 ON SHEET D–03	SEE NOTE # 11 ON SHEET D–03	SEE NOTE # 11 ON SHEET D–03	



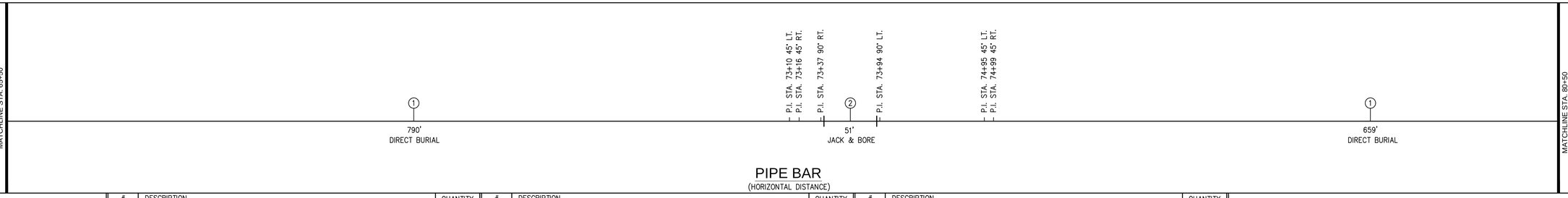
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,449 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	51 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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DENNIS M. WALSH, P.E.
N.J. LIC. NO. GE46534

REV.	DESCRIPTION	DATE
2	REMOVED 30" STEEL CASING @ J&B LOCATION	9/24/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_1–8 CS.dwg

ALIGNMENT SHEET 5

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

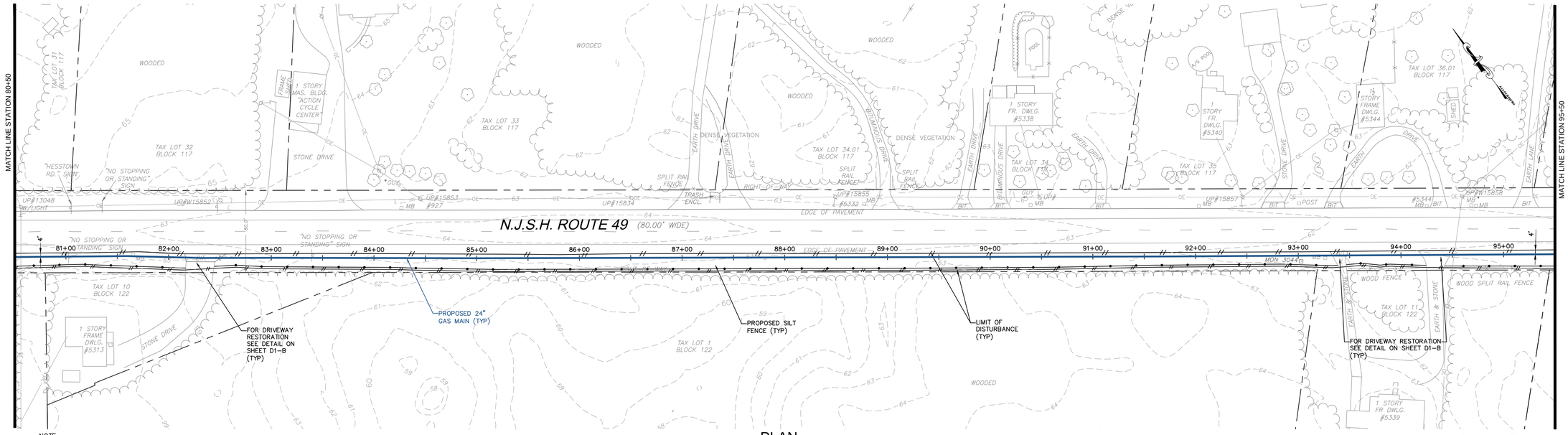
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-5

\\potland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_1–8 CS.dwg, May 18, 2015 – 1:21pm

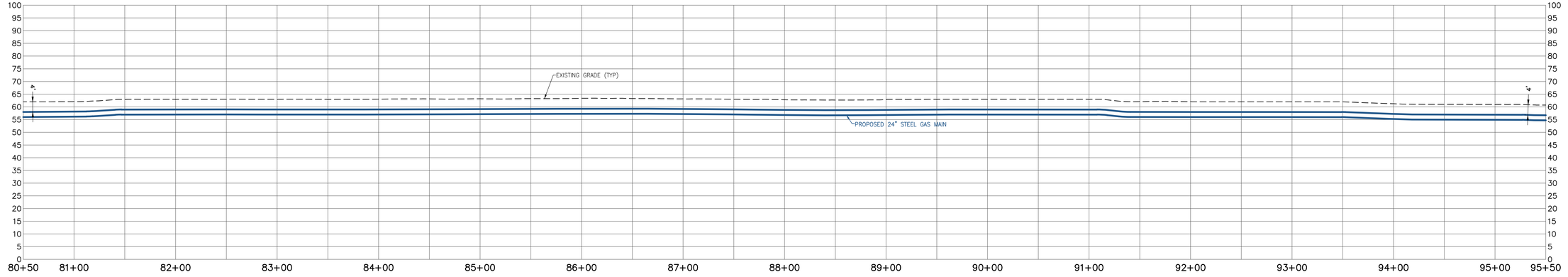
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,500'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B
VEGETATION	SEE NOTE # 11 ON SHEET D–03



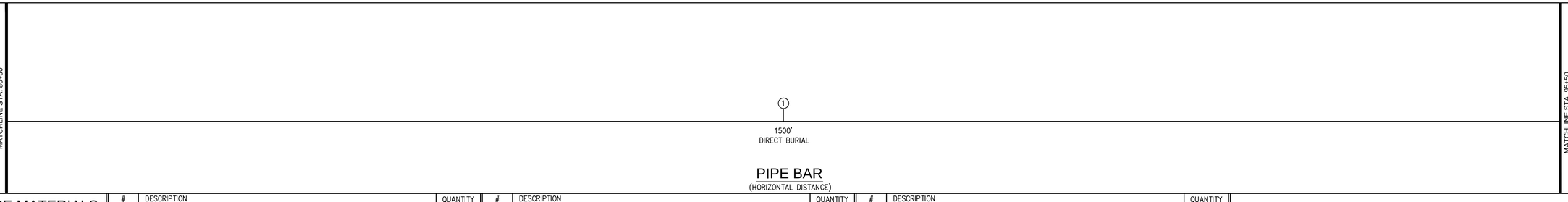
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,500 L.F.	2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.	3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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DENNIS M. WALSH, P.E.
N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
1	ISSUED FOR BID	12/09/15

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_1–8 CS.dwg

ALIGNMENT SHEET 6

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

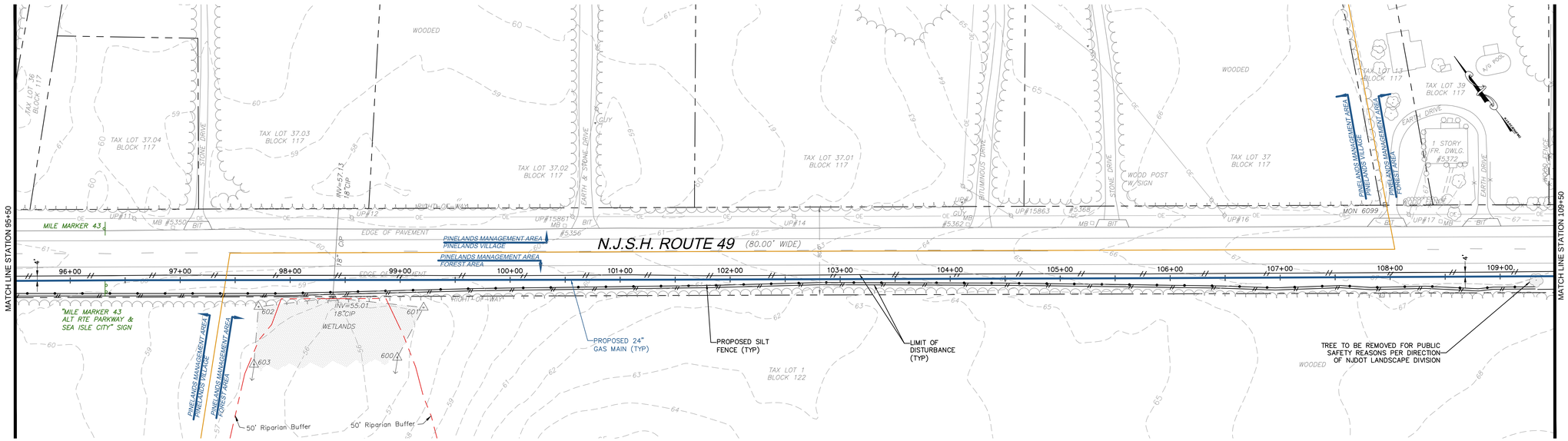
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-6

\\portland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_1–8 CS.dwg, May 18, 2015 – 1:22pm

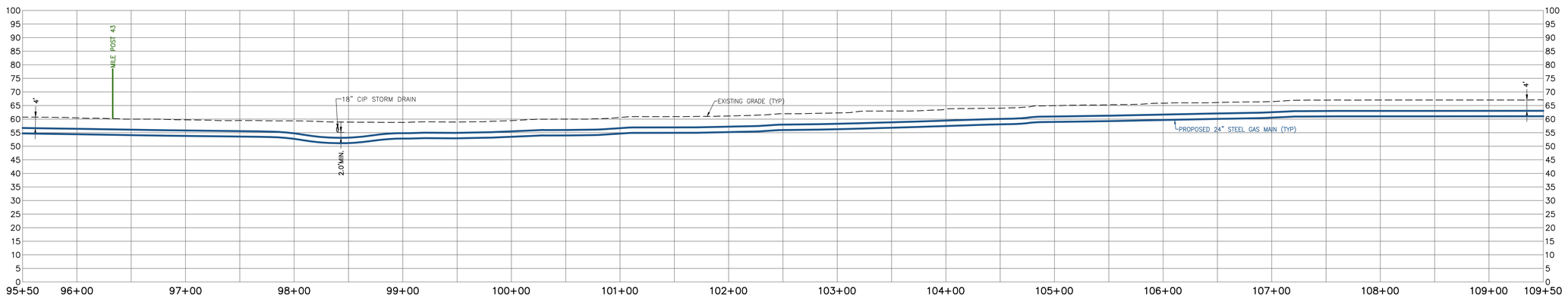
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,400'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B
VEGETATION	SEE NOTE # 11 ON SHEET D–03



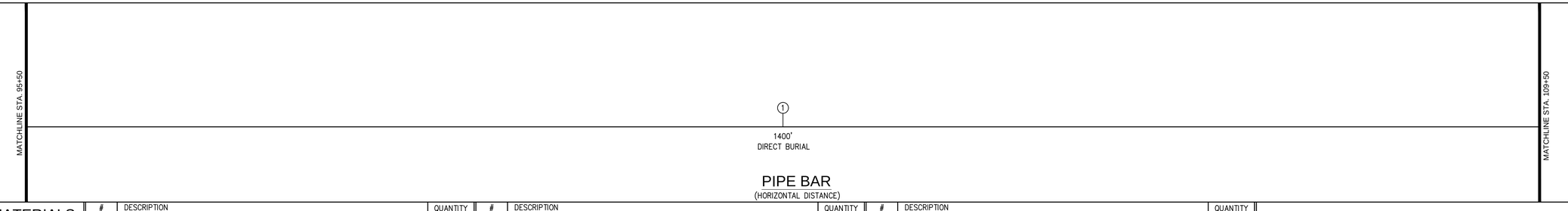
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,400 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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DENNIS M. WALSH, P.E.
N.J. LIC. NO. GE46534

REV.	DESCRIPTION	DATE
1	ISSUED FOR BID	12/09/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_1-8 CS.dwg

ALIGNMENT SHEET 7

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

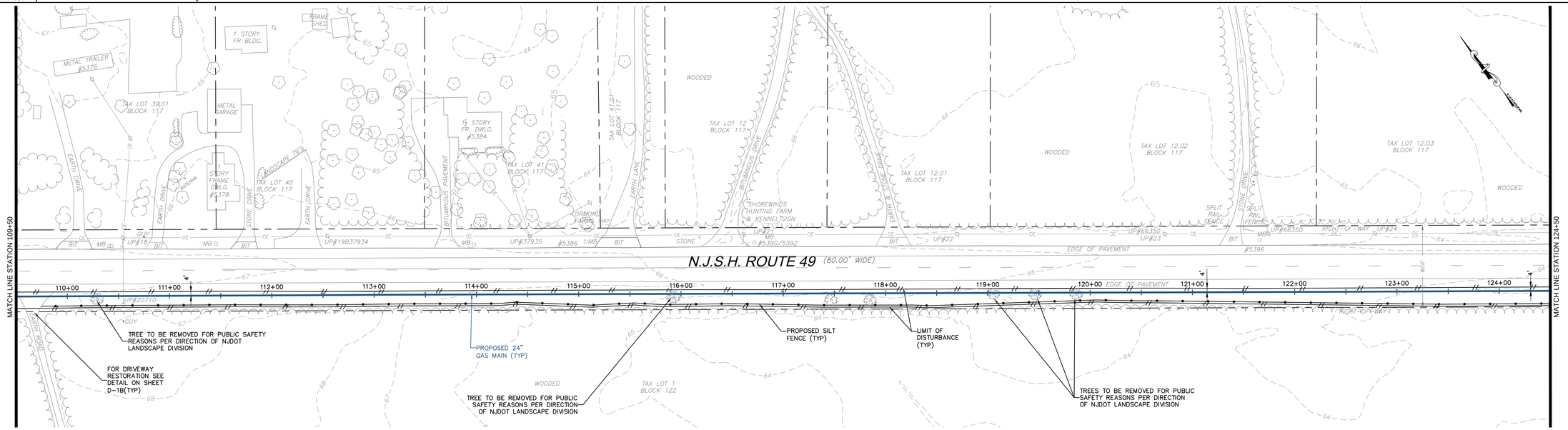
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-7

\\pcfiond\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_1-8 CS.dwg, May 18, 2015 – 1:22pm

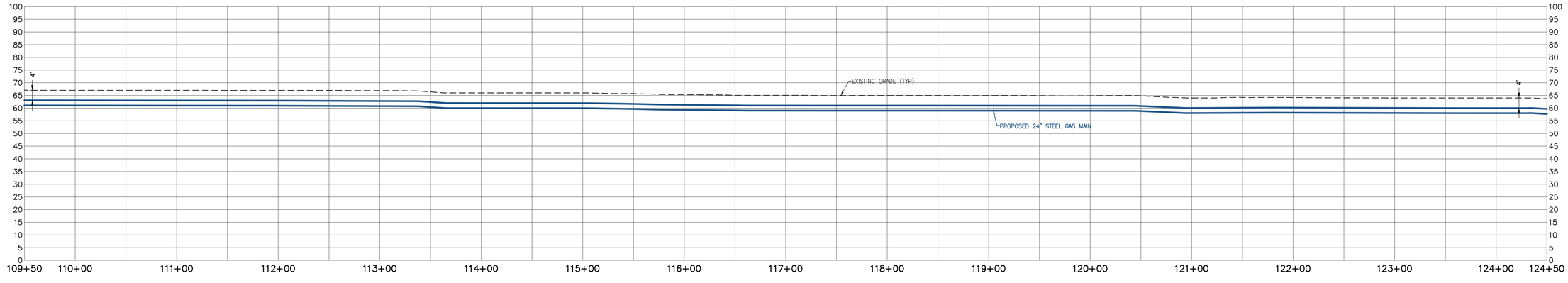
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,500'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B
VEGETATION	SEE NOTE # 11 ON SHEET D–03



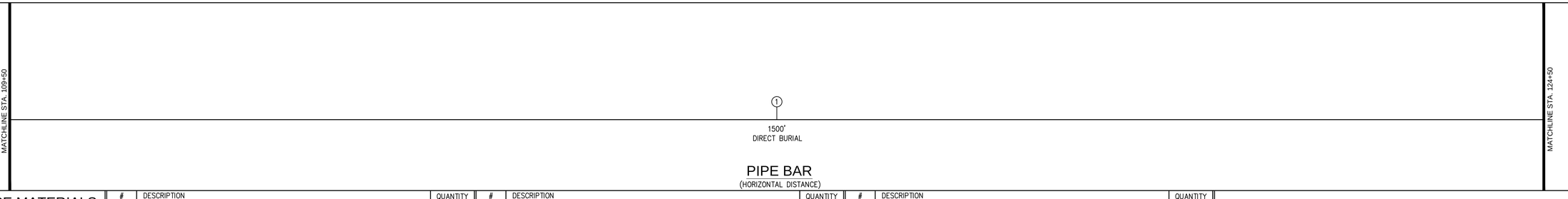
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,500 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
1	ISSUED FOR BID	12/09/13

DESIGNED BY: LS/JG
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_1–8 CS.dwg

ALIGNMENT SHEET 8

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

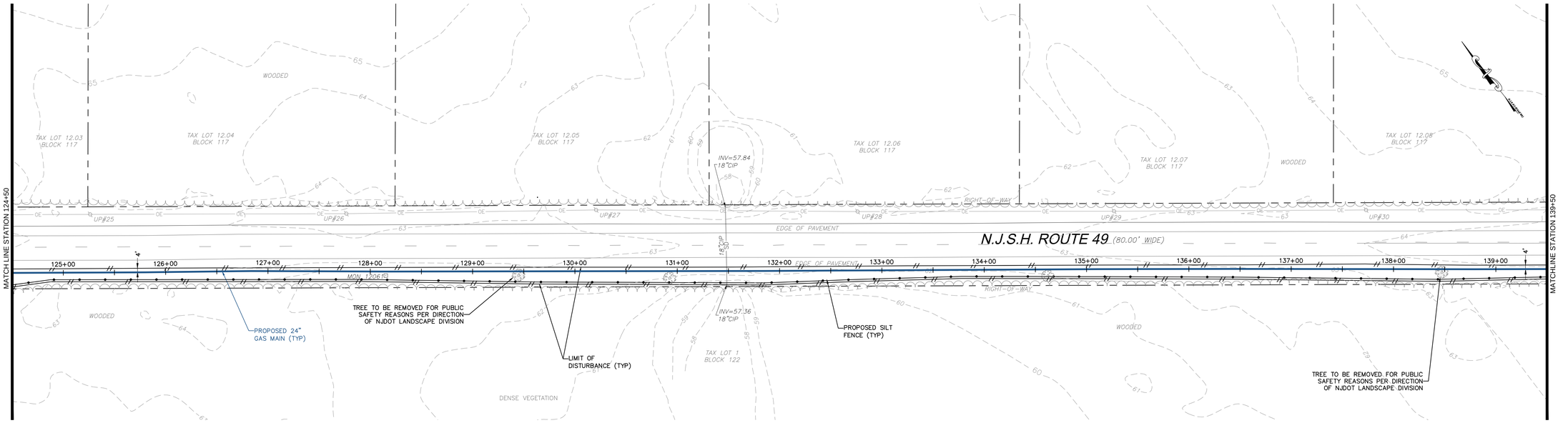
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-8

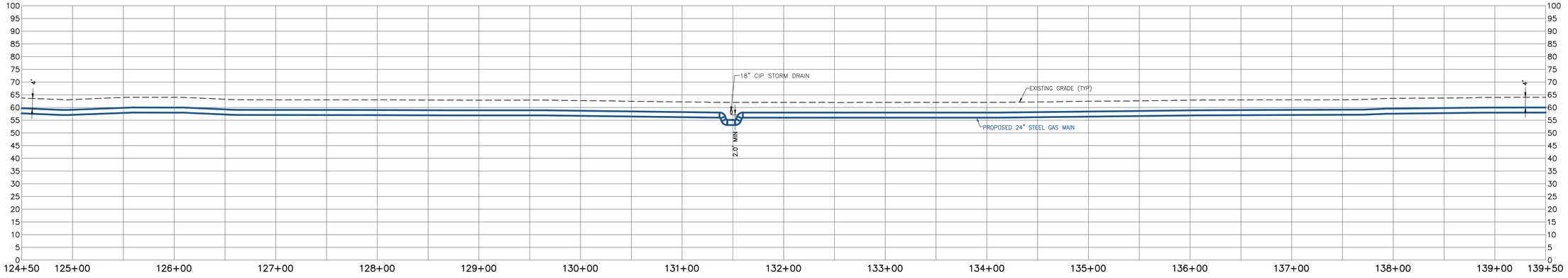
\\potland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_1–8 CS.dwg, May 18, 2015 – 1:22pm

TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,500'
RESTORATION	GRASS – DETAIL 6 ON SHEET D-1B
VEGETATION	SEE NOTE # 11 ON SHEET D-03

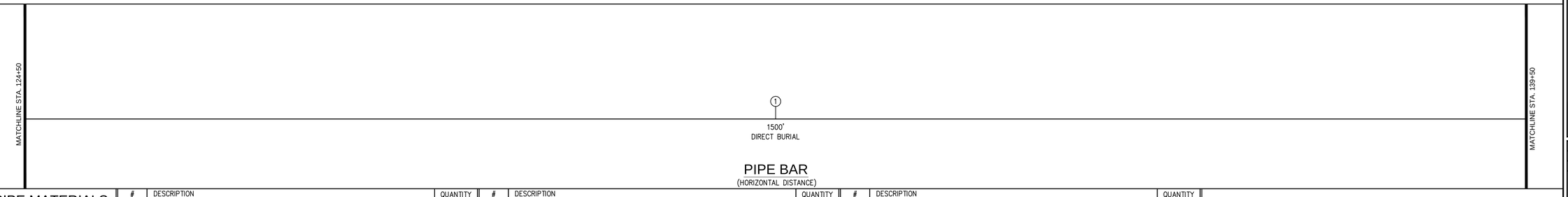


NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL-2, X-60, ERW OR DSAW PRITEC (40/10) OR X-TEC II (60/10)	1,500 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL-2, X-60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL-2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
1	ISSUED FOR #80	12/09/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_9-16 CS.dwg

ALIGNMENT SHEET 9

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

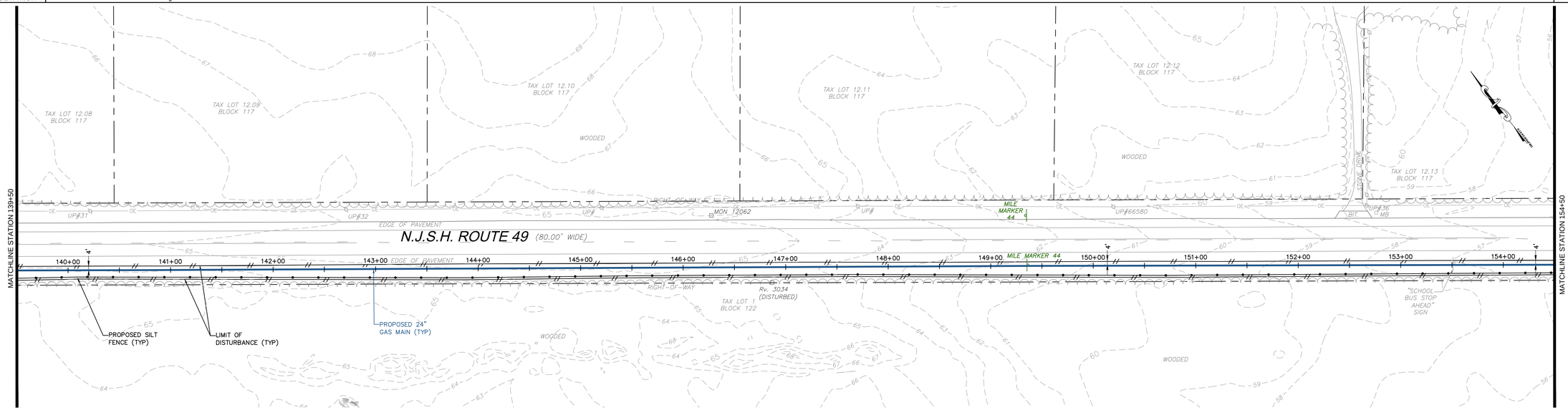
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-9

\\potland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_9-16 CS.dwg, May 18, 2015 – 1:23pm

24x36 SHEET
1:1

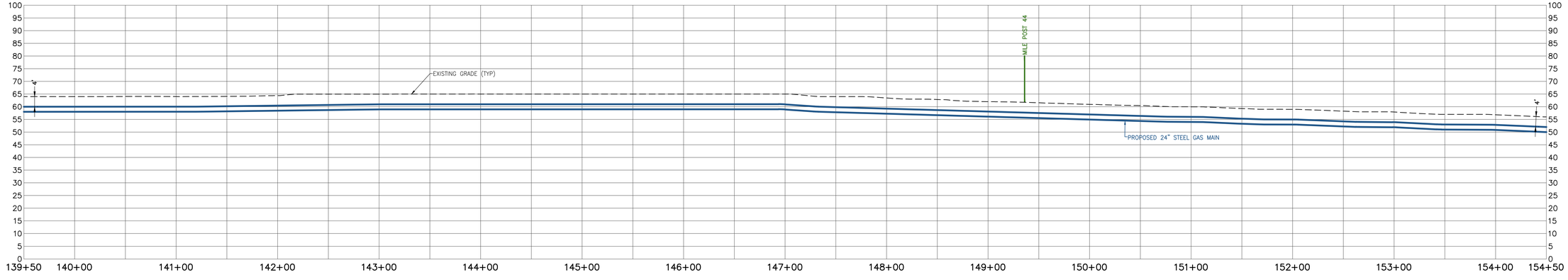
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,500'
RESTORATION	GRASS – DETAIL 6 ON SHEET D-1B
VEGETATION	SEE NOTE # 11 ON SHEET D-03



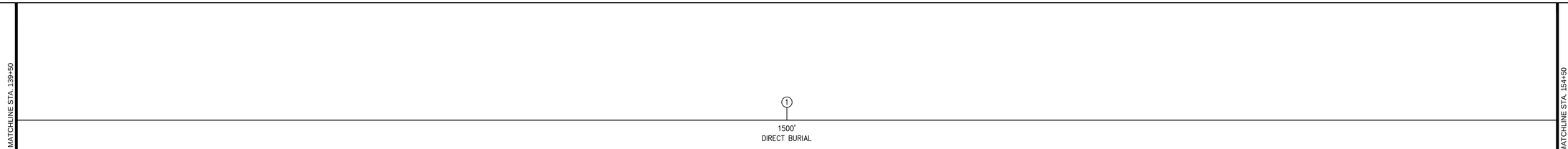
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

50' 0 50' 100'
BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS (LINEAR FOOTAGE IS APPROXIMATE)	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY
	1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL-2, X-60, ERW OR DSAW PRITEC (40/10) OR X-TEC II (60/10)	1,500 L.F.	2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL-2, X-60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.	3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL-2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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DENNIS M. WALSH, P.E.
NJ LIC.NO. GE46534

REV	DESCRIPTION	DATE
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_9-16 CS.dwg

ALIGNMENT SHEET 10

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

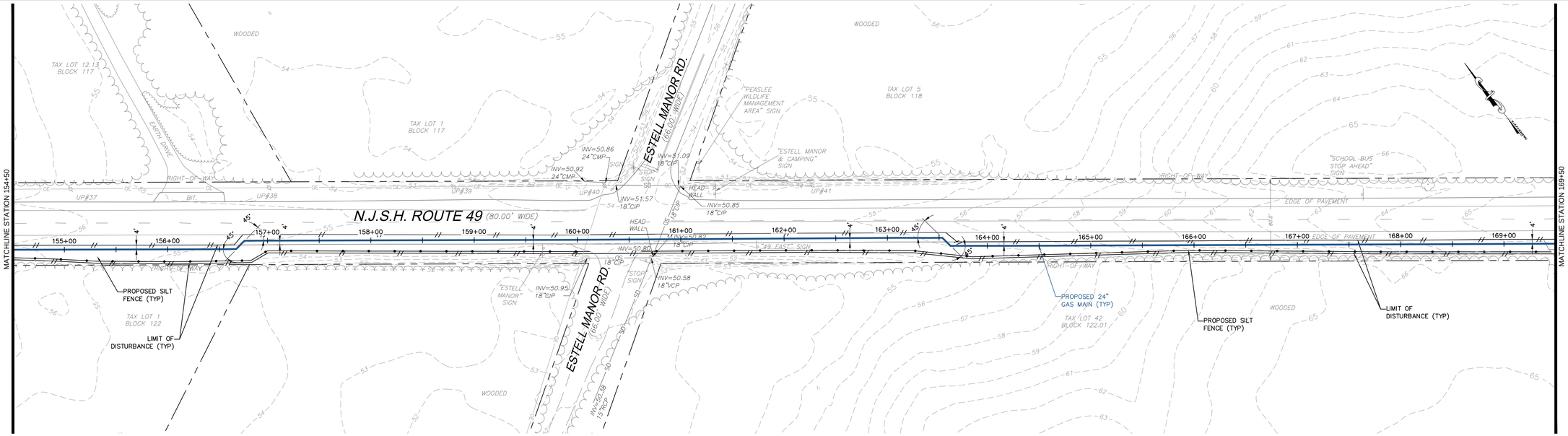
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-10

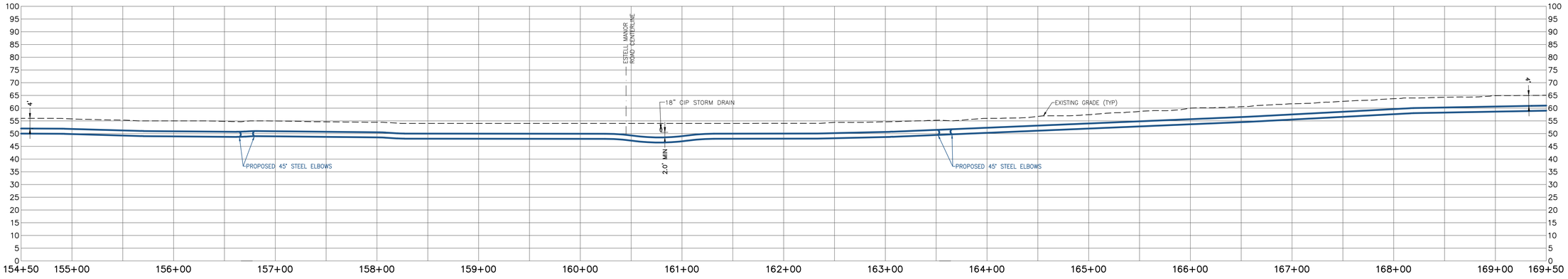
\\portland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_9-16 CS.dwg, May 18, 2015 – 1:23pm

TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY		
OWNERSHIP	STATE OF NEW JERSEY		
DISTANCE	222'	687'	591'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B	PAVEMENT–DETAIL 1A/1B ON SHEET D–1A	GRASS – DETAIL 6 ON SHEET D–1B
VEGETATION	SEE NOTE # 11 ON SHEET D–03	SEE NOTE # 11 ON SHEET D–03	SEE NOTE # 11 ON SHEET D–03

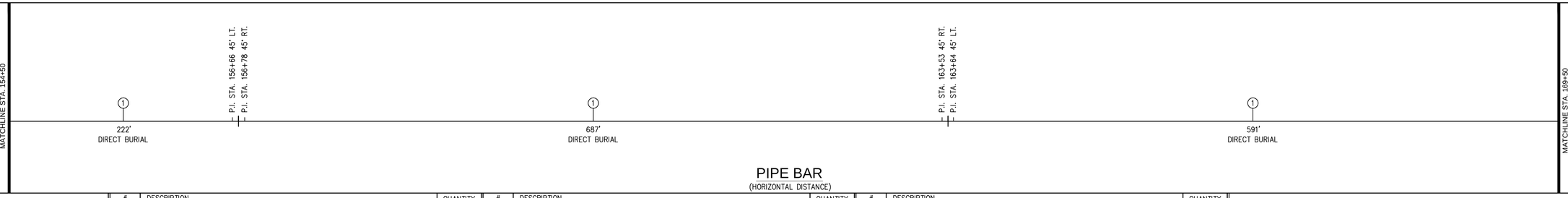


NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,500 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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DENNIS M. WALSH, P.E.
N.J. LIC.NO. GE46534

REV	DESCRIPTION	DATE
1	ISSUED FOR #80	12/09/15

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_9-16 CS.dwg

ALIGNMENT SHEET 11

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

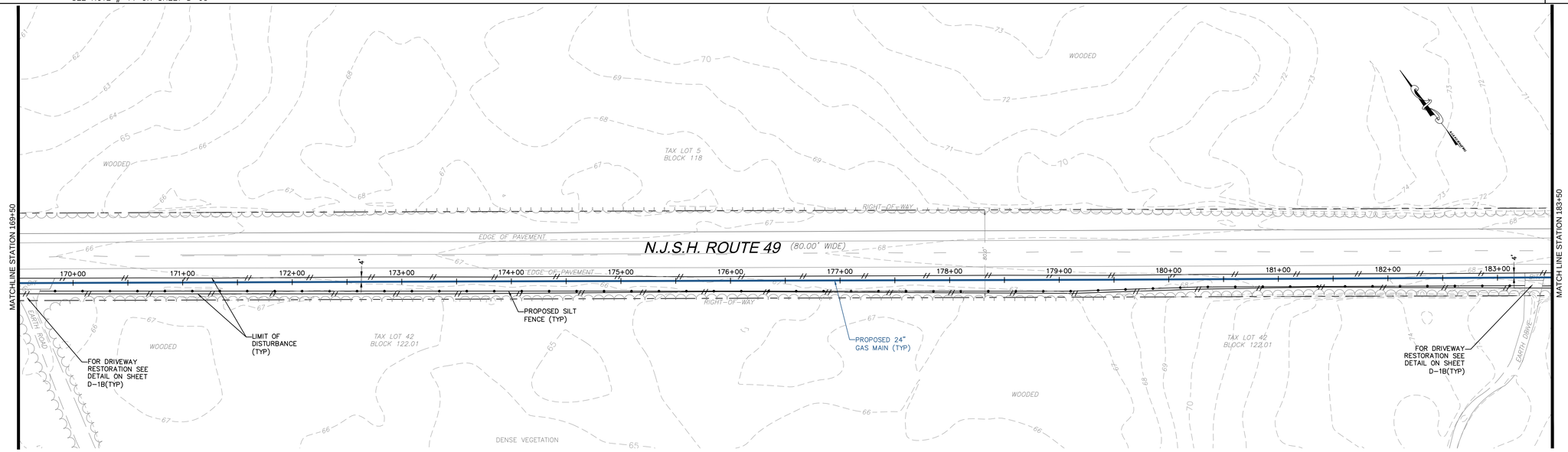
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-11

\\portland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_9-16 CS.dwg, May 18, 2015 – 1:23pm

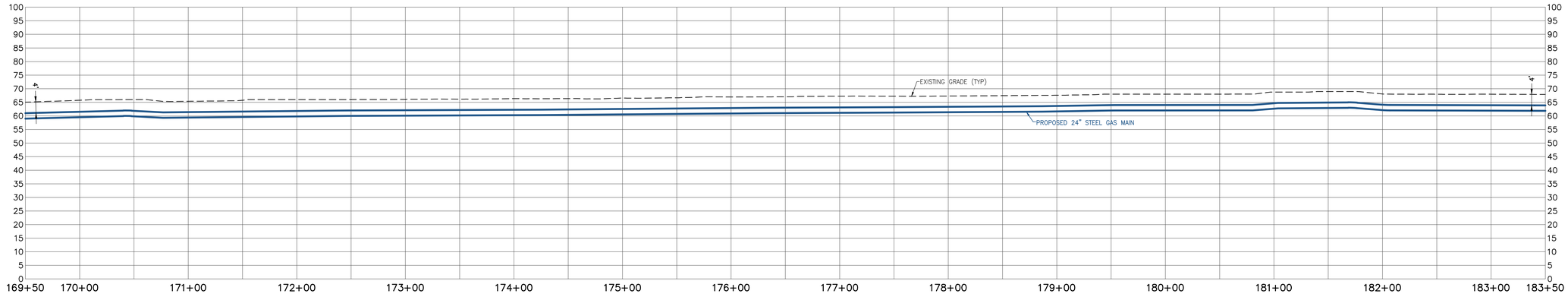
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,400'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B
VEGETATION	SEE NOTE # 11 ON SHEET D–03



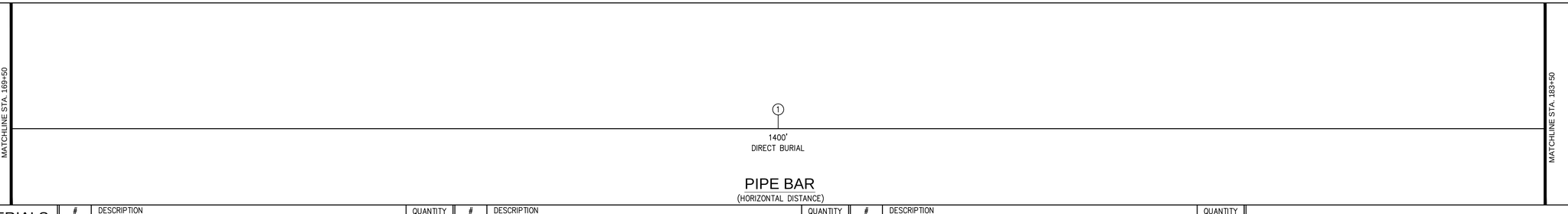
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,400 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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DENNIS M. WALSH, P.E.
N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
1	ISSUED FOR BID	12/09/15

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_9-16 CS.dwg

ALIGNMENT SHEET 12

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

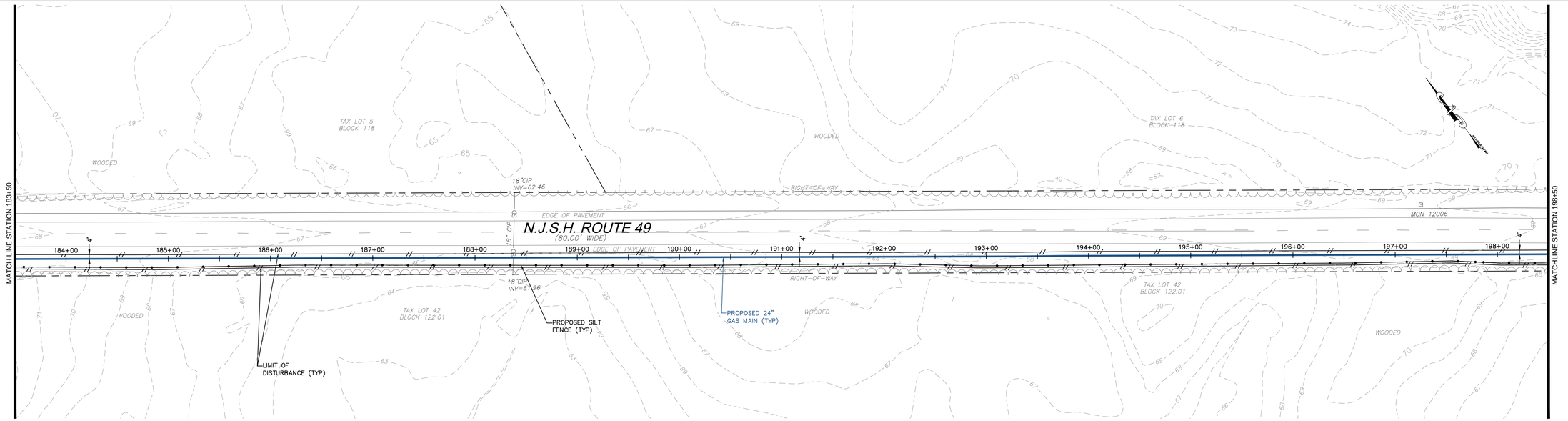
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-12

\\portland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_9-16 CS.dwg, May 18, 2015 – 1:23pm

24x36 SHEET
1:1

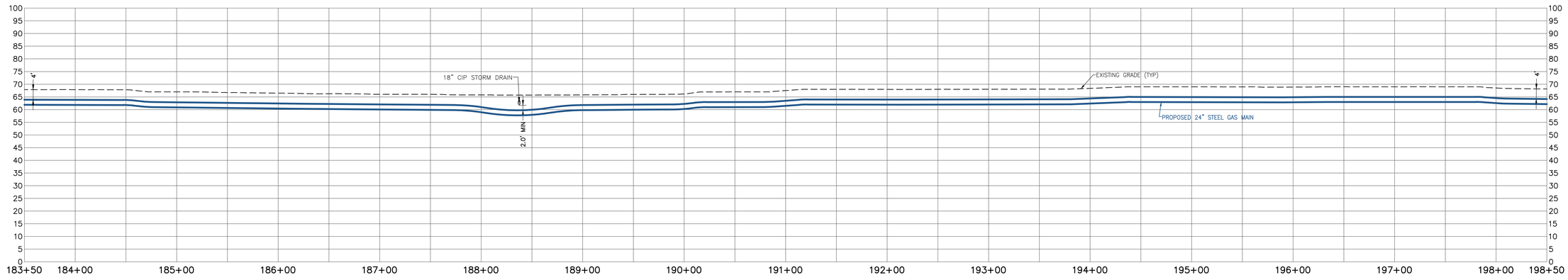
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,500'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B
VEGETATION	SEE NOTE # 11 ON SHEET D–03



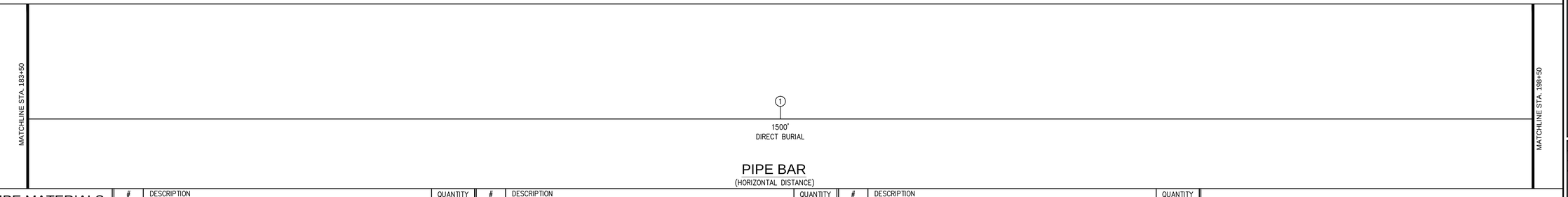
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

50' 0 50' 100'
BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,500 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DESIGNED BY: LS/AS DRAWN BY: GA/RJ	CHECKED BY: DW 225616_AS_9-16 CS.dwg	DATE
1	ISSUED FOR BID			12/20/13

ALIGNMENT SHEET 13

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

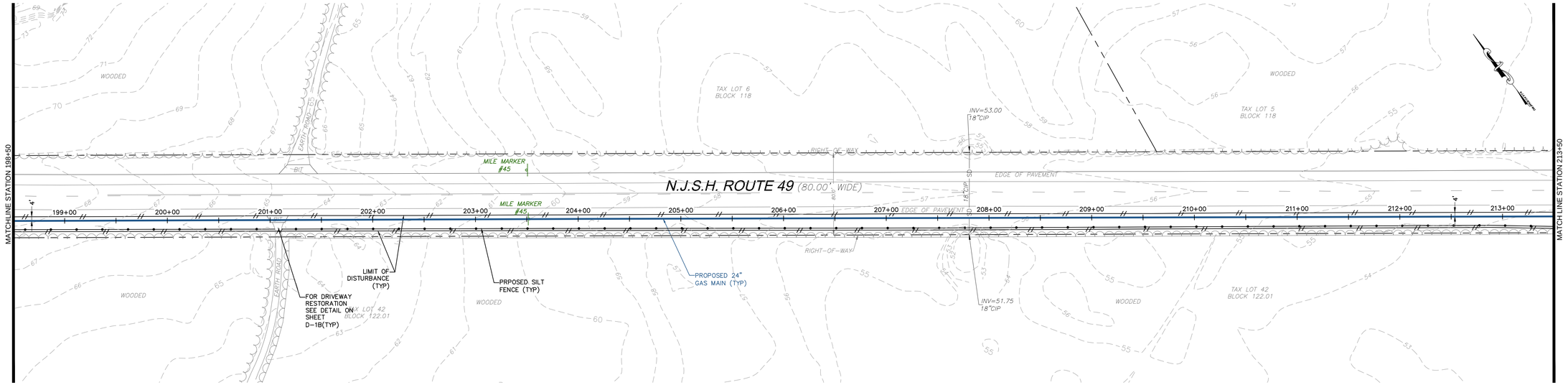
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-13

\\portland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_9-16 CS.dwg, May 18, 2015 – 1:23pm

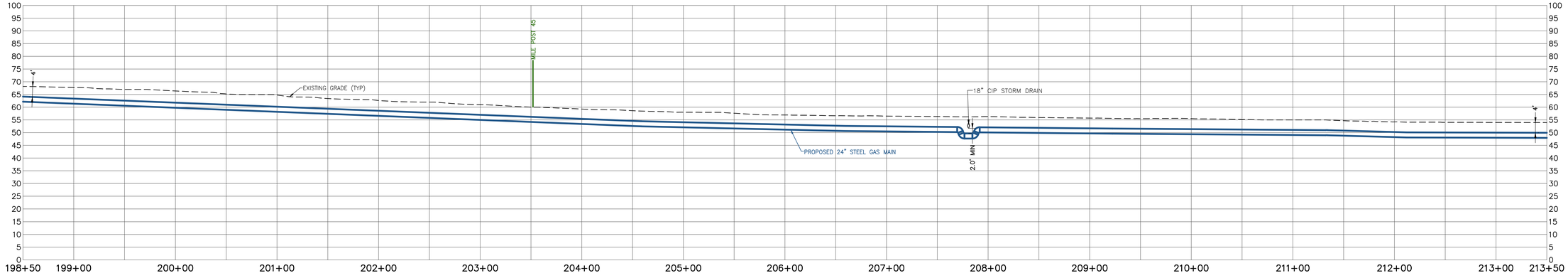
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,500'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B
VEGETATION	SEE NOTE # 11 ON SHEET D–03



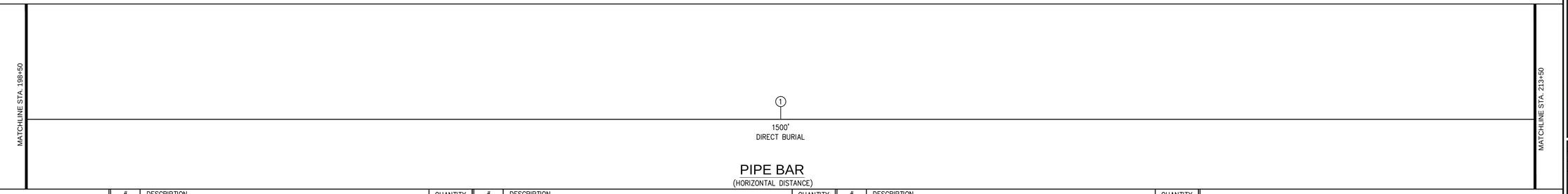
PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING

NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,502 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
1	ISSUED FOR BID	12/09/15

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_9-16 CS.dwg

ALIGNMENT SHEET 14

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

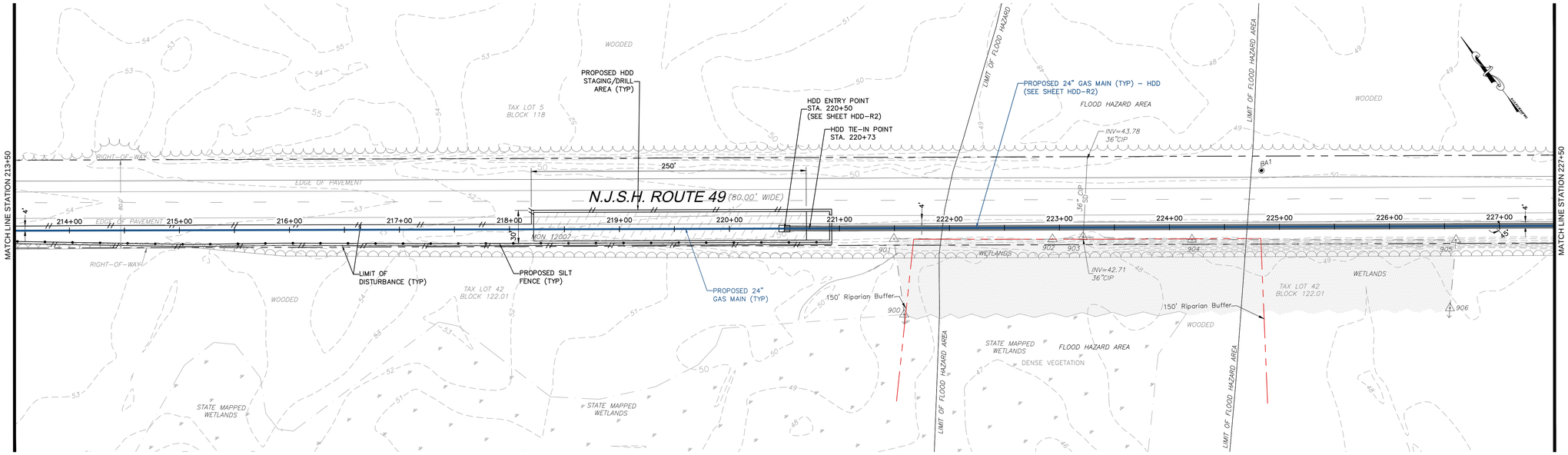
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-14

\\portland\projects1\225616 s\jg – english power plant\wip\Drawings_redesign\225616_AS_9-16 CS.dwg, May 18, 2015 – 1:23pm

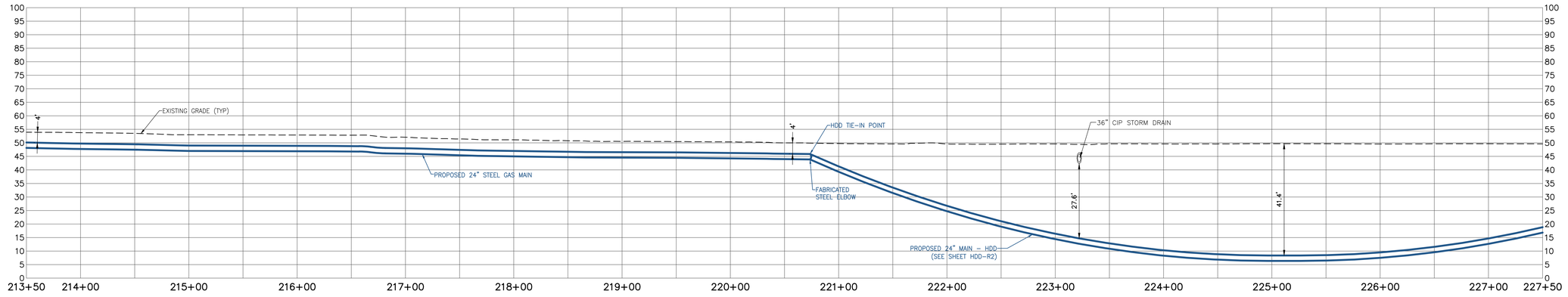
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY		
OWNERSHIP	STATE OF NEW JERSEY		
DISTANCE	724'	676'	
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B	NONE	
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE	



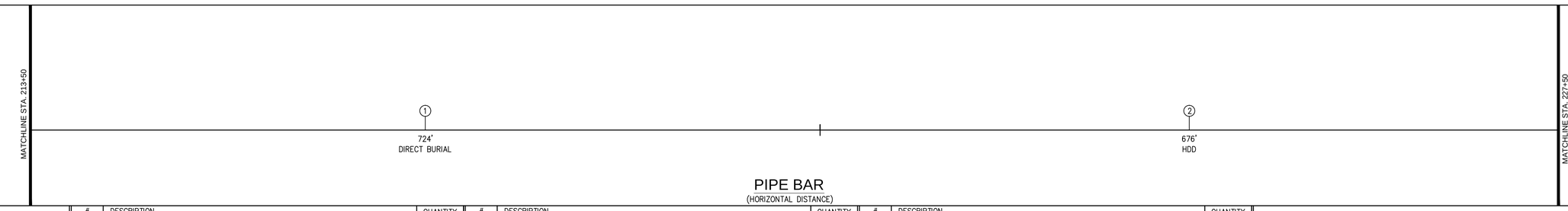
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	724 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	676 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD–R2	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_9–16 CS.dwg

ALIGNMENT SHEET 15

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

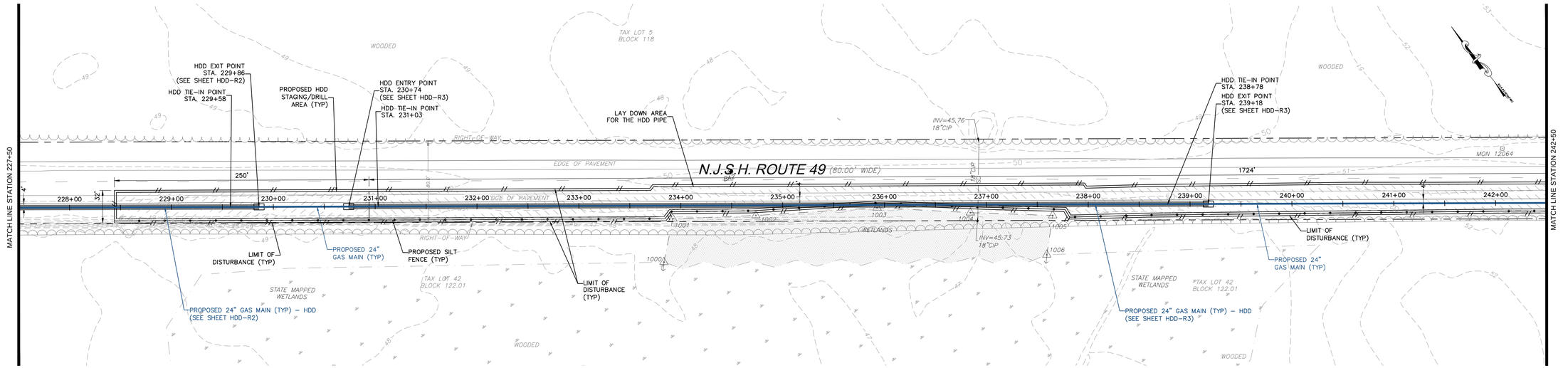
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-15

\\portland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_9–16 CS.dwg, May 18, 2015 – 1:24pm

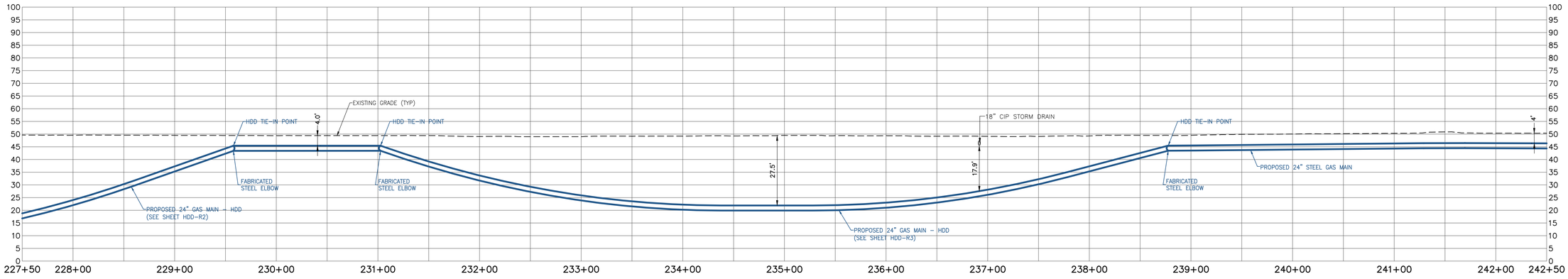
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY			
OWNERSHIP	STATE OF NEW JERSEY			
DISTANCE	208'	145'	775'	372'
RESTORATION	NONE	GRASS – DETAIL 6 ON SHEET D–1B	NONE	GRASS – DETAIL 6 ON SHEET D–1B
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D–03	NONE	SEE NOTE # 11 ON SHEET D–03



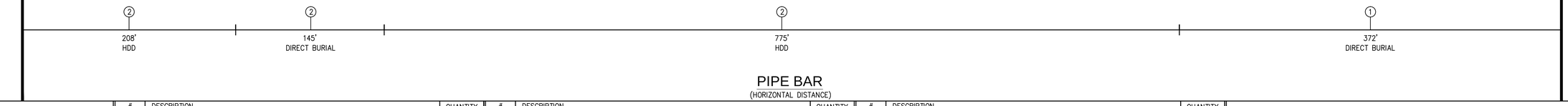
PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING

NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	372 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,128 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	CHANGED DIRECT BURIAL TO POWERSEAL COATING	9/14/14
2	REVISED STATIONING & ADDED HDD–R3	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_9-16 CS.dwg

ALIGNMENT SHEET 16

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

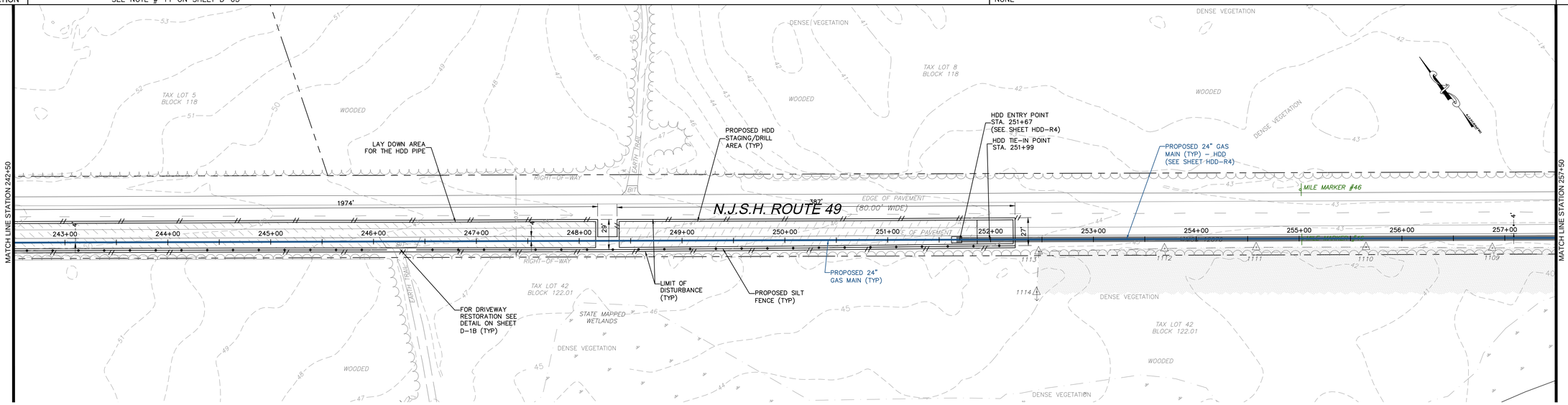
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-16

\\portland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_9-16 CS.dwg, May 18, 2015 – 1:24pm

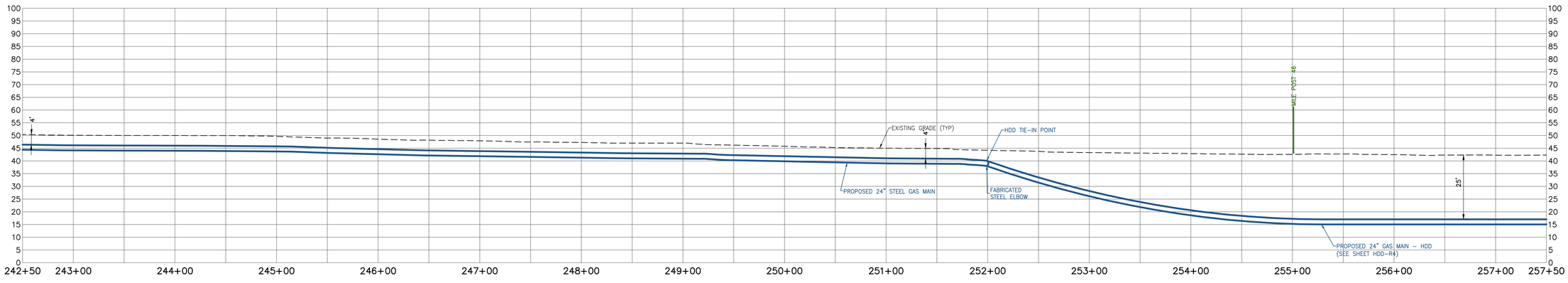
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY		
OWNERSHIP	STATE OF NEW JERSEY		
DISTANCE	949'	551'	
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B	NONE	
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE	



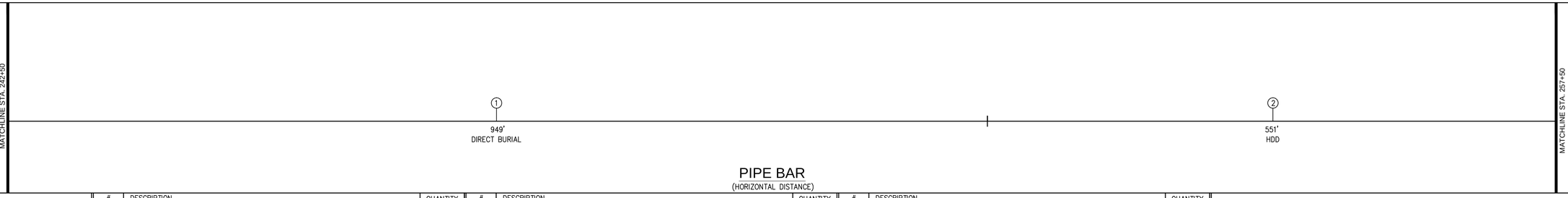
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS (LINEAR FOOTAGE IS APPROXIMATE)	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY
	①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	949 L.F.	②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	551 L.F.	③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD–R4	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_17–24 CS.dwg

ALIGNMENT SHEET 17

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

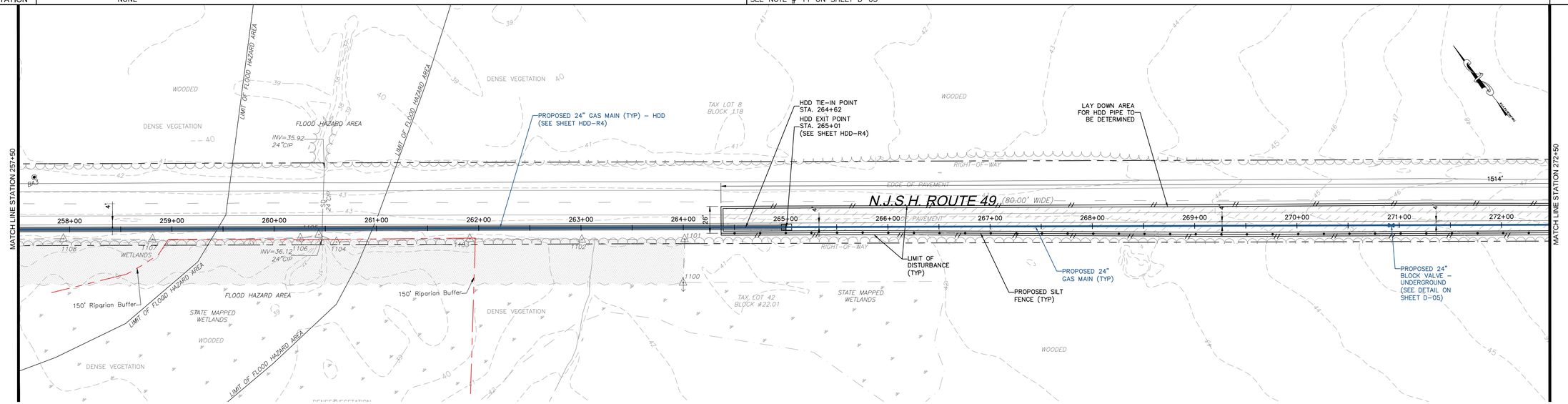
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-17

\\portland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_17–24 CS.dwg, May 18, 2015 – 1:25pm

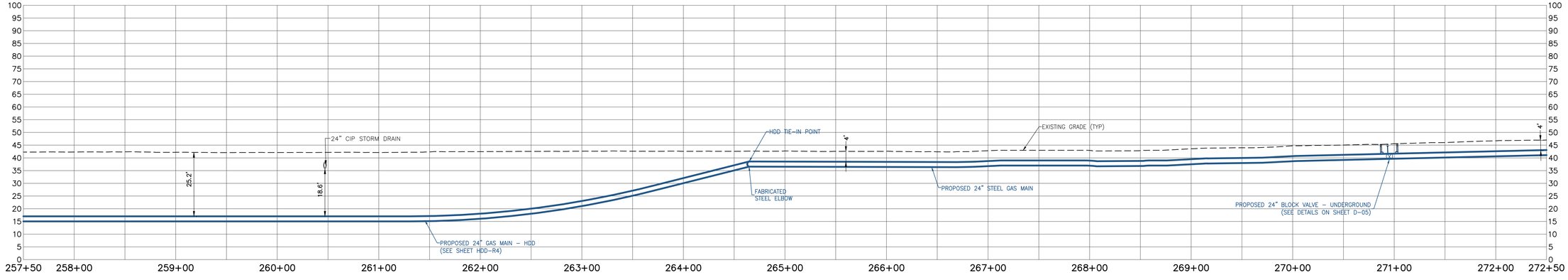
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY		
OWNERSHIP	STATE OF NEW JERSEY		
DISTANCE	715'	785'	
RESTORATION	NONE	GRASS – DETAIL 6 ON SHEET D–1B	
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D–03	



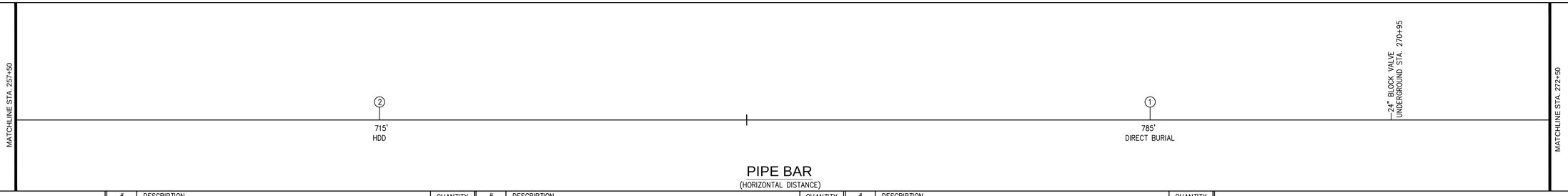
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	785 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	715' L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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DENNIS M. WALSH, P.E.
NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD–R4	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/RJ | 225616_AS_17–24 CS.dwg

ALIGNMENT SHEET 18

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

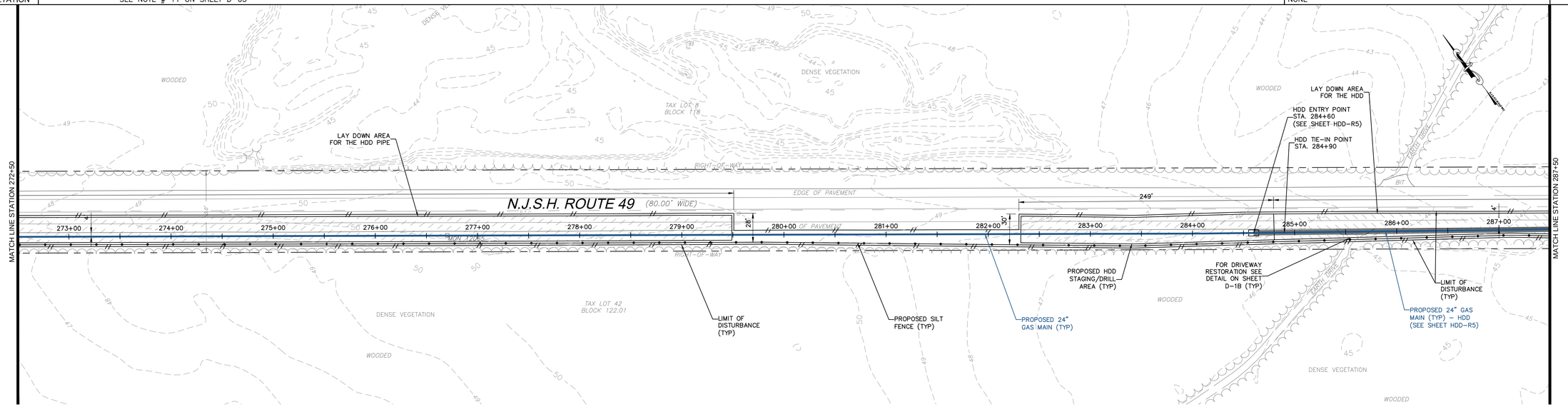
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-18

\\portland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_17–24 CS.dwg, May 18, 2015 – 1:25pm

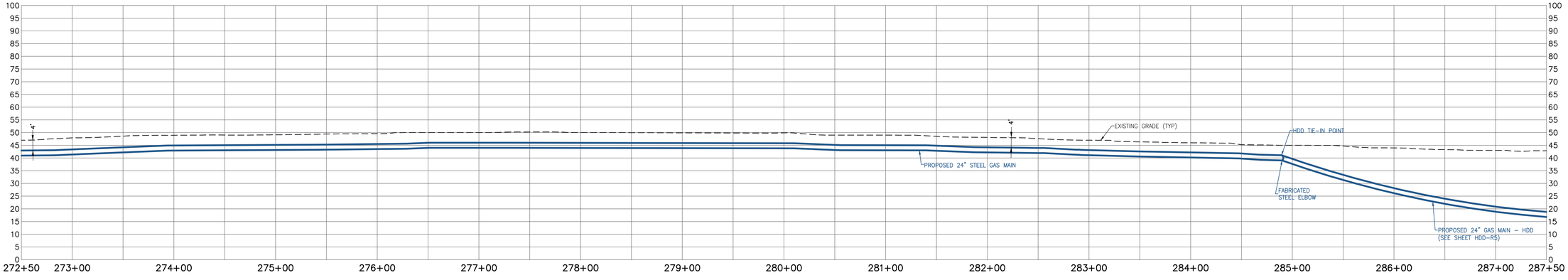
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY		
OWNERSHIP	STATE OF NEW JERSEY		
DISTANCE	1,240'	260'	
RESTORATION	GRASS – DETAIL 6 ON SHEET D-1B	NONE	
VEGETATION	SEE NOTE # 11 ON SHEET D-03	NONE	



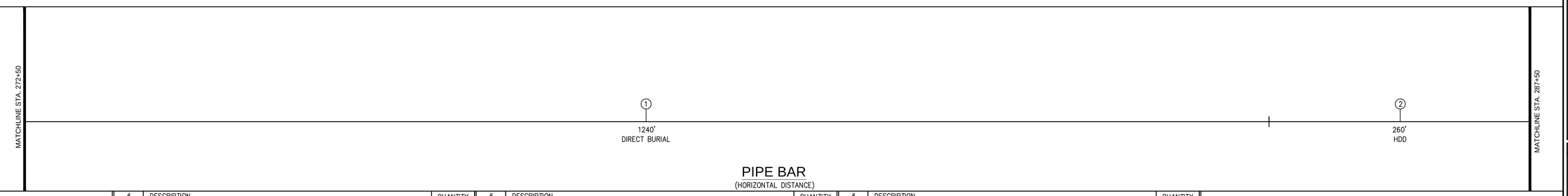
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL-2, X-60, ERW OR DSAW PRITEC (40/10) OR X-TEC II (60/10)	1,240 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL-2, X-60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	260 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL-2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC. NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD-R5	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_17-24 CS.dwg

ALIGNMENT SHEET 19

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

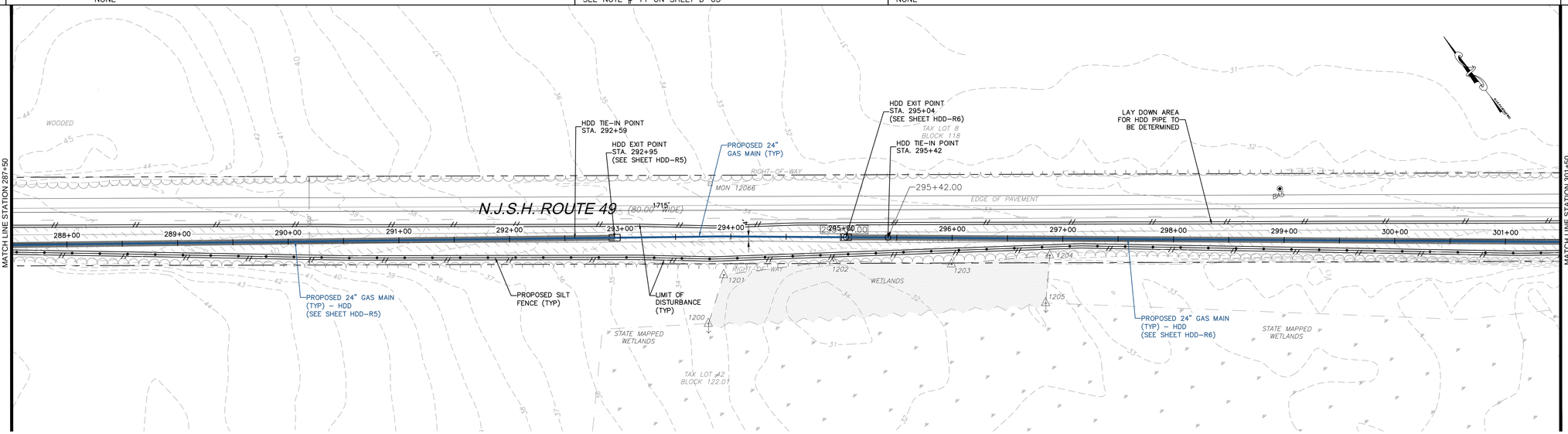
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-19

\\portland\projects1\225616 s\jg - england power plant\wip\drawings_redesign\225616_AS_17-24 CS.dwg, May 18, 2015 - 1:25pm

TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY		
OWNERSHIP	STATE OF NEW JERSEY		
DISTANCE	509'	283'	608'
RESTORATION	NONE	PAVEMENT–DETAIL 1A/1B ON SHEET D–1A	NONE
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D–03	NONE

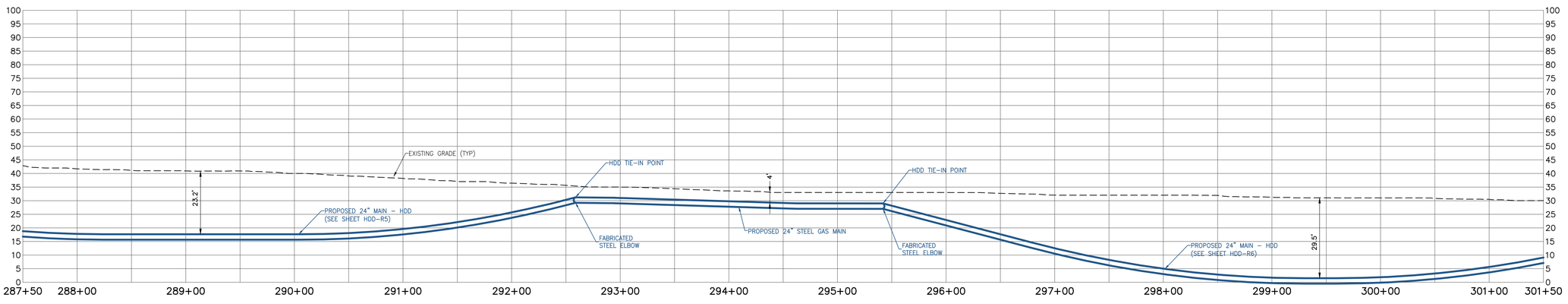


PLAN

SCALE: 1"=50'

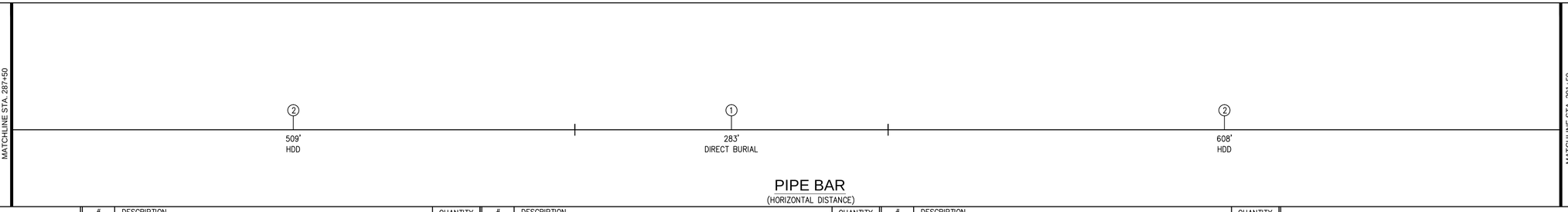
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE

SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR

(HORIZONTAL DISTANCE)

PIPE MATERIALS (LINEAR FOOTAGE IS APPROXIMATE)	#	DESCRIPTION	QUANTITY
	①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	283 L.F.
	②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,117 L.F.
	③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC. NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD–R5 & HDD–R6	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_17–24 CS.dwg

ALIGNMENT SHEET 20

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

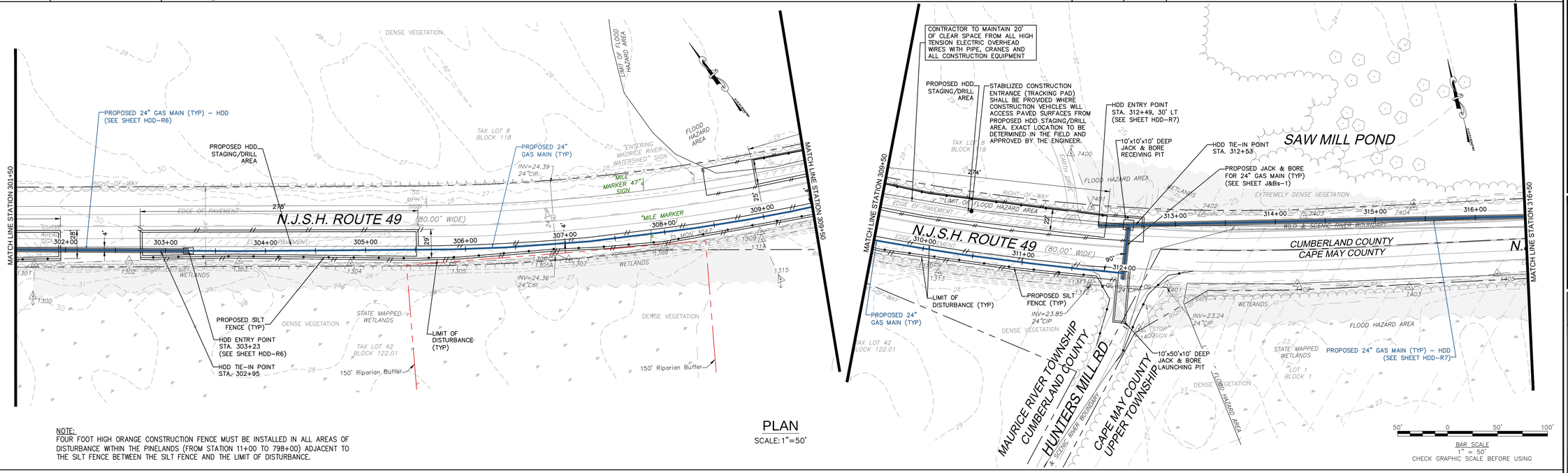
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-20

\\portland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_17–24 CS.dwg, May 18, 2015 – 1:25pm

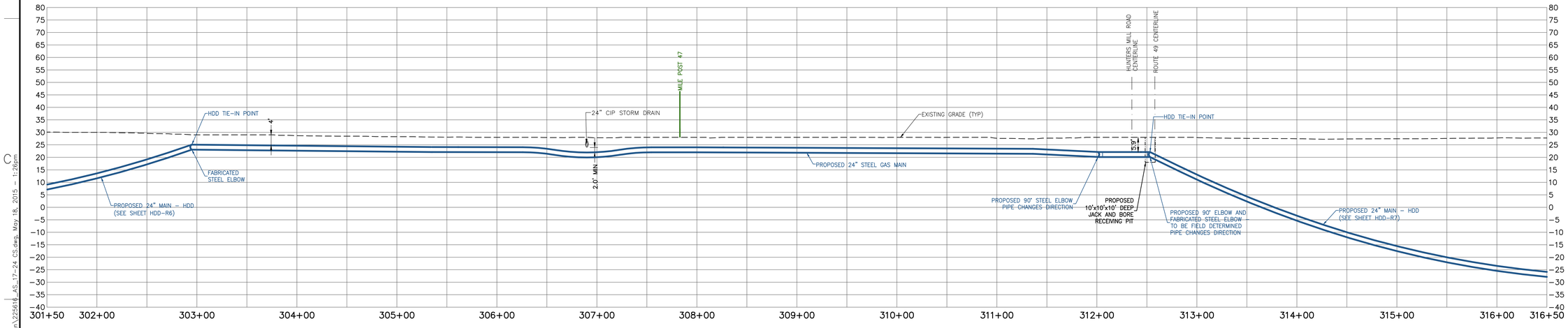
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY							
OWNERSHIP	STATE OF NEW JERSEY							
DISTANCE	146'	911'				43'	5'	400'
RESTORATION	NONE	GRASS – DETAIL 6 ON SHEET D-1B				NONE		NONE
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D-03				NONE		NONE

PAVEMENT–DETAIL 1A/1B ON SHEET D-1A
SEE NOTE #11 ON SHEET D-03

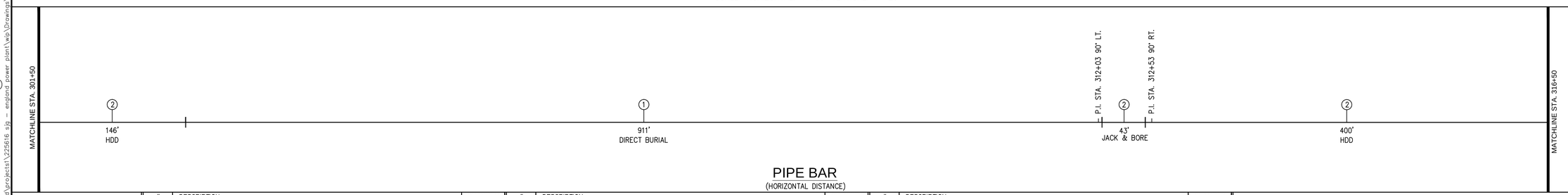


NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL-2, X-60, ERW OR DSAW PRITEC (40/10) OR X-TEC II (60/10)	911 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL-2, X-60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	589 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL-2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	REMOVED 30" STEEL CASING @ J&B LOCATION	9/24/14
2	REVISED STATIONING & ADDED HDD-R6 & R7	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_17-24 CS.dwg

ALIGNMENT SHEET 21

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-21

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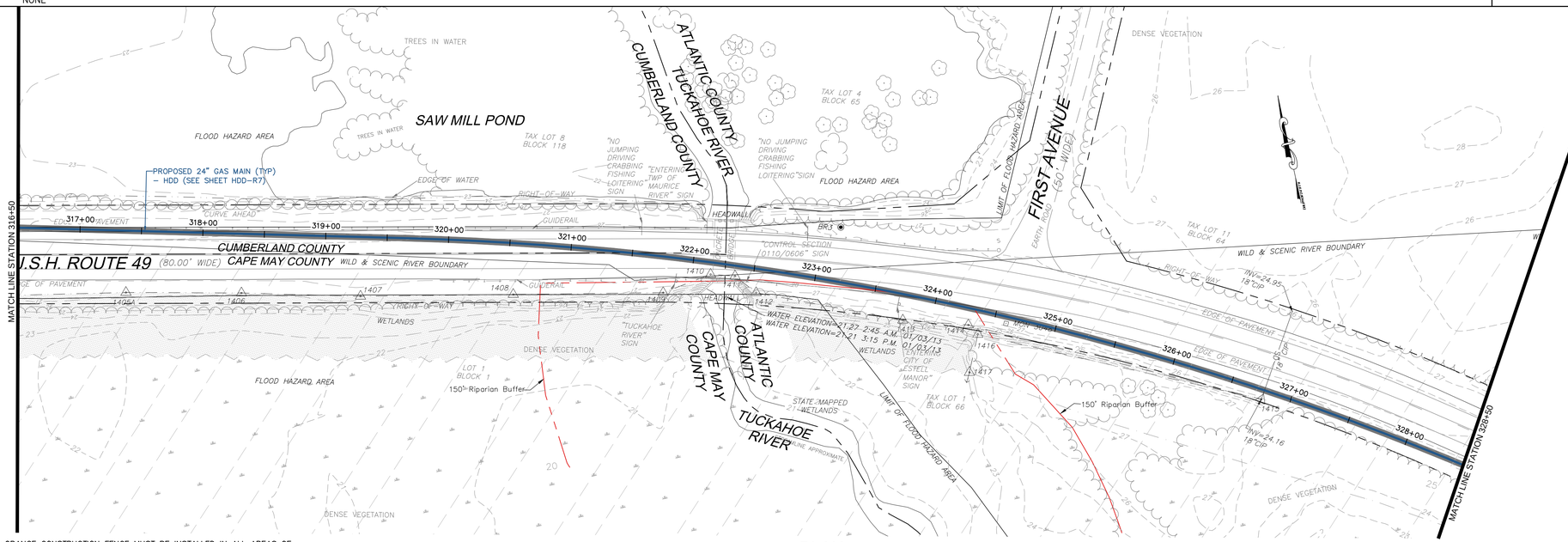
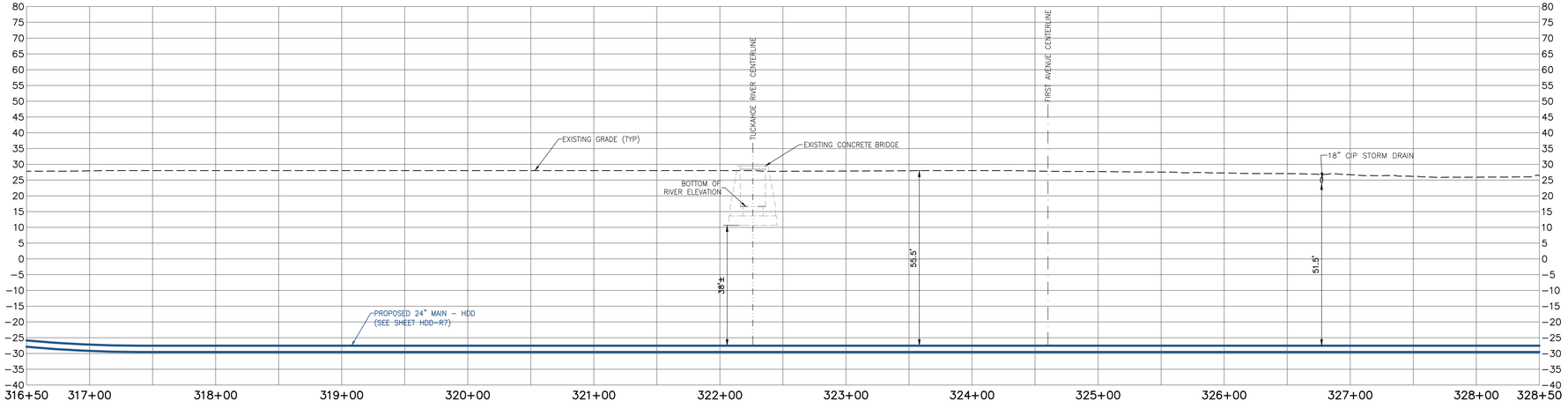
TOWNSHIP & COUNTY	MAURICE RIVER TOWNSHIP, CUMBERLAND COUNTY		ESTELL MANOR, ATLANTIC COUNTY
OWNERSHIP	STATE OF NEW JERSEY		UPPER TOWNSHIP, CAPE MAY COUNTY
DISTANCE	1,200'		
RESTORATION	NONE		
VEGETATION	NONE		



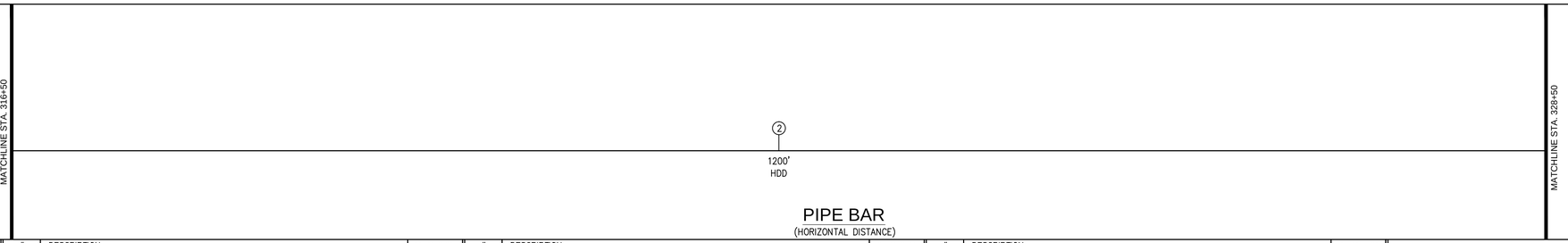
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL-2, X-60, ERW OR DSAW PRITEC (40/10) OR X-TEC II (60/10)	0 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL-2, X-60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,200 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL-2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_17-24 CS.dwg

ALIGNMENT SHEET 22

SOUTH JERSEY GAS
SOUTH JERSEY PLAZA
1 FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-22

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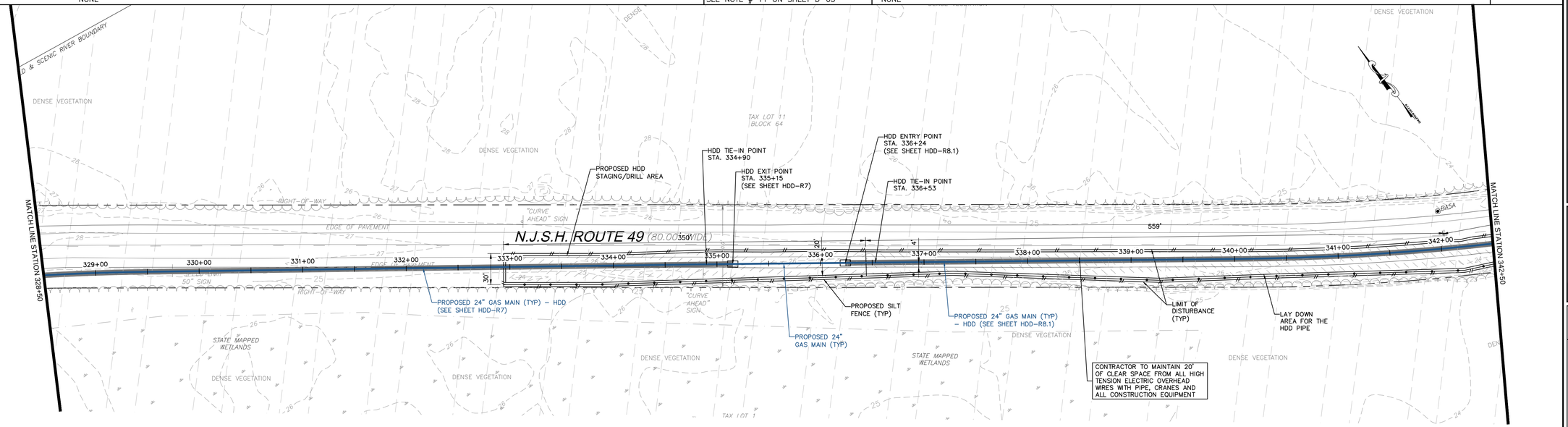
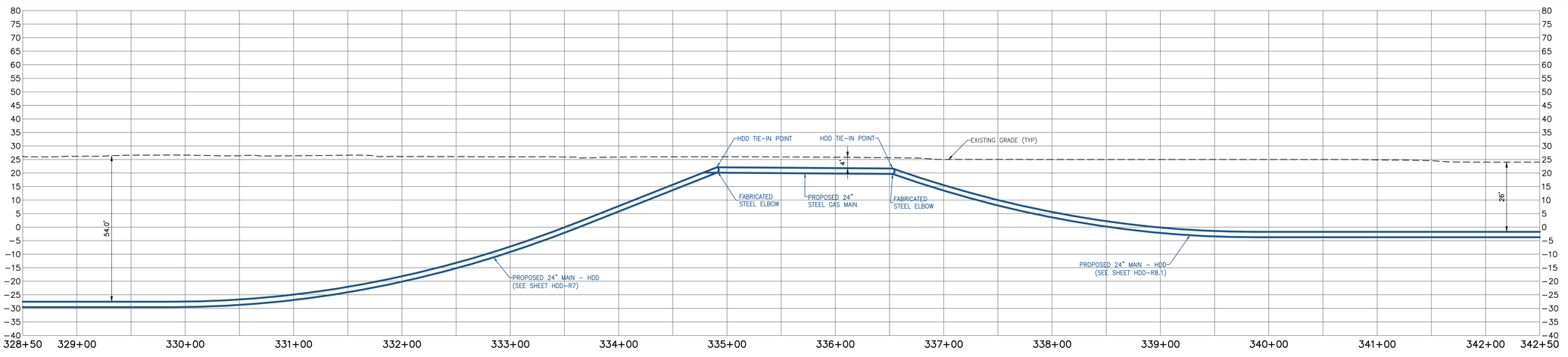
TOWNSHIP & COUNTY	ESTELL MANOR, ATLANTIC COUNTY			
OWNERSHIP	STATE OF NEW JERSEY			
DISTANCE	641'	162'	597'	
RESTORATION	NONE	PAVEMENT–DETAIL 1A/1B ON SHEET D–1A	NONE	
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D–03	NONE	



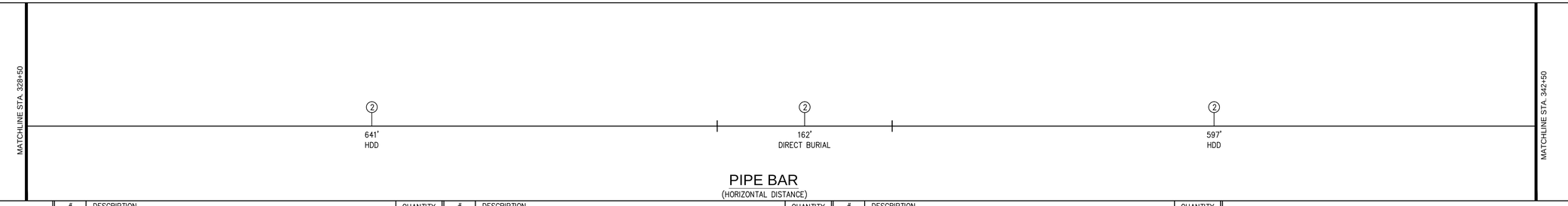
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	0 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,400 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	CHANGED DIRECT BURIAL TO POWERCRETE COATING	9/4/14
2	REVISED STATIONING & ADDED HDD-R8.1	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_17-24 CS.dwg

ALIGNMENT SHEET 23

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-23

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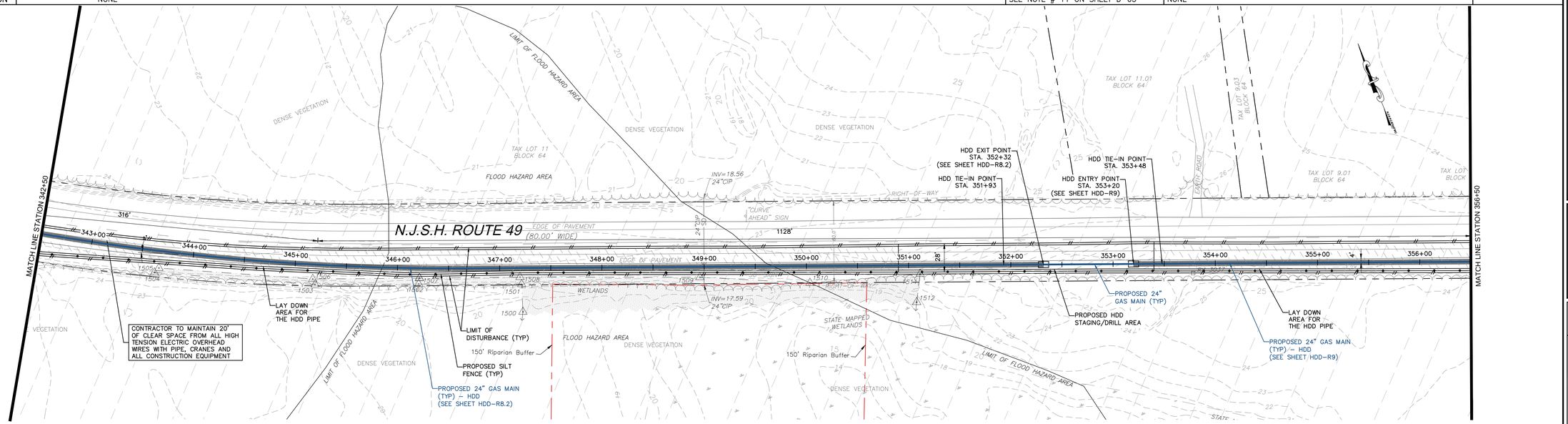
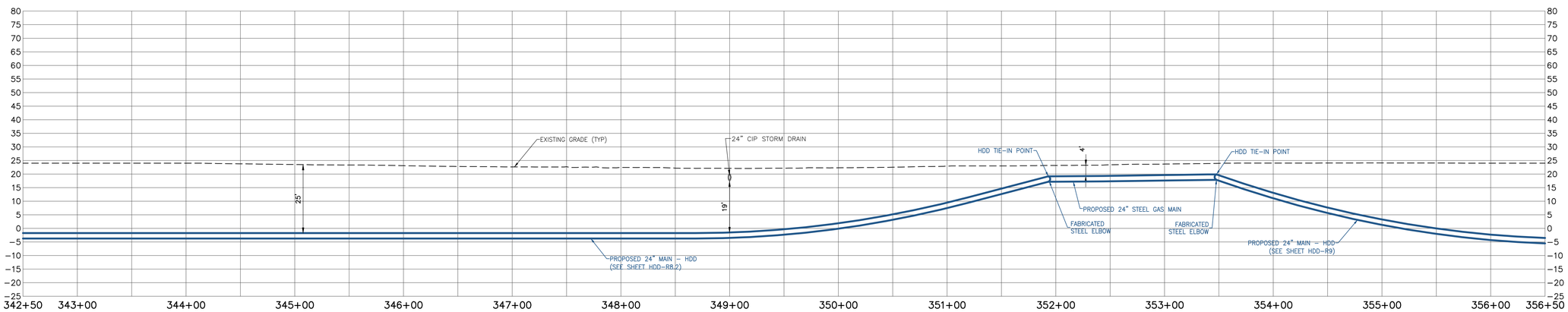
TOWNSHIP & COUNTY	ESTELL MANOR, ATLANTIC COUNTY			
OWNERSHIP	STATE OF NEW JERSEY			
DISTANCE	943'	155'	302'	
RESTORATION	NONE	GRASS – DETAIL 6 ON SHEET D–1B	NONE	
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D–03	NONE	



NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	0 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,400 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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DENNIS M. WALSH, P.E.
NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	CHANGED DIRECT BURIAL TO POWERCRETE COATING	9/4/14
2	REVISED STATIONING & ADDED HDD–R8.2 & HDD–R8	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_17–24 CS.dwg

ALIGNMENT SHEET 24

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

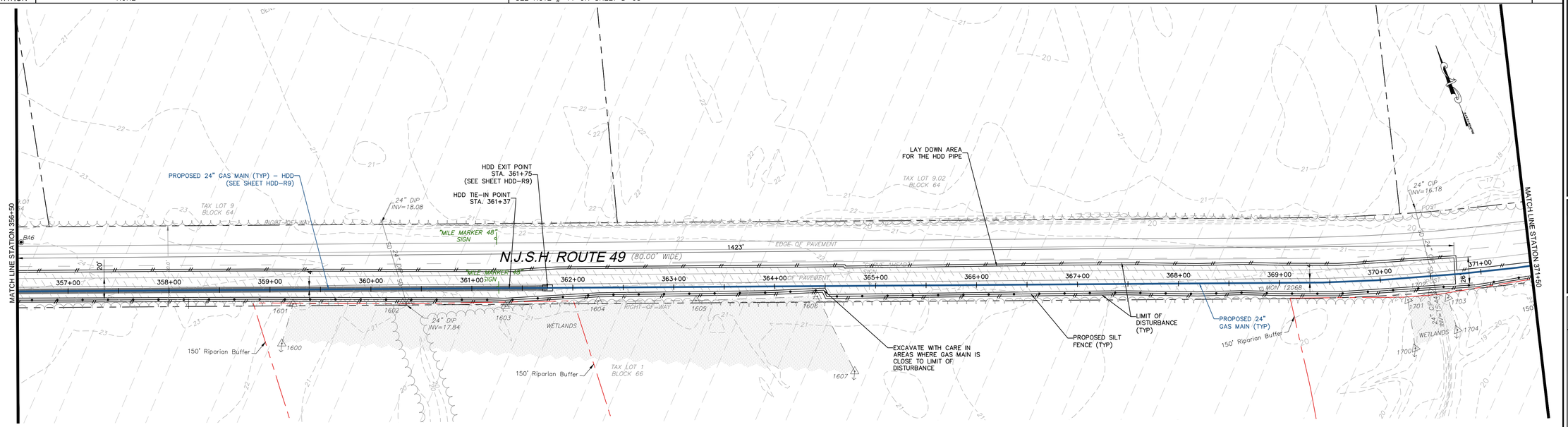
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-24

\\portland\projects1\225616 s\g – england power plant\wip\Drawings_redesign\225616_AS_17–24 CS.dwg, May 18, 2015 – 1:26pm

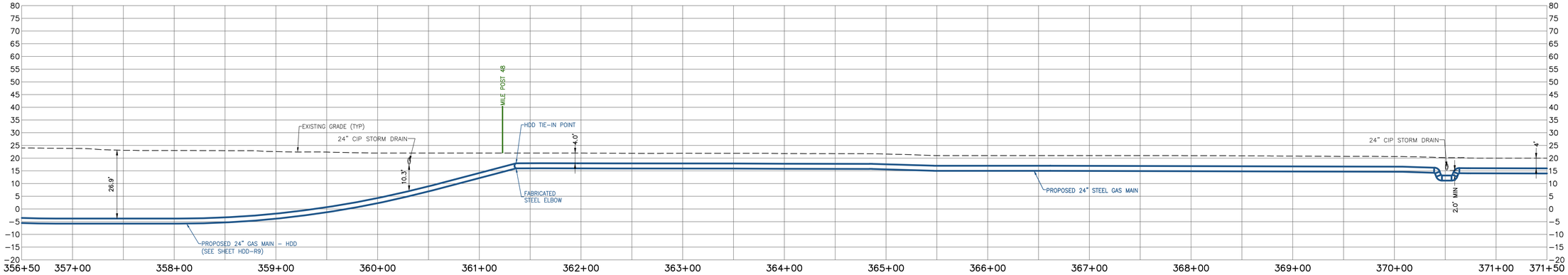
TOWNSHIP & COUNTY	ESTELL MANOR, ATLANTIC COUNTY		
OWNERSHIP	STATE OF NEW JERSEY		
DISTANCE	486'	1,014'	
RESTORATION	NONE	GRASS – DETAIL 6 ON SHEET D–1B	
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D–03	



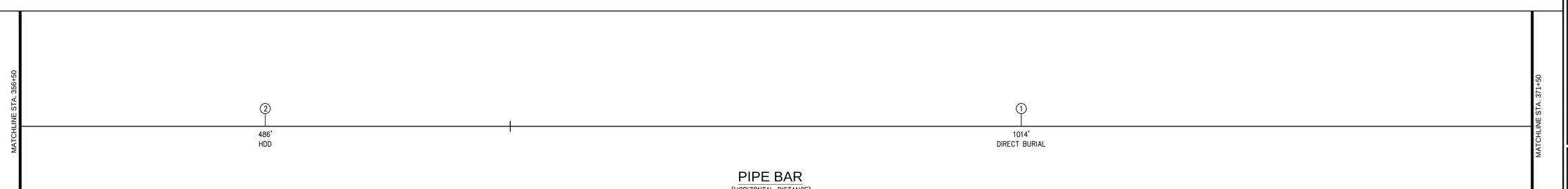
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,014 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	486 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD–R9	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/RJ | 225616_AS_25–32 CS.dwg

ALIGNMENT SHEET 25

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

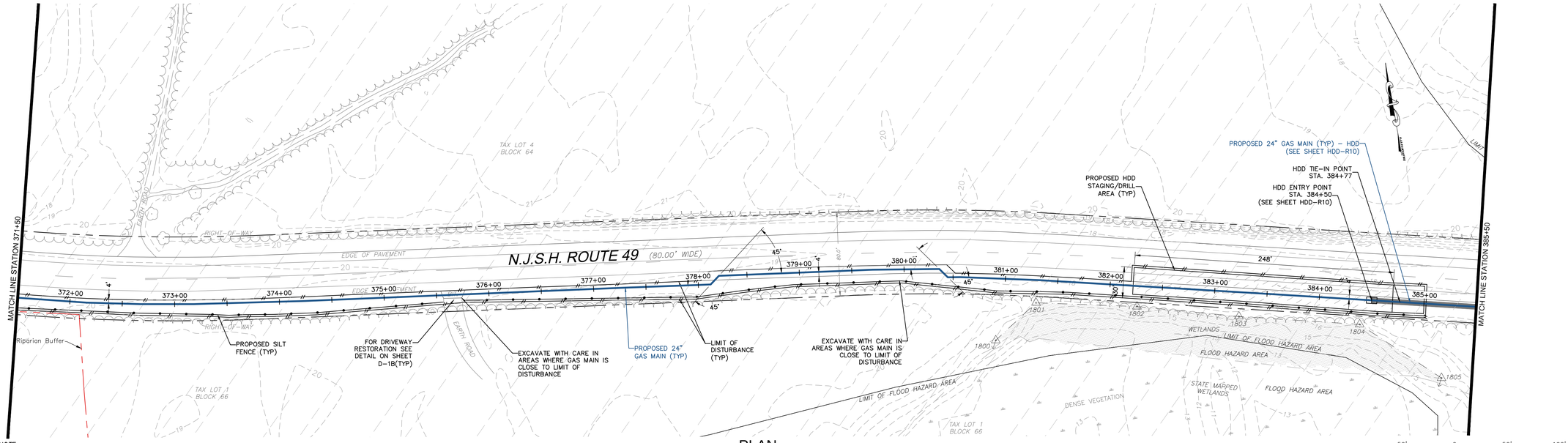
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-25

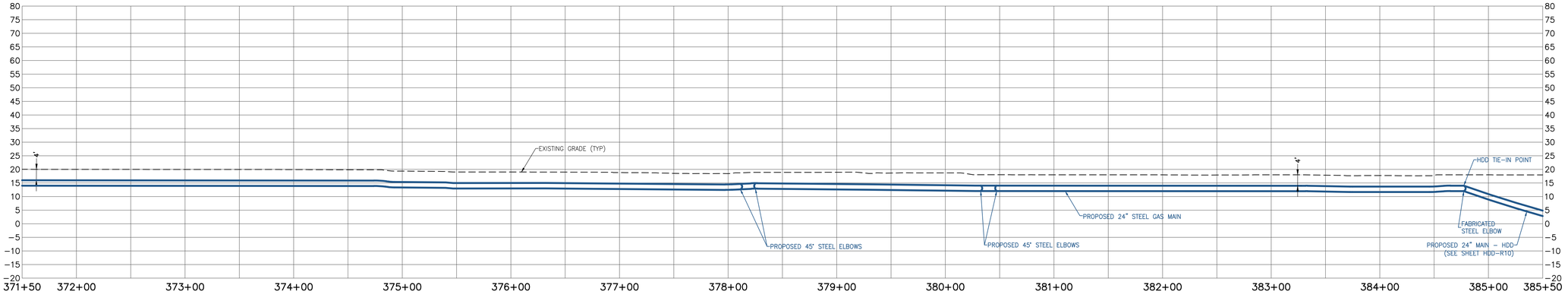
\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_25–32 CS.dwg, May 18, 2015 – 1:27pm

TOWNSHIP & COUNTY	ESTELL MANOR, ATLANTIC COUNTY				
OWNERSHIP	STATE OF NEW JERSEY				
DISTANCE	667'	222'	438'	73'	
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B	PAVEMENT–DETAIL 1A/1B ON SHEET D–1A	GRASS – DETAIL 6 ON SHEET D–1B	NONE	
VEGETATION	SEE NOTE # 11 ON SHEET D–03			NONE	

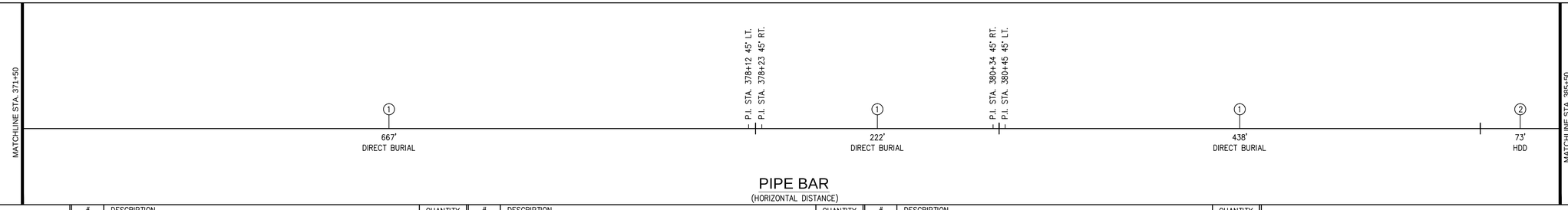


NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,327 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	73 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD–R10	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_25–32 CS.dwg

ALIGNMENT SHEET 26

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

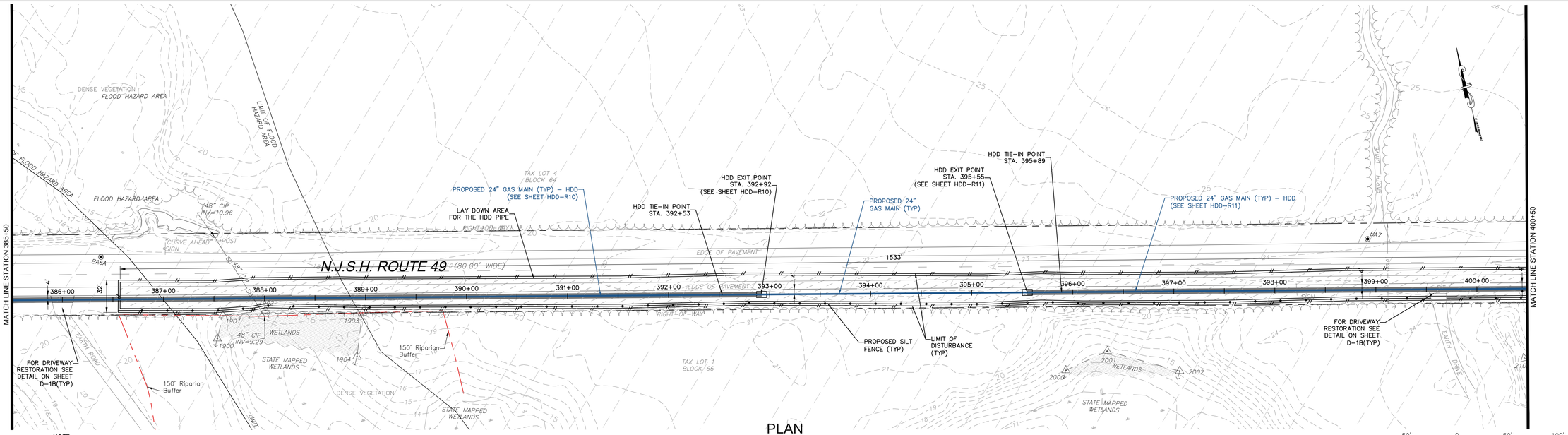
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-26

