

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

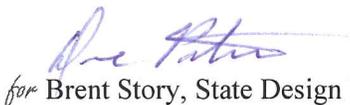
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**OFFICE OF DESIGN POLICY & SUPPORT  
INTERDEPARTMENTAL CORRESPONDENCE**

**FILE** P.I. # 0012828  
Cobb County  
GDOT District 7 - Metro Atlanta  
Operational Improvements: SR 6/US 278  
At SR 6 Spur

**OFFICE** Design Policy & Support

**DATE** 11/10/2014

**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  
Bobby Hilliard, Program Control Administrator  
Albert Shelby, State Program Delivery Engineer  
Cindy VanDyke, State Transportation Planning Administrator  
Hiral Patel, State Environmental Administrator  
Ben Rabun, State Bridge Engineer  
Kathy Zahul, State Traffic Engineer  
Angela Robinson, Financial Management Administrator  
Lisa Myers, State Project Review Engineer  
Charles "Chuck" Hasty, State Materials Engineer  
Mike Bolden, State Utilities Engineer  
Richard Cobb, Statewide Location Bureau  
Andy Casey, State Roadway Design Engineer  
Attn: Mac Cranford, District Design Engineer  
Rachel Brown, District Engineer  
Scott Lee, District Preconstruction Engineer  
Patrick Allen, District Utilities Engineer  
Roxanne Harris, Project Manager  
BOARD MEMBER - 13th Congressional District

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

Project Type: <u>Operational/ Improvement</u>	P.I. Number: <u>0012828</u>
GDOT District: <u>District 7</u>	County: <u>Cobb</u>
Federal Route Number: <u>US 278</u>	State Route Number: <u>SR 6 &amp; SR 6 Spur</u>
Project Number: _____	N/A

This project proposes to improve the operational efficiency of the intersection SR 6 and SR 6 Spur, by widening the westbound leg of the intersection to include a dedicated right turn lane on SR 6 Spur on to US 278. The right turn lane will be 400' long with a 100' entry taper.

**Submitted for approval:**

<u>Rachel S. Brown</u> District 7 District Engineer	<u>08-14-2014</u> DATE
<u>Albert Shelby</u> State Program Delivery Engineer	<u>8/25/14</u> DATE
<u>Bonnie Harris</u> GDOT Project Manager	<u>08-22-2014</u> DATE

**Recommendation for approval:**

* <u>HIRAL PATEL</u> State Environmental Administrator	<u>8/27/2014</u> ** DATE
* <u>KATHY ZAHUL</u> State Traffic Engineer	<u>9/17/2014</u> 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).

* <u>ANTHIA L. VANDYKE</u> State Transportation Planning Administrator	<u>8/29/2014</u> DATE
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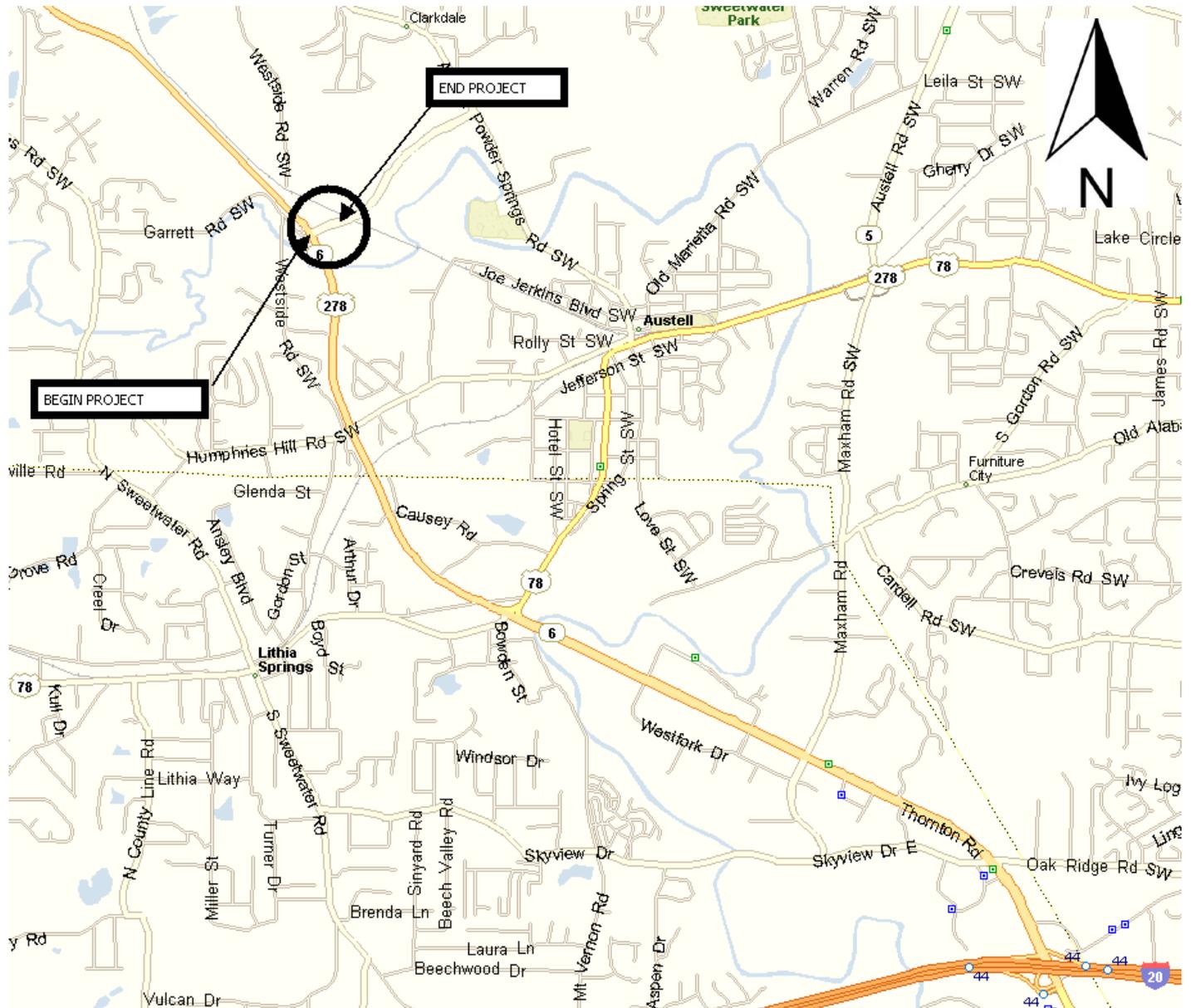
**Approval:**

Concur: <u>[Signature]</u> GDOT Director of Engineering	<u>10/27/14</u> DATE
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Approve: <u>[Signature]</u> GDOT Chief Engineer	<u>11/3/14</u> DATE
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\* RECOMMENDATION(S) ON FILE [Signature]  
\*\* WITH COMMENTS

## PROJECT LOCATION



**SR6/US 278 @ SR 6 SPUR  
Intersection Improvement  
PI No. 0012828  
Cobb County**

## **PLANNING & BACKGROUND DATA**

**Project Justification Statement:** State Route SR6/US 278 @ SR 6 SPUR in Cobb County was identified for minor intersection improvements. The proposed project is part of the GDOT Operational Improvement Lump Sum Program from the Office of Traffic Operations. This proposed project was presented to and approved by the Operational Improvement Committee.

SR 6/C H James Pkwy is a four lane roadway with a 15 foot striped median that is classified as an Urban Principal Arterial that connects Cobb County to Paulding County. The posted speed limit is 55 miles per hour (MPH). SR 6 Spur/Garrett Road is a three lane roadway that runs southwest to northeast and is classified as an Urban Minor Arterial. State Route 6 Spur connects Hiram Lithia Springs RD with Powder Spring Road SW. The Posted speed limit is 50 miles per hour (MPH). The existing traffic control at the intersection consists of a Stop and Go Traffic signal with protected left turn phases on all approaches.

GDOT District Traffic Operations staff performed an engineering study of the intersection operation. Intersection analysis indicated that the intersection signal delay at SR 6 (C H James Parkway) at SR 6 Spur (Westside Road/Garrett Road) was 51.7 seconds. Observation during peak traffic periods revealed motorists in the shared thru-right lane experienced the most delay on SR 6 Spur (Westside Road/Garrett Road) westbound (SW). The Queue length for this shared lane was 757 ft. This project proposes adding a 400 foot channelized right turn lane on the westbound approach. A capacity analysis of the intersection indicates that the intersection Level Of Service (LOS) will improve from a LOS E to LOS D and that the delay existing intersection delay will improve from 51.7 seconds to 35.7 seconds by adding the exclusive right turn lane on the west bound approach, enhancing the operational capacity of the intersection, with minimal impacts to the existing right of way.

The project lies within the boundaries of the Atlanta Regional Commission (ARC), Atlanta's Metropolitan Planning Organization (MPO). As an improvement project, this project is categorized under the "operational improvement lump sum category" in the MPO's RTP or TIP.

### **Existing conditions:**

State Route 6 (C H James Pkwy) @ SR 6 Spur (Westside Road/Garrett Road) is a four way signalized intersection with pedestrian signals, crosswalks, and wheelchair ramps. Sr 6 Spur is a 5 lane Route with six foot grassed shoulders with "W" beam guardrail are present along each quadrant of the intersection. The nearest signalized intersections are 0.81 miles or 4300 feet (SR 6 @ Humphries Hill RD SW) and 0.83 miles or 4500 feet (SR 6 Spur @ Austell Powder Spring Road SW) from the intersection of SR 6 and SR 6 Spur. The westbound leg (Garrett Road) is a three lane roadway that runs Southeast to Northwest and is classified as an Urban Minor Arterial. State Route 6 Spur connects the intersection of SR 6 (C H James Pkwy) and SR 6 Spur to the intersection of SR 6 Spur and Austell Powder Spring Road SW. The posted speed limit is 50 miles per hour (mph). The typical section consist of (5) 12 foot lanes, 6 foot rural paved shoulders, 6 foot grassed shoulders, W-beam guardrail, 15 foot raised center median with curb and gutter. The current ADT for SR 6 Spur is 4925.

