

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

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

FILE P.I. # 0012798 **OFFICE** Design Policy & Support
Richmond County
GDOT District 2 - Tennille **DATE** 5/29/2015
SR 28 @ 8 CR locations in Richmond County
Signal Upgrades

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
Darryl VanMeter, State Innovative Delivery Engineer
Bobby Hilliard, Program Control Administrator
Cindy VanDyke, State Transportation Planning Administrator
Hiral Patel, State Environmental Administrator
Ben Rabun, State Bridge Engineer
Andrew Heath, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Lisa Myers, State Project Review Engineer
Charles "Chuck" Hasty, State Materials Engineer
Lee Upkins, State Utilities Engineer
Richard Cobb, Statewide Location Bureau Chief
Jimmy Smith, District Engineer
Neal O'Brien, District Preconstruction Engineer
Jamie Lindsey, District Utilities Engineer
Marshall Troup, Project Manager
BOARD MEMBER - 12th Congressional District

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

Project Type: Signal Upgrade P.I. Number: 0012798
GDOT District: 2 County: Richmond
Federal Route Number: _____ State Route Number: 28

SR 28 @ 8 CR LOCS IN RICHMOND COUNTY

Submitted for approval:

Michael R. Holt, PE _____ 3-30-15
DATE
Parsons Brinckerhoff, Inc. _____
Albert V. Shelby III _____ 3-30-15
State Program Delivery Engineer DATE
Wahell J. P. _____ 3-30-15
GDOT Project Manager DATE

** Recommendation on file*

Recommendation for approval:
** Hiral Patel/KLP* _____ 4-14-15
State Environmental Administrator DATE
** Andrew Heath/KLP* _____ 4-6-15
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).

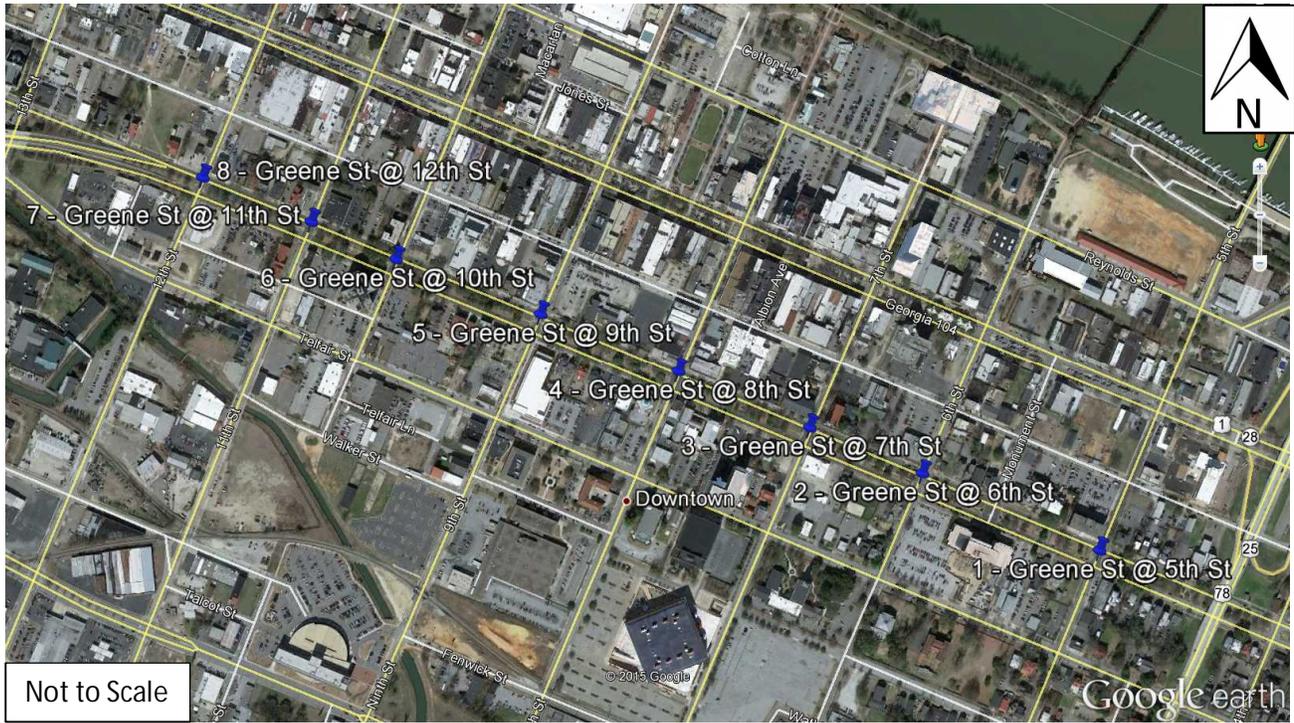
Cynthia S. VandeK _____ 4-3-15
State Transportation Planning Administrator DATE