\\potland\projects1\225616 s\jg – england power plant\wip\drawings_redesign\225616_AS_25–32 CS.dwg, May 18, 2015 – 1:27pm

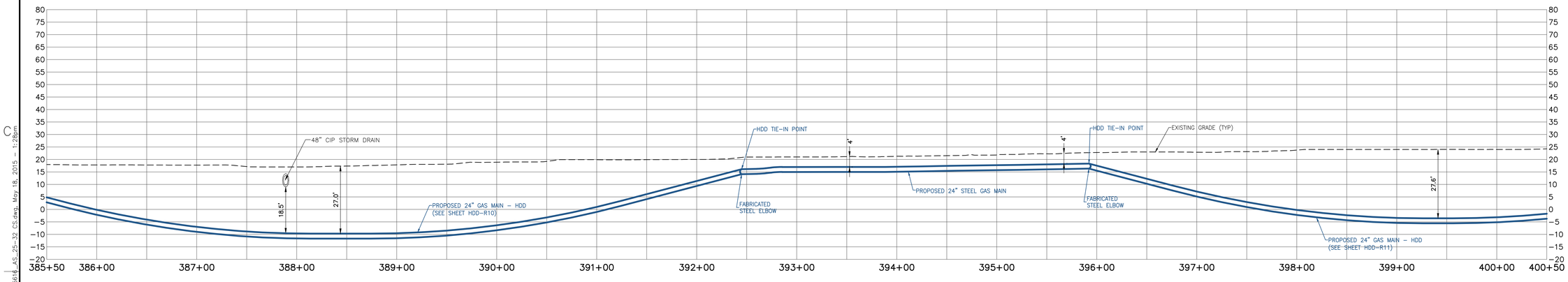
TOWNSHIP & COUNTY	ESTELL MANOR, ATLANTIC COUNTY		
OWNERSHIP	STATE OF NEW JERSEY		
DISTANCE	695'	347'	458'
RESTORATION	NONE	GRASS – DETAIL 6 ON SHEET D-1B	NONE
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D-03	NONE



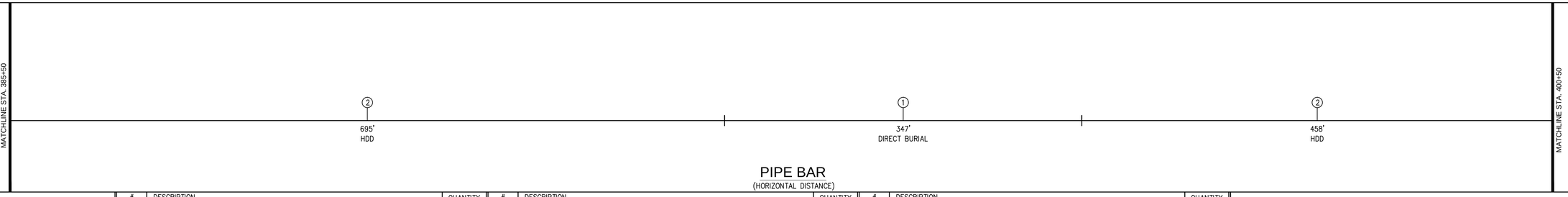
PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING

NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL-2, X-60, ERW OR DSAW PRITEC (40/10) OR X-TEC II (60/10)	347 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL-2, X-60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,153 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL-2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD-R10 & HDD-R11	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_25-32 CS.dwg

ALIGNMENT SHEET 27

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-27

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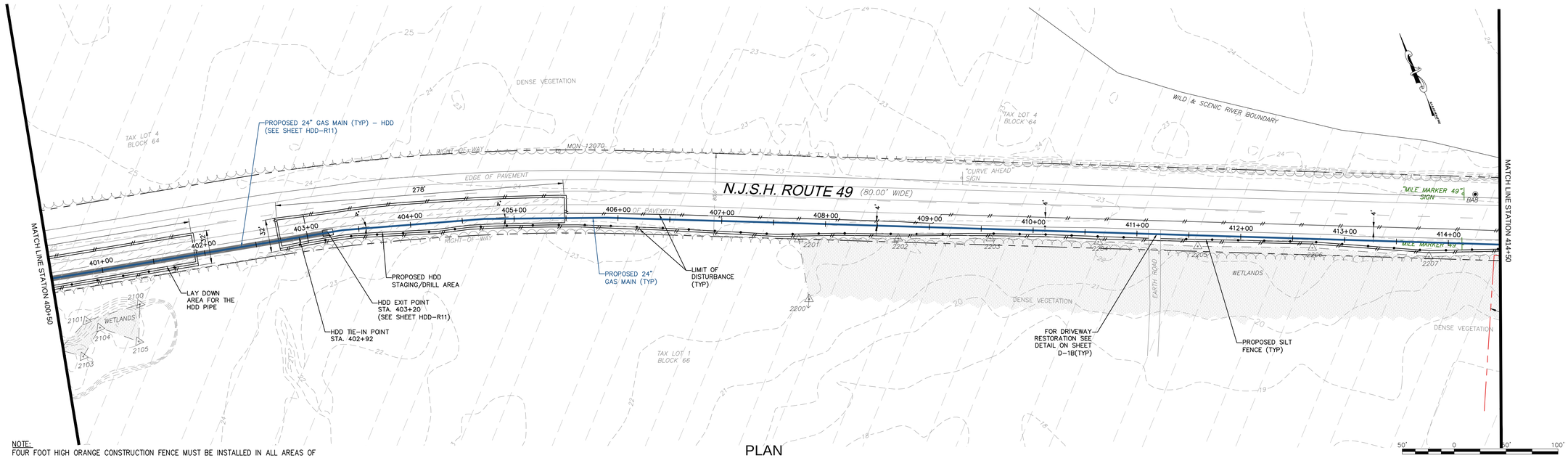
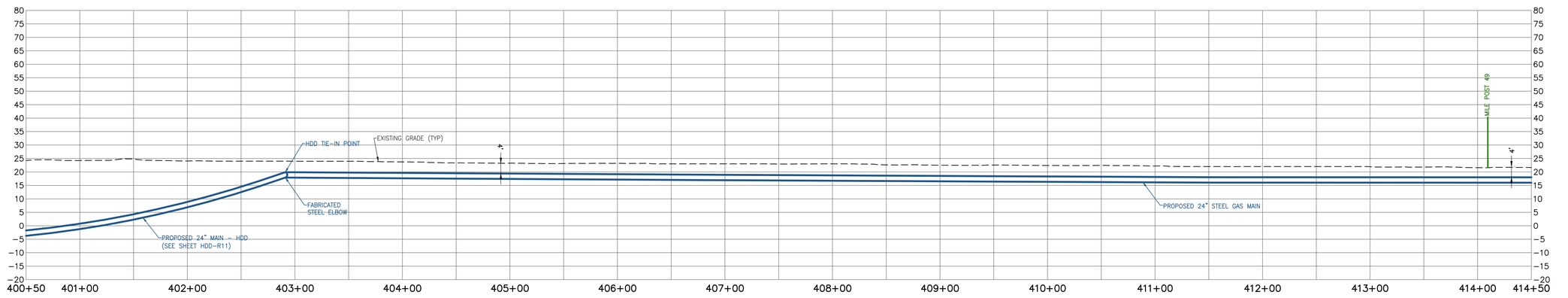
TOWNSHIP & COUNTY	ESTELL MANOR, ATLANTIC COUNTY		
OWNERSHIP	STATE OF NEW JERSEY		
DISTANCE	241'	1,159'	
RESTORATION	NONE	GRASS – DETAIL 6 ON SHEET D-1B	
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D-03	



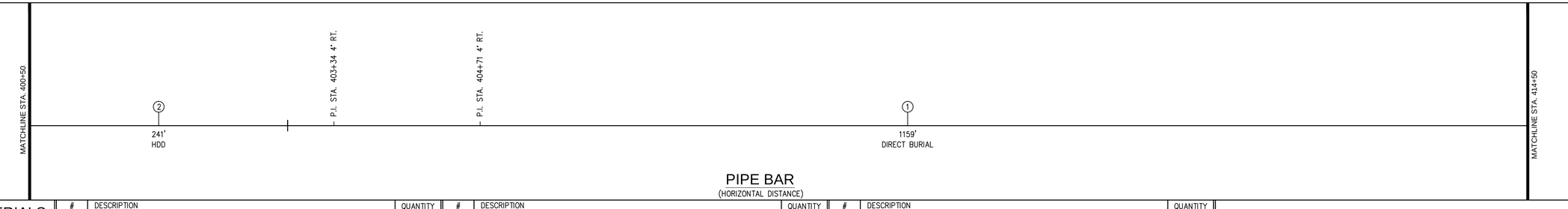
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL-2, X-60, ERW OR DSAW PRITEC (40/10) OR X-TEC II (60/10)	1,159 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL-2, X-60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	241 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL-2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD-R11	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_25-32 CS.dwg

ALIGNMENT SHEET 28

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

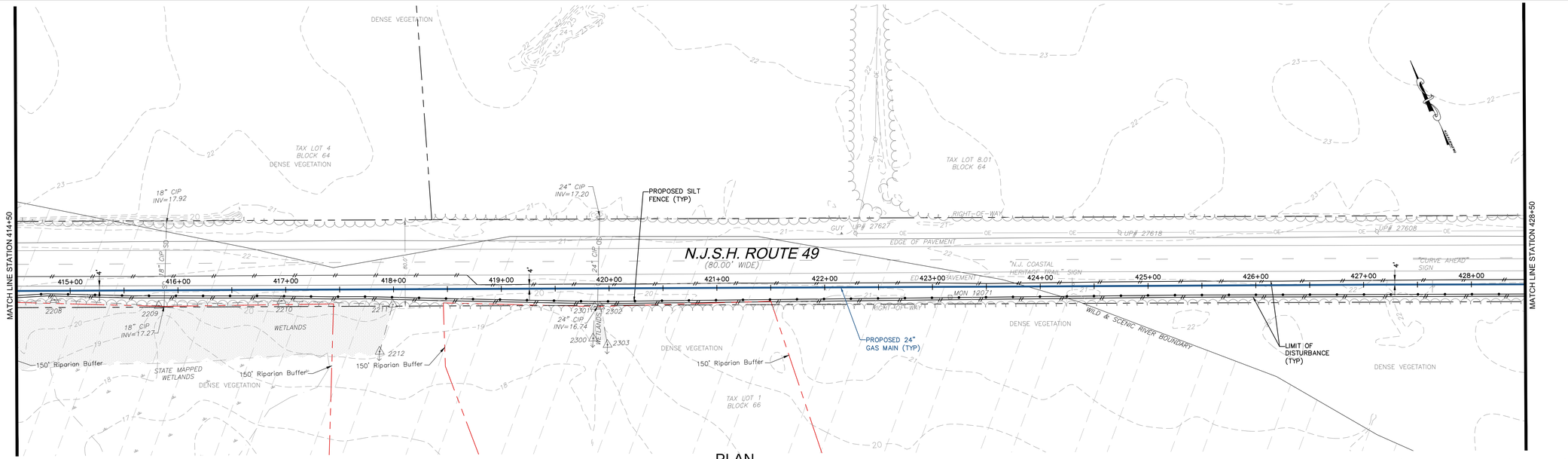
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-28

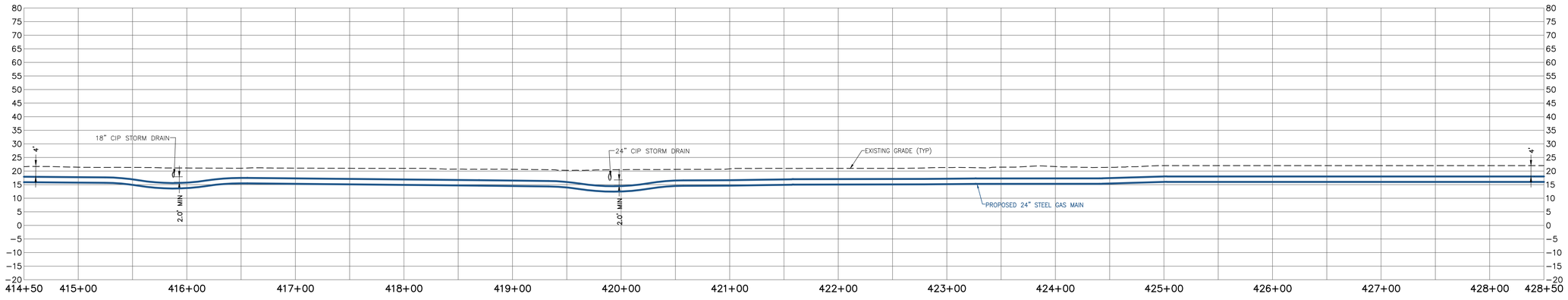
\\portland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_25-32 CS.dwg, May 18, 2015 – 1:28pm

TOWNSHIP & COUNTY	ESTELL MANOR, ATLANTIC COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,400'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B
VEGETATION	

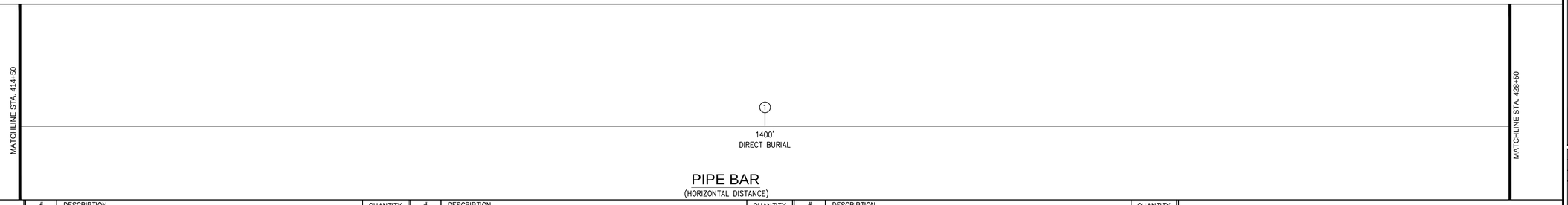


NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,400 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_25–32 CS.dwg

ALIGNMENT SHEET 29

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-29

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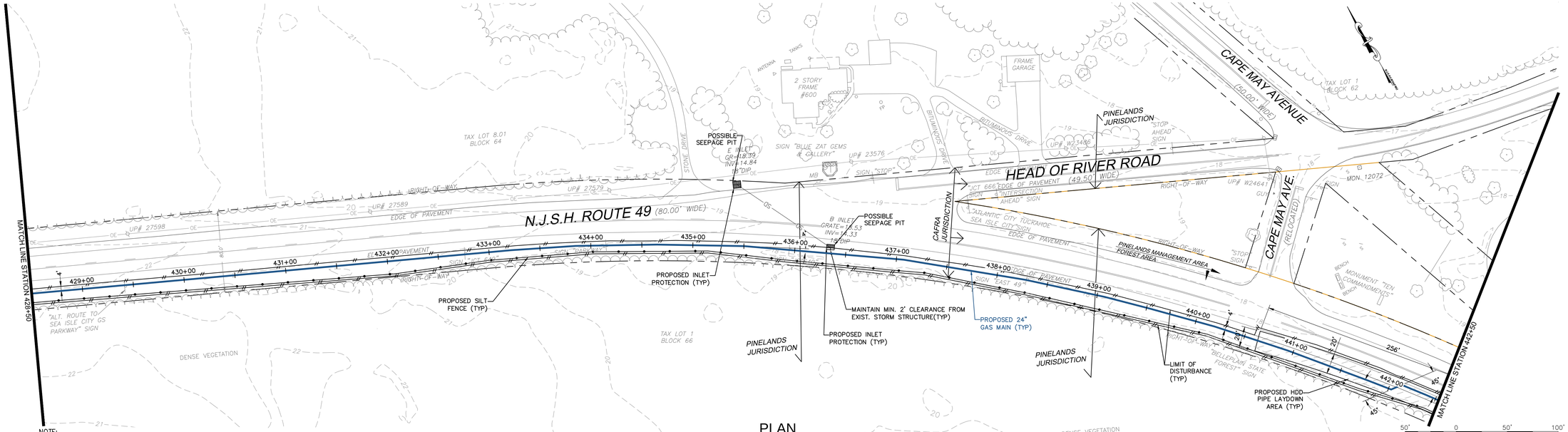
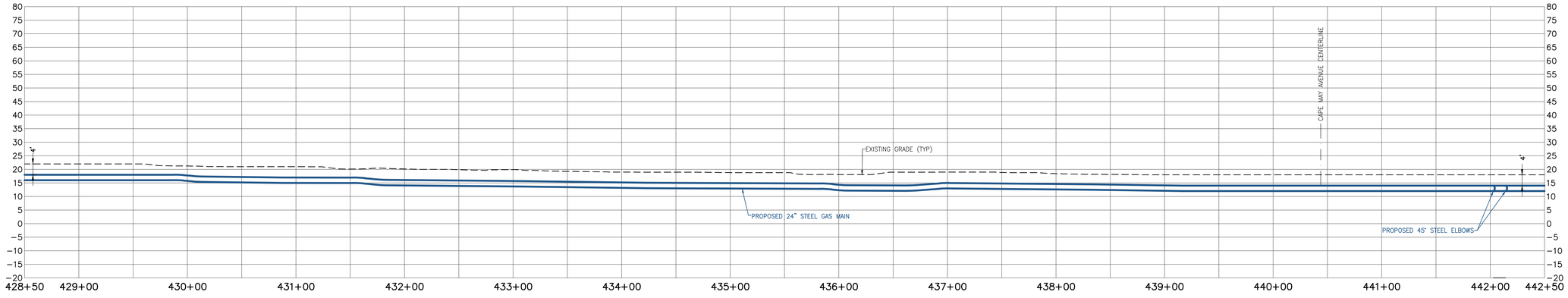
TOWNSHIP & COUNTY	ESTELL MANOR, ATLANTIC COUNTY		
OWNERSHIP	STATE OF NEW JERSEY		
DISTANCE	1,358'		42'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B		PAVEMENT–DETAIL 1A/1B ON SHEET D–1A
VEGETATION	SEE NOTE # 11 ON SHEET D–03		SEE NOTE # 11 ON SHEET D–03

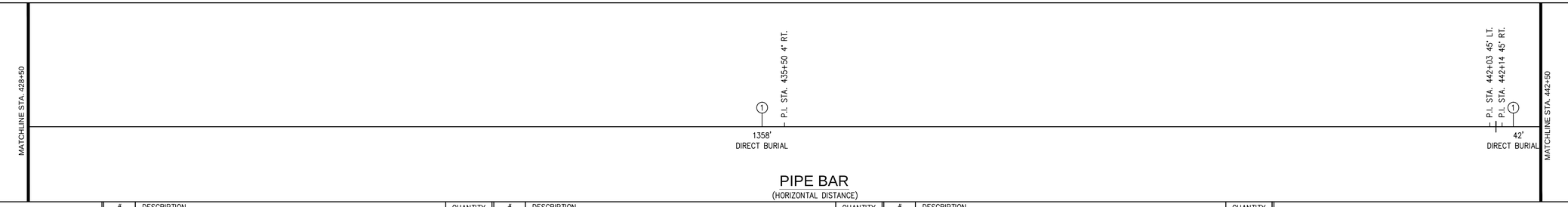


NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,400 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_25–32 CS.dwg

ALIGNMENT SHEET 30

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

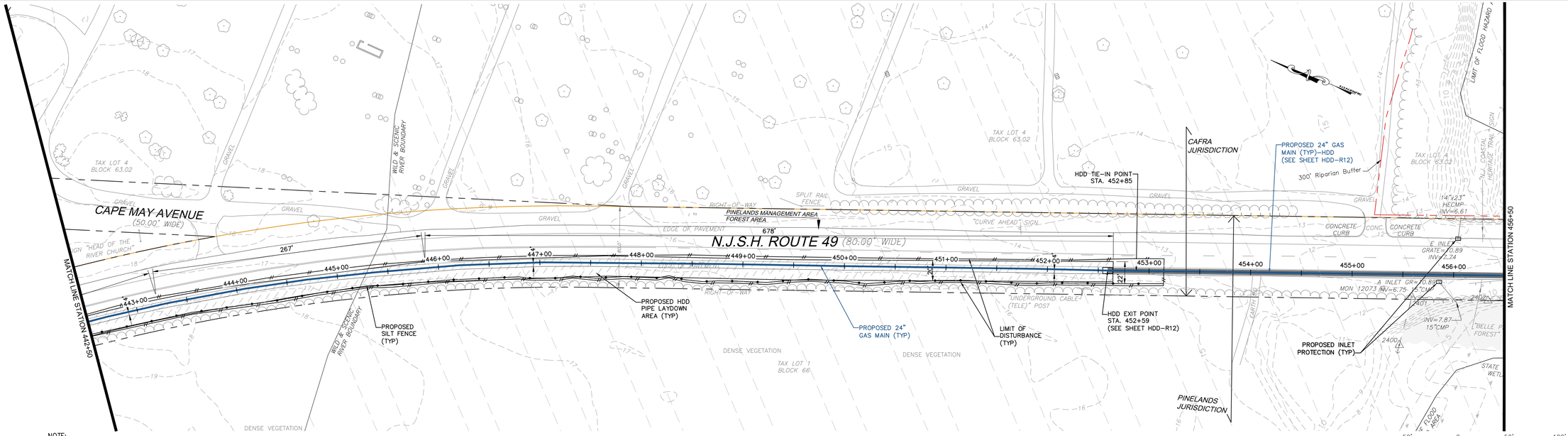
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-30

\\pcfiland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_25–32 CS.dwg, May 18, 2015 – 1:28pm

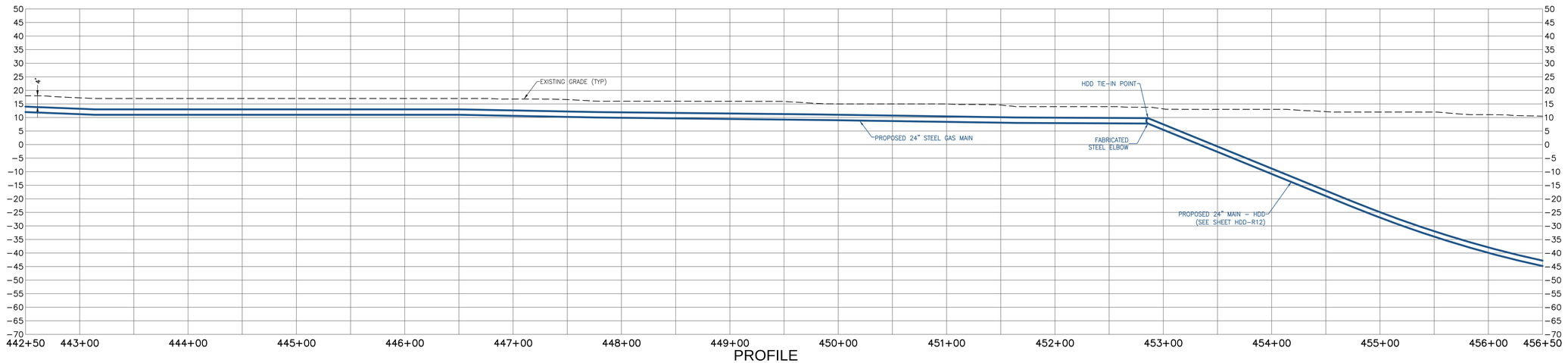
24x36 SHEET
1:1

TOWNSHIP & COUNTY	ESTELL MANOR, ATLANTIC COUNTY		
OWNERSHIP	STATE OF NEW JERSEY		
DISTANCE	1,036'	364'	
RESTORATION	PAVEMENT–DETAIL 1A/1B ON SHEET D–1A	NONE	
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE	

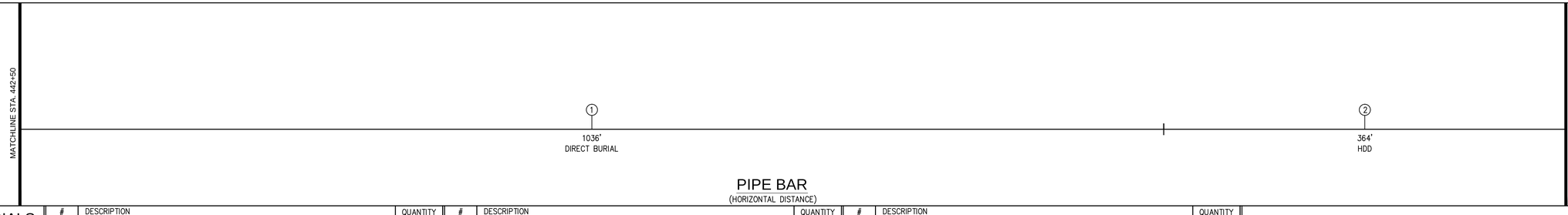


NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,036 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	364 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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DENNIS M. WALSH, P.E.
N.J. LIC.NO. GE46534

REV	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_25-32_CS.dwg

ALIGNMENT SHEET 31

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

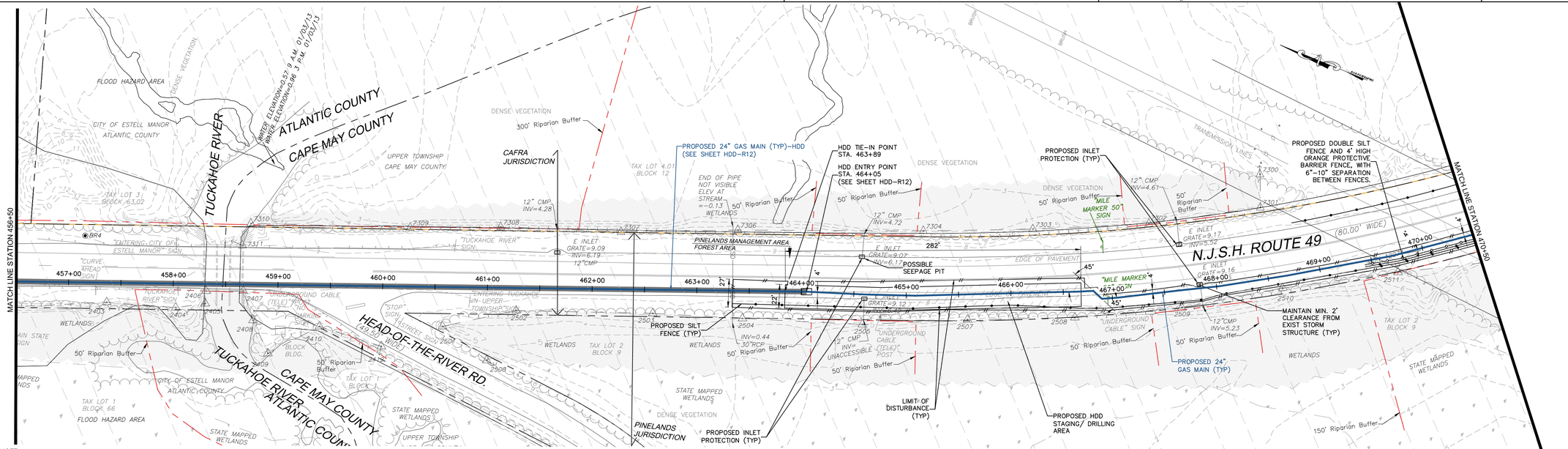
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-31

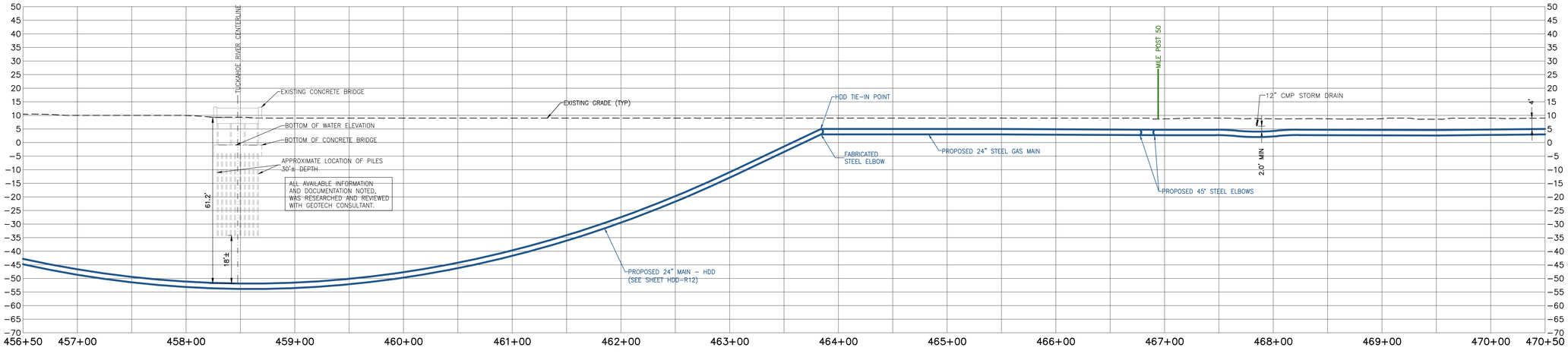
\\portland\projects1\225616 sig - england power plant\wip\Drawings_redesign\225616_AS_25-32_CS.dwg, May 18, 2015 - 1:29pm

TOWNSHIP & COUNTY	ESTELL MANOR, ATLANTIC COUNTY UPPER TOWNSHIP, CAPE MAY COUNTY			
OWNERSHIP	STATE OF NEW JERSEY			
DISTANCE	734'	300'	366'	
RESTORATION	NONE	PAVEMENT–DETAIL 1A/1B ON SHEET D–1A	GRASS – DETAIL 6 ON SHEET D–1B	
VEGETATION	NONE		SEE NOTE # 11 ON SHEET D–03	

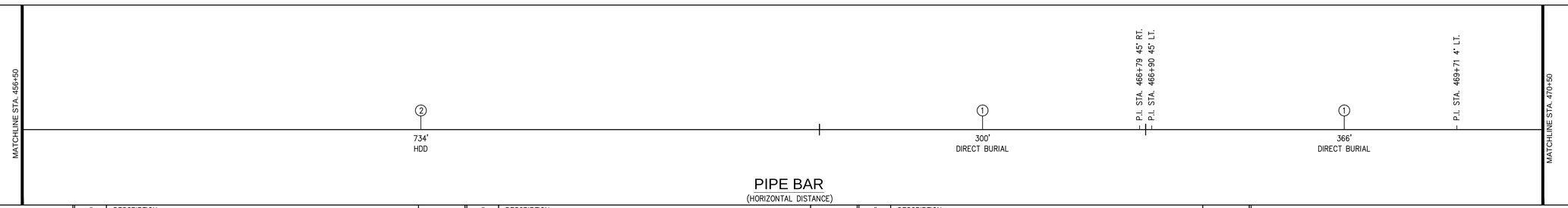


NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	666 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	734 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC. NO. GE46534

REV	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_25–32 CS.dwg

ALIGNMENT SHEET 32

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

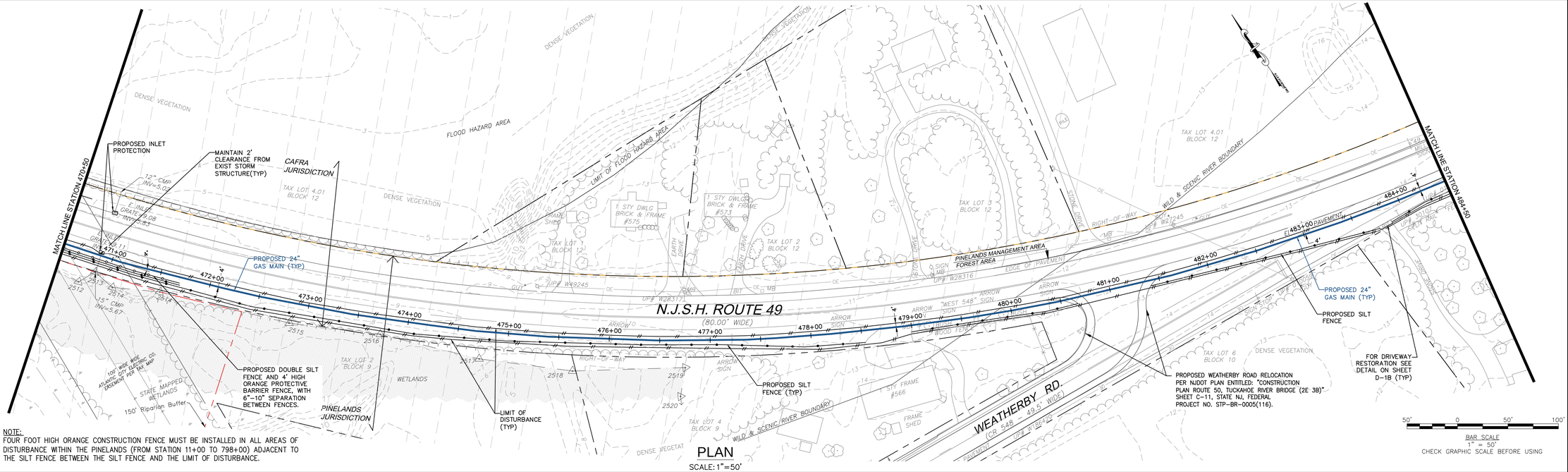
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-32

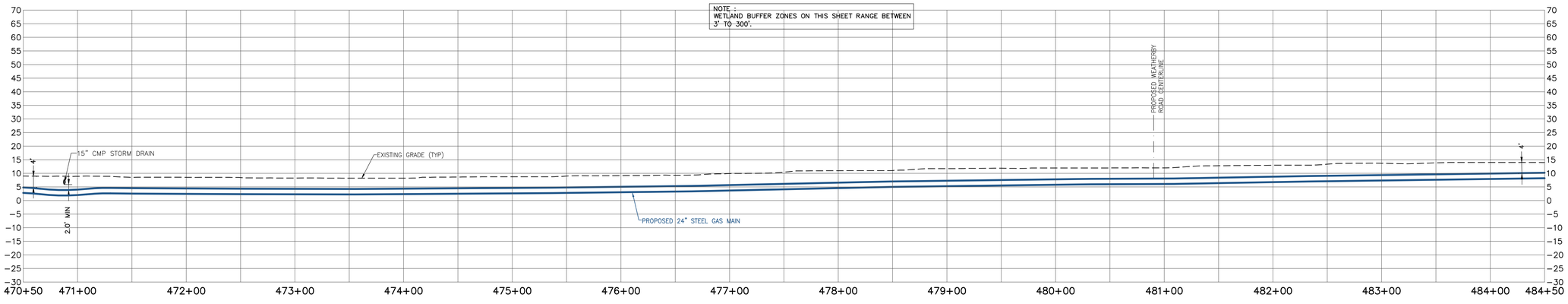
\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS–25–32 CS.dwg, May 18, 2015 – 1:29pm

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY			
OWNERSHIP	STATE OF NEW JERSEY			
DISTANCE	1,009'		88'	303'
RESTORATION	GRASS–DETAIL # 6 SHEET D–1B		PAVEMENT–DETAILS # 1A/1B ON SHEET D–1A	GRASS–DETAIL # 6 SHEET D–1B
VEGETATION	SEE NOTE # 11 ON SHEET D–03		SEE NOTE # 11 ON SHEET D–03	SEE NOTE # 11 ON SHEET D–03

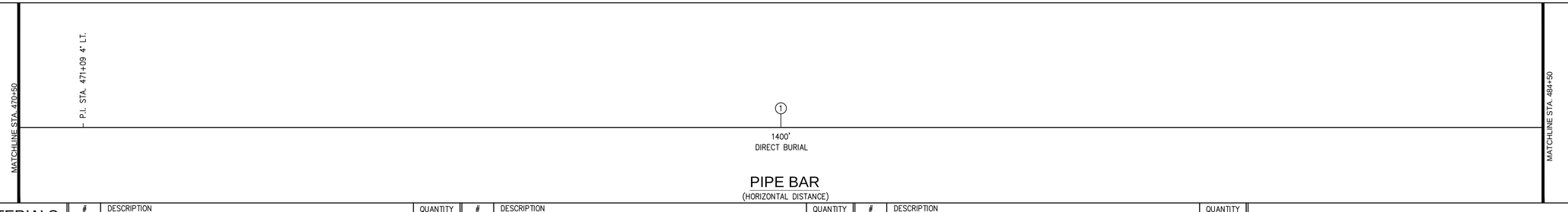


NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,400 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_33-40 CS.dwg

ALIGNMENT SHEET 33

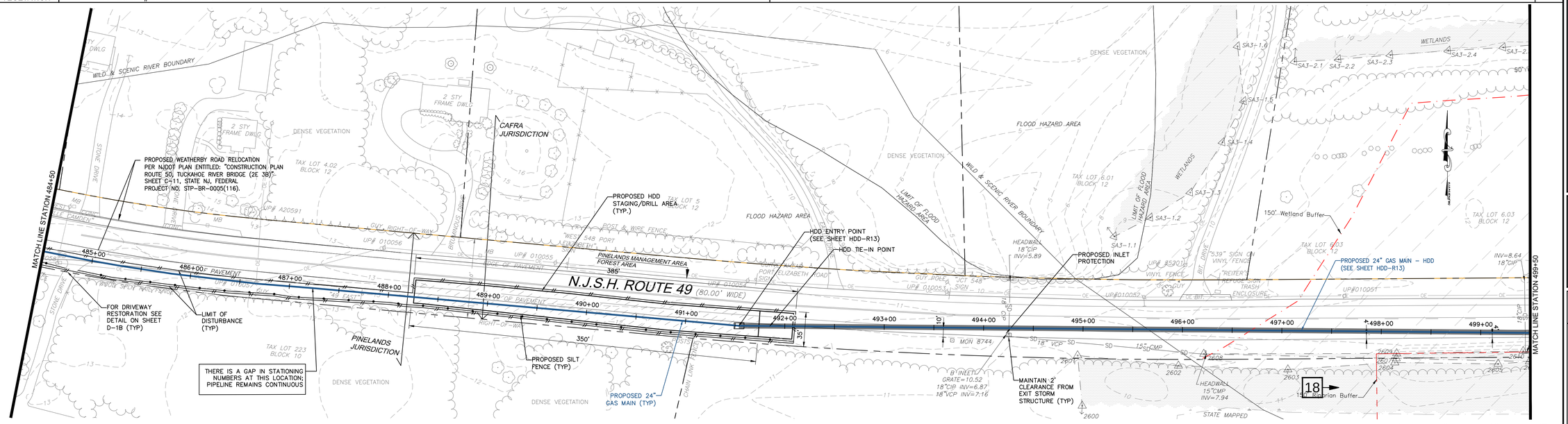
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-33

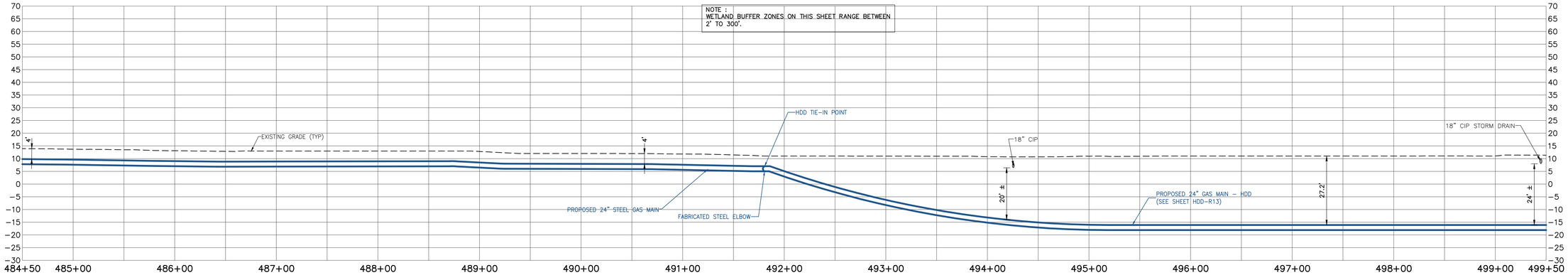
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY	
OWNERSHIP	STATE OF NEW JERSEY	
DISTANCE	730'	770'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B	NONE
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE



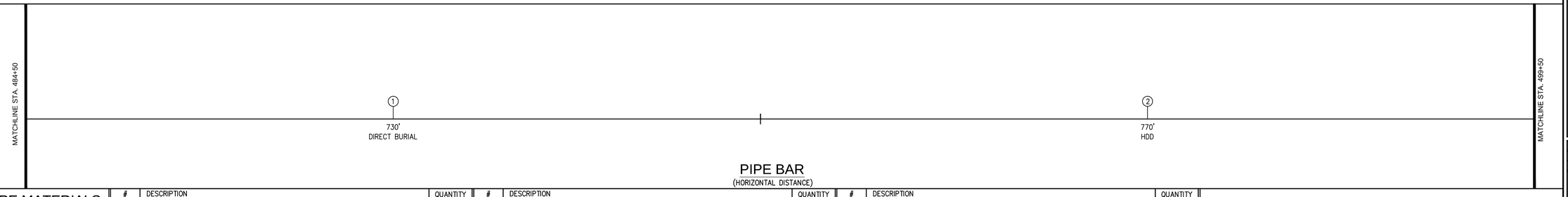
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	730 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	770 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD-R13	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_33-40_CS.dwg

ALIGNMENT SHEET 34

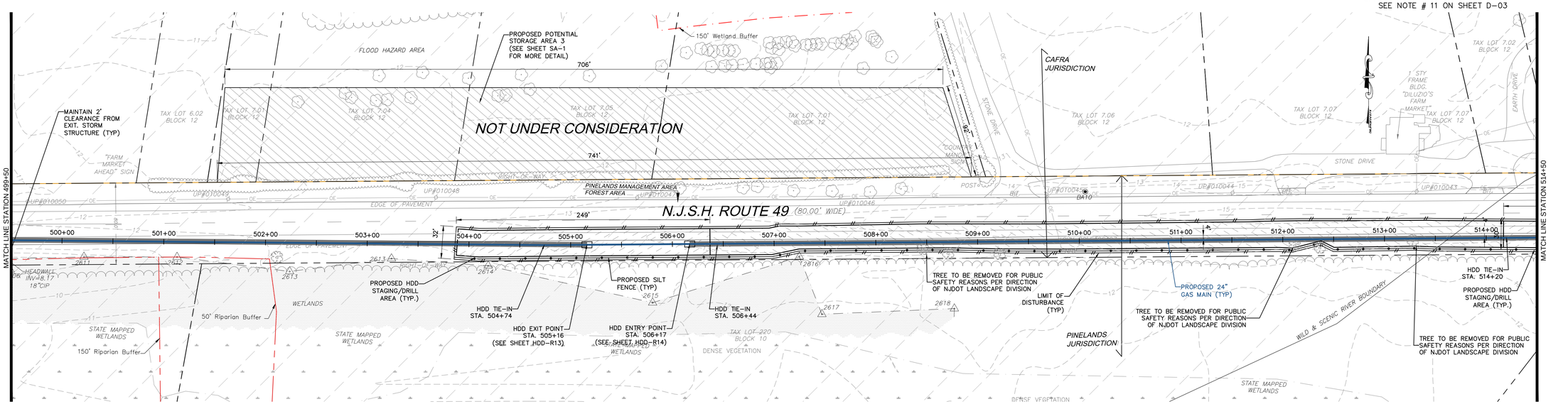
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-34

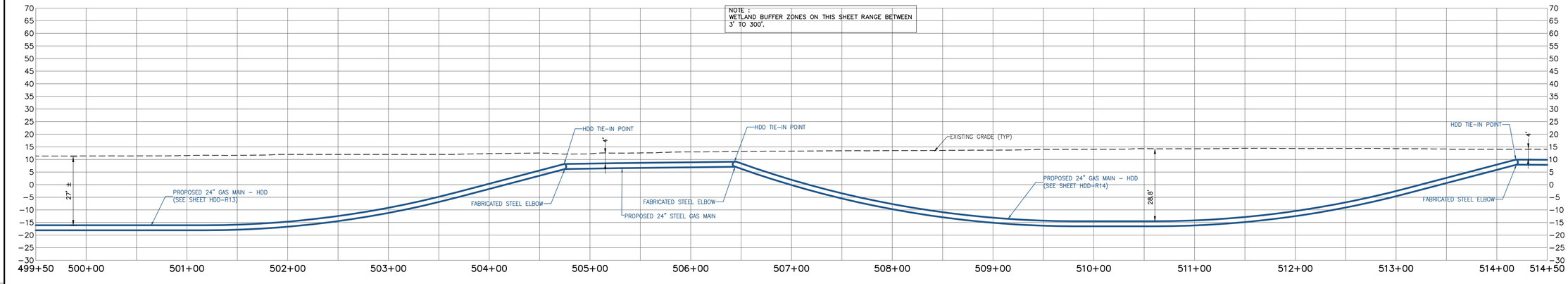
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY			
OWNERSHIP	STATE OF NEW JERSEY			
DISTANCE	524'	169'	775'	32'
RESTORATION	NONE	GRASS – DETAIL 6 ON SHEET D–1B	NONE	
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D–03	NONE	



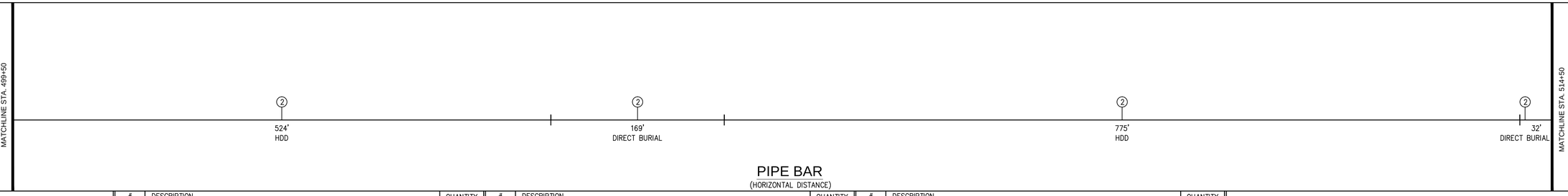
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS (LINEAR FOOTAGE IS APPROXIMATE)	#	DESCRIPTION	QUANTITY
	①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	0 L.F.
	②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,500 L.F.
	③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	CHANGED DIRECT BURIAL TO POWERCRETE COATING	9/4/14
2	REVISED STATIONING & ADDED HDD–R13 & HDD–R14	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_33–40_CS.dwg

ALIGNMENT SHEET 35

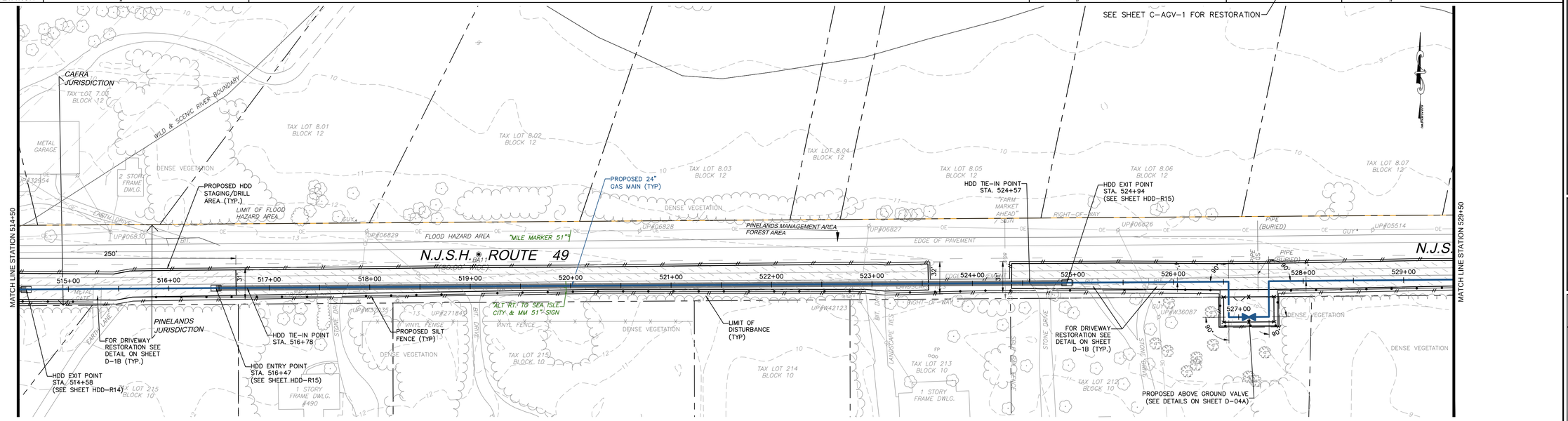
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-35

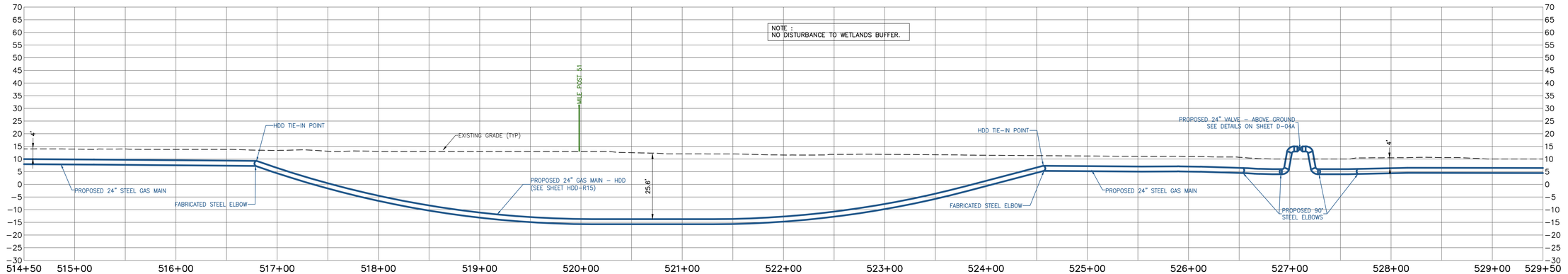
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY				
OWNERSHIP	STATE OF NEW JERSEY			BOBBY BEES HUNTERS CLUB BLOCK 212, LOT 10	STATE OF NEW JERSEY
DISTANCE	230'	777'	213'	80'	200'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B	NONE	GRASS – DETAIL 6 ON SHEET D–1B		GRASS – DETAIL 6 ON SHEET D–1B
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE	SEE NOTE #11 ON SHEET D–03		SEE NOTE #11 ON SHEET D–03



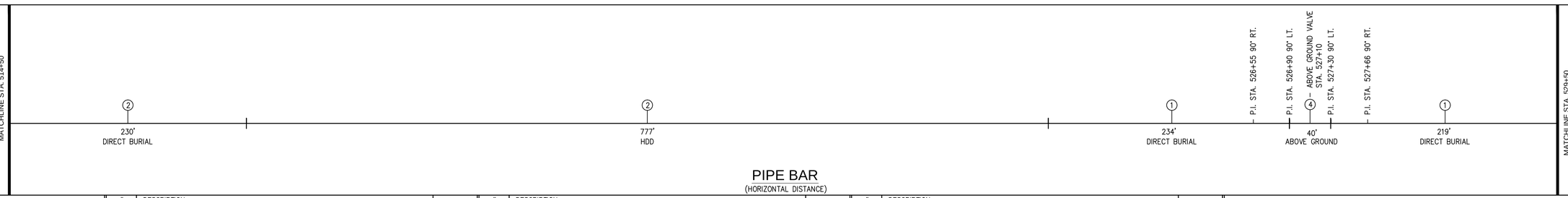
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

50' 0 50' 100'
BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	453 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,007 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.
		40 L.F.

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DENNIS M. WALSH, P.E.
N.J. LIC. NO. GE46534

REV.	DESCRIPTION	DATE
3	CHANGED DIRECT BURIAL TO POWERCRETE COATING	9/4/14
2	REVISED STATIONING & ADDED HDD–R15	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_33–40_CS.dwg

ALIGNMENT SHEET 36

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

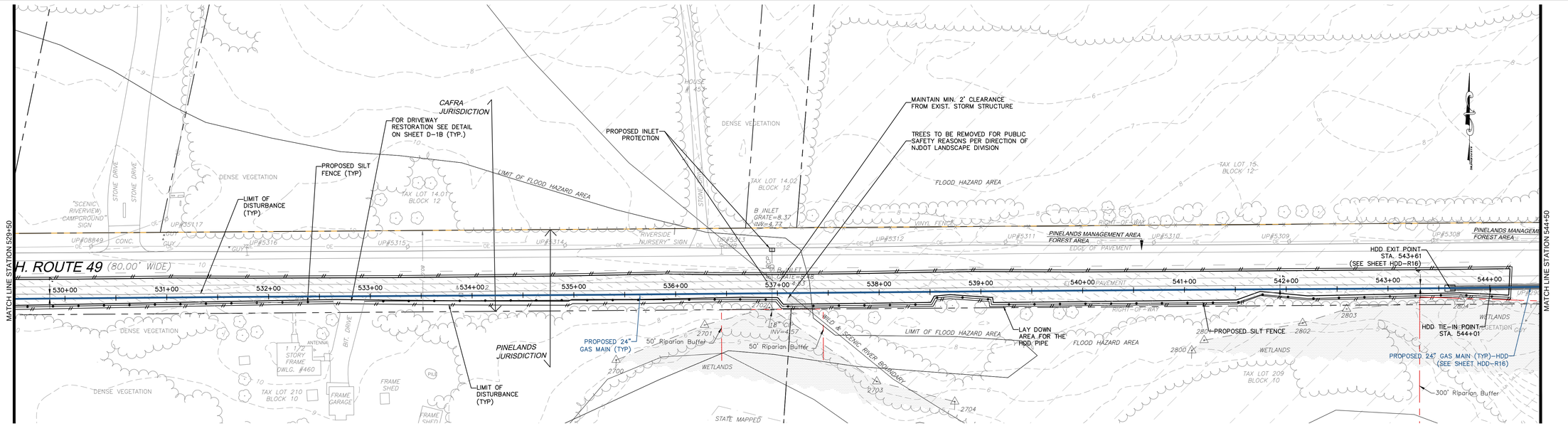
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-36

Xref \\PORTLAND\Projects1\225616 SJG – England Power Plant\wip\Drawings\ REDESIGN\XREF\ XR SJG–TBLK CS1.dwg

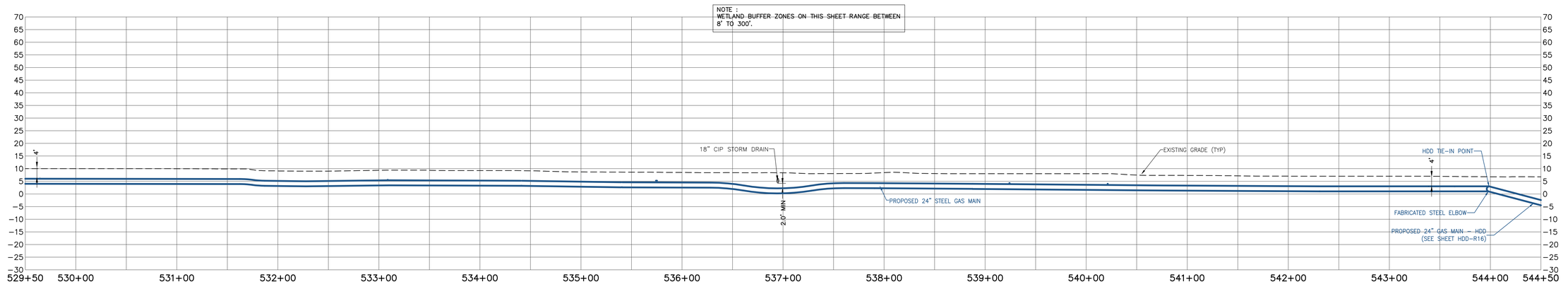
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY		
OWNERSHIP	STATE OF NEW JERSEY		
DISTANCE	1,449'	51'	
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B	NONE	
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE	



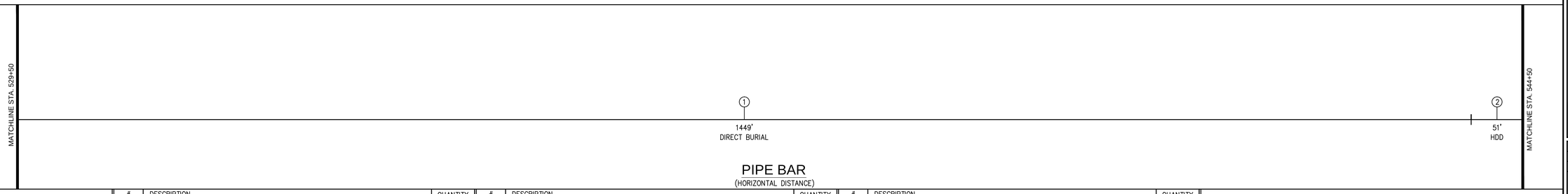
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS (LINEAR FOOTAGE IS APPROXIMATE)	#	DESCRIPTION	QUANTITY
	①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,449 L.F.
	②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	51 L.F.
	③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD–R16	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_33–40 CS.dwg

ALIGNMENT SHEET 37

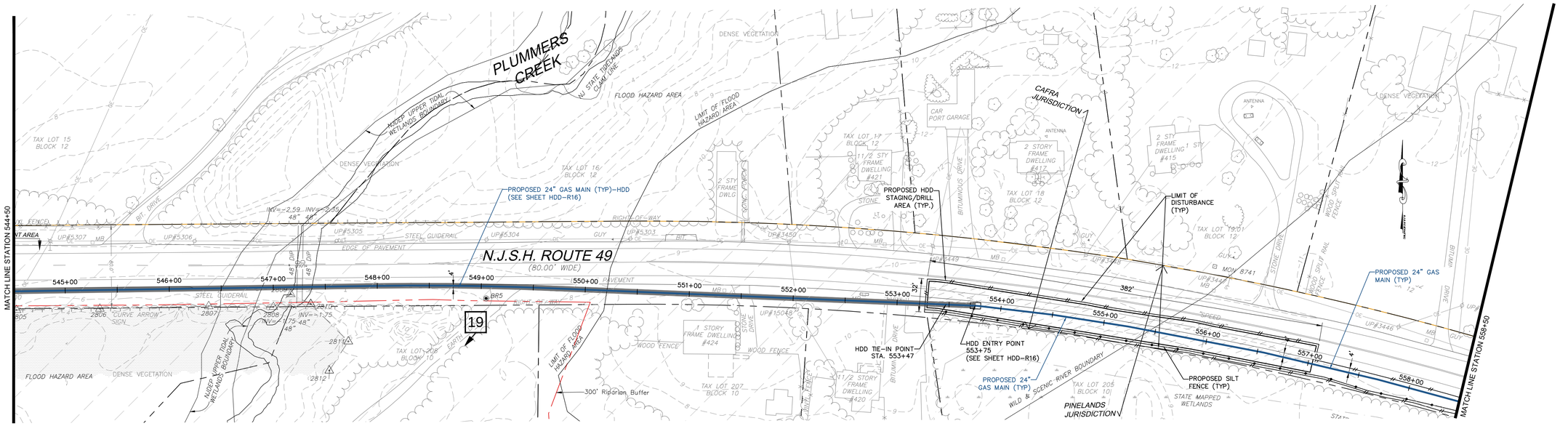
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-37

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY		
OWNERSHIP	STATE OF NEW JERSEY		
DISTANCE	891'	509'	
RESTORATION	NONE	GRASS – DETAIL 6 ON SHEET D-1B	
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D-03	

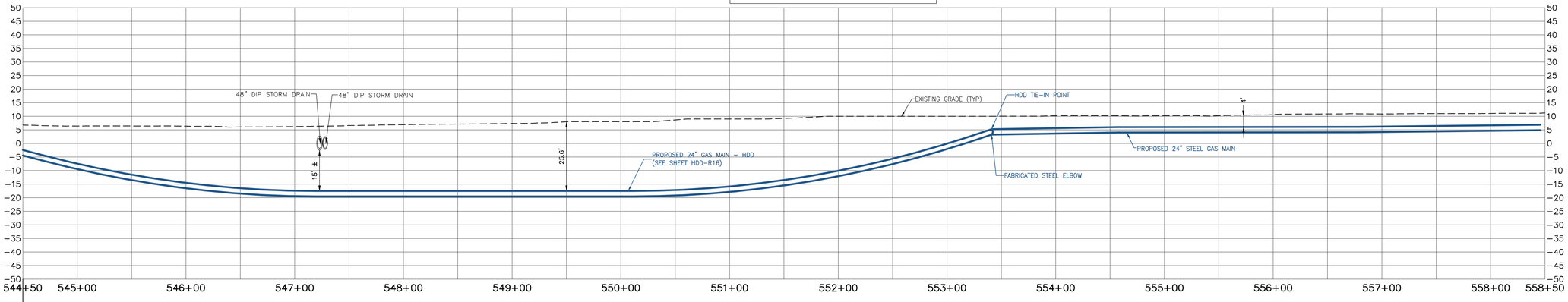


NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

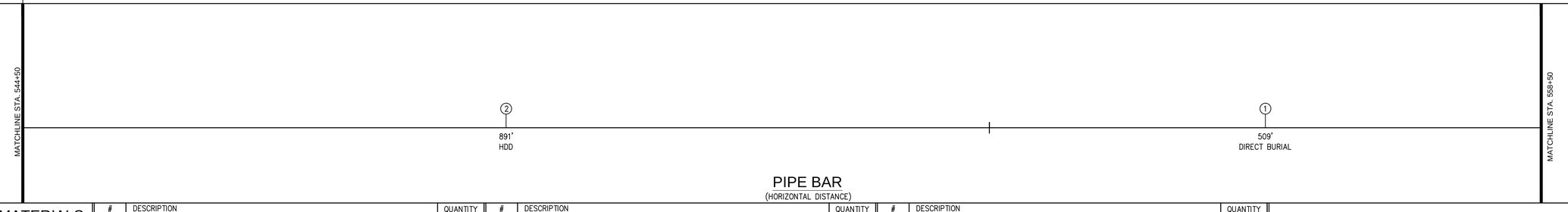
PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING

NOTE :
WETLAND BUFFER ZONES ON THIS SHEET RANGE BETWEEN 2' TO 300'.



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS (LINEAR FOOTAGE IS APPROXIMATE)	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY
	①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	509 L.F.	②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	891 L.F.	③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD–R16	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_33–40 CS.dwg

ALIGNMENT SHEET 38

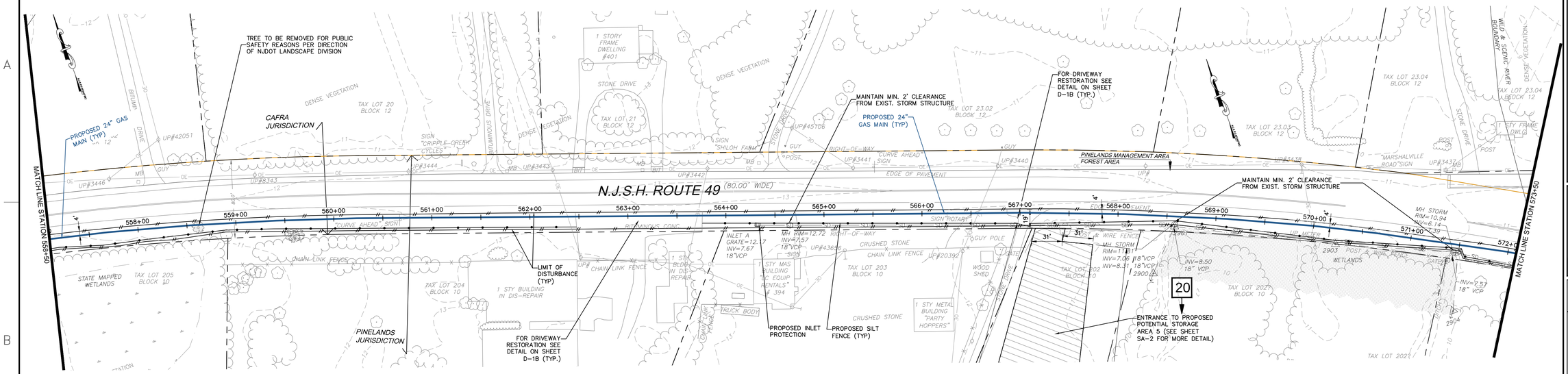
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-38

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,500'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B
VEGETATION	SEE NOTE # 11 ON SHEET D–03



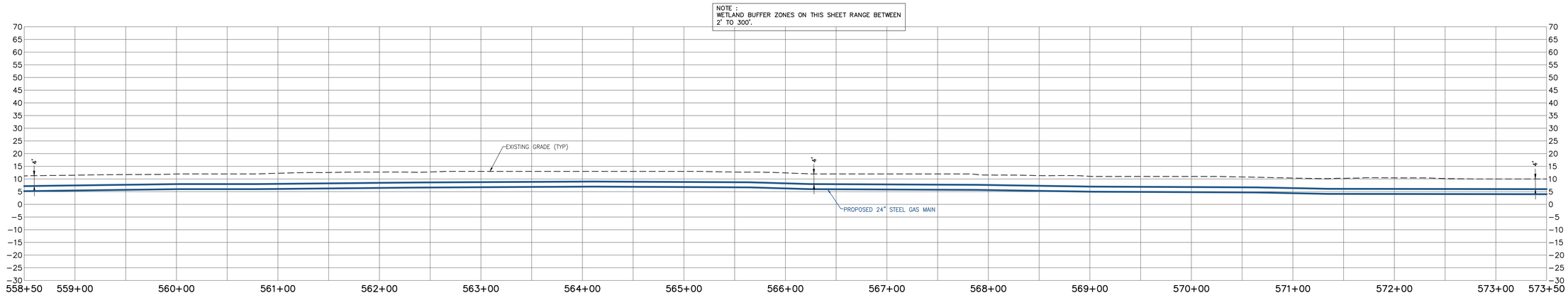
PLAN

SCALE:1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING

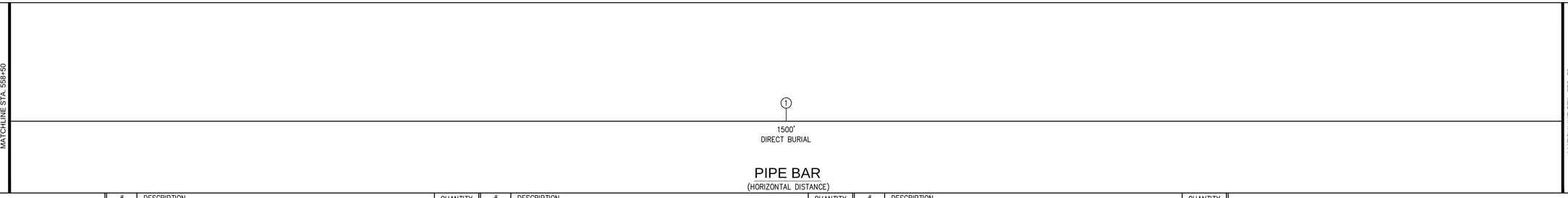
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

NOTE :
WETLAND BUFFER ZONES ON THIS SHEET RANGE BETWEEN 2' TO 300'.



PROFILE

SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,500 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/26/13

DESIGNED BY: LS/JG
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_33-40 CS.dwg

ALIGNMENT SHEET 39

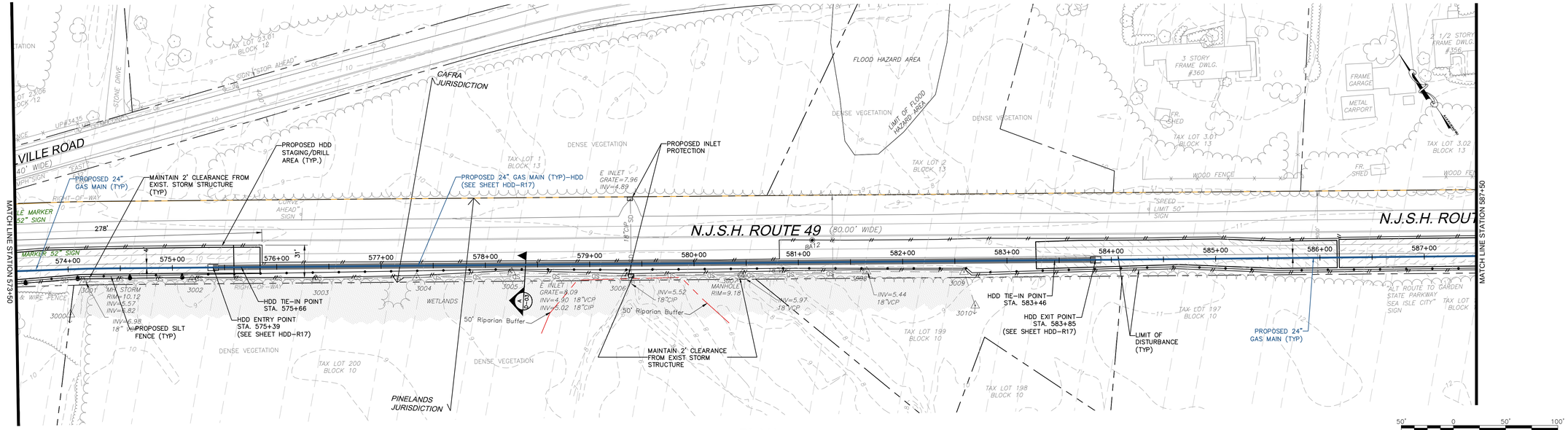
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

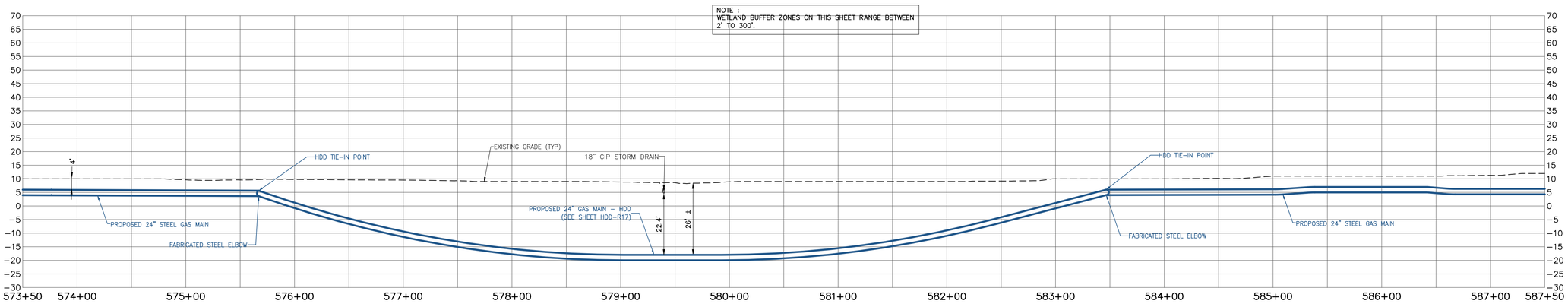
AS-39

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY			
OWNERSHIP	STATE OF NEW JERSEY			
DISTANCE	217'	780'	403'	
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B	NONE	GRASS – DETAIL 6 ON SHEET D–1B	
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE	SEE NOTE # 11 ON SHEET D–03	

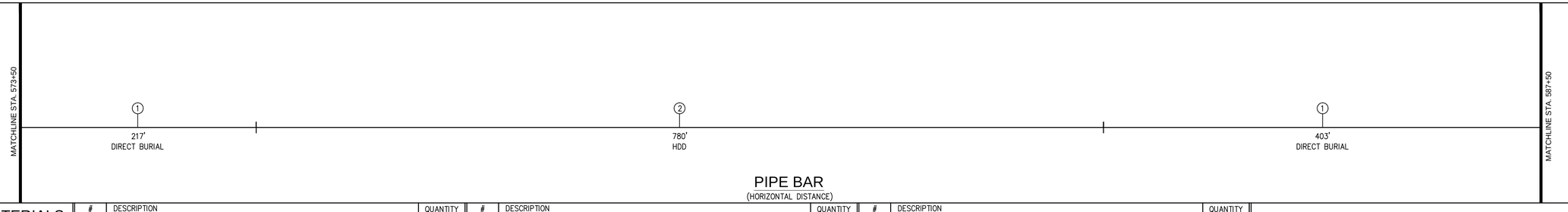


NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS (LINEAR FOOTAGE IS APPROXIMATE)	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY
	①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	620 L.F.	②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	780 L.F.	③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE	CHECKED BY: DW
2	REVISED STATIONING & ADDED HDD–R17	7/1/14	
1	ISSUED FOR BID	12/20/13	DESIGNED BY: LS/AS
			DRAWN BY: GA/RJ

225616_AS_33–40 CS.dwg

ALIGNMENT SHEET 40

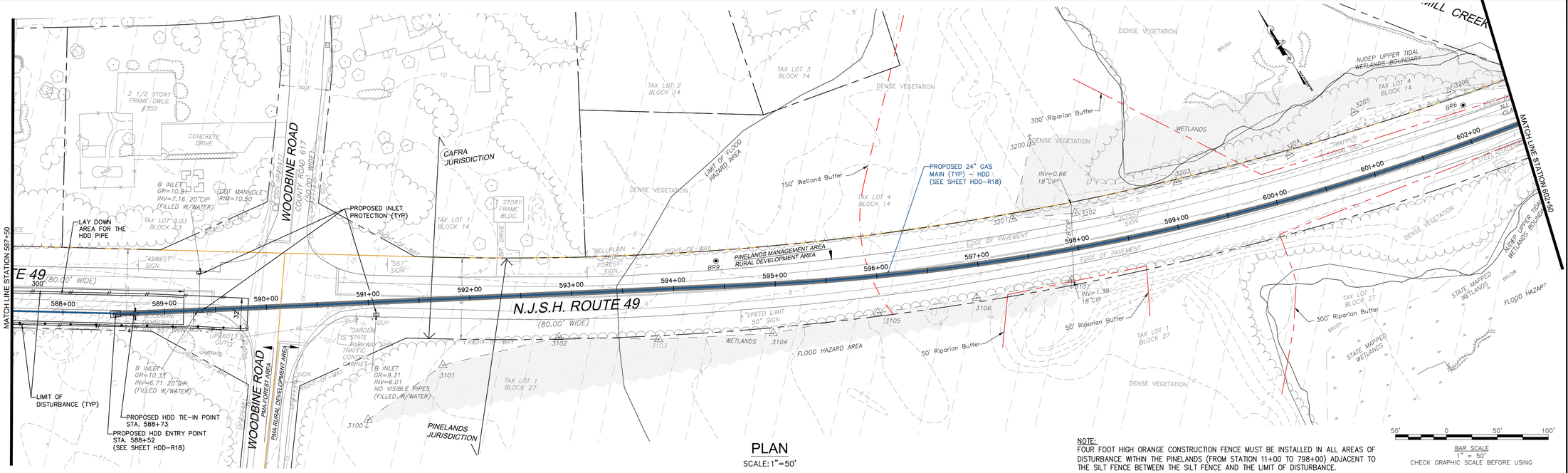
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-40

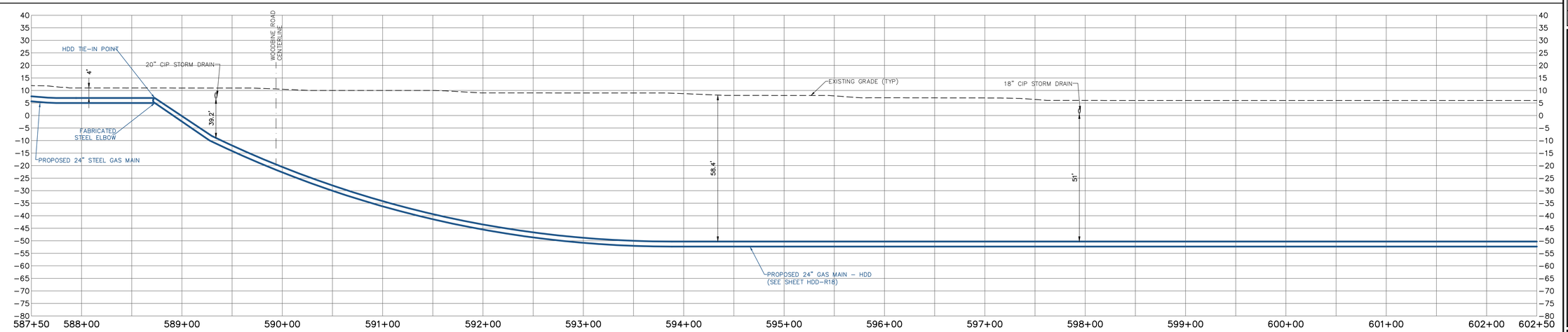
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY	
OWNERSHIP	STATE OF NEW JERSEY	
DISTANCE	123'	1,377'
RESTORATION	GRASS – DETAIL # 6 ON SHEET D–1B	NONE
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE



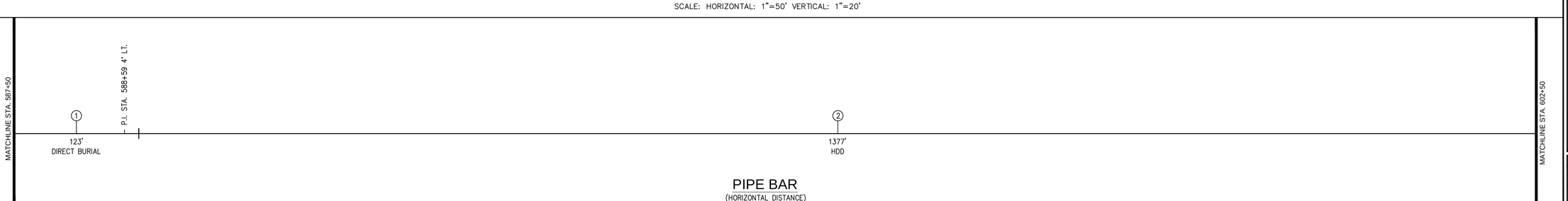
PLAN
SCALE: 1"=50'

NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	123 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,377 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC. NO. GE46534

REV	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_41–47 CS.dwg

ALIGNMENT SHEET 41

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

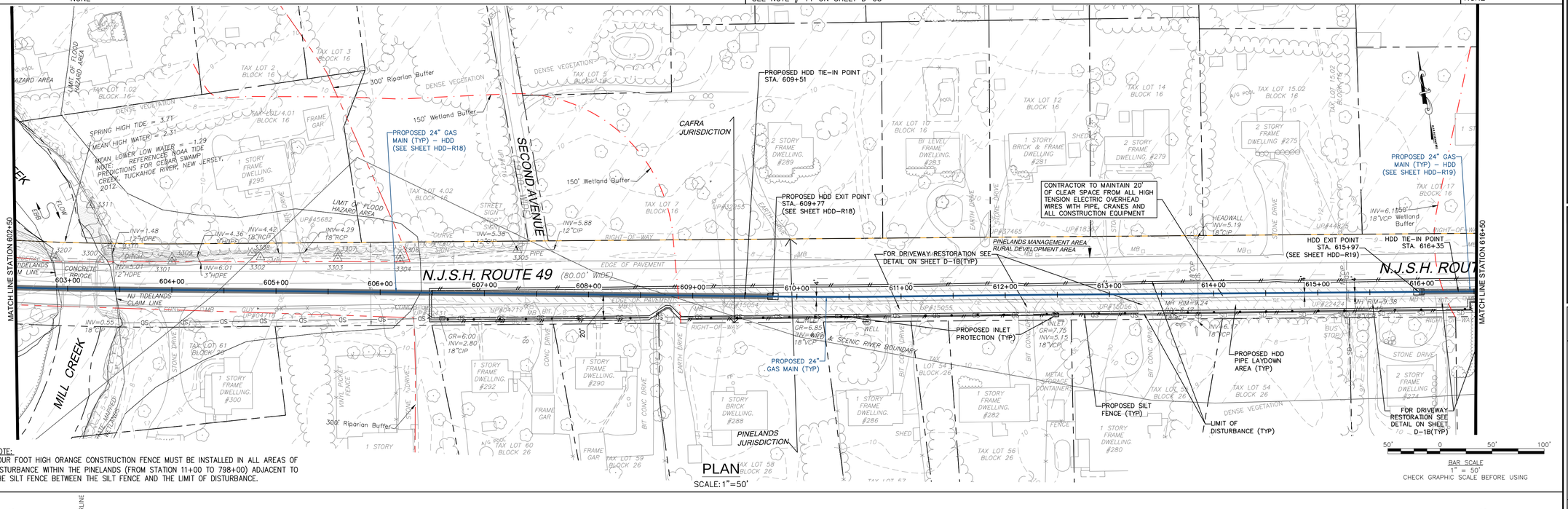
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-41

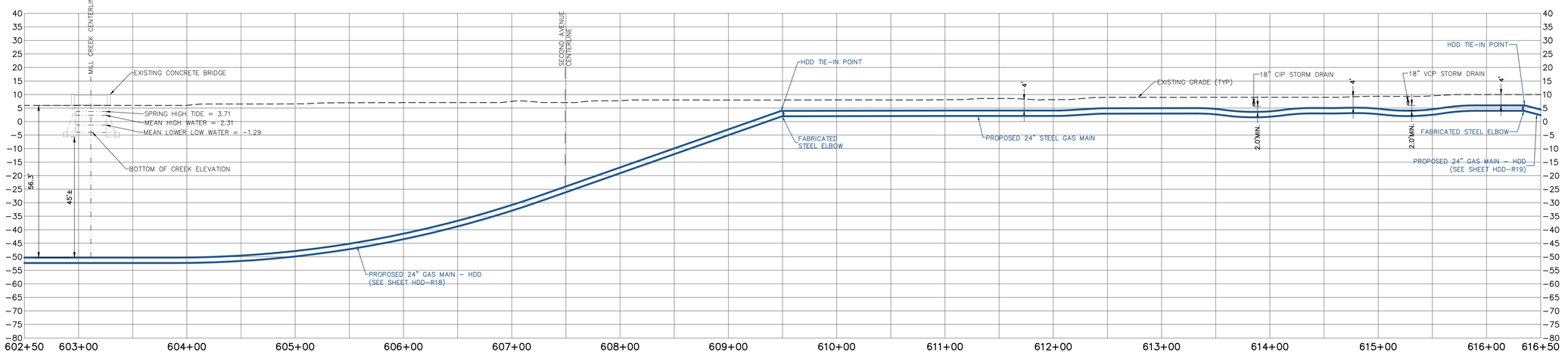
\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_41–47 CS.dwg, May 18, 2015 – 1:33pm

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY			
OWNERSHIP	STATE OF NEW JERSEY			
DISTANCE	699'	686'		15'
RESTORATION	NONE	PAVEMENT–DETAIL 1A/1B ON SHEET D–1A		NONE
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D–03		NONE

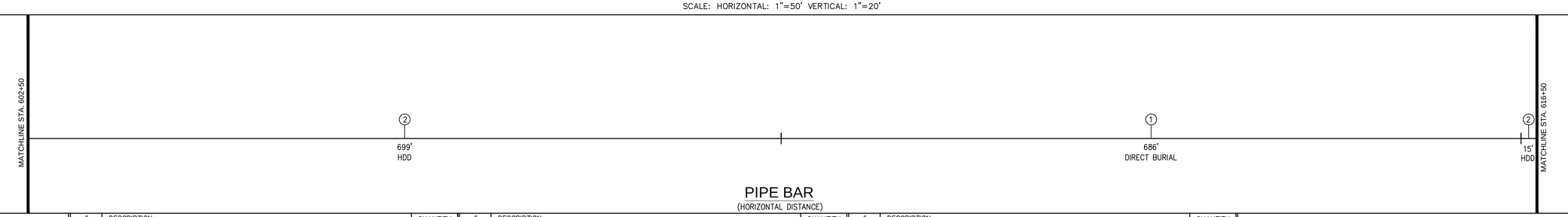


PLAN
SCALE: 1"=50'

NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	686 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	714 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD-R19	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_41-47 CS.dwg

ALIGNMENT SHEET 42

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

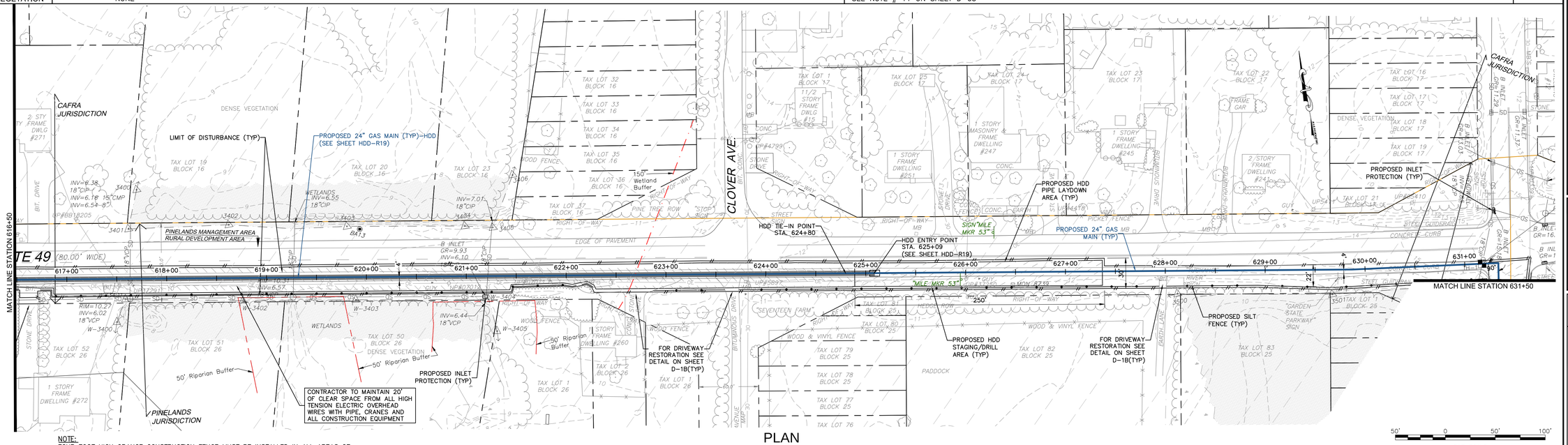
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-42

\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_41-47 CS.dwg, May 18, 2015 – 1:33pm

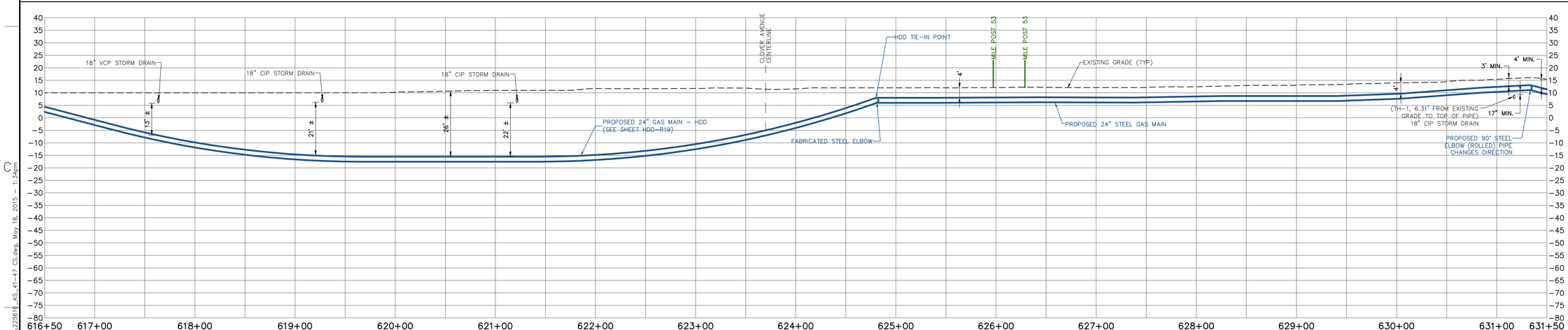
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	STATE OF NEW JERSEY

DISTANCE	830'	670'
RESTORATION	NONE	PAVEMENT–DETAIL 1A/1B ON SHEET D–1A
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D–03

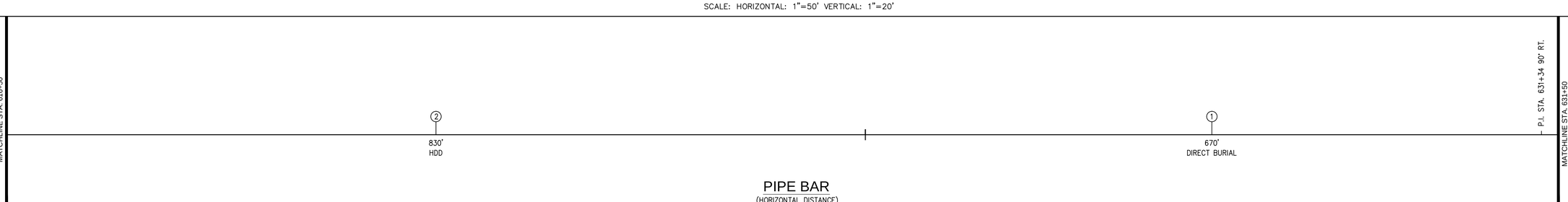


NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	670 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	830 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV	DESCRIPTION	DATE
3	REVISED ALIGNMENT PER TEST HOLES	8/19/14
2	REVISED STATIONING & ADDED HDD–R19	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_41–47 CS.dwg

ALIGNMENT SHEET 43

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-43

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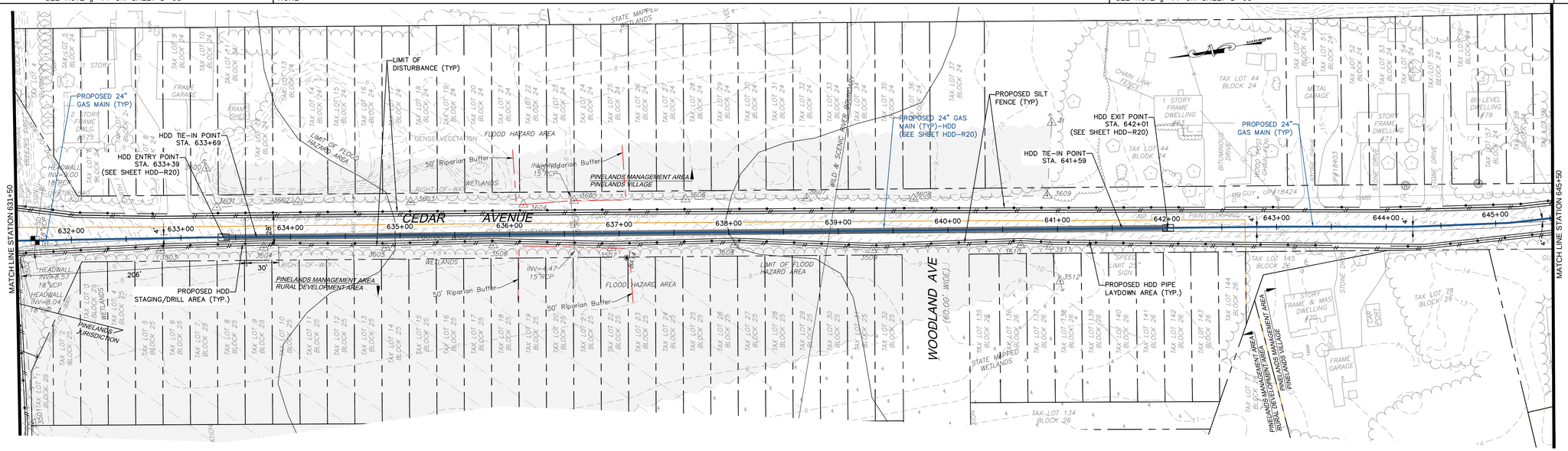
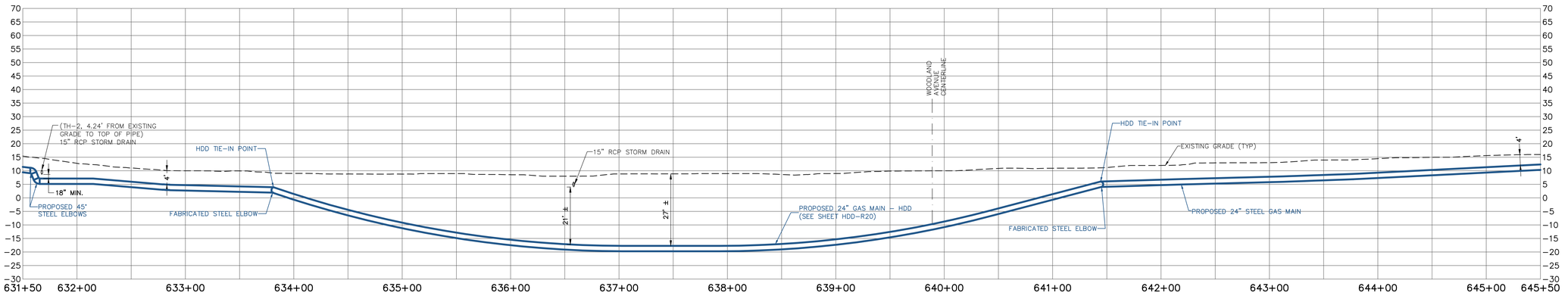
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY		
OWNERSHIP	UPPER TOWNSHIP		
DISTANCE	231'	763'	406'
RESTORATION	PAVEMENT–DETAIL 4A/4B ON SHEET D–1A	NONE	PAVEMENT–DETAIL 4A/4B ON SHEET D–1A
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE	SEE NOTE # 11 ON SHEET D–03



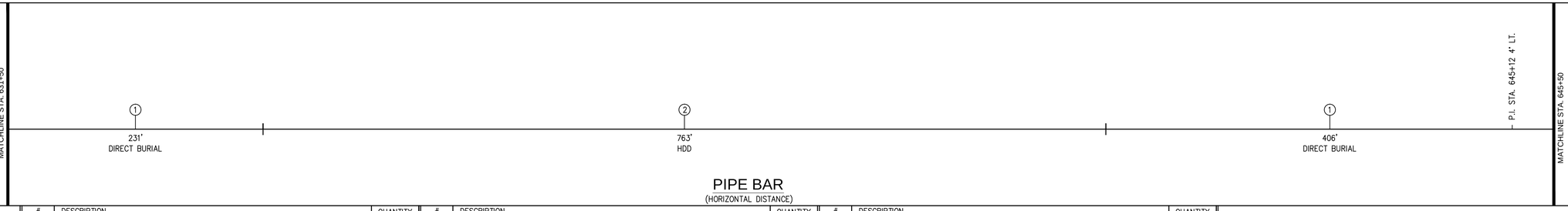
PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING

NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	637 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	763 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

50 Millstone Road, Building 300
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DENNIS M. WALSH, P.E.
NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	REVISED ALIGNMENT PER TEST HOLES DATED 7/2014	8/19/14
2	REVISED STATIONING & ADDED HDD–R20	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_41–47 CS.dwg

ALIGNMENT SHEET 44

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

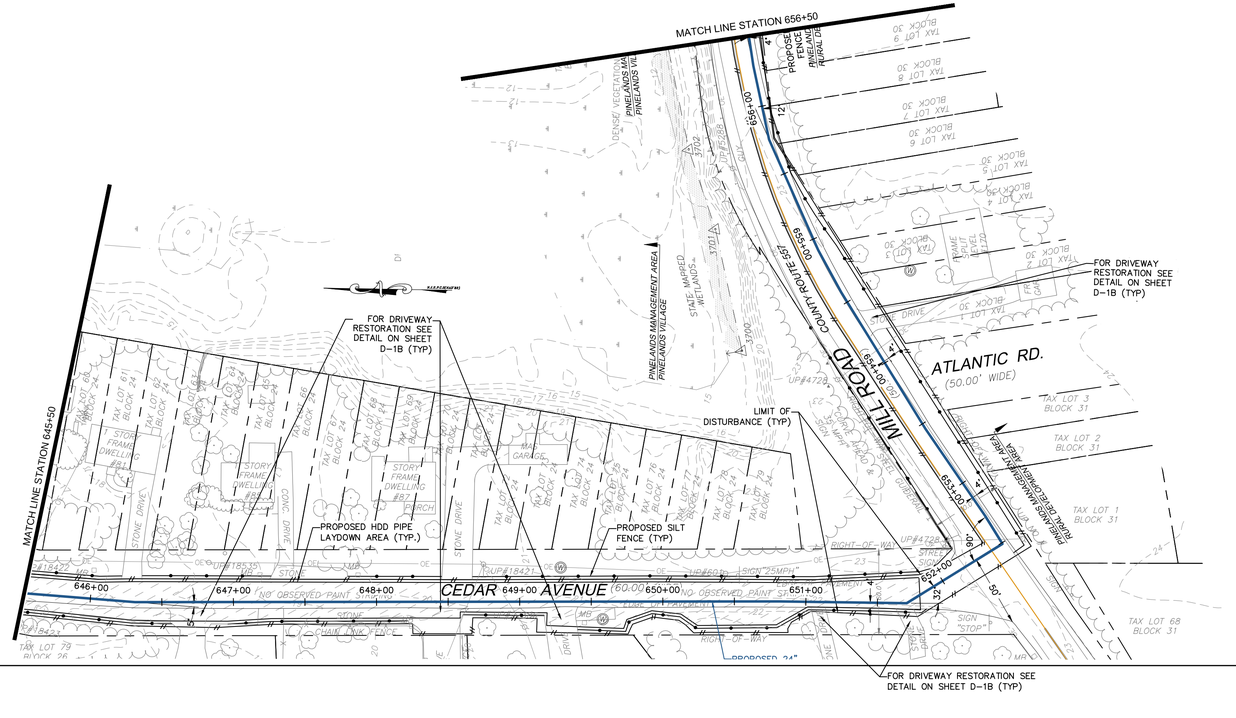
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-44

\\portland\projects1\225616 s\g – england power plant\wip\Drawings_redesign\225616_AS_41–47 CS.dwg, May 18, 2015 – 1:34pm

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY		
OWNERSHIP	UPPER TOWNSHIP		CAPE MAY COUNTY
DISTANCE	674'		526'
RESTORATION	PAVEMENT–DETAIL #4A/4B ON SHEET D–1A		PAVEMENT–DETAIL 3A/3B ON SHEET D–1A
VEGETATION			

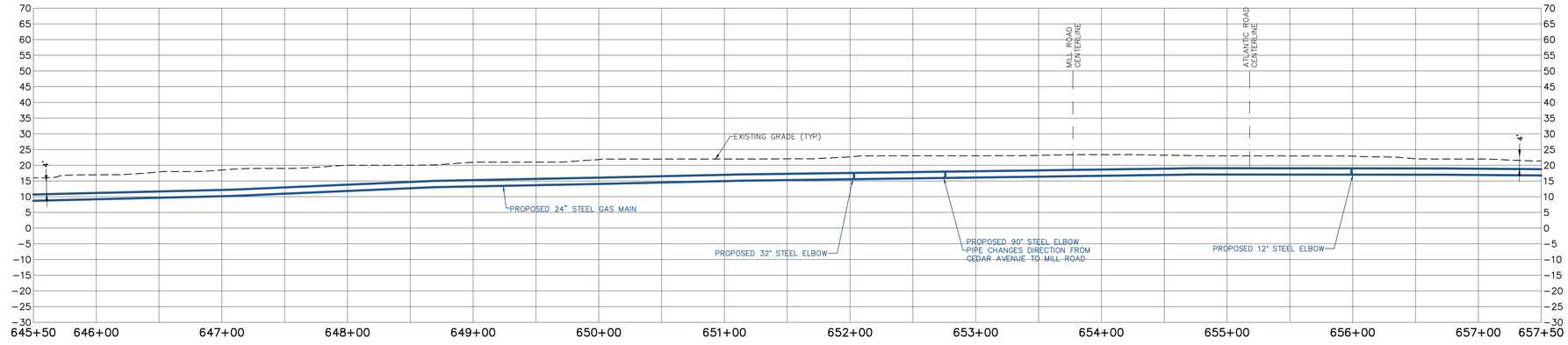


PLAN

SCALE: 1"=50'

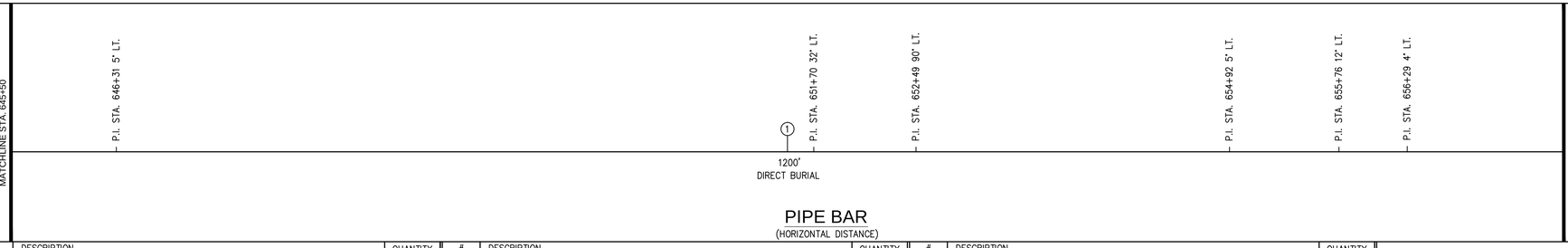
BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING

NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.



PROFILE

SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR

(HORIZONTAL DISTANCE)

PIPE MATERIALS

(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,200 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/26/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_41–47 CS.dwg

ALIGNMENT SHEET 45

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

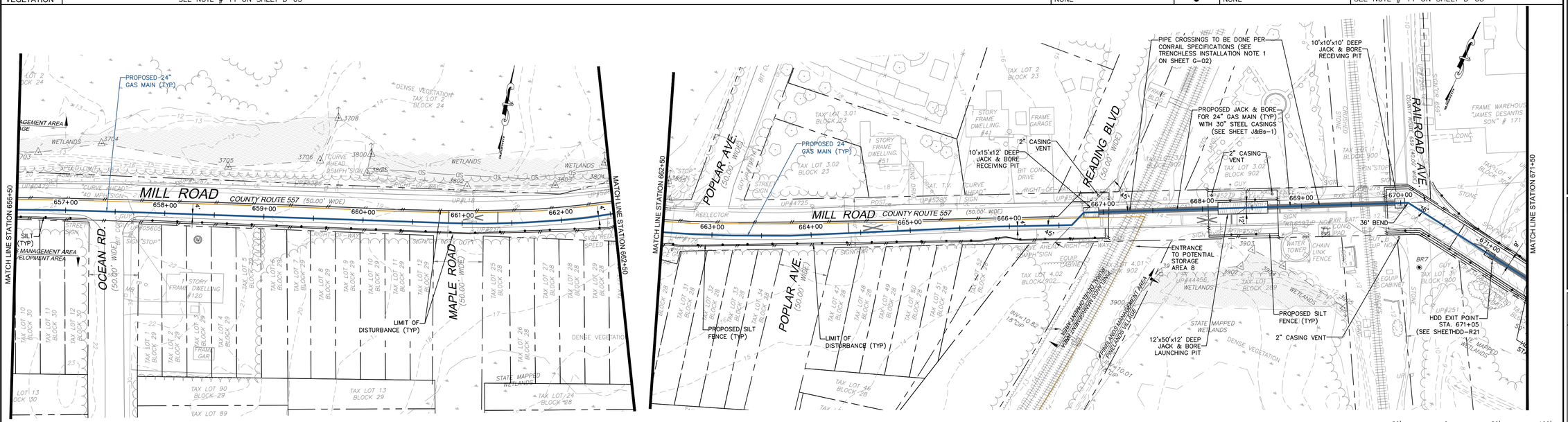
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-45

\\portland\projects1\225616 sjg – england power plant\wip\drawings_redesign\225616_AS_41–47 CS.dwg, May 18, 2015 – 1:34pm

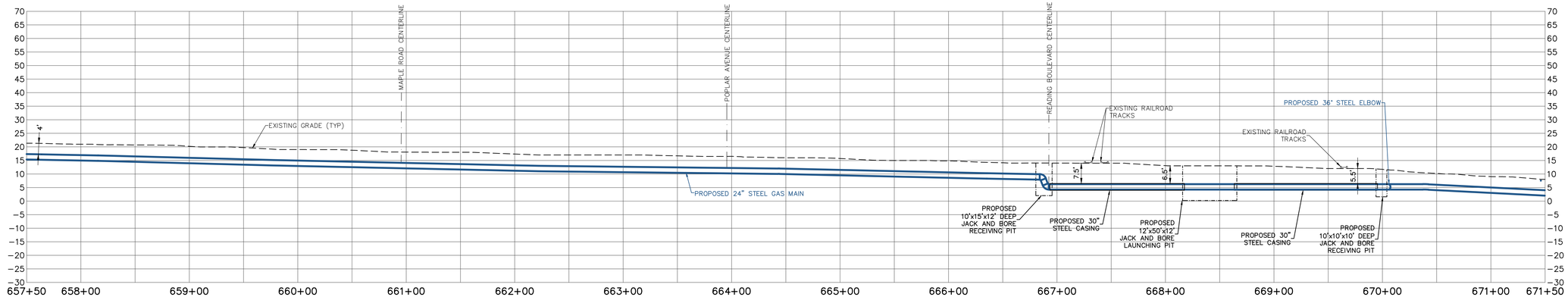
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY					
OWNERSHIP	CAPE MAY COUNTY	SEE NOTE # 11 ON SHEET D–03		PAVEMENT–DETAIL 3A/3B ON SHEET D–1A		
DISTANCE	943'	124'	46'	132'	155'	
RESTORATION	PAVEMENT–DETAIL 3A/3B ON SHEET D–1A	NONE		NONE	PAVEMENT–DETAIL 3A/3B ON SHEET D–1A	
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE		NONE	SEE NOTE # 11 ON SHEET D–03	



NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,098 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	302 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	256 L.F.

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DENNIS M. WALSH, P.E.
NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_41–47 CS.dwg

ALIGNMENT SHEET 46

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

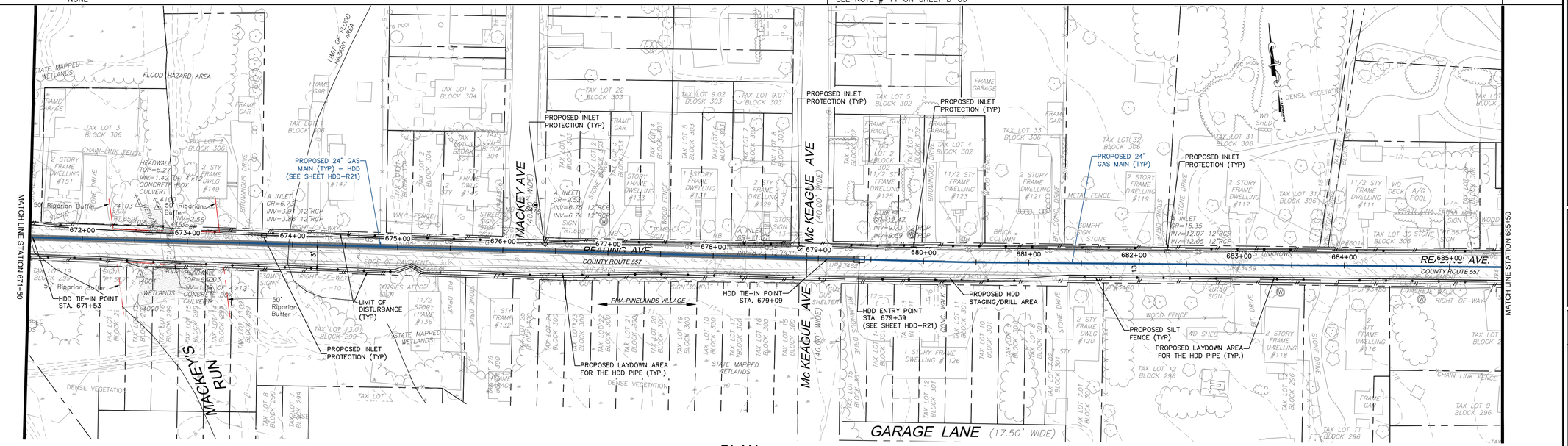
AS-46

\\portland\projects1\225616 sig – england power plant\wip\Drawings_redesign\225616_AS_41–47 CS.dwg, May 18, 2015 – 1:35pm

24x36 SHEET
1:1

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	CAPE MAY COUNTY
DISTANCE	759'
RESTORATION	NONE
VEGETATION	NONE

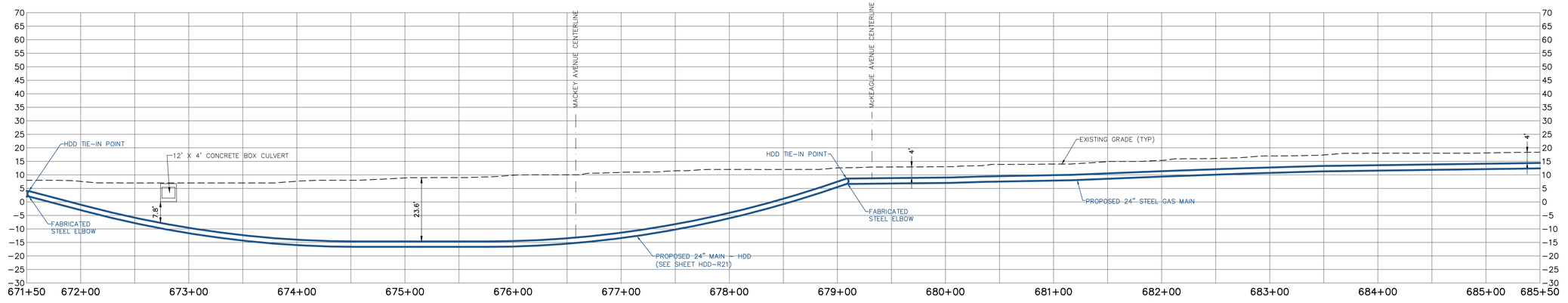
641'
PAVEMENT–DETAIL 3A/3B ON SHEET D–1A
SEE NOTE # 11 ON SHEET D–03



NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	641 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	759 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DESIGNED BY: LS/AS	DRAWN BY: GA/RJ	CHECKED BY: DW	225616_AS_41–47 CS.dwg
2	REVISED STATIONING & ADDED HDD–R21			7/1/14	
1	ISSUED FOR HDD			12/26/13	

ALIGNMENT SHEET 47

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

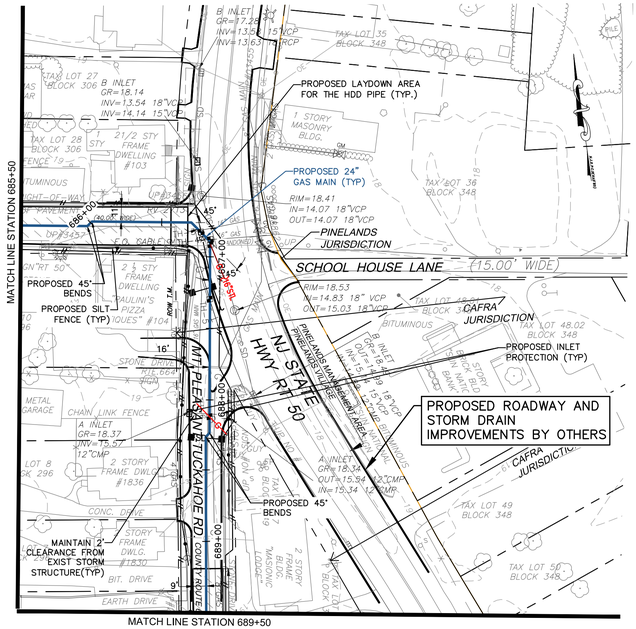
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

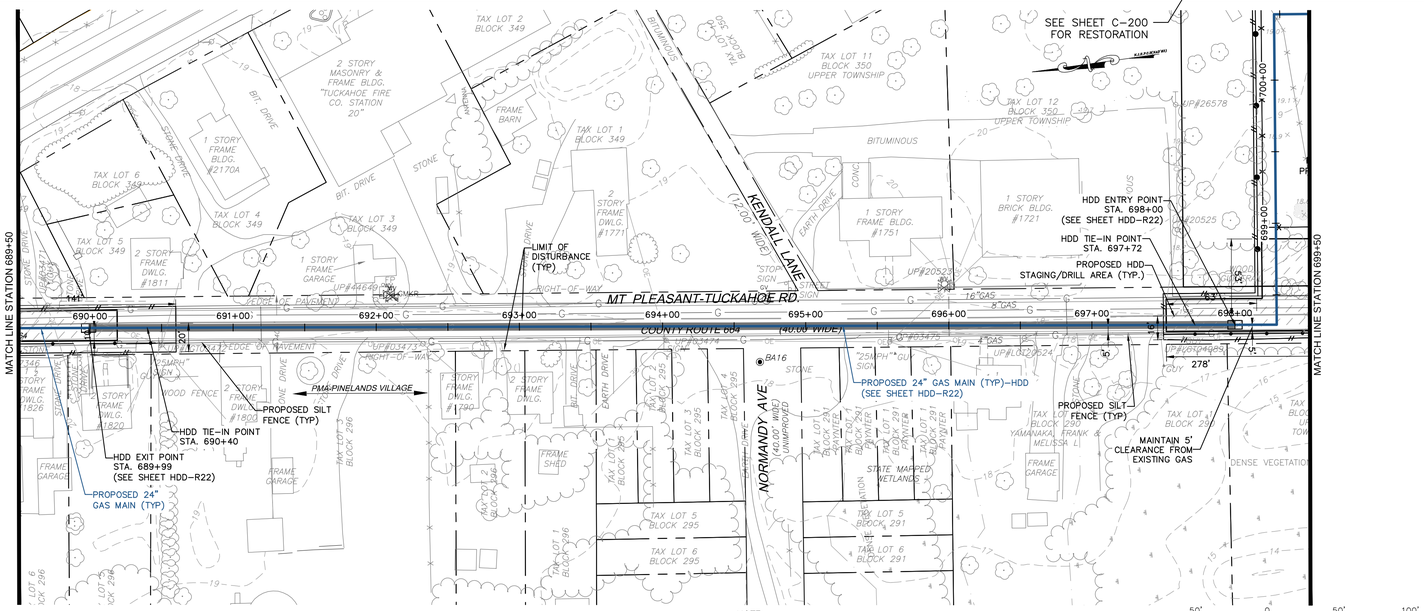
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-47

\\portland\projects1\225616 sig – england power plant\wip\Drawings_redesign\225616_AS_41–47 CS.dwg, May 18, 2015 – 1:35pm

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY				
OWNERSHIP	CAPE MAY COUNTY		PAVEMENT–DETAIL 3A/3B ON SHEET D–1A SEE NOTE # 11 ON SHEET D–03		UPPER TOWNSHIP
DISTANCE	498'	716'	92'	94'	
RESTORATION	PAVEMENT–DETAIL 3A/3B ON SHEET D–1A	NONE			
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE			

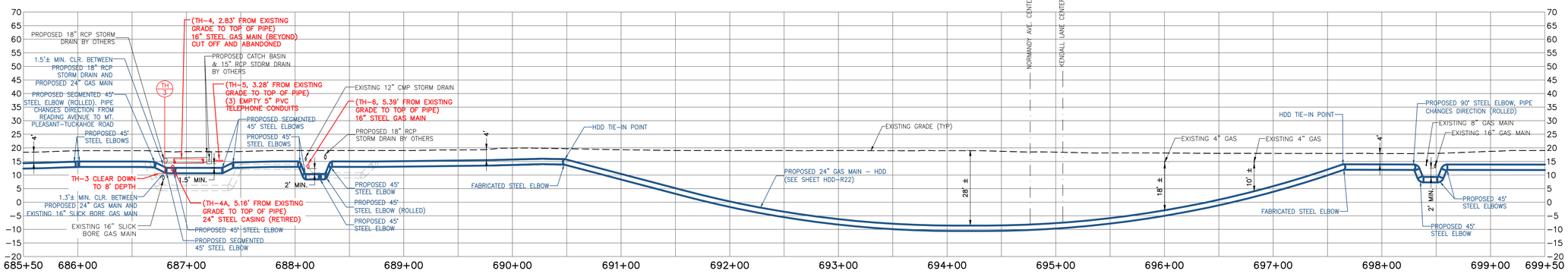




PLAN
SCALE: 1"=50'

NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

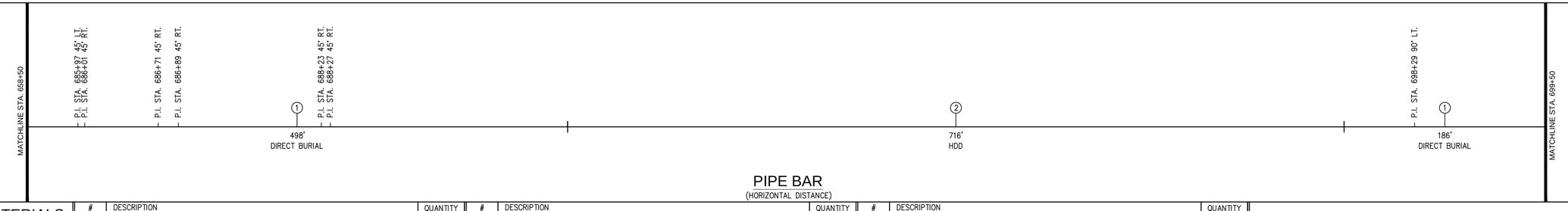
BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PLAN REFERENCE:

SOUTH JERSEY GAS PLAN TITLED "INSTALLATION OF 16" TRANSMISSION GAS MAIN VIA JACK AND BORE ACROSS RT. 50 UPPER TOWNSHIP ~ CAPE MAY COUNTY ~ NEW JERSEY" DWG. NO. BTF–757, DATED 08/24/2012.

PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	684 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	716 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	REVISED ALIGNMENT PER TEST HOLES DATED 7/2014	8/19/14
2	REVISED STATIONING & ADDED HDD–R22	7/17/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_48–55 CS.dwg

ALIGNMENT SHEET 48

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

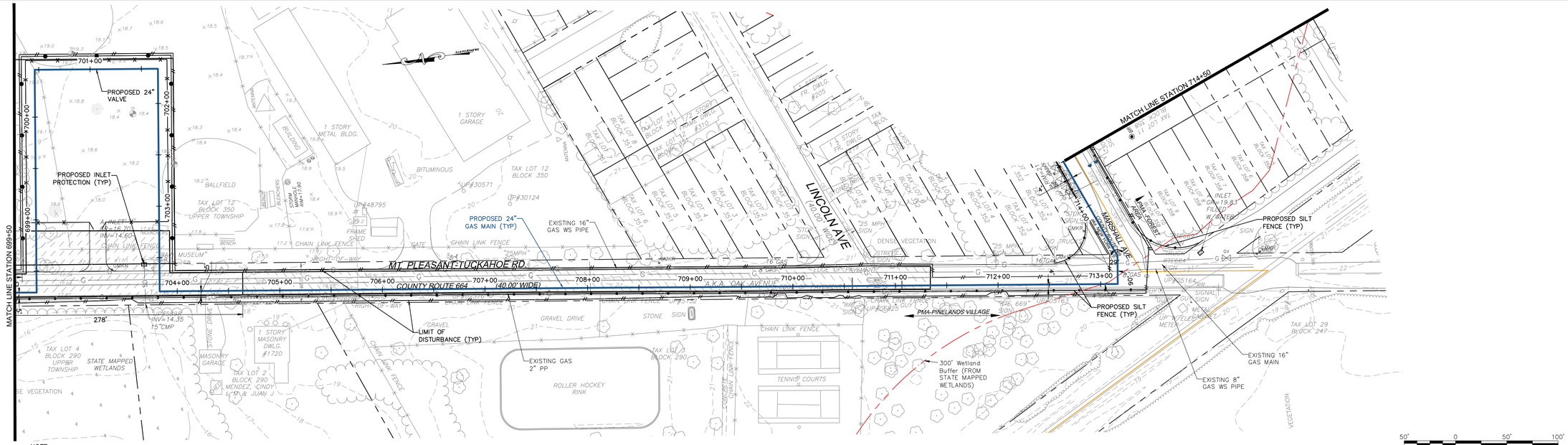
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-48

\\portland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_48–55 CS.dwg, May 18, 2015 – 1:36pm

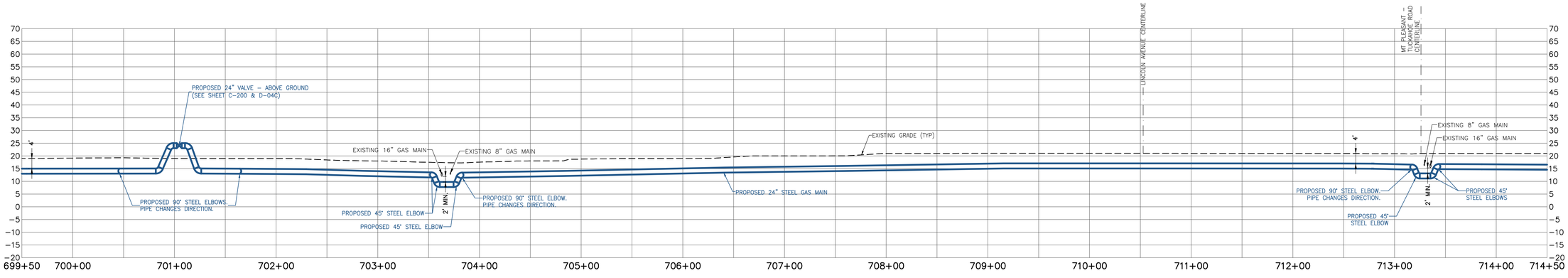
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY		
OWNERSHIP	UPPER TOWNSHIP	CAPE MAY COUNTY	
DISTANCE	406'	1094'	
RESTORATION	SEE SHEET C-200 FOR RESTORATION	PAVEMENT DETAIL # 3A/3B ON SHEET D-1A	
VEGETATION	SEE NOTE #11 ON SHEET D-03	SEE NOTE # 11 ON SHEET D-03	



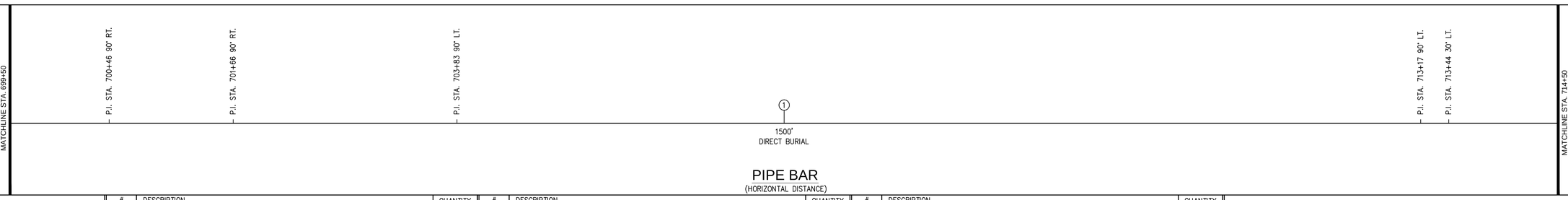
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS (LINEAR FOOTAGE IS APPROXIMATE)	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY
	①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL-2, X-60, ERW OR DSAW PRITEC (40/10) OR X-TEC II (60/10)	1,500 L.F.	②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL-2, X-60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 - 16 MIL)	0 L.F.	③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL-2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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DENNIS M. WALSH, P.E.
N.J. LIC NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_48-55 CS.dwg

ALIGNMENT SHEET 49

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

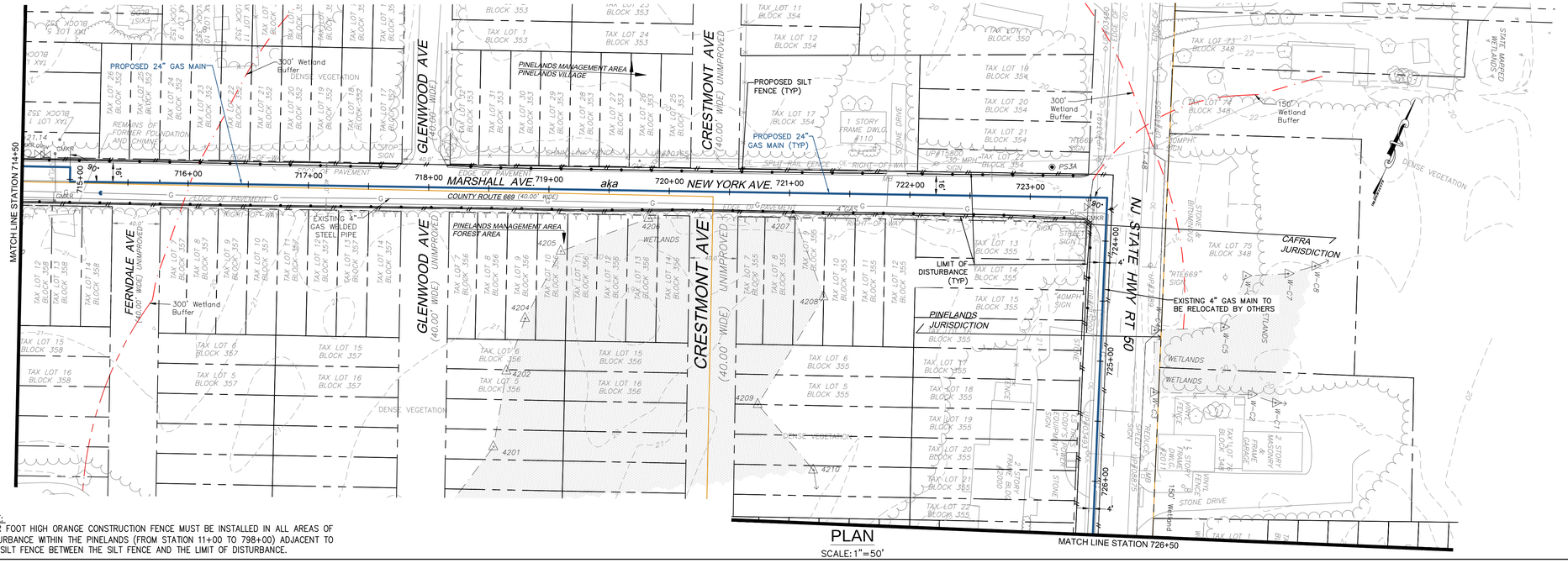
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-49

\\portland\projects1\225616 s\jg - england power plant\wip\drawings_redesign\225616_AS_48-55 CS.dwg, May 18, 2015 - 1:36pm

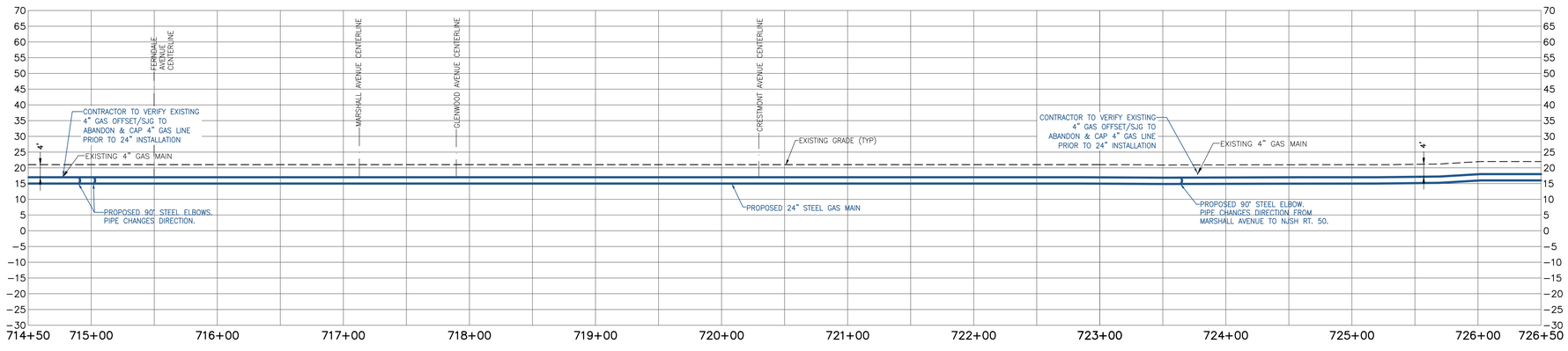
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY		
OWNERSHIP	CAPE MAY COUNTY	STATE OF NEW JERSEY	
DISTANCE	900'	300'	
RESTORATION	PAVEMENT–DETAIL 3A/3B ON SHEET D–1A	PAVEMENT–DETAIL 1A/1B ON SHEET D–1A	
VEGETATION		SEE NOTE # 11 ON SHEET D–03	



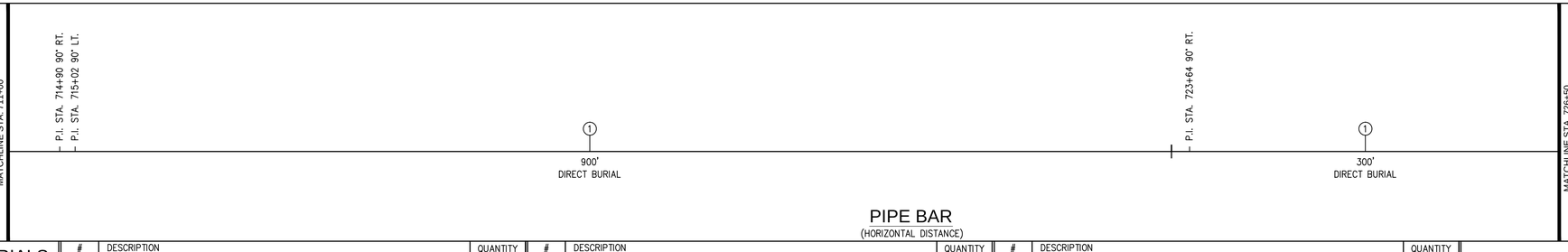
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,200 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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DENNIS M. WALSH, P.E.
NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	REVISED PROPOSED GAS MAIN ALIGNMENT	8/14/14
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_48-55 CS.dwg

ALIGNMENT SHEET 50

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

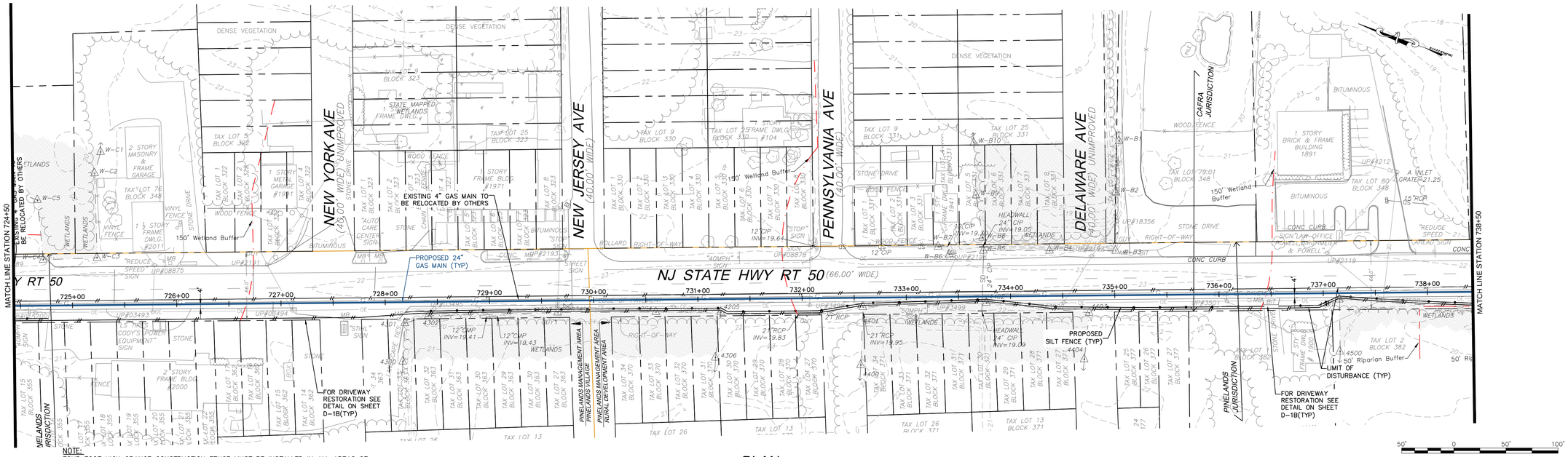
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-50

\\portland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_48-55 CS.dwg, May 18, 2015 – 1:36pm

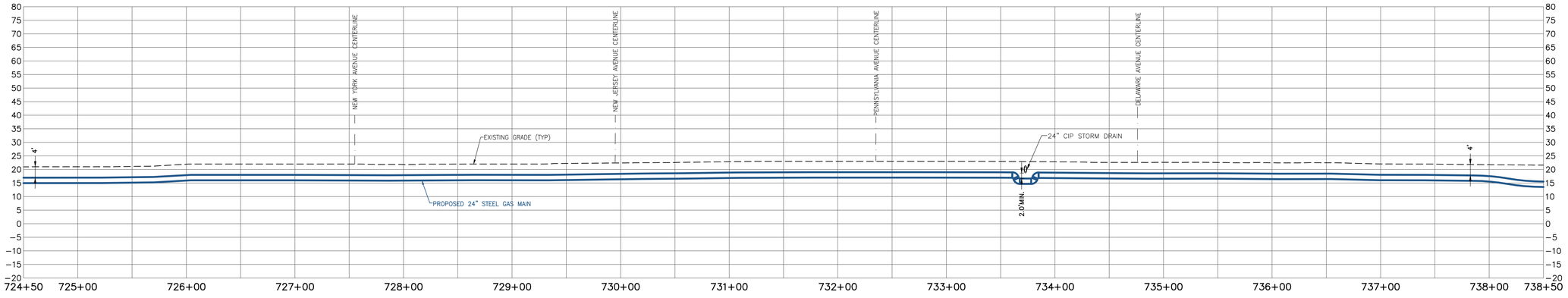
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,400'
RESTORATION	PAVEMENT–DETAIL 1A/1B ON SHEET D–1A
VEGETATION	SEE NOTE # 11 ON SHEET D–03



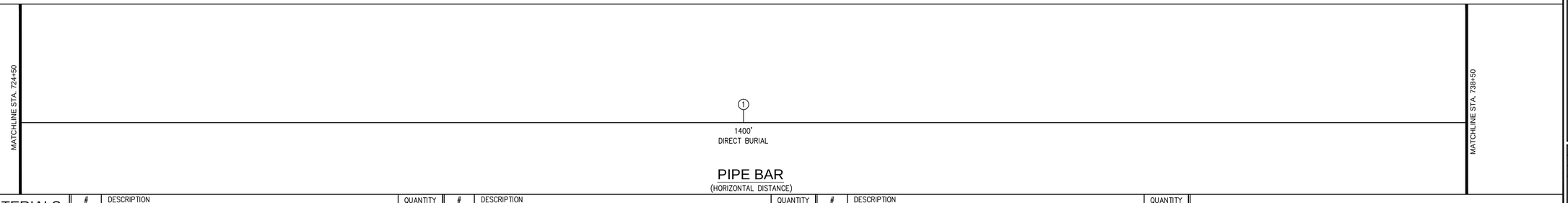
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,400 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	REVISED PROPOSED GAS MAIN ALIGNMENT	8/14/14
2	REVISED STATIONING	8/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_48-55 CS.dwg

ALIGNMENT SHEET 51

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

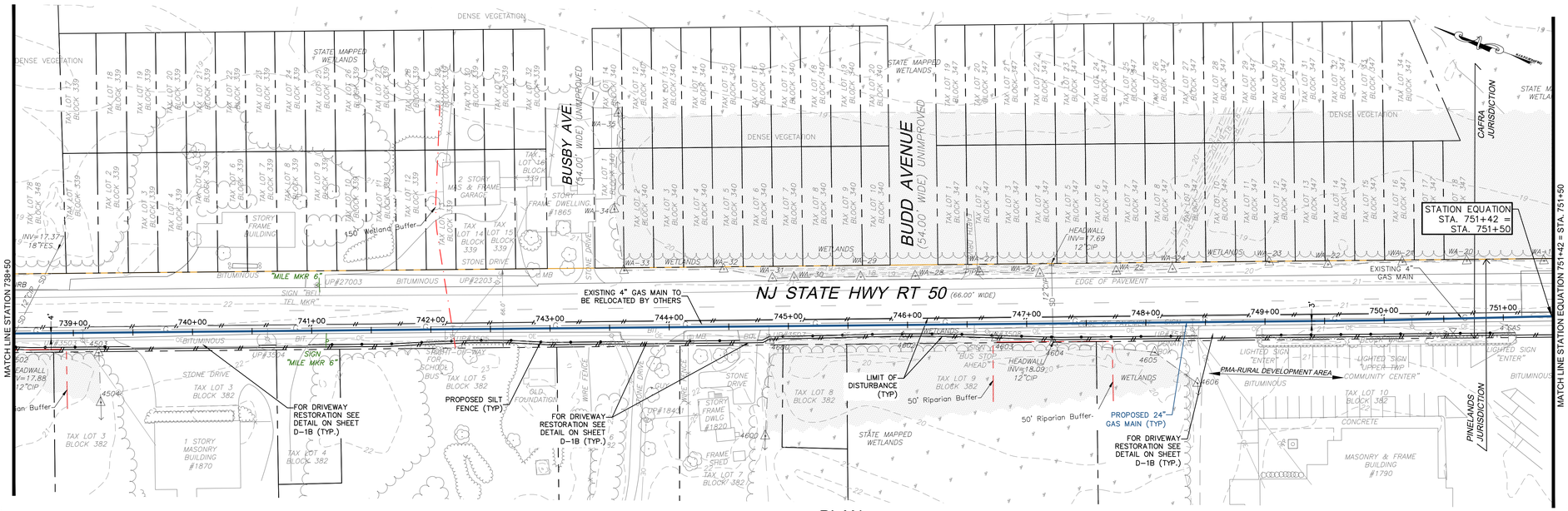
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-51

\\portland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_48-55 CS.dwg, May 18, 2015 – 1:37pm

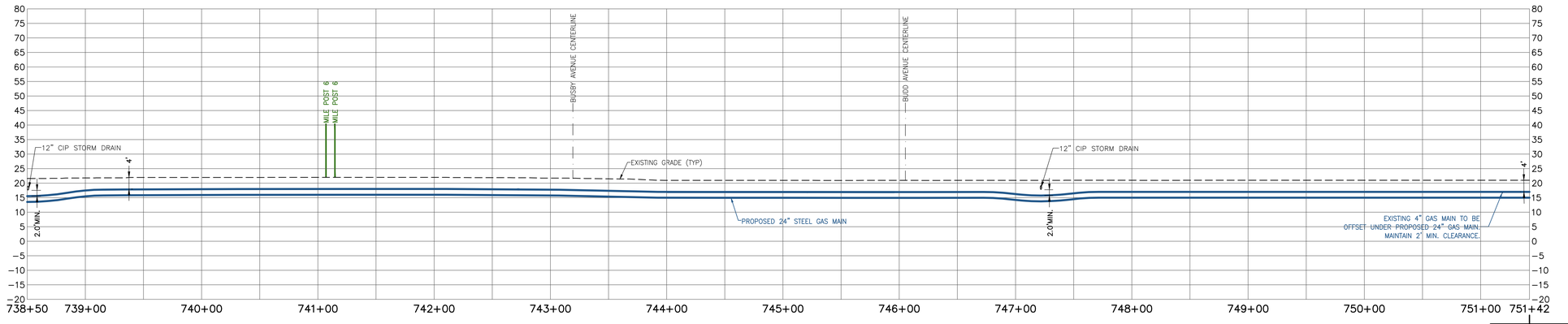
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,300'
RESTORATION	PAVEMENT–DETAIL 1A/1B ON SHEET D–1A
VEGETATION	SEE NOTE # 11 ON SHEET D–03



NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'

MATCHLINE STA. 738+50

① 1300' DIRECT BURIAL

MATCHLINE STA. 751+50

PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,300 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	REVISED PROPOSED GAS MAIN ALIGNMENT	8/14/14
2	REVISED STATIONING	8/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_48–55 CS.dwg

ALIGNMENT SHEET 52

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

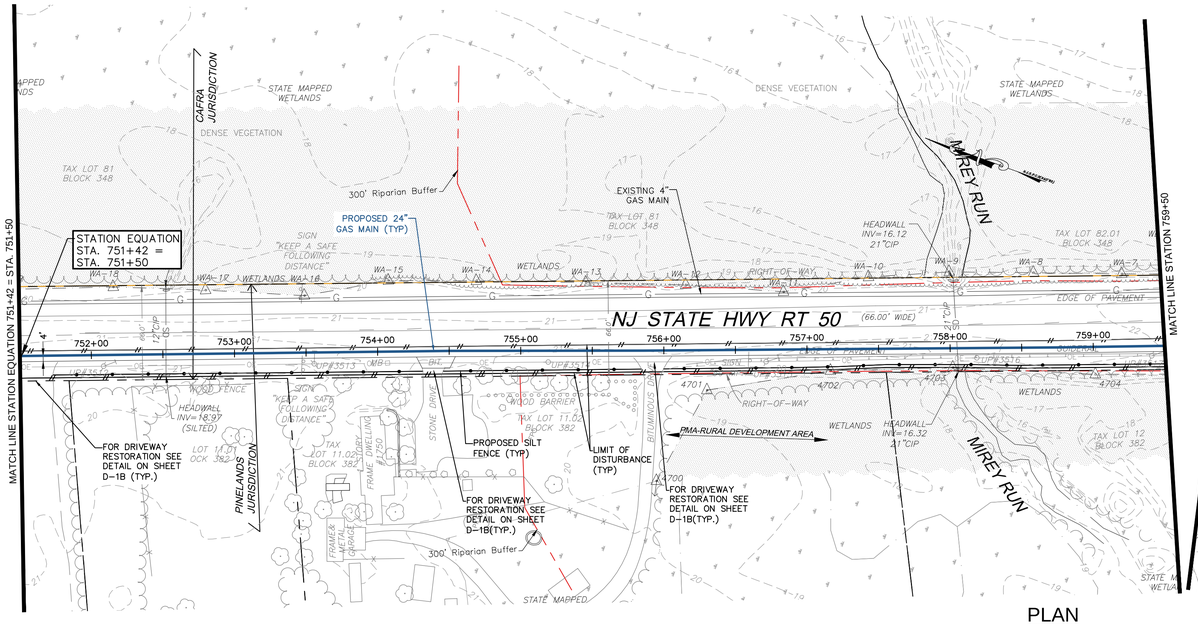
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

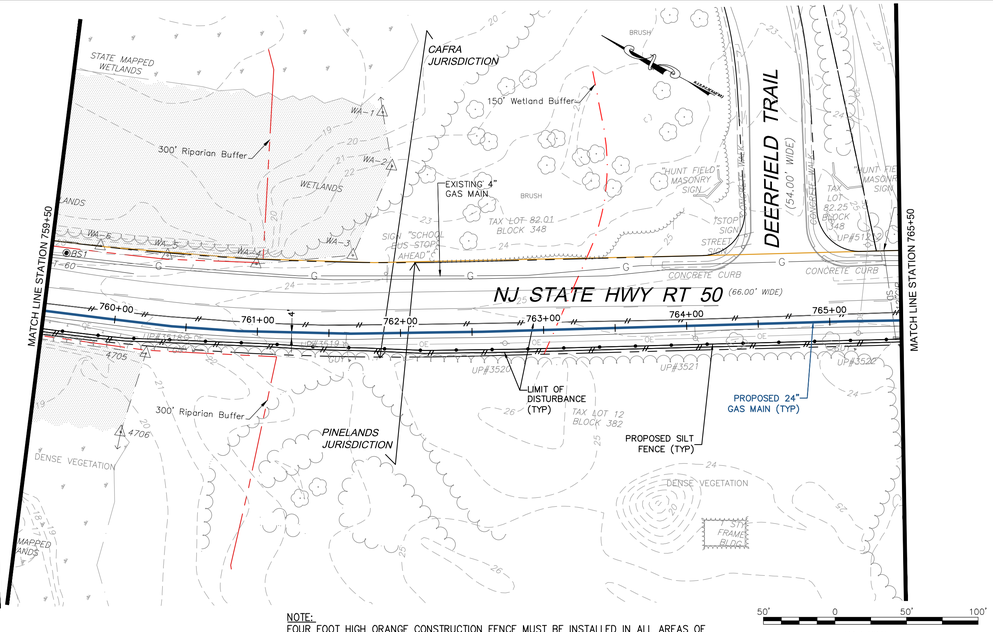
AS-52

\\portland\projects1\225616 sjg – england power plant\wip\drawings_redesign\225616_AS_48–55 CS.dwg, May 18, 2015 – 1:37pm

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,400'
RESTORATION	PAVEMENT–DETAIL 1A/1B ON SHEET D–1A
VEGETATION	SEE NOTE # 11 ON SHEET D–03

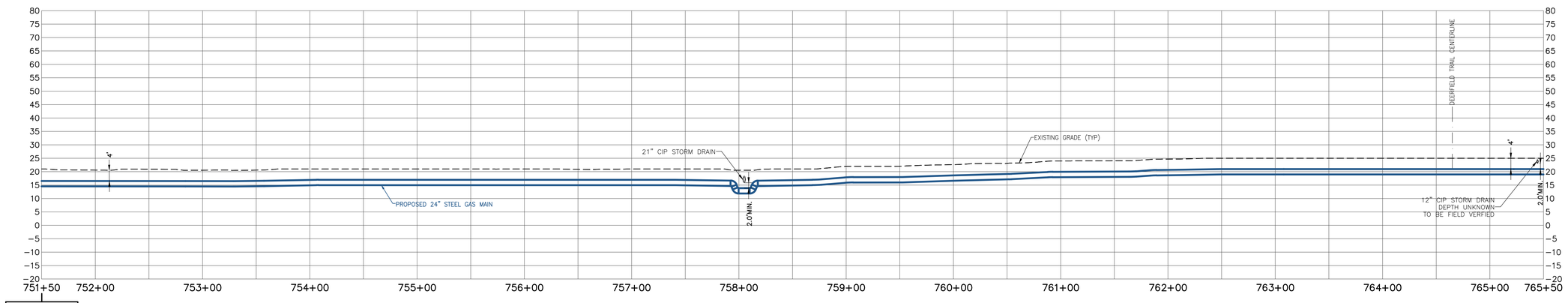


PLAN
SCALE: 1"=50'

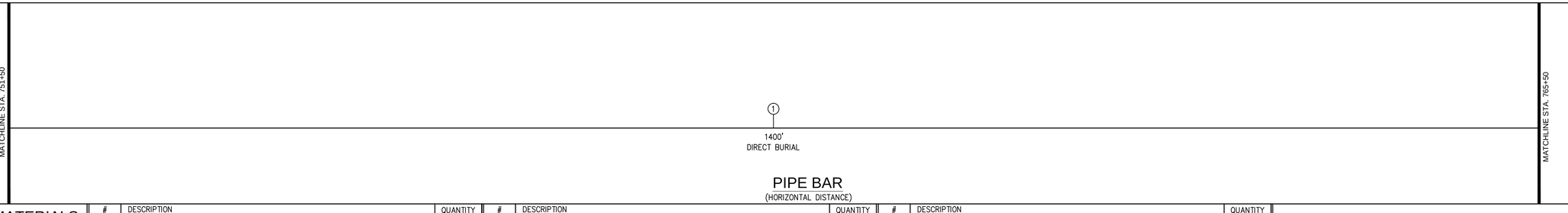


NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

50' 0 50' 100'
BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1400 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	REVISED PROPOSED GAS MAIN ALIGNMENT	8/14/14
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_48-55 CS.dwg

ALIGNMENT SHEET 53

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

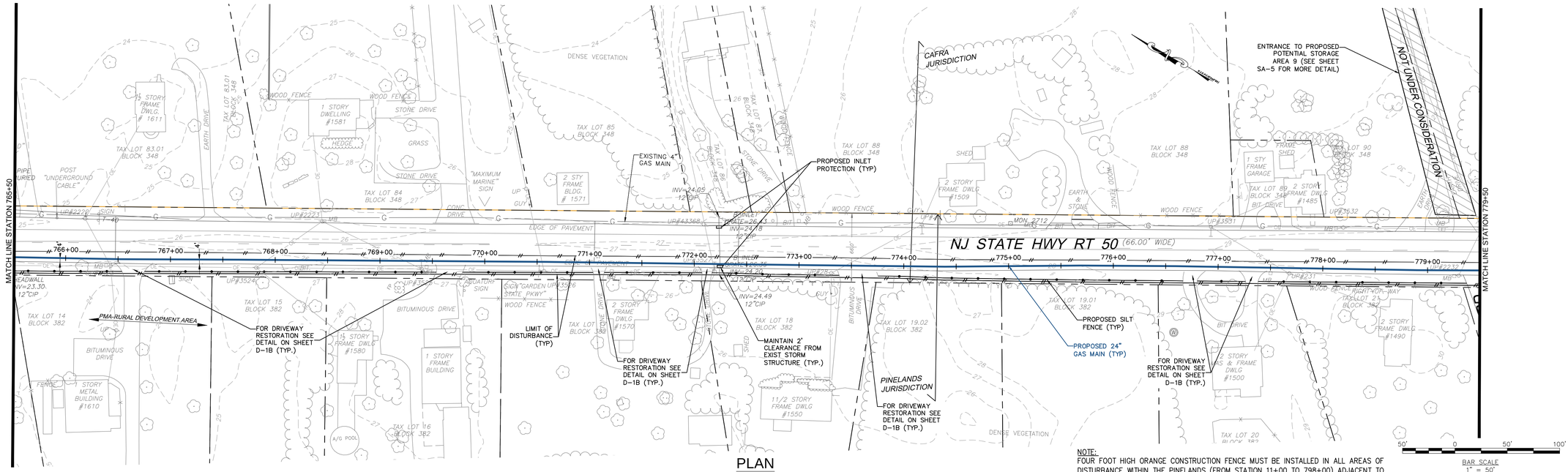
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-53

\\portland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_48-55 CS.dwg, May 18, 2015 – 1:37pm

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	STATE OF NEW JERSEY
DISTANCE	1,400'
RESTORATION	PAVEMENT–DETAIL 1A/1B ON SHEET D–1A
VEGETATION	SEE NOTE # 11 ON SHEET D–03

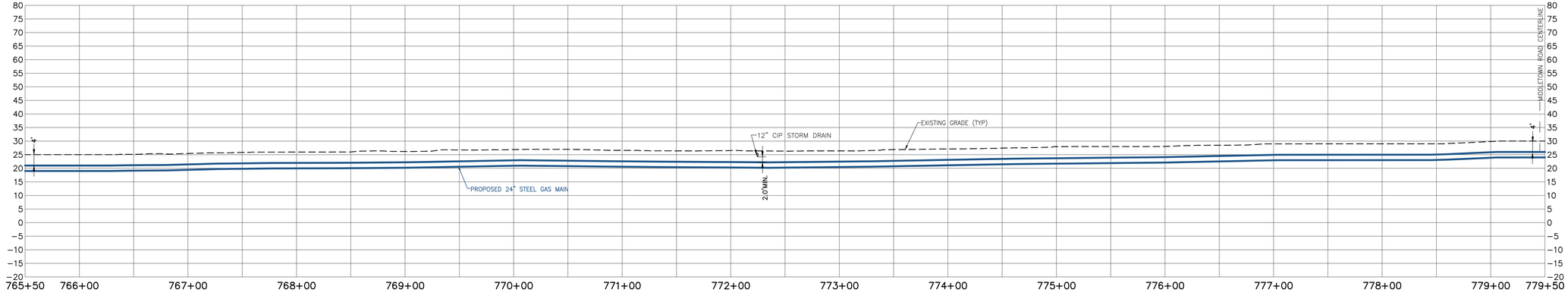


PLAN

SCALE:1"=50'

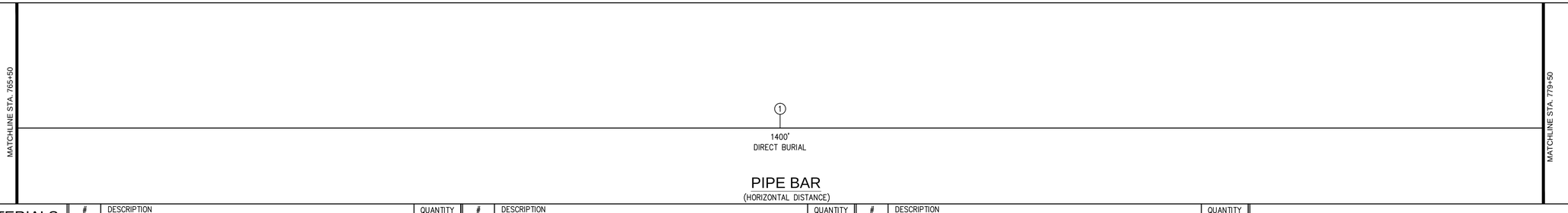
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE

SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,400 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE	CHECKED BY: DW
2	REVISED STATIONING	7/1/14	225616_AS_48–55 CS.dwg
1	ISSUED FOR BID	12/20/13	

DESIGNED BY: LS/JG
DRAWN BY: GA/PJ

ALIGNMENT SHEET 54

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

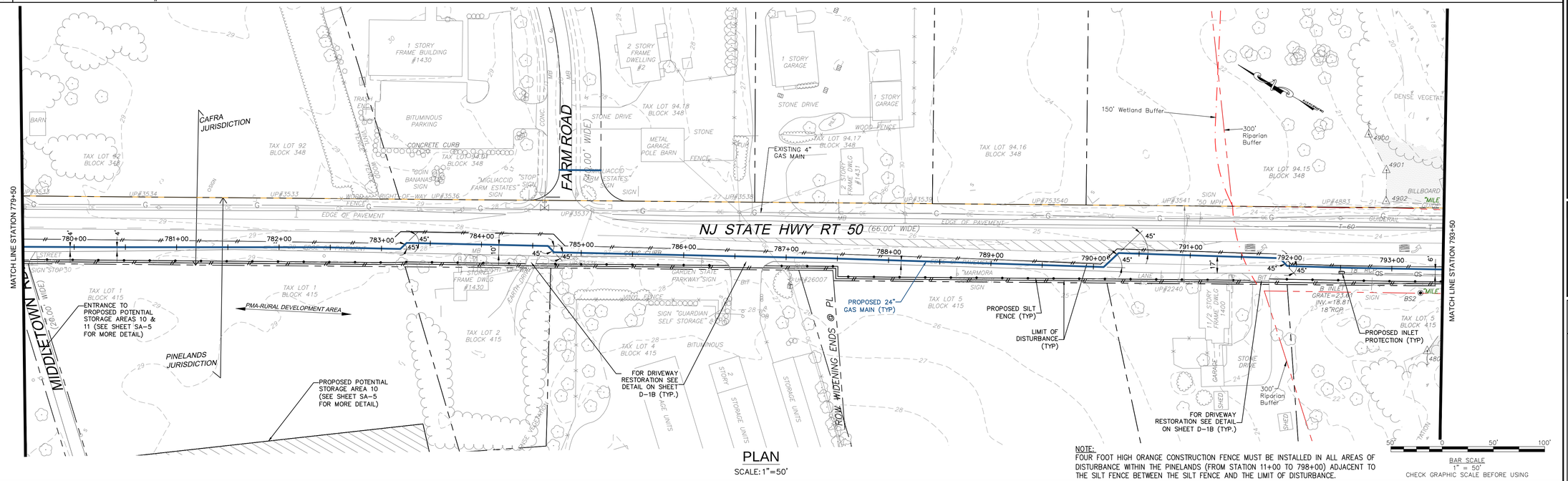
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-54

\\potland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_48–55 CS.dwg, May 18, 2015 – 1:38pm

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY				
OWNERSHIP	STATE OF NEW JERSEY				
DISTANCE	373'	146'	551'	172'	158'
RESTORATION	PAVEMENT–DETAIL # 1A/1B ON SHEET D–1A	PAVEMENT–DETAIL # 8A/8B ON SHEET D–1B	PAVEMENT–DETAIL # 1A/1B ON SHEET D–1A	PAVEMENT–DETAIL # 8A/8B ON SHEET D–1B	PAVEMENT–DETAIL # 1A/1B ON SHEET D–1A
VEGETATION	SEE NOTE # 11 ON SHEET D–03				

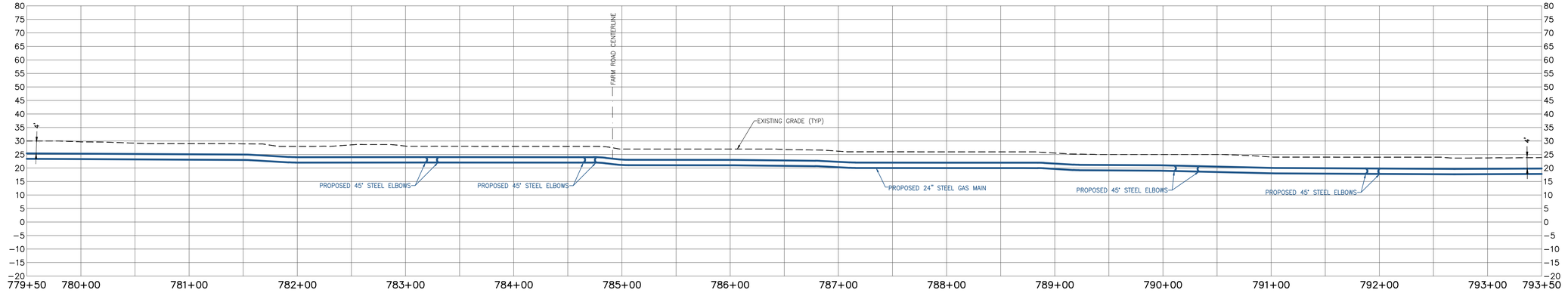


PLAN

SCALE: 1"=50'

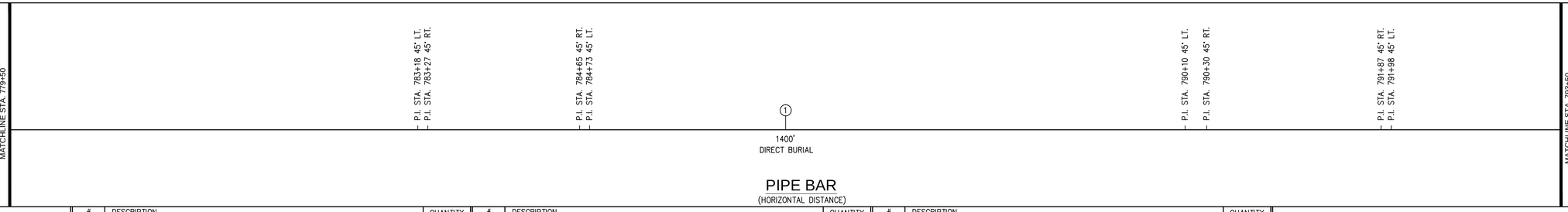
NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE

SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,400 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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DENNIS M. WALSH, P.E.
NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_48–55 CS.dwg

ALIGNMENT SHEET 55

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

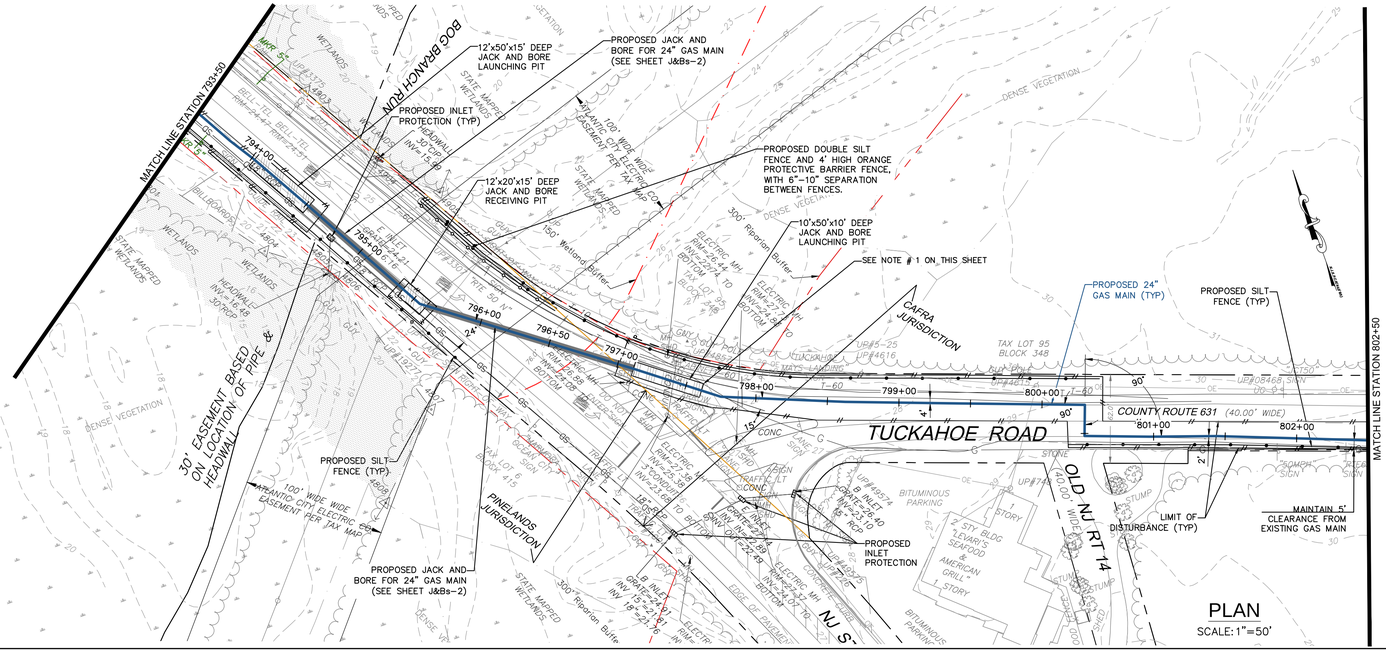
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-55

\\portland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_48–55 CS.dwg, May 18, 2015 – 1:38pm

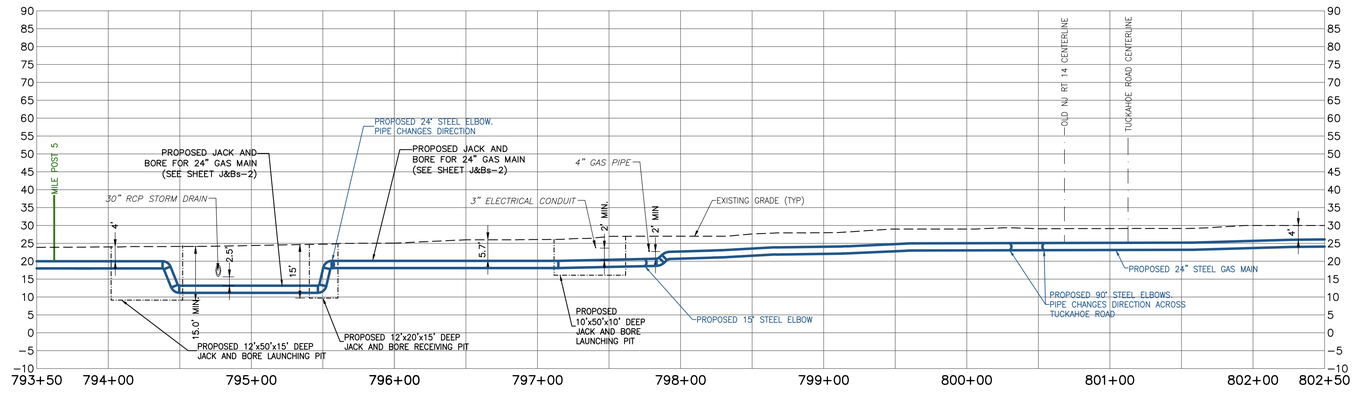
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY					
OWNERSHIP	STATE OF NEW JERSEY				CAPE MAY COUNTY	
DISTANCE	102'	89'	18'	155'	50'	486'
RESTORATION	PAVEMENT–DETAIL # 1A/1B ON SHEET D–1A	NONE	PAVEMENT–DETAIL # 1A/1B ON SHEET D–1A	NONE	PAVEMENT–DETAIL # 1A/1B ON SHEET D–1A	PAVEMENT–DETAILS # 3A/3B ON SHEET D–1A
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE	SEE NOTE # 11 ON SHEET D–03	NONE	SEE NOTE # 11 ON SHEET D–03	SEE NOTE # 11 ON SHEET D–03



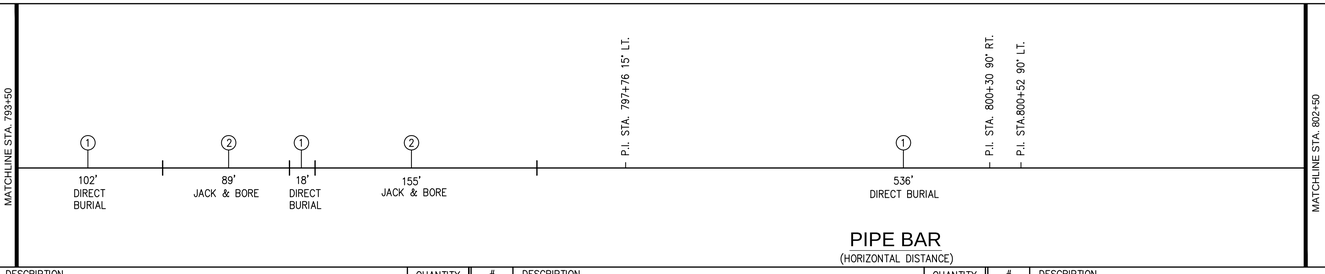
NOTES:

1. THE LAUNCHING PIT ON CR 631 WB RAMP IS PROPOSED AT THIS LOCATION DUE TO POSSIBLE CONFLICT WITH SEVERAL UTILITIES ON THE RAMP.
2. FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS (LINEAR FOOTAGE IS APPROXIMATE)	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY
	①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	656 L.F.	②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	244 L.F.	③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC NO. GE46534

REV.	DESCRIPTION	DATE
3	REMOVED 30" STEEL CASING @ J&B LOCATION	9/24/14
2	REVISED STATIONING	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_56–64 CS.dwg

ALIGNMENT SHEET 56

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

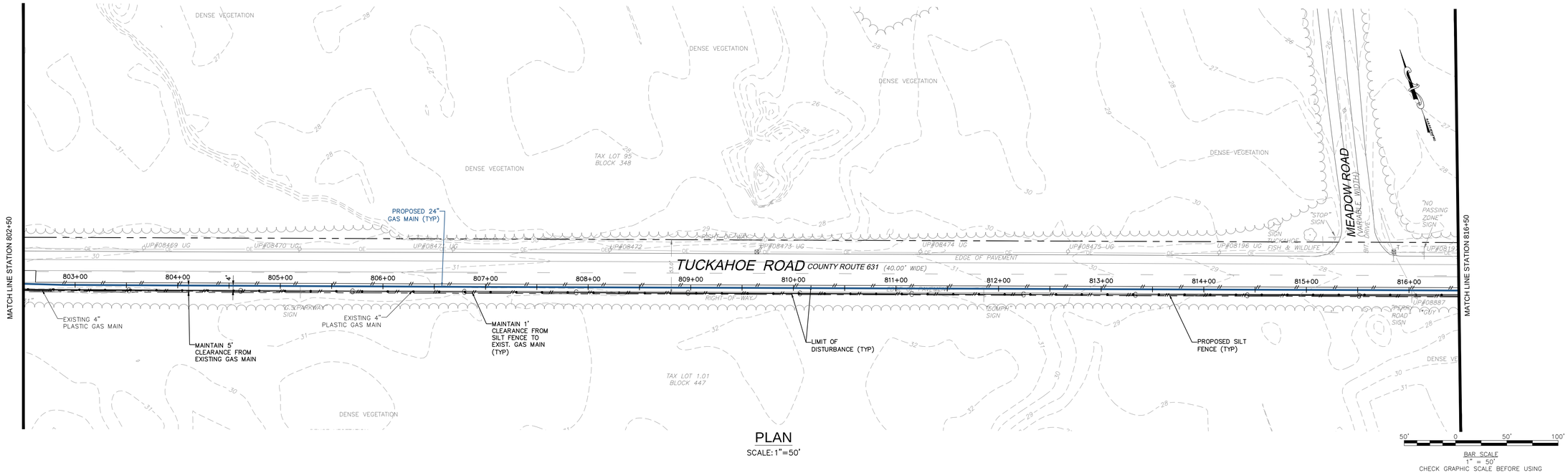
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-56

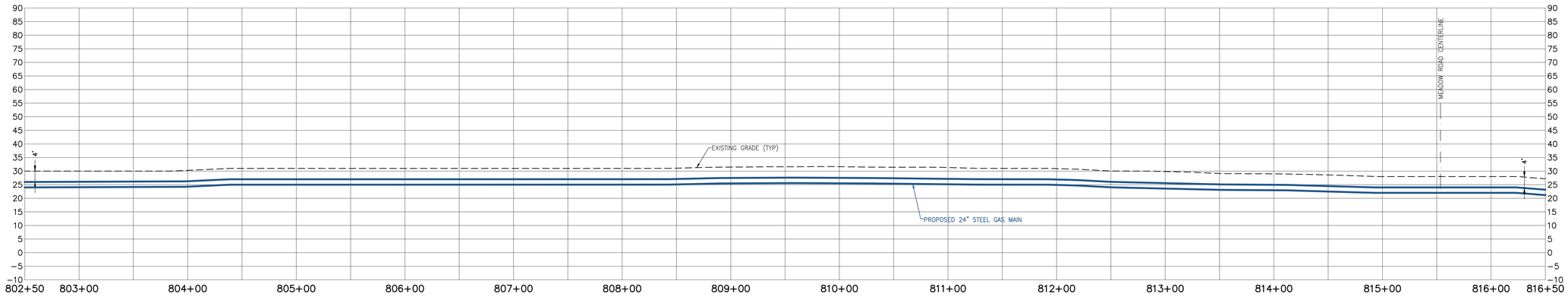
\\portland\projects1\225616 s\jg – england power plant\wip\drawings_redesign\225616_AS_56–64 CS.dwg, May 18, 2015 – 1:39pm

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	CAPE MAY COUNTY
DISTANCE	1,400'
RESTORATION	PAVEMENT–DETAIL # 2A/2B SHEET D–1A
VEGETATION	SEE NOTE # 11 ON SHEET D–03

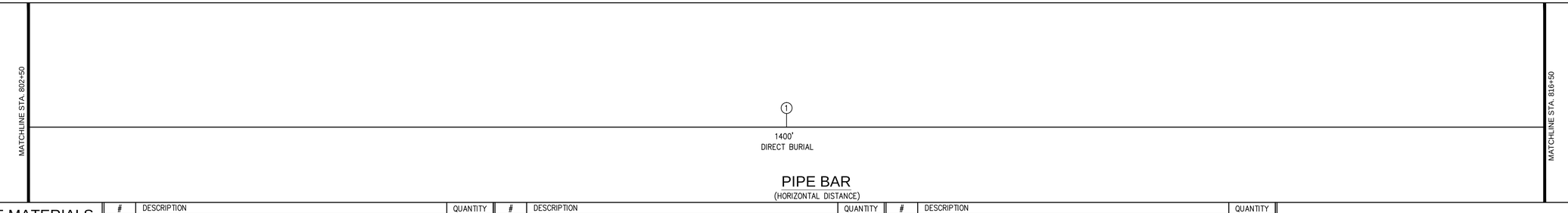


PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,400 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC. NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_56-64 CS.dwg

ALIGNMENT SHEET 57

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

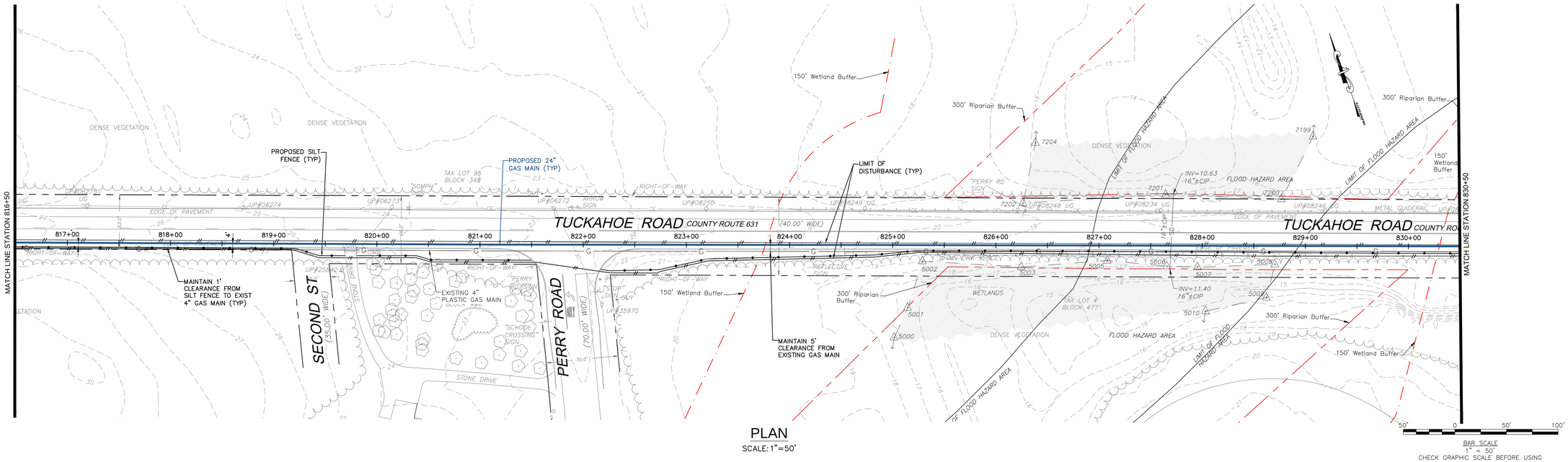
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

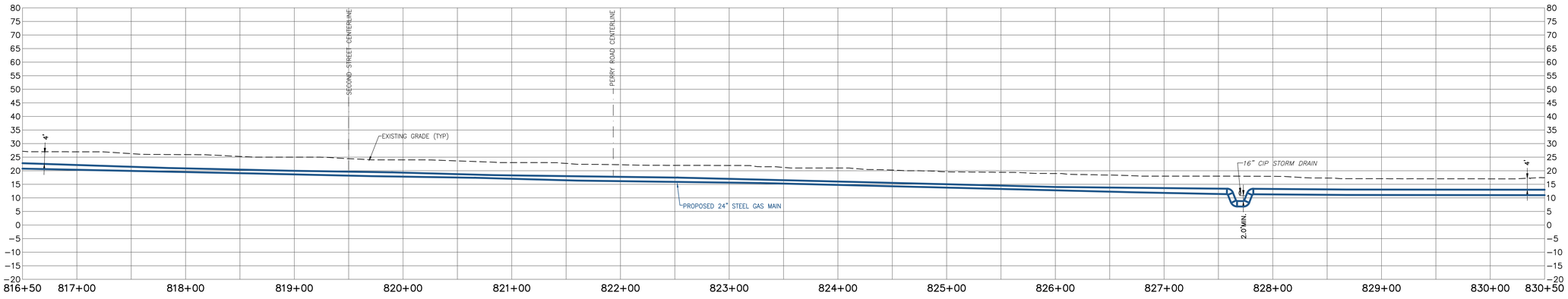
AS-57

\\portland\projects1\225616 sig – england power plant\wip\Drawings_redesign\225616_AS_56-64 CS.dwg, May 18, 2015 – 1:39pm

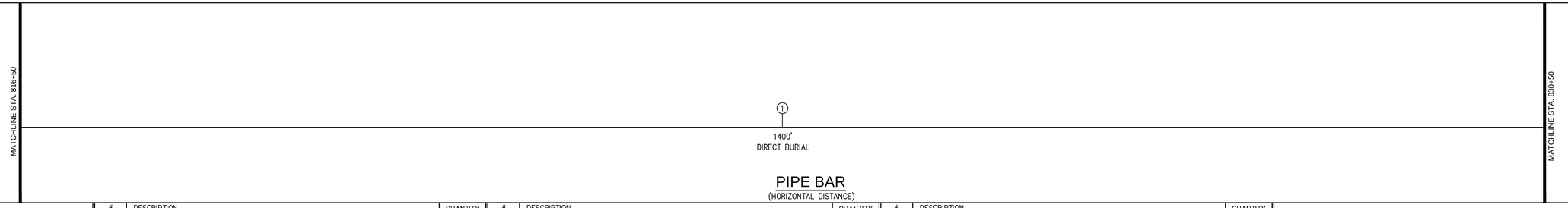
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	CAPE MAY COUNTY
DISTANCE	1,400'
RESTORATION	PAVEMENT–DETAIL # 2A/2B ON SHEET D–1A
VEGETATION	SEE NOTE # 11 ON SHEET D–03



PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,402 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_56–64 CS.dwg

ALIGNMENT SHEET 58

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

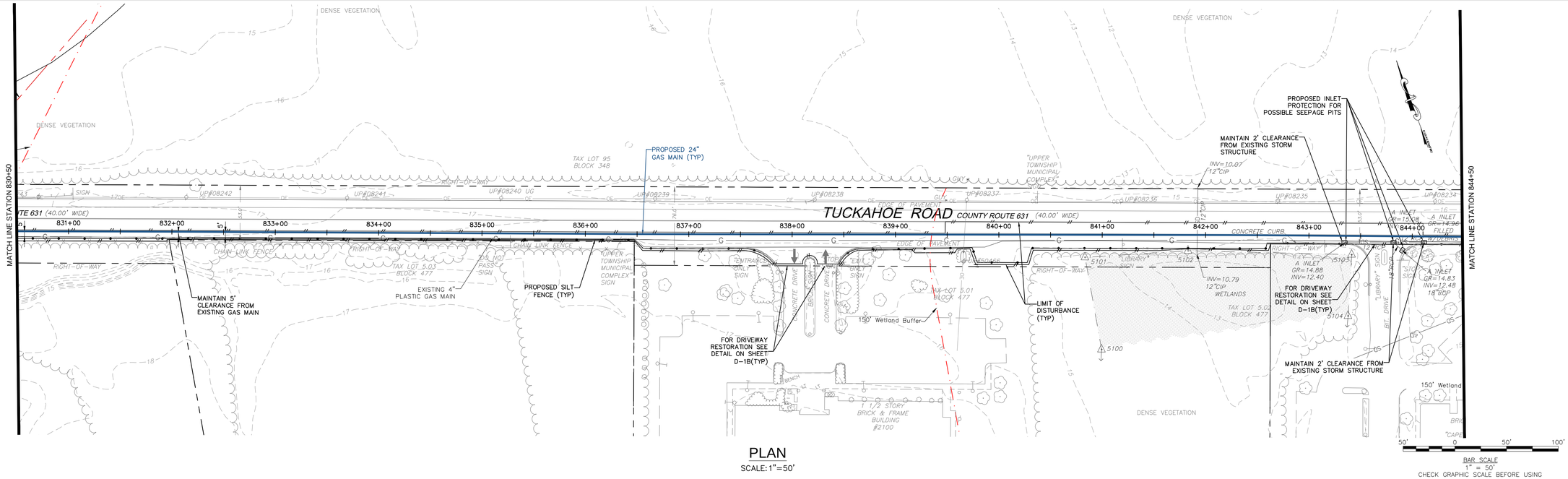
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

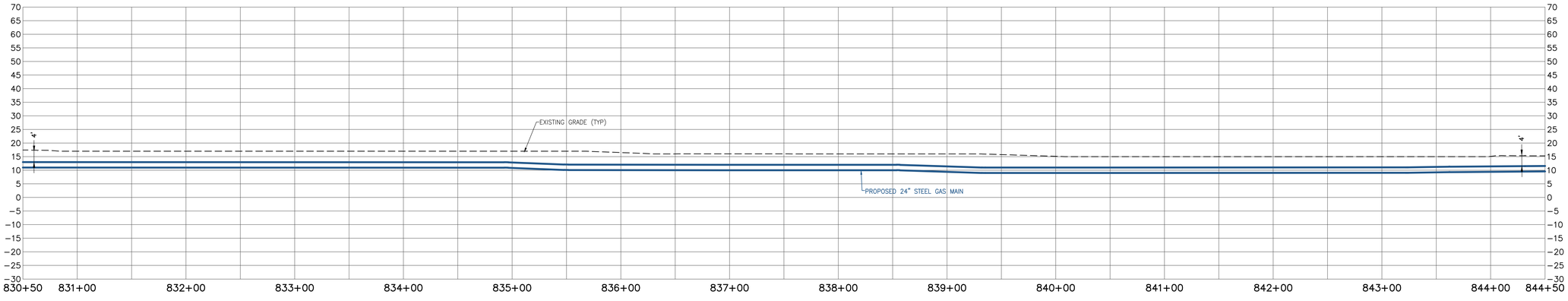
AS-58

\\portland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_56–64 CS.dwg, May 18, 2015 – 1:40pm

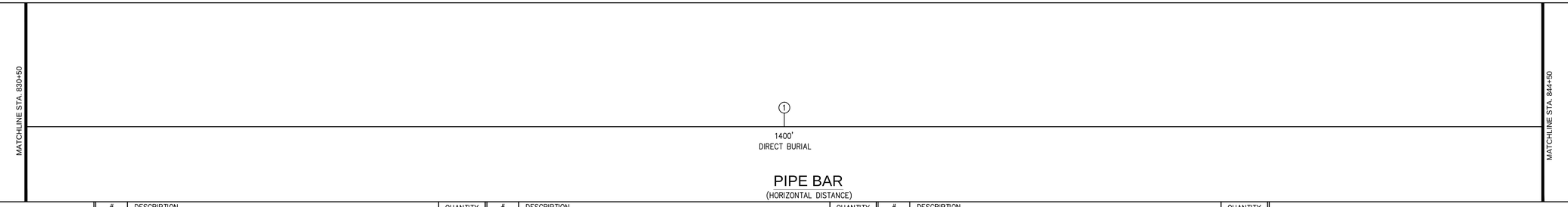
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY		
OWNERSHIP	CAPE MAY COUNTY		
DISTANCE	899'	462'	39'
RESTORATION	PAVEMENT–DETAIL # 2A/2B ON SHEET D–1A	PAVEMENT–DETAIL # 3A/3B ON SHEET D–1A	
VEGETATION	SEE NOTE # 11 ON SHEET D–03		PAVEMENT–DETAIL # 2A/2B ON SHEET D–1A



PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,400 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_56–64 CS.dwg

ALIGNMENT SHEET 59

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-59

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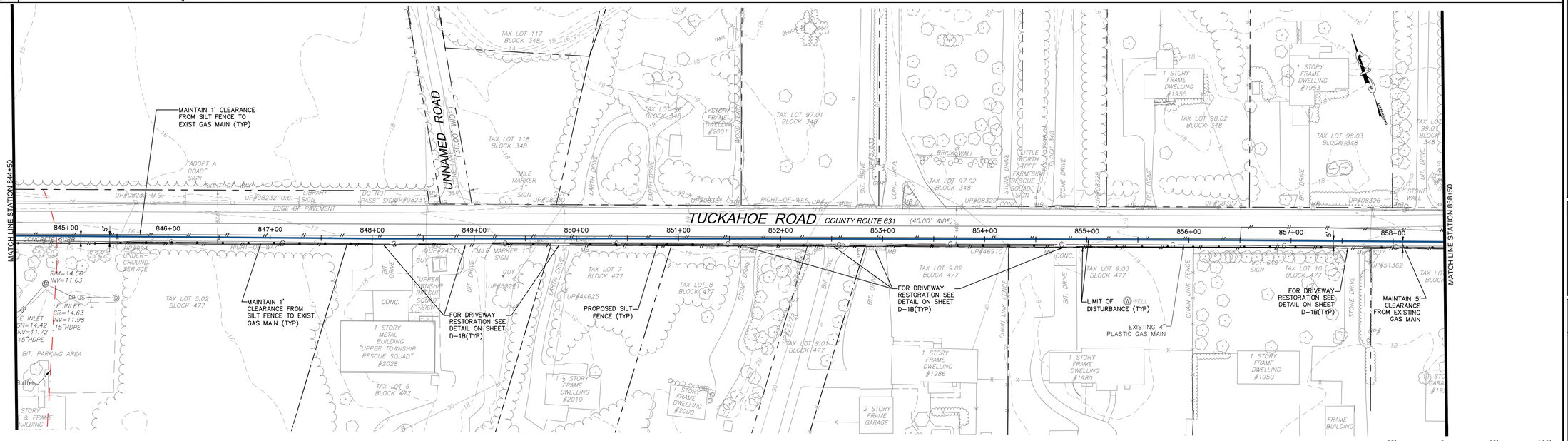
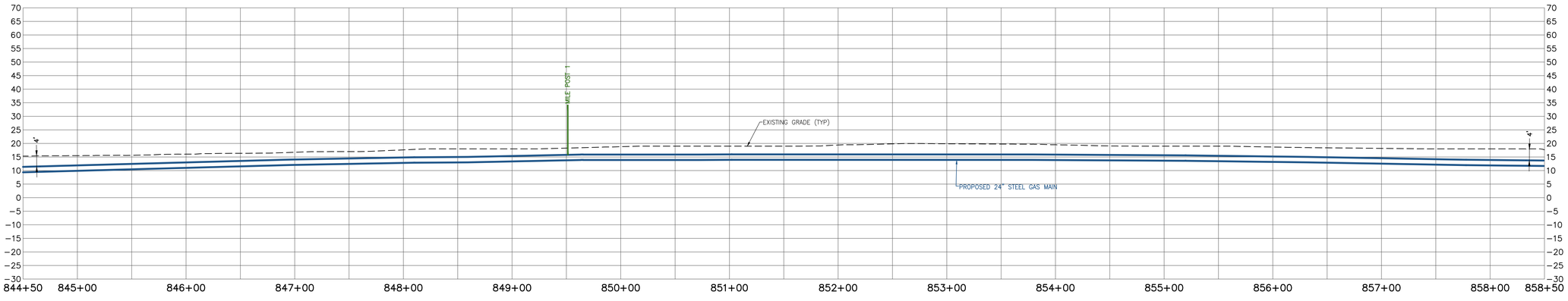
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY		
OWNERSHIP	CAPE MAY COUNTY		
DISTANCE	1,200'	200'	
RESTORATION	PAVEMENT–DETAIL # 2A/2B ON SHEET D–1A	PAVEMENT–DETAIL # 3A/3B ON SHEET D–1A	
VEGETATION	SEE NOTE # 11 ON SHEET D–03		

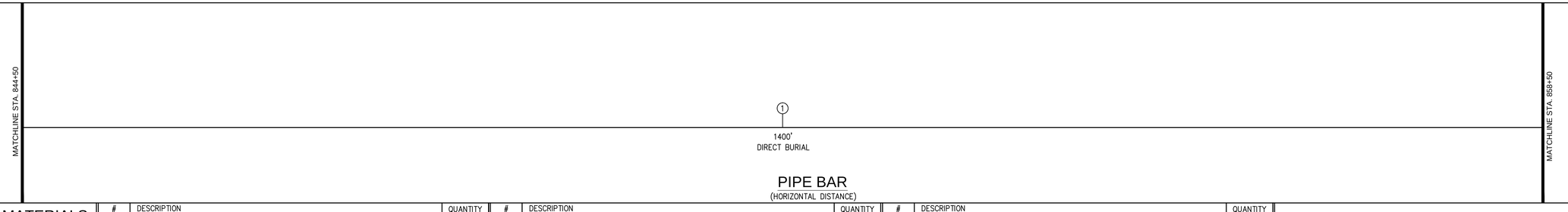


PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,400 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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REV.	DESCRIPTION	DATE
3	DIGITIZED ABANDONED & RETIRED VERIZON UTILITIES	8/19/2014
2	REVISED STATIONING	7/7/14
1	ISSUED FOR BID	12/9/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_56–64 CS.dwg

ALIGNMENT SHEET 60

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-60

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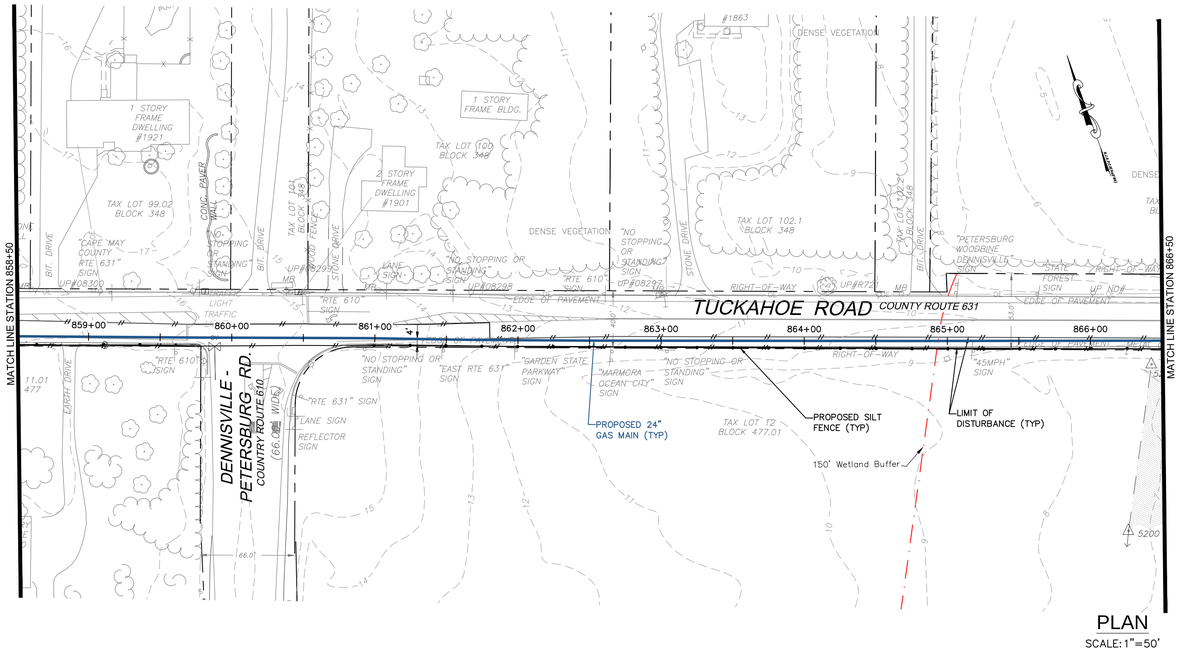
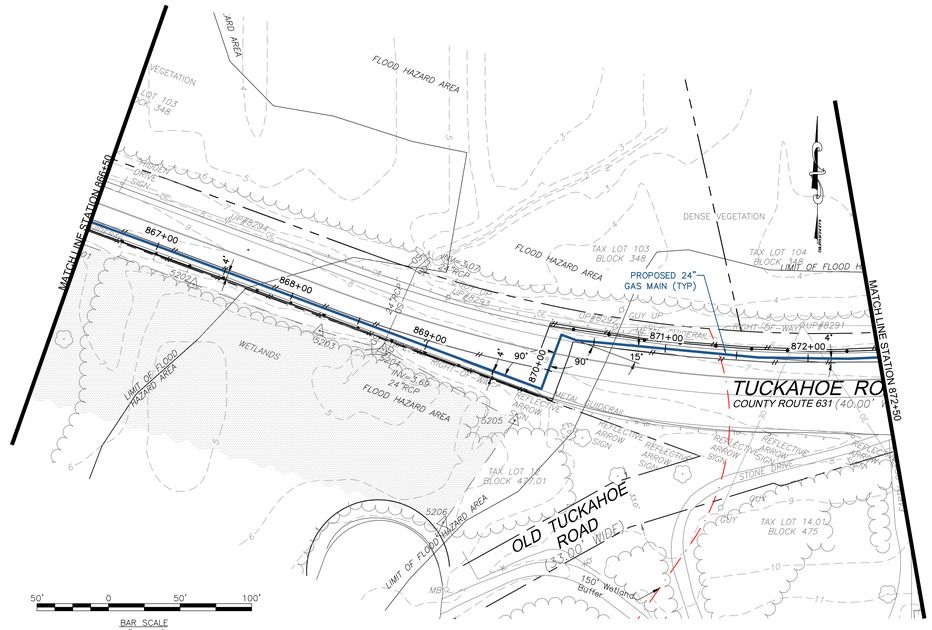
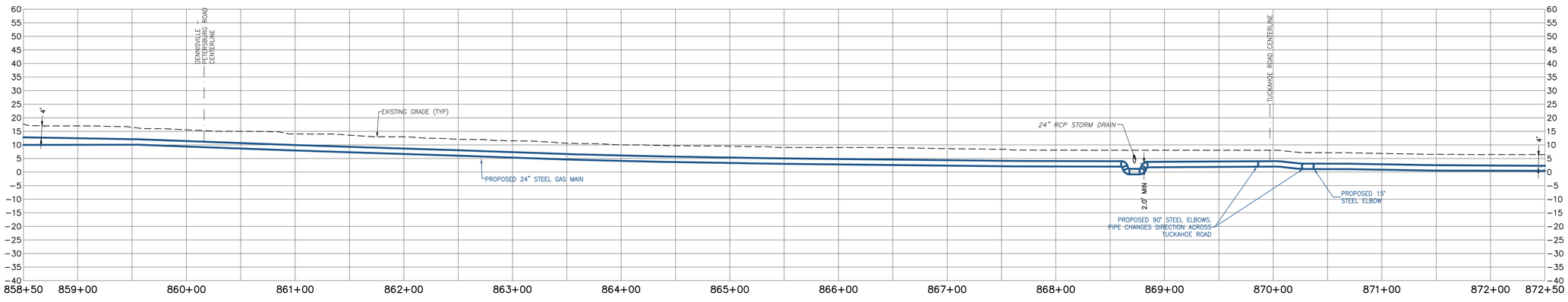
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY	
OWNERSHIP	CAPE MAY COUNTY	
DISTANCE	254'	1146'
RESTORATION	PAVEMENT–DETAIL # 3A/3B ON SHEET D–1A	PAVEMENT–DETAIL # 2A/2B ON SHEET D–1A
VEGETATION	SEE NOTE # 11 ON SHEET D–03	



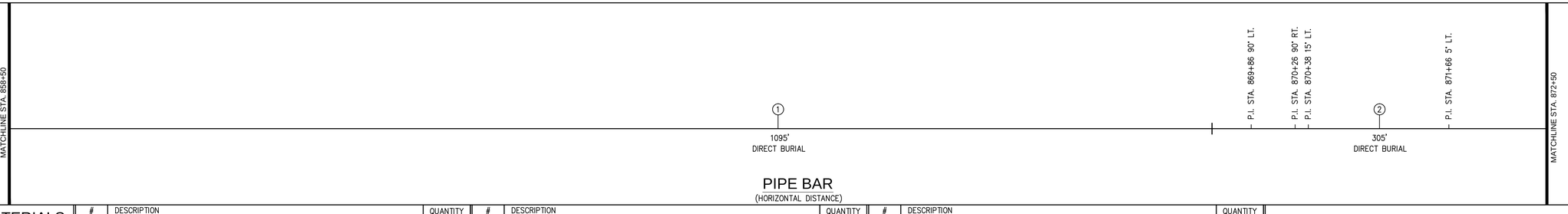
PLAN
SCALE: 1"=50'



BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,095 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	305 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	CHANGED DIRECT BURIAL TO POWERSEAL COATING	9/4/14
2	REVISED STATIONING	7/7/14
1	ISSUED FOR 60%	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_56–64 CS.dwg

ALIGNMENT SHEET 61

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-61

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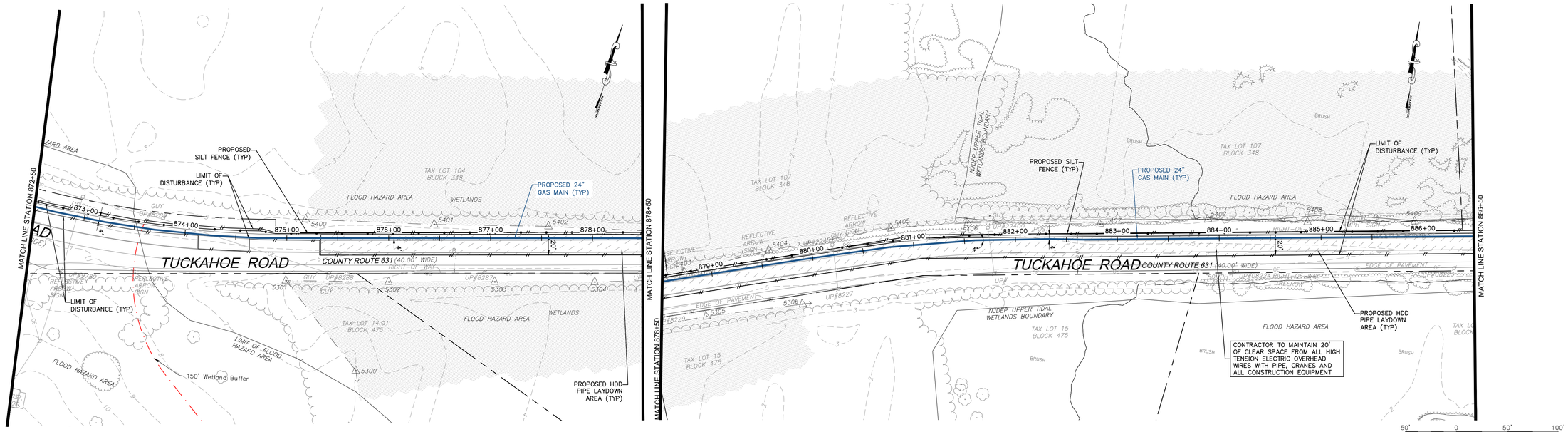
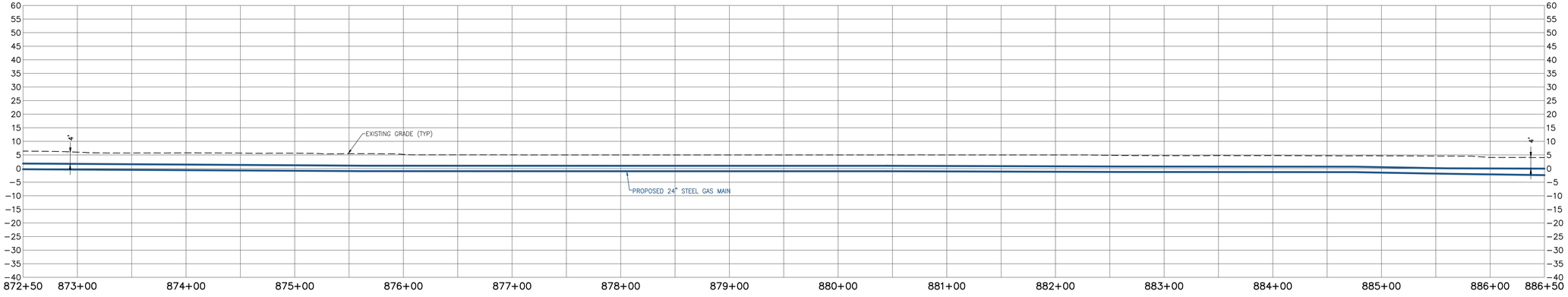
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY		
OWNERSHIP	CAPE MAY COUNTY		
DISTANCE	163'	50'	1,187'
RESTORATION	PAVEMENT–DETAIL # 2A/2B ON SHEET D–1A	PAVEMENT–DETAIL # 3A/3B ON SHEET D–1A	PAVEMENT–DETAIL # 2A/2B ON SHEET D–1A
VEGETATION	SEE NOTE # 11 ON SHEET D–03		

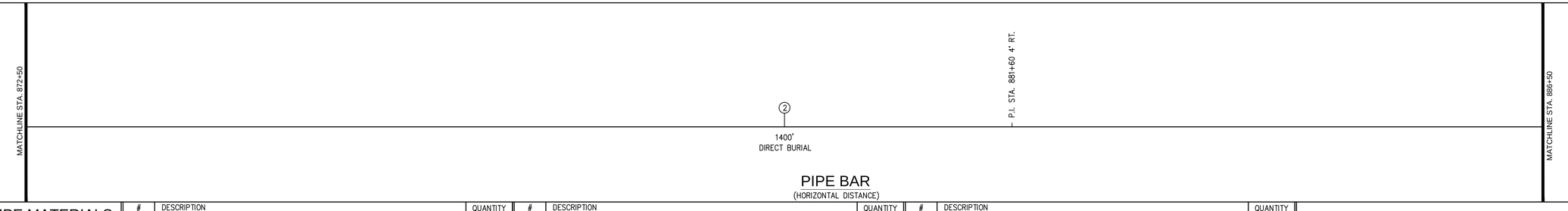


PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	0 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,400 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	CHANGED DIRECT BURIAL TO POWERSITE COATING	9/4/14
2	REVISED STATIONING	7/7/14
1	ISSUED FOR BID	12/29/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_56–64 CS.dwg

ALIGNMENT SHEET 62

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

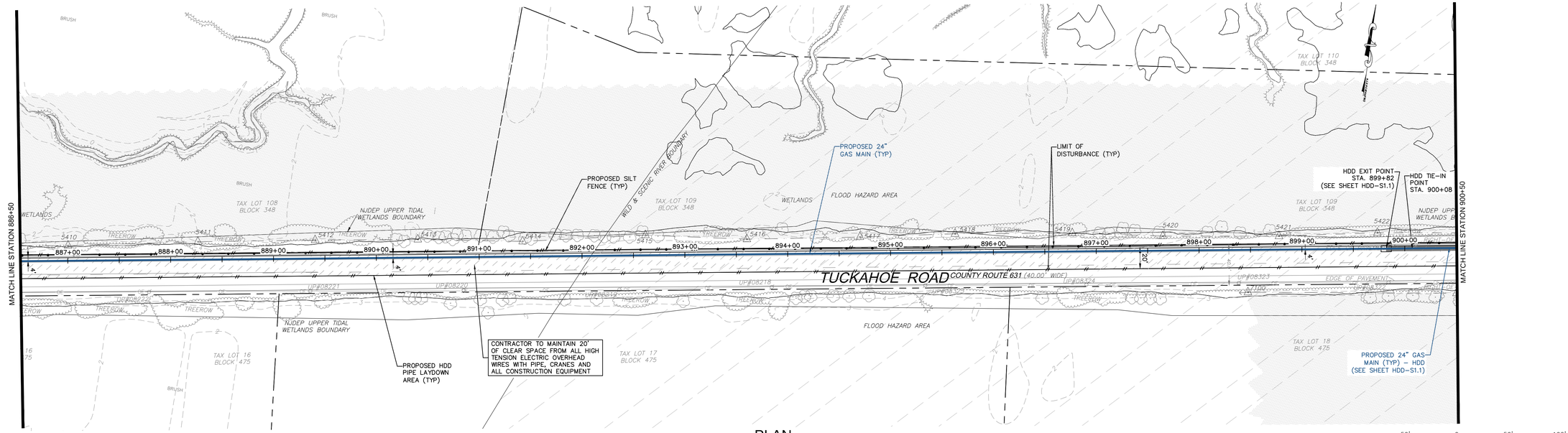
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-62

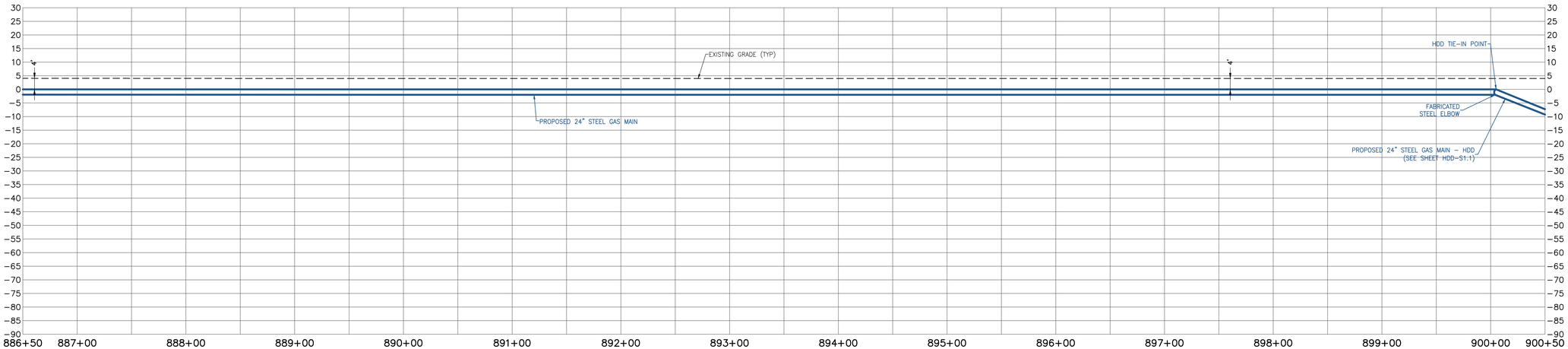
\\portland\projects1\225616 s\jg – england power plant\wip\drawings_redesign\225616_AS_56–64 CS.dwg, May 18, 2015 – 1:42pm

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY		
OWNERSHIP	CAPE MAY COUNTY		
DISTANCE	1,355'		45'
RESTORATION	PAVEMENT–DETAIL # 2A/2B ON SHEET D–1A		NONE
VEGETATION	SEE NOTE # 11 ON SHEET D–03		NONE

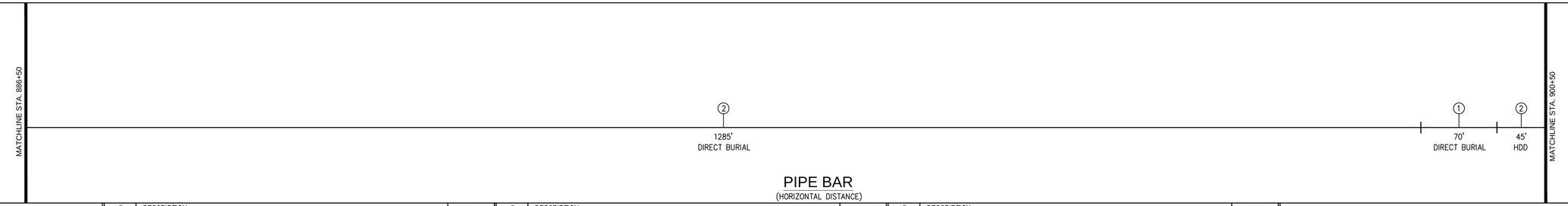


PLAN
SCALE: 1"=50'

50' 0 50' 100'
BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	70 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1330 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	CHANGED DIRECT BURIAL TO POWERCRETE COATING	9/4/14
2	REVISED STATIONING	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_56–64 CS.dwg

ALIGNMENT SHEET 63

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

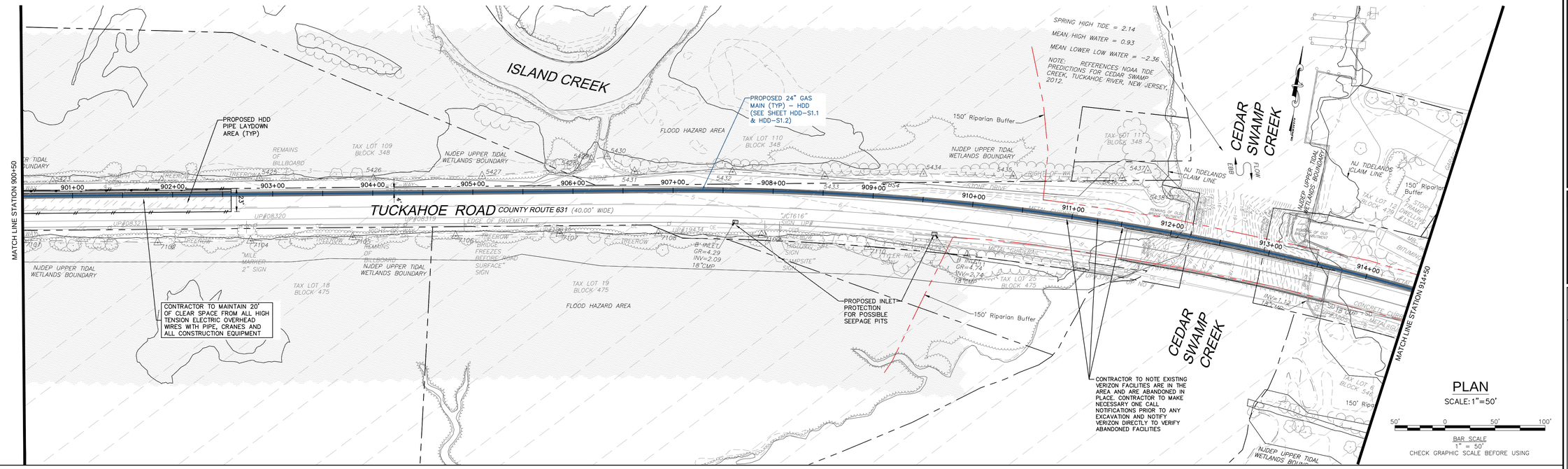
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-63

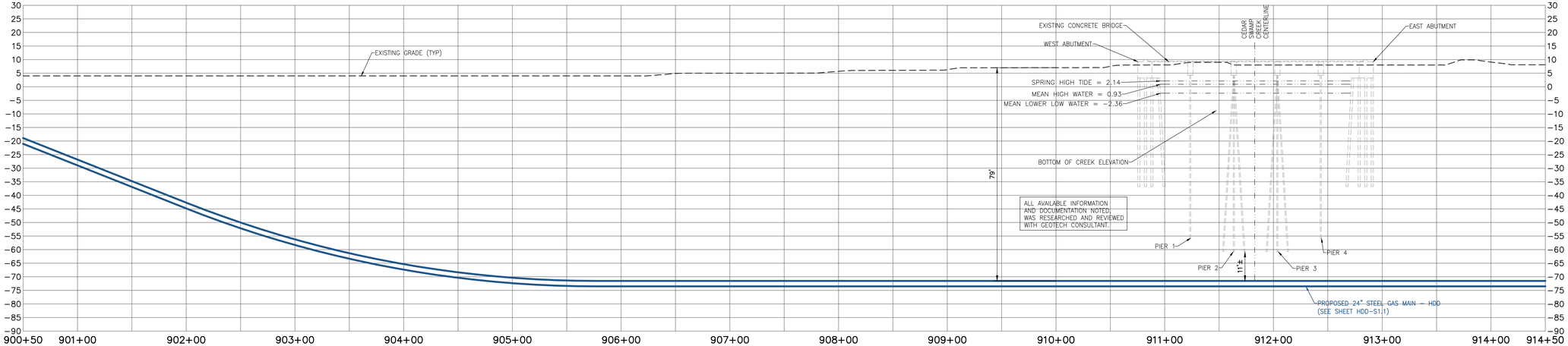
\\portland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_56–64 CS.dwg, May 18, 2015 – 1:42pm

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	CAPE MAY COUNTY
DISTANCE	1,400'
RESTORATION	NONE
VEGETATION	NONE

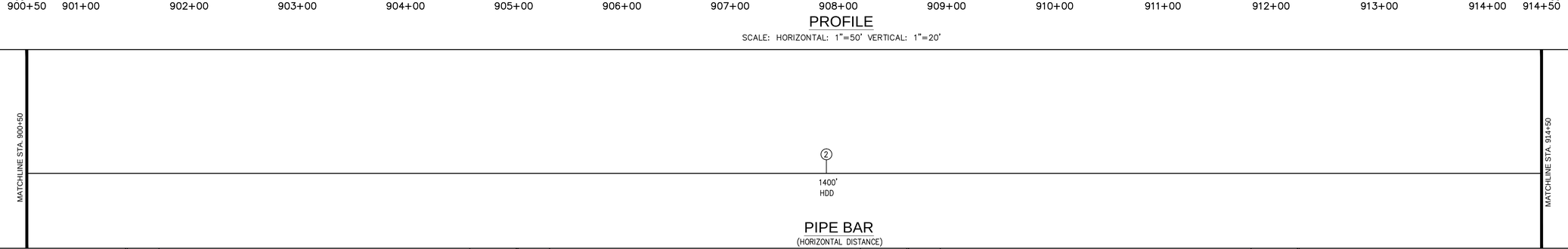


PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL-2, X-60, ERW OR DSAW PRITEC (40/10) OR X-TEC II (60/10)	0 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL-2, X-60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,404 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL-2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	DIGITIZED ABANDONED & RETIRED VERIZON UTILITIES	8/19/2014
2	REVISED STATIONING	7/7/2014
1	ISSUED FOR HDD	12/20/13

DESIGNED BY: LS/JG | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_56-64 CS.dwg

ALIGNMENT SHEET 64

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

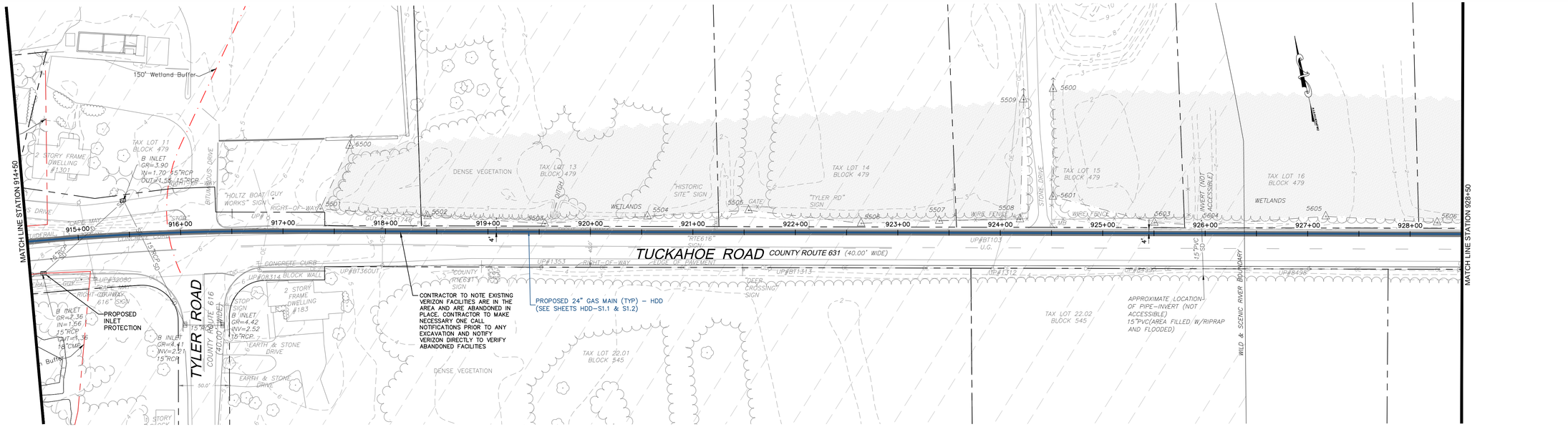
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-64

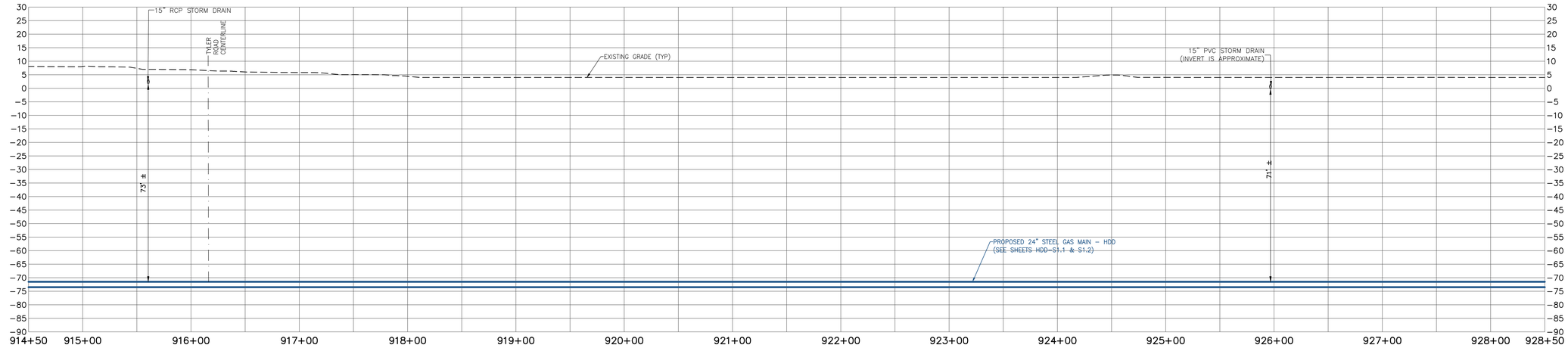
\\portland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_56-64 CS.dwg, May 18, 2015 – 1:43pm

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	CAPE MAY COUNTY
DISTANCE	1,400'
RESTORATION	NONE
VEGETATION	NONE

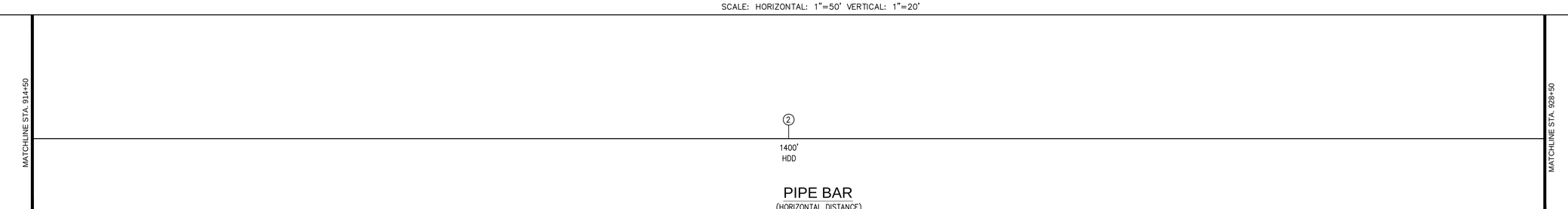


PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL-2, X-60, ERW OR DSAW PRITEC (40/10) OR X-TEC II (60/10)	0 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL-2, X-60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,400 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL-2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	DIGITIZED ABANDONED & RETIRED VERIZON UTILITIES	8/19/2014
2	REVISED STATIONING	7/7/14
1	ISSUED FOR HDD	12/20/13

DESIGNED BY: LS/JG | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_65-72 CS.dwg

ALIGNMENT SHEET 65

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

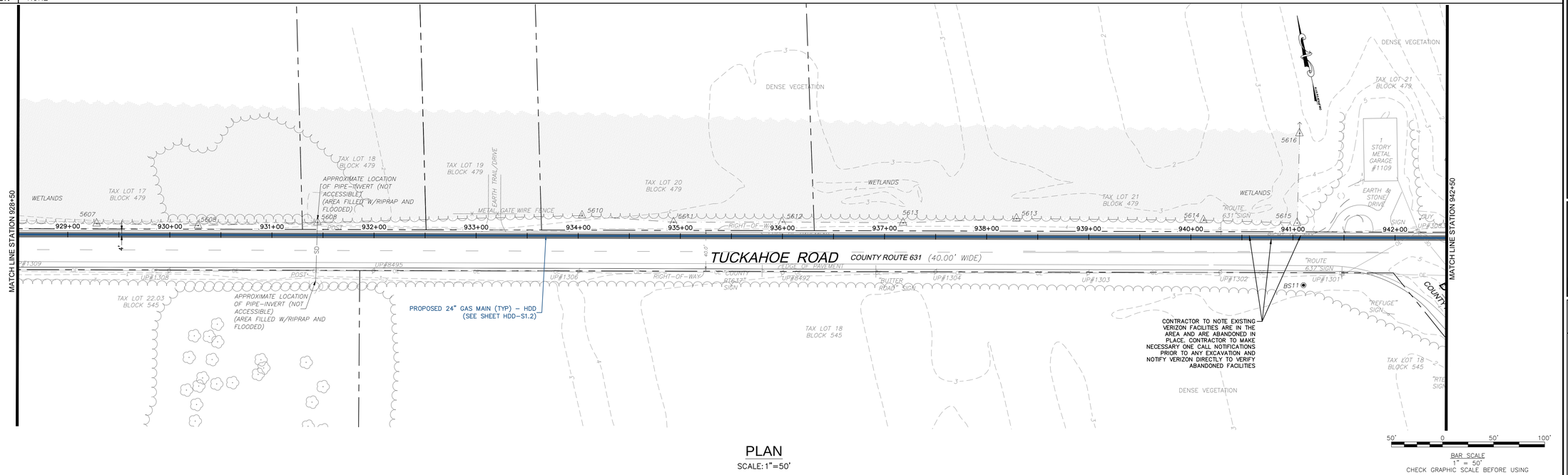
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-65

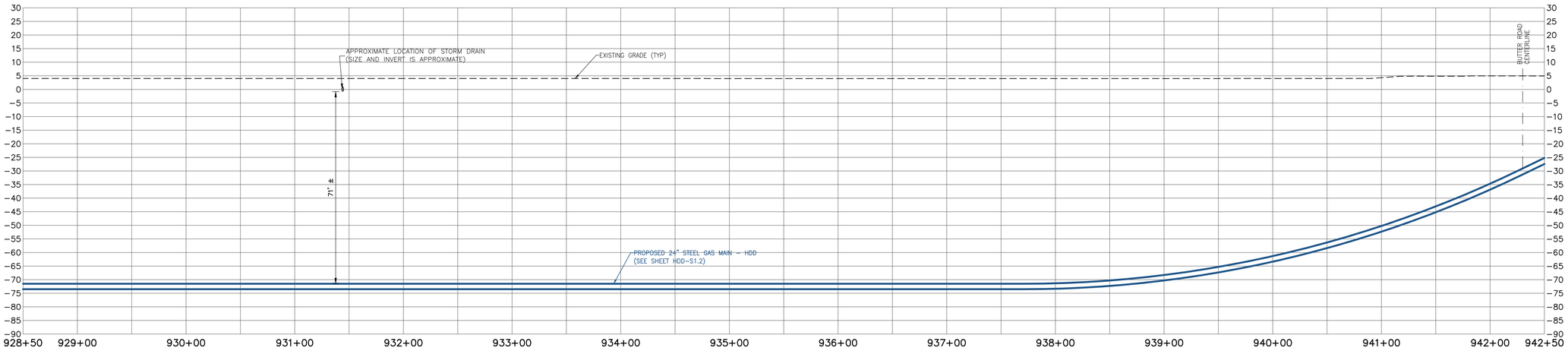
\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_65-72 CS.dwg, May 18, 2015 – 1:43pm

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	CAPE MAY COUNTY
DISTANCE	1,400'
RESTORATION	NONE
VEGETATION	NONE

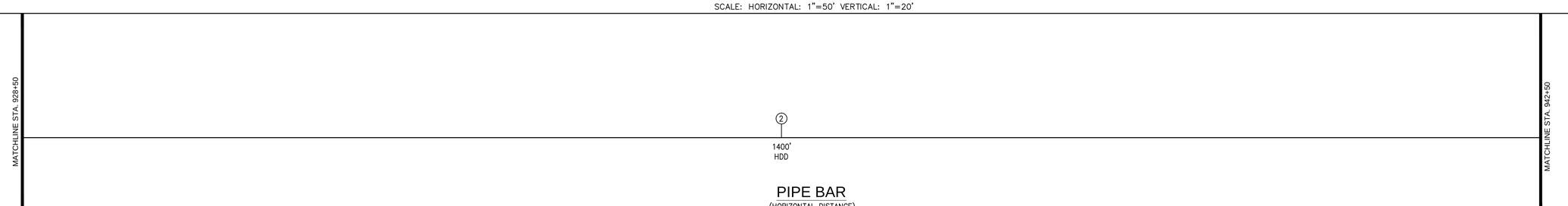


PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL-2, X-60, ERW OR DSAW PRITEC (40/10) OR X-TEC II (60/10)	0 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL-2, X-60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,400 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL-2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC. NO. GE46534

