

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

---

**OFFICE OF DESIGN POLICY & SUPPORT  
INTERDEPARTMENTAL CORRESPONDENCE**

**FILE** P.I. # 0012681 **OFFICE** Design Policy & Support  
Jackson County  
GDOT District 1 - Gainesville **DATE** 10/24/2013  
Signal Upgrade - SR11 BUS/US129 at CS936/Old  
Pendergrass Road in the City of Jefferson

**FROM**  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:**

Bobby Hilliard, Program Control Administrator  
Genetha Rice-Singleton, State Program Delivery Engineer  
Glenn Bowman, State Environmental Administrator  
Cindy VanDyke, State Transportation Planning Administrator  
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: Fletcher Miller, Design Group Manager  
Bayne Smith, District Engineer  
Brent Cook, District Preconstruction Engineer  
Neil Kantner, District Utilities Engineer  
Sue Anne Decker, Project Manager  
BOARD MEMBER - 9th Congressional District

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
LIMITED SCOPE PROJECT CONCEPT REPORT**

Project Type: <u>Signal Upgrade</u>	P.I. Number: <u>0012681</u>
GDOT District: <u>1</u>	County: <u>Jackson</u>
Federal Route Number: <u>129</u>	State Route Number: <u>SR 11 BUS</u>

Signalized Intersection Upgrade - SR 11 BUS/US 129 at CS 936/Old Pendergrass Road

**Submitted for approval:**

<u>C. Andy Coney</u> State Roadway Design Engineer	<u>6/20/13</u> DATE
<u>Jill Anne Decker</u> GDOT Project Manager	<u>7/10/2013</u> DATE
<u>David R. King</u> State Program Delivery Engineer	<u>7/25/2013</u> DATE

**Recommendation for approval:**

* <u>Glenn Bowman / KLP</u> State Environmental Administrator	<u>10-9-13</u> DATE
* <u>Kathy Zahal / KLP</u> State Traffic Engineer	<u>8-26-13</u> DATE

\* Recommendation on file  
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).

<u>Cynthia L. Kupper</u> State Transportation Planning Administrator	<u>8-2-13</u> DATE
---	-----------------------

**Approval:**

Concur: <u>[Signature]</u> GDOT Director of Engineering	<u>10/18/13</u> DATE
Approve: <u>[Signature]</u> GDOT Chief Engineer	<u>10/22/13</u> DATE



## PLANNING & BACKGROUND DATA

### Need and Purpose:

A signalized intersection in Jackson County has been identified for upgrade. The signal deficiency is characterized by the need and improvement to meet current design standards outlined in the Manual of Uniform Traffic Control Devices (MUTCD) and the American with Disabilities Act (ADA) requirements. These specific need for the signalized intersections improvement will aid in maximizing efficiency and effectiveness and include the following: need for modernization for cost-effective maintenance and communication capability, and signal operational capability to accommodate pedestrian traffic.

### Description of the proposed project:

The proposed project is located in Jackson County (100%). The project location consists of a traffic signalization upgrade including interconnect communication between intersections using fiber optics; countdown pedestrian signals, ADA wheel chair ramps, and cross walk striping. The project will end with volume data collection to develop and install signal coordination and timing.

The project consists of a signal upgrade, signal communication design, pedestrian facility improvements, and signal coordination at the following signalized intersections:

- SR 11 BUS/US 129 at CS 936/Old Pendergrass Rd/Dickson Dr, MP 1.96

**Federal Oversight:**  Exempt  State Funded  Other

**MPO:** Not Urban MPO Project ID

**Regional Commission:** Northeast Georgia RC RC Project ID

**Congressional District(s):** 9

**Projected Traffic:** AADT

Current Year: N/A Open Year: N/A Design Year: N/A

This project does not add capacity. Traffic service date is not required.

