ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. # 0011677
Jackson County
GDOT District 1 - Gainesville
SR 11 @ Mulberry River Tributary
Bridge Culvert Replacement

OFFICE Design Policy & Support

DATE June 25, 2014

FROM Kim Phillips for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT **APPROVED CONCEPT REPORT**

Attached is the approved Concept Report for the above subject project.

Attachment

DISTRIBUTION:

Glenn Bowman, Director of Engineering
Joe Carpenter, Director of P3/Program Delivery
Genetha Rice-Singleton, Assistant Director of P3/Program Delivery
Albert Shelby, State Program Delivery Engineer
Bobby Hilliard, Program Control Administrator
Cindy VanDyke, State Transportation Planning Administrator
Hiral Patel, State Environmental Administrator
Ben Rabun, State Bridge Engineer
Kathy Zahul, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Lisa Myers, State Project Review Engineer
Charles "Chuck" Hasty, State Materials Engineer
Mike Bolden, State Utilities Engineer
Paul Tanner, Asst. State Transportation Data Administrator
Attn: Systems & Classification Branch
Jeff Fletcher, Statewide Location Bureau Chief
Andy Casey, State Roadway Design Engineer
Attn: Justin Lott, District Design Engineer
Bayne Smith, District Engineer
Brent Cook, District Preconstruction Engineer
Neil Kantner, District Utilities Engineer
Charles Robinson, Project Manager
BOARD MEMBER - 9th Congressional District

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
PROJECT CONCEPT REPORT

Project Type:	Culvert Replacement	P.I. Number:	0011677
GDOT District:	District 1	County:	Jackson
Federal Route Number:	N/A	State Route Number:	11
	Project Number:	N/A	

The existing triple barrel bridge culvert is currently in a deteriorated state and is to be replaced. Along with the replacement of the bridge culvert the existing roadway will be brought up to standard, mainly with the addition of guardrail.

Submitted for approval: * Submissions on file

GDOT Concept/Design Phase Office Head & Office	DATE 5/27/2014
* FOR Hiral Patel /KLP — State Program Delivery Engineer	DATE 2/25/2014
* Charles Robinson/KLP — GDOT Project Manager	DATE 2/25/2014

** Recommendations on file

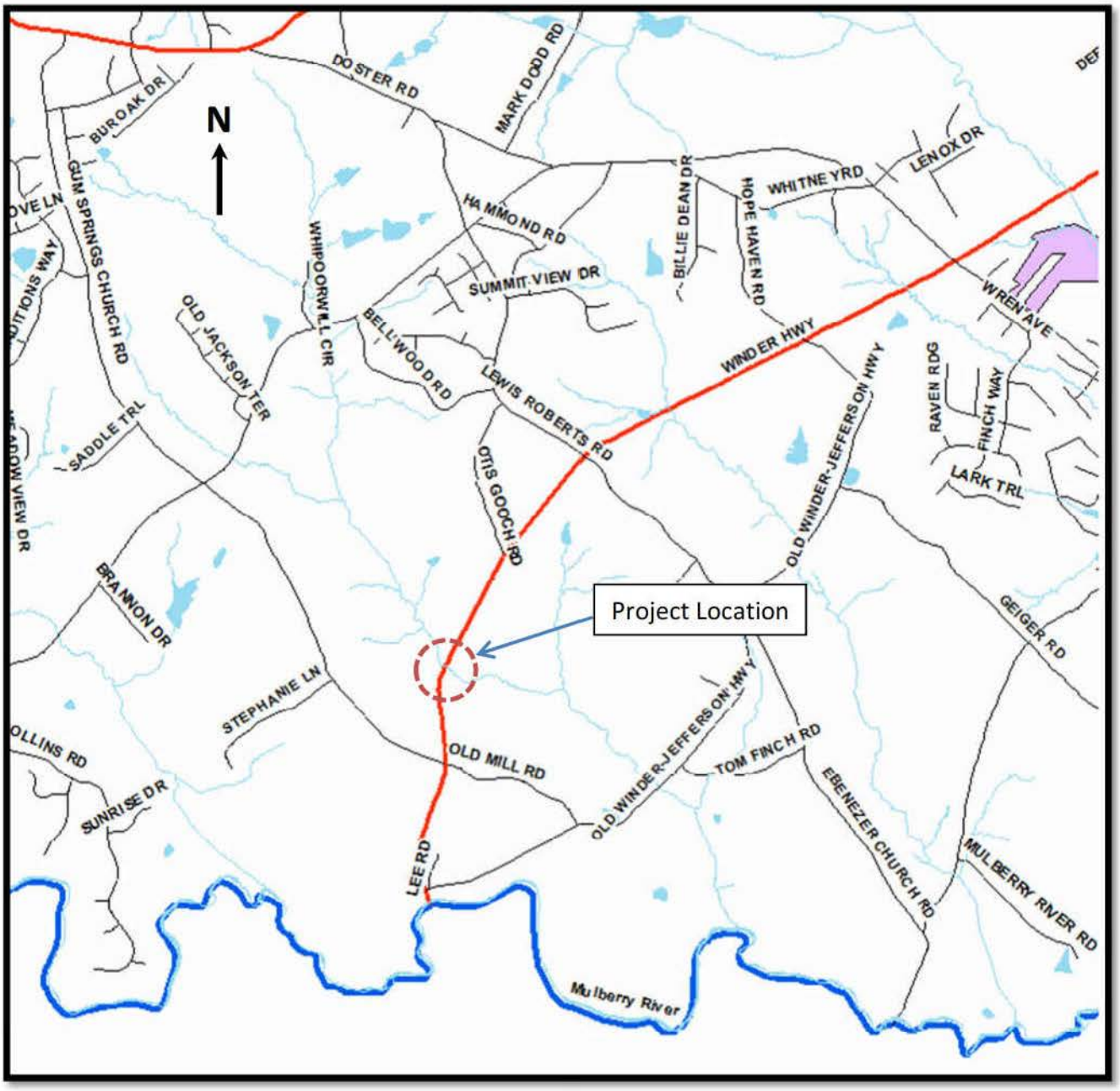
Recommendation for approval:

Program Control Administrator	DATE
** Glenn Bowman /KLP — State Environmental Administrator	DATE 3/5/2014
** Kathy Zahul /KLP — State Traffic Engineer	DATE 2/28/2014
** Lisa Myers /KLP — Project Review Engineer	DATE 2/28/2014
** FOR Jun Bimkammer /KLP — State Utilities Engineer	DATE 3/3/2014
** Bayne Smith/KLP — District Engineer	DATE 3/4/2014
** Ben Rabun /KLP — State Bridge Design Engineer	DATE 2/28/2014
State Transportation Financial Management Administrator	DATE

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).

** Cynthia VanDyke — State Transportation Planning Administrator	DATE 3/17/2014

PROJECT LOCATION MAP



Project Location Map

Bridge Culvert Replacement on SR 11 at Mulberry River Tributary

Jackson County

PLANNING AND BACKGROUND

Project Justification Statement: This bridge culvert was built in 1938. This is a three barrel reinforced concrete box bridge culvert that is 50 feet long. Each barrel is ten feet high and ten feet wide. This bridge culvert is in poor condition with settlement cracks that are causing fill to be lost and voids formed above the roof of the bridge culvert. The roadway has settled above those cracks and has started to crack. Due to the poor condition of the bridge culvert and the roadway settlement taking place replacement of this structure is recommended.

Existing conditions: The current roadway consists of 12 ft travel lanes with 6 ft shoulders. Existing utilities consist of a water line to the east, a fiber optic line to the west, and a telephone line to the west.