Approval:

Concur: John Som _____ 5/21/2015
GDOT Director of Engineering DATE

Approve: Margaret B. Pirkle _____ 5.27.15
GDOT Chief Engineer DATE

PROJECT LOCATION MAP



PLANNING & BACKGROUND DATA

Project Justification Statement:

The following intersections located in Richmond County have been identified by District 2 as high priority for minor intersection improvements. The proposed project is to be included in the GDOT Statewide Traffic Signal Maintenance and Upgrade Lump Sum Program from the Office of Traffic Operations.

- SR 28 (Greene Street) @ 5th Street
- SR 28 @ 6th Street
- SR 28 @ 7th Street
- SR 28 @ 8th Street
- SR 28 @ 9th Street
- SR 28 @ 10th Street
- SR 28 @ 11th Street
- SR 28 @ 12th Street

The project is to upgrade equipment, accommodate pedestrians, and to bring intersections to ADA standards. The District has given the following reasons for these intersections to be upgraded: pedestrian accommodations, ADA compliance, replace old conductor cable, install 332 cabinet w/2070 controller, replace support poles (mast arms), address utility issues, and upgrade to fiber optic communications.

The project limits will be 200 feet from the center point of the intersection, unless a setback loop needs to be replaced where the project limit will be 500 feet from the center point of the intersection. With this being a minor improvement, traffic studies were not needed for this project. The scope of this project will be limited to equipment upgrades, pedestrian accommodations, and bringing intersection to ADA standards. With the project funding coming from the Statewide Traffic Signal Maintenance and Upgrade Lump Sum Program, it is included in the STIP.

Existing conditions:

Mainline Design Features: SR 28 / Greene St from 5th St to 12th St

SR 28 is a four-lane, median-separated roadway with a curb and gutter drainage system. On each side of the 40 to 44 foot landscaped grass median, the roadway width includes two 18-20 foot lanes with a parking lane between intersections, and two lanes and a 10 foot left-turn lane at the intersections. Between 11th St and 12th St, Greene St widens before splitting into John C. Calhoun Expy and Greene St to the west. 10 foot sidewalks exist behind variable-width grass landscape strips along both sides of the roadway for the entire corridor length. A 5 foot sidewalk extends along the corridor through the center median. The speed limit on SR 28 / Greene St is 35 mph. The existing signal installations include crosswalks, tandem mast arms, 8-12" vehicular signal heads, and pedestrian signals on pedestals or poles near each crosswalk landing.

Side Road Design Features: 5th St

5th St is a four lane undivided roadway with two 10 foot lanes in each direction, curb and gutter drainage, 5 foot or wider sidewalks on each side, and a 35 mph speed limit.

Side Road Design Features: 6th St

6th St is a two lane undivided roadway with one 10 foot lane and one 7 foot parking lane in each direction, a 14 foot median with at-grade railroad tracks, curb and gutter drainage, 5+ foot sidewalks on each side.