**Functional Classification (SR 11 BUS/US 129):** Rural Minor Arterial  
**(CS 936/Old Pendergrass Rd):** Rural Minor Collector

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

**Will Context Sensitive Solutions procedures be utilized?**  No  Yes

County: Jackson

**DESIGN AND STRUCTURAL DATA -**

**Mainline Design Features: SR 11 BUS/US 129**

Feature	Existing	Proposed
<b>Typical Section</b>		
- Number of Lanes	2	2
- Lane Width(s)	12 ft	12 ft
- Sidewalks	5 ft *	5 ft*
Posted Speed	35 – 45 mph	35 – 45 mph
Access Control	By Permit	By Permit
Right-of-Way Width	80 ft	80 ft

\*The existing sidewalk is only on the north side of Old Pendergrass Rd.  
The proposed sidewalk will only be at the crosswalk location.

**Major road Design Features: CS 936/Old Pendergrass Rd**

Feature	Existing	Proposed
<b>Typical Section</b>		
- Number of Lanes	2	2
- Lane Width(s)	11 ft	11 ft
Posted Speed	25 mph	25 mph
Access Control	By Permit	By Permit
Right-of-Way Width	60 ft	60 ft

**Major Structures:** N/A

**Major Interchanges/Intersections:** SR 11 BUS/US 129 at CS 936/Old Pendergrass Rd

**Utility Involvements:** City of Jefferson – Water and Sewer, Georgia Power Distribution, Windstream Communications (Telephone), Windstream Communications (CATV)

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

**SUE Required:**  No  Yes

**Railroad Involvement:** N/A

**Complete Streets - Bicycle, Pedestrian, and/or Transit Warrants:**

Warrants met:  None  Bicycle  Pedestrian  Transit

**Right-of-Way:**

Required Right-of-Way anticipated:  No  Yes  Undetermined  
Easements anticipated:  None  Temporary  Permanent  Utility  Other

Two right-of-way miters were purchased for this intersection under PI No. 0007350.

**Location and Design approval:**  No  Required  
**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:** No

**Design Variances to GDOT Standard Criteria anticipated:** No

**VE Study anticipated:** No

**ENVIRONMENTAL DATA**

**Anticipated Environmental Document:**  
 GEPA:  NEPA:  CE  PCE

**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

**MS4 Compliance – Is the project located in an MS4 area?**  No  Yes

**Environmental Permits/Variations/Commitments/Coordination anticipated:** This intersection is located along the Jeffersonville Historic Boundary. There are trees in the northwest quadrant of the intersection that are historic. Efforts to minimize the impacts to these trees have been incorporated into the design. Coordination with the City (who wishes to keep the trees) and with an arborist (to determine impacts) is anticipated. Two right-of-way miters were purchased under Project P.I. No. 0007350 for this intersection. The impacts of that purchase will be evaluated.

**NEPA/GEPA Comments & Information:** SR 11 BUS/US 129 at CS 936/Old Pendergrass Rd was removed from Let Project P.I. No. 0007350 due to adverse impacts to historic trees.

**PROJECT RESPONSIBILITIES**

**Project Activities:**

Project Activity	Party Responsible for Performing Task(s)
Concept Development	GDOT Roadway Design
Design	GDOT Roadway Design
Right-of-Way Acquisition	N/A
Utility Relocation	Utility Owners or Contractor
Letting to Contract	GDOT
Construction Supervision	GDOT District 1 Construction

Providing Material Pits	N/A
Providing Detours	N/A
Environmental Studies, Documents, and Permits	GDOT Environmental Services
Environmental Mitigation	GDOT Environmental Services
Construction Inspection & Materials Testing	GDOT District 1 Construction

Lighting required:             No             Yes

Other projects in the area: N/A

Other coordination to date: SR 11 BUS/US 129 at CS 936/Old Pendergrass Rd Signalized Intersection upgrade was developed with Project P.I. No. 0007350 through FFPR until the intersection was removed with the 1/30/13 Revised Concept Report.

