

**GENERAL NOTES:**

ASSUMED LIVE LOAD = MS18 OR ALTERNATE LOADING.

ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.

ALL ELEVATIONS ARE SHOWN IN METERS.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET S-NSM.

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

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

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 EXISTING STRUCTURE CONSISTING OF FOUR SPANS (1 @ 36'-6", 2 @ 68'-6", 1 @ 40'-0") OF PRESTRESSED CONCRETE GIRDERS, 24'-0" CLEAR ROADWAY WIDTH WITH CONCRETE DECK ON CONCRETE END BENTS ON PILES AND CONCRETE POST AND BEAM BENTS ON SPREAD FOOTINGS AND LOCATED ON ALIGNMENT SHALL BE REMOVED.

THE EXISTING FOUNDATIONS AT BENT NO. 2 SHALL BE REMOVED PRIOR TO CONSTRUCTION.

ALL STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE 345W AND PAINTED IN ACCORDANCE WITH SYSTEM 4 OF ARTICLE 442-7 OF THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE NOTED ON PLANS.

FOR METRIC STRUCTURAL STEEL, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

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

FOR MAINTENANCE AND PROTECTION OF TRAFFIC BENEATH THE PROPOSED STRUCTURE, SEE SPECIAL PROVISIONS.

THE EXISTING FOUNDATIONS AT END BENT NO. 2 SHALL BE REMOVED PRIOR TO CONSTRUCTION.

WORK SHALL NOT BE STARTED ON THIS BRIDGE UNTIL THE ROADWAY SECTION HAS BEEN EXCAVATED.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

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

ALL FALSEWORK AND FORMS FOR THE CAST-IN-PLACE DECK SLAB CONTINUOUS UNIT SHALL REMAIN IN PLACE UNTIL THE ENTIRE UNIT IS CAST AND CURED.

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

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 THE 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.

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

PILES FOR END BENT NO. 1 SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 530 KN EACH.

THE REQUIRED BEARING CAPACITY OF THE SPREAD FOOTING AT END BENT NO. 2 IS 380 kPa. THE REQUIRED BEARING CAPACITY SHALL BE VERIFIED.

THE REQUIRED BEARING CAPACITY OF THE SPREAD FOOTING AT BENT NO. 1 IS 290 kPa. THE REQUIRED BEARING CAPACITY SHALL BE VERIFIED.

THE REQUIRED BEARING CAPACITY OF THE SPREAD FOOTING AT BENT NO. 2 IS 290 kPa (LEFT) AND 380 kPa (RIGHT). THE REQUIRED BEARING CAPACITY SHALL BE VERIFIED.

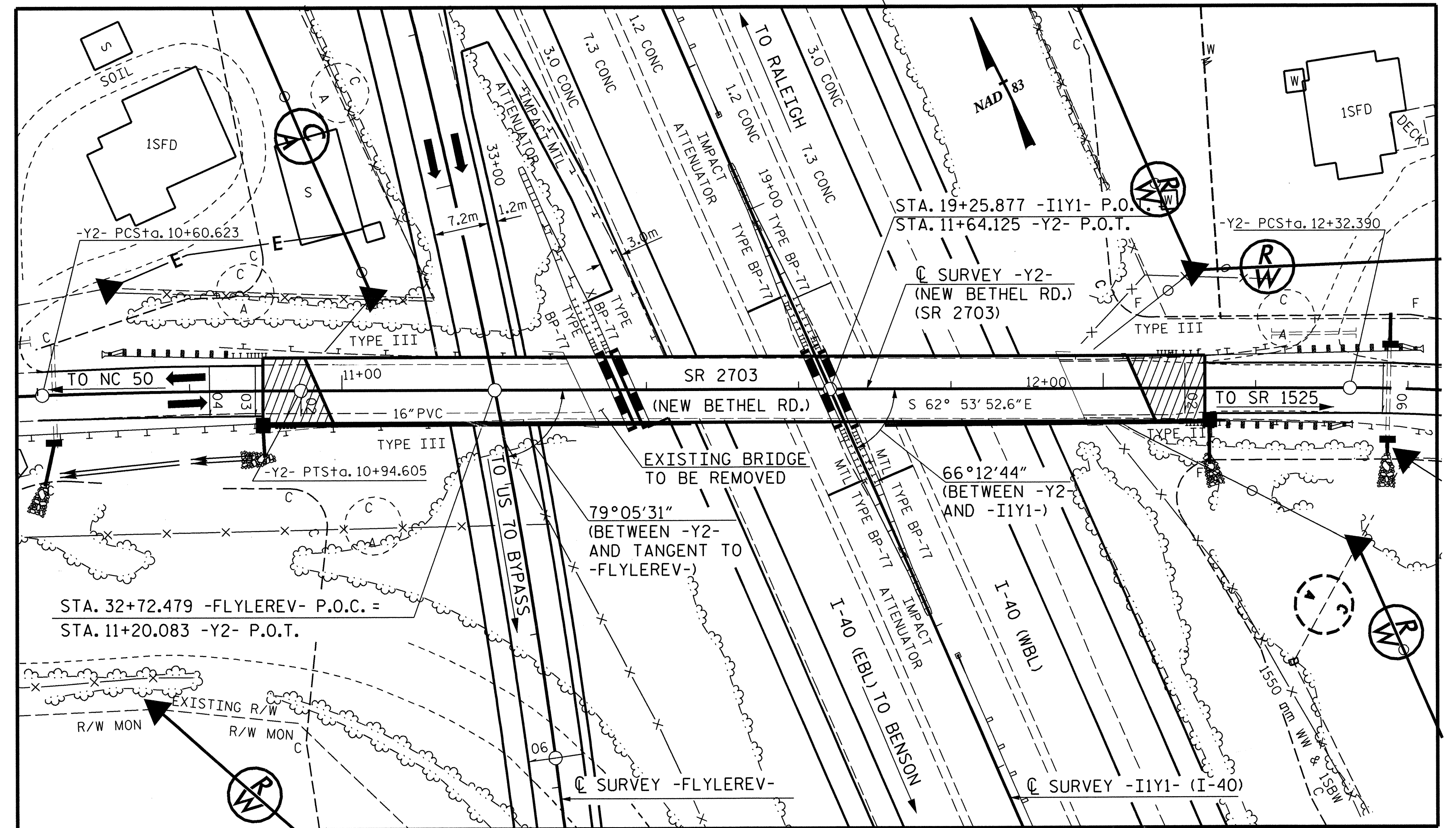
FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR LIMITS OF TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE TRAFFIC CONTROL PLANS. FOR PAY ITEM FOR TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE ROADWAY PLANS.