Side Road Design Features: 7th St

To the north of Greene St, 5th St is a two lane undivided roadway with one 12 foot lane and one 8 foot parking lane in each direction, curb and gutter drainage and 5+ foot sidewalks on each side. A second southbound lane replaces the parking lane near the intersection of Greene St. To the south of Greene St, 5th St is a four lane undivided roadway with two 10 foot lanes in each direction, curb and gutter drainage, 5+ foot sidewalks on each side, and a 30 mph speed limit. The left northbound lane becomes an exclusive left-turn lane at the intersection with Greene St.

Side Road Design Features: 8th St

8th St is a two lane undivided roadway with one 12 foot lane and one 8 foot parking lane in each direction, curb and gutter drainage, and 5+ foot sidewalks on each side. A 25 mph speed limit school zone exists between Greene St and Telfair St to the south.

Side Road Design Features: 9th St

9th St is a two lane undivided roadway with one 10 foot lane and one 8 foot parking lane in each direction, curb and gutter drainage, and 5+ foot sidewalks on each side.

Side Road Design Features: 10th St

10th St is a two lane undivided roadway with one 10 foot lane and one 7 foot parking lane in each direction, curb and gutter drainage, and 5+ foot sidewalks on each side.

Side Road Design Features: 11th St

11th St is a two lane undivided roadway with one 10 foot lane and one 7 foot parking lane in each direction, curb and gutter drainage, and 5+ foot sidewalks on each side.

Side Road Design Features: 12th St

12th St is a two lane undivided roadway with one 14 foot lane in each direction, curb and gutter drainage, and 5+ foot sidewalks on each side.

Other projects in the area:

0011389: GREENE STREET FROM SR 4 TO CR 480/EAST BOUNDARY STREET – TIA

No project description is available on TransPi. Construction program year is listed as 2020. This project is unlikely to occur as it is not listed in the TIP and includes TIA in the title, for which the sales tax did not pass in this region.

0011415: 5TH STREET FROM LANEY WALKER BLVD TO REYNOLDS STREET - TIA

No project description is available on TransPi. Construction program year is listed as 2020. This project is unlikely to occur as it is not listed in the TIP and includes TIA in the title, for which the sales tax did not pass in this region.

0011421: CR 2483/6TH ST FROM LANEY WALKER BLVD TO REYNOLDS ST – TIA

No project description is available on TransPi. Construction program year is listed as 2014. This project is unlikely to occur as it is not listed in the TIP and includes TIA in the title, for which the sales tax did not pass in this region.

0011763: SR 28 @ CSX #864840V IN AUGUSTA

No project description is available on TransPi. This project is included in the lump sum funding for the 2015-2018 draft TIP.

0009126: CR 2477 FM CR 2723 TO CR 2499 & FM CR 2509 TO CR 2523

This project consists of two Project Areas, A & B. Area A begins at the Jones St./James Brown Blvd (9th St) intersection in Augusta, Ga., continues southwest along James Brown Blvd, and ends at

the Walker St./ James Brown Blvd intersection. The length of proposed improvements is 1,960-feet. Area B begins at the Walton Way/James Brown Blvd (9th St) intersection, continues southwest along James Brown Blvd, and ends at the Adams Street/James Brown Blvd intersection. The length of proposed improvements is 1,030-feet. The work consist of reconstruction & new construction of 7.5' to 13' wide sidewalks in Area A, reconstruction & new construction of 6' to 8' wide sidewalks in Area B, installation of new trees with the brick accent trim tree wells, brick corner aprons, trash receptacles and grate drains where needed, grass landscaping strips, as well as New ADA accessible curb cut ramps and crosswalks at each intersection. Construction program year is listed as 2012, but a percent complete is not listed.

