

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

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

FILE P.I. # 0010883 **OFFICE** Design Policy & Support
Fulton County
GDOT District 7 - Metro Atlanta **DATE** December 17, 2013
Traffic Signal & Pedestrian Improvements
On SR 139

FROM  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
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
Jeff Fletcher, Statewide Location Bureau Chief
Emmanuella Myrthil, State Safety Program Coordinator
Rachel Brown, District Engineer
Scott Lee, District Preconstruction Engineer
Patrick Allen, District Utilities Engineer
Perry Black, Project Manager
BOARD MEMBER - 5th Congressional District

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

Project Type: Reconstruction/
Rehabilitation P.I. Number: 0010883
 GDOT District: 7 County: Fulton
 Federal Route Number: N/A State Route Number: 139
 Project Number: _____

Traffic Signal Upgrades for 5 Signals along SR 139 in Fulton County.

Submitted for approval:

<u>Douglas Tilt & ARCADIS, U.S., Inc.</u>	<u>10/18/13</u>
DATE	
<u>State Program Delivery Engineer</u>	<u>10/29/2013</u>
DATE	
<u>GDOT Project Manager</u>	<u>10/25/13</u>
DATE	

Recommendation for approval:

<u>Program Control Administrator</u>	<u>DATE</u>
<u>* Glenn Bowman / KLP</u>	<u>11/6/2013</u>
State Environmental Administrator	DATE

<u>State Traffic Engineer</u>	<u>DATE</u>
<u>* Lisa Myers / KLP</u>	<u>11/4/2013</u>
Project Review Engineer	DATE

<u>* Jun Birnkammer / KLP</u>	<u>11/2/2013</u>
FOR State Utilities Engineer	DATE

<u>District Engineer</u>	<u>DATE</u>
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<u>State Bridge Design Engineer</u>	<u>DATE</u>
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<u>State Transportation Financial Management Administrator</u>	<u>DATE</u>
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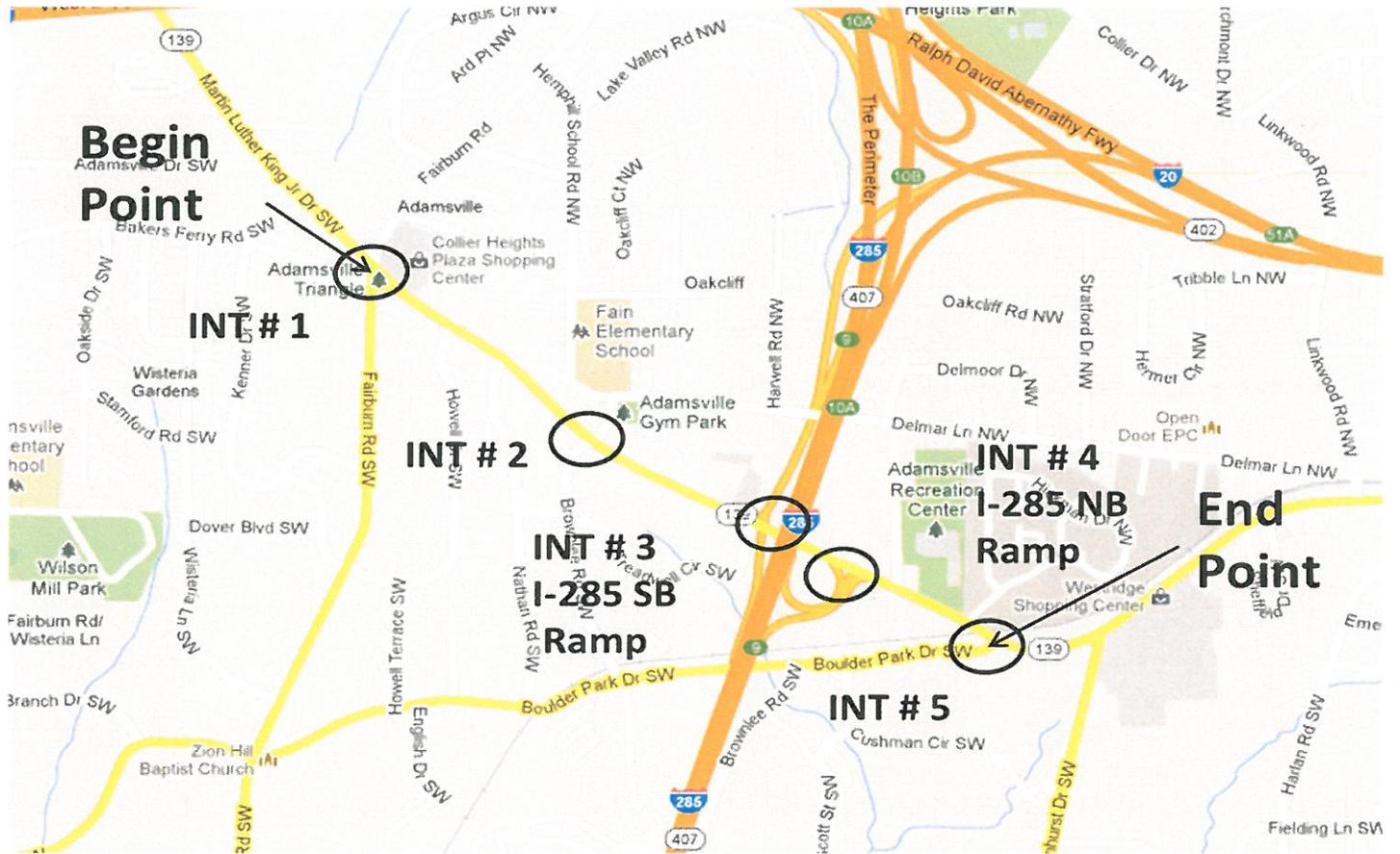
* Recommendation on file
 The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).

