

BRIDGE CONSISTS OF

- 1 - 100'-0" BULB TEE, 54 IN, PSC BEAM SPANS ----- SPECIAL DESIGN
- 2 - STEEL H PILE END BENTS ----- SPECIAL DESIGN
- 4 - END POST AND GUARDRAIL ATTACHMENT DETAIL ----- GA. STD. 3054 (9-30-02)
(L = 4'-0"; W = 1'-1"; H = 3'-6")
- BAR BENDING DETAILS ----- GA. STD. 3901 (8-69)
- TYPICAL FILL DETAIL AT END OF BRIDGE ----- GA. STD. 9037 (9-99)

DRAINAGE DATA

DRAINAGE AREA ----- 4.38 SQ MILES

FLOOD FREQUENCY	TOTAL DISCHARGE THRU BRIDGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
50 YEAR	1269 CFS	4.33 FPS	293 SQ FT	0.05 FT
100 YEAR	1479 CFS	4.58 FPS	323 SQ FT	0.08 FT
500 YEAR	1722 CFS	4.85 FPS	355 SQ FT	0.14 FT

TRAFFIC DATA

TRAFFIC ----- ADT = 3,250 (2013)
----- ADT = 5,200 (2033)

DESIGN SPEED ----- 55 MPH

TRUCKS ----- 5 %

24 HR TRUCKS ----- 8 %

DIRECTIONAL ----- 60 %

UTILITIES

NONE

GENERAL NOTES

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 MAY BE PURCHASED BY CONTACTING THE PLANS REPRODUCTION OFFICE AT (404) 347-0600. THE ORIGINAL BRIDGE WAS BUILT UNDER PROJECT NUMBER FAP 140-A.

WAITING PERIOD - DO NOT BEGIN WORK AT BENTS 1 AND 2 UNTIL THE COMPLETED END FILLS HAVE BEEN IN PLACE FOR AN ESTIMATED PERIOD OF 45 DAYS.

WAVE EQUATION - PERFORM WAVE EQUATION ANALYSIS (WEAP) IN ACCORDANCE WITH SPECIAL PROVISION 520. PROVIDE RESULTS OF THE WEAP TO THE GEOTECHNICAL BUREAU OF THE GEORGIA DOT FOR REVIEW AND APPROVAL TWO WEEKS PRIOR TO DRIVING PILES.

PDA TESTING - PERFORM PILE TESTING USING THE PILE DRIVING ANALYZER (PDA) IN ACCORDANCE WITH SPECIAL PROVISION SECTION 523. NOTIFY THE GEOTECHNICAL BUREAU OF THE GEORGIA DOT OFFICE OF MATERIALS AND RESEARCH AT 404-363-7546 TWO WEEKS PRIOR TO DRIVING PILES.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

PILE POINTS - REINFORCE ALL PILE TIPS AT BENTS 1 AND 2 IN ACCORDANCE WITH SECTIONS 520 AND 855 OF THE GEORGIA DOT SPECIFICATION.

DRIVING DATA PILE - ONE DRIVING DATA PILE SHALL BE REQUIRED AT BENT 2.

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.

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.

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.

DESIGN DATA

SPECIFICATIONS ----- AASHTO LRFD, 5TH EDITION, 2010
(DESIGNED FOR SEISMIC PERFORMANCE ZONE 1)

TYPICAL HL-93 LOADING ----- IMPACT ALLOWED

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

CONCRETE: SUPERSTRUCTURE ----- CLASS D, $f'_c = 4,000$ PSI
PSC BEAMS ----- CLASS AAA, $f'_c =$ SEE BEAM SHEETS
PSC BEAM ALLOWABLE TENSION ----- SEE BEAM SHEETS
SUBSTRUCTURE ----- CLASS A, $f'_c = 3,000$ PSI

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

PRETENSIONING STRANDS: ----- $f'_p = 270,000$ PSI

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
500-0100	423	SY	GROOVED CONCRETE
500-1011	LUMP	LS	SUPERSTR CONCRETE, CL D, BR NO - 1 (157)
500-2100	188	LF	CONCRETE BARRIER
500-3101	40	CY	CLASS A CONCRETE
507-9030	589	LF	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO - 1
511-1000	4762	LB	BAR REINF STEEL
511-3000	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 1 (36900)
520-0589	16	EA	H-PILE POINTS, HP 14 X 89
520-1151	560	LF	PILING IN PLACE, STEEL H, HP 14 X 89
520-4151	1	EA	LOAD TEST, STEEL H, HP 14 X 89 (IF REQD)
523-1000	1	EA	DYNAMIC LOAD TEST - BR NO - 1
540-1101	LUMP	LS	REMOVAL OF EXISTING BR, STA NO - 32+00
603-2024	580	SY	STN DUMPED RIP RAP, TP 1, 24 IN
603-7000	580	SY	PLASTIC FILTER FABRIC

BRIDGE NO. 1

DATE		REVISIONS		BY	
GEORGIA DEPARTMENT OF TRANSPORTATION ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES					
GENERAL NOTES S.R. 16 OVER TWO MILE CREEK HANCOCK COUNTY CSBRG-0007-00(033)					
DRAWING NO. 35-02			SCALE: NONE		
BRIDGE SHEET 2 OF 9			JANUARY 2012		
DESIGNED VMW	CHECKED JRT	DESIGN GROUP EJC	REVIEWED WMD	APPROVED BFR	