**Project Cost Estimate and Funding Responsibilities:**

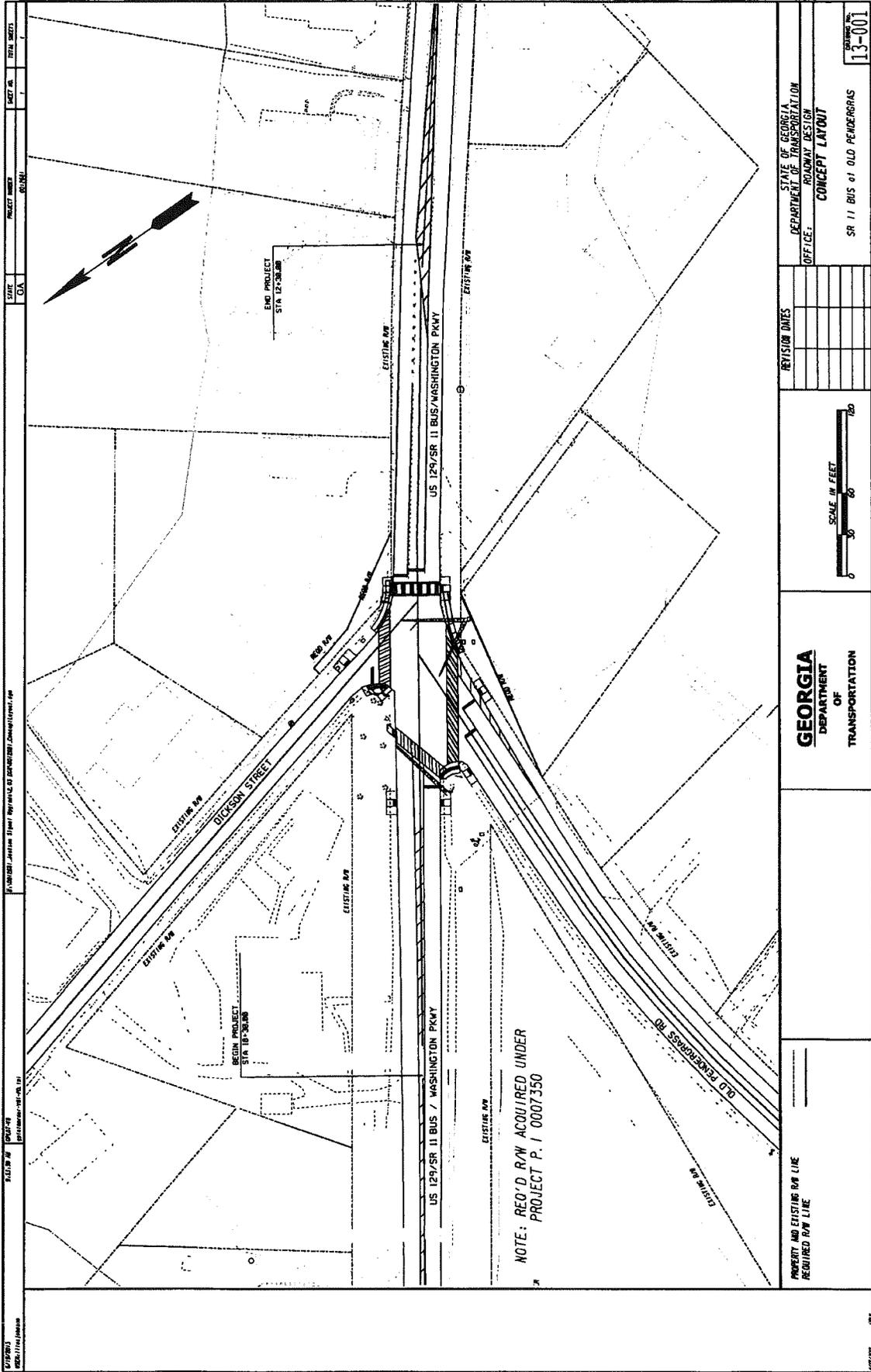
	Breakdown of PE	ROW	Reimbursable Utility	CST	Environmental Mitigation	Total Cost
By Whom	GDOT		GDOT	GDOT		
\$ Amount	\$50,000	\$0	\$50,000	\$208,934.25*	TBD	\$308,934.25
Date of Estimate	3/5/2013		6/27/2013	7/3/2013		