REV.	DESCRIPTION	DATE
3	DIGITIZED ABANDONED & RETIRED VERIZON UTILITIES	8/19/2014
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/26/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_65-72 CS.dwg

ALIGNMENT SHEET 66

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

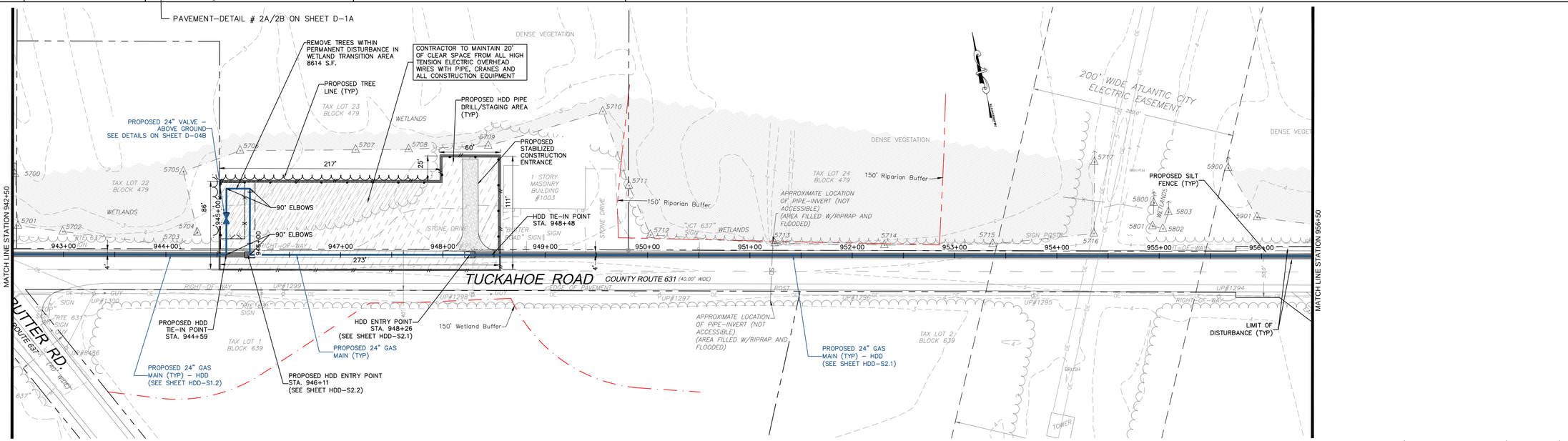
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-66

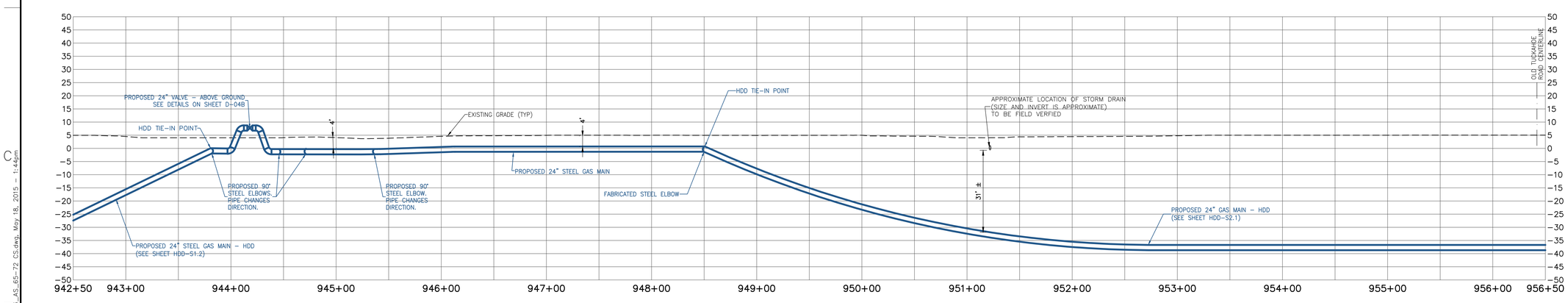
\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_65-72 CS.dwg, May 18, 2015 – 1:44pm

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY				
OWNERSHIP	CAPE MAY COUNTY		YANK AND SONS, LLC. BLOCK 479, LOT 23	CAPE MAY COUNTY	
DISTANCE	131'	4'	144'	326'	799'
RESTORATION	NONE	●	SEE SHEET C–AGV–2 FOR RESTORATION	PAVEMENT–DETAIL # 2A/2B ON SHEET D–1A	NONE
VEGETATION	NONE		SEE NOTE # 11 ON SHEET D–03		NONE

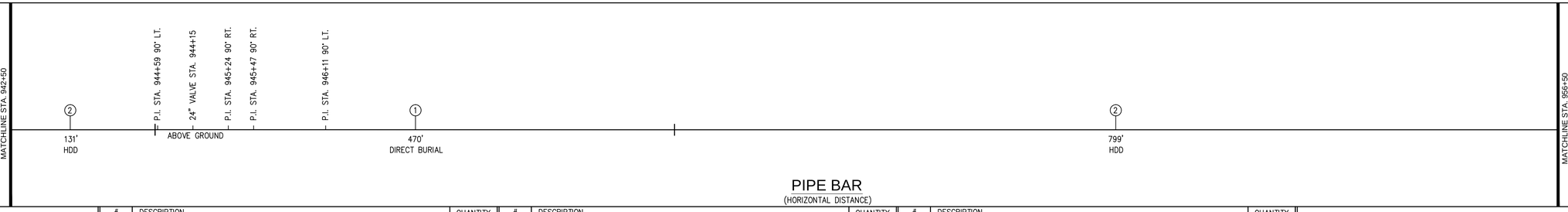


PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	474 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	930 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD–S2.1	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_65–72 CS.dwg

ALIGNMENT SHEET 67

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

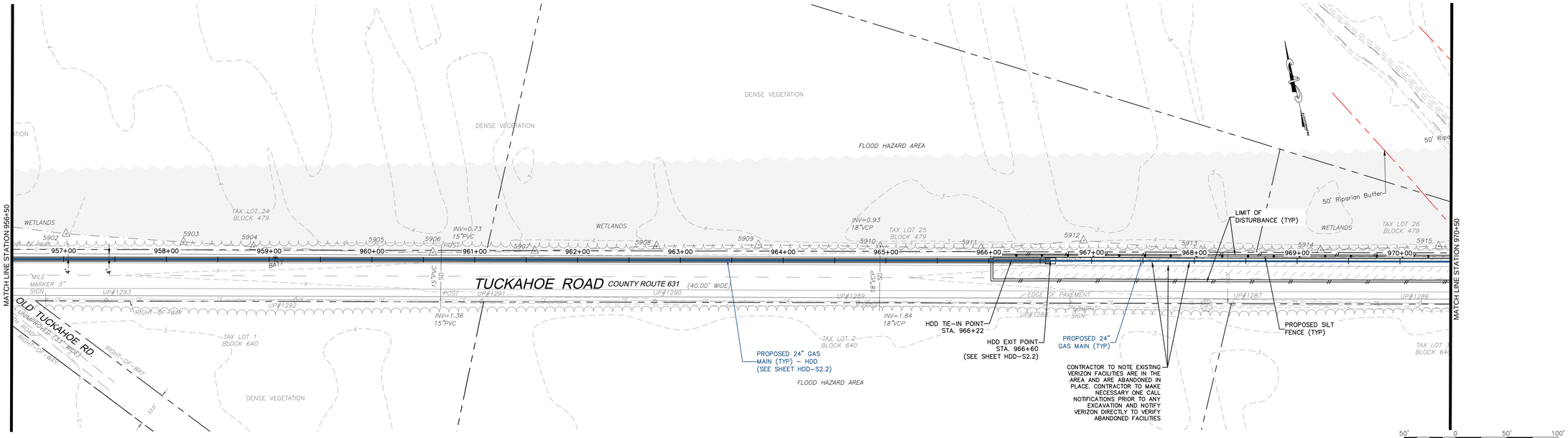
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-67

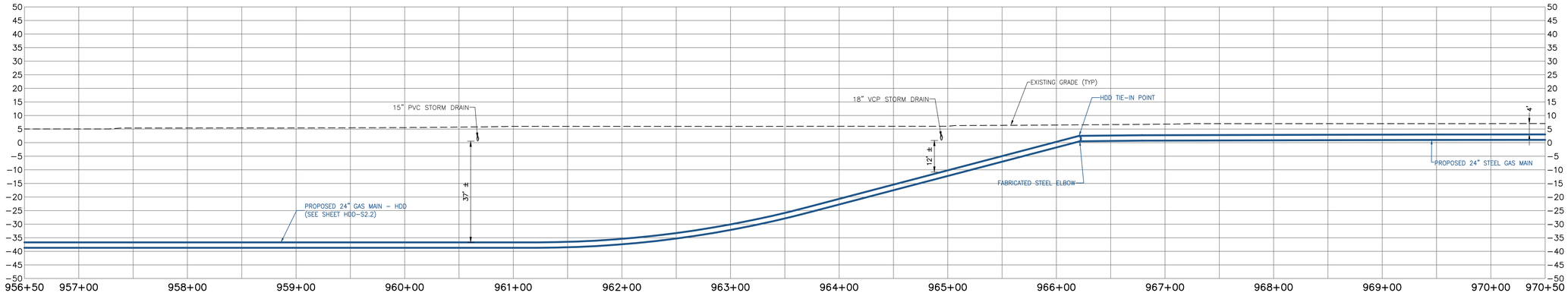
\\portland\projects1\225616 s\jg – england power plant\wip\drawings_redesign\225616_AS_65–72 CS.dwg, May 18, 2015 – 1:44pm

24x36 SHEET
1:1

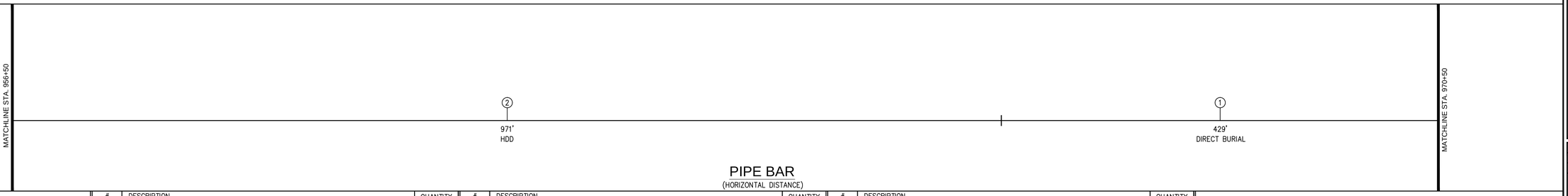
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY		
OWNERSHIP	CAPE MAY COUNTY		
DISTANCE	971'	429'	
RESTORATION	NONE	PAVEMENT–DETAIL # 2A/2B ON SHEET D–1A	
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D–03	



PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	429 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	971 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	DIGITIZED ABANDONED & RETIRED VERIZON UTILITIES	8/19/2014
2	REVISED STATIONING & ADDED HDD–S2.2	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_65–72 CS.dwg

ALIGNMENT SHEET 68

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

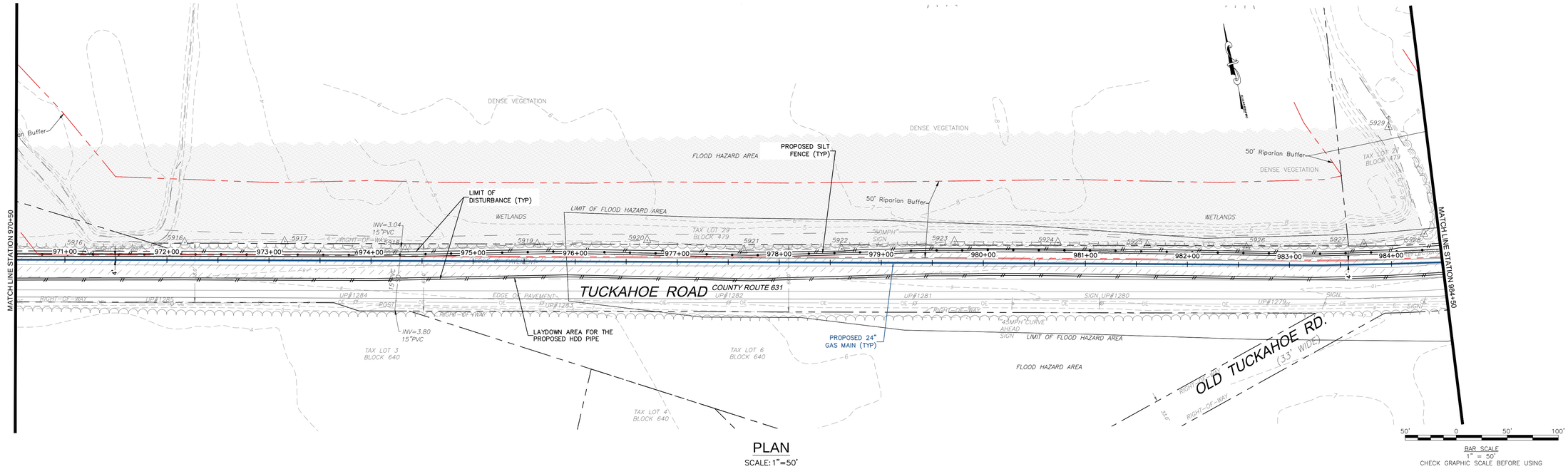
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-68

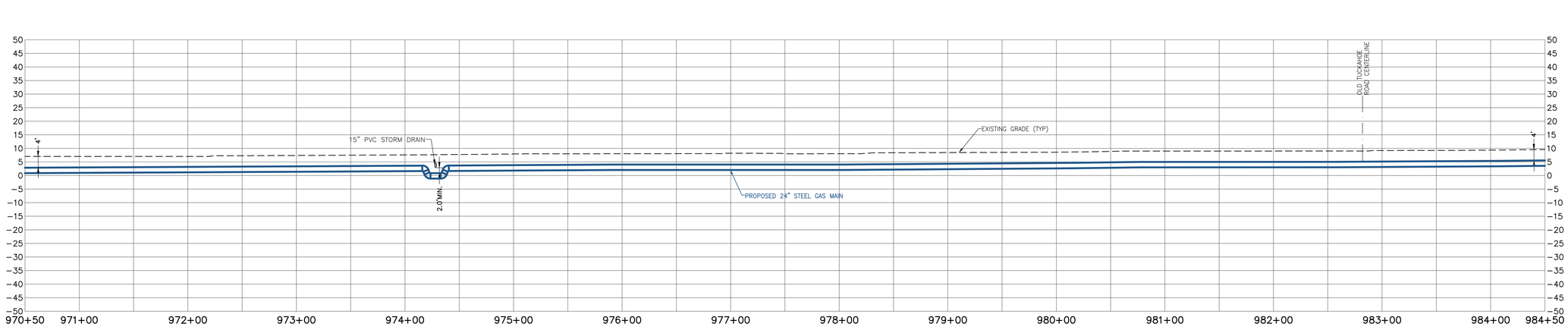
\\portland\projects1\225616 s\jg – england power plant\wip\drawings_redesign\225616_AS_65–72 CS.dwg, May 18, 2015 – 11:45pm

24x36 SHEET 1:1

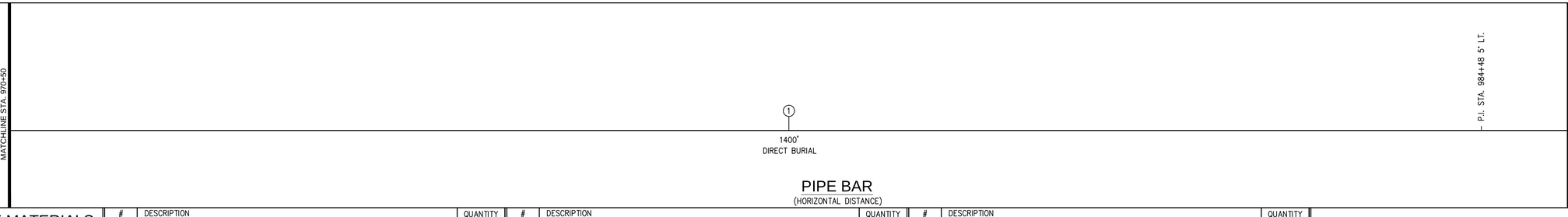
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	CAPE MAY COUNTY
DISTANCE	1,400'
RESTORATION	PAVEMENT–DETAIL # 2A/2B ON SHEET D–1A
VEGETATION	SEE NOTE # 11 ON SHEET D–03



PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,400 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/26/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_65–72 CS.dwg

ALIGNMENT SHEET 69

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

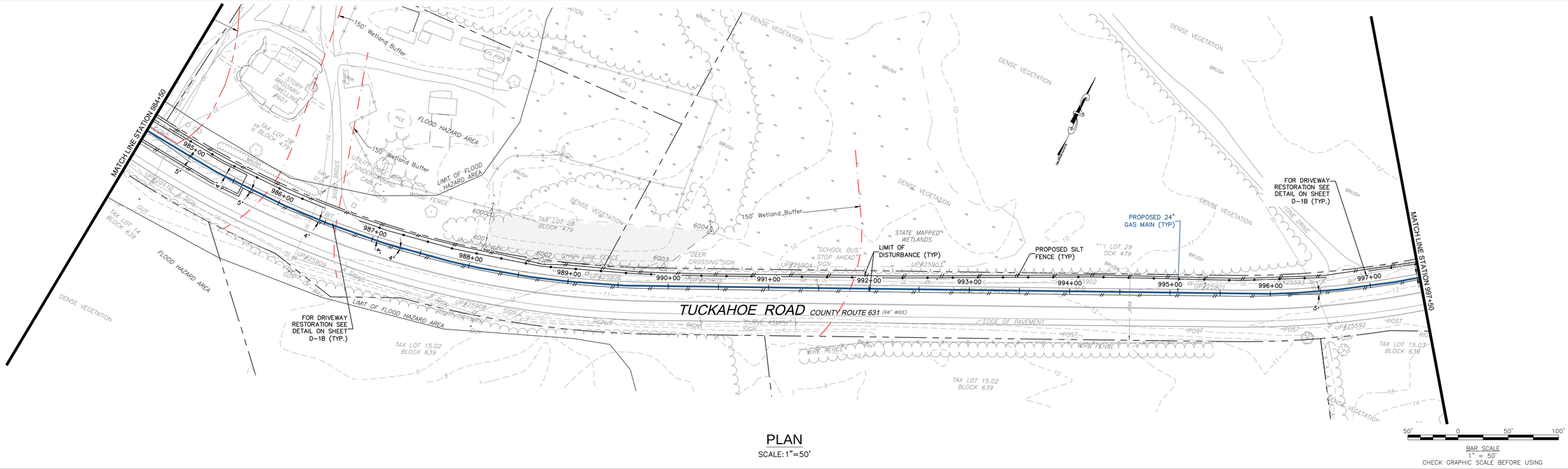
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

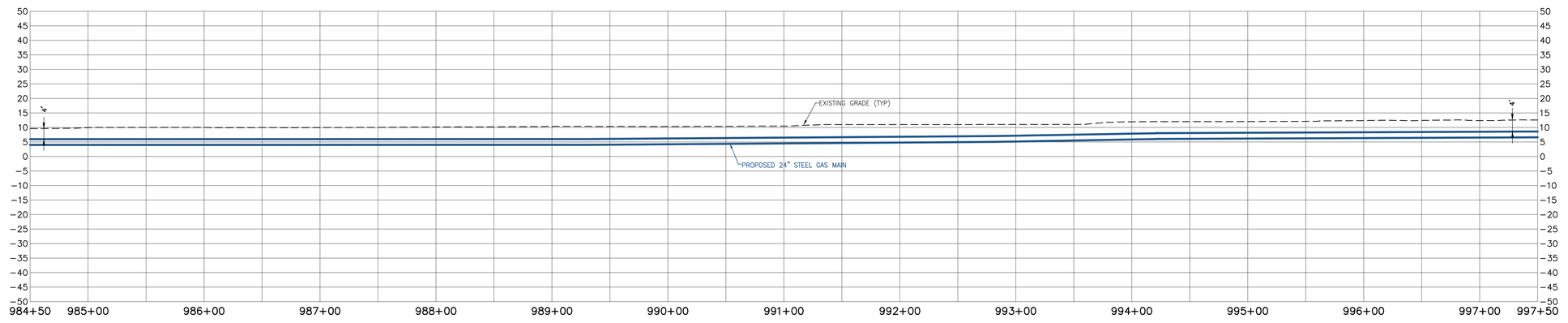
AS-69

\\portland\projects1\225616 s\g – england power plant\wip\Drawings_redesign\225616_AS_65–72 CS.dwg, May 18, 2015 – 11:45pm

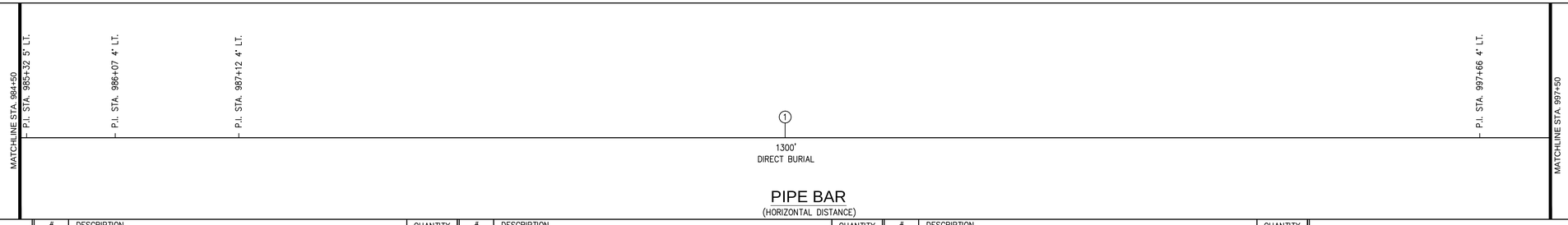
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	CAPE MAY COUNTY
DISTANCE	1,300'
RESTORATION	PAVEMENT–DETAIL # 2A/2B ON SHEET D–1A
VEGETATION	SEE NOTE # 11 ON SHEET D–03



PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,300 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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DENNIS M. WALSH, P.E.
NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR #80	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_65–72 CS.dwg

ALIGNMENT SHEET 70

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

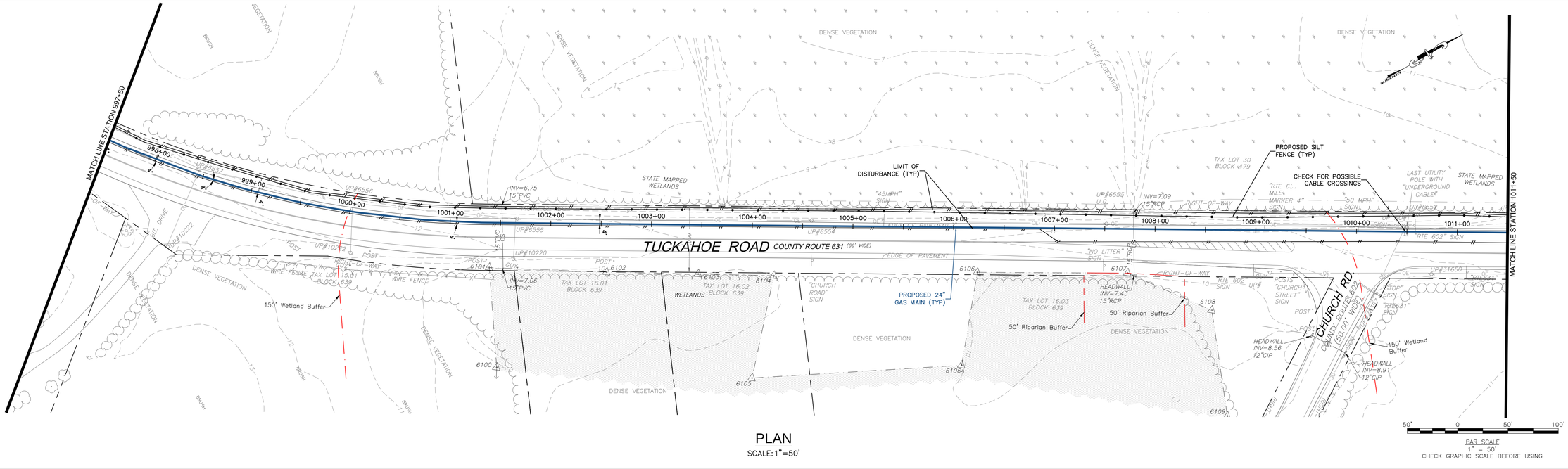
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-70

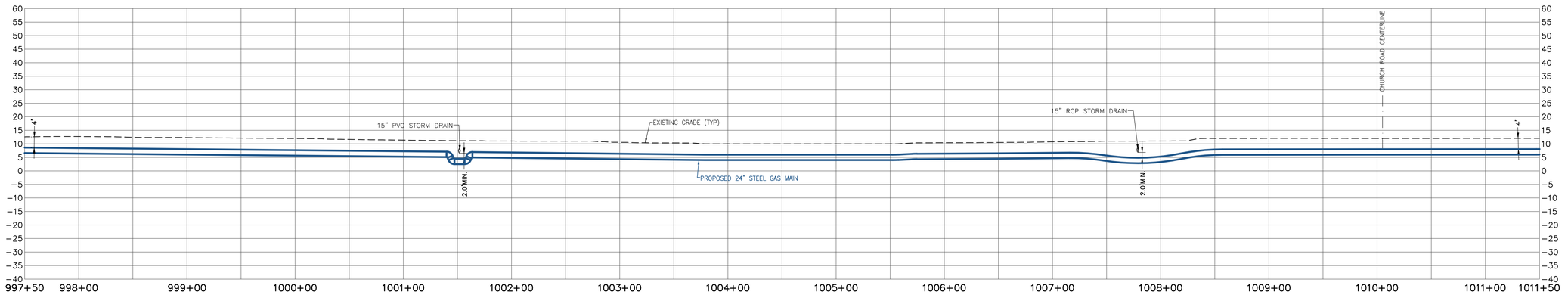
\\portland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_65–72 CS.dwg, May 18, 2015 – 11:45pm

24x36 SHEET
1:1

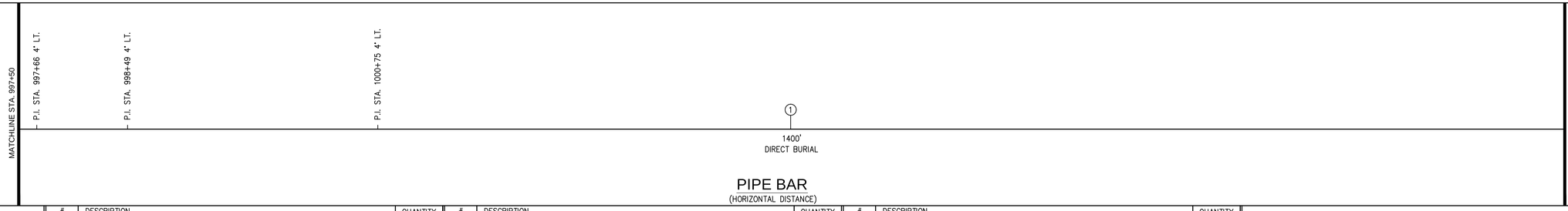
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	CAPE MAY COUNTY
DISTANCE	935' — 465'
RESTORATION	PAVEMENT–DETAIL # 2A/2B ON SHEET D–1A — PAVEMENT–DETAIL # 3A/3B ON SHEET D–1A
VEGETATION	SEE NOTE # 11 ON SHEET D–03



PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,400 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	0 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_65-72 CS.dwg

ALIGNMENT SHEET 71

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

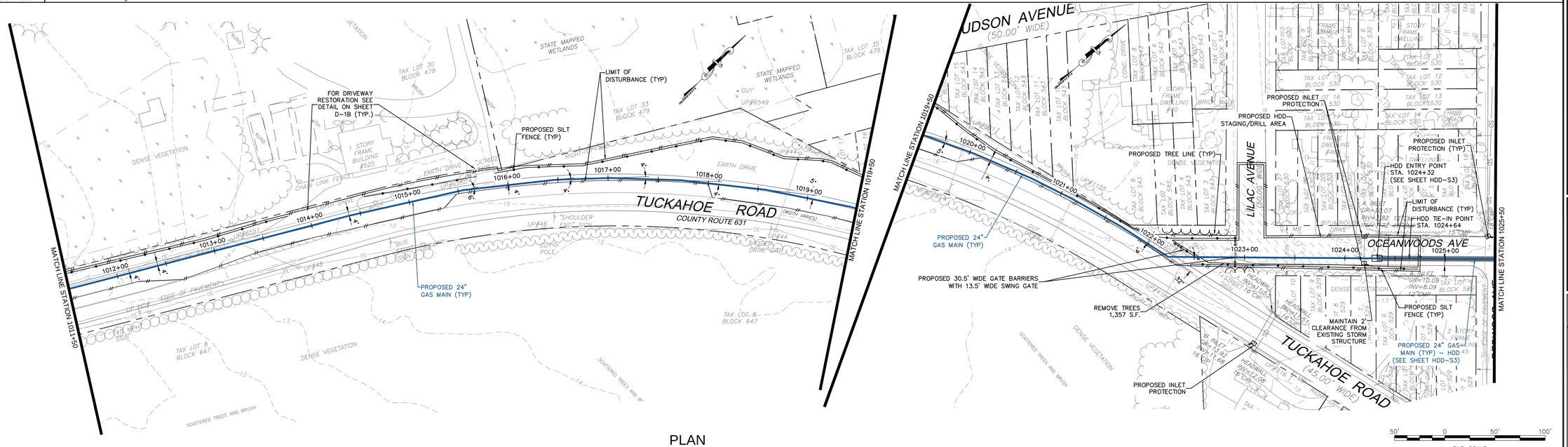
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-71

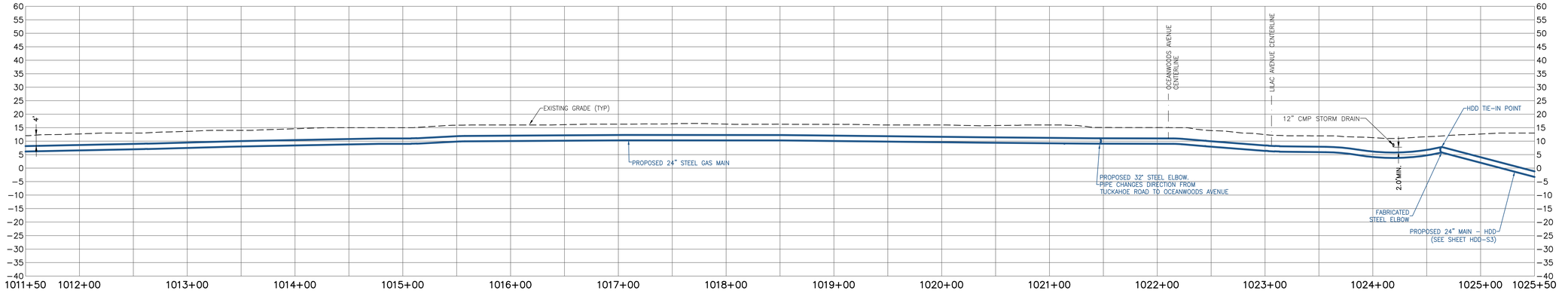
\\portland\projects1\225616 s\g – england power plant\wip\drawings_redesign\225616_AS_65-72 CS.dwg, May 18, 2015 – 1:46pm

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY						
OWNERSHIP	CAPE MAY COUNTY			GRASS–DETAIL # 6 SHEET D–1B	UPPER TOWNSHIP		
DISTANCE	321'	251'	211'	213'	65'	295'	86'
RESTORATION	PAVEMENT–DETAIL # 3A/3B ON SHEET D–1A	PAVEMENT–DETAIL # 2A/2B ON SHEET D–1A	PAVEMENT–DETAIL # 3A/3B ON SHEET D–1A	PAVEMENT–DETAIL # 2A/2B ON SHEET D–1A		PAVEMENT–DETAIL # 5A/5B ON SHEET D–1A AND D–1B	NONE
VEGETATION	SEE NOTE # 11 ON SHEET D–03						

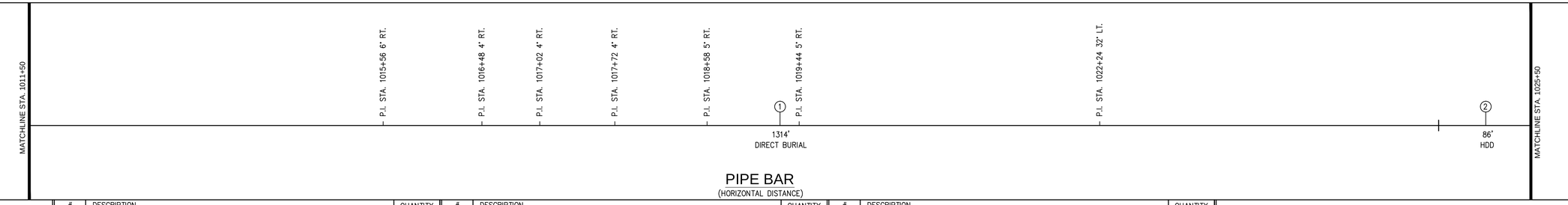


PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	1,314 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	86 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

REV.	DATE	DESCRIPTION
2	7/7/14	REVISED STATIONING & ADDED HDD–S3
1	12/20/13	ISSUED FOR BID

DESIGNED BY: LS/JG
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_65–72 CS.dwg

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NJ. LIC.NO. GE46534

ALIGNMENT SHEET 72

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

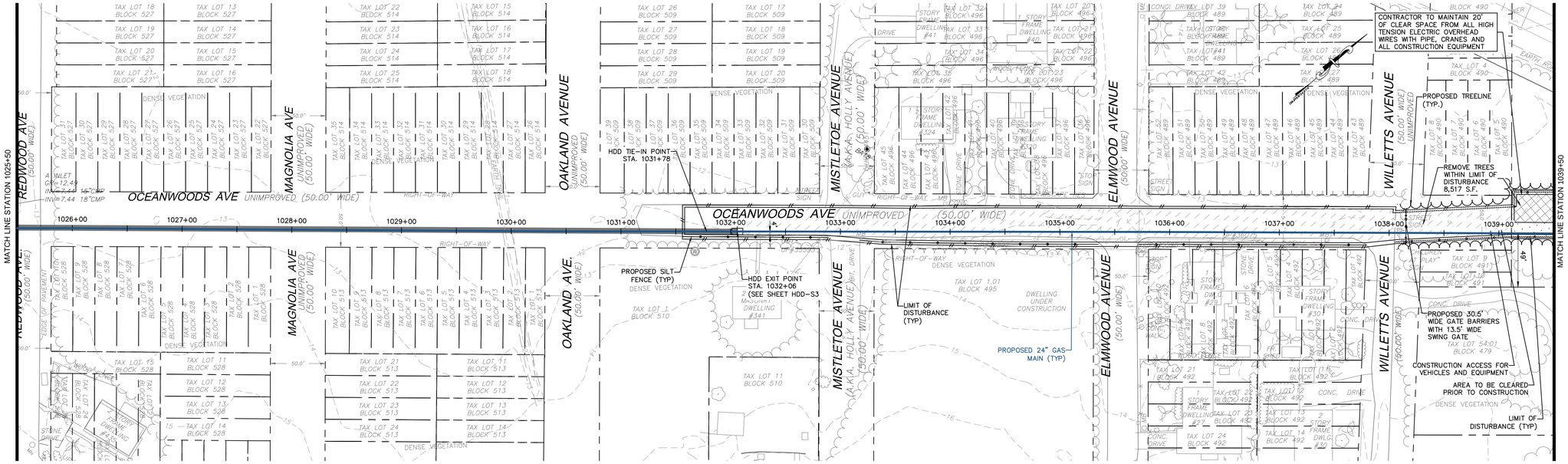
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-72

\\portland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_65–72 CS.dwg, May 18, 2015 – 1:46pm

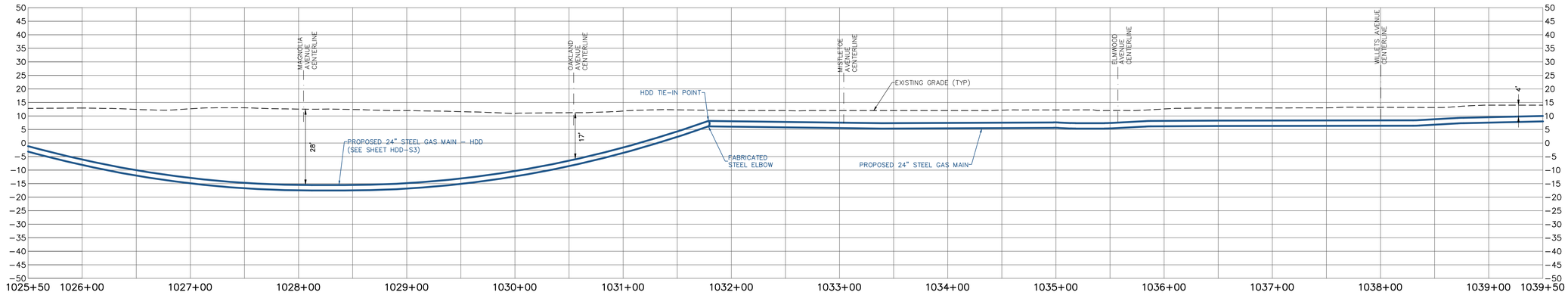
24x36 SHEET
1:1

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY		
OWNERSHIP	UPPER TOWNSHIP		ATLANTIC CITY RESCUE MISSION, INC. BLOCK 479 LOT 48.01
DISTANCE	629'	629'	142'
RESTORATION	NONE	PAVEMENT–DETAIL 5A/5B ON SHEET D–1A AND D–1B	GRASS–DETAIL 6 ON SHEET D–1B
VEGETATION	NONE		

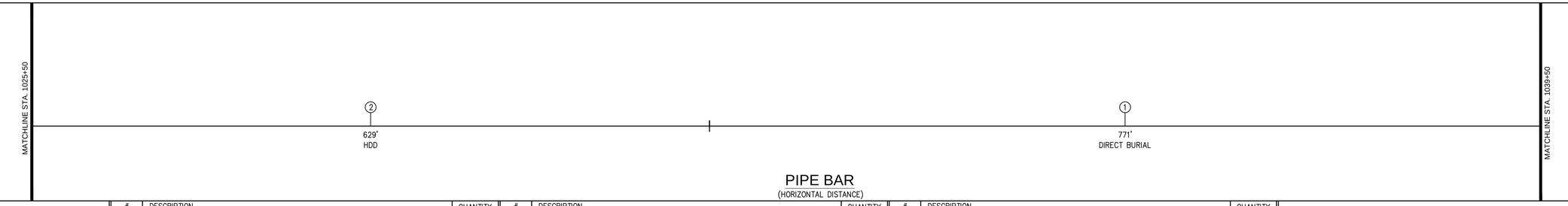


PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	771 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	629 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD–S3	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_73–82 CS.dwg

ALIGNMENT SHEET 73

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

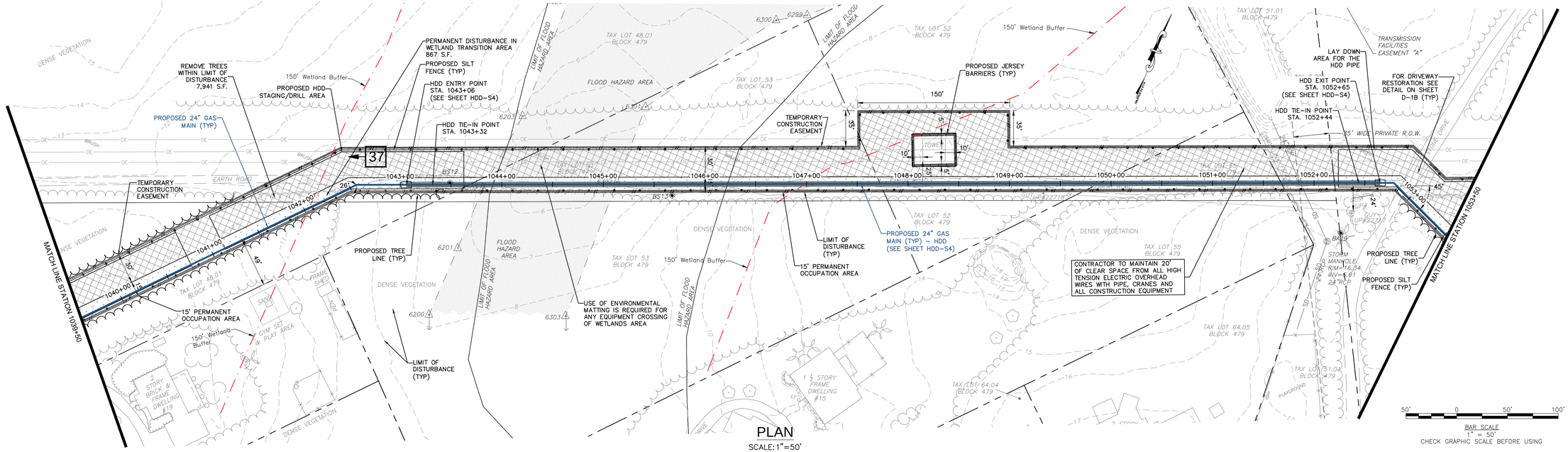
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-73

\\portland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_73–82 CS.dwg, May 18, 2015 – 1:47pm

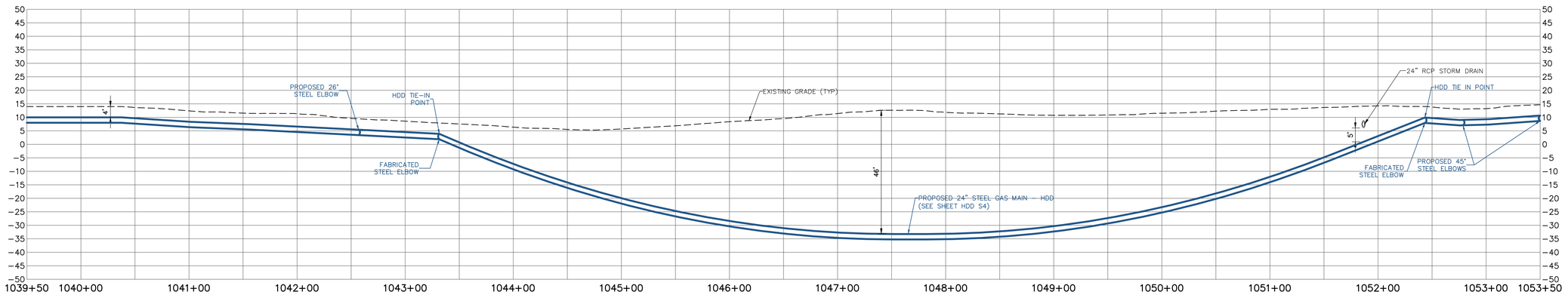
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY					
OWNERSHIP	ATLANTIC CITY RESCUE MISSION, INC. BLOCK 479 LOT 48.01	MACK, WILLIAM J. JR BLOCK 479 LOT 53	ATLANTIC CITY ELECTRIC CO R/E DEPT BLOCK 479 LOT 52	GREGORY G.CILIBERTO & TRICIA A. CILIBERTO BLOCK 479 LOT 55	UPPER TOWNSHIP	ATLANTIC CITY ELECTRIC CO R/E DEPT, BLOCK 661 LOT 81
DISTANCE	382'	912'			8'	91'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B	NONE				GRASS–DETAIL 6 ON SHEET D–1B
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE				

STONE DRIVE REPLACE IN–KIND

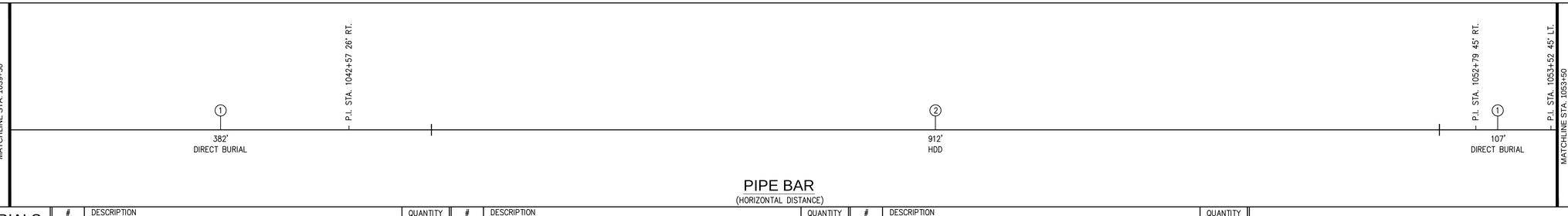


PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	489 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	912 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD–S4	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_73–82 CS.dwg

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East Windsor, New Jersey 08520
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N.J. LIC.NO. GE46534

ALIGNMENT SHEET 74

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

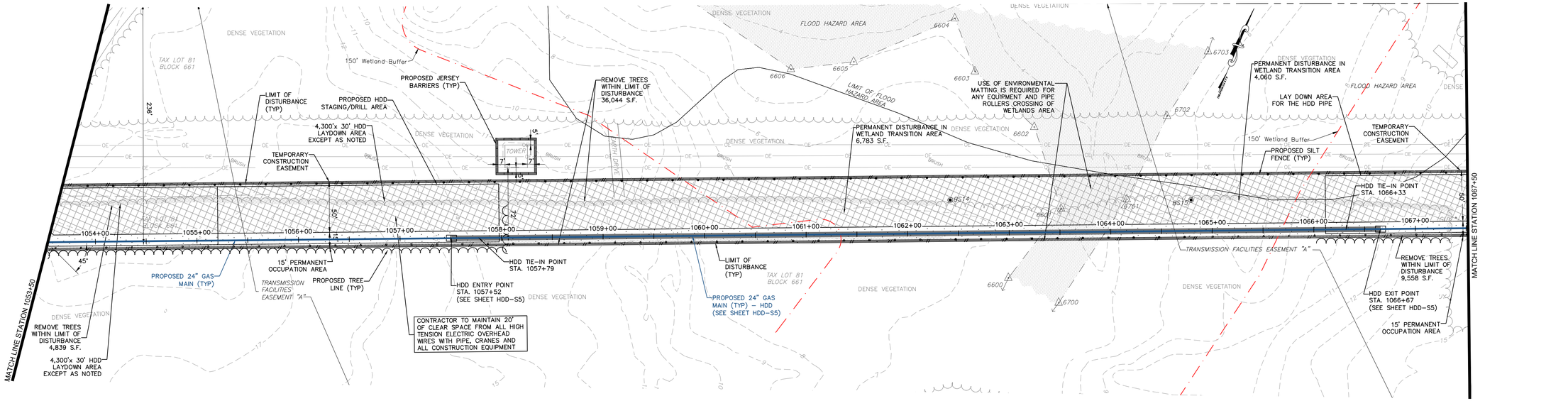
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-74

\\potland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_73–82 CS.dwg, May 18, 2015 – 1:48pm

24x36 SHEET
1:1

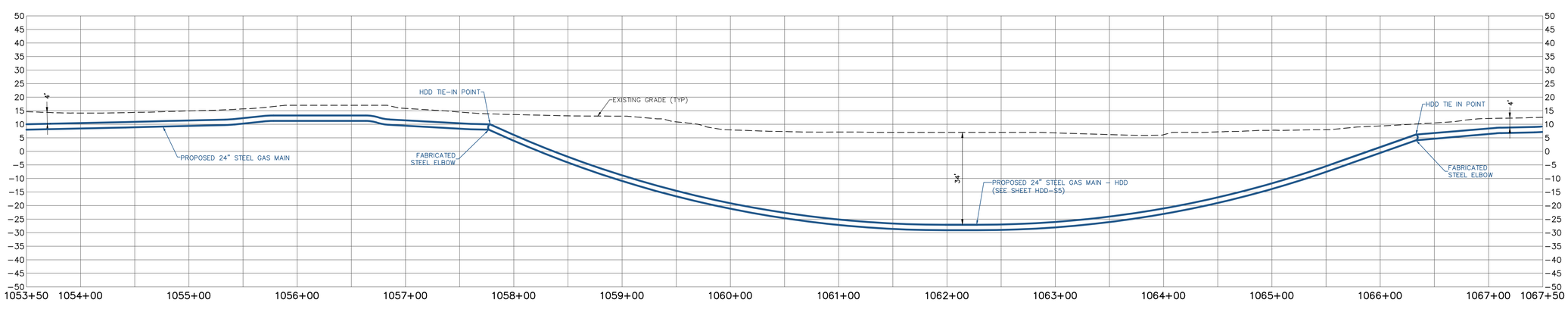
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY		
OWNERSHIP	ATLANTIC CITY ELECTRIC CO R/E DEPT BLOCK 661 LOT 81		
DISTANCE	428'	855'	117'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B	NONE	GRASS–DETAIL 6 ON SHEET D–1B
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE	SEE NOTE # 11 ON SHEET D–03



PLAN

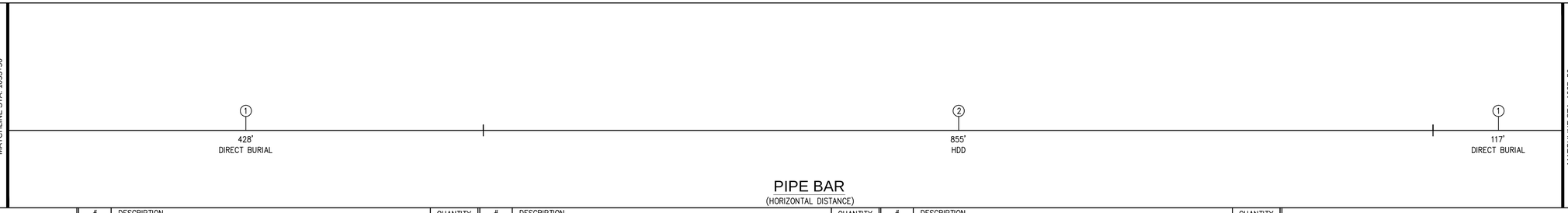
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE

SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR

(HORIZONTAL DISTANCE)

PIPE MATERIALS (LINEAR FOOTAGE IS APPROXIMATE)	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY
	①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	545 L.F.	②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	855 L.F.	③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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DENNIS M. WALSH, P.E.
N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE	DESIGNED BY: LS/AS DRAWN BY: GA/PJ CHECKED BY: DW 225616_AS_73–82 CS.dwg
2	REVISED STATIONING & ADDED HDD–S5	7/1/14	
1	ISSUED FOR BID	12/20/13	

ALIGNMENT SHEET 75

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

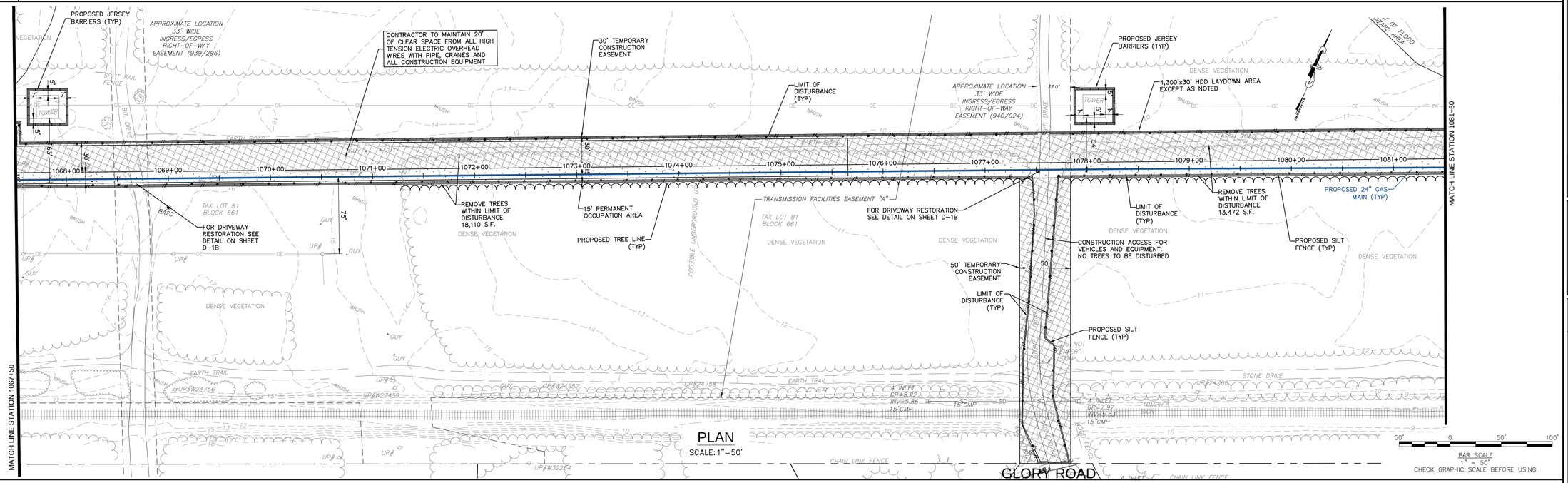
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-75

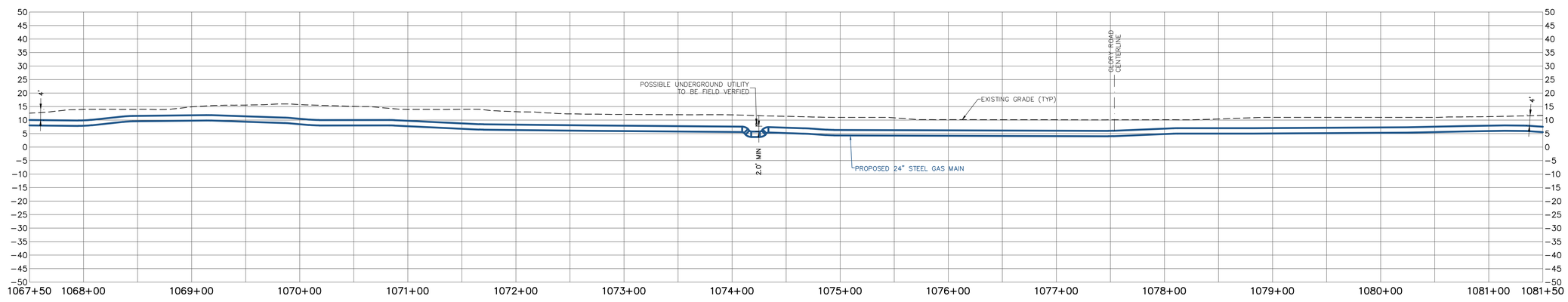
\\pcfiond\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_AS_73–82 CS.dwg, May 18, 2015 – 1:49pm

24x36 SHEET
1:1

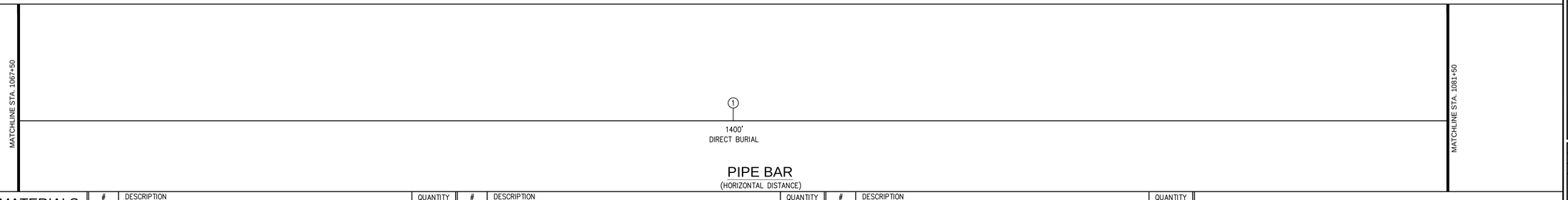
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY					
OWNERSHIP	ATLANTIC CITY ELECTRIC CO R/E DEPT BLOCK 661 LOT 81		BITUMINOUS DRIVE REPLACE IN-KIND			BITUMINOUS DRIVE REPLACE IN-KIND
DISTANCE	114'	12'	875'		9'	390'
RESTORATION	GRASS-DETAIL 6 ON SHEET D-1B	●	GRASS-DETAIL 6 ON SHEET D-1B		●	GRASS-DETAIL 6 ON SHEET D-1B
VEGETATION	SEE NOTE # 11 ON SHEET D-03					



PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS (LINEAR FOOTAGE IS APPROXIMATE)	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY	#	DESCRIPTION	QUANTITY
	①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL-2, X-60, ERW OR DSAW PRITEC (40/10) OR X-TEC II (60/10)	1,400 L.F.	②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL-2, X-60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 - 16 MIL)	0 L.F.	③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL-2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_73-82 CS.dwg

ALIGNMENT SHEET 76

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

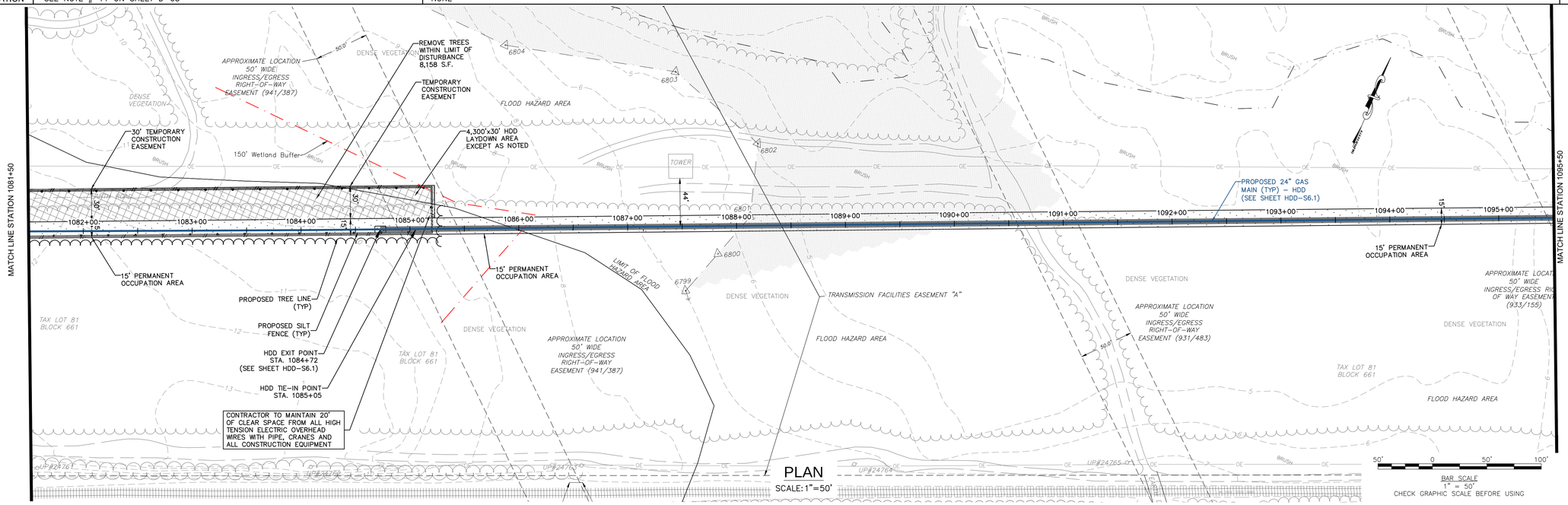
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

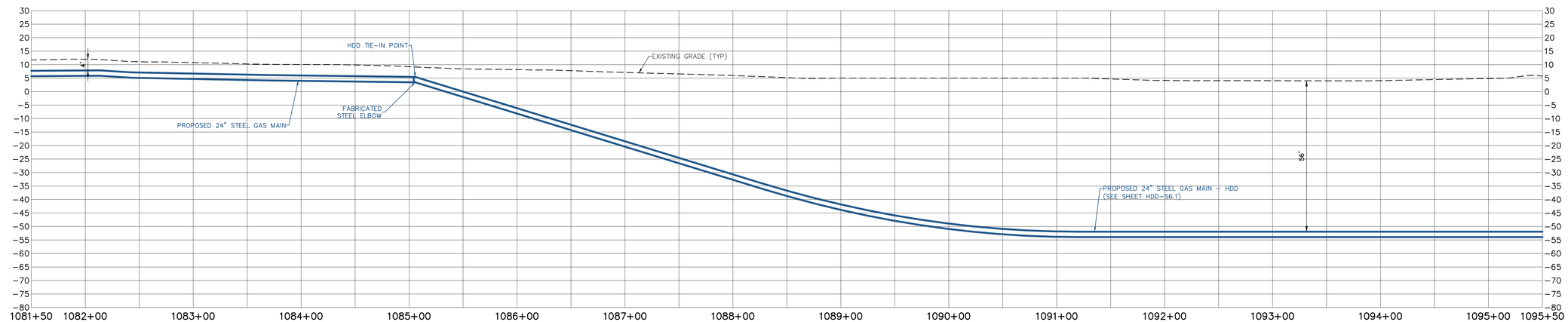
AS-76

\\pcfiond\projects1\225616 s\jg - england power plant\wip\Drawings_redesign\225616_AS_73-82 CS.dwg, May 18, 2015 - 1:49pm

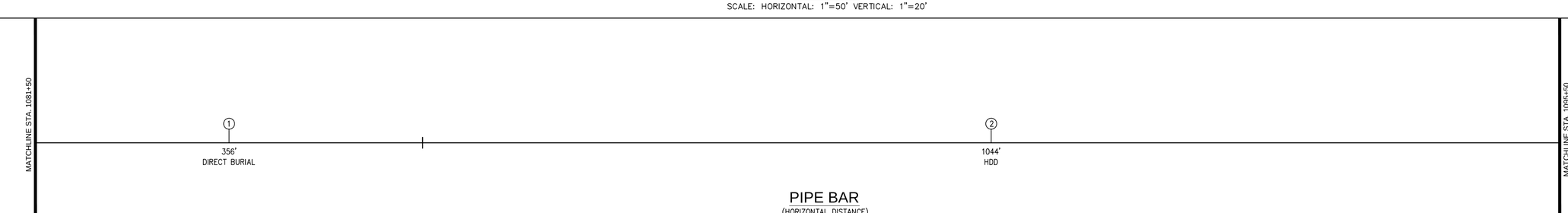
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY	
OWNERSHIP	ATLANTIC CITY ELECTRIC CO R/E DEPT BLOCK 661 LOT 81	
DISTANCE	356'	1,044'
RESTORATION	GRASS – DETAIL 6 ON SHEET D–1B	NONE
VEGETATION	SEE NOTE # 11 ON SHEET D–03	NONE



PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	356 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,044 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_AS_73–82 CS.dwg

ALIGNMENT SHEET 77

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

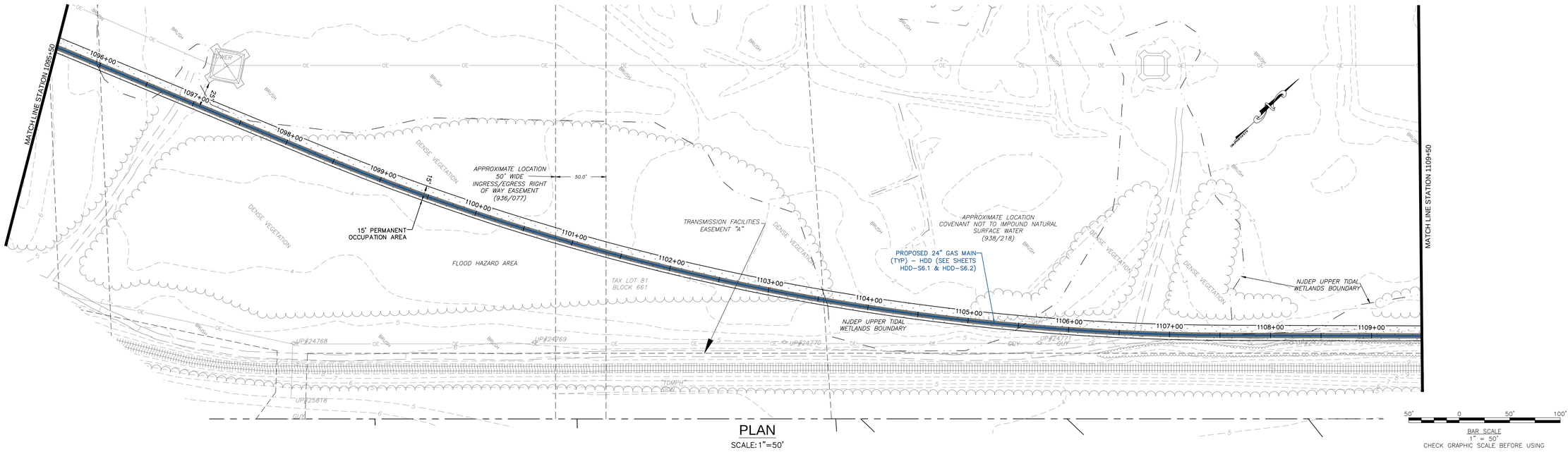
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-77

\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS–73–82 CS.dwg, May 18, 2015 – 1:50pm

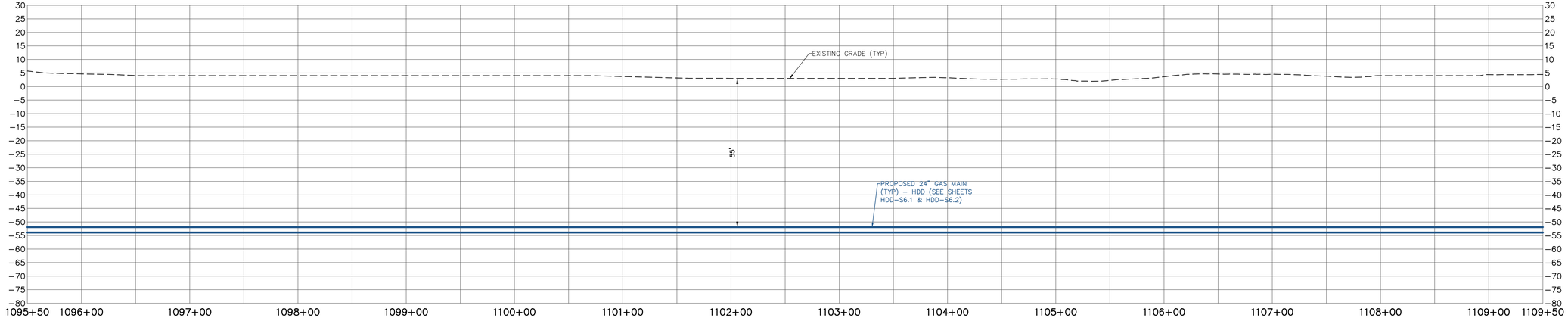
24x36 SHEET 1:1

TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	ATLANTIC CITY ELECTRIC CO R/E DEPT BLOCK 661 LOT 81
DISTANCE	1,400'
RESTORATION	NONE
VEGETATION	NONE

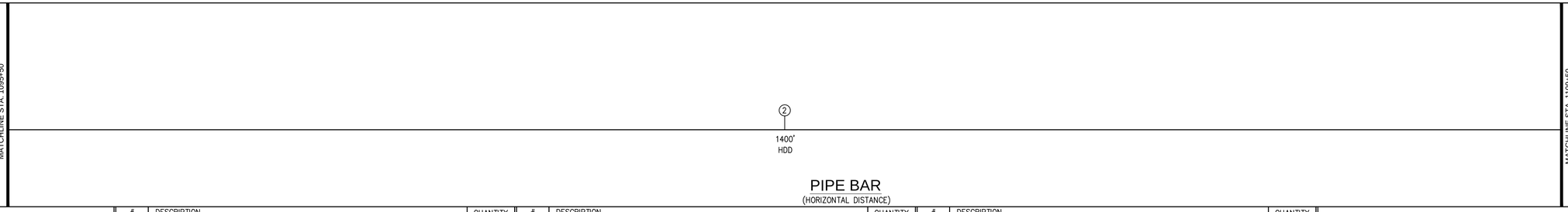


PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL-2, X-60, ERW OR DSAW PRITEC (40/10) OR X-TEC II (60/10)	0 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL-2, X-60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 - 16 MIL)	1,400 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL-2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_73-82 CS.dwg

ALIGNMENT SHEET 78

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-78

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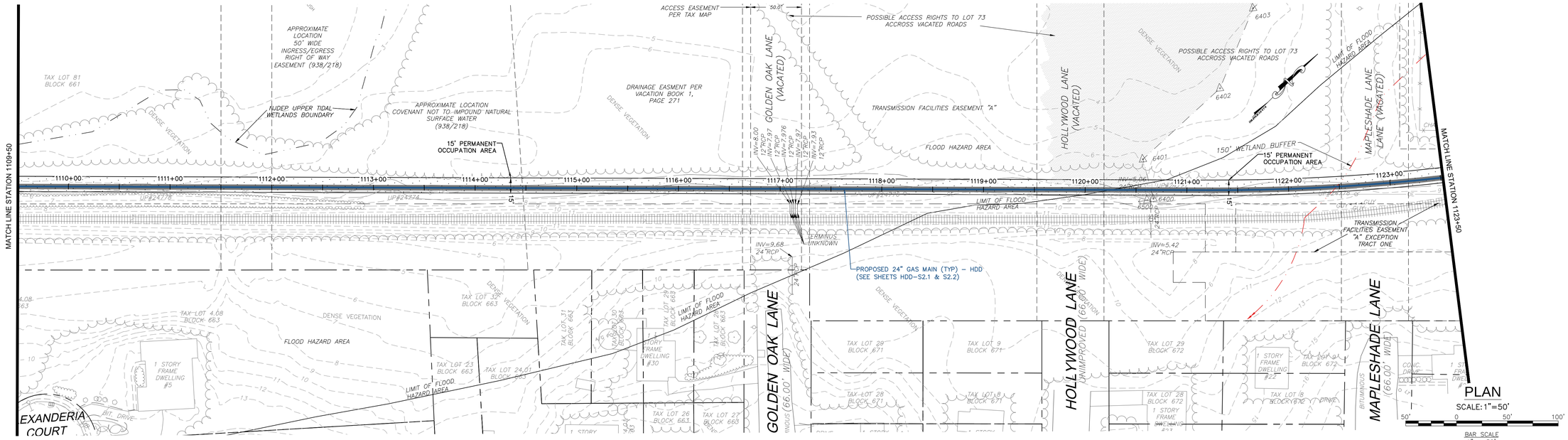
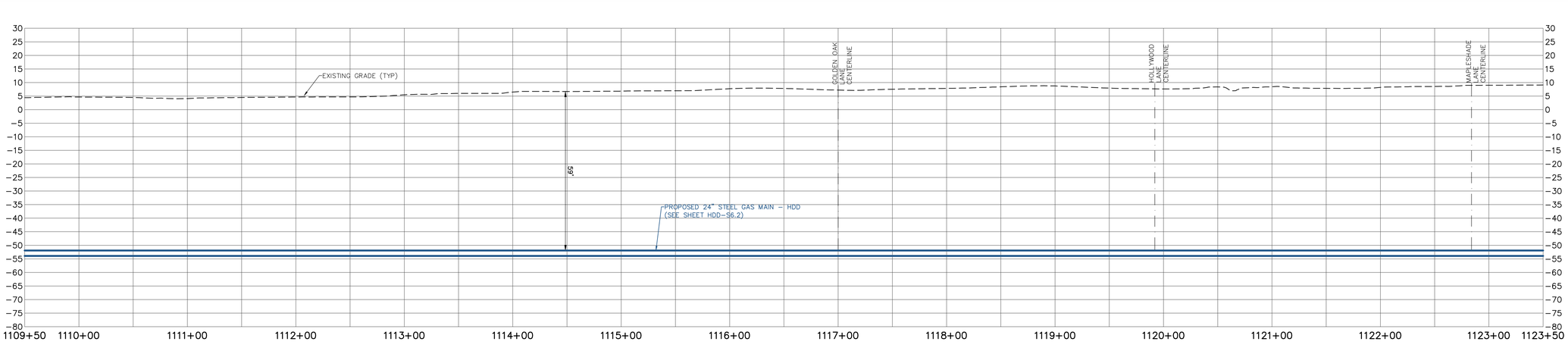
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY
OWNERSHIP	ATLANTIC CITY ELECTRIC CO R/E DEPT BLOCK 661 LOT 81
DISTANCE	1,400'
RESTORATION	NONE
VEGETATION	NONE



PLAN

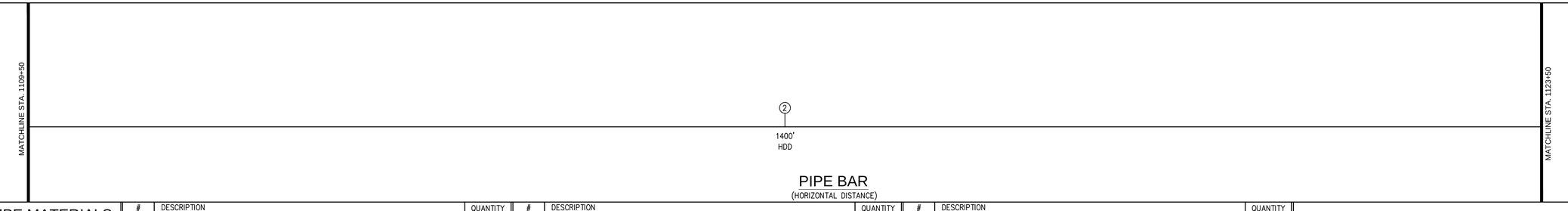
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE

SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR

(HORIZONTAL DISTANCE)

PIPE MATERIALS

(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
1	24.00" STEEL PIPE 0.375" WALL, API 5L PSL-2, X-60, ERW OR DSAW PRITEC (40/10) OR X-TEC II (60/10)	0 L.F.
2	24.00" STEEL PIPE 0.500" WALL, API 5L PSL-2, X-60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,400 L.F.
3	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL-2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR HDD	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_73-82 CS.dwg

ALIGNMENT SHEET 79

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-79

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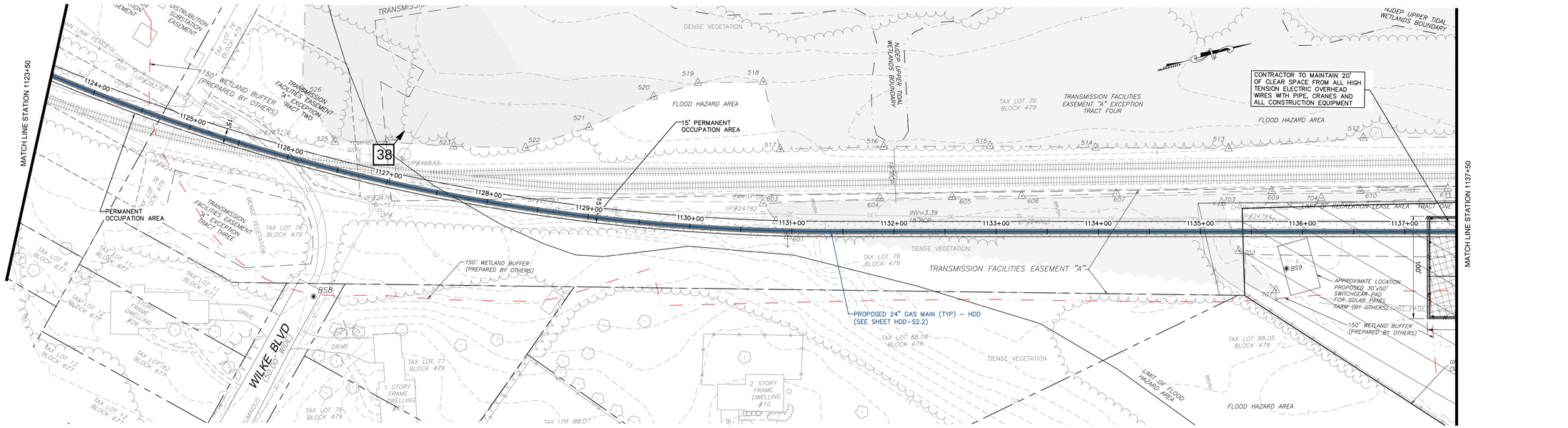
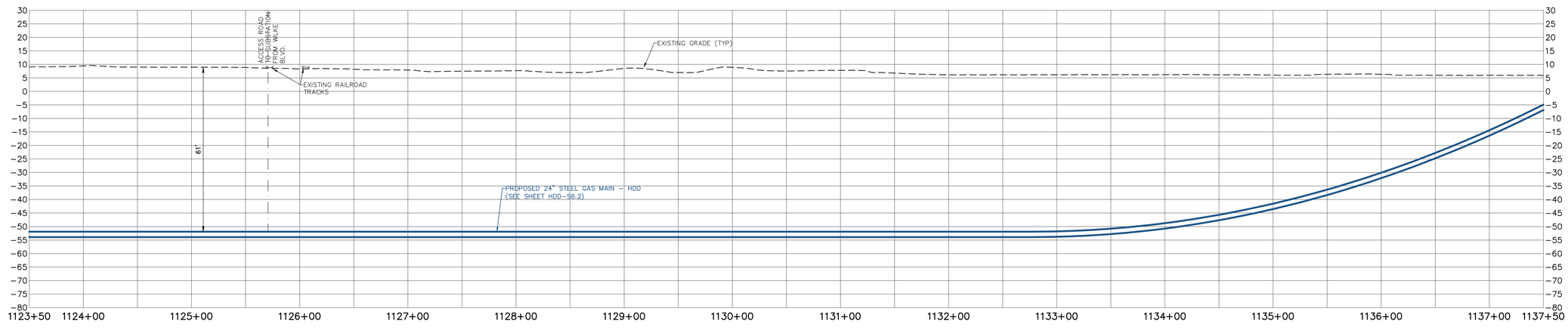
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY	
OWNERSHIP	ATLANTIC CITY ELECTRIC CO R/E DEPT BLOCK 661 LOT 81	B.L. ENGLAND BLOCK 479 LOT 76
DISTANCE	1,400'	
RESTORATION	NONE	
VEGETATION	NONE	



PLAN

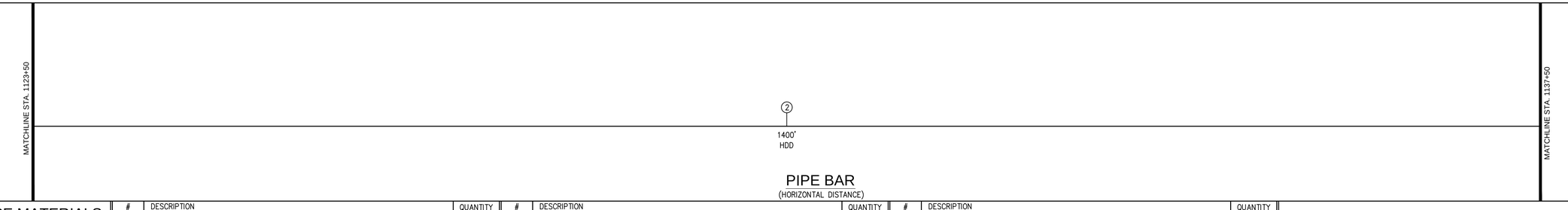
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE

SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL-2, X-60, ERW OR DSAW PRITEC (40/10) OR X-TEC II (60/10)	0 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL-2, X-60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	1,400 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL-2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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REV	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/26/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_73-82 CS.dwg

ALIGNMENT SHEET 80

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-80

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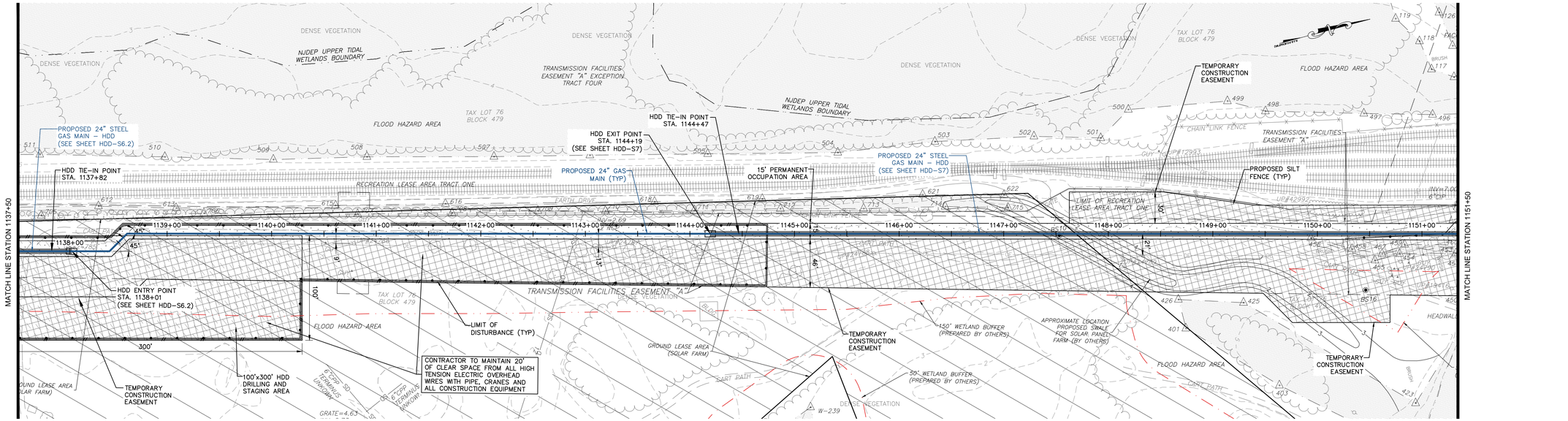
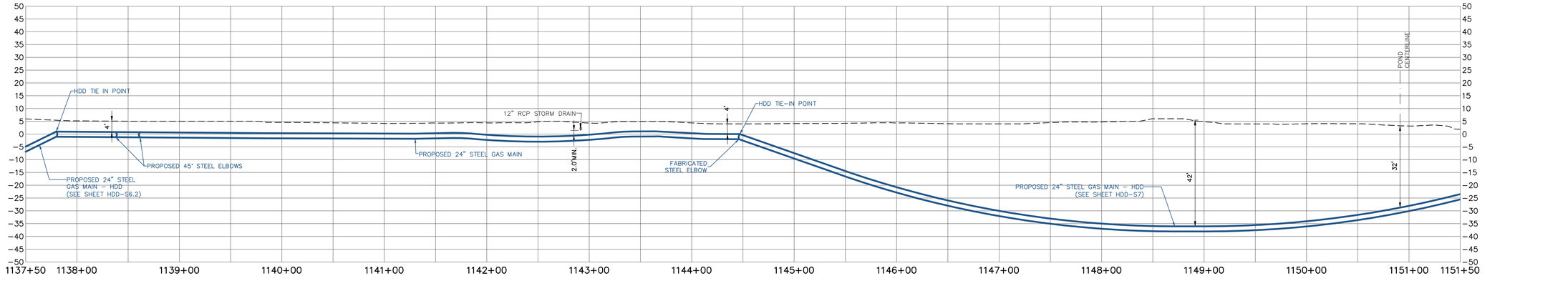
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY		
OWNERSHIP	B.L. ENGLAND BLOCK 479 LOT 76		
DISTANCE	30'	667'	703'
RESTORATION	NONE	GRASS – DETAIL 6 ON SHEET D–1B	NONE
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D–03	NONE



PLAN

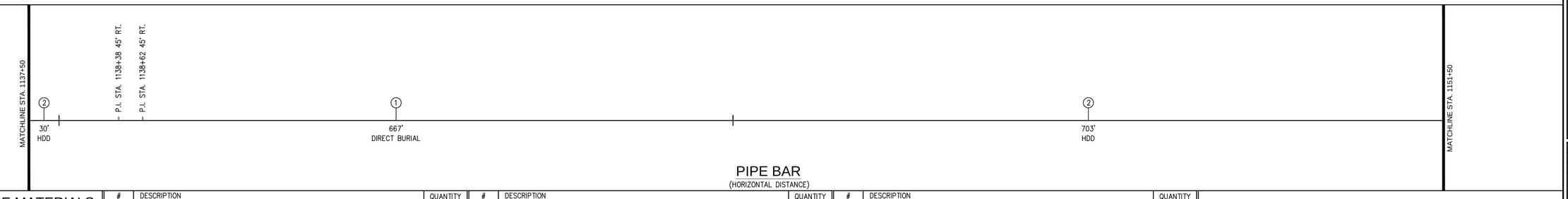
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING



PROFILE

SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR

(HORIZONTAL DISTANCE)

PIPE MATERIALS

(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	667 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	733 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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N.J. LIC. NO. GE46534

REV.	DESCRIPTION	DESIGNED BY: LS/AS DRAWN BY: GA/PJ	CHECKED BY: DW 225616_AS_73–82 CS.dwg	DATE
2	REVISED STATIONING & ADDED HDD–S7			7/1/14
1	ISSUED FOR BID			12/20/13

ALIGNMENT SHEET 81

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

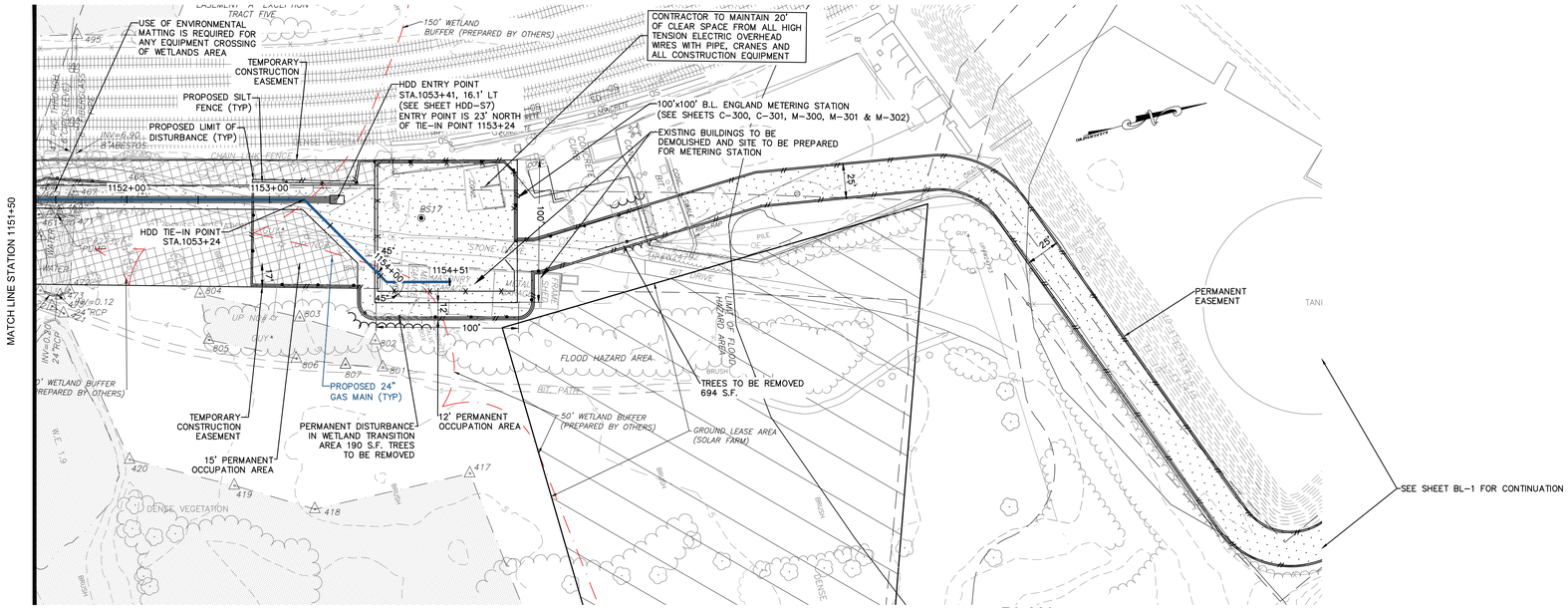
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-81

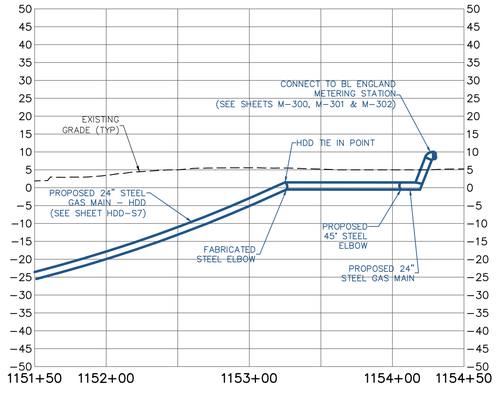
\\portland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_AS_73–82 CS.dwg, May 18, 2015 – 1:52pm

24x36 SHEET
1:1

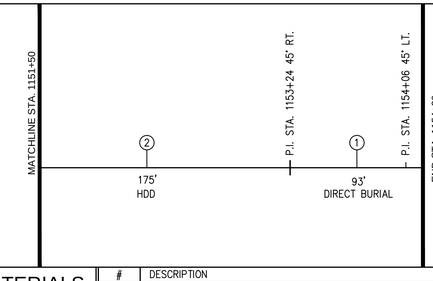
TOWNSHIP & COUNTY	UPPER TOWNSHIP, CAPE MAY COUNTY		
OWNERSHIP	B.L. ENGLAND BLOCK 479 LOT 76		
DISTANCE	175'	93'	
RESTORATION	NONE	GRASS–DETAIL 6 ON SHEET D–1B	SEE C–300 DRAWING FOR RESTORATIONS
VEGETATION	NONE	SEE NOTE # 11 ON SHEET D–03	



PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=20'



PIPE BAR
(HORIZONTAL DISTANCE)

PIPE MATERIALS
(LINEAR FOOTAGE IS APPROXIMATE)

#	DESCRIPTION	QUANTITY
①	24.00" STEEL PIPE 0.375" WALL, API 5L PSL–2, X–60, ERW OR DSAW PRITEC (40/10) OR X–TEC II (60/10)	93 L.F.
②	24.00" STEEL PIPE 0.500" WALL, API 5L PSL–2, X–60, ERW OR DSAW, COATED WITH POWERCRETE (40 MIL) ON FUSION BOND EPOXY (14 – 16 MIL)	175 L.F.
③	30.00" STEEL PIPE O.D. X 0.500" WALL, API 5L PSL–2, GRADE B, ERW OR DSAW, BARE STEEL	0 L.F.

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REV.	DESCRIPTION	DATE
2	REVISED STATIONING & ADDED HDD–S7	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_AS_73–82 CS.dwg

ALIGNMENT SHEET 82

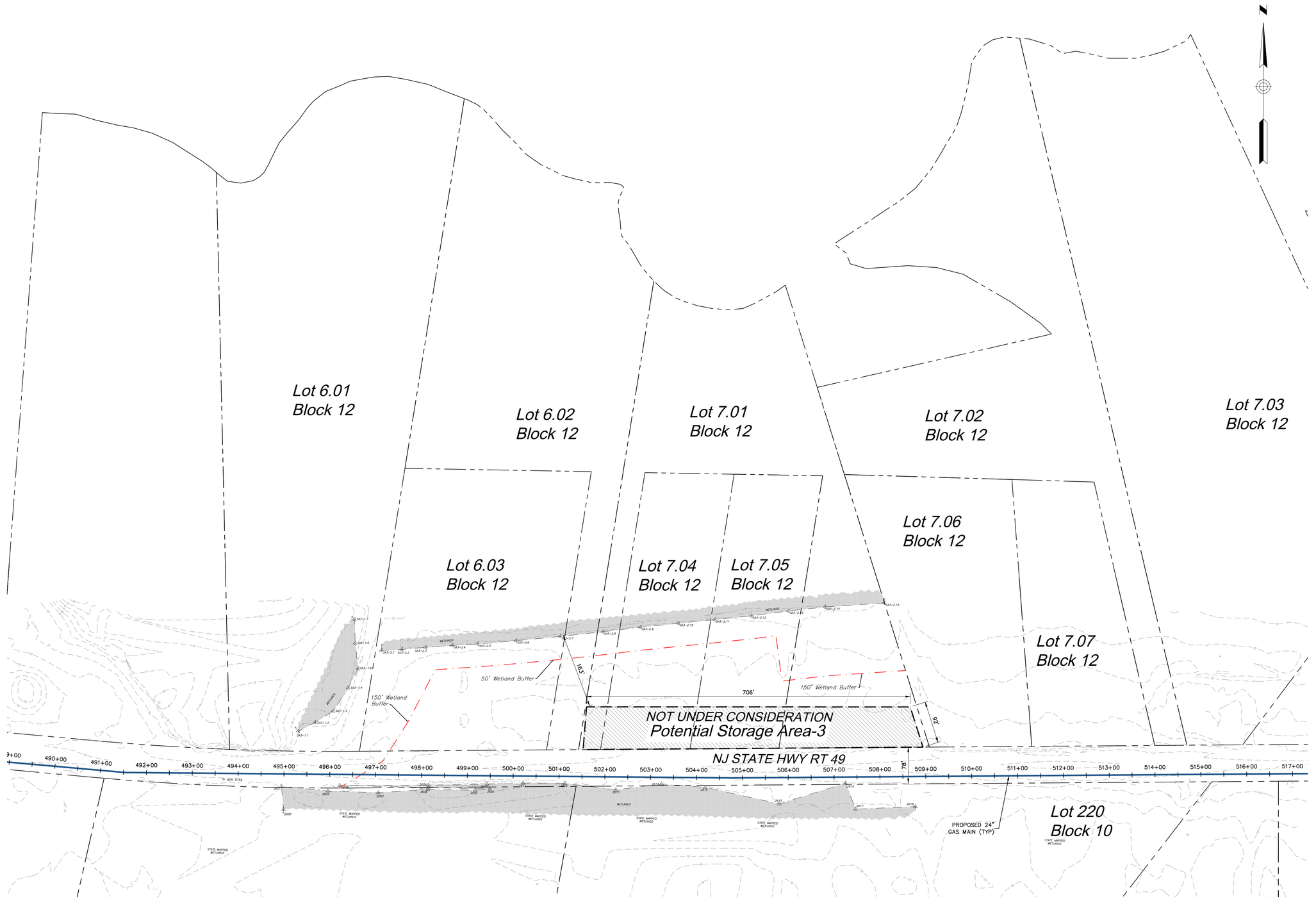
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

AS-82

\\portland\projects1\225616 s\g – england power plant\wip\drawings_redesign\225616_AS_73–82 CS.dwg, May 18, 2015 – 1:53pm



NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=100'

REFERENCE SHEET AS-35

100' 0 100' 200'
BAR SCALE
1" = 100'
CHECK GRAPHIC SCALE BEFORE USING

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East Windsor, New Jersey 08520
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NJ LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS CHECKED BY: DW
DRAWN BY: GA/PJ 225616-SA_1-6 CS.dwg

POTENTIAL STORAGE AREA 3

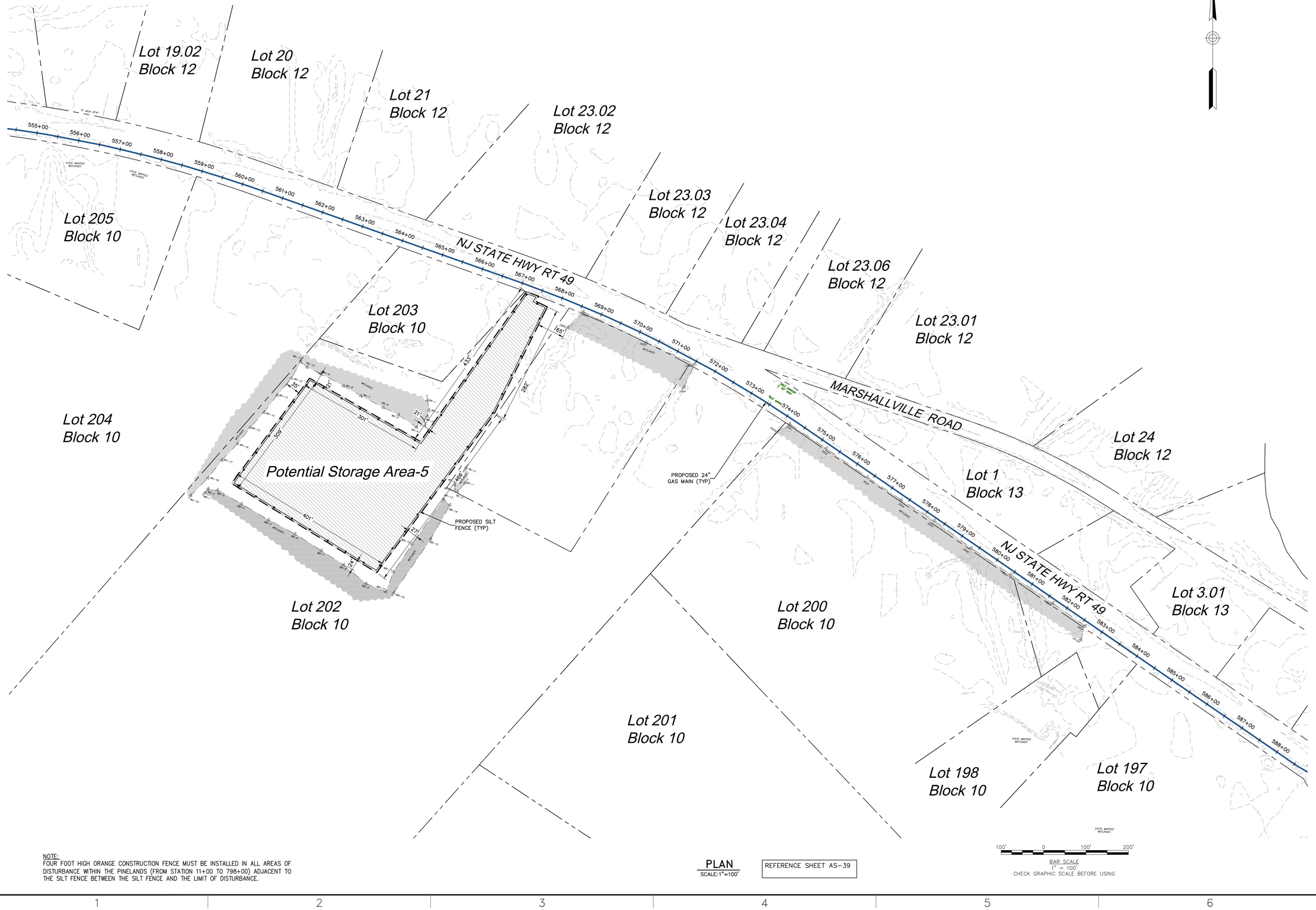
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

SA-1

\\portland\projects\225616 sig - england power plant\wip\Drawings_redesign\225616-SA_1-6 CS.dwg, May 18, 2015 - 1:53pm



NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=100'

REFERENCE SHEET AS-39

100' 0 100' 200'
BAR SCALE
1" = 100'
CHECK GRAPHIC SCALE BEFORE USING

50 Millstone Road, Building 300
East Windsor, New Jersey 08520
877.786.8881 | www.woodardcurran.com

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WOODARD & CURRAN

DENNIS M. WALSH, P.E.
NJ LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR #80	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616-SA_1-6 CS.dwg

POTENTIAL STORAGE AREA 5

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

SA-2

\\portland\projects\225616 sjg - england power plant\wip\Drawings_redesign\225616-SA_1-6 CS.dwg, May 18, 2015 - 1:53pm

24x36 SHEET
1:1

CEDAR AVENUE

MARSHALLVILLE ROAD COUNTY HWY 632

NJ STATE HWY RT 49

PROPOSED 24" GAS MAIN (TYP)

630+00 631+00 632+00 633+00 634+00 635+00 636+00 637+00 638+00 639+00 640+00 641+00

WETLANDS

Lot 5
Block 310

Lot 1
Block 309

Lot 2
Block 309

Lot 7
Block 310

Lot 1
Block 307

Lot 1
Block 308

Lot 1
Block 24

Lot 3.01
Block 902

514'

41'

156'

335'

Potential Storage Area-6

PROPOSED SILT FENCE (TYP)

220'

198'

201'

276'

150'

Potential Storage Area-7

Lot 13
Block 306

34'

96'

PROPOSED SILT FENCE (TYP)

245'

RAILROAD

COUNTY HWY 659

Lot 1
Block 20

Lot 12
Block 306

Lot 14.04
Block 306

Lot 2
Block 24

Lot 11
Block 306

Lot 13
Block 308

Lot 14.05
Block 306

WA-1 WA-2 WA-3 WA-4 WA-5 WA-6

WETLANDS

NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=80'

REFERENCE SHEET AS-44

80' 0 80' 160'
BAR SCALE
1" = 80'
CHECK GRAPHIC SCALE BEFORE USING

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NJ LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616-SA_1-6 CS.dwg

POTENTIAL STORAGE AREA 6 & 7

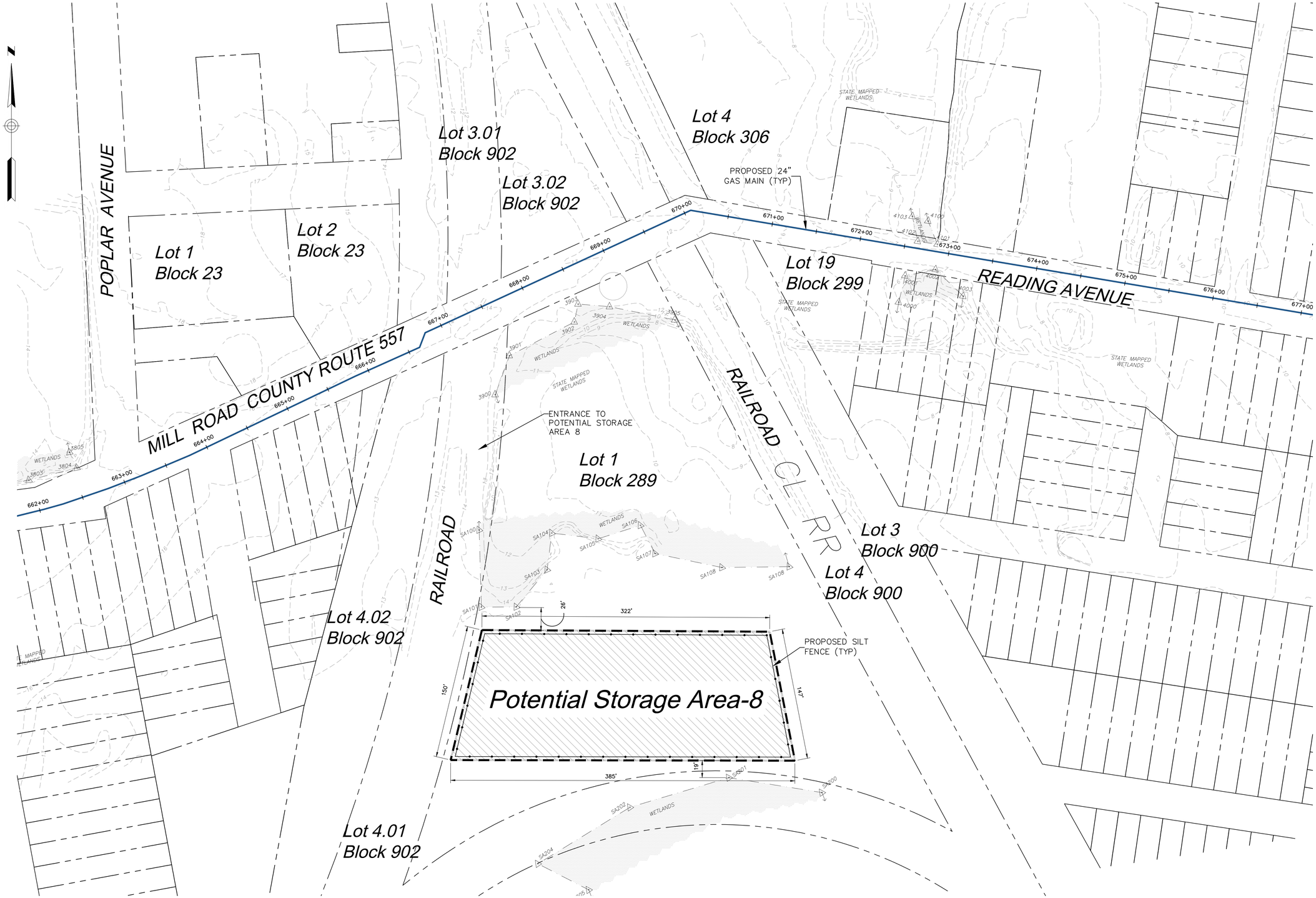
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

SA-3

\\portland\projects1\225616 sjg - england power plant\wip\Drawings_redesign\225616-SA_1-6 CS.dwg, May 18, 2015 - 1:53pm



NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1" = 50'

REFERENCE SHEETS
AS-46 AND AS-47

50' 0 50' 100'
BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING

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East Windsor, New Jersey 08520
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NJ LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616-SA_1-6 CS.dwg

POTENTIAL STORAGE AREA 8

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

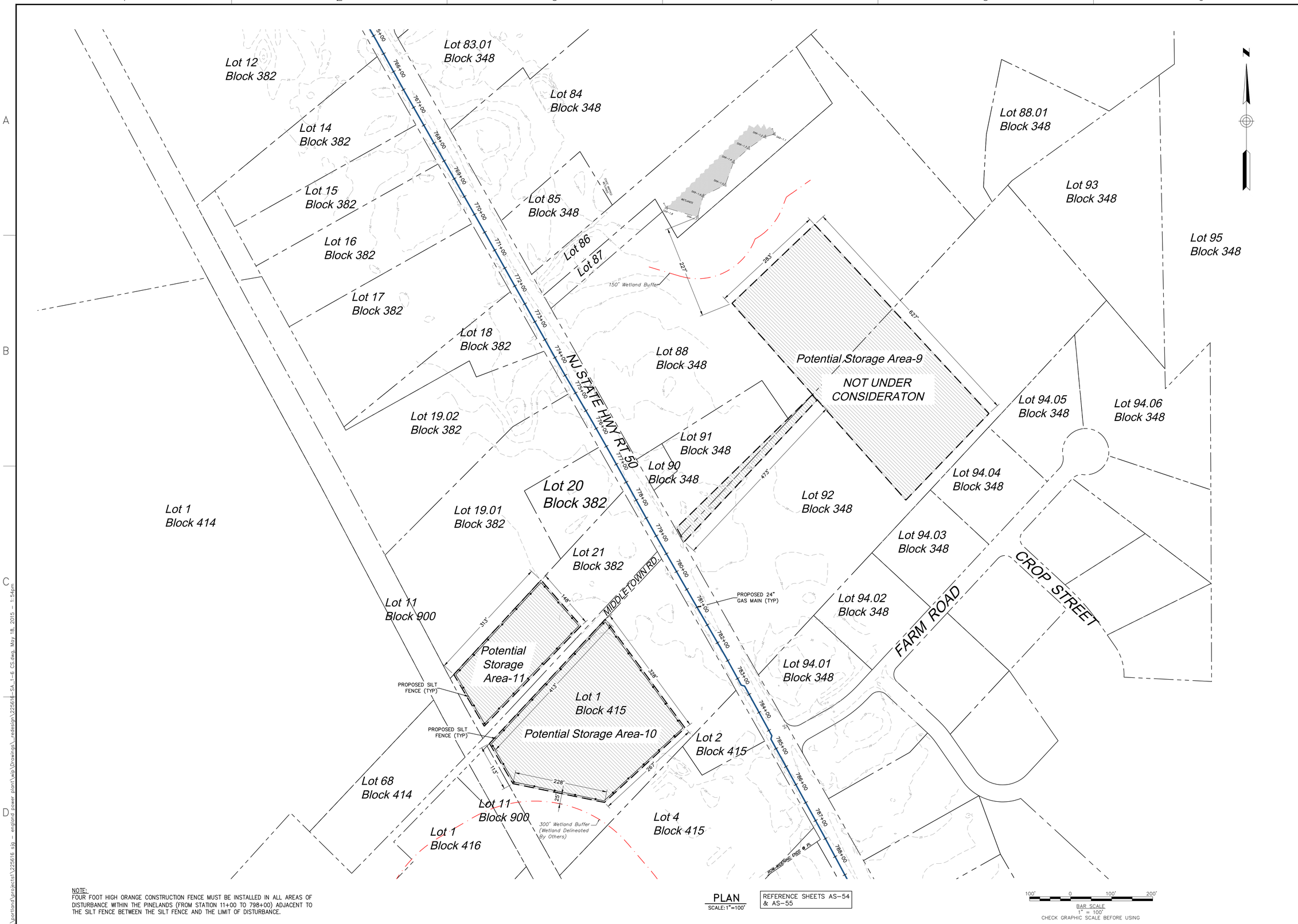
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

SA-4

24x36 SHEET
1:1

\\portland\projects1\225616 sig - england power plant\wip\Drawings_redesign\225616-SA_1-6 CS.dwg, May 18, 2015 - 11:54pm



NOTE:
FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN
SCALE: 1"=100'

REFERENCE SHEETS AS-54 & AS-55

100' 0 100' 200'
BAR SCALE
1" = 100'
CHECK GRAPHIC SCALE BEFORE USING

24x36 SHEET
1:1

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DENNIS M. WALSH, P.E.
NJ LIC.NO. GE46534

REV	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/PJ
CHECKED BY: DW
225616-SA_1-6 CS.dwg

POTENTIAL STORAGE AREA
9,10, & 11

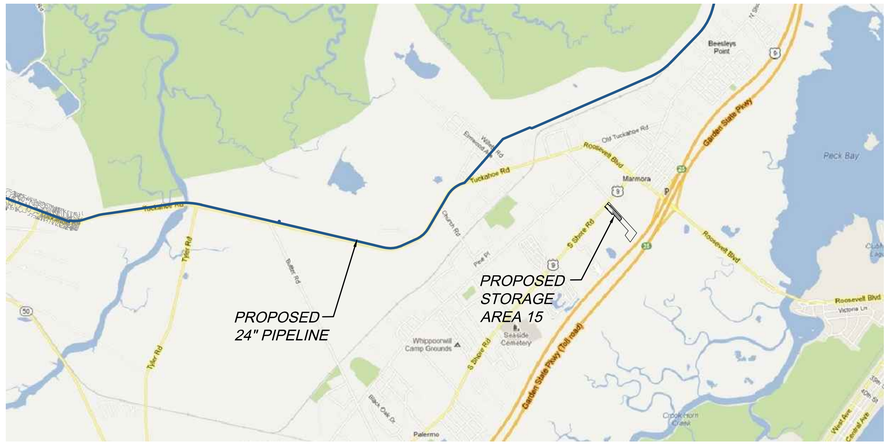
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

SA-5

\\portland\projects1\225616 sjg - england power plant\wip\Drawings_redesign\225616-SA_1-6 CS.dwg, May 18, 2015 - 1:54pm



PINE STREET

ROOSEVELT BLVD

TUCKAHOE ROAD

U.S. RT 9 / SOUTH SHORE ROAD

GARDEN STATE PARKWAY

Lot 12
Block 651

Lot 11
Block 651

Lot 15
Block 651

Lot 25
Block 600

Lot 30
Block 600

Lot 26
Block 600

Lot 31
Block 600

Lot 24.02
Block 600

Lot 32
Block 600

Lot 34
Block 600

Lot 24.01
Block 600

Lot 34.02
Block 599

Lot 34.01
Block 599

Potential
Storage
Area-15

Lot 37
Block 599

Lot 51
Block 599

Lot 33
Block 599

Lot 31
Block 599

Lot 30
Block 599

PLAN
SCALE: 1"=150'

150' 0 150' 300'
BAR SCALE
1" = 150'
CHECK GRAPHIC SCALE BEFORE USING

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NJ. LIC.NO. GE46534

REV	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR 60%	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616-SA_1-6 CS.dwg

POTENTIAL STORAGE AREA 15

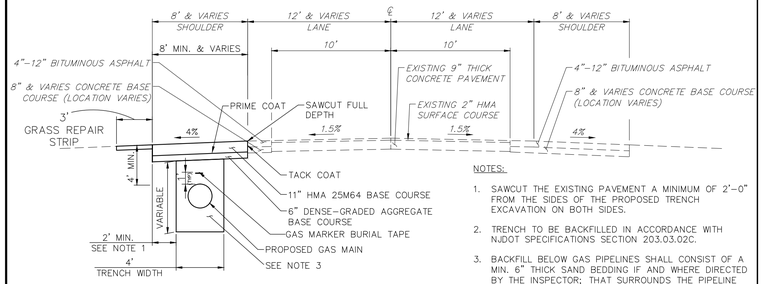
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

SA-6

\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616-SA_1-6 CS.dwg, May 18, 2015 – 1:54pm

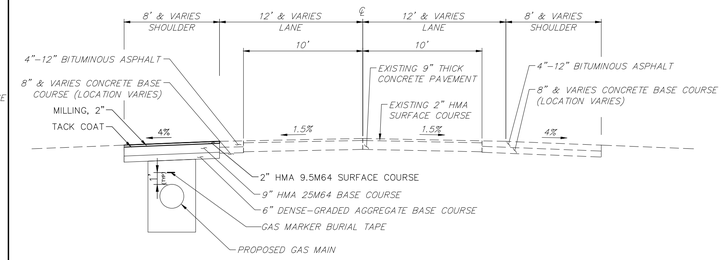


NOTES:

1. SAWCUT THE EXISTING PAVEMENT A MINIMUM OF 2'–0" FROM THE SIDES OF THE PROPOSED TRENCH EXCAVATION ON BOTH SIDES.
2. TRENCH TO BE BACKFILLED IN ACCORDANCE WITH NJDOT SPECIFICATIONS SECTION 203.03.02C.
3. BACKFILL BELOW GAS PIPELINES SHALL CONSIST OF A MIN. 6" THICK SAND BEDDING IF AND WHERE DIRECTED BY THE INSPECTOR; THAT SURROUNDS THE PIPELINE ON ALL SIDES.
4. EXCAVATION FOR GAS MAIN SHALL BE IN ACCORDANCE WITH NJDOT SPECIFICATIONS SECTION 653.03.01.

