TOTAL BILL OF MATERIAL

	PILE EXCAVATION IN SOIL	PILE EXCAVATION NOT IN SOIL	CONCRETE WEARING SURFACE	GROOVING BRIDGE FLOORS	CLASS AA CONCRETE	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	EPOXY COATED REINFORCING STEEL	HP 12 X 53 STEEL PILES		THREE BAR METAL RAIL	CONCRETE BARRIER RAIL	ELASTOMERIC BEARINGS	SELECT MATERIAL CLASS V	3'-0" X 3'-3" PRESTRESSED CONCRETE BOX BEAMS	
	LIN. FT.	LIN. FT.	SQ. FT.	SQ. FT.	CU. YDS.	CU. YDS.	LUMP SUM	LBS.	LBS.	NO.	LIN. FT.	LIN. FT.	LIN. FT.	LUMP SUM	TONS	NO.	LIN. FT.
SUPERSTRUCTURE			3,402	4,378	42.2				1,801			102.69	111.4			13	1,448
END BENT 1	135	27				40.8		5,448		10	185				4.0		
END BENT 2	180	36				40.5		5,456		10	250				3.7		
TOTAL	315	63	3,402	4,378	42.2	81.3	LUMP SUM	10,904	1,801	20	435	102.69	111.4	LUMP SUM	7.7	13	1,448

NOTES

ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.

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

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

THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.

THE ELEVATION AND CLEARANCE SHOWN ON THE PLANS AT THE POINT OF MINIMUM VERTICAL CLEARANCE ARE FROM THE BEST INFORMATION AVAILABLE. PRIOR TO BEGINNING BRIDGE CONSTRUCTION, VERIFY THE ELEVATION ON THE EXISTING GROUND AND CHECK THE CLEARANCE. REPORT ANY VARIATIONS TO THE ENGINEER.

THE INFORMATION OF THE UNDER GROUND 36"DIA. COLONIAL PIPELINE 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 OF THE ACTUAL CONDITION 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 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. PAYMENT FOR THE SAMPLES OF REINFORCING STEEL SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

THE EXISTING PAVEMENT WITHIN THE AREA OF THE END BENT PILES SHALL BE REMOVED AND THE ROADBED SCARIFIED TO A MINIMUM DEPTH OF 2'-0".

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA ON SHEET S-1 IS ROADWAY EXCAVATION. FOR DETAILS AND PAY ITEM, SEE ROADWAY PLANS.

CONTRACTOR SHALL SUBMIT "BOX BEAM ERECTION PLAN" TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. THE ENGINEER SHALL COORDINATE WITH COLONIAL PIPELINE COMPANY (CPC) TO INSURE THAT BOX BEAM ERECTION ACTIVITIES DO NOT DAMAGE THE PIPELINE.

PILE EXCAVATION IS REQUIRED TO INSTALL PILES AT END BENTS 1 AND 2 TO MINIMIZE VIBRATION.

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.

FOR CONTROL OF VIBRATIONS SPECIAL PROVISIONS, SEE GEOTECHNICAL SPECIAL PROVISIONS.

FOR SELECT MATERIAL CLASS V, SEE SPECIAL PROVISIONS.

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

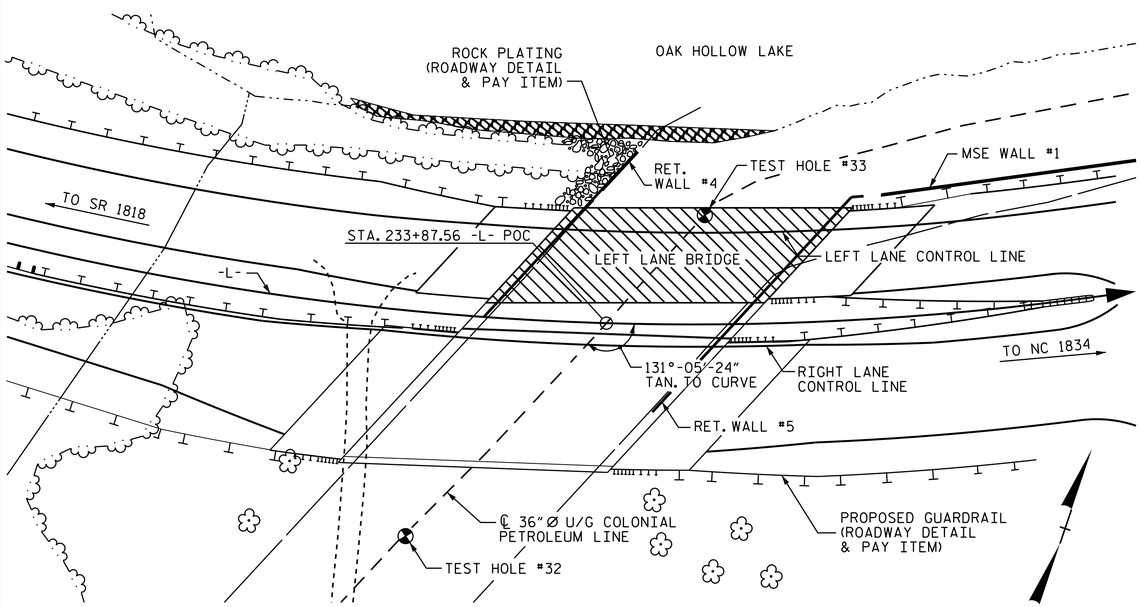
FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR CONCRETE WEARING SURFACE, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

BM #14: NAIL IN ROOT OF 18 INCH ELM, 213' RT. -L- STA. 231+69, EL. 820.88



FOR UTILITY INFORMATION, SEE UTILITY PLANS AND SPECIAL PROVISIONS.

LOCATION SKETCH

TEST HOLE #32 UTILITY INFORMATION

TYPE	= PETROLEUM
SIZE	= 36" Ø
MATERIAL	= STEEL WITH 3" CONC. ENCASEMENT
DEPTH	= 6.7'
TOP ELEVATION	= 808.88'
LOCATION	= STA. 233+13.35 -L- 92.36' RIGHT
DATE OF SURVEY	= MARCH, 2013

TEST HOLE #33 UTILITY INFORMATION

TYPE	= PETROLEUM
SIZE	= 36" Ø
MATERIAL	= STEEL WITH 3" CONC. ENCASEMENT
DEPTH	= 14.9'
TOP ELEVATION	= 796.32'
LOCATION	= STA. 234+29.19 -L- 44.89' LEFT
DATE OF SURVEY	= MARCH, 2013

PROJECT NO. U-3615B
GUILFORD COUNTY
STATION: 233+87.56 -L- POC

SHEET 3 OF 3

NORTH CAROLINA PROFESSIONAL SEAL 16301 ENGINEER TING HSIUNG FANG

DocuSigned by: Ting H. Fang
E72088400977435...
12/3/2014

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON SR 1820 (SKEET CLUB ROAD) OVER 36" Ø PETROLEUM PIPELINE

LEFT LANE

REVISIONS							SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:		S-48
1			3				TOTAL SHEETS
2			4				91

DRAWN BY : T. KIRSCHBAUM DATE : 8/20/13
CHECKED BY : T. H. FANG DATE : 9/10/13
DESIGN ENGINEER OF RECORD: T. H. FANG DATE : 1/6/14

03-DEC-2014 11:41
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STR. #2