DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PLAN AND PROFILE OF PROPOSED
SR 11/ SR 49/US 41 @ ROCKY CREEK AND OVERFLOW AND @ TOBESOFKEE CREEK & OVERFLOW

FEDERAL AID PROJECT
BIBB COUNTY

FEDERAL ROUTE * US 41/129
STATE ROUTE * SR 11/49/249
P.I.NO. 0009861

LOCATION SKETCH

DESIGN DATA:
TRAFFIC A.D.T.: 39600 (2020)
TRAFFIC A.D.T.: 48350 (2040)
TRAFFIC D.H.V.: 3850 (2040)
DIRECTIONAL DIST: 50%
% TRUCKS: 9.5%
24 HR.TRUCKS %: 13%
SPEED DESIGN: 55 MPH

LOCATION & DESIGN APPROVAL DATE: 1/9/17

FUNCTIONAL CLASS:
URBAN PRINCIPAL ARTERIAL

THIS PROJECT IS 100% IN BIBB COUNTY AND IS 100% IN CONG.DIST.NO.2.

PROJECT DESIGNATION: EXEMPT

THIS PROJECT HAS BEEN PREPARED USING THE HORIZONTAL GEORGIA COORDINATE SYSTEM OF 1984 (NAD 1983)/94 WEST ZONE, AND THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

NOTE :
ALL REFERENCES IN THIS DOCUMENT, WHICH INCLUDES ALL PAPERS, WRITINGS, DOCUMENTS, DRAWINGS, OR PHOTOGRAPHS USED, OR TO BE USED IN CONNECTION WITH THIS DOCUMENT, TO "STATE HIGHWAY DEPARTMENT OF GEORGIA", "STATE HIGHWAY DEPARTMENT", GEORGIA STATE HIGHWAY DEPARTMENT", "HIGHWAY DEPARTMENT", OR "DEPARTMENT" WHEN THE CONTEXT THEREOF MEANS THE STATE HIGHWAY DEPARTMENT OF GEORGIA, AND SHALL BE DEEMED TO MEAN THE DEPARTMENT OF TRANSPORTATION.

PLANS PREPARED BY: EUGENE CULVER
DESIGN ENGINEER

RECOMMENDED FOR SUBMISSION BY: CAROL A. BOWLER, P.E.
DESIGN ENGINEER GROUP MANAGER

RECOMMENDED FOR APPROVAL BY: C. Andy Cupp, P.E.
STATE ROADWAY DESIGN ENGINEER

4-12-19 Margaret B. Pirkle
DATE CHIEF ENGINEER

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. PE022529 MARGARET B. PIRKLE
4-12-19

LENGTH OF PROJECT	COUNTY No.021 BIBB COUNTY
	MILES
NET LENGTH OF ROADWAY	1.027
NET LENGTH OF BRIDGES	0.141
NET LENGTH OF PROJECT	1.168
NET LENGTH OF EXCEPTIONS	0.000
GROSS LENGTH OF PROJECT	1.168

SCALE IN FEET
0 400 800 1600

PLANS COMPLETED 4/12/19	4-27-20 - SHEETS: 13-0011, 22-0002
REVISIONS	7-7-20: 2-0001-2-0002, 3-0001, 8-0001, 50-0000,54-0005,
9-23-19 - SHEETS 04-0001, 06-0005, 07-0001,	7, 9, 10, 17, 19, 21, 22, 29, 31, 33, 34, 56-0017
24-0001-24-0012, 44-0001-44-0019, 50-0001-55-0001	7-20-20: 3-0001, 27-0003 - 27-0005
10-4-19 - SHEETS: 05-0004	
11-6-19 - SHEETS: 08-0001, 21-0001, 22-0002, 35-0002	
35-0012, 35-0025, 35-0036, 35-0059, 50-0001, 54-0003	
54-0005, 54-0015, 54-0017, 54-0027, 54-0029	
3-10-20 - SHEETS: 08-0001, 13-0011-13-0012, 26-0006	
26-0011-26-0012, 27-0004-27-0005	

DRAWING No.
01-0001

THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.

TYPICAL SECTION - 1A

TANGENT SECTION - FULL DEPTH

SR 11/SR 49

STA. 15+50 - STA. 22+74
STA. 25+48 - STA. 35+18
STA. 37+20 - STA. 43+05
STA. 45+51 - STA. 46+66
STA. 49+38 - STA. 55+00

SLOPES STEEPER THAN 2:1 WILL REQUIRE GUARDRAIL.
SEE DETAIL "A" FOR TYPICAL SHOULDER DETAIL FOR GUARDRAIL.

A	ASPH CONC 12.5 mm OGFC, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM MATL & H LIME 100 lbs/sq yd
B	RECYCLED ASPH CONC 12.5 mm SUPERPAVE, GP 2, INCL POLYMER-MODIFIED BITUM MATL & H LIME 165 lbs/sq yd
C	RECYCLED ASPH CONC 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H. LIME 220 lbs/sq yd
D	RECYCLED ASPH CONC 25 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME 330 lbs/sq yd
E	RECYCLED ASPH CONC 25 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME 880 lbs/sq yd
F	GR AGGR BASE CRS, 12 INCH, INCL MATL
G	GR AGGR BASE CRS, 8 INCH, INCL MATL

TYPICAL SECTION - 1B

SUPERELEVATED SECTION - FULL DEPTH

SR 11/SR 49

SEE ROADWAY PLANS FOR S.E. RATES & TRANSITIONS

SLOPE CONTROLS		
SLOPE	CUT	FILL
4:1	——	0-10'
2:1	ALL	OVER 10'

* SHOULDER TO SLOPE AT NORMAL RATE, HOWEVER, THE ALGEBRAIC DIFFERENCE IN PAVING SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%. MINIMUM SHOULDER SLOPE TO BE 2%.

** SHOULDER TO SLOPE AT NORMAL RATE OR SUPERELEVATION RATE, WHICHEVER IS GREATER.

ROADWAY DESIGN

REVISION DATES

TYPICAL SECTIONS

SR 11/ SR 49 @ ROCKY CREEK

BIBB COUNTY

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	05-0001
CORRECTED:		DATE:	
VERIFIED:		DATE:	

TYPICAL SECTION - 2

TANGENT SECTION - FULL DEPTH

SR 11/SR 49

STA. 55+00 - STA. 58+00

(A) ASPH CONC 12.5 mm OGFC, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM MATL & H LIME 100 lbs/sq yd

(B) RECYCLED ASPH CONC 12.5 mm SUPERPAVE, GP 2, INCL POLYMER-MODIFIED BITUM MATL & H LIME 165 lbs/sq yd

(C) RECYCLED ASPH CONC 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H. LIME 220 lbs/sq yd

(D) RECYCLED ASPH CONC 25 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME 330 lbs/sq yd

(E) RECYCLED ASPH CONC 25 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME 880 lbs/sq yd

(F) GR AGGR BASE CRS, 12 INCH, INCL MATL

(G) GR AGGR BASE CRS, 8 INCH, INCL MATL

(H) 4" CONC. MEDIAN WITH TP 7 CURB FACE CONC. CURB AND GUTTER, 8 IN X 30 IN, TYPE 7 GA. STD 9032B

TYPICAL SECTION DETAIL TO BE USED WHEN EXISTING PAVEMENT IS TO BE RESURFACED WITH TWO INCHES OR MORE OF ASPHALTIC CONCRETE

TYPICAL SECTION DETAIL TO BE USED WHEN EXISTING PAVEMENT IS TO BE RESURFACED WITH LESS THAN TWO INCHES OF ASPHALTIC CONCRETE

MILL EXISTING LANE ONE FOOT WIDE TO DEPTH OF ADJOINING LAYER TO BE PLACED. COST OF MILLING FOR THIS WORK TO BE INCLUDED IN THE UNIT PRICE BID FOR PAVEMENT REINFORCING FABRIC.

ALLOWABLE RANGES TABLE

FOR THIS PROJECT, CROSS SLOPES THAT ARE ADJUSTED TO "BEST FIT" EXISTING PAVEMENT SLOPES ARE SUBJECT TO THE FOLLOWING LIMITS:

A. NORMAL CROWN

SECTION WITH GRADES 0.5% OR GREATER	SECTION WITH GRADES LESS THAN 0.5%
0.0150 FT/FT - MINIMUM	0.0156 FT/FT - MINIMUM
0.0208 FT/FT - DESIRABLE	0.0208 FT/FT - DESIRABLE
0.0250 FT/FT - MAXIMUM	0.0300 FT/FT - MAXIMUM

B. SUPERELEVATION RATE

S.E. RATE SHOWN ON PLANS OR SE RATE EXISTING IN FIELD, WHICHEVER IS GREATER.

C. SUPERELEVATION TRANSITION LENGTH (LENGTH FROM FLAT POINT TO FULL SE)

	RATE OF CHANGE	CORRESPONDING DIFFERENCE IN GRADE BETWEEN PIVOT POINT AND EDGE OF PAVEMENT
MINIMUM	1:150	0.67%
DESIRABLE	1:200	0.50%
MAXIMUM	1:300	0.33%

LENGTH SHALL BE SET TO AVOID CREATING A FLAT GUTTER GRADE ON LOW SIDE AND TO AVOID FLAT CROSS SLOPES AT OR NEAR THE LOW POINT OF VERTICAL CURVES.

D. POSITIONING OF SUPERELEVATION TRANSITION LENGTH ON SIMPLE CURVES

50% OF TRANSITION INSIDE CURVE - MAXIMUM
33% OF TRANSITION INSIDE CURVE - DESIRABLE
20% OF TRANSITION INSIDE CURVE - MINIMUM

NOTE: CROWN WIPE-OUT SHALL BE AT THE SAME RATE AS THE SE TRANSITION.

E. SMOOTHING OF BREAKS IN EDGE PROFILE AT BEGIN AND END OF TRANSITION SHALL BE ACCOMPLISHED BY VERTICAL CURVE WITH A MINIMUM LENGTH (IN FEET) EQUAL TO THE SPEED DESIGN (IN MPH).

GDOT ROADWAY DESIGN

REVISION DATES

TYPICAL SECTIONS

SR 11/SR 49 @ ROCKY CREEK

BIBB COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		05-0002
CORRECTED:		DATE:		
VERIFIED:		DATE:		

- SHOULDER TO SLOPE AT NORMAL RATE, HOWEVER, THE ALGEBRAIC DIFFERENCE IN TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%. MINIMUM SHOULDER SLOPE TO BE 2%.
- SHOULDER TO SLOPE AT NORMAL RATE OR SUPERELEVATION RATE, WHICHEVER IS GREATER.

TWIN BRIDGE SECTION

TYPICAL SECTION - 3
SR 11/SR 49/US 41 BRIDGE SECTION

STA. 23+04 - STA. 25+18
STA. 35+48 - STA. 36+90
STA. 43+45 - STA. 45+31
STA. 46+96 - STA. 49+13

ROADWAY DESIGN

REVISION DATES

TYPICAL SECTIONS
SR 11/ SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:	
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CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 05-0003

VOID

TYPICAL SECTION 4A

STAGING & TEMPORARY PAVEMENT SECTION

SR 11/SR 49

SLOPES STEEPER THAN 2:1 WILL REQUIRE GUARDRAIL.
SEE DETAIL "A" FOR TYPICAL SHOULDER DETAIL FOR GUARDRAIL.

STA. 15+50 - STA. 23+04
STA. 25+18 - STA. 35+48
STA. 36+90 - STA. 43+45
STA. 45+31 - STA. 46+96
STA. 49+13 - STA. 58+00

SLOPE CONTROLS		
SLOPE	CUT	FILL
4:1	———	0-10'
2:1	ALL	OVER 10'

(A) ASPH CONC 12.5 mm OGFC, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM MATL & H LIME 100 lbs/sq yd
(B) RECYCLED ASPH CONC 12.5 mm SUPERPAVE, GP 2, INCL POLYMER-MODIFIED BITUM MATL & H LIME 165 lbs/sq yd
(C) RECYCLED ASPH CONC 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H. LIME 220 lbs/sq yd
(D) RECYCLED ASPH CONC 25 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME 330 lbs/sq yd
(E) RECYCLED ASPH CONC 25 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME 880 lbs/sq yd
(F) GR AGGR BASE CRS, 12 INCH, INCL MATL
(G) GR AGGR BASE CRS, 8 INCH, INCL MATL

ROADWAY DESIGN

REVISION DATES

TYPICAL SECTIONS
SR 11/ SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED: DATE:
BACKCHECKED: DATE:
CORRECTED: DATE:
VERIFIED: DATE:

DRAWING No. 05-0004

TYPICAL SECTION 5

STAGING CROSSOVERS & TEMPORARY PAVEMENT SECTION

SR 11/SR 49

STAGE 1

STA. 10+72.36 - STA. 17+00

STA. 57+00 - STA. 61+00

STAGE 2

STA. 10+50 - STA. 20+00

STA. 57+00 - STA. 62+50

A	ASPH CONC 12.5 mm OGFC, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM MATL & H LIME 100 lbs/sq yd
B	RECYCLED ASPH CONC 12.5 mm SUPERPAVE, GP 2, INCL POLYMER-MODIFIED BITUM MATL & H LIME 165 lbs/sq yd
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ROADWAY DESIGN

REVISION DATES

TYPICAL SECTIONS

SR 11/ SR 49 @ ROCKY CREEK

BIBB COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		05-0005
CORRECTED:		DATE:		
VERIFIED:		DATE:		

GDOT ROADWAY DESIGN

SCALE IN FEET
0 100 200 400

REVISION DATES

CONSTRUCTION LAYOUT
SR 11/ SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		11-0001
CORRECTED:		DATE:		
VERIFIED:		DATE:		

Curve# 2
PI Sta= 52+88.37
N= 1007971.4846
E= 2452436.3073
DELTA= 05°39'30.0" (LT)
D= 02°00'00.00"
T= 141.57
L= 282.92
R= 2864.79
E= 3.50
eMAX= 6%
ed= 4%

Survey Control Points

Description	Northing	Easting	Elevation
D 901	1,007,593.8130	2,452,288.5970	N/A
BV 011-67	1,008,665.4004	2,452,566.9887	290.866

ROADWAY DESIGN

SCALE IN FEET
0 100 200 400

REVISION DATES

CONSTRUCTION LAYOUT
SR 11/ SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED: DATE:
BACKCHECKED: DATE:
CORRECTED: DATE:
VERIFIED: DATE:

DRAWING No. 11-0002

Survey Control Points

Description	Northing	Easting	Elevation
D 901	1,007,593.8130	2,452,288.5970	N/A
BV 011-67	1,008,665.4004	2,452,566.9887	290.866

ROADWAY DESIGN

SCALE IN FEET
0 100 200 400

REVISION DATES

CONSTRUCTION LAYOUT
SR 11/ SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		11-0003
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VERIFIED:		DATE:		

STAGING CROSSOVERS

GDOT ROADWAY DESIGN

SCALE IN FEET
0 100 200 400

REVISION DATES

CONSTRUCTION LAYOUT
SR 11/ SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		11-0004
CORRECTED:		DATE:		
VERIFIED:		DATE:		

STAGING CROSSOVERS

ROADWAY DESIGN

SCALE IN FEET
0 100 200 400

REVISION DATES

CONSTRUCTION LAYOUT
SR 11/ SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		11-0005
CORRECTED:		DATE:		
VERIFIED:		DATE:		

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

GDOT ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

CONSTRUCTION PLAN
SR 11/SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0001
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

BEGIN LIMIT OF ACCESS.....BLA
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LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

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REVISION DATES

CONSTRUCTION PLAN
SR 11/SR 49 @ ROCKY CREEK
BIBB COUNTY

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BACKCHECKED:		DATE:	13-0002
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10/23/2015 GPLN

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GDOT ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

CONSTRUCTION PLAN
SR 11/SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	13-0003
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GDOT
ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

CONSTRUCTION PLAN
SR 11/SR 49 @ ROCKY CREEK
BIBB COUNTY

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GDOT
ROADWAY DESIGN

SCALE IN FEET
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REVISION DATES

CONSTRUCTION PLAN
SR 11/SR 49 @ ROCKY CREEK
BIBB COUNTY

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ROADWAY DESIGN

SCALE IN FEET
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REVISION DATES

CONSTRUCTION PLAN
SR 11/SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:	
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VERIFIED:		DATE:	

DRAWING No.
13-0006

10/23/2015 GPLN

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END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

PROPERTY AND EXISTING R/W LINE
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GDOT
ROADWAY DESIGN

SCALE IN FEET
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REVISION DATES

CONSTRUCTION PLAN
SR 11/SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0007
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

BEGIN LIMIT OF ACCESS.....BLA
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ROADWAY DESIGN

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REVISION DATES

CONSTRUCTION PLAN
SR 11/SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 13-0008

10/23/2015 GPLN

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ORANGE BARRIER FENCE
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ROADWAY DESIGN

SCALE IN FEET
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REVISION DATES

CONSTRUCTION PLAN
SR 11/SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	13-0009
CORRECTED:		DATE:	
VERIFIED:		DATE:	

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GDOT
ROADWAY DESIGN

SCALE IN FEET
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REVISION DATES

CONSTRUCTION PLAN
SR 11/SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	13-0010
CORRECTED:		DATE:	
VERIFIED:		DATE:	

10/23/2015 GPLN

VOID

GDOT | P.I. No. 0009861

USE ON CONSTRUCTION

BEGIN LIMIT OF ACCESS	BLA
END LIMIT OF ACCESS	ELA
LIMIT OF ACCESS	
REQ'D R/W & LIMIT OF ACCESS	
ORANGE BARRIER FENCE	
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	

PROPERTY AND EXISTING R/W LINE	
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EASEMENT FOR CONSTR OF SLOPES	
EASEMENT FOR CONSTR OF DRIVES	

GDOT ROADWAY DESIGN

SCALE IN FEET 0 20 40 80

REVISION DATES
03/10/20

CONSTRUCTION PLAN
SR 11/SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0011
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

VOID

GDOT

P.I. No. 0009861

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GDOT
ROADWAY DESIGN

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REVISION DATES

CONSTRUCTION PLAN
SR 11/SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No.
13-0012

10/23/2015 GPLN

LEFT PGL

GDOT ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE

SR 11/ SR 49 @ ROCKY CREEK

BIBB COUNTY

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 15-0001

LEFT PGL

GDOT ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE
SR 11/ SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	15-0002
CORRECTED:		DATE:	
VERIFIED:		DATE:	

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P.I. No. 0009861

LEFT PGL

ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE

SR 11/ SR 49 @ ROCKY CREEK

BIBB COUNTY

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 15-0003

7/31/2015 G20EDG

LEFT PGL

GDOT ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE
SR 11/ SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No.
15-0004

LEFT PGL

GDOT
ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE
SR 11/ SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No.
15-0005

LEFT PGL

GDOT ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE

SR 11/ SR 49 @ ROCKY CREEK

BIBB COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		15-0006
CORRECTED:		DATE:		
VERIFIED:		DATE:		

LEFT PGL

ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE

SR 11/ SR 49 @ ROCKY CREEK

BIBB COUNTY

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 15-0007

LEFT PGL

ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE
SR 11/ SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No.
15-0008

RIGHT PGL

ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE

SR 11/ SR 49 @ ROCKY CREEK

BIBB COUNTY

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No.
15-0009

RIGHT PGL

ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE

SR 11/ SR 49 @ ROCKY CREEK

BIBB COUNTY

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No.
15-0010

RIGHT PGL

GDOT
ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE
SR 11/ SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	15-0011
CORRECTED:		DATE:	
VERIFIED:		DATE:	

RIGHT PGL

GDOT
ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE
SR 11/ SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	15-0012
CORRECTED:		DATE:	
VERIFIED:		DATE:	

RIGHT PGL

ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE

SR 11/ SR 49 @ ROCKY CREEK

BIBB COUNTY

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No.
15-0013

RIGHT PGL

GDOT
ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE

SR 11/ SR 49 @ ROCKY CREEK

BIBB COUNTY

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 15-0014

RIGHT PGL

ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE

SR 11/ SR 49 @ ROCKY CREEK

BIBB COUNTY

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	15-0015
CORRECTED:		DATE:	
VERIFIED:		DATE:	

RIGHT PGL

ROADWAY DESIGN

SCALE IN FEET
0 20 40 80

REVISION DATES

MAINLINE PROFILE
SR 11/ SR 49 @ ROCKY CREEK
BIBB COUNTY

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No.
15-0016

REVISION DATES

DRIVEWAY PROFILES

SR 11/ SR 49 @ ROCKY CREEK

BIBB COUNTY

ROADWAY DESIGN

SCALE IN FEET 0 10 20 40

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		17-0001
CORRECTED:		DATE:		
VERIFIED:		DATE:		

REVISION DATES

ROADWAY DESIGN

SCALE IN FEET
0 10 20 40

DRIVEWAY PROFILES

SR 11/ SR 49 @ ROCKY CREEK

BIBB COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		17-0002
CORRECTED:		DATE:		
VERIFIED:		DATE:		

57+31 RT

ROADWAY DESIGN

SCALE IN FEET
0 10 20 40

REVISION DATES

DRIVEWAY PROFILES

SR 11/ SR 49 @ ROCKY CREEK

BIBB COUNTY

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No.
17-0003

P.I. NO. 0009861

PLAN

ELEVATION

NOTE:

* ELEVATIONS SHOWN ARE AT THE GUTTERLINE AT THE INSIDE FACE OF BARRIER. TOP OF COPING H ELEVATIONS ARE 3.5' ABOVE ELEVATIONS SHOWN.

** ELEVATIONS SHOWN ARE MAXIMUM ELEVATIONS AT THE TOP OF LEVELING PAD.

*** OFFSETS ARE MEASURED FROM ℄ SR 11 (SR 49, US 41)

SR 11 (SR 49, US 41) LEFT PGL VERTICAL CURVE DATA

S.E. DATA	
STA.	SLOPE
19+94.00	-2%
20+96.00	0%
21+98.00	+2%
23+00.00	+4%

SR 11 (SR 49, US 41) LEFT SUPERELEVATION DATA

WALL NO. 1

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

PLAN AND ELEVATION - RETAINING WALL 1
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

SCALE: 1" = 10'-0" (UNLESS OTHERWISE NOTED) OCTOBER 2017

DRAWING NO. 32-0001

WALL SHEET 1 OF 2

REVISIONS | DATE | BY

DESIGNED EJF | CHECKED TKH | REVIEWED DLC/SKG
DRAWN EJF | DESIGN GROUP DPD | APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

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P.I. NO. 0009861

GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2013 EDITION AND 2016 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.

FINISH - NO ARCHITECTURAL FINISH IS REQUIRED, UNLESS OTHERWISE STATED IN THE CONTRACT DOCUMENTS.

GRAFFITI PROOF COATING - ALL MSE WALL PANELS SHALL HAVE A GRAFFITI PROOF COATING AS PER SECTION 838 OF THE GEORGIA DOT SPECIFICATIONS.

CONCRETE COVER - MAINTAIN 2 INCHES COVER MINIMUM ON ALL REINFORCING STEEL.

STATIONS AND OFFSETS - STATIONS SHOWN ARE ALONG ℄ SR 11 (SR 49, US 41). OFFSETS SHOWN ARE MEASURED TO THE GUTTERLINE.

FOUNDATION BACKFILL MATERIAL - REMOVE 3'-0" OF EXISTING SOIL PLACE 3'-0" OF TYPE II FOUNDATION BACKFILL MATERIAL UNDER MSE WALL AS SHOWN IN THE PLANS FROM STATIONS 22+50 TO 23+04.

MSE WALL BACKFILL MATERIAL - LIGHTWEIGHT BACKFILL MATERIAL SHALL NOT BE USED FOR THIS MSE WALL.

STAGE CONSTRUCTION - A WAITING PERIOD OF 30 DAYS SHALL BE OBSERVED AFTER FINAL STAGE OF BACKFILL PLACEMENT AND PRIOR TO THE CONSTRUCTION OF THE ABUTMENT OR TRAFFIC BARRIER COPING H.

TEMPORARY SHORING - PROVIDE TEMPORARY SHORING AS NECESSARY FOR WALL CONSTRUCTION.

JOINTS - PROVIDE ONE INCH EXPANSION JOINT IN COPING OR BARRIER AT EVERY FOURTH PANEL.

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 TESTING. USE ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES FOR MANUAL SHIELDED METAL ARC

WALL PLANS - THE RETAINING WALL IS CONSIDERED A CONTRACTOR DESIGN. THESE WALL PLANS ARE CONCEPTUAL AND ARE FOR ILLUSTRATIVE PURPOSES ONLY. EXACT NUMBER OF SOIL REINFORCING STRIPS, THEIR LOCATIONS AND LENGTHS SHALL BE PROVIDED BY THE CONTRACTOR FOR THE WALL SYSTEM BID. THE PRESENCE OF THESE CONCEPTUAL PLANS IN THE CONTRACT DOCUMENTS IN NO WAY RELIEVES THE CONTRACTOR FROM PROVIDING A WALL SYSTEM WHICH PROVIDES STRUCTURAL ADEQUACY, IN ACCORDANCE WITH SECTION 627 OF THE GEORGIA DOT SPECIFICATIONS, AT THE BID PRICE.

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 JOINT FILLERS, NEOPRENE PADS, WATERPROOFING AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.

WALL DESIGN CALCULATIONS - CONTRACTOR TO PROVIDE WALL DESIGN CALCULATIONS. CALCULATIONS FOR EACH WALL DESIGN SECTION SHALL INCLUDE THE VERIFICATION OF INTERNAL STABILITY AND EXTERNAL STABILITY , AS WELL AS A DETERMINATION OF THE BEARING CAPACITY AND ESTIMATED SETTLEMENT FOR THE APPROPRIATE LRFD LIMIT STATES.

SECTION A-A
(LOOKING DOWNSTATION)

SECTION B-B
(LOOKING DOWNSTATION)

DESIGN DATA

SPECIFICATION ---------- AASHTO LFRD 7TH EDITION, 2014

STA. 21+00 TO 22+50
RETAINED SOIL: COHESION ---------- 0 PSF
ANGLE OF INTERNAL FRICTION ---------- 38°
UNIT WEIGHT ---------- 120 PCF

FOUNDATION SOIL: COHESION ---------- 0 PSF
ANGLE OF INTERNAL FRICTION ---------- 38°
UNIT WEIGHT ---------- 120 PCF

ESTIMATED SETTLEMENT ---------- 2.7 IN

STA. 22+50 TO 23+04
RETAINED SOIL: COHESION ---------- 0 PSF
ANGLE OF INTERNAL FRICTION ---------- 28°
UNIT WEIGHT ---------- 110 PCF

FOUNDATION SOIL: COHESION ---------- 0 PSF
ANGLE OF INTERNAL FRICTION ---------- 32°
UNIT WEIGHT ---------- 120 PCF

ESTIMATED SETTLEMENT ---------- 2.9 IN

SOIL REINFORCEMENT NOTES:
1. H=DESIGN HEIGHT+EMBEDMENT
2. MINIMUM REINFORCEMENT LENGTH = 0.7H OR 10 FEET WHICHEVER IS GREATER.
3. THE REINFORCEMENT STRAP LENGTHS PROVIDED ARE THE MINIMUM LENGTHS REQUIRED FOR EXTERNAL STABILITY. THE REINFORCEMENT LENGTHS USED IN THE CONSTRUCTION OF THE RETAINING WALLS SHALL BE THE LONGER OF THAT REQUIRED FOR EXTERNAL OR INTERNAL STABILITY AS DETERMINED BY PROPRIETARY WALL COMPANIES.

SUMMARY OF QUANTITIES - WALL NO. 1

NUMBER	QUANTITY	UNIT	PAY ITEM
207-0203	69	CY	FOUND BKFILL MATL, TP II
627-1000	267	SF	MSE WALL FACE, 0 - 10 FT HT, WALL NO - 1
627-1010	2054	SF	MSE WALL FACE, 10 - 20 FT HT, WALL NO - 1
627-1160	204	LF	COPING H, WALL NO - 1

WALL NO. 1

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

MISCELLANEOUS DETAILS - WALL 1
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

DRAWING NO. 32-0002
WALL SHEET 2 OF 2

REVISIONS: DATE | BY

NO SCALE | OCTOBER 2017

DESIGNED EJF | CHECKED TKH | REVIEWED DLC/SKG
DRAWN EJF | DESIGN GROUP DPD | APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

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P.I. NO. 0009861

PLAN

NOTES:
END BENT PILES NOT SHOWN

ALL BENTS ARE RADIAL

* SLOPE NORMAL TO END BENT

** STATIONS ARE ALONG CONSTRUCTION CENTERLINE AT THE INTERSECTION OF CONSTRUCTION CENTERLINE AND B.F.P.R. OR CENETERLINE OF BENT. ELEVATIONS ARE ALONG THE P.G.L. FOR BRIDGE NO. 1LT

R - RADIAL DIMENSION

P.I. STA. = 25+87.80
P.C. STA. = 23+36.53
P.T. STA. = 28+37.78
Δ = 10°-01'-30"
D = 02-00-00 RIGHT
T = 251.27 FT.
L = 501.25 FT.
R = 2864.79 FT.
S.E. = 4.00 %

HORIZONTAL CURVE DATA

STA. 22+55.97
EL. 293.16
+.5187%

VERTICAL GRADE DATA
(BRIDGE NO. 1LT)

STA. 20+18.28
EL. 291.93
+.5188%

VERTICAL GRADE DATA
(BRIDGE NO. 1RT)

PLACE RIP RAP AND FILTER FABRIC FROM 2 FT. BELOW ORIGINAL GROUND TO 2 FT. ABOVE FLOODSTAGE ELEVATION. EXTEND RIP RAP AND FILTER FABRIC 20 FT. BEYOND END OF WINGWALLS UNLESS OTHERWISE NOTED. WHERE BERM ELEVATION IS LOWER THAN 2 FT. ABOVE FLOODSTAGE, EXTEND RIP RAP AND FILTER FABRIC ACROSS BERM.

