

GENERAL NOTES - ALTERNATE 1

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2001 EDITION, AND 2008 SUPPLEMENTAL SPECIFICATIONS AS MODIFIED BY CONTRACT DOCUMENTS.

REINFORCING STEEL - PLACE AND TIE ALL REINFORCING STEEL IN ACCORDANCE WITH THE GEORGIA DOT SPECIFICATIONS. DO NOT WELD REINFORCING STEEL.

CHAMFER - CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROLS - SEE ROADWAY PLANS FOR TRAFFIC CONTROLS AND TRAFFIC CONTROL PAYMENT.

EXISTING BRIDGE PLANS - ORIGINAL BRIDGE PLANS ARE NOT AVAILABLE.

WAITING PERIOD - NONE REQUIRED.

FOOTING ELEVATIONS - DO NOT LOWER FOOTING ELEVATIONS, AS SHOWN ON THE PLANS, MORE THAN 3'-0" WITHOUT THE APPROVAL OF THE STATE BRIDGE ENGINEER. THIS SAME REQUIREMENT APPLIES TO THE SEAL CONCRETE.

COFFERDAMS - PROVIDE COFFERDAMS AT BENTS 2 AND 3.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

DRIVING DATA PILES - ONE DRIVING DATA PILE SHALL BE REQUIRED AT BENT 1.

REMOVE BOULDERS - REMOVE BOULDERS AT BENT 4 TO FACILITATE PILE DRIVING OPERATIONS. INCLUDE ALL COSTS FOR REMOVAL IN THE OVERALL BID SUBMITTED.

SMOOTH DOWEL BARS - PLACE SMOOTH DOWEL BARS IN FORMED 3" DIAMETER X 12" DEEP HOLES AND GROUT IN PLACE SIMILAR TO ANCHOR BOLTS, SEE SUB-SECTION 501.3.05.B.3 OF THE GEORGIA DOT SPECIFICATIONS. STIRRUPS MAY BE SHIFTED SLIGHTLY TO CLEAR FORMED HOLES.

UTILITY HANGERS - FURNISH AND INSTALL INSERTS. INSERTS SHALL BE ANVIL FIGURE 282, AAA TECHNOLOGY FIGURE 912 OR APPROVED EQUAL. INCLUDE THE COST OF FURNISHING AND INSTALLING INSERTS IN THE OVERALL BID SUBMITTED. ALL OTHER COMPONENTS OF HANGER ASSEMBLIES SHALL BE FURNISHED AND INSTALLED BY UTILITY OWNER.

WATER/SEWER MAIN HANGERS - PIPE ROLL SUPPORT ASSEMBLIES AND KEEPER STRAPS SHALL BE FURNISHED AND INSTALLED BY THE UTILITY OWNER. FURNISH AND INSTALL ALL OTHER COMPONENTS OF HANGER ASSEMBLIES AND INCLUDE THE COST IN THE OVERALL BID SUBMITTED.

USGS WATER MONITORING STATION - AT LEAST FOUR WEEKS PRIOR TO DEMOLITION OF THE EXISTING BRIDGE, CONTACT BRIAN MCCALLUM OF THE USGS REGIONAL OFFICE IN ATLANTA AT 770-903-9127 FOR THE REMOVAL AND RESETTING OF THE STREAM GAUGE ATTACHED TO THE DOWNSTREAM FACE OF THE EXISTING BRIDGE. THE GAUGE SHALL BE ATTACHED TO THE NEW BRIDGE SIMILAR TO THE EXISTING BRIDGE ATTACHMENT. INCLUDE THE COST OF REMOVAL AND RESETTING OF THE GAUGE IN THE OVERALL BID SUBMITTED.

STANDARD PLAN MODIFICATION - MODIFY THE APPROACH SLAB STANDARD TO INCREASE THE 3/4" EXPANSION JOINT SHOWN BETWEEN THE APPROACH SLAB AND THE BACK FACE PAVING REST AND END POST TO 1" AT BENT 1. SEE ROADWAY PLANS FOR APPROACH SLAB PAYMENT.

GROOVED CONCRETE - GROOVE THE ENTIRE LENGTH OF THE BRIDGE TRANSVERSELY AS PER SUB-SECTION 500.3.05.T.9.C OF THE GEORGIA DOT SPECIFICATIONS.

RIDING QUALITY - THE FINISHED BRIDGE DECK AND APPROACH SLABS SHALL MEET THE RIDE QUALITY REQUIREMENTS AS SPECIFIED IN SUB-SECTION 500.3.06.E OF THE GEORGIA DOT SPECIFICATIONS FOR STATE ROUTES WITH FOUR LANES OR MORE.

WELDING - ALL WELDING ON GEORGIA DOT PROJECTS SHALL BE PERFORMED BY CERTIFIED WELDERS THAT HAVE IN THEIR POSSESSION A CURRENT WELDING CERTIFICATION CARD ISSUED BY THE OFFICE OF MATERIALS AND RESEARCH. USE ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING.

SALVAGE MATERIAL - NO MATERIAL REMOVED FROM THE EXISTING STRUCTURE SHALL BE SALVAGED FOR USE BY THE GEORGIA DOT.