<u>State Transportation Planning Administrator (recommendation required)</u>	<u>11-4-13</u>
	DATE

County: Fulton

PROJECT LOCATION

Project Location Map



PLANNING & BACKGROUND DATA

Project Justification Statement: The project consists of traffic signal upgrades on SR 139 at five locations in Fulton County. Specific improvements will bring the intersections into compliance with current design standards and will include: modernization of traffic signal equipment, and improved pedestrian accommodations. No additional lanes will be added under this project.

Description of the proposed project: The proposed project is located in Fulton County, in the City of Adamsville. The approximate length of the project is 1 mile, and will consist of traffic signalization upgrades, including LED vehicular signals, countdown pedestrian signals, ADA wheelchair ramps, and crosswalk striping at all 5 intersections.

Federal Oversight: Full Oversight Exempt State Funded Other

MPO: Atlanta Regional Commission (ARC)

MPO Project ID N/A

Regional Commission: Atlanta Regional Commission

RC Project ID AR-123-2014

Congressional District(s): 5

Projected Traffic: This project will not add capacity

Current Year (20WW): N/A Open Year (20XX): N/A Design Year (20YY): N/A
Traffic Projections Performed by:

Functional Classification (Mainline): Urban Minor Arterial Street

- SR 139 (Martin Luther King Jr. Dr.)
- **Urban Collector Street**
 - I-285 SB Ramp
 - I-285 NB Ramp
- **Urban Minor Arterial Street**
 - Fairburn Rd
 - Brownlee Rd
 - Boulder Park Dr.

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

Is this project on a designated Bike Route, Pedestrian Plan, or Transit Network?

- None Bike Route Pedestrian Plan Transit Network
MARTA Bus Route
ARP

CONTEXT SENSITIVE SOLUTIONS

County: Fulton

Issues of Concern: N/A

Context Sensitive Solutions: N/A

DESIGN AND STRUCTURAL DATA

Mainline Design Features: SR 139 (Martin Luther King Jr. Dr.)

