Georgia Department of Transportation

Interoffice Memo
Office of Design Policy & Support

DATE: 6/5/2020

FILE: P.I.# 0014079
Troup County / GDOT District 3 - Thomaston
SR 14 Spur from S of SR 109 to SR 14/US29 - Widening

FROM: Dave Peters for R. Christopher Rudd, PE, State Design Policy Engineer

TO: SEE DISTRIBUTION

SUBJECT: APPROVED CONCEPT REPORT

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

Attachment

Distribution:

Hiral Patel, Director of Engineering
Joe Carpenter, Director of P3
Albert Shelby, Director of Program Delivery
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Darryl VanMeter, Assistant Director of P3/State Innovative Delivery Administrator
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Radney Simpson, Assistant State Transportation Planning Administrator
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Andrew Heath, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Erik Rohde, State Project Review Engineer
Monica Flournoy, State Materials Engineer
Patrick Allen, State Utilities Engineer
Eric Conklin, State Transportation Data Administrator
Attn: Systems & Classification Branch
Benny Walden, Statewide Location Bureau Chief
Ed David Adams, State Safety Program Manager
Michael Presley, District Engineer
Adam Smith, District Preconstruction Engineer
Scott Parker, District Utilities Manager
Cherral Dempsey, Project Manager
BOARD MEMBER - 3rd Congressional District

Georgia Department of Transportation

Project Concept Report

Project Type:	Widening	P.I. Number:	0014079
GDOT District:	3	County:	Troup
Federal Route Number:	N/A	State Route Number:	14
Project Number:			

SR 14 SPUR FROM S OF SR 109 TO SR 14/US 29

Submitted for approval: * Concept Report resubmitted 4/22/2020

J. Michael Stoltzfus — J. Michael Stoltzfus, P.E. - Lowe Engineers, LLC — Date: 9/25/19

Kimberly W. Nesbitt — State Program Delivery Administrator — Date: 10/14/19

Clinton B. Ford C.L.B. — GDOT Project Manager — Date: 10/10/19

Recommendation for approval: * Recommendations are on File ~OB

*Eric Duff — State Environmental Administrator — Date: 10/16/2019

*Chris Raymond — for State Traffic Engineer — Date: 3/27/2020

*Erik Rohde — Project Review Engineer — Date: 3/14/2020

*Marcela Coll — for State Utilities Engineer — Date: 3/27/2020

*Michael Presley — District Engineer — Date: 4/2/2020

*Bill DuVall — State Bridge Engineer — Date: 10/24/2019

☐ MPO Area: This project is consistent with the MPO adopted Regional Transportation Plan (RTP)/Long Range Transportation Plan (LRTP).

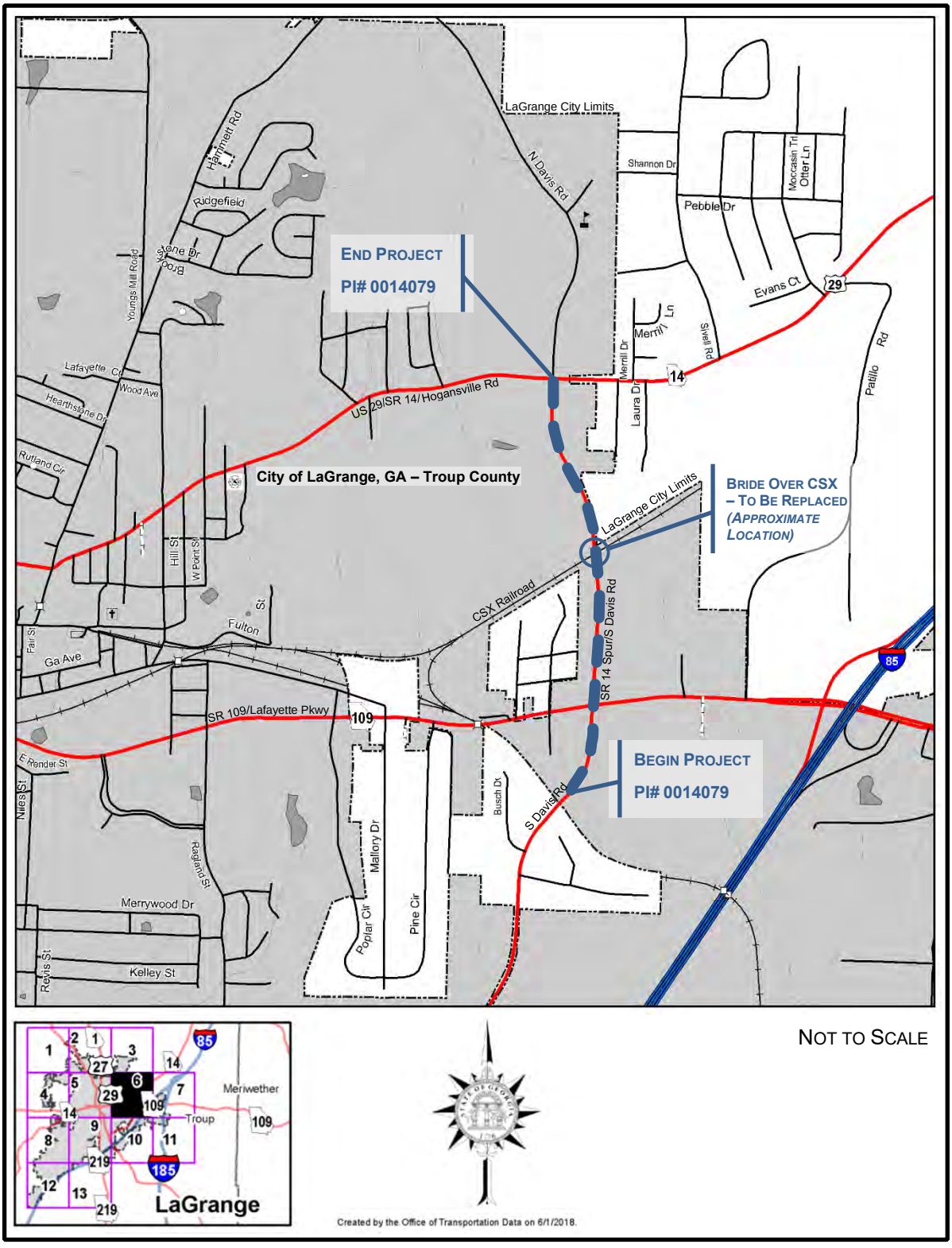
☒ Rural Area: This project is consistent with the goals outlined in the Statewide Transportation Plan (SWTP) and/or is included in the State Transportation Improvement Program (STIP).

