

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. # 0012818 **OFFICE** Design Policy & Support
Fulton County
GDOT District 7 - Metro Atlanta **DATE** 3/27/2015
Signal Equipment Upgrades: SR 3 at 14
locations and SR 6 at 2 locations

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:

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
Andrew Heath, 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
Richard Cobb, Statewide Location Bureau Chief
Kathy Zahul, District Engineer
Scott Lee, District Preconstruction Engineer
Xavier James, Project Manager
BOARD MEMBER - 5th Congressional District

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

Project Type: Reconstruction/
Rehabilitation P.I. Number: 0012818
GDOT District: 7 County: Fulton
Federal Route Number: US 19/41 State Route Number: SR 3/SR 6

SIGNAL EQUIPMENT UPGRADES: SR 3 @ 14 LOC & SR 6 @ 2 LOCS IN FULTON

Submitted for approval:
 1/28/2015
Lawrence Overn, P.E. Stantec Consulting Services, Inc. DATE
Albert V. Shelby III 2/3/2015
State Program Delivery Engineer DATE
Xavier J. Jernard 1/28/15
GDOT Project Manager DATE

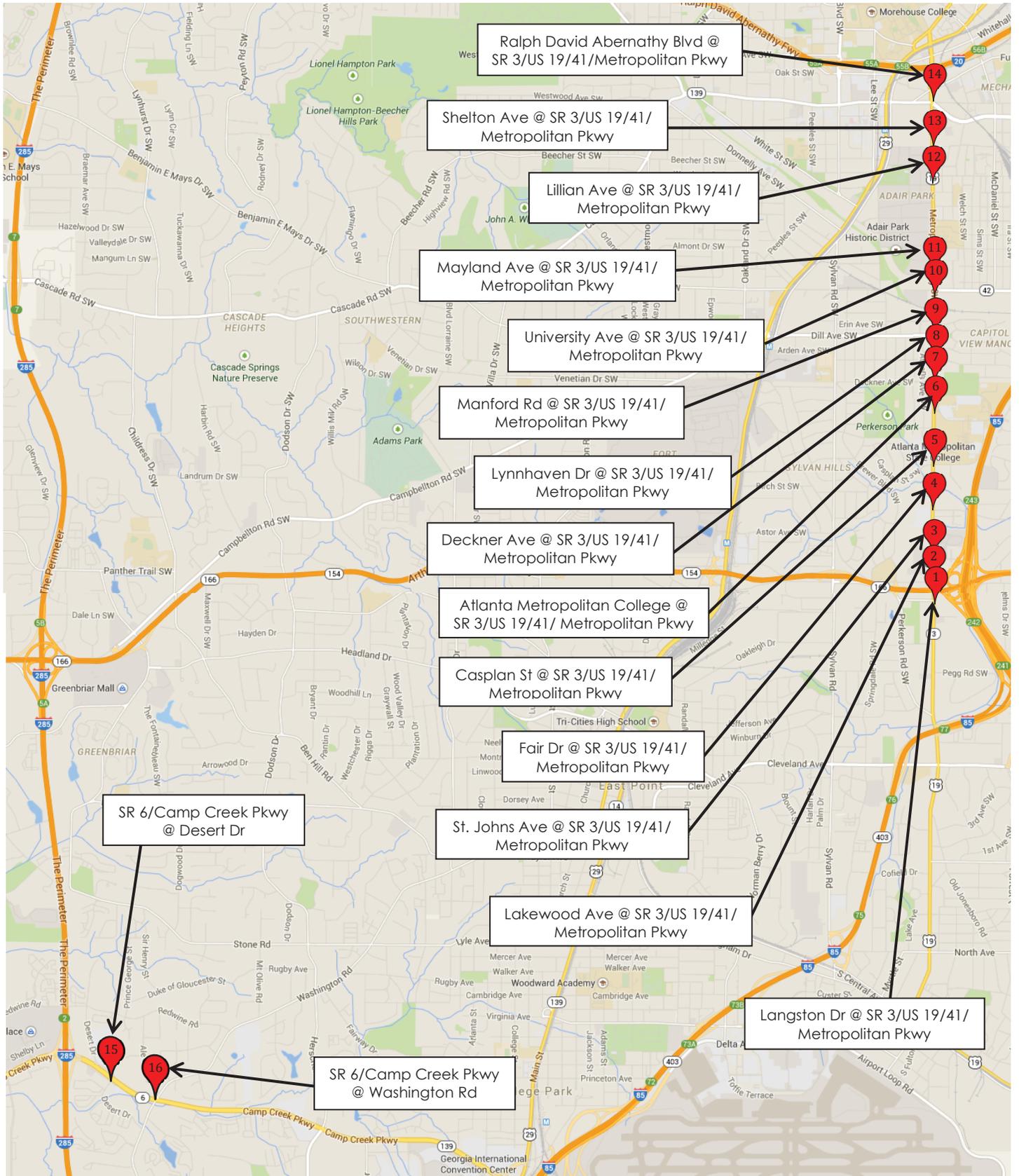
Recommendation for approval:
HIRAL PATEL 2/23/2015
State Environmental Administrator DATE
ANDREW HEATH 2/20/2015
State Traffic Engineer DATE

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 L. VANDUYKE 2/11/2015
State Transportation Planning Administrator DATE

Approval:
Concur:  3/23/2015
GDOT Director of Engineering DATE
Approve:  3.24.15
GDOT Chief Engineer DATE

PROJECT LOCATIONS



PLANNING & BACKGROUND DATA

Project Justification Statement: P.I. Number: 0012818

The following intersections located in Fulton County have been identified by The Office of Traffic Operations as high priority for minor intersection improvements. The proposed project is to be included in the Region wide Signal Upgrade Program Lump Sum.

1. SR 3/US 19/41/Metropolitan Parkway @ Langston Drive
2. SR 3/US 19/41/Metropolitan Parkway @ Lakewood Avenue
3. SR 3/US 19/41/Metropolitan Parkway @ St. Johns Avenue
4. SR 3/US 19/41/Metropolitan Parkway @ Fair Drive
5. SR 3/US 19/41/Metropolitan Parkway @ Casplan Street
6. SR 3/US 19/41/Metropolitan Parkway @ Atlanta Metropolitan College
7. SR 3/US 19/41/Metropolitan Parkway @ Deckner Avenue
8. SR 3/US 19/41/Metropolitan Parkway @ Lynnhaven Drive
9. SR 3/US 19/41/Metropolitan Parkway @ Manford Road
10. SR 3/US 19/41/Metropolitan Parkway @ University Avenue
11. SR 3/US 19/41/Metropolitan Parkway @ Mayland Avenue
12. SR 3/US 19/41/Metropolitan Parkway @ Lillian Avenue
13. SR 3/US 19/41/Metropolitan Parkway @ Shelton Avenue
14. SR 3/US 19/41/Metropolitan Parkway @ Ralph David Abernathy Boulevard
15. SR 6/Camp Creek Parkway @ Desert Drive
16. SR 6/Camp Creek Parkway @ Washington Road

The project will upgrade equipment, accommodate pedestrians, and update pedestrian facilities to meet current ADA standards. The Office of Traffic Operations has justified these upgrades based on the following deficiencies: pedestrian accommodations, ADA compliance, old conductor cable, 332 cabinet w/2070-1C, support poles/mast arms, utility issues, and Fiber Optic (hard line) signal interconnect. See attached Kickoff Meeting Minutes dated October 30th, 2014 for further details at each intersection.