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	5		N/A
- Lane Width(s)	12 ft.		N/A
- Median Width & Type	14 ft. , 2-way		N/A
- Outside Shoulder or Border Area Width	4		N/A
- Outside Shoulder Slope	N/A		N/A
- Inside Shoulder Width	N/A		N/A
- Sidewalks	5		N/A
- Auxiliary Lanes	Yes (Left and Right turn lanes)		N/A
- Bike Lanes	N/A		N/A
Posted Speed	35		N/A
Design Speed	N/A		N/A
Min Horizontal Curve Radius	N/A		N/A
Super elevation Rate	N/A		N/A
Grade	N/A		N/A
Access Control	N/A		N/A
Right-of-Way Width	N/A		N/A
Maximum Grade – Crossroad	N/A		N/A
Design Vehicle	N/A		N/A
<i>Additional Items as needed</i>	N/A		N/A

*According to current GDOT design policy if applicable

County: Fulton

Side Road Design Features: Fairburn Rd., I -285 Ramps,

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	3		N/A
- Lane Width(s)	12 ft.		N/A
- Median Width & Type	Undivided		N/A
- Outside Shoulder or Border Area Width	12 striped out		N/A
- Outside Shoulder Slope	N/A		N/A
- Inside Shoulder Width	N/A		N/A
- Sidewalks	5		N/A
- Auxiliary Lanes	Yes (Left and Right turn lanes)		N/A
- Bike Lanes	N/A		N/A
Posted Speed	N/A		N/A
Design Speed	N/A		N/A
Min Horizontal Curve Radius	N/A		N/A
Super elevation Rate	N/A		N/A
Grade	N/A		N/A
Access Control	N/A		N/A
Right-of-Way Width	N/A		N/A
Maximum Grade – Crossroad	N/A		N/A
Design Vehicle	N/A		N/A
Concrete Island	4 ft.		N/A

Major Structures:

Major Interchanges/Intersections: I-285 @ SR 139 (Martin Luther King Jr. Dr.)

Utility Involvements:

City of Atlanta – Sewer

City of Atlanta – Water

AT&T - Communication

Comcast - Communication

Georgia Power – Electrical

Zayo Fiber Solutions - Communication

Public Interest Determination Policy and Procedure recommended (Utilities)? No YesSUE Required: No Yes

County: Fulton

Railroad Involvement: A CSX RR bridge is located in NW & SW quadrants of the SR 139 at Boulder Park Drive intersection. A RR agreement will need to be executed to perform work on existing signal poles in this area.

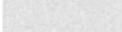
Complete Streets - Bicycle, Pedestrian, and/or Transit Warrants: N/A

Warrants met: None Bicycle Pedestrian Transit

Right-of-Way:

Required Right-of-Way anticipated: No Yes Undetermined

Easements anticipated: None Temporary Permanent Utility Other

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

Temporary easement will be needed from CSX Railroad to attached span wire to signal pole.

Location and Design approval: Not Required Required

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	Undetermined	Yes	Appvl Date (if applicable)
1. Design Speed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Lane Width	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Shoulder Width	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Bridge Width	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Horizontal Alignment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Superelevation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Vertical Alignment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Grade	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Stopping Sight Distance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Cross Slope	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Vertical Clearance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

County: Fulton

12. Lateral Offset to Obstruction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Bridge Structural Capacity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Median Usage & Width	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Intersection Skew Angle	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Lateral Offset to Obstruction	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Intersection Sight Distance	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Bike, Pedestrian & Transit Accommodations	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. GDOT Drainage Manual	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Georgia Standard Drawings	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. GDOT Bridge & Structural Manual	Bridge Design	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Roundabout Illumination	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Rumble Strips	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Safety Edge	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

VE Study anticipated: No Yes Completed – Date:

ENVIRONMENTAL DATA

Anticipated Environmental Document:

GEPA: NEPA: CE EA/FONSI EIS

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

This project is exempt and does not add capacity or change roadway conditions therefore it is excluded from a CO hotspot. To be included in lump sum funds.

County: Fulton

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

This project consists of a minor signal upgrades including strain poles, ADA ramps, and conduits. This project requires less than 1 acre of land disturbance, therefore is exempt from compliance with MS4 permit as described in Section 4.2.5.1a permit.

Environmental Permits/Variations/Commitments/Coordination anticipated: *List all anticipated permits, variations, commitments, and coordination needed –Section 404, TVA, Water Quality, etc.*

Permit/ Variance/ Commitment/ Coordination Anticipated	No	Yes	Remarks
1. U.S. Coast Guard Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Forest Service/Corps Land	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. CWA Section 404 Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Tennessee Valley Authority Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Buffer Variance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. Coastal Zone Management Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7. NPDES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Less than 1 disturbed acre
8. FEMA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Cemetery Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
10. Other Permits	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
11. Other Commitments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12. Other Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Is a PAR required? No Yes Completed – Date:

NEPA/GEPA: Early coordination, field studies and special study reports underway, PCE anticipated.