R. Paul Jarvis — State Transportation Planning Administrator — Date: 10-16-19

*** Recommendations also received from the following:**

10/18/2019 Office of Materials: Monica Flournoy
10/15/2019 Office of Intermodal: Alan Hood
10/31/2019 District 3 Utilities: Scott Parker
3/30/2020 District 3 Traffic: Tyler Peek
3/30/2020 District 3 Preconstruction Engineer: Adam Smith

PROJECT LOCATION MAP



PLANNING AND BACKGROUND

Project Justification Statement: ***(Provided by GDOT Office of Planning – Sept. 26, 2016)***

This project proposes the widening of an existing 1.25 mile-long two-lane facility connecting SR 109 to SR 14/U.S. 29, which is currently part of the existing LaGrange Bypass/North Davis Road corridor (see attached map). The proposed project was programmed in November 2015 at the request of the Office of Planning. Troup County and the City of LaGrange expressed a desire for an alternate route for through traffic to avoid going through the center of LaGrange, and this proposed project is part of a larger effort to provide this alternative. The Office of Planning recommends the southern project limit be located immediately south of its intersection with SR 109 to accommodate traffic utilizing existing access to commercial properties on the south side of the SR 109 corridor, with the northern project limit to be located at SR 14/U.S. 29, where it will also tie into PI # 0014078. Final determination of logical termini will be dependent on the environmental review effort during plan development activities conducted by the Office of Environmental Services.

Current (2018) Average Annual Daily Traffic (AADT) along the corridor is 15,900 VPD (Level of Service E), with three percent of that total (477 VPD) being comprised of truck traffic. Future (2040) traffic volumes are projected (assuming an annual growth rate of 1%) to be 19,791 VPD (LOS E), with three percent (593 VPD) being comprised of truck traffic.

For each year in the three-year period from 2016 to 2018 (which is the latest data available), crash rates for the SR 14 Spur corridor were above the statewide average for a similar functional classification of road (Non-NHS Urban Minor Arterial).

The proposed project is needed to allow for a bypass that will reduce through traffic in Downtown LaGrange, and to accommodate current and future demand due to increasing population and employment growth in eastern LaGrange and Troup County. In addition to congestion relief along the aforementioned corridors, the project (along with PI # 0014077 and PI # 0014078) is anticipated to increase connectivity between the U.S. 27 corridor and I-85, which will help to improve local access and support economic development.

Existing conditions: SR 14 Spur/South Davis Road is a two-lane facility for most of its length running north-south. Heading north from bridge ID 285-0020-0, there are dedicated right turns on the roadway in both directions at various driveway. At the intersection of SR 109/Lafayette Parkway, northbound and southbound approaches have a left turn, through, and right turn lane. Eastbound and westbound approaches have a left turn, through, and shared (through and right turn) lane. There are pedestrian crosswalks with ADA ramps but no sidewalks adjacent to the intersection. A two-lane bridge over single CSX railroad track lies approximately 2,500 feet from SR 109/Lafayette Parkway. North of the bridge and until the intersection with SR 14/U.S. 29/Hogansville Road, there are two lanes heading southbound and one lane heading northbound. At the intersection of SR 14/U.S. 29/Hogansville Road, all approaches have a left turn, through, and right turn lanes. There is sidewalk adjacent to this intersection, as well as, pedestrian crosswalks with island refuges.

Other projects in the area:

- PI No. 0014077 – New roadway construction will connect Youngs Mill Road to SR 1/U.S. 27.
  - Coordination with this project is not necessary.
- P.I. No. 0014078 – Widening of LaGrange Bypass/N Davis Road from SR 14/U.S. 29 to Youngs Mill Road.
  - Coordination with this project is necessary.
- P.I. No. S014892 – Right Runaround SR 14 Spur/ S. Davis Rd @ LaGrange Mall Entrance.
  - This project is complete, and coordination of new traffic data may be needed soon.
- An intersection improvement is planned for Mill Creek Parkway and South Davis Road to be constructed by others.
  - Coordination with this project will be necessary.

MPO: N/A – Project not in MPO **TIP #:** N/A

Congressional District(s): 3

Federal Oversight: ☐ PoDI ☐ Exempt ☒ State Funded ☐ Other

Projected Traffic: AADT 24 HR T: 16 %
Current Year (2018): 18,000 Open Year (2026): 28,850 Design Year (2046): 36,850
Traffic Projections Performed by: Lowe Engineers, LLC
Date approved by the GDOT Office of Planning: 3/21/19

AASHTO Functional Classification (Mainline): *Minor Arterial*

AASHTO Context Classification (Mainline): *Urban*

AASHTO Project Type (Mainline): *Reconstruction*

Complete Streets - Bicycle, Pedestrian, and/or Transit Standard Warrants:
Warrants met: ☐ None *☒ Bicycle *☒ Pedestrian ☐ Transit ~OB

**** There are sections of existing sidewalks at intersection. The mall and other potential traffic generators/destinations do not currently show evidence of foot or bicycle traffic that would warrant the addition of sidewalk or bicycle lanes.***

Is this a 3R (Resurfacing, Restoration, & Rehabilitation) Project? ☒ No ☐ Yes

Pavement Evaluation and Recommendations
Initial Pavement Evaluation Summary Report Required? ☒ No ☐ Yes
Feasible Pavement Alternatives: ☐ HMA ☐ PCC ☒ HMA & PCC

DESIGN AND STRUCTURAL

Description of the proposed project: The proposed project would widen SR 14 Spur/S. Davis Road from the intersection of SR 109/Lafayette Parkway to the intersection of SR 14/U.S. 29/Hogansville Road. In approximately 2,500 feet from SR 109/Lafayette Parkway, bridge structure (identification 285-0021-0) over the CSX railroad will also be replaced. The project would total approximately 1.50 miles.