INCIDENTAL ITEMS - INCLUDE THE COST INCIDENTAL TO THE WORK THAT IS NOT SPECIFICALLY COVERED BY THE GEORGIA STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS IN THE OVERALL BID SUBMITTED. THIS INCLUDES THE COST OF WATERPROOFING, JOINT FILLERS, AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.

BRIDGE CONSISTS OF

- 1 - 55'-0" TYPE II PSC BEAM SPANS ----- SPECIAL DESIGN
- 1 - 95'-0" BULB TEE, 54 IN, PSC BEAM SPANS ----- SPECIAL DESIGN
- 1 - 60'-0" TYPE II PSC BEAM SPANS ----- SPECIAL DESIGN
- 2 - STEEL H PILE END BENTS ----- SPECIAL DESIGN
- 2 - CONCRETE INTERMEDIATE BENTS ----- SPECIAL DESIGN
- 4 - END POST AND GUARDRAIL ATTACHMENT DETAIL ----- GA. STD. 3054 (9-30-02)  
(L = 4'-0"; W = 1'-1"; H = 3'-5 3/4")
- ONE PIPE ALUMINUM HANDRAILING ----- GA. STD. 3626 (10-22-85)
- BAR BENDING DETAILS ----- GA. STD. 3901 (8-69)
- TYPICAL FILL DETAIL AT END OF BRIDGE ----- GA. STD. 9037 (9-99)

DRAINAGE DATA

SPECIFICATIONS ----- AASHTO 2002 - 17TH EDITION  
(DESIGNED FOR SEISMIC PERFORMANCE CATEGORY A)

TYPICAL HS20-44 AND/OR MILITARY LOADING ----- IMPACT ALLOWED

FUTURE PAVING ALLOWANCE ----- 30 LBS PER SQ FT

CONCRETE: SUPERSTRUCTURE ----- CLASS AA,  $f_c = 3,500$  PSI  
PSC BEAMS ----- CLASS AAA,  $f_c =$  SEE BEAM SHEETS  
PSC BEAM ALLOWABLE TENSION ----- SEE BEAM SHEETS  
SUBSTRUCTURE ----- CLASS A,  $f_c = 3,500$  PSI

REINFORCEMENT STEEL: ----- GRADE 60,  $f_y = 60,000$  PSI

PRETENSIONING STRANDS: -----  $f_s = 270,000$  PSI

TRAFFIC DATA

TRAFFIC ----- ADT = 27,000 (2010)  
ADT = 40,100 (2030)

DESIGN SPEED ----- 45 MPH

TRUCKS ----- 3 %

DIRECTIONAL ----- 60 %

SUMMARY OF QUANTITIES - ALTERNATE 1

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
211-0300	483	CY	BRIDGE EXCAVATION, STREAM CROSSING
500-0100	793	SY	GROOVED CONCRETE
500-1006	LUMP	LS	SUPERSTR CONCRETE, CL AA, BR NO - 1 (422)
500-3002	191	CY	CLASS AA CONCRETE
500-3700	200	CY	SEAL CONC
507-9002	786	LF	PSC BEAMS, AASHTO TYPE II, BR NO - 1
507-9030	565	LF	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO - 1
511-1000	26219	LB	BAR REINF STEEL
511-3000	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 1 (83304)
516-1100	408	LF	ALUM HANDRAIL, STD 3626
520-1125	330	LF	PILING IN PLACE, STEEL H, HP 12 X 53
520-4125	1	EA	LOAD TEST, STEEL H, HP 12 X 53 (IF REQD)
525-1000	4	EA	COFFERDAM
540-1102	LUMP		REMOVAL OF EXISTING BR, BR NO - 1
603-2024	823	SY	STN DUMPED RIP RAP, TP 1, 24 IN
603-7000	823	SY	PLASTIC FILTER FABRIC

UTILITIES

8 INCH DIAMETER GAS MAIN ----- ATLANTA GAS LIGHT RESOURCES COMPANY

8 INCH DIAMETER WATER MAIN ----- FULTON CO. PUBLIC WORKS

USGS GAGING STATION NO. 02335700 ----- US GEOLOGICAL SURVEY

DRAINAGE DATA

FLOOD FREQUENCY	DISCHARGE	VELOCITY	DISCHARGE * THROUGH BRIDGE	AREA OF OPENING UNDER HIGHWATER	BACKWATER
50 YEAR	9,280 CFS	5.1 FPS	6,749 CFS	1,311 SQ FT	0.79 FT
100 YEAR	11,000 CFS	5.6 FPS	7,960 CFS	1,412 SQ FT	0.95 FT
500 YEAR	15,500 CFS	6.6 FPS	11,691 CFS	1,765 SQ FT	1.33 FT

\* REMAINDER OF DISCHARGE PASSES THROUGH OVERFLOW CULVERTS.

BRIDGE NO. 1 - ALTERNATE 1

DATE	GEORGIA <b>DEPARTMENT OF TRANSPORTATION</b> PRECONSTRUCTION DIVISION-OFFICE OF BRIDGE DESIGN		
	GENERAL NOTES CR 85 (KIMBALL BRIDGE ROAD) OVER BIG CREEK FULTON COUNTY BRZLB-0121-00(017)		
	NO SCALE		FEBRUARY 2008
	REVISIONS	BY	DATE

BRIDGE SHEET 2 OF 21	DESIGNED LEL DRAWN WMC	CHECKED DLC DESIGN GROUP SWW	REVIEWED WMD APPROVED PVL
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