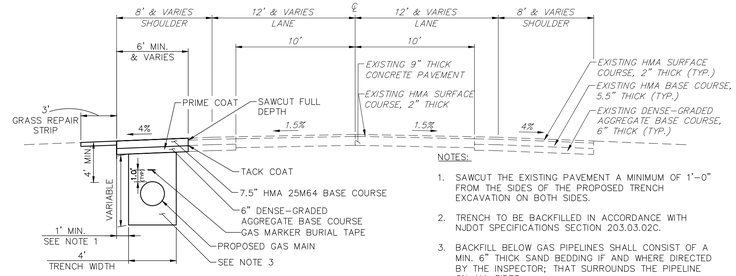
1A FOR NJDOT ROADWAYS IN SHOULDER – INTERIM

SCALE: 1"=6'



1B FOR NJDOT ROADWAYS IN SHOULDER – FINAL

SCALE: 1"=6'



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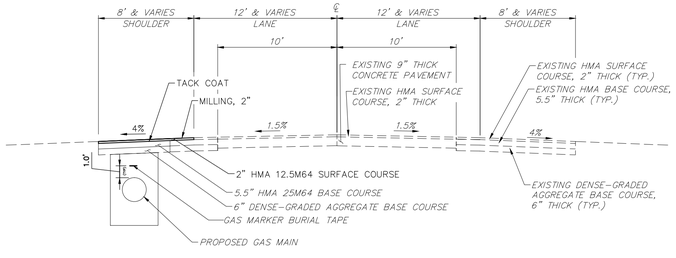
4. EXCAVATION FOR GAS MAIN SHALL BE IN ACCORDANCE WITH NJDOT SPECIFICATIONS SECTION 653.03.01.

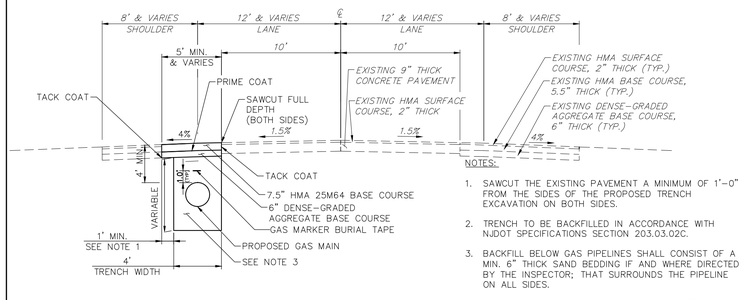
2A FOR COUNTY ROADWAYS IN SHOULDER – INTERIM

SCALE: 1"=6'



2B FOR COUNTY ROADWAYS IN SHOULDER – FINAL

SCALE: 1"=6'



NOTES:

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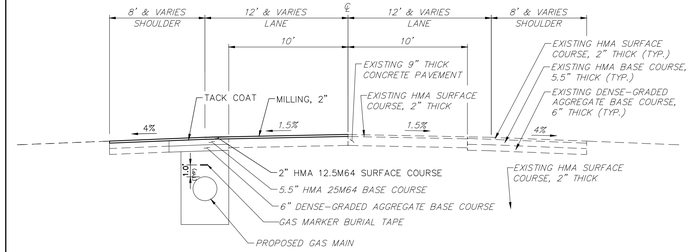
4. EXCAVATION FOR GAS MAIN SHALL BE IN ACCORDANCE WITH NJDOT SPECIFICATIONS SECTION 653.03.01.

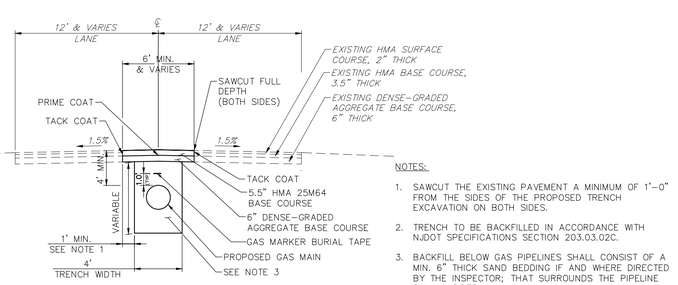
3A FOR COUNTY ROADWAYS IN SHOULDER & TRAFFIC LANE – INTERIM

SCALE: 1"=6'



3B FOR COUNTY ROADWAYS IN SHOULDER & TRAFFIC LANE – FINAL

SCALE: 1"=6'



NOTES:

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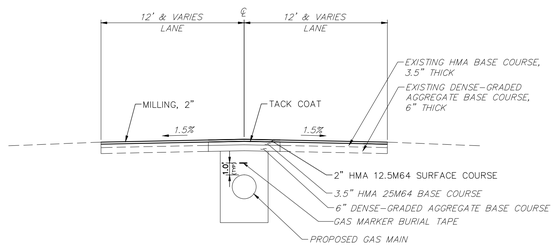
4. EXCAVATION FOR GAS MAIN SHALL BE IN ACCORDANCE WITH NJDOT SPECIFICATIONS SECTION 653.03.01.

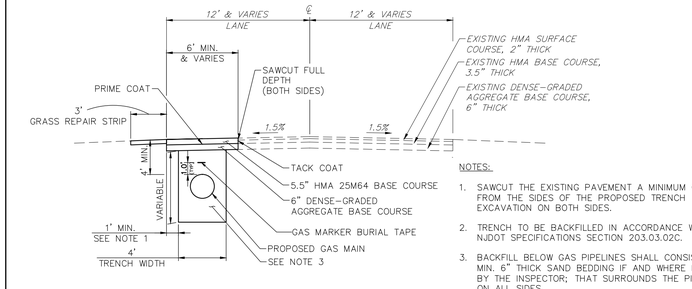
4A FOR MUNICIPAL ROADWAYS IN CENTER OF ROADWAY – INTERIM

SCALE: 1"=6'



4B FOR MUNICIPAL ROADWAYS IN CENTER OF ROADWAY – FINAL

SCALE: 1"=6'



NOTES:

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2. TRENCH TO BE BACKFILLED IN ACCORDANCE WITH NJDOT SPECIFICATIONS SECTION 203.03.02C.
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4. EXCAVATION FOR GAS MAIN SHALL BE IN ACCORDANCE WITH NJDOT SPECIFICATIONS SECTION 653.03.01.

5A FOR MUNICIPAL ROADWAYS IN TRAFFIC LANE – INTERIM

SCALE: 1"=6'

GENERAL PAVING NOTES:

1. CONTRACTOR SHALL PERFORM FINAL RESTORATION WITHIN 6 MONTHS, WEATHER PERMITTING, OF INTERIM PAVEMENT.
2. CONTRACTOR SHALL PROTECT SURROUNDING UNDISTURBED PAVEMENT WHEN USING EXCAVATION CONSTRUCTION EQUIPMENT INCLUDING OUTRIGGERS DURING CONSTRUCTION. ANY SCARING, GOUGING, SCRAPING OR DAMAGE BY THE CONTRACTOR TO THE EXISTING UNDISTURBED PAVEMENT SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO SJG AND TO THE SATISFACTION OF THE NJDOT.

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DENNIS M. WALSH, P.E.
N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
1	ISSUED FOR #80	12/09/13

DESIGNED BY: LS/AS
DRAWN BY: GA/BJ
CHECKED BY: DW
225616_D-1ABC_CS.dwg

TYPICAL PAVEMENT RESTORATION DETAIL SHEET 1A

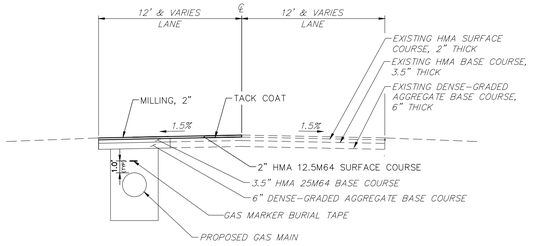
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24" B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

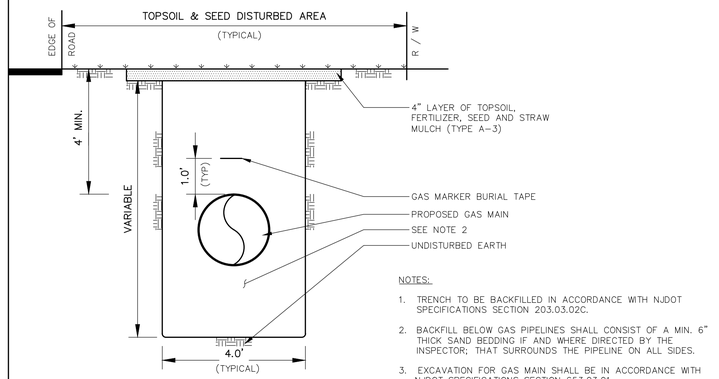
D-1A

\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_D-1ABC_CS.dwg, May 18, 2015 – 1:54pm



5B FOR MUNICIPAL ROADWAYS IN TRAFFIC LANE –FINAL

SCALE: 1"=6'

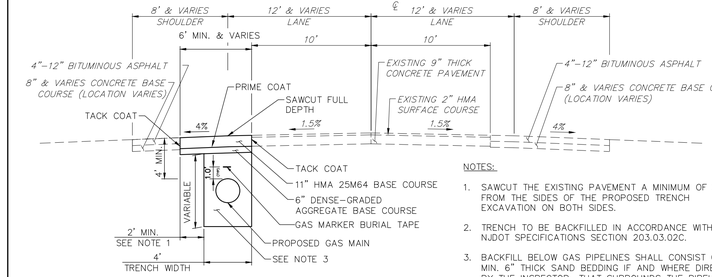


NOTES:

1. TRENCH TO BE BACKFILLED IN ACCORDANCE WITH NJDOT SPECIFICATIONS SECTION 203.03.02C.
2. BACKFILL BELOW GAS PIPELINES SHALL CONSIST OF A MIN. 6" THICK SAND BEDDING IF AND WHERE DIRECTED BY THE INSPECTOR; THAT SURROUNDS THE PIPELINE ON ALL SIDES.
3. EXCAVATION FOR GAS MAIN SHALL BE IN ACCORDANCE WITH NJDOT SPECIFICATIONS SECTION 653.03.01.

6 TYPICAL SURFACE RESTORATION FOR INSTALLATION IN GRASS AREAS

SCALE: 1:2



NOTES:

1. SAWCUT THE EXISTING PAVEMENT A MINIMUM OF 2'–0" FROM THE SIDES OF THE PROPOSED TRENCH EXCAVATION ON BOTH SIDES.
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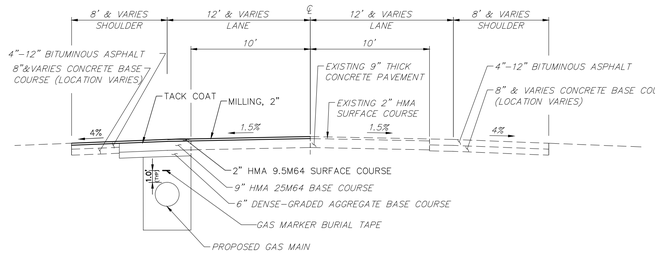
4. EXCAVATION FOR GAS MAIN SHALL BE IN ACCORDANCE WITH NJDOT SPECIFICATIONS SECTION 653.03.01.

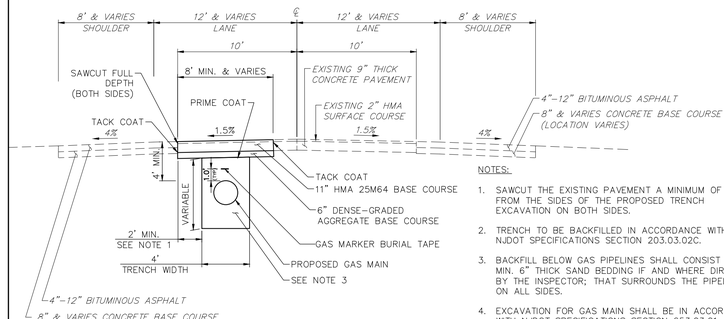
7A FOR NJDOT ROADWAYS IN SHOULDER/ LANE – INTERIM

SCALE: 1"=6'



7B FOR NJDOT ROADWAYS IN SHOULDER/ LANE – FINAL

SCALE: 1"=6'



NOTES:

1. SAWCUT THE EXISTING PAVEMENT A MINIMUM OF 2'–0" FROM THE SIDES OF THE PROPOSED TRENCH EXCAVATION ON BOTH SIDES.
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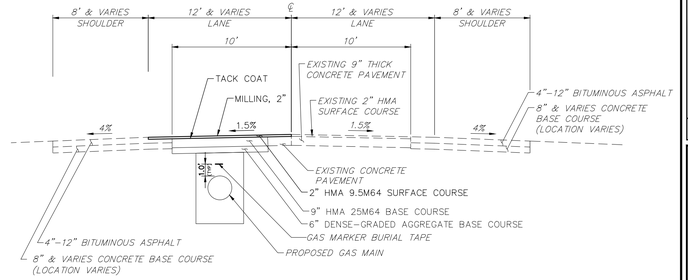
4. EXCAVATION FOR GAS MAIN SHALL BE IN ACCORDANCE WITH NJDOT SPECIFICATIONS SECTION 653.03.01.

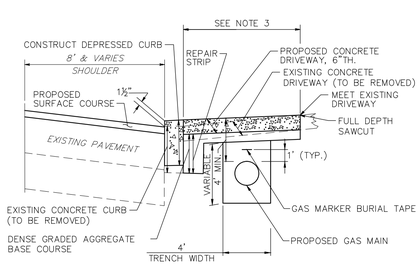
8A FOR NJDOT ROADWAYS IN LANE – INTERIM

SCALE: 1"=6'



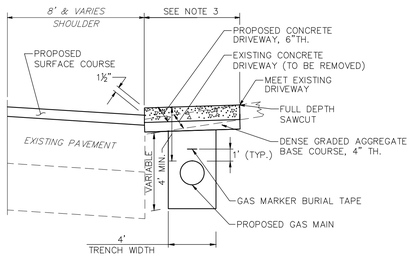
8B FOR NJDOT ROADWAYS IN LANE – FINAL

SCALE: 1"=6'



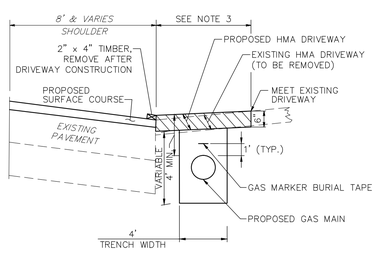
FINAL CONCRETE DRIVEWAY RESTORATION (WITH DEPRESSED CURB)

N.T.S.



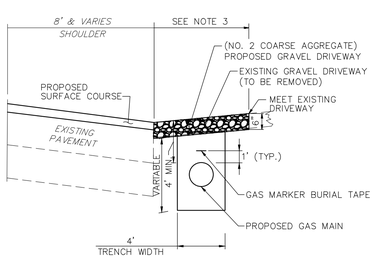
FINAL CONCRETE DRIVEWAY RESTORATION (WITHOUT DEPRESSED CURB)

N.T.S.



FINAL HMA DRIVEWAY RESTORATION (WITHOUT DEPRESSED CURB)

N.T.S.



FINAL GRAVEL DRIVEWAY RESTORATION (WITHOUT DEPRESSED CURB)

N.T.S.

DRIVEWAY RESTORATION DETAILS

NOTES:

1. TRENCH TO BE BACKFILLED IN ACCORDANCE WITH NJDOT SPECIFICATION SECTION 203.03.02C.
2. BACKFILL BELOW GAS PIPELINES SHALL CONSIST OF A MIN. 6" THICK SAND BEDDING IF AND WHERE DIRECTED BY THE INSPECTOR; THAT SURROUNDS THE PIPELINE ON ALL SIDES.
3. EXCAVATION FOR GAS MAIN SHALL BE IN ACCORDANCE WITH NJDOT SPECIFICATIONS SECTION 653.03.01.

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DENNIS M.WALSH, P.E.
N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DESIGNED BY: LS/JG	DRAWN BY: GA/PJ	CHECKED BY: DW	225616_D-1ABC_CS.dwg
1	ISSUED FOR #80				12/20/13 DATE

TYP PAVEMENT RESTORATION AND DETAIL SHEET 1B

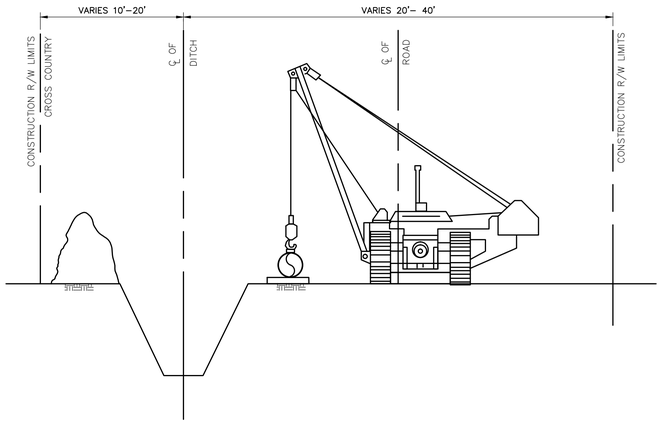
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

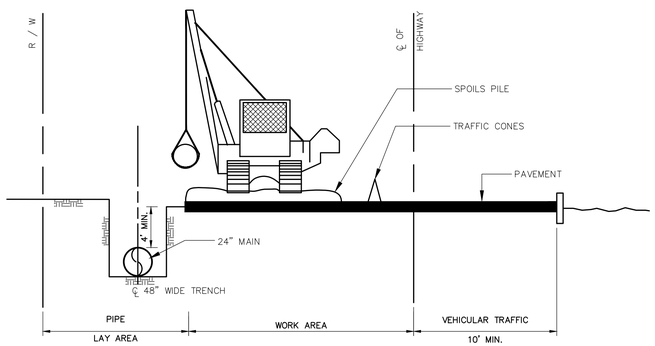
D-1B

\\portland\projects\225616 sjg - england power plant\wip\Drawings_redesign\225616_D-1ABC_CS.dwg, May 18, 2015 - 1:54pm



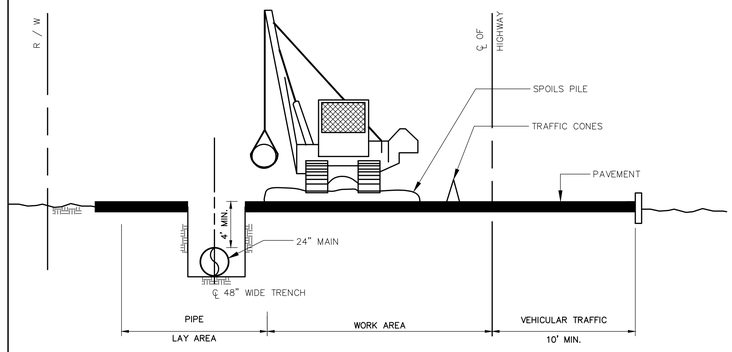
13 RIGHT OF WAY CONFIGURATION ADJACENT TO A PROPERTY LINE

NOT TO SCALE



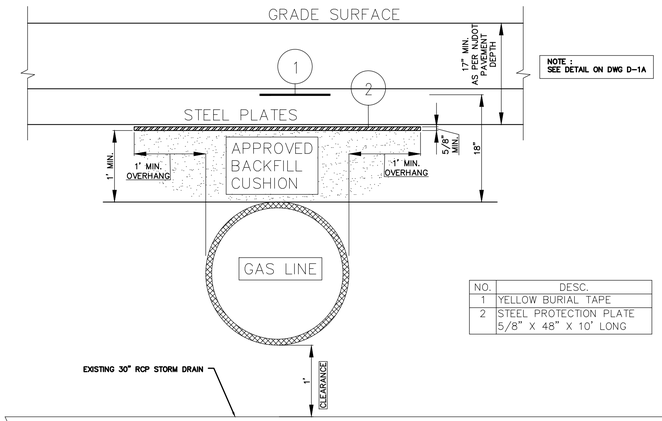
14 OFF ROADWAY CONSTRUCTION CONFIGURATION IN SHOULDER AREA

NOT TO SCALE



15 UNDER ROADWAY CONSTRUCTION CONFIGURATION IN TRAVEL LANE

NOT TO SCALE

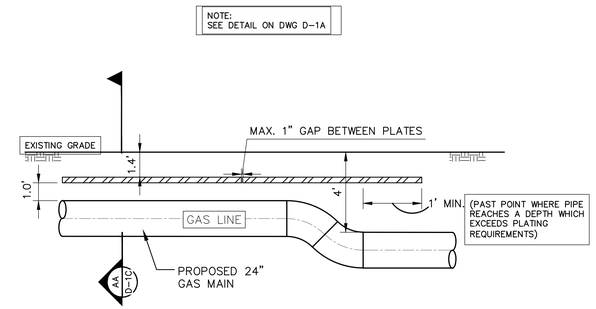


NO.	DESC.
1	YELLOW BURIAL TAPE
2	STEEL PROTECTION PLATE 5/8" X 48" X 10' LONG

SECTION A–A

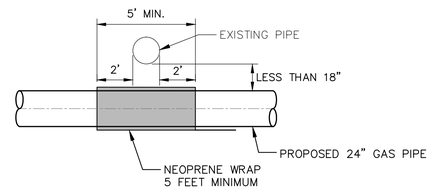
16A ALTERNATIVE INSTALLATION ON AS–56@ STATION 794+75

SCALE: 1"=1'



16B TYP. METHOD OF LAYING PROTECTIVE STEEL PLATES

SCALE: 1"=4'

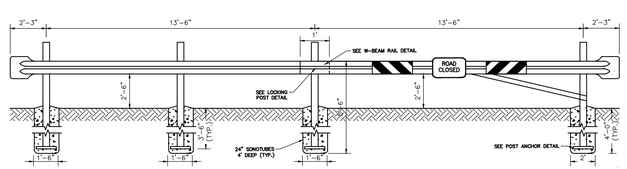


NOTE:

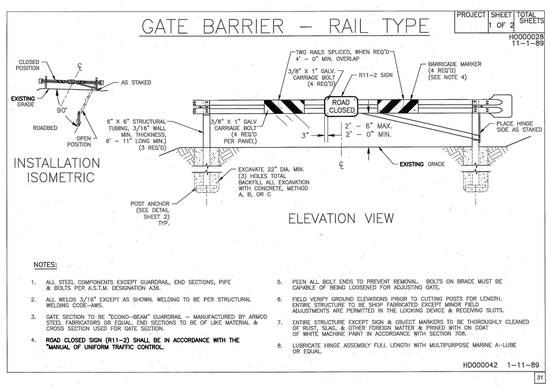
A NEOPRENE WRAP IS REQUIRED AROUND THE PROPOSED 24" GAS MAIN WHERE THERE IS A CLEARANCE OF LESS THAN 18", BETWEEN THE PROPOSED GAS MAIN AND ANY FOREIGN SUBSTRUCTURE(S).

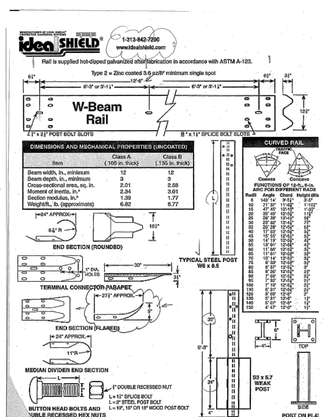
17 NEOPRENE WRAP PROTECTION DETAIL

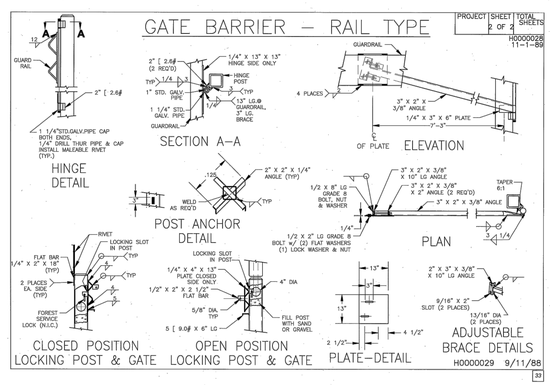
SCALE: 1"=4'



18 GATE BARRIER WITH SWING GATE DETAIL







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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	GATE BARRIER DETAIL	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_D–1ABC_CS.dwg

TYPICAL PAVEMENT RESTORATION AND DETAIL SHEET 1C

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

D-1C

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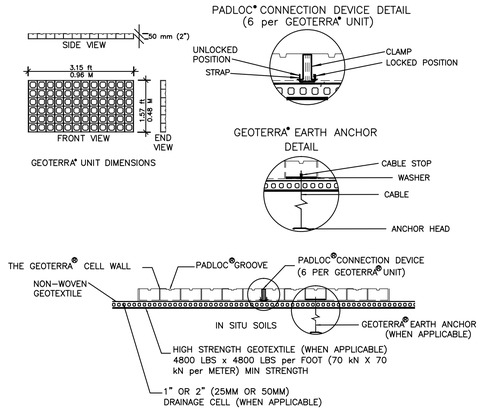
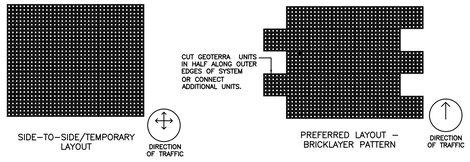


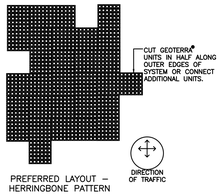
GEOTERRA® SYSTEM COMPONENTS

GEOTERRA® MATERIAL SPECIFICATION

MATERIAL	UP TO 97% RECYCLED POLYETHYLENE
COLOR	RANGES FROM DARK SHADES OF GRAY TO BLACK
CHEMICAL RESISTANCE	SUPERIOR
CARBON BLACK FOR ULTRAVIOLET LIGHT STABILIZATION	1.5% – 2.0%
UNIT MINIMUM CRUSH STRENGTH @ 21° C (73°F)	2,896 kPa (420 psi)
MATERIAL FLEXURAL MODULUS @ 23° C (73° F)	240,000 kPa (35,000 psi)
NOMINAL DIMENSIONS (WIDTH x LENGTH)	0.48 m x 0.96 m (1.57 ft x 3.15 ft)
NOMINAL UNIT DEPTH	50 mm (2 in)
NOMINAL COVERAGE AREA	0.46 sq.m (4.95 sq.ft)
CELLS PER UNIT	72
CELL SIZE	79 mm x 81 mm (3.1 in x 3.2 in)
TOP OPEN AREA PER UNIT	87%
BOTTOM OPEN AREA PER UNIT	41%
NOMINAL WEIGHT PER UNIT	4.1 kg (9 lbs)
UNITS PER PALLET	50

GEOTERRA® MATERIAL SPECIFICATIONS





TYPICAL APPLICATIONS

ENGINEER TO DETERMINE THE DESIGNATED DESIGN

DESIGN 1 AND 2

PREVENT RUTTING, PROTECT TURF, USE OVER SAND, CREATE A UNIFORM/STABLE SURFACE.

DESIGN 3

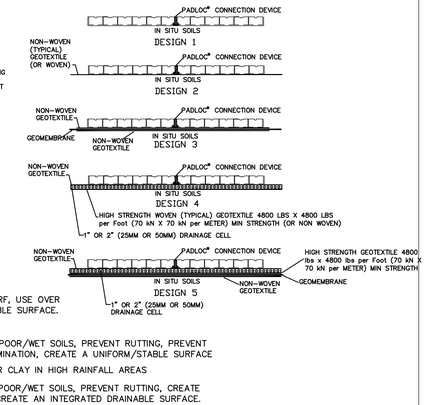
PROVIDE LOAD SUPPORT OVER POOR/WET SOILS, PREVENT RUTTING, PREVENT SUBBASE DEGRADATION/CONTAMINATION, CREATE A UNIFORM/STABLE SURFACE

DESIGN 4–USED PRIMARILY OVER CLAY IN HIGH RAINFALL AREAS

PROVIDE LOAD SUPPORT OVER POOR/WET SOILS, PREVENT RUTTING, CREATE A UNIFORM/STABLE SURFACE, CREATE AN INTEGRATED DRAINABLE SURFACE.

DESIGN 5–USED PRIMARILY OVER CLAY IN HIGH RAINFALL AREAS

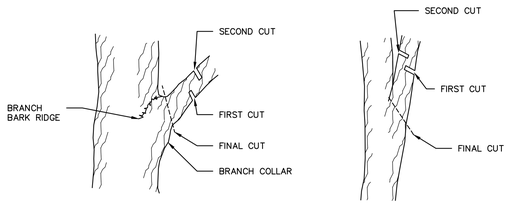
PREVENT SUBBASE DEGRADATION/CONTAMINATION, PROVIDE LOAD SUPPORT OVER POOR/WET SOILS, PREVENT RUTTING, CREATE A UNIFORM/STABLE SURFACE CREATE AN INTEGRATED DRAINABLE SURFACE.



PRESTO® GEOSYSTEMS – THE GEOTERRA® STRUCTURAL MAT SYSTEM TYPICAL CROSS-SECTIONS

8

N.T.S.

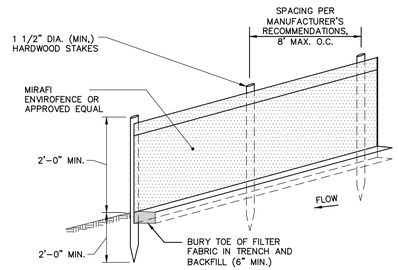


TYPICAL LIMB "V" LIMB

TREE LIMB REMOVAL DETAILS

9

N.T.S.



NOTES:

- INSTALL FABRIC ON UPHILL SIDE OF SUPPORT POSTS
- INSTALL SILT FENCE ACROSS SLOPES
- SILT FENCE SHALL NOT BE USED IN DRAINAGE WAYS
- PROVIDE METAL FENCE WITH 6" MAX. OPENINGS FOR GEOTEXTILE FABRIC REINFORCEMENT AS NECESSARY AND FOR HEAVY SEDIMENT LOADING.
- FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM CONSISTING OF METAL FASTENERS (NAILS OR STAPLES) AND A HIGH STRENGTH REINFORCEMENT MATERIAL (NYLON WEBBING, GROMMETS, WASHERS, ETC.) PLACED BETWEEN THE FASTENER AND THE GEOTEXTILE FABRIC. THE FASTENING SYSTEM SHALL RESIST TEARING AWAY FROM THE POST.
- THE FABRIC SHALL INCORPORATE A DRAWSTRING IN THE TOP PORTION OF THE FENCE FOR ADDED STRENGTH.

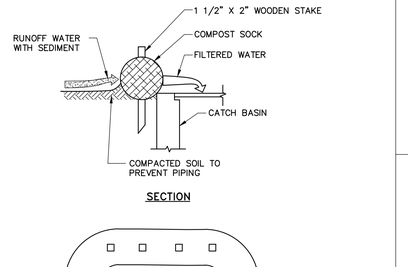
MAINTENANCE: INSPECT FOR TEARS IN THE FABRIC OR DAMAGE TO SUPPORTS. REPAIR AS NECESSARY. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES A DEPTH OF SIX-INCHES OR LESS.

REMOVAL: WHEN UPSLOPE AREAS ARE STABILIZED, THE STRUCTURE AND ANY ACCUMULATED SEDIMENT WILL BE REMOVED.

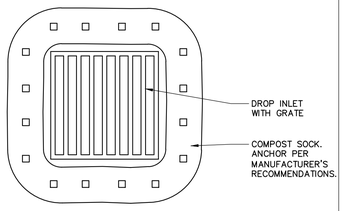
SEDIMENT BARRIER – SILTATION FENCE DETAIL

10

N.T.S.



SECTION



PLAN

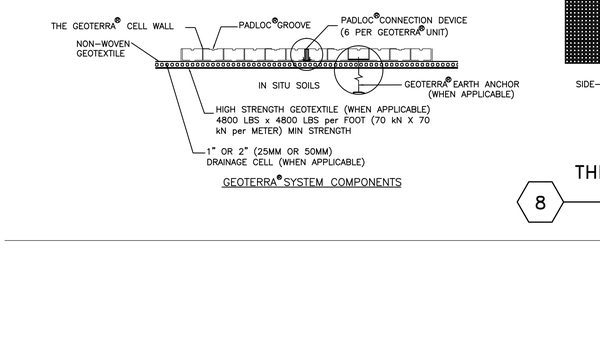
BARRIER MAINTENANCE NOTES:

1. ALL BARRIERS SHOULD BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHOULD BE MADE IMMEDIATELY.
2. SHOULD THE BARRIER DECOMPOSE OR BECOME INEFFECTIVE BEFORE THE END OF THE EXPECTED LIFE AND THE BARRIER IS STILL NECESSARY, IT SHOULD BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN THE DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
4. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIER IS NO LONGER REQUIRED SHOULD BE SMOOTHED TO CONFORM WITH THE EXISTING GRADE, PREPARED, AND SURFACED AS DETAILED.

COMPOST SOCK DROP INLET SEDIMENT FILTER DETAILS

14

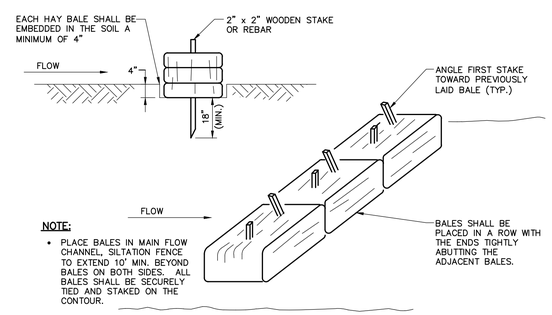
N.T.S.



TREE PROTECTION DETAIL

12

N.T.S.



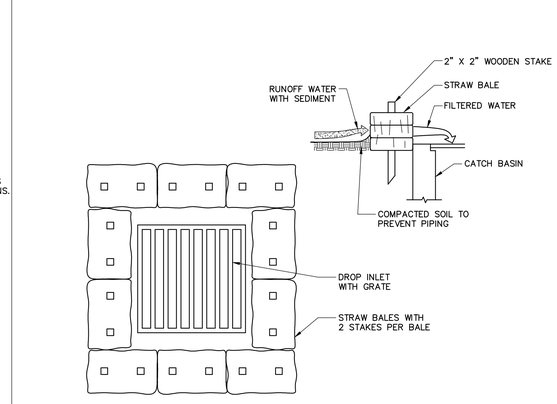
NOTE:

- PLACE BALES IN MAIN FLOW CHANNEL, SILTATION FENCE TO EXTEND 10' MIN. BEYOND BALES ON BOTH SIDES. ALL BALES SHALL BE SECURELY TIED AND STAKED ON THE CONTOUR.

HAYBALE BARRIER DETAIL

13

N.T.S.



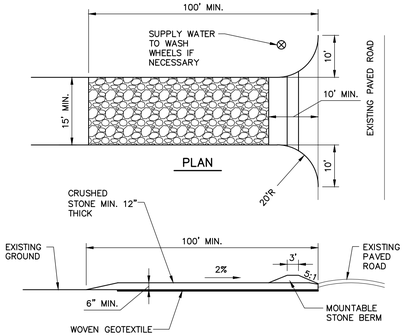
BARRIER MAINTENANCE NOTES:

1. ALL BARRIERS SHOULD BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHOULD BE MADE IMMEDIATELY.
2. SHOULD THE BARRIER DECOMPOSE OR BECOME INEFFECTIVE BEFORE THE END OF THE EXPECTED LIFE AND THE BARRIER IS STILL NECESSARY, IT SHOULD BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN THE DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
4. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIER IS NO LONGER REQUIRED SHOULD BE SMOOTHED TO CONFORM WITH THE EXISTING GRADE, PREPARED, AND SURFACED AS DETAILED.

STRAW BALE DROP INLET SEDIMENT FILTER DETAIL

15

N.T.S.



PROFILE

NOTES:

- STONE SIZE: ASTM C-33, SIZE NO. 2 (1 ½" TO 2½")
- INSTALLATION SHALL OCCUR AT THE INITIATION OF CONSTRUCTION ACTIVITIES.
- CROSSING EXISTING CURBS: PROVIDE CRUSHED STONE, CRUSHED CONCRETE, OR LUMBER RAMP. SOIL RAMPS ARE NOT ACCEPTABLE.
- WHEEL WASH PITS MAY ALSO BE USED, IF APPROVED.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN
- A STABILIZED CONSTRUCTION ENTRANCE MUST BE PROVIDED AT EACH POINT OF INGRESS AND EGRESS ONTO ADJACENT PAVED ROADS OR PAVED AREAS WITHIN THE PROJECT.

MAINTENANCE: INSPECT FOR EFFECTIVE REMOVAL OF SOIL FROM VEHICLES PRIOR TO LEAVING THE SITE. SWEEP ANY SOIL FROM ADJACENT ROADWAYS.

REMOVAL: AT LEAST ONE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED UNTIL ALL AREAS OF THE SITE ARE STABILIZED.

STABILIZED CONSTRUCTION ENTRANCE DETAILS

11

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NJ LIC.NO. GE45534

REV	DESCRIPTION	DESIGNED BY: LS/AG	CHECKED BY: DW	DRAWN BY: CA/RJ	225616_D-02 & 03 CS.dwg
1	ISSUED FOR BID				12/20/13 DATE

DETAILS

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

D-02

\\portland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_D-02 & 03 CS.DWG, May 18, 2015 – 1:54pm

EROSION CONTROL, STORMWATER MAINTENANCE AND PLANTING NOTES:

1. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE PLAN, OR AS DICTATED BY THE NEW JERSEY CONSERVATION DISTRICT OR OWNER. ALL EROSION CONTROL DEVICES SHALL BE MAINTAINED IN EFFECTIVE CONDITION DURING CONSTRUCTION. PROPER EROSION AND SEDIMENT CONTROL PRACTICES MUST BE IMPLEMENTED DURING ALL PHASES OF CONSTRUCTION AND UNTIL THE SITE IS SATISFACTORILY STABILIZED AS SPECIFIED ON THESE PLANS AND IN VOLUME TWO OF THE STATE OF NEW JERSEY STORMWATER BEST MANAGEMENT PRACTICES MANUAL AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.

2. THE CONTRACTOR IS RESPONSIBLE FOR THE TIMELY INSTALLATION, INSPECTION, MAINTENANCE, AND/OR REPLACEMENT OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES TO ENSURE PROPER OPERATION THROUGHOUT THE LIFE OF THE PROJECT. ALL APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND THE AREA IS STABILIZED AS ACCEPTED BY OWNER. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF PERMANENT MEASURES UNTIL CONSTRUCTION OF THE PROJECT IS COMPLETED OR UNTIL IT IS ACCEPTED BY THE OWNER. THE OWNER IS RESPONSIBLE THEREAFTER.

3. THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE STABILITY AND INTEGRITY OF NATURAL RESOURCES ON DOWNSTREAM OR OFF-SITE PROPERTY DUE TO CHANGES IN THE RATE AND VOLUME OF STORMWATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY. REFER TO THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY SECTION 21 FOR ACCEPTABLE METHODS AND MATERIALS.

4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CLEAN ROADS, CONTROL DUST, AND TAKE ALL NECESSARY MEASURES TO ENSURE THAT THE SITE AND ALL ROADS BE MAINTAINED IN A MUD AND DUST-FREE CONDITION AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES. DUST CONTROL SHALL INCLUDE, BUT IS NOT LIMITED TO WATER AND/OR CRUSHED STONE OR COARSE GRAVEL SHOULD BE APPLIED AS NECESSARY. IMMEDIATELY REMOVE ALL SEDIMENT WASHED, DROPPED, TRACKED, OR SPILLED ONTO PAVED SURFACES.

5. THE CONTRACTOR SHALL CONTROL DUST WHERE AREAS ARE SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON-SITE AND OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT. REFER TO THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY SECTION 16 FOR ACCEPTABLE METHODS AND MATERIALS. THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST:
   - SPRINKLING WITH WATER
   - MULCHES
   - VEGETATIVE COVER
   - SPRAY-ON ADHESIVES – ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

   CONTRACTOR SHALL UTILIZE THE BEST METHOD.

6. ALL PROPOSED CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE SURROUNDING ROADWAYS. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AND/OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO THE SURROUNDING ROADWAYS MUST BE REMOVED IMMEDIATELY.

7. A SILT FENCE SHALL BE INSTALLED AROUND ANY SOIL STOCKPILE AREAS.

8. THE CONTRACTOR SHALL RESTORE DISTURBED AREAS TO ORIGINAL CONDITIONS AS CLOSELY AS POSSIBLE. AREAS DAMAGED DURING CONSTRUCTION SHALL BE RESODDED, RESEEDED, OR OTHERWISE RESTORED TO THEIR ORIGINAL STATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION. TREES AND OTHER EXISTING VEGETATION SHALL BE RETAINED WHEREVER FEASIBLE.

9. TEMPORARY VEGETATIVE COVER SHALL BE APPLIED TO ANY DISTURBED AREAS (INCLUDING SOIL STOCKPILE AREAS) THAT HAVE NOT YET REACHED FINISHED GRADE AS SOON AS POSSIBLE, BUT NOT MORE THAN SEVENTY-TWO (72) HOURS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY CEASED, UNLESS THE ACTIVITY IS TO RESUME WITHIN TWENTY-ONE (21) DAYS. THE RECOMMENDED TEMPORARY SEEDING DATES ARE 2/15 – 4/30 AND 8/15 – 10/30. REFER TO THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY SECTION 7 FOR ACCEPTABLE METHODS AND MATERIALS. ANNUAL RYEGRASS IS NOT AN APPROPRIATE GRASS FOR TEMPORARY COVER; PERENNIAL RYEGRASS IS AN ACCEPTABLE SUBSTITUTE.

10. TOPSOIL SHALL BE USED WHERE SOILS ARE DISTURBED AND WILL BE VEGETATED. A UNIFORM APPLICATION DEPTH OF 5 INCHES IF REQUIRED FOR ALL TOPSOIL. IN AREAS WHERE SOIL WAS COMPACTED, SURFACE SHALL BE SCARIFIED 6"-12" IMMEDIATELY PRIOR TO PLACING TOPSOIL. REFER TO THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY SECTION 8 FOR ACCEPTABLE METHODS AND MATERIALS.

11. PERMANENT VEGETATIVE COVER SHALL BE APPLIED TO ALL DISTURBED AREAS THAT HAVE REACHED FINISHED GRADE AS SOON AS POSSIBLE, BUT NOT MORE THAN SEVENTY-TWO (72) HOURS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS PERMANENTLY CEASED. SEED GERMINATION SHALL HAVE BEEN TESTED WITHIN 12 MONTHS OF THE PLANTING DATE. MULCHING IS REQUIRED ON ALL SEEDING; REFER TO THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY SECTION 4.4 FOR ACCEPTABLE FORMS OF MULCHING. OPTIMAL SEEDING DATES FOR MOST COOL SEASON GRASSES ARE 2/15 – 4/30 AND 8/15 – 10/30.

SEEDING FOR PERMANENT STABILIZATION SHALL BE:

WITHIN PINELANDS JURISDICTION (STA. 11+00 TO STA. 798+00)

SEED MIXTURE	PLANTING RATE
LITTLE BLUESTEM, "CAMPER"	5 LBS/ACRE
HAIRGRASS, COASTAL, "PILGRIM", MA ECOTYPE, CERTIFIED	2 LBS/ACRE
WINTER BENTGRASS, PIEDMONT NC ECOTYPE	1 LBS/ACRE
VIRGINIA WILDRYE, PA ECOTYPE	10 LBS/ACRE

WITHIN CARFA JURISDICTION (STA. 798+00 TO SAT. 1153+50)
AND ALL OTHER DISTURBED AREAS

SEED MIXTURE	PLANTING RATE
TALL FESCUE (TURF-TYPE)	50 LBS/ACRE
REDTOP OR	5 LBS/ACRE
PERENNIAL RYEGRASS	5 LBS/ACRE
BIRDSFOOT TREFOIL OR	10 LBS/ACRE
WHITE CLOVER	5 LBS/ACRE

A. CUMBERLAND POND PIGGING STATION ONLY (C-100):
WOODY EVERGREEN TREES SHALL BE INSTALLED AROUND THE SIDES OF THE PIGGING STATION THAT ARE NOT CURRENTLY WOODED SO AS TO PROVIDE A SCREEN FROM SURROUNDING ROADS AND RESIDENCES. THESE TREES SHALL BE PLANTED ALONG THE SOUTHERN FACING BOUNDARY, ADJACENT TO THE ACCESS ROAD AND THE EASTERN FACING BOUNDARY, ADJACENT TO THE BACK OF IKE'S. WHEN PLANTED, TREES SHALL RANGE IN HEIGHT FROM 4-6 FEET AND BE PLANTED ON 10-FOOT CENTERS SO THAT AS THEY MATURE, THEY WILL PROVIDE COMPLETE VISUAL OBSTRUCTION. SPECIES TO BE PLANTED WILL BE GREEN GIANT ARBORVITAE (THUJA STANDISHII X PLICATA), AND SHALL BE PLANTED DURING THE DORMANT SEASON (BETWEEN NOVEMBER AND MARCH).

B. RTE 49 ROV SITE (C-AGV-1) & TUCKAHOE ROV SITE (C-AGV-2):
WOODY TREE SPECIES (IN 1 TO 5 GALLON POTS) SHALL BE INSTALLED ALONG THE PERIMETER FENCE OF AGV 1 & 2 WITH THE EXCEPTION OF THE ENTRANCE AND UNDERGROUND PIPING PORTIONS OF THE NORTH SIDE OF THE VALVE. TREES SHALL BE PLANTED ON 6-FOOT CENTERS, AND SHALL BE PLANTED DURING THE DORMANT SEASON (BETWEEN NOVEMBER AND MARCH). BALLED AND BURLAPPED TREES CAN BE PLANTED ANY TIME OF THE YEAR PROVIDED THEY WERE DUG DURING THE DORMANT SEASON PERIOD AND AFTER PLANTING RECEIVE AMPLE WATER DURING HOT, DRY WEATHER. SPECIES SHALL INCLUDE INKBERRY (ILEX GLABRA), NORTHERN BAYBERRY (MORELLA PENNSYLVANIA), AND MOUNTAIN LAUREL (KALMIA LATTIFOLIA).

12. AREAS WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED SHOULD BE MULCHED IMMEDIATELY FOLLOWING SEEDING IN ADDITION TO AREAS WHICH CANNOT BE SEEDED WITHIN THE RECOMMENDED SEEDING DATES AND ANY SOIL STOCKPILE AREAS. TEMPORARY MULCHING SHOULD BE PERFORMED AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY CEASED UNLESS THE ACTIVITY IS TO RESUME WITHIN TWENTY-ONE (21) DAYS.

13. STRAW OR HAY MULCH, WOOD FIBER MULCH, AND HYDROMULCH ARE RECOMMENDED. THE MATERIALS USED IN MULCHING SHALL CONFORM TO THE REQUIREMENTS OF THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

14. IF SEEDING CANNOT BE COMPLETED IMMEDIATELY OR WITHIN THE RECOMMENDED SEEDING DATES, USE THE TEMPORARY MULCHING MEASURE TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.

15. ANY EXISTING OR PROPOSED CATCH BASINS THAT MAY BE SUBJECT TO SEDIMENTATION PROCESSES SHALL HAVE SILT SACKS INSTALLED TO PREVENT SEDIMENT FROM ENTERING THE PROPOSED STORM DRAINAGE SYSTEM PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED SITE. THE PROPER INLET PROTECTION DEVICES SHALL BE INSTALLED WHERE STORM DRAIN INLETS ARE TO BE MADE OPERATIONAL BEFORE PERMANENT STABILIZATION OF ANY DISTURBED DRAINAGE AREA.

16. ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR RILL EROSION. WHERE EROSION IS OBSERVED, ADDITIONAL MULCH MUST BE APPLIED. IF NETTING IS USED, THE NET SHOULD BE INSPECTED AFTER RAINSTORMS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGE OCCUR, THE NET MUST BE REINSTALLED AS NECESSARY AFTER REPAIRING DAMAGE TO SLOPE. INSPECTIONS SHOULD TAKE PLACE UNTIL GRASSES ARE FIRMLY ESTABLISHED. GRASS IS CONSIDERED TO BE FIRMLY ESTABLISHED AT A MINIMUM HEIGHT OF THREE (3) INCHES.

17. INSPECTION OF PERIMETER SEDIMENT BARRIERS (INCLUDING THOSE ENCOMPASSING SOIL STOCKPILE AREAS) SHOULD BE MADE AFTER EACH STORM EVENT AND REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED. CLEAN OUT OF ACCUMULATED SEDIMENT BEHIND THE SILT FENCE IS NECESSARY IF ONE-HALF OF THE ORIGINAL HEIGHT OF THE BALES BECOMES FILLED IN WITH SEDIMENT. SEDIMENT SHOULD BE DISPOSED OF IN A SUITABLE AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURAL OR VEGETATIVE MEANS.

18. SILT SACKS HAVE BEEN PROPOSED IN ALL DOWN GRADIENT CATCH BASINS IN ORDER TO PREVENT SEDIMENT FROM ENTERING THE EXISTING AND PROPOSED STORM DRAINAGE SYSTEM PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED SITE. ALL SILT SACKS SHOULD BE INSPECTED AFTER EVERY RAIN STORM AND REPAIRS MADE AS NECESSARY. SEDIMENT SHOULD BE DISPOSED OF IN A SUITABLE AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURAL OR VEGETATIVE MEANS. CATCH BASIN INLET PROTECTION SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.

19. REPAIRS OR REPLACEMENT OF DRAINAGE STRUCTURES OR OTHER ELEMENTS OF THE FACILITY SHOULD BE DONE WITHIN 30 DAYS OF DEFICIENCY REPORTS. IF AN EMERGENCY SITUATION IS IMMINENT THEN REPAIR/REPLACEMENT MUST BE DONE IMMEDIATELY TO AVERT FAILURE OR DANGER TO NEARBY RESIDENTS.

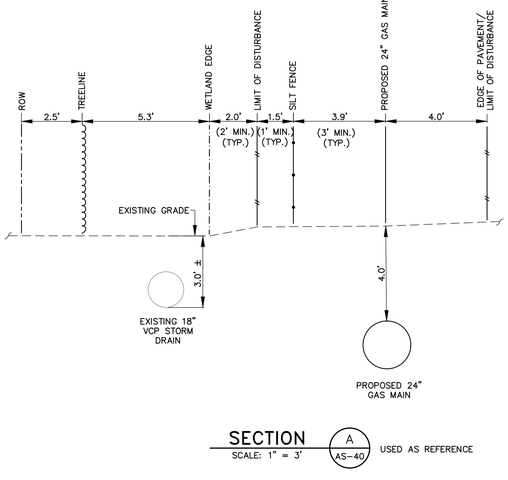
20. PERFORM DEWATERING ACTIVITIES TO PROPERLY REMOVE SUSPENDED SEDIMENT AND WATER FROM EXCAVATED AREAS THROUGH FILTRATION AND/OR SETTLEMENT PRIOR TO DISCHARGING WATER. REFER TO THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY SECTION 14 FOR ACCEPTABLE METHODS AND MATERIALS.

21. WASTE DISPOSAL: MATERIALS WHICH COULD BE A POTENTIAL SOURCE OF STORMWATER POLLUTION SUCH AS GASOLINE, DIESEL FUEL, HYDRAULIC OIL, FERTILIZER, ETC., SHALL BE STORED AT THE END OF EACH DAY IN A STORAGE TRAILER OR COVERED LOCATION AND TAKEN OFF-SITE AND PROPERLY DISPOSED OF. ALL TYPES OF WASTE GENERATED AT THIS SITE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH STATE AND FEDERAL LAWS AND REGULATIONS.

22. GOOD HOUSEKEEPING: THE PROJECT SITE SHALL PROVIDE FOR THE MINIMIZATION OF EXPOSURE OF CONSTRUCTION DEBRIS (INCLUDING, BUT NOT LIMITED TO, INSULATION, WIRING, PAINTS AND PAINT CANS, SOLVENTS, WALL BOARD, ETC.) TO PRECIPITATION BY MEANS OF DISPOSAL AND/OR PROPER SHELTER OR COVER. CONSTRUCTION WASTE MUST BE PROPERLY DISPOSED OF IN ORDER TO AVOID EXPOSURE TO PRECIPITATION AT THE END OF EACH WORKING DAY.

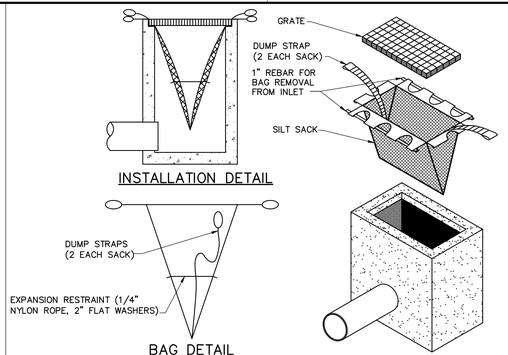
23. IMMEDIATELY PRIOR TO THE END OF CONSTRUCTION OR ACCEPTANCE BY THE OWNER, THE CONTRACTOR SHALL INSPECT ALL ON-SITE CATCH BASINS, OUTLET CONTROL STRUCTURES, STORM DRAIN PIPES. THESE STRUCTURES SHALL BE CLEANED/FLUSHED AS DIRECTED BY THE ENGINEER.

24. CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATED SWALES IN ACCORDANCE WITH STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY VEGETATIVE STANDARDS.



SECTION (A / AS-40) SCALE: 1" = 3' — USED AS REFERENCE

TYPICAL PIPELINE CROSS-SECTION ADJACENT TO WETLANDS



INSTALLATION DETAIL

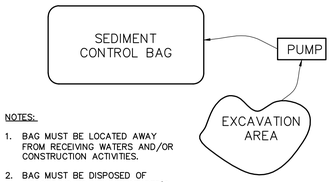
BAG DETAIL

BARRIER MAINTENANCE NOTES:

1. ALL BARRIERS SHOULD BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHOULD BE MADE IMMEDIATELY.
2. SHOULD THE BARRIER DECOMPOSE OR BECOME INEFFECTIVE BEFORE THE END OF THE EXPECTED LIFE AND THE BARRIER IS STILL NECESSARY, IT SHOULD BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN THE DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
4. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIER IS NO LONGER REQUIRED SHOULD BE SMOOTHED TO CONFORM WITH THE EXISTING GRADE, PREPARED, AND SURFACED AS DETAILED.

16 CATCH BASIN/DRAIN INLET PROTECTION SILT SACK DETAIL

N.T.S.

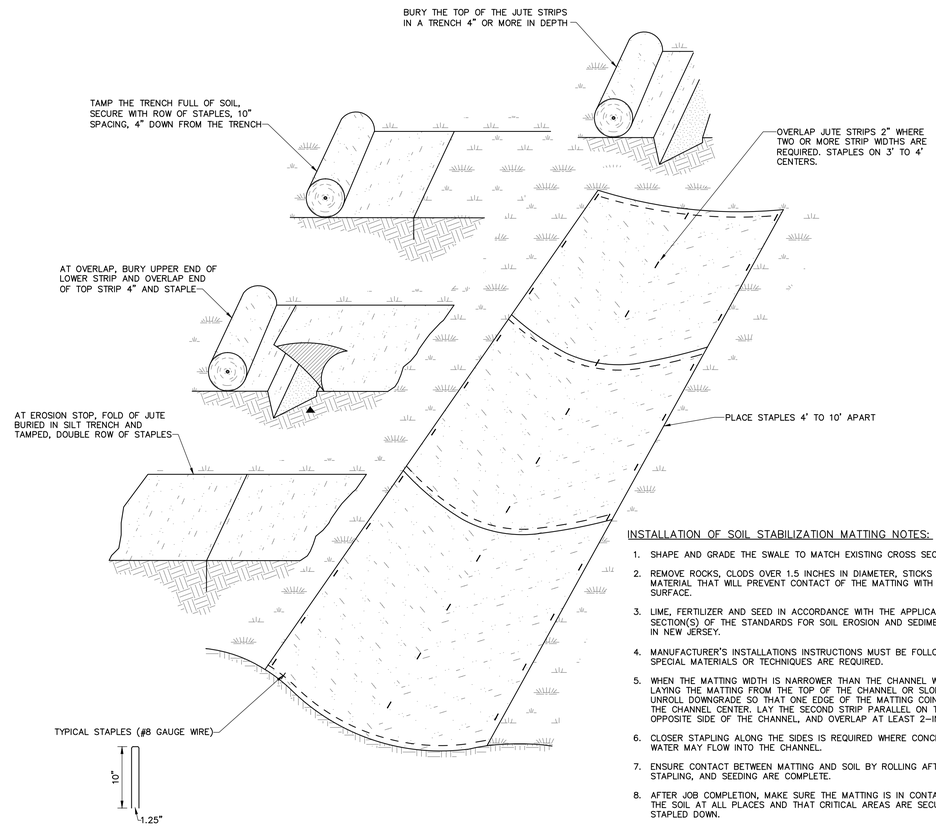


NOTES:

1. BAG MUST BE LOCATED AWAY FROM RECEIVING WATERS AND/OR CONSTRUCTION ACTIVITIES.
2. BAG MUST BE DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS. BAG MAY NOT BE REUSED.

17 SEDIMENT CONTROL BAG FOR DEWATERING DETAIL

N.T.S.



INSTALLATION OF SOIL STABILIZATION MATTING NOTES:

1. SHAPE AND GRADE THE SWALE TO MATCH EXISTING CROSS SECTION.
2. REMOVE ROCKS, CLODS OVER 1.5 INCHES IN DIAMETER, STICKS AND OTHER MATERIAL THAT WILL PREVENT CONTACT OF THE MATTING WITH THE SOIL SURFACE.
3. LIME, FERTILIZER AND SEED IN ACCORDANCE WITH THE APPLICABLE SECTION(S) OF THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
4. MANUFACTURER'S INSTALLATIONS INSTRUCTIONS MUST BE FOLLOWED WHEN SPECIAL MATERIALS OR TECHNIQUES ARE REQUIRED.
5. WHEN THE MATTING WIDTH IS NARROWER THAN THE CHANNEL WIDTH, START LAYING THE MATTING FROM THE TOP OF THE CHANNEL OR SLOPE AND UNROLL DOWNGRADE SO THAT ONE EDGE OF THE MATTING COINCIDES WITH THE CHANNEL CENTER. LAY THE SECOND STRIP PARALLEL ON THE OPPOSITE SIDE OF THE CHANNEL, AND OVERLAP AT LEAST 2-INCHES.
6. CLOSER STAPLING ALONG THE SIDES IS REQUIRED WHERE CONCENTRATED WATER MAY FLOW INTO THE CHANNEL.
7. ENSURE CONTACT BETWEEN MATTING AND SOIL BY ROLLING AFTER LAYING, STAPLING, AND SEEDING ARE COMPLETE.
8. AFTER JOB COMPLETION, MAKE SURE THE MATTING IS IN CONTACT WITH THE SOIL AT ALL PLACES AND THAT CRITICAL AREAS ARE SECURELY STAPLED DOWN.

EXISTING SWALE RESTORATION DETAIL

N.T.S.

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DENNIS M. WALSH, P.E.
NJ LIC.NO. GE46334

REV	DESCRIPTION	DATE
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AG
DRAWN BY: CA/RJ
CHECKED BY: DW
225616_D-02 & 03 CS.dwg

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

DETAILS

D-03

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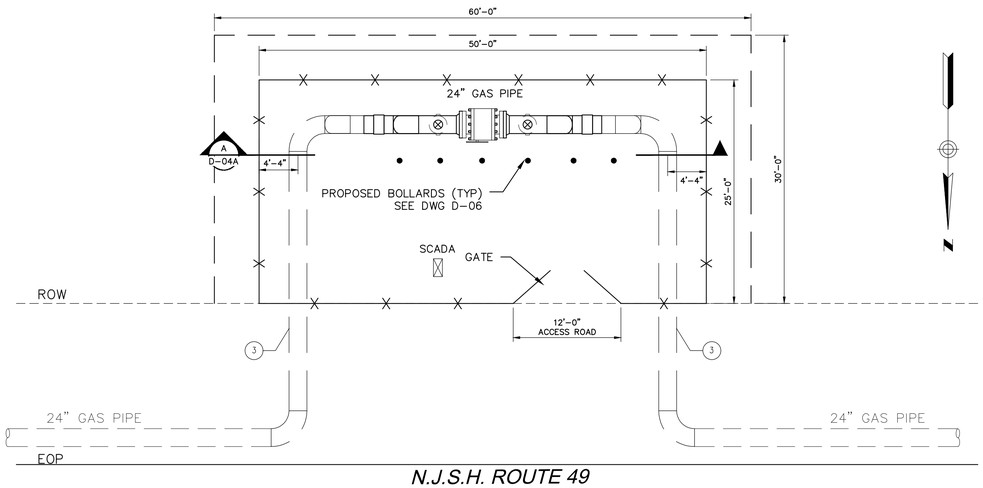
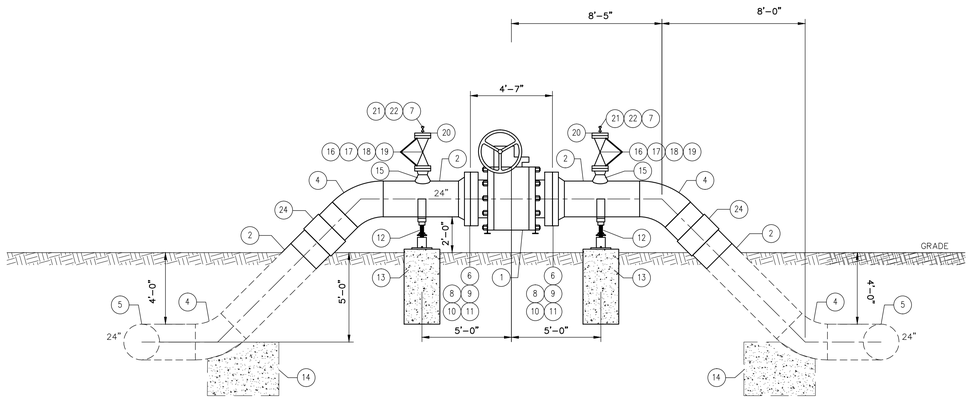


N.J.S.H. ROUTE 49

24" ROV SITE – ROUTE 49

SCALE: 1/8"=1'-0"

PLAN VIEW



SECTION

SCALE: 1/4" = 1'-0"

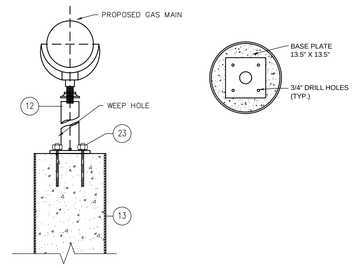
A
D-04A

6' 4' 2' 0 4' 8'

BAR SCALE
1/4" = 1'-0"
CHECK GRAPHIC SCALE BEFORE USING

BILL OF MATERIALS

ITEM	DESCRIPTION	QTY
1	24" GROVE B-5 VALVE, ANSI 600# CLASS, STEEL BODY, FLANGED, WORM GEAR OPERATED W/ HANDWHEEL	1
2	PIPE, LINE 24" O.D. X .375" W.T., API 5L-X60, BARE	20 FT
3	PIPE, LINE 24" O.D. X .375" W.T., API 5L- X60, COATED	58 FT
4	24" ELBOW, WELD, LR- 45º, .375 W.T., Y-60, B 16.9, ASTM 234	4
5	24" ELBOW, WELD, LR- 90º, .375 W.T., Y-60, B 16.9, ASTM 234	4
6	24" RF- WN FLANGE, CLASS 600#, ANSI 16.5, ASTM A105	2
7	1/2" SCREW PLUG, SOLID STEEL, X-HEAVY	2
8	24" ARMSTRONG SYNTHESEAL GASKET, CLASS 600# FLANGE OR EQUAL	2
9	6" ARMSTRONG SYNTHESEAL FLANGE GASKET, CLASS 600#, FULL FACE	4
10	1-7/8" x 13-1/4" LONG XYLON COATED STEEL STUD BOLTS, ASTM A-194, GRADE B-7	48
11	1-7/8" HEX NUT, ASTM A-193, GRADE 2H W/ WASHERS FOR 24" FLANGES	96
12	24" ADJUSTABLE PIPE SADDLE SUPPORT, PIPIING TECHNOLOGY OR EQUAL	2
13	24" DIAMETER SONOTUBE, WITH 5/8" THREADED RODS BOLTED TO SADDLE SUPPORT	2
14	5'-0 X 5'-0" X 2'-6" DEEP CONCRETE SUPPORT BLOCK, 3000 PSI CONC., W/ 2 LAYERS OF 15# FELT BETWEEN PIPE AND CONCRETE	2
15	24" X 6" WELD-O-LET, 4.026 BORE, ANSIB-16.9, ASTM 105	2
16	6" NORDSTROM VALVE, FIG 2249 1/2, ANSI 600# CLASS, STEEL BODY, FLANGED W/ OPERATING NUT	2
17	1" X 6.75" BOLT, STUD,ASTM A-193, GRADE B-7	24
18	1" HEX NUT, ASTM A-194, GRADE 2H	48
19	6" WELD NECK FLANGE, 600# CLASS, ANSI B16, ASTM A-105	2
20	6" BLIND FLANGE, 600# CLASS, ANSI B16, ASTM 105 W/ 1/2" THREADED TAP	2
21	1/2" X 6" X-HEAVY STEEL NIPPLE WITH THREADED ENDS	2
22	1/2" NORDSTRUM PLUG VALVE, FIG. 2224, ANSI 600 CLASS, STEEL BODY, THREADED ENDS	2
23	5/8" DIAMETER THREADED GALV. STEEL RODS W/ BOLTS FOR PIPE SUPPORTS & WASHERS FOR SADDLE SUPPORTS	8
24	24" MONOLITHIC ISOLATION JOINT, WELD END, 0.375 W.T., ANSI CLASS 600#, ISOJOINT	2



ADJUSTABLE 24" PIPE SADDLE SUPPORT

(FROM PIPING TECHNOLOGY FIG. 46)

1 D-04A

NOTE: SEE C-AGV-1 FOR SITE PLAN

SHEET REFRENCES:

C-AGV-1	SITE PLAN
AS-36	ALIGNMENT SHEET

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DENNIS M. WALSH, P.E.
NJ LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	ADDED MONOLITHIC ISOLATION JOINTS	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_D-04A&B CS.dwg

ROUTE 49
ROV DETAILS

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

D-04A

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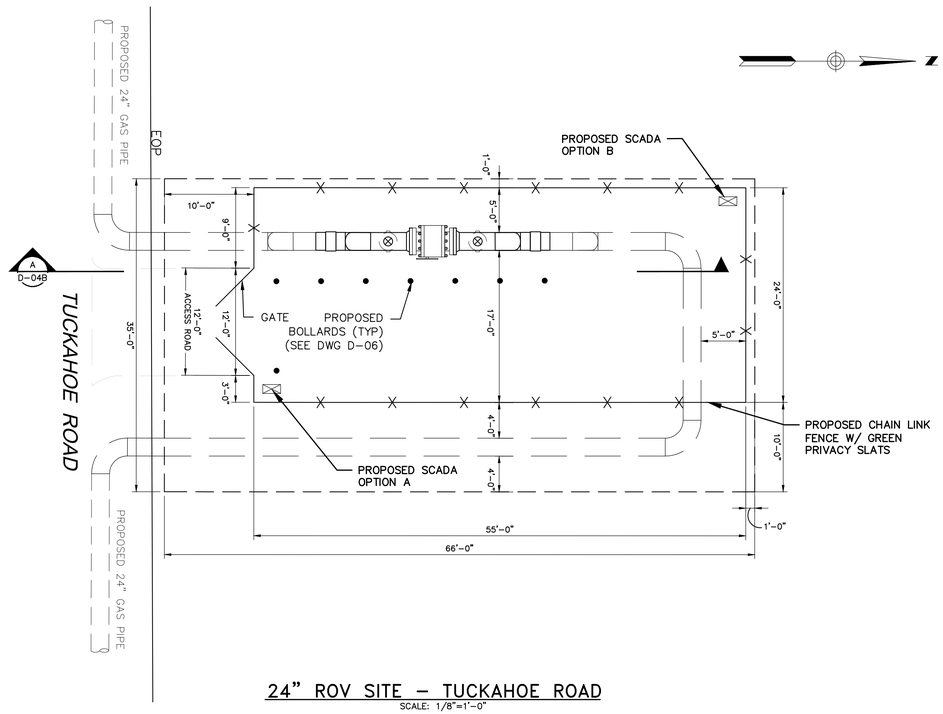
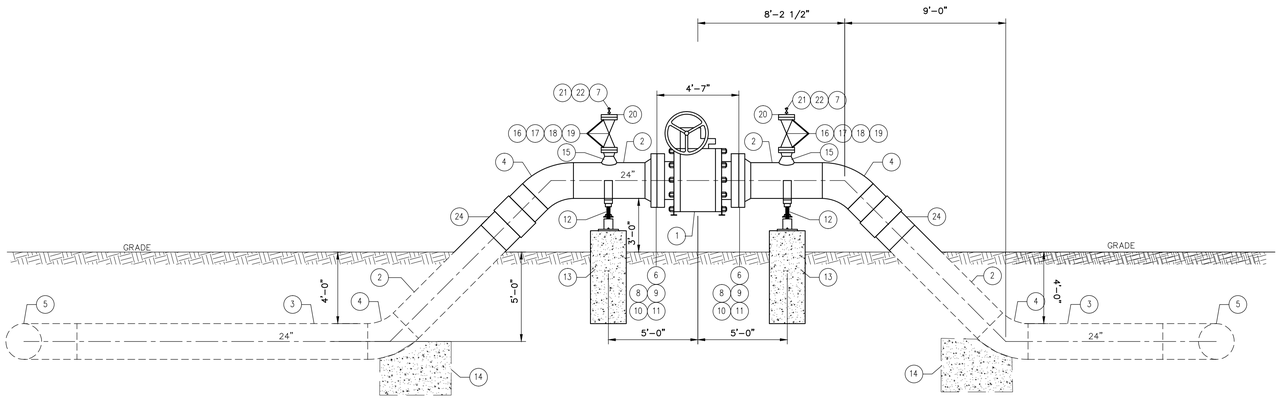


24" ROV SITE – TUCKAHOE ROAD

SCALE: 1/8"=1'-0"

PLAN VIEW



SECTION (A, D-04B)

SCALE: 1/4" = 1'-0"

6' 4' 2' 0 4' 8'

BAR SCALE
1/4" = 1'-0"
CHECK GRAPHIC SCALE BEFORE USING

BILL OF MATERIALS

ITEM	DESCRIPTION	QTY
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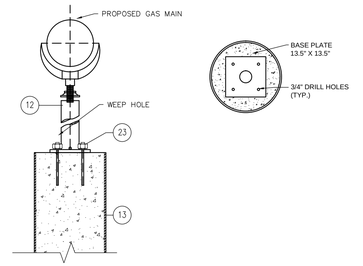
2	PIPE, LINE 24" O.D. X .375" W.T., API 5L-X60, BARE	22 FT
3	PIPE, LINE 24" O.D. X .375" W.T., API 5L- X60, COATED	101 FT
4	24" ELBOW, WELD, LR- 45°, .375 W.T., Y-60, B 16.9, ASTM 234	4
5	24" ELBOW, WELD, LR- 90°, .375 W.T., Y-60, B 16.9, ASTM 234	4
6	24" RF- WN FLANGE, CLASS 600#, ANSI 16.5, ASTM A105	2
7	1/2" SCREW PLUG, SOLID STEEL, X-HEAVY	2
8	24" ARMSTRONG SYNTHESEAL GASKET, CLASS 600# FLANGE OR EQUAL	2
9	6" ARMSTRONG SYNTHESEAL FLANGE GASKET, CLASS 600#, FULL FACE	4
10	1-7/8" x 13-1/4" LONG XYLON COATED STEEL STUD BOLTS, ASTM A-194, GRADE B-7	48
11	1-7/8" HEX NUT, ASTM A-193, GRADE 2H W/ WASHERS FOR 24" FLANGES	96
12	24" ADJUSTABLE PIPE SADDLE SUPPORT, PIPIING TECHNOLOGY OR EQUAL	2
13	24" DIAMETER SONOTUBE, WITH 5/8" THREADED RODS BOLTED TO SADDLE SUPPORT	2
14	5'-0 X 5'-0" X 2'-6" DEEP CONCRETE SUPPORT BLOCK, 3000 PSI CONC., W/ 2 LAYERS OF 15# FELT BETWEEN PIPE AND CONCRETE	2
15	24" X 6" WELD-O-LET, 4.026 BORE, ANSIB-16.9, ASTM 105	2
16	6" NORDSTROM VALVE, FIG 2249 1/2, ANSI 600# CLASS, STEEL BODY, FLANGED W/ OPERATING NUT	2
17	1" X 6.75" BOLT, STUD,ASTM A-193, GRADE B-7	24
18	1" HEX NUT, ASTM A-194, GRADE 2H	48
19	6" WELD NECK FLANGE, 600# CLASS, ANSI B16, ASTM A-105	2
20	6" BLIND FLANGE, 600# CLASS, ANSI B16, ASTM 105 W/ 1/2" THREADED TAP	2
21	1/2" X 6" X-HEAVY STEEL NIPPLE WITH THREADED ENDS	2
22	1/2" NORDSTRUM PLUG VALVE, FIG. 2224, ANSI 600 CLASS, STEEL BODY, THREADED ENDS	2
23	5/8" DIAMETER THREADED GALV. STEEL RODS W/ BOLTS FOR PIPE SUPPORTS & WASHERS FOR SADDLE SUPPORTS	8
24	24" MONOLITHIC ISOLATION JOINT, WELD END, 0.375 W.T., ANSI CLASS 600#	2



ADJUSTABLE 24" PIPE SADDLE SUPPORT (1, D-04B)

(FROM PIPING TECHNOLOGY FIG. 46)

NOTE: SEE C-AGV-2 FOR SITE PLAN

SHEET REFRENCES:

C-AGV-2 SITE PLAN

AS-67 ALIGNMENT SHEET

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NJ LIC.NO. GE46534

REV	DESCRIPTION	DATE
2	ADDED MONOLITHIC ISOLATION JOINTS	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
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TUCKAHOE ROAD
ROV DETAILS

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

D-04B

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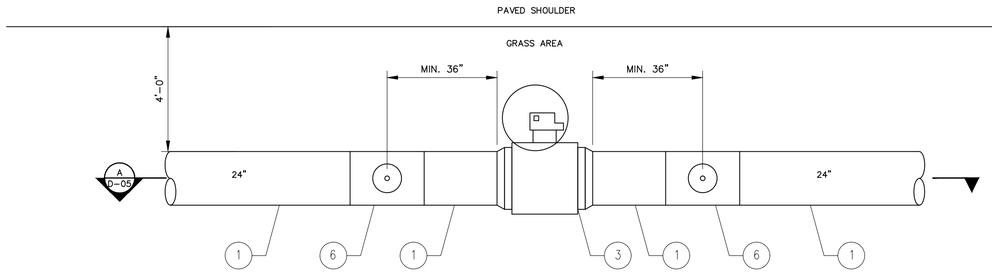
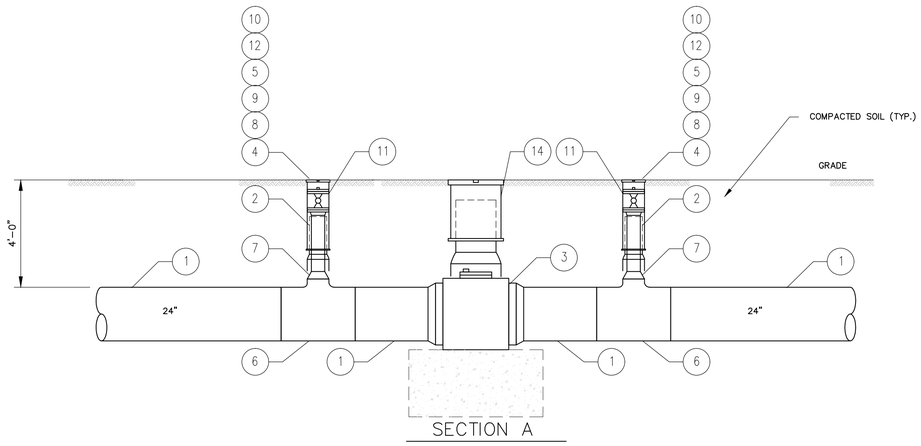


PLAN



SECTION A

TYPICAL BELOW GROUND BALL VALVE INSTALLATION DETAIL

SCALE: 3/8"=1'-0"

BILL OF MATERIALS

ITEMS	QUANTITY
(1) PIPE, LINE 24" O.D. x .375" W.T., API-5L x-60, PRITEC.	4 FEET
(2) PIPE, LINE 6.625" O.D. X .280" W.T., API-5L GR "B".	6 FEET
(3) VALVE, BALL, 24" CLASS 600# ANSI, WExWE, WITH BEVEL GEAR OPERATOR.. COATED FOR UNDERGROUND SERVICE, F.O. WE BTW .375" W.T., x 60 PIPE, GROVE B5 OR APPROVED EQUAL.	1
(4) VALVE, PLUG 6", CLASS 600, WExRFFE WITH BEVEL GEAR OPERATOR,COATED FOR UNDERGROUND SERVICE, WE BTW .280" W.T. GR. B PIPE. NORDSTROM FIGURE 4249 1/4 OR APPROVED EQUAL.	2
(5) FLANGE, BLIND 6" 600# ANSI RF., ASTM A-105. ASME 16.5 B.T.M. 0.280" W.T., API 5L, GR. "B" LINE PIPE W 1/2" TREADED TAP HOLE	2
(6) TEE, WELD, RED, 24"x24"x10", 24" O.D. x .375" W.T. x 10.750" O.D. x.365" W.T. MSS-SP-75 GR. Y-60, C/W BARRED BRANCH, NORMALIZE.	2
(7) REDUCER, 10"x.365" W.T. x 6" x .280" W.T. XS, ASTM A-105.	2
(8) GASKET RING, w THK. "FLEXITALLIC" TYPE CG, FOR 6" 600# RF, FLG.304 SS GAUGE RING 6" I.D. x 12" O.D., CAT. #CG-60.	4
(9) 1" X 6 3/4" LONG XYLON COATED STEEL BOLT W/ EXTRA HEAVY HEX NUTS AND WASHERS FOR 6" FLANGES	24
(10) 6" RF WN FLANGE CLASS 600# ANSI 16.5 ASTM A105 W.T. 0.280"	2
(11) 5 1/4" SHAFT 3-PIECE BINGHAM & TAYLOR VALVE BOX	2
(12) 1/2" SOLID STEEL PLUG	2
(13) 5'-0" X 5'-0" X 2'-6" DEEP CONCRETE SUPPORT BLOCK, 3000 PSI CONCRETE W/ 2 LAYERS OF #15 FELT BETWEEN VALVE AND CONCRETE	1
(14) 24" STEEL VALVE BOX	1

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1	ISSUED FOR BID	12/09/13

DESIGNED BY: LS/AS
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225616_D-05 CS.dwg

BELOW GROUND VALVE

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

D-05

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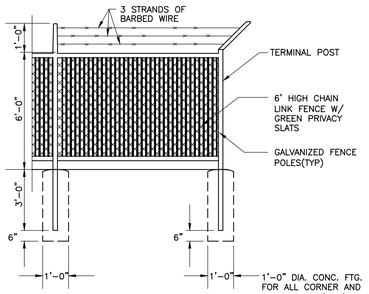
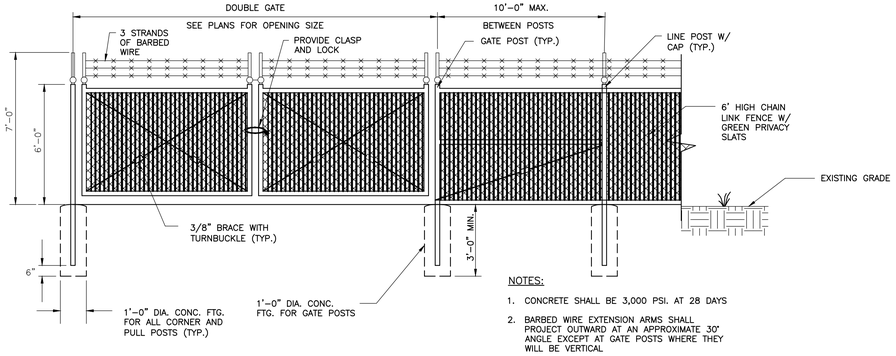
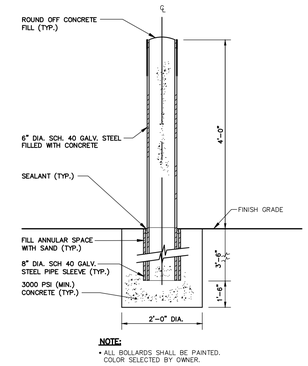


TYPICAL CHAIN LINK FENCE
N.T.S.



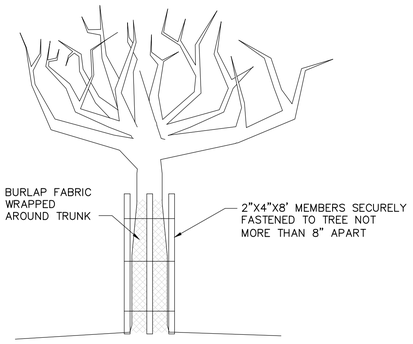
NOTES:
1. CONCRETE SHALL BE 3,000 PSI. AT 28 DAYS
2. BARBED WIRE EXTENSION ARMS SHALL PROJECT OUTWARD AT AN APPROXIMATE 30° ANGLE EXCEPT AT GATE POSTS WHERE THEY WILL BE VERTICAL

TYPICAL CHAIN LINK FENCE AND GATE
N.T.S.

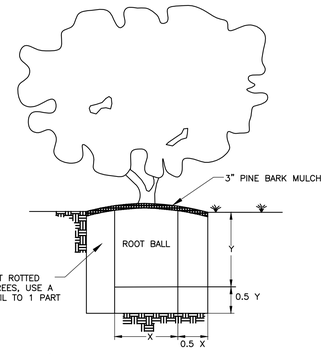


NOTE:
- ALL BOLLARDS SHALL BE PAINTED. COLOR SELECTED BY OWNER.

TYPICAL BOLLARD DETAIL
N.T.S.



TREE PROTECTION DETAIL
(NOT TO SCALE)

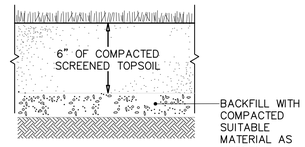


SOIL MIX NOTE:
4 PARTS TOPSOIL TO 1 PART ROTTED MANURE. FOR EVERGREEN TREES, USE A MIXTURE OF 4 PARTS TOPSOIL TO 1 PART PEAT HUMUS.

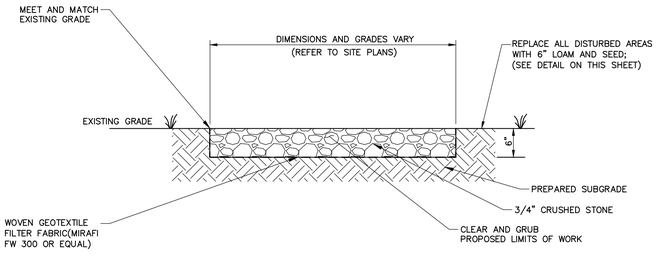
PLANTING NOTE:

TREES AND SHUBS (IN 1 TO 5 GALLON POTS) SELECTED FOR PLANTING ALONG THE PERIMETER FENCE OF CUMBERLAND POND PIGGING STATION (C-100), ROUTE 49 ROV (C-AVG-1) AND TUCKAHOE ROAD ROV (C-AGV-2) SHALL BE PLANTED AFTER THEY HAVE BECOME DORMANT AND BEFORE NEW GROWTH APPEARS (NOVEMBER TO MARCH). THE SELECTED SPECIES, INKBERYY (LLEX GLABRA), NORTHERN BAYBERRY (MORELLA PENNSYLVANICA) AND MOUNTAIN LAUREL (KALMIA LATIFOLIA) ARE TO BE INSTALLED AT 6-FOOT CENTERS. BALLED AND BURLAPPED TREES AND SHRUBS MAY BE PLANTED ANY TIME OF THE YEAR PROVIDED THEY WERE DUG DURING THE DORMANT PERIOD AND AFTER PLANTING RECEIVES AMPLE WATER DURING HOT, DRY WEATHER.

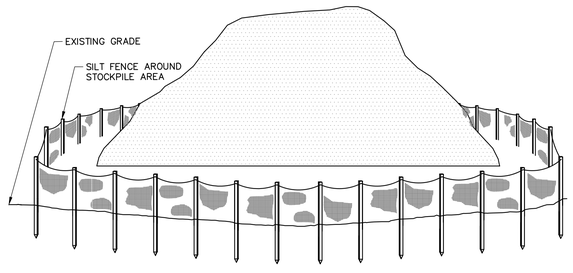
SHRUB PLANTING DETAIL
(NOT TO SCALE)



LOAM & SEED DETAIL
NOT TO SCALE



CRUSHED STONE AREA AND DRIVEWAY CROSS SECTION DETAIL
N.T.S.



NOTES:
1. STOCKPILES OF TOPSOIL SHOULD BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.
2. STOCKPILES SHOULD BE VEGETATED IN ACCORDANCE WITH STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY; SEE STANDARDS FOR PERMANENT (PAGE 4-1) OR TEMPORARY (PAGE 7-1) VEGETATIVE COVER FOR SOIL STABILIZATION. WEEDS SHOULD NOT BE ALLOWED TO GROW ON STOCKPILES.
3. SOIL STOCKPILE AREAS SHOULD NOT BE ESTABLISHED WITHIN PAVED AREAS. IF NECESSARY, STOCKPILE AREAS SHALL BE REMOVED FROM WITHIN PAVED AREAS A MAXIMUM OF THREE (3) DAYS AFTER ESTABLISHMENT.
4. SEE DETAIL 10 ON SHEET D-02 FOR SILT FENCE DETAIL.
5. SEE NOTE #7 ON SHEET D-03.

SOIL STOCKPILE AREA
NOT TO SCALE

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REV.	DESCRIPTION	DATE
2	REVISED INTERCONNECT STATION	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_D-06 CS.dwg

SITE PLAN DETAILS

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

D-06

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CUMBERLAND–SALEM SOIL CONSERVATION DISTRICT (SCD) NOTES

JURISDICTIONAL LIMITS OF CUMBERLAND–SALEM SCD: STATIONS 09+86 to 322+26

1. ALL APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN PLACE PRIOR TO ANY GRADING OPERATION AND/OR INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES.
2. SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THE PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
3. ALL APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND/OR THE AREA IS STABILIZED.
4. ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN SIXTY (60) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND FERTILIZATION IN ACCORDANCE WITH THE NEW JERSEY STANDARDS AND APPLICATION RATES SHALL BE INCLUDED IN THE NARRATIVE. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS (I.E. PEG AND TWINE, MULCH MATTING OR LIQUID MULCH BINDER).
5. ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH AT A RATE OF 2 TONS PER ACRE, ACCORDING TO THE NEW JERSEY STANDARDS IMMEDIATELY FOLLOWING ROUGH GRADING.
6. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
7. ALL SOIL EROSION AND SEDIMENTATION STRUCTURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS AND AFTER EVERY STORM EVENT.
8. SOIL STOCKPILES ARE NOT TO BE LOCATED WITHIN FIFTY (50) FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY. THE BASE OF ALL STOCKPILES SHOULD BE PROTECTED BY A HAY BALE BARRIER OR SEDIMENT FENCE. PROPOSED LOCATIONS MUST BE DELINEATED ON THE PLAN.
9. A CRUSHED STONE, TIRE CLEANING PAD WILL BE INSTALLED WHEREVER A CONSTRUCTION ENTRANCE EXISTS. THE RIP–RAP PAD MUST BE 100 FEET IN LENGTH AND THE STONE MUST BE 1.5 – 4" IN SIZE, PLACED 12" THICK AND THE FULL WIDTH OF THE ENTRANCE. IT SHOULD BE UNDERLAIN WITH A SUITABLE SYNTHETIC FILTER FABRIC AND MAINTAINED. (THE STRUCTURE MUST BE DELINEATED AND DETAIL INCLUDED ON THE PLANS.)
10. IF A STONE CONSTRUCTION ENTRANCE IS TO BE USED AS AN EXIT ON TO A MAJOR HIGHWAY, A THIRTY (30) FOOT PAVED TRANSITION AREA SHALL BE INSTALLED.
11. ALL DRIVEWAYS MUST BE STABILIZED WITH 2 1/2" CRUSHED STONE OR SUBBASE PRIOR TO INDIVIDUAL LOT CONSTRUCTION.
12. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
13. ALL CATCH BASIN INLETS WILL BE PROTECTED DURING CONSTRUCTION (FILTER DETAILS APPEAR ON PLAN).
14. ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
15. ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTRATION DEVICE. THE SEDIMENT FILTER MUST BE CAPABLE OF FILTERING THE SEDIMENT AND BE PLACED SO AS NOT TO CAUSE EROSION OF THE DOWNSTREAM AREA. DETAILS AND MAINTENANCE OF THE DEVICE MUST BE INCLUDED ON THE PLANS. FIELD PLACEMENT AND USE OF THE STRUCTURE MUST BE APPROVED BY THE DISTRICT EROSION CONTROL INSPECTOR PRIOR TO COMMENCEMENT OF DEWATERING ACTIVITIES.
16. THE CUMBERLAND/SALEM SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED, IN WRITING, 72 HOURS PRIOR TO ANY LAND DISTURBANCE.
17. SOIL HAVING A PH OF 4.0 OR LESS OR CONTAINING IRON SULPHIDE MUST BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR MORE BEFORE SEEDBED PREPARATION.
18. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO PROVIDE CONFIRMATION OF LIME, FERTILIZER AND SEED APPLICATION RATES AT THE REQUEST OF THE CUMBERLAND/SALEM SOIL CONSERVATION DISTRICT.
19. NJSA 4:24–39, ET SEQ., REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE ALL THE PROVISIONS OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES. ALL SITE WORK FOR THE PROJECT MUST BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE AS A PREREQUISITE TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.
20. NJSA 4:24–39, ET SEQ., REQUIRES THAT UPON PERMANENT SITE STABILIZATION AND COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL APPLY TO THE SOIL CONSERVATION DISTRICT FOR A FINAL COMPLIANCE INSPECTION TO CHECK THAT ALL THE PROVISIONS OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES.
21. OFFSITE SEDIMENT DISTURBANCE MAY REQUIRE ADDITIONAL CONTROL MEASURES TO BE DETERMINED BY THE EROSION CONTROL INSPECTOR.
22. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE MAINTAINED ON THE PROJECT SITE DURING CONSTRUCTION.
23. ANY CONVEYANCE OF THIS PROJECT PRIOR TO ITS COMPLETION WILL TRANSFER FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CERTIFIED PLAN TO ALL SUBSEQUENT OWNERS.
24. IMMEDIATELY AFTER THE COMPLETION OF STRIPPING AND STOCKPILING OF TOPSOIL, SEED THE STOCKPILE WITH ANNUAL RYE GRASS. STABILIZE TOPSOIL STOCKPILES WITH STRAW MULCH FOR PROTECTION IF THE SEASON DOES NOT PERMIT THE APPLICATION AND ESTABLISHMENT OF TEMPORARY SEEDING.
25. ANY CHANGES TO THE SITE PLAN WILL REQUIRE THE SUBMISSION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN TO THE CUMERLAND/SALEM SOIL CONSERVATION DISTRICT. THE REVISED PLAN MUST BE IN ACCORDANCE WITH THE CURRENT NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL.
26. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT BE CONSTRUCTED STEEPER THAN 3:1 UNLESS OTHERWISE APPROVED BY THE DISTRICT.
27. THE SOIL EROSION INSPECTOR MAY REQUIRE ADDITIONAL SOIL EROSION MEASURES TO BE INSTALLED, AS DIRECTED BY THE DISTRICT INSPECTOR.
28. ANY TEMPORARY DRIVING SURFACE, DISTURBED BY CONSTRUCTION, SHALL BE BASE PAVEMENT UNTIL FINAL PAVEMENT REPAIRS HAVE BEEN MADE.

STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY

STANDARD NOTES FOR TOPSOILING

1. TOPSOIL SHALL BE USED WHERE SOILS ARE TO BE DISTURBED AND WILL BE REVEGETATED.
2. TOPSOIL SHOULD BE FRIABLE, LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES, AND CONTAIN NO TOXIC SUBSTANCE OR ADVERSE CHEMICAL OR PHYSICAL CONDITION THAT MAY BE HARMFUL TO PLANT GROWTH. SOLUBLE SALTS SHOULD NOT BE EXCESSIVE (CONDUCTIVITY LESS THAN 0 5 MILLIMHOS PER CENTIMETER. MORE THAN 0.5 MILLIMHOS MAY DESICATE SEEDLINGS AND ADVERSELY IMPACT GROWTH). TOPSOIL HAULED IN FROM OFFSITE SHOULD HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.75 PERCENT. ORGANIC MATTER CONTENT MAY BE RAISED BY ADDITIVES.
3. TOPSOIL SUBSTITUTE IS A SOIL MATERIAL WHICH MAY HAVE BEEN AMENDED WITH SAND, SILT, CLAY, ORGANIC MATTER, FERTILIZER OR LIME AND HAS THE APPEARANCE OF TOPSOIL. TOPSOIL SUBSTITUTES MAY BE UTILIZED ON SITES WITH INSUFFICIENT TOPSOIL FOR ESTABLISHING PERMANENT VEGETATION. ALL TOPSOIL SUBSTITUTE MATERIALS SHALL MEET THE REQUIREMENTS OF TOPSOIL SPECIFIED IN NOTE 2 ABOVE. SOIL TESTS SHALL BE PERFORMED TO DETERMINE THE COMPONENTS OF SAND, SILT, CLAY, ORGANIC MATTER, SOLUBLE SALTS AND PH LEVEL.
4. FIELD EXPLORATION SHOULD BE MADE TO DETERMINE WHETHER QUANTITY AND OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.
5. STRIPPING SHOULD BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA.
6. WHERE FEASIBLE, LIME MAY BE APPLIED BEFORE STRIPPING AT A RATE DETERMINED BY SOIL TESTS TO BRING THE SOIL PH TO APPROXIMATELY 6.5.
7. STRIPPING DEPTH VARIES DEPENDING ON THE PARTICULAR SOIL.
8. STOCKPILES SHOULD BE VEGETATED IN ACCORDANCE WITH STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY FOR PERMANENT OR TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION. WEEDS SHOULD NOT BE ALLOWED TO GROW ON STOCKPILES.
9. GRADE AT THE ONSET OF THE OPTIMAL SEEDING PERIOD SO AS TO MINIMIZE THE DURATION AND AREA OF EXPOSURE OF DISTURBED SOIL TO EROSION. IMMEDIATELY PROCEED TO ESTABLISH VEGETATIVE COVER IN ACCORDANCE WITH THE SPECIFIED SEED MIXTURE.
10. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, ANCHORING, AND MAINTENANCE. SEE THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY FOR LAND GRADING.
11. FOR IDEAL CONDITIONS, SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT. LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL TO A PH OF APPROXIMATELY 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
12. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE; I.E., LESS THAN FIELD CAPACITY.
13. A UNIFORM APPLICATION TO A DEPTH OF 6" (UNSETTLED) IS REQUIRED. SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR MORE, IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY FOR STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOIL.

STANDARD NOTES FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

1. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY STANDARDS FOR LAND GRADING.
2. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10–20–10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE.
3. WORK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.
4. SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED PREPARATION. SEE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS.
5. SEED GERMINATION SHALL HAVE BEEN TESTED WITHIN 12 MONTHS OF THE PLANTING DATE. NO SEED SHALL BE ACCEPTED WITH A GERMINATION TEST DATE MORE THAN 12 MONTHS OLD UNLESS RETESTED.
6. AFTER SEEDING, FIRM THE SOIL WITH A CORRUGATED ROLLER TO ASSURE GOOD SEED–TO–SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE.
7. MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT.
8. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, OR SALT HAY TO BE APPLIED AT THE RATE OF 1–1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH–BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER–BLOWERS MUST NOT GRIND THE MULCH.

   APPLICATION. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 85% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND–SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

   ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. ANCHORING METHOD SHALL BE APPROVED BY ENGINEER AND IN ACCORDANCE WITH STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY STANDARD FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION.

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DENNIS M.WALSH, P.E.
N.J. LIC.NO. GE46534

REV	DESCRIPTION	DATE

DESIGNED BY: LS, JG
DRAWN BY: OA, PJ
CHECKED BY: DW
225616_D-07 CS.dwg

DETAILS

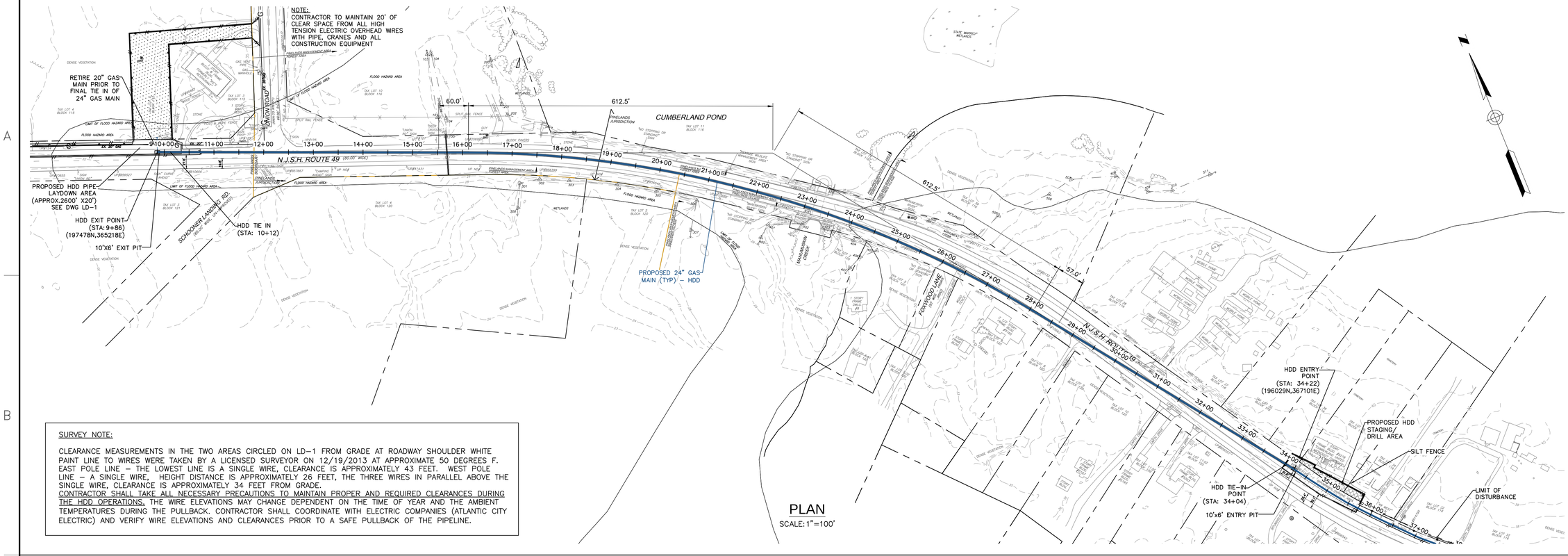
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: NONE

D-07

\\portland\projects1\225616 s\g – england power plant\wip\drawings_redesign\225616_D–07 CS.DWG, May 18, 2015 – 1:55pm



PLAN
SCALE: 1"=100'

SURVEY NOTE:

CLEARANCE MEASUREMENTS IN THE TWO AREAS CIRCLED ON LD-1 FROM GRADE AT ROADWAY SHOULDER WHITE PAINT LINE TO WIRES WERE TAKEN BY A LICENSED SURVEYOR ON 12/19/2013 AT APPROXIMATE 50 DEGREES F. EAST POLE LINE – THE LOWEST LINE IS A SINGLE WIRE, CLEARANCE IS APPROXIMATELY 43 FEET. WEST POLE LINE – A SINGLE WIRE, HEIGHT DISTANCE IS APPROXIMATELY 26 FEET, THE THREE WIRES IN PARALLEL ABOVE THE SINGLE WIRE, CLEARANCE IS APPROXIMATELY 34 FEET FROM GRADE.
CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN PROPER AND REQUIRED CLEARANCES DURING THE HDD OPERATIONS. THE WIRE ELEVATIONS MAY CHANGE DEPENDENT ON THE TIME OF YEAR AND THE AMBIENT TEMPERATURES DURING THE PULLBACK. CONTRACTOR SHALL COORDINATE WITH ELECTRIC COMPANIES (ATLANTIC CITY ELECTRIC) AND VERIFY WIRE ELEVATIONS AND CLEARANCES PRIOR TO A SAFE PULLBACK OF THE PIPELINE.

HDD GENERAL NOTES

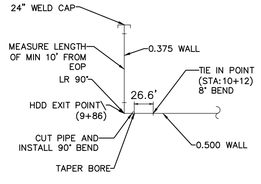
1. ALL NEW GAS PIPE USED FOR INSTALLATION IN HDD CROSSINGS SHALL BE:

   24" OD X 0.500 WALL, STEEL PIPE API 52 GRADE X-60 ERW DOUBLE RANDOM LENGTHS, COATED WITH POWERCRETE (40 MILS) ON FUSION BONDED EPOXY (14-16 MILS) (SEE MATERIALS ON ALIGNMENT SHEETS).

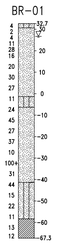
2. CONTRACTOR SHALL ENSURE FINAL WELD CONNECTIONS ARE PERFORMED TO MATCH THE OPEN TRENCH LINE PIPE 24" X .375, API 52 GRADE X-60. (SEE SJG STANDARD DRAWING AST-93); MODIFIED AS IN JACK & BORE DRAWING # J&BS-2 DETAIL FOR TAPER BORE.
3. CONTRACTOR SHALL SUBMIT HDD FINAL SCALED "AS BUILT" DRAWINGS (PLAN & PROFILE) WITH PILOT HOLE COORDINATES INCLUDING MEASURED DEPTH, TOTAL DISPLACEMENT(STATIONING),VERTICAL DEPTH, INCLINATION, AZIMUTH, 3 JOINT RADIUS, FINAL 24" PIPE ALIGNMENT WITH LOCATIONS OF EACH WELD IN THE FINAL INSTALLED POSITION WITH TANGENTIAL CALCULATIONS. EACH WELD SHALL HAVE A NUMBER TO CORRESPOND TO A LOCATION IN BOREHOLE.
4. WHEN PULLING BACK PIPE THROUGH BOREHOLE CONTRACTOR TO PULL OUT AN EXTRA TWENTY FEET (20') OF CARRIER PIPE TO PERMIT INSPECTION FOR GOUGES, SCRATCHES, SCRAPS, CUTS, AND OTHER FORMS OF DAMAGE. ANY PIPE AND/OR COATING DAMAGES SHALL BE REPORTED TO THE SJG ENGINEER IMMEDIATELY.
5. HDD CONTRACTOR TO MAINTAIN DAILY REPORTS OF DRILLING PROGRESS, ANGLES, 3 JOINT RADIUS AND LINE PIPE.
6. PRIOR TO PULLING BACK PIPE INTO HDD CROSSING PIPE SHALL BE JEEP TESTED BY THE CONTRACTOR AND WITNESSED BY SJG JUST PRIOR TO ENTERING THE BORE AND THE CONDITION OF THE COATING EVALUATED. ANY HOLIDAYS DETECTED SHALL BE REPAIRED AS PER SJG CONSTRUCTION MANUAL & SPECIFICATIONS.
7. A LOG SHALL BE MAINTAINED FOR ALL COATING HOLIDAYS AND THEIR REPAIRS AND A COMPLETE FINAL LOG SIGNED BY THE CONTRACTOR'S REPRESENTATIVE SHALL BE SUBMITTED TO SJG AFTER COMPLETION OF THE PROJECT.
8. CONTRACTOR TO LOG PULL BACK FORCES, TIME, LENGTH OF PIPE REMAINING, AND PULLBACK FORCE(FT/LBS) DURING THE PULLBACK OF THE PIPELINE EACH TIME THE CONTRACTOR REMOVES A LENGTH OF DRILL PIPE..
9. CONTRACTOR TO CALL "ONE CALL" PRIOR TO THE START OF ANY UNDERGROUND WORK.
10. HDD PROFILES ARE INDICATED AS MINIMUM HDD REQUIREMENTS. ANY VARIATIONS BY THE CONTRACTOR TO THE HDD PROFILES MUST BE BROUGHT TO THE ATTENTION OF SOUTH JERSEY GAS.
11. CONTRACTOR IS RESPONSIBLE FOR AND SHALL MAINTAIN ALL TRAFFIC CONTROL DEVICES DURING CONSTRUCTION ACTIVITIES. SEE CORRESPONDING CHERRY WEBER & ASSOCIATES TRAFFIC CONTROL PLANS & DRAWINGS ATTACHED IN THE SPECIFICATIONS AND DRAWINGS.
12. ALL HDD DRILLING RADII ARE 2400 FEET EXCEPT WHERE NOTED ON THE DRAWINGS.
13. BORINGS SHOWN ON THESE DRAWINGS ARE FOR REFERENCE PURPOSE ONLY. BORINGS ARE NOT DRAWN TO SCALE. CONTRACTOR SHALL REFER TO CHERRY WEBER AND ASSOCIATES GEOTECHNICAL ENGINEERING REPORT "24-INCH BL ENGLAND PIPELINE SUPPLY PROJECT" DATED JULY 24, 2014, DISTRIBUTED BY SJG RESOURCES FOR FURTHER INFORMATION ON BORINGS, GEOLOGY, SOIL ANALYSIS AND GROUNDWATER.
14. CONTRACTOR SHALL INSTALL AND MAINTAIN ENVIRONMENTAL CONTROLS, SOIL EROSION & DUST CONTROLS, SILT FENCE AND CONSTRUCTION FENCING DURING CONSTRUCTION AND AT ALL EXCAVATIONS AND WHERE NOTED ON DRAWINGS.
15. ALL CORRESPONDING ALIGNMENT SHEET DRAWINGS DETAILING LAYDOWN AREAS ARE MADE PART OF THIS CONTRACT.

