

BM#3 - NAIL IN 18" OAK
 111' LT. OF STA. 111+69.27 -L-
 ELEV. = 10.75

NOTES

ASSUMED LIVE LOAD ----- HL-93 OR ALTERNATE LOADING.

DESIGN FILL ----- MAX. 5.67' ----- MIN. 3.92'

THE RESIDENT ENGINEER SHALL CHECK THE LENGTH OF CULVERT BEFORE STAKING IT OUT TO MAKE CERTAIN THAT IT WILL PROPERLY TAKE CARE OF THE FILL.

FOR ALUMINUM BOX CULVERT, SEE SPECIAL PROVISIONS.

ALL MATERIALS SHALL MEET THE REQUIREMENTS OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES DATED JANUARY 2018.

THE DETAILS SHOWN ARE FOR GENERAL LAYOUT ONLY. THE SUPPLIER SHALL PROVIDE DESIGNS AND DETAILS FOR REVIEW AND APPROVAL THAT MEET THE REQUIREMENTS OF AASHTO LFRD BRIDGE DESIGN SPECIFICATIONS, SECTION 12, AND ARE SEALED BY A NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER.

UNLESS OTHERWISE INDICATED, THE SUPPLIER SHALL DESIGN, DETAIL AND FURNISH ALL STRUCTURAL ELEMENTS AND HARDWARE.

THE EXISTING STRUCTURE CONSISTING OF 3 @ 60" CORRUGATED METAL PIPES, 50.4' ALONG C OF PIPE, BURIED 1.0' SHALL BE REMOVED. THE EXISTING STRUCTURE IS PRESENTLY NOT POSTED FOR LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE STRUCTURE 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.

REMOVAL OF THE EXISTING STRUCTURE SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL INTO THE WATER. THE CONTRACTOR SHALL REMOVE THE STRUCTURE AND SUBMIT PLANS FOR DEMOLITION IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS.

THE EXISTING STRUCTURE 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 STRUCTURE SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

EXCAVATE ONE FOOT MINIMUM BELOW CULVERT AND REPLACE THE EXCAVATED MATERIAL WITH FOUNDATION CONDITIONING MATERIAL IN ACCORDANCE WITH SECTION 414 OF THE STANDARD SPECIFICATIONS.

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

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

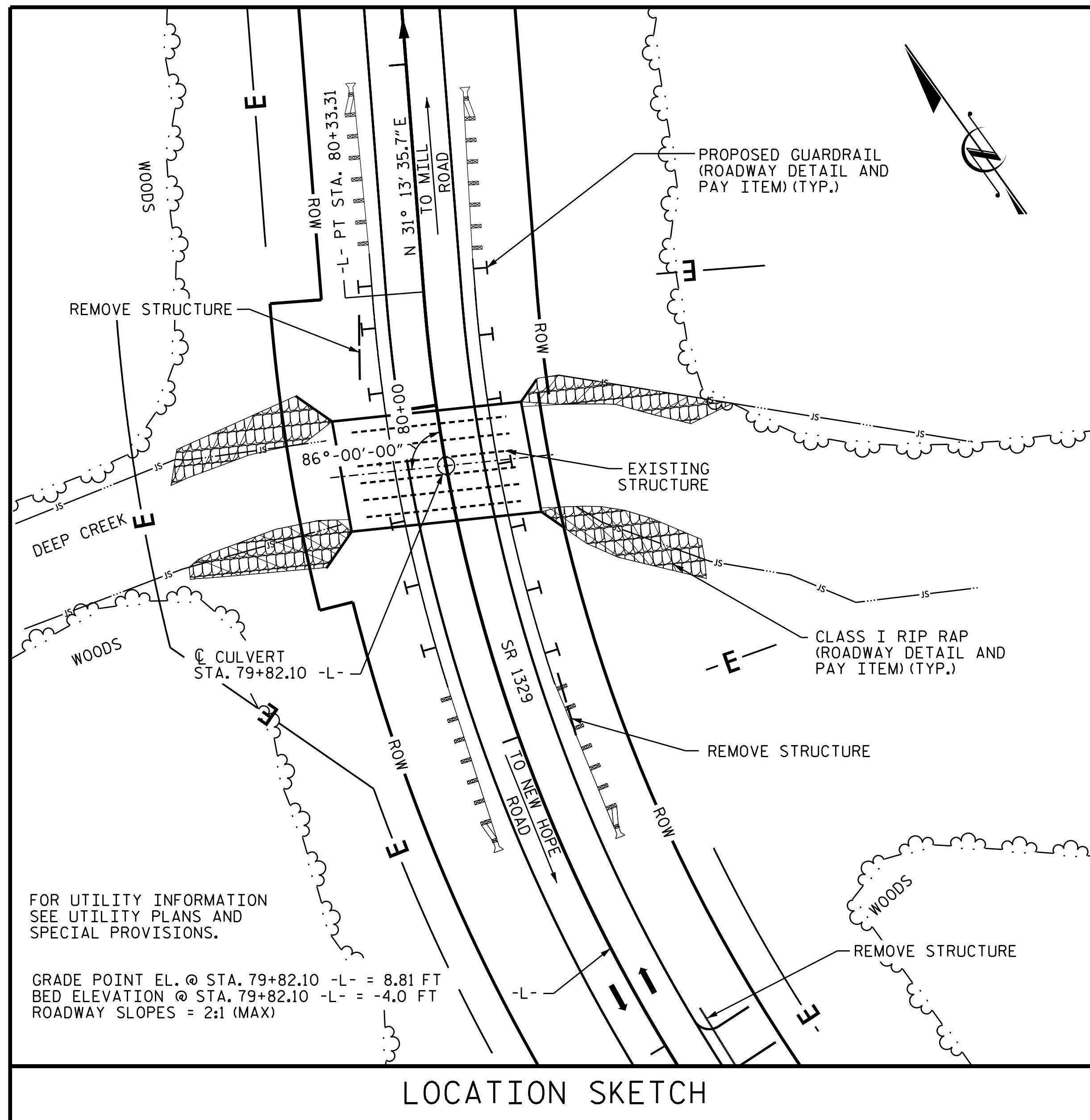
THIS STRUCTURE SHALL BE DESIGNED IN ACCORDANCE WITH THE AASHTO LFRD BRIDGE DESIGN SPECIFICATIONS.