The standard project limits will be 200 feet from the center point of the intersection; should setback loops need replacement, the project limits will be 500 feet from the center point of the intersection. If setback loops are present, the survey should include the edge of pavement and property lines to the setback loop. Standard erosion control details should be used. Traffic studies are not needed for this project. The scope of this project will be limited to equipment upgrades, pedestrian accommodations, and updating pedestrian facilities to meet ADA standards. Funding is provided by ARC. All communications and meetings involving this project should include the Office of Traffic Operations.

Table 1: Intersection Upgrade Needs

County	City	Primary Route	Intersecting Road	Reason for Upgrade
Fulton	Atlanta	SR 3/US 19/41/ Metropolitan Parkway	Langston Drive	Obsolete Equipment/ADA
Fulton	Atlanta	SR 3/US 19/41/ Metropolitan Parkway	Lakewood Drive	Obsolete Equipment/ADA
Fulton	Atlanta	SR 3/US 19/41/ Metropolitan Parkway	St. Johns Avenue	Obsolete Equipment/ADA
Fulton	Atlanta	SR 3/US 19/41/ Metropolitan Parkway	Fair Drive	Obsolete Equipment/ADA
Fulton	Atlanta	SR 3/US 19/41/ Metropolitan Parkway	Casplan Street	Obsolete Equipment/ADA
Fulton	Atlanta	SR 3/US 19/41/ Metropolitan Parkway	Atlanta Metropolitan College	Obsolete Equipment/ADA
Fulton	Atlanta	SR 3/US 19/41/ Metropolitan Parkway	Deckner Avenue	Obsolete Equipment/ADA
Fulton	Atlanta	SR 3/US 19/41/ Metropolitan Parkway	Lynnhaven Drive	Obsolete Equipment/ADA
Fulton	Atlanta	SR 3/US 19/41/ Metropolitan Parkway	Manford Drive	Obsolete Equipment/ADA
Fulton	Atlanta	SR 3/US 19/41/ Metropolitan Parkway	University Avenue	Obsolete Equipment/ADA
Fulton	Atlanta	SR 3/US 19/41/ Metropolitan Parkway	Mayland Avenue	Obsolete Equipment/ADA
Fulton	Atlanta	SR 3/US 19/41/ Metropolitan Parkway	Lillian Avenue	Obsolete Equipment/ADA
Fulton	Atlanta	SR 3/US 19/41/ Metropolitan Parkway	Shelton Avenue	Obsolete Equipment/ADA
Fulton	Atlanta	SR 3/US 19/41/ Metropolitan Parkway	Ralph David Abernathy Boulevard	Obsolete Equipment/ADA
Fulton	Atlanta	SR 6/Camp Creek Parkway	Desert Drive	Obsolete Equipment/ADA
Fulton	Atlanta	SR 6/Camp Creek Parkway	Washington Road	Obsolete Equipment/ADA

Existing conditions:

1. SR 3/US 19/41/Metropolitan Parkway @ Langston Drive

- SR 3/US 19/41/Metropolitan Parkway Mainline Design Features:
 - This roadway has 4 lanes with curb. There are 10-foot wide sidewalks on both sides. There are crosswalks on the south and west sides of the intersection. There are no bike lanes on SR 3/US 19/41/Metropolitan Parkway.
- Langston Drive Side Road Features:
 - This roadway creates a "T-intersection" with SR 3/US 19/41/Metropolitan Parkway, has 2 lanes with curb on the south side, and a dedicated left-turn lane on the west approach. There is a 5-foot wide sidewalk on the south side of Langston Drive with a

crosswalk. There are no bike lanes on Langston Drive. There is also a curb cut to an undeveloped lot opposite of Langston Drive.

2. SR 3/US 19/41/Metropolitan Parkway @ Lakewood Avenue

- SR 3/US 19/41/Metropolitan Parkway Mainline Design Features:
 - This roadway has 4 lanes with curb and gutter on the south side of Lakewood Ave and curb only on the north side of Lakewood Ave. This roadway has a dedicated left-turn lane and a 4 foot concrete median on the south side. There are 8-foot wide sidewalks on both sides to the north and 6-foot sidewalks on both sides to the south of the intersection. There are crosswalks on all sides of the intersection. There are no bike lanes on SR 3/US 19/41/Metropolitan Parkway.
- Lakewood Avenue Side Road Features:
 - This roadway has 2 lanes east of Metropolitan and 3 lanes west of Metropolitan with curb and dedicated left-turn lane on the west approach. There are 5-foot sidewalks on both side of Lakewood Ave on the east and west sides of the intersection. There are no bike lanes on Lakewood Ave.

3. SR 3/US 19/41/Metropolitan Parkway @ St. Johns Avenue

- SR 3/US 19/41/Metropolitan Parkway Mainline Design Features:
 - This roadway has 4 lanes with curb. There are 10-foot wide sidewalks on both sides. There is a crosswalk on the south side of the intersection. There are no bike lanes on SR 3/US 19/41/Metropolitan Parkway.
- St. Johns Avenue Side Road Features:
 - This roadway has 2 lanes with curb on the east. There are 8-foot wide sidewalks on both sides of St. Johns Avenue. There are no crosswalks and no bike lanes on St. Johns Avenue. There is a shopping center driveway opposite of St. Johns Avenue. The shopping center driveway has a 4-foot wide concrete median, a shared left-turn/through lane, a channelized right-turn lane with a concrete pedestrian island.

4. SR 3/US 19/41/Metropolitan Parkway @ Fair Drive

- SR 3/US 19/41/Metropolitan Parkway Mainline Design Features:
 - This roadway has 4 lanes with curb. There are 10-foot wide sidewalks on both sides. There are crosswalks on the south and east sides of the intersection. There are no bike lanes on SR 3/US 19/41/Metropolitan Parkway.
- Fair Drive Side Road Features:
 - This roadway has 4 lanes with curb and gutter on both sides. This roadway has a dedicated left turn lane and a shared right-turn/through lane. There is a shopping center driveway opposite of Fair Drive. The shopping center driveway has a 8-foot wide concrete median, a share left-turn/through lane and a right-turn/through lane.

