

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

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

FILE P.I. # 0009854 **OFFICE** Design Policy & Support
Tift County
GDOT District 4 - Tifton **DATE** March 24, 2014
SR 125 @ CR 410/Brighton Road
Roundabout – No Build

FROM  Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT APPROVED CONCEPT REPORT

Attached is the approved Concept Report for the above subject project.

Attachment

DISTRIBUTION:

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
Ben Rabun, State Bridge Engineer
Kathy Zahul, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Lisa Myers, State Project Review Engineer
Charles "Chuck" Hasty, State Materials Engineer
Mike Bolden, State Utilities Engineer
Jeff Fletcher, Statewide Location Bureau Chief
Andy Casey, State Roadway Design Engineer
Attn: Clay Bastian, Design Group Manager
Emmanuella Myrthil, State Safety Program Coordinator
Joe Sheffield, District Engineer
Brent Thomas, District Preconstruction Engineer
Tim Warren, District Utilities Engineer
Derrick Cameron, Project Manager
BOARD MEMBER - 8th Congressional District

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE 0009854 Tift County
P.I. No. 0009854
SR 125 at Brighton Road
OFFICE Roadway Design
DATE February 20, 2014

FROM  C. Andy Casey, P.E., State Roadway Design Engineer

TO Genetha Rice-Singleton, State Program Delivery Engineer
Attention: Derrick Cameron

SUBJECT **Concept Report**

Attached for your further handling is the concept report for 0009864 Tift County.

If there are any questions please contact Clay Bastian at 404-631-1610.


CAC:TH:cb

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

Project Type: Roundabout P.I. Number: 0009854
GDOT District: 4 County: Tift
Federal Route Number: N/A State Route Number: 125
Project Number: N/A

Project Description: *Project is a No-Build*

Submitted for approval:

C. Andy Curry 2/20/14
GDOT Office of Roadway Design DATE
Albert Skelby 2/21/14
State Program Delivery Engineer *for* DATE
[Signature] 21 February 2014
GDOT Project Manager DATE

