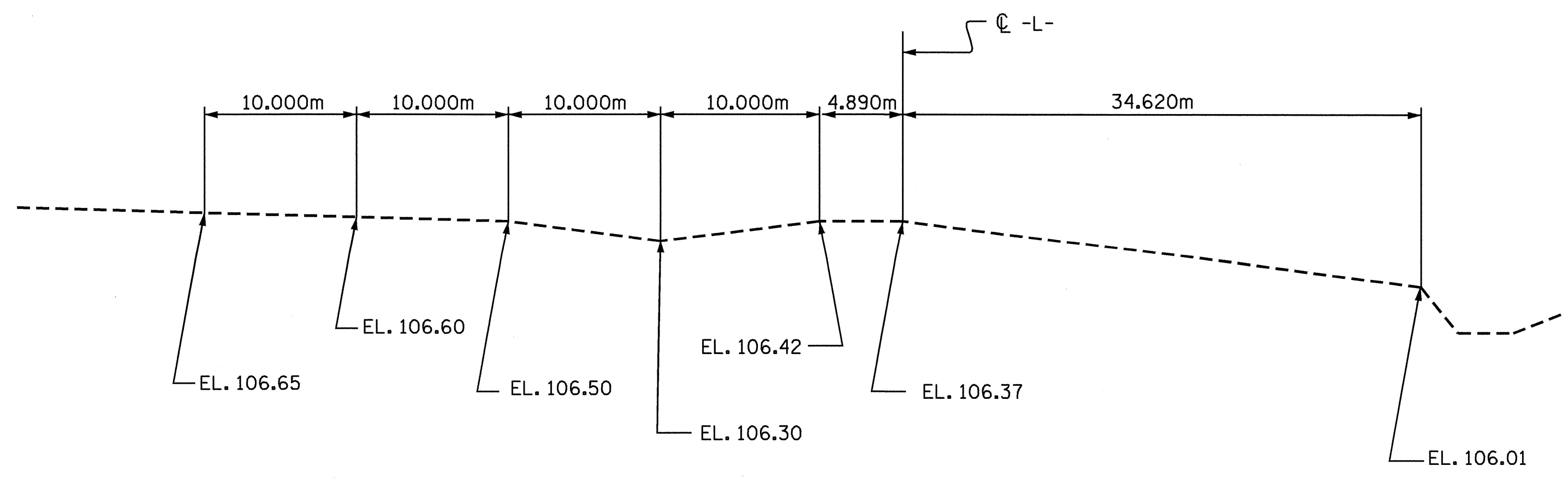


LOCATION SKETCH

NOTE:
FOR UTILITY INFORMATION,
SEE UTILITY PLANS AND
SPECIAL PROVISIONS.



PROFILE ALONG CULVERT

ASSEMBLED BY : J. LAMBERT DATE : 10/03
 CHECKED BY : S. PEARCE DATE : 11/03
 DRAWN BY : EEM 6/97
 CHECKED BY : ARB 7/97

GRADE DATA

GRADE POINT ELEVATION @
 STA. 62+33.970 -L- = 110.939
 BED ELEVATION @
 STA. 62+33.970 -L- = 106.370
 ROADWAY SLOPES = 2:1

HYDRAULIC DATA

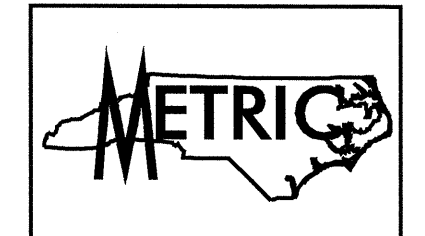
DESIGN DISCHARGE = 18.8 c.m.s.
 FREQUENCY OF DESIGN FLOOD = 50 YRS
 DESIGN HIGH WATER ELEVATION = 109.86
 DRAINAGE AREA = 213.4 Ha
 BASIC DISCHARGE (Q100) = 21.6 c.m.s.
 BASIC HIGH WATER ELEVATION = 110.55

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE = 21.0 c.m.s.
 FREQUENCY OF OVERTOPPING FLOOD = 100± YRS
 OVERTOPPING FLOOD ELEVATION = 110.80

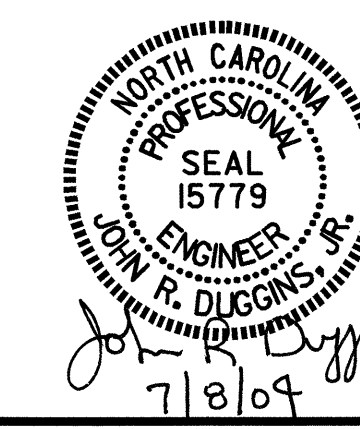
NOTES

ASSUMED LIVE LOAD -----MS18 OR ALTERNATE LOADING.
 DESIGN FILL----- 2.55m
 FOR OTHER DESIGN DATA AND NOTES SEE STANDARD NOTE SHEET.
 76mm Ø WEEP HOLES INDICATED TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.
 CONCRETE IN CULVERTS TO BE POURED IN THE FOLLOWING ORDER:
 1. WING FOOTINGS AND FLOOR SLAB INCLUDING 100mm OF ALL VERTICAL WALLS.
 2. THE REMAINING PORTIONS OF THE WALLS AND WINGS FULL HEIGHT FOLLOWED BY ROOF SLAB AND HEADWALLS.
 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.
 TRANSVERSE CONSTRUCTION JOINTS SHALL BE USED IN THE BARREL, SPACED TO LIMIT THE POURS TO A MAXIMUM OF 21.0m. LOCATION OF JOINTS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER.
 AT THE CONTRACTOR'S OPTION, HE MAY SPLICE THE VERTICAL REINFORCING STEEL IN THE INTERIOR FACE OF EXTERIOR WALL 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.
 FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
 IF APPROVED BY THE ENGINEER, THE CONTRACTOR MAY USE THE EXISTING WINGS AS TEMPORARY SHORING FOR THE CONSTRUCTION OF THE CULVERT EXTENSIONS. IN THIS CASE, THE BOTTOM SLAB OF THE OF THE EXTENSION SHALL BE POURED AT LEAST 72 HOURS PRIOR TO CUTTING THE WINGS. THE WINGS MAY BE CUT EARLIER PROVIDED THE SLAB CONCRETE STRENGTH HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 10.3 MPa.
 DOWELS SHALL BE USED TO CONNECT THE CULVERT EXTENSION TO THE EXISTING CULVERT AS SHOWN. FOR NOTE REGARDING SETTING OF DOWELS, SEE SHEET SNSM.
 ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
 ALL ELEVATIONS ARE IN METERS.
 A 900mm 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 CULVERT DIVERSION DETAILS AND PAY ITEMS, SEE EROSION CONTROL PLANS.



PROJECT NO. R-2610A
CHATHAM COUNTY
 STATION: 62+33.970 -L-

SHEET 1 OF 6



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
SINGLE
2.130m X 2.130m
CONCRETE BOX
CULVERT EXTENSION
134°-57'-36" SKEW

TOTAL STRUCTURE QUANTITIES		
CLASS A CONCRETE		
BARREL @ 1.95 m ³ /m	57.7	m ³
WINGS ETC.	9.8	m ³
TOTAL	67.2	m ³
REINFORCING STEEL		
BARREL	4448	kg
WINGS ETC.	334	kg
TOTAL	4782	kg
CULVERT EXCAVATION	LUMP SUM	
FOUNDATION COND. MAT'L	50 METRIC TONS	

REVISIONS						SHEET NO. C-13
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 18
2			4			