**Other projects in the area:**

- 0012620: SR 6/US 278 FROM I-20/DOUGLAS TO GARRETT ROAD/COBB**
- 0007826: SR 6/THORNTON ROAD FROM SR 120/PAULDING TO I-20/DOUGLAS (widening)**
- 0010821: SR 6 FROM I-20 WB TO SR 6 SPUR - TRUCK FRIENDLY LANES**

**Description of the proposed project:**

This project proposes to improve the operational efficiency of the intersection SR 6 and SR 6 Spur, by widening the eastern approach of the intersection to include a dedicated right turn lane on SR 6 Spur on to US 278. The right turn lane will be 400' long with a 100' entry taper.

**MPO:** Atlanta Regional Commission (ARC)

MPO Project ID N/A

**Regional Commission:**Atlanta Regional Commission

RC Project ID N/A

**Congressional District(s):** 13

**Federal Oversight:**  Exempt  State Funded  Other

**Projected Traffic:** ADT

SR 6:  
 Current Year (2014): 18,850      Open Year (2016): 19,650      Design Year (2036): 26,075  
 SR 6 SPUR:  
 Current Year (2014): 4,925      Open Year (2016): 5,075      Design Year (2036): 6,225  
 Traffic Projections Performed by: Office Of Planning

**Functional Classification (Mainline):** SR6: Urban Principal Arterial  
 SR 6 SPUR: Urban Minor Arterial

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

Warrants met:  None  Bicycle  Pedestrian  Transit

**DESIGN AND STRUCTURAL**

**Major Structures:** N/A

**Mainline Design Features:** SR 6 SPUR

Feature	Existing SR6 spur	Standard*	Proposed
<b>Typical Section</b>			
- Number of Lanes	5	5	6
- Lane Width(s)	12'	12'	12'
- Median Width & Type	15' raised	10' to 16'	15' raised
- Outside Shoulder or Border Area Width	12'	6' to 12'	15.5' (6.5') paved
- Outside Shoulder Slope	6%	6%	6%
Posted Speed	50 mph		50 mph
Design Speed	55 mph	55 mph	55 mph
Min Horizontal Curve Radius	757	833	926
Maximum Superelevation Rate	4%	6%	4%

Feature	Existing SR6 spur	Standard*	Proposed
Maximum Grade	2%	6%	2%
Access Control	Full	Full	Full
Design Vehicle	WB-67	WB-67	WB-67

\*According to current GDOT design policy if applicable

**Mainline Design Features: SR 6**

Feature	Existing SR6	Standard*	Proposed
Typical Section			
- Number of Lanes	5	5	5
- Lane Width(s)	12'	12'	12'
- Median Width & Type	15' flush	10' to 16'	15' flush
- Outside Shoulder or Border Area Width	15.5'	6' to 12'	15.5' (6.5' paved)
- Outside Shoulder Slope	6%	6%	6%
Posted Speed	55 mph		55 mph
Design Speed	55 mph	55 mph	55 mph
Min Horizontal Curve Radius	2916	833	926
Maximum Superelevation Rate	4%	6%	4%
Maximum Grade	2%	6%	2%
Access Control	Full	Full	Full
Design Vehicle	WB-67	WB-67	WB-67

\*According to current GDOT design policy if applicable

**Major Interchanges/Intersections: SR6/US 278 @ SR 6 SPUR**

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: GA Power

SUE Required:  No  Yes

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

**Right-of-Way:** Existing width: 100ft Proposed width: 100ft  
Required Right-of-Way anticipated:  No  Yes  Undetermined  
Easements anticipated:  None  Temporary  Permanent  Utility  Other

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

## ENVIRONMENTAL AND PERMITS

### Anticipated Environmental Document:

GEPA:  NEPA:  CE  PCE

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

\*MS4 will be exempted since the disturbed area is less than 1 acre.

**Environmental Permits, Variances, Commitments, and Coordination anticipated:** None

### 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

**NEPA/GEPA Comments & Information:** None

**NEPA/GEPA:** A Programmatic Categorical Exclusion (PCE) is anticipated.

**Ecology:** No adverse impacts anticipated.

**History:** No adverse impacts anticipated.

**Archeology:** No adverse impacts anticipated.

**Air & Noise:** No adverse impacts anticipated.

**Public Involvement:** No public meeting is anticipated at this time

**Major Stakeholders:** Traveling public, GDOT, and Cobb County.

## COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

**Project Meetings:** CTM held Fri 7/25/2014, see attached minutes

Project Activity	Party Responsible for Performing Task(s)
Concept Development	GDOT
Design	GDOT
Right-of-Way Acquisition	GDOT
Utility Relocation	Utility Companies
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	Contractor
Providing Detours	None
Environmental Studies, Documents, and Permits	GDOT
Environmental Mitigation	GDOT
Construction Inspection & Materials Testing	GDOT

**Other coordination to date:** None

### Project Cost Estimate and Funding Responsibilities:

	Breakdown of PE	ROW	Reimbursable Utility	CST*	Environmental Mitigation	Total Cost
Funded By	GDOT	N/A	N/A	GDOT	N/A	
\$ Amount	\$150,000	\$0	\$0	\$391,266.36	\$0	\$541,266.36
Date of Estimate	11/4/2013			8/7/2014		

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

## ALTERNATIVES DISCUSSION

Preferred Alternative:			
Estimated Property Impacts:	0	Estimated Total Cost:	\$541,267
Estimated ROW Cost:	\$0	Estimated CST Time:	9 months
<b>Rationale:</b> <i>The addition of a dedicated right turn lane will improve the operational efficiency of the intersection.</i>			

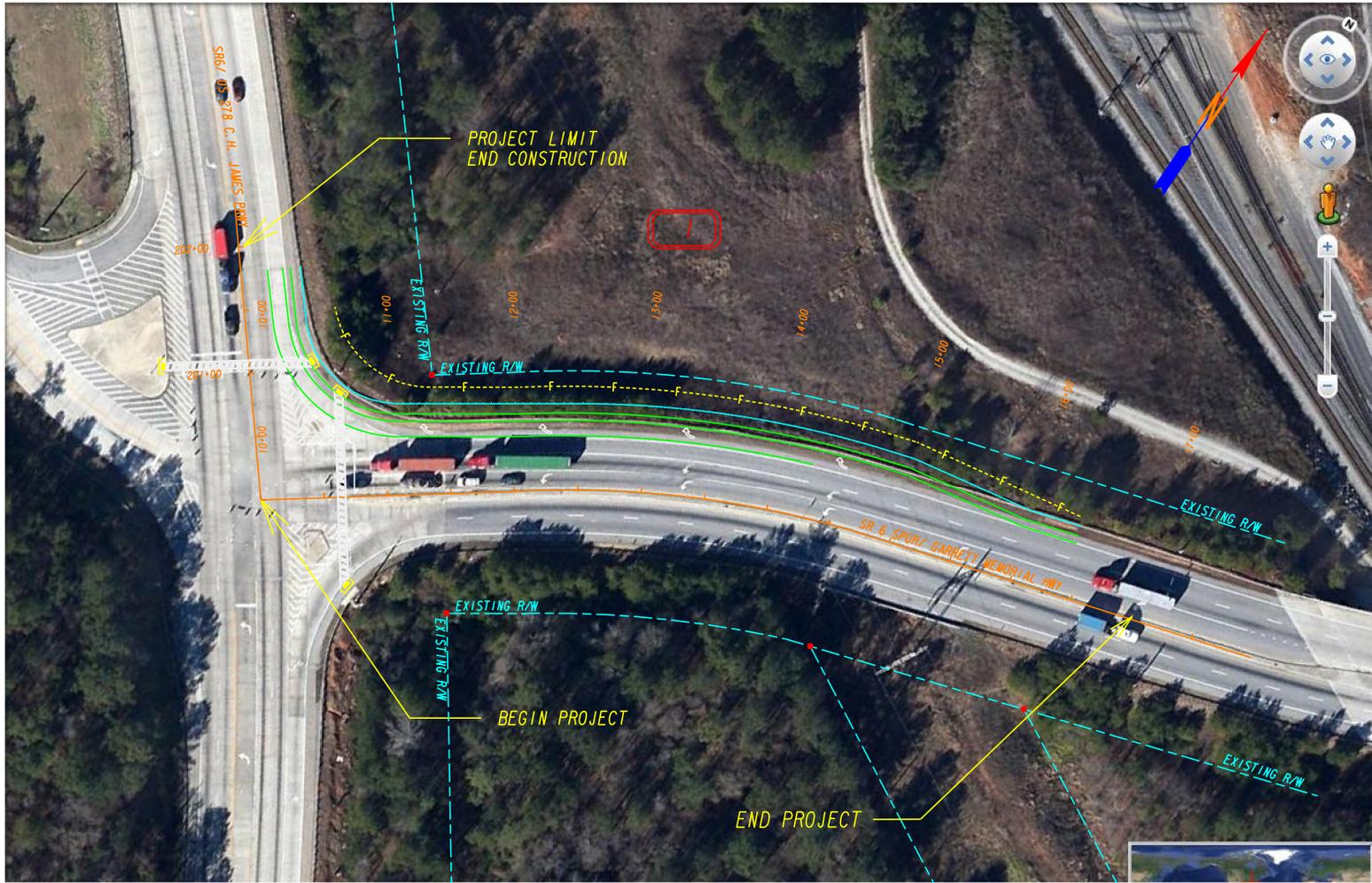
No-Build Alternative:			
Estimated Property Impacts:	0	Estimated Total Cost:	\$0
Estimated ROW Cost:	\$0	Estimated CST Time:	0
<b>Rationale:</b> <i>The No-Build alternative is not recommended for this project. The No-Build alternative will not improve the operation of the intersection and will continue to cause long queue lengths.</i>			

Additional Alternative:			
Estimated Property Impacts:	0	Estimated Total Cost:	\$2,023,799
Estimated ROW Cost:	\$200,000	Estimated CST Time:	18 months
<b>Rationale:</b> <i>Adjusting the skew angle of Garrett Road at the intersection will not will not improve the operational efficiency of the intersection more than adding one (1) additional right turn lane and will adversely impact ROW and Utilities</i>			

