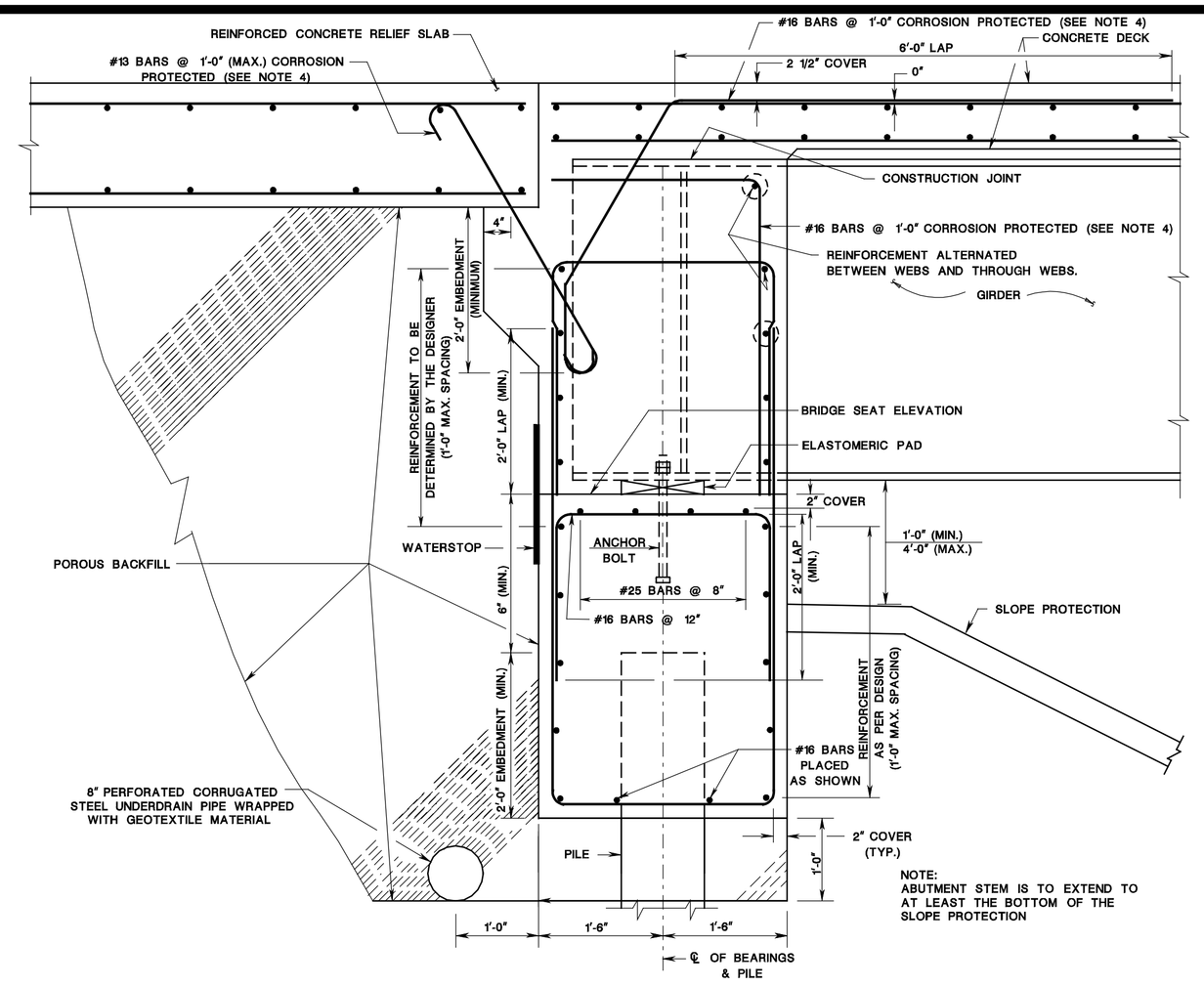
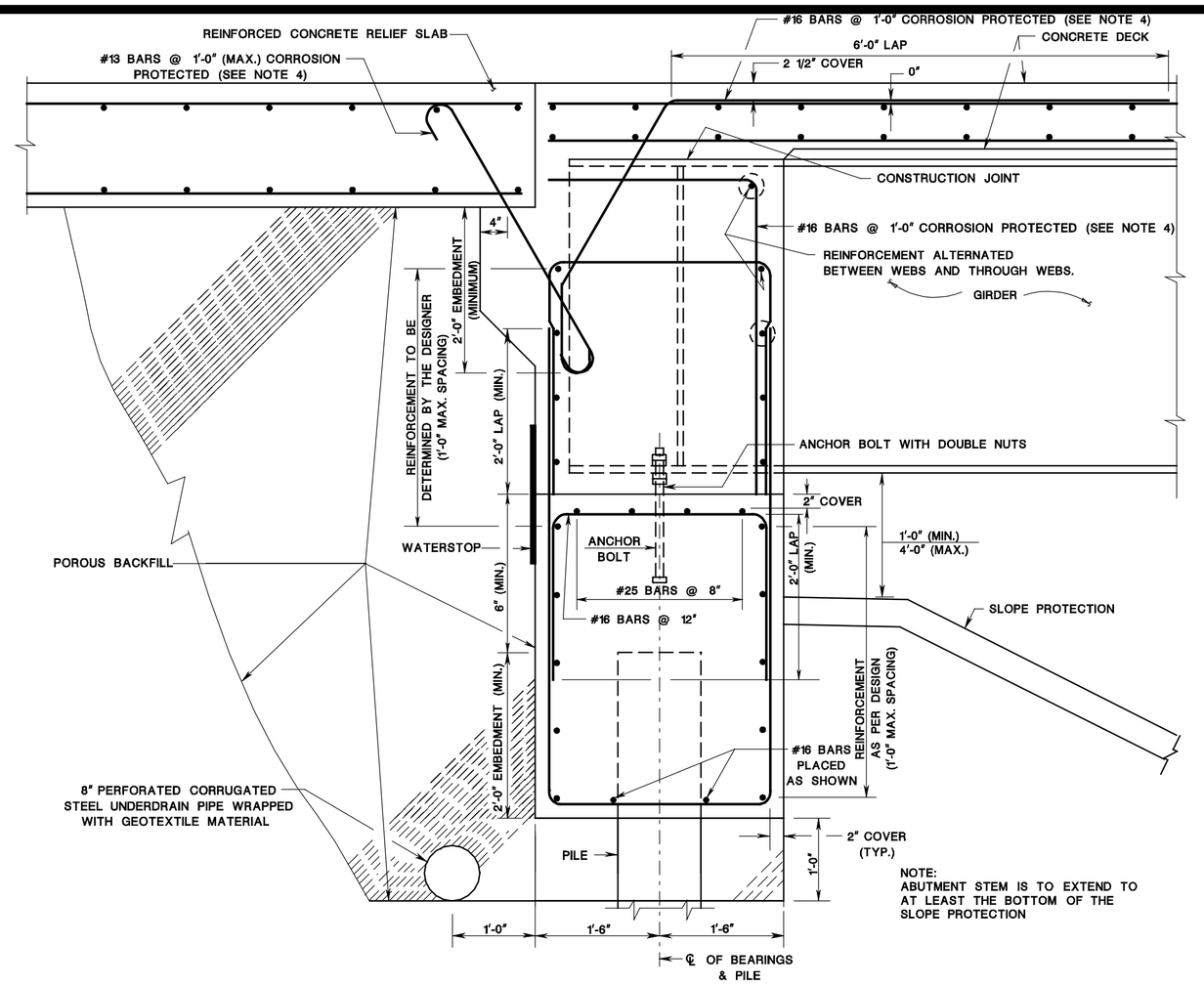