Major Structures:

Structure	Existing	Proposed
ID 285-0021-0 S.R. 14 Spur @ CSX Railroad	SR 14 Spur / LaGrange Bypass includes Structure 285-0021-0 which is a bridge consisting of three (3) spans of steel rolled beams on concrete intermediate bents. The bridge deck width is approximately 47-feet and the roadway curb-to-curb width is 43-feet. The total length of the bridge is approximately 137-feet.	The proposed concrete bridge over CSX Railroad will be approximately 265-feet long by 91.25 feet wide with a concrete deck on prestressed concrete beams. The typical section includes two (2) 12-foot travel lanes in each direction with a 24-foot median (20-feet raised), and 8-foot outside shoulders for a 34-foot total clear width in each direction.

Accelerated Bridge Construction (ABC) techniques anticipated: ☒ No ☐ Yes
Traffic will be maintained using phased bridge construction to replace the existing bridge. Temporary barricades will be set up on the east side of the existing bridge, with room for one travel lane in each direction. The existing bridge outside the temporary barricade will be removed and a portion of the new bridge will be constructed, wide enough to carry one lane of travel in each direction with a temporary barricade on the west side. Traffic will be moved to this section of the new bridge; the rest of the existing bridge will be deconstructed and then the rest of the proposed bridge will be constructed. As such, ABC techniques are not considered warranted to reduce overall bridge construction durations.

Is the project located on a NHS roadway? ☒ No ☐ Yes

P.I. Number: 0014079

Is the project located on a Special Roadway or Network? ☒ No ☐ Yes

Mainline Design Features: SR 14 Spur

Feature	Existing	*Policy	Proposed
Typical Section:			
- Number of Lanes	2-3		4
- **Lane Width(s)**	**12-ft**	**12-ft**	**12-ft**
- **Median Width & Type**	**N/A**	**24-ft Raised**	**24-ft Raised**
- **Outside Shoulder Width**	**6-ft (2-ft paved)**	**10-ft (6.5-ft paved)**	**10-ft (6.5-ft paved)**
- **Outside Shoulder Slope**	**6%**	**6%**	**6%**
- **Border Area Width (in C&G section)**	**12-ft**	**12-ft**	**12-ft**
- **Sidewalks**	**5', intermittent**	**N/A**	**5-ft** ~OB
- Auxiliary Lanes	12' Right- and Left-Turn lanes		12' Right- and Left-Turn lanes
- **Bike Accommodation**	**N/A**	**Bike-able Shoulders**	**Bike-able Shoulders**
Posted Speed	55 mph		55 mph
Design Speed	**55 mph**	**55 mph**	**55mph**
Minimum Horizontal Curve Radius	**1220-ft**	**960-ft**	**1220-ft**
Maximum Superelevation Rate	**10%**	**6%**	**5.9%**
Maximum Grade	**4.5%**	**6%**	**4.5%**
Access Control	By Permit	**By Permit**	By Permit
Design Vehicle			WB-67
Check Vehicle			
Pavement Type	HMA		HMA
Vertical Clearance for Bridge over Railroad	23-ft		23-ft

**According to current GDOT design policy if applicable*

Design Exceptions/Design Variances to FHWA or GDOT Controlling Criteria anticipated:

FHWA or GDOT Controlling Criteria	No	Undetermined	Yes	DE or DV	Approval Date (if applicable)
1. Design Speed	☒	☐	☐		
2. Design Loading Structural Capacity	☒	☐	☐		
3. Stopping Sight Distance	☒	☐	☐		
4. Horizontal Curve Radius	☒	☐	☐		
5. Maximum Grade	☒	☐	☐		
6. Vertical Clearance	☒	☐	☐		
7. Superelevation Rate	☒	☐	☐		
8. Lane Width	☒	☐	☐		
9. Cross Slope	☒	☐	☐		
10. Shoulder Width	☒	☐	☐		

Design Variances to GDOT Standard Criteria anticipated:

GDOT Standard Criteria	Reviewing Office	No	Undetermined	Yes	Approval Date (if applicable)
1. Access Control	DP&S	☒	☐	☐	
2. Shoulder Width	DP&S	☒	☐	☐	
3. Intersection Sight Distance	DP&S	☒	☐	☐	
4. Intersection Skew Angle	DP&S	☒	☐	☐	
5. Tangent Lengths on Reverse Curves	DP&S	☒	☐	☐	

6. Lateral Offset to Obstruction	DP&S	☒	☐	☐	
7. Rumble Strips	DP&S	☒	☐	☐	
8. Safety Edge	DP&S	☒	☐	☐	
9. Median Usage	DP&S	☒	☐	☐	
10. Roundabout Illumination Levels	DP&S	☒	☐	☐	
11. Complete Streets Warrants	DP&S	☒	☒ X	☐	will further evaluate ~OB
12. ADA Requirements in PROWAG	DP&S	☒	☐	☐	
13. GDOT Construction Standards	DP&S	☒	☐	☐	
14. GDOT Drainage Manual	DP&S	☒	☐	☐	

VE Study anticipated: ☒ No ☐ Yes ☐ Completed – Date: _____

Lighting Required: ☐ No ☒ Yes

Off-site Detours Anticipated: ☒ No ☐ Undetermined ☐ Yes
If yes: Roadway type to be closed: ☐ Local Road ☐ State Route
Detour Route selected: ☐ Local Road ☐ State Route
District Concurrence w/Detour Route: ☐ No/Pending ☐ Received *Select a date*

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

INTERSECTIONS AND INTERCHANGES

Interchanges/Major Intersections: Two major signalized intersections are along SR 14 Spur corridor within the project's limits:

Lafayette Pkwy/SR 109

Hogansville Rd/SR 14/US 29

Intersection Control to be determined by ICE Analysis.