0011419: CR 2477/JAMES BROWN RD FM WRIGHTSBORO RD TO REYNOLDS ST-TIA

No project description is available on TransPi. Construction program year is listed as 2014. This project is unlikely to occur as it is not listed in the TIP and includes TIA in the title, for which the sales tax did not pass in this region.

0011425: CR 2472/11TH STREET @ AUGUSTA CANAL - TIA

No project description is available on TransPi. Construction program year is listed as 2014. This project is unlikely to occur as it is not listed in the TIP and includes TIA in the title, for which the sales tax did not pass in this region.

0011386: SR 28 FROM CR 2720/BROAD STREET TO CR 2470/12TH STREET - TIA

No project description is available on TransPi. Construction program year is listed as 2014. This project is unlikely to occur as it is not listed in the TIP and includes TIA in the title, for which the sales tax did not pass in this region.

Description of the proposed project:

The purpose of this project consists of developing traffic signal plans for the upgrade of eight (8) existing traffic signal installations and signal communications in Downtown Augusta, Richmond County. The intersections are listed below:

1. SR 28 (Greene Street) @ 5th Street
2. SR 28 (Greene Street) @ 6th Street
3. SR 28 (Greene Street) @ 7th Street
4. SR 28 (Greene Street) @ 8th Street
5. SR 28 (Greene Street) @ 9th Street
6. SR 28 (Greene Street) @ 10th Street
7. SR 28 (Greene Street) @ 11th Street
8. SR 28 (Greene Street) @ 12th Street

MPO: Augusta-Richmond County Planning Commission

TIP #:

TIA Regional Commission: Not a TIA Project

Congressional District(s): 12

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 Principal Arterial

- SR 28 (Greene St)

Functional Classification (Side Road): Urban Minor Arterial Street

- 7th St
- 12th St

Functional Classification (Side Road): Urban Collector Street

- 5th St
- 8th St
- 9th St
- 11th St

Functional Classification (Side Road): Urban Local Road

- 6th St
- 10th St

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

Warrants met: None Bicycle Pedestrian Transit

DESIGN AND STRUCTURAL

Mainline Design Features: SR 38 / Greene St from 5th St to 12th St

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	4		N/A
- Lane Width(s)	10 ft.		N/A
- Median Width & Type	40-44 ft grass		N/A
- Outside Shoulder or Border Area Width	N/A		N/A
- Outside Shoulder Slope	N/A		N/A
- Inside Shoulder Width	N/A		N/A
- Sidewalks	8' both sides, 5' in center median		N/A
- Auxiliary Lanes	Yes (Left Turn Lanes, Parking Lanes)		N/A
- Bike Lanes	None		N/A
Posted Speed	35 mph		N/A
Design Speed	N/A		N/A
Min Horizontal Curve Radius	N/A		N/A
Maximum Superelevation Rate	N/A		N/A
Maximum Grade	N/A		N/A
Access Control	N/A		N/A
Design Vehicle	N/A		N/A
Signal Design	Mast Arm		Mast Arm

*According to current GDOT design policy if applicable

Major Interchanges/Intersections: None

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

NEPA/GEPA Comments & Information: The corridor (is in or between) two National Register listed historic districts. The median of Greene Street, which would be impacted by the curb cuts and drilling for fiber optic cable, is a contributing resource, and features historic granite curbing, historic walkways, and monuments. The director of Historic Augusta is concerned about loss of historic granite curbing throughout downtown. He discussed, with the archaeologist, a possible solution of retaining the granite by basically pushing it down to be flush with the street, rather than removing it, when the curb cut is installed. (There are examples of this being done throughout midtown Atlanta, although I believe it was done by the city, not GDOT.)