RIP RAP DETAIL
NO SCALE

ELEVATION
(BRIDGE NO. 1 LT SHOWN)

STATIONS AND ELEVATIONS			
BRIDGE	BENT	STATION	ELEVATION
LEFT	1	23+04.00	293.41
	2	23+44.00	293.62
	3	24+70.00	294.27
	4	25+10.00	294.48
RIGHT	1	23+12.00	293.45
	2	23+52.00	293.66
	3	24+78.00	294.32
	4	25+18.00	294.52

EXISTING BRIDGE NO. 1LT
EXISTING BRIDGE SERIAL NO. 021-0002-0
EXISTING BRIDGE I.D. NO. 021-0001ID-006.47N

EXISTING BRIDGE NO. 1RT
EXISTING BRIDGE SERIAL NO. 021-0001-0
EXISTING BRIDGE I.D. NO. 021-0001ID-006.46N

PROJECT P.I. NO. 0009861

BRIDGE NO. 1 LT & RT

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

PLAN AND ELEVATION
SR 11(SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

SCALE: 1" = 15'-0"(UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0001

BRIDGE SHEET 1 OF 23

REVISIONS | DATE | BY

DESIGNED EJF | CHECKED TKH | REVIEWED DLC/SKG
DRAWN EJF | DESIGN GROUP DPD | APPROVED WMD

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GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2013 EDITION AND 2016 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. MAINTAIN 2" MINIMUM CLEARANCE ON ALL REINFORCEMENT UNLESS OTHERWISE NOTED.

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 OBTAINED ON THE GEORGIA DOT WEBSITE AT:

HTTP://WWW.DOT.GA.GOV/BS/PROJECTS/PROJECTSEARCH

THE ORIGINAL LEFT BRIDGE WAS BUILT AND HAS NO PLANS AVAILABLE. IT WAS FIRST WIDENED UNDER PROJECT NUMBER NO. SP1552(8) (PROJECT ID NO. H017223). IT WAS WIDENED A SECOND TIME UNDER PROJECT NUMBER RAB(4)SP1552(15) (PROJECT ID NO. H011688). IT WAS WIDENED A THIRD TIME UNDER PROJECT NUMBER TSAPF-002-3(5) (PROJECT ID NO. H000234). THE ORIGINAL RIGHT BRIDGE WAS BUILT UNDER PROJECT NO. SN-FAP 79(2) (PROJECT ID NO. H014237). IT WAS WIDENED UNDER PROJECT NO. TSAPF-002-3(5) (PROJECT ID NO. H000234).

WAITING PERIOD - NONE REQUIRED.

COFFERDAMS - PROVIDE COFFERDAMS AT BENTS 2 AND 3 ON BOTH BRIDGES.

FOUNDATION BACKFILL MATERIAL - PLACE 1'-0" OF TYPE II FOUNDATION BACKFILL MATERIAL UNDER EACH FOOTING AT BENTS 2 AND 3 ON BOTH BRIDGES. THE QUANTITY IS BASED ON THE PLAN FOOTING DIMENSIONS PLUS 2'-0". THIS REQUIREMENT MAY BE WAIVED BY THE ENGINEER IF THE FOOTING AREA IS DRY.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

DYNAMIC PILE 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 TESTING AT 404-608-4720 TWO WEEKS PRIOR TO DRIVING PILES.

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 OFFICE OF MATERIALS AND TESTING FOR REVIEW AND APPROVAL TWO WEEKS PRIOR TO DRIVING PILES.

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.

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 4. 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.

EXTERIOR BEAM BRACING - THE CONTRACTOR SHALL PROVIDE BRACING FPR SPANS 1 AND 3 BETWEEN EXTERIOR BEAM AND THE FIRST INTERIOR BEAM UNTIL THE DECK HAS BEEN POURED AND THE OVERHANG FORMS REMOVED. ALL COST FOR DESIGNING, PROVIDING, INSTALLING AND REMOVING BRACING SHALL BE INCLUDED IN PRICE BID FOR LUMP - SUPERSTRUCTURE CONCRETE.

GENERAL NOTES CON'T

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 TESTING. USE ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING.

BRIDGE REMOVAL - REMOVE EXISTING BRIDGE AS PER SUB-SECTION 540.3.05 OF THE GEORGIA DOT SPECIFICATIONS.

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.

GENERAL NOTES (ALTERNATE 1)

DRIVING RESISTANCE - DETERMINE DRIVING RESISTANCE FOR PILES USING DYNAMIC PILE TESTING IN ACCORDANCE WITH SPECIAL PROVISION 520. DYNAMIC PILE TESTING SHALL BE REQUIRED AT EACH TEST PILE.

TEST PILES - DRIVE TEST PILES AT THE FOLLOWING LOCATIONS:

ONE 14 IN SQ PSC X 61 FT AT BRIDGE 1 LEFT BENT 1
ONE 14 IN SQ PSC X 18 FT AT BRIDGE 1 RIGHT BENT 2
ONE 14 IN SQ PSC X 24 FT AT BRIDGE 1 RIGHT BENT 3
ONE 14 IN SQ PSC X 48 FT AT BRIDGE 1 LEFT BENT 4

GENERAL NOTES (ALTERNATE 2)

DRIVING RESISTANCE - DETERMINE DRIVING RESISTANCE FOR PILES USING DYNAMIC PILE TESTING IN ACCORDANCE WITH SPECIAL PROVISION 520. DYNAMIC PILE TESTING SHALL BE REQUIRED FOR ONE PILE AT BENTS 1 LT, 2 RT, 3 RT AND 4 LT.

METAL SHELL PILES - USE A MINIMUM SHELL THICKNESS OF 3/8" FOR PILES HAVING AN OUTSIDE DIAMETER OF 14". USE THIS SHELL THICKNESS IN LIEU OF THOSE CALLED FOR IN SUB-SECTION 520.3.05.M AND SUB-SECTION 855.2.01.A.1 OF THE GEORGIA DOT SPECIFICATIONS.

PILE CLOSURE PLATE DETAIL - USE CLOSURE PLATE OPTION 2 AT THIS SITE IN ACCORDANCE WITH SUB-SECTION 520.3.05.M OF THE GEORGIA DOT SPECIFICATIONS.

LEFT BRIDGE CONSISTS OF

VOID

2 - 40'-0" TYPE I MOD PSC BEAM SPANS ---------- SPECIAL DESIGN

1 - 126'-0" BULB TEE, 65 IN, PSC BEAM SPAN ---------- SPECIAL DESIGN

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

2 - CONCRETE INTERMEDIATE BENTS ---------- SPECIAL DESIGN

3 - END POST AND GUARDRAIL ATTACHMENT DETAIL ------- GA. STD. 3054 (9-30-02)
(L = 4'-0"; W = 1'-1"; H = 3'-6")

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)

RIGHT BRIDGE CONSISTS OF

2 - 40'-0" TYPE I MOD PSC BEAM SPANS ---------- SPECIAL DESIGN

1 - 126'-0" BULB TEE, 65 IN, PSC BEAM SPAN ---------- SPECIAL DESIGN

2 - 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'-6")

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)

BRIDGE NO. 1 LT & RT

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

GENERAL NOTES
SR 11(SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

NO SCALE JULY 2017

DRAWING NO. 35-0002

BRIDGE SHEET 2 OF 23

REVISIONS | DATE | BY

DESIGNED EJF | CHECKED TKH | REVIEWED DLC/SKG
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1 INCH WHEN PRINTED FULL SIZE

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P.I. NO. 0009861

DRAINAGE DATA

DRAINAGE AREA ---------- 262.0 SQ MILES

FLOOD FREQUENCY	TOTAL DISCHARGE	DISCHARGE THRU BRIDGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
50 YEAR	15,300 CFS	6,046 CFS	6.12 FPS	988 SQ FT	1.05 FT
100 YEAR	17,300 CFS	6,902 CFS	6.41 FPS	1,077 SQ FT	1.09 FT
500 YEAR	22,600 CFS	9,258 CFS	7.07 FPS	1,309 SQ FT	1.18 FT

TRAFFIC DATA

TRAFFIC ---------- ADT = 39,600 (2020)
ADT = 48,350 (2040)

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

TRUCKS ---------- 9.5 %

24 HR TRUCKS ---------- 13 %

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

UTILITIES

NO UTILITIES ON BRIDGE

EXISTING UTILITIES

GAS MAIN ---------- ATLANTA GAS LIGHT COMPANY

FIBER OPTIC ---------- GDOT

18 TELEPHONE CONDUITS ---------- AT&T

WATER MAIN ---------- MACON WATER AUTHORITY

DESIGN DATA

SPECIFICATIONS ---------- AASHTO LRFD 7TH EDITION, 2014
(DESIGNED FOR SEISMIC PERFORMANCE ZONE 2, SD1 = 0.170)

DESIGN VEHICLE LIVE LOAD ---------- HL-93

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

CONCRETE: SUPERSTRUCTURE ---------- CLASS D, f'_c = 4,000 PSI
BARRIER ---------- 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 AA, f'_c = 3,500 PSI

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

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

METAL SHELL PILES (ALT. 2) ---------- GRADE 3, f_y = 45,000 PSI

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	LEFT BRIDGE	RIGHT BRIDGE	UNIT	PAY ITEM
207-0203	21	21	CY	FOUND BKFILL MATL, TP II
211-0300	290	330	CY	BRIDGE EXCAVATION, STREAM CROSSING
500-0100	1064	1031	SY	GROOVED CONCRETE
500-1011	LUMP	----	LS	SUPERSTR CONCRETE, CL D, BR NO - 1 LT (333)
500-1011	----	LUMP	LS	SUPERSTR CONCRETE, CL D, BR NO - 1 RT (327)
500-2100	407	395	LF	CONCRETE BARRIER
500-3002	201	203	CY	CLASS AA CONCRETE
507-8900	468	----	LF	PSC BEAMS, AASHTO TYPE I MOD, BR NO - 1 LT
507-8900	----	460	LF	PSC BEAMS, AASHTO TYPE I MOD, BR NO - 1 RT
507-9034	760	----	LF	PSC BEAMS, AASHTO, BULB TEE, 65 IN, BR NO - 1 LT
507-9034	----	741	LF	PSC BEAMS, AASHTO, BULB TEE, 65 IN, BR NO - 1 RT
511-1000	35825	36080	LB	BAR REINF STEEL
511-3000	LUMP	----	LS	SUPERSTR REINF STEEL, BR NO - 1 LT (82197)
511-3000	----	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 1 RT (81287)
523-1100	2	2	EA	DYNAMIC PILE TEST
525-1000	4	4	EA	COFFERDAM
540-1102	LUMP	----	LS	REMOVAL OF EXISTING BRIDGE, BR NO - 1 LT
540-1102	----	LUMP	LS	REMOVAL OF EXISTING BRIDGE, BR NO - 1 RT
603-2024	975	975	SY	STN DUMPED RIP RAP, TP 1, 24 IN
603-7000	975	975	SY	PLASTIC FILTER FABRIC

ALTERNATE 1 QUANTITIES

PAY ITEM NUMBER	LEFT BRIDGE	RIGHT BRIDGE	UNIT	PAY ITEM
520-2214	1420	1150	LF	PILING, PSC, 14 IN SQ
520-3214	2	2	EA	TEST PILE, PSC, 14 IN SQ
520-4214	1	1	EA	LOAD TEST, PSC, 14 IN SQ (IF REQD)

ALTERNATE 2 QUANTITIES

PAY ITEM NUMBER	LEFT BRIDGE	RIGHT BRIDGE	UNIT	PAY ITEM
520-1314	1580	1490	LF	PILING IN PLACE, METAL SHELL, 14 IN OD
520-4314	1	1	EA	LOAD TEST, METAL SHELL, 14 IN OD (IF REQD)

BRIDGE NO. 1 LT & RT

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

GENERAL NOTES
SR 11(SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

NO SCALE JULY 2017

DRAWING NO. 35-0003

BRIDGE SHEET 3 OF 23

REVISIONS | DATE | BY

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SPAN I
LEFT BRIDGE SHOWN

SPAN I
RIGHT BRIDGE SHOWN

BARRIER TRANSITION DETAIL
SCALE: ¼" = 1'-0"

DETAILS OF 1" EXPANSION JOINT IN BARRIER
SCALE: ½" = 1'-0"

SECTION AT ENDWALL
SCALE: ¾" = 1'-0"

P.I. NO. 0009861

BRIDGE NO. 1 LT & RT

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

DECK PLAN - SPAN 1
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

SCALE: 3⁄16" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0004

BRIDGE SHEET 4 OF 23

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SPAN 2
LEFT BRIDGE SHOWN

SLAB REINFORCEMENT NOT SHOWN

SECTION THRU DIAPHRAGM
SCALE: 3/4" = 1'-0"

SLAB REINFORCEMENT NOT SHOWN

SECTION THRU EDGE BEAM
SCALE: 3/4" = 1'-0"

DETAIL "A"
NO SCALE

NOTE:
DO NOT REMOVE EDGE BEAM FORMS UNTIL DECK HAS BEEN POURED AND REACHES 28-DAY STRENGTH.

LEFT BRIDGE SUPTERSTRUCTURE QUANTITIES

ITEM	SPAN 1	SPAN 2	SPAN 3	TOTAL
LUMP - LEFT BRIDGE - SUPERSTR. CONCRETE, CU. YDS., CLASS "D"	63.6	203.9	65.2	332.7
LUMP - LEFT BRIDGE - SUPERSTR. REINF. STEEL, LBS.	17370	47176	17651	82197

END POST CONCRETE AND BAR REINFORCEMENT STEEL QUANTITIES INCLUDED IN END SPAN QUANTITIES.

QUANTITIES FOR 600 BARS INCLUDED IN SPANS 1 AND 3

BRIDGE NO. 1 LT

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DATE | REVISIONS | BY

DECK PLAN - SPAN 2 LEFT
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

SCALE: 3/16" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0005
BRIDGE SHEET 5 OF 23

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SPAN 2
RIGHT BRIDGE SHOWN

NOTE: THE 400 SERIES BARS SHALL BE ALTERNATED AS SHOWN. THE MIN. LAP FOR THE 400 SERIES BARS SHALL BE 1'-9". TWO 600 BARS SHALL BE PLACED BETWEEN EACH PAIR OF 400 BARS IN TOP OF SLAB OVER INTERMEDIATE BENTS.

BAR REINFORCEMENT SCHEMATIC
400 BAR DETAIL
NO SCALE

BRIDGE NO. 1 RT

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DEPARTMENT OF TRANSPORTATION
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DECK PLAN - SPAN 2 RIGHT
SR 11(SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

SCALE: 3/16" = 1'-0"(UNLESS OTHERWISE NOTED) JULY 2017

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DRAWING NO. 35-0006
BRIDGE SHEET 6 OF 23

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SPAN 3
LEFT BRIDGE SHOWN

SPAN 3
RIGHT BRIDGE SHOWN

✱ SEAL AS PER GEORGIA DOT SPECIFICATIONS SECTION 449.2.D. SEAL SHALL BE 2" (H) BY 1/4" WIDE PRIOR TO INSTALLATION.

LONGITUDINAL SECTION

EXPANSION JOINT DETAILS
NO SCALE

RIGHT BRIDGE SUPTERSTRUCTURE QUANTITIES				
ITEM	SPAN 1	SPAN 2	SPAN 3	TOTAL
LUMP - RIGHT BRIDGE - SUPERSTR. CONCRETE, CU. YDS., CLASS "D"	64.0	199.3	63.7	327.0
LUMP - RIGHT BRIDGE - SUPERSTR. REINF. STEEL, LBS.	17414	46463	17410	81287

END POST CONCRETE AND BAR REINFORCEMENT STEEL QUANTITIES INCLUDED IN END SPAN QUANTITIES.

QUANTITIES FOR 600 BARS INCLUDED IN SPANS 1 AND 3

BRIDGE NO. 1 LT & RT

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

DECK PLAN - SPAN 3
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

SCALE: 3/16" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0007
BRIDGE SHEET 7 OF 23

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HALF SECTION THRU SLAB
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

HALF SECTION THRU SLAB AT INTERMEDIATE BENT
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

DIMENSION "D" IS MEASURED FROM TOP OF SLAB TO TOP OF BEAMS AT CENTERLINE BEARING. VARY "D" BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTION, HORIZONTAL BEAM THROW, AND VERTICAL CURVE. MAINTAIN A CONSTANT SLAB THICKNESS OF 7¾" BETWEEN BEAMS AND 8" AT THE OVERHANGS.
"D" = 9⅝" FOR ALL BEAMS

BARRIER DETAIL
SCALE: ¾" = 1'-0"

HALF SECTION THRU ENDWALL
(BENT 4 LEFT SHOWN - LOOKING AHEAD)

HALF SECTION THRU EDGE BEAM
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

** LEFT OVERHANG WIDTHS				** RIGHT OVERHANG WIDTHS			
BRIDGE	SPAN	MAX	MIN	BRIDGE	SPAN	MAX	MIN
1LT.	1	3'-9"	3'-8⅞"	1LT.	1	3'-9⅛"	3'-9"
1RT.	1	3'-9"	3'-8½"	1RT.	1	3'-9½"	3'-9"
1LT.	3	3'-9⅞"	3'-9"	1LT.	3	3'-9"	3'-8⅛"
1RT.	3	3'-9⅞"	3'-9"	1RT.	3	3'-9"	3'-8⅛"

HALF SECTION THRU ENDWALL
(BENT 1 LEFT ONLY - LOOKING AHEAD)

TYPICAL SECTION SCHEMATIC
(LOOKING AHEAD)
SCALE: 1" = 10'-0"

R INDICATES RADIAL DIMENSION
⊠ 500A, 500B, AND 501 BARS ARE PLACED RADIALLY. SPACING SHOWN IS ALONG LEFT SIDE OF DECK.

BRIDGE NO. 1 LT & RT

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

DECK SECTIONS - SPANS 1 AND 3
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

SCALE: ⅜" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0008
BRIDGE SHEET 8 OF 23

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DIMENSION "D" IS MEASURED FROM TOP OF SLAB TO TOP OF BEAMS AT CENTERLINE BEARING. VARY "D" BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTION, HORIZONTAL BEAM THROW, AND VERTICAL CURVE. MAINTAIN A CONSTANT SLAB THICKNESS OF 7¾" BETWEEN BEAMS AND 8¼" AT THE OVERHANGS.
"D" = 1'-1⅝" FOR INTERIOR BEAMS
"D" = 1'-2¼" FOR EXTERIOR BEAMS

HALF SECTION THRU SLAB
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

HALF SECTION THRU DIAPHRAGM
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

HALF SECTION THRU SLAB AT INTERMEDIATE BENT
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

HALF SECTION THRU EDGE BEAM
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

REBAR DETAIL IN COPING
NO SCALE

** LEFT OVERHANG WIDTHS				** RIGHT OVERHANG WIDTHS			
BRIDGE	SPAN	MAX	MIN	BRIDGE	SPAN	MAX	MIN
1LT.	2	4'-5⅜"	3'-9"	1LT.	2	3'-9"	3'-0¾"
1RT.	2	4'-5"	3'-9"	1RT.	2	3'-9"	3'-1⅛"

NOTE: SEE SHEET 35-0008 FOR TYPICAL SECTION SCHEMATIC

BRIDGE NO. 1 LT & RT

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

DECK SECTIONS - SPANS 2
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

SCALE: ⅜" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0009
BRIDGE SHEET 9 OF 23

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FRAMING PLAN

NOTE: ALL BEAMS ON SPAN 1 ARE PERPENDICULAR TO BENT 1.

BEAMS 2 THRU 5 ON SPAN 2 LT ARE PARALLEL TO A CHORD OF A CONCENTRIC CIRCLE FORMED BY THE LEFT BRIDGE CENTERLINE AND SPACED AS SHOWN.

BEAMS 8 THRU 11 ON SPAN 2 RT ARE PARALLEL TO A CHORD OF A CONCENTRIC CIRCLE FORMED BY THE RIGHT BRIDGE CENTERLINE AND SPACED AS SHOWN.

BEAMS 1, 6, 7, AND 12 OF SPAN 2 ARE ORIENTED TO INTERSECT THE RESPECTIVE BEAM CENTERLINES OF SPANS 1 AND 3.

BEAMS 1 THRU 6 ON SPAN 3 LT ARE PARALLEL TO A CHORD OF A CONCENTRIC CIRCLE FORMED BY THE LEFT BRIDGE CENTERLINE AND SPACED AS SHOWN.

BEAMS 7 THRU 12 ON SPAN 3 RT ARE PARALLEL TO A CHORD OF A CONCENTRIC CIRCLE FORMED BY THE RIGHT BRIDGE CENTERLINE AND SPACED AS SHOWN.

TABLE OF BEAM ANGLES "A"

BEAM	BENT 1	BENT 2 BACK	BENT 2 AHEAD	BENT 3 BACK	BENT 3 AHEAD	BENT 4
1	90°-00′-00.0″	89°-51′-02.2″	88°-44′-08.9″	88°-44′-39.1″	89°-36′-00.0″	89°-36′-00.0″
2	90°-00′-00.0″	89°-51′-02.2″	88°-44′-24.0″	88°-44′-24.0″	89°-36′-00.0″	89°-36′-00.0″
3	90°-00′-00.0″	89°-51′-02.2″	88°-44′-24.0″	88°-44′-24.0″	89°-36′-00.0″	89°-36′-00.0″
4	90°-00′-00.0″	89°-51′-02.2″	88°-44′-24.0″	88°-44′-24.0″	89°-36′-00.0″	89°-36′-00.0″
5	90°-00′-00.0″	89°-51′-02.2″	88°-44′-24.0″	88°-44′-24.0″	89°-36′-00.0″	89°-36′-00.0″
6	90°-00′-00.0″	89°-51′-02.2″	88°-44′-07.1″	88°-44′-40.9″	89°-36′-00.0″	89°-36′-00.0″
7	90°-00′-00.0″	89°-41′-26.2″	88°-43′-16.5″	88°-45′-31.3″	89°-36′-00.0″	89°-36′-00.0″
8	90°-00′-00.0″	89°-41′-26.2″	88°-44′-24.0″	88°-44′-24.0″	89°-36′-00.0″	89°-36′-00.0″
9	90°-00′-00.0″	89°-41′-26.2″	88°-44′-24.0″	88°-44′-24.0″	89°-36′-00.0″	89°-36′-00.0″
10	90°-00′-00.0″	89°-41′-26.2″	88°-44′-24.0″	88°-44′-24.0″	89°-36′-00.0″	89°-36′-00.0″
11	90°-00′-00.0″	89°-41′-26.2″	88°-44′-24.0″	88°-44′-24.0″	89°-36′-00.0″	89°-36′-00.0″
12	90°-00′-00.0″	89°-41′-26.2″	88°-43′-14.8″	88°-45′-33.2″	89°-36′-00.0″	89°-36′-00.0″

BRIDGE NO. 1 LT & RT

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

FRAMING PLAN
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

DATE | REVISIONS | BY

DRAWING NO. 35-0010
BRIDGE SHEET 10 OF 23

NO SCALE JULY 2017

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ELEVATION

SECTION AT MIDPOINT

SECTION AT END

MAINTAIN 1" MINIMUM CLEARANCE UNLESS SHOWN.
• INDICATES ½" DIAMETER PRESTRESSED STRANDS.

NOTES

1. BEAMS SHALL BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND SHALL BE PICKED UP WITHIN 3'-6" FROM THEIR ENDS. DISREGARDING THIS REQUIREMENT COULD LEAD TO COLLAPSE OF THE BEAM. PICK-UPS SHALL BE EMBEDDED TO WITHIN 4" OF THE BOTTOM OF THE BEAM. DETAILS OF PICK-UPS SHALL BE INCLUDED IN THE SHOP DRAWINGS.

2. CHAMFER EDGES OF BEAMS ½" OR ¾".

3. HORIZONTAL DIMENSIONS ARE IN PLACE DIMENSIONS. THE BEAM LENGTH INCLUDES THE ⅛" EPOXY MORTAR AT EACH END. SHOP DRAWINGS SHALL ADJUST HORIZONTAL DIMENSIONS FOR GRADE AND FABRICATION EFFECTS SUCH AS SHRINKAGE AND ELASTIC SHORTENING.

4. AT ℄ BEARING, FORM A 1¾" DIAMETER X 7" DEEP HOLE AT THE FIXED ENDS AND A 4" X 1¾" X 7" DEEP SLOT AT THE EXPANSION ENDS FOR A 1½" DIAMETER SMOOTH DOWEL. SEE PLAN AND ELEVATION SHEET FOR LOCATION OF FIXED AND EXPANSION ENDS.

5. TOPS OF BEAMS SHALL BE ROUGH FLOATED AT APPROXIMATELY THE TIME OF INITIAL SET. ENTIRE TOP SHALL BE SCRUBBED TRANSVERSELY WITH A COARSE BRUSH TO REMOVE ALL LAITANCE AND TO PRODUCE A ROUGHENED SURFACE FOR BONDING TO THE SLAB. ROUGHENED SURFACE SHALL HAVE AN AMPLITUDE OF APPROXIMATELY ¼". CONCRETE FINS OR PROJECTIONS SHALL BE REMOVED TO PRODUCE A VERTICAL FACE AT THE EDGE OF THE BEAM.

6. NON-COMPOSITE DEAD LOAD DEFLECTION (ΔNC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF THE SLAB AND COPING.

7. COMPOSITE DEAD LOAD DEFLECTION (ΔC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF BARRIER.

8. STRANDS SHALL MEET ALL REQUIREMENTS OF ASTM A 416 GRADE 270.

9. PRESTRESSING DATA IS AS FOLLOWS:

   A. USE 18 - ½" DIAMETER SPECIAL LOW-RELAXATION (A = 0.167 SQ IN) STRANDS. PRETENSION STRANDS TO 33,818 LBS EACH.

   B. PRETENSIONED STRANDS SHALL BE RELEASED AFTER THE CONCRETE HAS REACHED A MINIMUM STRENGTH (f'_{ci}) OF 5,000 PSI.

   C. INCLUDING THE TOP STRANDS, THE TOTAL JACKING FORCE OF PRETENSIONING IS 608,724 LBS.

   D. INCLUDING THE TOP STRANDS, THE NET PRESTRESSING FORCE OF THE STRANDS AFTER ALL LOSSES IS 482,188 LBS.

10. CONCRETE STRENGTH (f'_c) = 5,500 PSI.

11. ALLOWABLE PSC BEAM TENSION = 445 PSI.

TABLE OF LETTERED BEAM DIMENSIONS

SPAN	BEAM	A	B	C	D	E	F	G	H	ΔNC	ΔC
1	1	40'-1 13/16"	38'-9 13/16"	37'-7 13/16"	19'-4 15/16"	7	7	4 7/8"	4"	3/8"	1/16"
	2	40'-1 9/16"	38'-9 9/16"	37'-7 9/16"	19'-4 13/16"	7	7	4 3/4"	4"	3/8"	1/16"
	3	40'-1 1/4"	38'-9 1/4"	37'-7 1/4"	19'-4 5/8"	7	7	4 5/8"	4"	3/8"	1/16"
	4	40'-1"	38'-9"	37'-7"	19'-4 1/2"	7	7	4 1/2"	4"	3/8"	1/16"
	5	40'-0 11/16"	38'-8 11/16"	37'-6 11/16"	19'-4 3/8"	8	6	9 5/16"	9"	3/8"	1/16"
	6	40'-0 7/16"	38'-8 7/16"	37'-6 7/16"	19'-4 1/4"	8	6	9 3/16"	9"	3/8"	1/16"
	7	39'-11 1/16"	38'-7 1/16"	37'-5 1/16"	19'-3 9/16"	8	6	8 1/2"	9"	5/16"	1/16"
	8	39'-10 1/2"	38'-6 1/2"	37'-4 1/2"	19'-3 1/4"	10	5	9 1/4"	8"	3/8"	1/16"
	9	39'-9 15/16"	38'-5 15/16"	37'-3 15/16"	19'-3"	10	5	8 5/16"	8"	3/8"	1/16"
	10	39'-9 3/8"	38'-5 3/8"	37'-3 3/8"	19'-2 5/8"	10	5	8 11/16"	8"	3/8"	1/16"
	11	39'-8 11/16"	38'-4 11/16"	37'-2 11/16"	19'-2 1/16"	10	5	9 3/8"	7"	3/8"	1/16"
	12	39'-8 1/4"	38'-4 1/4"	37'-2 1/4"	19'-2 1/8"	10	5	9 1/8"	7"	5/16"	1/16"
3	1	40'-9 11/16"	39'-5 11/16"	38'-3 11/16"	19'-8 7/8"	7	7	8 13/16"	4"	3/8"	1/16"
	2	40'-8 1/4"	39'-4 1/4"	38'-2 1/4"	19'-8 1/8"	11	5	8 1/8"	4"	7/16"	1/16"
	3	40'-6 3/4"	39'-2 3/4"	38'-0 3/4"	19'-7 3/8"	11	5	7 3/8"	4"	7/16"	1/16"
	4	40'-5 5/16"	39'-1 5/16"	37'-11 5/16"	19'-6 11/16"	11	5	6 5/8"	4"	7/16"	1/16"
	5	40'-3 11/16"	38'-11 11/16"	37'-9 11/16"	19'-5 15/16"	11	5	5 7/8"	4"	7/16"	1/16"
	6	40'-2 3/8"	38'-10 3/8"	37'-8 3/8"	19'-5 3/16"	7	7	5 3/16"	4"	3/8"	1/16"
	7	39'-9 5/8"	38'-5 5/8"	37'-3 5/8"	19'-2 11/16"	8	6	8 13/16"	8"	5/16"	1/16"
	8	39'-8 7/16"	38'-4 7/16"	37'-2 7/16"	19'-2 3/8"	10	5	9 1/16"	7"	3/8"	1/16"
	9	39'-6 11/16"	38'-2 11/16"	37'-0 11/16"	19'-1 3/8"	10	5	9 5/16"	6"	3/8"	1/16"
	10	39'-5 1/4"	38'-1 1/4"	36'-11 1/4"	19'-0 5/8"	10	5	8 5/8"	6"	3/8"	1/16"
	11	39'-3 3/4"	37'-11 3/4"	36'-9 3/4"	18'-11 7/8"	10	5	8 1/8"	5"	3/8"	1/16"
	12	39'-2 5/16"	37'-10 5/16"	36'-8 5/16"	18'-11 3/16"	8	6	9 1/8"	4"	5/16"	1/16"

REINFORCEMENT

ALL BAR DIMENSIONS ARE OUT TO OUT.

AT THE TOP OF THE BEAM, BARS 550 AND 551 SHALL BE FIELD BENT OR SHOP BENT 90°, SUCH THAT THE HORIZONTAL LEG EXTENDS BETWEEN TOP AND BOTTOM MATS OF SLAB REINFORCEMENT.

SLIGHTLY SHIFT OR SLOPE BARS 451 TO AVOID CONFLICT WITH STRANDS.

BARS 350 MAY BE FABRICATED IN TWO PARTS BY LAPPING HORIZONTAL SECTION BY 1'-0" MINIMUM.