INTEGRAL ABUTMENT DETAIL
STEEL GIRDER ANCHORED TO PILE CAP
AND RESTING ON ELASTOMERIC PAD

INTEGRAL ABUTMENT CONSTRUCTION PROCEDURE

1. FOR BRIDGE LENGTHS OVER 100 FT. PRE-EXCAVATE HOLES TO A DEPTH OF 8 FT. BELOW THE FINISHED GROUND LINE ELEVATION.
2. DRIVE THE PILES AND CUT OFF PILES AT ELEVATIONS SHOWN.
3. BACKFILL HOLES OR, IF CASINGS ARE USED, WITH DESIGNATION I-8 SAND. IF CIP PILES ARE USED, FILL THE SHELL WITH CONCRETE.
4. IF CIP PILES ARE USED, FILL THE SHELL WITH CONCRETE.
5. PLACE THE ABUTMENT STEM CONCRETE TO REQUIRED BRIDGE SEAT ELEVATION WITH ANCHOR BOLTS IN PLACE. POUR THE PILE CAPS FOR THE WING WALLS CONCURRENTLY.
6. SET THE ELASTOMERIC PAD ON THE ABUTMENT WITH THE ANCHOR BOLTS PASSING THROUGH THEM. SET THE BEAMS AND ANCHOR THEM TO THE ABUTMENT USING SLOTTED HOLES IN THE BOTTOM FLANGE. DO NOT FULLY TIGHTEN THE ANCHOR NUTS AT THIS TIME.
8. POUR THE BRIDGE DECK EXCLUDING THE ABUTMENT BACKWALL/DIAPHRAGM AND THE LAST PORTION OF THE BRIDGE DECK EQUAL TO THE BACKWALL/DIAPHRAGM WIDTH.
9. TIGHTEN THE ANCHOR NUTS AND POUR THE ABUTMENT BACKWALL/DIAPHRAGM FULL HEIGHT AND THE REMAINDER OF THE DECK SLAB. THE WING WALLS MAY ALSO BE POURED CONCURRENTLY.
10. PLACE THE DRAIN SYSTEM AND BACKFILL IN 6" LIFTS UNTILL THE DESIRED SUBGRADE ELEVATION IS REACHED.
11. POUR THE RELEIF SLAB STARTING AT THE END AWAY FROM THE ABUTMENT AND PROGRESSING TOWARD THE BACKWALL.



