

TOTAL BILL OF MATERIAL																					
	4'-0" Ø DRILLED PIERS IN SOIL	4'-0" Ø DRILLED PIERS NOT IN SOIL	PERMANENT STEEL CASING FOR 4'-0" Ø DRILLED PIER	SID INSPECTION	SPT TESTING	CROSSHOLE SONIC LOGGING	CSL TUBES	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOOR	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	SPIRAL COLUMN REINFORCING STEEL	APPROX. LBS. STRUCTURAL STEEL	HP 12 X 53 STEEL PILES	CONCRETE BARRIER RAIL	ELASTOMERIC BEARINGS	EVAZOTE JOINT SEALS	GALVANIZED REINFORCING STRAPS	*#57 STONE BACKFILL FOR GALVANIZED REINFORCING STRAPS	
	LIN.FT.	LIN.FT.	LIN.FT.	EA.	EA.	EA.	LIN.FT.	SQ.FT.	SQ.FT.	CU.YDS.	LUMP SUM	LBS.	LBS.	LBS.	No.	LIN.FT.	LIN.FT.	LUMP SUM	LUMP SUM	LIN.FT.	CU.YDS.
SUPERSTRUCTURE								6,512	8,279		LUMP SUM			435,670			331.81	LUMP SUM	LUMP SUM		
END BENT No. 1	119.3	30.0	61.3	4	4	2	638.0			135.8		37,341	4,413		2	80				1,200	625
END BENT No. 2	112.3	30.0	34.1	4	4	2	610.0			142.6		40,775	4,659		2	80				1,200	625
TOTAL	231.6	60.0	95.4	8	8	4	1,248.0	6,512	8,279	278.4	LUMP SUM	78,116	9,072	435,670	4	160	331.81	LUMP SUM	LUMP SUM	2,400	1,250

**NOTES**

ASSUMED LIVE LOAD = HS 20 OR ALTERNATE LOADING.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.

FOR EROSION CONTROL MEASURES SEE EROSION CONTROL PLANS.

THIS BRIDGE HAS BEEN DESIGNED BY THE STRENGTH DESIGN METHOD AS SPECIFIED IN AASHTO STANDARD SPECIFICATIONS.

ALL STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE 50W AND PAINTED IN ACCORDANCE WITH SYSTEM 4 OF ARTICLE 442-7 OF THE STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS.

THE CLASS AA CONCRETE IN THE BRIDGE DECK SHALL CONTAIN FLY ASH OR GROUND GRANULATED BLAST FURNACE SLAG AT THE SUBSTITUTION RATE SPECIFIED IN ARTICLE 1024-1 AND IN ACCORDANCE WITH ARTICLES 1024-5 AND 1024-6 OF THE STANDARD SPECIFICATIONS. NO PAYMENT WILL BE MADE FOR THIS SUBSTITUTION AS IT IS CONSIDERED INCIDENTAL TO THE COST OF THE REINFORCED CONCRETE DECK SLAB.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO STANDARD SPECIFICATIONS FOR SEISMIC DESIGN OF HIGHWAY BRIDGES FOR SEISMIC PERFORMANCE CATEGORY A.

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 MINIMIZING RAILROAD FLAGGING SERVICE, SEE SPECIAL PROVISIONS.

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.