PLACE BARS 452 WITH OPEN ENDS AWAY FROM BEAM ENDS.

BRIDGE NO. 1 LT & RT

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

TYPE I MOD PSC BEAM - SPANS 1 AND 3
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

DATE | REVISIONS | BY

DRAWING NO. 35-0011

BRIDGE SHEET 11 OF 23

NO SCALE JULY 2017

DESIGNED EJF | CHECKED TKH | REVIEWED DLC/SKG
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P.I. NO. 0009861

ELEVATION

MAINTAIN 1" MINIMUM CLEARANCE UNLESS SHOWN.
• INDICATES 0.6" DIAMETER PRESTRESSED STRANDS.

SECTION AT MIDPOINT

SECTION AT END

NOTES

1. BEAMS SHALL BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND SHALL BE PICKED UP WITHIN 7'-9" FROM THEIR ENDS. DISREGARDING THIS REQUIREMENT COULD LEAD TO COLLAPSE OF THE BEAM. PICK-UPS SHALL BE EMBEDDED TO WITHIN 4" OF THE BOTTOM OF THE BEAM. DETAILS OF PICK-UPS SHALL BE INCLUDED IN THE SHOP DRAWINGS.

2. CHAMFER EDGES OF BEAMS 1/2", 3/4" OR 1".

3. HORIZONTAL DIMENSIONS ARE IN PLACE DIMENSIONS. THE BEAM LENGTH INCLUDES THE 1/8" EPOXY MORTAR AT EACH END. SHOP DRAWINGS SHALL ADJUST HORIZONTAL DIMENSIONS FOR GRADE AND FABRICATION EFFECTS SUCH AS SHRINKAGE AND ELASTIC SHORTENING.

4. AT ℄ BEARING, FORM A 1 3/4" DIAMETER X 7" DEEP HOLE AT THE FIXED ENDS AND A 6" X 1 3/4" X 7" DEEP SLOT AT THE EXPANSION ENDS FOR A 1 1/2" DIAMETER SMOOTH DOWEL. SEE PLAN AND ELEVATION SHEET FOR LOCATION OF FIXED AND EXPANSION ENDS.

5. TOPS OF BEAMS SHALL BE ROUGH FLOATED AT APPROXIMATELY THE TIME OF INITIAL SET. ENTIRE TOP SHALL BE SCRUBBED TRANSVERSELY WITH A COARSE BRUSH TO REMOVE ALL LAITANCE AND TO PRODUCE A ROUGHENED SURFACE FOR BONDING TO THE SLAB. ROUGHENED SURFACE SHALL HAVE AN AMPLITUDE OF APPROXIMATELY 1/4". CONCRETE FINS OR PROJECTIONS SHALL BE REMOVED TO PRODUCE A VERTICAL FACE AT THE EDGE OF THE BEAM.

6. NON-COMPOSITE DEAD LOAD DEFLECTION (ΔNC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF THE SLAB AND COPING.

7. COMPOSITE DEAD LOAD DEFLECTION (ΔC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF BARRIER.

8. STRANDS SHALL MEET ALL REQUIREMENTS OF ASTM A 416 GRADE 270.

9. PRESTRESSING DATA IS AS FOLLOWS:

   A. USE 54 - 0.6" DIAMETER LOW-RELAXATION (A = 0.217 SQ IN) STRANDS. PRETENSION TOP FOUR (4) STRANDS TO 10,000 LBS EACH. PRETENSION BOTTOM STRANDS TO 43,943 LBS EACH.

   B. PRETENSIONED STRANDS SHALL BE RELEASED AFTER THE CONCRETE HAS REACHED A MINIMUM STRENGTH (f'_{ci}) OF 8,000 PSI.

   C. INCLUDING THE TOP STRANDS, THE TOTAL JACKING FORCE OF PRETENSIONING IS 2,237,150 LBS.

   D. INCLUDING THE TOP STRANDS, THE NET PRESTRESSING FORCE OF THE STRANDS AFTER ALL LOSSES IS 1,675,435 LBS.

10. CONCRETE STRENGTH (f'_c) = 8,500 PSI.

11. ALLOWABLE PSC BEAM TENSION = 553 PSI.

⊛ DIAPHRAGM BAR SHALL BE A 1" DIAMETER PLAIN BAR, THREADED 5" ON EACH END, WITH 1/4" X 3 1/2" DIAMETER WASHERS AND HEX NUTS (ASTM A 709 GRADE 36).

TIGHTEN DIAPHRAGM BAR AS PER SUB-SECTION 507.3.05.C OF THE GEORGIA DOT SPECIFICATIONS.

AFTER EXCESS DIAPHRAGM BAR HAS BEEN CUT OFF, PAINT DIAPHRAGM BAR, WASHER, AND NUT EXPOSED IN RECESS WITH SPECIAL PROTECTIVE COATING NO. 2 P AS PER SECTION 535 OF THE GEORGIA DOT SPECIFICATIONS. AFTER PAINTING, FILL THE RECESS WITH AN APPROVED EPOXY GROUT.

GALVANIZING OF THE DIAPHRAGM BAR AS PER SUB-SECTION 865.2.01.B.12 OF THE GEORGIA DOT SPECIFICATIONS IS NOT REQUIRED.

RECESS DETAIL FOR DIAPHRAGM BAR ENDS

TABLE OF LETTERED BEAM DIMENSIONS

SPAN	BEAM	A	B	C	D	E	F	G	H	ΔNC	ΔC
2	1	128'-6 7/16"	127'-8 7/16"	126'-6 7/16"	63'-10 1/4"	21	20	11 1/4"	6"	2 9/16"	1/4"
	2	128'-11 3/16"	127'-3 11/16"	126'-11 3/16"	63'-7 15/16"	21	20	9 15/16"	5"	2 9/16"	1/4"
	3	127'-9 3/16"	126'-11 7/16"	125'-9 3/16"	63'-5 7/8"	21	20	7 5/8"	5"	2 9/16"	1/4"
	4	127'-4 9/16"	126'-6 9/16"	125'-4 9/16"	63'-3 5/16"	21	20	5 5/16"	5"	2 1/2"	1/4"
	5	126'-11 15/16"	126'-1 15/16"	124'-11 15/16"	63'-0 15/16"	20	20	10 15/16"	9"	2 1/2"	1/4"
	6	126'-7 5/16"	125'-9 5/16"	124'-7 5/16"	62'-10 11/16"	20	20	10 11/16"	7"	2 5/16"	1/4"
	7	125'-4 7/16"	124'-6 7/16"	123'-4 7/16"	62'-3 1/4"	20	20	5 1/4"	5"	2 5/16"	3/8"
	8	124'-11 13/16"	124'-1 13/16"	122'-11 13/16"	62'-0 15/16"	21	19	11 7/8"	8"	2 3/8"	7/8"
	9	124'-7 3/16"	123'-9 3/16"	122'-7 3/16"	61'-10 5/8"	21	19	11 5/8"	6"	2 5/16"	3/8"
	10	124'-2 9/16"	123'-4 9/16"	122'-2 9/16"	61'-8 5/16"	21	19	10 5/16"	5"	2 5/16"	3/8"
	11	123'-9 15/16"	122'-11 15/16"	121'-9 15/16"	61'-5 15/16"	21	19	7 15/16"	5"	2 1/4"	3/8"
	12	123'-5 5/16"	122'-7 5/16"	121'-5 5/16"	61'-3 11/16"	21	19	5 11/16"	5"	2 1/16"	5/16"

REINFORCEMENT

ALL BAR DIMENSIONS ARE OUT TO OUT.

AT THE TOP OF THE BEAM, BARS 550 AND 650 SHALL BE FIELD BENT OR SHOP BENT 90°, SUCH THAT THE HORIZONTAL LEG EXTENDS BETWEEN TOP AND BOTTOM MATS OF SLAB REINFORCEMENT.

SLIGHTLY SHIFT OR SLOPE BARS 451 TO AVOID CONFLICT WITH STRANDS.

BARS 350 MAY BE FABRICATED IN TWO PARTS BY LAPPING HORIZONTAL SECTION BY 1'-0" MINIMUM.

PLACE BARS 450 WITH OPEN ENDS AWAY FROM BEAM ENDS.

BRIDGE NO. 1 LT & RT

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

BULB TEE, 65 IN PSC BEAM - SPAN 2
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

DATE | REVISIONS | BY

DRAWING NO. 35-0012

BRIDGE SHEET 12 OF 23

NO SCALE JULY 2017

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PLAN

BENT 1 SHOWN
BENT 4 SIMILAR

PREFORMED FOAM JOINT FILLER SHALL BE FURNISHED IN ACCORDANCE WITH SUB-SECTION 833.2.10 OF THE GEORGIA DOT SPECIFICATIONS.

ENDWALL NOT SHOWN

SECTION A-A

PLAN

SECTION B-B

BEARING PAD

NOTES

1. BEARING PADS HAVE BEEN DESIGNED ACCORDING TO AASHTO SPECIFICATIONS DIVISION I, SECTION 14.6.6 METHOD A AND SHALL BE FURNISHED IN ACCORDANCE WITH AASHTO SPECIFICATIONS DIVISION II, SECTION 18, BEARINGS.
2. 1 1/2" DIAMETER SMOOTH DOWELS SHALL BE ASTM A 709 GRADE 50.
3. BEARING PADS SHALL BE MADE OF 60 DUROMETER HARDNESS NEOPRENE, GRADE 2 OR HIGHER.
4. 3" DIAMETER HOLE IN BEARING PADS MAY BE FORMED OR DRILLED.
5. BEARING PADS SHALL HAVE 1/4" COVER ON THE TOP, BOTTOM, AND SIDES AND AROUND THE HOLE.
6. 3/16" LOAD PLATES AND 12 GAGE INTERNAL PLATE(S) (IF REQUIRED) SHALL BE ASTM A 709 GRADE 36 OR ASTM A 1011 GRADE 36.
7. NUMBER OF INTERNAL PLATES SHOWN FOR ILLUSTRATION PURPOSES ONLY. THE NUMBER OF INTERNAL PLATE(S) SPECIFIED SHALL BE EQUALLY SPACED BETWEEN LOAD PLATES.
8. USE OF 1 1/2° MOLD DRAFT IS OPTIONAL.

BENT	BEARING PADS							
	W	L	T	NUMBER OF INTERNAL PLATE(S)	DESIGN SHEAR DEFLECTION	DESIGN LOADS (KIPS)		
						DEAD LOAD	LIVE LOAD (NO IMPACT)	DEAD LOAD + LIVE LOAD
1	16"	10"	3"	3	1/4"	57.9	57.4	115.3
2 BACK	16"	10"	3"	3	0"	36.9	57.4	94.3
2 AHEAD	22"	10"	3 1/4"	4	0"	155.8	92.8	248.6
3 BACK	22"	10"	3 1/4"	4	1/2"	155.8	92.8	248.6
3 AHEAD	16"	10"	3"	3	1/2"	36.5	57.7	94.2
4	16"	10"	3"	3	3/4"	57.6	57.7	114.3

BRIDGE NO. 1 LT & RT

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

BEARING PAD DETAILS
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

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DRAWING NO. 35-0013

BRIDGE SHEET 13 OF 23

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PLAN

SECTION A-A
SCALE: ¾" = 1'-0"

SECTION B-B
SCALE: ¾" = 1'-0"

ELEVATION
BENT 1- LEFT BRIDGE
(LOOKING BACK)

THE PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 210 KIPS.

ALL PILES SHALL BE 14 IN. SQUARE PSC FOR ALTERNATE 1 (SHOWN) OR 14 IN. O.D. METAL SHELL FOR ALTERNATE 2 (SIMILAR).

PLAN DRIVING OBJECTIVE (ALT 1)

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 323 KIPS AFTER A MINIMUM ELEVATION OF 250 IS ACHIEVED.

PLAN DRIVING OBJECTIVE (ALT 2)

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 323 KIPS AFTER A MINIMUM ELEVATION OF 244 IS ACHIEVED.

NOTES:
1. POUR WINGWALLS MONOLITICALLY WITH CAP.
2. SEE GA. STD. 9037 FOR DRAINAGE DETAILS REQUIRED AT END BENTS.
3. BOTTOM OF WINGWALL IS LEVEL.

SUBSTRUCTURE QUANTITIES

ITEM	BENT 1 LT
CU YD CLASS "AA" CONCRETE	14.9
LB BAR REINFORCEMENT STEEL	2147

BRIDGE NO. 1 LT

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

END BENT 1 LT
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK
BIBB COUNTY 0009861

SCALE: ⅜" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DATE | REVISIONS | BY

DRAWING NO. 35-0014
BRIDGE SHEET 14 OF 23

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PLAN

ELEVATION
BENT 1- RIGHT BRIDGE
(LOOKING BACK)

SECTION A-A
SCALE: ¾" = 1'-0"

SECTION B-B
SCALE: ¾" = 1'-0"

THE PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 210 KIPS.

ALL PILES SHALL BE 14 IN. SQUARE PSC FOR ALTERNATE 1 (SHOWN) OR 14 IN. O.D. METAL SHELL FOR ALTERNATE 2 (SIMILAR).

PLAN DRIVING OBJECTIVE (ALT 1)

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 323 KIPS AFTER A MINIMUM ELEVATION OF 265 IS ACHIEVED.

PLAN DRIVING OBJECTIVE (ALT 2)

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 323 KIPS AFTER A MINIMUM ELEVATION OF 243 IS ACHIEVED.

NOTES:
1. POUR WINGWALLS MONOLITICALLY WITH CAP.
2. SEE GA. STD. 9037 FOR DRAINAGE DETAILS REQUIRED AT END BENTS.
3. BOTTOM OF WINGWALLS ARE LEVEL.

SUBSTRUCTURE QUANTITIES

ITEM	BENT 1 RT
CU YD CLASS "AA" CONCRETE	17.0
LB BAR REINFORCEMENT STEEL	2381

P.I. NO. 0009861

BRIDGE NO. 1 RT

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

END BENT 1RT
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK
BIBB COUNTY 0009861

DATE | REVISIONS | BY

DRAWING NO. 35-0015
BRIDGE SHEET 15 OF 23

SCALE: ⅜" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

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PLAN

ELEVATION
(LOOKING AHEAD)

NOTE:
1. EXTEND 1120 SERIES BARS 4'-6" MINIMUM INTO CAP.
2. 26-420 BARS IN VERTICAL FACE OF CAP NOT SHOWN IN ELEVATION VIEW
3. CAP REINFORCEMENT IS SYMMETRICAL ABOUT CENTERLINE OF BENT
4. FOOTINGS ARE IDENTICAL

* AT CONTRACTOR'S OPTION CONST. JT. MAY BE RELOCATED TO TOP OF FOOTING

SECTION A-A
SCALE: ¾" = 1'-0"

SECTION B-B
SCALE: ¾" = 1'-0"

NOTE: ALTERNATE 621 BARS END FOR END AT EACH LOCATION

PILE LAYOUT
SCALE: ⅜" = 1'-0"

THE PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 211 KIPS.

ALL PILES SHALL BE 14 IN. SQUARE PSC FOR ALTERNATE 1 (SHOWN) OR 14 IN. O.D. METAL SHELL FOR ALTERNATE 2 (SIMILAR).

PLAN DRIVING OBJECTIVE (ALT 1)

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 332 KIPS AFTER A MINIMUM ELEVATION OF 258 IS ACHIEVED.

PLAN DRIVING OBJECTIVE (ALT 2)

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 332 KIPS AFTER A MINIMUM ELEVATION OF 257 IS ACHIEVED.

DETAIL "A"
NO SCALE
** FORM 3" DIAMETER X 12" DEEP HOLE FOR DOWEL BAR.

SUBSTRUCTURE QUANTITIES	
ITEM	BENT 2 LT
CU YD CLASS "AA" CONCRETE	83.6
LB BAR REINFORCEMENT STEEL	15345

BEAM THROW DETAIL						
		X	Y	Z	θ	α
BENT 2 LT	BEAM 1	¼"	0"	1/16"	89°-51'-02.2"	88°-44'-08.9"
	BEAM 2	¼"	1/16"	1/16"	89°-51'-02.2"	88°-44'-24.0"
	BEAM 3	¼"	⅛"	1/16"	89°-51'-02.2"	88°-44'-24.0"
	BEAM 4	¼"	⅛"	1/16"	89°-51'-02.2"	88°-44'-24.0"
	BEAM 5	¼"	⅛"	1/16"	89°-51'-02.2"	88°-44'-24.0"
	BEAM 6	¼"	0"	1/16"	89°-51'-02.2"	88°-44'-07.1"

P.I. NO. 0009861

BRIDGE NO. 1 LT

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

INTERMEDIATE BENT 2 LEFT
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

SCALE: ⅜" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0016

BRIDGE SHEET 16 OF 23

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PLAN

ELEVATION
(LOOKING AHEAD)

NOTE:
1. EXTEND 1120 SERIES BARS 4'-6" MINIMUM INTO CAP.
2. 26-420 BARS IN VERTICAL FACE OF CAP NOT SHOWN IN ELEVATION VIEW
3. CAP REINFORCEMENT IS SYMMETRICAL ABOUT CENTERLINE OF BENT
4. FOOTINGS ARE IDENTICAL

* AT CONTRACTOR'S OPTION CONST. JT. MAY BE RELOCATED TO TOP OF FOOTING

SECTION A-A
SCALE: 3/4" = 1'-0"

SECTION B-B
SCALE: 3/4" = 1'-0"

NOTE: ALTERNATE 621 BARS END FOR END AT EACH LOCATION

PILE LAYOUT
SCALE: 3/8" = 1'-0"

THE PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 211 KIPS.

ALL PILES SHALL BE 14 IN. SQUARE PSC FOR ALTERNATE 1 (SHOWN) OR 14 IN. O.D. METAL SHELL FOR ALTERNATE 2 (SIMILAR).

PLAN DRIVING OBJECTIVE (ALT 1)

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 345 KIPS AFTER A MINIMUM ELEVATION OF 257 IS ACHIEVED.

PLAN DRIVING OBJECTIVE (ALT 2)

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 345 KIPS AFTER A MINIMUM ELEVATION OF 256 IS ACHIEVED.

DETAIL "A"
NO SCALE
** FORM 3" DIAMETER X 12" DEEP HOLE FOR DOWEL BAR.

SUBSTRUCTURE QUANTITIES	
ITEM	BENT 2 RT
CU YD CLASS "AA" CONCRETE	83.8
LB BAR REINFORCEMENT STEEL	15427

BEAM THROW DETAIL

		X	Y	Z	θ	α
BENT 2 RT	BEAM 7	1/4"	0"	1/16"	89°-41'-26.2"	88°-43'-16.5"
	BEAM 8	1/4"	7/16"	1/16"	89°-41'-26.2"	88°-44'-24.0"
	BEAM 9	1/4"	1/2"	1/16"	89°-41'-26.2"	88°-44'-24.0"
	BEAM 10	1/4"	1/2"	1/16"	89°-41'-26.2"	88°-44'-24.0"
	BEAM 11	1/4"	1/2"	1/16"	89°-41'-26.2"	88°-44'-24.0"
	BEAM 12	1/4"	0"	1/16"	89°-41'-26.2"	88°-43'-14.8"

GDOT
P.I. NO. 0009861

BRIDGE NO. 1 RT

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

INTERMEDIATE BENT 2 RIGHT
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

SCALE: 3/8" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0017
BRIDGE SHEET 17 OF 23

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PLAN

NOTE:
1. EXTEND 1130 SERIES BARS 4'-6" MINIMUM INTO CAP.
2. 26-430 BARS IN VERTICAL FACE OF CAP NOT SHOWN IN ELEVATION VIEW.
3. CAP REINFORCEMENT IS SYMMETRICAL ABOUT CENTERLINE OF BENT.
4. FOOTINGS ARE IDENTICAL
* AT CONTRACTOR'S OPTION CONST. JT. MAY BE RELOCATED TO TOP OF FOOTING.

ELEVATION
BENT 3 LEFT
(LOOKING AHEAD)

SECTION A-A
SCALE: ¾" = 1'-0"

SECTION B-B
SCALE: ¾" = 1'-0"

NOTE: ALTERNATE 621 BARS END FOR END AT EACH LOCATION

PILE LAYOUT
SCALE: ⅜" = 1'-0"

THE PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 203 KIPS.

ALL PILES SHALL BE 14 IN. SQUARE PSC FOR ALTERNATE 1 (SHOWN) OR 14 IN. O.D. METAL SHELL FOR ALTERNATE 2 (SIMILAR).

PLAN DRIVING OBJECTIVE (ALT 1)

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 326 KIPS AFTER A MINIMUM ELEVATION OF 240 IS ACHIEVED.

PLAN DRIVING OBJECTIVE (ALT 2)

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 326 KIPS AFTER A MINIMUM ELEVATION OF 240 IS ACHIEVED.

DETAIL "A"
NO SCALE
** FORM 3" DIAMETER X 12" DEEP HOLE FOR DOWEL BAR.

SUBSTRUCTURE QUANTITIES	
ITEM	BENT 3 LT
CU YD CLASS "AA" CONCRETE	85.2
LB BAR REINFORCEMENT STEEL	15952

BEAM THROW DETAIL						
		X	Y	Z	θ	α
BENT 3 LT	BEAM 1	1/16"	0"	1/4"	88°-44'-39.1"	89°-36'-00.0"
	BEAM 2	1/16"	1/16"	1/4"	88°-44'-24.0"	89°-36'-00.0"
	BEAM 3	1/16"	0"	1/4"	88°-44'-24.0"	89°-36'-00.0"
	BEAM 4	1/16"	0"	1/4"	88°-44'-24.0"	89°-36'-00.0"
	BEAM 5	1/16"	1/16"	1/4"	88°-44'-24.0"	89°-36'-00.0"
	BEAM 6	1/16"	0"	1/4"	88°-44'-40.9"	89°-36'-00.0"

GDOT
P.I. NO. 0009861

BRIDGE NO. 1 LT & RT

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

INTERMEDIATE BENT 3 LEFT
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

SCALE: ⅜" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0018
BRIDGE SHEET 18 OF 23

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PLAN

NOTE:
1. EXTEND 1130 SERIES BARS 4'-6" MINIMUM INTO CAP.
2. 26-430 BARS IN VERTICAL FACE OF CAP NOT SHOWN IN ELEVATION VIEW.
3. CAP REINFORCEMENT IS SYMMETRICAL ABOUT CENTERLINE OF BENT.
4. FOOTINGS ARE IDENTICAL

* AT CONTRACTOR'S OPTION CONST. JT. MAY BE RELOCATED TO TOP OF FOOTING.

ELEVATION
BENT 3 RIGHT
(LOOKING AHEAD)

SECTION A-A
SCALE: ¾" = 1'-0"

SECTION B-B
SCALE: ¾" = 1'-0"

NOTE: ALTERNATE 621 BARS END FOR END AT EACH LOCATION

PILE LAYOUT
SCALE: ⅜" = 1'-0"

THE PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 203 KIPS.

ALL PILES SHALL BE 14 IN. SQUARE PSC FOR ALTERNATE 1 (SHOWN) OR 14 IN. O.D. METAL SHELL FOR ALTERNATE 2 (SIMILAR).

PLAN DRIVING OBJECTIVE (ALT 1)

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 326 KIPS AFTER A MINIMUM ELEVATION OF 255 IS ACHIEVED.

PLAN DRIVING OBJECTIVE (ALT 2)

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 326 KIPS AFTER A MINIMUM ELEVATION OF 241 IS ACHIEVED.

DETAIL "A"
NO SCALE
** FORM 3" DIAMETER X 12" DEEP HOLE FOR DOWEL BAR.

SUBSTRUCTURE QUANTITIES	
ITEM	BENT 3 RT
CU YD CLASS "AA" CONCRETE	85.1
LB BAR REINFORCEMENT STEEL	15891

BEAM THROW DETAIL						
		X	Y	Z	θ	α
BENT 3 RT	BEAM 7	1/16"	0"	1/4"	88°-45'-31.5"	89°-36'-00.0"
	BEAM 8	1/16"	1/16"	1/4"	88°-44'-24.0"	89°-36'-00.0"
	BEAM 9	1/16"	0"	1/4"	88°-44'-24.0"	89°-36'-00.0"
	BEAM 10	1/16"	0"	1/4"	88°-44'-24.0"	89°-36'-00.0"
	BEAM 11	1/16"	1/16"	1/4"	88°-44'-24.0"	89°-36'-00.0"
	BEAM 12	1/16"	0"	1/4"	88°-45'-33.2"	89°-36'-00.0"

P.I. NO. 0009861

BRIDGE NO. 1

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

INTERMEDIATE BENT 3 RIGHT
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

SCALE: ⅜" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0019

BRIDGE SHEET 19 OF 23

REVISIONS | DATE | BY

DESIGNED EJF | CHECKED TKH | REVIEWED DLC/SKG
DRAWN EJF | DESIGN GROUP DPD | APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

0009861.dgn

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PLAN

SECTION A-A
SCALE: ¾" = 1'-0"

SECTION B-B
SCALE: ¾" = 1'-0"

ELEVATION
BENT 4 - LEFT BRIDGE
(LOOKING AHEAD)

THE PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 210 KIPS.

ALL PILES SHALL BE 14 IN. SQUARE PSC FOR ALTERNATE 1 (SHOWN) OR 14 IN. O.D. METAL SHELL FOR ALTERNATE 2 (SIMILAR).

PLAN DRIVING OBJECTIVE (ALTERNATE 1)

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 323 KIPS AFTER A MINIMUM ELEVATION OF 254 AT BENT 4 LEFT AND 245 AT BENT 4 RIGHT IS ACHIEVED.

PLAN DRIVING OBJECTIVE (ALTERNATE 2)

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 323 KIPS AFTER A MINIMUM ELEVATION OF 253 AT BENT 4 LEFT AND 242 AT BENT 4 RIGHT IS ACHIEVED.

PLAN

NOTES:
1. POUR WINGWALLS MONOLITICALLY WITH CAP.
2. SEE GA. STD. 9037 FOR DRAINAGE DETAILS REQUIRED AT END BENTS.
3. BOTTOM OF WINGWALLS ARE LEVEL.

ELEVATION
BENT 4 - RIGHT BRIDGE
(LOOKING AHEAD)
SCALE: ¾" = 1'-0"

SUBSTRUCTURE QUANTITIES		
ITEM	BENT 4 LT	BENT 4 RT
CU YD CLASS "AA" CONCRETE	16.9	16.9
LB BAR REINFORCEMENT STEEL	2381	2381

BRIDGE NO. 1 LT & RT

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

END BENT 4
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

DATE | REVISIONS | BY

DRAWING NO. 35-0020
BRIDGE SHEET 20 OF 23

SCALE: ⅜" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

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P.I. NO. 0009861

AS BUILT FOUNDATION INFORMATION
BRIDGE NO. 1 LEFT ALT. ( )

BENT	PILE/FOOTING LOCATION	PILE TIP ELEVATION	BOTTOM OF FOOTING ELEV
1	BEAM 1		
	BEAM 2		
	BEAM 3		
	BEAM 4		
	BEAM 5		
	BEAM 6		
2 COL. 1	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
2 COL. 2	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
3 COL. 1	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
3 COL. 2	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
4	BEAM 1		
	BEAM 2		
	BEAM 3		
	BEAM 4		
	BEAM 5		
	BEAM 6		

AS BUILT FOUNDATION INFORMATION
BRIDGE NO. 1 RIGHT ALT. ( )

BENT	PILE/FOOTING LOCATION	PILE TIP ELEVATION	BOTTOM OF FOOTING ELEV
1	BEAM 7		
	BEAM 8		
	BEAM 9		
	BEAM 10		
	BEAM 11		
	BEAM 12		
2 COL. 1	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
2 COL. 2	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
3 COL. 1	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
3 COL. 2	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
4	BEAM 7		
	BEAM 8		
	BEAM 9		
	BEAM 10		
	BEAM 11		
	BEAM 12		

TYPICAL FOOTING ELEVATION
(ALTERNATE 1)

TYPICAL FOOTING ELEVATION
(ALTERNATE 1)

PILE LAYOUT
(ALTERNATE 1)

PILE LAYOUT
(ALTERNATE 2)

MARK ALTERNATE SELECTED		
ALT. 1	PSC PILES	
ALT. 2	METAL SHELL PILES	

THIS "AS BUILT FOUNDATION INFORMATION" SHEET SHALL BE FILLED IN BY THE PROJECT ENGINEER AND FORWARDED TO THE BRIDGE OFFICE AFTER INSTALLATION OF ALL PILES AND FOOTINGS FOR POSTING TO THE PLANS AS A PERMANENT RECORD OF THE BRIDGE CONSTRUCTION.