**Comments/Additional Information:** None

**LIST OF ATTACHMENTS/SUPPORTING DATA**

1. Concept Layout
2. Typical sections
3. Cost Estimate
4. Fuel and AC Adjustment
5. Crash summaries
6. Traffic diagrams
7. TE Study
8. Concept team meeting minutes



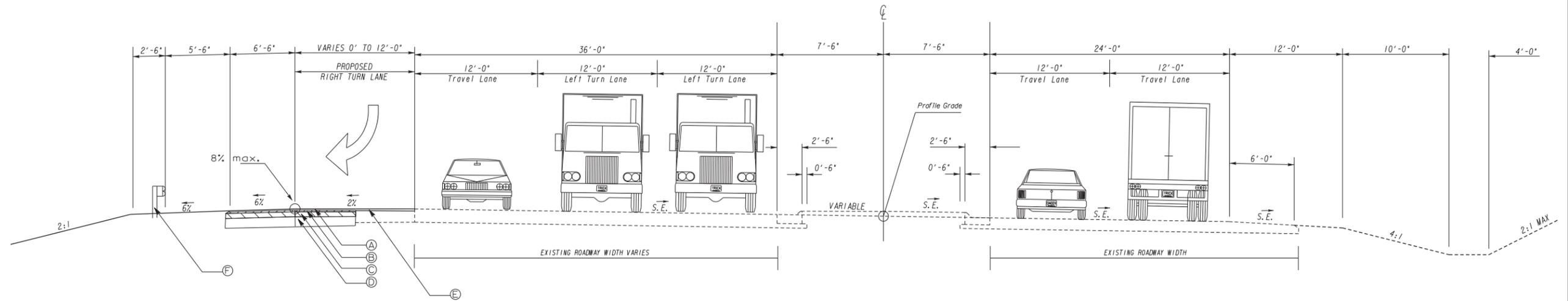
PROPERTY AND EXISTING R/W LINE  
 REQUIRED R/W LINE  
 CONSTRUCTION LIMITS  
 EASEMENT FOR CONSTR  
 & MAINTENANCE OF SLOPES  
 EASEMENT FOR CONSTR OF SLOPES  
 EASEMENT FOR CONSTR OF DRIVES

— R — BEGIN LIMIT OF ACCESS.....BLA  
 — F — END LIMIT OF ACCESS.....ELA  
 — G — LIMIT OF ACCESS  
 — H — REQ'D R/W & LIMIT OF ACCESS

**GEORGIA**  
 DEPARTMENT  
 OF  
 TRANSPORTATION

REVISION DATES	

STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION  
 OFFICE: DISTRICT 7 PRECONSTRUCTION  
 Concept Layout  
 SR6/US 278 @ SR6 SPUR  
 DRAWING NO. 01-01



SLOPE = RATE OF S.E.  
SEE PLANS TS-01  
STATION 10+00 TO 14+61  
FULL SE ROADWAY TYPICAL SECTION

- REQUIRED PAVEMENT
- Ⓐ RECYCLED ASPHALT CONCRETE, 12.5mm, 135 lb/sy
  - Ⓑ RECYCLED ASPHALT CONCRETE, 19 mm, 220 lb/sy
  - Ⓒ RECYCLED ASPHALT CONCRETE, 25 mm, 880 lb/sy
  - Ⓓ GRADED AGGREGATE BASE, 12"
  - Ⓔ VARIABLE DEPTH MILLING
  - Ⓕ GUARDRAIL USE 7 FOOT POST

REVISION DATES		

STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: DISTRICT 7 PRECONSTRUCTION

**TYPICAL SECTIONS**

INTERSECTION IMPROVEMENT

DRAWING No. 05-01

# DETAILED COST ESTIMATE



**Job: 0012828\_AJ**

**JOB NUMBER** 0012828\_AJ

**FED/STATE PROJECT NUMBER** 0012828

**SPEC YEAR:** 01

**DESCRIPTION:** SR 6/US 278 @ SR 6 SPUR  
0012828

**ITEMS FOR JOB 0012828\_AJ**

**0010 - ROADWAY**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0340	150-1000	1.000	LS	\$75,000.00000	TRAFFIC CONTROL - 0012828	\$75,000.00
0275	150-5010	1.000	EA	\$5,895.57302	TRAF CTRL,PORTABLE IMPACT ATTN	\$5,895.57
0004	210-0100	1.000	LS	\$50,000.00000	GRADING COMPLETE - 0012828	\$50,000.00
0265	310-1101	539.000	TN	\$25.41797	GR AGGR BASE CRS, INCL MATL	\$13,700.29
0019	402-1801	25.000	TN	\$92.00000	RECYL AC PATCHING, INCL BM	\$2,300.00
0240	402-1812	50.000	TN	\$76.35384	RECYL AC LEVELING,INC BM&HL	\$3,817.69
0245	402-3113	40.000	TN	\$130.00000	RECYL AC 12.5MM SP,GP1/2,BM&HL	\$5,200.00
0255	402-3121	257.000	TN	\$82.55857	RECYL AC 25MM SP,GP1/2,BM&HL	\$21,217.55
0250	402-3190	65.000	TN	\$99.78099	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	\$6,485.76
0020	413-1000	28.000	GL	\$3.47433	BITUM TACK COAT	\$97.28
0025	432-5010	230.000	SY	\$8.07195	MILL ASPH CONC PVMT,VARB DEPTH	\$1,856.55
0035	441-0108	13.000	SY	\$72.95408	CONC SIDEWALK, 8 IN	\$948.40
0260	446-1100	500.000	LF	\$3.96717	PVMT REF FAB STRIPS, TP2,18 INCH WIDTH	\$1,983.59
0095	641-1200	650.000	LF	\$17.30461	GUARDRAIL, TP W	\$11,248.00
0345	647-1000	1.000	LS	\$125,000.00000	TRAF SIGNAL INSTALLATION NO - 0012828	\$125,000.00
<b>SUBTOTAL FOR ROADWAY:</b>						<b>\$324,750.68</b>

**0030 - EROSION CONTROL**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0190	163-0232	1.000	AC	\$77.46168	TEMPORARY GRASSING	\$77.46
0305	163-0240	7.000	TN	\$283.99496	MULCH	\$1,987.96
0230	163-0300	2.000	EA	\$1,189.49120	CONSTRUCTION EXIT	\$2,378.98
0195	165-0030	400.000	LF	\$1.00140	MAINT OF TEMP SILT FENCE, TP C	\$400.56
0235	165-0101	2.000	EA	\$462.46255	MAINT OF CONST EXIT	\$924.93
0200	171-0030	800.000	LF	\$3.28673	TEMPORARY SILT FENCE, TYPE C	\$2,629.38
0335	700-6910	1.000	AC	\$515.13538	PERMANENT GRASSING	\$515.14
0205	700-7000	1.500	TN	\$101.07664	AGRICULTURAL LIME	\$151.61
0210	700-8000	0.500	TN	\$467.65717	FERTILIZER MIXED GRADE	\$233.83
0215	700-8100	25.000	LB	\$2.99119	FERTILIZER NITROGEN CONTENT	\$74.78
0310	716-2000	100.000	SY	\$1.09289	EROSION CONTROL MATS, SLOPES	\$109.29
<b>SUBTOTAL FOR EROSION CONTROL:</b>						<b>\$9,483.92</b>

# DETAILED COST ESTIMATE



**Job: 0012828\_AJ**

**0040 - SIGNING AND MARKING**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0120	636-1020	16.000	SF	\$15.96114	HWY SGN,TP1MAT,REFL SH TP3	\$255.38
0125	636-2070	60.000	LF	\$6.72940	GALV STEEL POSTS, TP 7	\$403.76
0135	652-0120	8.000	EA	\$35.95000	PAVEMENT MARKING, ARROW, TP 2	\$287.60
0140	653-1501	550.000	LF	\$0.74544	THERMO SOLID TRAF ST 5 IN, WHI	\$409.99
0150	653-1704	72.000	LF	\$4.93030	THERM SOLID TRAF STRIPE,24",WH	\$354.98
0155	653-1804	1000.000	LF	\$1.93232	THERM SOLID TRAF STRIPE, 8",WH	\$1,932.32
0160	653-6004	90.000	SY	\$3.59965	THERM TRAF STRIPING, WHITE	\$323.97
0185	654-1003	20.000	EA	\$4.15252	RAISED PVMT MARKERS TP 3	\$83.05
0170	657-1054	100.000	LF	\$7.76108	PRF PL SD PVMT MKG,5",WH,TP PB	\$776.11
0175	657-6054	50.000	LF	\$7.74226	PRF PL SD PVMT MKG,5",YW,TP PB	\$387.11
<b>SUBTOTAL FOR SIGNING AND MARKING:</b>						<b>\$5,214.27</b>

**0050 - DRAINAGE**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0350	550-1180	20.000	LF	\$52.50939	STM DR PIPE 18",H 1-10	\$1,050.19
0355	550-4218	1.000	EA	\$574.36724	FLARED END SECT 18 IN, ST DR	\$574.37
<b>SUBTOTAL FOR DRAINAGE:</b>						<b>\$1,624.56</b>

**TOTALS FOR JOB 0012828\_AJ**

<b>ITEMS COST:</b>	<b>\$341,073.43</b>
<b>COST GROUP COST:</b>	<b>\$0.00</b>
<b>ESTIMATED COST:</b>	<b>\$341,073.43</b>
<b>CONTINGENCY PERCENT:</b>	<b>0.08</b>
<b>ENGINEERING AND INSPECTION:</b>	<b>0.05</b>
<b>ESTIMATED COST WITH CONTINGENCY AND E&amp;I:</b>	<b>\$383,707.61</b>

**PROJ. NO.:** SR 6 / US 278 @ SR 6 SPUR

**P.I. NO.** 0012828

**DATE:** 8/6/2014

<b>Base Construction Cost</b>		\$	341,073.43
E & I	5%	\$	17,053.67
Construction Contingency	7.50%	\$	25,580.51
<b>Subtotal Construction Cost</b>		\$	383,707.61
Liquid AC Adjustment (50 % cap)		\$	7,558.75
<b>Total Construction Cost</b>		\$	391,266.36

**PROJ. NO.** SR 6 / US 278 @ SR 6 SPUR  
**P.I. NO.** 0012828  
**DATE** 8/6/2014

CALL NO.

