

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE	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	
	LUMP SUM	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		134.0	30.0	65.91	4	4	2	696.0			131.7		38,464	4,730		2	80				1,200	625
END BENT No. 2		161.0	30.0	59.0	4	4	2	804.0			133.2		41,466	5,394		2	80				1,200	625
TOTAL	LUMP SUM	295.0	60.0	124.91	8	8	4	1,500.0	6,512	8,279	264.9	LUMP SUM	79,930	10,124	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.

AFTER SERVING AS A TEMPORARY STRUCTURE THE EXISTING STRUCTURE CONSISTING OF 5 SPANS @ 47'-6" WITH A CLEAR ROADWAY OF 28.2' AND A REINFORCED CONCRETE DECK ON REINFORCED CONCRETE GIRDERS WITH END BENTS AND INTERIOR BENTS ON REINFORCED CONCRETE CAPS AND STEEL PILES SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY NOT POSTED FOR LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE DETERIORATE DURING CONSTRUCTION OF THE PROPOSED STRUCTURE, A LOAD LIMIT MAY BE POSTED AND MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

THE SUBSTRUCTURE OF THE EXISTING BRIDGE INDICATED ON THE PLANS IS FROM THE BEST INFORMATION AVAILABLE. SINCE THIS INFORMATION IS SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR, THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THE EXISTING BRIDGE SUBSTRUCTURE SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

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.

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

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.

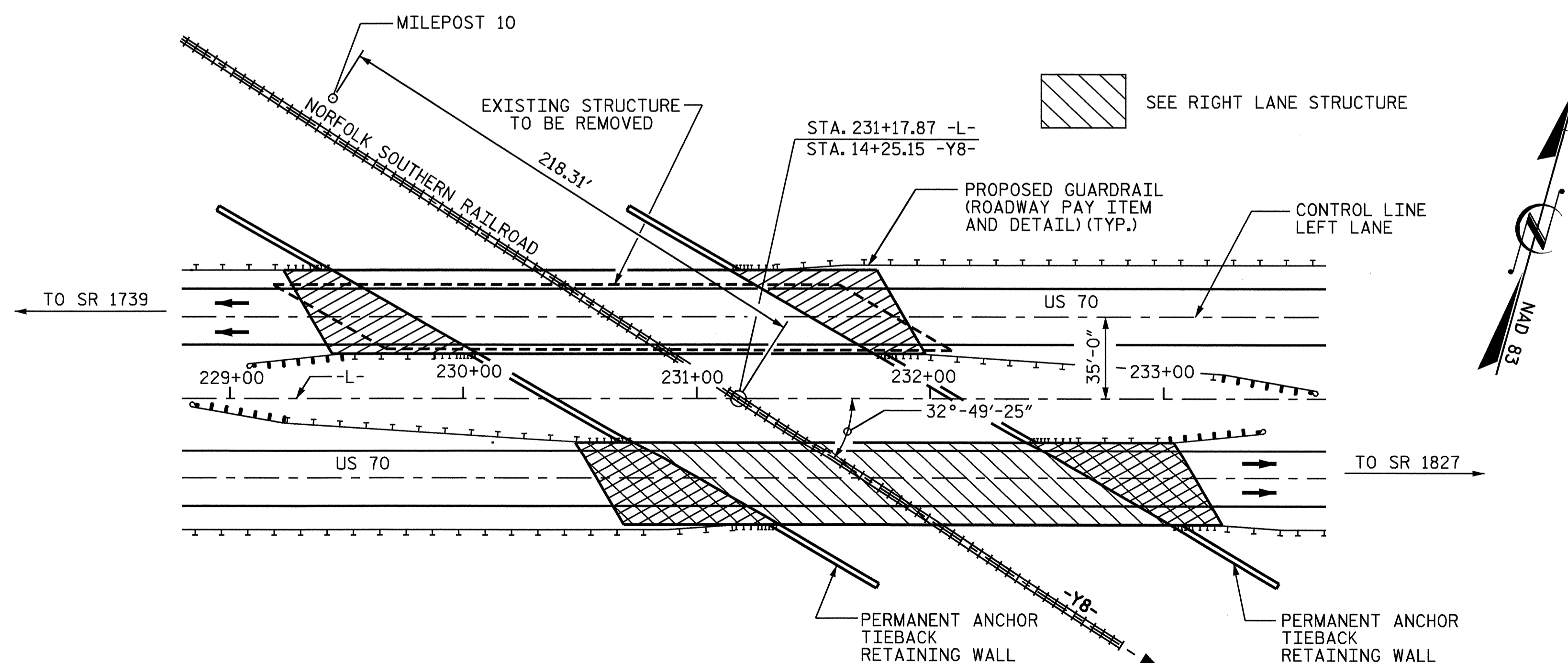
FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

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 FORMWORK OVER OR ADJACENT TO TRAFFIC, SEE SPECIAL PROVISIONS.

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: 8/30/04

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
 (LEFT LANE)

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

TOTAL SHEETS: 120