PROJECT ENGINEER — DATE

(AREA CODE) TELEPHONE NUMBER

BRIDGE NO. 1 LT & RT

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

AS BUILT FOUNDATION DATA
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY — 0009861

NO SCALE — JULY 2017

DRAWING NO. 35-0021

BRIDGE SHEET 21 OF 23

REVISIONS — DATE — BY

DESIGNED EJF — CHECKED TKH — REVIEWED DLC/SKG
DRAWN EJF — DESIGN GROUP DPD — APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

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10:02:05 AM 2/6/2018 01023352

LOCATION	NO. OF LOC.	MARK	LENGTH FT.	LENGTH IN.	NO. BARS REQ'D.	TYPE	AG		B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	J FT.	J IN.	K FT.	K IN.	N	θ
SPAN 1 LEFT	1								SUPERSTRUCTURE LEFT BRIDGE																	
		400A	39- 9		118	1																				
		401A	12-11		24	1																				
		401B	18- 0		16	1																				
		402A	50- 5		3	1																				
		403	5- 2		45	31	4	4	0- 9		1-10 1/8		1-10 1/8													
		500A	52- 4		79	2			50- 8		0-10		0-10													
		500B	8- 3		158	3			7- 5		0-10															
		501	50-11		59	1																				
		502	8-11		90	23			1- 3		3-10		3-10													101
		503	6- 8		90	23			0- 6		3- 1		3- 1													79
		504	5- 2		34	46			2- 2 1/8		1-10		0- 3		0- 8		0- 8									
		505A	48- 6		1	1																				
		506A	2- 9		60	24			1- 1		0-10		0-10		0- 7		0- 7									
		506B	4- 3		69	3			2-10 5/8		1- 4															
		507	43-11		1	1																				
		508A	7- 9		5	1																				
		600	10- 0		70	1																				
		800	50- 0		2	1																				
		801	43-11		1	1																				
		802	7- 9		5	1																				
		900A	14-10		15	16	6	6	5- 7		0- 8		0- 8		3- 8		3- 8									
		900B	5- 1		3	34	6		2- 5 1/2		0- 8		1- 8		0- 8											
		900C	3- 8		3	34	6		1- 1		0- 8		1- 8		0- 8											
SPAN 2 LEFT	1								SUPERSTRUCTURE LEFT BRIDGE																	
		300	5- 0		4	1																				
		400B	50- 0		236	1																				
		400C	32- 0		118	1																				
		401C	17-11		56	1																				
		401D	17- 7		56	1																				
		403	5- 2		60																					
		404	2- 3		4	3			1- 2 7/8		1- 0															
		405	7-11		30	1																				
		406A	10- 7		30	25	4	4	0- 7		4- 4															
		406B	8- 6		10	25	4	4	0- 7		3- 3 3/8															
		407	5- 7		312	14			3- 2		0- 7 1/2		0- 8		0- 5 3/4		0- 8									
		408	25- 0		24	1																				
		500A	52- 4		238																					
		500B	8- 3		476																					
		501	50-11		188																					
		502	8-11		294																					
		503	6- 8		294																					
		506A	2- 9		50																					
		507	43-11		2																					
		508B	4-11		10	1																				
		509A	4-11		10	1																				
		509B	6- 7		10	1																				
		800	50- 0		4																					
		801	43-11		2																					
		802	7- 9		10																					
SPAN 3 LEFT	1								SUPERSTRUCTURE LEFT BRIDGE																	
		400A	39- 9		118	1																				
		401F	18- 6		16	1																				
		401G	18- 2		16	1																				
		402B	51- 9		3	1																				
		403	5- 2		45	31	4	4	0- 9		1-10 1/8		1-10 1/8													

LOCATION	NO. OF LOC.	MARK	LENGTH FT.	LENGTH IN.	NO. BARS REQ'D.	TYPE	AG		B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	J FT.	J IN.	K FT.	K IN.	N	θ
		500A	52- 4		81	2			50- 8		0-10		0-10													
		500B	8- 3		162	3			7- 5		0-10															
		501	50-11		60	1																				
		502	8-11		86	23			1- 3		3-10		3-10													101
		503	6- 8		86	23			0- 6		3- 1		3- 1													79
		504	5- 2		34	46			2- 2 1/8		1-10		0- 3		0- 8		0- 8									
		505B	49- 4		1	1																				
		506A	2- 9		60	24			1- 1		0-10		0-10		0- 7		0- 7									
		506B	4- 3		71	3			2-10 5/8		1- 4															
		507	43-11		1	1																				
		508A	7- 9		5	1																				
		900A	14-10		15	16	6	6	5- 7		0- 8		0- 8		3- 8		3- 8									
		900B	5- 1		6	34	6		2- 5 1/2		0- 8		1- 8		0- 8											
BENT 1 LEFT	1								SUBSTRUCTURE LEFT BRIDGE																	
		410	6- 9		24	32	5	5	2- 8		1- 8		1- 8													
		411	9- 5		59	25	4	4	2- 8		1- 8															
		412	5- 8		59	2			2- 8		1- 6		1- 6													
		413A	8- 3		10	1																				
		413B	6-11		2	1																				
		414A	51- 6		2	1																				
		510	8- 8		14	1																				
		511	6- 0		20	1																				
		512	7- 5		4	3			5- 7		1-10															
		513	2- 8		12	1																				
		514	4- 5		8	1																				
		610	5- 8		3	1																				
		1010A	54- 2		4	3			52- 4		1-10															
BENT 2 LEFT	1								SUBSTRUCTURE LEFT BRIDGE																	
		420	47- 8		26	1																				
		421	5- 0		112	2			1- 8		1- 8		1- 8													
		422	10- 8		56	2			1- 8		4- 6		4- 6													
		423A	6- 2		4	1																				
		423B	8- 5		8	1																				
		520	17- 8		68	25	4	4	3- 8		4- 8															
		521A	6- 2		4	1																				
		521B	8- 5		8	1																				
		620	13- 9		62	25	4	4	3- 2		3- 2															
		621	4- 3		248	10	4	5	3- 2																	
		1020	12- 4		36	10	1	1	9- 6																	
		1120A	18-10		16	9	1		17- 3																	
		1120B	17- 8		16	9	1		16- 1																	
		1121	50-10		9	10	1	1	47- 8																	
		1122	47- 8		8	1																				
BENT 3 LEFT	1								SUBSTRUCTURE LEFT BRIDGE																	
		430	47- 8		26	1																				
		431	5- 0		112	2			1- 8		1- 8		1- 8													
		432	10- 8		56	2			1- 8		4- 6		4- 6													
		433A	6- 2		4	1																				

LOCATION	NO. OF LOC.	MARK	LENGTH FT.	LENGTH IN.	NO. BARS REQ'D.	TYPE	AG		B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	J FT.	J IN.	K FT.	K IN.	N	θ
		433B	8- 5		8	1																				
		530	17- 8		68	25	4	4	3- 8		4- 8															
		531A	6- 2		4	1																				
		531B	8- 5		8	1																				
		630	13- 9		69	25	4	4	3- 2		3- 2															
		631	4- 3		276	10	4	5	3- 2																	
		1030	12- 4		36	10	1	1	9- 6																	
		1130A	20- 6		16	9	1	1	18-11																	
		1130B	19- 4		16	9	1	1	17- 9																	
		1131	50-10		9	10	1	1	47- 8																	
		1132	47- 8		8	1																				
BENT 4 LEFT	1								SUBSTRUCTURE LEFT BRIDGE																	
		410	6- 9		24	32	5	5	2- 8		1- 8		1- 8													
		411	9- 5		60	25	4	4	2- 8		1- 8															
		412	5- 8		60	2			2- 8		1- 6		1- 6													
		413A	8- 3		12	1																				
		414B	51-10		2	1																				

BRIDGE NO. 1 LT & RT

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

BAR REINFORCEMENT SCHEDULE
SR 11(SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

NO SCALE JULY 2017

DESIGNED EJF CHECKED TKH REVIEWED DLC/SKG
DRAWN EJF DESIGN GROUP DPD APPROVED WMD

P.I. NO. 0009861

DATE | REVISIONS | BY

DRAWING NO. 35-0022

BRIDGE SHEET 22 OF 23

1 INCH WHEN PRINTED FULL SIZE

0009861.dgn

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LOCATION	NO. OF LOC.	MARK	LENGTH FT.	LENGTH IN.	NO. BARS REQ'D.	TYPE	A	G	B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	J FT.	J IN.	K FT.	K IN.	N	θ
		510	8	8	28	1																				
		511	6	0	40	1																				
		610	5	8	6	1																				
		1010B	56	10	4	2			53	2	1	10	1	10												
SPAN 1 RIGHT	1								SUPERSTRUCTURE RIGHT BRIDGE																	
		400A	39	9	118	1																				
		401B	18	0	16	1																				
		401C	17	11	16	1																				
		402B	51	9	3	1																				
		403	5	2	45	31	4	4	0	9	1	10 1/8	1	10 1/8												
		500A	52	4	79	2			50	8	0	10	0	10												
		500B	8	3	158	3			7	5	0	10														
		501	50	11	59	1																				
		502	8	11	84	23			1	3	3	10	3	10												101
		503	6	8	84	23			0	6	3	1	3	1												79
		504	5	2	34	46			2	2 1/8	1	10	0	3	0	8	0	8								
		505B	49	4	1	1																				
		506A	2	9	60	24			1	1	0	10	0	10	0	7	0	7								
		506B	4	3	71	3			2	10 5/8	1	4														
		507	43	11	1	1																				
		508A	7	9	5	1																				
		600	10	0	70	1																				
		800	50	0	2	1																				
		801	43	11	1	1																				
		802	7	9	5	1																				
		900A	14	10	15	16	6	6	5	7	0	8	0	8	3	8	3	8								
		900B	5	1	6	34	6		2	5 1/2	0	8	1	8	0	8										
SPAN 2 RIGHT	1								SUPERSTRUCTURE RIGHT BRIDGE																	
		300	5	0	4	1																				
		400B	50	0	236																					
		400C	32	0	118	1																				
		401D	17	7	56	1																				
		401E	17	2	56	1																				
		403	5	2	60																					
		404	2	3	4	3			1	2 7/8	1	0														
		405	7	11	30	1																				
		406A	10	7	30	25	4	4	0	7	4	4														
		406B	8	6	10	25	4	4	0	7	3	3 3/8														
		407	5	7	312	14			3	2	0	7 1/2	0	8	0	5 3/4	0	8								
		408	25	0	24	1																				
		500A	52	4	233																					
		500B	8	3	466																					
		501	50	11	184																					
		502	8	11	287																					
		503	6	8	287																					
		506A	2	9	50																					
		507	43	11	2																					
		508B	4	11	10																					
		509A	4	11	10	1																				
		509B	6	7	10	1																				
		800	50	0	4																					
		801	43	11	2																					
		802	7	9	10																					

LOCATION	NO. OF LOC.	MARK	LENGTH FT.	LENGTH IN.	NO. BARS REQ'D.	TYPE	A	G	B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	J FT.	J IN.	K FT.	K IN.	N	θ
SPAN 3 RIGHT	1								SUPERSTRUCTURE RIGHT BRIDGE																	
		400A	39	9	118	1																				
		401B	18	0	16	1																				
		401D	17	7	16	1																				
		402B	51	9	3	1																				
		403	5	2	45	31	4	4	0	9	1	10 1/8	1	10 1/8												
		500A	52	4	79	2			50	8	0	10	0	10												
		500B	8	3	158	3			7	5	0	10														
		501	50	11	59	1																				
		502	8	11	84	23			1	3	3	10	3	10												101
		503	6	8	84	23			0	6	3	1	3	1												79
		504	5	2	34	46			2	2 1/8	1	10	0	3	0	8	0	8								
		505B	49	4	1	1																				
		506A	2	9	60	24			1	1	0	10	0	10	0	7	0	7								
		506B	4	3	71	3			2	10 5/8	1	4														
		507	43	11	1	1																				
		508A	7	9	5	1																				
		600	10	0	70	1																				
		800	50	0	2	1																				
		801	43	11	1	1																				
		802	7	9	5	1																				
		900A	14	10	15	16	6	6	5	7	0	8	0	8	3	8	3	8								
		900B	5	1	6	34	6		2	5 1/2	0	8	1	8	0	8										
BENT 1 OR 4 RT	2								SUBSTRUCTURE RIGHT BRIDGE																	
		410	6	9	24	32	5	5	2	8	1	8	1	8												
		411	9	5	60	25	4	4	2	8	1	8														
		412	5	8	60	2			2	8	1	6	1	6												
		413A	8	3	12	1																				
		414B	51	10	2	1																				
		510	8	8	28	1																				
		511	6	0	40	1																				
		610	5	8	6	1																				
		1010B	56	10	4	2			53	2	1	10	1	10												
BENT 2 RIGHT	1								SUBSTRUCTURE RIGHT BRIDGE																	
		420	47	8	26	1																				
		421	5	0	112	2			1	8	1	8	1	8												
		422	10	8	56	2			1	8	4	6	4	6												
		423A	6	2	4	1																				
		423B	8	5	8	1																				
		520	17	8	68	25	4	4	3	8	4	8														
		521A	6	2	4	1																				
		521B	8	5	8	1																				
		620	13	9	63	25	4	4	3	2	3	2														
		621	4	3	252	10	4	5	3	2																
		1020	12	4	36	10	1	1	9	6																
		1120C	19	1	16	9	1		17	6																
		1120D	17	10	16	9	1		16	3																
		1121	50	10	9	10	1	1	47	8																
		1122	47	8	8	1																				

LOCATION	NO. OF LOC.	MARK	LENGTH FT.	LENGTH IN.	NO. BARS REQ'D.	TYPE	A	G	B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	J FT.	J IN.	K FT.	K IN.	N	θ
BENT 3 RIGHT	1								SUBSTRUCTURE RIGHT BRIDGE																	
		430	47	8	26	1																				
		431	5	0	112	2			1	8	1	8	1	8												
		432	10	8	56	2			4	6	4	6	4	6												
		433A	6	2	4	1																				
		433B	8	5	8	1																				
		530	17	8	68	25	4	4	3	8	4	8														
		531A	6	2	4	1																				
		531B	8	5	8	1																				
		630	13	9	68	25	4	4	3	2	3	2														
		631	4	3	272	10	4	5	3	2																
		1030	12	4	36	10	1	1	9	6																
		1130A	20	5	16	9	1		18	10																
		1130B	19	3	16	9	1		17	8																
		1131	50	10	9	10	1	1	47	8																
		1132	47	8	8	1																				

BRIDGE NO. 1 LT & RT

DRAWING NO. 35-0023

BRIDGE SHEET 23 OF 23

1 INCH WHEN PRINTED FULL SIZE

P.I. NO. 0009861

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

BAR REINFORCEMENT SCHEDULE
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK

BIBB COUNTY 0009861

NO SCALE JULY 2017

DESIGNED EJF CHECKED TKH REVIEWED DLC/SKG
DRAWN EJF DESIGN GROUP DPD APPROVED WMD

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DATE | REVISIONS | BY

10/04/26 AM

2/6/2018

01/23/352

P.I. NO. 0009861

PLAN

GRADE DATA

PLACE RIP RAP AND FILTER FABRIC FROM 2 FT. BELOW ORIGINAL GROUND TO 2 FT. ABOVE FLOODSTAGE ELEVATION. EXTEND RIP RAP AND FILTER FABRIC 20 FT. BEYOND END OF WINGWALLS UNLESS OTHERWISE NOTED. WHERE BERM ELEVATION IS LOWER THAN 2 FT. ABOVE FLOODSTAGE, EXTEND RIP RAP AND FILTER FABRIC ACROSS BERM.

RIP RAP DETAIL
NO SCALE

ELEVATION
(BRIDGE NO. 2 LT. SHOWN)

NOTE:
END BENT PILES NOT SHOWN.
*SLOPE NORMAL TO END BENT.
**STATIONS ARE ALONG CONSTRUCTION CENTERLINE AT THE INTERSECTION OF CONSTRUCTION CENTERLINE AND B.F.P.R. ELEVATIONS ARE ALONG THE PROFILE GRADE LINE.

EXISTING BRIDGE NO. 2 LT.
BRIDGE SERIAL NO. 021-0004-0
BRIDGE ID NO. 021-0001ID-006.70N

EXISTING BRIDGE NO. 2 RT.
BRIDGE SERIAL NO. 021-0003-0
BRIDGE ID NO. 021-0001ID-006.69N

PROJECT PI NO. 0009861

BRIDGE NO. 2 LT & RT

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

PLAN AND ELEVATION
SR 11(SR 49, US 41) OVER
TOBESOFKEE CREEK OVERFLOW
BIBB COUNTY 0009861

REVISIONS | DATE | BY

DRAWING NO. 35-0024
BRIDGE SHEET 1 OF 11

SCALE: 1" = 15'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DESIGNED ASA | CHECKED LQL | REVIEWED DLC/SKG
DRAWN WMC | DESIGN GROUP DPD | APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

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GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2013 EDITION, AND 2016 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. MAINTAIN 2" MINIMUM CLEARANCE ON ALL REINFORCEMENT UNLESS OTHERWISE NOTED.

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 OBTAINED ON THE GEORGIA DOT WEBSITE AT:

HTTP://WWW.DOT.GA.GOV/BS/PROJECTS/PROJECTSEARCH

THE ORIGINAL LEFT BRIDGE PLANS ARE NOT AVAILABLE. THE ORIGINAL LEFT BRIDGE WAS WIDENED UNDER PROJECT NUMBER R.A.B.(4)S.P.1552(15) (PROJECT ID NO. H011688). IT WAS WIDENED A SECOND TIME UNDER PROJECT NUMBER F-002-3(4) (PROJECT ID NO. H000234). THE ORIGINAL RIGHT BRIDGE WAS BUILT UNDER PROJECT NUMBER S.N.F.A.P 79(2) (PROJECT ID NO. H014237). THE ORIGINAL RIGHT BRIDGE WAS WIDENED UNDER PROJECT NUMBER F-002-3(4) (PROJECT ID NO. H000234).

WAITING PERIOD - NONE REQUIRED.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

DYNAMIC PILE 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 TESTING AT 404-608-4720 TWO WEEKS PRIOR TO DRIVING PILES.

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 OFFICE OF MATERIALS AND TESTING FOR REVIEW AND APPROVAL TWO WEEKS PRIOR TO DRIVING PILES.

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.

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 END 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.

HIGH PERFORMANCE CONCRETE (HPC) - PRESTRESSED CONCRETE BEAMS FOR SPAN 1 OF THIS BRIDGE UTILIZE HIGH PERFORMANCE CONCRETE. SPECIAL REQUIREMENTS ARE REQUIRED AS DETAILED IN SPECIAL PROVISION SECTIONS 500 AND 865. HPC BEAMS WILL BE PAID FOR AS *PSC BEAMS*.

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 TESTING. USE ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING.

BRIDGE REMOVAL - REMOVE EXISTING BRIDGE AS PER SUB-SECTION 540.3.05 OF THE GEORGIA DOT SPECIFICATIONS.

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.

GENERAL NOTES (ALTERNATE 1)

DRIVING RESISTANCE - DETERMINE DRIVING RESISTANCE FOR PILES USING DYNAMIC PILE TESTING IN ACCORDANCE WITH SPECIAL PROVISION 520. DYNAMIC PILE TESTING SHALL BE REQUIRED AT EACH TEST PILE AT EACH TEST PILE.

TEST PILES - DRIVE TEST PILES AT THE FOLLOWING LOCATIONS:

ONE 16 IN SQ PSC X 61 FT AT BRIDGE 2 LEFT BENT 1
ONE 16 IN SQ PSC X 43 FT AT BRIDGE 2 RIGHT BENT 2

GENERAL NOTES (ALTERNATE 2)

DRIVING RESISTANCE - DETERMINE DRIVING RESISTANCE FOR PILES USING DYNAMIC PILE TESTING IN ACCORDANCE WITH SPECIAL PROVISION 520. DYNAMIC PILE TESTING SHALL BE REQUIRED FOR ONE PILE AT BENTS 1 LT, 2 RT.

METAL SHELL PILES - USE A MINIMUM SHELL THICKNESS OF 5/16" FOR PILES HAVING AN OUTSIDE DIAMETER OF 16". USE THIS SHELL THICKNESSES IN LIEU OF THOSE CALLED FOR IN SUB-SECTION 520.3.05.M AND SUB-SECTION 855.2.01.A.1 OF THE GEORGIA DOT SPECIFICATIONS.

PILE CLOSURE PLATE DETAIL - USE CLOSURE PLATE OPTION 2 AT THIS SITE IN ACCORDANCE WITH SUB-SECTION 520.3.05.M OF THE GEORGIA DOT SPECIFICATIONS.

EACH BRIDGE CONSISTS OF

1 - 142'-0" BULB TEE, 74 IN, PSC BEAM SPAN ---------- SPECIAL DESIGN

2 - 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")

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 ---------- 16.7 SQ MILES

FLOOD FREQUENCY	TOTAL DISCHARGE	DISCHARGE THRU BRIDGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
50 YEAR	15,300 CFS	2,216 CFS	2.59 FPS	855 SQ FT	1.05 FT
100 YEAR	17,300 CFS	2,497 CFS	2.70 FPS	926 SQ FT	1.09 FT
500 YEAR	22,600 CFS	3,173 CFS	2.83 FPS	1,118 SQ FT	1.18 FT

TRAFFIC DATA

TRAFFIC ---------- ADT = 39,600 (2020)
ADT = 48,350 (2040)

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

TRUCKS ---------- 9.5 %

24 HR TRUCKS ---------- 13 %

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

UTILITIES

NO UTILITIES ON BRIDGE

EXISTING UTILITIES

GAS MAIN ---------- ATLANTA GAS LIGHT COMPANY

FIBER OPTIC ---------- GDOT

18 TELEPHONE CONDUITS ---------- AT&T

WATER MAIN ---------- MACON WATER AUTHORITY

VOID

DESIGN DATA

SPECIFICATIONS ---------- AASHTO LRFD 7TH EDITION, 2014
(DESIGNED FOR SEISMIC PERFORMANCE ZONE 2, SD1 = 0.170)

DESIGN VEHICLE LIVE LOAD ---------- HL-93

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

CONCRETE: SUPERSTRUCTURE ---------- CLASS D, f'_c = 4,000 PSI
BARRIER ---------- CLASS D, f'_c = 4,000 PSI
PSC BEAMS ---------- CLASS AAA, f'_c = 9000 PSI
PSC BEAM ALLOWABLE TENSION ---------- 569 PSI
SUBSTRUCTURE ---------- CLASS A, f'_c = 3,000 PSI

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

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

METAL SHELL PILES (ALT. 2): ---------- GRADE 3, f_y = 45,000 PSI

P.I. NO. 0009861

BRIDGE NO. 2 LT & RT

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

GENERAL NOTES
SR 11(SR 49, US 41) OVER
TOBESOFKEE CREEK OVERFLOW
BIBB COUNTY 0009861

DATE | REVISIONS | BY

DRAWING NO. 35-0025
BRIDGE SHEET 2 OF 11

NO SCALE JULY 2017

DESIGNED ASA | CHECKED LQL | REVIEWED DLC/SKG
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SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITIES LEFT BRIDGE	QUANTITIES RIGHT BRIDGE	UNIT	PAY ITEM
500-0100	726	726	SY	GROOVED CONCRETE
500-1011	LUMP	----	LS	SUPERSTR CONCRETE, CL D, BR NO - 2 LT (258)
500-1011	----	LUMP	LS	SUPERSTR CONCRETE, CL D, BR NO - 2 RT (258)
500-2100	272	272	LF	CONCRETE BARRIER
500-3102	60	60	CY	CLASS A CONCRETE
507-9033	842	----	LF	PSC BEAMS, AASHTO, BULB TEE, 74 IN, BR NO - 2 LT
507-9033	----	842	LF	PSC BEAMS, AASHTO, BULB TEE, 74 IN, BR NO - 2 RT
511-1000	7312	7312	LB	BAR REINF STEEL
511-3000	LUMP	----	LS	SUPERSTR REINF STEEL, BR NO - 2 LT (58516)
511-3000	----	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 2 RT (58516)
523-1100	1	1	EA	DYNAMIC PILE TEST
540-1102	LUMP	----	LS	REMOVAL OF EXISTING BR, STA NO - 2 LT
540-1102	----	LUMP	LS	REMOVAL OF EXISTING BR, STA NO - 2 RT
603-2024	1673	1673	SY	STD DUMPED RIP RAP, TP 1, 24 IN
603-7000	1673	1673	SY	PLASTIC FILTER FABRIC

ALTERNATE 1 QUANTITIES

PAY ITEM NUMBER	QUANTITIES LEFT BRIDGE	QUANTITIES RIGHT BRIDGE	UNIT	PAY ITEM
520-2216	1650	1155	LF	PILING IN PLACE, PSC, 16 IN SQ
520-3216	1	1	EA	TEST PILE, PSC, 16 IN SQ
520-4216	1	1	EA	LOAD TEST, PSC, 16 IN SQ (IF REQD)

ALTERNATE 2 QUANTITIES

PAY ITEM NUMBER	QUANTITIES LEFT BRIDGE	QUANTITIES RIGHT BRIDGE	UNIT	PAY ITEM
520-1316	1930	1530	LF	PILING IN PLACE, METAL SHELL, 16 IN OD
520-4316	1	1	EA	LOAD TEST, METAL SHELL, 16 IN OD (IF REQD)

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2/6/2018
01/023352

BRIDGE NO. 2 LT & RT

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

GENERAL NOTES
SR 11(SR 49, US 41) OVER
TOBESOFKEE CREEK OVERFLOW
BIBB COUNTY 0009861

NO SCALE JULY 2017

DRAWING NO. 35-0026
BRIDGE SHEET 3 OF 11

REVISIONS | DATE | BY

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DRAWN WMC | DESIGN GROUP DPD | APPROVED WMD

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DECK PLAN

LEFT BRIDGE SHOWN
RIGHT BRIDGE SIMILAR

NOTE: THE 400 SERIES BARS SHALL BE ALTERNATED AS SHOWN. THE MINIMUM LAP FOR THE 400 SERIES BARS SHALL BE 1'-9".

SUPERSTRUCTURE QUANTITIES - LEFT BRIDGE	
ITEM	SPAN 1
LUMP - SUPERSTR. CONCRETE, CU. YDS., CLASS "D"	257.4
LUMP - SUPERSTR. REINF. STEEL, LBS.	58516

SUPERSTRUCTURE QUANTITIES - RIGHT BRIDGE	
ITEM	SPAN 1
LUMP - SUPERSTR. CONCRETE, CU. YDS., CLASS "D"	257.4
LUMP - SUPERSTR. REINF. STEEL, LBS.	58516

END POST CONCRETE AND BAR REINFORCEMENT STEEL INCLUDED IN QUANTITIES.

DETAILS OF 1" EXPANSION JOINT IN BARRIER

SCALE: 1/2" = 1'-0"

LONGITUDINAL SECTION

EXPANSION JOINT DETAILS

(BENT 1 ONLY)

BARRIER DETAIL

SCALE: 3/4" = 1'-0"

BARRIER TRANSITION DETAIL

SCALE: 1/4" = 1'-0"

BRIDGE NO. 2 LT & RT

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

DECK PLAN
SR 11(SR 49, US 41) OVER
TOBESOFKEE CREEK OVERFLOW
BIBB COUNTY 0009861

SCALE: 3/16" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DATE	REVISIONS	BY

DRAWING NO. 35-0027
BRIDGE SHEET 4 OF 11

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DIMENSION "D" IS MEASURED FROM TOP OF SLAB TO TOP OF BEAMS AT CENTERLINE BEARING. VARY "D" BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTION. MAINTAIN A CONSTANT SLAB THICKNESS OF 7¾"BETWEEN BEAMS AND 8¼"AT THE OVERHANGS.

"D" = 1'-1⅛" FOR INTERIOR BEAMS
"D" = 1'-2⅛"FOR EXTERIOR BEAMS

HALF SECTION THRU SLAB
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

HALF SECTION THRU DIAPHRAGM
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

SLAB REINFORCEMENT NOT SHOWN

SECTION THRU DIAPHRAGM
SCALE: ¾" = 1'-0"

NOTE:
1. OTHER REINFORCING IN ENDWALL AND PAVING REST NOT SHOWN.
2. LAP 900 BARS A MINIMUM OF 3'-8"

SECTION THRU ENDWALL
(LEFT BRIDGE BENT 2 SHOWN - LOOKING AHEAD)

SLAB REINFORCEMENT NOT SHOWN

SECTION AT ENDWALL
SCALE: ¾" = 1'-0"

TYPICAL SECTION SCHEMATIC
(LOOKING AHEAD)
NO SCALE

REBAR DETAIL IN COPING
SCALE: ¾" = 1'-0"

BRIDGE NO. 2 LT & RT

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

DATE | REVISIONS | BY

DECK SECTIONS
SR 11(SR 49, US 41) OVER
TOBESOFKEE CREEK OVERFLOW
BIBB COUNTY 0009861

DRAWING NO. 35-0028
BRIDGE SHEET 5 OF 11

SCALE: ⅜"= 1'-0"(UNLESS OTHERWISE NOTED) JULY 2017

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ELEVATION

SECTION AT MIDPOINT

SECTION AT END

MAINTAIN 1" MINIMUM CLEARANCE UNLESS SHOWN.
• INDICATES 0.6" DIAMETER PRESTRESSED STRANDS.

NOTES

1. BEAMS SHALL BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND SHALL BE PICKED UP WITHIN 9'-0" FROM THEIR ENDS. DISREGARDING THIS REQUIREMENT COULD LEAD TO COLLAPSE OF THE BEAM. PICK-UPS SHALL BE EMBEDDED TO WITHIN 4" OF THE BOTTOM OF THE BEAM. DETAILS OF PICK-UPS SHALL BE INCLUDED IN THE SHOP DRAWINGS.
2. CHAMFER EDGES OF BEAMS ½", ¾" OR 1".
3. HORIZONTAL DIMENSIONS ARE IN PLACE DIMENSIONS. THE BEAM LENGTH INCLUDES THE ⅛" EPOXY MORTAR AT EACH END. SHOP DRAWINGS SHALL ADJUST HORIZONTAL DIMENSIONS FOR GRADE AND FABRICATION EFFECTS SUCH AS SHRINKAGE AND ELASTIC SHORTENING.
4. AT ℄ BEARING, FORM A 1¾" DIAMETER X 7" DEEP HOLE AT THE FIXED ENDS AND A 6" X 1¾" X 7" DEEP SLOT AT THE EXPANSION ENDS FOR A 1½" DIAMETER SMOOTH DOWEL. SEE PLAN AND ELEVATION SHEET FOR LOCATION OF FIXED AND EXPANSION ENDS.
5. TOPS OF BEAMS SHALL BE ROUGH FLOATED AT APPROXIMATELY THE TIME OF INITIAL SET. ENTIRE TOP SHALL BE SCRUBBED TRANSVERSELY WITH A COARSE BRUSH TO REMOVE ALL LAITANCE AND TO PRODUCE A ROUGHENED SURFACE FOR BONDING TO THE SLAB. ROUGHENED SURFACE SHALL HAVE AN AMPLITUDE OF APPROXIMATELY ¼". CONCRETE FINS OR PROJECTIONS SHALL BE REMOVED TO PRODUCE A VERTICAL FACE AT THE EDGE OF THE BEAM.
6. NON-COMPOSITE DEAD LOAD DEFLECTION (ΔNC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF THE SLAB AND COPING.
7. COMPOSITE DEAD LOAD DEFLECTION (ΔC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF BARRIER.
8. STRANDS SHALL MEET ALL REQUIREMENTS OF ASTM A 416 GRADE 270.
9. PRESTRESSING DATA IS AS FOLLOWS:
   A. USE 54 - 0.6" DIAMETER LOW-RELAXATION (A = 0.217 SQ IN) STRANDS. PRETENSION TOP FOUR (4) STRANDS TO 10,000 LBS EACH. PRETENSION BOTTOM STRANDS TO 43,943 LBS EACH.
   B. PRETENSIONED STRANDS SHALL BE RELEASED AFTER THE CONCRETE HAS REACHED A MINIMUM STRENGTH (f'_{ci}) OF 8,000 PSI.
   C. INCLUDING THE TOP STRANDS, THE TOTAL JACKING FORCE OF PRETENSIONING IS 2,237,150 LBS.
   D. INCLUDING THE TOP STRANDS, THE NET PRESTRESSING FORCE OF THE STRANDS AFTER ALL LOSSES IS 1,705,920 LBS.
10. CONCRETE STRENGTH (f'_c) = 9,000 PSI.
11. ALLOWABLE PSC BEAM TENSION = 569 PSI.

