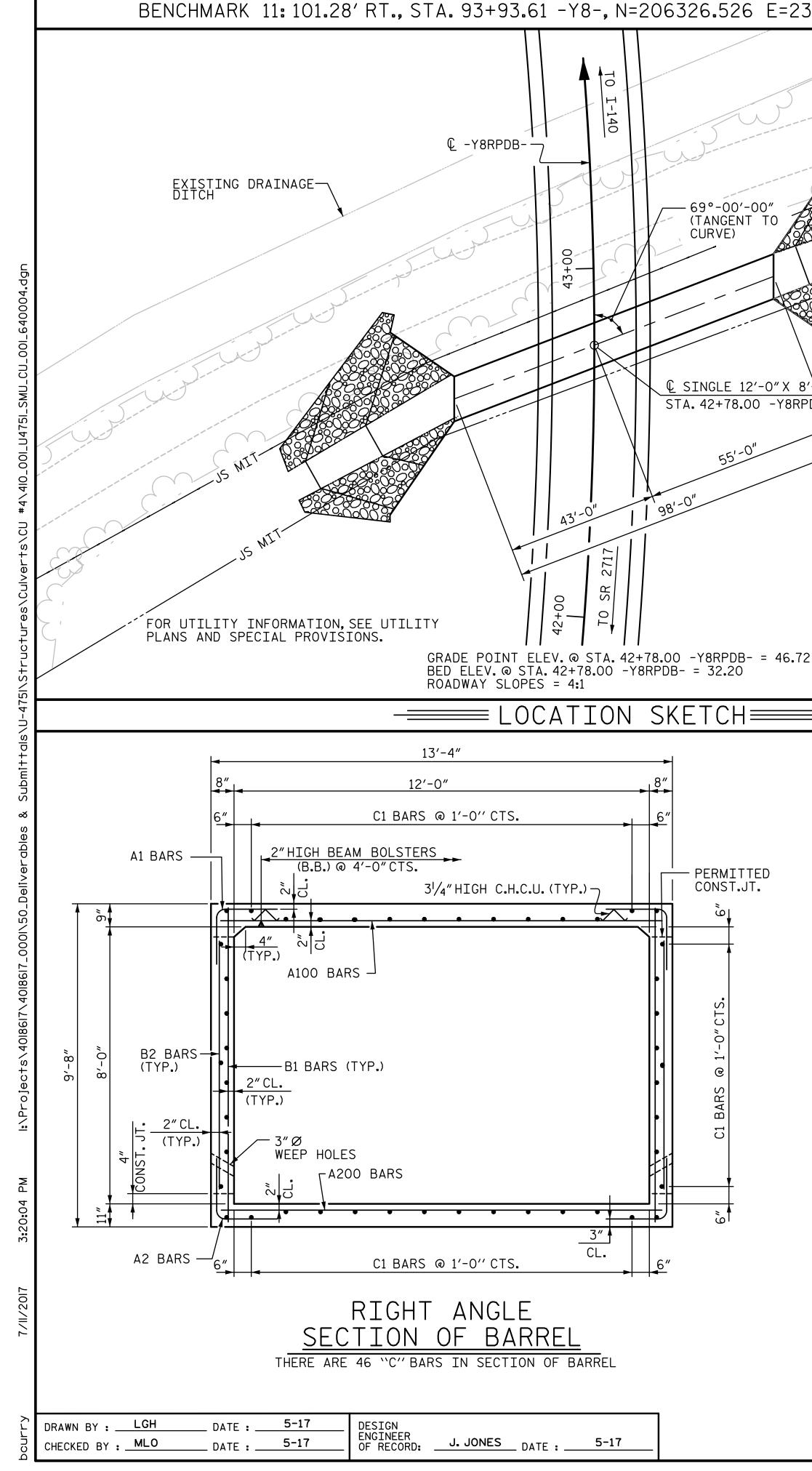
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	DESIGN DISCHARGE = 500 CFS					
	FREQUENCY OF DESIGN FLOOD = 50 YRS.					
	DESIGN HIGH WATER ELEVATION = 40.0 FT.					
	DRAINAGE AREA = 274 ACRES					
JS MIT	BASE DISCHARGE (Q100) = 600 CFS					
JS III	BASE HIGH WATER ELEVATION = 40.85 FT.					
UT TO CREEK	OVERTOPPING FLOOD DATA					
Jacob JS MIT	OVERTOPPING DISCHARGE = 1200 CFS					
	FREQUENCY OF OVERTOPPING FLOOD = 500 YRS.					
	OVERTOPPING FLOOD ELEVATION = 47.2 FT. @ STA.43+76 -Y8RPDB-					
	-Y8RPDB- CURVE DATA					
(ROADWAY DETAIL <u>'-O"RCBC</u> AND PAY ITEM, TYP.) PDB-	P.I. STA. = 50+39.08 -Y8RPDB- △ = 126°-18'-36.03"(LT) RADIUS = 1,060' TANGENT = 2,094.35' LENGTH = 2,336.80'					
	TOTAL STRUCTURE QUANTITIES   CULVERT EXCAVATION @ STA. 42+78.00 -Y8RPDB- LUMP SUM					
	FOUNDATION CONDITIONING MATERIAL					
	TOTAL: 125 TONS					
	CLASS A CONCRETE					
	BARREL @ 1.222 CU.YDS./FT					
	WINGS, ETC 48.8 CU.YDS.					
	TOTAL148.0 CU.YDS.					
2	REINFORCING STEEL BARREL 21,906 LBS.					
	WINGS, ETC. 3,142 LBS.					
	TOTAL25,048 LBS					

L - V8RPDB-

3'-0"	10'-0"	10'-0"	10'-0″	10'-0"	10'-0"	10
EL. 33.8±	EL. 33.8±	EL. 33.9±	EL. 33.9±	EL. 33.9±	EL. 34.1±	

PROFILE ALONG CULVERT

## TES:

SUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.