5. SR 3/US 19/41/Metropolitan Parkway @ Casplan Street

- SR 3/US 19/41/Metropolitan Parkway Mainline Design Features:
 - This roadway has 4 lanes with curb. There are 10-foot wide sidewalks on both sides of Metropolitan Parkway on the south side of Casplan Street as well as on the east side of Metropolitan Parkway on the north side of Casplan Street. There is a 5 foot sidewalk with a grassed beauty strip on the west side of Metropolitan Parkway, north of Casplan Street. There is a crosswalk on the south side of the intersection. There are no bike lanes on SR 3/US 19/41/Metropolitan Parkway.

- Casplan Street Side Road Features:
 - This roadway has 2 lanes with curb and gutter on both sides. There is a 10-foot sidewalk on the south side of Casplan Street and a 5-foot sidewalk with a grassed beauty strip on the north both side of Casplan Street. There are no sidewalks on the east side of the intersection. There is a crosswalk on the east side of the intersection.
- 6. SR 3/US 19/41/Metropolitan Parkway @ Atlanta Metropolitan College**
 - SR 3/US 19/41/Metropolitan Parkway Mainline Design Features:
 - This roadway has 4 lanes with curb and a dedicated southbound left-turn lane. There is a 10 foot wide striped median on the south side. There are 6-foot wide sidewalks with grassed beauty strip on both sides of Metropolitan Parkway. There is a crosswalk on the north side of the intersection. There are no bike lanes on SR 3/US 19/41/Metropolitan Parkway.
 - Atlanta Metropolitan College Side Road Features:
 - This roadway created a “T-intersection” at Metropolitan Parkway and has 4 lanes with curb and gutter on both sides, with right and left-turn approach lanes. There are 8-foot sidewalks on both sides. This roadway has a 20 foot wide median.
- 7. SR 3/US 19/41/Metropolitan Parkway @ Deckner Avenue**
 - SR 3/US 19/41/Metropolitan Parkway Mainline Design Features:
 - This roadway has 4 lanes with curb. There are 6-foot wide sidewalks with textured/colored beauty strip on both sides of Metropolitan Parkway. There are crosswalks on the south and west sides of the intersection. There are no bike lanes on SR 3/US 19/41/Metropolitan Parkway.
 - Deckner Avenue Side Road Features:
 - This roadway has 2 lanes with curb on both sides. There is a 5-foot sidewalk with a grassed beauty strip on both sides of Deckner Avenue. There is a private driveway opposite of Deckner Avenue.
- 8. SR 3/US 19/41/Metropolitan Parkway @ Lynnhaven Drive/Gennessee Ave.**
 - SR 3/US 19/41/Metropolitan Parkway Mainline Design Features:
 - This roadway has 4 lanes with curb. There are 6-foot wide sidewalks with textured/colored beauty strip on both sides of Metropolitan Parkway. There are crosswalks on the south, east, and west sides of the intersection. There are no bike lanes on SR 3/US 19/41/Metropolitan Parkway.
 - Lynnhaven Drive/Gennessee Ave. Side Road Features:
 - This roadway has 2 lanes with curb on both sides west of Metropolitan Parkway and on the south side of the roadway east of Metropolitan Parkway. There are 5-foot sidewalks with a grassed beauty strip on both sides of Lynnhaven Drive east of metropolitan Parkway and on the south side of Gennessee Ave. west of Metropolitan Parkway. There is an 8-foot sidewalk on the north side of Gennessee Ave. west of Metropolitan Parkway.
- 9. SR 3/US 19/41/Metropolitan Parkway @ Manford Road/Dill Ave.**
 - SR 3/US 19/41/Metropolitan Parkway Mainline Design Features:
 - This roadway has 4 lanes with curb. On the south side, there are here are 7-foot wide sidewalks on both sides of Metropolitan Parkway. On the north side, there are 5-foot sidewalks with textured/colored beauty strip on the east side and a 4-foot sidewalk on the west side of Metropolitan Parkway. There are crosswalks on all sides of the intersection. There are no bike lanes on SR 3/US 19/41/Metropolitan Parkway.
 - Manford Road/Dill Ave. Side Road Features:
 - This roadway has 2 lanes with curb. There are 5-foot sidewalks on both sides of Dill Ave. west of Metropolitan Parkway and on the north side of Manford Road east of

Metropolitan Parkway. On the south side of Manford Road east of Metropolitan Parkway there is a 5-foot sidewalk with grassed beauty strip.

10. SR 3/US 19/41/Metropolitan Parkway @ University Avenue

- SR 3/US 19/41/Metropolitan Parkway Mainline Design Features:
 - This roadway has 4 lanes with curb. On the south side, there are 8-foot wide sidewalks on both sides of Metropolitan Parkway and textured/colored beauty strip on the east side only. On the north side, there are 8-foot wide sidewalks on both sides of Metropolitan Parkway. There are crosswalks on all sides of the intersection. There are no bike lanes on SR 3/US 19/41/Metropolitan Parkway.
- University Avenue Side Road Features:
 - This roadway has 2 lanes with curb west of Metropolitan and 3 lanes east of Metropolitan with a dedicated westbound right-turn lane. There are 8-foot sidewalks on both sides east of Metropolitan Parkway and on the south side west of Metropolitan Parkway. On the north side of University Avenue west of Metropolitan Parkway there is a 5-foot sidewalk with grassed beauty strip.

11. SR 3/US 19/41/Metropolitan Parkway @ Mayland Avenue

- SR 3/US 19/41/Metropolitan Parkway Mainline Design Features:
 - This roadway has 4 lanes with curb. There are here are 5-foot wide sidewalks with textured/colored beauty strip on both sides of Metropolitan Parkway. There are crosswalks on the north and south sides of the intersection. There are no bike lanes on SR 3/US 19/41/Metropolitan Parkway.
- Mayland Avenue Side Road Features:
 - This roadway has 2 lanes with curb. There are 5-foot sidewalks with grassed beauty strip on both sides of Mayland Avenue.

12. SR 3/US 19/41/Metropolitan Parkway @ Lillian Avenue

- SR 3/US 19/41/Metropolitan Parkway Mainline Design Features:
 - This roadway has 4 lanes with curb. There are 5-foot wide sidewalks with textured/colored beauty strip on both sides of Metropolitan Parkway. There are crosswalks on the west and south sides of the intersection. There are no bike lanes on SR 3/US 19/41/Metropolitan Parkway.
- Lillian Avenue Side Road Features:
 - This roadway is an eastbound one-way road with 2 lanes with curb with left and right-turn lanes. There are 5-foot sidewalks on both sides of Lillian Avenue.

