

BRIDGE CONSISTS OF

- 4 - 40'-0" TYPE I MOD PSC BEAM SPANS ----- SPECIAL DESIGN
- 2 - STEEL H PILE END BENTS ----- SPECIAL DESIGN
- 3 - STEEL H PILE INTERMEDIATE BENTS ----- SPECIAL DESIGN
- 4 - END POST AND GUARDRAIL ATTACHMENT DETAIL ----- GA. STD. 3054 (9-30-02)
(L = 4'-0"; W = 1'-1"; H = 2'-8")
- BAR BENDING DETAILS ----- GA. STD. 3901 (8-69)
- TYPICAL FILL DETAIL AT END OF BRIDGE ----- GA. STD. 9037 (9-99)

DRAINAGE DATA

DRAINAGE AREA -----	17.12	SQ MILES		
<u>FLOOD FREQUENCY</u>	<u>TOTAL DISCHARGE</u>	<u>MEAN VELOCITY</u>	<u>AREA OF OPENING UNDER FLOODSTAGE</u>	<u>BACKWATER</u>
50 YEAR	3630 CFS	4.07 FPS	891 SQ FT	0.55 FT
100 YEAR	4190 CFS	4.38 FPS	956 SQ FT	0.65 FT
500 YEAR	5610 CFS	5.07 FPS	1,107 SQ FT	0.94 FT

TRAFFIC DATA

TRAFFIC -----	ADT = 8,800 (2012)	ADT = 14,000 (2032)
DESIGN SPEED -----	45	MPH
TRUCKS -----	4	%
24 HR TRUCKS -----	4.5	%
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.

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.

EXISTING BRIDGE PLANS - ORIGINAL BRIDGE PLANS ARE NOT AVAILABLE.

TRAFFIC CONTROLS - ROAD TO BE CLOSED DURING CONSTRUCTION. SEE ROADWAY PLANS FOR DETOUR, TRAFFIC CONTROLS AND TRAFFIC CONTROL PAYMENT.

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.

WAITING PERIOD - DO NOT BEGIN WORK AT BENTS 1 AND 5 UNTIL THE COMPLETED END FILLS HAVE BEEN IN PLACE FOR AN ESTIMATED PERIOD OF 60 DAYS.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

DRIVING DATA PILES - ONE DRIVING DATA PILE SHALL BE REQUIRED AT EACH OF BENTS 1, 2, AND 4.

PILE POINTS - REINFORCE ALL PILE TIPS AT BENTS 2, 3, AND 4 IN ACCORDANCE WITH SECTIONS 520 AND 855 OF THE GEORGIA DOT SPECIFICATIONS.

SPECIAL PROTECTIVE COATING - CLEAN AND PAINT PILES WITH SPECIAL PROTECTIVE COATING NO. 2P IN ACCORDANCE WITH SECTIONS 520 AND 535 OF THE GEORGIA DOT SPECIFICATIONS.

PILOT HOLES - DRILL A 24" DIAMETER PILOT HOLE TO ELEVATION 775.00 FOR EACH PILE AT BENT 2. IF MINIMUM TIP CANNOT BE ACHIEVED, SEE SPECIAL PROVISION 520 FOR ADDITION REQUIREMENTS.

PILE ENCASEMENT - ENCASE PILES AT BENTS 2, 3, AND 4 AND IN CONCRETE UP TO ELEVATION 796.20 OR 2'-0" ABOVE GROUND, WHICHEVER IS HIGHER. ENCASEMENT SHALL BE IN ACCORDANCE WITH SECTION 547 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 OF EXISTING BRIDGE MATERIALS - ALL EXISTING STEEL BEAMS ARE TO BE SALVAGED FOR USE BY COWETA COUNTY. NOTIFY COWETA COUNTY PUBLIC WORKS DIRECTOR, BILL CANTHORNE, AT (770)-252-0794 TWO WEEKS PRIOR TO REMOVAL FOR PICK UP COORDINATION WITH COWETA COUNTY.

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 17TH EDITION, 2002
(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, $f'_c = 3,000$ 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	676	SY	GROOVED CONCRETE
500-1006	LUMP	LS	SUPERSTR CONCRETE, CL AA, BR NO - 1 (213)
500-2100	308	LF	CONCRETE BARRIER
500-3101	62	CY	CLASS A CONCRETE
507-8900	778	LF	PSC BEAMS, AASHTO TYPE I MOD, BR NO - 1
511-1000	6580	LB	BAR REINF STEEL
511-3000	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 1 (58330)
520-0573	15	EA	H-PILE POINTS, HP 14 X 73
520-1125	350	LF	PILING IN PLACE, STEEL H, HP 12 X 53
520-1147	600	LF	PILING IN PLACE, STEEL H, HP 14 X 73
520-4125	1	EA	LOAD TEST, STEEL H, HP 12 X 53 (IF REQD)
520-4147	1	EA	LOAD TEST, STEEL H, HP 14 X 73 (IF REQD)
520-5000	100	LF	PILOT HOLES
540-1102	LUMP	LS	REMOVAL OF EXISTING BR, BR NO - 1
547-2014	85	LF	PILE ENCASEMENT, 14 IN PILE
603-2024	995	SY	STN DUMPED RIP RAP, TP 1, 24 IN
603-7000	995	SY	PLASTIC FILTER FABRIC

BRIDGE NO. 1	
GEORGIA DEPARTMENT OF TRANSPORTATION ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES	
GENERAL NOTES C.R. 546 (LOWER FAYETTEVILLE ROAD) OVER SHOAL CREEK COWETA COUNTY BRS LB-0736-00(005)	
DRAWING NO. 35-02	NO SCALE
BRIDGE SHEET 2 OF 11	AUGUST 2011
DESIGNED A.D.N.	CHECKED J.H.-D.
DRAWN A.D.N.	DESIGN GROUP P.S.R.
REVIEWED W.E.J./W.M.D.	APPROVED B.F.R.

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