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Aug-14	\$ 3.500
DIESEL		\$ 3.835
LIQUID AC		\$ 608.00

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

**LIQUID AC ADJUSTMENTS**

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

**Asphalt**

Price Adjustment (PA)				<b>7514.88</b>	\$	<b>7,514.88</b>
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	972.80		
Monthly Asphalt Cement Price month project let (APL)			\$	608.00		
<b>Total Monthly Tonnage of asphalt cement (TMT)</b>				<b>20.6</b>		

ASPHALT	Tons	%AC	AC ton
Leveling	50	5.0%	2.5
12.5 OGFC		5.0%	0
12.5 mm	40	5.0%	2
9.5 mm SP		5.0%	0
25 mm SP	257	5.0%	12.85
19 mm SP	65	5.0%	3.25
	<b>412</b>		<b>20.6</b>

**BITUMINOUS TACK COAT**

Price Adjustment (PA)				\$	<b>43.87</b>	\$	<b>43.87</b>
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	972.80			
Monthly Asphalt Cement Price month project let (APL)			\$	608.00			
<b>Total Monthly Tonnage of asphalt cement (TMT)</b>				<b>0.120262826</b>			

Bitum Tack

Gals	gals/ton	tons
28	232.8234	0.12026283

**BITUMINOUS TACK COAT (surface treatment)**

Price Adjustment (PA)				<b>0</b>	\$	<b>-</b>
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	972.80		
Monthly Asphalt Cement Price month project let (APL)			\$	608.00		
<b>Total Monthly Tonnage of asphalt cement (TMT)</b>				<b>0</b>		

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

**TOTAL LIQUID AC ADJUSTMENT** \$ **7,558.75**

**SR6 (C H James Pkwy) at SR6 Spur (Westside Road/ Garrett Road)**

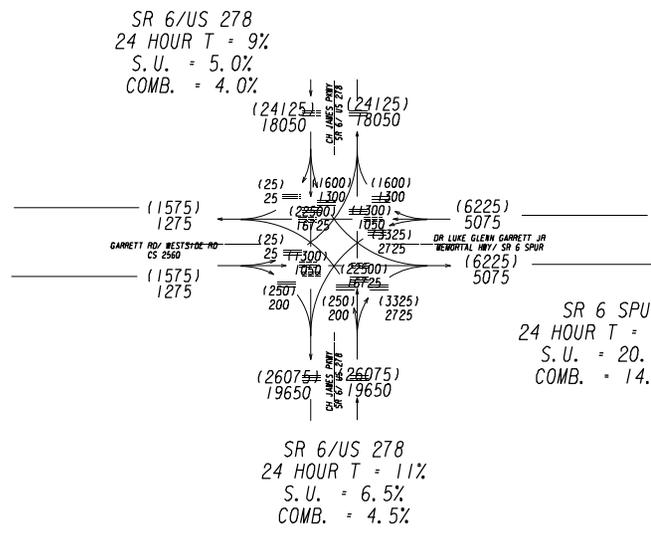
<b>Crash Summary</b>						
Year	Beginning MP	Ending MP	Number of Accidents	Number of Injuries	Number of Fatalities	
2010	6.34	6.39	10	5	0	
2011	6.34	6.39	4	2	0	
2012	6.34	6.39	15	5	0	
Total			29	12	0	

<b>Type of Collisions</b>						
Year	Angle	Not with Vehicle	Head-On	Rear-End	Sideswipe (same direction)	Sideswipe (opposite direction)
2010	1	2	1	7	0	0
2011	0	1	0	2	0	0
2012	1	3	0	9	1	1
Total	2	6	1	18	1	1

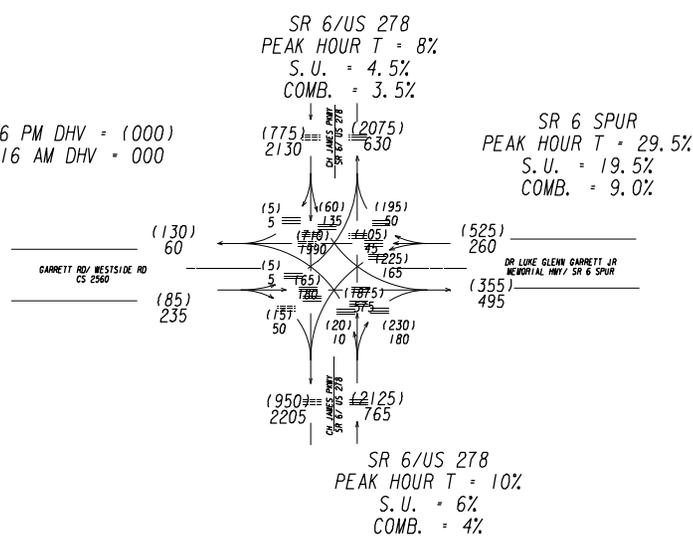
<b>Location of Impacts</b>						
Gore	Median	Off Roadway	On Roadway	On Shoulder	Ramp	
0	0	0	29	0	N/A	



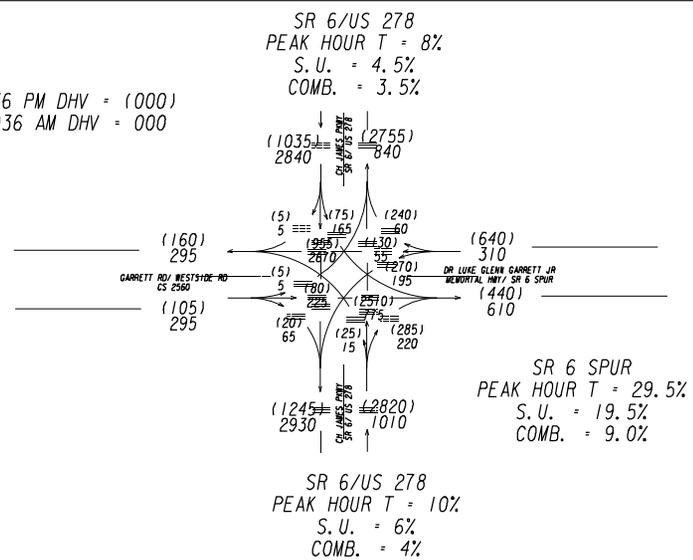
2036 ADT = (000)  
2016 ADT = 000



2016 PM DHV = (000)  
2016 AM DHV = 000



2036 PM DHV = (000)  
2036 AM DHV = 000



PI\* 0012828  
COBB COUNTY  
SR 6/ US 278  
AT SR 6 SPUR

BUILD - NO BUILD  
2036 ADT = (000)  
2016 ADT = 000

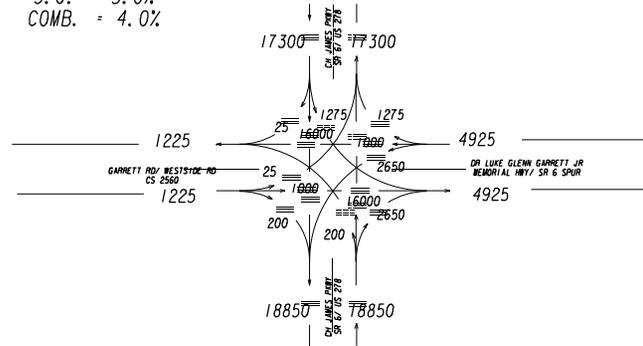
BUILD - NO BUIL  
2036 PM DHV = (000)  
2036 AM DHV = 000  
2016 PM DHV = (000)  
2016 AM DHV = 000

COBB  
COUNTY

REVISION DATES	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION
MAY 05/2014	OFFICE: PLANNING
	<b>TRAFFIC DIAGRAM</b>
	DRAWING No. <b>10-1</b>

EXISTING 2014 ADT = 000

SR 6/US 278  
 24 HOUR T = 9%  
 S. U. = 5.0%  
 COMB. = 4.0%



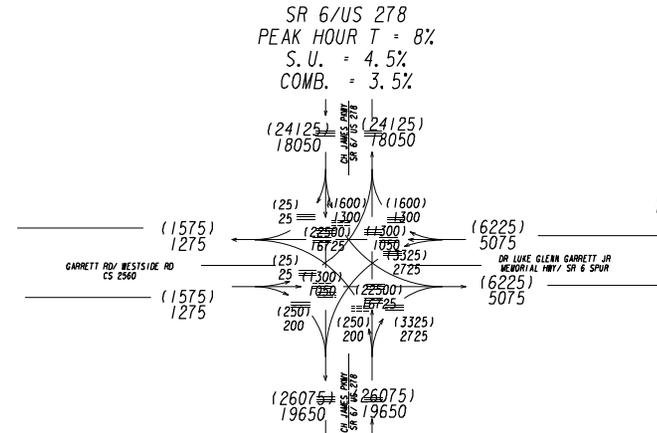
SR 6 SPUR  
 24 HOUR T = 34.5%  
 S. U. = 20.25%  
 COMB. = 14.25%

2036 ADT = (000)  
 2016 ADT = 000

24 HOUR T = 34.5%  
 S. U. = 20.25%  
 COMB. = 14.25%

SR 6/US 278  
 24 HOUR T = 11%  
 S. U. = 6.5%  
 COMB. = 4.5%

EXISTING  
 2014 PM DHV = (000)  
 2014 AM DHV = 000



SR 6/US 278  
 PEAK HOUR T = 8%  
 S. U. = 4.5%  
 COMB. = 3.5%

SR 6 SPUR  
 PEAK HOUR T = 29.5%  
 S. U. = 19.5%  
 COMB. = 9.0%

SR 6/US 278  
 PEAK HOUR T = 10%  
 S. U. = 6%  
 COMB. = 4%

PI\* 0012828  
 COBB COUNTY  
 SR 6/ US 278  
 AT SR 6 SPUR

EXISTING 2014 ADT = 000

EXISTING  
 2014 PM DHV = (000)  
 2014 AM DHV = 000

COBB  
 COUNTY

REVISION DATES

ME 05/2014			

STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION

OFFICE: PLANNING

TRAFFIC DIAGRAM

DRAWING No.