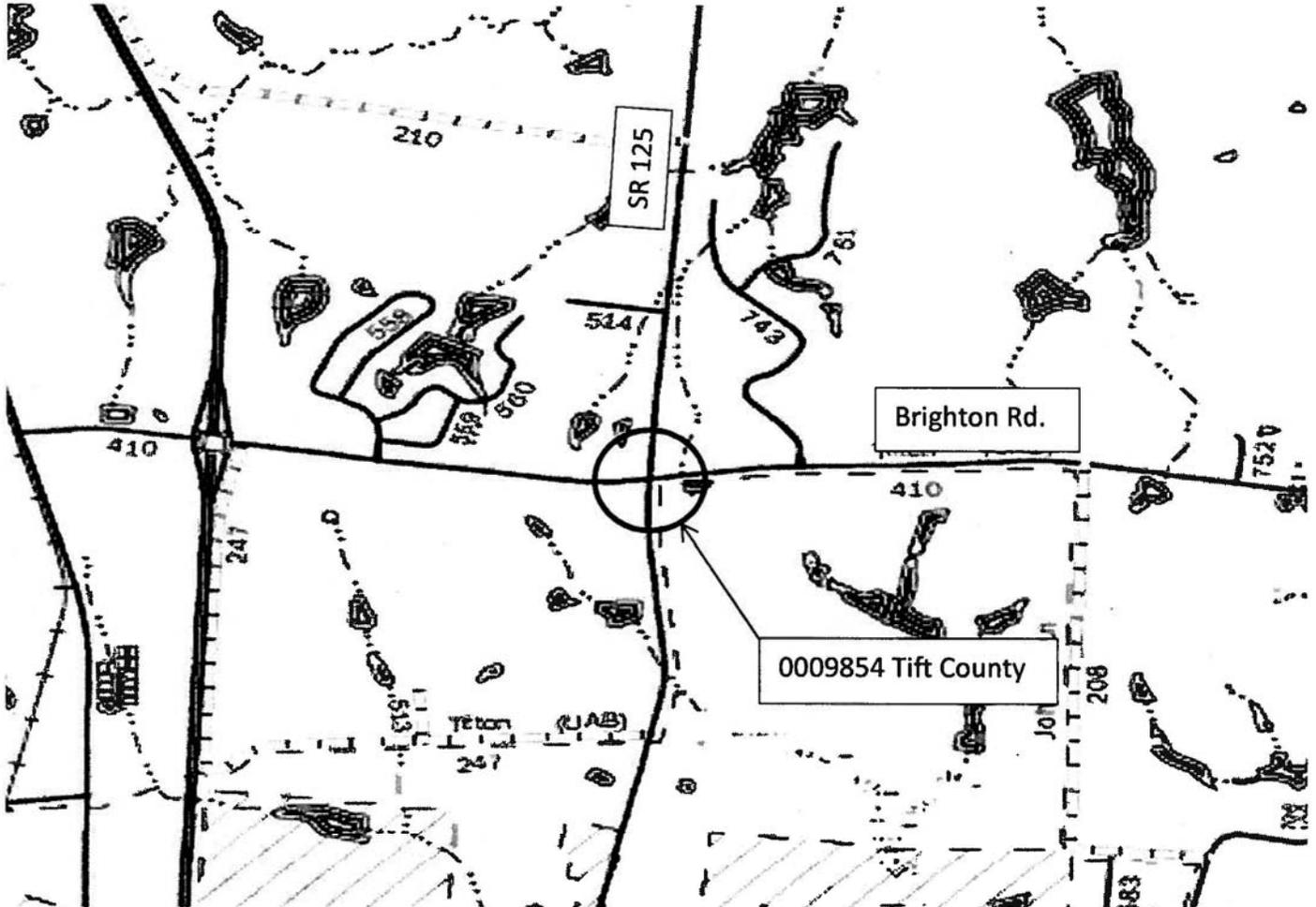
** Recommendation on file*
Recommendation for approval:
** Glenn Bowman / KLP* 3-5-2014
State Environmental Administrator DATE
** Kathy Zahul / KLP* 3-17-2014
State Traffic Engineer DATE

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).
Christina L. Karp 2-27-14
State Transportation Planning Administrator DATE

Approval:
Concur: *Alan Bonner* 3/20/14
GDOT Director of Engineering DATE
Approve: *Alan M. My* 3/24/14
GDOT Chief Engineer DATE

County: Tift

PROJECT LOCATION



County: Tift

PLANNING & BACKGROUND DATA

Project Justification Statement: Traffic Operations: Based on the crash data, it seems that the stop signs, rumble strips and advanced warning signs that were installed has addressed the safety concerns for this intersection. A no-build concept is to be submitted.

Existing conditions: This is a four way stop condition intersection with 2 lanes in each direction and rural shoulders. Rumble strips and advanced warning signs have been added.

Other projects in the area: None

Description of the proposed project: N/A No-Build

MPO: N/A

MPO Project ID N/A

Regional Commission: N/A

RC Project ID N/A

Congressional District(s): 8

Federal Oversight: Exempt State Funded Other

Projected Traffic: ADT

Current Year (2012): 2050 **Open Year (2018):** 2250

Design Year (2038): 2750

Traffic Projections Performed by: GDOT Office of Planning

Functional Classification (Mainline): Rural Minor Arterial

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

Warrants met: None Bicycle Pedestrian Transit

DESIGN AND STRUCTURAL

Description of Proposed Project: N/A No-Build

Mainline Design Features: SR 125 all design features to remain unchanged

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

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:

SUE Required: No Yes

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

Right-of-Way: Existing width: 80ft Proposed width: N/A
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: N/A No-Build

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? 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: N/A No-Build

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Project Meetings: None

Project Activity	Party Responsible for Performing Task(s)
Concept Development	GDOT Office of Roadway Design
Design	N/A
Right-of-Way Acquisition	N/A
Utility Relocation	N/A
Letting to Contract	N/A
Construction Supervision	N/A
Providing Material Pits	N/A
Environmental Studies, Documents, and Permits	N/A
Environmental Mitigation	N/A
Construction Inspection & Materials Testing	N/A

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					
\$ Amount	\$290,000	None	None	None	None	
Date of Estimate						

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

ALTERNATIVES DISCUSSION

Preferred Alternative: No build			
Estimated Property Impacts:	0	Estimated Total Cost:	\$0.00
Estimated ROW Cost:	\$0.00	Estimated CST Time:	N/A
Rationale: Based on the crash data, it seems that the stop signs, rumble strips and advanced warning signs that were installed has addressed the safety concerns for this intersection.			