⊛ DIAPHRAGM BAR SHALL BE A 1" DIAMETER PLAIN BAR, THREADED 5" ON EACH END, WITH ¼" X 3½" DIAMETER WASHERS AND HEX NUTS (ASTM A 709 GRADE 36).

TIGHTEN DIAPHRAGM BAR AS PER SUB-SECTION 507.3.05.C OF THE GEORGIA DOT SPECIFICATIONS.

AFTER EXCESS DIAPHRAGM BAR HAS BEEN CUT OFF, PAINT DIAPHRAGM BAR, WASHER, AND NUT EXPOSED IN RECESS WITH SPECIAL PROTECTIVE COATING NO. 2 P AS PER SECTION 535 OF THE GEORGIA DOT SPECIFICATIONS. AFTER PAINTING, FILL THE RECESS WITH AN APPROVED EPOXY GROUT.

GALVANIZING OF THE DIAPHRAGM BAR AS PER SUB-SECTION 865.2.01.B.12 OF THE GEORGIA DOT SPECIFICATIONS IS NOT REQUIRED.

RECESS DETAIL FOR DIAPHRAGM BAR ENDS

REINFORCEMENT

ALL BAR DIMENSIONS ARE OUT TO OUT.

AT THE TOP OF THE BEAM, BARS 550 AND 650 SHALL BE FIELD BENT OR SHOP BENT 90°, SUCH THAT THE HORIZONTAL LEG EXTENDS BETWEEN TOP AND BOTTOM MATS OF SLAB REINFORCEMENT.

SLIGHTLY SHIFT OR SLOPE BARS 451 TO AVOID CONFLICT WITH STRANDS.

BARS 350 MAY BE FABRICATED IN TWO PARTS BY LAPPING HORIZONTAL SECTION BY 1'-0" MINIMUM.

PLACE BARS 450 WITH OPEN ENDS AWAY FROM BEAM ENDS.

BRIDGE NO. 2 LT & RT

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

BULB TEE, 74 IN PSC BEAM
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK OVERFLOW
BIBB COUNTY 0009861

P.I. NO. 0009861

REVISIONS	BY	DATE

DRAWING NO. 35-0029
BRIDGE SHEET 6 OF 11

NO SCALE — JULY 2017

DESIGNED ASA — CHECKED LQL — REVIEWED DLC/SKG
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PLAN
BENT 1 SHOWN
BENT 2 SIMILAR

PREFORMED FOAM JOINT FILLER SHALL BE FURNISHED IN ACCORDANCE WITH SUB-SECTION 833.2.10 OF THE GEORGIA DOT SPECIFICATIONS.

ENDWALL NOT SHOWN

SECTION A-A

PLAN

SECTION B-B

BEARING PAD

NOTES

1) BEARING PADS HAVE BEEN DESIGNED ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 14.7.6 METHOD A AND SHALL BE FURNISHED IN ACCORDANCE WITH WITH AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, SECTION 18, BEARING DEVICES.

2) 1 1/2" DIAMETER SMOOTH DOWELS SHALL BE ASTM A 709 GRADE 50.

3) BEARING PADS SHALL BE MADE OF 60 DUROMETER HARDNESS NEOPRENE, GRADE 2 OR HIGHER.

4) 3" DIAMETER HOLE IN BEARING PADS MAY BE FORMED OR DRILLED.

5) BEARING PADS SHALL HAVE 1/4" COVER ON THE TOP, BOTTOM, AND SIDES AND AROUND THE HOLE.

6) 3/16" LOAD PLATES, 12 GAUGE INTERNAL PLATE(S) (IF REQUIRED) SHALL BE ASTM A709 GRADE 36 OR ASTM A 1011 GRADE 36.

7) NUMBER OF INTERNAL PLATES SHOWN FOR ILLUSTRATION PURPOSES ONLY. THE NUMBER OF INTERNAL PLATE(S) SPECIFIED SHALL BE EQUALLY SPACED BETWEEN LOAD PLATES.

8) USE OF 1 1/2° MOLD DRAFT IS OPTIONAL.

BENT	BEARING PADS								
	W	L	T	NUMBER OF INTERNAL PLATE(S)	GAGE OF INTERNAL PLATE(S)	DESIGN SHEAR DEFLECTION	DESIGN LOADS (KIPS)		
							DEAD LOAD	LIVE LOAD (NO IMPACT)	DEAD LOAD + LIVE LOAD
1	22"	12"	2 1/4"	2	12	9/16"	170.0	96.8	266.8
2	22"	12"	2 1/4"	2	12	0"	170.0	96.8	266.8

BRIDGE NO. 2 LT & RT

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

BEARING PAD DETAILS
SR 11 (SR 49, US 41) OVER
TOBESOFKEE CREEK OVERFLOW
BIBB COUNTY 0009861

DATE | REVISIONS | BY

DRAWING NO. 35-0030
BRIDGE SHEET 7 OF 11

NO SCALE JULY 2017

DESIGNED ASA | CHECKED LQL | REVIEWED DLC/SKG
DRAWN WMC | DESIGN GROUP DPD | APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

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REVISED MAY 18, 2011

PLAN

SECTION A-A

SCALE: ¾" = 1'-0"

SECTION B-B

SCALE: ¾" = 1'-0"

ELEVATION

BENT 1- LEFT BRIDGE (LOOKING BACK)

THE PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 239 KIPS.

ALL PILES SHALL BE 16 IN. SQUARE PSC FOR ALTERNATE 1 (SHOWN) OR 16 IN. O.D. METAL SHELL FOR ALTERNATE 2 (SIMILAR).

PLAN DRIVING OBJECTIVE

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 368 KIPS AFTER A MINIMUM ELEVATION OF 250 AT BENT 1 AND 260 AT BENT 2 IS ACHIEVED.

BRIDGE NO. 2 LT & RT

NOTE: 1. SEE GA. STD. 9037 FOR DRAINAGE DETAILS REQUIRED AT END BENTS.
2. POUR WINGWALLS MONOLITHICALLY WITH CAP.
3. WINGWALL PILES NOT SHOWN
4. FOR CAP ELEVATIONS AT ALL BENTS, SEE SUBSTRUCTURE LAYOUT SCHEMATIC ON BR. SH. 9.
5. RIGHT BRIDGE NOT SHOWN.
6. BOTTOM OF WINGWALLS ARE LEVEL.

SUBSTRUCTURE QUANTITIES (PER EACH BRIDGE)

ITEM	BENT 1	BENT 2	TOTAL
CU YD CLASS "A" CONCRETE	29.8	29.9	59.7
LB BAR REINFORCEMENT STEEL	3656	3656	7312

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

END BENT DETAILS
SR 11(SR 49, US 41) OVER
TOBESOFKEE CREEK OVERFLOW
BIBB COUNTY 0009861

P.I. NO. 0009861

DATE | REVISIONS | BY

DRAWING NO. 35-0031
BRIDGE SHEET 8 OF 11

SCALE: ⅜" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

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P.I. NO. 0009861

PLAN

ELEVATION
BENT 1
(LOOKING BACK)

PLAN

ELEVATION
BENT 2
(LOOKING AHEAD)

BRIDGE NO. 2 LT & RT

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

SUBSTRUCTURE LAYOUT SCHEMATIC
SR 11(SR 49, US 41) OVER
TOBESOFKEE CREEK OVERFLOW

BIBB COUNTY 0009861

NO SCALE JULY 2017

DRAWING NO. 35-0032

BRIDGE SHEET 9 OF 11

REVISIONS	DATE	BY

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PLAN

BENT 1 LT BRIDGE SHOWN,
BENT 1 RT AND BENT 2 LT AND RT SIMILAR
LOOKING BACK

AS BUILT FOUNDATION INFORMATION BRIDGE NO. 2 LEFT ALT. ( )		
BENT	PILE LOCATION	PILE TIP ELEVATION
1	LT WING END	
	LT WING MID	
	PILE 1	
	PILE 2	
	PILE 3	
	PILE 4	
	PILE 5	
	PILE 6	
	PILE 7	
	PILE 8	
	PILE 9	
	PILE 10	
	PILE 11	
	PILE 12	
	RT WING MID	
	RT WING END	
2	LT WING END	
	LT WING MID	
	PILE 1	
	PILE 2	
	PILE 3	
	PILE 4	
	PILE 5	
	PILE 6	
	PILE 7	
	PILE 8	
	PILE 9	
	PILE 10	
	PILE 11	
	PILE 12	
	RT WING MID	
	RT WING END	

AS BUILT FOUNDATION INFORMATION BRIDGE NO. 2 RIGHT ALT. ( )		
BENT	PILE LOCATION	PILE TIP ELEVATION
1	LT WING END	
	LT WING MID	
	PILE 1	
	PILE 2	
	PILE 3	
	PILE 4	
	PILE 5	
	PILE 6	
	PILE 7	
	PILE 8	
	PILE 9	
	PILE 10	
	PILE 11	
	PILE 12	
	RT WING MID	
	RT WING END	
2	LT WING END	
	LT WING MID	
	PILE 1	
	PILE 2	
	PILE 3	
	PILE 4	
	PILE 5	
	PILE 6	
	PILE 7	
	PILE 8	
	PILE 9	
	PILE 10	
	PILE 11	
	PILE 12	
	RT WING MID	
	RT WING END	

MARK ALTERNATE SELECTED		
ALT. 1	PSC PILES	
ALT. 2	METAL SHELL PILES	

THIS "AS BUILT FOUNDATION INFORMATION" SHEET SHALL BE FILLED IN BY THE PROJECT ENGINEER AND FORWARDED TO THE BRIDGE OFFICE AFTER INSTALLATION OF ALL PILES FOR POSTING TO THE PLANS AS A PERMANANT RECORD OF THE BRIDGE CONSTRUCTION.

PROJECT ENGINEER DATE

(AREA CODE) TELEPHONE NUMBER

BRIDGE NO. 2 LT & RT

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

AS BUILT FOUNDATION INFORMATION
SR 11(SR 49, US 41) OVER
TOBESOFKEE CREEK OVERFLOW
BIBB COUNTY 0009861

NO SCALE JULY 2017

DRAWING NO. 35-0033
BRIDGE SHEET 10 OF 11

REVISIONS | DATE | BY

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LOCATION	NO. OF LOC.	MARK	LENGTH FT.	LENGTH IN.	NO. BARS REQ'D.	TYPE	A	G	B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	J FT.	J IN.	K FT.	K IN.	N	θ
SPAN 1 LT OR RT	2																									
		400A	60- 0		270	1																				
		400B	25- 2		135	1																				
		401	19- 0		112	1																				
		402	51- 9		16	1																				
		403	7-11		40	1																				
		404A	12- 1		40	25	4	4	0- 7		5- 1															
		404B	8- 2		10	25	4	4	0- 7		3- 1 5/8															
		405	30- 0		24	1																				
		406	5- 5		372	14	4	4	3- 2		0- 6 3/8		0- 8		0- 4 3/8		0- 8									
		500A	52- 4		263	2			50- 8		0-10		0-10													
		500B	7- 4		526	3			6- 5 1/2		0-10		0-10													
		501	50-11		208	1																				
		502	8- 7		308	23			1- 3		3- 8		3- 8													
		503	6- 8		308	23			0- 6		3- 1		3- 1													
		504A	8- 7		36	46			6- 3		1- 1 7/8		0- 3		0- 8		0- 8									
		504B	9- 3		62	46			6- 3		1-10		0- 3		0- 8		0- 8									
		505	49- 4		2	1																				
		506A	3- 4		50	6			1- 1		0-10		0-10		0- 7		0- 7									
		506B	8- 6		140	3			7- 0		1- 6															
		507A	4-11		10	1																				
		507B	6- 7		10	1																				
		900A	12-10		80	16	6	6	3- 7		0- 8		0- 8		3- 8		3- 8									
		900B	6- 1		32	34	6		1- 5 1/2		0- 8		3- 8		0- 8											
ENDBENT LT OR	4																									
RT																										
		410	10- 5		63	25	4	4	2- 8		2- 2															
		411	7- 9		48	32	5	5	2- 8		2- 2		2- 2													
		412	9- 5		12	25	4	4	2- 2		2- 2															
		413	1- 8		16	1																				
		510	10- 7		72	1																				
		511	16- 7		48	1																				
		512	51-10		4	1																				
		610	6- 3		6	2			4- 3		1- 0		1- 0		0- 8 1/2		0- 8 1/2									
		1010	56-10		4	2			53- 2		1-10		1-10													

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2/6/2018

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GDOT

P.I. NO. 0009861

BRIDGE NO. 2 LT & RT

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

BAR REINFORCING SCHEDULE
SR 11(SR 49, US 41) OVER
TOBESOFKEE CREEK OVERFLOW

BIBB COUNTY 0009861

NO SCALE JULY 2017

DRAWING NO. 35-0034

BRIDGE SHEET 11 OF 11

REVISIONS | DATE | BY

DESIGNED ASA | CHECKED LQL | REVIEWED DLC/SKG
DRAWN WMC | DESIGN GROUP DPD | APPROVED WMD

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P.I. NO. 0009861

PLAN

NOTES:

END BENT PILES NOT SHOWN.

* SLOPE NORMAL TO END BENT.

**STATIONS ARE ALONG CONSTRUCTION CENTERLINE AT THE INTERSECTION OF CONSTRUCTION CENTERLINE AND B.F.P.R. ELEVATIONS ARE ALONG THE PROFILE GRADE LINE FOR BRIDGE NO. 3 LT.

GRADE DATA
(BRIDGE NO. 3 LT.)

LVC = 165 FT

VERTICAL CURVE DATA
(BRIDGE NO. 3 RT.)

PLACE RIP RAP AND FILTER FABRIC FROM 2 FT. BELOW ORIGINAL GROUND TO 2 FT. ABOVE FLOODSTAGE. EXTEND RIP RAP AND FILTER FABRIC 20 FT. BEYOND END OF WINGWALLS UNLESS OTHERWISE NOTED. WHERE BERM ELEVATION IS LOWER THAN 2 FT. ABOVE FLOODSTAGE, EXTEND RIP RAP AND FILTER FABRIC ACROSS BERM.

RIP RAP DETAIL
NO SCALE

ELEVATION
(BRIDGE NO. 3 LT. SHOWN)

STATIONS AND ELEVATIONS			
BRIDGE	BENT	STATION	ELEVATION
LEFT	1	43+35.00	293.06
	2	43+65.00	293.23
	3	44+91.00	293.94
	4	45+21.00	294.11
RIGHT	1	43+45.00	293.11
	2	43+75.00	293.28
	3	45+01.00	293.99
	4	45+31.00	294.16

EXISTING BRIDGE NO. 3 LT.	EXISTING BRIDGE NO. 3 RT.
EXISTING BRIDGE SERIAL NO. 021-0006-0	EXISTING BRIDGE SERIAL NO. 021-0005-0
EXISTING BRIDGE I.D. NO. 021-00011D-006.85N	EXISTING BRIDGE I.D. NO. 021-00011D-006.84N

PROJECT P.I. NO. 0009861

BRIDGE NO. 3 LT. & RT.

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

PLAN AND ELEVATION
SR 11 (SR 49, US 41) OVER
ROCKY CREEK OVERFLOW

BIBB COUNTY 0009861

SCALE: 1" = 15'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0035

BRIDGE SHEET 1 OF 18

REVISIONS | DATE | BY

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GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2013 EDITION, AND 2016 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. MAINTAIN 2" MINIMUM CLEARANCE ON ALL REINFORCEMENT UNLESS OTHERWISE NOTED.

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 OBTAINED ON THE GEORGIA DOT WEBSITE AT:

HTTP://WWW.DOT.GA.GOV/BS/PROJECTS/PROJECTSEARCH

THE ORIGINAL LEFT BRIDGE PLANS ARE NOT AVAILABLE. THE ORIGINAL LEFT BRIDGE WAS WIDENED UNDER PROJECT NUMBER R.A.B.(4)-S.P.-1552(15) (PROJECT ID NO. H011688) AND WIDENED AGAIN UNDER PROJECT NUMBER F-002-3(4) (PROJECT ID NO. H000234).

THE ORIGINAL RIGHT BRIDGE WAS BUILT UNDER PROJECT NUMBER S.N.F.A.P.79(2) (PROJECT ID NO. H014237) AND WIDENED UNDER PROJECT NUMBER F-002-3(4) (PROJECT ID NO. H000234).

WAITING PERIOD - NONE REQUIRED.

COFFERDAMS - PROVIDE COFFERDAMS AT BENTS 2 AND 3 ON BOTH BRIDGES.

FOUNDATION BACKFILL MATERIAL - PLACE 1'-0" OF TYPE II FOUNDATION BACKFILL MATERIAL UNDER EACH FOOTING AT BENTS 2 AND 3 ON BOTH BRIDGES. THE QUANTITY IS BASED ON THE PLAN FOOTING DIMENSIONS PLUS 2'-0". THIS REQUIREMENT MAY BE WAIVED BY THE ENGINEER IF THE FOOTING AREA IS DRY.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

DYNAMIC PILE 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 TESTING AT AT 404-608-4720 TWO WEEKS PRIOR TO DRIVING PILES.

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 OFFICE OF MATERIALS AND TESTING FOR REVIEW AND APPROVAL TWO WEEKS PRIOR TO DRIVING PILES.

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.

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 4. 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.

EXTERIOR BEAM BRACING - THE CONTRACTOR SHALL PROVIDE BRACING FOR SPANS 1 AND 3 BETWEEN EXTERIOR BEAM AND THE FIRST INTERIOR BEAM UNTIL THE DECK HAS BEEN POURED AND THE OVERHANG FORMS REMOVED. ALL COST FOR DESIGNING, PROVIDING, INSTALLING AND REMOVING BRACING SHALL BE INCLUDED IN PRICE BID FOR LUMP-SUPERSTRUCTURE CONCRETE.

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 TESTING. USE ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING.

GENERAL NOTES

BRIDGE REMOVAL - REMOVE EXISTING BRIDGE AS PER SUB-SECTION 540.3.05 OF THE GEORGIA DOT SPECIFICATIONS.

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.

GENERAL NOTES (ALTERNATE 1)

DRIVING RESISTANCE - DETERMINE DRIVING RESISTANCE FOR PILES USING DYNAMIC PILE TESTING IN ACCORDANCE WITH SPECIAL PROVISION 520. DYNAMIC PILE TESTING SHALL BE REQUIRED FOR EACH TEST PILE.

TEST PILES - DRIVE TEST PILES AT THE FOLLOWING LOCATIONS:

ONE 14 IN SQ PSC X 52 FT AT BRIDGE 3 LEFT BENT 1
ONE 14 IN SQ PSC X 26 FT AT BRIDGE 3 RIGHT BENT 2
ONE 14 IN SQ PSC X 27 FT AT BRIDGE 3 RIGHT BENT 3
ONE 14 IN SQ PSC X 53 FT AT BRIDGE 3 LEFT BENT 4

GENERAL NOTES (ALTERNATE 2)

DRIVING RESISTANCE - DETERMINE DRIVING RESISTANCE FOR PILES USING DYNAMIC PILE TESTING IN ACCORDANCE WITH SPECIAL PROVISION 520. DYNAMIC PILE TESTING SHALL BE REQUIRED FOR ONE PILE AT EACH OF BENTS 1 LT, 2 RT, 3 RT, AND 4 LT.

METAL SHELL PILES - USE A MINIMUM SHELL THICKNESS OF 3/8" FOR PILES HAVING AN OUTSIDE DIAMETER OF 14". USE THIS SHELL THICKNESS IN LIEU OF THOSE CALL FOR IN SUB-SECTION 520.3.05.M AND SUB-SECTION 855.2.01.A.1 OF THE GEORGIA DOT SPECIFICATIONS.

PILE CLOSURE PLATE DETAIL - USE CLOSURE PLATE OPTION 2 AT THIS SITE IN ACCORDANCE WITH SUB-SECTION 520.3.05.M OF THE GEORGIA DOT SPECIFICATIONS.

DESIGN DATA

SPECIFICATIONS ---------- AASHTO LRFD 7TH EDITION, 2014
(DESIGNED FOR SEISMIC PERFORMANCE ZONE 2, SD1 = 0.170)

DESIGN VEHICLE LIVE LOAD ---------- HL-93

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

CONCRETE: SUPERSTRUCTURE ---------- CLASS D, f'_c = 4,000 PSI
BARRIER ---------- 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 AA, f'_c = 3,500 PSI

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

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

METAL SHELL PILES (ALT. 2): ---------- GRADE 3, f_y = 45,000 PSI

EACH BRIDGE CONSISTS OF

VOID

2 - 30'-0" TYPE I MOD PSC BEAM SPANS ---------- SPECIAL DESIGN

1 - 126'-0" BULB TEE, 65 IN, PSC BEAM SPAN ---------- SPECIAL DESIGN

2 - 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'-6")

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)

BRIDGE NO. 3 LT. & RT.

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

GENERAL NOTES SHEET
SR 11(SR 49, US 41) OVER
ROCKY CREEK OVERFLOW
BIBB COUNTY 0009861

NO SCALE JULY 2017

DRAWING NO. 35-0036
BRIDGE SHEET 2 OF 18

REVISIONS | DATE | BY

DESIGNED TKH | CHECKED EJF | REVIEWED DLC/SKC
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DRAINAGE DATA

DRAINAGE AREA ---------- 262.0 SQ MILES

FLOOD FREQUENCY	TOTAL DISCHARGE	DISCHARGE THRU BRIDGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
50 YEAR	15,300 CFS	3,041 CFS	2.47 FPS	1,231 SQ FT	1.05 FT
100 YEAR	17,300 CFS	3,428 CFS	2.61 FPS	1,315 SQ FT	1.09 FT
500 YEAR	22,600 CFS	4,462 CFS	2.90 FPS	1,538 SQ FT	1.18 FT

TRAFFIC DATA

TRAFFIC ---------- ADT = 39.600 (2020)
ADT = 48,350 (2040)

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

TRUCKS ---------- 9.5 %

24 HR TRUCKS ---------- 13 %

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

EXISTING UTILITIES

GAS MAIN ---------- ATLANTA GAS LIGHT COMPANY

FIBER OPTIC ---------- GDOT

18 TELEPHONE CONDUITS ---------- AT&T

WATER MAIN ---------- MACON WATER AUTHORITY

UTILITIES

NO UTILITIES ON BRIDGE

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	LEFT BRIDGE	RIGHT BRIDGE	UNIT	PAY ITEM
207-0203	21	21	CY	FOUND BKFILL MATL, TP II
211-0300	167	167	CY	BRIDGE EXCAVATION, STREAM CROSSING
500-0100	951	951	SY	GROOVED CONCRETE
500-1011	LUMP	----	LS	SUPERSTR CONCRETE, CL D, BR NO - 3 LT (299)
500-1011	----	LUMP	LS	SUPERSTR CONCRETE, CL D, BR NO - 3 RT (299)
500-2100	360	360	LF	CONCRETE BARRIER
500-3002	198	198	CY	CLASS AA CONCRETE
507-8900	344	----	LF	PSC BEAMS, AASHTO TYPE I MOD, BR NO - 3 LT
507-8900	----	344	LF	PSC BEAMS, AASHTO TYPE I MOD, BR NO - 3 RT
507-9034	751	----	LF	PSC BEAMS, AASHTO, BULB TEE, 65 IN, BR NO - 3 LT
507-9034	----	751	LF	PSC BEAMS, AASHTO, BULB TEE, 65 IN, BR NO - 3 RT
511-1000	35489	35517	LB	BAR REINF STEEL
511-3000	LUMP	----	LS	SUPERSTR REINF STEEL, BR NO - 3 LT (73210)
511-3000	----	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 3 RT (73210)
523-1100	2	2	EA	DYNAMIC PILE TEST
525-1000	4	4	EA	COFFERDAM
540-1102	LUMP	----	LS	REMOVAL OF EXISTING BRIDGE, BR NO - 3 LT
540-1102	----	LUMP	LS	REMOVAL OF EXISTING BRIDGE, BR NO - 3 RT
603-2024	1702	1702	SY	STN DUMPED RIP RAP, TP 1, 24 IN
603-7000	1702	1702	SY	PLASTIC FILTER FABRIC

ALTERNATE 1 QUANTITIES

PAY ITEM NUMBER	LEFT BRIDGE	RIGHT BRIDGE	UNIT	PAY ITEM
520-2214	1150	1110	LF	PILING, PSC, 14 IN SQ
520-3214	2	2	EA	TEST PILE, PSC, 14 IN SQ
520-4214	1	1	EA	LOAD TEST, PSC, 14 IN SQ (IF REQD)

ALTERNATE 2 QUANTITIES

PAY ITEM NUMBER	LEFT BRIDGE	RIGHT BRIDGE	UNIT	PAY ITEM
520-1314	1250	1150	LF	PILING IN PLACE, METAL SHELL, 14 IN OD
520-4314	1	1	EA	LOAD TEST, METAL SHELL, 14 IN OD (IF REQD)

BRIDGE NO. 3 LT. AND RT.

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

GENERAL NOTES SHEET
SR 11(SR 49, US 41) OVER
ROCKY CREEK OVERFLOW

BIBB COUNTY 0009861

NO SCALE JULY 2017

DRAWING NO. 35-0037
BRIDGE SHEET 3 OF 18

REVISIONS: DATE | BY

DESIGNED TKH | CHECKED EJF | REVIEWED DLC/SKG
DRAWN TKH | DESIGN GROUP DPD | APPROVED WMD

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10/5/2017 AM
2/6/2018
01/023/52

P.I. NO. 0009861

NOTE:
LEFT BRIDGE SHOWN, RIGHT BRIDGE SIMILAR.

SUPERSTRUCTURE QUANTITIES - LEFT BRIDGE				
ITEMS	SPAN 1	SPAN 2	SPAN 3	TOTAL
LUMP - SUPERSTR CONCRETE, CU. YDS., CLASS "D"	51.9	195.5	51.9	299.3
LUMP - SUPERSTR REINF. STEEL, LBS.	13994	45222	13994	73210

SUPERSTRUCTURE QUANTITIES - RIGHT BRIDGE				
ITEMS	SPAN 1	SPAN 2	SPAN 3	TOTAL
LUMP - SUPERSTR CONCRETE, CU. YDS., CLASS "D"	51.9	195.5	51.9	299.3
LUMP - SUPERSTR REINF. STEEL, LBS.	13994	45222	13994	73210

END POST CONCRETE AND BAR REINFORCEMENT STEEL QUANTITIES INCLUDED IN END SPAN QUANTITIES.
QUANTITIES FOR 600 BARS INCLUDED IN QUANTITIES FOR SPANS 1 AND 3.

BARRIER TRANSITION DETAIL
NO SCALE

NOTE: THE 400 SERIES BARS SHALL BE ALTERNATED AS SHOWN.
THE MIN. LAP FOR THE 400 SERIES BARS SHALL BE 1'-9". TWO 600 BARS SHALL BE PLACED BETWEEN EACH PAIR OF 400 BARS IN TOP OF SLAB OVER INTERMEDIATE BENTS.

SLAB REINFORCEMENT SCHEMATIC
400 BAR DETAIL
NO SCALE

BRIDGE NO. 3 LT. & RT.

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

DECK PLAN
SR 11 (SR 49, US 41) OVER
ROCKY CREEK OVERFLOW
BIBB COUNTY 0009861

SCALE: 3/16" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0038
BRIDGE SHEET 4 OF 18

REVISIONS | DATE | BY

DESIGNED TKH | CHECKED EJF | REVIEWED DLC/SKG
DRAWN TKH | DESIGN GROUP DPD | APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

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2/6/2018
01023352

P.I. NO. 0009861

DIMENSION "D" IS MEASURED FROM TOP OF SLAB TO TOP OF BEAMS AT CENTERLINE BEARING. VARY "D" BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTION AND VERTICAL CURVE. MAINTAIN A CONSTANT SLAB THICKNESS OF 7¾" BETWEEN BEAMS AND 8" AT THE OVERHANGS.
"D" = 9⅛" AT INTERIOR BEAMS
"D" = 9⅜" AT EXTERIOR BEAMS

SECTION THRU SLAB
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

DETAILS OF 1" EXPANSION JOINT IN BARRIER
SCALE: ½" = 1'-0"

HALF SECTION THRU ENDWALL
(BENT 4 LEFT BRIDGE SHOWN - LOOKING AHEAD)

HALF SECTION THRU EDGE BEAM
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

BARRIER DETAIL
SCALE: ¾" = 1'-0"

SECTION THRU SLAB AT INTERMEDIATE BENT

TYPICAL SECTION SCHEMATIC
(LOOKING AHEAD)
SCALE: 1" = 10'-0"

LONGITUDINAL SECTION

END BENT 4 EXPANSION JOINT DETAILS
NO SCALE

SECTION AT ENDWALL
SCALE: ¾" = 1'-0"

BRIDGE NO. 3 LT. & RT.

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

DECK SECTIONS - SPANS 1 AND 3
SR 11 (SR 49, US 41) OVER
ROCKY CREEK OVERFLOW

BIBB COUNTY 0009861

SCALE: ⅜" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0039
BRIDGE SHEET 5 OF 18

REVISIONS | DATE | BY

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P.I. NO. 0009861

DIMENSION "D" IS MEASURED FROM TOP OF SLAB TO TOP OF BEAMS AT CENTERLINE BEARING. VARY "D" BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTION AND VERTICAL CURVE. MAINTAIN A CONSTANT SLAB THICKNESS OF 7¾"BETWEEN BEAM AND 8¼"AT THE OVERHANGS.
"D" = 1'-0⅝"AT INTERIOR BEAMS
"D" = 1'-1⅜"AT EXTERIOR BEAMS

HALF SECTION THRU SLAB
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

HALF SECTION THRU DIAPHRAGM
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

SLAB REINFORCEMENT NOT SHOWN

SECTION THRU DIAPHRAGM
SCALE: ¾" = 1'-0"

NOTE: SEE DRAWING 35-0039 FOR TYPICAL SECTION SCHEMATIC

SECTION THRU EDGE BEAM
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

NOTE:
DO NOT REMOVE EDGE BEAM FORMS UNTIL DECK IS POURED AND REACHES 28 DAY CONCRETE STRENGTH.