SIGN FILL = 4.86' MIN. AND 7.54' MAX.

OTHER DESIGN DATA AND NOTES SEE STANDARD NOTE SHEET.

WEEP HOLES INDICATED TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.

CRETE IN CULVERT TO BE POURED IN THE FOLLOWING ORDER: WING FOOTINGS AND FLOOR SLAB INCLUDING 4" OF ALL

VERTICAL WALLS. THE REMAINING PORTIONS OF THE WALLS AND WINGS FULL HEIGHT FOLLOWED BY ROOF SLAB AND HEADWALLS.

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

MENSIONS FOR WING LAYOUT AS WELL AS ADDITIONAL REINFORCING STEEL EDDED IN BARREL ARE SHOWN ON WING SHEET (SHEET 4 OF 4).

NSVERSE CONSTRUCTION JOINTS SHALL BE USED IN THE BARREL, SPACED TO LIMIT POURS TO A MAXIMUM OF 70 FEET.LOCATION OF JOINTS SHALL BE SUBJECT TO PROVAL OF THE ENGINEER.

THE CONTRACTOR'S OPTION, HE MAY SPLICE THE VERTICAL REINFORCING STEEL IN INTERIOR FACE OF EXTERIOR WALL ABOVE LOWER WALL CONSTRUCTION JOINT. THE ICE LENGTH SHALL BE AS PROVIDED IN THE SPLICE LENGTH CHART SHOWN ON THE NS.EXTRA WEIGHT OF STEEL DUE TO THE SPLICES SHALL BE PAID FOR BY THE NTRACTOR.

THE CONTRACTOR'S OPTION HE MAY SUBMIT, TO THE ENGINEER FOR APPROVAL, SIGN AND DETAIL DRAWINGS FOR A PRECAST REINFORCED CONCRETE BOX CULVERT \_IEU OF THE CAST-IN-PLACE CULVERT SHOWN ON THE PLANS. THE DESIGN SHALL VIDE THE SAME SIZE AND NUMBER OF BARRELS AS USED ON THE CAST-IN-PLACE IGN. FOR OPTIONAL PRECAST REINFORCED CONCRETE BOX CULVERT, SEE SPECIAL VISIONS.

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

FOOT STRIP OF FILTER FABRIC SHALL BE ATTACHED TO THE FILL FACE OF THE NG COVERING THE ENTIRE LENGTH OF THE EXPANSION JOINT.

\_VERT TO BE BACK FILLED WITH NATIVE MATERIAL TO A DEPTH OF 1'-O". TIVE MATERIAL CONSISTS OF MATERIAL THAT IS EXCAVATED FROM THE STREAM AT THE PROJECT SITE DURING CULVERT CONSTRUCTION. NATIVE MATERIAL IS BJECT TO APPROVAL BY THE ENGINEER AND MAY BE SUBJECT TO PERMIT NDITIONS.

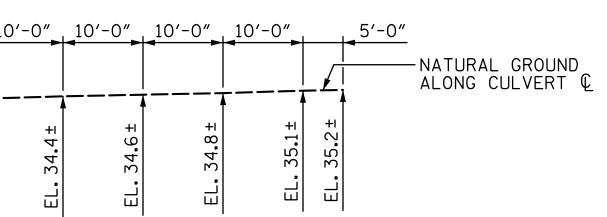
PLACEMENT OF NATURAL STREAM BED MATERIAL, SEE SPECIAL PROVISIONS.

SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FALSEWORK AND FORMWORK. SEE SPECIAL PROVISIONS.

CRANE SAFETY, SEE SPECIAL PROVISIONS.

GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.



## PROJECT NO. U-4751 NEW HANOVER

COUNTY

STATION: 42+78.00 -Y8RPDB-

SHEET 1 OF 4

ED FINAL OMPLETED	Docusigned by: CARO	STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH								
IT CONSIDERED IGNATURES CO	SEAL 036940	SINGLE 12'-O"X 8'-O" CONCRETE BOX CULVERT 69°-00'-00"SKEW								
NNN	7/12/2017									
DOCUMENT	$\bigcirc$ STV $100$			SIONS		SHEET NO. C4-1				
NS S	9	NO. BY:	DATE:	NO. BY:	DATE:					
	STV ENGINEERS, INC. 900 West Trade St., Suite 715 Charlotte, NC 28202	1		3		TOTAL SHEETS				
	NC License Number F-0991	2		<b>4</b>		4				