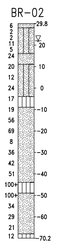
100' 0 100' 200'
BAR SCALE
1" = 100'
CHECK GRAPHIC SCALE BEFORE USING

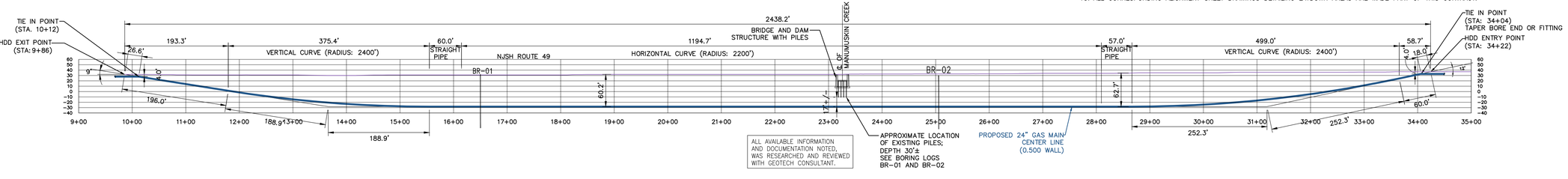
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



NOTE: SEE DRAWING FROM NJ DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING
CUMBERLAND POND DAM
GENERAL PLAN, ELEVATION AND NOTES ROUTE 49
CONTRACT NO. 042950392
SHEET B2 OF B16







PROFILE REFER TO AS-1 AND AS-2
SCALE: 1"=100'

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR HDD	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_HDD_CS.dwg

CUMBERLAND POND – HDD

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

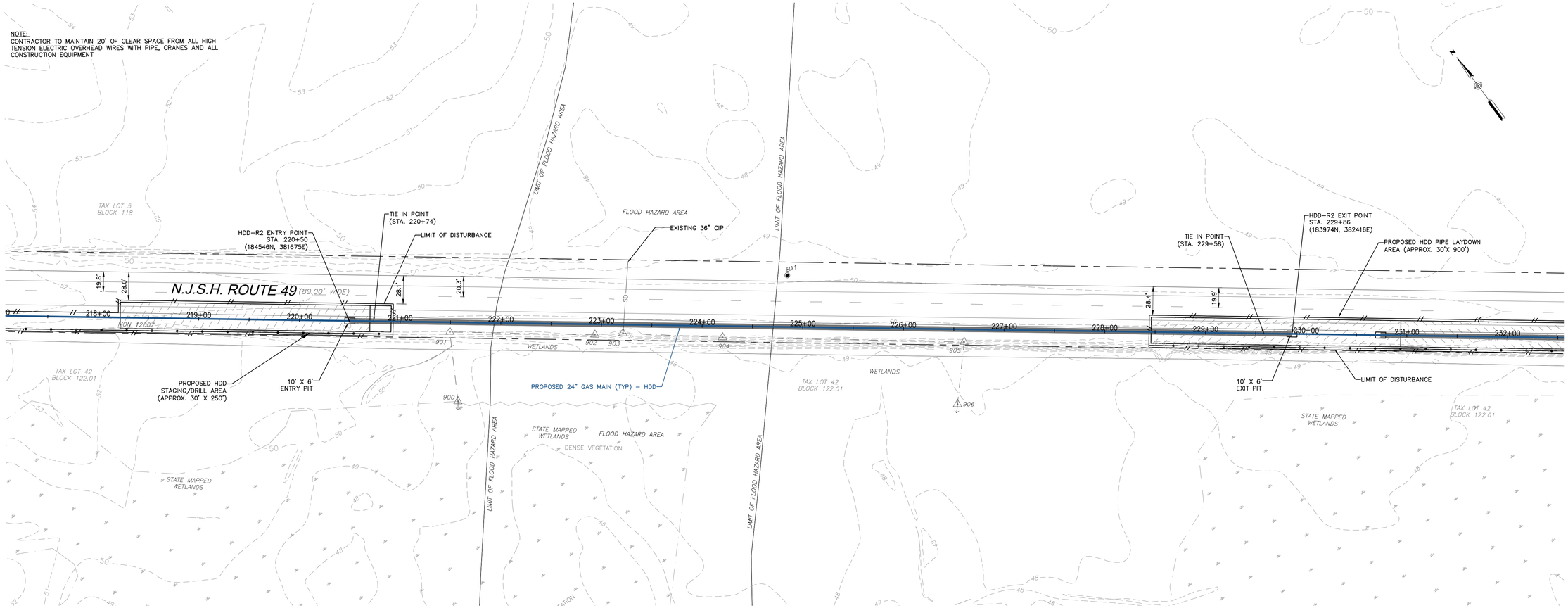
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

HDD-R1

\\portland\projects1\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD_CS.dwg, May 18, 2015 - 1:56pm

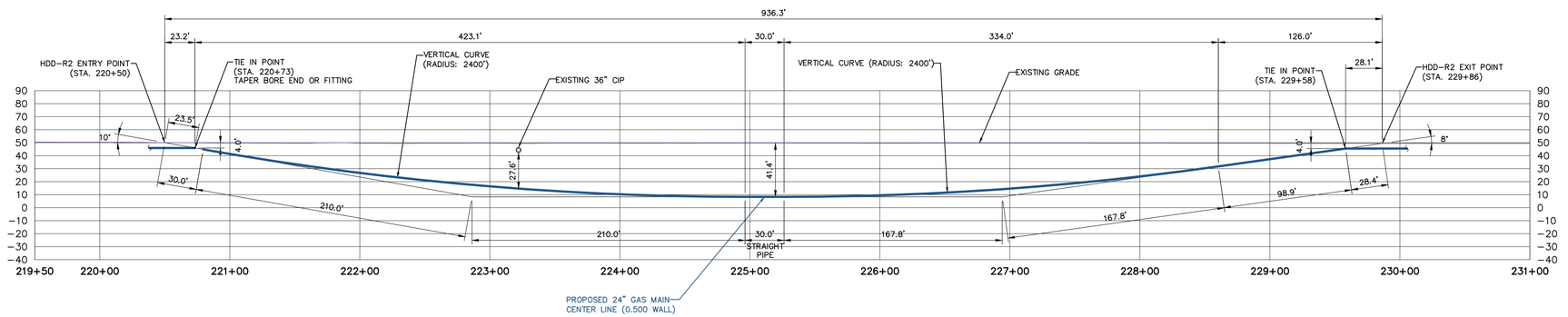
NOTE:
CONTRACTOR TO MAINTAIN 20' OF CLEAR SPACE FROM ALL HIGH TENSION ELECTRIC OVERHEAD WIRES WITH PIPE, CRANES AND ALL CONSTRUCTION EQUIPMENT



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2

BA-01



PROFILE REFER TO AS-15 & AS-16
SCALE: 1"=50'

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N.J. LIC. NO. GE46534

REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-R2.dwg

HDD-R2 AT STATION 220+50

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

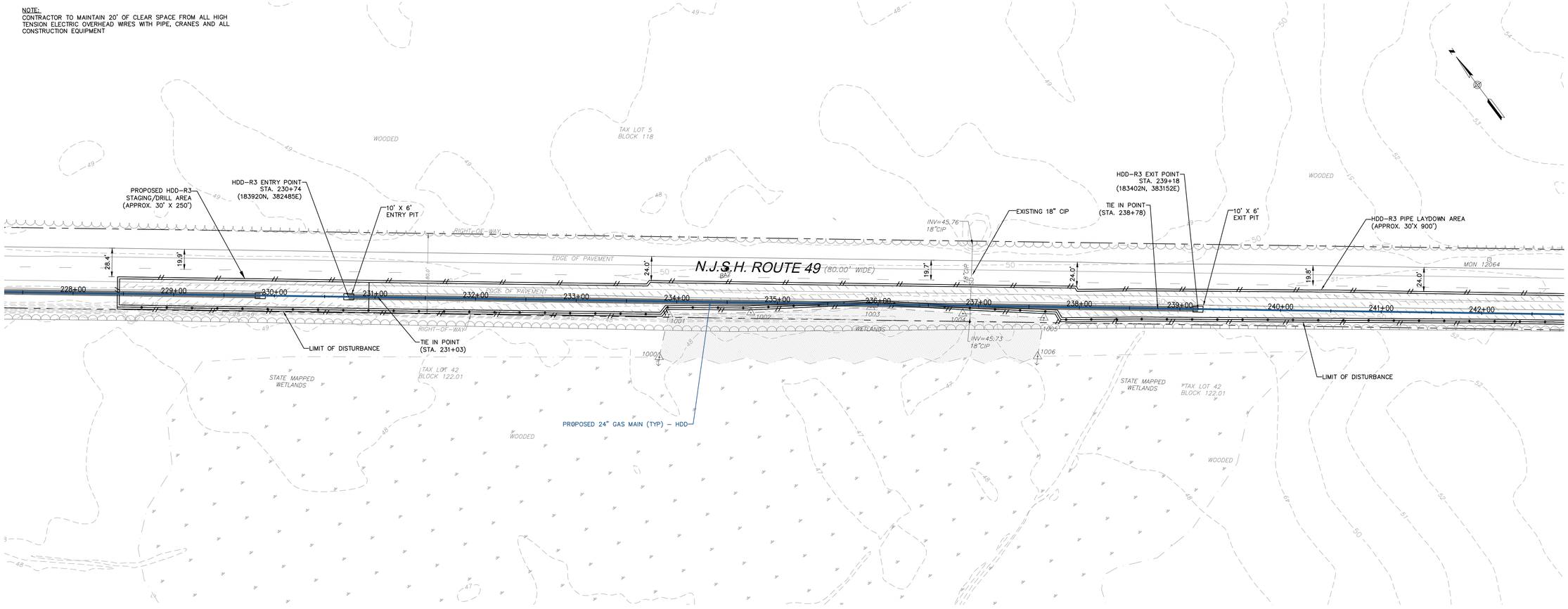
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R2

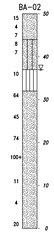
\\PORTLAND\Projects\225616 sjg - englond power plant\wip\Drawings_redesign\225816_HDD-R2.dwg, May 18, 2015 - 1:56pm

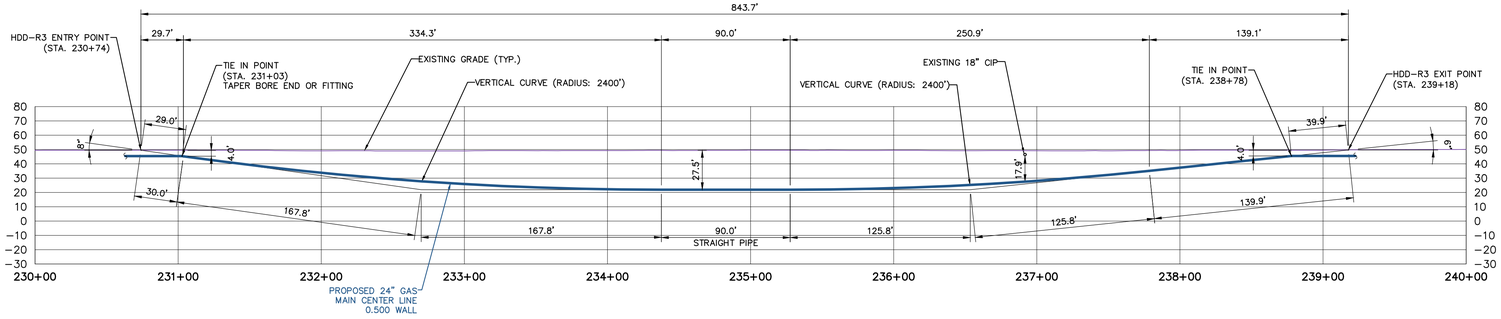
NOTE:
CONTRACTOR TO MAINTAIN 20' OF CLEAR SPACE FROM ALL HIGH TENSION ELECTRIC OVERHEAD WIRES WITH PIPE, CRANES AND ALL CONSTRUCTION EQUIPMENT



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2





PROFILE
SCALE: 1"=50'

REFER TO AS-16

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-R3.dwg

HDD-R3 AT STATION 230+74

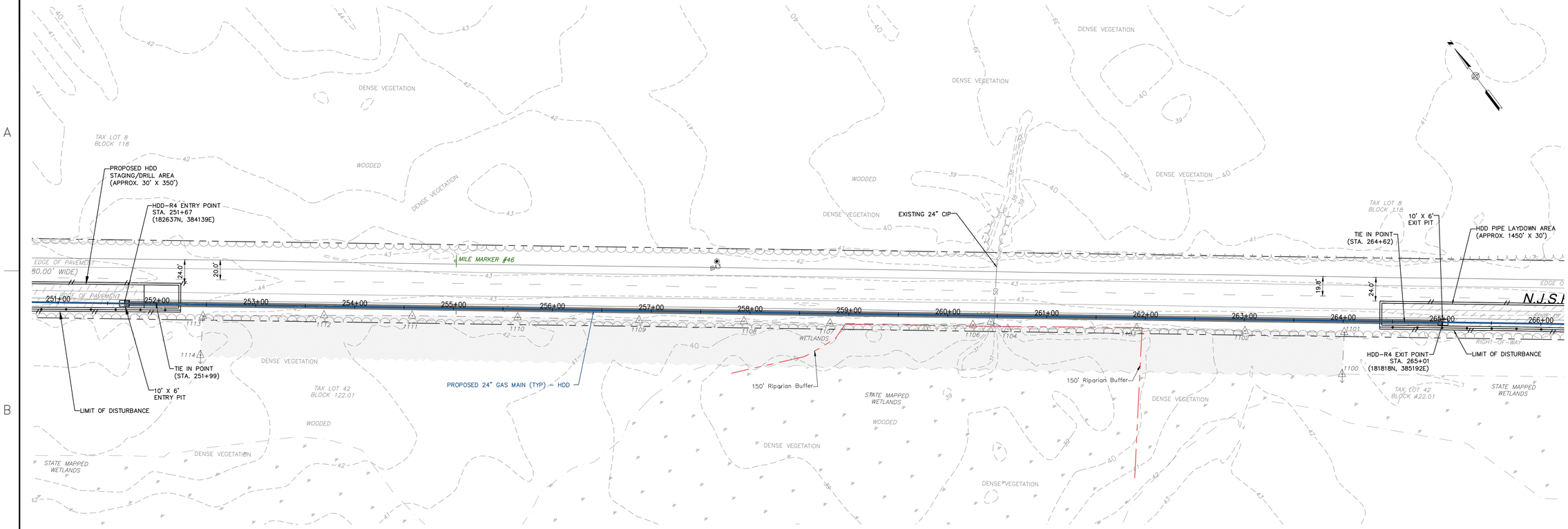
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R3

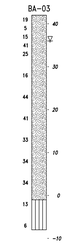
\\PORTLAND\Projects\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-R3.dwg, May 18, 2015 - 1:57pm

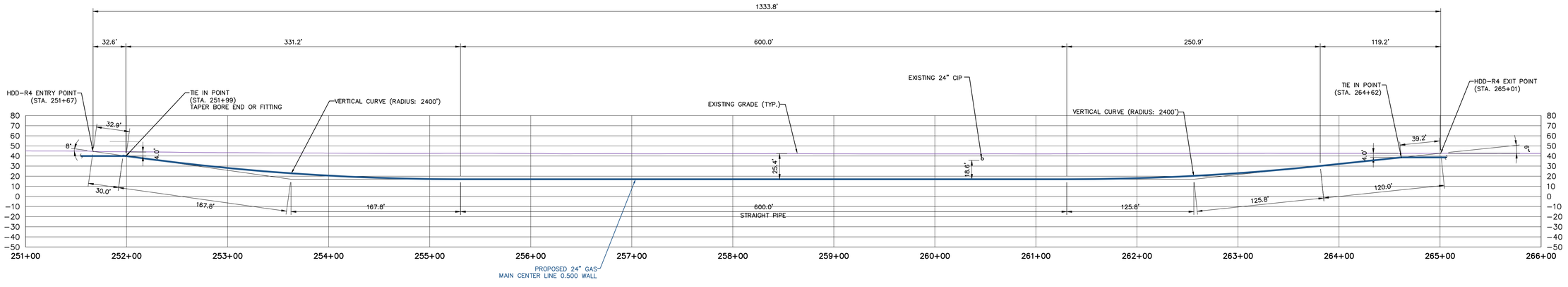


PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1

NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2





PROFILE REFER TO AS-17 AND AS-18
SCALE: 1"=50'

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NJ LIC.NO. GE46534

REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-R4.dwg

HDD-R4 AT STATION 251+67

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

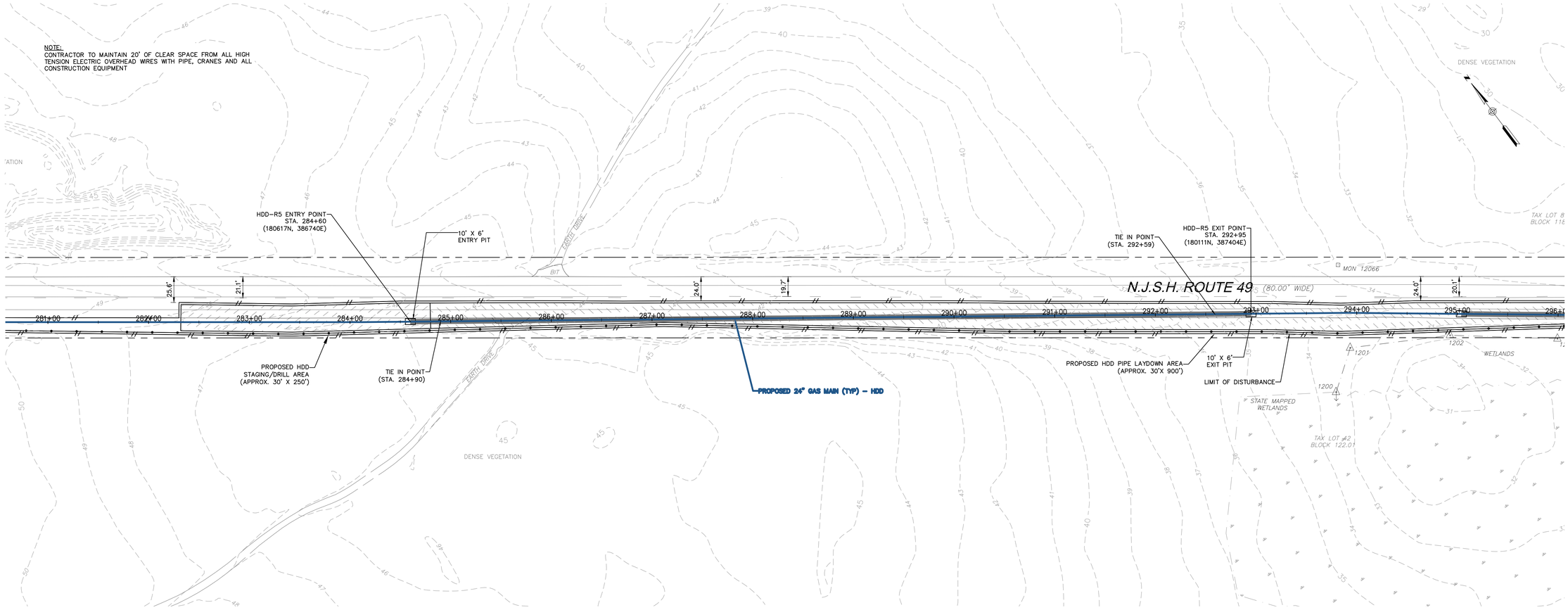
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R4

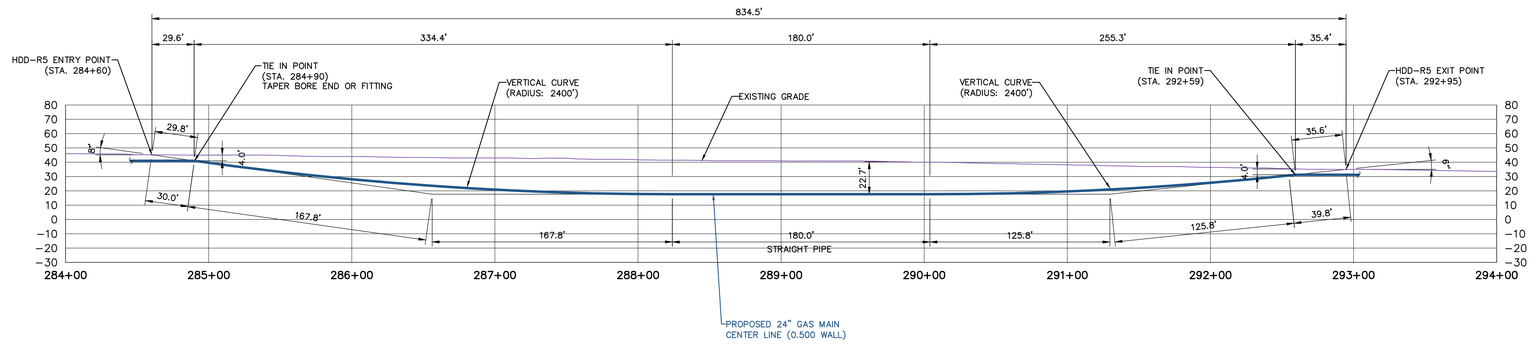
\\PORTLAND\Projects\225616 sjg - england power plant\wip\Drawings_redesign\225816_HDD-R4.dwg, May 18, 2015 - 1:57pm

NOTE:
CONTRACTOR TO MAINTAIN 20' OF CLEAR SPACE FROM ALL HIGH TENSION ELECTRIC OVERHEAD WIRES WITH PIPE, CRANES AND ALL CONSTRUCTION EQUIPMENT



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE REFER TO AS-19 AND AS-20
SCALE: 1"=50'

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NJ. LIC.NO. GE46534

REV	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-R5.dwg

HDD-R5 AT STATION 284+60

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

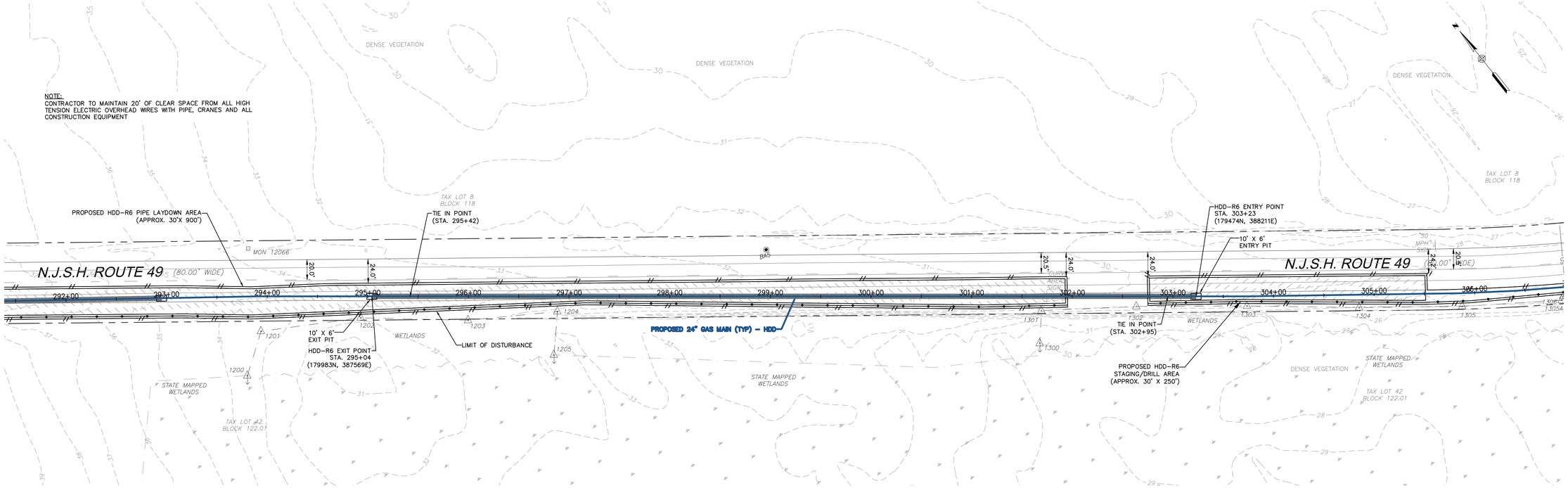
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R5

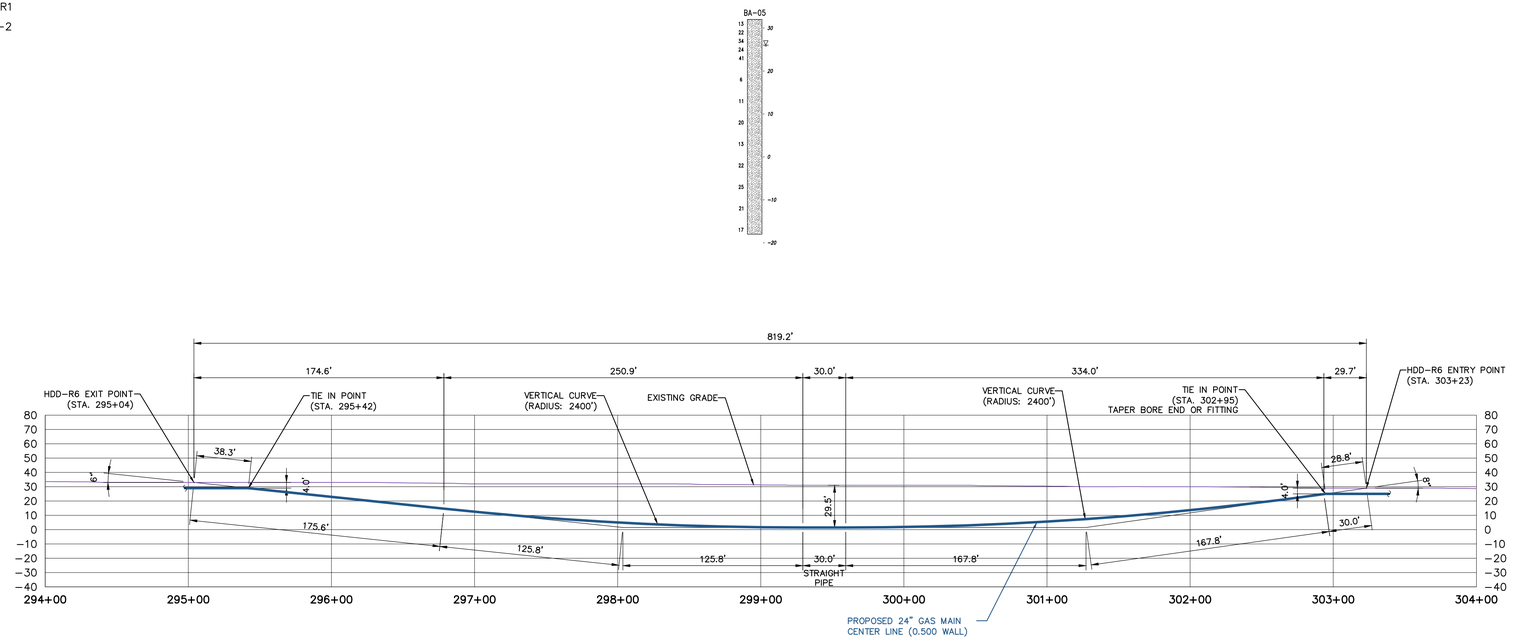
\\PORTLAND\Projects\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-R5.dwg, May 18, 2015 - 1:58pm

NOTE:
CONTRACTOR TO MAINTAIN 20' OF CLEAR SPACE FROM ALL HIGH TENSION ELECTRIC OVERHEAD WIRES WITH PIPE, CRANES AND ALL CONSTRUCTION EQUIPMENT



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE
SCALE: 1"=50'

REFER TO AS-20 AND AS-21

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DENNIS M.WALSH, P.E.
N.J. LIC.NO. GE46534

REV	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-R6.dwg

HDD-R6 AT STATION 303+23

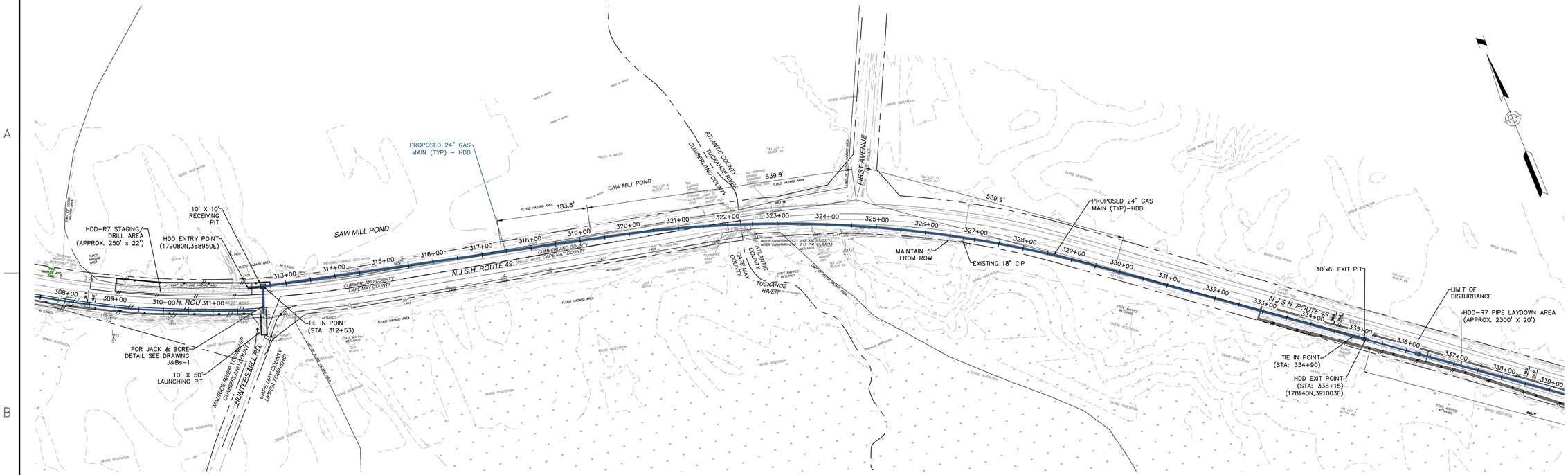
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R6

\\PORTLAND\Projects\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-R6.dwg, May 18, 2015 - 1:58pm



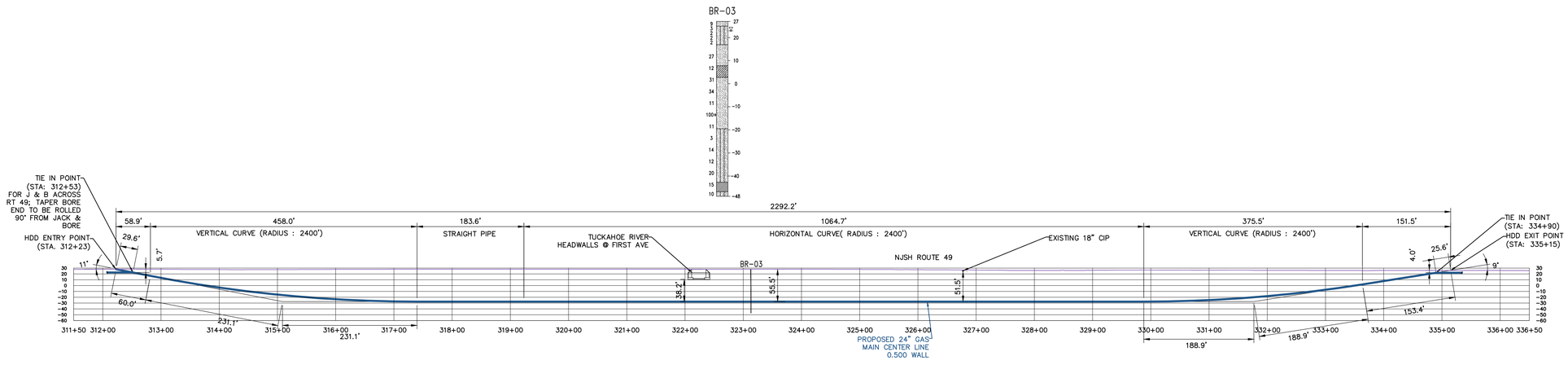
PLAN
SCALE: 1"=100'

BAR SCALE
1" = 100'
CHECK GRAPHIC SCALE BEFORE USING

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD–R1

NOTE: REFER DRAWING # J&Bs–1 FOR DETAIL ON HUNTER'S MILL ROAD JACK & BORE ACROSS RT 49

NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs–2



PROFILE REFER TO AS-21 , AS-22 AND AS-23
SCALE: 1"=100'

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_HDD_CS.dwg

TUCKAHOE RIVER @ FIRST AVENUE HDD

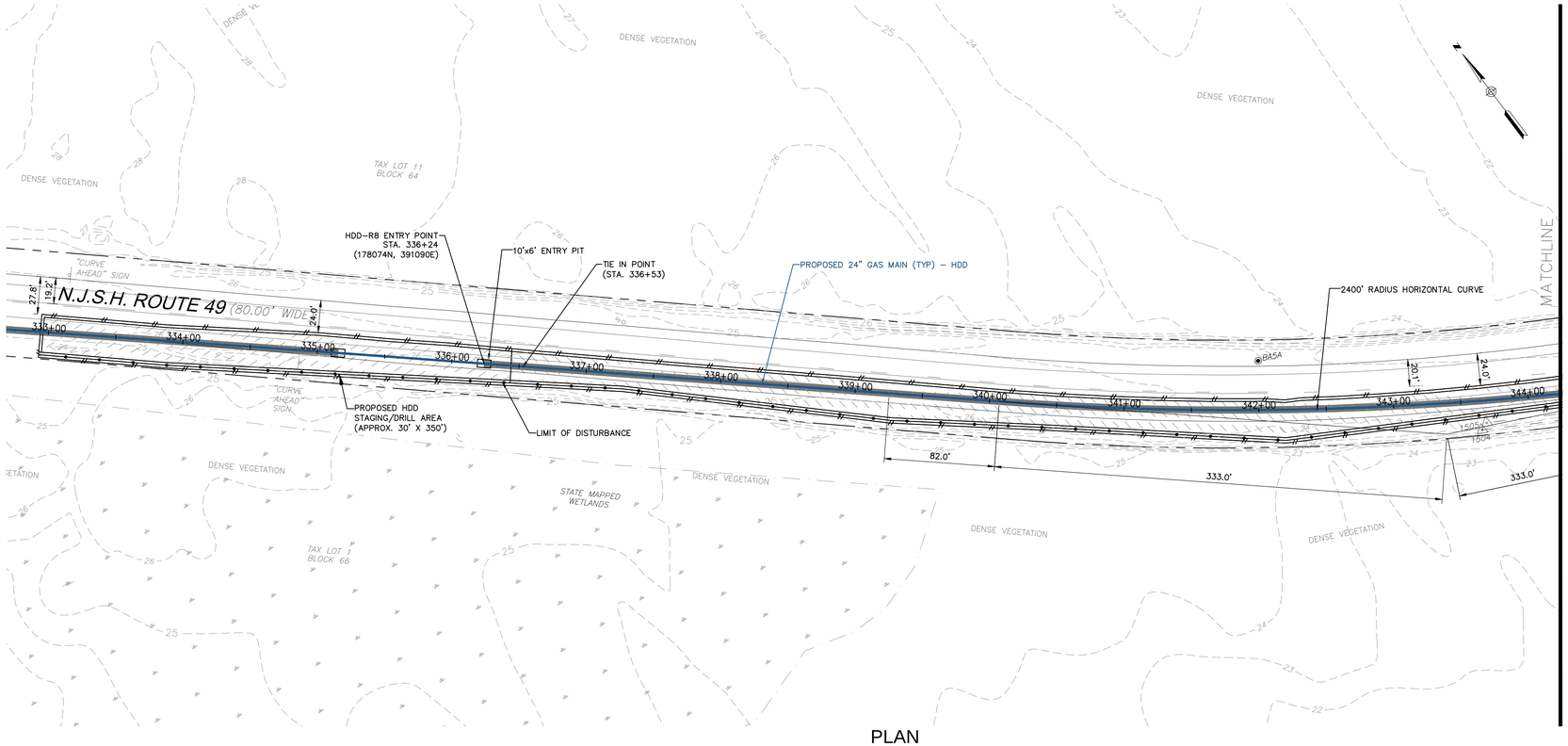
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

HDD-R7

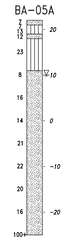
\\portland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_HDD_CS.dwg, May 18, 2015 – 1:59pm

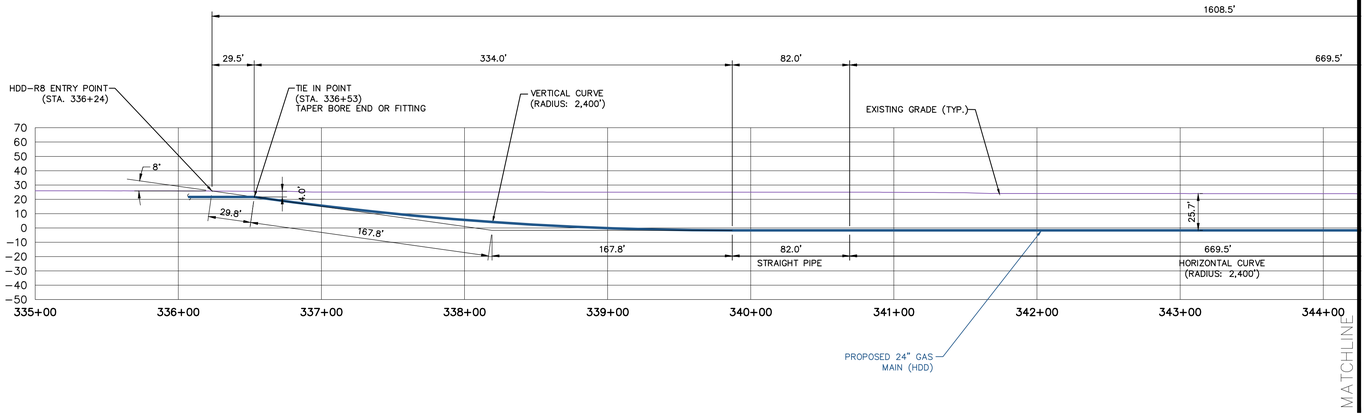


PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2

BA-05A





PROFILE REFER TO AS-23 AND AS-24
SCALE: 1"=50'

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DENNIS M. WALSH, P.E.
NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-R81-2.dwg

HDD-R8.1 & HDD-R8.2 AT STATION 336+24

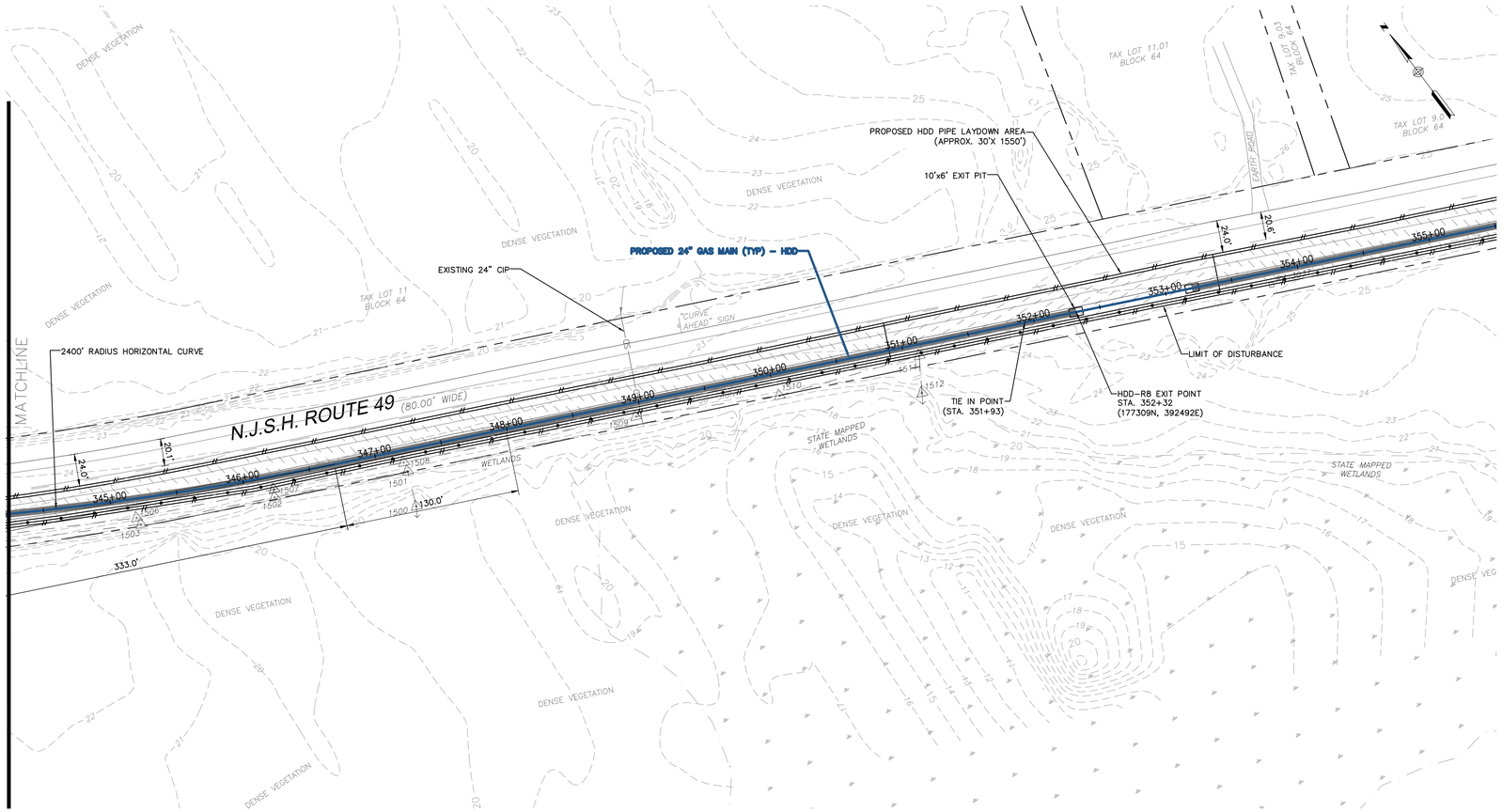
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

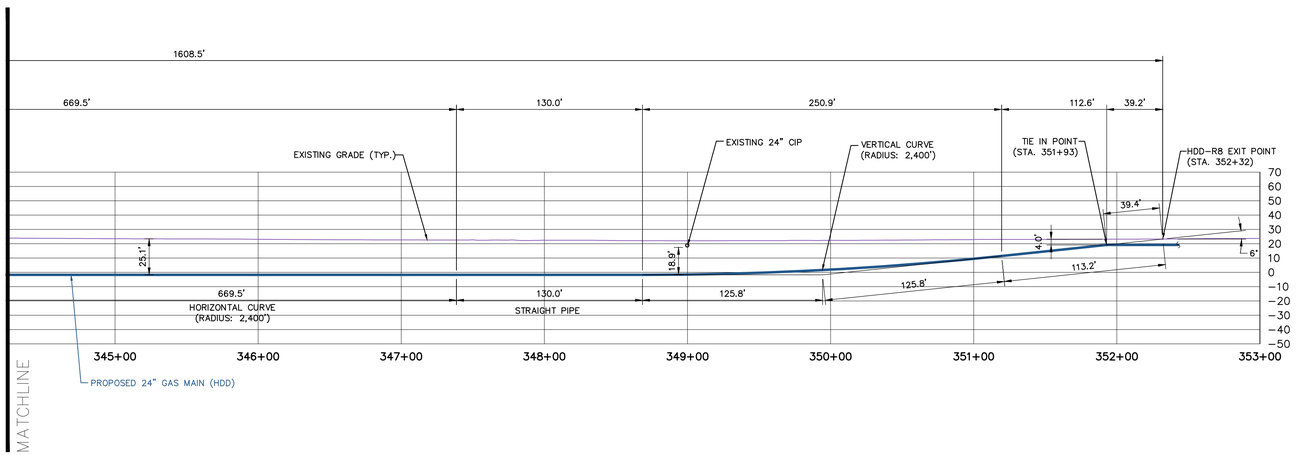
HDD-R8.1

\\PORTLAND\Projects\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-R8.1-2.dwg, May 18, 2015 – 2:00pm



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD–R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs–2



PROFILE REFER TO AS-23 AND AS-24
SCALE: 1"=50'

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD–R8.1–2.dwg

HDD–R8.1 & HDD–R8.2 AT STATION 336+24

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

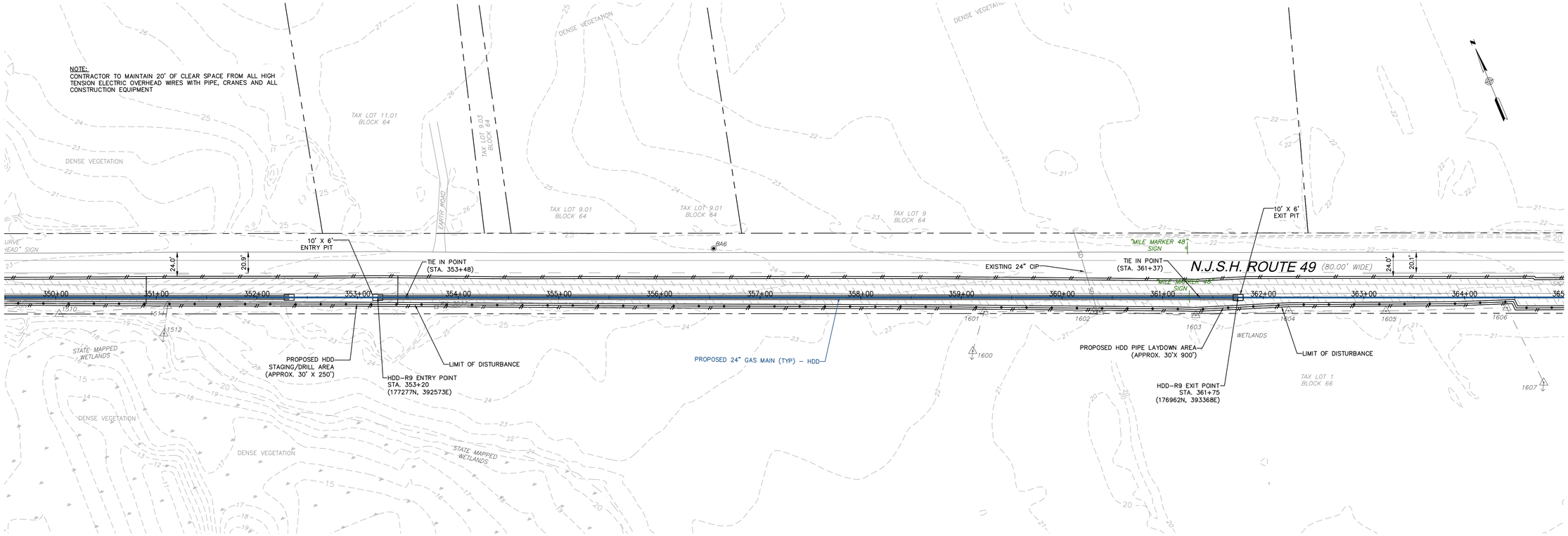
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R8.2

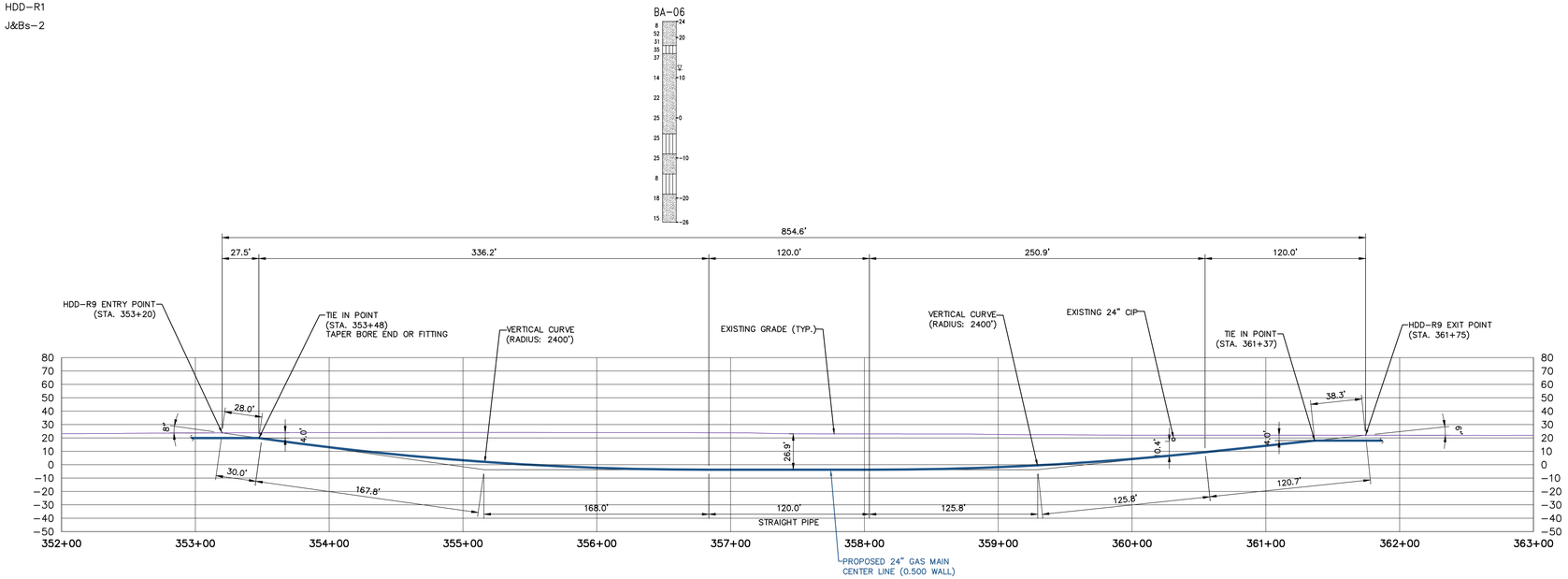
\\PORTLAND\Projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_HDD–R8.1–2.dwg, May 18, 2015 – 2:09pm

NOTE:
CONTRACTOR TO MAINTAIN 20' OF CLEAR SPACE FROM ALL HIGH TENSION ELECTRIC OVERHEAD WIRES WITH PIPE, CRANES AND ALL CONSTRUCTION EQUIPMENT



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE REFER TO AS-24 AND AS-25
SCALE: 1"=50'

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REV	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-R9.dwg

HDD-R9 AT STATION 353+20

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

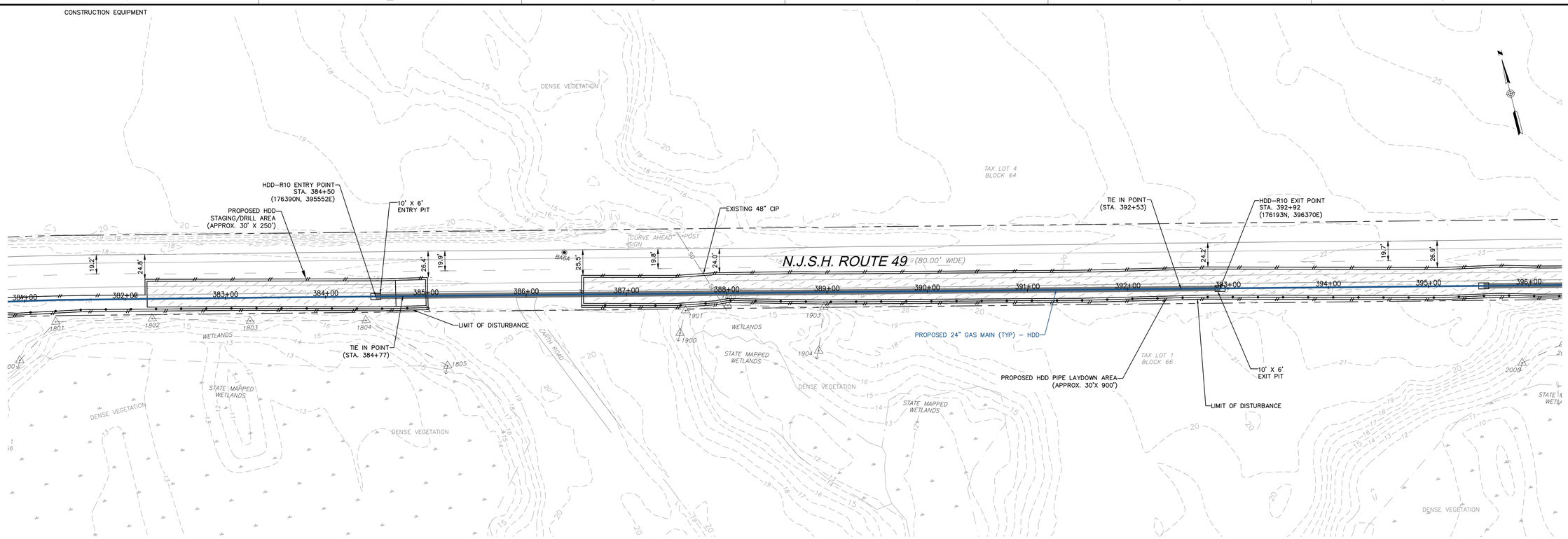
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R9

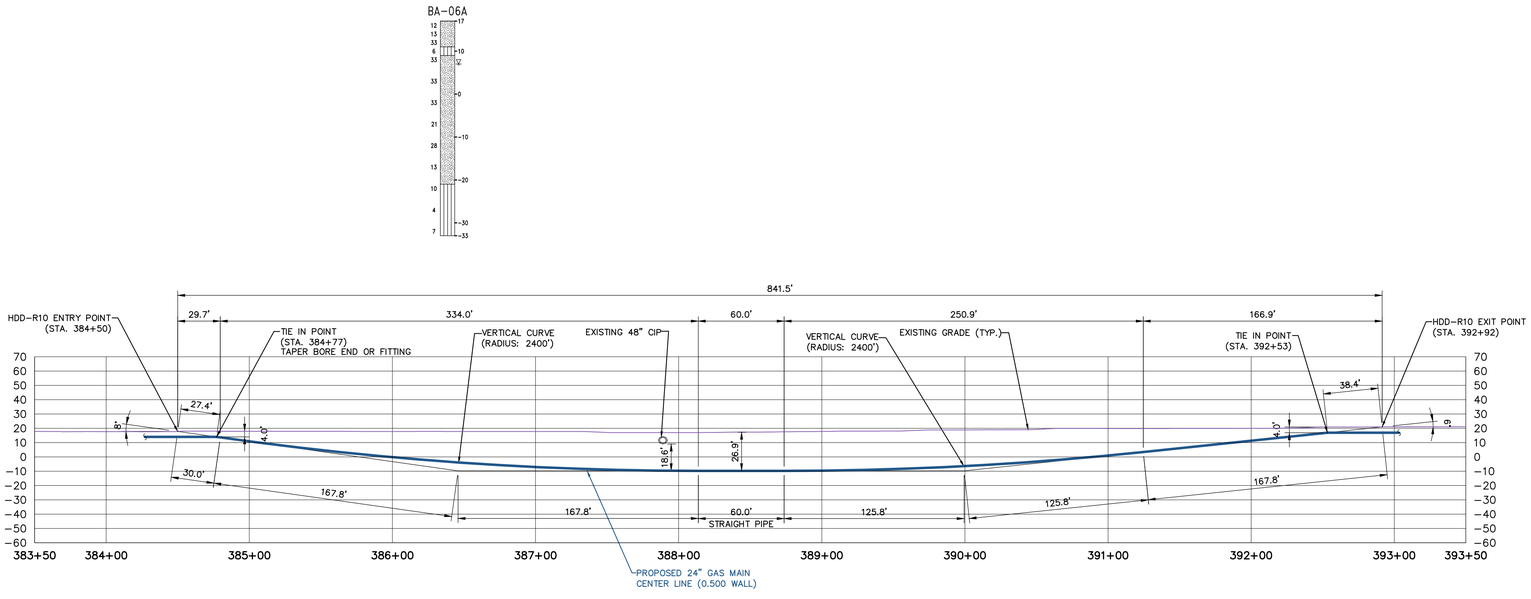
\\PORTLAND\Projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_HDD-R9.dwg, May 18, 2015 – 2:00pm

CONSTRUCTION EQUIPMENT



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE REFER TO AS-26 AND AS-27
SCALE: 1"=50'

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-R10.dwg

HDD-R10 AT STATION 384+50

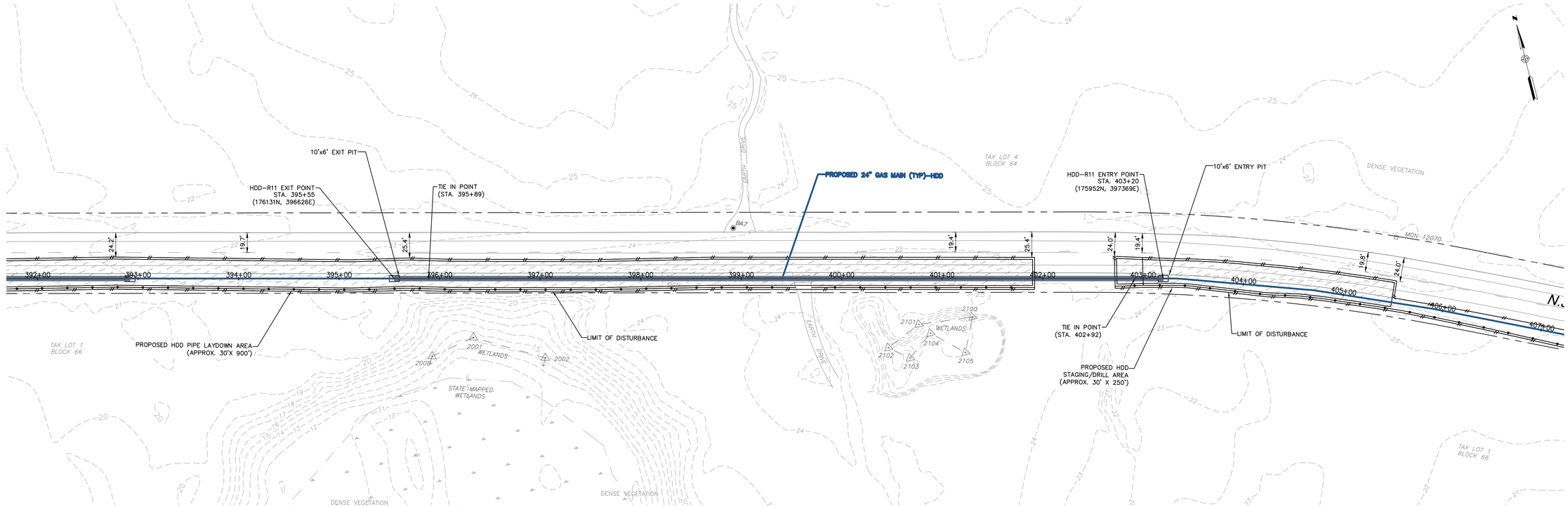
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R10

\\PORTLAND\Projects\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-R10.dwg, May 18, 2015 - 2:01pm

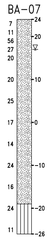


PLAN
SCALE: 1"=50'

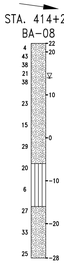
NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1

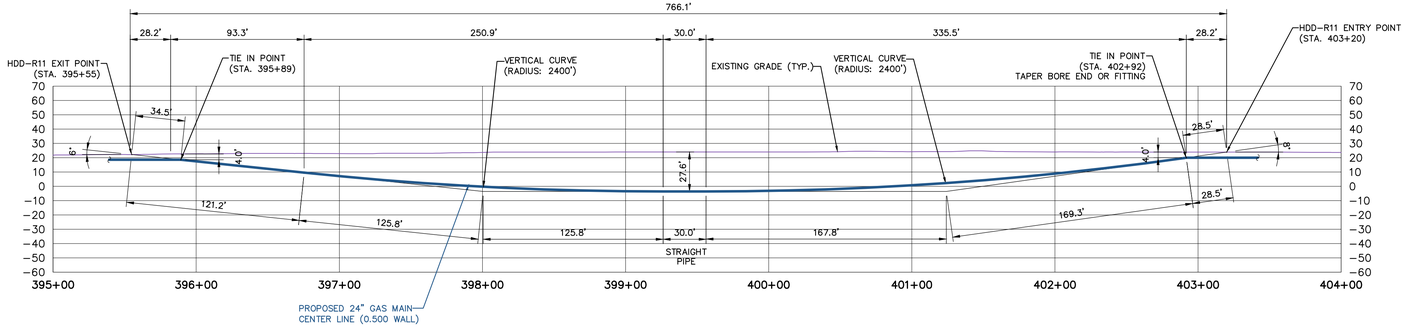
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2

BA-07



STA. 414+25
BA-08





PROFILE REFER TO AS-27 AND AS-28
SCALE: 1"=50'

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-R11.dwg

HDD-R11 AT STATION 403+20

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

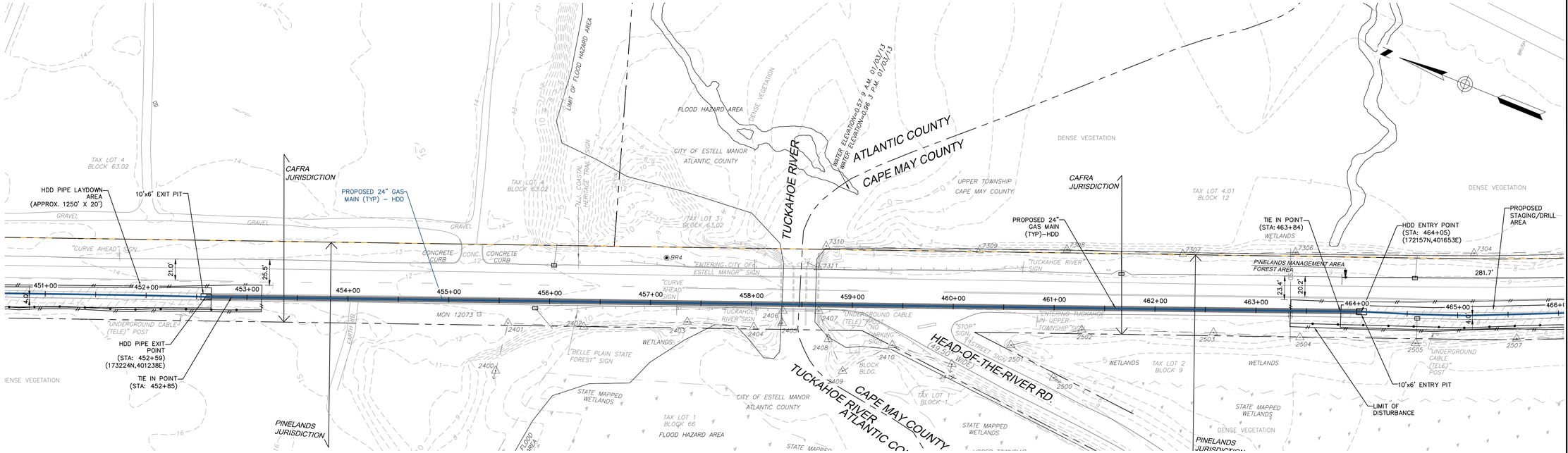
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R11

24x36 SHEET
1:1

\\PORTLAND\Projects\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-R11.dwg, May 18, 2015 - 2:01pm

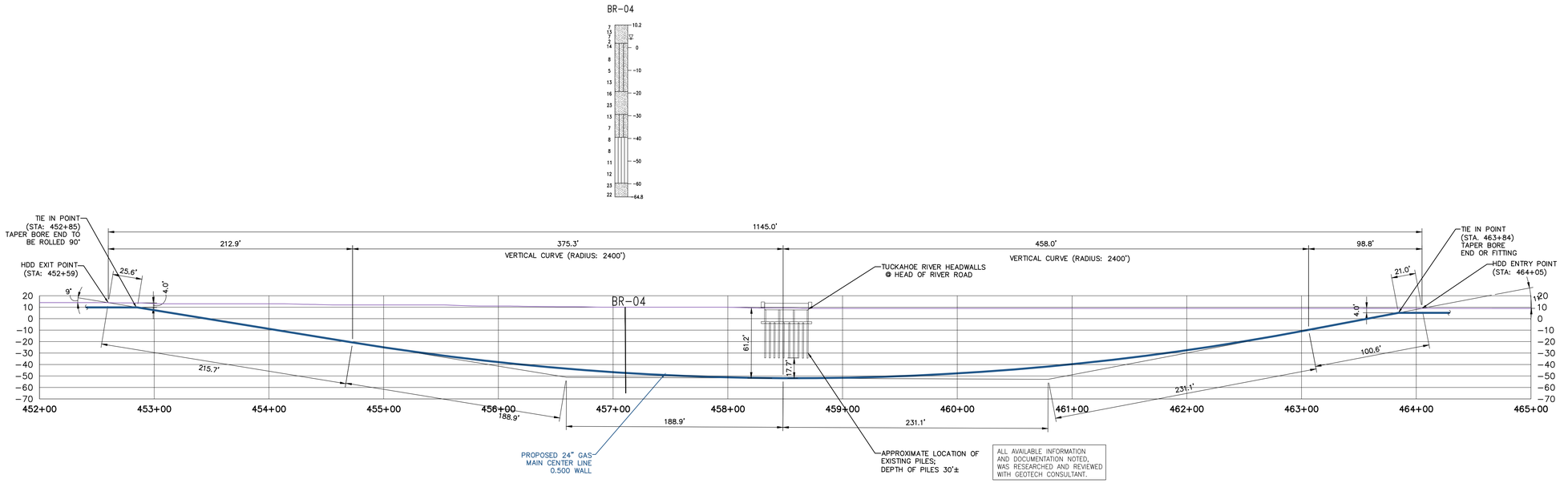


PLAN
SCALE: 1"=50'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD–R1

NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs–2



PROFILE REFER TO AS-31 AND AS-32
SCALE: 1"=50'

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REV	DESCRIPTION	DATE
1	ISSUED FOR BID	12/09/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_HDD_CS.dwg

TUCKAHOE RIVER @ HEAD OF RIVER ROAD – HDD

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

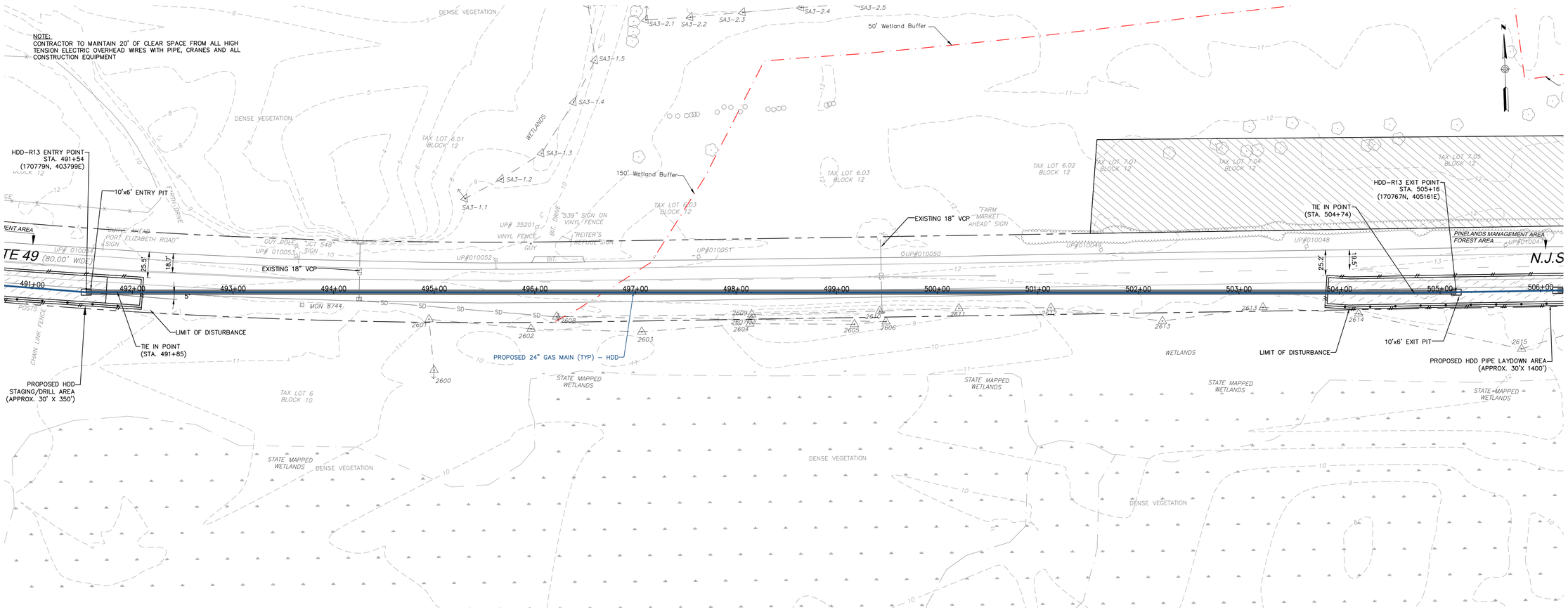
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

HDD-R12

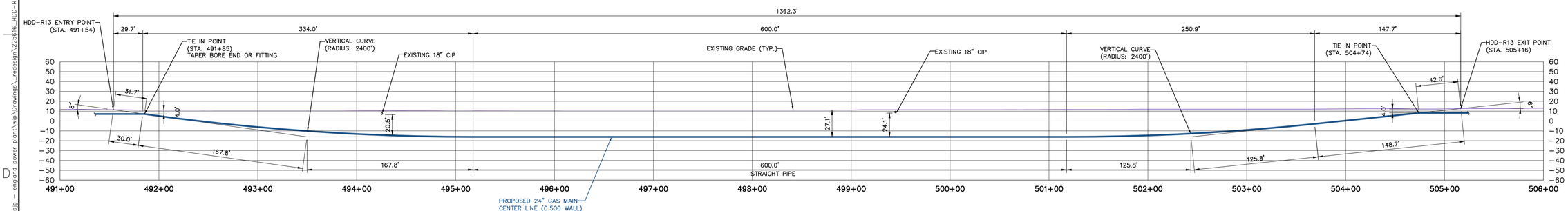
\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_HDD_CS.dwg, May 18, 2015 – 2:02pm

24x36 SHEET
1:1



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE REFER TO AS-34 AND AS-35
SCALE: 1"=50'

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NJ LIC.NO. GE46534

REV	DESCRIPTION	DATE

DESIGNED BY: LS/JG
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CHECKED BY: DW
225616_HDD-R13.dwg

HDD-R13 AT STATION 491+54

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

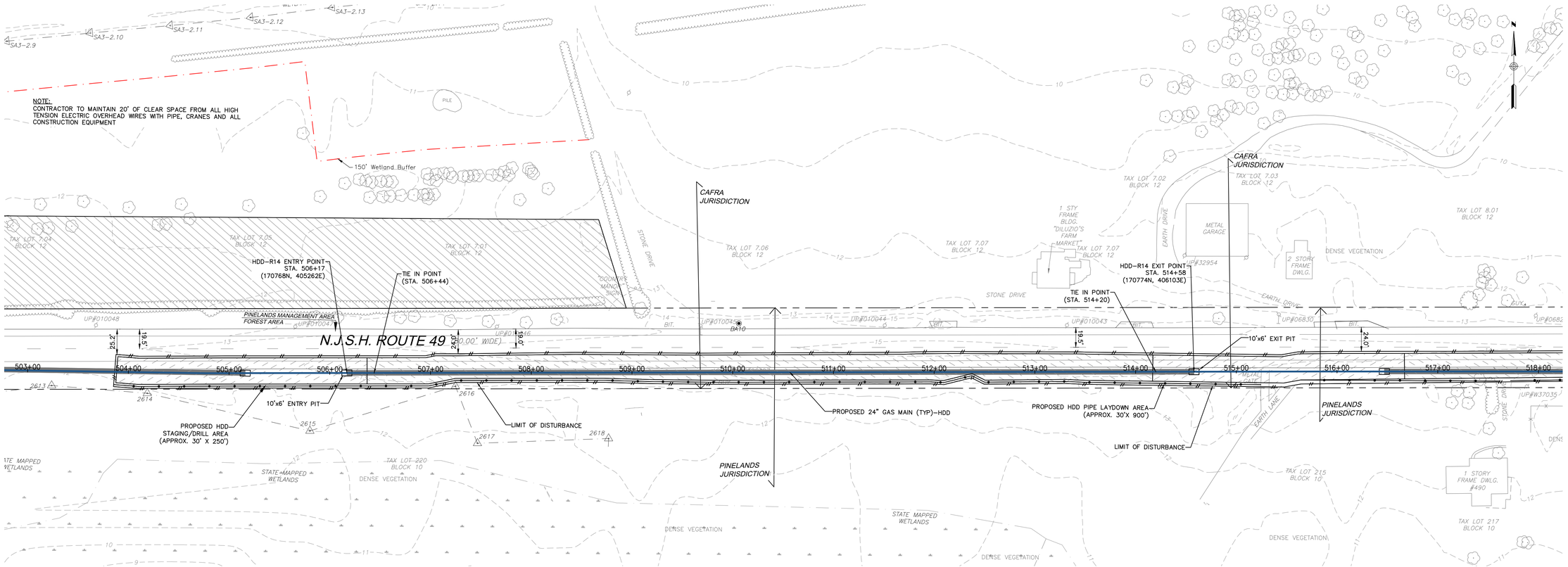
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R13

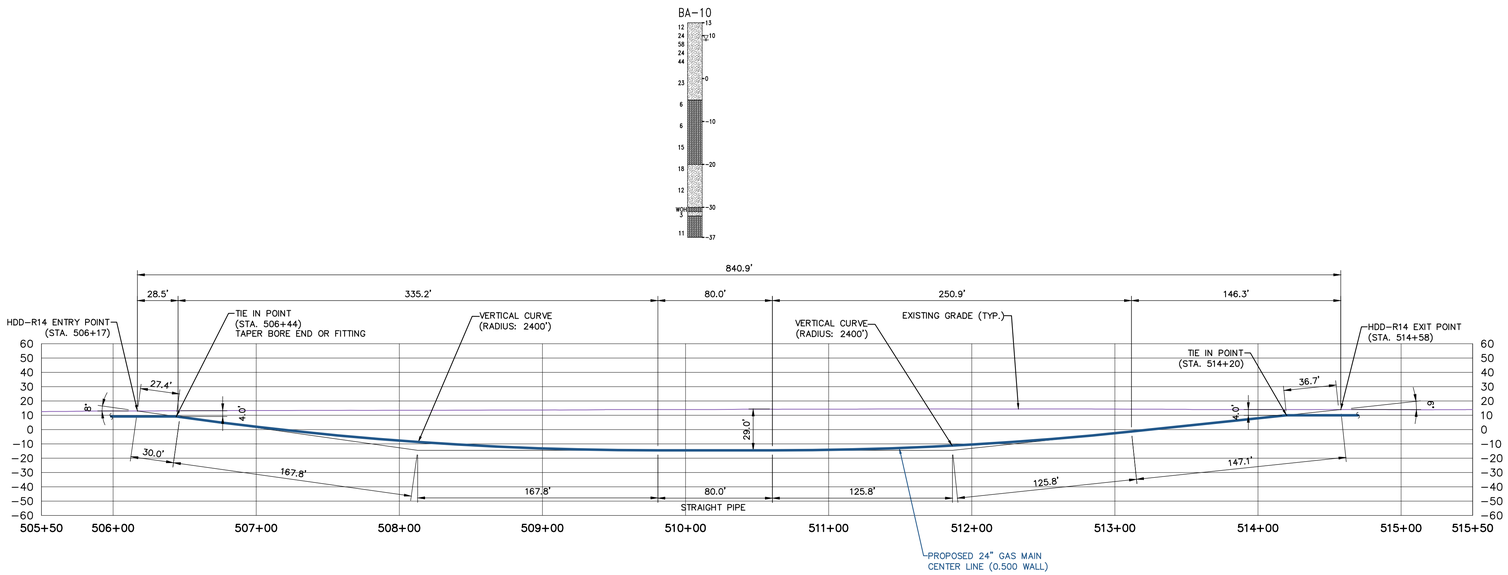
\\PORTLAND\Projects1\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-R13.dwg, May 18, 2015 - 2:02pm

NOTE:
CONTRACTOR TO MAINTAIN 20' OF CLEAR SPACE FROM ALL HIGH TENSION ELECTRIC OVERHEAD WIRES WITH PIPE, CRANES AND ALL CONSTRUCTION EQUIPMENT



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE REFER TO AS-35
SCALE: 1"=50'

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-R14.dwg

HDD-R14 AT STATION 506+17

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

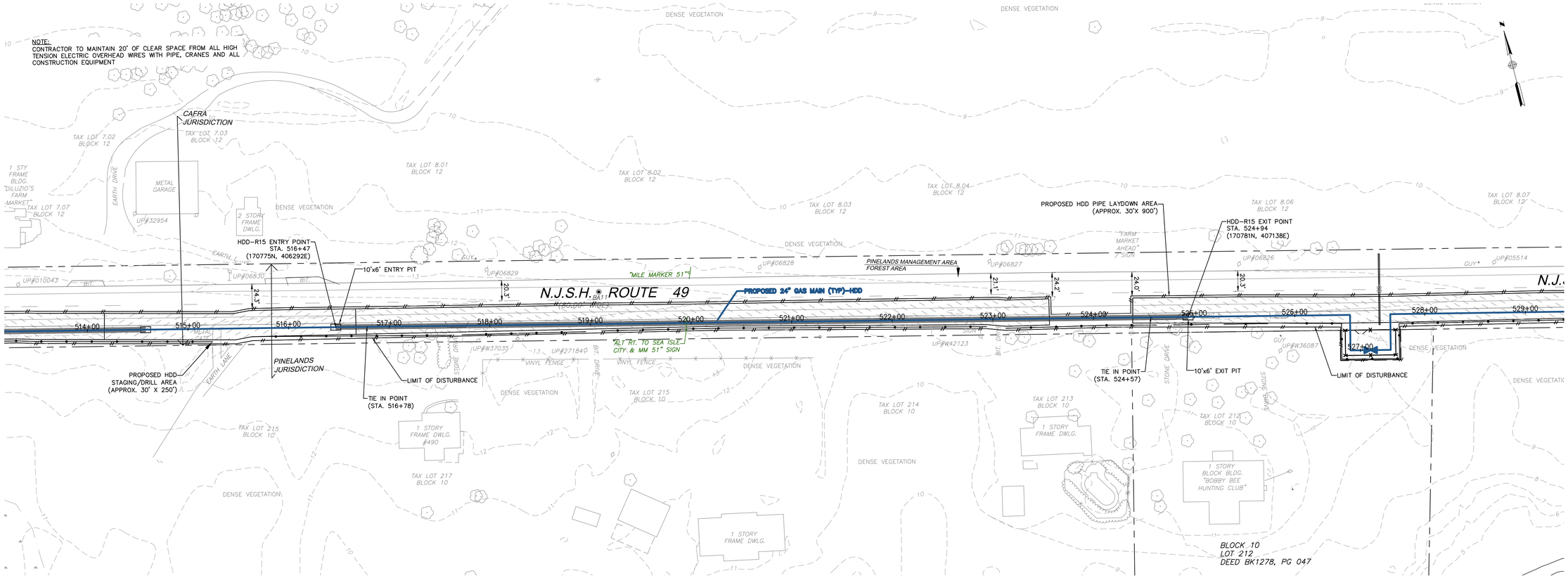
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R14

\\PORTLAND\Projects\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-R14.dwg, May 18, 2015 - 2:03pm

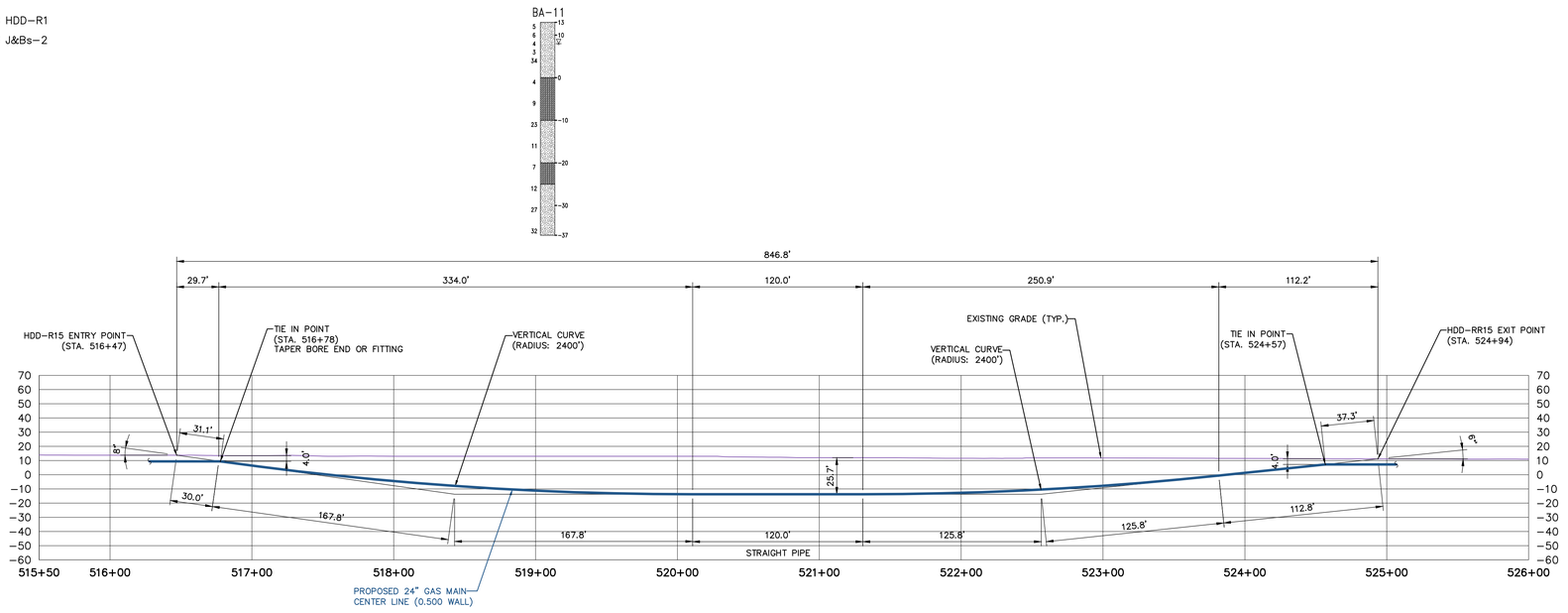
NOTE:
CONTRACTOR TO MAINTAIN 20' OF CLEAR SPACE FROM ALL HIGH TENSION ELECTRIC OVERHEAD WIRES WITH PIPE, CRANES AND ALL CONSTRUCTION EQUIPMENT



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1

NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE REFER TO AS-36
SCALE: 1"=50'

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: AE/TK | 225616_HDD-R15.dwg

HDD-R15 AT STATION 516+47

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

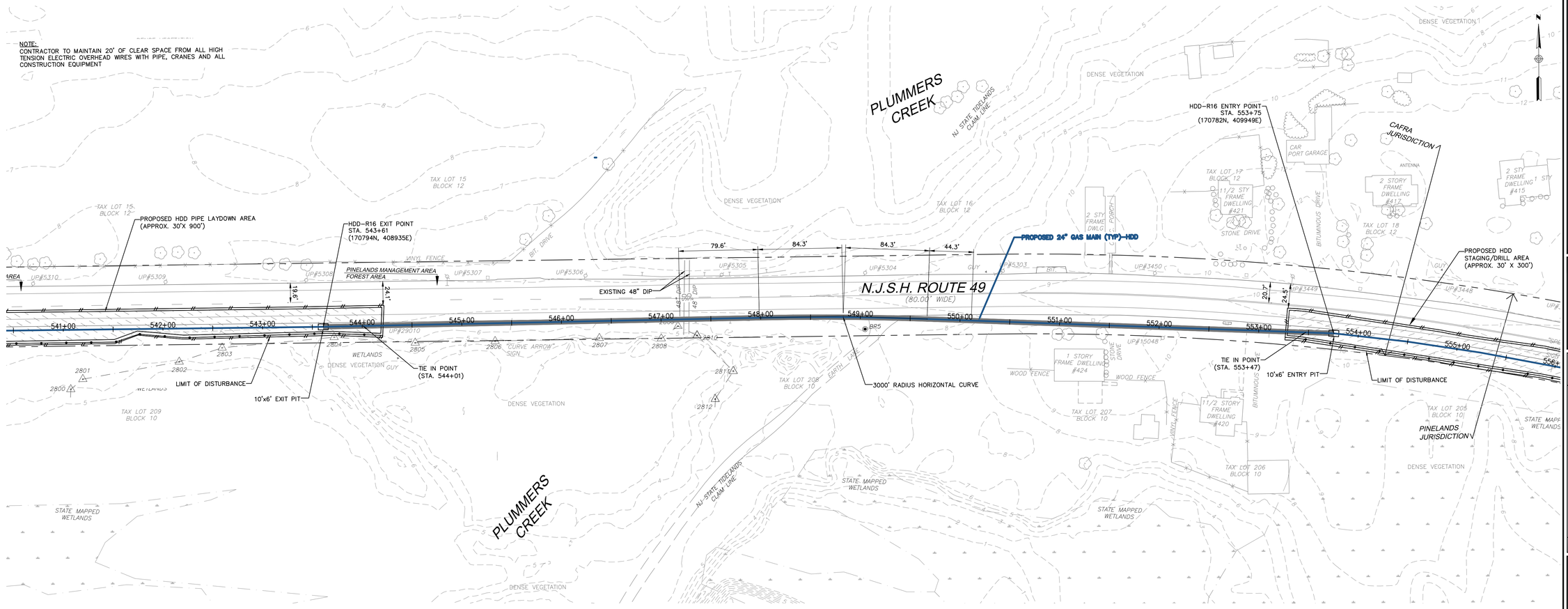
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R15

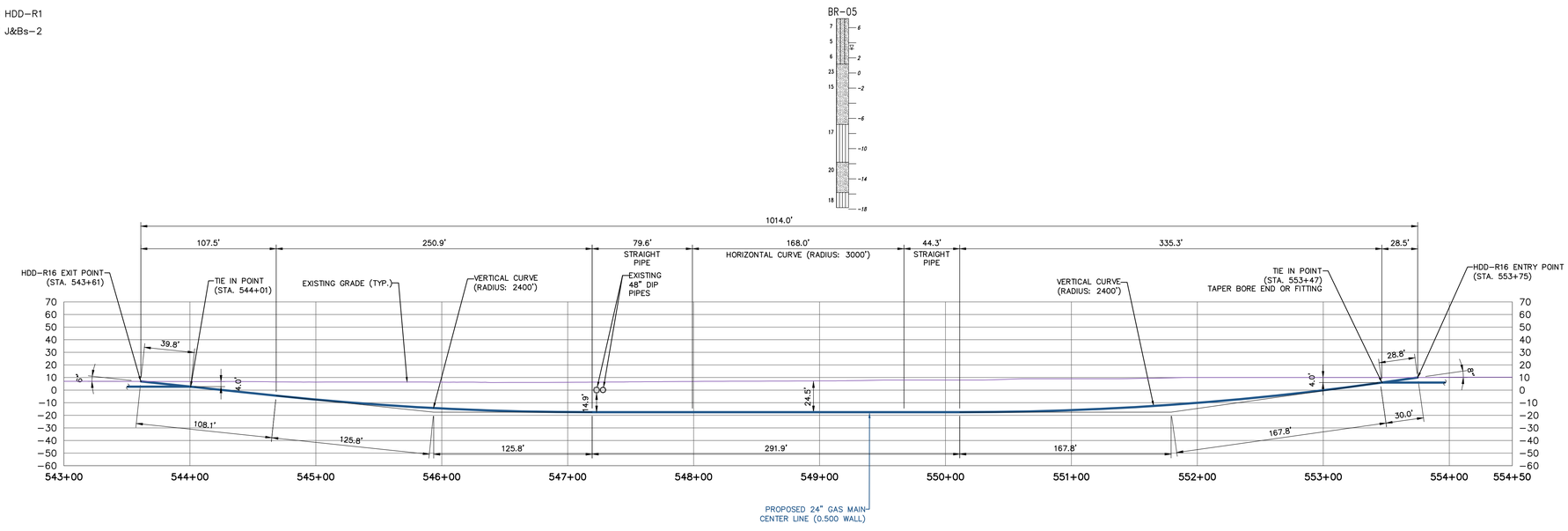
\\PORTLAND\Projects\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-R15.dwg, May 18, 2015 - 2:04pm

NOTE:
CONTRACTOR TO MAINTAIN 20' OF CLEAR SPACE FROM ALL HIGH TENSION ELECTRIC OVERHEAD WIRES WITH PIPE, CRANES AND ALL CONSTRUCTION EQUIPMENT



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE
SCALE: 1"=50'

REFER TO AS-37 AND AS-38

50 Millstone Road, Building 300
East Windsor, New Jersey 08520
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DENNIS M.WALSH, P.E.
NJ LIC.NO. GE46534

REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-R16.dwg

HDD-R16 AT STATION 553+75

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R16

\\PORTLAND\Projects\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-R16.dwg, May 18, 2015 — 2:04pm

NOTE:
CONTRACTOR TO MAINTAIN 20' OF CLEAR SPACE FROM ALL HIGH TENSION ELECTRIC OVERHEAD WIRES WITH PIPE, CRANES AND ALL CONSTRUCTION EQUIPMENT

MARSHALLVILLE ROAD
(CR 632 - 40' WIDE)

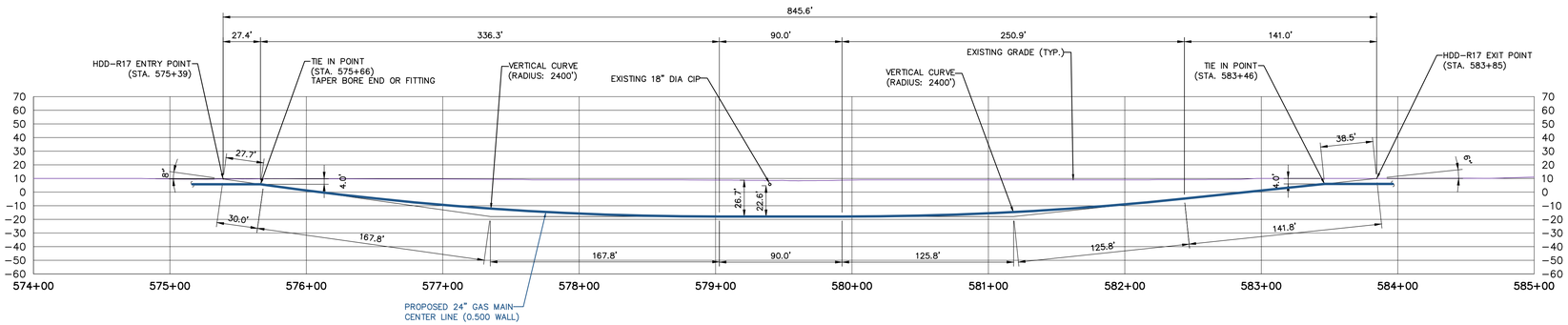
N.J.S.H. ROUTE 49 (80.00' WIDE)

PROPOSED HDD STAGING/DRILL AREA (APPROX. 30' X 250')
10'x6' ENTRY PIT
TIE IN POINT (STA. 575+66)
CAFRA JURISDICTION
PROPOSED 24" GAS MAIN (TYP)-HDD
EXISTING 18" CIP
10'x6' EXIT PIT
TIE IN POINT (STA. 583+46)
LIMIT OF DISTURBANCE
HDD-R17 ENTRY POINT STA. 575+39 (170020N, 411956E)
PINELANDS JURISDICTION
PROPOSED HDD PIPE LAYDOWN AREA (APPROX. 30'X 600')
HDD-R17 EXIT POINT STA. 583+85 (169541N, 412653E)
WETLANDS
DENSE VEGETATION
3 STORY FRAME DWLG. #360
FRAME GARAGE
METAL CARPORT
FR. SHED
WOOD FENCE
SPLIT RAIL FENCE
POST & WIRE FENCE
"MILE MARKER 52" SIGN
"STOP AHEAD" SIGN
"CURVE AHEAD" SIGN
"SPEED LIMIT 50" SIGN
"25 MPH" SIGN
"GS PARKWAY" SIGN
"ALT ROUTE TO GA STATE PARKWAY "SEA ISLE CITY" SIGN
STONE DRIVE
DRIVE
UP#3435
UP#3436
UP#6842
572+00 573+00 574+00 575+00 576+00 577+00 578+00 579+00 580+00 581+00 582+00 583+00 584+00 585+00 586+00 587+00

PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2

BA-12



PROFILE REFER TO AS-40
SCALE: 1"=50'

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-R17.dwg

HDD-R17 AT STATION 575+39

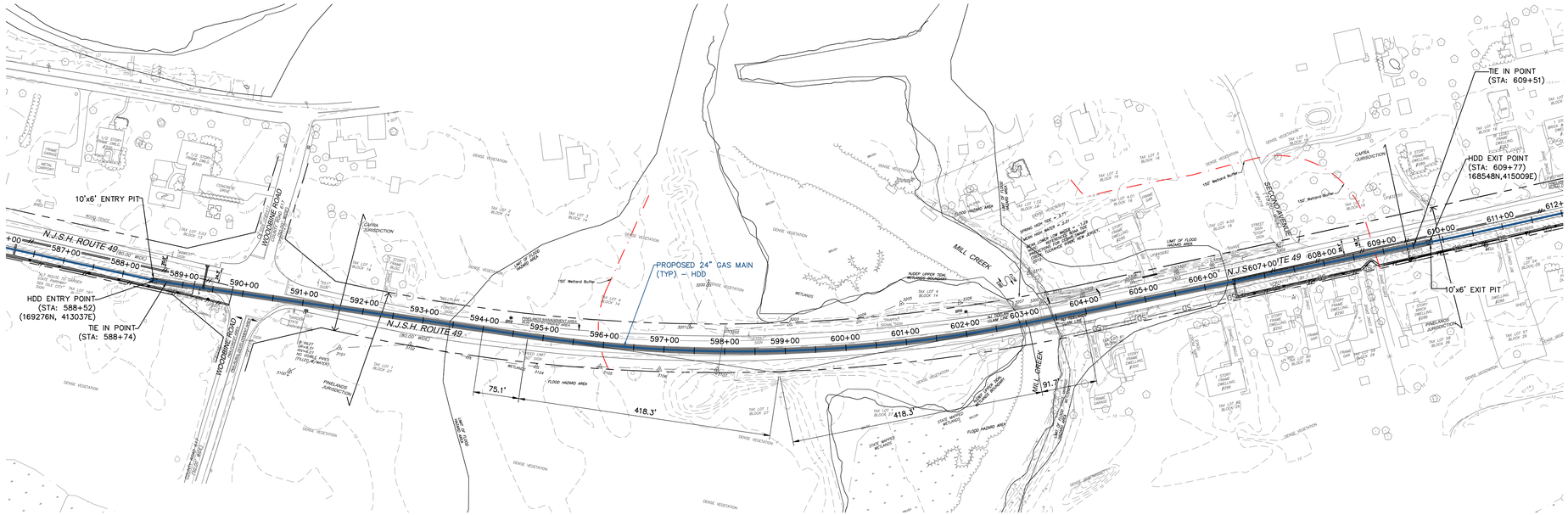
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R17

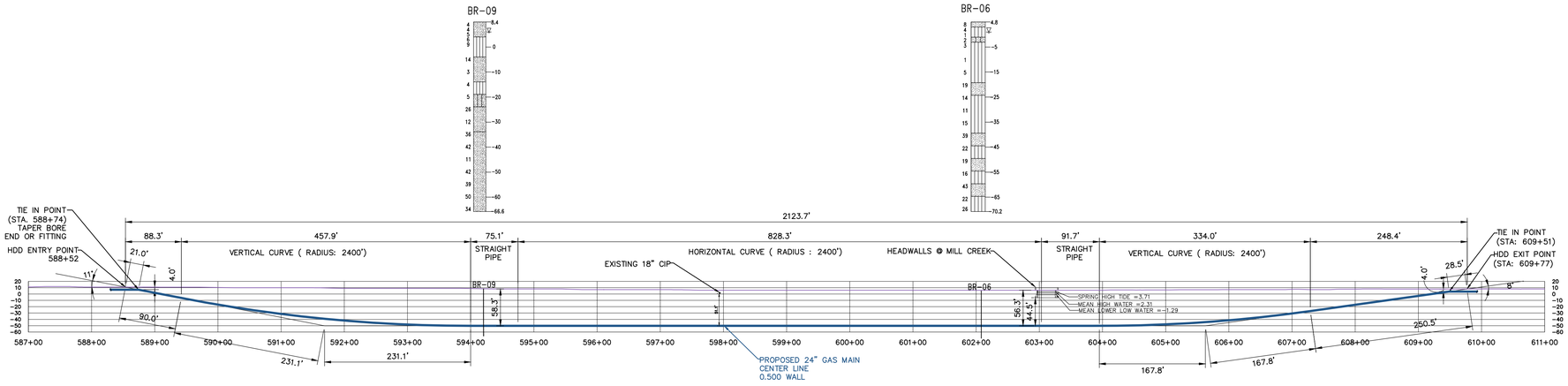
\\portland\projects1\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-R17.dwg, May 18, 2015 - 2:05pm



PLAN
SCALE: 1"=100'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1

NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE REFER TO AS-41 AND AS-42
SCALE: 1"=100'

100' 0 100' 200'
BAR SCALE
1" = 100'
CHECK GRAPHIC SCALE BEFORE USING

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR HDD	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_HDD_CS.dwg

MILL CREEK – HDD

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

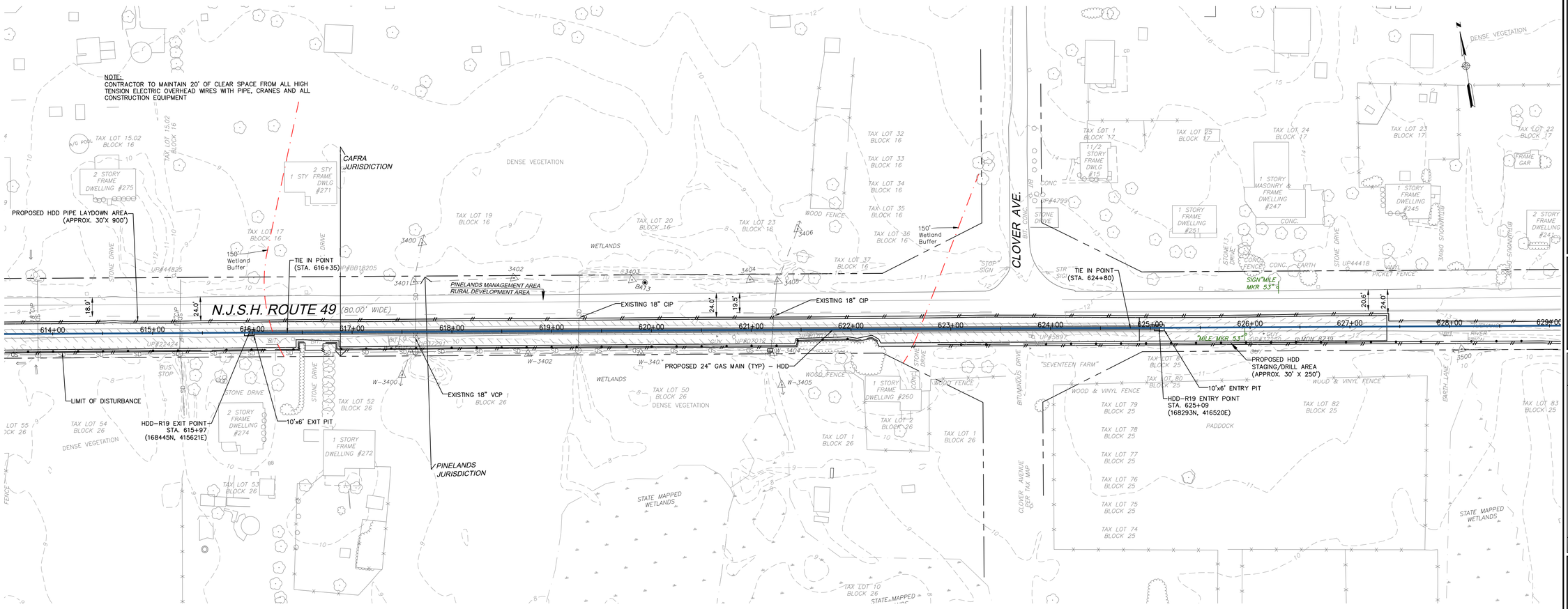
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

HDD-R18

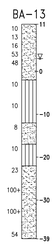
\\portland\projects1\225616 s\jg – england power plant\wip\Drawings_redesign\225616_HDD_CS.dwg, May 18, 2015 – 2:05pm

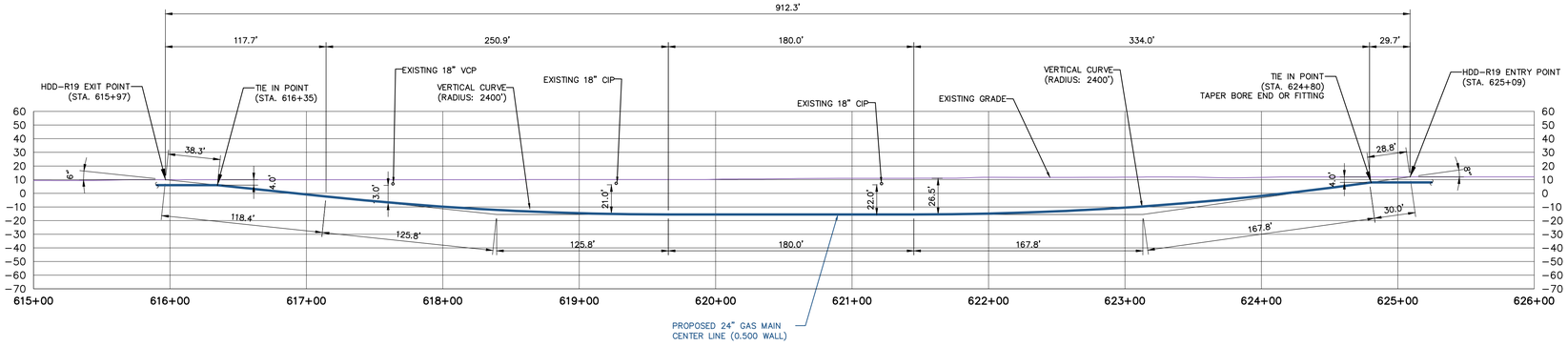
24x36 SHEET
1:1



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2





PROFILE REFER TO AS-42 AND AS-43
SCALE: 1"=50'

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REV	DESCRIPTION	DATE

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DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-R19.dwg

HDD-R19 AT STATION 625+09

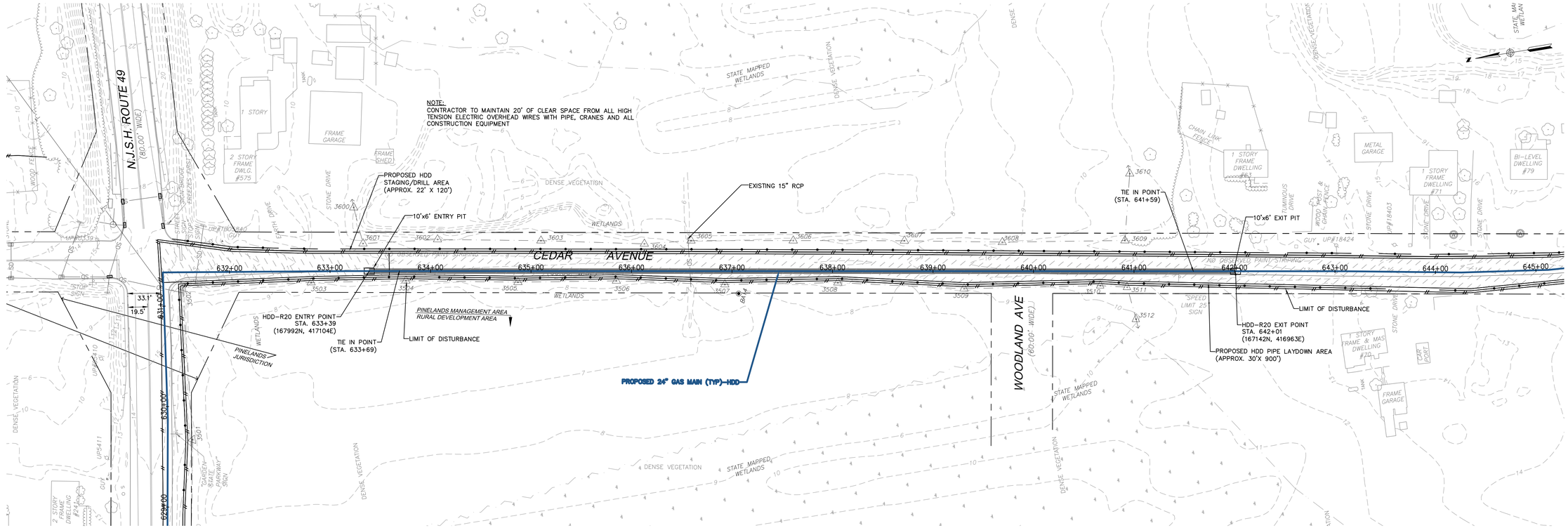
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R19

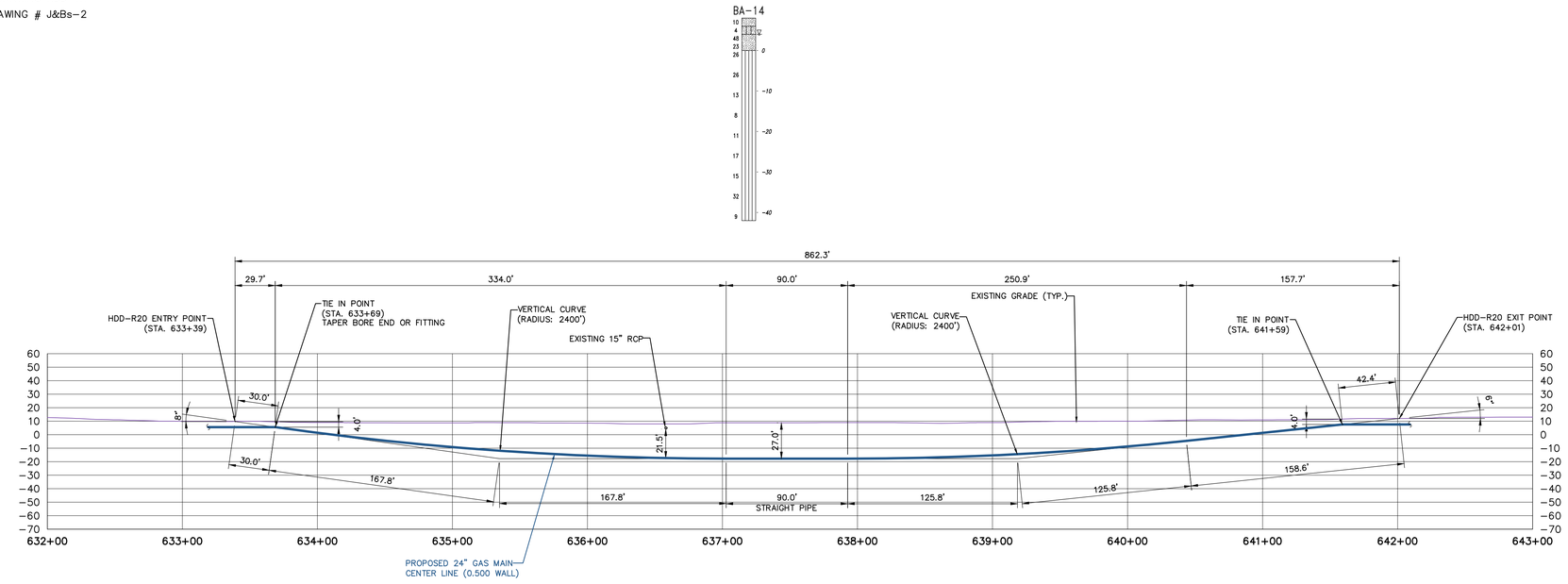
\\portland\projects1\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-R19.dwg, May 18, 2015 - 2:06pm



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1

NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE REFER TO AS-44
SCALE: 1"=50'

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REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
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HDD-R20 AT STATION 633+39

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

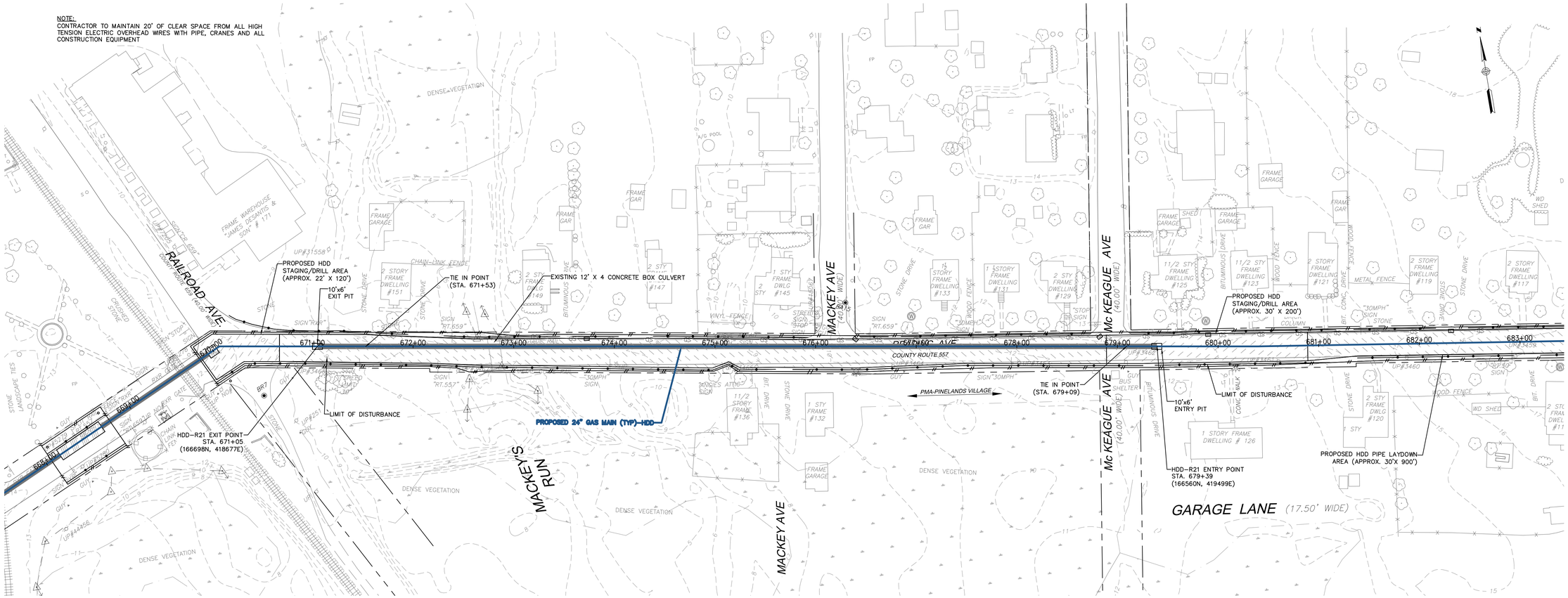
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R20

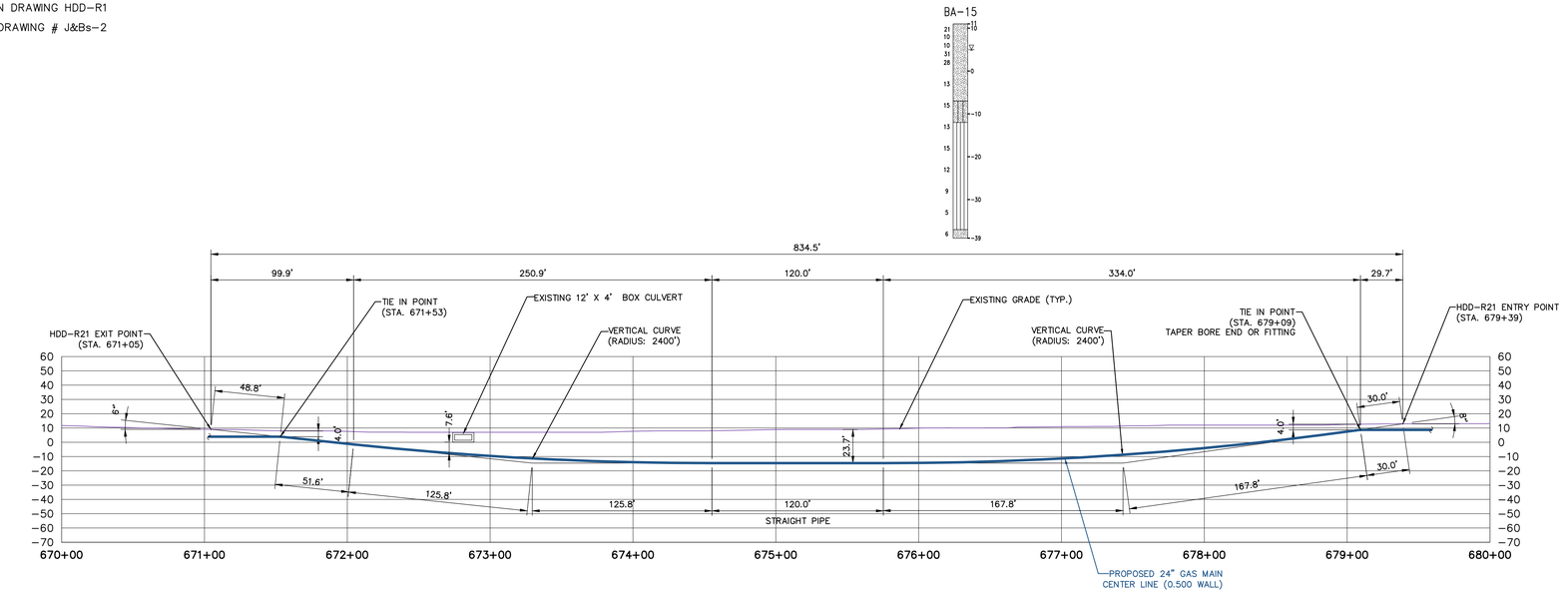
\\portland\projects1\225616 s\g - england power plant\wip\Drawings_redesign\225616_HDD-R20.dwg, May 18, 2015 - 2:06pm

NOTE:
CONTRACTOR TO MAINTAIN 20' OF CLEAR SPACE FROM ALL HIGH TENSION ELECTRIC OVERHEAD WIRES WITH PIPE, CRANES AND ALL CONSTRUCTION EQUIPMENT



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE REFER TO AS-47
SCALE: 1"=50'