Other projects in the area:

- 0007663
  - SR 124 FM CR 171/JOSH PIRKLE ROAD TO SR 11/US 129: Reconstruction/Rehabilitation
- 0008434
  - SR 53 FROM I-85 TO CR 167/TAPP WOOD ROAD: Reconstruction/Rehabilitation
- M004206
  - SR 11 @ 1 LOC; SR 53 @ 1 LOC & SR 246 @ 1 LOC - DECK REHAB
- M004299
  - SR 53 FROM JACKSON COUNTY LINE TO SR 11: Maintenance

MPO: N/A - Project not in MPO MPO Project ID N/A

Regional Commission: Northeast Georgia RC RC Project ID N/A

Congressional District(s): 9

Federal Oversight: ☐ Full Oversight ☒ Exempt ☐ State Funded ☐ Other

Projected Traffic: AADT

Current Year (2012): 4500 Open Year (2019): 4800 Design Year (2039): 5800
Traffic Projections Performed by: Office of Planning

Functional Classification (Mainline): Rural Minor Arterial

Complete Streets - Bicycle, Pedestrian, and/or Transit Warrants:
Warrants met: ☒ None ☐ Bicycle ☐ Pedestrian ☐ Transit

Is this a 3R (Resurfacing, Restoration, & Rehabilitation) Project? ☒ No ☐ Yes

Pavement Evaluation and Recommendations
Preliminary Pavement Evaluation Summary Report Required? ☒ No ☐ Yes
Preliminary Pavement Type Selection Report Required? ☒ No ☐ Yes
Feasible Pavement Alternatives: ☒ HMA ☐ PCC ☐ HMA & PCC

DESIGN AND STRUCTURAL

Description of the proposed project: The proposed project replaces the existing 50 ft. triple barrel bridge culvert with a 100 ft. triple barrel bridge culvert. The entire length of the project is 0.14 miles. Both the existing and proposed triple barrel bridge culverts are 10 feet by 10 feet per barrel. The existing alignment is to be utilized for final construction. A reduced shoulder width of 8 ft. will be used and a shoulder of 13.5 ft. will be used to accommodate guardrail. An off-site detour will be used to allow the culvert to be replaced with an open cut. The road will continue to be a rural two lane, 55 mph corridor.

Major Structures:

Structure	Existing	Proposed
ID # and/or Location	*50 ft. long, 10 ft. high and 10 ft. wide, 3 barrel, concrete, poor condition*	*100 ft. long, 10 ft. high and 10 ft. wide, 3 barrel, concrete*
Retaining walls		
Other		

Mainline Design Features: SR 11/ Rural Minor Arterial

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	2	2	2
- Lane Width(s)	12 ft	12 ft	12 ft
- Median Width & Type	n/a	n/a	n/a
- Outside Shoulder or Border Area Width	6', 2' paved	10'	8',4' paved
- Outside Shoulder Slope	6%	6%	6%
- Inside Shoulder Width	n/a	n/a	n/a
- Sidewalks	n/a	n/a	n/a
- Auxiliary Lanes	n/a	n/a	n/a
- Bike Lanes	n/a	n/a	n/a
Posted Speed	55 mph		55 mph
Design Speed	n/a	55 mph	55 mph
Min Horizontal Curve Radius	n/a	1060 ft	800 ft
Superelevation Rate	10%	6% or 8% max	10% max
Grade	5.1%	6%	5.24%
Access Control	Permitted	Permitted	Permitted
Right-of-Way Width	60 ft		206 ft
Maximum Grade – Crossroad	n/a	n/a	n/a
Design Vehicle	SU	SU	SU

*According to current GDOT design policy if applicable

Major Interchanges/Intersections: N/A

Lighting required: ☒ No ☐ Yes

If lighting is included in the project, attach lighting agreements or commitment letters.

Off-site Detours Anticipated: ☐ No ☐ Undetermined ☒ Yes

Transportation Management Plan [TMP] Required: ☐ No ☒ Yes

If Yes: Project classified as: ☒ Non-Significant ☐ Significant

TMP Components Anticipated: ☒ TTC ☐ TO ☐ PI

Design Exceptions to FHWA/AASHTO controlling criteria anticipated:

FHWA/AASHTO Controlling Criteria	No	Undeter-mined	Yes	Appvl Date (if applicable)
1. Design Speed	☒	☐	☐	
2. Lane Width	☒	☐	☐	
3. Shoulder Width	☒	☐	☐	
4. Bridge Width	☒	☐	☐	
5. Horizontal Alignment	☐	☒	☐	
6. Superelevation	☐	☒	☐	
7. Vertical Alignment	☐	☐	☒	
8. Grade	☒	☐	☐	
9. Stopping Sight Distance	☒	☐	☐	
10. Cross Slope	☒	☐	☐	
11. Vertical Clearance	☒	☐	☐	
12. Lateral Offset to Obstruction	☒	☐	☐	
13. Bridge Structural Capacity	☒	☐	☐	

The Horizontal Alignment and Superelevation Exceptions may not be required due to the substandard components are located where the project ties into existing.

Design Variances to GDOT Standard Criteria anticipated:

GDOT Standard Criteria	Reviewing Office	No	Undeter-mined	Yes	Appvl Date (if applicable)
1. Access Control - *Median Opening Spacing*	DP&S	☒	☐	☐	
2. Median Usage & Width	DP&S	☒	☐	☐	
3. Intersection Skew Angle	DP&S	☒	☐	☐	
4. Lateral Offset to Obstruction	DP&S	☒	☐	☐	
5. Intersection Sight Distance	DP&S	☒	☐	☐	
6. Bike, Pedestrian & Transit Accommodations	DP&S	☒	☐	☐	
7. GDOT Drainage Manual	DP&S	☒	☐	☐	
8. Georgia Standard Drawings	DP&S	☒	☐	☐	
9. GDOT Bridge & Structural Manual	Bridge Design	☒	☐	☐	
10. Roundabout Illumination	DP&S	☒	☐	☐	

VE Study anticipated: ☒ No ☐ Yes ☐ Completed – Date:

UTILITY AND PROPERTY

Temporary State Route needed: ☒ No ☐ Yes ☐ Undetermined

Railroad Involvement: N/A

Utility Involvements: Water (Jackson County), Telephone Line, Fiber Optic Line

SUE Required: ☒ No ☐ Yes ☐ Undetermined

Public Interest Determination Policy and Procedure recommended (Utilities)? ☒ No ☐ Yes

Right-of-Way (ROW): Existing width: 60 ft Proposed width: 206 ft

Required Right-of-Way anticipated: ☐ None ☒ Yes ☐ Undetermined
Easements anticipated: ☐ None ☐ Temporary ☒ Permanent ☐ Utility ☐ Other
Check all easement types that apply.

Anticipated total number of impacted parcels:		4
Displacements anticipated:	Businesses:	0
	Residences:	0
	Other:	0
	Total Displacements:	0

Location and Design approval: ☐ Not Required ☒ Required

CONTEXT SENSITIVE SOLUTIONS

Issues of Concern: N/A

Context Sensitive Solutions Proposed: N/A

ENVIRONMENTAL & PERMITS

Anticipated Environmental Document:

GEPA: ☐ **NEPA:** ☒ CE ☐ EA/FONSI ☐ EIS

MS4 Permit Compliance – Is the project located in a MS4 area? ☒ No ☐ Yes

Environmental Permits/Variances/Commitments/Coordination anticipated:

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Permit/ Variance/ Commitment/ Coordination Anticipated	No	Yes	Remarks
1. U.S. Coast Guard Permit	☒	☐	
2. Forest Service/Corps Land	☒	☐	
3. CWA Section 404 Permit	☐	☒	
4. Tennessee Valley Authority Permit	☒	☐	
5. Buffer Variance	☐	☒	
6. Coastal Zone Management Coordination	☒	☐	
7. NPDES	☐	☒	
8. FEMA	☒	☐	
9. Cemetery Permit	☒	☐	
10. Other Permits	☒	☐	
11. Other Commitments	☐	☒	See Environmental Commitment Sheet
12. Other Coordination	☐	☐	

Is a PAR required? ☒ No ☐ Yes ☐ Completed – Date:

Environmental Comments and Information:

NEPA/GEPA: A Categorical Exclusion will be prepared. There are no known or suspected 4(f) resources.

Ecology: The ecology resource survey has been completed and the draft report has been prepared. There is one perennial stream, one intermittent stream, and three ephemeral, non-buffered state waters. There is potential habitat for one aquatic protected species. An additional species survey will be completed.

History: The historic resource survey has been completed and the draft report has been prepared. No significant resources were located within the APE. SHPO concurrence is expected.

Archeology: The archaeological survey has been completed, and a short form report drafted. No archaeological resources, including cemeteries, were located within the APE. SHPO concurrence is expected.

Air & Noise: The project is not located in a non-attainment area; therefore no ozone or hotspot analysis will be required. A Type III noise assessment with no modeling required will be prepared for this project.

Public Involvement: An off-site detour is proposed for this project. A detour public meeting will be required.

Major stakeholders: The major stakeholders are the residents of Jackson County and the traveling public.

Project Air Quality:

Is the project located in a PM 2.5 Non-attainment area?	☒ No	☐ Yes
Is the project located in an Ozone Non-attainment area?	☒ No	☐ Yes
Is a Carbon Monoxide hotspot analysis required?	☒ No	☐ Yes

CONSTRUCTION

Issues potentially affecting constructability/construction schedule: Contractor may need area in potential ESA for equipment during construction of the culvert replacement.

