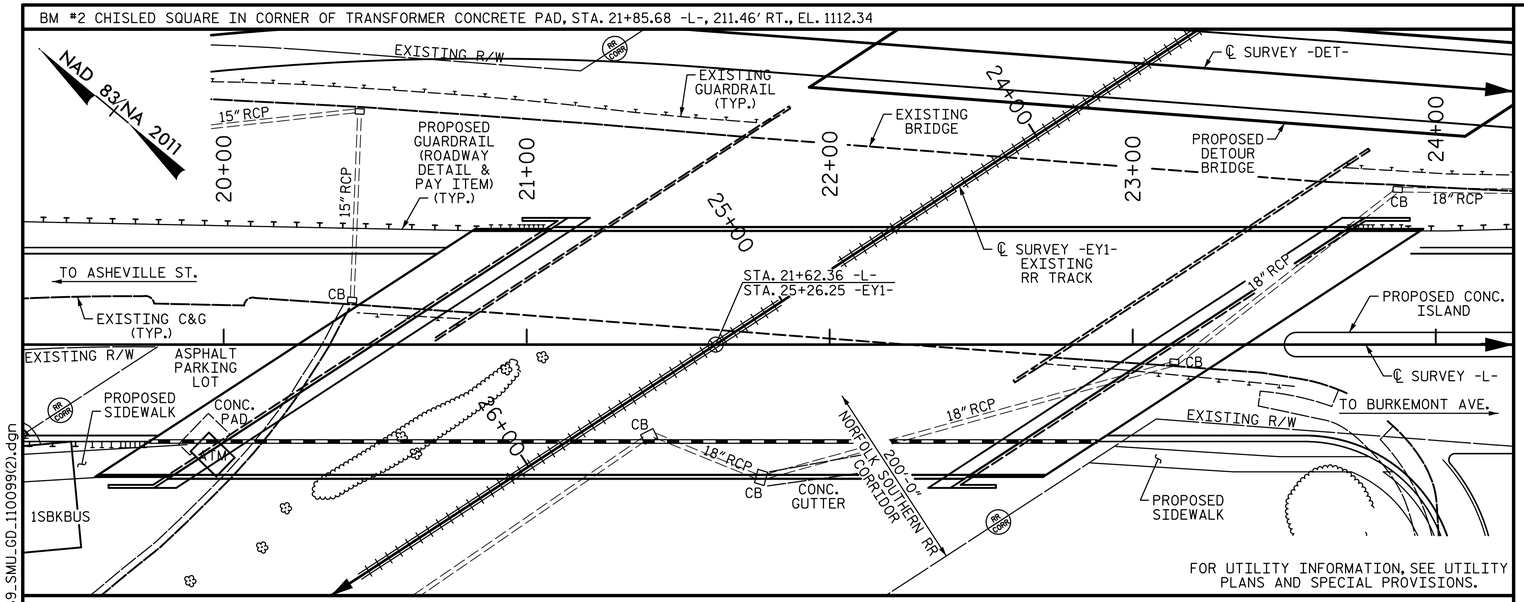

LOCATION SKETCH

TOTAL BILL OF MATERIAL

	CONSTRUCTION, MAINTANANCE & REMOVAL OF TEMP. STRUCTURE	REMOVAL OF EXISTING STRUCTURE	ASBESTOS ASSESSMENT	4'-0" DIA. DRILLED PIERS IN SOIL	4'-0" DIA. DRILLED PIERS NOT IN SOIL	CSL TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	REINF. CONC. DECK SLAB	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINF. STEEL	SPIRAL COLUMN REINF. STEEL
	LS	LS	LS	LF	LF	EA	LS	SF	SF	CY	LS	LB	LB
SUPERSTRUCTURE								21,981	20,865		LS		
END BENT 1							LS			185.8		21,505	
BENT 1				328.4	95					183.1		51,631	13,759
BENT 2				331.4	92					202.6		54,451	15,190
END BENT 2							LS			180.8		22,054	
TOTAL	LS	LS	LS	659.8	187	4	LS	21,981	20,865	752.3	LS	149,641	28,949

TOTAL BILL OF MATERIAL

	MODIFIED 63" PRESTRESSED CONCRETE GIRDERS		PILE DRIVING EQUIP. SETUP HP 12 X 53 STEEL PILES	HP 12x53 STEEL PILES		TWO BAR METAL RAIL	VERTICAL CONC. BARRIER RAIL	1'-4"X 2'-6" CONCRETE PARAPET	1'-4"X 3'-3" CONCRETE PARAPET	90" CHAIN LINK FENCE	4" SLOPE PROTECTION	ELASTOMERIC BEARINGS	STRIP SEAL EXP. JOINT	ARCHITECTURAL CONCRETE SURFACE TREATMENT	APPLICATION OF BRIDGE COATING
	NO.	LF	EA	NO.	LF	LF	LF	LF	LF	LF	SY	LS	LS	SF	SF
SUPERSTRUCTURE	30	2544				556	287.5	312.5	262.5	524.92		LS	LS	3450	3450
END BENT 1			18	18	990						955				
BENT 1															
BENT 2															
END BENT 2			18	18	945						1075				
TOTAL	30	2544	36	36	1935	556	287.5	312.5	262.5	524.92	2030	LS	LS	3450	3450

SAMPLE BAR REPLACEMENT

SIZE	LENGTH
#3	6'-2"
#4	7'-4"
#5	8'-6"
#6	9'-8"
#7	10'-10"
#8	12'-0"
#9	13'-2"
#10	14'-6"
#11	15'-10"

NOTE:
SAMPLE BAR REPLACEMENT LENGTHS BASED ON 30"(SAMPLE LENGTH) PLUS TWO SPLICE LENGTHS AND fy = 60 ksi.

