

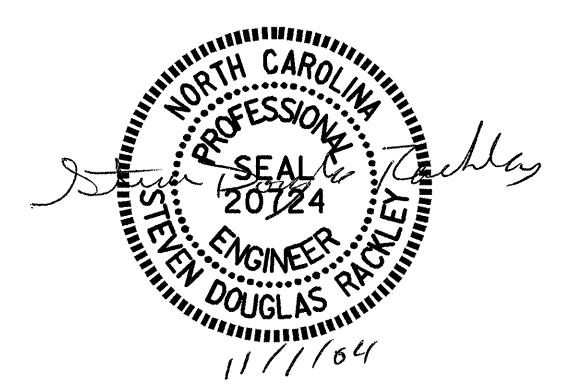
FOUNDATION LAYOUT

DIMENSIONS LOCATING DRILLED PIERS ARE SHOWN TO CENTERLINE OF DRILLED PIERS.

NOTES

- THE DRILLED PIERS AT END BENT No.1 AND END BENT No.2 HAVE BEEN DESIGNED FOR BOTH SKIN FRICTION AND TIP BEARING. THE REQUIRED TIP BEARING CAPACITY IS 20 TONS/FT².
- THE REQUIRED TIP BEARING CAPACITY AT END BENT No.1 AND END BENT No.2 SHALL BE VERIFIED.
- DRILLED PIERS FOR END BENT No.1 AND END BENT No.2 HAVE BEEN DESIGNED FOR AN APPLIED LOAD OF 292.2 TONS EACH AT THE TOP OF THE COLUMN.
- PERMANENT STEEL CASING MAY BE REQUIRED FOR DRILLED PIERS AT END BENT No.1 AND END BENT No.2. IF REQUIRED, THE CASING SHALL NOT EXTEND BELOW ELEVATION 735.0 WITHOUT THE ENGINEER'S PERMISSION. THE NEED FOR PERMANENT CASING WILL BE DETERMINED BY THE ENGINEER.
- FOR PERMANENT STEEL CASING, SEE SPECIAL PROVISION FOR DRILLED PIERS.
- DRILLED PIERS AT END BENT No.1 SHALL EXTEND TO AN ELEVATION NO HIGHER THAN 718.0 FOR PIERS 1 AND 2 AND 708.0 FOR PIERS 3 AND 4 AND SATISFY THE REQUIRED TIP BEARING CAPACITY.
- DRILLED PIERS AT END BENT No.2 SHALL EXTEND TO AN ELEVATION NO HIGHER THAN 708.0 AND SATISFY THE REQUIRED TIP BEARING CAPACITY.
- FOR DRILLED PIERS, SEE SPECIAL PROVISIONS.
- SID INSPECTIONS ARE REQUIRED TO DETERMINE THE BOTTOM CLEANLINESS OF THE DRILLED PIERS AT END BENT No.1 AND END BENT No.2.
- CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR THE DRILLED PIERS AT END BENT No.1 AND END BENT No.2. SEE SPECIAL PROVISION FOR CROSSHOLE SONIC LOGGING.
- SPT TESTING IS REQUIRED TO DETERMINE THE TIP BEARING CAPACITY OF THE DRILLED PIERS AT END BENT No.1 AND END BENT No.2. SEE DRILLED PIERS SPECIAL PROVISION.
- WAITING PERIOD FOR APPROACH SLAB CONSTRUCTION SHALL BE ONE MONTH AFTER COMPLETION OF THE EMBANKMENT AT EACH END BENT.

- PILES FOR WING WALLS AT END BENT No.1 AND END BENT No.2 SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 50 TONS EACH.
- WHEN DRIVING PILES, THE MAXIMUM BLOW COUNT SHALL NOT BE EXCEEDED.
- THE OUTSIDE DIAMETER OF THE PIER MAY NOT EXCEED 54 INCHES AT ANY POINT ALONG THE PIER. THE PORTION OF THE PIER EXTENDING INTO THE CAP MUST HAVE AN OUTSIDE DIAMETER OF 48 INCHES.
- THE DRILLED PIERS SHALL BE CONSTRUCTED PRIOR TO BEGINNING ANY PERMANENT ANCHOR TIEBACK RETAINING WALL CONSTRUCTION.
- THE CONTRACTOR SHALL OBSERVE A ONE MONTH WAITING PERIOD BEGINNING AFTER THE EMBANKMENT IS PLACED TO THE BOTTOM OF CAP ELEVATION PRIOR TO PLACING THE APPROACH FILL. THE CONTRACTOR MAY BEGIN CONSTRUCTION OF THE END BENT AFTER THE EMBANKMENT HAS BEEN PLACED TO THE BOTTOM OF CAP ELEVATION.
- GALVANIZED REINFORCING STRIPS SHALL BE ATTACHED TO THE END BENT CAPS AND DESIGNED PER "GALVANIZED REINFORCING STRIPS" SPECIAL PROVISION.
- THE LOCATION OF THE CONSTRUCTION JOINT IN THE DRILLED PIERS IS BASED ON AN APPROXIMATE GROUND LINE ELEVATION. IF THE CONSTRUCTION JOINT IS ABOVE THE ACTUAL GROUNDLINE ELEVATION, THE CONTRACTOR SHALL PLACE THE CONSTRUCTION JOINT 1.0 BELOW THE GROUND LINE.
- THE CONTRACTOR'S ATTENTION IS DRAWN TO THE FACT THAT THE STEEL PILES IN THE WINGS SHALL BE DRIVEN VERTICALLY TO AVOID CONFLICT WITH THE GALVANIZED TIEBACK STRAPS.
- INSTALL WING WALL PILES PRIOR TO BEGINNING ANY PERMANENT ANCHOR TIEBACK RETAINING WALL CONSTRUCTION.



PROJECT NO. R-2911D
ROWAN COUNTY
 STATION: 231+17.87 -L-
14+25.15 -Y8-
 SHEET 2 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 GENERAL DRAWING
 FOR BRIDGE OVER NORFOLK
 SOUTHERN RAILROAD ON US 70
 BETWEEN SR 1739 AND NC 801
 (RIGHT LANE)

DRAWN BY : M.K. BEARD DATE : 08/10/04
 CHECKED BY : J.P. ADAMS DATE : 8/31/04

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S-29	
1			3			TOTAL SHEETS	
2			4			120	