10-1

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

TRAFFIC ENGINEERING REPORT

For State Route 6/C H James Parkway (MP 6.34 – 6.39)

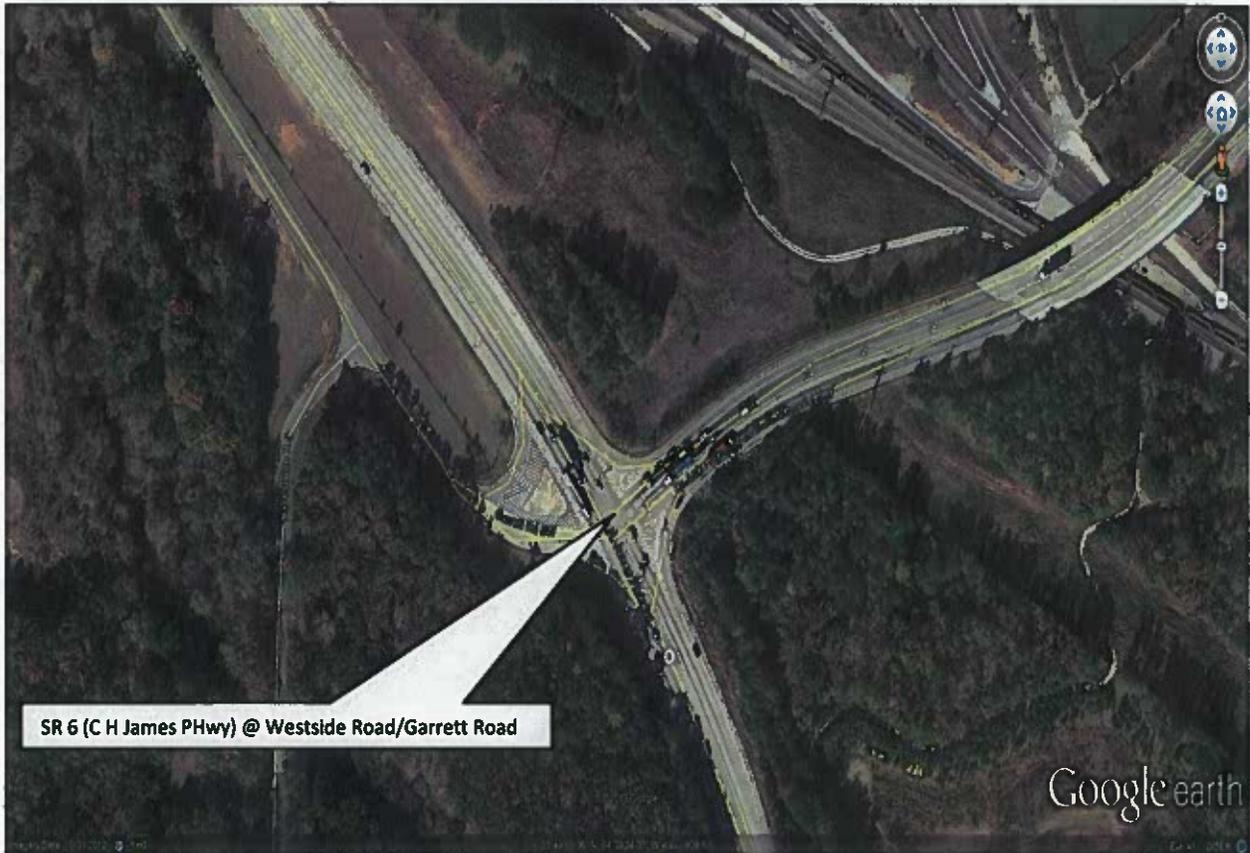
at

SR 6 Spur/Westside Road/Garrett Road (MP 0.00 – 0.08)

City of Austell

Cobb County, Georgia

SR 6 Milepost 6.34



**Location:**

The intersection at SR 6 (C H James Pkwy) at SR 6 Spur (Westside Road/Garrett Road) is located in the City of Austell in Cobb County.

**Reason for the Investigation:**

A traffic engineering study is recommended by the Department for operational deficiencies and the evaluation for a roundabout at SR 6 (C H James Pkwy) at SR 6 Spur (Westside Road/Garrett Road).

**Description of Intersection:**

State Route 6 (C H James Pkwy) @ SR 6 Spur (Westside Road/Garrett Road) is a four way signalized intersection with pedestrian signals, crosswalks, and wheelchair ramps. Three feet grassed shoulders with "W" beam guardrail are present along each quadrant of the intersection. There are not any street lights at the intersection. Four signal poles are at the intersection. The nearest signalized intersections are 0.81 miles or 4300 feet (SR 6 @ Humphries Hill RD SW) and 0.83 miles or 4500 feet (SR 6 Spur @ Austell Powder Spring Road SW) from the intersection of SR 6 and SR 6 Spur.

State Route 6 (C H James Pkwy) is a four lane roadway with left and right turn lanes to access SR 6 Spur and Garrett Road. State Route 6 is classified as an Urban Principal Arterial and runs Northeast to Northwest in Cobb County connecting Fulton and Paulding Counties. The posted speed limit is 55 miles per hour (mph). State Route 6 has 12 ft lanes with grassed shoulders. The current AADT for SR 6 is 32990.

SR 6 Spur (Westside Road/Garrett Road) is a three lane roadway that runs Southeast to Southwest and is classified as an Urban Minor Arterial. State Route 6 Spur connects the intersection of SR 6 (C H James Pkwy) and SR 6 Spur to the intersection of SR 6 Spur and Austell Powder Spring Road SW. The posted speed limit is 50 miles per hour (mph). Post Road has 12 ft lanes with grassed shoulders. The current AADT for SR 6 Spur is 7250.

**Traffic Volumes in vehicles per day (vpd):**

Latest year percent trucks: 30%

Latest year 24 hour percent trucks: 30%

Year	SR 6 @ MP 6.34 Count Station (vpd)	SR 6 Spur @ MP 0.00 Count Station (vpd)
2012 (Current AADT)	32990	7250
2011 (Previous AADT)	32030	7260

**Peak Hour Traffic Volume (vehicles only)**

The table below gives the peak hour volumes movement and direction. Peak hour counts are found by using any four consecutive 15-minute intervals during the two or three hour count periods.

TIME	SR 6 Spur (Westside Road/Garret Road)								SR 6 (C H James Pkwy)							
	EASTBOUND (NE)				WESTBOUND (SW)				NORTHBOUND (NW)				SOUTHBOUND (SE)			
	THRU	LEFT	RIGHT	P E D S	THRU	LEFT	RIGHT	P E D S	THRU	LEFT	RIGHT	P E D S	THRU	LEFT	RIGHT	P E D S
4:45PM - 5:00PM	12	0	3	0	24	61	63	0	489	4	44	0	125	11	0	0
5:00PM - 5:15PM	9	3	1	0	24	45	51	0	466	4	49	0	126	5	1	0
5:15PM - 5:30PM	8	1	4	0	33	48	50	0	450	1	40	0	144	7	0	0
5:30PM - 5:45PM	6	0	1	0	27	46	54	0	422	3	37	0	134	12	0	0
<b>TOTAL</b>	<b>35</b>	<b>4</b>	<b>9</b>	<b>0</b>	<b>108</b>	<b>200</b>	<b>218</b>	<b>0</b>	<b>1827</b>	<b>12</b>	<b>170</b>	<b>0</b>	<b>529</b>	<b>35</b>	<b>1</b>	<b>0</b>

Traffic delays were observed at the intersection. The queue lengths on SR 6 (C H James Pkwy) northbound (NW) queue length(s) were 42 ft (left turn lane), 1235 ft (thru lane), and 49 ft (right turn lane). State Route 6 southbound (SE) queue lengths were 90 ft (right turn lane), 196 ft (thru lane), and 3 ft (right turn lane). The queue lengths on SR 6 Spur (Westside Road/Garrett Road) eastbound (NE) were 96 ft (thru lane) and 23 ft (right turn lane). State Route 6 Spur westbound (SW) queue lengths were 177 ft (left turn lane) and 757 ft (shared thru-right lane).

All morning and evening turning movement counts are attached.

**Existing Traffic Control:**

A traffic signal is present at the intersection of SR 6 (C H James Pkwy) and SR 6 Spur (Westside Road/Garrett Road). SR 6 (C H James Pkwy) is a four lane Urban Principal Arterial roadway that runs southeast to northwest at the intersection. The current AADT for SR 6 (C H James Pkwy) at this location is 32990. The lanes are 12 feet. A 12 foot center turn lane is also present. SR 6 Spur (Westside Road/ Dr. Luke Glenn Garret Jr. Memorial; Dr.) is a four lane and Garrett Road/ Dr. Luke Glenn Garret Jr. Memorial; Dr.) is a three lane Urban Minor Arterial roadway that runs southwest to northeast at the intersection. The current AADT for SR 6 Spur (Westside Road /Garret Road) at this location is 7250. The lanes are 12 feet. Pedestrian signals and crosswalks are located at the intersection of SR 6 (C H James Pkwy) and SR 6 Spur (Westside Road/Garrett Road). Wheelchair ramps are present but, are not ADA accessible.

**Vehicular Speeds:**

- The posted speed limit on SR 6 (C H James Pkwy) is 55 MPH.
- The posted speed limit on SR 6 Spur (Westside Road/Dr. Luke Glenn Garret Jr. Memorial; Dr.) is 50 MPH.
- The posted speed limit on Garrett Road/Dr. Luke Glenn Jr. Memorial Dr. is 35 MPH.

**Pedestrian Movements:**

Pedestrians were not visible during the traffic counts. There are crosswalks and pedestrian signals present at this intersection.

**Other modes of transportation present:**

Other modes of transportation such as public transit and bicycle facilities (bike lanes) were not present.

**Delay:**

The intersection signal delay at SR 6 (C H James Pkwy) at SR 6 Spur (Westside Road/Garrett Road) was 57.1 seconds. Observation during peak traffic periods revealed motorists in the shared thru-right lane experienced the most delay on SR 6 Spur (Westside Road/Garrett Road) westbound (SW). The Queue length for this shared lane was 757 ft.

**Parking:**

There was no parking observed or expected at the intersection.

**Accident History:**

Crash reports for this intersection indicate 29 crashes have occurred between 2010 and 2012. The collisions are mostly "rear-end" collisions located on the roadway. Most of these collisions occurred during daylight and dry conditions. The number of collisions and the location of impacts are shown in the tables below.