13. SR 3/US 19/41/Metropolitan Parkway @ Shelton Avenue

- SR 3/US 19/41/Metropolitan Parkway Mainline Design Features:
 - This roadway has 4 lanes with curb. There are 6-foot wide sidewalks with textured/colored beauty strip on both sides of Metropolitan Parkway. There are crosswalks on all sides of the intersection. There are no bike lanes on SR 3/US 19/41/Metropolitan Parkway.
- Shelton Avenue Side Road Features:
 - This roadway has 2 lanes with curb. There are 7-foot sidewalks on both sides west of Metropolitan Parkway and on the north side of Shelton Avenue east of Metropolitan Parkway. On the south side of Shelton Avenue east of Metropolitan Parkway there is a 5-foot sidewalk with grassed beauty strip.

14. SR 3/US 19/41/Metropolitan Parkway @ Ralph David Abernathy Boulevard/Glenn St.

- SR 3/US 19/41/Metropolitan Parkway Mainline Design Features:
 - On the south side of Ralph David Abernathy Boulevard, this roadway has 4 lanes with curb as well as 6-foot wide sidewalks with textured/colored beauty strip on both sides of Metropolitan Parkway. On the north side of Ralph David Abernathy Boulevard, there is a dedicated southbound left-turn lane, a shared left-turn/through

lane and a shared right-turn/through lane. The north side has a 4-foot painted median and 3 northbound through departure lanes. There are 6-foot wide sidewalks on both sides of Metropolitan Parkway. There are crosswalks on all five sides of the intersection. There are no bike lanes on SR 3/US 19/41/Metropolitan Parkway. There are two concrete channelizing islands in the southeast corners, between Metropolitan Parkway and Ralph David Abernathy Boulevard and between Ralph David Abernathy Boulevard and Glenn Street.

- Ralph David Abernathy Boulevard Side Road Features:
 - This roadway is the west and southeast legs of the intersection and has 4 lanes with curb. There are 5-foot wide sidewalks with grassed beauty strip on both sides, west of Metropolitan Parkway and on the north side of Ralph David Abernathy Boulevard east of Metropolitan Parkway. On the south side of Ralph David Abernathy Boulevard east of Metropolitan Parkway there is a 5-foot sidewalk with no grassed beauty strip. There are bike lanes on both sides of Ralph David Abernathy Boulevard.
- Glenn Street Side Road Features:
 - This roadway is the east leg of the intersection and has 3 lanes with curb including two westbound lanes and one eastbound receiving lane. There are 6-foot sidewalks on both sides west of Glenn Street. There are no bike lanes on Glenn Street.

15. SR 6/Camp Creek Parkway (EB/WB) @ Desert Drive (NB/SB)

- SR 6/Camp Creek Parkway (EB/WB) Mainline Design Features:
 - This roadway has 4 lanes with dedicated left-turn lanes on both sides of Desert Drive and a dedicated westbound right-turn lane. This roadway has a 4-foot raised concrete median and a 15-foot striped lane gore on both sides. There are crosswalks and pedestrian landings on all sides of the intersection. There are no sidewalks and no bike lanes on SR 6/ Camp Creek Parkway.
- Desert Drive Side Road Features:
 - This roadway has 2 lanes north of Camp Creek and 3 lanes south of Camp Creek with a dedicated left-turn lane. There are no sidewalks and no bike lanes on Desert Drive.

16. SR 6/Camp Creek Parkway (EB/WB) @ Washington Road (NB/SB)

- SR 6/Camp Creek Parkway (EB/WB) Mainline Design Features:
 - This roadway has 4 lanes with dedicated left-turn and right-turn lanes on both sides of Desert Drive. This roadway has a 4-foot raised concrete median on both sides. There is a free-flow eastbound right-turn lane. There are striped channelizing islands in the northwest and southwest quadrants of the intersection as well as a raised concrete channelizing island on the northeast quadrant of the intersection. There are crosswalks and pedestrian islands on all sides of the intersection. There are no sidewalks and no bike lanes on SR 6/ Camp Creek Parkway.
- Washington Road (NB/SB) Side Road Features:
 - This roadway has 4 lanes, including northbound and southbound left-turn and right-turn lanes. There are no sidewalks and no bike lanes on Washington Road. There is a southbound receiving lane for the free-flow eastbound right turn lane.

Other projects in the area:

PI-N/A ARC #FS-281 – I-285 West at SR 6 / Camp Creek Parkway: Diverging Diamond

PI0012882 ARC#FS-280 – Global Gateway Connector: Bicycle and pedestrian bridge connecting the City of College Park to the adjacent convention center and area trail segments.

PI0009397/CSSTP000900397 ARC#AR-450 – Glenwood Avenue to Allene Avenue: Beltline corridor multi-use trail and streetscapes.

PI0009396/CSSTP-0000-00(396) ARC#AR-450B – Lena Street to University Avenue: Beltline corridor multi-use trail and streetscapes.

PI0012593 ARC#AT-277 – SR 14/SR 154 from Sparks Street to Ivan Allen Boulevard: Phase 1.0 Bicycle Mobility Improvements at various locations throughout the city.

PI –N/A ARC#AT-288 – US 41/US 19: Signal upgrades at 11 locations.

Description of the proposed project: The proposed project is located in Fulton County in the Cities of Atlanta and East Point. The approximate length of the project is 3.3 miles and will consist of traffic signalization upgrades, including LED vehicular signals, countdown pedestrian signals, ADA wheelchair ramps, and crosswalk striping at 16 intersections.

MPO: Atlanta Regional Commission (ARC)

TIP #:

TIA Regional Commission: Not a TIA Project

Congressional District(s): 5

Federal Oversight: Exempt State Funded Other

Projected Traffic: N/A

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

Functional Classification (Mainline): Urban Minor Arterial

- SR 3/US 19/41/Metropolitan Parkway @
 - Langston Drive
 - Lakewood Avenue
 - St. Johns Avenue
 - Fair Drive
 - Casplan Street
 - Atlanta Metropolitan College
 - Deckner Avenue
 - Lynnhaven Drive
 - Manford Road
 - University Avenue
 - Mayland Avenue
 - Lillian Avenue
 - Shelton Avenue
 - Ralph David Abernathy Boulevard

Functional Classification (Mainline): Principal Arterial

- SR 6/Camp Creek Parkway @
 - @ Desert Drive
 - Washington Road

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

Warrants met: None Bicycle Pedestrian Transit
 Crosswalks, pedestrian pushbuttons, and pedestrian signal heads will be added at all intersections, except as noted in the Kickoff Meeting Minutes.