NOTES:

ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.

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

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

ALL PAVEMENT MARKING WILL BE IN ACCORDANCE WITH THE PAVEMENT MARKING PLANS.

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

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

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.

THE SUBSTRUCTURE OF THE EXISTING BRIDGE INDICATED ON THE PLANS IS FROM THE BEST INFORMATION AVAILABLE. 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 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 SAMPLE BARS SHOULD COME FROM STEEL ACTUALLY USED IN THE PROJECT AND THE SAMPLE BARS SHOULD BE REPLACED BY SPLICED BARS AS SPECIFIED IN THE SAMPLE BAR REPLACEMENT CHART. PAYMENT FOR THE SAMPLE BARS AND REPLACEMENT REINFORCING STEEL SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

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 21+62.39."

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA ON SHEET S-1 SHALL BE EXCAVATED FOR A DISTANCE OF 42 FT LEFT AND 48 FT RIGHT EACH SIDE OF CENTERLINE ROADWAY AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR UNCLASSIFIED STRUCTURE EXCAVATION. SEE SECTION 412 OF THE STANDARD SPECIFICATIONS.

AFTER SERVING AS A TEMPORARY STRUCTURE, THE EXISTING STRUCTURE CONSISTING OF 2 SPANS AT 32'-6" AND 3 SPANS AT 42'-6" SHALL BE REMOVED. THE SUPERSTRUCTURE HAS A CLEAR ROADWAY WIDTH OF 64'-0" WITH REINFORCED CONCRETE DECK ON I BEAMS. END BENT 1, BENT 2, BENT 3, AND END BENT 2 CONSIST OF REINFORCED CONCRETE CAPS ON H-PILES. BENT 1 AND BENT 4 CONSIST OF REINFORCED CONCRETE CAPS ON H-PILES WITH FULL CONCRETE ENCASEMENT. THE EXISTING BRIDGE IS LOCATED EAST OF THE PROPOSED STRUCTURE. THE EXISTING STRUCTURE IS PRESENTLY NOT POSTED FOR LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE DETERIORATE DURING CONSTRUCTION OF THE PROPOSED BRIDGE, A LOAD LIMIT MAY BE POSTED AND MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

EXISTING PILES AT BENT 4 SHALL BE REMOVED IN ENTIRETY AS DIRECTED BY THE ENGINEER TO AVOID INTERFERENCE WITH PROPOSED DRILLED PIERS AT BENT 2.

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

FOR ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES, SEE SPECIAL PROVISIONS.

THE RAILROAD TRACK TOP OF RAIL ELEVATIONS ON THE PLANS ARE FROM THE BEST INFORMATION AVAILABLE. PRIOR TO BEGINNING BRIDGE CONSTRUCTION, VERIFY THE TOP OF RAIL ELEVATIONS AND REPORT ANY VARIATIONS TO THE ENGINEER. ANY PLAN REVISIONS NECESSARY TO ACHIEVE THE REQUIRED MINIMUM CLEARANCE WILL BE PROVIDED BY THE DEPARTMENT.

WORK SHALL NOT BE STARTED ON THIS BRIDGE (OR SPECIFIC PARTS OF BRIDGE) UNTIL ROADWAY SECTION HAS BEEN EXCAVATED.

THE CONTRACTOR WILL BE REQUIRED TO CONSTRUCT, MAINTAIN AND AFTERWARD REMOVE A TEMPORARY STRUCTURE AT STATION 21+62.39 -L- FOR USE DURING CONSTRUCTION OF THE PROPOSED STRUCTURE. FOR CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY STRUCTURE, SEE SPECIAL PROVISIONS.

FOR ARCHITECTURAL CONCRETE SURFACE TREATMENT SEE SPECIAL PROVISIONS.

FOR APPLICATION OF BRIDGE COATING, SEE SPECIAL PROVISIONS.

PROJECT NO. B-5869
BURKE COUNTY
STATION: 21+62.39 -L-

SHEET 3 OF 4 REPLACES BRIDGE #99

DRAWN BY: S.D. COOPER DATE: 3-2022
CHECKED BY: M. AVERETTE DATE: 3-2022
DESIGN ENGINEER OF RECORD: M. AVERETTE DATE: 3-2022

WGI
5640 Dillard Drive, Suite 200
Cary, NC 27518
LICENSURE NO. C-4434

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 023908 MARK A. AVERETTE
3/23/2023 | 5:11 AM PDT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

MILE POST 80.1
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON US64/US 70 (W. FLEMING DR.) OVER NORFOLK SOUTHERN RR BETWEEN ASHEVILLE ST. AND BURKEMONT AVE.

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-4
1			3			TOTAL SHEETS
2			4			72