Year	Collision Summary				
	Beg MP	End MP	Number of Accidents	Number of Injuries	Number of Fatalities
2010	6.34	6.39	10	5	0
2011	6.34	6.39	4	2	0
2012	6.34	6.39	15	5	0
<b>Total</b>	-	-	<b>29</b>	<b>10</b>	<b>0</b>

Year	Type of Collisions					
	Angle	Not with Vehicle	Head-On	Rear-End	Sideswipe (same direction)	Sideswipe (opp direction)
2010	1	2	1	7	0	0
2011	0	1	0	2	0	0
2012	1	3	0	9	1	1
<b>Total</b>	<b>2</b>	<b>6</b>	<b>1</b>	<b>18</b>	<b>1</b>	<b>1</b>

Location of Impacts					
Gore	Median	Off Roadway	On Roadway	On Shoulder	Ramp
0	0	0	29	0	N/A

Available accident printouts are attached. Also included are collision diagrams.

**Sight Distance:**

The results are summarized in the table below.

Intersecting Road	Arterial Speed (mph)	Existing SDL (ft.)	Required SDL (ft.)	Existing SDR (ft.)	Required SDR (ft.)
SR 6 NB (NW) C H James Pkwy	55	616	650	413	685
SR 6 SB (SE) C H James Pkwy	55	571	650	454	685
SR 6 Spur WB (SW) Westside Road	50	1325	590	895	625
SR 6 Spur EB (NE) Garret Road	35	895	390	650	390

**Operational Analysis Synchro 7 Signal Controlled (Existing Conditions):**

The capacity and LOS for the intersection (SR 6 @ SR 6 Spur) was evaluated using Synchro 7 (Signal Controlled) traffic analysis software. The software provided the estimated delay of traffic and the LOS results for a signalized intersection at this location for the existing conditions. The approach delay for SR 6 (C H James Pkwy) northbound (NW) is 39.7 seconds. The Level-of-Service (LOS) for the northbound (NW) approach is F. The approach delay for SR 6 (C H James Pkwy) southbound (SE) is 19.1 seconds. The southbound (SE) LOS is D. State Route 6 Spur (Westside Road/Garrett Road) eastbound (NE) approach delay is 81.5 seconds with an approach LOS F. State Route 6 Spur (Westside Road/Garrett Road) westbound (SW) approach delay is 162.3 seconds with an approach LOS F. The cycle length for the intersection is 180 seconds. The maximum v/c Ratio is 1.32. The Intersection signal delay is 57.1 seconds with an intersection LOS E.

**Operational Analysis Synchro 7 Signal Controlled (Proposed Conditions):**

The capacity and LOS for the intersection (SR 6 @ SR 6 Spur) was evaluated using Synchro 7 (Signal Controlled) traffic analysis software. The software provided the estimated delay of traffic and the LOS results for a signalized intersection at this location for the proposed conditions. The proposed conditions consist of adding a 400 ft dedicated right turn lane on SR 6 Spur (Westside Road/Garrett Road) westbound (SW) approach. The approach delay for SR 6 (C H James Pkwy) northbound (NW) is 30.7 seconds. The Level-of-Service (LOS) for the northbound (NW) approach is C. The approach delay for SR 6 (C H James Pkwy) southbound (SE) is 17.2 seconds. The southbound (SE) LOS is B. State Route 6 Spur (Westside Road/Garrett Road) eastbound (NE) approach delay is 81.5 seconds with an approach LOS F. State Route 6 Spur (Westside Road/Garrett Road) westbound (SW) approach delay is 70.5 seconds with an approach LOS E. The cycle length for the intersection is 180 seconds. The maximum v/c Ratio is 0.88. The Intersection signal delay is 35.7 seconds with an intersection LOS D.

**Operational Analysis Roundabout (Proposed Conditions):**

The volume split at SR 6(C H James Pkwy) at SR 6 Spur (Westside Road/Garrett Road) is 82/18. The traffic volume on SR 6 (C H James Pkwy) makes up 82% of the traffic volumes at the intersection during peak hours. The traffic volume on SR 6 Spur (Westside Road/Garrett Road) makes up 18% of the traffic volumes at this intersection during peak hours. The maximum allowable split for a roundabout is 85/15. The intersection at SR 6 (C H James Pkwy) at SR 6 Spur (Westside Road/Garrett Road) meets the roundabout split requirement.

However, the design for a roundabout to function for 20 years (design year) to manage the traffic volumes at the intersection of SR 6 (C H James Pkwy) at SR 6 Spur (Westside Road) is not sufficient for operational improvement. A three lane roundabout analysis with slip lanes at each approach for right turns was performed using SIDRA for the peak hour. Dual slip lanes were implemented for the right turn on SR 6 Spur (Westside Road/Garrett Road) in an effort to improve the overall functionality of the westbound (SW) approach. The analysis shows that SR 6 (C H James Pkwy) southbound (SE) approach will function at a LOS F and the northbound (NW) approach will function at a LOS B. The analysis shows that SR 6 Spur (Westside Road/Garrett Road) eastbound (NE) approach will function at a LOS F and westbound (SW) approach will function at a LOS A. The roundabout intersection LOS is F.

Comparison Charts for Signal Operations and Roundabout Operations is on Page 7. Roundabout data and Synchro 7 signal controlled data are attached.

## Operational Analysis Comparison Charts

Road Name	Direction	SYNCHRO 7 Existing Signalized				SYNCHRO 7 Proposed Signalized				SIDRA Roundabout			
		Delay	LOS	V/C	Q (ft)	Delay	LOS	V/C	Q (ft)	Delay	LOS	V/C	Q (ft)
SR 6	Northbound (NW)	81.5	D	0.94	89.9	30.7	C	0.88	89.9	13.7	B	0.569	68.8
	left	89.9	F	0.19	89.9	89.9	F	0.19	89.9	13.9	B	0.569	68.8
	thru	42.7	D	0.94	42.7	32.8	C	0.88	32.8	13.7	B	0.569	68.8
	right	3.6	A	0.19	3.6	3.4	A	0.18	3.4	3.6	A	0.002	0.1
SR 6	Southbound (SE)	19.1	B	0.49	105.5	17.2	B	0.49	105.5	181.1	F	1.395	4299.1
	left	105.5	F	0.49	105.5	105.5	F	0.49	105.5	3.6	A	0.018	1.1
	thru	13.3	B	0.25	13.3	11.4	B	0.24	11.4	198.3	F	1.395	4299.1
	right	10	A	0.00	10.0	10.0	A	0.0	10.0	6.6	A	0.272	20.6
SR 6 Spur	Eastbound (NE)	81.5	F	0.39	92.2	81.5	F	0.39	92.2	81.9	F	1.010	209.5
	left	-	-	-	-	-	-	-	-	109.2	F	1.010	209.5
	thru	92.2	F	0.39	92.2	92.2	F	0.39	92.2	102.4	F	1.010	209.5
	right	36.3	D	0.10	36.3	36.3	D	0.10	36.3	46.7	E	0.693	59.6
SR 6 Spur	Westbound (SW)	162.3	F	1.32	214.3	70.5	E	0.77	94.9	8.8	A	0.123	7.9
	left	77.5	E	0.49	77.5	91.9	F	0.71	91.9	9.1	A	0.123	7.9
	thru	214.3	F	1.32	214.3	94.9	F	0.65	94.9	9.1	A	0.123	7.9
	right	-	-	-	-	38.9	D	0.77	38.9	7.5	A	0.027	1.7
	Total Intersection	57.1	E	1.32	214.3	35.7	D	0.88	105.5	132.2	F	1.395	4299.1

Additional operational analysis report information is attached in the appendix.

#### Conclusion:

The conclusion is based on the collected data, intersection capacity analysis, accident data, and observations:

State Route 6 (C H James Pkwy) at SR 6 Spur (Westside Road/Garrett Road) was evaluated using Synchro 7 (Signalized Controlled Analysis) and SIDRA (Roundabout Analysis) to compare the peak hour traffic conditions. The evaluations served a purpose to determine that an addition of a 400 ft dedicated right turn lane on SR 6 Spur (Westside Road/Garrett Road) westbound (SW) approach to be the most effective operational improvement at the intersection of SR 6 and SR 6 Spur. The existing intersection conditions of the intersection delivers a LOS E and an intersection delay of 57.1 seconds. The proposed signalized intersection conditions of the intersection (adding 400' dedicated right turn lane) delivers a LOS D and an intersection delay of 35.7 seconds. The intersection LOS improves from an existing LOS E to a LOS D. Furthermore, the intersection delay decreases from an existing 57.1 seconds to 35.7 seconds which, is a 21.7 second decrease in the existing intersection delay.