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N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: AE/TK | 225616_HDD-R21.dwg

HDD-R21 AT STATION 679+09

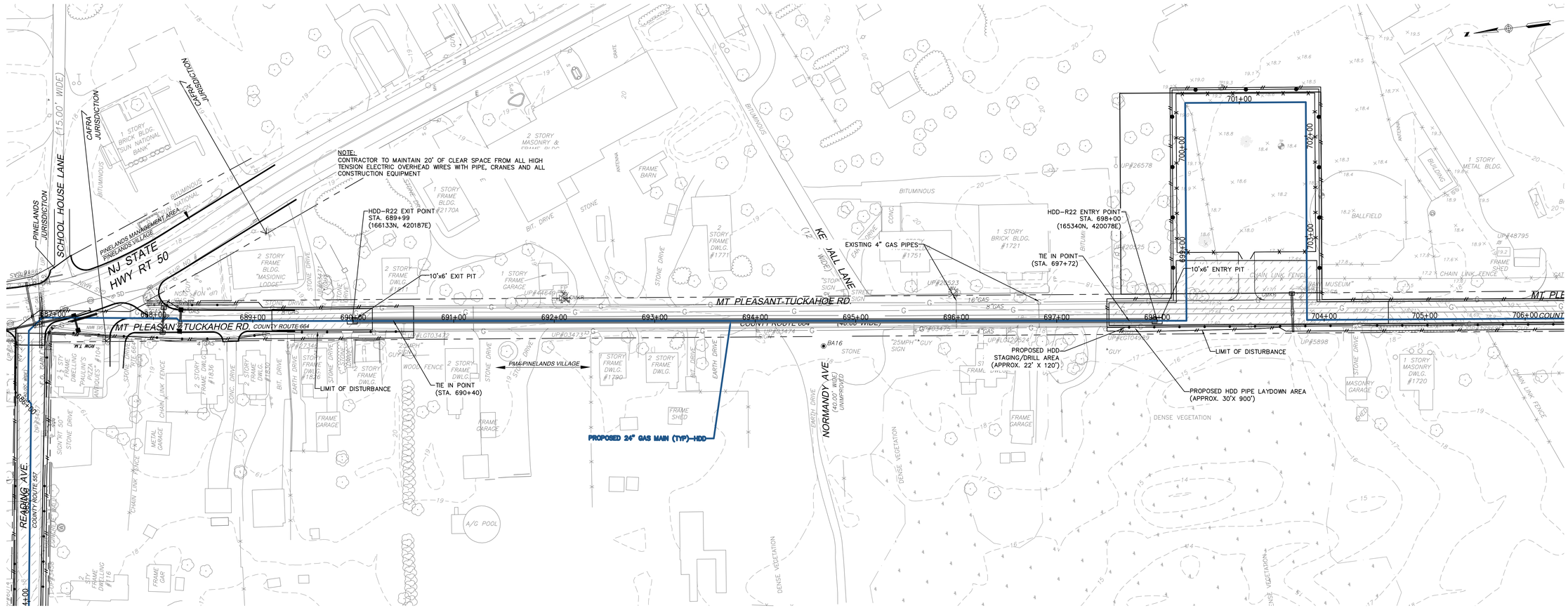
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

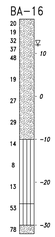
HDD-R21

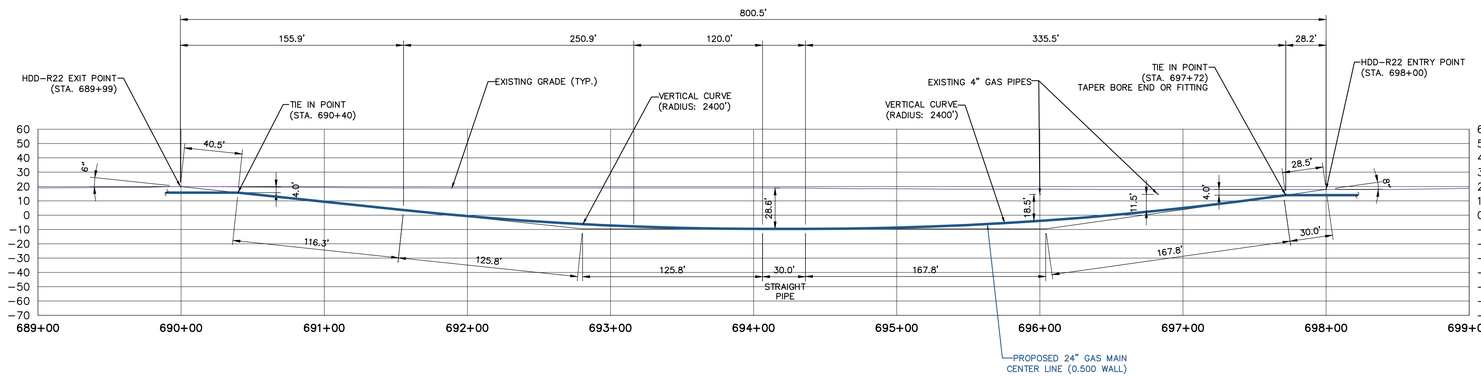
\\portland\projects1\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-R21.dwg, May 18, 2015 - 2:07pm



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2





PROFILE REFER TO AS-48
SCALE: 1"=50'

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REV.	DESCRIPTION	DATE

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HDD-R22 AT STATION 698+00

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-R22

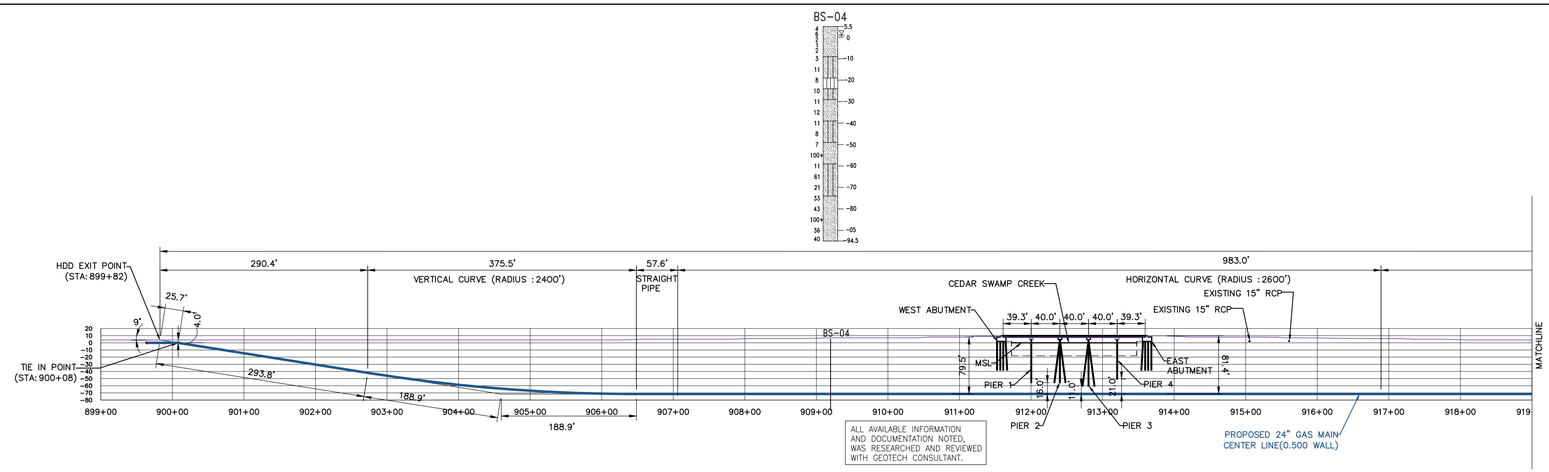
\\portland\projects1\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-R22.dwg, May 18, 2015 - 2:07pm



PLAN
SCALE: 1"=100'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD–R1

NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs–2



PROFILE REFER AS-63 TO AS-67
SCALE: 1"=100'

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REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR #80	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_HDD_CS.dwg

CEDAR SWAMP CREEK – HDD

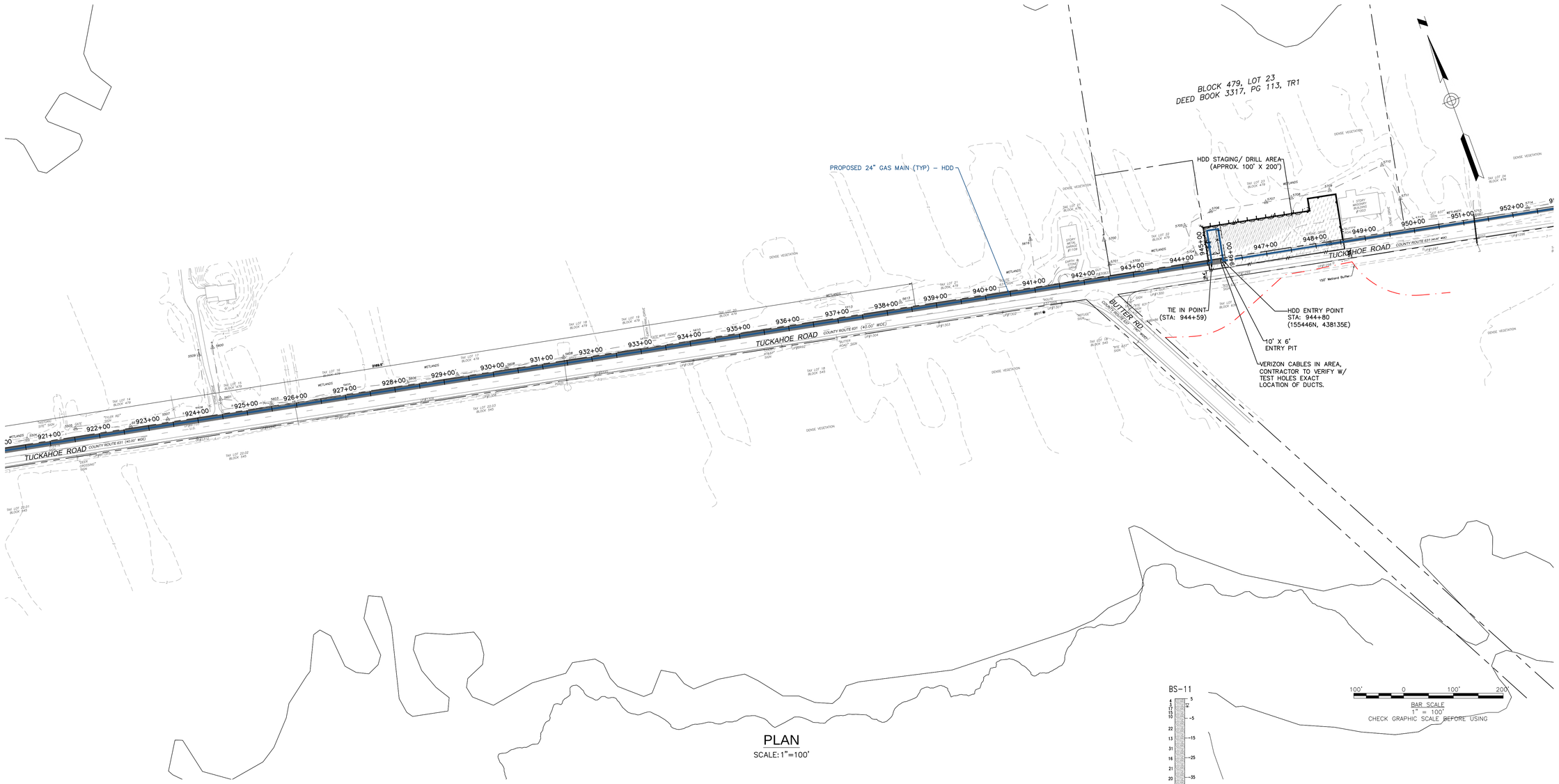
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

HDD-S1.1

\\portland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_HDD_CS.dwg, May 18, 2015 – 2:08pm



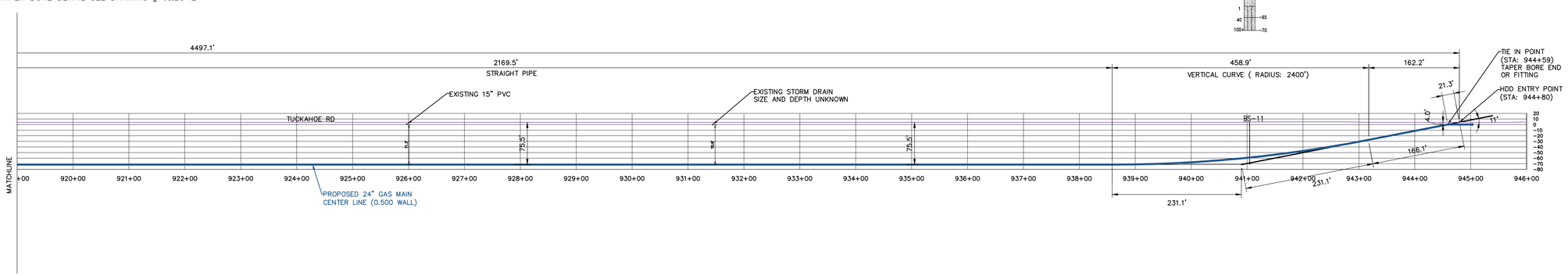
PLAN
SCALE: 1"=100'

BS-11

BAR SCALE
1" = 100'
CHECK GRAPHIC SCALE BEFORE USING

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD–R1

NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs–2



PROFILE REFER TO AS-63 TO AS-67
SCALE: 1"=100'

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REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_HDD_CS.dwg

CEDAR SWAMP CREEK – HDD

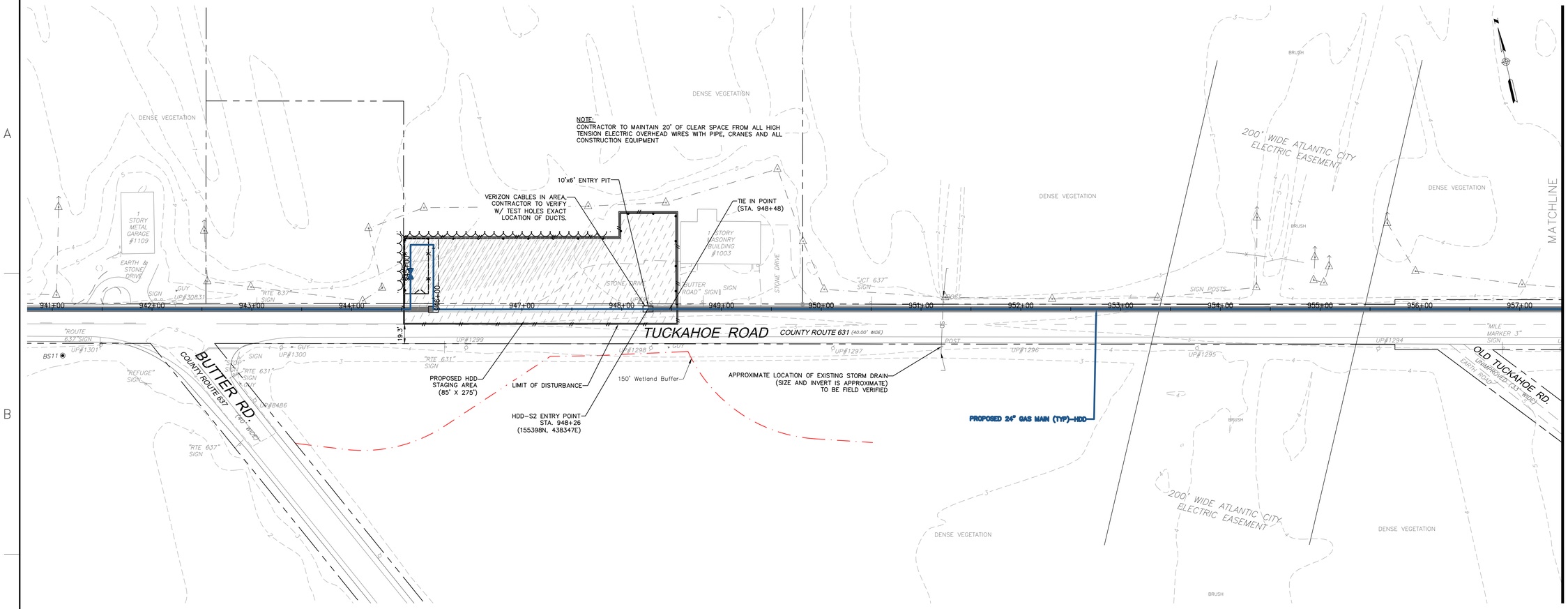
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

HDD-S1.2

\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_HDD_CS.dwg, May 18, 2015 – 2:08pm

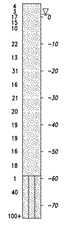


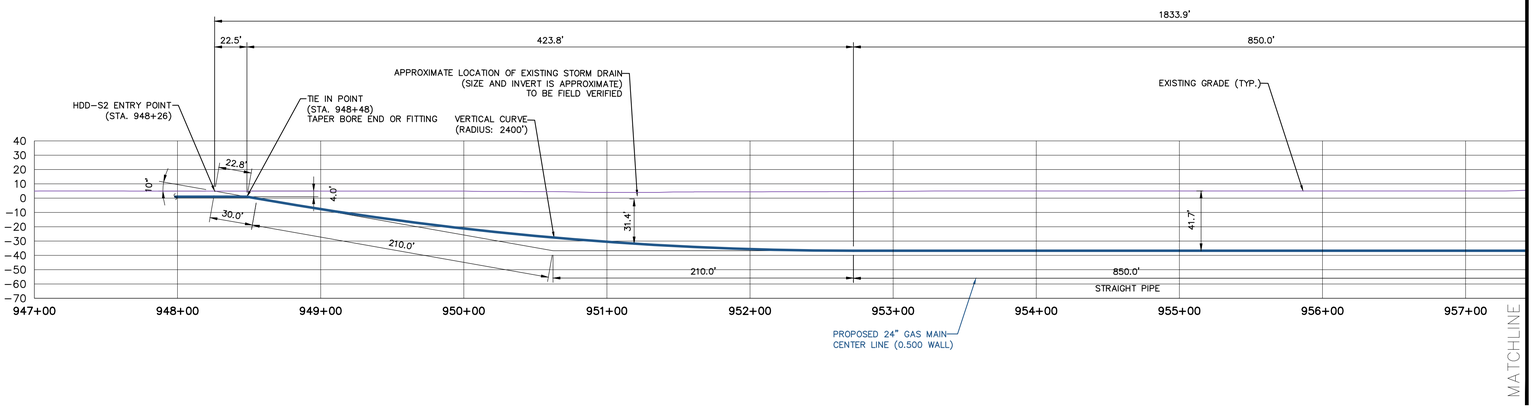
PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1

NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2

BS-11
STA. 941+10





PROFILE REFER TO AS-67
SCALE: 1"=50'

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REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-S2.1-2.dwg

HDD-S2.1 AT STATION 948+26

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

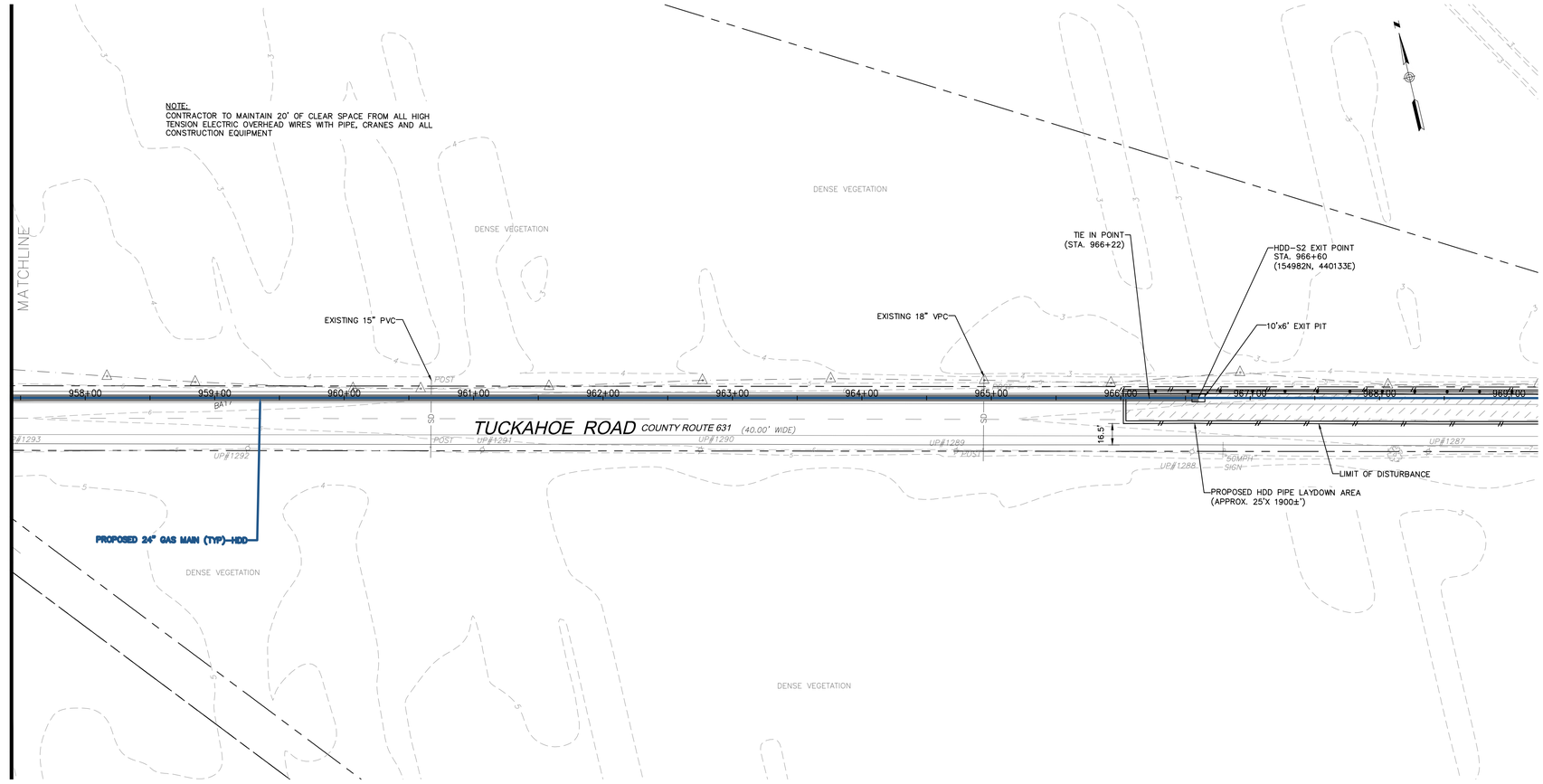
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-S2.1

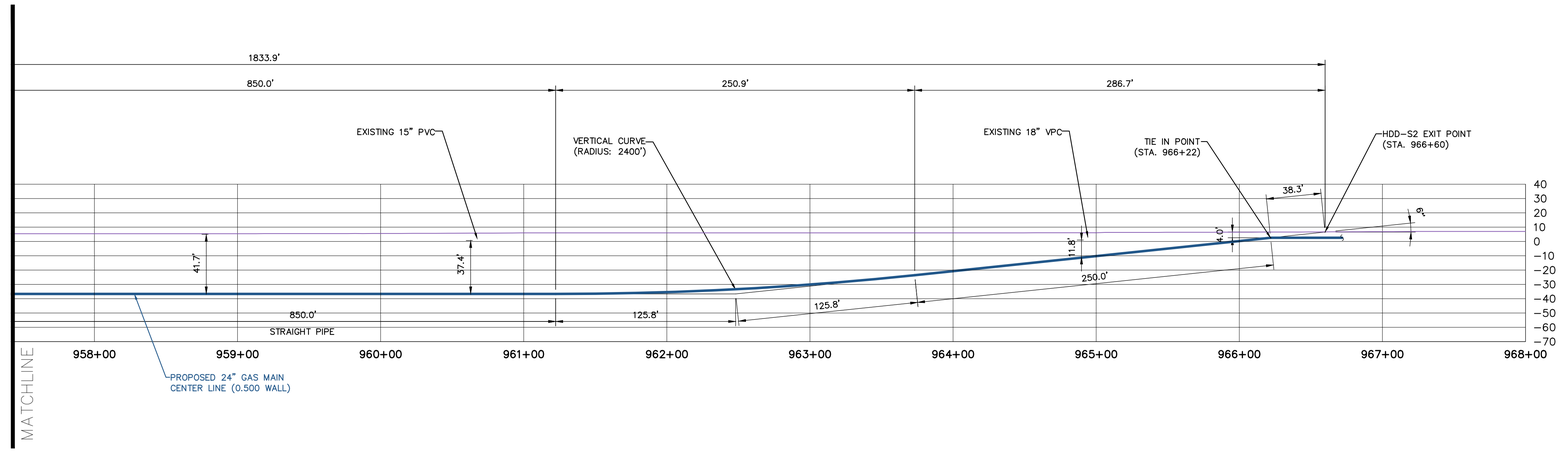
\\portland\projects1\225616 sig - england power plant\wip\Drawings_redesign\225616_HDD-S2.1-2.dwg, May 18, 2015 - 2:08pm

24x36 SHEET
1:1



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE REFER TO AS-68
SCALE: 1"=50'

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NJ LIC.NO. GE46534

REV	DESCRIPTION	DATE

DESIGNED BY: LS/JG
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-S2.1-2.dwg

HDD-S2.2 AT STATION 948+26

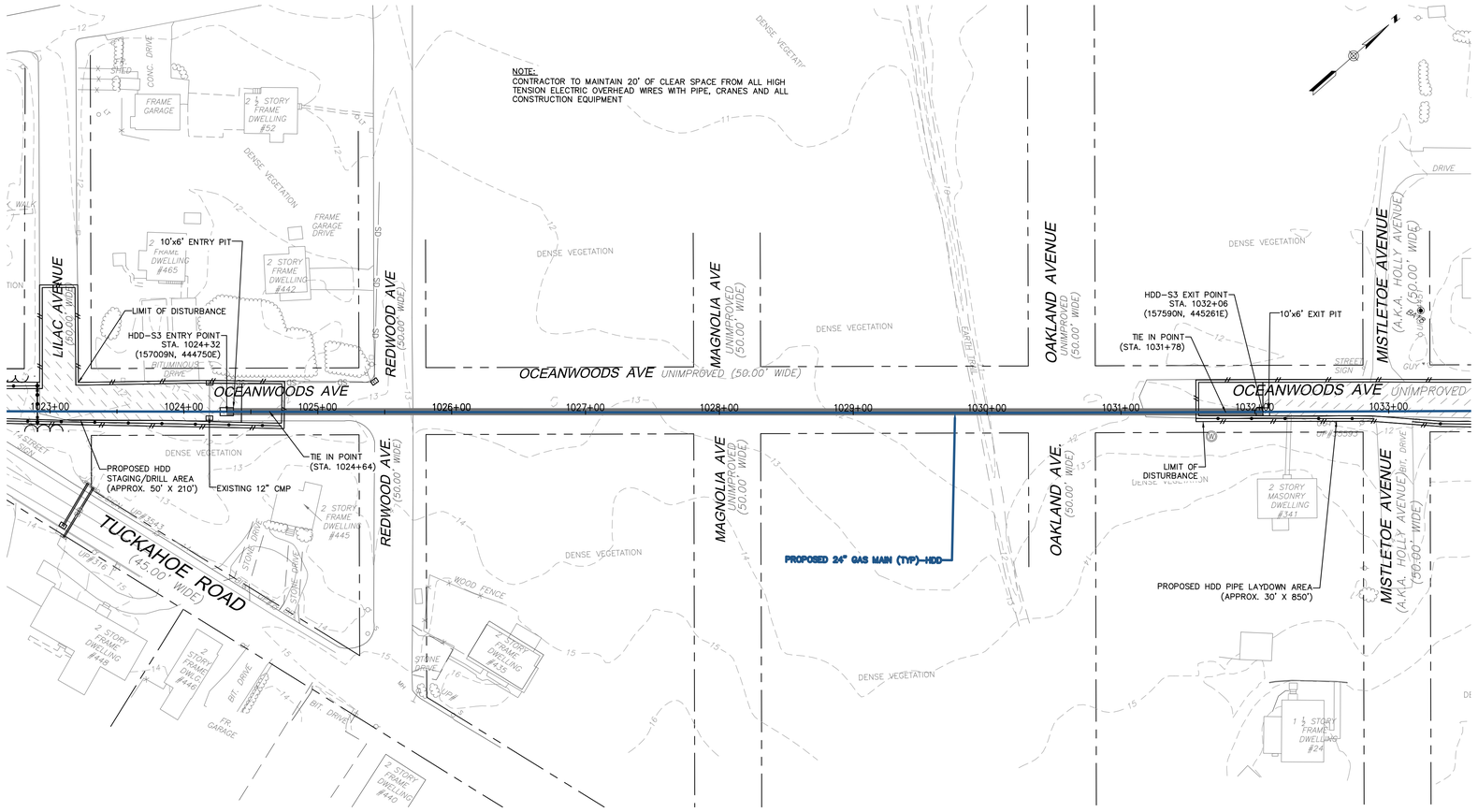
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

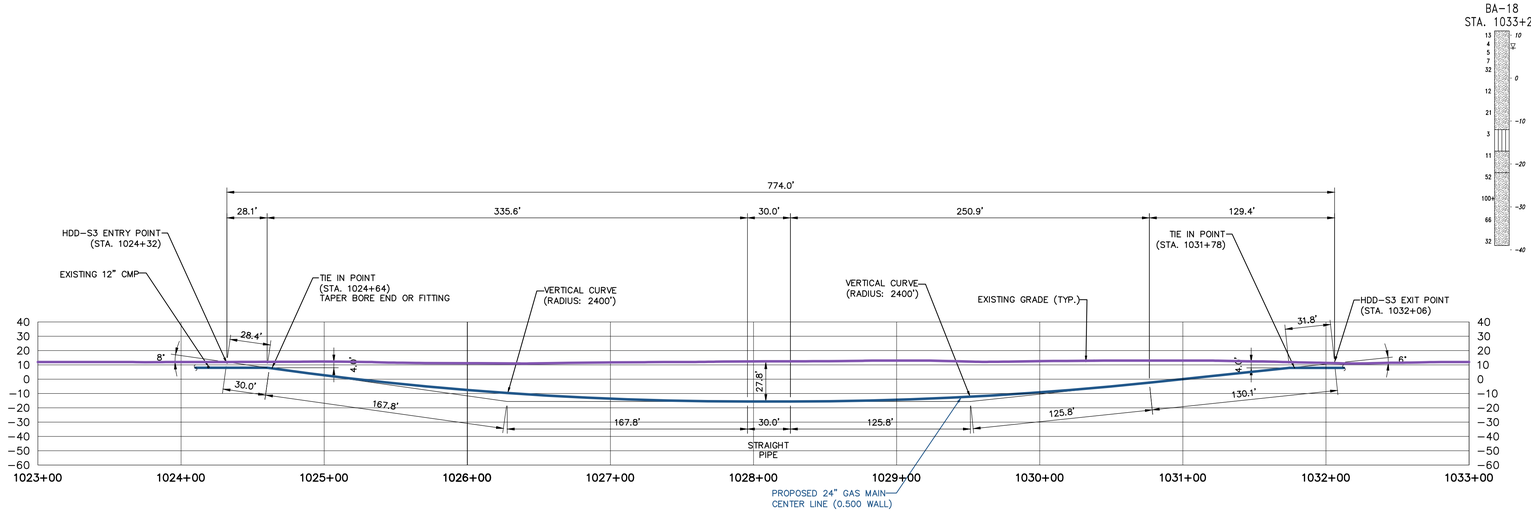
HDD-S2.2

\\portland\projects1\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-S2.1-2.dwg, May 18, 2015 - 2:09pm



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



BA-18
STA. 1033+24

PROFILE REFER TO AS-72 & AS-73
SCALE: 1"=50'

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DENNIS M. WALSH, P.E.
NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: AE/TK | 225616_HDD-S3.dwg

HDD-S3 AT STATION 1032+26

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

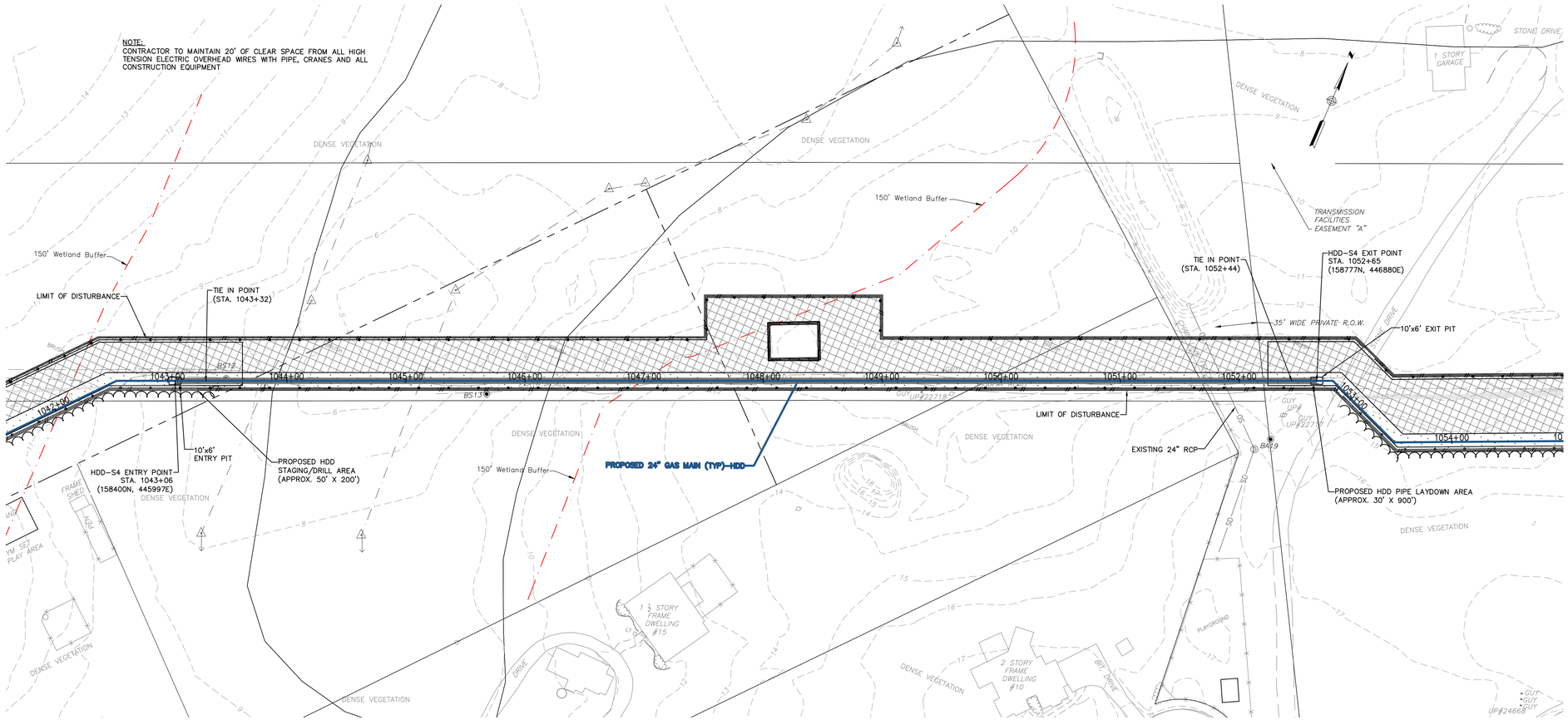
JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-S3

\\portland\projects1\225616 s\jg - englond power plant\wip\Drawings_redesign\225616_HDD-S3.dwg, May 18, 2015 - 2:09pm

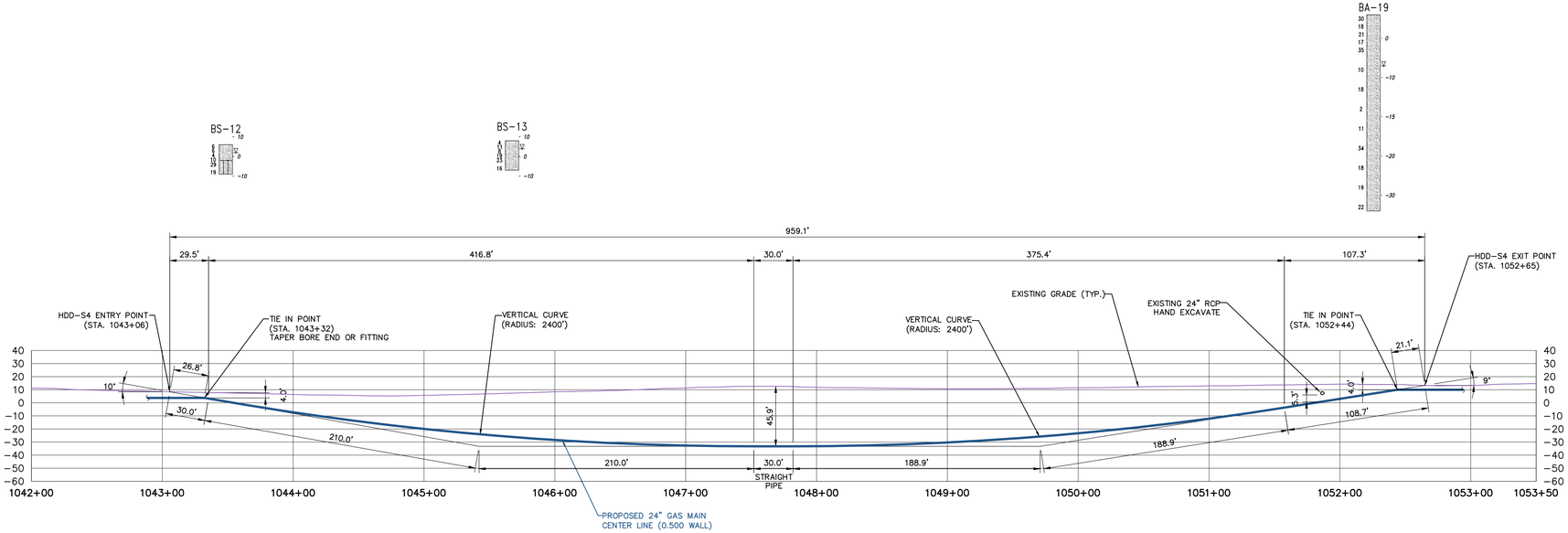
24x36 SHEET
1:1

NOTE:
CONTRACTOR TO MAINTAIN 20' OF CLEAR SPACE FROM ALL HIGH TENSION ELECTRIC OVERHEAD WIRES WITH PIPE, CRANES AND ALL CONSTRUCTION EQUIPMENT



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE REFER TO AS-74
SCALE: 1"=50'

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: AE/TK | 225616_HDD-S4.dwg

HDD-S4 AT STATION 1043+23

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

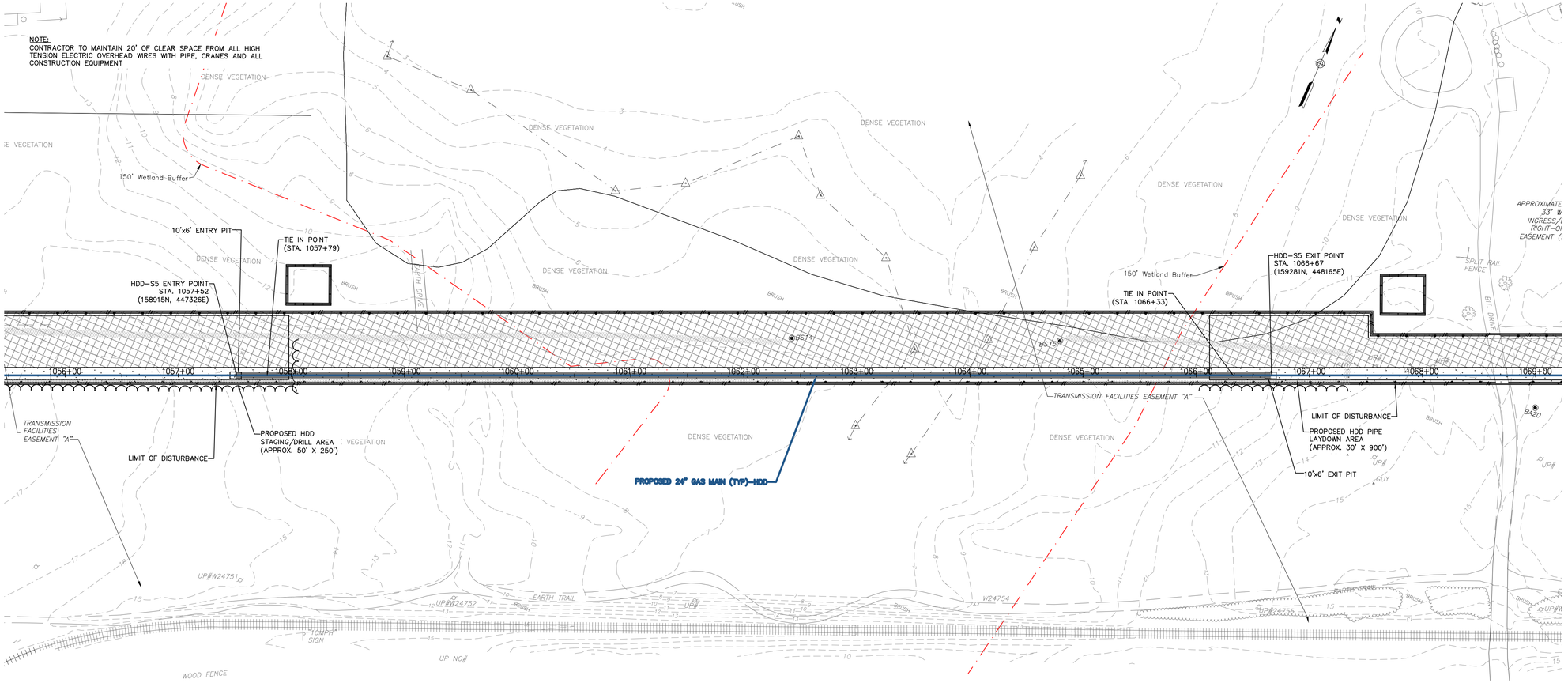
JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-S4

\\portland\projects1\225616 sig - england power plant\wip\Drawings_redesign\225616_HDD-S4.dwg, May 18, 2015 - 2:10pm

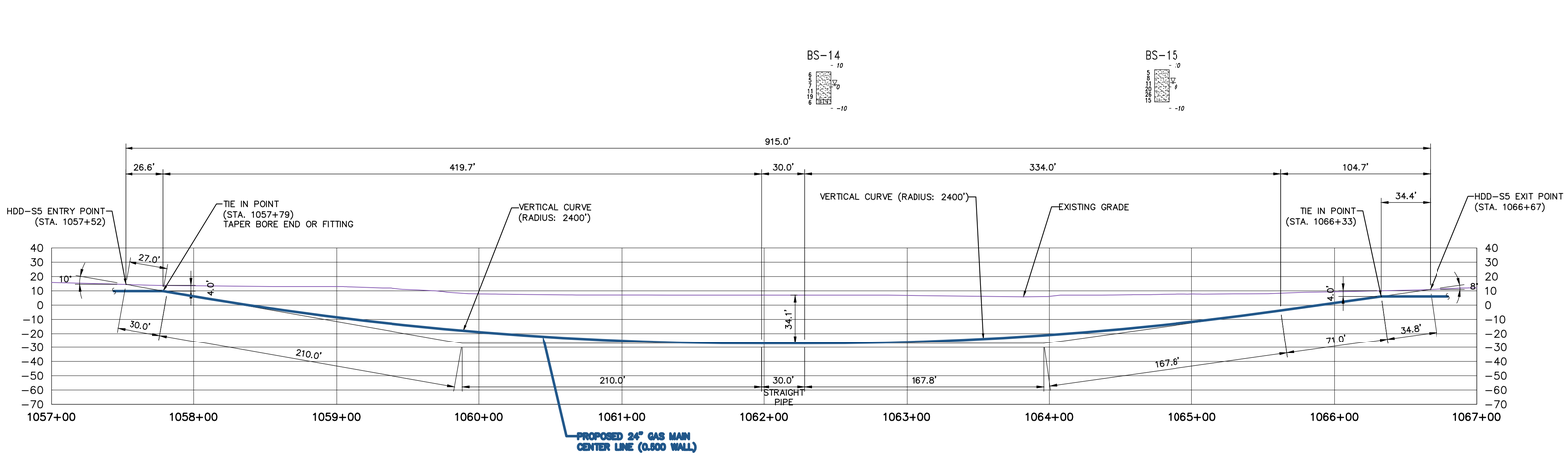
24x36 SHEET
1:1

NOTE:
CONTRACTOR TO MAINTAIN 20' OF CLEAR SPACE FROM ALL HIGH TENSION ELECTRIC OVERHEAD WIRES WITH PIPE, CRANES AND ALL CONSTRUCTION EQUIPMENT



PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1
NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE REFER TO AS-75
SCALE: 1"=50'

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N.J. LIC.NO. GE46534

REV	DESCRIPTION	DATE

DESIGNED BY: LS/AS
DRAWN BY: AE/TK
CHECKED BY: DW
225616_HDD-S5.dwg

HDD-S5 AT STATION 10+57+50

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-S5

\\portland\projects1\225616 s\g - england power plant\wip\Drawings_redesign\225616_HDD-S5.dwg, May 18, 2015 - 2:10pm

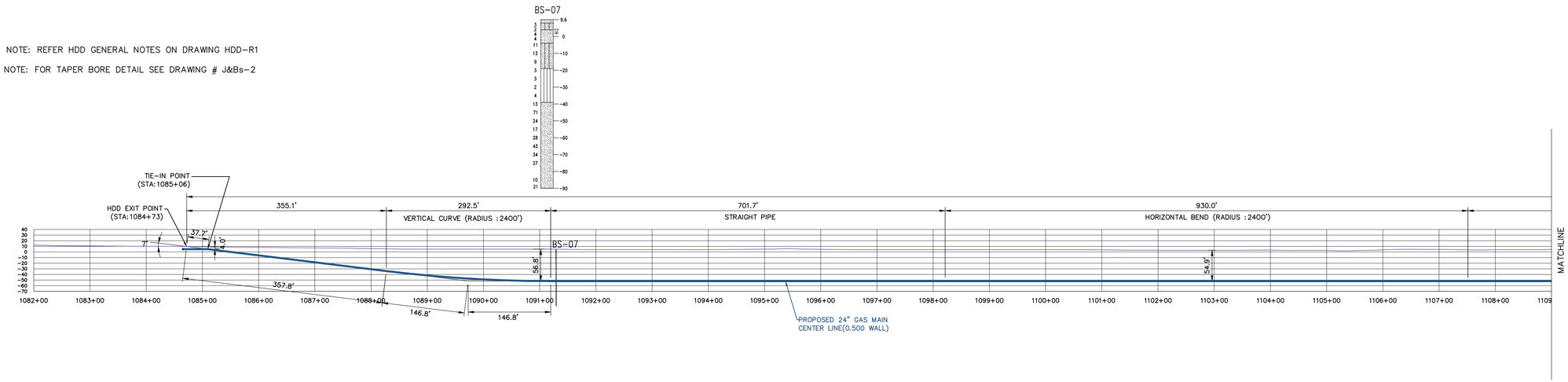


PLAN
SCALE: 1"=100'

100' 0 100' 200'
BAR SCALE
1" = 100'
CHECK GRAPHIC SCALE BEFORE USING

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1

NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE REFER AS-77 TO AS-80
SCALE: 1"=100'

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DENNIS M.WALSH, P.E.
N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR HDD	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_HDD_CS.dwg

ALTANTIC CITY ELECTRIC – HDD

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

HDD-S6.1

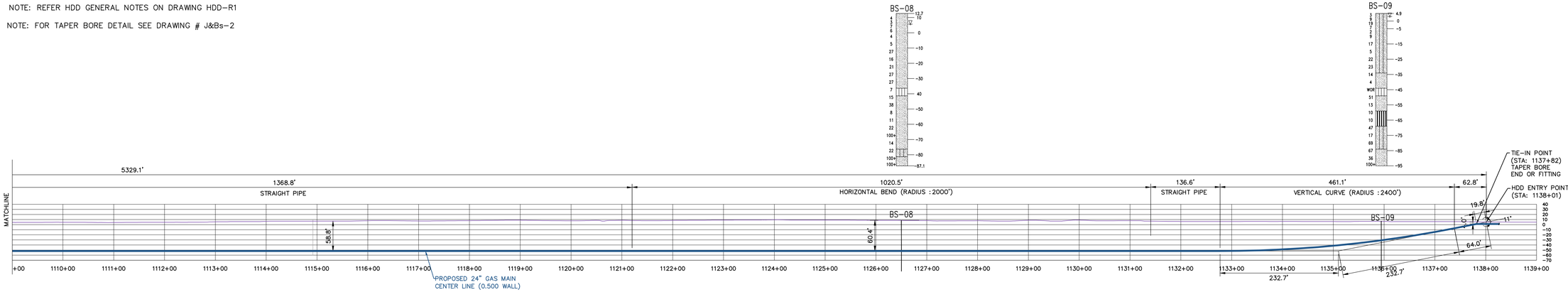
\\portland\projects1\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD_CS.dwg, May 18, 2015 – 2:10pm



PLAN
SCALE: 1"=100'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1

NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2



PROFILE REFER AS-77 TO AS-80
SCALE: 1"=100'

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DENNIS M.WALSH, P.E.
N.J. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_HDD_CS.dwg

ATLANTIC CITY ELECTRIC – HDD

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

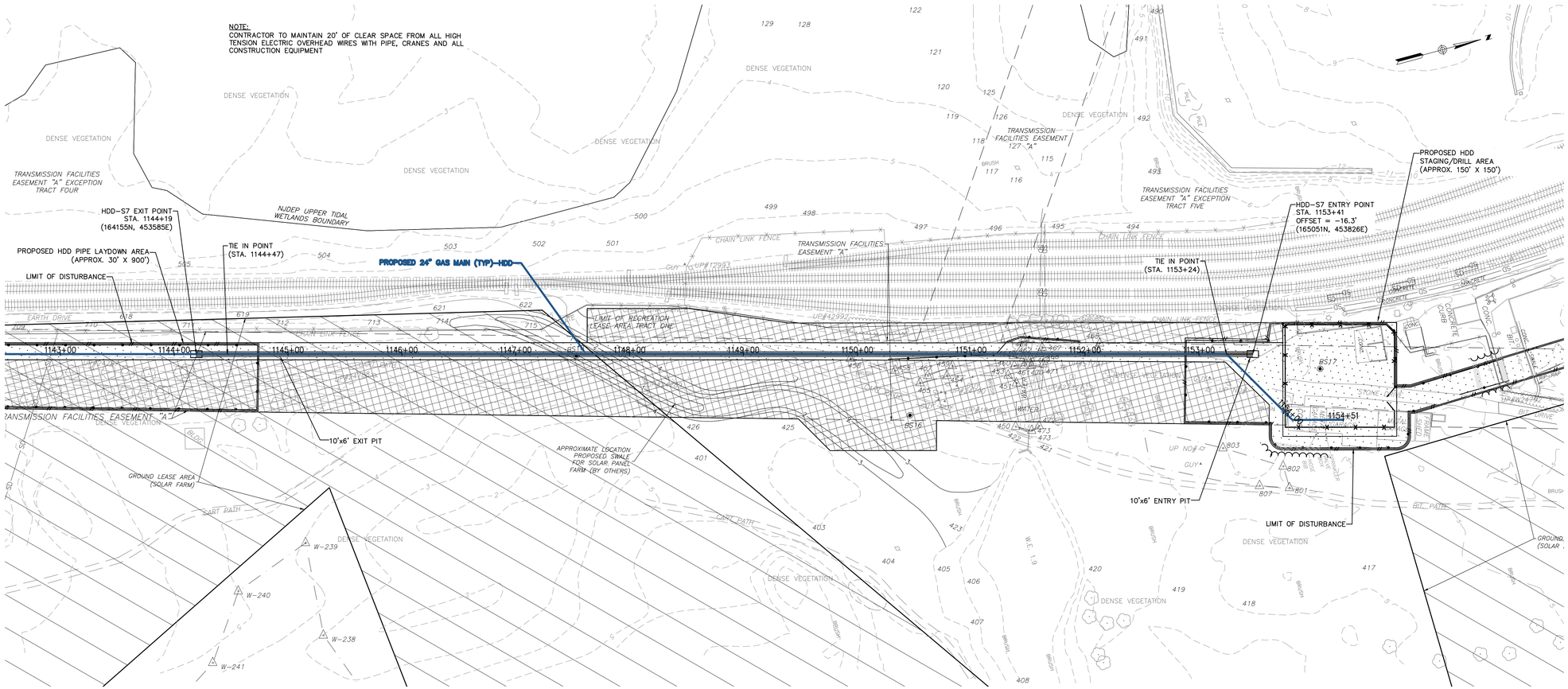
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

HDD-S6.2

\\portland\projects1\225616 sig – england power plant\wip\Drawings_redesign\225616_HDD_CS.dwg, May 18, 2015 – 2:11pm

24x36 SHEET
1:1

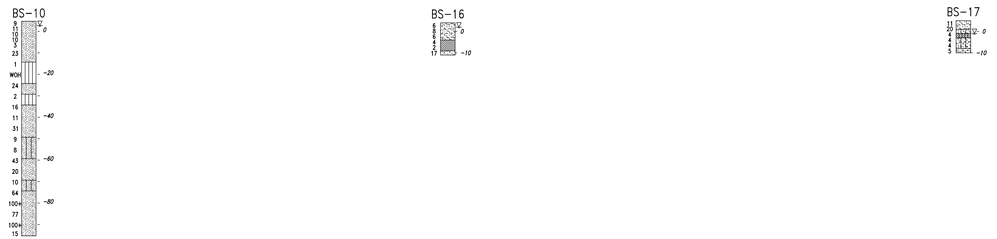
NOTE:
CONTRACTOR TO MAINTAIN 20' OF CLEAR SPACE FROM ALL HIGH TENSION ELECTRIC OVERHEAD WIRES WITH PIPE, CRANES AND ALL CONSTRUCTION EQUIPMENT

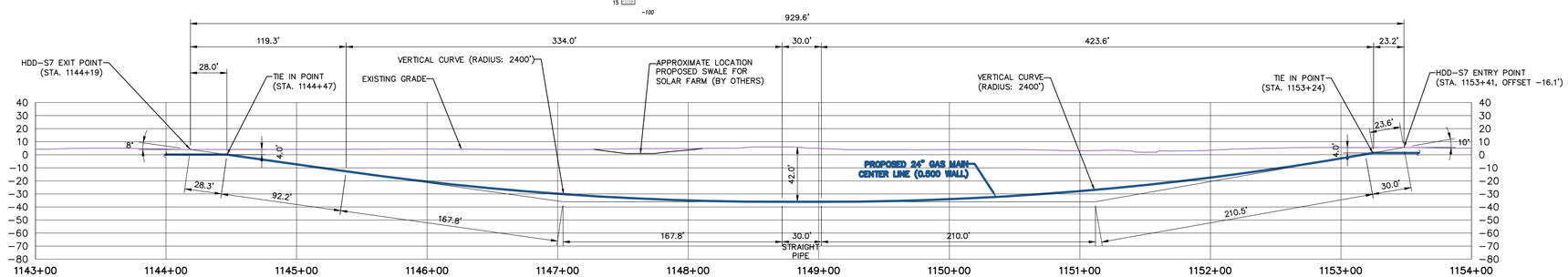


PLAN
SCALE: 1"=50'

NOTE: REFER HDD GENERAL NOTES ON DRAWING HDD-R1

NOTE: FOR TAPER BORE DETAIL SEE DRAWING # J&Bs-2





PROFILE
SCALE: 1"=50'

REFER TO AS-81 & AS-82

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NJ. LIC.NO. GE46534

REV	DESCRIPTION	DATE

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: AE/TK | 225616_HDD-S7.dwg

HDD-S7 AT STATION 1153+93

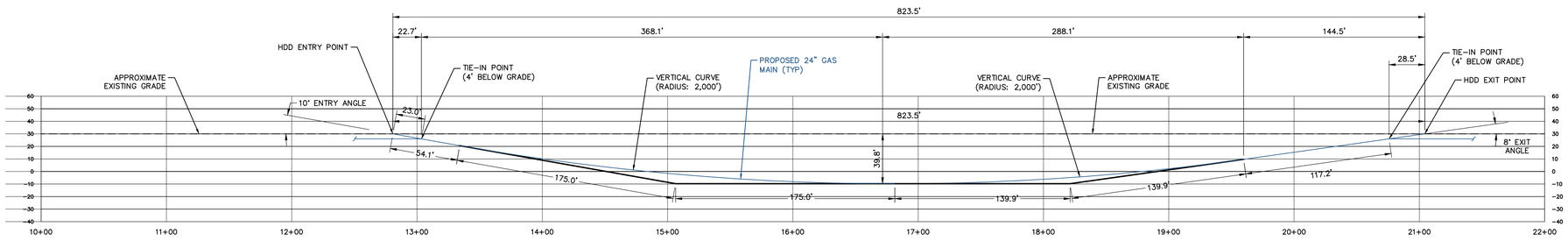
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: JULY 1, 2014
SCALE: AS SHOWN

HDD-S7

\\portland\projects1\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD-S7.dwg, May 18, 2015 - 2:11pm



PROFILE

SCALE: 1"=50'

50' 0 50' 100'

BAR SCALE
1" = 50'
CHECK GRAPHIC SCALE BEFORE USING

(HDD ALTERNATE FOR CROSSINGS ON AS-15, 18, 27, 38, & 53)

NOTES

1. REFER TO GENERAL HDD NOTES ON SHEET HDD-R1.
2. EXISTING GRADES AND PIPE LENGTHS MAY VARY BASED ON FINAL FIELD CONDITIONS.
3. THE STATIONS SHOW ON THIS PROFILE ARE GENERAL; SHOWN FOR GRAPHICAL PURPOSES ONLY, ACTUAL STATIONS TO TO BE DETERMINED IN THE FIELD.
4. CONTRACTOR TO MAINTAIN A MINIMUM OF 15' CLEARANCE FROM THE TOP THE PROPOSED 24" GAS PIPE TO THE BOTTOM OF THE EXISTING PIPE CROSSING.
5. TYPICAL LAYDOWN AREA SHALL BE 20' WIDE X (DRILL LENGTH + 50') AND THE DRILL / STAGING AREA SHALL BE 25' WIDE X 150' LONG.
6. CONTRACTOR TO INSTALL AND MAINTAIN ALL TRAFFIC CONTROLS IN ACCORDANCE WITH NJDOT REQUIREMENTS.
7. FOR ANY DEVIATION FROM THIS TYPICAL HDD ALTERNATE DESIGN, THE CONTRACTOR MUST REQUEST APPROVAL FROM SOUTH JERSEY GAS, PRIOR TO CONSTRUCTION.

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NJ LIC.NO. GE46534

REV.	DESCRIPTION	DATE
1	ISSUED FOR #80	12/09/15

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_HDD_ALT_CS.dwg

TYPICAL HDD CROSSING ALTERNATE DESIGN

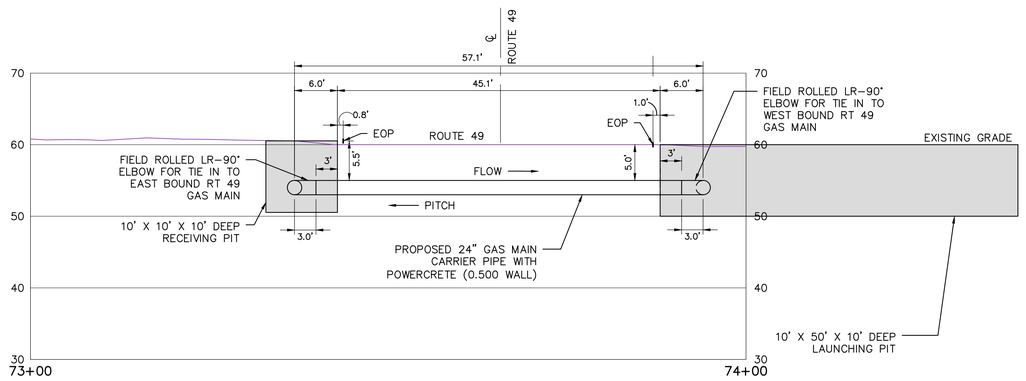
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

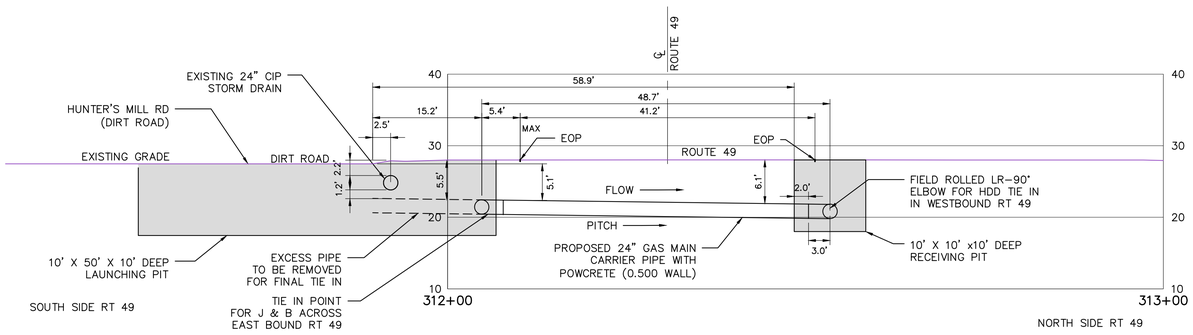
HDD-1.0
ALT

\\portland\projects1\225616 sjg - england power plant\wip\Drawings_redesign\225616_HDD_ALT_CS.dwg, May 18, 2015 - 2:11pm



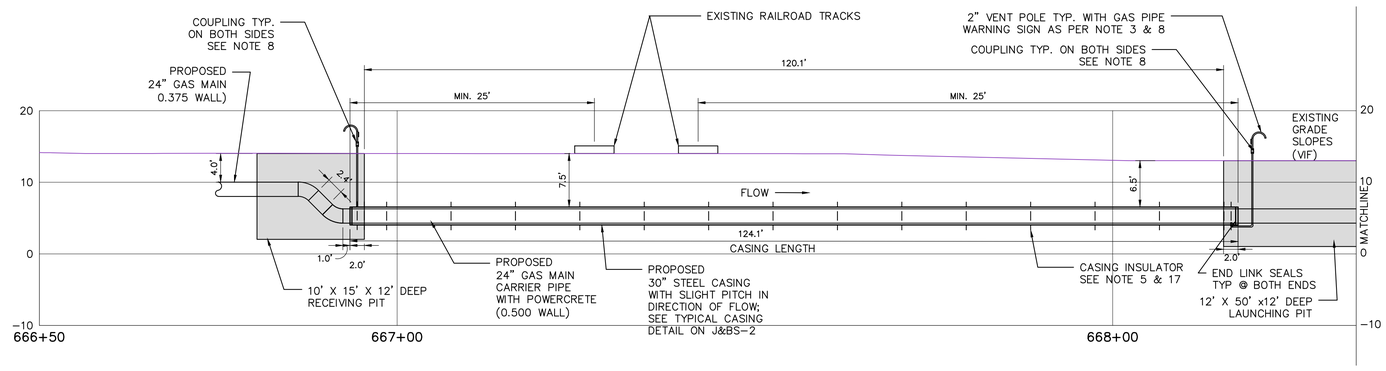
J & B DETAIL @ HESSTOWN ROAD
STATION 73+90(REFER AS-5)

SCALE: 1"=10'



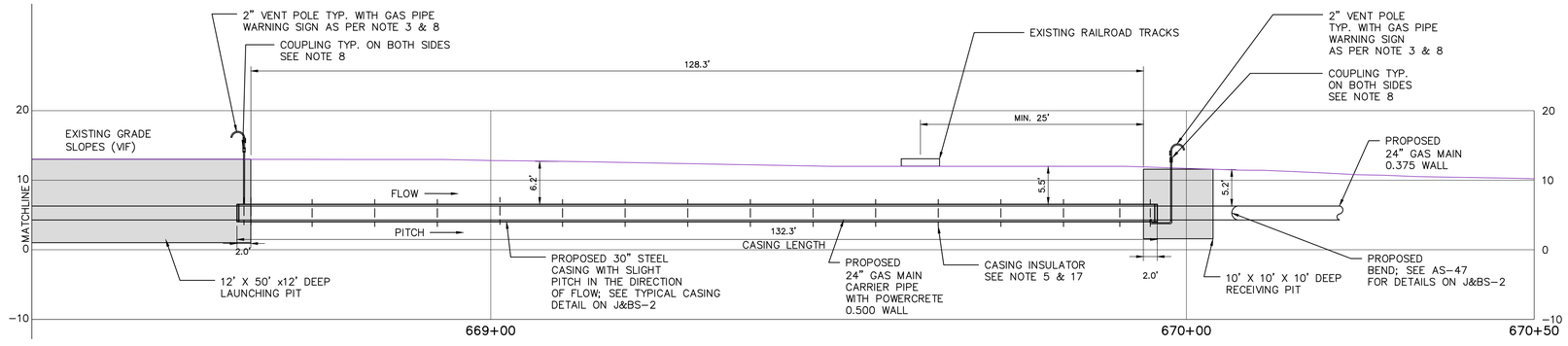
J & B DETAIL @ HUNTER'S MILL ROAD
STATION 312+23 (REFER AS-21)

SCALE: 1"=10'



J & B DETAIL @ RAILROAD CROSSING 1
STATION 666+95 (REFER AS-46)

SCALE: 1"=10'



J & B DETAIL @ RAILROAD CROSSING 2
STATION 668+66 (REFER AS-46)

SCALE: 1"=10'

SEE DRAWING J&BS-2 FOR JACK & BORE NOTES

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DENNIS M.WALSH, P.E.
NJ LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	REMOVED 30" STEEL CASING @ J&B LOCATIONS	9/24/14
2	REMOVED JACK & BORE DETAILS, REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_J & B CS.dwg

JACK & BORE DETAILS

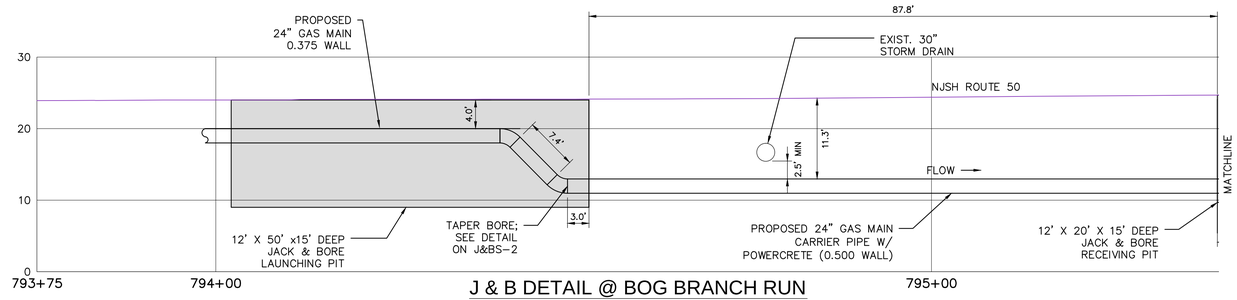
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

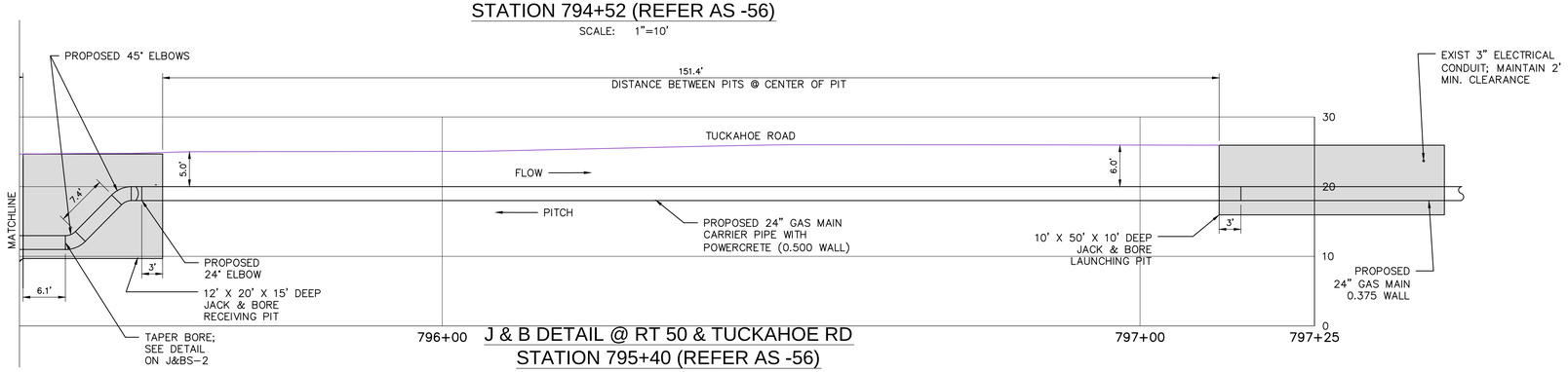
J&BS-1

\\portland\projects1\225616 sjg - england power plant\wip\Drawings_redesign\225616_J & B CS.DWG, May 18, 2015 - 2:14pm



J & B DETAIL @ BOG BRANCH RUN STATION 794+52 (REFER AS -56)

SCALE: 1"=10'



J & B DETAIL @ RT 50 & TUCKAHOE RD STATION 795+40 (REFER AS -56)

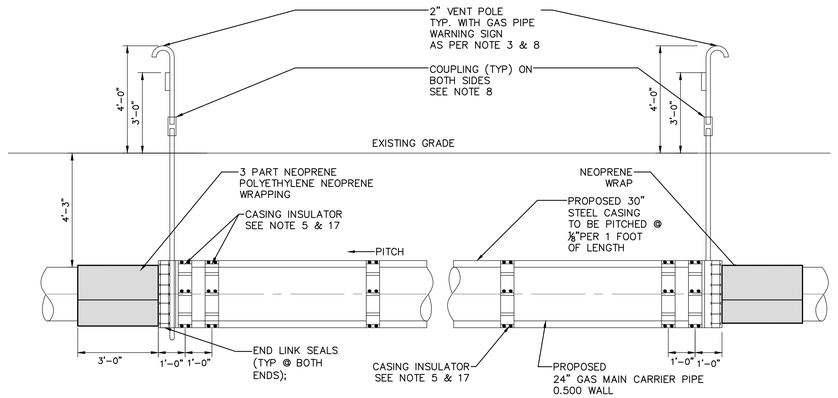
SCALE: 1"=10'

ITEM NO.	DESCRIPTION	TOTAL QUANTITY	UNIT MEASURE
1	30" .500 WALL BARE STEEL API 5L GRADE B LINE PIPE, CASING	256	LF
2	24" .500 WALL POWERCRETE COATED API 5L-X60 LINE PIPE, CARRIER	666	LF
3	LINK SEALS LS500C- 21 EACH SIDE TOTAL/CASING-42	84	EACH CSG
4	CASING INSULATORS 30" X 24" IPS, MODEL PE	22	EACH
5	30" X 2" WELD O LETS	4	EACH CSG
6	2" STEEL PIPE, SEAMLESS SCHEDULE 80	60	LF
7	2" STEEL 90 DEGREE WELD ELBOWS	6	EACH
8	2" COMPRESSION COUPLINGS - DRESSER STYLE 90 OR EQUAL	4	EACH CSG
9	24" DIAMETER RAYCHEM DIRAX SLEEVES WITH LEADING EDGE FOR POWERCRETE COATED PIPE (BASED ON 1 SLEEVE EVERY 20' OF PIPE LENGTH)	34	EACH
10	RAYCHEM COVALENCE S1239 EPOXY KIT W/GLOVES, MIX STICKS, & APPLICATORS	4	EACH
11	WIRE- RED, GREEN, WHITE, YELLOW (500' OF EACH COLOR PER CROSSING)	8	100' ROLLS
12	CP TEST STATION BOXES - (AST-57)	8	EACH CSG
13	PIPELINE WARNING SIGNS - (AST-96)	4	EACH CSG
14	TEST STATION - BIG FINK TYPE (AST-9)	4	EACH CSG
15	PIPELINE MARKER ON CASING VENT 2/CASING (AST-62 & AST 96)	4	EACH CSG
16	17 LB MG ANODES 4/CASING	8	EACH CSG

	J&BS	SHEET	30" CASING PRYTEC		24" CARRIER PIPE		
			LENGTH (FT)	WALL (IN.)	LENGTH (FT)	WALL (IN.)	COATING
1	HESSTOWN RD	AS-5	0	0.5	51	0.5	POWERCRETE
2	HUNTERS MILL	AS-21	0	0.5	45	0.5	POWERCRETE
3	TUCKAHOE RR XING (1)	AS-46	124	0.5	148	0.5	POWERCRETE
4	TUCKAHOE RR XING (2)	AS-46	132	0.5	167	0.5	POWERCRETE
5	BOG BRANCH RUN	AS-56	0	0.5	97	0.5	POWERCRETE
6	ROUTE 50 & TUCKAHOE RD	AS-56		0	158	0.5	POWERCRETE

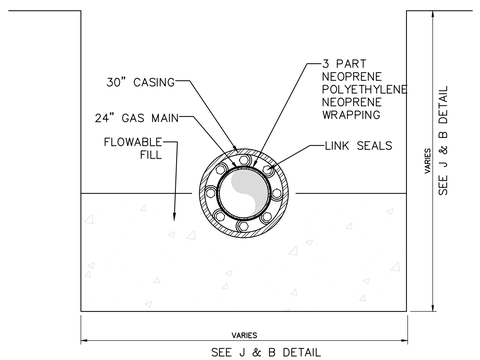
TOTAL 30" CASING GRADE B (FT) 256

TOTAL 24" .500 WALL X-60 POWERCRETE (FT) 666



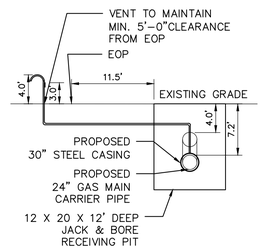
TYPICAL CASING DETAIL

SCALE: 3/8"=1'



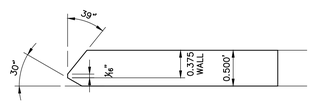
TYPICAL CASING END DETAIL

SCALE: 3/8"=1'



VENT PIPE DETAIL

SCALE: 1"=10'



END PREPARATION TAPER BORE DETAIL

SCALE: 1"=1'

JACK AND BORE NOTES:

1. JACK AND BORE RAILROAD CROSSINGS INSTALLATIONS SHALL BE IN COMPLIANCE WITH SPECIFICATIONS FOR PIPELINE OCCUPANCY OF CONSOLIDATED RAIL CORPORATION PROPERTY CE 8 DATED: 5-1-95 AND SPECIFICATIONS FOR PIPELINE OCCUPANCY ON NJ TRANSIT PROPERTY EP-2 DATED: NOVEMBER 2012.
2. CASINGS SHALL BE SPECIFIED ONLY BY THE SJG ENG. DEPT. AND/OR AS REQUIRED BY THE FEDERAL, STATE, LOCAL, OR RAILROAD AGENCIES.
3. ALL CASINGS SHALL BE INSTALLED IN ACCORDANCE WITH DWG. AST-62 AND AST-13.
4. EACH CASING SHALL BE PURGED AND CLEANED WITH AIR & VISUALLY INSPECTED FOR ANY REMAINING DEBRIS OR OTHER CONTAMINATION PRIOR TO INSTALLING CARRIER PIPE.
5. ADEQUATE CASING SPACER INSULATORS, INCLUDING TWO EACH ON 1 FOOT SPACING AT EACH END SHALL BE REQ. AS PER DWG AST-62. EXTREME CARE MUST BE EXERCISED DURING THE CARRIER PIPE INSERTION PROCESS.
6. CASING MUST BE SLIGHTLY GRADED WITH A BOTTOM-OUT CASING VENT INSTALLED ON THE DEEPER END AS SHOWN ON DWG AST-62.
7. CASING VENT HOLES MUST BE A MIN. OF 2" IN DIAMETER.
8. CASING VENTS SHALL BE CUT 12" ABOVE GRADE & A COUPLING TO BE INSTALLED.
9. LINK SEAL CASING END SEALS OR APPROVED EQUAL BY THE SJG ENG. DEPT. MUST BE INSTALLED ON EACH END.CARE WILL BE TAKEN TO ENSURE UNIFORM TIGHTENING OF EACH LINK SECTION.
10. INSTALL REQ. CORROSION CONTROL TEST STATIONS PER DWG. AST-62 & DWG. AST-65 ON ANY CASING INSTALLATION.
11. FIELD VERIFY ALL DIMENSIONS BEFORE INSTALLATION.
12. BORINGS SHOWN ON THESE DRAWINGS ARE FOR REFERENCE PURPOSE ONLY. BORINGS NOT DRAWN TO SCALE. CONTRACTOR SHALL REFER TO CHERRY WEBER AND ASSOCIATES, GEOTECHNICAL ENGINEERING REPORT "24-INCH BL ENGLAND PIPELINE SUPPLY PROJECT" DATED: FEBRUARY 14, 2013, DISTRIBUTED BY SJG RESOURCES FOR FURTHER INFORMATION ON BORINGS, GEOLOGY, SOIL ANALYSIS, AND GROUNDWATER.
13. CONTRACTOR SHALL PRE-SURVEY SITE CONDITIONS FOR EACH JACK AND BORE TO VERIFY SURFACE FEATURES, SUBSURFACE GEOTECHNICAL CONDITIONS AND UTILITY DATA PRIOR TO CONSTRUCTION.
14. CONTRACTOR SHALL CONDUCT A LINE AND GRADE SURVEY TO ENSURE PROPER ALIGNMENT OF EQUIPMENT PRIOR TO STARTING ANY JACK AND BORE OPERATION. CONTRACTOR TO CHECK ALIGNMENT REGULARLY AND AFTER EACH SECTION OF PIPE IS INSTALLED AND NOTE ANY DEVIATION, PROBLEM OR REMARKABLE INCIDENT DURING JACK AND BORE. CONTRACTOR TO PROVIDE A DAILY REPORT ON RATE OF BORE ADVANCEMENT, TYPE OF MATERIAL REMOVED FROM BOREHOLE, CONDITION OF PIPE, WATER CONDITION DEVIATION FROM ORIGINAL ALIGNMENT, AND ANY OTHER REMARKABLE CONDITION.
15. CONTRACTOR SHALL INSPECT AND EXAMINE THE CONDITION OF PIPE AND COATING WHEN EXITING THE BORE. ANY PIPE AND COATING DEFECTS SHALL BE REPORTED TO THE SJG ENGINEER IMMEDIATELY. UPON EXAMINATION OF PIPE DEFECTS A DETERMINATION BY THE SJG ENGINEER SHALL BE MADE FOR REPAIR OR TO CONTINUE JACKING OPERATIONS UNTIL THE EXITING PIPE IS SATISFACTORY AND ACCEPTABLE BY THE SJG ENGINEER. ANY REPAIRS SHALL BE IN ACCORDANCE WITH SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL.
16. CATHODIC PROTECTION-SEE SJG CONTRACT SPECIFICATIONS, AST-62, AST-63 AND SJG CONSTRUCTION MANUAL.
17. THE CONTRACTOR SHALL EXAMINE / VISUALLY INSPECT CASING SPACER ROLLERS FOR PROPER TORQUE AND INSTALLATION (NOT COCKED OR SLIDING). ENSURE THE PIPE COATING IS NOT COMPROMISED OR DAMAGED DURING INSTALLATION. CLEARANCES AND SPANS FOR CASING SPACERS / ROLLERS MUST BE MAINTAINED AS DESCRIBED IN THE CASING SPACERS INFORMATION DOCUMENTATION.
18. ALL AST DRAWING REFERENCES ARE FOUND IN SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL.

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DENNIS M.WALSH, P.E.
NJ LIC.NO. GE46534

REV.	DESCRIPTION	DATE	CHECKED BY: DW
3	REMOVED 30" STEEL CASING @ AMR LOCATIONS	9/24/14	225616_J & B CS.dwg
2	REMOVED JACK & BORE DETAILS, REVISED BOM	7/7/14	
1	ISSUED FOR BID	12/20/13	

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ

JACK & BORE DETAILS

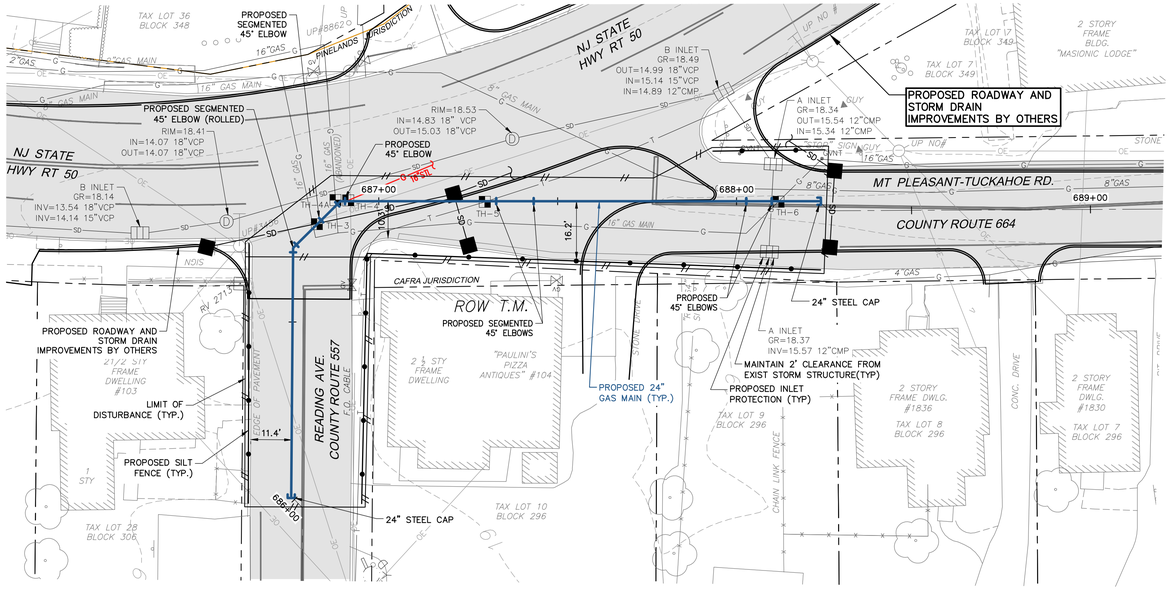
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

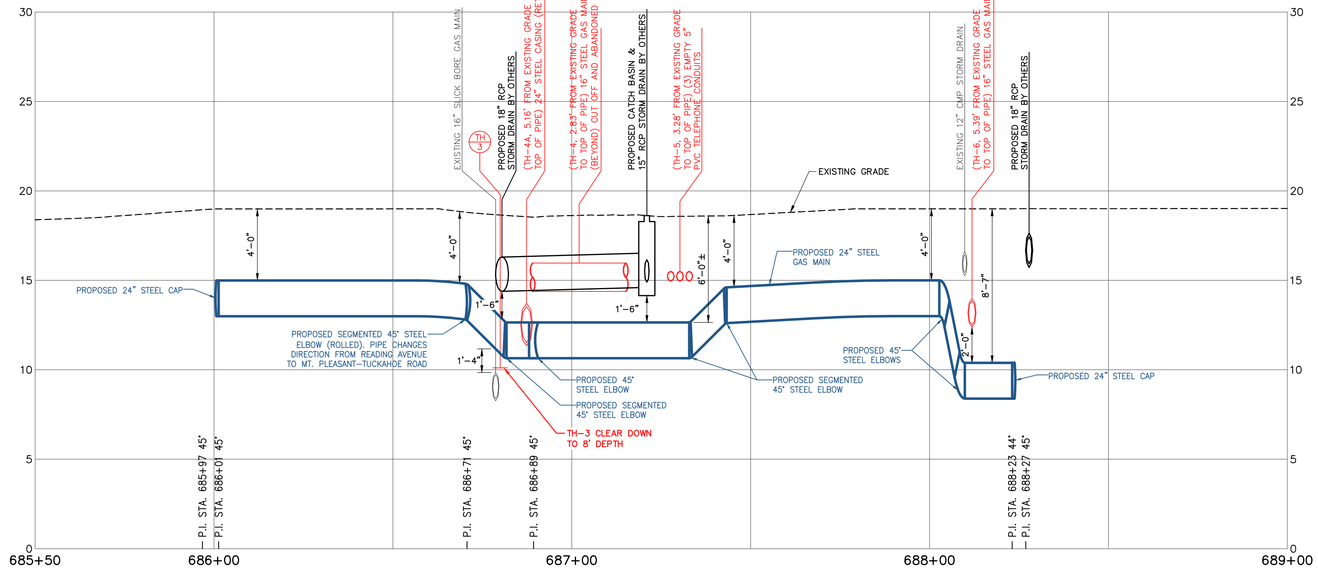
J&BS-2

\\portland\projects1\225616 sjg - england power plant\wip\Drawings_redesign\225616_J & B CS.DWG, May 18, 2015 - 2:15pm



PLAN

SCALE: 1"=20'



PROFILE (REFER TO AS-48)

SCALE: HORIZONTAL: 1"=20'
VERTICAL: 1"=4'

GENERAL NOTES:

1. CONTRACTOR SHALL MAINTAIN 4'–0" MINIMUM COVER ON PROPOSED GAS PIPELINE UNLESS OTHERWISE NOTED.
2. ALL OFFSETS SHOULD USE LONG RADIUS (LR) SEGMENTABLE STEEL BENDS.
3. THE PROPOSED 24" GAS MAIN STARTING POINT IS AT STATION 9+86.
4. THESE DRAWINGS WERE PREPARED FOR SOUTH JERSEY GAS (SJG) SOLELY FOR THEIR USE, AS WELL AS ITS CONTRACTORS AND/OR ITS AGENTS, IN CONSTRUCTING THE PROPOSED PIPELINES AND APPURTENANCES. ANY USE OR RELIANCE THEREON BY OTHER PARTIES IS DONE SO AT THEIR SOLE RISK AND LIABILITY.
5. CONSTRUCTION TO BE PERFORMED AS SHOWN ON THESE DRAWINGS SHALL BE IN COMPLIANCE WITH TITLE 49 OF THE CODE OF FEDERAL REGULATIONS, PART 192; TITLE 14 , PART 7 OF THE NJ ADMINISTRATIVE CODE AND SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL.
6. ALL WELDING TO BE IN COMPLIANCE WITH THE 20TH EDITION OF API 1104 AND 1107 AS REFERENCED BY CFR 49 PART 192 OF THE FEDERAL REGULATIONS, TITLE 14, PART 7 OF THE NJ ADMINISTRATIVE CODE AND SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL.
7. CONTRACTOR SHALL COAT AND/OR WRAP ALL UNDERGROUND STEEL PIPING AND FITTINGS IN ACCORDANCE WITH SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL.
8. ALL SEGMENTS OF PIPING SHALL BE CLEANED DAILY WITH A SWAB PRIOR TO WELDING. ALL OPEN ENDS ON WELDED SECTIONS SHALL BE CLOSED DAILY USING END CAPS AND AT THE END OF WORK SHIFTS. NO SECTIONS OF WELDED PIPE SHALL BE LEFT OPEN OVERNIGHT.
9. ALL SECTIONS OF STEEL PIPING SHALL BE INSPECTED PRIOR TO AND DURING THE LOWERING–IN WITH AN APPROVED HOLIDAY DETECTOR AND IN ACCORDANCE WITH SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL.
10. ALL BURIED MATERIAL SHALL BE PADDED TO A MINIMUM DEPTH OF 12" OVER THE PIPE USING BACKFILL MATERIAL FREE OF STUMPS, ROCKS, LARGE LUMPS OR OTHER HARD OBJECTS THAT MAY DAMAGE THE PIPE AS PER SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL AND APPROVED BY SOUTH JERSEY GAS.
11. CONTRACTOR SHALL USE PIPE COATED WITH POWERCRETE, OR SJG APPROVED EQUIVALENT, FOR HDD AND JACKING INSTALLATIONS.
12. ALL EXISTING UTILITIES NOTED ON DRAWINGS ARE APPROXIMATE LOCATIONS ONLY AND SHALL BE LOCATED AND MARKED PRIOR TO START OF CONSTRUCTION.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING & SUPPORTING EXISTING UTILITIES & STRUCTURES.
14. FABRICATE PER FIELD CONDITIONS & VERIFY ALL DIMENSIONS IN FIELD.
15. INSTALL GAS MAIN WITH MIN OF 18 INCHES VERTICAL & A MIN OF 5 FT HORIZONTAL SUBSTRUCTURE CLEARANCE AS REQUIRED BY SJG. ANY DEVIATIONS FROM THESE CLEARANCES MUST BE APPROVED BY SJG PRIOR TO INSTALLATION.
16. ALL TRENCH EXCAVATION AND PROTECTION SHALL BE IN ACCORDANCE WITH OSHA SPECIFICATIONS & SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL. CONTRACTOR SHALL SUBMIT A DETAILED CONSTRUCTION SHEETING/SHORING AND DEWATERING PLAN FOR ALL TRENCHING OPERATIONS AND ALL EXCAVATIONS INDICATED IN THE DRAWINGS ONE MONTH PRIOR TO CONSTRUCTION.
17. CONTRACTOR MUST COMPLY WITH ONE CALL REQUIREMENTS AS REQUIRED BY LAW.
18. THE PIPE ROUTE SHOWN MAY BE ALTERED DUE TO ACTUAL FIELD CONDITIONS. SOME FITTINGS MAY BE ADDED/ELIMINATED AT THE DIRECTION OF SJG.
19. CONTRACTOR SHALL REPLACE/ RESTORE ANY AND ALL FEATURES, SUCH AS MAILBOXES, SIGNS, ETC., THAT ARE DISTURBED DURING CONSTRUCTION, IN KIND.
20. WELDS TO BE 100% X–RAYED. CONTRACTOR WILL COORDINATE SCHEDULING WITH SJG INSPECTOR AND SJG X–RAY CONTRACTOR.
21. CONTRACTOR SHALL SUPPLY ALL CONCRETE, REINFORCING RODS, ROCKSHIELD, NEOPRENE AND NECESSARY FORMING MATERIALS.
22. ALL WELDS TO FITTINGS WITH 0.500"W.T. AND GREATER OR 24" NOM. PIPE SIZE AND LARGER SHALL BE PREHEATED TO COMPLY WITH 824.3 AND 824.4, ANSI B31.8 AROUND THE ENTIRE CIRCUMFERENCE OF THE WELD FOR A DISTANCE OF 3" BOTH SIDES OF THE WELD. PREHEATED AREA TO BE TESTED WITH A 250°F TEMPERATURE INDICATING CRAYON, SUCH AS "TEMPILSTICK", FOR PROPER TEMPERATURE JUST PRIOR TO STRIKING ARC. ALL WELDS TO FITTINGS WITH AN AMBIENT TEMPERATURE UNDER 40°F SHALL BE PREHEATED AS DESCRIBED ABOVE.
23. PRIOR TO INSTALLING WELDOLETS, THREADOLETS AND SOCKOLETS 2" AND SMALLER, PREHEAT AN APPROXIMATELY ONE SQUARE FOOT AROUND THE OPENING TO A MINIMUM OF 250°F. TEST THE PREHEATED AREA WITH A 250°F INDICATION CRAYON (TEMPLESTICK) FOR PROPER TEMPERATURE.
24. A CONTRACTION TYPE INSERTION RING SHALL BE INSTALLED IN ALL SOCKETWELD PIPING JOINTS FOR OBTAINING THE PROPER GAP REQUIRED BY ANSI B16.1 PRIOR TO WELDING. INSERTION RINGS SHALL BE PROVIDED BY CONTRACTOR.
25. ALL TRAFFIC CONTROL REFERENCES ARE AS PER THE MAINTENANCE AND PROTECTION OF TRAFFIC (MPTs) DRAWINGS TCP 01–22 PREPARED BY CHERRY WEBER AND ASSOCIATES, FREEHOLD NJ, ARE FOR THE EXCLUSIVE USE OF SOUTH JERSEY GAS AND THEIR CONTRACTORS DURING THE CONSTRUCTION OF THIS PROJECT.
26. ALL FITTINGS AND BENDS LESS THAN 45 DEGREES SUBJECT TO FINAL FIELD CONDITIONS AND FIT.
27. ALL LOCATIONS WHERE THE PROPOSED 24" PIPE WILL BE INSTALLED 18" OR LESS FROM ANY FOREIGN SUBSTRUCTURE(S), THE CONTRACTOR SHALL INSTALL A NEOPRENE WRAP FOR PROTECTION AROUND THE CARRIER PIPE AS INDICATED IN DETAIL DRAWING D–1C.
28. ALL AST DRAWING REFERENCES ARE FOUND IN SJG CONTRACT SPECIFICATIONS AND CONSTRUCTION MANUAL.
29. ALL FIELD COLD BENDS OF 24" PIPE SHALL BE MADE TO A MINIMUM RADIUS OF 60 FEET, PER SECTION 841.231 OF ASME B31.8.
30. CONTRACTOR SHALL NOT CLEAR, GRUB, AND/OR REMOVE ANY WOODY VEGETATION FROM ANY RIGHT OF WAYS DURING THE PERIOD OF MARCH 15TH TO JULY 31ST IN THE CAFRA JURISDICTION.
31. FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE. THE PURPOSE OF THE CONSTRUCTION FENCE IS TO ACT AS AN OBVIOUS BARRIER TO IDENTIFY THE LIMIT OF DISTURBANCE.
32. CONTRACTOR TO COORDINATE ACCESS DURING CONSTRUCTION WITH PROPERTY OWNER TO ENSURE MINIMAL INCONVENIENCE.
33. THE LOD (LIMIT OF DISTURBANCE IS THE LIMIT OF EXPECTED RESTORATION AND NOT THE AVAILABLE WORKSPACE WHICH IS DEPICTED MORE CLEARLY ON THE MPT PLANS.
34. AFTER THE HYDROSTATIC TEST, THE CONTRACTOR SHALL REMOVE THE WATER, DRY THE LINE TO THE SATISFACTION OF THE ENGINEER AND PRESSURIZE AND MAINTAIN THE SEGMENT OF MAIN WITH 50 PSIG OF NITROGEN. CONTRACTOR SHALL MONITOR PRESSURE TO ENSURE THERE IS NO LOSS OF PRESSURE IN THE LINE FOR 8 HOURS AFTER OBSERVING THE FINAL RECORDED IN PRESSURE OF 50 PSIG.
35. CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE EXISTING NJDOT PROJECT UNDER CONTRACT DURING THE WORK AND PRIOR TO FINAL PAVING.
36. CONTRACTOR TO COORDINATE WITH THE NJDOT ON FINAL PREPARATION FOR FINAL PAVEMENT BY THE NJDOT.

NOTE:

FOUR FOOT HIGH ORANGE CONSTRUCTION FENCE MUST BE INSTALLED IN ALL AREAS OF DISTURBANCE WITHIN THE PINELANDS (FROM STATION 11+00 TO 798+00) ADJACENT TO THE SILT FENCE BETWEEN THE SILT FENCE AND THE LIMIT OF DISTURBANCE.

PLAN REFERENCE:

SOUTH JERSEY GAS PLAN TITLED "INSTALLATION OF 16" TRANSMISSION GAS MAIN VIA JACK AND BORE ACROSS RT. 50 UPPER TOWNSHIP ~ CAPE MAY COUNTY ~ NEW JERSEY" DWG. NO. BTF–757, DATED 08/24/2012.

20' 0 20' 40'

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

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NJ. LIC.NO. GE46534

REV	DESCRIPTION	DATE

DESIGNED BY: LS/JG
DRAWN BY: JBC
CHECKED BY: DW
225616_AS_48_C-01.dwg

PLAN & PROFILE
24" STEEL GAS MAIN
READING AVE & MT PLEASANT–TUCKAHOE RD

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

C-01

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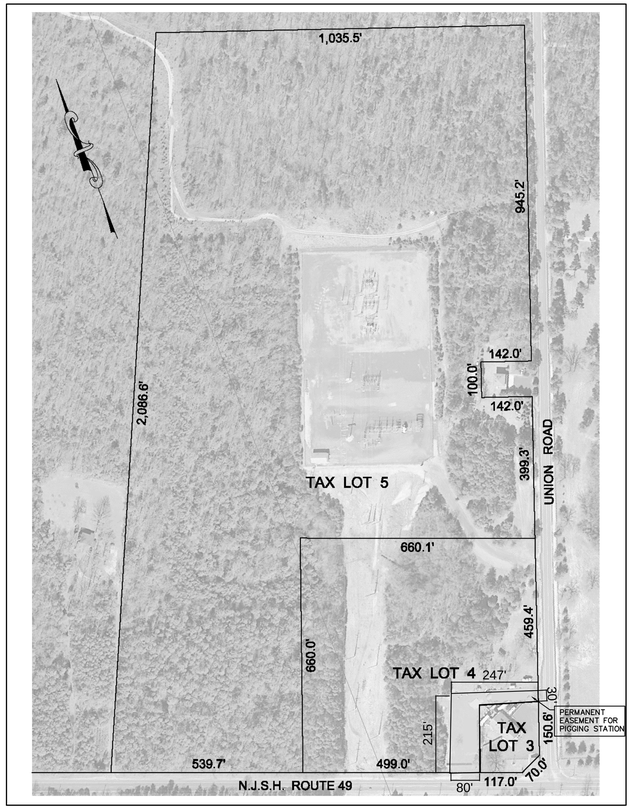
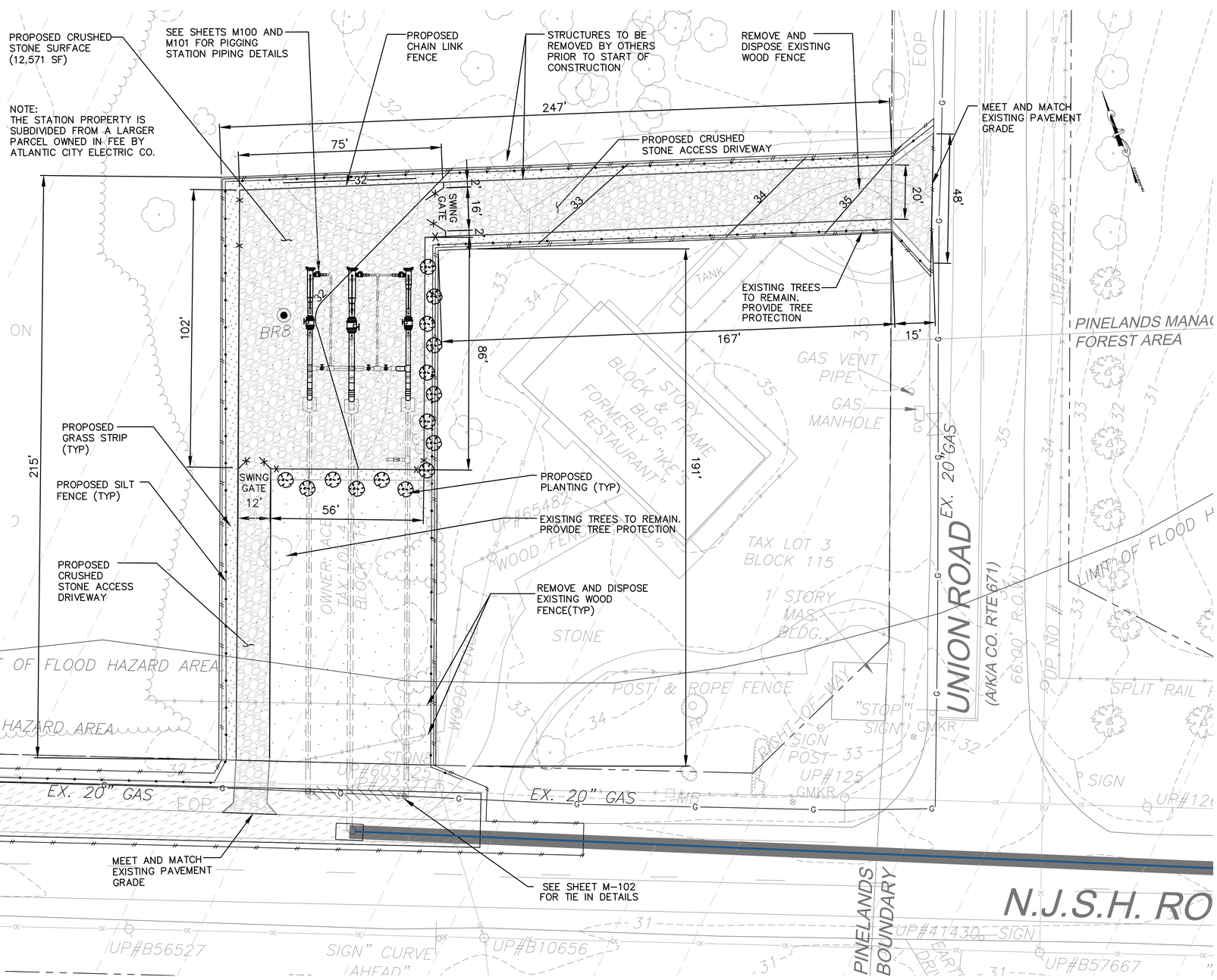


EASEMENT KEY PLAN



LEGEND

- EASEMENT
- CHAINLINK FENCE
- LIMIT OF DISTURBANCE LINE
- SILT FENCE
- PROPOSED PLANTING
- PROPERTY LINE
- BURIED PIPING
- EXISTING TREELINE
- ABANDON GAS MAIN
- PROPOSED GRASS
- PROPOSED CRUSHED STONE
- HDD WORK AREA

NOTES:

1. SEE SHEET D-02, D-03 AND D-06 FOR SPECIFIC SITE PLAN DETAILS.
2. SEE SHEET D-03 FOR PLANTING SCHEDULE.

SHEET REFERENCES:

AS-1
LD-1
M-100
M-101, M102

20' 0 20' 40'
BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

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REV	DESCRIPTION	DATE
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/JG
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_C-100 CS.dwg

CUMBERLAND POND PIGGING STATION SITE PLAN – MAURICE RIVER TOWNSHIP CUMBERLAND COUNTY

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

C-100

24x36 SHEET
1:1

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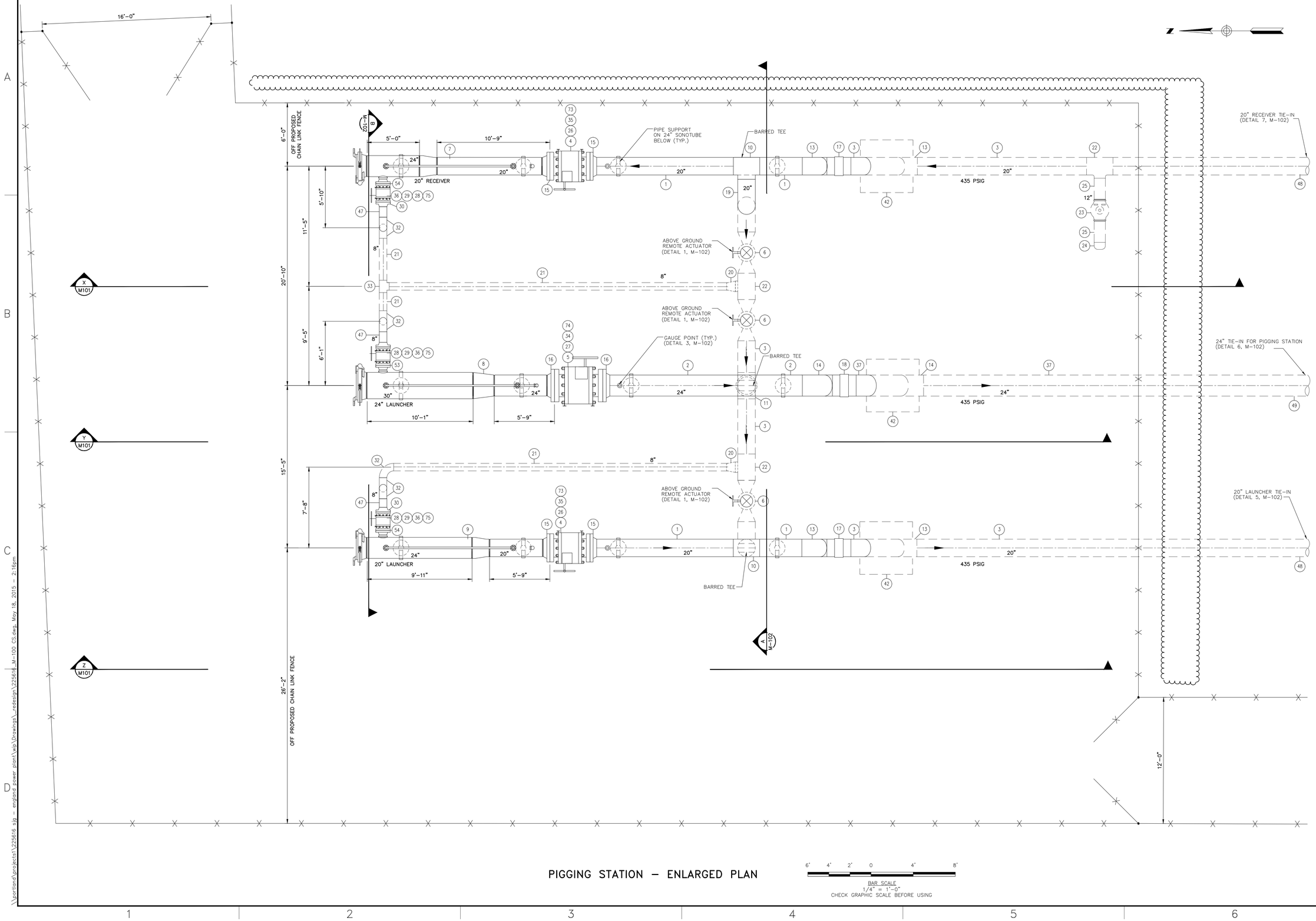

PIGGING STATION – ENLARGED PLAN

BAR SCALE
1/4" = 1'-0"
CHECK GRAPHIC SCALE BEFORE USING

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NJ LIC.NO. GE46534

REV	DESCRIPTION	DATE
1	ISSUED FOR #80	12/09/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_M-100 CS.dwg

CUMBERLAND POND
PIGGING STATION
ENLARGED PLAN

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

M-100

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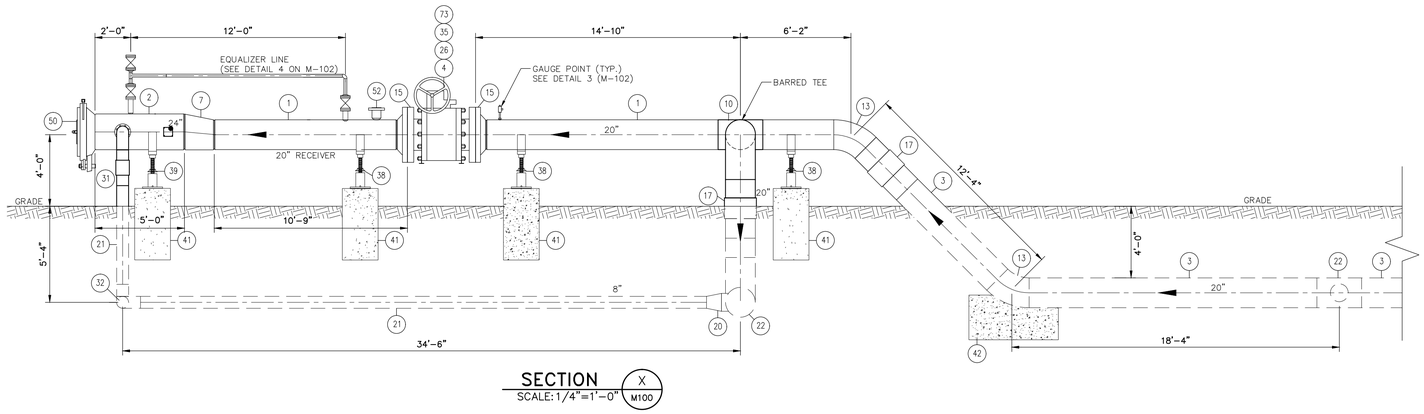
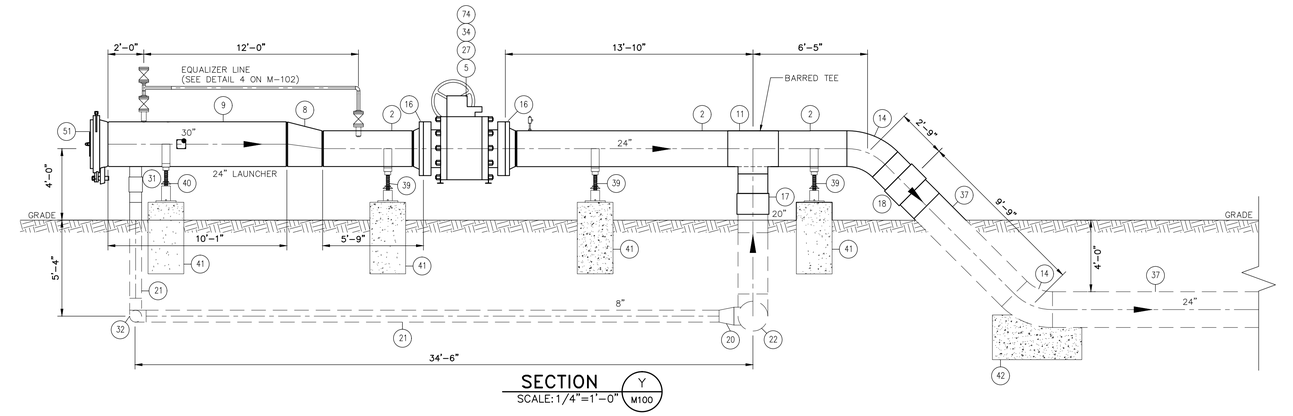
NOTES

1. ALL SONOTUBE SUPPORT STRUCTURES SHALL BE FILLED WITH 3000 PSI CONCRETE AND SHALL BEAR ON FIRM UNDISTURBED SOILS. SEE BORING DETAILS FOR THE LOCATION IN QUESTION.
2. CONTRACTOR TO ALLOW 14 DAYS CURING TIME ON ALL CONCRETE SUPPORT STRUCTURES BEFORE SETTING ANY EQUIPMENT OR PIPE STRUCTURES.
3. ALL UNDERGROUND PIPE WITH CONCRETE SUPPORTS SHALL HAVE TWO LAYERS OF 15# IMPREGNATED FELT INSTALLED BETWEEN THE PIPE AND THE CONCRETE.
4. UNDERGROUND PIPE COATING SHALL BE APPLIED TO ALL PIPE RISERS TO A HEIGHT OF 6" ABOVE THE FINAL GRADE.
5. CONTRACTOR SHALL INSTALL ALL TRAP ASSOCIATED PIPING INCLUDING EQUALIZER LINES, VALVES AND GAUGE MONITORING POINTS.
6. THE 20" AND 24" DIAMETER TEES ON THE PIG RUNS ARE TO BE BARRED AT THE BRANCH RUN. ALL BARS MUST BE WELDED IN PLACE AND FLUSH WITH THE INSIDE PIPE WALL AS PER PLAN.
7. ALL PIPE SUPPORTS ARE TO BE ADJUSTABLE SADDLE TYPE FABRICATED BY PIPING TECHNOLOGY AS PER–FIGURE 46 (PIPING TECHNOLOGY CATALOGUE) WITH THE REQUIRED STEEL BASE. THE 13.5"X13.5" STEEL BASE SHALL HAVE FOUR–3/4" HOLES DRILLED TO ACCOMMODATE THE 5/8" DIA. BOLTS.