DESIGN AND STRUCTURAL

Description of the proposed project: See Field Visit Kick Off Meeting Minutes Attachment

Major Structures: N/A

Mainline Design Features: SR 3/US 19/41/Metropolitan Parkway from Langston Drive to Ralph David Abernathy Boulevard

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	4		N/A
- Lane Width(s)	10 ft.	12 ft.	N/A
- Sidewalks	Ranges 5-10 ft. on both sides	5 ft.	N/A
- Auxiliary Lanes	Yes (Left-turn lanes at select intersections)		N/A
Posted Speed	35 mph		N/A

*According to current GDOT design policy if applicable

Mainline Design Features: SR 6/Camp Creek Parkway from Desert Drive to Washington Road

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	4		N/A
- Lane Width(s)	12 ft.	12 ft.	N/A
- Sidewalks	None	5 ft.	N/A
- Auxiliary Lanes	Yes (Left & Right turn lanes)		N/A
Posted Speed	45 mph		N/A

*According to current GDOT design policy if applicable

Major Interchanges/Intersections: N/A

Lighting required: No Yes

Transportation Management Plan [TMP] Required: No Yes
 If Yes: Project classified as: Non-Significant Significant
 TMP Components Anticipated: TTC TO PI

Will Context Sensitive Solutions procedures be utilized? No Yes

Design Exceptions to FHWA/AASHTO controlling criteria anticipated: None

Design Variances to GDOT Standard Criteria anticipated: None

UTILITY AND PROPERTY

Temporary State Route Needed: No Yes Undetermined

Railroad Involvement: None

Utility Involvements:

- AT&T - Telecom
- Atlanta Gas Light - Gas
- City of Atlanta - Water & Sewer
- City of East Point – Electric
- City of East Point – Water & Sewer
- City of East Point – Traffic & Safety
- City of Hapeville – Water & Sewer
- Comcast Communications – CATV
- Georgia Power – Electric
- Georgia Public Web - Telecom
- Level 3 Communications – Telecom
- MARTA – Electric
- Plantation Pipeline
- Qwest Communications – Telecom
- Tower Cloud, Inc - Telecom
- Verizon Business (MCI Facilities) – Telecom
- Zayo Fiber Solutions - Telecom

SUE Required: No Yes Undetermined

Public Interest Determination Policy and Procedure recommended? No Yes

Right-of-Way: Existing width: _____ft Proposed width: _____ft

Required Right-of-Way anticipated: No Yes Undetermined

Easements anticipated: None Temporary Permanent Utility

Other

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

ENVIRONMENTAL AND PERMITS

Anticipated Environmental Document:

GEPA: **NEPA:** CE PCE

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

Environmental Permits, Variances, Commitments, and Coordination anticipated:

Air Quality:

- | | | |
|---|--|---|
| Is the project located in a PM 2.5 Non-attainment area? | <input type="checkbox"/> No | <input checked="" type="checkbox"/> Yes |
| Is the project located in an Ozone Non-attainment area? | <input type="checkbox"/> No | <input checked="" type="checkbox"/> Yes |
| Is a Carbon Monoxide hotspot analysis required? | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes |

This project is exempt and does not add capacity or change roadway conditions; therefore, it is excluded from a CO hotspot.

NEPA/GEPA Comments & Information:

Ecology: Due to the nature and scope of the project, a combined Ecology Resource/AOE is anticipated. Department of Natural Resources and United States Fish & Wildlife Service coordination is in process. Field survey is to be completed upon response from DNR and USFWS. Design will avoid any impacts. Preliminary surveys did not identify any Waters of the U.S. at the intersections; however, crossings are near a number of the project intersections, and ditches that require further evaluation by a qualified ecologist were noted. The potential protected species in the area will be determined by coordination with Georgia Department of Natural Resources and U.S. Fish and Wildlife Service. Tree pruning could require bat surveys. A survey for federally-protected bats that exists within the project area may be required. The bat survey would be required to receive Ecology Report approval. A Section 404 Permit would be required if USACE-jurisdictional waters are impacted by the proposed project. Mitigation credits would be required to be purchased if the impacts exceeded 100 linear feet for streams or 0.1 acre for wetlands. A stream buffer variance would be required for any impacts within 25-foot of top of bank at USACE-jurisdictional streams or state buffered waters. Stream buffer credits may be required based on the type of impact. A National Pollutant Discharge Elimination System (NPDES) permit would be required for greater than 1.0 acre of disturbance for the proposed project.

History: Section 106 Notification begun. Historian completed a desktop survey for historic properties based on property tax records, Georgia NARGHIS (Natural, Archaeological, and Historic Resources GIS) research, and aerial maps. Results are pending. Field survey pending completion of 30 day response period. Preliminary screening identified potential eligible resources and/or historic districts. A Historic Resources Survey Report and Assessment of Effects documentation are anticipated. Potential Section 4(f) resources at several intersections. The intent of the project is to design the signalization improvements to avoid any impacts to Section 4 (f) properties.

Archeology: EPEI's staff archaeologist requested a Georgia Site File and NARGHIS review for any potential archaeological sites in the project area. Results are pending. A short form of findings is expected.

Air & Noise: Project is located in a non-attainment area for PM2.5 and Ozone. CO hotspot analysis not required. Project exempt from PM2.5. Based on project type a Type III Noise Assessment is anticipated.

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Project Activity	Party Responsible for Performing Task(s)
Concept Development	Stantec Consulting Services, Inc.
Design	Stantec Consulting Services, Inc.
Right-of-Way Acquisition	GDOT
Utility Relocation (Construction)	Utility Owners
Utility Coordination (Pre-Let)	GDOT
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	GDOT
Providing Detours	GDOT
Environmental Studies, Documents, & Permits	GDOT
Environmental Mitigation	N/A
Construction Inspection & Materials Testing	GDOT

Other coordination to date: N/A

Project Cost Estimate and Funding Responsibilities:

	Breakdown of PE	ROW	Reimbursable Utility	CST*	Environmental Mitigation	Total Cost
Funded By	GDOT	N/A	GDOT	GDOT	N/A	
\$ Amount	\$400,000.00	N/A	\$100,000.00	\$2,324,428.72	N/A	\$2,824,428.78
Estimate Date	5/19/2014	N/A	1/5/2015	1/27/2015	N/A	

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

Comments/Additional Information: None

LIST OF ATTACHMENTS/SUPPORTING DATA

1. Field Visit Kick-off Meeting Minutes
2. Construction Cost Estimate
3. Utility Cost estimate

TO#12 – PI#0012818 Traffic Signal Design Kickoff Meeting Minutes171001601

Date/Time: October 30, 2014 / 9:00 AM
Place: Atlanta, Georgia
Attendees: Larry Overn, Stantec
Kim Williams, Stantec
Mike Holt, Parsons Brinkerhoff
Scott Younker, URS
Jonathan Moore,
Jill Brown, Edwards Pittman
Xavier James, GDOT
Kate D'Ambrosio, GDOT
Mike Govus, GDOT
Edlin Regis, GDOT
Ricky White, City of Atlanta
Leonard Mitchell, City of Atlanta
Lawrence Ware, City of Atlanta
Jim Silvester, AT&T
Carly Jackson, Georgia Power
Distribution: All of the above

The list of the intersections in the contract is as follows.