LIST OF ATTACHMENTS/SUPPORTING DATA

1. Crash summaries
2. Capacity analysis summary

Tift County

P.I. Number 0009854

Crash Summaries

Crash History:

Year	Total Crashes	Crash Types			Severity		
		Angle	Sideswipe- Opposite Direction	PDO	Injury	Fatal	
2009	1	0	1	0	1	0	
2010	1	1	0	0	0	0	
2011	1	1	0	0	0	0	
Total	3	2	1	0	1	0	

HCS+: Unsignalized Intersections Release 5.4

Phone:
E-Mail:

Fax:

ALL-WAY STOP CONTROL (AWSC) ANALYSIS

Analyst: Bastian
 Agency/Co.: GDOT
 Date Performed: 3/21/2013
 Analysis Time Period: AM
 Intersection: SR 125 @ Brighton Rd.
 Jurisdiction:
 Units: U. S. Customary
 Analysis Year: 2012
 Project ID: 0009854
 East/West Street: Brighton Rd.
 North/South Street: SR 125

Worksheet 2 - Volume Adjustments and Site Characteristics

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	0	170	0	0	175	0	0	100	0	0	255	0
% Thrus Left Lane												

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	T		T		T		T	
PHF	1.00		1.00		1.00		1.00	
Flow Rate	170		175		100		255	
% Heavy Veh	4		4		4		4	
No. Lanes		1		1		1		1
Opposing-Lanes	1		1		1		1	
Conflicting-lanes	1		1		1		1	
Geometry group	1		1		1		1	
Duration, T	0.25 hrs.							

Worksheet 3 - Saturation Headway Adjustment Worksheet

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rates:								
Total in Lane	170		175		100		255	
Left-Turn	0		0		0		0	
Right-Turn	0		0		0		0	
Prop. Left-Turns	0.0		0.0		0.0		0.0	
Prop. Right-Turns	0.0		0.0		0.0		0.0	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
Geometry Group		1		1		1		1
Adjustments Exhibit 17-33:								
hLT-adj		0.2		0.2		0.2		0.2

HCS+: Unsignalized Intersections Release 5.4

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Fax:

ALL-WAY STOP CONTROL (AWSC) ANALYSIS

Analyst: Bastian
 Agency/Co.: GDOT
 Date Performed: 3/21/2013
 Analysis Time Period: PM
 Intersection: SR 125 @ Brighton Rd.
 Jurisdiction:
 Units: U. S. Customary
 Analysis Year: 2012
 Project ID: 0009854
 East/West Street: Brighton Rd.
 North/South Street: SR 125

Worksheet 2 - Volume Adjustments and Site Characteristics

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	0	225	0	0	95	0	0	255	0	0	120	0
% Thrus Left Lane												

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	T		T		T		T	
PHF	1.00		1.00		1.00		1.00	
Flow Rate	225		95		255		120	
% Heavy Veh	4		4		4		4	
No. Lanes		1		1		1		1
Opposing-Lanes		1		1		1		1
Conflicting-lanes		1		1		1		1
Geometry group		1		1		1		1
Duration, T	0.25	hrs.						