SECTION (X / M100)
SCALE: 1/4"=1'–0"



SECTION (Y / M100)
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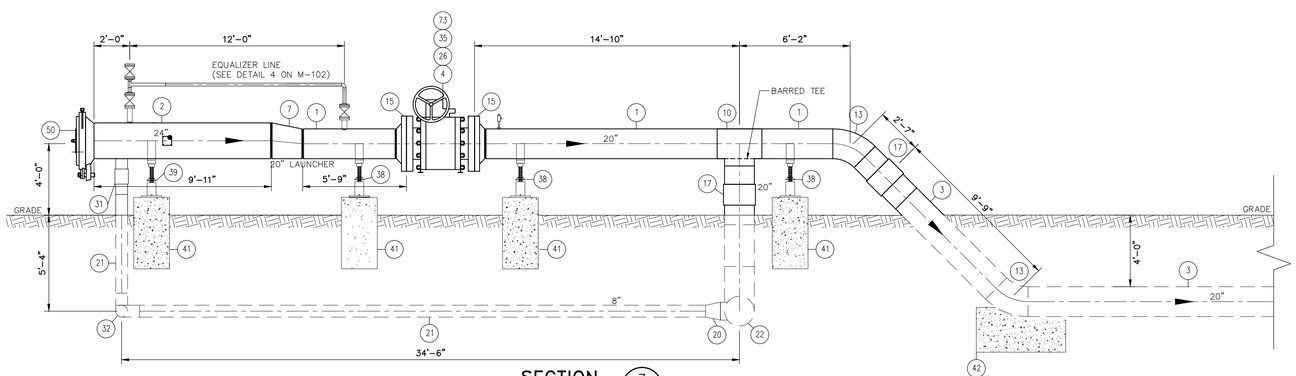

SECTION (Z / M100)
SCALE: 1/4"=1'–0"

BAR SCALE
1/4" = 1'–0"
CHECK GRAPHIC SCALE BEFORE USING

BILL OF MATERIALS (M–100, M–101, M–102)

CUMBERLAND POND - PIGGING STATION
BILL OF MATERIALS (M101, M102, M103)

ITEM	DESCRIPTION	QTY
1	PIPE, 20" O.D. X .375" W.T., API 5L-X60, BARE	48.0 (FT)
2	PIPE, 24" O.D. X .375" W.T., API 5L-X60, BARE	34.0 (FT)
3	PIPE, 20" O.D. X .375" W.T., API 5L- X60, COATED	306.0 (FT)
4	VALVE, BALL, 20" CLASS 600# ANSI RFxRF, GROVE B5, WORM GEAR OPERATED WITH HANDWHEEL	2
5	VALVE, BALL, 24" CLASS 600# ANSI RFxRF GROVE B5, WORM GEAR OPERATED WITH HANDWHEEL	1
6	VALVE, BALL, 20" CLASS 600# ANSI WExWE GROVE B5, WITH TYPE "B" ELEVATED WORM GEAR EXTENSION W/ ABOVE GROUND REMOTE OPERATED ACTUATOR, COATED FOR UNDERGROUND SERVICE	3
7	20" X 24" ECCENTRIC REDUCER, 0.322 W.T., Y-60, ANSI 16.9, ASTM 234	2
8	24" X 30" ECCENTRIC REDUCER, 0.322 W.T., Y-60, ANSI 16.9, ASTM 234	1
9	PIPE, 30" O.D. X .375 W.T.. API 5L-X60, BARE	11
10	TEE, WELD, 20"x 20"X 20", 0.375 W.T., Y-60, /W BARRED BRANCH, B 16.9, ASTM 234	2
11	TEE, WELD, 24"x 24"X 20", 0.375 W.T., Y-60, /W BARRED BRANCH, B 16.9, ASTM 234	1
12	TEE, WELD, 20"x 20"X 20", 0.375 W.T., Y-60,, B 16.9, ASTM 234	1
13	20" ELBOW, WELD, LR- 45^0, 0.375 W.T., Y-60, B 16.9, ASTM 234	4
14	24" ELBOW, WELD, LR- 45^0, 0.375 W.T., Y-60, B 16.9, ASTM 234	2
15	20" RF- WN FLANGE, CLASS 600#, ANSI 16.5, ASTM A105	2
16	24" RF- WN FLANGE, CLASS 600#, ANSI 16.5, ASTM A105	1
17	20" MONOLITHIC ISOLATION JOINT, WELD END .375 W.T., ANSI CLASS 600#, ISOJOINT	7
18	24" MONOLITHIC ISOLATION JOINT, WELD END .375 W.T., ANSI CLASS 600#, ISOJOINT	1
19	20" ELBOW, WELD, LR- 90^0, .375 W.T., Y-60, B 16.9, ASTM 234	5
20	TEE, WELD, 20"x 20"X 8", .375 W.T., Y-60, B 16.9, ASTM 234	2
21	PIPE, LINE 8" O.D. X .322" W.T., API 5X-60, COATED	86.0 (FT)
22	TEE, WELD, 20"x 20"X 12", .375 W.T., Y-60, C/W BARRED BRANCH, B 16.9, ASTM 234	1
23	VALVE, BALL, 12" CLASS 600# ANSI WExWE GROVE B5, WITH TYPE "B" ELEVATED WORM GEAR EXTENSION, COATED FOR UNDERGROUND SERVICE	1
24	12" WELD END CAP, .375" W.T., Y-60, B 16.9, ASTM 234	1
25	PIPE, LINE 12" O.D. X .375" W.T., API 5L-X60, COATED	2.0 (FT)
26	ARMSTRONG SYNTHESEAL GASKET FOR 20" CLASS 600# FLANGE OR EQUAL	4
27	ARMSTRONG SYNTHESEAL GASKET FOR 24" CLASS 600# FLANGE OR EQUAL	2
28	VALVE, BALL, 8" CLASS 600# ANSI RFxRF, GROVE B5, WORM GEAR OPERATED WITH HANDWHEEL	3
29	ARMSTRONG SYNTHESEAL GASKET FOR 8" CLASS 600# FLANGE OR EQUAL	3
30	8" RF- WN FLANGE, CLASS 600#, ANSI 16.5, ASTM A105	6
31	8" APS MONOLITHIC ISOLATION JOINT, WELD END, ANSI CLASS 600#, 0.322	3
32	8" ELBOW, WELD, LR- 90^0, .322 W.T., Y-60, B 16.9, ASTM 234	7
33	TEE, WELD, 8" x 8" x 8", .322" W.T., Y-60, B 16.9, ASTM 234	1
34	1-7/8" x 13-1/4" LONG XYLON COATED STEEL STUD BOLTS W/ 2 X-HEAVY HEX NUTS & WASHERS FOR 24" FLANGES	48
35	1-3/4" x 11-1/2" LONG XYLON COATED STEEL STUD BOLTS W/ 2 X-HEAVY HEX NUTS & WASHERS FOR 20" FLANGES	96
36	1-1/8" x 7-3/4" LONG XYLON COATED STEEL STUD BOLTS W/ 2 X-HEAVY HEX NUTS & WASHERS FOR 8" FLANGES	72
37	PIPE, 24" O.D. X .375" W.T., API 5L- X60, COATED	155.0 (FT)
38	ADJUSTABLE PIPE SADDLE SUPPORT FOR 20" PIPE, PIPING TECHNOLOGY-FIG. 46, WITH BASE PLATE	6
39	ADJUSTABLE PIPE SADDLE SUPPORT FOR 24" PIPE, PIPING TECHNOLOGY-FIG. 46, WITH BASE PLATE	5
40	ADJUSTABLE PIPE SADDLE SUPPORT FOR 30" PIPE, PIPING TECHNOLOGY-FIG. 46, WITH BASE PLATE	1
41	24" DIAMETER SONOTUBE FILLED WITH 3000 PSI CONCRETE, WITH 5/8" THREADED REINFORCING RODS BOLTED TO SADDLE SUPPORT (SEE DETAIL 2- M 103)	12
42	5'-0 X 5'-0" X 2'-6" DEEP CONCRETE SUPPORT BLOCK, 3000 PSI CONC., W/ TWO LAYERS OF 15# FELT BETWEEN THE PIPE AND CONCRETE	3
43	36"- 10" x 3/4" THREADOLET, 3000 LB, ANSI B16.9, ASTM A105	3
44	3/4" X 6" X-HEAVY PIPE NIPPLE - THREADED ENDS	3
45	3/4" APOLLO BALL VALVE, STEEL BODY, 2000 LB, WOG, SCREW ENDS	3
46	3/4" SOLID SCREW PLUG, CLASS 3000 LB	3
47	PIPE, 8.625" O.D. X .322 W.T., API 5L-X60	3 (FT)
48	20" END CAP, WELD, STANDARD WT., Y-60, ANSI B 16.9, ASTM 234	2
49	24" END CAP, WELD, STANDARD WT., Y-60, ANSI B 16.9, ASTM 234	1
50	24" TDW D2000, CLAMP RING -QUICK OPENING ENCLOSURE	2
51	30" TDW D2000, CLAMP RING -QUICK OPENING ENCLOSURE	1
52	PIG SIGNAL- TDW PIGSIG V, FLAG INDICATOR, MANUAL, WITH THREAD-O-RING NIPPLE	1
53	30" x 8" WELDOLET, STD. WT., ANSI B 16.9, ASTM A-105	1
54	24" X 8" WELDOLET, STD. WT., ANSI B 16.9, ASTM A-105	2
55	TEE, WELD, 4"x 4"X 2", STD WT., Y-60, B 16.9, ASTM 234	3
56	4" NORDSTROM PLUG VALVE, FIG. 2245, CARBON STEEL BODY, ANSI 600#, RF x RF, WRENCH OPERATED	6
57	2" NORDSTROM PLUG VALVE, FIG. 2245, CARBON STEEL BODY, ANSI 600#, RF x RF, WRENCH OPERATED	3
58	30" x 4" WELDOLET, STD. WT., ANSI B 16.9, ASTM A105	1
59	24" x 4" WELDOLET, STD. WT., ANSI B 16.9, ASTM A105	2
60	24" x 2" WELDOLET, STD. WT., ANSI B 16.9, ASTM A105	1
61	20" x 2" WELDOLET, STD. WT., ANSI B 16.9, ASTM A105	2
62	4" RF- WN FLANGE, CLASS 600#, ANSI B 16.5, ASTM A105	9
63	2" RF- WN FLANGE, CLASS 600#, ANSI B 16.5, ASTM A105	6
64	PIPE, 2.375" O.D., 0.154" W.T., API 5L-X60, BARE	18 (FT)
65	3/4" X-HEAVY SCREW PLUG -TOP OF BLIND FLANGE	3
66	4" BLIND FLANGE, CLASS 600#, ANSI B16.5, ASTM A-105, WITH 3/4" TAP	3
67	2" ELBOW -90^0, STANDARD WT., Y-60, ANSI B 16.9, ASTM 234	3
68	ARMSTRONG SYNTHESEAL GASKET FOR 2" CLASS 600# FLANGE CONNECTION OR EQUAL	6
69	ARMSTRONG SYNTHESEAL GASKET FOR 4" CLASS 600# FLANGE CONNECTION OR EQUAL	12
70	7/8" x 5-3/4" LONG XYLON COATED STEEL STUD BOLTS W/ EXTRA HEAVY HEX NUTS & WASHERS, FOR 4" FLANGES	96
71	5/8" x 4-1/4" LONG XYLON COATED STEEL STUD BOLTS W/ EXTRA HEAVY HEX NUTS & WASHERS, FOR 2" FLANGES	48
72	5/8" x 12" LONG GALV. STEEL THREADED WITH BOLTS AND WASHERS FOR SADDLE SUPPORT	48
73	1-3/4" HEX NUTS, ASTM A194, GRADE 2H, WITH WASHERS	192
74	1-7/8" HEX NUTS, ASTM A194, GRADE 2H, WITH WASHERS	96
75	1-1/8" HEX NUTS, ASTM A194, GRADE 2H, WITH WASHERS	144
76	7/8" HEX NUTS, ASTM A194, GRADE 2H, WITH WASHERS	192
77	5/8" HEX NUTS, ASTM A194, GRADE 2H, WITH WASHERS	96

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DENNIS M. WALSH, P.E.
NJ. LIC.NO. GE46534

REV	DESCRIPTION	DATE
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AG
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_M-101&102 CS.dwg

CUMBERLAND POND PIGGING STATION SECTIONS

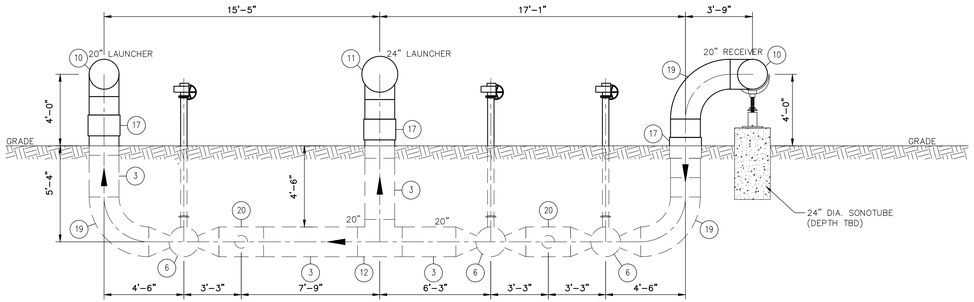
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

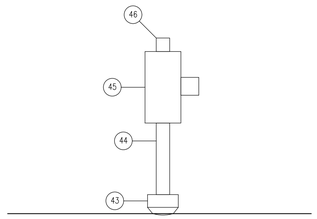
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

M-101

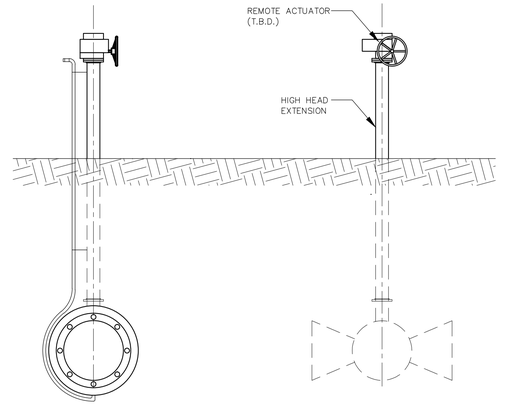
\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_M-101&102 CS.dwg, May 18, 2015 – 2:16pm



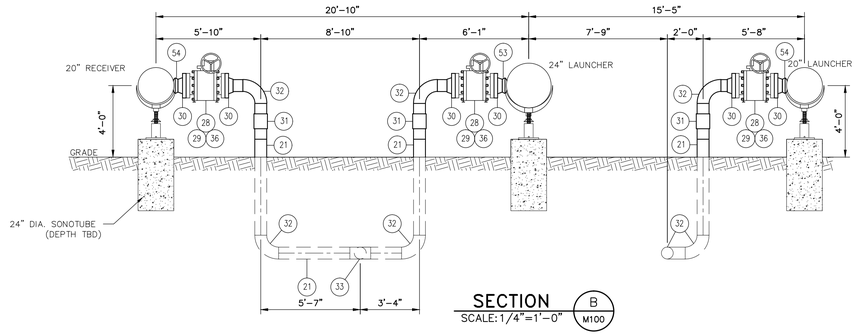
SECTION (A / M100)
SCALE: 1/4"=1'-0"



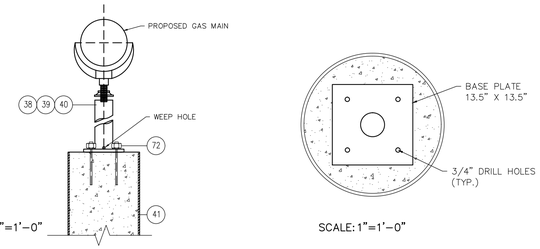
GAUGE POINT AT TRAP VALVE (TYPICAL) (3)
SCALE: 3"=1'-0"



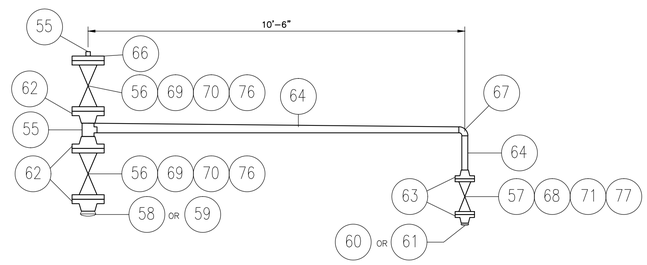
20" BALL VALVE WITH STEM & GREASE EXTENSION (1)
SCALE: 1/2"=1'-0"



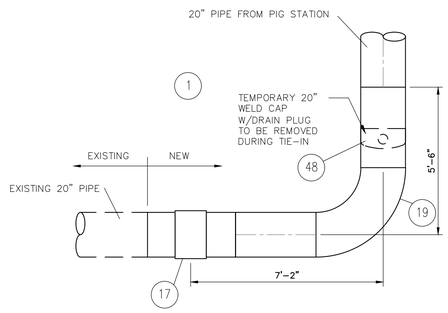
SECTION (B / M100)
SCALE: 1/4"=1'-0"



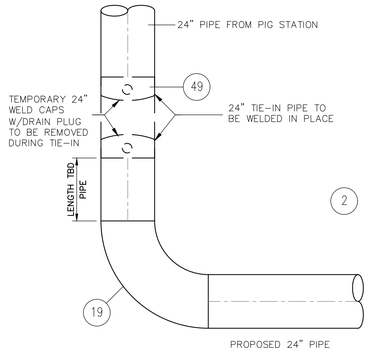
ADJUSTABLE PIPE SADDLE SUPPORT & BASE PLATE DETAIL (2)
(FROM PIPING TECHNOLOGY FIG. 46)



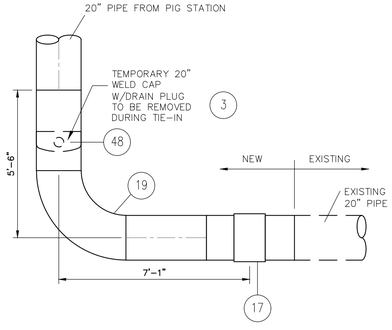
EQUALIZER LINE DETAIL (TYP.)
(TO BE SUPPLIED BY PIGGING TRAP FABRICATOR) (4 / M101)
SCALE: 1/2"=1'-0"



20" PIPELINE TIE-IN DETAIL (WEST SIDE) (5 / M100)
(AT PIGGING STATION RTE 49)
SCALE: 3/8"=1'-0"



24" PIPELINE TIE-IN DETAIL (6 / M100)
(AT PIGGING STATION RTE 49)
SCALE: 3/8"=1'-0"



20" TIE-IN DETAIL (EAST SIDE) (7 / M100)
(AT PIGGING STATION RTE 49)
SCALE: 3/8"=1'-0"

6' 4' 2' 0 4' 8'
BAR SCALE
1/4" = 1'-0"
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NJ. LIC.NO. GE46534

REV	DESCRIPTION	DATE
1	ISSUED FOR BID	12/06/13

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_M-101&102 CS.dwg

CUMBERLAND POND
PIGGING STATION
SECTIONS & DETAILS

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

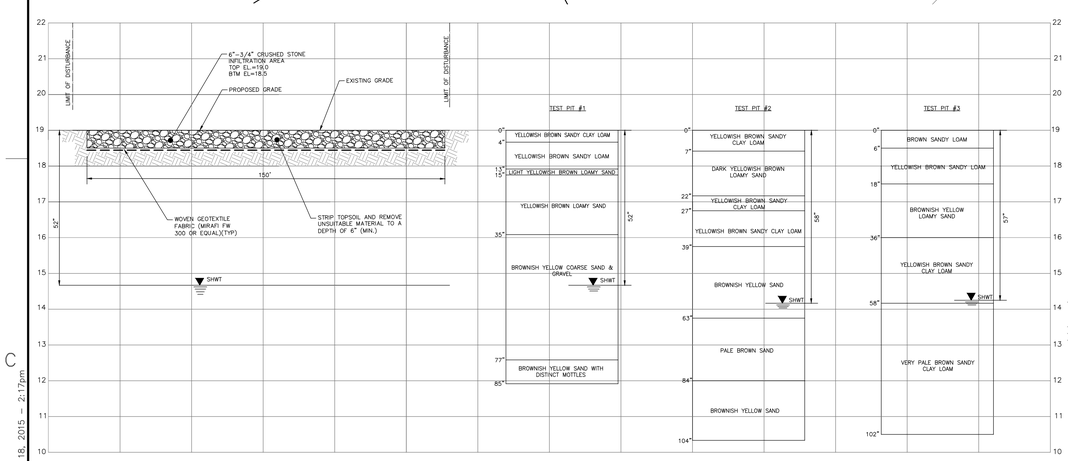
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

M-102

\\portland\projects\225616 sjg — england power plant\wip\Drawings_redesign\225616_M-101&102 CS.dwg, May 18, 2015 - 2:16pm

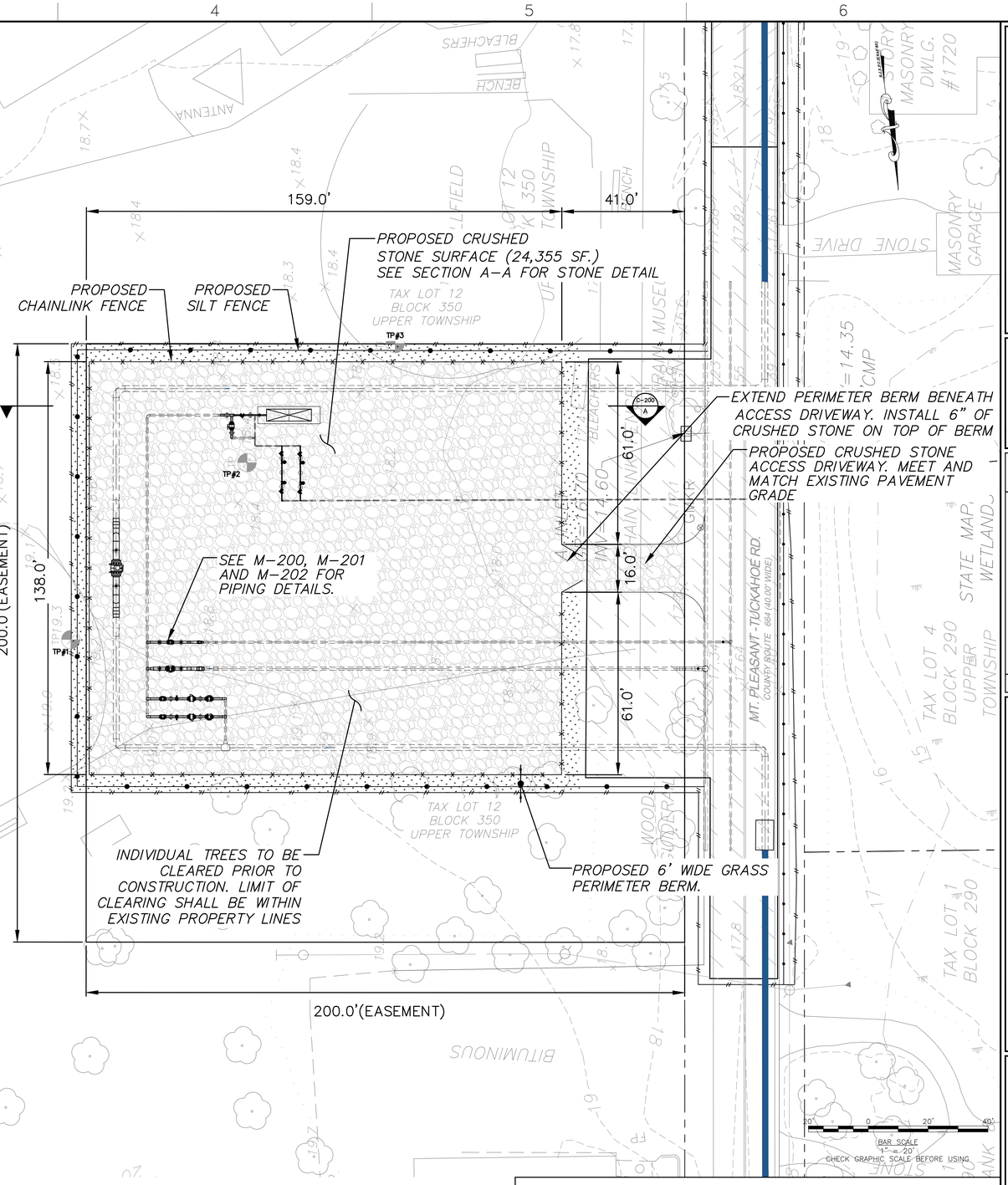


EASEMENT KEY PLAN



SECTION A–A CRUSHED STONE INFILTRATION AREA DETAIL

SCALE:HORIZ:1"=30'
VERT:1"=2'



LEGEND

- HDD STAGING LAYDOWN AREA
- PROPOSED CRUSHED STONE
- PROPOSED GRASS
- 21.5 PROPOSED ELEVATION SPOT GRADE
- CHAINLINK FENCE
- LOD LINE
- SILT FENCE
- PROPOSED TREE LINE
- PROPERTY LINE
- BURIED PIPING

NOTE:

1. SEE SHEET D–02, D–03 AND D–06 FOR SPECIFIC SITE PLAN DETAILS.
2. SEE SHEET D–03 FOR PLANTING SCHEDULE.

SHEET REFERENCES

AS–49
M–200
M–201
M–202
S–001

CP NOTE:

A DEEPWELL GROUNDBED SYSTEM IS TO BE INSTALLED WITHIN THE MT. PLEASANT/TUCKAHOE RD. SITE. THE SYSTEM IS TO BE INSTALLED IN ACCORDANCE WITH ARK ENGINEERING'S CATHODIC PROTECTION REPORT WHICH IS ALSO REFERENCED ON DWG#G–02. FOR DETAILS REGARDING THE SYSTEM LOCATION–SEE ARK ENGINEERING REPORT–APPENDIX C–DWG#3070–100

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NJ LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	REVISED CRUSHED STONE INFILTRATION AREA	11/17/14
2	MOVED STATION TO MT PLEASANT – TUCKAHOE RD	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/RJ | 225616_C-200 CS.dwg

MT. PLEASANT–TUCKAHOE RD.
INTERCONNECT STATION SITE

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

C-200

\\portland\projects1\225616 sjg – england power plant\wip\Drawings_redesign\225616_C-200 CS.dwg, May 18, 2015 – 2:17pm

12' 8' 4' 0 8' 16'

BAR SCALE
1/8" = 1'-0"
CHECK GRAPHIC SCALE BEFORE USING

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NJ LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	MPKD STATION TO MT PLEASANT – TUCKAHOE RD	7/1/14
1	ISSUED FOR 60%	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_M-200,201&202 CS*.dwg

MT. PLEASANT-TUCKAHOE RD. INTERCONNECT STATION ENLARGED PLAN & SECTIONS

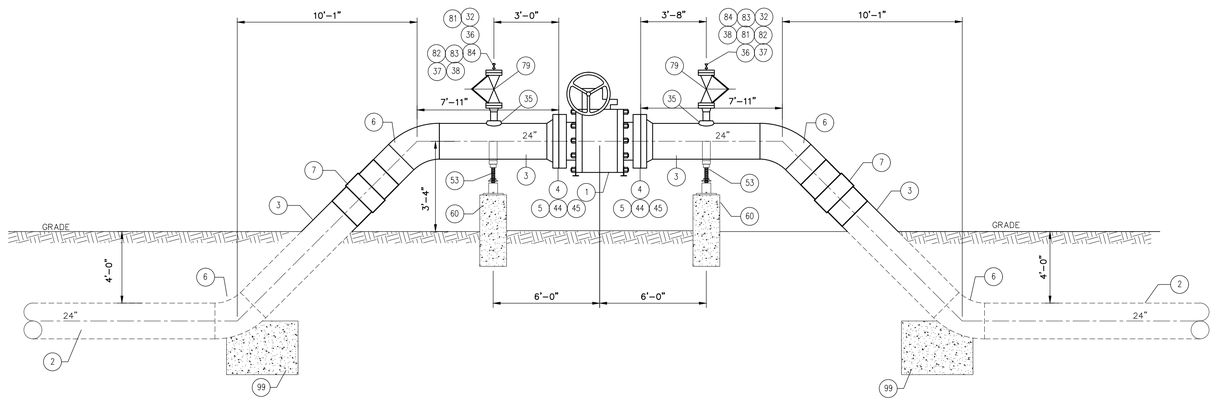
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

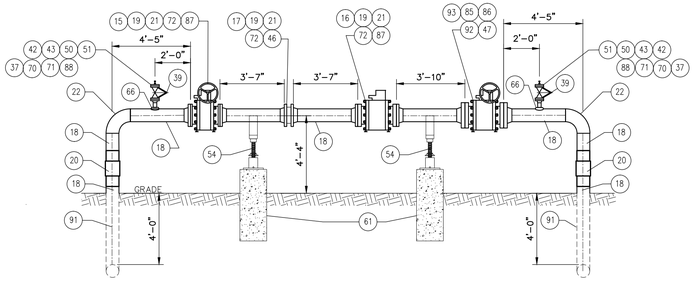
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

M-200

\\portland\projects1\225616 sig - england power plant\wip\Drawings_redesign\225616_M-200,201&202 CS.dwg, May 18, 2015 - 2:18pm



SECTION (A / M-200)
SCALE: 1/4" = 1'-0"



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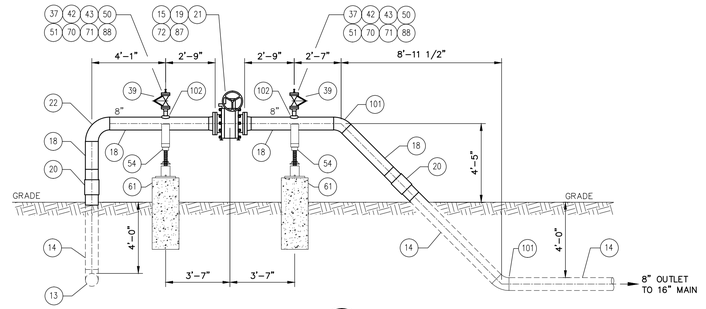

SECTION (P / M-200)
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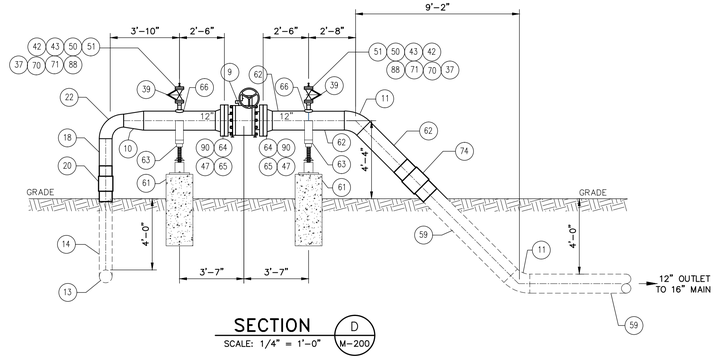

SECTION (D / M-200)
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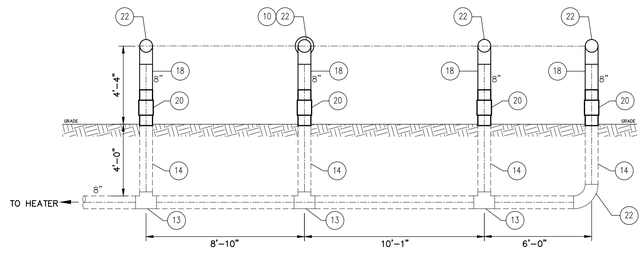
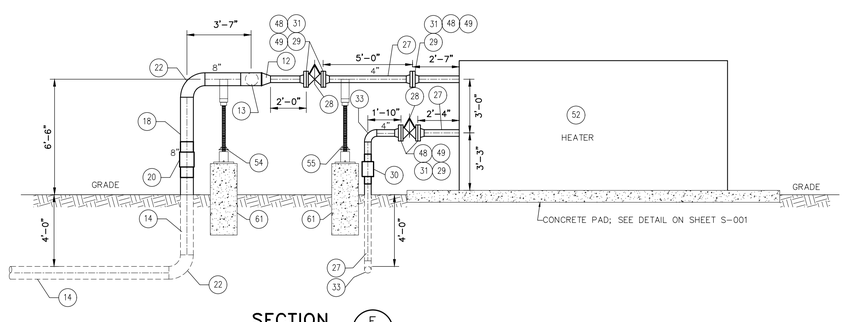


SECTION (E / M-200)
SCALE: 1/4" = 1'-0"



SECTION (F / M-200)
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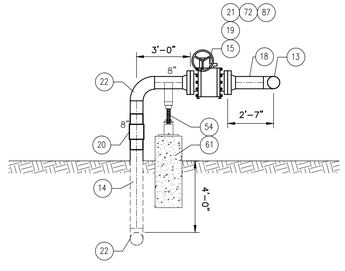

SECTION (G / M-200)
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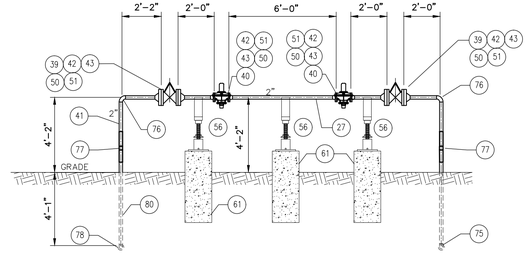

SECTION (H / M-200)
SCALE: 1/4" = 1'-0"

6' 4' 2' 0 4' 8'
BAR SCALE
1/4" = 1'-0"
CHECK GRAPHIC SCALE BEFORE USING

BILL OF MATERIAL
INTERCONNECT CONSOLIDATED MATERIALS

ITEM NO.	DESCRIPTION	QUANITY
1	24" GROVE B-5 BALL VALVE, ANSI 600# CLASS, STEEL BODY, FLANGED, WORM GEAR OPERATED W/ HANDWHEEL	1
2	24" COATED STEEL PIPE, O.D 24.000 X 0.375 WALL, API 5X-60, (BURIED PIPING) (INCLUDED WITH RUN PIPE)	-
3	24" BARE STEEL PIPE, O.D.24.000 X 0.375 WALL, API 5X-60, (ABOVE GRADE PIPING)	25 FT
4	24" ARMSTRONG SYNTHESEAL GASKET, ANSI 600# CLASS, FULL FACE	2
5	24" 600# ANSI CLASS WELD NECK FLANGE, ANSI B16, ASTM A-105, 0.375 WALL	2
6	24" - 45 DEGREE ELBOW, LONG RADIUS, 0.375 WALL, Y-60, ANSI B16.9, ASTM A 234	4
7	24" APS MONOLITIC ISOLATION JOINT, WELD END, ANSI CLASS 600#, 0.375 WALL	2
8	16" X 8" CONCENTRIC REDUCER, WELD, STANDARD WEIGHT WALL, Y-60, ANSI B-16.9 ASTM A 234	1
9	12" GROVE B-5 BALL VALVE, ANSI 300# CLASS, FLANGED, STEEL BODY, WORM GEAR OPERATED W/ HAND WHEEL	1
10	12" X 8" CONENTRIC REDUCER, WELD, STANDARD WEIGHT WALL ,ANSI B-16.9 ASTM A 234	1
11	12" - 45 DEGREE ELBOW, LONG RADIUS, 0.375 WALL, Y-60, ANSI B16.9, ASTM A 234	6
12	8" X 4" CONCENTRIC REDUCER, WELD, STANDARD WEIGHT WALL ,ANSI B-16.9 ASTM A 234	2
13	8" X 8" TEE, WELD, 0.322 WALL, Y-60,ANSI B16.9, ASTM A 234	5
14	8" COATED STEEL PIPE, O.D.8.625 X 0.322 WALL, API 5X-60, (BURIED PIPING)	127 FT
15	8" GROVE B-5 BALL VALVE, ANSI 300# CLASS, STEEL BODY, FLANGED, WORM GEAR OPERATED W/ HANDWHEEL	4
16	8" FISHER V-260 BALL CONTROL VALVE FLANGED WHEEL OPERATED 300#	2
17	8" FISHER BUTTERFLY VALVE, FIG.8560, WAFER STYLE	2
18	8" BARE STEEL PIPE, O.D.8.625 X 0.322 WALL, API 5X-60, (ABOVE GRADE PIPING)	44 FT
19	8" ARMSTRONG SYNTHESEAL GASKET, ANSI 300# CLASS, FULL FACE	16
20	8" APS MONOLITIC ISOLATION JOINT, WELD END, ANSI CLASS 300#, 0.322 WALL	9
21	8" 300# ANSI CLASS WELD NECK FLANGE, ANSI B16, ASTM A-105, 0.322 WALL	16
22	8" - 90 ELBOW, LONG RADIUS, 0.322 WALL, Y-60, ANSI B16.9, ASTM 234	12
23	2" PLASTIC PIPE, MEDIUM DENSITY, SDR 11, PE2708	50 FT
24	4" X 2" CONCENTRIC REDUCER, WELD, STANDARD WEIGHT WALL ,ANSI B-16.9 ASTM A 234	1
25	2" X 2" TEE, WELD, 0.154. WALL, Y-60,ANSI B16.9, ASTM A 234	1
26	4" COATED STEEL PIPE, O.D. 4.500 X 0.237 WALL, API 5X-60, (BURIED PIPING)	75 FT
27	4" BARE STEEL PIPE, O.D. 4.500 X 0.237 WALL, API 5X-60, (ABOVE GRADE PIPING)	10 FT
28	4" NORDSTROM PLUG VALVE, FIG. 4245 1/2, ANSI 300# CLASS, STEEL BODY, FLANDGED, W/OPERATING NUT	2
29	4" ARMSTRONG SYNTHESEAL GASKET, ANSI 300# CLASS, FULL FACE	5
30	4" APS MONOLITIC ISOLATION JOINT, WELD END, ANSI CLASS 300#, 0.237 WALL	1
31	4" 300# ANSI CLASS WELD NECK FLANGE, ANSI B16, ASTM A-105, 0.237 WALL	4
32	6" 600# ANSI CLASS BLIND FLANGE, ANSI B16, ASTM A-105, 0.237 WALL, 1/2" THREADED TAP HOLE	2
33	4" - 90 DEGREE ELBOW, LONG RADIUS, 0.237 WALL, Y-60, ANSI B16.9, ASTM 234	3
34	4" - 45 DEGREE ELBOW, LONG RADIUS, 0.237 WALL, Y-60, ANSI B16.9, ASTM A 234	8
35	24" X 6" WELD-O-LET, XHVY, ANSI B16.9, ASTM 105	2
36	1/2" X 6" STEEL NIPPLE, EXTRA HEAVY	5
37	1/2" SOLID STEEL PLUG	7
38	1/2" NORDSTROM PLUG VALVE, FIG. 2224, ANS 600# CLASS, STEEL BODY, THREADED ENDS	2
39	2" NORDSTROM PLUG VALVE, FIG 2045 1/2, ANSI 300# CLASS, STEEL BODY, FLANGED, W/OPERATING NUT	9
40	2" FISHER REGULATOR, ANSI 300# CLASS,TYPE 99 W/7/8" ORIFICE, FLANGED	4
41	2" BARE STEEL PIPE, O.D. 2.375 X 0.154 WALL, API 5X-60, (ABOVE GRADE PIPING)	40 FT
42	2" ARMSTRONG SYNTHESEAL GASKET, ANSI 300# CLASS, FULL FACE	26
43	2" 300# ANSI CLASS WELD NECK FLANGE, ANSI B16, ASTM A-105, 0.154 WALL	23
44	1 7/8" X 13.00", BOLT, STUD, ASTM A 193, GRADE B-7	48
45	1 7/8" HEX NUT, ASTM A 194, GRADE 2H,	96
46	7/8" X 16.00" BOLT, STUD, ASTM A 193, GRADE B-7	24
47	1 1/8" HEX NUT, ASTM A 194, GRADE 2H,	160
48	3/4" X 4.50" BOLT, STUD, ASTM A 193, GRADE B-7	32
49	3/4" HEX NUT, ASTM A 194, GRADE 2H,	64
50	5/8" X 3.50" BOLT, STUD, ASTM A 193, GRADE B-7	184
51	5/8" HEX NUT, ASTM A 194, GRADE 2H,	352
52	BRUEST HOTCAT HEATER, MODEL NUMBER HC-575	1
53	24" ADJUSTABLE PIPE SADDLE SUPPORT, PIPING TECHNOLOGY OR EQUAL	2
54	8" ADJUSTABLE PIPE SADDLE SUPPORT, PIPING TECHNOLOGY OR EQUAL	8
55	4" ADJUSTABLE PIPE SADDLE SUPPORT, PIPING TECHNOLOGY OR EQUAL	1
56	2" ADJUSTABLE PIPE SADDLE SUPPORT, PIPING TECHNOLOGY OR EQUAL	6
57	TD WILLIAMSON 16" SPHERICAL 3 WAY TEE WITH LOCK-O-RING FLANGE, ANSI 300# CLASS	1
58	16" X 12" CONCENTRIC REDUCER, WELD, STANDARD WEIGHT WALL, ANSI B16.9, ASTM A-234	1
59	12" COATED STEEL PIPE. O.D. 12.750 X 0.375 WALL, API 5 X .60, (BURIED)	205 FT
60	18" SONOTUBE WITH 5/8" THREADED ROD FOR BASE PLATE HOLD DOWN	2
61	16" SONOTUBE WITH 5/8" THREADED ROD FOR BASE PLATE HOLD DOWN	20
62	12" BARE STEEL PIPE, O.D. 12.750 X 0.375 WALL, API 5X-60, (ABOVE GRADE PIPING)	15 FT
63	12" ADJUSTABLE PIPE SADDLE SUPPORT, PIPING TECHNOLOGY OR EQUAL	2
64	12" 300# ANSI CLASS WELD NECK FLANGE, ANSI B16, ASTM A-105, 0.375 WALL	2
65	12" ARMSTRONG SYNTHESEAL GASKET, ANSI 300# CLASS, FULL FACE	2
66	12" X 2" WELD-O-LET, XHVY, ANSI B16.9, ASTM 234	2
67	4" PLASTIC PIPE, MEDIUM DENSITY, SDR 11, PE2708	3 FT
68	2" ELECTRO-FUSE PLASTIC COUPLING, MEDIUM DENSITY, PE 2708	4
69	5/8" DIA.X 12" LONG GALV. THREADED STEEL ROD WITH NUTS & WASHERS FOR SADDLE SUPPORTS	64
70	2" 300# ANSI CLASS BLIND FLANGE, ANSI B16, ASTM A-105, 0.237 WALL, WITH 1/2" THREADED TAP HOLE	5
71	2" X 4" STEEL NIPPLE, EXTRA HEAVY	5
72	7/8" X 5.50 BOLT, STUD, ASTM A-193 GRADE B-7	184
73	24" X 16" TEE, WELD END, 0.375 WALL, Y-60, ANSI B16.9, ASTM A-234	1
74	12" APS MONOLITIC ISOLATION JOINT, WELD END, ANSI 300# CLASS, WELD END, 0.375 WALL	2
75	4" x 2" TEE, WELDED END, STANDARD WALL, Y-60, ANSI B16.9, ASTM A-234	2
76	2" - 90 DEGREE ELBOW, LONG RADIUS, 0.237 WALL, Y-60, ANSI B16.9, ASTM A-234	4
77	2" APS MONOLITIC ISOLATION JOINT, WELD END, ANSI 300# CLASS, 0.154 WALL	4
78	4" x 2" 90 DEGREE REDUCING ELBOW, LONG RADIUS, STANDARD WEIGHT WALL, Y-60, ANSI B16.9, ASTM A-234	2
79	6" NORDSTROM PLUG VALVE, FIG 2249 1/2 ANSI 600 # CLASS, STEEL BODY, FLANGED, W/ OPERATING NUT	2
80	2" COATED STEEL PIPE INSIDE THE STATION, (BURIED)	20 FT
81	6" -600# ANSI CLASS WELD NECK FLANGE, ANSI B16, ASTM A-105, 0.280 WALL	2
82	6" ARMSTRONG SYNTHESEAL GASKET ANSI CLASS 600#, FULL FACE	4
83	1" X 6.75" BOLT, STUD, ASTM A-193, GRADE B-7	48
84	1 HEX NUT, ASTM A-194, GRADE 2H	96
85	8"- 600# ANSI CLASS WELD NECK FLANGE, ANSI B16, ASTM -105, 0.322 WALL	4
86	8" ARMSTRONG SYNTHESEAL GASKET ANSI CLASS 600#, FULL FACE	4
87	7/8" HEX NUT, ASTM A-194, GRADE H	400
88	1/2" NORDSTROM PLUG VALVE, FIG 2024, ANSI CLASS 300#, STEEL BODY, THREADED W/ OPERATING NUT	4
89	4" x 4" TEE, MEDIUM DENSITY, PE2708	1
90	1 1/8" X 6.75" BOLT, STUD, ASTM A-193, GRADE B	32
91	8" APS MONOLITHIC ISOLATION JOINT, WELD END, 600# CLASS, 0.322 WALL	6
92	1 1/8" X 7.75" BOLT, STUD, ASTM A-193, GRADE B	48
93	8" GROVE B-5 BALL VALVE, ANSI 600# CLASS, STEEL BODY, FLANGED, WORM GEAR OPERATED W/ HANDWHEEL	2
94	PROTECTIVE BOLLARD	29
95	24"- 90° ELBOW, LONG RADIUS, 0.375 WALL, Y-60, ANSI B16.9, ASTM A-234	4
96	2" - 45° ELBOW, MEDIUM DENSITY, SDR 11, PE 2708	8
97	12" - 90° ELBOW, LONG RADIUS, 0.375 WALL, Y60, ANSI B16.9, ASTM 234	2
98	16" X 2" WELD-O-LET, XHVY, ANSI B16.9, ASTM 234	1
99	5'-0" X 5'-0" X 2'-6" DEEP CONCRETE SUPPORT BLOCK, 3000 PSI CONC., W/ 2 LAYERS OF 15# FELT BETWEEN PIPE AND CONCRETE	2
100	4" STYLE 38 DRESSER COUPLING	4
101	8" - 45 DEGREE ELBOW, LONG RADIUS, 0.375 WALL, Y-60, ANSI B16.9, ASTM A 234	2
102	8" X 2" WELD-O-LET, XHVY, ANSI B16.9, ASTM 234	2
103	TD WILLIAMSON 8" SPHERICAL 3 WAY TEE WITH LOCK-O-RING FLANGE, ANSI 300# CLASS	1
104	4" - 45° ELBOW, PLASTIC PIPE, MEDIUM DENSITY, SDR 11, PE2708	1

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	MOVED STATION TO MT PLEASANT – TUCKAHOE RD	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AG CHECKED BY: DW
DRAWN BY: GA/RJ 225616_M-200,201&202 CS*.dwg

MT. PLEASANT–TUCKAHOE RD. INTERCONNECT STATION SITE SECTIONS AND DETAILS

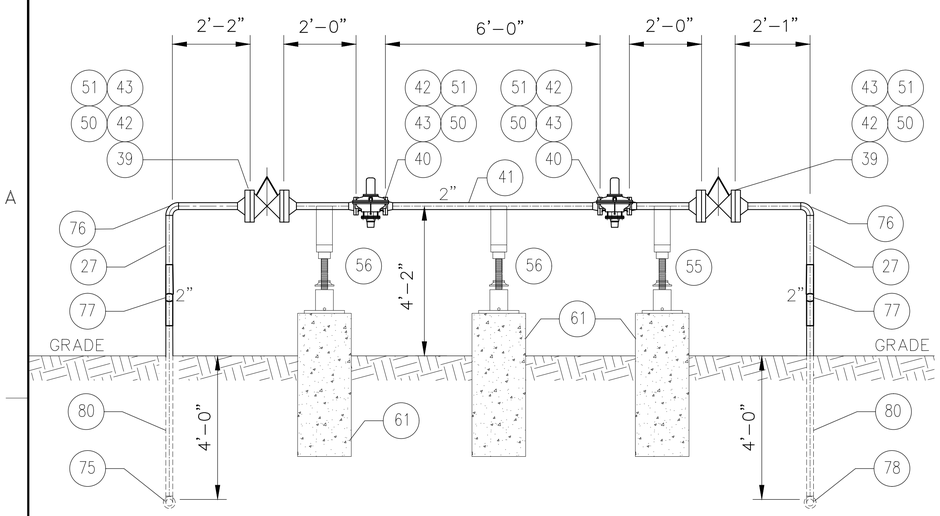
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

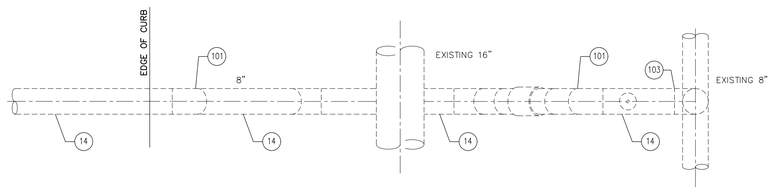
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

M-201

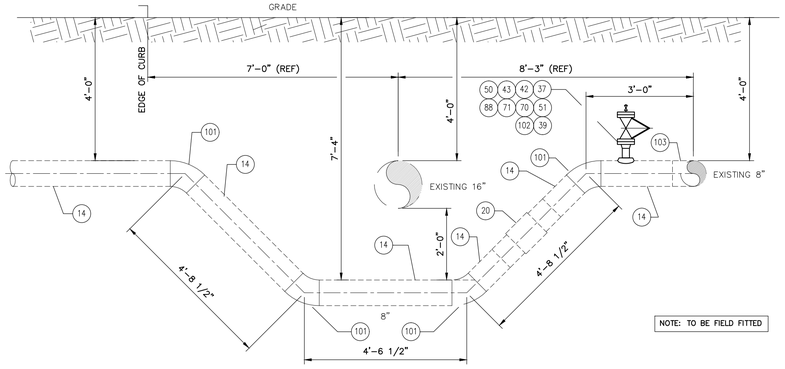
\\portland\projects1\225616 s\jg - england power plant\wip\Drawings_redesign\225616_M-200,201&202 CS.dwg, May 18, 2015 - 2:18pm



SECTION (I, M–200)
SCALE: 1/2" = 1'–0"



PLAN
SCALE: 1/2" = 1'–0"



SECTION (J, M–200)
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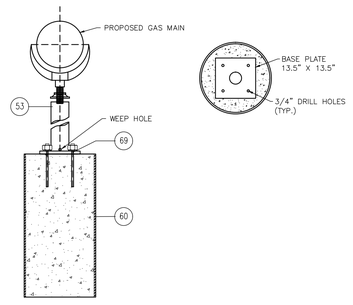
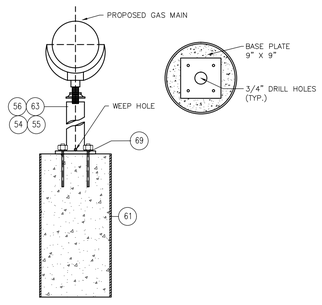
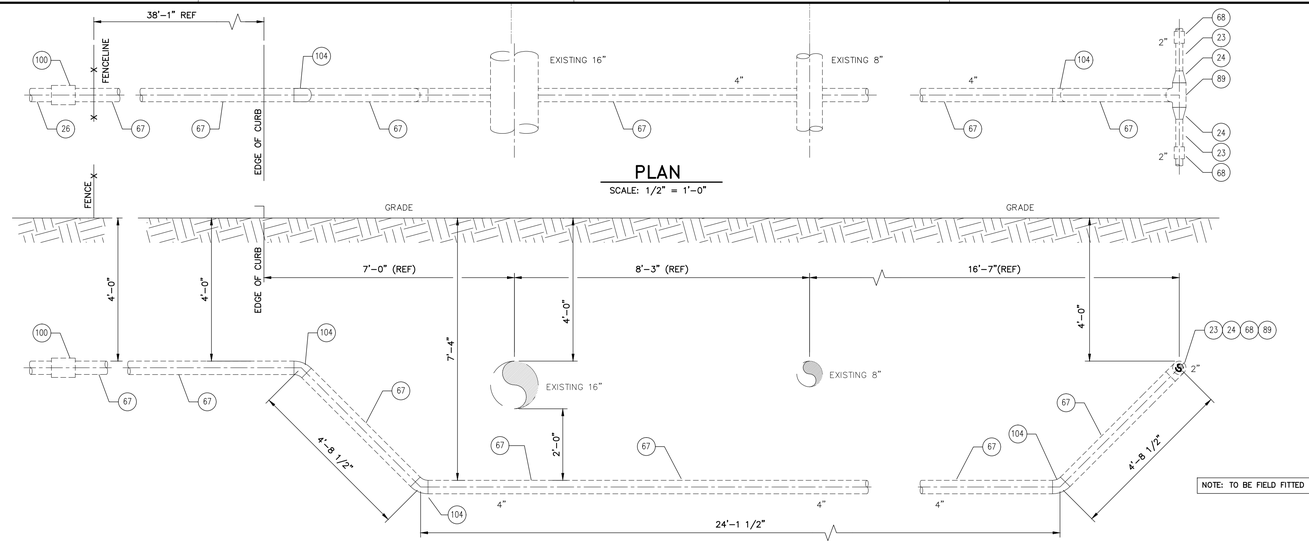


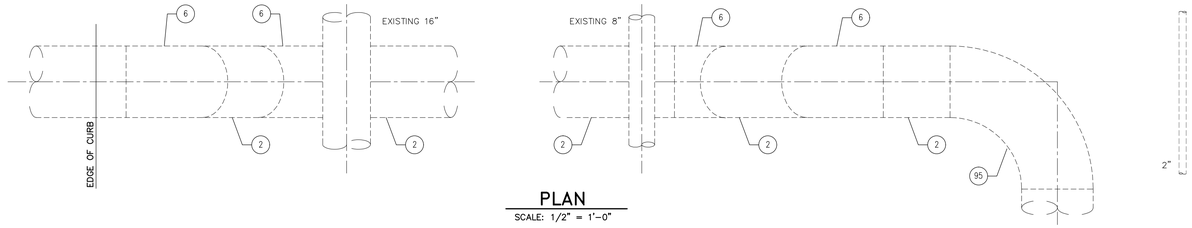
ADJUSTABLE 24" PIPE SADDLE SUPPORT (1, M–202)
(FROM PIPING TECHNOLOGY FIG. 46)



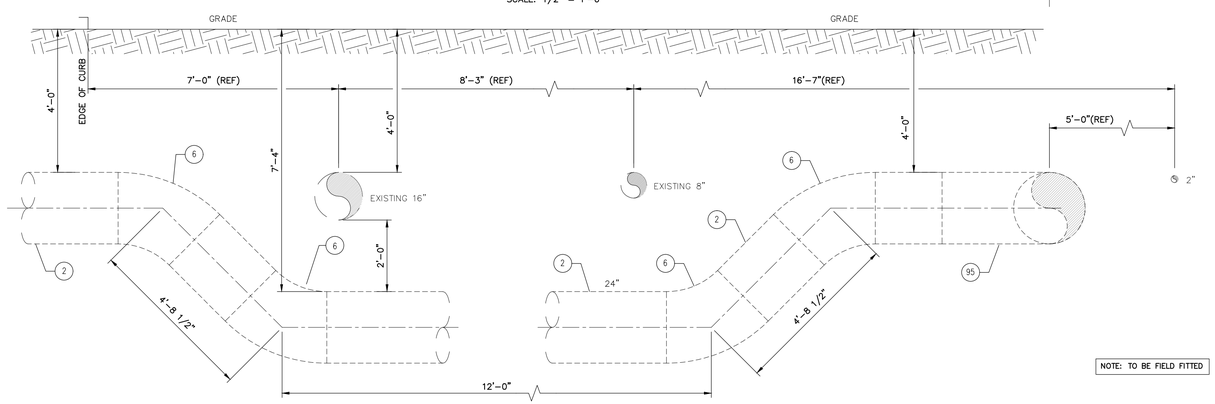
ADJUSTABLE 2", 4", 8" AND 12" PIPE SADDLE SUPPORT (2, M–202)
(FROM PIPING TECHNOLOGY FIG. 46)



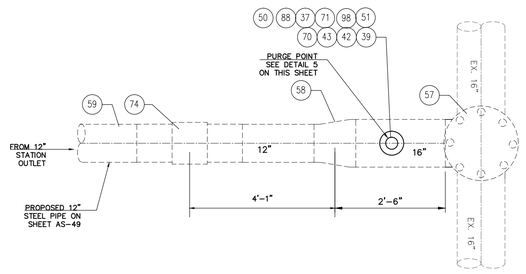
SECTION (K, M–200)
SCALE: 1/2" = 1'–0"



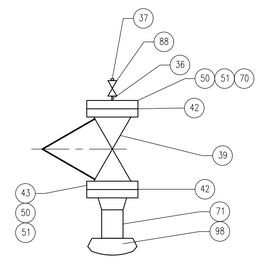
PLAN
SCALE: 1/2" = 1'–0"



SECTION (L, M–200 SHOWN; M, M–200 SIMILAR)
SCALE: 1/2" = 1'–0"



DETAIL FOR 12" TIE–IN TO EXISTING 16" ON AS–49 (4, M–202)
SCALE: 1/2" = 1'–0"



2" PURGE POINT DETAIL ON 16" PIPE (5, M–202)
SCALE: 1 1/2" = 1'–0"

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DATE
2	MOVED STATION TO MT PLEASANT – TUCKAHOE RD	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_M–200,201&202 CS*.dwg

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

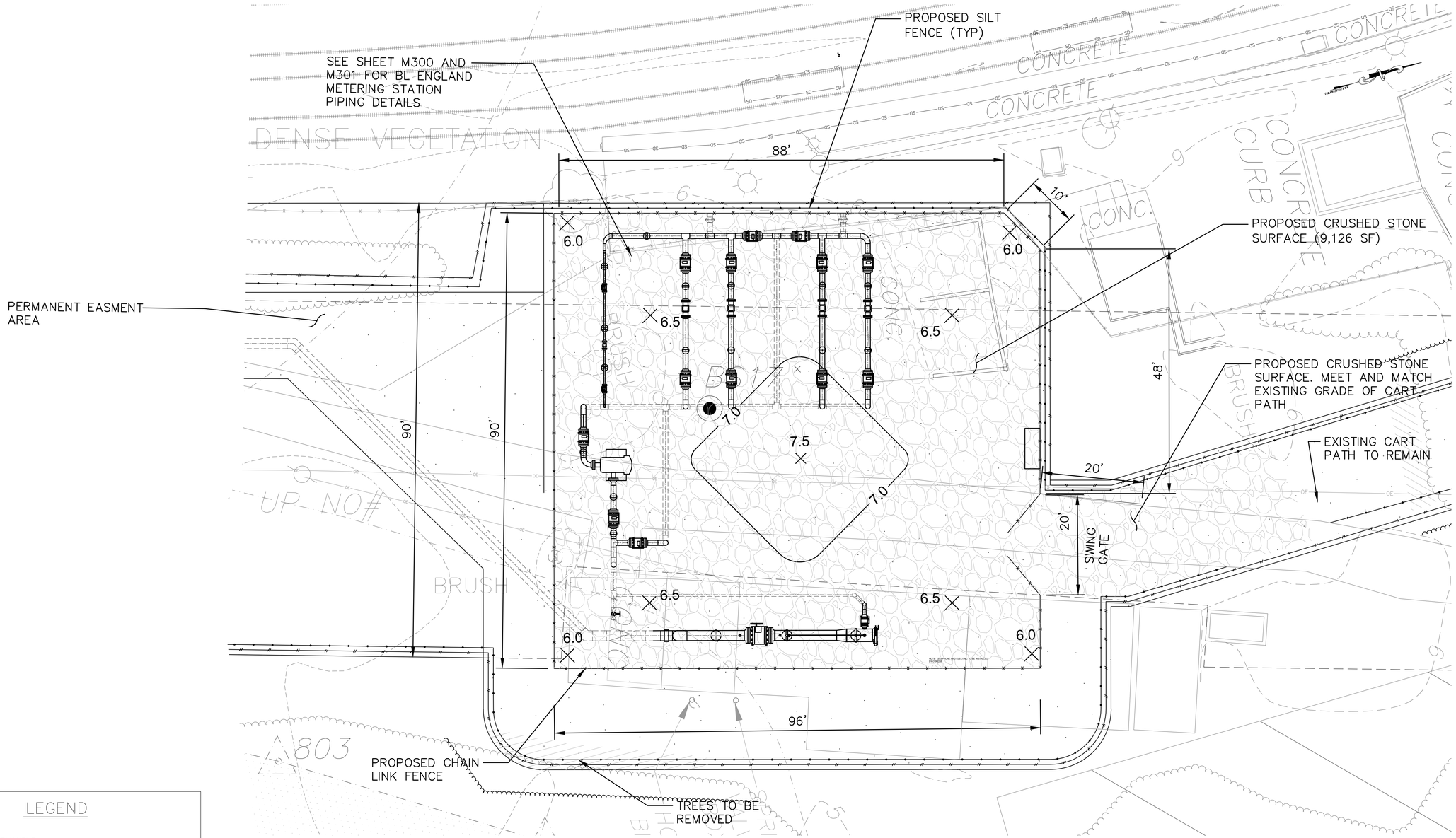
PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

MT. PLEASANT–TUCKAHOE RD. INTERCONNECT STATION SITE SECTIONS AND DETAILS

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

M-202

\\portland\projects\225616 sjg – england power plant\wip\Drawings_redesign\225616_M–200,201&202 CS.dwg, May 18, 2015 – 2:19pm



LEGEND

- PERMANENT EASEMENT
- PROPOSED CRUSHED STONE
- PROPOSED GRASS
- 21.5 — PROPOSED ELEVATION SPOT GRADE
- CHAINLINK FENCE
- LIMIT OF DISTURBANCE LINE
- SILT FENCE
- PROPOSED TREELINE
- EASEMENT LINE
- EXISTING TREELINE

NOTES:

1. SEE SHEET D–02, D–03 AND D–06 FOR SPECIFIC SITE PLAN DETAILS.
2. REFER TO C–301 FOR DEMOLITION AND SITE PREPARATION WORK.
3. ALL CATHODIC PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH ARK ENGINEERING & TECHNICAL SERVICE, INC. REPORT TITLED "AC INTERFERENCE ANALYSIS & MITIGATION SYSTEM DESIGN, SOUTH JERSEY GAS COMPANY, PROPOSED 24" B.L. ENGLAND PIPELINE", DATED: 9/3/2014.

SHEET REFERENCES:

C–301
AS–82
M–300
M–301
M–302

BAR SCALE
1" = 10'
CHECK GRAPHIC SCALE BEFORE USING

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NJ LIC.NO. GE46534

REV.	DESCRIPTION	DATE
3	ADDED CATHODIC PROTECTION NOTE	9/4/14
2	REVISED INLET PIPE ALIGNMENT	7/7/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: DJM
CHECKED BY: DW
225616_C-300 CS.dwg

BL ENGLAND METERING STATION SITE PLAN
UPPER TOWNSHIP
CAPE MAY COUNTY

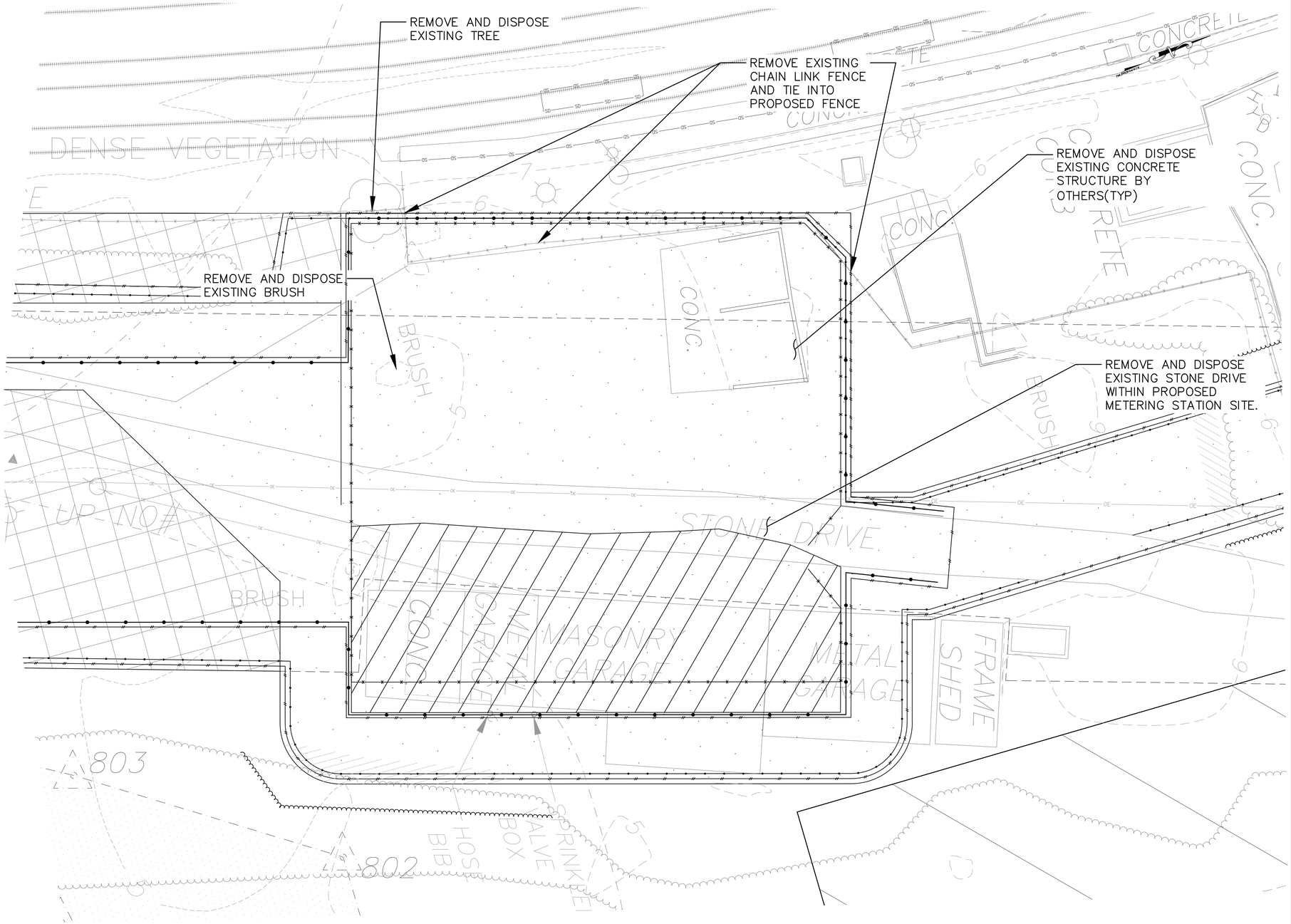
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

C-300

\\portland\projects1\225616 sig - england power plant\wip\Drawings_redesign\225616_C-300 CS.dwg, May 18, 2015 - 2:19pm



LEGEND

- TEMPORARY EASEMENT
- PERMANENT EASEMENT
- EXISTING STRUCTURES, FOUNDATIONS AND ALL UTILITY SERVICES TO BE REMOVED AND DISPOSED BY OTHERS PRIOR TO THE START OF CONSTRUCTION(TYP)
- CHAINLINK FENCE
- LIMIT OF DISTURBANCE LINE
- SILT FENCE
- PROPOSED TREELINE
- EASEMENT LINE
- EXISTING TREELINE
- TREES TO BE CLEARED

NOTE:

SEE SHEET D-06 FOR SPECIFIC SITE PLAN DETAILS

10' 0 10' 20'

BAR SCALE
1" = 10'
CHECK GRAPHIC SCALE BEFORE USING

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REV.	DESCRIPTION	DESIGNED BY: LS/AS	DRAWN BY: DJM	CHECKED BY: DW	225616_C-301 CS.dwg
1	ISSUED FOR #80				12/09/13 DATE

BL ENGLAND METERING STATION
DEMOLITION PLAN – UPPER TOWNSHIP
CAPE MAY COUNTY

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

C-301

\\portland\projects1\225616 sig - england power plant\wip\Drawings_redesign\225616_C-301 CS.dwg, May 18, 2015 - 2:20pm

LOAD SUPPLY
UNIT 3
UNIT 3 STARTUP
& AUX. BOILER

LOAD SUPPLY
TO CT & HRSG

SOUTH JERSEY GAS BL

FROM FENCE

10'-0" FROM FENCE

34'-0" FROM FENCE

16'-0"

9'-0"

4'-0"

18'-0"

6"

4"

8"

12"

24"

FOR CONCRTE PAD FOR FILTER; SEE DETAIL ON SHEET S-001

FILTER

ABOVE GROUND REMOTE ACTUATOR SEE DETAIL ON SHEET M-302

24" SMART PIG RECEIVER ASSEMBLY

5'-4" FROM FENCE

PROPOSED SCADA; 3'-0 X 8'-0"

PROPOSED CHAIN LINK FENCE; SEE DETAIL ON DWG D-06

5'-0"

PLAN
SCALE: 1/4"=1'

BAR SCALE
1/4" = 1'-0"
CHECK GRAPHIC SCALE BEFORE USING

NOTE: TELEPHONE AND ELECTRIC TO BE INSTALLED BY OTHERS

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REV.	DESCRIPTION	DATE
2	REVISED INLET PIPE ALIGNMENT	7/1/2014
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_M-300,301&302 CS*.dwg

BL ENGLAND METERING STATION
LAYOUT ENLARGED PLAN

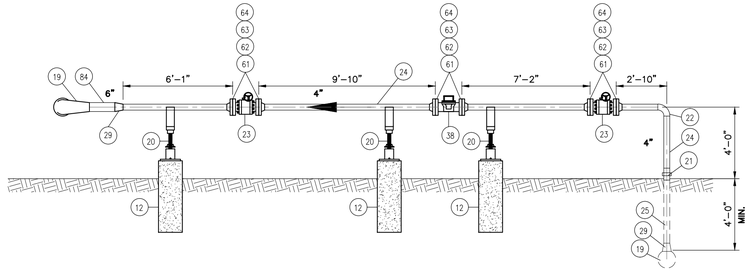
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

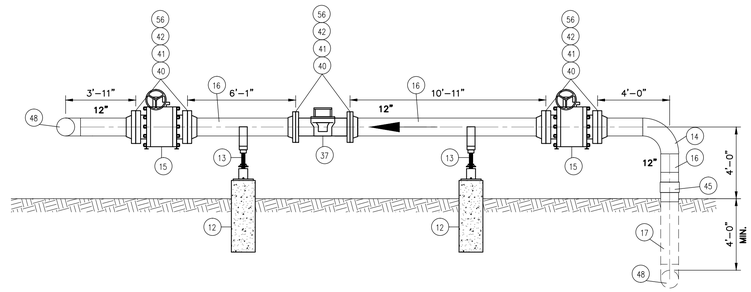
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

M-300

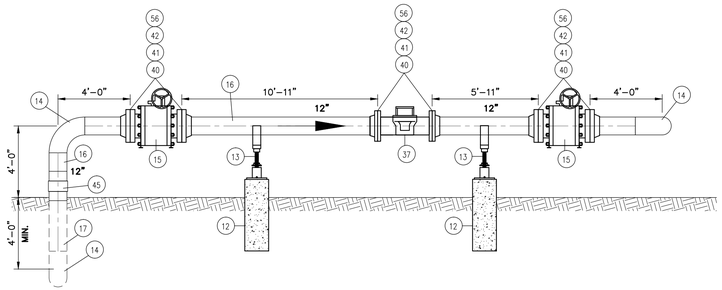
\\portland\projects1\225616 s\g - england power plant\wip\Drawings_redesign\225616_M-300,301&302 CS.dwg, May 18, 2015 - 2:20pm



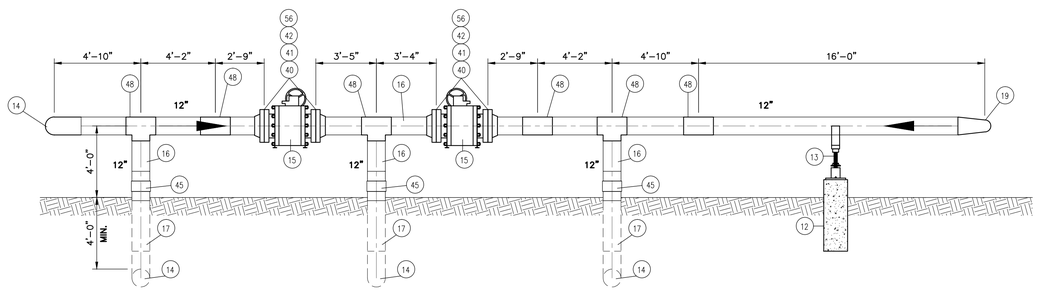
SECTION A M300
SCALE: 1/4"=1' (TYPICAL 4" METER RUN)



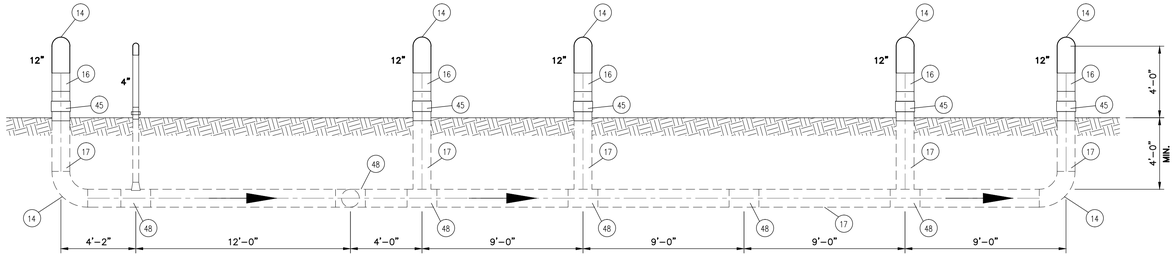
SECTION B M300
SCALE: 1/4"=1' (TYPICAL 12" METER RUN)



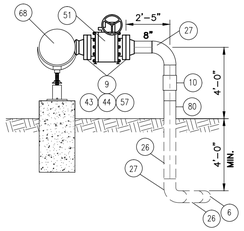
SECTION C M300
SCALE: 1/4"=1'



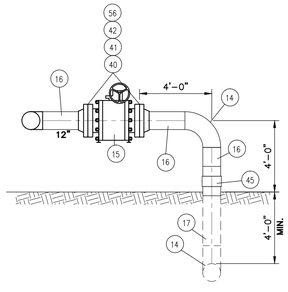
SECTION D M300
SCALE: 1/4"=1'



SECTION E M300
SCALE: 1/4"=1'



SECTION F M300
SCALE: 1/4"=1'



SECTION G M300
SCALE: 1/4"=1'

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NJ. LIC.NO. GE46534

REV.	DESCRIPTION	DESIGNED BY: LS/AS	DRAWN BY: GA/PJ	CHECKED BY: DW	225616_M-300,301&302 CS*.dwg
1	ISSUED FOR BID				12/20/13 DATE

BL ENGLAND METERING STATION
SECTIONS ENLARGED PLAN

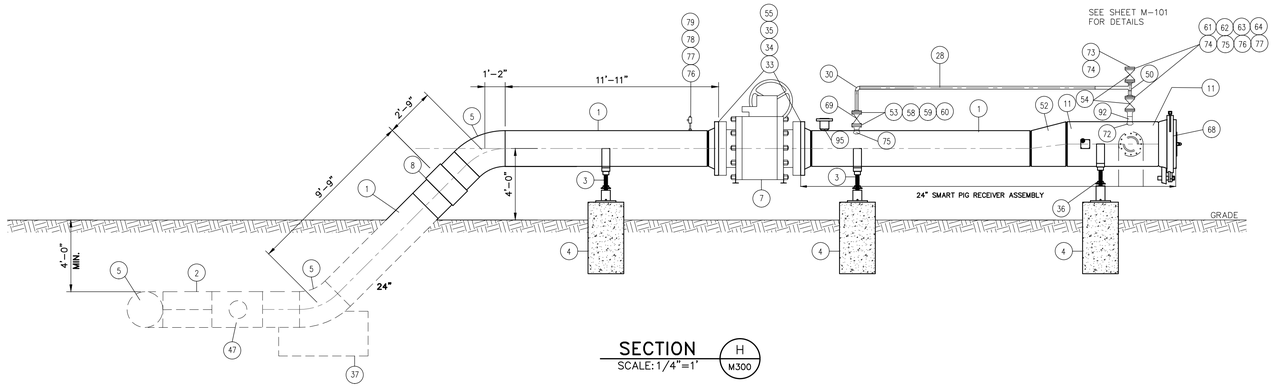
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

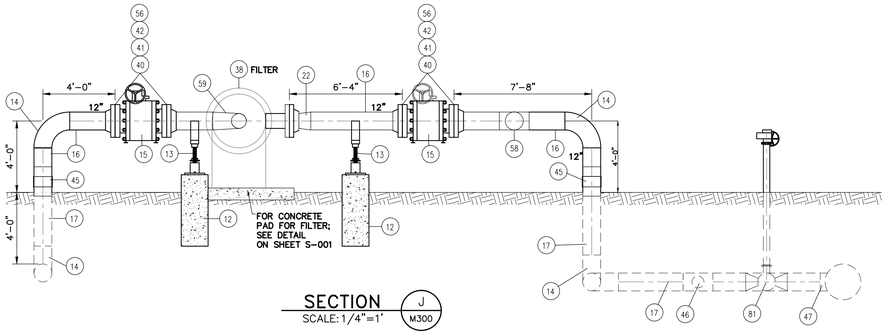
JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

M-301

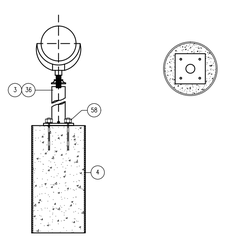
\\portland\projects1\225616 s\g - england power plant\wip\Drawings_redesign\225616_M-300_301&302 CS.dwg, May 18, 2015 - 2:20pm



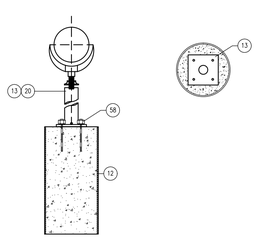
SECTION H
SCALE: 1/4"=1' M300



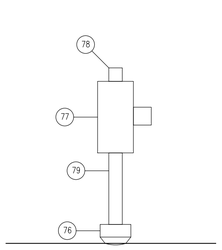
SECTION J
SCALE: 1/4"=1' M300



ADJUSTABLE 24" & 30" PIPE SADDLE SUPPORT
(FROM PIPING TECHNOLOGY FIG. 46) 1 M-300
NOT TO SCALE



ADJUSTABLE 4" & 12" PIPE SADDLE SUPPORT
(FROM PIPING TECHNOLOGY FIG. 46) 2 M-300
NOT TO SCALE

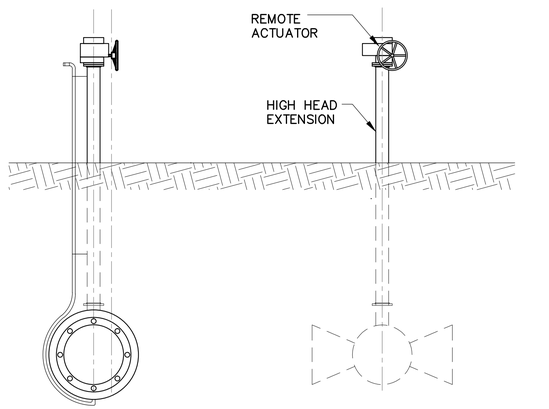


GAUGE POINT AT TRAP VALVE (TYP) 3 M-300
SCALE: 3"=1'-0"

NOTES:

1. ALL SONOTUBE SUPPORT STRUCTURES SHALL BE FILLED WITH 3000 PSI CONCRETE AND SHALL BEAR ON FIRM UNDISTURBED SOILS. SEE BORING DETAILS FOR THE LOCATION IN QUESTION.
2. CONTRACTOR TO ALLOW 14 DAYS CURING TIME ON ALL CONCRETE SUPPORT STRUCTURES BEFORE SETTING ANY EQUIPMENT OR PIPE STRUCTURES.
3. ALL UNDERGROUND PIPE WITH CONCRETE SUPPORTS SHALL HAVE TWO LAYERS OF 15# IMPREGNATED FELT INSTALLED BETWEEN THE PIPE AND THE CONCRETE.
4. UNDERGROUND PIPE COATING SHALL BE APPLIED TO ALL PIPE RISERS TO A HEIGHT OF 6" ABOVE THE FINAL GRADE.
5. ALL PIGGING TRAPS RECEIVERS AND LAUNCHERS SHALL BE FABRICATED BY OTHERS AND DELIVERED TO THE SITE. THE CONTRACTOR SHALL INSTALL ALL LAUNCHERS AND RECEIVERS AT THE PIGGING STATION.
6. CONTRACTOR SHALL INSTALL ALL TRAP ASSOCIATED PIPING INCLUDING EQUALIZER LINES, VALVES AND GAUGE MONITORING POINTS.
7. THE 20" AND 24" DIAMETER TEES ON THE PIG RUNS ARE TO BE BARRED AT THE BRANCH RUN. ALL BARS MUST BE WELDED IN PLACE AND FLUSH WITH THE INSIDE PIPE WALL AS PER PLAN.
8. ALL PIPE SUPPORTS ARE TO BE ADJUSTABLE SADDLE TYPE FABRICATED BY PIPING TECHNOLOGY AS PER-FIGURE 46 (PIPING TECHNOLOGY CATALOGUE) WITH THE REQUIRED STEEL BASE. THE 13.5"X13.5" STEEL BASE SHALL HAVE FOUR-3/4" HOLES DRILLED TO ACCOMMODATE THE 5/8" DIA. BOLTS.

6' 4' 2' 0 4' 8'
BAR SCALE
1/4" = 1'-0"
CHECK GRAPHIC SCALE BEFORE USING



12" BALL VALVE WITH STEM & GREASE EXTENSION DETAIL
SCALE: 1/2"=1'-0"

BILL OF MATERIALS

BL ENGLAND METERING STATION CONSOLIDATED MATERIALS

ITEM #	DESCRIPTION	QUANTITY
1	24" BARE STEEL PIPE, O.D. 24.000 X 0.375 WALL, API 5L-X60, (ABOVE GRADE PIPING)	32 FT
2	24" COATED STEEL PIPE, O.D. 24.000 X 0.375 WALL, API 5L-X60, COATED	10 FT
3	24" ADJUSTABLE PIPE SADDLE SUPPORT, PIPING TECHNOLOGY- FIG 46 WITH BASE PLATE	2
4	24" SONOTUBE WITH 5/8" THREADED ROD FOR BASE HOLD DOWN PLATE	3
5	24" - 45 DEGREE ELBOW, LONG RADIUS, 0.375 WALL, Y-60, B16.9 ASTM 234	4
6	8" - 45 DEGREE ELBOW, LONG RADIUS, 0.322 WALL, Y-60, B16.9 ASTM 234	1
7	24" GROVE B-5 BALL VALVE, ANSI 600# CLASS, STEEL BODY, FLANGED, WORM GEAR OPERATED, W/HANDWHEEL	1
8	24" APS MONOLITHIC ISOLATION JOINT, WELD END, ANSI CLASS 600#, 0.375 WALL	1
9	8" ARMSTRONG SYNTHESEAL GASKET, ANSI 600# CLASS, FULL FACE	2
10	8" APS MONOLITIC ISOLATION JOINT, WELD END, ANSI 600# CLASS. 0.322" WALL	1
11	30" BARE STEEL PIPE, O.D. 24.000 X 0.375 WALL, API 5L-X60, (SMART PIG RECEIVER)	5 FT
12	16" SONOTUBE WITH 5/8" THREADED ROD FOR BASE PLATE HOLD DOWN	18
13	12" ADJUSTABLE PIPE SADDLE SUPPORT, PIPING TECHNOLOGY OR EQUAL	16
14	12" - 90 DEGREE ELBOW, LONG RADIUS, 0.375 WALL, Y-60, B16.9 ASTM 234	28
15	12" GROVE B-5 BALL VALVE, ANSI 600# CLASS, STEEL BODY, FLANGED, WORM GEAR OPERATED W/HANDWHEEL W/ ACTUATOR	4
16	12" BARE STEEL PIPE, O.D. 12.750" X 0 .375" WALL, API 5L-X60, (ABOVE GRADE PIPING)	137 FT
17	12" COATED STEEL PIPE, O.D. 12.750" X 0 .375" WALL, API 5L-X60, (BURIED)	280 FT
18	12" X 10" CONCENTRIC REDUCER, WELD, STANDARD WEIGHT WALL, ANSI B-16-9, ASTM A 234	1
19	12" X 6"- 90 DEGREE REDUCING ELBOW, LONG RADIUS, STANDARD WEIGHT WALL, Y-60, ANSI B16.9, ASTM234	2
20	4" ADJUSTABLE PIPE SADDLE SUPPORT, PIPING TECHNOLOGY OR EQUAL	2
21	4" APS MONOLITIC ISOLATION JOINT, WELD END, ANSI 600# CLASS. 0.237" WALL	1
22	4" - 90 DEGREE ELBOW, LONG RADIUS, 0.237 WALL, Y-60, B16.9 ASTM 234	2
23	4" GROVE B-4 BALL VALVE, ANSI 600# CLASS, STEEL BODY, FLANGED, WORM GEAR OPERATED, W/HANDWHEEL W/ ACTUATOR	1
24	4" BARE STEEL PIPE, O.D. 4.50" X 0 .237" WALL, API 5L-X60, (ABOVE GRADE PIPING)	17 FT
25	4" COATED STEEL PIPE, O.D. 4.50" X 0 .237" WALL, API 5L-X60, (BURIED)	8 FT
26	8" COATED STEEL PIPE, O.D. 8.625" X .322" WALL, API 5L-X60, (BURIED)	48 FT
27	8" - 90 DEGREE ELBOW, LONG RADIUS, STANDARD WEIGHT WALL, Y-60, ANSI B16.9, ASTM234	2
28	2" BARE STEEL PIPE, O.D. 2.375" X .154" WALL, API 5L-X60, (ABOVE GRADE PIPING)	20 FT
29	6" X 4" CONCENTRIC REDUCER, WELD , STANDARD WEIGHT WALL, ANSI B-16.9 ASTM A-234	2
30	2" - 90 DEGREE ELBOW, LONG RADIUS, 0.154 WALL, Y-60, B16.9 ASTM 234	1
31	5' X 5' X 2'-6" DEEP CONCRETE BLOCK, 3000 PSI W/ 1/4" NEOPRENE AND RFP SPACER BETWEEN PIPE & CONCRETE	1
32	APOLLO TYPE 1640-GPF-740-Q FABRICATED PIPELINE/PROCESS FILTER	1
33	24" ARMSTRONG SYNTHESEAL GASKET, ANSI 600# CLASS, FULL FACE	2
34	1-7/8" X 13.00" BOLT, STUD, ASTM A-193, GRADE 7, (24") - 24 BOLTS	48
35	24" 600# ANSI CLASS WELD NECK FLANGE, ANSI 16, ASTM A105, 0.375 WALL	2
36	30" ADJUSTABLE PIPE SADDLE SUPPORT, PIPING TECHNOLOGY OR EQUAL	1
37	12" AUTO ADJUST TUBINE METER W/MKII T-230 BODY- 600# ANSI, FLANGED	4
38	4" AUTO ADJUST TURBINE METER -MKII T-18 BODY - 600# ANSI, FLANGED	1
39	4" FLOW RESTRICTOR FOR 4" TURBINE METER - TO BE SUPPLIED WITH METER	1
40	12" ARMSTRONG SYNTHESEAL GASKET, ANSI 600# CLASS, FULL FACE	40
41	1 1/4" X 8.75" BOLT, STUD, ASTM A193, GRADE B, (12") - 20 BOLTS	800
42	12" 600# ANSI CLASS WELD NECK FLANGE, ANSI B16, ASTM 105, 0.375" WALL	42
43	1 1/8" X 7.75" BOLT, STUD, ASTM A193, GRADE B, (8" VALVE) - 12 BOLTS	24
44	8" 600# ANSI CLASS WELD NECK FLANGE, ANSI B16, ASTM A105, 0.322 WALL	2
45	12" APS MONOLITIC ISOLATION JOINT, WELD END, ANSI 600# CLASS. 0.375" WALL	10
46	12" X 8" TEE, WELD END, STANDARD WEIGHT WALL, Y-60, ANSI B-16.9 ASTM A-234	1
47	24" X 12" TEE, WELD END, 0.375" WALL, Y-60, ANSI B16.9, ASTM 234 (12" OUTLET TO BE BARRED)	1
48	12" X 12" TEE, WELD END, 0.375" WALL, Y-60, ANSI B16.9, ASTM 234	12
49	12" X 10" 90 DEGREE REDUCING ELBOW, STANDARD WEIGHT WALL, ANSI B-16.9 ASTM A-234	1
50	4" X 2" TEE, WELD END, 0.237" WALL, Y-60, ANSI B16.9, ASTM 234	1
51	8" GROVE B4 BALL VALVE, ANSI 600# CLASS, STEEL BODY, FLANGED, WORM GEAR OPERATED W/HANDWHEEL	1
52	30" X 24" ECCENTRIC REDUCER, WELD , STANDARD WEIGHT WALL, ANSI B-16.9 ASTM A-234	1
53	2" - ANSI 600# CLASS WELD NECK FLANGE, ANSI B16, ASTM A105, 0.237" WALL	2
54	4" NORDSTROM PLUG VALVE, FIG. 2245, ANSI CLASS 600#, STEEL BODY, FLANGED, 2" WRENCH OPERATED NUT	2
55	1 7/8" HEX NUT, ASTM A194, GRADE 2H, W/ WASHERS (24" VAVLE)	96
56	1 1/4"" HEX NUT, ASTM A194, GRADE 2H, W/WASHERS (10" & 12" VALVE)	1664
57	1 1/8" HEX NUT, ASTM A194, GRADE 2H, W/WASHERS (8" VALVE)	36
58	5/8" HEX NUT, ASTM A194, GRADE 2H, W/WASHERS (2" VALVE & PIPE SUPPORTS)	116
59	5/8" X 4.25" BOLT, STUD, ASTM A193, GRADE B, (2" VALVE) - 8 BOLTS	16
60	2" ARMSTRONG SYNTHESEAL GASKET, ANSI 600# CLASS, FULL FACE	2
61	4" - ANSI 600# CLASS WELD NECK FLANGE, ANSI B16, ASTM A105, 0.237" WALL	11
62	4" ARMSTRONG SYNTHESEAL GASKET, ANSI 600# CLASS, FULL FACE	12
63	7/8" X 5.75" BOLT, STUD, ASTM A193, GRADE B, (4" VALVE) - 8 BOLTS	96
64	7/8" HEX NUT, ASTM A194, GRADE 2H, W/ WASHERS (4" VALVE)	192
65	10" 600# ANSI CLASS WELD NECK FLANGE, ANSI B16, ASTM 105, 0.365" WALL	2
66	10" ARMSTRONG SYNTHESEAL GASKET, ANSI 600# CLASS, FULL FACE	2
67	1 1/4" X 8.50" BOLT, STUD, ASTM A193, GRADE B, (10" VALVE) - 16 BOLTS	32
68	30" TDW D-2000 CLAMP RING CLOSURE W/HINGE, 1480 PSIG DESIGN PRESSURE, BUNA -N O RING, BEVELED TO MATCH 0.375 WALL	1
69	2" NORDSTROM PLUG VALVE,FIG 2245, CARBON STEEL, ANSI 600#, RFxRF, WRENCH OPERATED	1
70	30"X 8" WELD-O-LET, STD. WT., ANSI 16.9 ASTM A105	1
71	24" X 2" WELD-O-LET, STD. WT., ANSI 16.9 ASTM A105	1
72	30"X 4" WELD-O-LET, STD. WT., ANSI 16.9 ASTM A105	1
73	4" BLIND FLANGE, CLASS 600#, ANSI B16.5, ASTM A105 , WITH 3/4" TAP	1
74	3/4" EXTRA HEAVY SCREW PLUG TOP OF BLIND FLANGE	1
75	PIG SIGNAL-TDW PIGSIGV, W/FLAG INDICATOR, MANUAL WITH THREAD-O-RING NIPPLE	1
76	36"-10" X 3/4" THREDOLET, 3000 LB, ANSI B16.9, ASTM A105	1
77	3/4" APOLLO BALL VALVE, STEEL BODY, 2000 LB, WOG, SCREW ENDS	1
78	3/4" SOLID SCEW PLUG, CLASS 3000 LB	1
79	3/4" x 6" X-HEAVY PIPE NIPPLE - THREADED ENDS	1
80	8" BARE STEEL PIPE, O.D. 8.625" X .322" WALL, API 5L-X60	4 FT
81	12" GROVE B-5 BALL VALVE, ANSI 600# CLASS, STEEL BODY, WELD END W/3 FT. ABOVE GROUND EXT. & HANDWHEEL	1
82	12" GROVE B-5 BALL VALVE, ANSI 600# CLASS, STEEL BODY, FLANGED, WORM GEAR OPERATED W/HANDWHEEL	11
83	4" GROVE B-4 BALL VALVE, ANSI 600# CLASS, STEEL BODY, FLANGED, WORM GEAR OPERATED, W/HANDWHEEL	2
84	6" BARE STEEL PIPE O.D. 6.625 X .280 WALL , API 5L – X52 ON M-302	1

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NJ. LIC.NO. GE46534

REV	DESCRIPTION	DATE
2	ADDED MONOLITHIC ISOLATION JOINTS	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS
DRAWN BY: GA/RJ
CHECKED BY: DW
225616_M-300,301&302 CS*.dwg

BL ENGLAND METERING STATION
SECTIONS ENLARGED PLAN

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

M-302

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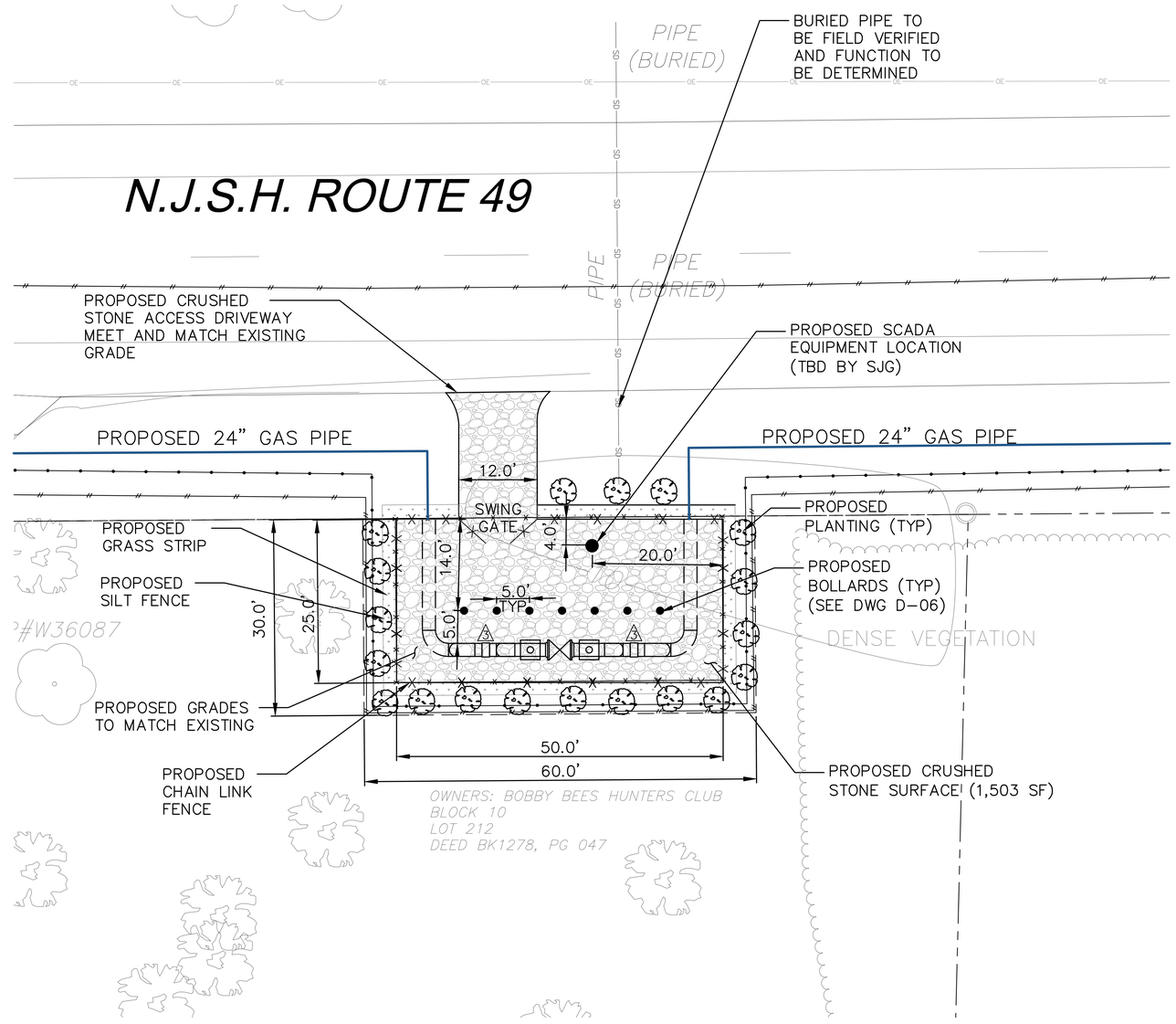

LEGEND

- PROPOSED CRUSHED STONE
- PROPOSED GRASS
- EASEMENT
- PROPERTY LINE
- CHAINLINK FENCE
- LIMIT OF DISTURBANCE LINE
- SILT FENCE
- BURIED PIPING

NOTES:

1. SEE SHEET D-04A AND D-06 FOR SPECIFIC VALVE AND SITE PLAN DETAILS.
2. SEE SHEET D-03 FOR PLANTING SCHEDULE.

SHEET REFERENCES:

D-04A
AS-36

10' 0 10' 20'
BAR SCALE
1" = 10'
CHECK GRAPHIC SCALE BEFORE USING

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2	ADDED MONOLITHIC ISOLATION JOINTS	12/20/13
1	ISSUED FOR BID	7/1/14

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CHECKED BY: DW
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RT49 ROV SITE PLAN
UPPER TOWNSHIP
CAPE MAY COUNTY

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

C-AGV-1

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24x36 SHEET
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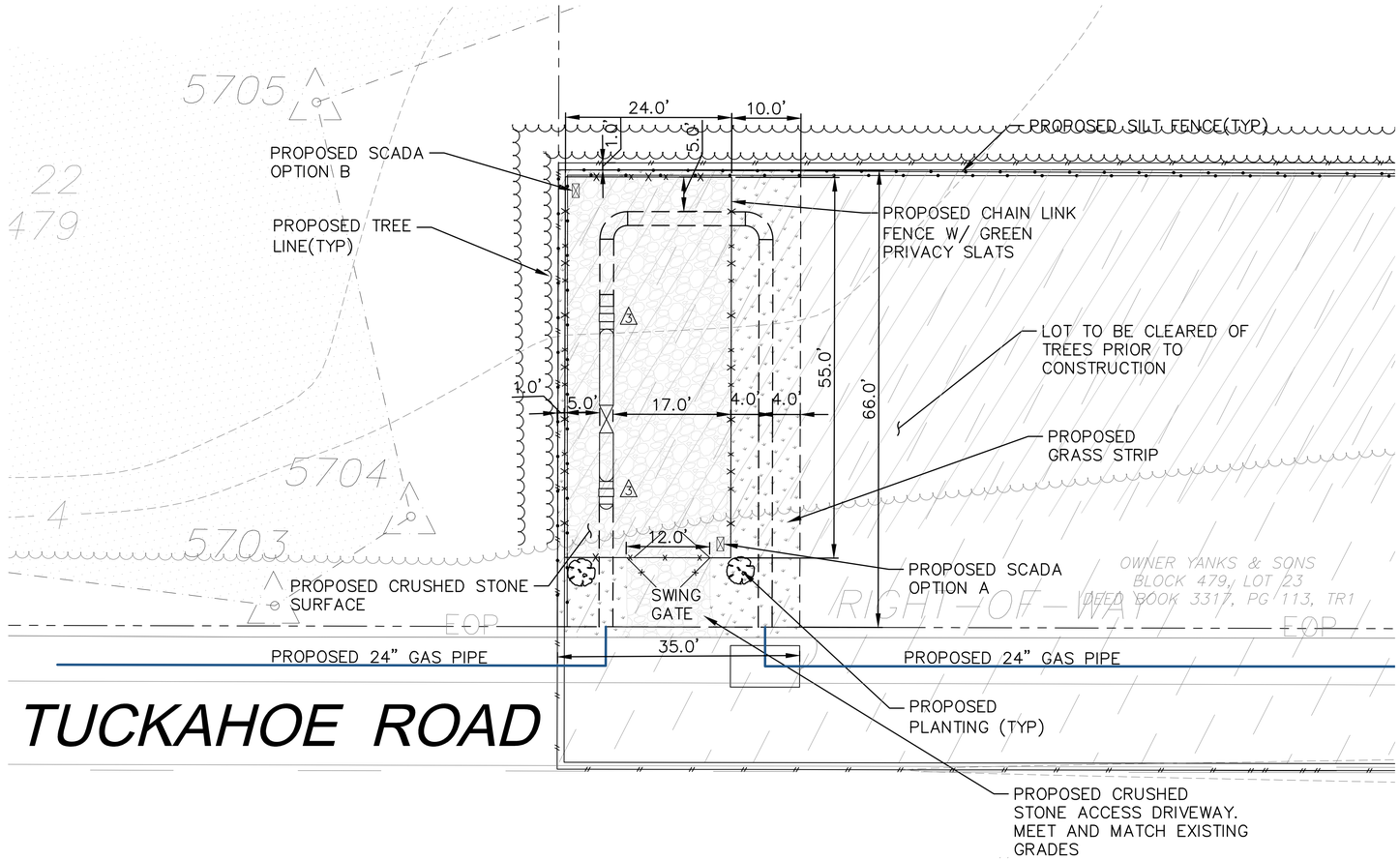

LEGEND

- PROPOSED CRUSHED STONE
- PROPOSED GRASS
- EASEMENT
- CHAINLINK FENCE
- LIMIT OF DISTURBANCE LINE
- SILT FENCE
- PROPOSED PLANTING
- PROPERTY LINE
- BURIED PIPING
- EXISTING TREELINE
- ABANDON GAS MAIN

NOTES:

1. SEE SHEET D-04B AND D-06 FOR SPECIFIC VALVE AND SITE PLAN DETAILS.
2. SEE SHEET AS-67 FOR LOT CLEARING LIMITS.
3. SEE SHEET D-03 FOR PLANTING SCHEDULE.

SHEET REFERENCES

D-04B
AS-67

10' 0 10' 20'
BAR SCALE
1" = 10'
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2	ADDED MONOLITHIC ISOLATION JOINTS	12/20/13
1	ISSUED FOR BID	7/1/14

DESIGNED BY: LS/AS
DRAWN BY: GA/PJ
CHECKED BY: DW
225616_C-AGV-2 CS.dwg

TUCKAHOE ROV SITE
UPPER TOWNSHIP
CAPE MAY COUNTY

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

C-AGV-2

24x36 SHEET
1:1

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80' 0 80' 160'

BAR SCALE
1" = 80'
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REV.	DESCRIPTION	DATE
2	REVISED STATIONING	7/1/14
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AS | CHECKED BY: DW
DRAWN BY: GA/PJ | 225616_AS_73-82 CS.dwg

BL ENGLAND CONSTRUCTION ACCESS SITE PLAN

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

BL-1

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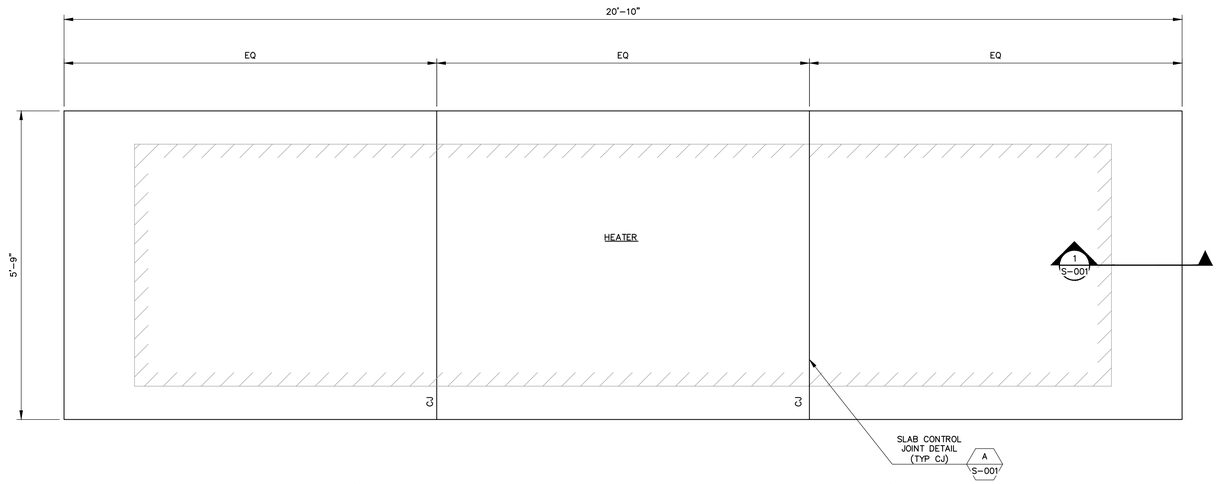
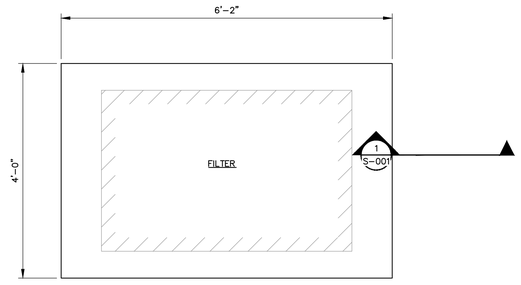


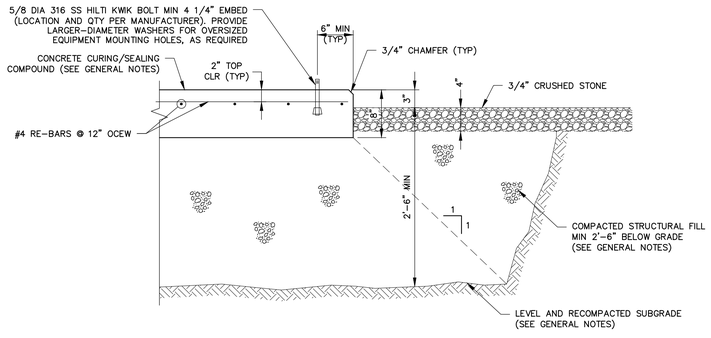
HEATER PAD PLAN (MT. PLEASANT–TUCKAHOE RD. INTERCONNECT STATION)

SCALE: 3/4" = 1'-0"



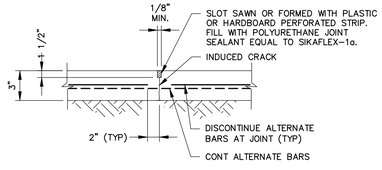
FILTER PAD PLAN (BL ENGLAND METERING STATION)

SCALE: 3/4" = 1'-0"



SECTION 1/S-001

SCALE: 1" = 1'–0"



A SLAB CONTROL JOINT DETAIL S-001

N.T.S.

GENERAL NOTES

A. EXCAVATION AND SUBGRADE PREPARATION:

1. OVER–EXCAVATE A MINIMUM OF 2'–6" BELOW GRADE.
2. PROOF ROLL SUBGRADE W/ MINIMUM OF 6 COVERAGES WITH A HEAVY VIBRATORY ROLLER.
3. BACKFILL WITH COMPACTED STRUCTURAL FILL PLACED IN MAXIMUM 6" LIFTS AND COMPACTED TO MINIMUM 95% COMPACTION USING A VIBRATORY ROLLER. COMPACTION TESTING SHALL BE ARRANGED AND PAID FOR BY SJG (TYP.). STRUCTURAL FILL SHALL MEET THE FOLLOWING GRADATION:

SIEVE SIZE	PERCENT PASSING
4 INCH	100
3 INCH	90–100
1/4 INCH	25–90
#40	0–30
#200	0–5

B. REINFORCED CONCRETE:

1. COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS – 4000 PSI; AIR CONTENT 6%± 1%; W/C RATIO 0.45 MAXIMUM; SLUMP 4" MAXIMUM AFTER ALL WATER HAS BEEN ADDED. SUBMIT TEST RESULTS TO THE ENGINEER. THE ABOVE MIX DESIGN SPECIFICATIONS SHALL ALSO APPLY TO CONCRETE LEVELING PADS.
2. ALL DESIGN IN ACCORDANCE WITH ACI 318 CONCRETE BUILDING CODE, LATEST EDITION. ALL CONCRETE SHALL BE PROVIDED, PLACED, AND MOIST CURED (MIN. 7 DAYS) AS PER ALL APPLICABLE SECTIONS OF THE ACI, AS APPROVED BY THE ENGINEER.
3. REINFORCEMENT: (# 4 RE–BARS) ASTM A615 GRADE 60 – ALL SPLICES CLASS B (U.N.O.). REINFORCEMENT SHALL BE DETAILED, FABRICATED, AND PLACED AS PER ACI 315 DETAILING MANUAL.
4. PROVIDE 3/4" CHAMFER ON EXPOSED EDGES OF CONCRETE, U.N.O.
5. PROVIDE "RUBBED FINISH" IMMEDIATELY UPON STRIPPING FORMS FOR ALL CONCRETE SURFACES EXPOSED TO VIEW.
6. ALL CONCRETE SHALL BE FIELD TESTED BY AN INDEPENDENT TESTING LABORATORY AS PER ASTM SPECIFICATIONS (COORDINATED BY CONTRACTOR BUT AT SJG'S EXPENSE). FOR EACH PLACEMENT, ONE SET OF 4 STANDARD 6" x 12" COMPRESSION TEST CYLINDERS SHALL BE TAKEN AND TESTED IN ACCORDANCE WITH ASTM C 39: 1 SPECIMEN TESTED AT 7 DAYS; 2 SPECIMENS TESTED AT 28 DAYS; AND 1 SPECIMEN RETAINED IN RESERVE FOR LATER TESTING IF REQUIRED.
7. CONCRETE CURING/SEALING COMPOUND: PROVIDE THE FOLLOWING FOR HORIZONTAL AND VERTICAL EXPOSED TO VIEW CONCRETE SURFACES OF THE SLAB: CLEAR EPOXY COATING EQUAL TO "CERTI–VEX GUARD CLEAR" BY VEXCON CHEMICALS, A ONE–STEP CURE AND PENETRATING WATER REPELLENT SEALER MEETING ASTM C–1315, TYPE 1, CLASS B, NCHRP–244. APPLY (2) COATS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

C. DESIGN LOADS (IBC 2009 NEW JERSEY EDITION):
WIND LOAD: V = 110 MPH; EXPOSURE B
SEISMIC LOAD: S_{DS} = 0.177g; S_{D1} = 0.077g SEISMIC DESIGN CATEGORY B
OPERATING WEIGHTS: FILTER = 7,100 LBS
HEATER = 8,000 LBS

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DENNIS M. WALSH, P.E.
N.J. LIC.NO. GE46534

REV	DESCRIPTION	DATE
1	ISSUED FOR BID	12/20/13

DESIGNED BY: LS/AG
DRAWN BY: DMB
CHECKED BY: DW
225616_S001.dwg

STRUCTURAL EQUIPMENT PAD PLAN, DETAILS & NOTES

SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NJ 08037

PROPOSED 24"
B.L. ENGLAND GAS PIPELINE

JOB NO.: 225616
DATE: AUGUST 23, 2013
SCALE: AS SHOWN

S-001

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