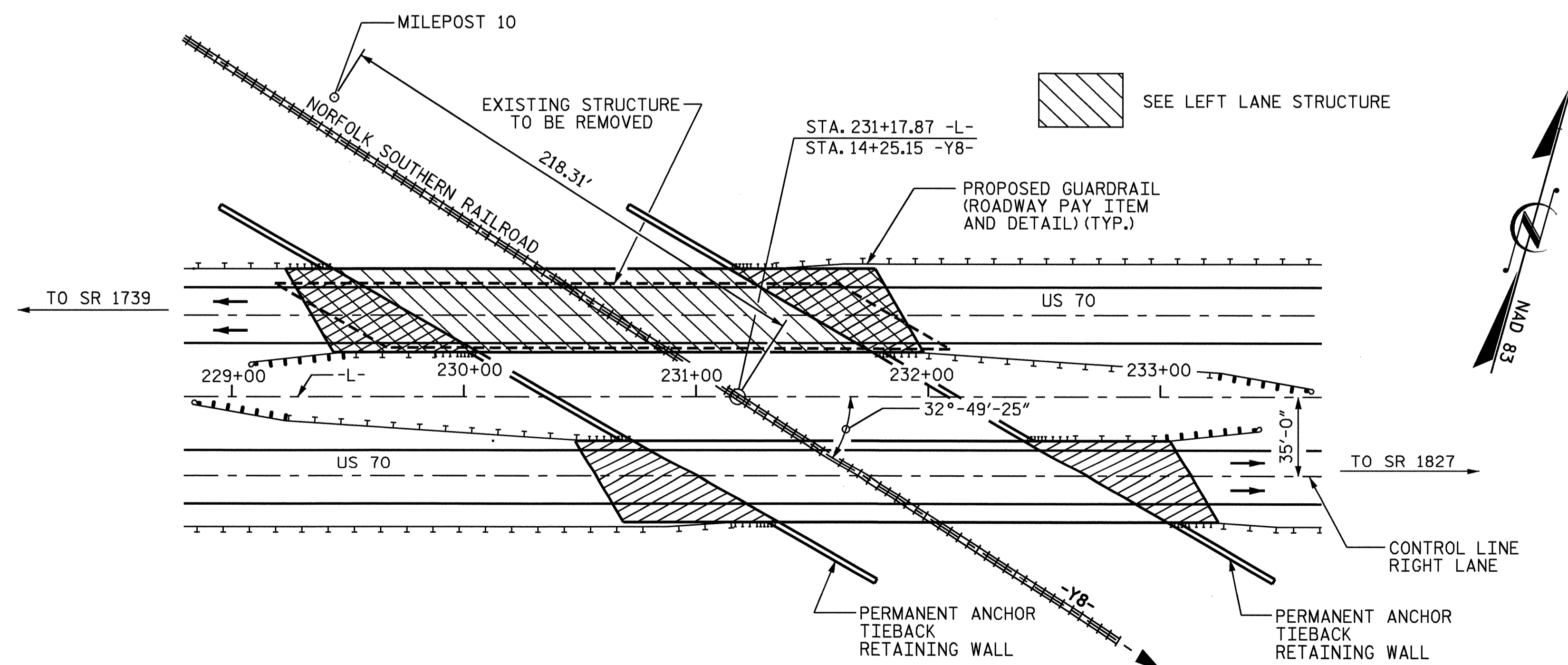
FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL CAST THE CONNECTION HARDWARE PROVIDED BY THE MSE WALL CONTRACTOR INTO THE BACKWALL OF BOTH END BENTS AS SHOWN ON THE END BENT PLANS.

FOR FALSEWORK AND FRAMEWORK OVER OR ADJACENT TO TRAFFIC, SEE SPECIAL PROVISIONS.

REMOVABLE FORMS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.

BENCH MARK IS USGS MONUMENT F-186, A STANDARD BRASS DISK SET VERTICALLY IN SOUTHEAST FACE OF THE TWO CONCRETE PILLERS WHICH ARE NORTHEAST OF THE TRACK, 714.23' RT STA. 240+12.25 -BL-, ELEV. 721.05



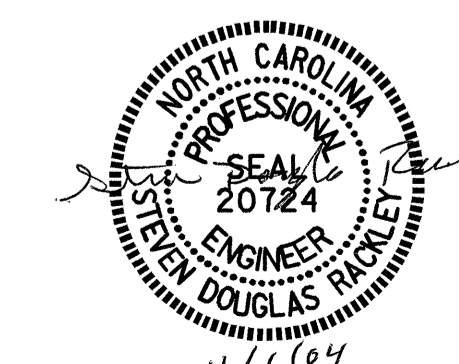
FOR UTILITY INFORMATION, SEE UTILITY PLANS AND SPECIAL PROVISIONS.

**LOCATION SKETCH**

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

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

SHEET 3 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)

REVISIONS				SHEET NO.
NO.	BY:	DATE:	NO.	DATE:
1			3	
2			4	

S-30  
TOTAL SHEETS 120