FOR CULVERT DIVERSION DETAILS AND PAY ITEM, SEE EROSION CONTROL PLANS.

NO PRECAST REINFORCED BOX CULVERT OPTION WILL BE ALLOWED.

BACKFILL SILLS WITH NATIVE MATERIAL.

NATIVE MATERIAL CONSISTS OF MATERIAL THAT IS EXCAVATED FROM THE STREAM AT THE PROJECT SITE DURING CULVERT CONSTRUCTION. NATIVE MATERIAL IS SUBJECT TO APPROVAL BY THE ENGINEER AND MAY BE SUBJECT TO PERMIT CONDITIONS.



FOR UTILITY INFORMATION
 SEE UTILITY PLANS AND
 SPECIAL PROVISIONS.

GRADE POINT EL. @ STA. 79+82.10 -L- = 8.81 FT
 BED ELEVATION @ STA. 79+82.10 -L- = -4.0 FT
 ROADWAY SLOPES = 2:1 (MAX)

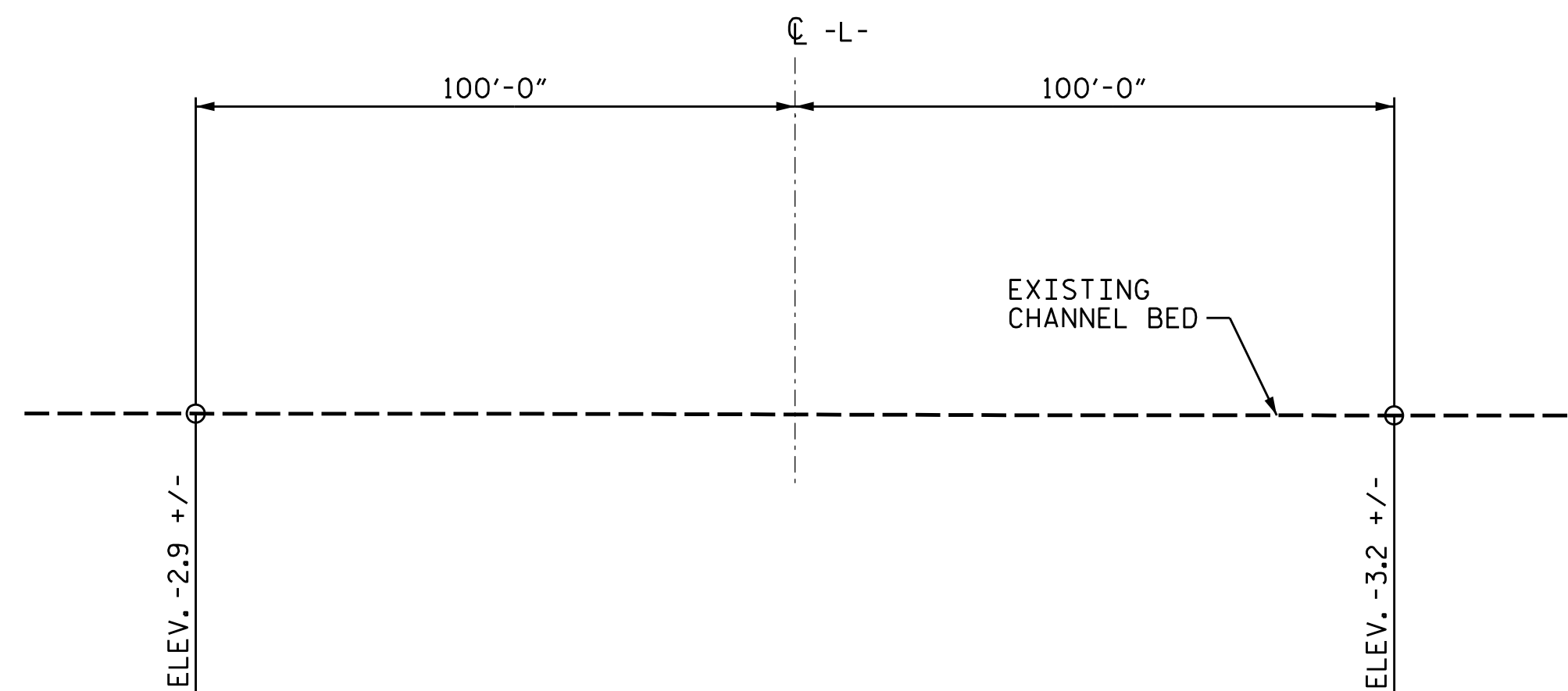
LOCATION SKETCH

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE = 1090 CFS
 FREQUENCY OF OVERTOPPING FLOOD = <500 YR.
 OVERTOPPING FLOOD ELEVATION = 6.9 FT.
 OCCURS @ STA. 82+80 -L-

HYDRAULIC DATA

DESIGN DISCHARGE = 563 CFS
 FREQUENCY OF DESIGN FLOOD = 25 YR.
 DESIGN HIGH WATER ELEVATION = 4.2 FT.