Worksheet 3 - Saturation Headway Adjustment Worksheet

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rates:								
Total in Lane	225		95		255		120	
Left-Turn	0		0		0		0	
Right-Turn	0		0		0		0	
Prop. Left-Turns	0.0		0.0		0.0		0.0	
Prop. Right-Turns	0.0		0.0		0.0		0.0	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
Geometry Group		1		1		1		1
Adjustments Exhibit 17-33:								
hLT-adj		0.2		0.2		0.2		0.2

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ALL-WAY STOP CONTROL(AWSC) ANALYSIS

Analyst: Bastian
 Agency/Co.: GDOT
 Date Performed: 3/21/2013
 Analysis Time Period: AM
 Intersection: SR 125 @ Brighton Rd.
 Jurisdiction:
 Units: U. S. Customary
 Analysis Year: 2038
 Project ID: 0009854
 East/West Street: Brighton Rd.
 North/South Street: SR 125

Worksheet 2 - Volume Adjustments and Site Characteristics

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	0	225	0	0	235	0	0	135	0	0	345	0
% Thrus Left Lane												

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	T		T		T		T	
PHF	1.00		1.00		1.00		1.00	
Flow Rate	225		235		135		345	
% Heavy Veh	4		4		4		4	
No. Lanes		1		1		1		1
Opposing-Lanes		1		1		1		1
Conflicting-lanes		1		1		1		1
Geometry group		1		1		1		1
Duration, T	0.25	hrs.						

Worksheet 3 - Saturation Headway Adjustment Worksheet

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rates:								
Total in Lane	225		235		135		345	
Left-Turn	0		0		0		0	
Right-Turn	0		0		0		0	
Prop. Left-Turns	0.0		0.0		0.0		0.0	
Prop. Right-Turns	0.0		0.0		0.0		0.0	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
Geometry Group		1		1		1		1
Adjustments Exhibit 17-33:								
hLT-adj		0.2		0.2		0.2		0.2

hRT-adj	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7
hadj, computed	0.1	0.1	0.1	0.1

Worksheet 4 - Departure Headway and Service Time

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow rate	225		235		135		345	
hd, initial value	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
x, initial	0.20		0.21		0.12		0.31	
hd, final value	5.86		5.84		6.02		5.62	
x, final value	0.37		0.38		0.23		0.54	
Move-up time, m		2.0		2.0		2.0		2.0
Service Time	3.9		3.8		4.0		3.6	

Worksheet 5 - Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rate	225		235		135		345	
Service Time	3.9		3.8		4.0		3.6	
Utilization, x	0.37		0.38		0.23		0.54	
Dep. headway, hd	5.86		5.84		6.02		5.62	
Capacity	475		485		385		595	
Delay	12.20		12.39		10.77		14.97	
LOS	B		B		B		B	
Approach:								
Delay		12.20		12.39		10.77		14.97
LOS		B		B		B		B
Intersection Delay	13.06							
Intersection LOS					B			

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ALL-WAY STOP CONTROL (AWSC) ANALYSIS

Analyst: Bastian
 Agency/Co.: GDOT
 Date Performed: 3/21/2013
 Analysis Time Period: PM
 Intersection: SR 125 @ Brighton Rd.
 Jurisdiction:
 Units: U. S. Customary
 Analysis Year: 2038
 Project ID: 0009854
 East/West Street: Brighton Rd.
 North/South Street: SR 125

Worksheet 2 - Volume Adjustments and Site Characteristics

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	0	305	0	0	130	0	0	340	0	0	160	0
% Thrus Left Lane												

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	T		T		T		T	
PHF	1.00		1.00		1.00		1.00	
Flow Rate	305		130		340		160	
% Heavy Veh	4		4		4		4	
No. Lanes		1		1		1		1
Opposing-Lanes		1		1		1		1
Conflicting-lanes		1		1		1		1
Geometry group		1		1		1		1
Duration, T	0.25 hrs.							

Worksheet 3 - Saturation Headway Adjustment Worksheet

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rates:								
Total in Lane	305		130		340		160	
Left-Turn	0		0		0		0	
Right-Turn	0		0		0		0	
Prop. Left-Turns	0.0		0.0		0.0		0.0	
Prop. Right-Turns	0.0		0.0		0.0		0.0	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
Geometry Group		1		1		1		1
Adjustments Exhibit 17-33:								
hLT-adj	0.2		0.2		0.2		0.2	