1. SR 3/US 19/41/Metropolitan Pkwy @ Langston Dr.
2. SR 3/US 19/41/Metropolitan Pkwy @ Lakewood Ave.
3. SR 3/US 19/41/Metropolitan Pkwy @ St. Johns Ave.
4. SR 3/US 19/41/Metropolitan Pkwy @ Fair Dr.
5. SR 3/US 19/41/Metropolitan Pkwy @ Casplan St.
6. SR 3/US 19/41/Metropolitan Pkwy @ Atlanta Metropolitan College
7. SR 3/US 19/41/Metropolitan Pkwy @ Deckner Ave.
8. SR 3/US 19/41/Metropolitan Pkwy @ Lynnhaven Dr.
9. SR 3/US 19/41/Metropolitan Pkwy @ Manford Rd.
10. SR 3/US 19/41/Metropolitan Pkwy @ University Ave.
11. SR 3/US 19/41/Metropolitan Pkwy @ Mayland Ave.
12. SR 3/US 19/41/Metropolitan Pkwy @ Lillian Ave.
13. SR 3/US 19/41/Metropolitan Pkwy @ Shelton Ave.
14. SR 3/US 19/41/Metropolitan Pkwy @ Ralph David Abernathy Blvd.
15. SR 6/Camp Creek Pkwy @ Desert Dr.
16. SR 6/Camp Creek Pkwy @ Washington Rd.

The meeting began at 9:00am in Atlanta. All parties met at the GDOT TMC before heading out to begin the field review of all proposed intersections.

All of the intersections included in the project are located on GDOT RTOP corridors. The RTOP contract will be responsible for replacing the existing communications and as part of this project we will relocate or replace fiber optic drops as necessary. The existing communications network along SR 3/US 19/41/Metropolitan Parkway is a mix of multi-mode and single-mode fiber optic cable. The RTOP contract will be replacing all of this fiber optic cable with a new single-mode fiber optic cable. The RTOP contract will also replace the existing wireless communication on SR 6/Camp Creek Parkway with a new single-mode fiber optic cable.

Initially, the assumption for all signal upgrades was to install spanwire installations with joint use poles to minimize the number of poles on each corner of the intersection. However, once in the field, the City of Atlanta requested the signals be upgraded to mastarms, so each intersection and the proposed installation was discussed at each intersection.

In addition, the installation of advance detection was discussed for all intersections. Because these intersections are part of the RTOP contract, advanced detection will be provided on the SR3/US 19/41/Metropolitan Parkway and SR 6/Camp Creek Parkway approaches at each intersection. The advance detection will utilize either inductive loops or wireless magnetometers.

Finally, at the request of the RTOP corridor manager and the City of Atlanta, we will review existing stopbar locations along SR3/US 19/41/Metropolitan Parkway to ensure that buses and trucks can make the turning movements without encroaching on opposing traffic.

1. SR 3/US 19/41/Metropolitan Pkwy @ Langston Dr.

This intersection currently operates as a T-intersection; however, there is a driveway on the eastern side of the intersection. The signal will be updated with a mastarm installation, but no signalization will be provided for the eastern leg. The mastarms will be designed in such a way to allow for future development.

- Install mastarms on the NE and SW quadrants of the intersection.
- Move cabinet to NE quadrant of intersection.
- All arrow signal heads will be provided for the western leg.
- No crosswalk will be provided across the northern leg of the intersection.
- No crosswalk will be provided across the eastern approach.
- Crosswalks and ramps across the western and southern legs will be updated.
- Wireless magnetometers will be used for advance detection.

2. SR 3/US 19/41/Metropolitan Pkwy @ Lakewood Ave.

This intersections will be updated with a mastarm installation as detailed below.

- Install tandem mastarms in NE and SW quadrants.
- Provide flashing yellow arrow protected/permissive installation for the northbound left turn lane.
- Mini-skip "chicken tracks" lane lines will be replaced for the northbound and southbound approaches of SR 3/US 19/41/Metropolitan Parkway to provide additional guidance to drivers through the lane shift.
- Move signal cabinet to the SW quadrant.
- Repair curb and sidewalk in the NW quadrant.
- Remove poles not currently in use in the NE quadrant.
- Update all crosswalks and ramps.
- Wireless magnetometers will be used for advance detection.

3. SR 3/US 19/41/Metropolitan Pkwy @ St. Johns Ave.

This intersection will be updated with a tandem mastarm installation as detailed below.

- Install tandem mastarms in the NW and SE quadrants.
- Retain existing cabinet location.
- Cut back median nose on western leg.
- Rebuild concrete island in the SW quadrant.
- Add detectable warning strip in SW quadrant.
- Reduce crosswalk width across southern leg.
- Update all crosswalks and ramps.
- Wireless magnetometers will be used for advance detection.
- Video detection will be used for western leg because of existing pavement condition.

4. SR 3/US 19/41/Metropolitan Pkwy @ Fair Dr.

This intersection will be updated with a mastarm installation as detailed below.

- Install single mastarm poles in each quadrant.
- Move cabinet location to the NW quadrant.
- Update all crosswalks and ramps.
- Wireless magnetometers will be used for advance detection.
- Video detection will be used for western leg because of existing pavement condition.
- Remove Georgia Power pole #486660 from the NW quadrant of the intersection.

5. SR 3/US 19/41/Metropolitan Pkwy @ Casplan St.

This intersection will be updated with a tandem mastarm installation as detailed below.

- Install tandem mastarms in the NE and SW quadrants.
- Move cabinet to NE quadrant.
- Update all crosswalks and ramps.
- Wireless magnetometers will be used for advanced detection.

6. SR 3/US 19/41/Metropolitan Pkwy @ Atlanta Metropolitan College

This intersection will be updated with a mastarm installation. However, because of the potential for adverse impacts to historical properties a preferred alternative and optional alternative were developed. The preferred installation is detailed below. There are utility conflicts along the western side of SR3/US 19/41/Metropolitan Parkway that would require the acquisition of right-of-way to place a new pole.

- Tandem mastarm on the western side of the intersection.
- Retain existing cabinet location.
- All arrow signal heads will be provided for the eastern approach.
- Private single-family driveways will not be signalized per Alan Davis.
- Update crosswalks and ramps.
- No crosswalk will be provided across the southern leg.
- Wireless magnetometers will be provided for advanced detection.

