

BRIDGE CONSISTS OF

- 1 - 83'-5 1/8 " TYPE III PSC BEAM SPANS ----- SPECIAL DESIGN WITH BULB TEE, 56 IN, PSC FASCIA BEAM
- 2 - 103'-8 5/8 " BULB TEE, 56 IN, PSC BEAM SPANS ----- SPECIAL DESIGN
- 1 - 70'-10 5/8 " TYPE III PSC BEAM SPANS ----- SPECIAL DESIGN WITH BULB TEE, 56 IN, PSC FASCIA BEAM
- 2 - STEEL PILE END BENTS ----- SPECIAL DESIGN
- 3 - CONCRETE INTERMEDIATE BENTS ----- SPECIAL DESIGN
- 4 - END POST AND GUARDRAIL ATTACHMENT DETAIL ----- GA. STD. 3054 (9-30-02)
(1 - L = 4'-0"; W = 1'-1"; H = 2'-10")
(2 - L = 4'-6"; W = 1'-1"; H = 2'-10")
- BAR BENDING DETAILS ----- GA. STD. 3901 (8-69)
- TYPICAL FILL DETAIL AT END OF BRIDGE ----- GA. STD. 9037 (9-99)
- CHAIN LINK WIRE FENCE ----- GA. STD. 9031N (8-13-85)

TRAFFIC DATA

- TRAFFIC ----- ADT = 23,870 (2014)
ADT = 31,820 (2034)
- DESIGN SPEED ----- 45 MPH
- TRUCKS ----- 2%
- 24 HR TRUCKS ----- 5%
- DIRECTIONAL ----- 62%

UTILITIES

- 16" Ø WATER MAIN ----- GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES
- 6" Ø FIBERGLASS CONDUIT ----- GEORGIA DOT

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.
- WAITING PERIOD - NONE REQUIRED.
- PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.
- PILE POINTS - REINFORCE ALL PILE TIPS AT END BENT 5 IN ACCORDANCE WITH SECTIONS 520 AND 855 OF THE GEORGIA DOT SPECIFICATION.

GENERAL NOTES (CONTINUED)

- DRIVING DATA PILES - ONE DRIVING DATA PILE SHALL BE REQUIRED AT EACH OF BENTS 1 AND 4.
- 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.
- ABUTMENT SOIL REINFORCING DEVICE INSERTS - INCLUDE THE COST OF FURNISHING AND INSTALLING INSERTS FOR SOIL REINFORCING DEVICES AT END BENTS 1 AND 5 IN THE OVERALL BID SUBMITTED.
- FILL SETTLEMENT - PROTECT PILES DRIVEN AT BENTS 1 AND 5 FROM NEGATIVE SKIN FRICTION WHEN USED IN CONJUNCTION WITH MECHANICALLY STABILIZED EARTH WALLS, SEE SECTION 551 OF THE GEORGIA DOT SPECIFICATIONS. DRIVE PILES AT END BENTS BEFORE WALL LEVELING PADS ARE CONSTRUCTED.
- UTILITY CASING - ENCASE EACH UTILITY WITHIN THE LIMITS OF THE WALL BACKFILL IN A CONCRETE PIPE EXTENDING FROM THE BACK FACE OF THE BRIDGE END WALL TO 2'-0" BEYOND THE LIMIT OF THE MSE WALL BACKFILL MATERIAL. THE PIPE SHALL BE SUPPLIED AND PLACED BY THE UTILITY OWNER DURING CONSTRUCTION OF THE WALL; TAKE CARE NOT TO DAMAGE WALL MESH OR STRAPS.
- 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.
- 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.
- 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 1/4" AT BENTS 1 AND 5. 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.
- PSC BEAMS - PRESTRESSED CONCRETE AASHTO BULB TEE 56 IN BEAMS SHALL BE PAID FOR AS "LF PSC BEAMS, AASHTO BULB TEE 54 IN".
- CHAIN LINK FENCE - CHAIN LINK FENCE SHALL BE PAID FOR AS "LF CH LK FENCE, ZC COAT, 6 FT, 9 GA".
- 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.
- 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 WATERPROOFING, JOINT FILLERS, SIGN SUPPORTS, AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.
- CONCRETE PLACEMENT RATE - THE MINIMUM PLACEMENT RATE FOR THE CONCRETE DECK POUR SHALL BE 45 CUBIC YARDS PER HOUR.

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 AA, f_c = 3,500 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
211-0200	433	CY	BRIDGE EXCAVATION, GRADE SEPARATION
500-0100	3135	SY	GROOVED CONCRETE
500-1006	LUMP	LS	SUPERSTR CONCRETE, CL AA, BR NO - 7 (1294)
500-3002	578	CY	CLASS AA CONCRETE
507-9003	1210	LF	PSC BEAMS, AASHTO TYPE III, BR NO - 7
507-9030	2712	LF	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO - 7
511-1000	91507	LB	BAR REINF STEEL
511-3000	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 7 (252805)
520-0573	13	EA	H-PILE POINTS, HP 14 X 73
520-1147	5305	LF	PILING IN PLACE, STEEL H, HP 14 X 73
643-1152	711	LF	CH LK FENCE, ZC COAT, 6 FT, 9 GA

BRIDGE NO. 7



GEORGIA
DEPARTMENT OF TRANSPORTATION
PRECONSTRUCTION DIVISION-OFFICE OF BRIDGE DESIGN

GENERAL NOTES
COLLINS HILL RD. OVER SR 316
GWINNETT COUNTY MSL00-0004-00(086)

SCALE: NONE OCTOBER 2010

DRAWING NO. 35-002	DESIGNED AOC	CHECKED DRB	REVIEWED WMD/WEI
BRIDGE SHEET 2 OF 24	DRAWN CAB	DESIGN GROUP X	APPROVED PVL