Intersection Control Evaluation (ICE) Required: ☐ No ☒ Yes, Stage 1 ICE included in attachments
(ICE Stage 2 will be completed 1/3 of the way through preliminary design per GDOT ICE Policy.)

Roundabout Concept Validation Required: ☐ No ☒ Yes ☐ Completed – Date: Date

UTILITY AND PROPERTY

Railroad Involvement: CSX-owned railroad track is within the project limits. CSX ROW is approximately 210-feet wide roughly centered on existing mainline track. This is to accommodate access roads, utilities, drainage, and two (2) future tracks, one either side of the existing mainline. Railroad coordination will be required. ~OB

NOTE: The railroad inventory number is 050480A, at Railroad Milepost XXB-0068.10. There are approximately 16 trains a day at this crossing traveling at an average speed of 45mph. The contact for CSX Transportation is Todd Allton; Todd_Allton@csx.com.

Utility Involvements:	Gas, Water, & Sewer	City of LaGrange
	Electric	Diverse Power
	Telecommunications	City of LaGrange
		AT&T
		MCI/Verizon
	Television	Charter Communications
	Petroleum	Plantation Pipeline

SUE Required: ☐ No ☒ Yes ☐ Undetermined

Public Interest Determination Policy and Procedure recommended: ☒No* ☐Yes
*See Concept Utility Report in attachment. It states "Consideration"

Right-of-Way (ROW): Existing width: 130ft. Proposed width: 130-225ft.

Required Right-of-Way anticipated: ☐None ☒Yes ☐Undetermined

Easements anticipated: ☐None ☒Temporary ☒Permanent * ☐Utility ☐Other

** Permanent easements will include the right to place utilities.*

Anticipated total number of impacted parcels:		34
	Businesses:	0
Displacements anticipated:	Residences:	0
	Other:	
	Total Displacements:	0

Location and Design approval: ☐ Not Required ☒ Required

Impacts to USACE property anticipated: ☒ No ☐ Yes ☐ Undetermined

CONTEXT SENSITIVE SOLUTIONS

Issues of Concern: N/A

Context Sensitive Solutions Proposed: N/A

ENVIRONMENTAL & PERMITS

Anticipated Environmental Document: **GEPA ~ None**

Level of Environmental Analysis:

☒ The environmental considerations noted below are based on preliminary desktop or screening level environmental analysis and are subject to revision after the completion of resource identification, delineation, and agency concurrence.

☐ The environmental considerations noted below are based on the completion of resource identification, delineation, and agency concurrence.

Water Quality Requirements:
MS4 Permit Compliance – Is the project located in a MS4 area? ☒ No ☐ Yes

Is Non-MS4 water quality mitigation anticipated? ☒ No ☐ Yes

Environmental Permits/Variances/Commitments/Coordination anticipated:

Permit/Variance/Commitment/ Coordination Anticipated	No	Yes	Remarks
1. U.S. Coast Guard Permit	☒	☐	
2. Forest Service/NPS	☒	☐	
3. CWA Section 404 Permit	☐	☒	
4. Tennessee Valley Authority Permit	☒	☐	
5. USACE Real Estate Outgrant	☒	☐	
6. Buffer Variance	☐	☒	
7. Coastal Zone Management Coordination	☒	☐	
8. NPDES	☐	☒	
9. FEMA	☒	☐	
10. Cemetery Permit	☒	☐	
11. Other Permits	☒	☐	
12. Other Commitments	☒	☐	
13. Other Coordination	☒	☐	

Is a PAR required? ☒ No ☐ Yes ☐ Completed – Date:

Environmental Comments and Information:

NEPA/GEPA: This being a state-funded project with a total project cost of less than $100 million, there is no environmental document required. Based on census data and field observations, the project is not anticipated to cause a disproportionate impact to disadvantaged communities.

Churches and Institutions: There are three churches within or near the project environmental survey boundary (ESB): Old Pathway Baptist Church at 350 Davis Rd; Welcome Baptist Church and Christian School at 15 Iris Dr; and Trinity United Methodist Church at 101 North Davis Rd.

Public Land: There are no publicly owned parks or recreational facilities within the project area. The City of Lagrange and Troup County Recycling Center and water tower are situated at 550 South Davis Rd.

LUSTs: The GA EPD LUST database lists seven LUST sites within or near the project ESB. These are located at 1399, 1405, 1409.5, 1501, 1503, 1506, and 1511 Lafayette Pkwy, Lagrange, GA. Six of these sites have a cleanup status listed as No Further Action (NFA), while one site (1506) is shown as Cleanup Initiated.

Ecology: The draft Ecology Resource Survey Report has been submitted. While the project area is in range of several protected species, the ecology survey did not identify suitable habitat for any of those species. Bat and migratory bird roosting habitat was identified. Supplemental Specification 107.23G applies. The ecology report identified seven (7) jurisdictional waters within the project area.

History: The Historic Resources Survey Report was published on February 6, 2019. A total of nine (9) resources were identified in the report as being fifty (50) years of age or older. However, as the Criteria of Eligibility was applied to the resources identified, only two (2) have been recommended eligible for inclusion in the National Register of Historic Places. These properties should be avoidable.

Archaeology: A Phase I archaeological survey identified one new archaeological site one previously recorded site was partially investigated. The portion of the new site within the project area lacks data potential and has an unknown National Register eligibility. The previously recorded site was determined ineligible for the National Register.

Air Quality:

Is the project located in an Ozone Non-attainment area? ☒ No ☐ Yes
Is a Carbon Monoxide hotspot analysis required? ☐ No ☒ Yes

Noise Effects: Not applicable to state-funded projects unless a historic resource is involved.

Public Involvement: Public involvement is anticipated, including public information meetings.

Major stakeholders: Troup County, the city of LaGrange, the traveling public, CSX, and businesses along the corridor.

CONSTRUCTION

Issues potentially affecting constructability/construction schedule: Possible staging issues may occur at the bridge as the bridge must stay open for traffic. Crane placement may not be in the right of way of CSX.