SLAB REINFORCEMENT NOT SHOWN

SECTION THRU EDGE BEAM
SCALE: ¾" = 1'-0"

DETAIL "A"
NO SCALE

SECTION THRU SLAB AT INTERMEDIATE BENT

REBAR DETAIL IN COPING

BRIDGE NO. 3 LT. & RT.

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

DECK SECTIONS - SPAN 2
SR 11(SR 49, US 41) OVER
ROCKY CREEK OVERFLOW
BIBB COUNTY 0009861

REVISIONS: DATE | BY

DRAWING NO. 35-0040
BRIDGE SHEET 6 OF 18

SCALE: ⅜" = 1'-0"(UNLESS OTHERWISE NOTED) JULY 2017

DESIGNED TKH | CHECKED EJF | REVIEWED DLC/SKG
DRAWN TKH | DESIGN GROUP DPD | APPROVED WMD

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P.I. NO. 0009861

ELEVATION

MAINTAIN 1" MINIMUM CLEARANCE UNLESS SHOWN.
• INDICATES ½" DIAMETER PRESTRESSED STRANDS.

SECTION AT MIDPOINT

SECTION AT END

NOTES

1. BEAMS SHALL BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND SHALL BE PICKED UP WITHIN 3'-6" FROM THEIR ENDS. DISREGARDING THIS REQUIREMENT COULD LEAD TO COLLAPSE OF THE BEAM. PICK-UPS SHALL BE EMBEDDED TO WITHIN 4" OF THE BOTTOM OF THE BEAM. DETAILS OF PICK-UPS SHALL BE INCLUDED IN THE SHOP DRAWINGS.

2. CHAMFER EDGES OF BEAMS ½" OR ¾".

3. HORIZONTAL DIMENSIONS ARE IN PLACE DIMENSIONS. THE BEAM LENGTH INCLUDES THE ⅛" EPOXY MORTAR AT EACH END. SHOP DRAWINGS SHALL ADJUST HORIZONTAL DIMENSIONS FOR GRADE AND FABRICATION EFFECTS SUCH AS SHRINKAGE AND ELASTIC SHORTENING.

4. AT ℄ BEARING, FORM A 1¾" DIAMETER X 7" DEEP HOLE AT THE FIXED ENDS AND A 4" X 1¾" X 7" DEEP SLOT AT THE EXPANSION ENDS FOR A 1½" DIAMETER SMOOTH DOWEL. SEE PLAN AND ELEVATION SHEET FOR LOCATION OF FIXED AND EXPANSION ENDS.

5. TOPS OF BEAMS SHALL BE ROUGH FLOATED AT APPROXIMATELY THE TIME OF INITIAL SET. ENTIRE TOP SHALL BE SCRUBBED TRANSVERSELY WITH A COARSE BRUSH TO REMOVE ALL LAITANCE AND TO PRODUCE A ROUGHENED SURFACE FOR BONDING TO THE SLAB. ROUGHENED SURFACE SHALL HAVE AN AMPLITUDE OF APPROXIMATELY ¼". CONCRETE FINS OR PROJECTIONS SHALL BE REMOVED TO PRODUCE A VERTICAL FACE AT THE EDGE OF THE BEAM.

6. NON-COMPOSITE DEAD LOAD DEFLECTION (ΔNC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF THE SLAB AND COPING.

7. COMPOSITE DEAD LOAD DEFLECTION (ΔC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF BARRIER.

8. STRANDS SHALL MEET ALL REQUIREMENTS OF ASTM A 416 GRADE 270.

9. PRESTRESSING DATA IS AS FOLLOWS:

   A. USE 14 - ½" DIAMETER SPECIAL LOW-RELAXATION (A = 0.167 SQ IN) STRANDS. PRETENSION STRANDS TO 33,818 LBS EACH.

   B. PRETENSIONED STRANDS SHALL BE RELEASED AFTER THE CONCRETE HAS REACHED A MINIMUM STRENGTH (f'_{ci}) OF 4,500 PSI.

   C. INCLUDING THE TOP STRANDS, THE TOTAL JACKING FORCE OF PRETENSIONING IS 473,452 LBS.

   D. INCLUDING THE TOP STRANDS, THE NET PRESTRESSING FORCE OF THE STRANDS AFTER ALL LOSSES IS 380,570 LBS.

10. CONCRETE STRENGTH (f'_c) = 5,000 PSI.

11. ALLOWABLE PSC BEAM TENSION = 424 PSI.

REINFORCEMENT

ALL BAR DIMENSIONS ARE OUT TO OUT.

AT THE TOP OF THE BEAM, BARS 550 AND 551 SHALL BE FIELD BENT OR SHOP BENT 90°, SUCH THAT THE HORIZONTAL LEG EXTENDS BETWEEN TOP AND BOTTOM MATS OF SLAB REINFORCEMENT.

SLIGHTLY SHIFT OR SLOPE BARS 451 TO AVOID CONFLICT WITH STRANDS.

BARS 350 MAY BE FABRICATED IN TWO PARTS BY LAPPING HORIZONTAL SECTION BY 1'-0" MINIMUM.

PLACE BARS 452 WITH OPEN ENDS AWAY FROM BEAM ENDS.

BRIDGE NO. 3 LT. & RT.

DRAWING NO.	REVISIONS	BY	DATE
35-0041			
BRIDGE SHEET 7 OF 18			

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

TYPE I MOD PSC BEAM - END SPANS
SR 11(SR 49, US 41) OVER
ROCKY CREEK OVERFLOW

BIBB COUNTY 0009861

NO SCALE JULY 2017

DESIGNED TKH CHECKED EJF REVIEWED DLC/SKG
DRAWN TKH DESIGN GROUP DPD APPROVED WMD

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REVISED MAY 8, 2014

P.I. NO. 0009861

ELEVATION

SECTION AT MIDPOINT

SECTION AT END

MAINTAIN 1" MINIMUM CLEARANCE UNLESS SHOWN.
• INDICATES 0.6" DIAMETER PRESTRESSED STRANDS.

NOTES

1. BEAMS SHALL BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND SHALL BE PICKED UP WITHIN 7'-9" FROM THEIR ENDS. DISREGARDING THIS REQUIREMENT COULD LEAD TO COLLAPSE OF THE BEAM. PICK-UPS SHALL BE EMBEDDED TO WITHIN 4" OF THE BOTTOM OF THE BEAM. DETAILS OF PICK-UPS SHALL BE INCLUDED IN THE SHOP DRAWINGS.
2. CHAMFER EDGES OF BEAMS ½", ¾" OR 1".
3. HORIZONTAL DIMENSIONS ARE IN PLACE DIMENSIONS. THE BEAM LENGTH INCLUDES THE ⅛" EPOXY MORTAR AT EACH END. SHOP DRAWINGS SHALL ADJUST HORIZONTAL DIMENSIONS FOR GRADE AND FABRICATION EFFECTS SUCH AS SHRINKAGE AND ELASTIC SHORTENING.
4. AT ℄ BEARING, FORM A 1¾" DIAMETER X 7" DEEP HOLE AT THE FIXED ENDS AND A 6" X 1¾" X 7" DEEP SLOT AT THE EXPANSION ENDS FOR A 1½" DIAMETER SMOOTH DOWEL. SEE PLAN AND ELEVATION SHEET FOR LOCATION OF FIXED AND EXPANSION ENDS.
5. TOPS OF BEAMS SHALL BE ROUGH FLOATED AT APPROXIMATELY THE TIME OF INITIAL SET. ENTIRE TOP SHALL BE SCRUBBED TRANSVERSELY WITH A COARSE BRUSH TO REMOVE ALL LAITANCE AND TO PRODUCE A ROUGHENED SURFACE FOR BONDING TO THE SLAB. ROUGHENED SURFACE SHALL HAVE AN AMPLITUDE OF APPROXIMATELY ¼". CONCRETE FINS OR PROJECTIONS SHALL BE REMOVED TO PRODUCE A VERTICAL FACE AT THE EDGE OF THE BEAM.
6. NON-COMPOSITE DEAD LOAD DEFLECTION (ΔNC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF THE SLAB AND COPING.
7. COMPOSITE DEAD LOAD DEFLECTION (ΔC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF BARRIER.
8. STRANDS SHALL MEET ALL REQUIREMENTS OF ASTM A 416 GRADE 270.
9. PRESTRESSING DATA IS AS FOLLOWS:
   A. USE 50 - 0.6" DIAMETER LOW-RELAXATION (A = 0.217 SQ IN) STRANDS. PRETENSION TOP FOUR (4) STRANDS TO 10,000 LBS EACH. PRETENSION BOTTOM STRANDS TO 43,943 LBS EACH.
   B. PRETENSIONED STRANDS SHALL BE RELEASED AFTER THE CONCRETE HAS REACHED A MINIMUM STRENGTH (f'_{ci}) OF 7,400 PSI.
   C. INCLUDING THE TOP STRANDS, THE TOTAL JACKING FORCE OF PRETENSIONING IS 2,061,378 LBS.
   D. INCLUDING THE TOP STRANDS, THE NET PRESTRESSING FORCE OF THE STRANDS AFTER ALL LOSSES IS 1,545,559 LBS.
10. CONCRETE STRENGTH (f'_c) = 8,000 PSI.
11. ALLOWABLE PSC BEAM TENSION = 537 PSI.

⊛ DIAPHRAGM BAR SHALL BE A 1" DIAMETER PLAIN BAR, THREADED 5" ON EACH END, WITH ¼" X 3½" DIAMETER WASHERS AND HEX NUTS (ASTM A 709 GRADE 36).

TIGHTEN DIAPHRAGM BAR AS PER SUB-SECTION 507.3.05.C OF THE GEORGIA DOT SPECIFICATIONS.

AFTER EXCESS DIAPHRAGM BAR HAS BEEN CUT OFF, PAINT DIAPHRAGM BAR, WASHER, AND NUT EXPOSED IN RECESS WITH SPECIAL PROTECTIVE COATING NO. 2 P AS PER SECTION 535 OF THE GEORGIA DOT SPECIFICATIONS. AFTER PAINTING, FILL THE RECESS WITH AN APPROVED EPOXY GROUT.

GALVANIZING OF THE DIAPHRAGM BAR AS PER SUB-SECTION 865.2.01.B.12 OF THE GEORGIA DOT SPECIFICATIONS IS NOT REQUIRED.

RECESS DETAIL FOR DIAPHRAGM BAR ENDS

REINFORCEMENT

ALL BAR DIMENSIONS ARE OUT TO OUT.

AT THE TOP OF THE BEAM, BARS 550 AND 650 SHALL BE FIELD BENT OR SHOP BENT 90°, SUCH THAT THE HORIZONTAL LEG EXTENDS BETWEEN TOP AND BOTTOM MATS OF SLAB REINFORCEMENT.

SLIGHTLY SHIFT OR SLOPE BARS 451 TO AVOID CONFLICT WITH STRANDS.

BARS 350 MAY BE FABRICATED IN TWO PARTS BY LAPPING HORIZONTAL SECTION BY 1'-0" MINIMUM.

PLACE BARS 450 WITH OPEN ENDS AWAY FROM BEAM ENDS.

BRIDGE NO. 3 LT. & RT.

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

BULB TEE, 65 IN PSC BEAM-INTERMEDIATE SPANS
SR 11(SR 49, US 41) OVER
ROCKY CREEK OVERFLOW
BIBB COUNTY 0009861

DATE | REVISIONS | BY

DRAWING NO. 35-0042
BRIDGE SHEET 8 OF 18

NO SCALE JULY 2017

DESIGNED TKH | CHECKED EJF | REVIEWED DLC/SKG
DRAWN TKH | DESIGN GROUP DPD | APPROVED WMD

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1 INCH WHEN PRINTED FULL SIZE

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REVISED NOVEMBER 30, 2012

PLAN
BENT 1 SHOWN
BENT 4 SIMILAR

PREFORMED FOAM JOINT FILLER SHALL BE FURNISHED IN ACCORDANCE WITH SUB-SECTION 833.2.10 OF THE GEORGIA DOT SPECIFICATIONS.

ENDWALL NOT SHOWN

SECTION A-A

PLAN

SECTION B-B

BEARING PAD

NOTES

1. BEARING PADS HAVE BEEN DESIGNED ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 14.7.6 METHOD A AND SHALL BE FURNISHED IN ACCORDANCE WITH AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, SECTION 18, BEARING DEVICES.
2. 1 1/2" DIAMETER SMOOTH DOWELS SHALL BE ASTM A 709 GRADE 50.
3. BEARING PADS SHALL BE MADE OF 60 DUROMETER HARDNESS NEOPRENE, GRADE 2 OR HIGHER.
4. 3" DIAMETER HOLE IN BEARING PADS MAY BE FORMED OR DRILLED.
5. BEARING PADS SHALL HAVE 1/4" COVER ON THE TOP, BOTTOM, AND SIDES AND AROUND THE HOLE.
6. 3/16" LOAD PLATES AND 12 GAGE INTERNAL PLATE(S) (IF REQUIRED) SHALL BE ASTM A 709 GRADE 36 OR ASTM A 1011 GRADE 36.
7. NUMBER OF INTERNAL PLATES SHOWN FOR ILLUSTRATION PURPOSES ONLY. THE NUMBER OF INTERNAL PLATE(S) SPECIFIED SHALL BE EQUALLY SPACED BETWEEN LOAD PLATES.
8. USE OF 1 1/2° MOLD DRAFT IS OPTIONAL.

BENT	BEARING PADS							
						DESIGN LOADS (KIPS)		
	W	L	T	NUMBER OF INTERNAL PLATE(S)	DESIGN SHEAR DEFLECTION	DEAD LOAD	LIVE LOAD (NO IMPACT)	DEAD LOAD + LIVE LOAD
1	16"	10"	3 1/4"	3	1/4"	48	49	97
2 BACK	16"	10"	3 1/4"	3	0"	28	49	77
2 AHEAD	22"	10"	2 1/4"	2	0"	150	92	242
3 BACK	22"	10"	2 1/4"	2	1/2"	150	92	242
3 AHEAD	16"	10"	3 1/4"	3	1"	28	49	77
4	16"	10"	3 1/4"	3	1 1/4"	48	49	97

BRIDGE NO. 3 LT. & RT.

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

BEARING PAD DETAILS
SR 11(SR 49, US 41) OVER
ROCKY CREEK OVERFLOW
BIBB COUNTY 0009861

DATE | REVISIONS | BY

DRAWING NO. 35-0043
BRIDGE SHEET 9 OF 18

NO SCALE JULY 2017

DESIGNED TKH | CHECKED EJF | REVIEWED DLC/SKG
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P.I. NO. 0009861

NOTES:
1. POUR WINGWALLS MONOLITICALLY WITH CAP.
2. SEE GA. STD. 9037 FOR DRAINAGE DETAILS REQUIRED AT END BENTS.
3. BOTTOM OF WINGWALL IS LEVEL.

PLAN

ELEVATION
BENT 1- LEFT BRIDGE
(LOOKING BACK)

PLAN

ELEVATION
BENT 4
(LOOKING AHEAD)
SCALE: 3/16" = 1'-0"

SECTION A-A
NO SCALE

SECTION B-B
NO SCALE

PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 181 KIPS.

ALL PILES SHALL BE 14 IN. SQ. PSC FOR ALTERNATE 1 (SHOWN), OR 14 IN. O.D. METAL SHELL FOR ALTERNATE 2 (SIMILAR).

PLAN DRIVING OBJECTIVE

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 278 KIPS AFTER A MINIMUM TIP ELEVATION OF 260 AT BENT 1 AND 245 AT BENT 4 IS ACHIEVED.

SUBSTRUCTURE QUANTITIES		
ITEM	BENT 1 LT	BENT 4 LT
CY CLASS "AA" CONCRETE	16.3	16.3
LB BAR REINFORCEMENT STEEL	2014	2014

BRIDGE NO. 3 LT.

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

END BENTS 1 LT AND 4 LT
SR 11 (SR 49, US 41) OVER
ROCKY CREEK OVERFLOW

BIBB COUNTY 0009861

SCALE: 3/8" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0044
BRIDGE SHEET 10 OF 18

REVISIONS | DATE | BY

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PLAN

SECTION A-A

SCALE: ¾"= 1'-0"

ELEVATION

(LOOKING AHEAD)

NOTES:

1. EXTEND 1120 SERIES BARS 4'-6" MINIMUM INTO CAP.
2. 18-420 AND 10-522 BARS IN VERTICAL FACE OF CAP NOT SHOWN IN ELEVATION VIEW
3. CAP REINFORCEMENT IS SYMMETRICAL ABOUT CENTERLINE OF BENT
4. FOOTINGS ARE IDENTICAL.

* AT CONTRACTOR'S OPTION CONST. JT. MAY BE RELOCATED TO TOP OF FOOTING

SECTION C-C

SCALE: ¾"= 1'-0"

NOTE: ALTERNATE 621 BARS END FOR END AT EACH LOCATION

PILE LAYOUT

SCALE: ⅜"= 1'-0"

SUBSTRUCTURE QUANTITIES	
ITEM	BENT 2 LT
CY CLASS "AA" CONCRETE	82.0
LB BAR REINFORCEMENT STEEL	15624

PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 215 KIPS.

ALL PILES SHALL BE 14 IN. SQ. PSC FOR ALTERNATE 1(SHOWN), OR 14 IN. O.D. METAL SHELL FOR ALTERNATE 2 (SIMILAR).

PLAN DRIVING OBJECTIVE

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 349 KIPS AFTER A MINIMUM TIP ELEVATION OF 255 IS ACHIEVED.

BRIDGE NO. 3 LT.

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

INTERMEDIATE BENT 2 LEFT
SR 11(SR 49, US 41) OVER
ROCKY CREEK OVERFLOW

BIBB COUNTY 0009861

SCALE: ⅜"= 1'-0"(UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0045

BRIDGE SHEET 11 OF 18

DESIGNED TKH | CHECKED EFJ | REVIEWED DLC/SKG
DRAWN TKH | DESIGN GROUP DPD | APPROVED WMD

REVISIONS | DATE | BY

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ELEVATION
(LOOKING AHEAD)

SECTION A-A
SCALE: ¾" = 1'-0"

SECTION C-C
SCALE: ¾" = 1'-0"
NOTE: ALTERNATE 631 BARS END FOR END AT EACH LOCATION

PILE LAYOUT
SCALE: ⅜" = 1'-0"

SUBSTRUCTURE QUANTITIES	
ITEM	BENT 3 LT
CY CLASS "AA" CONCRETE	82.7
LB BAR REINFORCEMENT STEEL	15837

PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 212 KIPS.

ALL PILES SHALL BE 14 IN. SQ. PSC FOR ALTERNATE 1 (SHOWN), OR 14 IN. O.D. METAL SHELL FOR ALTERNATE 2 (SIMILAR).

PLAN DRIVING OBJECTIVE

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 341 KIPS FOR ALT. 1 AND 341 KIPS FOR ALT. 2 AFTER A MINIMUM TIP ELEVATION OF 247 IS ACHIEVED.

NOTES:
1. EXTEND 1130 SERIES BARS 4'-6" MINIMUM INTO CAP.
2. 18-420 AND 10-522 BARS IN VERTICAL FACE OF CAP NOT SHOWN IN ELEVATION VIEW
3. CAP REINFORCEMENT IS SYMMETRICAL ABOUT CENTERLINE OF BENT
4. FOOTINGS ARE IDENTICAL.

* AT CONTRACTOR'S OPTION CONST. JT. MAY BE RELOCATED TO TOP OF FOOTING

BRIDGE NO. 3 LT.

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

INTERMEDIATE BENT 3 LEFT
SR 11 (SR 49, US 41) OVER
ROCKY CREEK OVERFLOW

BIBB COUNTY 0009861

SCALE: ⅜" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0046
BRIDGE SHEET 12 OF 18

REVISIONS: DATE | BY

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NOTES:
1. POUR WINGWALLS MONOLITICALLY WITH CAP.
2. SEE GA. STD. 9037 FOR DRAINAGE DETAILS REQUIRED AT END BENTS.
3. BOTTOM OF WINGWALL IS LEVEL.

PLAN

SECTION A-A
NO SCALE

SECTION B-B
NO SCALE

ELEVATION
BENT 1- LEFT BRIDGE
(LOOKING BACK)

PLAN

ELEVATION
BENT 4
(LOOKING AHEAD)
SCALE: 3/16" = 1'-0"

PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 181 KIPS.

ALL PILES SHALL BE 14 IN. SQ. PSC FOR ALTERNATE 1 (SHOWN), OR 14 IN. METAL SHELL FOR ALTERNATE 2 (SIMILAR).

PLAN DRIVING OBJECTIVE

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 278 KIPS AFTER A MINIMUM TIP ELEVATION OF 260 AT BENT 1 AND 254 AT BENT 4 IS ACHIEVED.

SUBSTRUCTURE QUANTITIES

ITEM	BENT 1 RT.	BENT 4 RT.
CY CLASS "AA" CONCRETE	16.3	16.3
LB BAR REINFORCEMENT STEEL	2014	2014

BRIDGE NO. 3 RT.

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

END BENTS 1 RT AND 4 RT
SR 11 (SR 49, US 41) OVER
ROCKY CREEK OVERFLOW
BIBB COUNTY 0009861

SCALE: 3/8" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0047
BRIDGE SHEET 13 OF 18

DATE | REVISIONS | BY

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P.I. NO. 0009861

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PLAN

ELEVATION

(LOOKING AHEAD)

NOTES:

1. EXTEND 1120 SERIES BARS 4'-6" MINIMUM INTO CAP.
2. 18-420 AND 10-522 BARS IN VERTICAL FACE OF CAP NOT SHOWN IN ELEVATION VIEW
3. CAP REINFORCEMENT IS SYMMETRICAL ABOUT CENTERLINE OF BENT
4. FOOTINGS ARE IDENTICAL.

* AT CONTRACTOR'S OPTION CONST. JT. MAY BE RELOCATED TO TOP OF FOOTING

SECTION A-A

SCALE: ¾" = 1'-0"

SECTION C-C

SCALE: ¾" = 1'-0"

NOTE: ALTERNATE 621 BARS END FOR END AT EACH LOCATION

SUBSTRUCTURE QUANTITIES	
ITEM	BENT 2 RT
CY CLASS "AA" CONCRETE	82.2
LB BAR REINFORCEMENT STEEL	15645

PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 215 KIPS.

ALL PILES SHALL BE 14 IN. SQ. PSC FOR ALTERNATE 1(SHOWN), OR 14 IN. METAL SHELL FOR ALTERNATE 2 (SIMILAR).

PLAN DRIVING OBJECTIVE

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 339 KIPS FOR ALT. 1 AND 339 KIPS FOR ALT. 2 AFTER A MINIMUM TIP ELEVATION OF 255 IS ACHIEVED.

PILE LAYOUT

SCALE: ⅜" = 1'-0"

BRIDGE NO. 3 RT.

GEORGIA

DEPARTMENT OF TRANSPORTATION

ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES

INTERMEDIATE BENT 2 RIGHT
SR 11(SR 49, US 41) OVER
ROCKY CREEK OVERFLOW

BIBB COUNTY 0009861

SCALE: ⅜" = 1'-0"(UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0048

BRIDGE SHEET 14 OF 18

REVISIONS | DATE | BY

DESIGNED TKH | CHECKED EJF | REVIEWED DLC/SKG
DRAWN TKH | DESIGN GROUP DPD | APPROVED WMD

P.I. NO. 0009861

1 INCH WHEN PRINTED FULL SIZE

0009861B3.DGN

1055930 AM 2/6/2018 01023352

P.I. NO. 0009861

PLAN

ELEVATION

(LOOKING AHEAD)

NOTES:

1. EXTEND 1130 SERIES BARS 4'-6" MINIMUM INTO CAP.
2. 18-420 AND 10-522 BARS IN VERTICAL FACE OF CAP NOT SHOWN IN ELEVATION VIEW
3. CAP REINFORCEMENT IS SYMMETRICAL ABOUT CENTERLINE OF BENT
4. FOOTINGS ARE IDENTICAL.

* AT CONTRACTOR'S OPTION CONST. JT. MAY BE RELOCATED TO TOP OF FOOTING

SECTION A-A

SCALE: ¾" = 1'-0"

SECTION C-C

SCALE: ¾" = 1'-0"

NOTE: ALTERNATE 631 BARS END FOR END AT EACH LOCATION

PILE LAYOUT

SCALE: ⅜" = 1'-0"

SUBSTRUCTURE QUANTITIES	
ITEM	BENT 3 RT
CY CLASS "AA" CONCRETE	82.9
LB BAR REINFORCEMENT STEEL	15844

PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 212 KIPS.

ALL PILES SHALL BE 14 IN. SQ. PSC FOR ALTERNATE 1 (SHOWN), OR 14 IN. METAL SHELL WITH ⅜" O.D. FOR ALTERNATE 2 (SIMILAR).

PLAN DRIVING OBJECTIVE

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 332 KIPS FOR ALT. 1 AND 332 KIPS FOR ALT. 2 AFTER A MINIMUM TIP ELEVATION OF 252 IS ACHIEVED.

BRIDGE NO. 3 RT.

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

INTERMEDIATE BENT 3 RIGHT
SR 11 (SR 49, US 41) OVER
ROCKY CREEK OVERFLOW

BIBB COUNTY 0009861

SCALE: ⅜" = 1'-0" (UNLESS OTHERWISE NOTED) JULY 2017

DRAWING NO. 35-0049

BRIDGE SHEET 15 OF 18

REVISIONS: DATE | BY

DESIGNED TKH | CHECKED EJF | REVIEWED DLC/SKG
DRAWN TKH | DESIGN GROUP DPD | APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

0009861B3.DGN

01023352 2/6/2018 1055822 AM

P.I. NO. 0009861

AS BUILT FOUNDATION INFORMATION
BRIDGE NO. 3 LEFT ALT. ( )

BENT	PILE/FOOTING LOCATION	PILE TIP ELEVATION	BOTTOM OF FOOTING ELEVATION
1	BEAM 1		
	BEAM 2		
	BEAM 3		
	BEAM 4		
	BEAM 5		
	BEAM 6		
2 COL. 1	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
2 COL. 2	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
3 COL. 1	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
3 COL. 2	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
4	BEAM 1		
	BEAM 2		
	BEAM 3		
	BEAM 4		
	BEAM 5		
	BEAM 6		

AS BUILT FOUNDATION INFORMATION
BRIDGE NO. 3 RIGHT ALT ( )

BENT	PILE/FOOTING LOCATION	PILE TIP ELEVATION	BOTTOM OF FOOTING ELEVATION
1	BEAM 1		
	BEAM 2		
	BEAM 3		
	BEAM 4		
	BEAM 5		
	BEAM 6		
2 COL. 1	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
2 COL. 2	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
3 COL. 1	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
3 COL. 2	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
4	BEAM 1		
	BEAM 2		
	BEAM 3		
	BEAM 4		
	BEAM 5		
	BEAM 6		

TYPICAL FOOTING ELEVATION

TYPICAL FOOTING ELEVATION

PILE LAYOUT
ALT. 1

PILE LAYOUT
ALT. 2

THIS "AS BUILT FOUNDATION INFORMATION" SHEET SHALL BE FILLED IN BY THE PROJECT ENGINEER AND FORWARDED TO THE BRIDGE OFFICE AFTER INSTALLATION OF ALL PILES AND FOOTINGS FOR POSTING TO THE PLANS AS A PERMANANT RECORD OF THE BRIDGE CONSTRUCTION.

PROJECT ENGINEER — DATE

(AREA CODE) TELEPHONE NUMBER

MARK ALTERNATE SELECTED		
ALT. 1	PSC PILES	
ALT. 2	METAL SHELL PILES	

BRIDGE NO. 3 LT. & RT.

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

AS BUILT FOUNDATION INFORMATION
SR 11(SR 49, US 41) OVER
ROCKY CREEK OVERFLOW

BIBB COUNTY 0009861

NO SCALE JULY 2017

DRAWING NO. 35-0050

BRIDGE SHEET 16 OF 18

REVISIONS — DATE — BY

DESIGNED TKH — CHECKED EJF — REVIEWED DLC/SKG
DRAWN TKH — DESIGN GROUP DPD — APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

0009861B3.DGN

10/5/10 AM
2/6/2008
01023352

LOCATION	NO. OF LOC.	MARK	LENGTH FT. IN.	NO. BARS REQ'D.	TYPE	A	G	B FT. IN.	C FT. IN.	D FT. IN.	E FT. IN.	F FT. IN.	H FT. IN.	J FT. IN.	K FT. IN.	N	θ
SPAN 1 LEFT	2																
OR SPAN 3 LEFT		400A	29- 8	119	1												
		401A	13- 1	32	1												
		402	51- 9	3	1												
		403	5- 2	45	31	4	4	0- 9	1- 9 3/4	1- 9 3/4							
		500A	52- 4	60	2			50- 8	0-10	0-10							
		500B	7- 3	120	3			6- 5	0-10								
		501	50-11	45	1												
		502	8-11	64	23			1- 3	3-10	3-10							101
		503	6- 8	64	23			0- 6	3- 1	3- 1							79
		504	4-11	36	46			1-11	1-10	0- 3	0- 8	0- 8					
		505	49- 4	1	1												
		506A	2- 9	60	24			1- 1	0-10	0-10	0- 7	0- 7					
		506B	4- 2	70	3			2-10 3/8	1- 4								
		507	43-11	1	1												
		508A	7- 9	5	1												
		600	10- 0	72	1												
		800	49- 4	2	1												
		801	43-11	1	1												
		802	7- 9	5	1												
		900A	14-10	15	16	6	6	5- 7	0- 8	0- 8	3- 8	3- 8					
		900B	5- 1	6	34	6		2- 5 1/2	0- 8	1- 8	0- 8						
SPAN2	1																
		300	5- 0	4	1												
		400B	50- 0	238	1												
		400C	29- 2	119	1												
		401B	17- 7	112	1												
		403	5- 2	60													
		404	7-11	30	1												
		405A	10- 7	30	25	4	4	0- 7	4- 4								
		405B	8- 6	10	25	4	4	0- 7	3- 3 3/8								
		406	1-10	4	3			1- 2 3/8	0- 8								
		407	5- 6	168	14			3- 2	0- 6	0- 8	0- 6	0- 8					
		408	13- 0	24	1												
		500A	52- 4	233													
		500B	7- 3	466													
		501	50-11	184													
		502	8-11	294													
		503	6- 8	294													
		506A	2- 9	50													
		507	43-11	2													
		508B	4-11	10	1												
		509A	4-11	10	1												
		509B	6- 7	10	1												
		800	49- 4	4													
		801	43-11	2													
		802	7- 9	10													

LOCATION	NO. OF LOC.	MARK	LENGTH FT. IN.	NO. BARS REQ'D.	TYPE	A	G	B FT. IN.	C FT. IN.	D FT. IN.	E FT. IN.	F FT. IN.	H FT. IN.	J FT. IN.	K FT. IN.	N	θ
BENT 1 LEFT	1																
		410	6- 9	24	32	5	5	2- 8	1- 8	1- 8							
		411	9- 5	50	25	4	4	2- 8	1- 8								
		412	51-10	2	1												
		510	8- 8	28	1												
		511	5- 9	40	1												
		610	5- 8	6	1												
		1010	56-10	4	2			53- 2	1-10	1-10							
BENT 2 LEFT	1																
		420	47- 8	18	1												
		520	17- 8	62	25	4	4	3- 8	4- 8								
		521	10- 4	49	2			1- 8	4- 4	4- 4							
		522	47- 8	10	1												
		620	13- 9	61	25	4	4	3- 2	3- 2								
		621	4- 3	244	10	4	5	3- 2									
		1020	12- 4	44	10	1	1	9- 6									
		1120A	17- 4	16	9	1		15- 9									
		1120B	18- 0	16	9	1		16- 4 1/2									
		1121	50-10	10	10	1	1	47- 8									
		1122	47- 8	8	1												
BENT 3 LEFT	1																
		430	47- 8	18	1												
		530	17- 8	62	25	4	4	3- 8	4- 8								
		531	10- 4	49	2			1- 8	4- 4	4- 4							
		532	47- 8	10	1												
		630	13- 9	63	25	4	4	3- 2	3- 2								
		631	4- 3	252	10	4	5	3- 2									
		1030	12- 4	44	10	1	1	9- 6									
		1130A	18- 1	16	9	1		16- 6									
		1130B	18- 8	16	9	1		17- 1									
		1131	50-10	10	10	1	1	47- 8									
		1132	47- 8	8	1												
BENT 4 LEFT	1																
		440	6- 9	24	32	5	5	2- 8	1- 8	1- 8							
		441	9- 5	50	25	4	4	2- 8	1- 8								
		442	51-10	2	1												
		540	8- 8	28	1												
		541	5- 9	40	1												
		640	5- 8	6	1												
		1040	56-10	4	2			53- 2	1-10	1-10							

P.I. NO. 0009861

DRAWING NO. 35-0051

BRIDGE SHEET 17 OF 18

1 INCH WHEN PRINTED FULL SIZE

BRIDGE NO. 3 LT. & RT.