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Project Meetings:

Kickoff Meeting: Thursday, July 31st, 2014 @ 8:30 AM

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

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	GDOT	GDOT	GDOT	N/A	
\$ Amount	\$232,838	\$0	\$62,500	\$1,600,117		\$1,819,259
Date of Estimate	7/10/2014	8/29/2014	3/24/2015	8/29/2014		

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

Comments/Additional Information:

LIST OF ATTACHMENTS/SUPPORTING DATA

1. CES Cost Estimates
2. Parsons Brinckerhoff Kickoff Meeting Minutes
3. Utility Cost Estimate
4. Revisions to Programmed Costs Workbook

STATE HIGHWAY AGENCY

DATE : 08/29/2014

PAGE : 1

JOB ESTIMATE REPORT

JOB NUMBER : 0012798 SPEC YEAR: 13
 DESCRIPTION: SR 28 @ 8 CR LOCS IN RICHMOND COUNTY

ITEMS FOR JOB 0012798

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - PI NO 0012798	1.000	45000.00	45000.00
0010	441-0104		SY	CONC SIDEWALK, 4 IN	860.000	37.90	32596.33
0015	441-0748		SY	CONC MEDIAN, 6 IN	65.000	67.34	4377.42
0020	441-6222		LF	CONC CURB & GUTTER/ 8X30TP2	1090.000	25.44	27740.18
0030	636-1020		SF	HWY SGN,TP1MAT,REFL SH TP3	464.000	16.52	7667.90
0035	636-1029		SF	HWY SGN,TP2 MATL,REFL SH TP 3	612.000	23.59	14441.76
0040	636-1033		SF	HWY SIGNS, TP1MAT,REFL SH TP 9	135.000	19.45	2626.38
0045	636-2080		LF	GALV STEEL POSTS, TP 8	470.000	8.39	3943.33
0050	639-3004		EA	STEEL STRAIN POLE, TP IV W 60' TANDEM MAST ARMS	1.000	21000.00	21000.00
0055	639-3004		EA	STEEL STRAIN POLE, TP IV W 50' TANDEM MAST ARMS	6.000	20000.00	120000.00
0060	639-3004		EA	STEEL STRAIN POLE, TP IV W 45' TANDEM MAST ARMS	6.000	19500.00	117000.00
0065	639-3004		EA	STEEL STRAIN POLE, TP IV W 45' MAST ARM	1.000	14500.00	14500.00
0070	639-3004		EA	STEEL STRAIN POLE, TP IV W 40' TANDEM MAST ARMS	1.000	19000.00	19000.00
0075	639-3004		EA	STEEL STRAIN POLE, TP IV W 40' MAST ARM	2.000	14000.00	28000.00
0080	639-3004		EA	STEEL STRAIN POLE, TP IV W 35' MAST ARM	1.000	13500.00	13500.00
0085	647-1000		LS	TRAF SIGNAL INSTALLATION NO - 1	1.000	58000.00	58000.00
0090	647-1000		LS	TRAF SIGNAL INSTALLATION NO - 2	1.000	67000.00	67000.00
0095	647-1000		LS	TRAF SIGNAL INSTALLATION NO - 3	1.000	56000.00	56000.00
0100	647-1000		LS	TRAF SIGNAL INSTALLATION NO - 4	1.000	56000.00	56000.00
0105	647-1000		LS	TRAF SIGNAL INSTALLATION NO - 5	1.000	56000.00	56000.00
0110	647-1000		LS	TRAF SIGNAL INSTALLATION NO - 6	1.000	56000.00	56000.00
0115	647-1000		LS	TRAF SIGNAL INSTALLATION NO - 7	1.000	56000.00	56000.00
0120	647-1000		LS	TRAF SIGNAL INSTALLATION NO - 8	1.000	58000.00	58000.00
0125	647-2150		EA	PULL BOX, PB-5	9.000	1737.00	15633.00
0130	653-1804		LF	THERM SOLID TRAF STRIPE, 8,WB	1200.000	2.51	3016.58
0135	682-6233		LF	CONDUIT, NONMETL, TP 3, 2 IN	14290.000	2.81	40226.06
0140	682-9950		LF	DIRECTIONAL BORE - 5 IN	7545.000	9.76	73701.45
0145	687-1000		LS	TRAFFIC SIGNAL TIMING - PI NO 0012798	1.000	36000.00	36000.00
0150	700-7000		TN	AGRICULTURAL LIME	1.000	88.51	88.51
0155	700-8000		TN	FERTILIZER MIXED GRADE	1.000	559.74	559.74
0160	700-8100		LB	FERTILIZER NITROGEN CONTENT	75.000	3.53	265.34
0165	700-9300		SY	SOD	120.000	8.02	962.41
0170	935-1117		LF	OUT PLNT FBR OPT CBL,LOOSE TB,SM,96 FBR	5520.000	2.75	15180.00
0175	935-1512		LF	OUT PLNT FBR OPT CBL,DROP,SM,12 FBR	400.000	5.00	2000.00
0180	935-3103		EA	FIBER OPTIC CLOSURE,UNDRGRD,24 FBR	8.000	674.00	5392.00
0185	935-3107		EA	FIBER OPTIC CLOSURE,UNDRGRD,96 FIBER	1.000	875.00	875.00