INTEGRAL ABUTMENT DETAIL
STEEL GIRDER ANCHORED TO PILE CAP
AND RESTING ON NUTS

INTEGRAL ABUTMENT CONSTRUCTION PROCEDURE

1. FOR BRIDGE LENGTHS OVER 100 FT. PRE-EXCAVATE HOLES TO A DEPTH OF 8 FT. BELOW THE FINISHED GROUND LINE ELEVATION.
2. DRIVE THE PILES AND CUT OFF PILES AT ELEVATIONS SHOWN.
3. BACKFILL HOLES OR, IF CASINGS ARE USED, WITH DESIGNATION I-8 SAND. IF CIP PILES ARE USED, FILL THE SHELL WITH CONCRETE.
4. IF CIP PILES ARE USED, FILL THE SHELL WITH CONCRETE.
5. PLACE THE ABUTMENT STEM CONCRETE TO REQUIRED BRIDGE SEAT ELEVATION WITH ANCHOR BOLTS IN PLACE. POUR THE PILE CAPS FOR THE WING WALLS CONCURRENTLY.
6. SET THE BEAMS ON NUTS AT THE DESIRED LEVELS AND ANCHOR THEM TO THE ABUTMENT USING SLOTTED HOLES IN THE BOTTOM FLANGE. DO NOT FULLY TIGHTEN THE ANCHOR NUTS AT THIS TIME.
8. POUR THE BRIDGE DECK EXCLUDING THE ABUTMENT BACKWALL/DIAPHRAGM AND THE LAST PORTION OF THE BRIDGE DECK EQUAL TO THE BACKWALL/DIAPHRAGM WIDTH.
9. TIGHTEN THE ANCHOR NUTS AND POUR THE ABUTMENT BACKWALL/DIAPHRAGM FULL HEIGHT AND THE REMAINDER OF THE DECK SLAB. THE WING WALLS MAY ALSO BE POURED CONCURRENTLY.
10. PLACE THE DRAIN SYSTEM AND BACKFILL IN 6" LIFTS UNTILL THE DESIRED SUBGRADE ELEVATION IS REACHED.
11. POUR THE RELEIF SLAB STARTING AT THE END AWAY FROM THE ABUTMENT AND PROGRESSING TOWARD THE BACKWALL.

STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS
N. J.			

STRUCTURE NO.

STRUCTURE NAME

CONTROL SECTION		JOB NO.	
DES. BY		CHK. BY	
DWN. BY			
EST. BY		CHK. BY	
SPECS. BY			

IN CHARGE OF

BDC04MB-01

GENERAL NOTES

1. DIAMETER OF AUGERED HOLE SHALL BE TWICE THE SIZE OF THE PILE.
2. CUSHION SAND SHALL BE DESIGNATION I-8 SAND.
3. COST OF PREBORING, USE OF CASING IF REQUIRED TO SHORE UP HOLES AND PROVISION OF CUSHION SAND SHALL BE INCLUDED IN THE UNIT PRICE OF THE PILE ITEM.

NOTE TO DESIGNER:

DETAILING INCLUDED WITHIN THIS DRAWING MAY BE UTILIZED IN PREPARING CONTRACT PLANS. HOWEVER, IN CONFORMANCE WITH THE PROVISIONS OF SECTION 15 OF THIS MANUAL, ALTERNATIVE DETAILING MAY BE PROVIDED.

STANDARD DRAWING PLATE 2.5-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURAL ENGINEERING

INTEGRAL ABUTMENTS FOR
STEEL SUPERSTRUCTURE - 2 OF 2

ROUTE : SECTION :

MUNICIPALITY COUNTY

SCALE : NONE

BRIDGE SHEET NO. ____ OF ____