STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	STP00-0000-00 (833)	159	309

BRIDGE CONSISTS OF

9 - 140'-0" BULB TEE, 74 IN, PSC BEAM SPANS ---------- SPECIAL DESIGN

2 - PSC PILE END BENTS ---------- SPECIAL DESIGN

8 - 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 = 2'-8")
(L = 4'-6"; W = 1'-1"; H = 2'-8")
(L = 5'-0"; W = 1'-1"; H = 2'-8")
(L = 7'-3"; W = 1'-1"; H = 2'-8")

SQUARE PRESTRESSED CONCRETE PILES ---------- GA. STD. 3215 (2-22-84)

BAR BENDING DETAILS ---------- GA. STD. 3901 (8-69)

TYPICAL FILL DETAIL AT END OF BRIDGE ---------- GA. STD. 9037 (9-99)

DRAINAGE DATA

DRAINAGE AREA ---------- 4284 SQ MILES

FLOOD FREQUENCY	DISCHARGE	VELOCITY	AREA OF OPENING UNDER HIGHWATER	BACKWATER
50 YEAR	94,100 CFS	2.73 FPS	34,513 SQ FT	0.18 FT
100 YEAR	107,000 CFS	2.88 FPS	37,133 SQ FT	0.20 FT
500 YEAR	139,000 CFS	3.43 FPS	40,520 SQ FT	0.39 FT

TRAFFIC DATA

TRAFFIC ---------- ADT = 1,800 (2018)
ADT = 2,400 (2038)

DESIGN SPEED ---------- 55 MPH

TRUCKS ---------- 10 %

24 HR TRUCKS ---------- 12 %

DIRECTIONAL ---------- 50 %

UTILITIES

⚠1 - 6 INCH DIAMETER STEEL GAS MAIN ---------- CITY OF DUBLIN NATURAL GAS

GENERAL NOTES

⚠SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2013 EDITION, 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.

WAITING PERIOD - DO NOT BEGIN WORK AT BENTS 1 AND 10 UNTIL THE COMPLETED END FILLS HAVE BEEN IN PLACE FOR AN ESTIMATED PERIOD OF 60 DAYS.

⚠COFFERDAMS - PROVIDE COFFERDAMS AT BENTS 3, 4, 6 (RIGHT FOOTING), AND 7.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

STEEL H-PILES - USE STEEL FOR H-PILES THAT MEETS THE REQUIREMENTS OF ASTM A 709 GR 50.

PILE DRIVING - SHOULD PILES FAIL TO OBTAIN DRIVING RESISTANCE AFTER ACHIEVING THE PILE TIP ELEVATIONS SHOWN, ALLOW PILES TO FREEZE A MINIMUM OF 24 HOURS AND RESTRIKE WITH A WARM HAMMER.

BENT NUMBER	PILE TIP ELEVATION
1	140.00
2	72.00
3	72.00
4	72.00
5	72.00
6	72.00
7	72.00
8	72.00
9	72.00
10	140.00

TEST PILES - DRIVE TEST PILES AT THE FOLLOWING LOCATION:

ONE 14 IN SQ PSC X 71 FT AT BENT 10 RIGHT

DRIVING DATA PILES - ONE DRIVING DATA PILE SHALL BE REQUIRED AT EACH OF BENTS 1 AND 6.

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 CONCRETE INSERTS. USE ANVIL FIGURE 282, AAA TECHNOLOGY FIGURE 912 OR APPROVED EQUAL CONCRETE INSERTS. INCLUDE THE COST OF FURNISHING AND INSTALLING CONCRETE 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" AT BENT 1. SEE ROADWAY PLANS FOR APPROACH SLAB PAYMENT.

STANDARD PLAN MODIFICATION - MODIFY THE ENDPOST STANDARD TO INCREASE THE NUMBER OF P401 AND P701 BARS TO PROVIDE 8 OF EACH BAR IN THE 7'-3" ENDPOST.

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. 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 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
BARRIER ---------- CLASS AA, f'_c = 3,500 PSI
PSC BEAMS ---------- CLASS AAA, f'_c = 8,000 PSI
PSC BEAM ALLOWABLE TENSION ---------- 536 PSI
SUBSTRUCTURE ---------- CLASS AA, f'_c = 3,500 PSI

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

PRETENSIONING STRANDS: ---------- f'_s = 270,000 PSI

STEEL H-PILES: ---------- f_y = 50,000 PSI

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
211-0300	654	CY	BRIDGE EXCAVATION, STREAM CROSSING
500-0100	5320	SY	GROOVED CONCRETE
500-1006	LUMP	LS	SUPERSTR CONCRETE, CL AA, BR NO - 1 (1833)
500-2100	2505	LF	CONCRETE BARRIER
⚠500-3002	1302	CY	CLASS AA CONCRETE
507-9033	7457	LF	PSC BEAMS, AASHTO, BULB TEE, 74 IN, BR NO - 1
⚠511-1000	234278	LB	BAR REINF STEEL
⚠511-3000	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 1 (388482)
520-1147	9945	LF	PILING IN PLACE, STEEL H, HP 14 X 73
520-2214	2005	LF	PILING, PSC, 14 IN SQ
520-3214	1	EA	TEST PILE, PSC, 14 IN SQ
520-4147	1	EA	LOAD TEST, STEEL H, HP 14 X 73 (IF REQD)
520-4214	1	EA	LOAD TEST, PSC, 14 IN SQ (IF REQD)
⚠525-1000	7	EA	COFFERDAM
603-2024	5865	SY	STN DUMPED RIP RAP, TP 1, 24 IN
603-7000	5865	SY	PLASTIC FILTER FABRIC

BRIDGE NO. 1

GEORGIA
DEPARTMENT OF TRANSPORTATION
ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES

GENERAL NOTES
CR 454 OVER OCONEE RIVER
LAURENS COUNTY STP00-0000-00(833)

NO SCALE MARCH 2013

DESIGNED JBK CHECKED DLC REVIEWED DLC/WMD
DRAWN JBK DESIGN GROUP SKG APPROVED BFR

BY	REVISIONS	DATE
JBK	⚠ PFPR COMMENTS	11/14/2013

DRAWING NO. 35-003
BRIDGE SHEET 3 OF 32

1 INCH WHEN PRINTED FULL SIZE

11/15/2013 4:10:59 PM

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