STATE HIGHWAY AGENCY

DATE : 08/29/2014
PAGE : 2

JOB ESTIMATE REPORT

0190	935-3402	EA	FBR OPTIC CLOSURE,FDC(RACK MTD),12 FBR	8.000	615.00	4920.00
0195	935-4010	EA	FIBER OPTIC SPLICE, FUSION	192.000	34.00	6528.00
0200	935-5050	EA	FIBER OPTIC PATCH CORD, SM	64.000	74.00	4736.00
0205	935-6562	EA	EXT TRNSCVR,DRP&RPT,1310SM,(SIGNAL JOBS)	8.000	1616.00	12928.00
0210	935-8000	LS	TESTING	1.000	3188.00	3188.00
0215	937-6050	EA	INT VIDEO DET SYS ASMBLY, TP A	48.000	5583.00	267984.00
0220	937-6150	EA	PROGRAMMING MONITOR, TP A	8.000	289.00	2312.00
0225	937-8000	LS	TESTING	1.000	2142.00	2142.00
0230	937-8500	LS	TRAINING	1.000	3160.00	3160.00
0235	999-5200	SF	DETECTABLE WARNING SURFACE	940.000	16.13	15162.20

ITEM TOTAL						1451353.59
INFLATED ITEM TOTAL						1451353.59

TOTALS FOR JOB 0012798

ESTIMATED COST:						1451353.59
CONTINGENCY PERCENT (5.0):						72567.68
ESTIMATED TOTAL:						1523921.27

GDOT Signal Design, Task Order #7
PI 0012798, Augusta-Richmond County
Field Visit/Kickoff Meeting Minutes
August 7, 2014

Meeting Date:
Thursday, July 31st @ 8:30 AM

Participants:
Marshall Troup, GDOT Project Manager
George Brewer, GDOT OPD
Thomas Johnson, GDOT Dist. 2 ROW
Michael Nash, GDOT RR Section
Glen Bollinger, City of Augusta
Mike Edwards, City of Augusta
Ron Lampkin, City of Augusta
Mike Holt, Parsons Brinckerhoff

The meeting began at the Augusta Area office on Frontage Road. The following discussion ensued:

General Comments

- Larry Bowman is the assigned NEPA specialist
- Current letting date is programmed for July 2017
- SUE is approved for this project
- Railroad coordination should be conducted early; Norfolk Southern owns the crossing at Greene & 6th St.
- City prefers video detection at all signals
- City prefers InSync by Rhythm Engineering for adaptive signal control – need to coordinate request through Alan Davis, State Signal Engineer
- City request the fiber optic communications cable be routed to the new IT building, currently under construction on Telfair Street between 5th & 6th Streets; City will confirm fiber connection point.