Early Completion Incentives recommended for consideration: ☒ No ☐ Yes

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Federal Aviation Administration (FAA) coordination anticipated: ☒No ☐ Yes

Due to the proximity of the LaGrange Airport, if any construction or alteration including equipment will exceed 200 feet above ground level (for example cranes for bridge beam installation) a FAA form 7460 Notice of Proposed Construction or Alteration shall be submitted to the Federal Aviation Administration at the following link: https://oeaaa.faa.gov/oeaaa/external/portal.jsp

Initial Concept Team Meeting: January 3, 2019 – Meeting provided initial insight and input from various team participants.

Concept Team Meeting: May 29, 2019 – Meeting reviewed the draft concept report.

Other coordination to date:

Project Activity	Party Responsible for Performing Task(s)
Concept Development	Lowe Engineers
Design	Lowe Engineers
Right-of-Way Acquisition	GDOT
Utility Coordination (Preconstruction)	GDOT District 3
Utility Relocation (Construction)	Utility Owners
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	Contractor
Providing Detours	Contractor
Environmental Studies, Documents, & Permits	Lowe Engineers (Kimley-Horn)
Environmental Mitigation	Lowe Engineers (Kimley-Horn)
Construction Inspection & Materials Testing	GDOT

Project Cost Estimate Summary and Funding Responsibilities:

	PE Activities		ROW	Reimbursable Utilities	CST*	Total Cost
	PE Funding	Section 404 Mitigation				
Programmed Cost:	$1,542,000		$11,371,000	$0	$16,996,140	$29,909,140
Funded By:	HB170	N/A	HB170	HB170	HB170	
Estimated Amount:	$1,542,000 **$40,500	$0	$11,397,000	**$2,277,700	$17,072,266	$32,329,466 ~OB
Date of Estimate:	05/03/2019	7/18/2019	07/26/2019	05/28/2019	03/05/2020	
Cost Difference:	$40,500		$26,000	$2,277,700	$76,126	$2,420,326

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

** Includes Railroad Reimbursable Costs: Construction, inspection, fees = $327,700 and RR P.E. review =$40,500 ~OB

ALTERNATIVES DISCUSSION

Alternative selection:

Preferred Alternative: Symmetrical widening of the existing roadway from two-lanes to four-lanes with 24-feet median throughout the corridor. The Level of Service (LOS) would improve from E to C.			
Estimated Property Impacts:	**34**	**Estimated Total Cost:**	***$32,329,466*** * ~OB
Estimated ROW Cost:	**$11,397,000**	**Estimated CST Time:**	**36 months**
Rationale: This alternative will require less ROW and less overall impacts to properties. This alternative has good geometry and sight distance compared to the other alternatives. Capacity analysis of the proposed alternate using the 2046 forecast traffic shows that the Level of Service will improve to LOS C.			

*Estimated Total Cost includes: PE Funding, Construction, Engineering and Inspection, Contingencies, and Liquid AC Cost Adjustment, and ROW Cost.

No-Build Alternative: The No-Build Alternative would consist of no improvements to existing SR 14 Spur corridor. The Level of Service (LOS) would further decrease from E to LOS F.			
Estimated Property Impacts:	**0**	**Estimated Total Cost:**	**$0**
Estimated ROW Cost:	**$0**	**Estimated CST Time:**	**0**
Rationale: This alternative was not selected because it does not address the traffic congestion and above-average crash rates.			

Alternative 1: Alternative 1 would widen the SR 14 Spur corridor from two-lanes to four-lanes with a 24-feet median throughout the corridor. The proposed bridge over the railroad would be offset right 20 feet from original bridge placement. The Level of Service (LOS) would improve from E to C.			
Estimated Property Impacts:	**34**	**Estimated Total Cost:**	**$33,651,990***
Estimated ROW Cost:	**$12,452,000**	**Estimated CST Time:**	**30 months**
Rationale: This alternative was not selected because the alignment shift caused more overall impacts to properties than the preferred alternative and required more ROW. This shift in alignment would cause impact to an AT&T slick site. This would substantially increase the total cost because of the utility relocations.			

*Estimated Total Cost includes: PE Funding, Construction, Engineering and Inspection, Contingencies, and Liquid AC Cost Adjustment, and ROW Cost.

Alternative 2: Alternative 2 would symmetrically widen the SR 14 Spur corridor from two-lanes to four-lanes with 32-feet depressed median. The existing bridge over the railroad would be replaced with parallel bridges. The Level of Service (LOS) would improve from E to C.			
Estimated Property Impacts:	**34**	**Estimated Total Cost:**	**$37,886,900**
Estimated ROW Cost:	**$13,487,000**	**Estimated CST Time:**	**30 months**
Rationale: This alternative was not selected because it will have the most substantial impact to properties on all the alignments. This alternative would cause impact to an AT&T slick site. This would substantially increase the total cost because of the utility relocations.			

*Estimated Total Cost includes: PE Funding, Construction, Engineering and Inspection, Contingencies, and Liquid AC Cost Adjustment, and ROW Cost.

Comments: None.

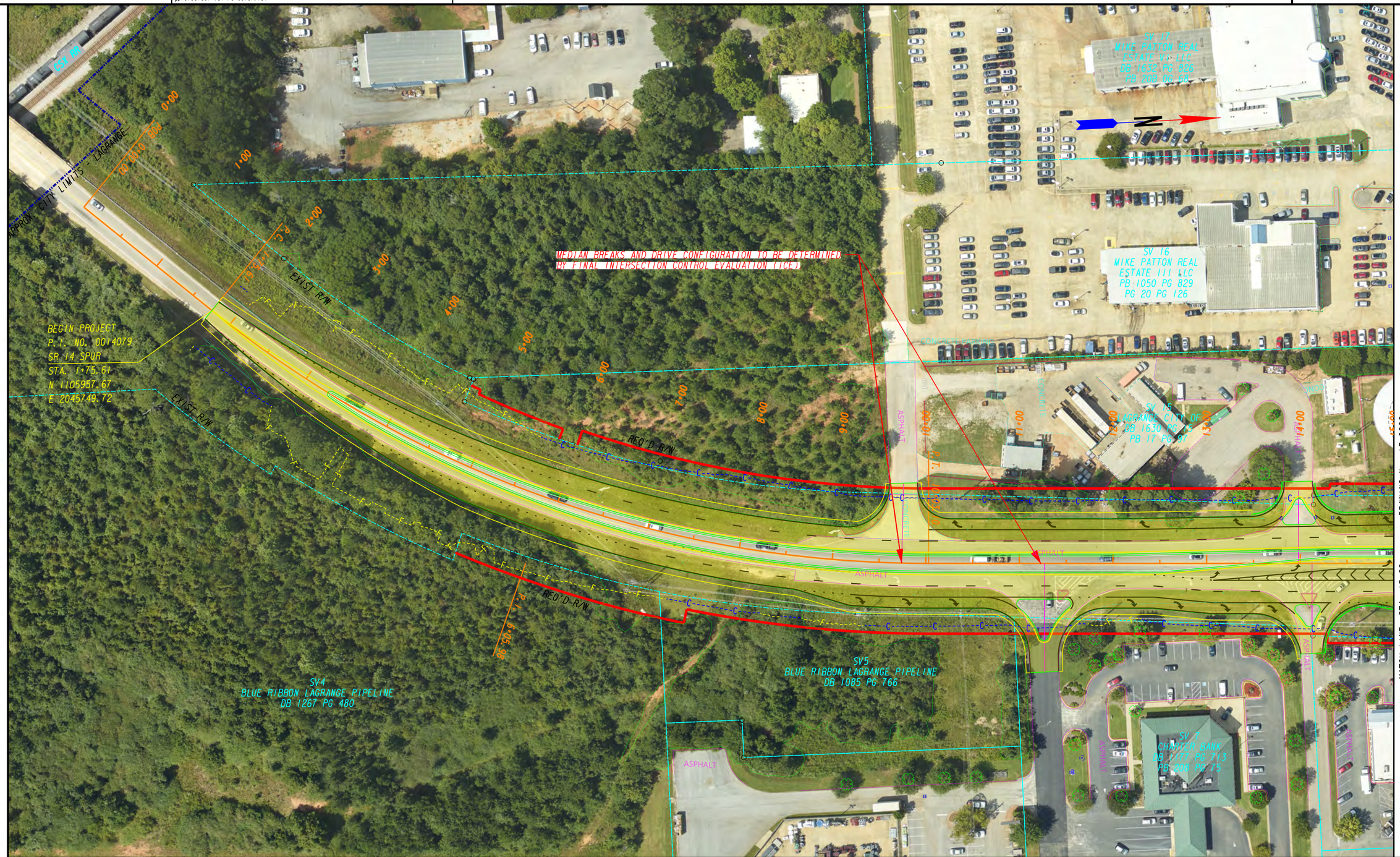
LIST OF ATTACHMENTS/SUPPORTING DATA

1. Concept Layout
2. Typical Sections
3. Detailed Cost Estimates:
    a. Revised Concept Cost Estimate
    b. Revisions to Programmed Costs
    c. ROW
    d. Utilities
    e. Railroad
    f. Mitigation
4. Concept Utility Report
5. Crash Summaries
6. Design Traffic Diagrams
7. ICE Reports
    a. Stage 1 Screening Decision Record
    b. Stage 1 Report
8. Capacity Analysis
    a. 2018 Exist & 2046 No Build
    b. 2046 Build
9. S I & A Report
10. Railroad Coordination
11. Minutes of Initial Concept Meeting
12. Minutes of Concept Meeting

APPROVALS

Concur: _____ 6/4/2020
Director of Engineering — Date

Approve: _____ 6/5/2020
Digitally signed by Margaret B. Pirkle
DN: cn=Margaret B. Pirkle, o=Georgia Department of Transportation, ou=Chief Engineer, email=mpirkle@dot.ga.gov, c=US
Date: 2020.06.05 11:58:19 -04'00'
Chief Engineer — Date



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

CITY LIMITS LINE
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

LOWE ENGINEERS
990 HAMMOND DRIVE, SUITE 900, ATLANTA, GA 30328
PHONE 770.857.8400 FAX 770.857.8401

GDOT
SCALE IN FEET
0 50 100 200

REVISION DATES

CONCEPT PLAN
SR 14 SPUR
FROM S OF SR 109 TO SR 14/US 29

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0001
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

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

CITY LIMITS LINE
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
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ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

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SCALE IN FEET
0 50 100 200

REVISION DATES

CONCEPT PLAN
SR 14 SPUR
FROM S OF SR 109 TO SR 14/US 29

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0002
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

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

CITY LIMITS LINE
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

LOWE ENGINEERS
990 HAMMOND DRIVE, SUITE 900, ATLANTA, GA 30328
PHONE 770.857.8400 FAX 770.857.8401

SCALE IN FEET
0 50 100 200

REVISION DATES

CONCEPT PLAN
SR 14 SPUR
FROM S OF SR 109 TO SR 14/US 29

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0003
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

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PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
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EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
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GDOT
SCALE IN FEET
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REVISION DATES