 DRAINAGE AREA = 3.41 SQ. MI.
 BASE DISCHARGE (Q100) = 909 CFS
 BASE HIGH WATER ELEVATION = 5.2 FT.



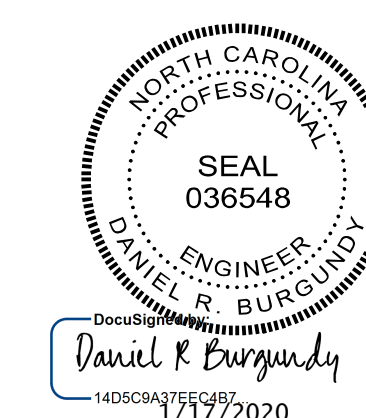
PROFILE ALONG CULVERT

I HEREBY CERTIFY THESE PLANS
 ARE THE AS-BUILT PLANS

TOTAL STRUCTURE QUANTITIES	
CULVERT EXCAVATION	LUMP SUM
FOUNDATION CONDITIONING MATERIAL	141 TONS
ALUMINUM BOX CULVERT @ STA. 79+82.10 -L-	LUMP SUM
MOMENT SLAB	68.0 LIN. FT.

PROJECT NO. R-5740
PERQUIMANS COUNTY
 STATION: 79+82.10 -L-

SHEET 1 OF 3 STRUCTURE NO. 710086



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SINGLE
32'-11" x 9'-4"
ALUMINUM BOX CULVERT
94° SKEW

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	C-2
1			3			TOTAL SHEETS
2			4			7

PREPARED IN THE OFFICE OF:
ATKINS
 1616 EAST MILLBROOK ROAD, SUITE 160
 RALEIGH, NORTH CAROLINA 27609
 (919) 876-6888 NCBES #F-0326

DRAWN BY : CAB DATE : 11/19
 CHECKED BY : CYL DATE : 11/19
 DESIGN ENGINEER OF RECORD : DRB DATE : 11/19