After the office meeting, all attendees adjourned to downtown Augusta for a field review of the project intersections. The following general comments and intersection specific comments were made:

General Comments

- All signal heads will be 12" LED
- All permissive left-turn movements along Greene Street will have 3-section FYA heads installed, due to the median width; existing R10-12 (right turn yield on green ball) signs will not be replaced.
- Certain existing protected-only LT phases will be converted to protected-permissive LT phases (see details below) with 4-section flashing yellow arrow signal heads; City to coordinate permit revisions with District 2 Traffic Operations.
- Mast arms/ped poles/signal heads to be epoxy-coated black (City will provide specification).
- All existing signs mounted to signal equipment will be replaced with post mounted signs.
- City will provide necessary tree trimming for new mast arm installations.
- City will relocate existing Wi-Fi radios to new mast arms.
- New pedestal poles will be designed at the back of sidewalk where possible to accommodate larger truck turning radii.
- Street lights on existing mast arms will not be replaced.

- New D3-1 street name signs shall include the conventional street name (green sign) with the historical street name (brown sign) mounted below, as currently exists.
- Fiber optic communications cable to be designed through the median; City to advise PB of IT building connection point (pull box).

Intersection Design

1. Greene St. @ 5th St.
 - New cabinet in east median; existing cabinet will be removed from existing base, and existing conduits will be cut flush and capped (base can't be removed, as the street lighting cabinet is also mounted to the same base)
 - New tandem mast arms behind existing mast arms (east and west medians) with video detection
 - Replace existing EB protected-only signals with 4-section protected-permissive FYA signal
 - ADA upgrades at all corners (ped. poles, curb ramps, crosswalks)
 - New electrical service on NE corner, conduit to cabinet
2. Greene St. @ 6th St.
 - New cabinet in west median
 - Norfolk Southern may decide to install a new pre-emption cabinet at this intersection; if the City can't agree on a location for the cabinet, new pre-emption cable will be designed from the new signal cabinet to the existing pre-emption box mounted to the existing mast arm pole. The mast arm pole will be cut and capped above the pre-emption cabinet, similar to what was modified at Broad & 6th St.
 - New tandem mast arm in east median (NB/EB signals), new single mast arms in west median (SB signals) and NW corner (WB signals) with video detection
 - New post mounted nearside signals on Greene St
 - New pre-emption blank-out signs for NB/SB movements
 - ADA upgrades at all corners (ped. poles, curb ramps, crosswalks)
 - Consider bulb-outs for medians and extending solid yellow lines through median
 - New electrical service on NW corner, conduit to cabinet
3. Greene St. @ 7th St.
 - New cabinet in west median
 - New tandem mast arms behind existing mast arms (east and west medians) with video detection
 - ADA upgrades at all corners (ped. poles, curb ramps, crosswalks)
 - New electrical service on SW corner, conduit to cabinet
4. Greene St. @ 8th St.
 - New cabinet in west median
 - New tandem mast arms behind existing mast arms (east and west medians) with video detection
 - ADA upgrades at all corners (ped. poles, curb ramps, crosswalks)
 - New electrical service in median, next to cabinet
5. Greene St. @ 9th St.
 - New cabinet in west median
 - New tandem mast arms behind existing mast arms (east and west medians) with video detection
 - ADA upgrades at all corners (ped. poles, curb ramps, crosswalks)
 - New electrical service in median, next to cabinet
6. Greene St. @ 10th St.
 - New cabinet in west median
 - New tandem mast arm in west median (SB/WB signals), new single mast arms in east median (NB signals) and SE corner (EB signals) with video detection

