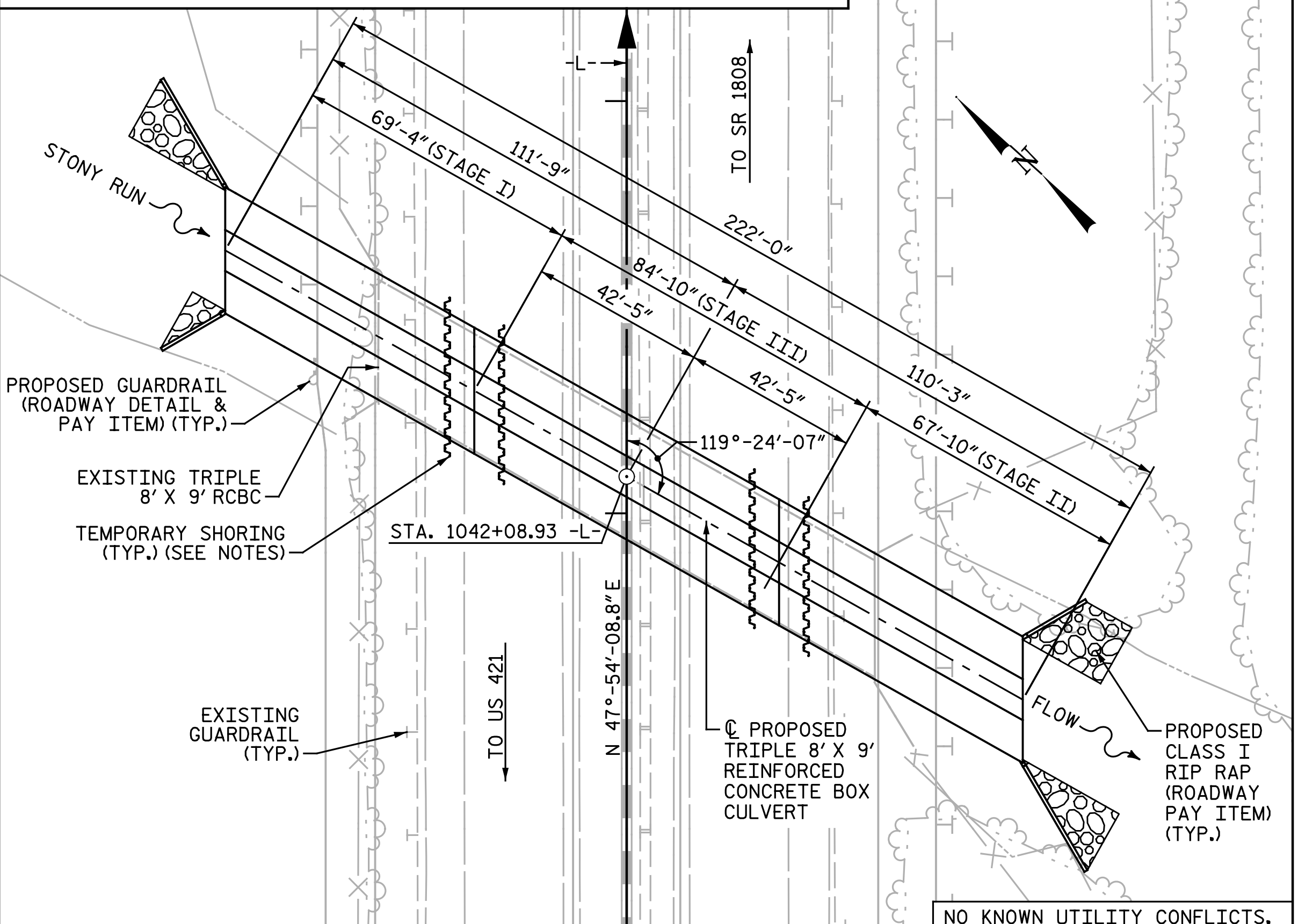
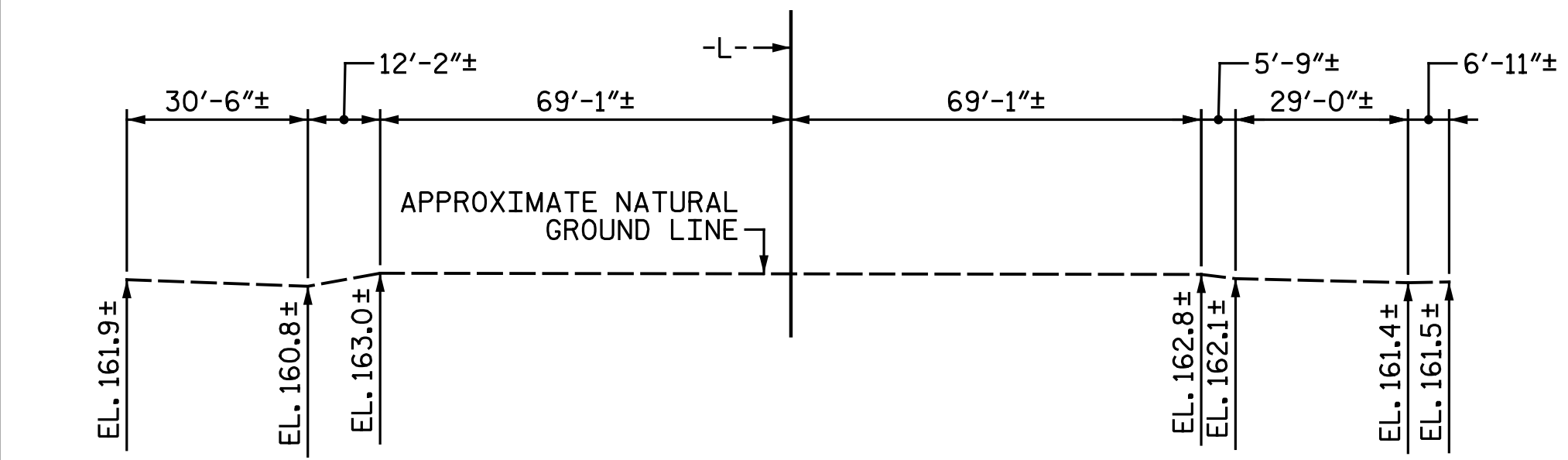


