



FOUNDATION LAYOUT

(DIMENSIONS LOCATING PILES & DRILLED PIERS ARE TO THE CENTERLINE OF THE PILE OR DRILLED PIER AT THE BOTTOM OF THE CAP)

NOTES : (CONTINUED FROM SHEET 1 OF 3)

THE DRILLED PIERS AT BENT No. 1 AND BENT No. 2 HAVE BEEN DESIGNED FOR BOTH SKIN FRICTION AND TIP BEARING. THE REQUIRED TIP BEARING CAPACITY IS 30 TSF.

THE DRILLED PIERS AT END BENT No. 2 HAVE BEEN DESIGNED FOR BOTH SKIN FRICTION AND TIP BEARING. THE REQUIRED TIP BEARING CAPACITY IS 30 TSF.

THE REQUIRED TIP BEARING CAPACITY AT BENT No. 1 AND BENT No. 2 SHALL BE VERIFIED.

THE REQUIRED TIP BEARING CAPACITY AT END BENT No. 2 SHALL BE VERIFIED.

DRILLED PIERS FOR BENT No. 1 AND BENT No. 2 HAVE BEEN DESIGNED FOR AN APPLIED LOAD OF 191 TONS EACH AT THE TOP OF THE COLUMN.

DRILLED PIERS FOR END BENT No. 2 HAVE BEEN DESIGNED FOR AN APPLIED LOAD OF 86 TONS EACH AT THE TOP OF THE COLUMN.

PERMANENT STEEL CASING IS NOT REQUIRED FOR DRILLED PIERS AT BENT No. 1.

PERMANENT STEEL CASING MAY BE REQUIRED FOR DRILLED PIERS AT BENT No. 2. IF REQUIRED, THE CASING SHALL NOT EXTEND BELOW ELEVATION 2626' WITHOUT THE ENGINEER'S PERMISSION. THE NEED FOR PERMANENT STEEL CASING WILL BE DETERMINED BY THE ENGINEER.

PERMANENT STEEL CASING IS NOT REQUIRED FOR DRILLED PIERS AT END BENT No. 2.

FOR PERMANENT STEEL CASING, SEE SPECIAL PROVISION FOR DRILLED PIERS.

DRILLED PIERS AT BENT No. 1 SHALL EXTEND TO AN ELEVATION NO HIGHER THAN 2619' AND SATISFY THE REQUIRED TIP BEARING CAPACITY.

DRILLED PIERS AT BENT No. 2 SHALL EXTEND TO AN ELEVATION NO HIGHER THAN 2618' (LEFT) AND 2614' (RIGHT) AND SATISFY THE REQUIRED TIP BEARING CAPACITY.

DRILLED PIERS AT END BENT No. 2 SHALL EXTEND TO AN ELEVATION NO HIGHER THAN 2617' AND SATISFY THE REQUIRED TIP BEARING CAPACITY.

THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLES OF EACH SIZE BAR USED. THE BARS FROM WHICH THE SAMPLES ARE TAKEN MUST THEN BE SPLICED WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLE, PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

THE SCOUR CRITICAL ELEVATION FOR BENT No. 1 AND BENT No. 2 IS ELEVATION 2625'. THE SCOUR CRITICAL ELEVATIONS ARE FOR USE BY MAINTENANCE FORCES TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

THE SCOUR CRITICAL ELEVATION FOR END BENT No. 2 IS ELEVATION 2626'. THE SCOUR CRITICAL ELEVATIONS ARE FOR USE BY MAINTENANCE FORCES TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

SLURRY CONSTRUCTION SHALL NOT BE USED FOR THIS PROJECT.

SPT TESTING IS NOT REQUIRED TO DETERMINE THE TIP BEARING CAPACITY OF THE DRILLED PIERS AT BENT No. 1, BENT No. 2 OR END BENT No. 2.

SID INSPECTIONS MAY BE REQUIRED TO DETERMINE THE BOTTOM CLEANLINESS OF THE DRILLED PIERS AT BENT No. 1, BENT No. 2 AND END BENT No. 2. THE ENGINEER WILL DETERMINE THE NEED FOR SID INSPECTION. SEE DRILLED PIER SPECIAL PROVISION.

CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR THE DRILLED PIERS AT BENT No. 1, BENT No. 2 AND END BENT No. 2. SEE SPECIAL PROVISION FOR CROSSHOLE SONIC LOGGING.

FOR DRILLED PIERS, SEE SPECIAL PROVISIONS.

PILES FOR END BENT No. 1 SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 50 TONS EACH.

STEEL PILE POINTS ARE REQUIRED FOR PILES AT END BENT No. 1. SEE SPECIAL PROVISION FOR STEEL PILE POINTS.

WHEN DRIVING PILES, THE MAXIMUM BLOW COUNT SHALL NOT BE EXCEEDED.

THE CONTRACTOR MAY USE ADHESIVELY ANCHORED ANCHOR BOLTS/DOWELS IN PLACE OF ANCHOR BOLTS/DOWELS. SEE SPECIAL PROVISION FOR ADHESIVELY ANCHORED ANCHOR BOLTS OR DOWELS.

INASMUCH AS THE PAINT SYSTEM ON THE EXISTING STRUCTURAL STEEL CONTAINS LEAD, THE CONTRACTOR'S ATTENTION IS DIRECTED TO ARTICLE 107-1 OF THE STANDARD SPECIFICATIONS. ANY COSTS RESULTING FROM COMPLIANCE WITH APPLICABLE STATE OR FEDERAL REGULATIONS PERTAINING TO HANDLING OF MATERIALS CONTAINING LEAD BASED PAINT SHALL BE INCLUDED IN THE BID PRICE FOR "REMOVAL OF EXISTING STRUCTURE AT STATION 11+06.50 -L-".

FOR TEMPORARY WORK BRIDGE, SEE SPECIAL PROVISION FOR CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY ACCESS AT STATION 11+06.50 -L-.

NEEDLE BEAMS WILL NOT BE ALLOWED UNLESS OTHERWISE CALLED FOR ON THE PLANS OR APPROVED BY THE ENGINEER.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR CRANE SAFTY, SEE SPECIAL PROVISIONS.

THE CONTRACTOR MAY CHOOSE TO UTILIZE THE STANDARD OVERHANG FALSEWORK BRACING SYSTEM. SEE "STANDARD OVERHANG FALSEWORK" SHEETS.



PROJECT NO. B-3922
WATAUGA COUNTY
 STATION: 11+06.50 -L-

SHEET 2 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING
 BRIDGE ON
 RELOCATED SR 1149
 OVER COVE CREEK BETWEEN
 US 321 AND DEAD END

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS 41
2			4			

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 CHECKED BY : A.R. CHESSON DATE : 2/05