Early Completion Incentives recommended for consideration: ☒ No ☐ Yes

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Initial Concept Meeting: *N/A*

Concept Meeting: 12/17/13

Other coordination to date: TBD

Project Activity	Party Responsible for Performing Task(s)
Concept Development	District 1 Design
Design	District 1 Design
Right-of-Way Acquisition	District 1 ROW
Utility Relocation	GDOT D1 Coord/Utility Companies Relocate
Letting to Contract	GDOT
Construction Supervision	District 1 Construction
Providing Material Pits	Contractor
Providing Detours	GDOT/Contractor
Environmental Studies, Documents, and Permits	GDOT/Contractor
Environmental Mitigation	GDOT
Construction Inspection & Materials Testing	District 1 Construction

Project Cost Estimate Summary and Funding Responsibilities:

	Breakdown of PE	ROW	Reimbursable Utility	CST*	Environmental Mitigation	Total Cost
Funded By	GDOT	GDOT	GDOT	GDOT	GDOT	
$ Amount	$ 421,685	$ 138,000	$ 0	$ 595,560**	$ 58,500	$ 1,213,745
Date of Estimate	3/4/2013	6/3/2014	1/17/2014	5/23/2014	4/2/2014	

* CST Cost includes: Construction, Engineering and Inspection, Construction Contingency and Liquid AC Cost Adjustment.

**Construction estimate is based on a cast in place alternate. However, project will be investigated for precast alternate design/bidding which may reduce costs further.

ALTERNATIVES DISCUSSION

Alternative selection: Off-Site Detour

Preferred Alternative: Off-Site Detour			
Estimated Property Impacts:	4	**Estimated Total Cost:**	$1,213,745
Estimated ROW Cost:	$138,000	**Estimated CST Time:**	4 mo.
Rationale: The Layout provides minimal impact of ROW, earthwork, and utilities. Main cost is construction of the bridge culvert. Detour length is a total of 14.7 miles.			

Alternative 1: On-site Detour			
Estimated Property Impacts:	5	**Estimated Total Cost:**	$1,481,513
Estimated ROW Cost:	$156,000	**Estimated CST Time:**	6 mo.
Rationale: The layout provides minimal impact of ROW, earthwork, and utilities. Detour consists of a single travel lane operated with a temporary signal.			

Alternative 2: Existing Alignment, Existing Horizontal Curve redesigned to current standards			
Estimated Property Impacts:	5	**Estimated Total Cost:**	$1,559,972
Estimated ROW Cost:	$113,650	**Estimated CST Time:**	6 mo.
Rationale: Additional costs due to redesigning the existing horizontal curve. Adjusting the curve is questionably beyond scope of project.			

Alternative 3: 48' Horizontal Alignment Offset to West. Use combination of existing 2-lane roadway and proposed 2-lane roadway for on-site detour.			
Estimated Property Impacts:	5	**Estimated Total Cost:**	$1,728,554
Estimated ROW Cost:	$115,600	**Estimated CST Time:**	6 mo.
Rationale: Additional construction costs for this alternative may prove to be too costly.			

Alternative 4: Off-Site Detour with improved profile (meeting criteria for 45 mph) at project location.			
Estimated Property Impacts:	4	**Estimated Total Cost:**	$1,483,654
Estimated ROW Cost:	$154,000	**Estimated CST Time:**	5 mo.
Rationale: Additional construction costs for this alternative may prove to be too costly.			

LIST OF ATTACHMENTS/SUPPORTING DATA

1. Concept Layout
2. Typical sections
3. Detailed Cost Estimates:
    a. Total Construction Cost Summary
    b. Construction including Engineering and Inspection
    c. Completed Fuel & Asphalt Price Adjustment forms
    d. Right-of-Way
    e. Utility Cost Estimate
    f. Environmental Mitigation Estimate
4. Crash summaries
5. Traffic Counts
6. Bridge Inventory
7. Concept Meeting Minutes
8. Phone Conversation Minutes with Jackson County
9. E-mail Chain with Glenn Bowman regarding preferred alternate

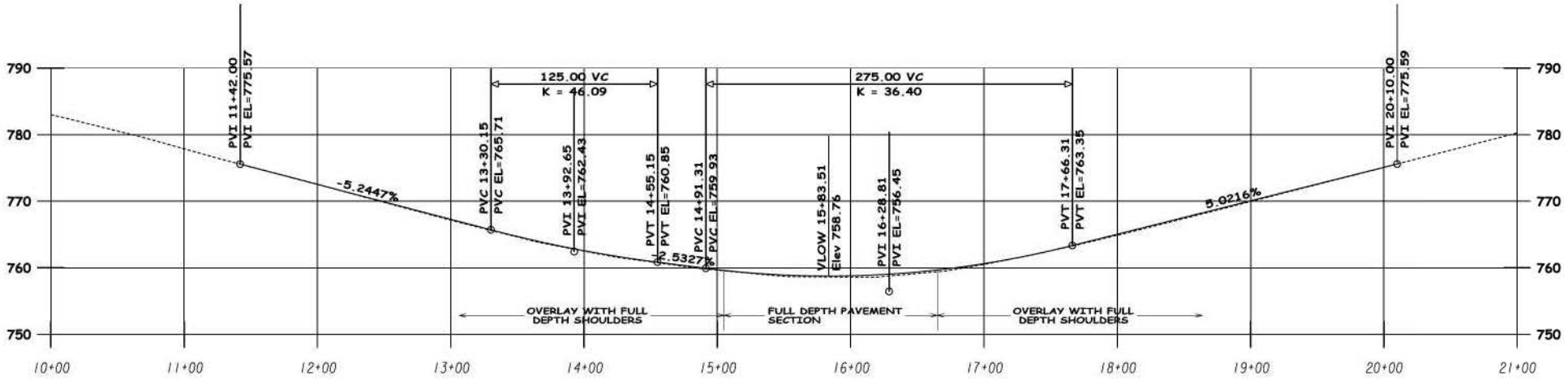
APPROVALS

Concur: Glenn Bowman
Director of Engineering

Approve:
Chief Engineer

6/23/14
Date

PI: 0011677 Jackson County
SR 11 @ Mulberry Tributary
Concept Layout
Off-Site Detour



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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%

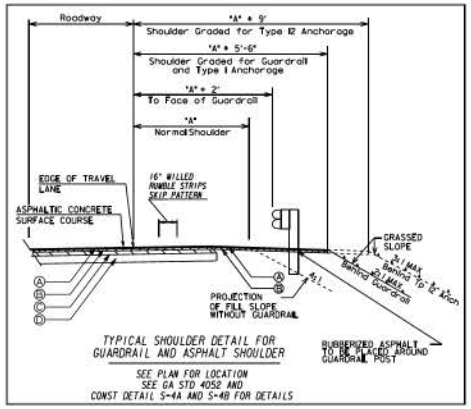
LENGTH SHALL BE SET TO AVOID CREATING A FLAT GUTTER GRADE ON LOW SIDE AND TO AVOID FLAT CROSS SLOPES AT OR NEAR THE LOW POINT OF VERTICAL CURVES.

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.

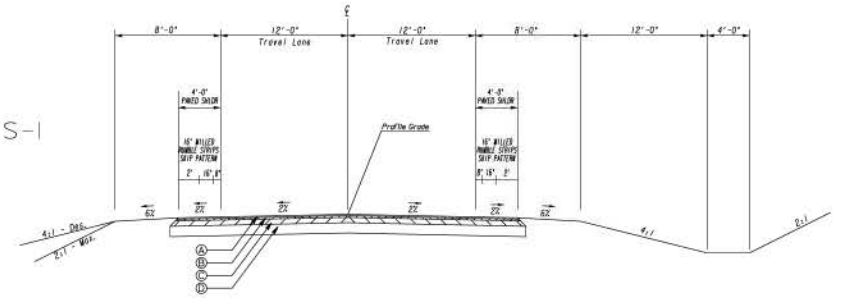
E. SMOOTHING OF BREAKS IN EDGE PROFILE AT BEGIN AND END OF TRANSITION SHALL BE ACCOMPLISHED BY VERTICAL CURVE WITH A MINIMUM LENGTH (IN FEET) EQUAL TO THE SPEED DESIGN (IN MPH).