WORK SHALL NOT BE STARTED ON THIS BRIDGE UNTIL THE ROADWAY SECTION HAS BEEN EXCAVATED.

TOTAL BILL OF MATERIAL															
LOCATION	REMOVAL OF EXISTING STRUCTURE	FOUNDATION EXCAVATION	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOORS	CLASS "A" CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	SPIRAL COLUMN REINFORCING STEEL	STRUCTURAL STEEL	HP 310x79 STEEL PILES	CONCRETE BARRIER RAIL	100 mm SLOPE PROTECTION	POT BEARINGS	EVAZOTE JOINT SEALS	STRUCTURE DRAINAGE SYSTEM
	LUMP SUM	LUMP SUM	SQ. METER	SQ. METER	CU. METER	LUMP SUM	KILOGRAMS	KILOGRAMS	APPROX. KG.	NO.	METER	SQ. METER	LUMP SUM	LUMP SUM	LUMP SUM
SUPERSTRUCTURE			1,036.6	976.9					138,200		216,184				
END BENT 1					24.8	LUMP SUM	2,031			11	115	190			
BENT 1		LUMP SUM			57.5		4,426	589							
BENT 2		LUMP SUM			55.0		4,197	470							
END BENT 2		LUMP SUM			81.6	LUMP SUM	3,926				155				
TOTAL	LUMP SUM	LUMP SUM	1,036.6	976.9	218.9	LUMP SUM	14,580	1,059	138,200	11	115	345	LUMP SUM	LUMP SUM	LUMP SUM

BM No. BY2-201 - A 760 mm REBAR WITH NCDOT TRAVERSE CAP 4.790 m RT. OF -Y2- STA. 11+29.454 EL. 94.595



**LOCATION SKETCH**

NOTE: NO KNOWN UTILITY CONFLICTS.

PROJECT NO. R-2552AA

WAKE / JOHNSTON COUNTY

STATION: 19+25.877 -I1Y1- P.O.T. = 11+64.125 -Y2- P.O.T.

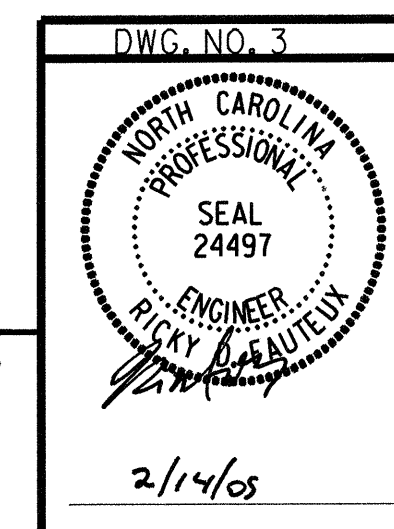
SHEET 3 OF 3

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

GENERAL DRAWING FOR  
BRIDGE ON NEW BETHEL ROAD (SR 2703)  
OVER I-40 BETWEEN  
NC 50 AND SR 1525

JANUARY 2005

NO.		BY:		DATE:		NO.		BY:		DATE:		SHEET	
1						3						5-3	TOTAL SHEETS
2						4						429	



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DRAWN BY : F.D. WEEDEN DATE : 01/05  
CHECKED BY : R.D. FAUTEUX DATE : 01/05