**Recommendation:**

The District Seven Office of Traffic Operations recommends adding a 400 ft dedicated right turn lane on SR 6 Spur (Westside Road/Garrett Road) westbound (SW) approach. The addition of the dedicated right turn lane will improve the operation of the intersection by:

- Improving the existing intersection LOS from a LOS E to a LOS D
- Decreasing the existing intersection delay of 57.1 seconds to 35.7 seconds (a 21.7 second decrease in the intersection delay)
- Decreasing the existing maximum v/c ratio from 1.32 to a maximum v/c ratio of 0.88

PREPARED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
Traffic Operations Engineer II

RECOMMENDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
District Traffic Operations Manager

RECOMMENDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
District Traffic Engineer

RECOMMENDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
State Traffic Operations Engineer

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
Director of Operations

cc: file

**Traffic Engineering Report Appendix**

- GDOT's Roundabout Analysis Tool
- SIDRA Roundabout Analysis
- Synchro 7 Analysis
- Traffic Count Summary Sheets
- Signal Timing Data (Programmed EPAC Data)
- Accident Diagram
- Location Map
- Right-of-Way Plans



# Your Company Name Here

This is your address  
Your City, State ZipCode  
*Your Tagline Here*

File Name : SR 6 at Garrett  
Site Code : 00000000  
Start Date : 1/31/2013  
Page No : 1

Default Comments  
Change These in The Preferences Window  
Select File/Preference in the Main Screenshot  
Then Click the Comments Tab

Start Time	GARRET												GARRET												GA 6											
	From North				From East				From South				From West				From North				From East				From South				From West							
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total					
06:30 AM	9	3	38	0	50	50	126	1	0	177	13	35	0	0	48	1	406	42	0	449	1	406	42	0	449	1	406	42	0	449	724					
06:45 AM	9	6	39	0	54	44	145	2	0	191	20	37	1	0	58	12	404	45	0	461	12	404	45	0	461	12	404	45	0	461	764					
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07:00 AM	11	20	55	1	87	40	177	2	0	219	8	56	1	0	65	1	362	47	0	410	1	362	47	0	410	1	362	47	0	410	781					
07:15 AM	5	17	50	0	72	31	137	3	0	171	8	66	3	0	77	2	452	56	0	510	2	452	56	0	510	2	452	56	0	510	830					
07:30 AM	13	10	52	0	75	49	156	3	0	208	19	51	1	0	71	2	391	52	0	445	2	391	52	0	445	2	391	52	0	445	799					
07:45 AM	8	5	46	0	59	44	156	2	4	206	2	24	2	0	28	0	336	29	0	365	0	336	29	0	365	0	336	29	0	365	658					
Total	37	52	203	1	293	164	626	10	4	804	37	197	7	0	241	5	1541	184	0	1730	5	1541	184	0	1730	5	1541	184	0	1730	3068					
08:00 AM	14	6	54	0	74	47	96	1	0	144	6	22	3	0	31	2	326	51	0	379	2	326	51	0	379	2	326	51	0	379	628					
08:15 AM	3	9	63	0	75	30	130	0	0	160	2	16	6	0	24	1	376	21	0	398	1	376	21	0	398	1	376	21	0	398	657					
08:30 AM	8	5	44	0	57	21	116	0	0	137	4	23	1	0	28	1	316	16	0	333	1	316	16	0	333	1	316	16	0	333	555					
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Total	31	33	215	0	279	118	467	1	0	586	17	82	11	0	110	4	1247	111	0	1362	4	1247	111	0	1362	4	1247	111	0	1362	2337					
09:00 AM	5	8	62	0	75	19	107	4	0	130	2	12	1	0	15	0	233	17	0	250	0	233	17	0	250	0	233	17	0	250	470					
09:15 AM	2	9	71	0	82	22	137	2	0	161	1	10	1	0	12	0	230	21	0	251	0	230	21	0	251	0	230	21	0	251	506					
***BREAK***																																				
Total	7	17	133	0	157	41	244	6	0	291	3	22	2	0	27	0	463	38	0	501	0	463	38	0	501	0	463	38	0	501	976					
***BREAK***																																				
11:00 AM	10	6	43	0	59	43	146	3	0	192	2	9	2	0	13	0	143	10	0	153	0	143	10	0	153	0	143	10	0	153	417					
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11:30 AM	6	7	43	0	56	37	162	0	0	199	4	4	1	0	9	1	139	11	0	151	0	139	11	0	151	0	139	11	0	151	415					
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Total	27	24	173	0	224	150	633	6	0	789	14	21	4	0	39	2	594	54	0	650	2	594	54	0	650	2	594	54	0	650	1702					
12:00 PM	5	9	48	0	62	48	163	3	0	214	2	4	1	0	7	1	154	11	0	166	0	154	11	0	166	0	154	11	0	166	449					
12:15 PM	11	7	36	0	54	23	209	2	0	234	5	11	1	0	17	0	161	10	0	171	0	161	10	0	171	0	161	10	0	171	476					
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Total	34	29	193	0	256	159	683	10	0	852	21	27	4	0	52	3	649	43	0	695	3	649	43	0	695	3	649	43	0	695	1855					
***BREAK***																																				
03:00 PM	20	7	52	0	79	37	305	3	0	345	2	7	0	0	9	1	139	4	0	144	0	139	4	0	144	0	139	4	0	144	577					
03:15 PM	21	12	51	0	84	39	304	1	0	344	2	5	0	0	7	0	151	7	0	158	0	151	7	0	158	0	151	7	0	158	593					
03:30 PM	23	20	42	0	85	59	358	2	0	419	0	7	0	0	7	3	187	11	0	201	0	187	11	0	201	0	187	11	0	201	712					
03:45 PM	19	23	40	0	82	45	351	3	0	399	3	20	0	0	23	1	125	13	0	139	0	125	13	0	139	0	125	13	0	139	643					
Total	83	62	185	0	330	180	1318	9	0	1507	7	39	0	0	46	5	602	35	0	642	5	602	35	0	642	5	602	35	0	642	2525					

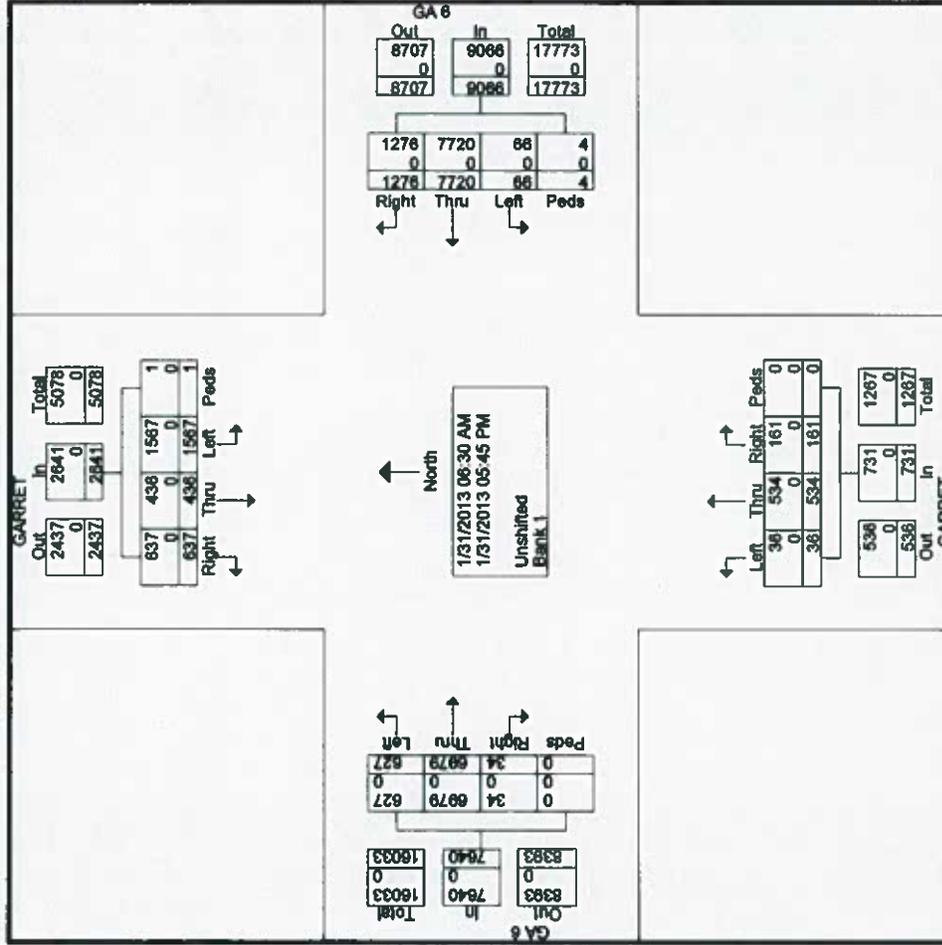


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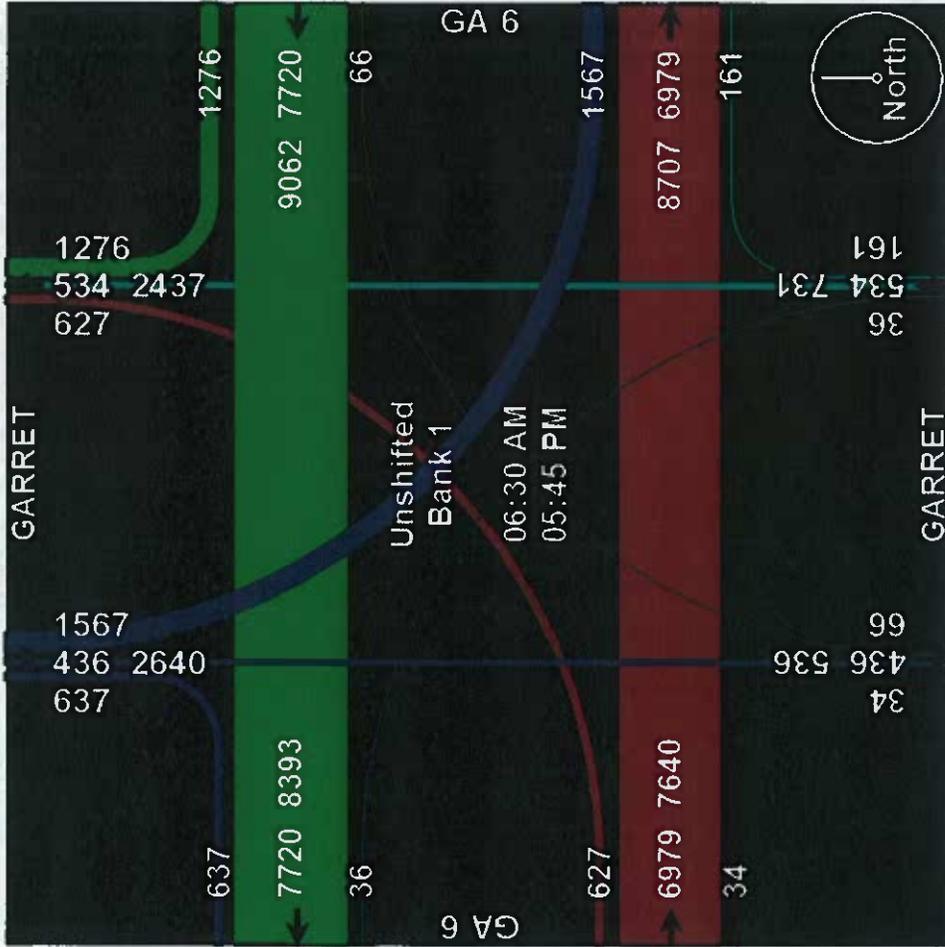
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Site Code : 00000000  
Start Date : 1/31/2013  
Page No : 3