TYPICAL SHOULDER DETAIL FOR GUARDRAIL AND ASPHALT SHOULDER

SEE PLAN FOR LOCATION
SEE GA STD 4052 AND CONST DETAIL S-4A AND S-4B FOR DETAILS

TS-1

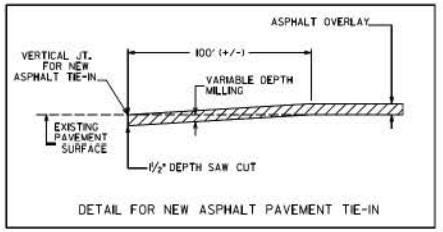


SR 11
TANGENT SECTION
APPLIES TO STA 12+18 TO STA 19+64

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

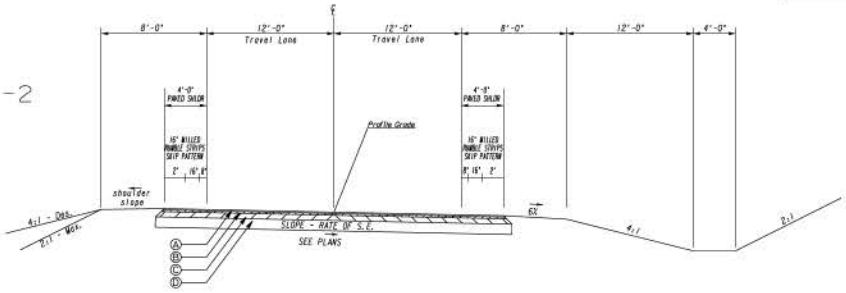
S.E. RATE	SHOULDER SLOPE
2.0% OR 3.0%	4.0%
4.0% OR 5.0%	2.0%
6.0% OR 7.0%	1.0%
8.0 % +	0.0%

Ⓐ 9.5 mm SUPERPAVE, TYPE II, GP 2 ONLY, INCL BITUM MATL AND H LIME, 135 LB/SY
Ⓑ 19 mm SUPERPAVE, GP 1 OR 11, INCL BITUM MATL AND H LIME, 220 LB/SY
Ⓒ 25 mm SUPERPAVE, GP 1 OR 11, INCL BITUM MATL AND H LIME, 440 LB/SY
Ⓓ GRADED AGGREGATE BASE COURSE, INCL MATL, 12 IN



DETAIL FOR NEW ASPHALT PAVEMENT TIE-IN

TS-2



SUPER ELEVATED SECTION

SEE ROADWAY PLANS FOR SUPERELEVATION RATES AND TRANSITIONS

SAFETY EDGE TREATMENT SHALL BE FOLLOWED FOR THE OUTSIDE EDGE OF ALL UNCURBED PAVEMENTS WHETHER EDGE OF TRAVEL LANE OR SHOULDER (EXCLUDING PAVEMENT BEHIND GUARDRAIL) SEE CONST DETAIL P-7 FOR DETAILS

REVISION DATES		

GDOT DISTRICT 1

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: DISTRICT ONE DESIGN

TYPICAL SECTIONS

SR11 @ MULBERRY RIVER TRIB.
JACKSON COUNTY

DRAWING No. 05-001

02/14/2012 GPLM

Project Cost Estimate Summary

PI 0011677, Jackson County

Construction:

Construction Cost Estimate	$	554,787.66
Engineering and Inspection (5%)	$	27,739.38
Total Liquid AC Adjustment	$	13,032.56
Subtotal	$	595,559.60

Total Costs:

PE Costs:	$	421,685.00
Right of Way Costs:	$	138,000.00
Utilities:	$	0.00
Construction:	$	595,560.00
Environmental Mitigation:	$	58,500.00
Total Project Costs:	$	1,213,745.00

DETAILED COST ESTIMATE

Georgia Department of Transportation

Job: 0011677

JOB NUMBER *0011677* **FED/STATE PROJECT NUMBER** *0011677*

SPEC YEAR: *01*

DESCRIPTION: *SR 11 @ MULBERRY RIVER TRIBUTARY 6.3 MI SW OF JEFFERSON*

ITEMS FOR JOB 0011677

0010 - ROADWAY

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0035	150-1000	1.000	LS	$60,000.00000	TRAFFIC CONTROL - NA	$60,000.00
0040	210-0100	1.000	LS	$66,221.26000	GRADING COMPLETE - NA	$66,221.26
0020	310-1101	778.520	TN	$22.42717	GR AGGR BASE CRS, INCL MATL	$17,460.00
0005	402-3100	280.960	TN	$93.35312	REC AC 9.5 MM SP,TPI,GP1ORBL1,INCL BM&HL	$26,228.49
0015	402-3121	229.440	TN	$84.19448	RECYL AC 25MM SP,GP1/2,BM&HL	$19,317.58
0010	402-3190	253.860	TN	$87.14380	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	$22,122.33
0085	413-1000	117.280	GL	$4.06134	BITUM TACK COAT	$476.31
0090	641-1200	971.550	LF	$15.96283	GUARDRAIL, TP W	$15,508.69
0095	641-5001	2.000	EA	$641.56417	GUARDRAIL ANCHORAGE, TP 1	$1,283.13
0100	641-5012	4.000	EA	$1,840.54512	GUARDRAIL ANCHORAGE, TP 12	$7,362.18
					SUBTOTAL FOR ROADWAY:	**$235,979.97**

0030 - EROSION CONTROL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0075	163-0528	400.000	LF	$3.39000	CONSTR AND REM FAB CK DAM -TP C SLT FN	$1,356.00
0065	163-0541	8.000	EA	$297.02932	CONSTR & REM ROCK FILTER DAMS	$2,376.23
0055	165-0030	1584.000	LF	$0.54981	MAINT OF TEMP SILT FENCE, TP C	$870.90
0080	165-0041	400.000	LF	$1.19576	MAINT OF CHECK DAMS - ALL TYPES	$478.30
0070	165-0110	8.000	EA	$110.13629	MAINT OF ROCK FILTER DAM	$881.09
0060	171-0030	1584.000	LF	$2.79193	TEMPORARY SILT FENCE, TYPE C	$4,422.42
					SUBTOTAL FOR EROSION CONTROL:	**$10,384.94**

0040 - CULVERT

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0025	500-3101	527.120	CY	$506.73081	CLASS A CONCRETE	$267,107.94
0030	511-1000	59282.000	LB	$0.65904	BAR REINF STEEL	$39,069.21
					SUBTOTAL FOR CULVERT:	**$306,177.15**

0050 - SIGNING & MARKING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0105	653-1501	1746.000	LF	$0.57667	THERMO SOLID TRAF ST 5 IN, WHI	$1,006.87
0110	653-1502	1746.000	LF	$0.57824	THERMO SOLID TRAF ST, 5 IN YEL	$1,009.61
0115	654-1001	44.000	EA	$5.20724	RAISED PVMT MARKERS TP 1	$229.12
					SUBTOTAL FOR SIGNING & MARKING:	**$2,245.60**

TOTALS FOR JOB 0011677

File Location: Div of Preconstruction > CES

DETAILED COST ESTIMATE

Georgia Department of Transportation

Job: 0011677

ITEMS COST:	$554,787.66
COST GROUP COST:	$0.00
ESTIMATED COST:	$554,787.66
CONTINGENCY PERCENT:	0.00
ENGINEERING AND INSPECTION:	0.00
ESTIMATED COST WITH CONTINGENCY AND E&I:	$554,787.66

File Location: Div of Preconstruction > CES

PROJ. NO.		CALL NO.
P.I. NO.	0011677	
DATE	10/13/2013	

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Oct-13	$ 3.692
DIESEL		$ 3.931
LIQUID AC		$ 561.00

Link to Fuel and AC Index:
http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)]xTMTxAPL

Asphalt

Price Adjustment (PA)			**12863.0007**	**$**	**12,863.00**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$ 897.60		
Monthly Asphalt Cement Price month project let (APL)			$ 561.00		
Total Monthly Tonnage of asphalt cement (TMT)			38.2145		

ASPHALT	Tons	%AC	AC ton
Leveling		5.0%	0
12.5 OGFC		5.0%	0
12.5 mm		5.0%	0
9.5 mm SP	281	5.0%	14.0485
25 mm SP	229	5.0%	11.4725
19 mm SP	254	5.0%	12.6935
	764.29		**38.2145**

BITUMINOUS TACK COAT

Price Adjustment (PA)			**$ 169.56**	**$**	**169.56**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$ 897.60		
Monthly Asphalt Cement Price month project let (APL)			$ 561.00		
Total Monthly Tonnage of asphalt cement (TMT)			0.503729436		

Bitum Tack Gals	gals/ton	tons
117	232.8234	0.50372944

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)			**0**	**$**	**-**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$ 897.60		
Monthly Asphalt Cement Price month project let (APL)			$ 561.00		
Total Monthly Tonnage of asphalt cement (TMT)			0		

Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.		0.20	0	232.8234	0
Double Surf.Trmt.		0.44	0	232.8234	0
Triple Surf. Trmt		0.71	0	232.8234	0
					0

TOTAL LIQUID AC ADJUSTMENT	**$**	**13,032.56**

GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY

Date: 6/3/2014
Revised:

Project: 0011677
County: Jackson
PI: 0011677

Description: SR 11 @ Mulberry Tributary
Project Termini: SR 11 @ Mulberry Tributary

Existing ROW: Varies
Parcels: 4
Required ROW: Varies

Land and Improvements		$45,746.25
Proximity Damage	*$0.00*	
Consequential Damage	*$0.00*	
Cost to Cures	*$0.00*	
Trade Fixtures	*$0.00*	
Improvements	*$10,000.00*	
Valuation Services		$8,000.00
Legal Services		$40,200.00
Relocation		$8,000.00
Demolition		$0.00
Administrative		$35,500.00
TOTAL ESTIMATED COSTS		$137,446.25
TOTAL ESTIMATED COSTS (ROUNDED)		***$138,000.00***

Preparation Credits	Hours	Signature

Prepared By: LaShone Alexander CG#: 286999 06/03/2014
Approved By: LaShone Alexander CG#: 286999 06/03/2014

NOTE: No Market Appreciation is included in this Preliminary Cost Estimate

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. 0011677 Jackson
SR 11 @ Mulberry River Tributary
6.3 miles SW of Jefferson

OFFICE Gainesville

DATE January 17, 2014

FROM Nathaniel O'Kelley (NO)
Assistant District Utilities Engineer

TO Charles A. Robinson, Project Manager

SUBJECT PRELIMINARY UTILITY COST ESTIMATE

As requested by your office, we are furnishing you with a Preliminary Utility Cost estimate for the subject project.

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE
Jackson County Water	$ 16,228.00	$ 0.00
Windstream Comm. (Telephone)	$ 14,028.00	$ 0.00
TOTAL	**$ 30,256.00**	**$ 0.00**

If you have any questions, please contact Nathaniel O'Kelley at 770-532-5510.

HNO:hno

C: Mike Bolden, State Utilities Engineer
Angie Robinson, Office of Financial Management
Dana Garrison, Area Engineer
Nicholas Ryan Mullins, District 1 Design
File

Houppermans, Colin

From: Robinson, Charles A.
Sent: Wednesday, April 02, 2014 4:22 PM
To: Houppermans, Colin
Cc: Lott, Justin
Subject: FW: PI 0011677, Jackson County - ENVE.DGN file

Hi Colin,

Please note that I have been informed that the environmental mitigation costs for the above referenced project have been estimated at $58,500 as indicated in email below. Please include this amount in the concept report.

Please let me know if you have any questions.

Thanks,

Charles A. Robinson
Project Manager
Georgia Department of Transportation
Office of Program Delivery
One Georgia Center
600 West Peachtree Street, Floor 25
Atlanta, GA 30308
Office: (404) 631-1439
Mobile: (404) 985-0720
Fax: (404) 631-1588
chrobinson@dot.ga.gov

From: Lenor Bromberg [mailto:lbromberg@keagroup.com]
Sent: Wednesday, April 02, 2014 4:12 PM
To: Robinson, Charles A.
Cc: Jon Russell
Subject: Fwd: PI 0011677, Jackson County - ENVE.DGN file

Charles -

In the email below please find the estimated mitigation costs as well as the basis for this cost.

Please let us know of you have any questions.

Thank you!

-Lenor

Lenor M. Bromberg, PE, AVS
Associate VP - Environmental & Design
KEA Group
770-500-9605 cell

Begin forwarded message:

From: "Jon Russell" <jrussell@keagroup.com>
Date: April 2, 2014 at 3:27:46 PM EDT
To: "'Lenor Bromberg'" <lbromberg@keagroup.com>
Subject: RE: PI 0011677, Jackson County - ENVE.DGN file

In the concept report drawing it shows the new culvert being 97', so we can estimate 120' of stream impact. Using a very basic multiplier, 780 credits would be required, costing around $58,500.

If I don't see you respond in the next while I will pass it along to Charles.

-Jon

Kennedy Engineering & Associates Group LLC
Exceptional People, Exceptional Service, Exceptional Solutions

678-904-8591 ext. 26
845-596-1953 - cell

From: Lenor Bromberg [mailto:lbromberg@keagroup.com]
Sent: Wednesday, April 02, 2014 2:59 PM
To: Jon Russell
Subject: Fwd: PI 0011677, Jackson County - ENVE.DGN file

Jon,

Can you please take a quick stab at potential impacts and mitigation cost for the Jackson project and let me know what you think?

Thank you!

-Lenor

Lenor M. Bromberg, PE, AVS
Associate VP - Environmental & Design
KEA Group
770-500-9605 cell

Begin forwarded message:

From: "Robinson, Charles A." <chrobinson@dot.ga.gov>
Date: April 2, 2014 at 2:47:43 PM EDT
To: 'Lenor Bromberg' <lbromberg@keagroup.com>
Cc: "Houppermans, Colin" <chouppermans@dot.ga.gov>, "Lott, Justin" <JLott@dot.ga.gov>, 'Tommy Crochet' <tcrochet@mcgeepartners.com>, "jrussell@keagroup.com" <jrussell@keagroup.com>
Subject: RE: PI 0011677, Jackson County - ENVE.DGN file

Crash Data

JACKSON COUNTY, SR 11 milelogs 0.51 - 1.75

Accident No	Date	Time	County	Route Type	Route	Milelog	Intersecting Rt Type	Intersecting Rt	Injuries	Fatalities	Harmful Event	Collision	Location of Impact	Light	Surface	DirVeh1	DirVeh2	MnvrVeh1	MnvrVeh2
'84930284	11/16/2008	8:36 PM	Jackson	State Route	'001100	0.53		'	0	0	Deer	Not A Collision With A Motor Vehicle	On Roadway	Dark-Not Lighted	Dry	S		Straight	
'70310266	1/7/2007	4:30 PM	Jackson	State Route	'001100	0.67		'	2	0	Tree	Not A Collision With A Motor Vehicle	Off Roadway	Daylight	Wet	S		Negotiating a Curve	
'65110721	12/26/2006	7:12 AM	Jackson	State Route	'001100	0.68		'	1	0	Tree	Not A Collision With A Motor Vehicle	Off Roadway	Dark-Not Lighted	Wet	N		Negotiating a Curve	
'74940380	10/27/2007	12:15 PM	Jackson	State Route	'001100	0.68		'	0	0	Motor Vehicle in Motion	Rear End	On Roadway	Daylight	Dry	N	N	Negotiating a Curve	Turning Right
'90350466	1/27/2009	6:30 AM	Jackson	State Route	'001100	0.68		'	4	0	Motor Vehicle in Motion	Head On	On Roadway	Dark-Not Lighted	Dry	N	S	Negotiating a Curve	Negotiating a Curve
'50200741	1/5/2005	6:35 PM	Jackson	State Route	'001100	0.73		'	0	0	Motor Vehicle in Motion	Sideswipe - Same Direction	On Roadway	Dark-Not Lighted	Dry	S	S	Straight	Straight
'53010469	7/21/2005	11:34 AM	Jackson	State Route	'001100	0.88		'	1	0	Tree	Not A Collision With A Motor Vehicle	Off Roadway	Daylight	Dry	E		Negotiating a Curve	
'84930270	11/12/2008	6:27 PM	Jackson	State Route	'001100	0.88		'	0	0	Tree	Not A Collision With A Motor Vehicle	Off Roadway	Dark-Not Lighted	Dry	N		Straight	
'55190479	11/21/2005	3:15 PM	Jackson	State Route	'001100	0.98		'	0	0	Other Non-Collision	Not A Collision With A Motor Vehicle	Off Roadway	Daylight	Wet	N		Negotiating a Curve	
'94180356	9/22/2009	1:11 AM	Jackson	State Route	'001100	1.26		'	2	0	Embankment	Not A Collision With A Motor Vehicle	Off Roadway	Dark-Lighted	Wet	N		Straight	
'72180521	5/1/2007	10:35 PM	Jackson	State Route	'001100	1.27	2	'016100	0	0	Deer	Not A Collision With A Motor Vehicle	Gore	Dark-Not Lighted	Dry	S		Straight	
'55190743	8/20/2005	3:41 PM	Jackson	State Route	'001100	1.5		'	0	0	Deer	Not A Collision With A Motor Vehicle	On Roadway	Daylight	Dry	S		Straight	
'50260597	1/22/2005	3:00 AM	Jackson	State Route	'001100	1.63		'	0	0	Overturn	Not A Collision With A Motor Vehicle	Off Roadway	Dark-Not Lighted	Dry	W		Straight	
'60710072	2/10/2006	8:31 AM	Jackson	State Route	'001100	1.69		'	0	0	Ditch	Not A Collision With A Motor Vehicle	Off Roadway	Daylight	Dry	W		Entering/Leaving Driveway	
'60320156	1/6/2006	6:59 PM	Jackson	State Route	'001100	1.72		'	0	0	Deer	Not A Collision With A Motor Vehicle	On Roadway	Dark-Not Lighted	Dry	N		Straight	
'51390728	4/11/2005	4:27 PM	Jackson	State Route	'001100	1.73	2	'016200	0	0	Motor Vehicle in Motion	Angle	On Roadway	Daylight	Dry	W	S	Straight	Straight
'52980579	8/17/2005	6:33 PM	Jackson	State Route	'001100	1.73	2	'016200	0	0	Motor Vehicle in Motion	Angle	On Roadway	Daylight	Dry	W	N	Turning Left	Straight
'55190795	5/29/2005	2:24 PM	Jackson	State Route	'001100	1.73	2	'016200	0	0	Motor Vehicle in Motion	Rear End	On Roadway	Daylight	Dry	N	N	Straight	Stopped
'62010221	5/16/2006	2:00 PM	Jackson	State Route	'001100	1.73	2	'016200	0	0	Motor Vehicle in Motion	Angle	On Roadway	Daylight	Dry	W	W	Turning Left	Turning Left
'70270437	1/10/2007	7:52 PM	Jackson	State Route	'001100	1.73	2	'016200	0	0	Ditch	Not A Collision With A Motor Vehicle	Off Roadway	Dark-Lighted	Dry	E		Turning Left	
'75870005	11/23/2007	10:34 PM	Jackson	State Route	'001100	1.73	2	'016200	0	0	Animal	Not A Collision With A Motor Vehicle	On Roadway	Dark-Not Lighted	Dry	E		Straight	
'74940375	10/23/2007	12:55 PM	Jackson	State Route	'001100	1.73	2	'016200	0	0	Motor Vehicle in Motion	Rear End	On Roadway	Daylight	Dry	N	N	Straight	Straight
'80760209	2/19/2008	5:41 PM	Jackson	State Route	'001100	1.73	2	'016200	0	0	Ditch	Not A Collision With A Motor Vehicle	Off Roadway	Daylight	Dry	E		Straight	
'94490283	9/9/2009	11:48 AM	Jackson	State Route	'001100	1.73	2	'016200	2	0	Motor Vehicle in Motion	Angle	On Shoulder	Daylight	Dry	E	S	Straight	Straight
'84580359	10/4/2008	7:23 PM	Jackson	State Route	'001100	1.74		'	0	0	Other Non-Collision	Not A Collision With A Motor Vehicle	Off Roadway	Daylight	Dry	E		Straight	