In the event that the single mastarm on the eastern side of the intersection creates adverse environmental impacts, the optional alternative will provide a diagonal mastarm in the NE quadrant and a single mastarm in the SE quadrant of the intersection.

7. SR 3/US 19/41/Metropolitan Pkwy @ Deckner Ave.

This intersection will be updated with a tandem mastarm installation as detailed below.

- Tandem mastarm on the eastern side of the intersection.
- All arrow signal heads will be provided for the western approach.
- Private single-family driveways will not be signalized per Alan Davis.
- Retain existing ADA ramps, but update detectable warning strip in the SW quadrant.
- Update crosswalks on the southern and western legs.
- No crosswalk will be provided across the northern leg.
- Wireless magnetometers will be provided for advanced detection.

8. SR 3/US 19/41/Metropolitan Pkwy @ Lynnhaven Dr.

This intersection will be updated with a tandem mastarm installation as detailed below.

- Tandem mastarms will be installed on the NE and SW quadrants.
- Provide nearside supplemental signal head on the mastarm for the eastbound approach.
- Shift existing crosswalk further north on northern leg.
- Retain existing crosswalks and ramps across southern, eastern, and western legs.
- Install pedestrian facilities on the SE quadrant on existing utility pole.
- Wireless magnetometers will be provided for advanced detection.

9. SR 3/US 19/41/Metropolitan Pkwy @ Manford Rd.

This intersection will be updated with a tandem mastarm installation as detailed below.

- Tandem mastarms will be installed on the NE and SW quadrants.
- Move cabinet to NE quadrant.
- Retain existing ramps, but update detectable warning strips.
- Refurbish existing crosswalks.
- Investigate the possibility of removing timber pole in the NE quadrant and transferring utilities to MEAG transmission pole.
- Wireless magnetometers will be provided for advanced detection.

10. SR 3/US 19/41/Metropolitan Pkwy @ University Ave.

This intersection will be updated with a tandem mastarm installation as detailed below. If there is sufficient right-of-way, mastarm poles will be placed behind walls; otherwise, the poles will be placed in front of the existing walls.

- Tandem mastarms will be installed on the NE and SW quadrants.
- Move cabinet to the NE quadrant.
- Retain existing ramps on the NE, NW, and SW quadrants.
- Update existing ramps on the SE quadrant and combine into one ramp.
- Realign crosswalk across southern leg.
- Refurbish crosswalks across the northern, eastern, and western legs.
- Wireless magnetometers will be provided for advanced detection.

11. SR 3/US 19/41/Metropolitan Pkwy @ Mayland Ave.

This intersection will be updated with a tandem mastarm installation as detailed below.

- Tandem mastarms will be installed on the NW and SE quadrants.
- Retain existing cabinet location.
- Relocate crosswalks on the eastern and western legs setback from the mainline.
- Angle crosswalk across northern leg behind existing pole.
- Update all crosswalk striping and ramps.
- Investigate the removal of the utility pole on the NE and NW quadrants.
- Wireless magnetometers will be provided for advanced detection.

12. SR 3/US 19/41/Metropolitan Pkwy @ Lillian Ave.

This intersection will be updated with a spanwire installation as detailed below. The installation of a mastarm was investigated on site; however, because of the presence of trees with overhanging limbs on the eastern side of the intersection, a spanwire design was chosen.

- Spanwire design with 4 new exclusive poles.
- Remove existing pole on SE quadrant.
- Investigate removal of existing pole on SW quadrant.
- All arrow signal heads will be provided for the western approach.
- Update crosswalks and ramps on the southern and western legs.
- No crosswalk will be provided across the northern leg.
- Install striped bulb-out on western leg to narrow approach to one lane.
- Inductive loops with aerial lead-in using existing points of attachment will be provided for advanced detection.

13. SR 3/US 19/41/Metropolitan Pkwy @ Shelton Ave.

This intersection will be updated with a tandem mastarm installation as detailed below.

- Tandem mastarms will be installed on the NE and SW quadrants.
- Retain existing cabinet location.
- Remove pole in the NE quadrant.
- Refurbish all crosswalks.
- Provide combination B/C ramps on NW and SW quadrants.
- Install double yellow lane lines to the back of the presence loops on Shelton Avenue.
- Wireless magnetometers will be provided for advanced detection.

14. SR 3/US 19/41/Metropolitan Pkwy @ Ralph David Abernathy Blvd.

This intersection will be updated with a spanwire installation as detailed below. In addition, the RTOP contract has proposed some changes to the operation of the intersection that will be implemented prior to the completion of this contract. We will ensure that our design uses the updated RTOP operation and configuration.

- Will not replace existing CCTV.
- Spanwire design with exclusive poles in the NE, NW, and SE quadrants and a joint use pole in the SW quadrant.
- Reposition crosswalks on the southern and western legs to be perpendicular to the roadways.
- Provide a crosswalk in SE quadrant from island to curb.
- Update all ramps.
- If existing ramp locations change, fill in existing ramp with full curb section and sidewalk.
- Cut back median nose on southeastern leg.
- Inductive loops with aerial lead-in using existing points of attachment will be provided for advanced detection.

15. SR 6/Camp Creek Pkwy @ Desert Dr.

This intersection will be updated with a spanwire installation as detailed below. RTOP is investigating a change to the operation of the signal including mainline protected/permissive phasing and side street split phasing. We will ensure that our design uses the updated RTOP operation and configuration.

- Spanwire design with 4 new exclusive concrete poles and luminaire arm in NE quadrant.
- Retain existing cabinet location and battery backup.

- Retain all existing crosswalk locations and landings.
- Refurbish existing crosswalk striping.
- Cut back median noses on the eastern and western legs.
- Add nearside supplemental signal head on the NE quadrant.
- Inductive loops with underground lead-in will be provided for advanced detection.

16. SR 6/Camp Creek Pkwy @ Washington Rd.

This intersection will be updated with a spanwire installation as detailed below. RTOP is investigating a change to the operation of the signal providing mainline protected/permissive phasing. We will ensure that our design uses the updated RTOP operation and configuration.

- Spanwire design with 4 new exclusive concrete poles.
- Retain existing cabinet location and battery backup.
- Retain all existing crosswalks and landings.
- Cut back median noses on the western leg.
- Retain island in the NE quadrant, but reshape nose to remove from crosswalk.
- Extend stopbars across all right turn lanes.
- Hatch out acceleration lane in NW quadrant.
- Inductive loops with underground lead-in will be provided for advanced detection.

The meeting adjourned at 2:30 PM

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

Stantec Consulting Services Inc.