Ecology: Early coordination underway; field study to begin soon, no ecological impacts anticipated.

History: Field study complete, 1 NRHP eligible historic property (CSX RR ROW). Report in production

Archeology: Field study complete, No NRHP eligible historic properties. Report in production.

Air & Noise: PM 2.5 exempt submitted, awaiting approval for Air Quality Report. Noise Screening Assessment Memo submitted.

Public Involvement: Not anticipated

County: Fulton

Major stakeholders:

- Georgia Department of Transportation
- CSX Railroad
- Traveling Public
- First Responders/Public Safety
- Fulton County
- City of Atlanta
- City of Adamsville

CONSTRUCTION

Issues potentially affecting constructability/construction schedule: N/A

Early Completion Incentives recommended for consideration: No Yes**PROJECT RESPONSIBILITIES****Project Activities:**

Project Activity	Party Responsible for Performing Task(s)
Concept Development	<ul style="list-style-type: none"> • GDOT Office of Program Delivery • Stantec • ARCADIS U.S. Inc.
Design	Arcadis
Right-of-Way Acquisition	Not Anticipated
Utility Relocation	None Anticipated
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	GDOT
Providing Detours	GDOT
Environmental Studies, Documents, and Permits	GDOT
Environmental Mitigation	N/A
Construction Inspection & Materials Testing	GDOT

Lighting required: No Yes

Initial Concept Meeting: N/A

Concept Meeting: 9-10-2013

Other projects in the area: None

Other coordination to date: N/A

Project Cost Estimate and Funding Responsibilities:

	Breakdown of PE	ROW	Reimbursable Utility	CST*	Environmental Mitigation	Total Cost
By Whom	GDOT	GDOT	GDOT	GDOT	N/A	
\$ Amount	225,000	0	0	649,298.94 675,688	0	\$900,688.76
Date of Estimate	11/20/2013	11/20/2013	11/20/2013	11/20/2013	11/20/2013	

*CST Cost includes: Construction, Engineering and Inspection.

Other alternates considered: None

Comments:

Attachments:

1. Concept Meeting Minutes
2. Field Visit Concept Meeting Minutes
3. Construction Cost Estimate

APPROVALS

Concur: *Joe Caspino* 12/6/2013
 Director of Engineering

Approve: *Bill R M: M*
 Chief Engineer

12/12/13
 Date



ARCADIS
2410 Paces Ferry Road
Suite 400
Atlanta
Georgia 30339
Tel 770.431.8666
Fax 770.435.2666

MEETING MINUTES

Subject:
Initial Concept Meeting Minutes
Traffic Signal Upgrade Project
Fulton County

PI Numbers:
PI0010883

Department:
Georgia Department of Transportation

Place/Date of Meeting:
Georgia Department of Transportation
District 7

September 10, 2013

Minutes by:
Dino Pampolina

Issue Date:
September 11, 2013

Participants:
Perry Black, GDOT- Office of Program Delivery
Jill Franks, GDOT- Office of Utilities
Leisa Jones, GDOT- Office of Utilities
Adam Archual, HNTB
Doug Tilt, ARCADIS
Jim Tolson, ARCADIS
Dino Pampolina, ARCADIS

Copies:
Participants

General Comments:

- Perry mentioned the schedule if Right of way is needed due date is December 2014, PFPR is May July 2014, Letting Date is Nov 2015 and will be open to traffic August 2016. Cost estimate is \$642,680.
- Perry received comments from District 7 Traffic Operations that recommended adding several intersections to this project including HAWK signals. Perry indicated that it will be taken into consideration but it would be very doubtful due to schedule restraints. Recent directives from the Chief Engineer has placed keeping projects on schedule as a top priority. If there is a need for additional work then another project should be programmed.
- Suggested that we label the I-285 Ramps on location map on Concept Report. Also suggested we label northbound/southbound. I would recommend just putting a North arrow on drawing.