NO BUILD ADT = BUILD ADT
Department of Transportation
State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE Jackson County
P.I. # 0011677

OFFICE Planning

DATE August 24, 2012

FROM Cynthia L. VanDyke, State Transportation Planning Administrator

TO Genetha Rice-Singleton, State Program Delivery Engineer
Attention: Charles A. Robinson P.E.

SUBJECT **Updated** Traffic Assignments for SR 11 @ Mulberry Creek River Tributary 6.3 miles SW of Jefferson

We are furnishing estimated Traffic Assignment for the above project is as follows:

2012 ADT = 4500
2019 ADT = 4800
2039 ADT = 5800
2012 DHV = 425
2019 DHV = 450
2039 DHV = 550
K = 9.5%
D = 55%
T. = 6%
S.U. T = 4%
COMB. T = 2%
24 HOUR T = 7%
S.U. = 5%
COMB. = 2%

If you have any questions concerning this information, please contact Dan Funk at (404) 631-1959.

CLV/DRF

Bridge Inventory Data Listing

Structure ID:157-0001-0

Programming Data

201 Project No:	SAP 416-A REOP
202 Plans Available:	1
249 Prop Proj No:	000000000000000000000000
250 Approval Status:	0000
251 PI Number:	0000000
252 Contract Date:	02/01/1901
260 Seismic No:	00000
75 Type Work:	00 0
94 Bridge Imp. Cost:	$0
95 Roadway Imp. Cost:	0
96 Total Imp Cost:	0
76 Imp Length:	000000
97 Imp Year:	0000
114Furure ADT:	005565 Year:3930

Hydralic Data

215Waterway Data:	
High Water Elev:	0000.0 Year:1900
Flood Elev:	0000.0 Freq:00
Avg Streambed Elev:	0000.0
Drainage Area:	00000
Area of Opening:	000300
113 Scour Critical	8
216Water Depth:	06.2 Br.Height:09.8
222Slope Protection:	0
221Slope Protection	0 Fwd:0
219Fender System	0
220Dolphin:	0
223Current Cover:	7
Type:	1
No. Barrels:	3
* Width:	10.00 Height:10.00
* Length:	50 Apron:1
265 U/W Insp. Area:	0 Diver:ZZZ
Location ID No:	157-00011D-000.88N

Measurements:

*29ADT	003710 Year:3910
109%Trucks:	11
* 28 Lanes On:	02 Under:00
210 No. Tracks On:	00 Under:00
* 48 Max. Span Length	0010
* 49 Structure Length:	32
51 Br. Rwdy. Width	0.00
52 Deck Width:	0.00
* 47 Tot. Horiz. Cl:	35
50 Curb / Sidewalk Width	0.00 / 0.00
32 Approach Rdwy. Width	028
*229 Shoulder Width:	
Rear Lt:	2.20 Type:2 Rt:2.20
Fwd. Lt:	2.20 Type:2 Rt:2.40
Permanent Width:	
Rear:	23.70 Type:2
	23.20 Type:2
Intersection Rear:	0 Fwd: 0
36Safety Features Br. Rail:	N
Transition:	N
App. G. Rail:	N
App. Rail End:	N
53 Minimum Cl. Over:	99' 99 "
Under:	
*228 Minimum Vertical Cl	
Act. Odm Dir.:	99' 99"
Oppo. Dir:	99' 99"
Posted Odm. Dir:	00' 00"
Oppo. Dir:	00' 00"
55 Lateral Undercl. Rt:	N 0 0
56 Lateral Undercl. Lt:	0.00
*10 Max Min Vert Cl:	99' 99" Dir:0
39 Nav Vert Cl:	000 Horiz:0000
116 Nav Vert Cl Closed:	000
245 Deck Thickness Main	0.00
Deck Thick Approach:	0.00
246 Overlay Thickness:	0.00
212 Year Last Painted:	Sup:0000Sub:0000

65 Inventory Rating Mathod:	0
63 Operating Rating Method:	0
66 Inventory Type:	2 Rating: 27
64 Operating Type:	2 Rating: 27
231Calculated Loads:	
H-Modified:	00 0
HS-Modified:	00 0
Type 3:	00 0
Type 3s2:	00 0
Timber:	00 0
Piggyback:	00 0
261 H Inventory Rating:	15
262 H Operating Rating	25
67 Structural Evaluation:	4
58 Deck Condition:	N
59 Superstructure Condition:	N
* 227 Collision Damage:	0
60A Substructure Condition:	N
60B Scour Condition:	5
60C Underwater Condition	N
71 Waterway Adequacy:	9
61 Channel Protection Cond.:	5
68 Deck Geometry:	N
69 UnderClr. Horz/Vert:	N
72 Appr. Alignment:	5
62 Culvert:	4

Posting Data

70 Bridge Posting Required	5
41 Struct Open, Posted, CL:	A
* 103 Temporary Structure:	0
232 Posted Loads	
H-Modified:	00
HS-Modified:	00
Type 3:	00
Type 3s2:	00
Timber:	00
Piggyback	00
253 Notification Date:	02/01/1901
258 Fed Notify Date:	2/1/1901 12:00:00AM

Processed Date:10/25/2012

Parameters: Bridge Serial Num

Bridge Inventory Data Listing

Structure ID:157-0001-0 **Jackson** **SUFF. RATING:** 62.59

Location & Geography

Structure ID:	157-0001-0
200 Brdge Information:	07
*6A Feature Int:	MULBERRY RIVER TRIB
*6B Critical Bridge:	0
*7A Route No Carried:	SR00011
*7B Facility Carried:	SR 11
9 Location:	6.3 MI SW OF JEFFERSON
2 Dot District:	1
207 Year Photo:	2012
*91 Inspection Frequency:	24 Date: 08/08/2012
92A Fract Crit Insp Freq:	0 Date: 02/01/1901
92B Underwater Insp Freq:	0 Date: 02/01/1901
92C Other Spc. Insp Freq:	0 Date: 02/01/1901
* 4 Place Code:	00000
*5 Inventory Route(O/U)	1
Type:	3
Designation:	1
Number:	00011
Direction:	0
*16 Latitude:	34 03.8610 HMMS Prefix:SR
*17 Longtitude:	83 -39.7390 HMMS Suffix:00 MP:0.88
98 Border Bridge	000%Shared:00
99 ID Number:	000000000000000
*100 STRAHNET:	0
12 Base Highway Network:	1
13A LRS Inventory Route:	1571001100
13B Sub Inventory Route:	0
101 parellel Structure:	N
*102 Direction of Traffic:	2
*264 Road Inventory Mile Post:	000.87
*208 Inspection Area:	1 Initials: EFP
Engineer's Initials:	gmc
* Location ID No:	157-00011D-000.88N

*104 Highway System:	0
*26 Functional Classification:	06
*204 Federal Route Type:	F No: 00522
105 Federal Lands Highway:	0
*110 Truck Route:	0
2006 School Bus Route:	1
217 Benchmark Elevation:	0000.00
218 Datum:	0
*19 Bypass Length:	04
*20 Toll:	3
*21 Maintanance:	01
*22 Owner:	01
*31 Design Load:	2
37 Historical Significance:	5
205 Congressional District:	10
27 Year Constructed:	1938
106 Year Reconsrtucted:	0000
33 Bridge Medium:	0
34 Skew:	00
35 Structure Flared:	0
38 Navigation Control:	0
213 Special Steel Design:	0
267 Type of Paint:	0
*42 Type of Service On:	1
Type of Service Under:	5
214 Movable Bridge:	0
203 Type Bridge:	Q
259 Pile Encasement	3
*43 Structure Type Main:	1 19
45 No.Spans Main:	003
44 Structure Type Appr:	0 00
46 No Spans Appr:	0000
226 Bridge Curve Horz	0 Vert: 0
111 pier Protection	0
107 Deck Structure Type:	N
108 Wearing Structure Type:	N
Membrane Type:	N
Deck Protection:	N

Signs & Attachments

225 Expansion Joint Type:	00
242 Deck Drains:	0
243 Parapet Location:	0
Height:	0
Width:	0
238 Curb Height:	0
Curb Material:	0
239 Handrail	00
*240 Medium Barrier Rail:	0
241 Bridge Median Height:	0
* Bridge Median Width:	0
230 Guardrail Loc. Dir. Rear:	0
Fwrd:	0
Oppo. Dir. Rear:	0
Oppo. Fwrd:	0
244 Aproach Slab	0
224 Retaining Wall:	0
233Posted Speed Limit:	55
236 Warning Sign:	0.00
234 Delineator:	0.00
235 Hazzard Boards:	0
237 Utilities Gas:	00
Water:	00
Electric:	00
Telephone:	00
Sewer:	00
247 Lighting Street:	0
Navigation:	0
Aerial:	0
*248 County Continuity No.:	15

CONCEPT TEAM MEETING (CTM) MINUTES

PROJECT: PI # 0011677, Jackson County
SR 11 @ MULBERRY RIVER TRIBUTARY
6.3 MI SW OF JEFFERSON

LOCATION: GDOT District 1 Office

MEETING DATE: December 17, 2014 at 9:00 AM

ATTENDEES: See attached sign-in sheet

Charles Robinson, the Project Manager called the meeting to order giving an overview of the project and asked all attendees to introduce themselves.

Charles Robinson then reviewed the project schedule. Charles confirmed that the project was on schedule to Let in January 2017.

Nicholas Mullins and Justin Lott led the review of the project's concept report and concept layouts including alternatives. The concept layouts included alternatives for an on-site detour as well as an off-site detour. The off-site detour was presented as the preferred alternative.

Ben Rabun asked if the GDOT Road User Costs spreadsheet had been completed for this project. Nick replied that it had not, but that it would be completed prior to the submission of the concept report for approval. Charles stated that the preferred concept layout would be determined after further review of the alternatives at the concept team meeting with the subject matter experts (SMEs), coordination with Jackson County and completion of the GDOT Road User costs spreadsheet. Justin Lott agreed.

Nick stated the cast in place option for the construction of the culvert was proposed based on some initial discussions with District 1 Construction Office. Ben Rabun stated that the precast culvert alternative may have benefits including but not limited to reduced construction time. Justin stated that both options will be carefully evaluated as the preliminary engineering design progresses.

Ben Rabun also inquired about the proposed trip times and detour route. The detour route included SR 319 which Brent Cook stated does not exist as shown on the detour layout. Justin stated that the detour routes and trip times will be revised accordingly.

GEORGIA DEPARTMENT OF TRANSPORTATION
MEETING / CONFERENCE RECORD OF ATTENDEES

PURPOSE: P.I. No. 0011677 Concept Team Meeting

LOCATION: GDOT District 1 Office

DATE: 12/17/2013 **TIME:** 9:00 A.M.

MODERATOR: Charles A. Robinson

	NAME	ORGANIZATION	PHONE NO.	GDOT suffix: @dot.ga.gov E-MAIL ADDRESS
1	Charles A. Robinson	GDOT- Office of Program Delivery	404-631-1439	chrobinson@dot.ga.gov
2	Kim Coley	GDOT- Planning	7705325530	kcoley@dot.ga.gov
3	Nathaniel O'Kelley	GDOT- Dist. Utilities	770-532-5510	nokelley@dot.ga.gov
4	Daniel Rock	GDOT- Design		drock@dot.ga.gov
5	Nick Mullins	D1 Design	770-532-5112	nmullins@dot.ga.gov
6	Jeff Bridges	Jackson County	706-367-5288	jbridges@jacksoncountyga.com
7	Lane Gortemoller	KEA Group	678 904-8591	lgortemoller@keagroup.com
8	Linda E Taibl	Comcast	770-559-6541	Linda_Taibl@cable.comcast.com
9	Kathe Ahmed	GDOT-	404-631-1528	kahmed@dot.ga.gov
10	Steven Herg	GDOT- PM	404-631-1161	kh.herg@dot.ga.gov
11	Shane Gilles	GDOT District - Traffic Eng.	770-718-5041	shgilles@dot.ga.gov
12	Douglas Torres	GDOT- Lead Estimator	404-859-7463	dtorres@dot.ga.gov
13	Brandon Kirby	GDOT PM	678 3043 0816	bKirby@dot.ga.gov
14	Jason Dykes	GDOT- ADCE	770-718-5023	JDYKES@DOT.GA.GOV
15	Brent Cook	GDOT - DPE	770. 532. 5522	bcook@dot.ga.gov
16	Tammy Crochet	McGee Partners	770-933-6400	tcrochet@mcgeepartners.com
17	Bret Anderson	GDOT - Grant, R/W	770-718-5042	banderson@dot.ga.gov
18	*Ben Rabun	GDOT - Bridge Design	404-631-1985	brabun@dot.ga.gov

* teleconference

Project: PI 0011677, Jackson County
SR 11 @ Mulberry River Tributary
6.3 Miles southwest of Jefferson

Date: February 11, 2014 at 10:05 AM

Subject: Phone Conversation with Jackson County and GDOT
Discussion of Off-Site Detour

Attendees: Kevin Poe- Jackson County- County Manager
Justin Lott- GDOT- District Design Engineer

- Justin Lott stated that GDOT's preferred alternate would be to construct the project using an off-site detour. The Jackson County Roads Superintendent attended the Concept Team Meeting and did not seem to have a problem using an off-site detour.
- Kevin Poe asked what the off-site detour route would be. Justin said it would consist of using SR 211, SR 82, and SR 11 Connector.
- Justin indicated that the detour route would be limited to only state routes, however, local residents may choose to utilize county roads they are familiar with.
- Kevin said that he was not sure that the county commissioners would be in favor of the off-site detour and he would check with them.
- Kevin asked Justin what the approximate detour time would be and Justin said it would likely be between 2-6 months. The exact timeframe would be worked out during the preliminary design process.
- Kevin said his main concern would be trucks using the county roads rather than the official detour route.
- Justin indicated the other project alternate that was being considered was an on-site detour that would keep one lane of traffic open using a temporary traffic signal. The temporary traffic signal would allow each direction of travel to utilize the one lane open during construction of the project.
- Kevin checked with the Commissioners whose area is affected by the project and they were not in favor of the off-site detour.
- Kevin did say the Commissioners would support using the on-site detour keeping one lane of traffic open with a temporary traffic signal.
- Justin told Kevin the concept report would be revised so the on-site detour would be the selected alternate.

Houppermans, Colin

From: Bowman, Glenn
Sent: Thursday, May 22, 2014 8:07 AM
To: Lott, Justin
Cc: Houppermans, Colin; Robinson, Charles A.; Cook, Brent; Simpson, Jim; Peters, Dave; Phillips, Kim
Subject: RE: 0011677, Jackson Concept Report

Follow Up Flag: Follow up
Flag Status: Flagged

I discussed the design exception with the Chief and we agreed that using the existing (30 mph) profile would be acceptable for this culvert replacement project as long as there is no discernable accident history due to this feature. Please look into this and if there is no history then move forward with it, otherwise we'll have to reassess. PE estimate is ok too so just keep holding the line to keep costs as low as possible. Thanks for your patience!

Glenn Bowman, P.E.
Director of Engineering
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Atlanta, Georgia 30308
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From: Bowman, Glenn
Sent: Tuesday, May 20, 2014 12:08 PM
To: Lott, Justin
Cc: Houppermans, Colin; Robinson, Charles A.; Cook, Brent; Simpson, Jim; Peters, Dave; Phillips, Kim
Subject: RE: 0011677, Jackson Concept Report

Thanks, and you're right on #1. I will make sure the Chief is on board as he just might overrule me and sign an exception for 30 mph. My meeting with him this afternoon may get cancelled but I will surely get an answer by tomorrow and let you know.

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From: Lott, Justin
Sent: Tuesday, May 20, 2014 11:15 AM
To: Bowman, Glenn
Cc: Houppermans, Colin; Robinson, Charles A.; Cook, Brent; Simpson, Jim; Peters, Dave; Phillips, Kim
Subject: RE: 0011677, Jackson Concept Report

Glenn,
I have a few other things to run by you mainly in regards to the comments below.

1. I am not comfortable with recommending a design exception for the 30 mph sag that hugs the existing so please use the single 850' VC (a 45 mph design that will also be a design exception.)

- We have developed a design that has a 45 mph design sag vertical curve in it (see attached). If we put in a 45 mph vertical curve our cost estimate is approximately what was submitted in the previous concept report that got rejected. Colin prepared a spreadsheet to outline the previous rejected amount, an estimate using the existing profile, and an alternate to raise the profile to meet a 45 mph design speed (see attached). The higher cost is mainly due to more earthwork, more full depth pavement, a longer culvert, and slightly longer project limits. Do you still want us to go with the 45 mph vertical curve? If so, we will revise the concept report and resubmit. I just wanted to make sure it wouldn't be rejected again due to construction cost.

2. Shouldn't the PE costs be lower? You won't need to do extensive staging, fewer plan sheets, etc. The PE estimate should be what we've already spent plus what it will take to complete the project from now, not what the programmed amount is.
- The programmed amount of PE funds on this project is approximately $421,000 with $221,000 in contract funds for survey and environmental work and $200,000 in funds for in-house. In regards to the in-house funds, we have already spent approximately $82,000 in in-house PE funds. This is more than I would expect but the GDOT survey crew has had to go out and pick up additional data because the consultant survey crew had angered a property owner. Also, there were some points that were not within tolerance that may have required more field work. I have attached a man-hour estimate that estimates the remaining design work at approximately $75,000. I did not adjust the hourly rates but they appear to be low in comparison to the recent job worth study. According to the values in District 1, I would expect the DEGM hourly rate to be about $6 higher and the LDE rate to be about $5 higher. The design engineer rate is pretty close. Assuming, the hourly rates don't need adjustment this brings the new PE estimate to $157,000. That does not include any hours that are charged to it from Program Delivery, Environmental, Engineering Services, Design Policy & Support, etc.

3. Please put a double asterisk beside the CST estimate with a note below: "**Construction estimate is based on a cast in place alternate. However, project will be investigated for precast alternate design/bidding which may reduce costs further."
- Will do.

Please let me know if you have any other questions.

Thanks,

Justin Lott, P.E.
District Design Engineer
Phone: 770-718-5005
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jlott@dot.ga.gov

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From: Bowman, Glenn
Sent: Friday, May 09, 2014 5:49 PM
To: Lott, Justin
Cc: Houppermans, Colin; Robinson, Charles A.; Cook, Brent; Simpson, Jim; Peters, Dave
Subject: RE: 0011677, Jackson Concept Report

Sorry guys, this got by me. I think we can make a good argument now that the project is minimized. A few other things:

1. I am not comfortable with recommending a design exception for the 30 mph sag that hugs the existing so please use the single 850' VC (a 45 mph design that will also be a design exception.)
2. Shouldn't the PE costs be lower? You won't need to do extensive staging, fewer plan sheets, etc. The PE estimate should be what we've already spent plus what it will take to complete the project from now, not what the programmed amount is.
3. Please put a double asterisk beside the CST estimate with a note below: "**Construction estimate is based on a cast in place alternate. However, project will be investigated for precast alternate design/bidding which may reduce costs further."

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From: Lott, Justin
Sent: Wednesday, April 30, 2014 12:15 PM
To: Bowman, Glenn
Cc: Houppermans, Colin; Robinson, Charles A.; Cook, Brent; Simpson, Jim; Peters, Dave
Subject: RE: 0011677, Jackson Concept Report

Glenn,
We had another discussion with Jackson County and they indicated that they would be agreeable to an off-site detour if it helped us on the construction cost and kept the project moving. We also talked to the District Construction Office and they think the work could be accomplished by detouring 2-3 months. Based on GA standard 2530P, the maximum fill height would be 10 feet above a precast 10'x10' multi barrel culvert. We would be pushing this threshold as our design would require approximately 10-12 feet of cover. District Construction also prefers the cast-in-place option.

Colin has reduced the project limits, reduced the shoulder width to the AASHTO minimum (8'), and recalculated the cost estimates based on those changes. Please see the attached cost estimate comparison that shows the reductions. This amount is still higher than the STIP amount but I don't know what other actions that can be taken to reduce the amount. Could you check and see if these values would be acceptable prior to us resubmitting the concept report?

Also, a design exception for vertical curves would be needed in order to keep the profile as close to existing as possible (see attached). I'm assuming it would not be a problem to get these two vertical curve exceptions approved so we can keep project cost down. Is that correct?

Please let us know if you have any questions.

Thanks,

Justin Lott, P.E.
District Design Engineer
Phone: 770-718-5005

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From: Bowman, Glenn
Sent: Friday, April 25, 2014 3:37 PM
To: Lott, Justin
Subject: RE: 0011677, Jackson Concept Report

Emphasize that we are proposing a very short closure at 3 months or less. Talk to construction. Seems to me we could dig out the old on in a week, install a new precast one in two, and fill and pave in a couple more.

Glenn Bowman, P.E.
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Atlanta, Georgia 30308
Office: 404-631-1519 Mobile: 404-326-5871

From: Lott, Justin
Sent: Friday, April 25, 2014 10:59 AM
To: Bowman, Glenn
Subject: RE: 0011677, Jackson Concept Report

Thanks for the heads up Glenn!! We are currently reviewing what options we have available. Early indication is saying that the off-site detour would be the best cost savings measure. I will coordinate with Jackson County again to see if they will reconsider their opinion.

Thanks,

Justin Lott, P.E.
District Design Engineer
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Gainesville, GA 30507
jlott@dot.ga.gov

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From: Bowman, Glenn
Sent: Wednesday, April 23, 2014 8:24 AM
To: Lott, Justin
Cc: Robinson, Charles A.; Cook, Brent; Simpson, Jim; Peters, Dave
Subject: 0011677, Jackson Concept Report

Justin,

I wanted to give you a heads up that the Chief has rejected the subject Concept Report in its current form. His main concern is the high project cost for a culvert replacement. He questioned why PE is 50% of construction costs and noted the total estimate is now 55% over the STIP estimate. We must bring these down.

Can't we shorten the southern project limit considerably? Should be able to come out of existing curve smoothly to the detour alignment without having to rebuild the whole curve. Or could we simply tell the locals the cost for staging the onsite detour is simply too high and we'll expedite construction, say three month closure during the summer months? Wouldn't a precast alternative help drive down construction time? Just some ideas. We are behind the baseline already so the changes must be expedited.

I am routing the report back through Design Policy.

Glenn Bowman, P.E.
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