\*Cost includes 5% Engineering and Inspection

Comments/additional information: None

**Attachments:**

1. Concept Layout
2. Cost Estimates



NOTE: REQ'D R/W ACQUIRED UNDER PROJECT P. I 0007350

PROJECT NUMBER: 00104  
 SHEET NO.: 1  
 TOTAL SHEETS: 4  
 DATE: 01/11/07  
 DRAWN BY: J. HARRIS  
 CHECKED BY: J. HARRIS  
 PROJECT NAME: SR 11 BUS 01 OLD PENNINGTON

STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE: ROADWAY DESIGN CONCEPT LAYOUT SR 11 BUS 01 OLD PENNINGTON DRAWING NO. 13-001	REVISION DATES	SCALE: IN FEET 0 30 60 120
	PROPERTY AND EXISTING R/W LINE REQUIRED R/W LINE	

# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

## INTERDEPARTMENT CORRESPONDENCE

**FILE** 0012681, Jackson **OFFICE** GAINESVILLE  
 PI No. 0012681  
**FROM** *NAK* Nell Kantner, P.E., District Utilities Eng. **DATE** 6/27/2013  
  
**TO** Genetha Rice-Singleton, P.E., State Program Delivery Engineer  
**ATTEN** Suzanne Dunn, 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
Atlanta Gas Light		\$0	\$0
City of Jefferson - W/S		\$5,000	\$0
Georgia Power Distribution		\$0	\$50,000
Windstream Telecommunication		\$5,000	\$0
Windstream CATV		\$2,500	\$0
<b>TOTALS</b>		<b>\$12,500</b>	<b>\$50,000</b>
<b>Total Non-Reimbursable Cost</b>		<b>\$12,500</b>	
<b>Total Reimbursable Cost</b>			<b>\$50,000</b>

If you have any questions, please contact Neil Kantner at 770-532-5510.

NAK

**C:** Mike Bolden, State Utilities Engineer  
 Dana Garrison, Area Engineer  
 File

# DETAILED COST ESTIMATE



**Job: 0012681**

JOB NUMBER 0012681

FED/STATE PROJECT NUMBER

SPEC YEAR: 01

DESCRIPTION: SR 11 BUS/US 129 AT OLD PENDERGRASS ES  
TRAFFIC SIGNAL UPGRADE

**ITEMS FOR JOB 0012681**

**0010 - TRAFFIC SIGNALS**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0010	615-1200	258.000	LF	\$13.57916	DIRECTIONAL BORE - 0012681	\$3,503.42
0015	639-3004	2.000	EA	\$9,439.81369	STEEL STRAIN POLE, TP IV	\$18,879.63
0020	647-1000	1.000	LS	\$88,100.00000	TRAF SIGNAL INSTALLATION NO - 1	\$88,100.00
0018	937-6050	4.000	EA	\$4,376.77546	INT VIDEO DET SYS ASMBLY, TP A	\$17,507.10
0019	937-8030	1.000	LS	\$6,000.00000	TESTING - INTERSECTION VIDEO DETECTION	\$6,000.00
<b>SUBTOTAL FOR TRAFFIC SIGNALS:</b>						<b>\$133,990.15</b>