Kickoff Meeting Minutes
PI 0012798, Augusta
August 7, 2014

- ADA upgrades at all corners (ped. poles, curb ramps, crosswalks)
 - Replace damaged curb between catch basins in NE corner
 - New electrical service in median, next to cabinet
7. Greene St. @ 11th St.
- New cabinet in west median
 - New tandem mast arms behind existing mast arms (east and west medians) with video detection
 - ADA upgrades at all corners (ped. poles, curb ramps, crosswalks)
 - New electrical service on SW corner, conduit to cabinet
8. Greene St. @ 12th St.
- New cabinet in east median
 - New tandem mast arms behind existing mast arms (east and west medians) with video detection
 - Replace existing EB protected-only signals with 4-section protected-permissive FYA signal
 - ADA upgrades at all corners (ped. poles, curb ramps, crosswalks)
 - New electrical service on SE corner, conduit to cabinet
 - City to coordinate with Utilities Dept. for removal of pump station cabinet and meter on existing mast arm pole in NW corner

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. 0012798 Richmond **OFFICE** Tennille - Utilities
SR 28 @ 8 Locations **DATE** March 24, 2015

FROM ^{MBJ} James Lindsey, District Utilities Engineer

TO Marshall Troup, Project Manager

SUBJECT **CONCEPT UTILITY COST ESTIMATE**

We are furnishing you with a Concept Utility Cost Estimate for each utility with facilities located within the project limits.

<u>Facility Owner</u>	<u>Non- Reimbursable</u>	<u>Reimbursable</u>
Georgia Power (Dist.)	\$0.00	\$10,000.00
Augusta Utilities Department	\$0.00	\$30,000.00
Comcast	\$1,241.12	\$0.00
Level 3 Communications	\$145,000.00	\$0.00
AGL	\$10,000.00	\$0.00
United Private Networks	\$10,000.00	\$0.00
WOW Inc.	\$9,735.00	\$0.00
<u>Spirit Communications - Palmetto Net</u>	<u>\$00.00</u>	<u>\$22,500.00</u>
Totals	\$175,976.12	\$62,500.00

This estimate was compiled using information provided by the various utility owners. Please be advised this is an estimate and may be revised when project plans are developed and prior rights research is complete. If you should have questions, please contact Michael D. Thomas in the Utilities Section of this office at 478-552-4606.

JL: MDT
Attachment

cc: Mike Bolden, State Utilities Engineer
Lee Upkins, Assistant State Utilities Engineer
Jun Birnkammer, State Utilities Preconstruction Engineer
Angela D. Robinson, Office of Financial Management
Rodney Way, Area Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. 0012798

OFFICE Program Delivery

PROJECT DESCRIPTION

SR 28 @ 8 CR LOCS IN RICHMOND COUNTY

DATE September 8, 2014

From: Albert V. Shelby III, Program Delivery Engineer

To: Lisa L. Myers, State Project Review Engineer

Subject: REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER Marshall Troup

MGMT LET DATE 5/15/2017

MGMT ROW DATE 2/15/2016

PROGRAMMED COSTS (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION \$ 1,100,000.00

DATE 3/25/2015

RIGHT OF WAY \$ 250,000.00

DATE ---

UTILITIES \$ -

DATE ---

REVISED COST ESTIMATES

CONSTRUCTION* \$ 1,600,117.33

RIGHT OF WAY \$ -

UTILITIES \$ 62,500.00

*Cost Contains 5 % Contingency

REASONS FOR COST INCREASE AND CONTINGENCY JUSTIFICATION:

This project is a signal upgrade 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:	\$	1,451,353.59	Base Estimate From CES
B. ENGINEERING AND INSPECTION (E & I):	\$	72,567.68	Base Estimate (A) x 5 %
C. CONTINGENCY:	\$	76,196.06	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:	\$	1,600,117.33	(A + B + C + D = E)

REIMBURSABLE UTILITY COSTS

UTILITY OWNER	REIMBURSABLE COST
Georgia Power (Dist.)	\$ 10,000.00
Augusta Utilities Department	\$ 30,000.00
Spirit Communications - Palmetto Net	\$ 22,500.00
TOTAL	\$ 62,500.00

ATTACHMENTS: