

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

Project Type: <u>Safety</u>	P.I. Number: <u>0008314</u>	
GDOT District: <u>6</u>	County: <u>Pickens</u>	
Federal Route Number: <u>N/A</u>	State Route Number: <u>136</u>	
Project Number: <u>CSSFT-0008-00(314)</u>		

SR 136 from SR 136 Connector to SR 515

Submitted for approval:

<hr/> Sarah Worachek, Gresham Smith & Partners	<hr/> Date
<hr/> State Program Delivery Engineer	<hr/> Date
<hr/> GDOT Project Manager	<hr/> Date

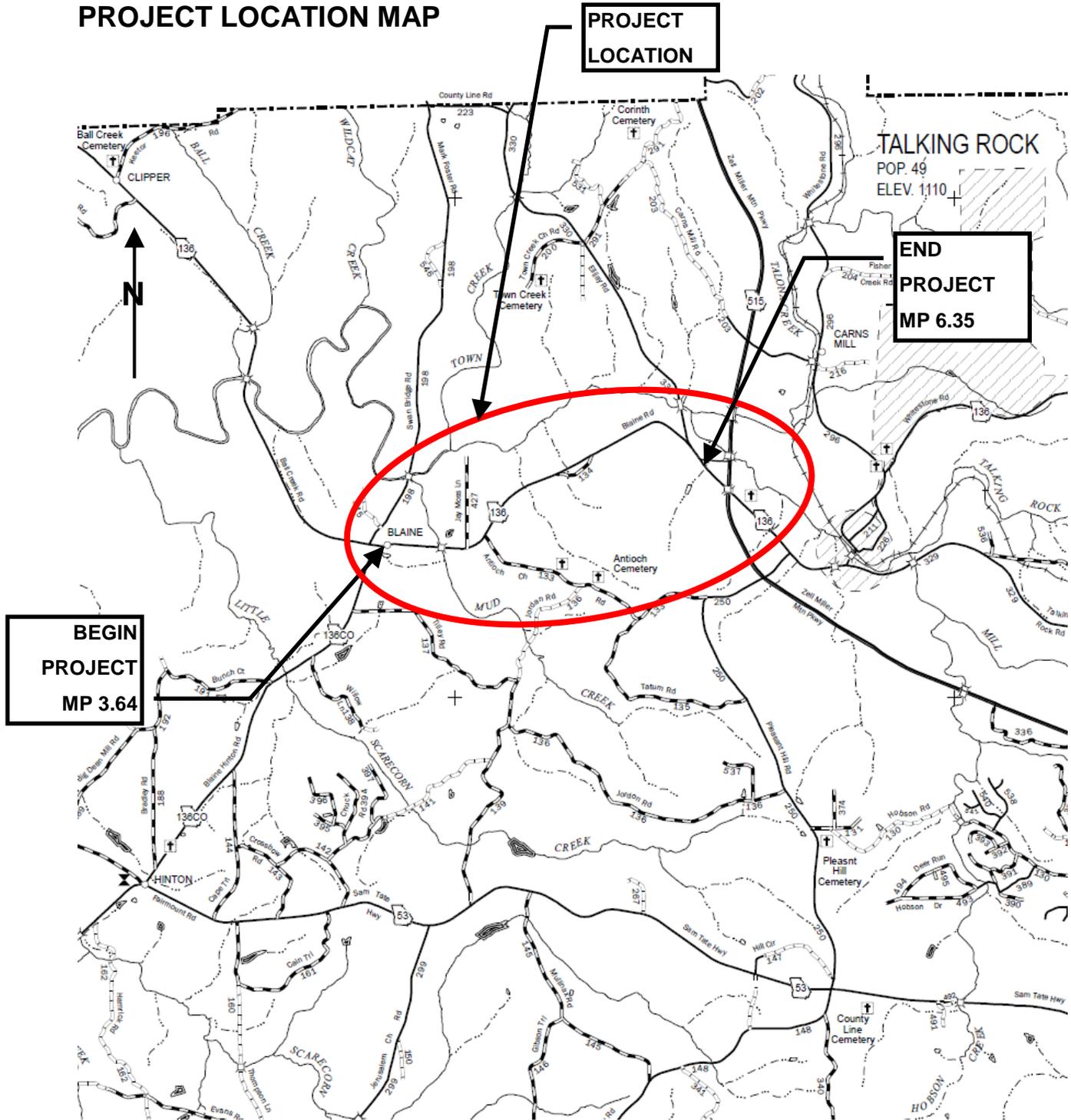
Recommendation for approval:

<hr/> State Environmental Administrator	<hr/> Date
<hr/> State Traffic Engineer	<hr/> Date
<hr/> Project Review Engineer	<hr/> Date
<hr/> State Utilities Engineer	<hr/> Date
<hr/> District Engineer	<hr/> Date
<hr/> State Bridge Engineer	<hr/> Date

- MPO Area: This project is consistent with the MPO adopted Regional Transportation Plan (RTP)/Long Range Transportation Plan (LRTP).
- Rural Area: This project is consistent with the goals outlined in the Statewide Transportation Plan (SWTP) and/or is included in the State Transportation Improvement Program (STIP).

<hr/> State Transportation Planning Administrator	<hr/> Date
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PROJECT LOCATION MAP



PLANNING AND BACKGROUND

Project Justification Statement: In Georgia, nearly a third of fatal crashes occur at intersections. Therefore, intersection safety is a focus area for the Georgia Department of Transportation. Nationally intersection crashes account for 40% of all reported crashes and approximately 20% of traffic fatalities. Of those crashes, almost half are the result of angle collisions. Angle collisions are often high speed, high impact crashes which often result in serious injuries or fatalities. Roundabouts have been identified as one of nine proven safety countermeasures by the Federal Highway Administration (FHWA). Roundabouts decrease total crashes at an intersection by approximately 80% by reducing the speeds and conflict points of vehicles, only leaving the potential for lower impact, less severe crashes. This proposed project will reduce crash frequency and severity on SR 136 by installing roundabouts at the intersections of SR 136 at SR 136 Conn. and SR 136 at SR 515. The project will also improve the horizontal alignment along SR 136, from the SR 136 Conn to SR 515, and adds bikeable shoulders throughout this stretch of roadway.

Existing conditions:

The SR 136 and SR 136 Connector in the Blaine Community has a stop sign controlled intersection and a left turn from SR 136 Connector to SR 136 at an acute angle with no turn lanes that has conflicting turn movements and has had a number of severe crashes. SR136 has two lanes at 12 ft widths with a 2 ft paved shoulder with no turn lanes. The SR 136 and Antioch Church Road intersections horizontal curve and lack of turn lanes doesn't meet AASHTO guidance resulting in single and angle crashes. Both of legs of Priest Circle to SR 136 have inadequate site distance and is not compliant with the Design Policy Manual-Version 4.6. The SR 136 SB and Ellijay Road NB intersection has significant single vehicle crashes and angle crashes at the intersection due to the left turn from SR 136 to Ellijay Road being an acute angle and no turn lanes. The existing roadway is entirely within Pickens County. Only other stop controlled intersections on this project are at both arms of Priest Circle and Antioch Church Rd with no turn lanes on either of them. The project begins at MP 3.64 and ends at MP 6.35 on the existing alignment for a length of 2.7 miles. The only turn lanes on the project are between the SR 136 / SR 515 Connector and SR 136 and a small one at one leg of Priest Circle.

Other projects in the area:

0008290	SR 515 at CR 203/Carns Mill Rd turn lane addition	Long Range
0008043	SR 515/SR 5 at CR 250/Antioch Church Road Installation of Restricted Crossing U-turn intersection	Construction Work Program
M005314	SR 136 from SR 61/US 411/Gordon to SR 16 Conn/Pickens Maintenance	Maintenance

MPO: N/A - Project not in MPO

TIP #: N/A

TIA Regional Commission: Northwest Georgia RC

Congressional District(s): 14

Federal Oversight: PoDI Exempt State Funded Other

- The shoulders on both sides of SR 136 throughout the project (except at the roundabouts) will be widened to a 10 ft width with a 6.5 ft paved width to accommodate bicyclists on a rural roadway as per the GDOT Design Policy Manual-Version 4.6 and AASHTO Publication Guide for the Development of Bicycle Facilities. A rumble strip will also be embedded into the paved shoulder to alert straying motorists and should help to decrease the number the number of single vehicle crashes. The foreslopes, ditches, and drainage structures affected by the shoulder widening will be upgraded to comply with clear zone requirements in the AASHTO Roadside Design Guide. The existing pavement between the new, widened shoulders will be overlaid and restriped. SR 136/SR 515 Connector will retain four 12 ft travel lanes and existing shoulder width and have a design speed limit of 25 mph. SR 136 Connector width will be extended from 12 ft to 16 ft and have a 5' sidewalk on the approach to the roundabout.

Major Structures:

Structure	Existing	Proposed
Double barrel	10 ft x 10 ft bridge culvert, ID # 227-0020-0, over Mud Creek	10 ft x 10 ft bridge culvert, ID # 227-0020-0, to be lengthened over Mud Creek
Retaining Wall	N/A	A 0-10' cut wall will be needed for approximately 300'.

Mainline Design Features: SR 136 (Rural Major Collector)

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	2		2
- Lane Width(s)	12ft	11-12 ft	12 ft
- Turn Lane Width(s)		11-12 ft	12 ft
- Median Width & Type			
- Outside Shoulder or Border Area Width		10 ft	10 ft
- Outside Shoulder Slope	2:1/4:1	2:1/4:1	2:1/4:1
- Inside Shoulder Width		6 ft	N/A
- Paved Shoulder	2ft	6.5 ft	6.5 ft
- Sidewalks			
- Auxiliary Lanes			
- Bike Lanes			
Posted Speed	55mph		55 mph
Design Speed	55mph		55 mph
Min Horizontal Curve Radius	662ft	1060 ft	1060 ft
Maximum Superelevation Rate	10.0%	6.0%	6.0%
Maximum Grade	7.11%	7.0%	7.0%
Access Control			Full
Design Vehicle		SU	SU
Pavement Type		HMA & PCC	HMA & PCC

*According to current GDOT design policy if applicable

Mainline Design Features: SR 136 Roundabouts

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes			1
- Lane Width(s)			18 ft
- Turn Lane Width(s)			
- Median Width & Type			Splitter Islands 4 – 55 ft
- Outside Shoulder or Border Area Width			14 ft
- Outside Shoulder Slope			2:1/4:1
- Inside Shoulder Width			14 ft
- Paved Shoulder			
- Sidewalks		5 ft	5 ft
- Auxiliary Lanes			
- Bike Lanes			
Posted Speed			15 mph Advisory
Design Speed			15 mph
Min Horizontal Curve Radius			
Maximum Superelevation Rate			2.0 %
Maximum Grade			2.0 %
Access Control			Full
Design Vehicle		WB-67	WB-67
Pavement Type		HMA & PCC	HMA & PCC
Inscribed Diameter			170 ft

*According to current GDOT design policy if applicable

Major Interchanges/Intersections:

- SR 136 at SR 136 Connector
- SR 136 at SR 515 Connector road
- SR 136 at Ellijay Road

Lighting required: No Yes

Off-site Detours Anticipated: No Yes Undetermined

Transportation Management Plan [TMP] Required: No Yes

If Yes: Project classified as: Non-Significant Significant
 TMP Components Anticipated: TTC TO PI

Design Exceptions to FHWA/AASHTO controlling criteria anticipated:

FHWA/AASHTO Controlling Criteria	No	Undeter- mined	Yes	Appvl Date (if applicable)
1. Design Speed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Lane Width	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Shoulder Width	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Bridge Width	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Horizontal Alignment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Superelevation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Vertical Alignment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10/17/2012
8. Grade	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Stopping Sight Distance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Cross Slope	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Vertical Clearance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Lateral Offset to Obstruction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Bridge Structural Capacity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

There are design parameters associated with the proposed design profile which will require exception:

1. The proposed broken back sag vertical curves on SR 136 between the SR 136 Connector intersection and the Antioch Church Road intersection have K values that are 78.96 and 74.70 respectively. These values match the existing profile and are both lower than the minimum (K value of 115) sag vertical curve as required by AASHTO.
2. The proposed crest vertical curve on SR 136 at the Antioch Church Road intersection has a K value of 69.76. This value matches the existing profile and is lower than the minimum (K value of 114) crest vertical curve as required by AASHTO.
3. The proposed sag vertical curve on SR 136 between the intersections of Antioch Church Road and the Priest Circle has a K value of 96.73. This value matches the existing profile and is lower than the minimum (K value of 115) sag vertical curve as required by AASHTO.
4. The proposed crest vertical curve on SR 136 at the western Priest Circle intersection leg has a K value of 90.59. This value matches the existing profile and is lower than the minimum (K value of 114) crest vertical curve as required by AASHTO.
5. The proposed sag vertical curve on SR 136 between the western intersection and eastern intersection of Priest Circle has a K value of 80.63. This value matches the existing profile and is lower than the minimum (K value of 115) sag vertical curve as required by AASHTO.
6. The proposed crest vertical curve on SR 136 at the eastern intersection Priest Circle has a K value of 86.54. This value matches the existing profile and is lower than the minimum (K value of 114) crest vertical curve as required by AASHTO.
7. The proposed sag vertical curve on SR 136 just east of the eastern intersection with Priest Circle has a K value of 94.43. This value matches the existing profile and is lower than the minimum (K value of 115) sag vertical curve as required by AASHTO.

Design exceptions for the above items have been submitted to the GDOT Office of Design Policy and Support for review and approval.

ROUNABOUTS

Roundabout Lighting Agreement/Commitment Letter received: No Yes

Roundabout Planning Level Assessment: N/A

Roundabout Feasibility Study: N/A

Roundabout Peer Review Required: No Yes Completed – Date:

CONTEXT SENSITIVE SOLUTIONS

Issues of Concern: Local opposition to project

Context Sensitive Solutions Proposed: Citizen's Advisory Committee (CAC)

ENVIRONMENTAL & PERMITS

Anticipated Environmental Document:

GEPA: NEPA: CE EA/FONSI EIS

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

Environmental Permits/Variations/Commitments/Coordination anticipated:

Permit/ Variance/ Commitment/ Coordination Anticipated	No	Yes	Remarks
1. U.S. Coast Guard Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Forest Service/Corps Land	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. CWA Section 404 Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. 33 USC 408 Decision	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Tennessee Valley Authority Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. Buffer Variance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Coastal Zone Management Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. NPDES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. FEMA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
10. Cemetery Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
11. Other Permits	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12. Other Commitments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13. Other Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Trail of Tears Association, Georgia Chapter

Is a PAR required? No Yes Completed – Date:

Environmental Comments and Information:

NEPA/GEPA:

- An Environmental Assessment will be required.

Waters of the US:

- US Army Corps of Engineers Nationwide Permit 14 is anticipated
- Waters of the US that would be impacted are not a suitable habitat for protected species

Ecology:

- Streams
- Wetlands
- Federally protected aquatic species
- Seasonal clearing restrictions are anticipated for bat surveys
- Protected plan surveys are anticipated

History:

- SHPO concurrence is required.
- Old Federal Road
- Blaine Community
- Low House
- Residence on 55 Priest Circle
- Trail of Tears

Archeology:

- Possible cemetery site
- Trail of Tears
- Blaine Masonic Lodge
- Possible cemetery site

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
Carbon Monoxide hotspot analysis: Required Not Required TBD

Noise Effects:

- To be completed in design

Public Involvement:

- Meeting with Marble Valley Historical Society December 14, 2009
- Meeting with Northwest Georgia Regional Commission December 14, 2009
- Meeting with Georgia Chapter of Trail of Tears Association December 16, 2009
- Citizen Advisory Committee Meeting #1 February 24, 2010
- Citizen Advisory Committee Meeting #2 May 26, 2010
- Citizen Advisory Committee Meeting #3 September 2, 2010
- PIOH November 9, 2010
- City of Talking Rock and Pickens County December 14, 2009

Major stakeholders:

- Marble Valley Historical Society
- Northwest Georgia Regional Commission
- City of Talking Rocks
- Georgia Chapter of Trail of Tears Association

CONSTRUCTION

Issues potentially affecting constructability/construction schedule:

- Underground storage tank at SR 136 and SR 136 Conn. intersection

Early Completion Incentives recommended for consideration: No Yes

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Initial Concept Meeting: August 19, 2008 - See attached minutes

Concept Meeting: N/A

Other coordination to date:

- Stakeholder Meeting With Northwest Georgia Regional Commission - 12/14/2009
- Stakeholder Meeting With Marble Valley Historical Society - 12/14/2009
- Stakeholder Meeting With City of Talking Rock and Pickens County - 12/14/2009
- Georgia Chapter of Trail of Tears Association - 12/16/2009
- Stakeholder Meeting With Marble Valley Historical Society - 01/11/2010
- SR 136 Safety Project Citizens Advisory Committee Meeting #1 - 02/24/2010
- SR 136 Safety Project Citizens Advisory Committee Meeting #2 - 05/26/2010
- SR 136 Safety Project Citizens Advisory Committee Meeting #3 - 11/02/2010

Project Activity	Party Responsible for Performing Task(s)
Concept Development	GDOT Office of Program Delivery, GS&P
Design	Gresham Smith and Partners with GDOT review
Right-of-Way Acquisition	GDOT
Utility Coordination (Preconstruction)	GDOT
Utility Relocation (Construction)	Georgia Power Company, Amicalola EMC, Ellijay Telephone, Pickens County Water
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	GDOT/ Contractor
Providing Detours	N/A
Environmental Studies, Documents, & Permits	Edwards-Pitman with GDOT review
Environmental Mitigation	GDOT
Construction Inspection & Materials Testing	GDOT

Project Cost Estimate Summary and Funding Responsibilities:

	Breakdown of PE	ROW	Reimbursable Utility	CST*	Environmental Mitigation	Total Cost
Funded By	GDOT	GDOT	GDOT	GDOT	GDOT	
\$ Amount	\$703,523.00	\$2,538,000.00	\$1,533,000.00	\$5,572,989.04		\$10,347,512.04
Date of Estimate	9-13	9-14	4-15	5-15	TBD	

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

ALTERNATIVES DISCUSSION

Alternative selection:

Preferred Alternative: The preferred alternative consists of corridor improvements including a replacement for the existing tee intersection at SR 136 and SR 136 Connector in the Blaine community with a roundabout. This will entail realigning the horizontal curve on SR 136 to meet AASHTO guidance and adding dedicated left and right turn lanes to SR 136 and Antioch Church Road. The intersection of SR 136 and Antioch Church Road will also be improved. The intersections of SR 136 with both legs of Priest Circle will be modified to increase the intersection skew angle from 40 degree to 90 degrees. SR 136 will be realigned on the new location to perpendicularly intersect Ellijay Road at a roundabout intersection. SR 136 would then follow the short portion of Ellijay Road back to the present intersection and realign back unto its present alignment. The intersection of SR 136 and the SR 515 Connector Road will also be adjusted to achieve a perpendicular skew angle.

Estimated Property Impacts:	715,767 SQFT	Estimated Total Cost:	\$10,347,512.04
Estimated ROW Cost:	\$2,538,000.00	Estimated CST Time:	18 months

Rationale: A roundabout intersection was chosen by the project’s Citizen Advisory Committee (CAC) as the preferred alternative since it will provide traffic calming, have fewer conflicting turn movements while keeping SR 136 traffic moving (i.e., no stopping in left or right turn lanes), minimize impacts to adjacent environmental resources, not conflict with nearby left turn movements to other side roads, and lessen right of way impacts. This enhancement is anticipated to reduce both the number of single vehicles crashes at the curve and angle crashes at the intersection. The improved intersection of SR 136 and Antioch Church Road are anticipated to reduce the number of single and angle crashes by improving the intersection’s lane configuration as well as the horizontal sight distance and geometry/superelevation of SR 136. The intersections of SR 136 and both legs of Priest Circle modifications will improve the sight distance and make both intersections compliant with the GDOT Design Policy Manual-Version 4.6. The roundabout of SR 136 and Ellijay Road intersection will allow for the removal of the nearby existing tee intersection at SR 136 and Ellijay Road and will remove the existing deficient horizontal curve on SR 136. A roundabout intersection was chosen by the project’s Citizen Advisory Committee (CAC-see attached minutes) as the preferred alternative since it will provide traffic calming, have fewer conflicting turn movements while keeping SR 136 traffic moving (i.e., no stopping in left or right turn lanes), minimize impacts to adjacent environmental resources, and lessen right of way impacts. This enhancement is anticipated to reduce both the number of single vehicles crashes at the curve and angle crashes at the intersection.

No-Build Alternative: No changes

Estimated Property Impacts:	0 SQFT	Estimated Total Cost:	0
Estimated ROW Cost:	\$0.00	Estimated CST Time:	0

Rationale: The SR 136 and SR 136 Connector has had conflicting turn movements and has had a number of severe crashes. The SR 136 and Antioch Church Road doesn’t meet AASHTO guidance resulting in single and angle crashes. Both of legs of Priest Circle to SR 136 have inadequate site distance and is not compliant with the Design Policy Manual-Version 4.6. The SR 136 and Ellijay Road intersection has significant single vehicle crashes and angle crashes at the intersection. The no-build alternative does not address any of the safety concerns along with corridor and was therefore not chosen as the preferred alternative.