ARCADIS

- Leisa commented that this project may need SUE level B. She will verify with her boss. If needed this cost is covered by their consultant that they have under contract, and would not impact the schedule. Also, this would act as the first utility submission.
- Perry mentions that we may need section 24-utilities?
- Perry asked about temporary easement and said that if need we would need to do right of way plans.
- Jill suggested that we add railroad temporary easement to the concept report because we will be attaching to the pole on railroad right of way. Then send her the plan sheet with a write up of the impacts. She will handle RR coordination.
- Perry asks that we list the Utility owners.
- Jill stated RR owner is CSX. I suggest we list them. Also I would suggest that in our statement we say CSX is only affected at one location (list location). And the impact is a temporary easement for attachments to existing signal pole.
- Adam will get started on environmental after the meeting. Adam stated he will look a possibly considering a PCE document.
- Perry will look into the need for MS4.
- Perry said that the Utility Cost Estimate was submitted a few weeks ago.
- Add Fulton County and City of Adamsville to Major Stakeholder list.
- Take Right of Way Estimate off list of attachments.



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Tel 770.431.8666
Fax 770.435.2666

MEETING MINUTES

Subject:
Field Visit Concept Meeting Minutes
Traffic Signal Upgrade Project
Fulton County

PI Numbers:
PI0010883

Department:
Georgia Department of Transportation

Place/Date of Meeting:
SR 139

September 19, 2013

Minutes by:
Dino Pampolina

Issue Date:
September 20, 2013

Participants:
Perry Black, GDOT- Office of Program Delivery
Yalonda Pride-Foster, GDOT- Office of Utilities
Brad Humphrey, GDOT- Traffic Operations
Troy Gallaway, GDOT-Traffic Operations
Alan Davis, GDOT-Traffic Operations
Tim Hatton, HNTB
Adam Archual, HNTB
Larry Overn, STANTEC
Doug Tilt, ARCADIS
Jim Tolson, ARCADIS

Copies:
Participants

General Comments:

- Perry mentioned that there have been changes to the PDP and this would help the environmental process.
- Alan and Troy stated that they did want to use flashing yellow heads.
- All parties were in agreement that was a need for communication, but it would have to be done with another task order because it would consist of signals out of our scope.
- Yalonda asks if we could send her our preliminary design and this would be our 1st and 2nd Utility submission.

ARCADIS

- Perry and Troy will provide us with the TIP#, ARC #, and RC #.
- Suggested that we add GPS Clocks in all cabinets for coordination.

Intersection Comments:

- **SR 139 @ Fairburn Rd.**
- Brad with District 7 told us the signal heads have been replaced due to hanging to low and getting hit.
- Will upgrade all signal heads, ADA ramps, Cabinets, striping, crosswalks, peds.
- Doug suggested the Dino add mast arms with elevation and send to Yalonda so she can get a Utility estimate. Then we will decide the next course of action.
- **SR 139 @ Brownlee Rd.**
- Will replace the NW & SW poles with concrete poles, cabinet, peds add ADA ramps, striping and crosswalks.
- Will use spilt phasing because of sight distance on side street.
- **SR 139 @ I-285 SB Ramp.**
- Will replace all poles with new concrete poles, and relocate cabinet to SW corner.
- On the SW corner will determine if we can put a 75" radius so we can add concrete island
- Will relocate the crosswalk to the westside of the intersection.
- Will use video detection for the bridge.
- Will replace all signal heads because they are hanging to low.
- **SR 139 @ I-285 NB Ramp.**
- We will replace all new strain poles, signal heads, all new peds, cabinet, ADA ramps, add 2 concrete island and increase the size on the SE quadrant. To improve safety we will move the stop bar up in front of the driveway on the NE quadrant.
- Will remove signal head on SW pole.
- **SR 139 @ Boulder Park Dr.**
- Will upgrade to ADA ramps, all signal heads and add tether wire to keep the span tight.
- Will keep video detection for railroad leg.
- Will add use crosswalk sign R9-3a and R9-3b.
- Will replace striping and peds.

DATE : 11/19/2013

0010883
STATE HIGHWAY AGENCY
JOB DETAIL ESTIMATE

JOB NUMBER : 0010883
DESCRIPTION: SR 139 @ 5 LOCATION- SIGNAL UPGRADES FULTON CO.