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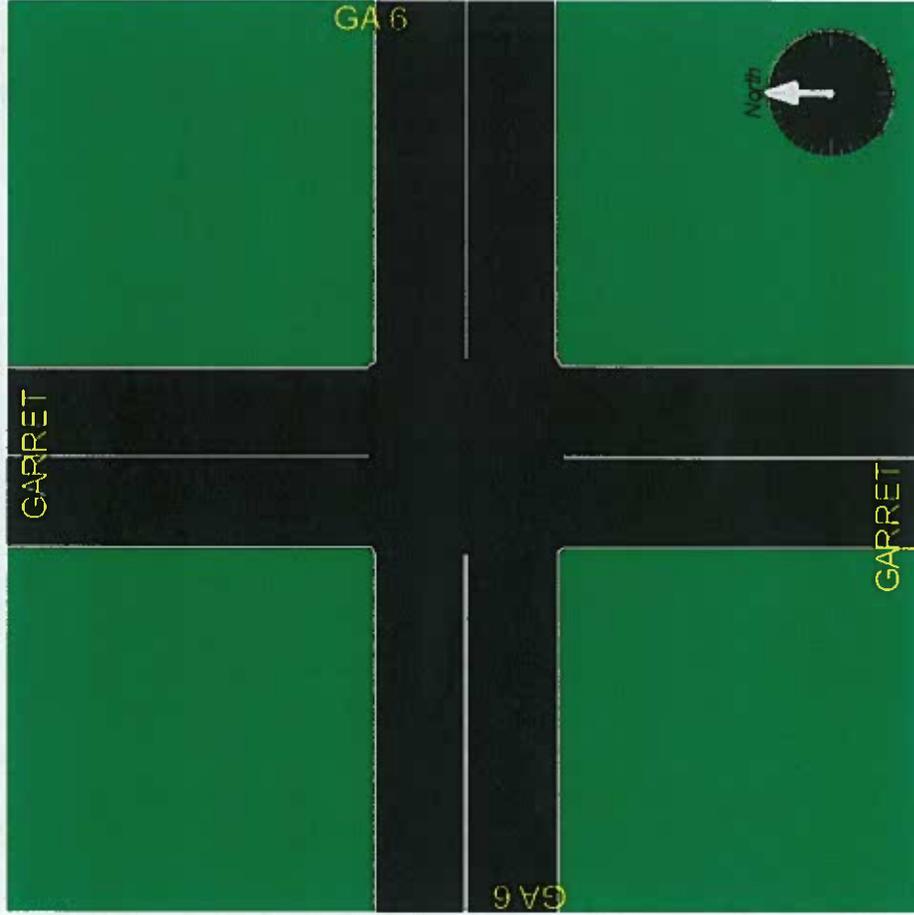
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Then Click the Comments Tab

File Name : SR 6 at Garrett  
Site Code : 00000000  
Start Date : 1/31/2013  
Page No : 5



**Subject:** (PI 0012828) SR6/US 278 @ SR6 SPUR – Concept Team Meeting

**Meeting Date:** Friday, July 25, 2014

**Time:** 10:00am – 12:00pm

**Location:** 600 West Peachtree Street, GO Conference Rooms 403 & 404

**Attendees:**

Name	Company	Phone	Email
Roxanne Harris	GDOT - OPD Project Manager	404-347-0607	<a href="mailto:rharris@dot.ga.gov">rharris@dot.ga.gov</a>
Chandria Brown	GDOT - OPD Program Manager	404-631-1580	<a href="mailto:cbrown@dot.ga.gov">cbrown@dot.ga.gov</a>
Mac Cranford	District 7 - Preconstruction	770-986-1260	<a href="mailto:mcranford@dot.ga.gov">mcranford@dot.ga.gov</a>
Adrian Jackson	District 7 - Preconstruction	770-986-1116	<a href="mailto:adjackson@dot.ga.gov">adjackson@dot.ga.gov</a>
Clyde Cunningham	GDOT - D7 Utilities	770-986-1117	<a href="mailto:ccunningham@dot.ga.gov">ccunningham@dot.ga.gov</a>
Shun L. Pringle	GDOT - D7 Construction	770-986-1414	<a href="mailto:springle@dot.ga.gov">springle@dot.ga.gov</a>
Robert Reid	GDOT - Engineering Services	404-631-1754	<a href="mailto:rreid@dot.ga.gov">rreid@dot.ga.gov</a>
Darrell Richardson	GDOT - OPM	404-631-1705	<a href="mailto:drichardson@dot.ga.gov">drichardson@dot.ga.gov</a>
Keisha Jackson	GDOT - NEPA	404-631-1160	<a href="mailto:kejackson@dot.ga.gov">kejackson@dot.ga.gov</a>
Bessie Reina	GDOT - Planning	404-631-1750	<a href="mailto:briena@dot.ga.gov">briena@dot.ga.gov</a>
Clyde Reece	GDOT - Survey	770-986-1420	<a href="mailto:creece@dot.ga.gov">creece@dot.ga.gov</a>
Chester Thomas	GDOT - Traffic Operations	404-635-2851	<a href="mailto:chthomas@dot.ga.gov">chthomas@dot.ga.gov</a>
Mike Lobdell	GDOT - D7 Traffic Engineer	770-986-1765	<a href="mailto:mlobdell@dot.ga.gov">mlobdell@dot.ga.gov</a>
Peter B. Emmanuel	GDOT - Project Manager	404-631-1158	<a href="mailto:pemmanuel@dot.ga.gov">pemmanuel@dot.ga.gov</a>
Ashley Ikpelue	GDOT - D7 Traffic Operations	770-986-1773	<a href="mailto:aikpelue@dot.ga.gov">aikpelue@dot.ga.gov</a>

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**Summary:**

The purpose of this Concept Team Meeting was to review the draft concept report and highlight any risks that may affect the project schedule. This project proposes adding a 400ft dedicated right turn lane on SR6 SPUR. The PTIP meeting was held on December 13, 2013. Currently, there is no required right of way needed for the proposed improvements. The existing shoulder is full depth. Per the Traffic Ops Program Manager, this project has FY 2016 Construction funding.

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## SME Comments:

### ▪ Office of Planning

- The Planning Office has not identified any issues with the cost current estimate but this may change due to risk contingency (+5 - 10% to cost).
- The current signal is northbound and southbound but the goal is to change the signal to flashing yellow and add sensors to prompt a change during peak traffic volumes.
- A truck rollover system will replace the signal at the intersection for 0012620.
- An additional meeting will be held with signals and special studies to answer the following questions:
  1. Do we have enough survey to move the cabinet from its existing location?
  2. Is the cabinet going to be moved under PI 0012620 ITS instead?
  3. Will we need to request more money to fund this move?

### ▪ Traffic Operations

- This project requires signal design coordination with PI 0012620 – SR 6/US 278 FROM I-20/DOUGLAS TO GARRETT ROAD/COBB; the Traffic Operations office for R-TOP modifications(Flashing yellow, phasing, upgrades)
- The project was originally had \$250K programmed for construction. The current construction cost estimate is \$364,XXX. The Traffic Ops Program Manager, Chester Thomas, is fine with the current cost estimate.

### ▪ Environmental

- Concerned about the potential relocation of the signal cabinet. This information would need to be captured in the environmental documentation. (*per risk management discussion*)
- This project potentially qualifies for a no effect bat determination.
- This project's level of environmental documentation will be a Programmatic Categorical Exclusion (PCE) based on the data provided to date.
- The PM will coordinate with the assigned NEPA and special studies team members to review the proposed project improvements.
- This area is considered industrial as opposed to historic.
- Potentially, there could be wetlands or streams found. (*per risk management discussion*)
- A PCE can have a 404 permit. This project is not large enough to qualify for an individual permit (IP).

- Construction
  - Construction does not have any constructability concerns at this time.
  - Construction would like the team to be cognizant of drainage and traffic striping during the design process.
  
- Survey
  - Database survey has been completed
  
- Office of Design Policy and Support
  - Per Dave Peters: For the cost estimate, in accordance with the recently updated Policy 3A-9, contingencies should be included. It's a new requirement from Engineering \*Services.
  
- Utilities
  - The only utility at this point is Georgia Power. There is no utility phase currently because the power is not expected to be impacted.

**Risk Management:**

Moving forward all PMs will be responsible for maintaining a log containing risks that have been highlighted by each SME during project concept meetings. During Concept Team Meetings all SMEs will be responsible for highlighting risks and providing mitigation strategies.

<b>Department:</b> Preconstruction (Designer)
<b>Risk:</b> Signal issues and coordinating with other projects within the area. GA Power could be impacted.
<b>Mitigation Strategy:</b> Remove cabinet from quadrant and place in an alternate location. Project is adjacent to a railroad in an MS4 area. We will need to add an MS4 contingency as this could impact environmental, ROW and the railroad. Early coordination strategies with GDOT teams of other projects in the area, SMEs and utilities can mitigate issues caused by MS4 changes.

<b>Department:</b> Traffic Operations
<b>Risk:</b> If FY16 is missed traffic, air, and noise will have to be redone
<b>Mitigation Strategy:</b> Identify any ecological risks early on and communicate with all affected team members. Early communication can prevent delays in response time.

<b>Department:</b> Utilities
<b>Risk:</b> There are potentially Georgia Power and Cobb EMC in the project corridor; RR coordination may be required due to the additional impervious area.

**Mitigation Strategy:** Utilities needs project information as soon as possible to reach out to the utility companies. There is possibly enough information available at this time for 1<sup>st</sup> submission; Project team needs to coordinate the GDOT RR coordination group to obtain assessment for railroad coordination.

**Department:** ROW

**Risk:** MS4 design could potentially cause Right of Way to be needed

**Mitigation Strategy:** Design Team needs to review potential impacts caused by MS4 design.

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**Action Items:**

Item	Task	Responsible Person
1	Schedule meeting with project team for PI 0012620 (PM-Peter Emanuel) and Traffic Operations to coordinate the signal design	Roxanne Harris
2	Schedule meeting with Environmental team to discuss environmental surveys for PI 0012828 and 0012620	Roxanne Harris
3	Track highlighted risks and mitigation strategies	Roxanne Harris