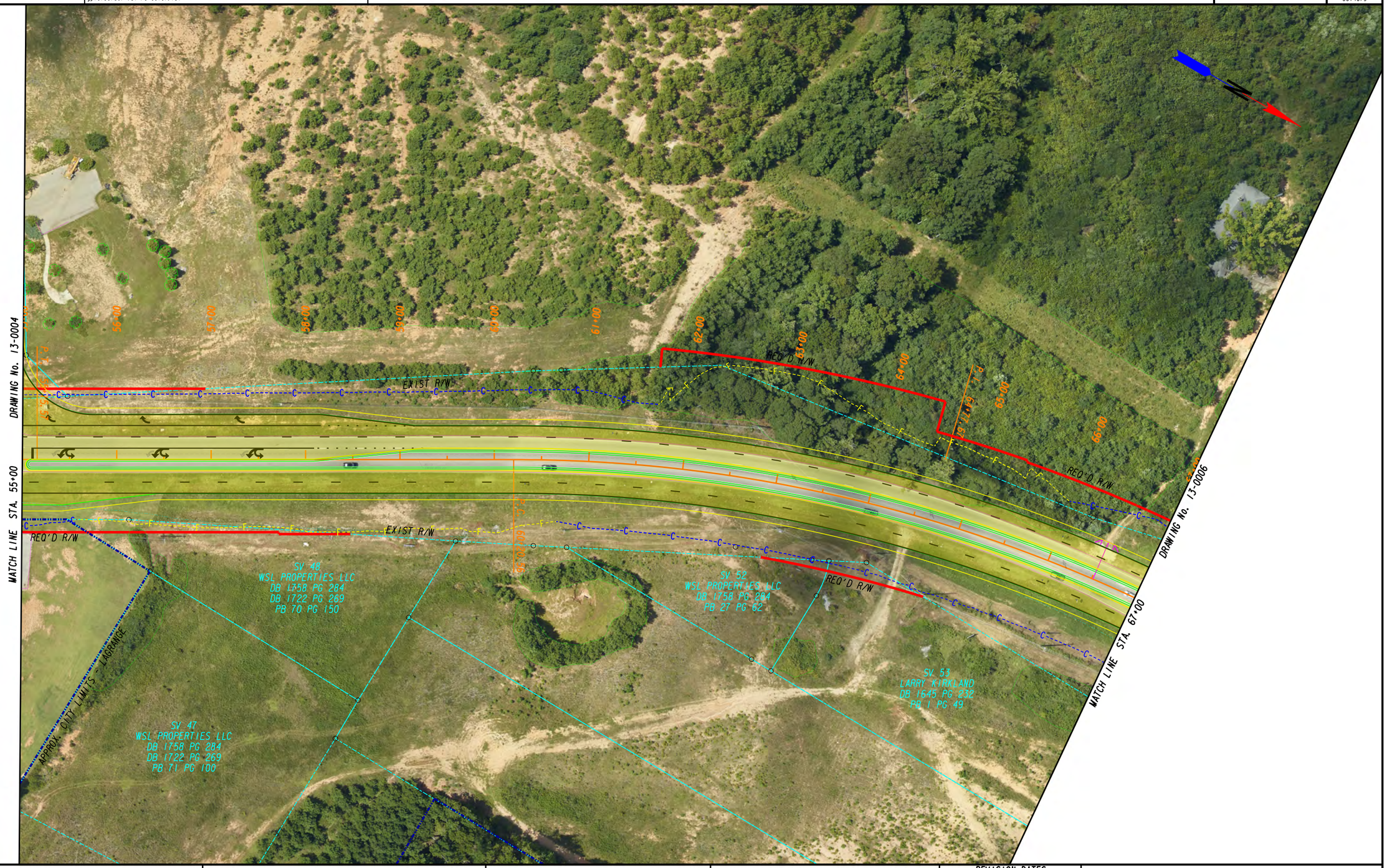
CONCEPT PLAN

SR 14 SPUR

FROM S OF SR 109 TO SR 14/US 29

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0004
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
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0 50 100 200

REVISION DATES

CONCEPT PLAN
SR 14 SPUR
FROM S OF SR 109 TO SR 14/US 29

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BACKCHECKED:		DATE:	
CORRECTED:		DATE:	13-0005
VERIFIED:		DATE:	

10/23/2015 GPLN

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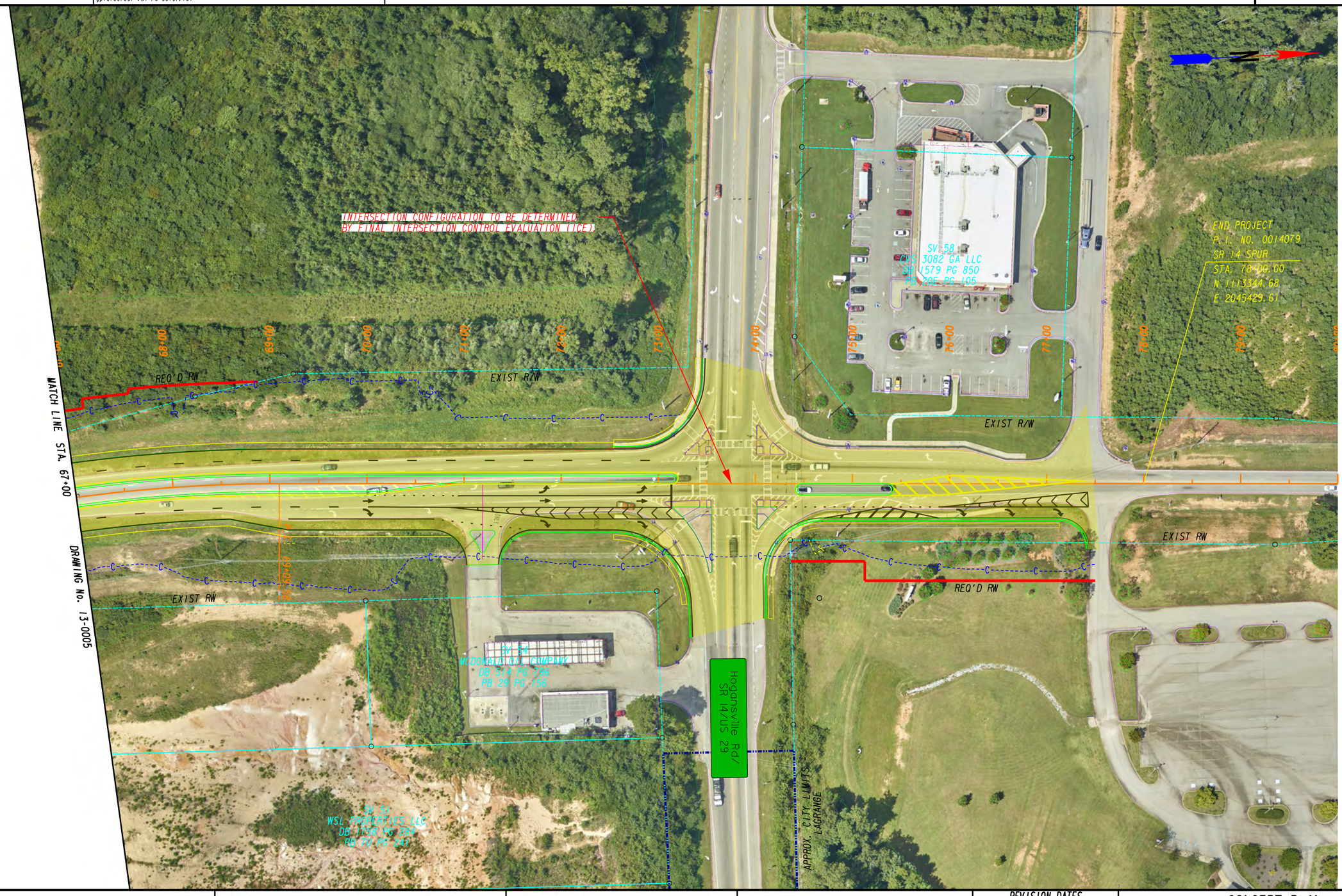