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

BAR REINFORCEMENT SCHEDULE
SR 11(SR 49, US 41) OVER
ROCKY CREEK OVERFLOW

BIBB COUNTY 0009861

NO SCALE JULY 2017

DESIGNED TKH CHECKED EJF REVIEWED DLC/SKG
DRAWN TKH DESIGN GROUP DPD APPROVED WMD

REVISIONS DATE BY

0009861B3.DGN

10:56:11 AM 2/6/2018 01023352

LOCATION	NO. OF LOC.	MARK	LENGTH FT. IN.	NO. BARS REQ'D.	TYPE	A	G	B FT. IN.	C FT. IN.	D FT. IN.	E FT. IN.	F FT. IN.	H FT. IN.	J FT. IN.	K FT. IN.	N	θ
SPAN 1 RIGHT	2																
OR SPAN 3 RIGHT		400A	29- 8	119	1												
		401A	13- 1	32	1												
		402	51- 9	3	1												
		403	5- 2	45	31	4	4	0- 9	1- 9 3/4	1- 9 3/4							
		500A	52- 4	60	2			50- 8	0-10	0-10							
		500B	7- 3	120	3			6- 5	0-10								
		501	50-11	45	1												
		502	8-11	64	23			1- 3	3-10	3-10							101
		503	6- 8	64	23			0- 6	3- 1	3- 1							79
		504	4-11	36	46			1-11	1-10	0- 3	0- 8	0- 8					
		505	49- 4	1	1												
		506A	2- 9	60	24			1- 1	0-10	0-10	0- 7	0- 7					
		506B	4- 2	70	3			2-10 3/8	1- 4								
		507	43-11	1	1												
		508A	7- 9	5	1												
		600	10- 0	72	1												
		800	49- 4	2	1												
		801	43-11	1	1												
		802	7- 9	5	1												
		900A	14-10	15	16	6	6	5- 7	0- 8	0- 8	3- 8	3- 8					
		900B	5- 1	6	34	6		2- 5 1/2	0- 8	1- 8	0- 8						
SPAN2	1																
		300	5- 0	4	1												
		400B	50- 0	238	1												
		400C	29- 2	119	1												
		401B	17- 7	112	1												
		403	5- 2	60													
		404	7-11	30	1												
		405A	10- 7	30	25	4	4	0- 7	4- 4								
		405B	8- 6	10	25	4	4	0- 7	3- 3 3/8								
		406	1-10	4	3			1- 2 3/8	0- 8								
		407	5- 6	168	14			3- 2	0- 6	0- 8	0- 6	0- 8					
		408	13- 0	24	1												
		500A	52- 4	233													
		500B	7- 3	466													
		501	50-11	184													
		502	8-11	294													
		503	6- 8	294													
		506A	2- 9	50													
		507	43-11	2													
		508B	4-11	10	1												
		509A	4-11	10	1												
		509B	6- 7	10	1												
		800	49- 4	4													
		801	43-11	2													
		802	7- 9	10													

LOCATION	NO. OF LOC.	MARK	LENGTH FT. IN.	NO. BARS REQ'D.	TYPE	A	G	B FT. IN.	C FT. IN.	D FT. IN.	E FT. IN.	F FT. IN.	H FT. IN.	J FT. IN.	K FT. IN.	N	θ
BENT 1 RIGHT	1																
		410	6- 9	24	32	5	5	2- 8	1- 8	1- 8							
		411	9- 5	50	25	4	4	2- 8	1- 8								
		412	51-10	2	1												
		510	8- 8	28	1												
		511	5- 9	40	1												
		610	5- 8	6	1												
		1010	56-10	4	2			53- 2	1-10	1-10							
BENT 2 RIGHT	1																
		420	47- 8	18	1												
		520	17- 8	62	25	4	4	3- 8	4- 8								
		521	10- 4	49	2			1- 8	4- 4	4- 4							
		522	47- 8	10	1												
		620	13- 9	61	25	4	4	3- 2	3- 2								
		621	4- 3	244	10	4	5	3- 2									
		1020	12- 4	44	10	1	1	9- 6									
		1120C	18- 1	16	9	1		16- 5 1/2									
		1120B	17- 6	16	9	1		15-11									
		1121	50-10	10	10	1	1	47- 8									
		1122	47- 8	8	1												
BENT 3 RIGHT	1																
		430	47- 8	18	1												
		530	17- 8	62	25	4	4	3- 8	4- 8								
		531	10- 4	49	2			1- 8	4- 4	4- 4							
		532	47- 8	10	1												
		630	13- 9	63	25	4	4	3- 2	3- 2								
		631	4- 3	252	10	4	5	3- 2									
		1030	12- 4	44	10	1	1	9- 6									
		1130C	18- 9	16	9	1		17- 1 3/4									
		1130D	18- 1	16	9	1		16- 6 1/4									
		1131	50-10	10	10	1	1	47- 8									
		1132	47- 8	8	1												
BENT 4 RIGHT	1																
		440	6- 9	24	32	5	5	2- 8	1- 8	1- 8							
		441	9- 5	50	25	4	4	2- 8	1- 8								
		442	51-10	2	1												
		540	8- 8	28	1												
		541	5- 9	40	1												
		640	5- 8	6	1												
		1040	56-10	4	2			53- 2	1-10	1-10							

DRAWING NO. 35-0052

BRIDGE SHEET 18 OF 18

1 INCH WHEN PRINTED FULL SIZE

P.I. NO. 0009861

BRIDGE NO. 3 LT. & RT.

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

BAR REINFORCEMENT SCHEDULE
SR 11(SR 49, US 41) OVER
ROCKY CREEK OVERFLOW

BIBB COUNTY 0009861

NO SCALE JULY 2017

DESIGNED TKH CHECKED EJF REVIEWED DLC/SKG
DRAWN TKH DESIGN GROUP DPD APPROVED WMD

0009861B3.DGN

DATE | REVISIONS | BY

01054432 AM 2/6/2008 01023352

P.I. NO. 0009861

PLAN

NOTES

END BENT PILES NOT SHOWN.

* SLOPE NORMAL TO END BENT.

** STATIONS ARE ALONG CONSTRUCTION CENTERLINE AT THE INTERSECTION OF CONSTRUCTION CENTERLINE AND B.F.P.R. ELEVATIONS ARE ALONG THE PROFILE GRADE LINE FOR BRIDGE NO. 4 LT.

GRADE DATA
(BRIDGE NO. 4 LT.)

GRADE DATA
(BRIDGE NO. 4 RT.)

RIP RAP DETAIL
NO SCALE

ELEVATION
(BRIDGE NO. 4 LT. SHOWN)

STATIONS AND ELEVATIONS			
BRIDGE	BENT	STATION	ELEVATION
LEFT	1	47+01.00	294.00
	2	47+41.00	293.74
	3	48+73.00	292.85
	4	49+13.00	292.58
RIGHT	1	46+96.00	294.04
	2	47+36.00	293.77
	3	48+68.00	292.88
	4	49+08.00	292.61

EXISTING BRIDGE NO. 4 LT.
BRIDGE SERIAL NO. 021-0008-0
BRIDGE ID NO. 021-0001ID-006.91N

EXISTING BRIDGE NO. 4 RT.
BRIDGE SERIAL NO. 021-0007-0
BRIDGE ID NO. 021-0001ID-006.90N

PROJECT PI NO. 0009861

BRIDGE NO. 4 LT. & RT.

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

PLAN AND ELEVATION
SR 11(SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

SCALE: 1" = 15'-0" (UNLESS OTHERWISE NOTED) MAY 2017

DRAWING NO. 35-0053

BRIDGE SHEET 1 OF 18

REVISIONS | DATE | BY

DESIGNED DLW | CHECKED DPD | REVIEWED DLC/SKG
DRAWN SLW/DLW | DESIGN GROUP DPD | APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

PRINTING.dgn

9:46:39 AM 2/6/2018 01023352

GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2013 EDITION, AND 2016 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. MAINTAIN 2" MINIMUM CLEARANCE ON ALL REINFORCEMENT UNLESS OTHERWISE NOTED.

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 OBTAINED ON THE GEORGIA DOT WEBSITE AT:

HTTP://WWW.DOT.GA.GOV/BS/PROJECTS/PROJECTSEARCH

THE ORIGINAL LEFT BRIDGE PLANS ARE NOT AVAILABLE. THE ORIGINAL LEFT BRIDGE WAS WIDENED UNDER PROJECT NUMBER RAB(4)SP1552(15) (PROJECT ID NO. H011688) AND WIDENED AGAIN UNDER PROJECT NUMBER TSAPF-002-3(5)(PROJECT NO. H000234).

THE ORIGINAL RIGHT BRIDGE WAS BUILT UNDER PROJECT NUMBER SN-FAP79(2) (PROJECT NO. H014237) AND WAS WIDENED UNDER PROJECT NUMBER TSAF-002-3(5) (PROJECT NO. H000234).

WAITING PERIOD - NONE REQUIRED.

COFFERDAMS - PROVIDE COFFERDAMS AT BENTS 2 AND 3 ON BOTH BRIDGES.

FOUNDATION BACKFILL MATERIAL - PLACE 1'-0" OF TYPE II FOUNDATION BACKFILL MATERIAL UNDER EACH FOOTING AT BENTS 2 AND 3 ON BOTH BRIDGES. THE QUANTITY IS BASED ON THE PLAN FOOTING DIMENSIONS PLUS 2'-0". THIS REQUIREMENT MAY BE WAVED BY THE ENGINEER IF THE FOOTING AREA IS DRY.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

DYNAMIC PILE 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 TESTING AT 404-608-4720 TWO WEEKS PRIOR TO DRIVING PILES.

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 OFFICE OF MATERIALS AND TESTING FOR REVIEW AND APPROVAL TWO WEEKS PRIOR TO DRIVING PILES.

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.

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 4. 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.

GENERAL NOTES

EXTERIOR BEAM BRACING - THE CONTRACTOR SHALL PROVIDE BRACING FOR SPANS 1 AND 3 BETWEEN EXTERIOR BEAM AND THE FIRST INTERIOR BEAM UNTIL THE DECK HAS BEEN POURED AND THE OVERHANG FORMS REMOVED. ALL COST FOR DESIGNING, PROVIDING, INSTALLING AND REMOVING BRACING SHALL BE INCLUDED IN PRICE BID FOR LUMP-SUPERSTRUCTURE CONCRETE.

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 TESTING. USE ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING.

BRIDGE REMOVAL - REMOVE EXISTING BRIDGE AS PER SUB-SECTION 540.3.05 OF THE GEORGIA DOT SPECIFICATIONS.

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.

GENERAL NOTES (ALTERNATE 1)

DRIVING RESISTANCE - DETERMINE DRIVING RESISTANCE FOR PILES USING DYNAMIC PILE TESTING IN ACCORDANCE WITH SPECIAL PROVISION 520. DYNAMIC PILE TESTING SHALL BE REQUIRED AT EACH TEST PILE.

TEST PILES - DRIVE TEST PILES AT THE FOLLOWING LOCATIONS:

ONE 14 IN SQ PSC X 69 FT AT BRIDGE 3 LEFT BENT 1
ONE 14 IN SQ PSC X 27 FT AT BRIDGE 3 RIGHT BENT 2
ONE 14 IN SQ PSC X 42 FT AT BRIDGE 3 RIGHT BENT 3
ONE 14 IN SQ PSC X 63 FT AT BRIDGE 3 LEFT BENT 4

GENERAL NOTES (ALTERNATE 2)

DRIVING RESISTANCE - DETERMINE DRIVING RESISTANCE FOR PILES USING DYNAMIC PILE TESTING IN ACCORDANCE WITH SPECIAL PROVISION 520. DYNAMIC PILE TESTING SHALL BE REQUIRED FOR ONE PILE AT EACH OF BENTS 1 LT, 2 RT, 3 RT, 4 LT.

METAL SHELL PILES - USE A MINIMUM SHELL THICKNESS OF 3/8" FOR PILES HAVING AN OUTSIDE DIAMETER OF 14". USE THIS SHELL THICKNESS IN LIEU OF THOSE CALL FOR IN SUB-SECTION 520.3.05.M AND SUB-SECTION 855.2.01.A.1 OF THE GEORGIA DOT SPECIFICATIONS.

PILE CLOSURE PLATE DETAIL - USE CLOSURE PLATE OPTION 2 AT THIS SITE IN ACCORDANCE WITH SUB-SECTION 520.3.05.M OF THE GEORGIA DOT SPECIFICATIONS.

DESIGN DATA

SPECIFICATIONS ---------- AASHTO LRFD 7TH EDITION, 2014
(DESIGNED FOR SEISMIC PERFORMANCE ZONE 2, SD1 = 0.170)

DESIGN VEHICLE LIVE LOAD ---------- HL-93

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

CONCRETE: SUPERSTRUCTURE ---------- CLASS D, f'_c = 4,000 PSI
BARRIER ---------- 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 AA, f'_c = 3,500 PSI

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

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

METAL SHELL PILES (ALT. 2): ---------- GRADE 3, f_y = 45,000 PSI

EACH BRIDGE CONSISTS OF

2 - 30'-0" TYPE I MOD PSC BEAM SPANS ---------- SPECIAL DESIGN

1 - 132'-0" BULB TEE, 65 IN, PSC BEAM SPAN ---------- SPECIAL DESIGN

2 - 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'-6")

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)

P.I. NO. 0009861

BRIDGE NO. 4 LT. & RT.

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

GENERAL NOTES SHEET
SR 11(SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

NO SCALE MAY 2017

DRAWING NO. 35-0054

BRIDGE SHEET 2 OF 18

REVISIONS | DATE | BY

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DRAINAGE DATA

DRAINAGE AREA ---------- 262.0 SQ MILES

FLOOD FREQUENCY	TOTAL DISCHARGE	DISCHARGE THRU BRIDGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
50 YEAR	15,300 CFS	3,997 CFS	2.82 FPS	1,416 SQ FT	1.05 FT
100 YEAR	17,300 CFS	4,473 CFS	2.96 FPS	1,513 SQ FT	1.09 FT
500 YEAR	22,600 CFS	5,707 CFS	3.23 FPS	1,769 SQ FT	1.18 FT

TRAFFIC DATA

TRAFFIC ---------- ADT = 39,600 (2020)
ADT = 48,350 (2040)

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

TRUCKS ---------- 9.5 %

24 HR TRUCKS ---------- 13 %

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

EXISTING UTILITIES

GAS MAIN ---------- ATLANTA GAS LIGHT COMPANY

TELEPHONE CONDUITS ---------- AT&T

FIBER OPTIC ---------- GDOT

WATER MAIN ---------- MACON WATER AUTHORITY

UTILITIES

NO UTILITIES ON BRIDGE

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITIES LEFT BRIDGE	QUANTITIES RIGHT BRIDGE	UNIT	PAY ITEM
207-0203	21	21	CY	FOUND BKFILL MATL, TP II
211-0300	236	210	CY	BRIDGE EXCAVATION, STREAM CROSSING
500-0100	1084	1084	SY	GROOVED CONCRETE
500-1011	LUMP	----	LS	SUPERSTR CONCRETE, CL D, BR NO - 4 LT (332)
500-1011	----	LUMP	LS	SUPERSTR CONCRETE, CL D, BR NO - 4 RT (332)
500-2100	412	412	LF	CONCRETE BARRIER
500-3002	199	199	CY	CLASS AA CONCRETE
507-8900	464	----	LF	PSC BEAMS, AASHTO TYPE I MOD, BR NO - 4 LT
507-8900	----	464	LF	PSC BEAMS, AASHTO TYPE I MOD, BR NO - 4 RT
507-9034	787	----	LF	PSC BEAMS, AASHTO, BULB TEE, 65 IN, BR NO - 4 LT
507-9034	----	787	LF	PSC BEAMS, AASHTO, BULB TEE, 65 IN, BR NO - 4 RT
511-1000	34476	34497	LB	BAR REINF STEEL
511-3000	LUMP	----	LS	SUPERSTR REINF STEEL, BR NO - 4 LT (82692)
511-3000	----	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 4 RT (82692)
523-1100	2	2	EA	DYNAMIC PILE TEST
525-1000	4	4	EA	COFFERDAM
540-1102	LUMP	----	LS	REMOVAL OF EXISTING BRIDGE, BR NO - 4 LT
540-1102	----	LUMP	LS	REMOVAL OF EXISTING BRIDGE, BR NO - 4 RT
603-2024	1540	1540	SY	STN DUMPED RIP RAP, TP 1, 24 IN
603-7000	1540	1540	SY	PLASTIC FILTER FABRIC

ALTERNATE 1 QUANTITIES

PAY ITEM NUMBER	QUANTITIES LEFT BRIDGE	QUANTITIES RIGHT BRIDGE	UNIT	PAY ITEM
520-2214	1835	1615	LF	PILING, PSC, 14 IN SQ
520-3214	2	2	EA	TEST PILE, PSC, 14 IN SQ
520-4214	1	1	EA	LOAD TEST, PSC, 14 IN SQ (IF REQD)

ALTERNATE 2 QUANTITIES

PAY ITEM NUMBER	QUANTITIES LEFT BRIDGE	QUANTITIES RIGHT BRIDGE	UNIT	PAY ITEM
520-1314	2480	2135	LF	PILING IN PLACE, METAL SHELL, 14 IN OD
520-4314	1	1	EA	LOAD TEST, METAL SHELL, 14 IN OD (IF REQD)

GDOT P.I. NO. 0009861

BRIDGE NO. LT. & RT.

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

GENERAL NOTES - SHEET 2
SR 11(SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

NO SCALE MAY 2017

DRAWING NO. 35-0055
BRIDGE SHEET 3 OF 18

REVISIONS DATE BY

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NOTE:
LEFT BRIDGE SHOWN, RIGHT BRIDGE SIMILAR.

BARRIER TRANSITION DETAIL

SCALE: ¼" = 1'-0"

DETAILS OF 1" EXPANSION JOINT IN BARRIER

SCALE: ½" = 1'-0"

EXPANSION JOINT DETAILS

NO SCALE

BARRIER DETAIL

SCALE: ¾" = 1'-0"

NOTE: THE 400 SERIES BARS SHALL BE ALTERNATED AS SHOWN. THE MIN. LAP FOR THE 400 SERIES BARS SHALL BE 1'-9". TWO 600 BARS SHALL BE PLACED BETWEEN EACH PAIR OF 400 BARS IN TOP OF SLAB OVER INTERMEDIATE BENTS.

SLAB REINFORCEMENT SCHEMATIC

400 BAR DETAIL

NO SCALE

LEFT BRIDGE SUPERSTRUCTURE QUANTITIES				
ITEM	SPAN 1	SPAN 2	SPAN 3	TOTAL
LUMP - SUPERSTR. CONCRETE, CU. YDS., CLASS "D"	64.2	203.4	64.2	331.8
LUMP - SUPERSTR. REINF. STEEL, LBS.	17060	48572	17060	82692

RIGHT BRIDGE SUPERSTRUCTURE QUANTITIES				
ITEM	SPAN 1	SPAN 2	SPAN 3	TOTAL
LUMP - SUPERSTR. CONCRETE, CU. YDS., CLASS "D"	64.2	203.4	64.2	331.8
LUMP - SUPERSTR. REINF. STEEL, LBS.	17060	48572	17060	82692

END POST CONCRETE AND BAR REINFORCEMENT STEEL QUANTITIES INCLUDED IN SPANS 1 AND 3 QUANTITIES.
600 BARS INCLUDED IN THE REINFORCEMENT QUANTITES FOR SPANS 1 AND 3.

BRIDGE NO. 4 LT. & RT.

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

DATE | REVISIONS | BY

DECK PLAN
SR 11 (SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

DRAWING NO. 35-0056

BRIDGE SHEET 4 OF 18

SCALE: ⅛" = 1'-0" (UNLESS OTHERWISE NOTED) MAY 2017

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DIMENSION "D" IS MEASURED FROM TOP OF SLAB TO TOP OF BEAMS AT CENTERLINE BEARING. VARY "D" BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTION AND VERTICAL CURVE. MAINTAIN A CONSTANT SLAB THICKNESS OF 7¾" BETWEEN BEAMS AND 8" AT THE OVERHANGS.
"D" = 9¼" AT INTERIOR BEAMS
"D" = 9¾" AT EXTERIOR BEAMS

SECTION THRU SLAB
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

HALF SECTION THRU ENDWALL
(BENT 4 LEFT BRIDGE SHOWN - LOOKING AHEAD)

HALF SECTION THRU EDGE BEAM
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

SECTION THRU SLAB AT INTERMEDIATE BENT

SECTION AT ENDWALL
SCALE: 3/4" - 1'-0"

TYPICAL SECTION SCHEMATIC
(LOOKING AHEAD)
SCALE: 1" = 10'-0"

BRIDGE NO. 4 LT. & RT.

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

DECK SECTIONS - SPANS 1 AND 3
SR 11 (SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

SCALE: ⅜" = 1'-0" (UNLESS OTHERWISE NOTED) MAY 2017

DRAWING NO. 35-0057
BRIDGE SHEET 5 OF 18

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DIMENSION "D" IS MEASURED FROM TOP OF SLAB TO TOP OF BEAMS AT CENTERLINE BEARING. VARY "D" BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTION AND VERTICAL CURVE. MAINTAIN A CONSTANT SLAB THICKNESS OF 7¾"BETWEEN BEAM AND 8¼"AT THE OVERHANGS.
"D"= 1'-0¾"AT INTERIOR BEAMS
"D"= 1'-1½"AT EXTERIOR BEAMS

HALF SECTION THRU SLAB
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

HALF SECTION THRU DIAPHRAGM
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

SLAB REINFORCEMENT NOT SHOWN

SECTION THRU DIAPHRAGM
SCALE: ¾"= 1'-0"

SECTION THRU EDGE BEAM
(LEFT BRIDGE SHOWN - LOOKING AHEAD)

SLAB REINFORCEMENT NOT SHOWN

SECTION THRU EDGE BEAM
SCALE: ¾"= 1'-0"
BRIDGE NO. 4 LT. & RT.

DETAIL "A"
NO SCALE

SECTION THRU SLAB AT INTERMEDIATE BENT

REBAR DETAIL IN COPING
NO SCALE

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

DECK SECTIONS - SPAN 2
SR 11(SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

SCALE: ⅜"= 1'-0"(UNLESS OTHERWISE NOTED) MAY 2017

DRAWING NO. 35-0058
BRIDGE SHEET 6 OF 18

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ELEVATION

SECTION AT MIDPOINT

SECTION AT END

MAINTAIN 1" MINIMUM CLEARANCE UNLESS SHOWN.
• INDICATES 1/2" DIAMETER PRESTRESSED STRANDS.

NOTES

1. BEAMS SHALL BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND SHALL BE PICKED UP WITHIN 3'-6" FROM THEIR ENDS. DISREGARDING THIS REQUIREMENT COULD LEAD TO COLLAPSE OF THE BEAM. PICK-UPS SHALL BE EMBEDDED TO WITHIN 4" OF THE BOTTOM OF THE BEAM. DETAILS OF PICK-UPS SHALL BE INCLUDED IN THE SHOP DRAWINGS.

2. CHAMFER EDGES OF BEAMS 1/2" OR 3/4".

3. HORIZONTAL DIMENSIONS ARE IN PLACE DIMENSIONS. THE BEAM LENGTH INCLUDES THE 1/8" EPOXY MORTAR AT EACH END. SHOP DRAWINGS SHALL ADJUST HORIZONTAL DIMENSIONS FOR GRADE AND FABRICATION EFFECTS SUCH AS SHRINKAGE AND ELASTIC SHORTENING.

4. AT ℄ BEARING, FORM A 1 3/4" DIAMETER X 7" DEEP HOLE AT THE FIXED ENDS AND A 4" X 1 3/4" X 7" DEEP SLOT AT THE EXPANSION ENDS FOR A 1 1/2" DIAMETER SMOOTH DOWEL. SEE PLAN AND ELEVATION SHEET FOR LOCATION OF FIXED AND EXPANSION ENDS.

5. TOPS OF BEAMS SHALL BE ROUGH FLOATED AT APPROXIMATELY THE TIME OF INITIAL SET. ENTIRE TOP SHALL BE SCRUBBED TRANSVERSELY WITH A COARSE BRUSH TO REMOVE ALL LAITANCE AND TO PRODUCE A ROUGHENED SURFACE FOR BONDING TO THE SLAB. ROUGHENED SURFACE SHALL HAVE AN AMPLITUDE OF APPROXIMATELY 1/4". CONCRETE FINS OR PROJECTIONS SHALL BE REMOVED TO PRODUCE A VERTICAL FACE AT THE EDGE OF THE BEAM.

6. NON-COMPOSITE DEAD LOAD DEFLECTION (ΔNC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF THE SLAB AND COPING.

7. COMPOSITE DEAD LOAD DEFLECTION (ΔC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF BARRIER.

8. STRANDS SHALL MEET ALL REQUIREMENTS OF ASTM A 416 GRADE 270.

9. PRESTRESSING DATA IS AS FOLLOWS:

   A. USE 18 - 1/2" DIAMETER SPECIAL LOW-RELAXATION (A = 0.167 SQ IN) STRANDS. PRETENSION STRANDS TO 33,818 LBS EACH.

   B. PRETENSIONED STRANDS SHALL BE RELEASED AFTER THE CONCRETE HAS REACHED A MINIMUM STRENGTH (f'_{ci}) OF 5,000 PSI.

   C. INCLUDING THE TOP STRANDS, THE TOTAL JACKING FORCE OF PRETENSIONING IS 608,724 LBS.

   D. INCLUDING THE TOP STRANDS, THE NET PRESTRESSING FORCE OF THE STRANDS AFTER ALL LOSSES IS 482,188 LBS.

10. CONCRETE STRENGTH (f'_c) = 5,500 PSI.

11. ALLOWABLE PSC BEAM TENSION = 445 PSI.

REINFORCEMENT

ALL BAR DIMENSIONS ARE OUT TO OUT.

AT THE TOP OF THE BEAM, BARS 550 AND 551 SHALL BE FIELD BENT OR SHOP BENT 90°, SUCH THAT THE HORIZONTAL LEG EXTENDS BETWEEN TOP AND BOTTOM MATS OF SLAB REINFORCEMENT.

SLIGHTLY SHIFT OR SLOPE BARS 451 TO AVOID CONFLICT WITH STRANDS.

BARS 350 MAY BE FABRICATED IN TWO PARTS BY LAPPING HORIZONTAL SECTION BY 1'-0" MINIMUM.

PLACE BARS 452 WITH OPEN ENDS AWAY FROM BEAM ENDS.

BRIDGE NO. 4 LT. & RT.

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

TYPE I MOD PSC BEAM - END SPANS
SR 11(SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

NO SCALE MAY 2017

DRAWING NO. 35-0059

BRIDGE SHEET 7 OF 18

DATE	REVISIONS	BY

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ELEVATION

MAINTAIN 1" MINIMUM CLEARANCE UNLESS SHOWN.
• INDICATES 0.6" DIAMETER PRESTRESSED STRANDS.