Larry Overn
Associate
Phone: (678) 689-2370
Fax: (770) 813-0688
Larry.Overn@stantec.com

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. OO12818

OFFICE Program Delivery

PROJECT DESCRIPTION

SIGNAL EQUIPMENT UPGRADE: SR 3 @ 14 LOC & SR 6 @ 2 LOCS
in FULTON

DATE January 28, 2015

From: Albert V. Shelby III, Program Delivery Engineer

To: Lisa L. Myers, State Project Review Engineer

Subject: **REVISIONS TO PROGRAMMED COSTS**

PROJECT MANAGER Xavier James

MGMT LET DATE 11/15/2018

MGMT ROW DATE 2/15/2017

PROGRAMMED COSTS (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION \$ 2,293,200.00

DATE 8/8/2014

RIGHT OF WAY \$ 800,000.00

DATE 8/8/2014

UTILITIES \$ -

DATE ---

REVISED COST ESTIMATES

CONSTRUCTION* \$ 2,324,428.72

RIGHT OF WAY \$ -

UTILITIES \$ 100,000.00

*Cost Contains 5 % Contingency

REASONS FOR COST INCREASE AND CONTINGENCY JUSTIFICATION:

This project is a signal (Reconstruction/Rehabilitation) project and is at low risk. The contingency chosen is 5% because it is currently in the concept phase.

CONTINGENCY SUMMARY

A. CONSTRUCTION COST ESTIMATE:	\$	2,108,325.37	Base Estimate From CES	
B. ENGINEERING AND INSPECTION (E & I):	\$	105,416.27	Base Estimate (A) x	5 %
C. CONTINGENCY:	\$	110,687.08	Base Estimate (A) + E & I (B) x	5 %
			See % Table in "Risk Based Cost Estimation" Memo	
D. TOTAL LIQUID AC ADJUSTMENT:	\$		Total From Liquid AC Spreadsheet	
E. CONSTRUCTION TOTAL:	\$	2,324,428.72	(A + B + C + D = E)	

REIMBURSABLE UTILITY COSTS

UTILITY OWNER	REIMBURSABLE COST
Georgia Power	\$ 100,000.00
TOTAL	\$ 100,000.00

ATTACHMENTS:

JOB NUMBER : 0012818
DESCRIPTION: SR 3 @ 14 LOCS & SR 6 @ 2 LOCS IN FULTON

SPEC YEAR: 13

ITEMS FOR JOB 0012818

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - PI NO. 0012818	1.000	80000.00	80000.00
0010	441-0104		SY	CONC SIDEWALK, 4 IN	600.000	51.00	30600.00
0015	441-0748		SY	CONC MEDIAN, 6 IN	560.000	59.26	33185.60
0020	441-6222		LF	CONC CURB & GUTTER/ 8X30TP2	1100.000	19.29	21219.00
0025	639-3004		EA	STEEL STRAIN POLE, TP IV WITH 65-FT MASTARM	5.000	16364.38	81821.90
0030	639-3004		EA	STEEL STRAIN POLE, TP IV WITH TANDEM 65-FT MASTARMS	19.000	21364.38	405923.24
0035	639-4004		EA	STRAIN POLE, TP IV	13.000	7246.37	94202.85
0040	639-4014		EA	STR POLE,TP 4,INCL LUMIN. ARM	2.000	8484.79	16969.58
0045	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 1	1.000	51100.00	51100.00
0050	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 2	1.000	57600.00	57600.00
0055	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 3	1.000	55900.00	55900.00
0060	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 4	1.000	55700.00	55700.00
0065	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 5	1.000	55900.00	55900.00
0070	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 6	1.000	52800.00	52800.00
0075	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 7	1.000	51500.00	51500.00
0080	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 8	1.000	55900.00	55900.00
0085	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 9	1.000	56800.00	56800.00
0090	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 10	1.000	57500.00	57500.00
0095	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 11	1.000	55900.00	55900.00
0100	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 12	1.000	49300.00	49300.00
0105	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 13	1.000	55900.00	55900.00
0110	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 14	1.000	70800.00	70800.00
0115	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 15	1.000	57800.00	57800.00
0120	647-1000		LS	TRAF SIGNAL INSTALLATION NO - NO. 16	1.000	57800.00	57800.00
0121	653-1501		LF	THERMO SOLID TRAF ST 5 IN, WHI	500.000	1.05	529.91
0122	653-1502		LF	THERMO SOLID TRAF ST, 5 IN YEL	500.000	0.95	478.39
0123	653-1704		LF	THERM SOLID TRAF STRIPE,24,WH	1400.000	6.16	8636.24
0124	653-1804		LF	THERM SOLID TRAF STRIPE, 8,WH	18400.000	2.16	39785.77
0125	653-3501		GLF	THERMO SKIP TRAF ST, 5 IN, WHI	500.000	0.63	319.46
0130	653-6004		SY	THERM TRAF STRIPING, WHITE	100.000	5.42	542.23
0135	682-6233		LF	CONDUIT, NONMETL, TP 3, 2 IN	11500.000	3.66	42090.00
0140	682-9950		LF	DIRECTIONAL BORE - 5-IN	2400.000	11.44	27456.00
0145	682-9950		LF	DIRECTIONAL BORE - 7-IN	1000.000	11.44	11440.00
0150	700-7000		TN	AGRICULTURAL LIME	1.000	116.18	116.19
0155	700-8000		TN	FERTILIZER MIXED GRADE	1.000	612.04	612.04
0160	700-8100		LB	FERTILIZER NITROGEN CONTENT	75.000	4.29	322.47
0165	700-9300		SY	SOD	150.000	6.40	960.66
0170	935-1511		LF	OUT PLNT FBR OPT CBL,DROP,SM,6 FBR	6000.000	1.97	11823.48
0175	935-3602		EA	FBR. OP. CLOS., FDC PRE-TERM., TYP. A, 6	16.000	649.03	10384.51
0180	935-4010		EA	FIBER OPTIC SPLICE, FUSION	64.000	47.01	3008.82
0185	935-8000		LS	TESTING	1.000	10000.00	10000.00

JOB ESTIMATE REPORT

0190	937-6050	EA	INT VIDEO DET SYS ASMBLY, TP A	50.000	5483.77	274188.56
0195	937-6150	EA	PROGRAMMING MONITOR, TP A	1.000	508.47	508.47
0200	937-8000	LS	TESTING	1.000	3000.00	3000.00

ITEM TOTAL 2108325.35
INFLATED ITEM TOTAL 2108325.37

TOTALS FOR JOB 0012818

ESTIMATED COST: 2108325.37
CONTINGENCY PERCENT (0.0): 0.00
ESTIMATED TOTAL: 2108325.37