SPEC YEAR: 01

ITEMS FOR JOB 0010883

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	647-1000		LS	TRAF SIGNAL INSTALLATION NO - TRAFFIC	1.000	53500.00	53500.00
0010	647-1000		LS	SIGNAL INSTALLATION NO 1	1.000	48500.00	48500.00
0015	647-1000		LS	TRAF SIGNAL INSTALLATION NO - TRAFFIC	1.000	75500.00	75500.00
0020	647-1000		LS	SIGNAL INSTALLATION NO 3	1.000	82500.00	82500.00
0025	647-1000		LS	TRAF SIGNAL INSTALLATION NO - TRAFFIC	1.000	90500.00	90500.00
0030	150-1000		LS	TRAFFIC CONTROL - TRAFFIC CONTROL	1.000	40000.00	40000.00
0035	441-0108		SY	CONC SIDEWALK, 8 IN	2332.000	3.90	9101.94
0040	441-0748		SY	CONC MEDIAN, 6 IN	1674.000	35.03	58646.36
0045	441-6222		LF	CONC CURB & GUTTER/ 8"X30"TP2	494.000	3.92	1940.68
0050	636-1041		SF	HWY SIGNS, TP ZMAT, REFL SH TP 9	170.000	31.91	5424.76
0055	639-4004		EA	STRAIN POLE, TP IV	17.000	5910.46	100477.98
0060	647-2130		EA	PULL BOX, PB-3	5.000	363.90	1819.53
0065	653-0120		EA	THERM PVMT MARK, ARROW, TP 2	11.000	89.75	987.30
0070	653-1501		LF	THERMO SOLID TRAF ST 5 IN, WHI	7643.000	0.54	4194.94
0075	653-1502		LF	THERMO SOLID TRAF ST, 5 IN YEL	6478.000	0.74	4803.24
0080	653-1704		LF	THERM SOLID TRAF STRIPE, 24", WH	416.000	0.30	124.90
0085	653-1804		LF	THERM SOLID TRAF STRIPE, 8", WH	3387.000	1.12	3802.31
0090	653-3501		GLF	THERMO SKIP TRAF ST, 5 IN, WHI	1059.000	1.88	1992.05
0095	653-3502		GLF	THERMO SKIP TRAF ST, 5 IN, YEL	3607.000	0.26	973.82
0100	654-1001		EA	RAISED PVMT MARKERS TP 1	80.000	16.54	1323.26
0105	654-1003		EA	RAISED PVMT MARKERS TP 3	96.000	7.53	723.29
0110	682-6222		LF	CONDUIT, NONMETL, TP 2, 2 IN	150.000	7.83	1175.88
0115	682-6233		LF	CONDUIT, NONMETL, TP 3, 2 IN	300.000	3.66	1098.00
0120	937-6050		EA	INT VIDEO DET SYS ASMBLY, TP A	7.000	4313.10	30191.72
0125	700-6910		AC	PERMANENT GRASSING	1.000	875.42	875.42
0130	700-7000		TN	AGRICULTURAL LIME	1.000	131.27	131.27
0135	700-8000		TN	FERTILIZER MIXED GRADE	1.000	498.01	498.01
0140	700-8100		LB	FERTILIZER NITROGEN CONTENT	150.000	1.98	297.01
0145	700-9300		SY	SOD	2500.000	7.86	19655.35
0150	713-3001		SY	WOOD FIBER BLANKET, TP I, SLOPES	2500.000	1.10	2754.08
ITEM TOTAL							643513.09

KUL ESI

CONFINGENCY PERCENT (5.0) :
ESTIMATED TOTAL:

32175.66
675688.76

JOB DETAIL ESTIMATE

MARTA Bus Route 73

Routes Intersecting at
Hamilton E. Holmes Station:
Rutas Intersectando en la
Estación Hamilton E. Holmes:

- 3-Martin Luther King Jr. Dr./Auburn Ave.
- 56-Adamsville/Collier Heights
- 60-Hightower/Moores Mill
- 66-Lynhurst Rd./Barge Rd. Park/Ride
- 73-Fulton Industrial
- 153-Hamilton E. Holmes Dr./Browntown
- 165-Fairburn Rd./Barge Rd. Park/Ride
- 170-Brownlee Rd./Peyton
- 201-Six Flags Over Georgia Shuttle