Alternative 1: One corridor improvements alternative considered included making SR 136 Connector the through movement and adjusting SR 136 to intersect perpendicularly with the realigned SR 136 Connector, adjusting SR 136 at Antioch Church Road by adding an alignment shift and increasing the radius along SR 136, adding a full realignment of both legs of Priest Circle to be fully perpendicular to SR 136, increasing the radius of the curve with a realignment of SR 136 before the intersection with Ellijay Rd and adding a three legged roundabout between the two approaches of SR 136 and the SR 515 Connector Road.			
Estimated Property Impacts:	662,468 SQFT	Estimated Total Cost:	\$8,396,790.67
Estimated ROW Cost:	\$1,757,814.66	Estimated CST Time:	18 months
Rationale: The SR 136 / SR 136 Connector intersection was ruled unacceptable because it would have only minimally improved the safety of the intersection and it would also have had significant historic impacts. The SR 136/Antioch Church Road intersection ultimately had higher right of way costs, higher environmental impacts, and was anticipated to be less safe than the preferred alternative and was removed from consideration. SR 136 at Priest Circle was a marginally safer design but the moderate environmental impacts and considerably higher right of way cost made it less desirable than the alternative most preferred by the CAC. The larger radius curve added at SR 136 before Ellijay Rd curve was determined to have high monetary costs, high environmental impacts and offered only minimal safety improvement. The SR 136 / SR 515 Connector Road roundabout with the SR 136 was removed from consideration due to the high directional distribution of turning movements between SR 515 and SR 136, GDOT District Six's desire to keep SR 136 as the through movement, a roundabout costing more than a traditional "T" intersection, and additional potential impacts to adjacent historic resources and streams. The CAC's top preference was to have a single through movement for SR 136 travelling into Talking Rock.			

Alternative 2: Another corridor improvements alternative considered included reconfiguring the intersection of SR 136/SR 136 Connector with Swan Bridge Road creating a 4-way signalized intersection, realigning on leg of Priest Circle with SR 136 and closing off the other leg with a cul-de-sac, realigning the road from Ellijay Rd so that SR 515 Connector Road becomes the primary through movement, adjusting the intersection of SR 136 with Ellijay Rd to create a "T" intersection with SR 136/515 Connector Road, and also creating a "T" intersection with SR 136 from Talking Rock to SR 515 Connector Road thus making the SR 515 Connector Road the primary through movement onto Ellijay Road/SR 136.			
Estimated Property Impacts:	655,574 SQFT	Estimated Total Cost:	\$8,309,409.13
Estimated ROW Cost:	\$1,739,521.89	Estimated CST Time:	18 months
Rationale: The 4-way signalized intersection between SR 136, SR 136 Connector, and Swan Bridge Road had significant monetary cost and high environmental impacts and was therefore removed from consideration. The SR 136 at Priest Circle was removed from consideration because while it was a moderately safer design than the preferred alternative, it had much higher environmental impact, higher monetary costs, poor corridor preservation and was least preferred by the CAC. The SR 136 / SR 515 Connector Road intersection alternative was comparable to the preferred alternative in terms of performance measures, however it did a poor job of preserving the original corridor, and it was believed by the GDOT District Office that it was better to have SR 136 as the primary through movement leading into Talking Rock.			

Alternative 3: The SR 136 / SR 136 Connector intersection had an alternative where it retained the existing intersection configuration, but adding enhanced signing and marking. An alternative for the SR 136 horizontal curve before Ellijay Road entailed retaining the existing deficient horizontal curve, but adding enhanced signing and marking.			
Estimated Property Impacts:	0 SQFT	Estimated Total Cost:	\$158,910.27
Estimated ROW Cost:	\$0.00	Estimated CST Time:	3 months
Rationale: This alternative was dismissed as inadequately addressing the safety concern but the SR 136 / SR 136 Connector intersection alternative was determined during the CAC process that enhanced signing and marking could be a component of the proposed roundabout. The same was true for the SR 136 horizontal curve before Ellijay Road.			

LIST OF ATTACHMENTS/SUPPORTING DATA

1. Concept Layout
2. Typical sections
3. Detailed Cost Estimates:
 - a. Construction including Engineering and Inspection and Contingencies
 - b. Completed Liquid AC Cost Adjustment forms
 - c. Right-of-Way
 - d. Utilities
4. Crash summaries
5. Traffic diagrams
6. Capacity analysis summary
7. Roundabout Data (To be completed by others)
 - a. Planning Level Assesment
 - b. Roundabout Feasibility Study
 - c. Lighting Agreement or Commitment Letter
 - d. Peer Review and Reponses
8. S I & A Report(s)
9. Minutes of Concept meetings
10. Minutes of any meetings that shows support or objection to the concept
11. Other Attachments
 - a. Design Exceptions

APPROVALS

Concur: _____
 Director of Engineering

Approve: _____
 Chief Engineer

 Date

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