SECTION AT MIDPOINT

SECTION AT END

NOTES

1. BEAMS SHALL BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND SHALL BE PICKED UP WITHIN 7'-9" FROM THEIR ENDS. DISREGARDING THIS REQUIREMENT COULD LEAD TO COLLAPSE OF THE BEAM. PICK-UPS SHALL BE EMBEDDED TO WITHIN 4" OF THE BOTTOM OF THE BEAM. DETAILS OF PICK-UPS SHALL BE INCLUDED IN THE SHOP DRAWINGS.
2. CHAMFER EDGES OF BEAMS ½", ¾" OR 1".
3. HORIZONTAL DIMENSIONS ARE IN PLACE DIMENSIONS. THE BEAM LENGTH INCLUDES THE ⅛" EPOXY MORTAR AT EACH END. SHOP DRAWINGS SHALL ADJUST HORIZONTAL DIMENSIONS FOR GRADE AND FABRICATION EFFECTS SUCH AS SHRINKAGE AND ELASTIC SHORTENING.
4. AT ℄ BEARING, FORM A 1¾" DIAMETER X 7" DEEP HOLE AT THE FIXED ENDS AND A 6" X 1¾" X 7" DEEP SLOT AT THE EXPANSION ENDS FOR A 1½" DIAMETER SMOOTH DOWEL. SEE PLAN AND ELEVATION SHEET FOR LOCATION OF FIXED AND EXPANSION ENDS.
5. TOPS OF BEAMS SHALL BE ROUGH FLOATED AT APPROXIMATELY THE TIME OF INITIAL SET. ENTIRE TOP SHALL BE SCRUBBED TRANSVERSELY WITH A COARSE BRUSH TO REMOVE ALL LAITANCE AND TO PRODUCE A ROUGHENED SURFACE FOR BONDING TO THE SLAB. ROUGHENED SURFACE SHALL HAVE AN AMPLITUDE OF APPROXIMATELY ¼". CONCRETE FINS OR PROJECTIONS SHALL BE REMOVED TO PRODUCE A VERTICAL FACE AT THE EDGE OF THE BEAM.
6. NON-COMPOSITE DEAD LOAD DEFLECTION (ΔNC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF THE SLAB AND COPING.
7. COMPOSITE DEAD LOAD DEFLECTION (ΔC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF BARRIER.
8. STRANDS SHALL MEET ALL REQUIREMENTS OF ASTM A 416 GRADE 270.
9. PRESTRESSING DATA IS AS FOLLOWS:
   A. USE 56 - 0.6 DIAMETER LOW-RELAXATION (A = 0.217 SQ IN) STRANDS. PRETENSION TOP FOUR (4) STRANDS TO 10,000 LBS EACH. PRETENSION BOTTOM STRANDS TO 43,943 LBS EACH.
   B. PRETENSIONED STRANDS SHALL BE RELEASED AFTER THE CONCRETE HAS REACHED A MINIMUM STRENGTH (f'_{ci}) OF 8,000 PSI.
   C. INCLUDING THE TOP STRANDS, THE TOTAL JACKING FORCE OF PRETENSIONING IS 2,325,036 LBS.
   D. INCLUDING THE TOP STRANDS, THE NET PRESTRESSING FORCE OF THE STRANDS AFTER ALL LOSSES IS 1,735,727 LBS.
10. CONCRETE STRENGTH (f'_c) = 8,500 PSI.
11. ALLOWABLE PSC BEAM TENSION = 553 PSI.

⊛ DIAPHRAGM BAR SHALL BE A 1" DIAMETER PLAIN BAR, THREADED 5" ON EACH END, WITH ¼" X 3½" DIAMETER WASHERS AND HEX NUTS (ASTM A 709 GRADE 36).

TIGHTEN DIAPHRAGM BAR AS PER SUB-SECTION 507.3.05.C OF THE GEORGIA DOT SPECIFICATIONS.

AFTER EXCESS DIAPHRAGM BAR HAS BEEN CUT OFF, PAINT DIAPHRAGM BAR, WASHER, AND NUT EXPOSED IN RECESS WITH SPECIAL PROTECTIVE COATING NO. 2 P AS PER SECTION 535 OF THE GEORGIA DOT SPECIFICATIONS. AFTER PAINTING, FILL THE RECESS WITH AN APPROVED EPOXY GROUT.

GALVANIZING OF THE DIAPHRAGM BAR AS PER SUB-SECTION 865.2.01.B.12 OF THE GEORGIA DOT SPECIFICATIONS IS NOT REQUIRED.

RECESS DETAIL FOR DIAPHRAGM BAR ENDS

REINFORCEMENT

ALL BAR DIMENSIONS ARE OUT TO OUT.

AT THE TOP OF THE BEAM, BARS 550 AND 650 SHALL BE FIELD BENT OR SHOP BENT 90°, SUCH THAT THE HORIZONTAL LEG EXTENDS BETWEEN TOP AND BOTTOM MATS OF SLAB REINFORCEMENT.

SLIGHTLY SHIFT OR SLOPE BARS 451 TO AVOID CONFLICT WITH STRANDS.

BARS 350 MAY BE FABRICATED IN TWO PARTS BY LAPPING HORIZONTAL SECTION BY 1'-0" MINIMUM.

PLACE BARS 450 WITH OPEN ENDS AWAY FROM BEAM ENDS.

BRIDGE NO. 4 LT. & RT.

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

BULB TEE, 65 IN PSC BEAM-INTERMEDIATE SPANS
SR 11 (SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

DATE	REVISIONS	BY

DRAWING NO. 35-0060

BRIDGE SHEET 8 OF 18

NO SCALE MAY 2017

DESIGNED DLW CHECKED DPD REVIEWED DLC/SKG
DRAWN SLW/DLW DESIGN GROUP DPD APPROVED WMD

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REVISED NOVEMBER 30, 2012

PLAN
BENT 1 SHOWN
BENT 4 SIMILAR

PREFORMED FOAM JOINT FILLER SHALL BE FURNISHED IN ACCORDANCE WITH SUB-SECTION 833.2.10 OF THE GEORGIA DOT SPECIFICATIONS.

ENDWALL NOT SHOWN

SECTION A-A

PLAN

SECTION B-B

BEARING PAD

NOTES

1) BEARING PADS HAVE BEEN DESIGNED ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 14.7.6 METHOD A AND SHALL BE FURNISHED IN ACCORDANCE WITH AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, SECTION 18, BEARING DEVICES.

2) 1½" DIAMETER SMOOTH DOWELS SHALL BE ASTM A 709 GRADE 36.

3) BEARING PADS SHALL BE MADE OF 60 DUROMETER HARDNESS NEOPRENE, GRADE 2 OR HIGHER.

4) 3" DIAMETER HOLE IN BEARING PADS MAY BE FORMED OR DRILLED.

5) BEARING PADS SHALL HAVE ¼" COVER ON THE TOP, BOTTOM, AND SIDES AND AROUND THE HOLE.

6) 3/16" LOAD PLATES AND 12 GAGE INTERNAL PLATE(S) (IF REQUIRED) SHALL BE ASTM A 709 GRADE 36 OR ASTM A 1011 GRADE 36.

7) NUMBER OF INTERNAL PLATES SHOWN FOR ILLUSTRATION PURPOSES ONLY. THE NUMBER OF INTERNAL PLATE(S) SPECIFIED SHALL BE EQUALLY SPACED BETWEEN LOAD PLATES.

8) USE OF 1½° MOLD DRAFT IS OPTIONAL.

BENT	BEARING PADS							
	W	L	T	NUMBER OF INTERNAL PLATE(S)	DESIGN SHEAR DEFLECTION	DESIGN LOADS (KIPS)		
						DEAD LOAD	LIVE LOAD (NO IMPACT)	DEAD LOAD + LIVE LOAD
1	16"	10"	3¼"	3	5/16"	61.6	57.3	118.9
2BK	16"	10"	3¼"	3	0"	38.7	57.3	96.0
2AH	22"	10"	2¾"	3	0"	165.8	94.0	259.8
3BK	22"	10"	2¾"	3	½"	165.8	94.0	259.8
3AH	16"	10"	3¼"	3	15/16"	38.7	57.3	96.0
4	16"	10"	3¼"	3	1 3/16"	61.6	57.3	118.9

BRIDGE NO. 4 LT. & RT.

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

BEARING PAD DETAILS
SR 11(SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

NO SCALE MAY 2017

DRAWING NO. 35-0061

BRIDGE SHEET 9 OF 18

REVISIONS | DATE | BY

DESIGNED DLW | CHECKED DPD | REVIEWED DLC/SKG
DRAWN SLW/DLW | DESIGN GROUP DPD | APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

PRINTING.dgn

9:55:03 AM 2/6/2018 01023352

PLAN

ELEVATION
BENT 1- LEFT BRIDGE
(LOOKING BACK)

SECTION A-A
NO SCALE

✱ FORM 3"DIA. X 12"DEEP
HOLE FOR DOWEL BAR

SECTION B-B
NO SCALE

PLAN

ELEVATION
BENT 4
(LOOKING AHEAD)
SCALE: 3/16" = 1'-0"

NOTES:
1. SEE GA. STD. 9037 FOR DRAINAGE DETAILS REQUIRED AT END BENTS.
2. POUR WINGWALLS MONOLITHICALLY WITH CAP.
3. BOTTOM OF WINGWALLS ARE LEVEL

SUBSTRUCTURE QUANTITIES		
ITEM	BENT 1	BENT 4
CY CLASS "AA" CONCRETE	16.7	16.8
LB BAR REINFORCEMENT STEEL	2020	2020

THE PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 210 KIPS.

ALL PILES SHALL BE 14 IN. SQ. PSC FOR ALTERNATE 1 (SHOWN), OR METAL SHELL 14 IN. OD. FOR ALTERNATE 2.

PLAN DRIVING OBJECTIVE

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 323 KIPS AFTER A MINIMUM TIP OF 255 AT BENT 1 AND 250 AT BENT 4 IS ACHIEVED.

BRIDGE NO. 4 LT.

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

END BENTS 1 LT AND 4 LT
SR 11 (SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

SCALE: 3/8" = 1'-0" (UNLESS OTHERWISE NOTED) MAY 2107

DRAWING NO. 35-0062
BRIDGE SHEET 10 OF 18

REVISIONS | DATE | BY

DESIGNED DLW | CHECKED DPD | REVIEWED DLC/SKG
DRAWN JTM/DLW | DESIGN GROUP DPD | APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

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P.I. NO. 0009861

9:55:42 AM 2/6/2018 01023352

PLAN

ELEVATION

(LOOKING AHEAD)

NOTES:

1. FOOTINGS ARE IDENTICAL
2. EXTEND 1120 SERIES BARS 4'-6" MINIMUM INTO CAP.
3. CAP REINFORCEMENT IS SYMMETRICAL ABOUT CENTERLINE OF BENT
4. 18-420 AND 10-522 BARS IN VETICAL FACES OF CAP NOT SHOWN IN ELEVATION VIEW.

* AT CONTRACTOR'S OPTION CONST. JT. MAY BE RELOCATED TO TOP OF FOOTING

SECTION A-A

SCALE: ¾" = 1'-0"

SECTION C-C

SCALE: ¾" = 1'-0"

NOTE: ALTERNATE 621 BARS END FOR END AT EACH LOCATION

SUBSTRUCTURE QUANTITIES	
ITEM	BENT 2 LT
CY CLASS "AA" CONCRETE	83.1
LB BAR REINFORCEMENT STEEL	15296

THE PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 215 KIPS. ALL PILES

ALL PILES SHALL BE 14 IN. SQ. PSC FOR ALTERNATE 1 (SHOWN), OR METAL SHELL 14 IN. OD. FOR ALTERNATE 2.

PLAN DRIVING OBJECTIVE

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 353 KIPS AFTER A MINIMUM TIP ELEVATION OF 250 IS ACHIEVED.

PILE LAYOUT

BRIDGE NO. 4 LT.

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

INTERMEDIATE BENT 2 LEFT
SR 11 (SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

SCALE: ⅜" = 1'-0" (UNLESS OTHERWISE NOTED) MAY 2107

DRAWING NO. 35-0063

BRIDGE SHEET 11 OF 18

REVISIONS | DATE | BY

DESIGNED DLW | CHECKED DPD | REVIEWED DLC/SKG
DRAWN JTM/DLW | DESIGN GROUP DPD | APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

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P.I. NO. 0009861

9:56:46 AM 2/6/2018 01023352

ELEVATION

(LOOKING AHEAD)

NOTES:

1. FOOTINGS ARE IDENTICAL
2. EXTEND 1130 SERIES BARS 4'-6" MINIMUM INTO CAP.
3. CAP REINFORCEMENT IS SYMMETRICAL ABOUT CENTERLINE OF BENT
4. 18-430 AND 10-532 BARS IN VETICAL FACES OF CAP NOT SHOWN IN ELEVATION VIEW.

* AT CONTRACTOR'S OPTION CONST. JT. MAY BE RELOCATED TO TOP OF FOOTING

SECTION A-A

SECTION C-C

NOTE: ALTERNATE 631 BARS END FOR END

SUBSTRUCTURE QUANTITIES	
ITEM	BENT 3 LT
CY CLASS "AA" CONCRETE	82.3
LB BAR REINFORCEMENT STEEL	15140

THE PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 212 KIPS. ALL PILES

ALL PILES SHALL BE 14 IN. SQ. PSC FOR ALTERNATE 1 (SHOWN), OR METAL SHELL 14 IN. OD. FOR ALTERNATE 2.

PLAN DRIVING OBJECTIVE

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 332 KIPS AFTER A MINIMUM TIP ELEVATION OF 250 IS ACHIEVED.

PILE LAYOUT

BRIDGE NO. 4 LT.

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

INTERMEDIATE BENT 3 LEFT
SR 11 (SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

SCALE: 3/8" = 1'-0" (UNLESS OTHERWISE NOTED) MAY 2017

DRAWING NO. 35-0064

BRIDGE SHEET 12 OF 18

DATE	REVISIONS	BY

DESIGNED DLW | CHECKED DPD | REVIEWED DLC/SKG
DRAWN JTM/DLW | DESIGN GROUP DPD | APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

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P.I. NO. 0009861

9:57:17 AM 2/6/2018 01023352

P.I. NO. 0009861

PLAN

ELEVATION
BENT 1- RIGHT BRIDGE
(LOOKING BACK)

SECTION A-A
NO SCALE

FORM 3"DIA. X 12"DEEP HOLE FOR DOWEL BAR

SECTION B-B
NO SCALE

PLAN

ELEVATION
BENT 4 - RIGHT BRIDGE
(LOOKING AHEAD)
SCALE: 3/16" = 1'-0"

NOTES:
1. SEE GA. STD. 9037 FOR DRAINAGE DETAILS REQUIRED AT END BENTS.
2. POUR WINGWALLS MONOLITHICALLY WITH CAP.
3. BOTTOM OF WINGWALLS ARE LEVEL

SUBSTRUCTURE QUANTITIES		
ITEM	BENT 1	BENT 4
CY CLASS "AA" CONCRETE	16.7	16.8
LB BAR REINFORCEMENT STEEL	2020	2020

THE PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 210 KIPS.

ALL PILES SHALL BE 14 IN. SQ. PSC FOR ALTERNATE 1 (SHOWN), OR METAL SHELL 14 IN. OD. FOR ALTERNATE 2.

PLAN DRIVING OBJECTIVE

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 323 KIPS AFTER A MINIMUM TIP OF 255 AT BENT 1 AND 250 AT BENT 4 IS ACHIEVED.

BRIDGE NO. 4 RT.

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

END BENTS 1RT AND 4 RT
SR 11 (SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

SCALE: 3/8" = 1'-0" (UNLESS OTHERWISE NOTED) MAY 2017

DRAWING NO. 35-0065
BRIDGE SHEET 13 OF 18

REVISIONS | DATE | BY

DESIGNED DLW | CHECKED DPD | REVIEWED DLC/SKG
DRAWN JTM/DLW | DESIGN GROUP DPD | APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

PRINTING.dgn

9:57:49 AM
2/6/2018
01023352

PLAN

ELEVATION
(LOOKING AHEAD)

NOTES:

1. FOOTINGS ARE IDENTICAL
2. EXTEND 1120 SERIES BARS 4'-6" MINIMUM INTO CAP.
3. CAP REINFORCEMENT IS SYMMETRICAL ABOUT CENTERLINE OF BENT
4. 18-420 AND 10-522 BARS IN VETICAL FACES OF CAP NOT SHOWN IN ELEVATION VIEW.

* AT CONTRACTOR'S OPTION CONST. JT. MAY BE RELOCATED TO TOP OF FOOTING

SECTION A-A
SCALE: ¾"= 1'-0"

SECTION C-C
SCALE: ¾"= 1'-0"

NOTE: ALTERNATE 621 BARS END FOR END AT EACH LOCATION

SUBSTRUCTURE QUANTITIES	
ITEM	BENT 2 RT
CY CLASS "AA" CONCRETE	83.1
LB BAR REINFORCEMENT STEEL	15303

THE PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 215 KIPS. ALL PILES

ALL PILES SHALL BE 14 IN. SQ. PSC FOR ALTERNATE 1(SHOWN), OR METAL SHELL 14 IN. OD. FOR ALTERNATE 2.

PLAN DRIVING OBJECTIVE

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 345 KIPS AFTER A MINIMUM TIP ELEVATION OF 250 IS ACHIEVED.

PILE LAYOUT

BRIDGE NO. 4 RT.

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

INTERMEDIATE BENT 2 RIGHT
SR 11(SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

SCALE: ⅜"= 1'-0"(UNLESS OTHERWISE NOTED) MAY 2017

DRAWING NO. 35-0066

BRIDGE SHEET 14 OF 18

DESIGNED DLW	CHECKED DPD	REVIEWED DLC/SKG
DRAWN JTM/DLW	DESIGN GROUP DPD	APPROVED WMD

REVISIONS | DATE | BY

P.I. NO. 0009861

1 INCH WHEN PRINTED FULL SIZE

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9:58:25 AM 2/6/2018 01023352

PLAN

ELEVATION

(LOOKING AHEAD)

PILE LAYOUT

SECTION A-A

SCALE: ¾" = 1'-0"

SECTION C-C

NOTE: ALTERNATE 631 BARS END FOR END AT EACH LOCATION

SUBSTRUCTURE QUANTITIES	
ITEM	BENT 3 RT
CY CLASS "AA" CONCRETE	82.3
LB BAR REINFORCEMENT STEEL	15154

THE PILES ARE DESIGNED FOR A MAXIMUM FACTORED LOAD OF 212 KIPS. ALL PILES

ALL PILES SHALL BE 14 IN. SQ. PSC FOR ALTERNATE 1 (SHOWN), OR METAL SHELL 14 IN. OD. FOR ALTERNATE 2.

PLAN DRIVING OBJECTIVE

ALL PILES SHALL BE DRIVEN TO A DRIVING RESISTANCE OF 332 KIPS AFTER A MINIMUM TIP ELEVATION OF 250 IS ACHIEVED.

NOTES:

1. FOOTINGS ARE IDENTICAL
2. EXTEND 1130 SERIES BARS 4'-6" MINIMUM INTO CAP.
3. CAP REINFORCEMENT IS SYMMETRICAL ABOUT CENTERLINE OF BENT
4. 18-430 AND 10-532 BARS IN VETICAL FACES OF CAP NOT SHOWN IN ELEVATION VIEW.

* AT CONTRACTOR'S OPTION CONST. JT. MAY BE RELOCATED TO TOP OF FOOTING

BRIDGE NO. 4 RT.

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

INTERMEDIATE BENT 3 RIGHT
SR 11 (SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

SCALE: ⅜" = 1'-0" (UNLESS OTHERWISE NOTED) MAY 2017

DRAWING NO. 35-0067

BRIDGE SHEET 15 OF 18

DESIGNED DLW | CHECKED DPD | REVIEWED DLC/SKG
DRAWN JTM/DLW | DESIGN GROUP DPD | APPROVED WMD

REVISIONS | DATE | BY

P.I. NO. 0009861

1 INCH WHEN PRINTED FULL SIZE

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9/29/30 AM 2/6/2018 01023352

P.I. NO.
0009861

AS BUILT FOUNDATION INFORMATION
BRIDGE NO. 4 LEFT ALT. ( )

BENT	PILE/FOOTING LOCATION	PILE TIP ELEVATION	BOTTOM OF FOOTING ELEVATION
1	BEAM 1		
	BEAM 2		
	BEAM 3		
	BEAM 4		
	BEAM 5		
	BEAM 6		
2 COL. 1	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
2 COL. 2	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
3 COL. 1	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
3 COL. 2	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
4	BEAM 1		
	BEAM 2		
	BEAM 3		
	BEAM 4		
	BEAM 5		
	BEAM 6		

AS BUILT FOUNDATION INFORMATION
BRIDGE NO. 4 RIGHT ALT. ( )

BENT	PILE/FOOTING LOCATION	PILE TIP ELEVATION	BOTTOM OF FOOTING ELEVATION
1	BEAM 1		
	BEAM 2		
	BEAM 3		
	BEAM 4		
	BEAM 5		
	BEAM 6		
2 COL. 1	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
2 COL. 2	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
3 COL. 1	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
3 COL. 2	PILE 1		
	PILE 2		
	PILE 3		
	PILE 4		
	PILE 5		
	PILE 6		
	PILE 7		
	PILE 8		
	PILE 9		
4	BEAM 1		
	BEAM 2		
	BEAM 3		
	BEAM 4		
	BEAM 5		
	BEAM 6		

TYPICAL FOOTING ELEVATION
ALTERNATE 1

TYPICAL FOOTING ELEVATION
ALTERNATE 2

PILE LAYOUT

PILE LAYOUT

THIS "AS BUILT FOUNDATION INFORMATION" SHEET SHALL BE FILLED IN BY THE PROJECT ENGINEER AND FORWARDED TO THE BRIDGE OFFICE AFTER INSTALLATION OF ALL PILES AND FOOTINGS FOR POSTING TO THE PLANS AS A PERMANANT RECORD OF THE BRIDGE CONSTRUCTION.

PROJECT ENGINEER _____ DATE _____

(AREA CODE) TELEPHONE NUMBER _____

MARK ALTERNATE SELECTED		
ALT. 1	PSC PILES	
ALT. 2	METAL SHELL PILES	

BRIDGE NO. 4 LT. & RT.

REVISIONS	BY	DATE

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

AS BUILT FOUNDATION INFORMATION
SR 11(SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

NO SCALE MAY 2017

DRAWING NO. 35-0068
BRIDGE SHEET 16 OF 18

DESIGNED DLW | CHECKED DPD | REVIEWED DLC/SKG
DRAWN JTM/DLW | DESIGN GROUP DPD | APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

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2/6/2018 10:00:34 AM

01023352

LOCATION	NO. OF LOC.	MARK	LENGTH FT.	LENGTH IN.	NO. BARS REQ'D.	TYPE	A	G	B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	J FT.	J IN.	K FT.	K IN.	N	θ
SPAN 1 OR 3	2								LEFT BRIDGE																	
		400A	39- 8		119	1																				
		401A	18- 1		32	1																				
		404	51- 9		3	1																				
		405	5- 2		45	31	4	4	0- 9		1- 9 3/4		1- 9 3/4													
		500A	52- 4		79	2			50- 8		0-10		0-10													
		500B	7- 4		158	3			6- 5 1/2		0-10		0-10													
		501	50-11		57	1																				
		502	8-11		84	23			1- 3		3-10		3-10													
		503	8- 2		84	23			0- 6		3-10		3-10													
		504	5- 0		36	46			1-11 1/4		1-10		0- 3		0- 8		0- 8									
		505	49- 4		1	1																				
		506A	2- 9		60	24			1- 1		0-10		0-10		0- 7		0- 7									
		506B	4- 0		70	3			2- 7 3/4		1- 4															
		507	43-11		1	1																				
		508A	7- 7		5	1																				
		600	10- 0		72	1																				
		800	49- 9		2	1																				
		801	43-11		1	1																				
		802	7- 9		5	1																				
		900A	14-10		15	16	6	6	5- 7		0- 8		0- 8		3- 8		3- 8									
		900B	5- 1		6	34	6		2- 5 1/2		0- 8		1- 8		0- 8											
SPAN 2	1								LEFT BRIDGE																	
		300	5- 0		4	1																				
		400B	60- 0		238	1																				
		400C	15- 2		119	1																				
		401B	18- 5		112	1																				
		402	5- 6		312	14			3- 2		0- 6		0- 8		0- 5 5/8		0- 8									
		403	25- 0		24	1																				
		405	5- 2		60																					
		406	2- 6		4	3			1- 6		1- 0															
		407	8- 0		30	1																				
		408A	10- 7		30	25	4	4	0- 7		4- 4															
		408B	6- 5		10	25	4	4	0- 7		2- 3															
		500A	52- 4		245																					
		500B	7- 4		490																					
		501	50-11		193																					
		502	8-11		308																					
		503	8- 2		308																					
		506A	2- 9		50																					
		507	43-11		2																					
		508B	4-11		10																					
		509A	5- 0		10	1																				
		509B	6- 7		10	1																				
		800	49- 9		4																					
		801	43-11		2																					
		802	7-10		10																					

LOCATION	NO. OF LOC.	MARK	LENGTH FT.	LENGTH IN.	NO. BARS REQ'D.	TYPE	A	G	B FT.	B IN.	C FT.	C IN.	D FT.	D IN.	E FT.	E IN.	F FT.	F IN.	H FT.	H IN.	J FT.	J IN.	K FT.	K IN.	N	θ
ENDBENT 1 OR 4	2								LEFT BRIDGE																	
		410	6- 9		24	32	5	5	2- 8		1- 8		1- 8													
		411	9- 5		48	25	4	4	2- 8		1- 8															
		412	51-10		2	1																				
		510	8- 8		28	1																				
		511	6- 0		40	1																				
		610	5- 2		6	1																				
		1010	56-10		4	2			53- 2		1-10		1-10													
BENT 2	1								LEFT BRIDGE																	
		420	47- 8		18	1																				
		520	17- 8		62	25	4	4	3- 8		4- 8															
		521	10- 2		49	2			1- 8		4- 3		4- 3													
		522	47- 8		10	1																				
		620	13- 9		57	25	4	4	3- 2		3- 2															
		621	4- 3		228	10	4	5	3- 2																	
		1020	12- 4		40	10	1	1	9- 6																	
		1120A	17-10		16	9	1		16- 3																	
		1120B	18- 5		16	9	1		16-10																	
		1121	50-10		10	10	1	1	47- 8																	
		1122	47- 8		8	1																				
BENT 3	1								LEFT BRIDGE																	
		430	47- 8		18	1																				
		530	17- 8		62	25	4	4	3- 8		4- 8															
		531	10- 2		49	2			1- 8		4- 3		4- 3													
		532	47- 8		10	1																				
		630	13- 9		57	25	4	4	3- 2		3- 2															
		631	4- 3		228	10	4	5	3- 2																	
		1030	12- 4		40	10	1	1	9- 6																	
		1130A	16-11		16	9	1		15- 4																	
		1130B	17- 6		16	9	1		15-11																	
		1131	50-10		10	10	1	1	47- 8																	
		1132	47- 8		8	1																				

P.I. NO. 0009861

DRAWING NO. 35-0069

BRIDGE SHEET 17 OF 18

1 INCH WHEN PRINTED FULL SIZE

BRIDGE NO. 4 LT. & RT.

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

BAR REINFORCEMENT SCHEDULE
SR 11(SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

NO SCALE MAY 2017

DESIGNED DLW CHECKED DPD REVIEWED DLC/SKC
DRAWN DLW/JTM DESIGN GROUP DPD APPROVED WMD

REVISIONS DATE BY

PRINTING.dgn

01023741.AM 2/6/2018 01023752

LOCATION	NO. OF LOC.	MARK	LENGTH FT. IN.	NO. BARS REQ'D.	TYPE	AG	B FT. IN.	C FT. IN.	D FT. IN.	E FT. IN.	F FT. IN.	H FT. IN.	J FT. IN.	K FT. IN.	N	θ
SPAN 1 OR 3	2						RIGHT BRIDGE									
		400A	39- 8	119	1											
		401A	18- 1	32	1											
		404	51- 9	3	1											
		405A	5- 2	45	31											
		500A	52- 4	79	2											
		500B	7- 4	158	3											
		501	50-11	57	1											
		502	8-11	84	23											
		503	8- 2	84	23											
		504	5- 0	36	46											
		505	49- 4	1	1											
		506A	2- 9	60	24											
		506B	4- 0	70	3											
		507	43-11	1	1											
		508	7- 7	5	1											
		600	10- 0	72	1											
		800	49- 9	2	1											
		801	43-11	1	1											
		802	7- 9	5	1											
		900A	14-10	15	16											
		900B	5- 1	6	34											
SPAN 2	1						RIGHT BRIDGE									
		300	5- 0	4	1											
		400B	60- 0	238	1											
		400C	15- 2	119	1											
		401B	18- 5	112	1											
		402	5- 6	312	14											
		403	25- 0	24	1											
		405A	5- 2	60												
		405B	3-10	20	25											
		406	2- 6	4	3											
		407	8- 0	30	1											
		408A	10- 7	30	25											
		408B	6- 5	10	25											
		506A	2- 9	50												
		500A	52- 4	245												
		500B	7- 4	490												
		501	50-11	193												
		502	8-11	308												
		503	8- 2	308												
		507	43-11	2												
		508	7- 7	10												
		509A	5- 0	10	1											
		509B	6- 7	10	1											
		800	49- 9	4												
		801	43-11	2												
		802	7-10	10												

LOCATION	NO. OF LOC.	MARK	LENGTH FT. IN.	NO. BARS REQ'D.	TYPE	AG	B FT. IN.	C FT. IN.	D FT. IN.	E FT. IN.	F FT. IN.	H FT. IN.	J FT. IN.	K FT. IN.	N	θ
ENDBENT 1 OR 4	2						RIGHT BRIDGE									
		410	6- 9	24	32											
		411	9- 5	48	25											
		412	51-10	2	1											
		510	8- 8	28	1											
		511	6- 0	40	1											
		610	5- 2	6	1											
		1010	56-10	4	2											
BENT 2	1						RIGHT BRIDGE									
		420	47- 8	18	1											
		520	17- 8	62	25											
		521	10- 2	49	2											
		522	47- 8	10	1											
		620	13- 9	57	25											
		621	4- 3	228	10											
		1020	12- 4	40	10											
		1120C	17-10	16	9	1	16-10									
		1120D	18- 5	16	9	1	16- 4									
		1121	50-10	10	10											
		1122	47- 8	8	1											
BENT 3	1						RIGHT BRIDGE									
		430	47- 8	18	1											
		530	17- 8	62	25											
		531	10- 2	49	2											
		532	47- 8	10	1											
		630	13- 9	57	25											
		631	4- 3	228	10											
		1030	12- 4	40	10											
		1130C	16-11	16	9	1	16- 0									
		1130D	17- 6	16	9	1	15- 5									
		1131	50-10	10	10											
		1132	47- 8	8	1											

P.I. NO. 0009861

BRIDGE NO. 4 LT. & RT.

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

BAR REINFORCEMENT SCHEDULE
SR 11 (SR 49, US 41) OVER
ROCKY CREEK

BIBB COUNTY 0009861

NO SCALE MAY 2017

DRAWING NO. 35-0070
BRIDGE SHEET 18 OF 18

REVISIONS: DATE | BY

DESIGNED DLW | CHECKED DPD | REVIEWED DLC/SKC
DRAWN DLW/JTM | DESIGN GROUP DPD | APPROVED WMD

1 INCH WHEN PRINTED FULL SIZE

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