**0020 - SIGN AND MARKINGS**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0025	636-1041	106.000	SF	\$31.00780	HWY SIGNS,TP 2MAT,REFL SH TP 9	\$3,286.83
0030	636-2070	48.000	LF	\$9.47035	GALV STEEL POSTS, TP 7	\$454.58
0035	652-5451	2000.000	LF	\$0.14913	SOLID TRAF STRIPE, 5 IN, WHITE	\$298.26
0040	652-5452	700.000	LF	\$0.42798	SOLID TRAF STRIPE, 5 IN, YELLO	\$299.59
0045	652-5701	70.000	LF	\$2.30267	SOLID TRAF STRIPE, 24", WHITE	\$161.19
0050	652-5801	900.000	LF	\$1.16329	SOLID TRAF STRIPE, 8 IN, WHITE	\$1,046.96
0060	653-0120	4.000	EA	\$98.05828	THERM PVMT MARK, ARROW, TP 2	\$392.23
0065	653-0130	2.000	EA	\$112.19169	THERM PVMT MARK, ARROW, TP 3	\$224.38
0140	653-3501	100.000	GLF	\$0.73072	THERMO SKIP TRAF ST, 5 IN, WHI	\$73.07
0055	653-6006	813.000	SY	\$4.07391	THERM TRAF STRIPING, YELLOW	\$3,312.09
0130	654-1001	6.000	EA	\$6.41010	RAISED PVMT MARKERS TP 1	\$38.46
0135	654-1003	16.000	EA	\$5.81438	RAISED PVMT MARKERS TP 3	\$93.03
0079	656-0050	300.000	LF	\$0.53328	REM EX SLD TRF STRIPE, 5",THER	\$159.98
0078	656-0240	275.000	LF	\$5.27123	REM EX SLD TRF STRIPE,24",THER	\$1,449.59
<b>SUBTOTAL FOR SIGN AND MARKINGS:</b>						<b>\$11,290.24</b>

**0030 - ROADWAY**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0080	150-1000	1.000	LS	\$10,000.00000	TRAFFIC CONTROL - 0012681	\$10,000.00
0145	210-0100	1.000	LS	\$20,000.00000	GRADING COMPLETE - 0012681	\$20,000.00
0085	441-0108	129.000	SY	\$74.91161	CONC SIDEWALK, 8 IN	\$9,663.60
0160	441-6222	207.000	LF	\$26.11465	CONC CURB & GUTTER/ 8"X30"TP2	\$5,405.73
0165	634-1200	6.000	EA	\$140.51964	RIGHT OF WAY MARKERS	\$843.12
<b>SUBTOTAL FOR ROADWAY:</b>						<b>\$45,912.45</b>

# DETAILED COST ESTIMATE



Job: 0012681

**0040 - EROSION CONTROL**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0005	163-0232	1.000	AC	\$406.81472	TEMPORARY GRASSING	\$406.81
0095	163-0240	13.000	TN	\$262.18909	MULCH	\$3,408.46
0100	165-0010	144.000	LF	\$1.09980	MAINT OF TEMP SILT FENCE, TP A	\$158.37
0105	171-0010	288.000	LF	\$1.77734	TEMPORARY SILT FENCE, TYPE A	\$511.87
0115	700-7000	3.000	TN	\$79.78744	AGRICULTURAL LIME	\$239.36
0120	700-8000	1.000	TN	\$531.91219	FERTILIZER MIXED GRADE	\$531.91
0125	700-8100	50.000	LB	\$2.35439	FERTILIZER NITROGEN CONTENT	\$117.72
0155	700-9300	280.000	SY	\$8.63365	SOD	\$2,417.42
<b>SUBTOTAL FOR EROSION CONTROL:</b>						<b>\$7,791.92</b>

**TOTALS FOR JOB 0012681**

<b>ITEMS COST:</b>	<b>\$198,984.76</b>
<b>COST GROUP COST:</b>	<b>\$0.00</b>
<b>ESTIMATED COST:</b>	<b>\$198,984.76</b>
<b>CONTINGENCY PERCENT:</b>	<b>0.00</b>
<b>ENGINEERING AND INSPECTION:</b>	<b>0.00</b>
<b>ESTIMATED COST WITH CONTINGENCY AND E&amp;I:</b>	<b>\$198,984.76</b>