B.M. #65 - BENCH TIE IN 12" PECAN, STA. 1035+49.29 -L-, 125.7' LEFT, EL. 176.05



LOCATION SKETCH



PROFILE ALONG CULVERT

ROADWAY DATA	
GRADE POINT ELEV. @ STATION 1042+08.93 -L-	= 180.23
BED ELEV. @ STATION STA. 1042+08.93 -L-	= 162.70
ROADWAY SLOPES	= 3:1

HYDRAULIC DATA	
DESIGN DISCHARGE	= 2580 C.F.S.
FREQUENCY OF DESIGN FLOOD	= 100 YR.
DESIGN HIGH WATER ELEVATION	= 174.10
DRAINAGE AREA	= 7.64 SQ. MI.
BASE DISCHARGE (Q100)	= 2580 C.F.S.
BASE HIGH WATER ELEVATION	= 174.10

OVERTOPPING FLOOD DATA	
OVERTOPPING DISCHARGE	= 3295 C.F.S.
FREQUENCY OF OVERTOPPING FLOOD	= 100+ YR.
OVERTOPPING FLOOD ELEVATION	= 176.80

DRAWN BY : M. D. MAYHEW DATE : 1-28-20
 CHECKED BY : A. H. SHARPE DATE : 4-26-21

NOTE: OVERTOPS ROADWAY CROWN POINT @ STA. -L- 1036+44.00 LT (SAG)

NOTES:

- ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.
- MAXIMUM DESIGN FILL = 8.89'.
- MINIMUM DESIGN FILL = 7.81'.
- FOR OTHER DESIGN DATA AND NOTES, SEE STANDARD NOTE SHEET.
- 3" Ø WEEP HOLES INDICATED TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.
- CONCRETE IN STAGE I AND STAGE II OF CULVERT TO BE POURED IN THE FOLLOWING ORDER:
 1. WING FOOTINGS AND FLOOR SLAB INCLUDING 4" OF ALL VERTICAL WALLS.
 2. THE REMAINING PORTIONS OF THE WALLS AND WINGS FULL HEIGHT FOLLOWED BY ROOF SLAB AND HEADWALLS.
- CONCRETE IN STAGE III OF CULVERT TO BE POURED IN THE FOLLOWING ORDER:
 1. FLOOR SLAB INCLUDING 4" OF ALL VERTICAL WALLS.
 2. THE REMAINING PORTIONS OF THE WALLS FOLLOWED BY ROOF SLAB.

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.

DIMENSIONS FOR WING LAYOUT AS WELL AS ADDITIONAL REINFORCING STEEL EMBEDDED IN BARREL ARE SHOWN ON WING SHEET.

STEEL IN THE BOTTOM SLAB MAY BE SPLICED AT THE PERMITTED CONSTRUCTION JOINT AT THE CONTRACTOR'S OPTION. EXTRA WEIGHT OF STEEL DUE TO THE SPLICES WILL BE PAID FOR BY THE CONTRACTOR.

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

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

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

A 3 FOOT STRIP OF FILTER FABRIC SHALL BE ATTACHED TO THE FILL FACE OF THE WING COVERING THE ENTIRE LENGTH OF THE EXPANSION JOINT.

NO PRECAST REINFORCED BOX CULVERT OPTION WILL BE ALLOWED.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

THE EXISTING STRUCTURE CONSISTING OF A TRIPLE BARREL REINFORCED CONCRETE BOX CULVERT, 8' WIDE X 9' DEEP X 140'± LONG AND LOCATED AT THE PROPOSED STRUCTURE, 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.

FOR ASBESTOS ASSESSMENT FOR CULVERT DEMOLITION, SEE "ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES" SPECIAL PROVISION.

TOTAL STRUCTURE QUANTITIES	
CULVERT EXCAVATION	LUMP SUM
FOUNDATION CONDITIONING MATERIAL	
STAGE I	150 TONS
STAGE II	147 TONS
STAGE III	183 TONS
TOTAL	480 TONS
CLASS A CONCRETE	
STAGE I	207.0 C.Y.
STAGE II	203.2 C.Y.
STAGE III	220.6 C.Y.
TOTAL	630.8 C.Y.
REINFORCING STEEL	
STAGE I	27,552 LBS.
STAGE II	27,030 LBS.
STAGE III	31,182 LBS.
TOTAL	85,764 LBS.
REMOVAL OF EXISTING STRUCTURE	LUMP SUM
ASBESTOS ASSESSMENT	LUMP SUM

I HEREBY CERTIFY THESE PLANS ARE THE AS-BUILT PLANS.

PROJECT NO. I-5878
 HARNETT COUNTY
 STATION: 1042+08.93 -L-
 SHEET 1 OF 6

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

TRIPLE 8 FT. X 9 FT.
 CONCRETE BOX CULVERT
 119°-24'-07" SKEW

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Michael Baker International

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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	C2-1
1			3			TOTAL SHEETS
2			4			8