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
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SCALE IN FEET

REVISION DATES

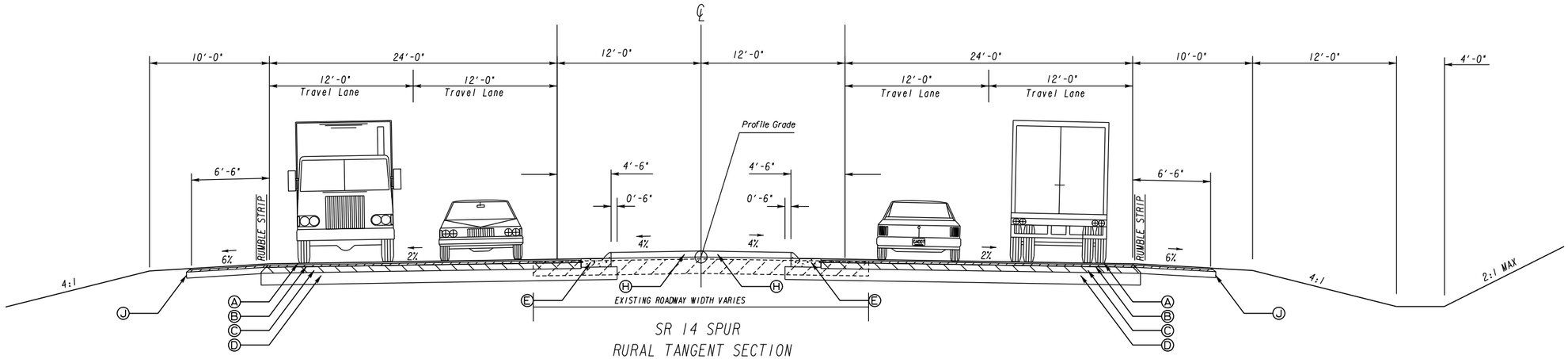
CONCEPT PLAN

SR 14 SPUR

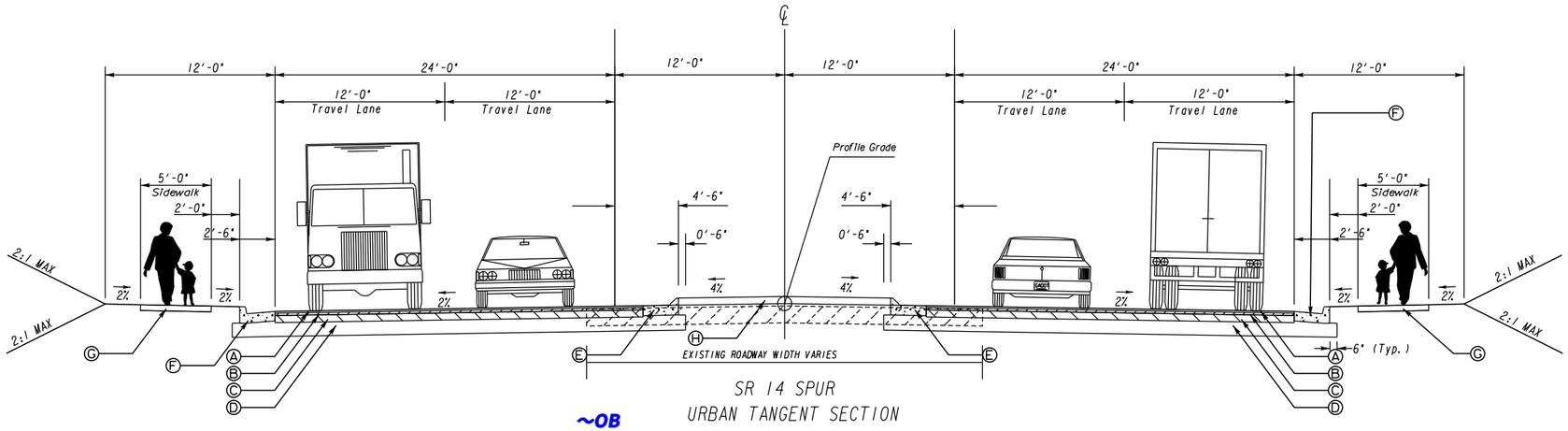
FROM S OF SR 109 TO SR 14/US 29

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	13-0006
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10/23/2015 GPLN



SR 14 SPUR
RURAL TANGENT SECTION



SR 14 SPUR
URBAN TANGENT SECTION

~OB

(A) 402-4510 RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM MATL & H LIME, 165 LB/SY

(B) 402-3190 RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 220 LB/SY

(C) 402-3121 RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 660 LB/SY

(D) 310-1101 GR AGGR BASE CRS, INCL MATL

(E) 441-6740 CONC CURB & GUTTER, 8 IN X 30 IN, TP 7

(F) 441-6222 CONC CURB & GUTTER, 8 IN X 30 IN, TP 2

(G) 441-0104 CONC SIDEWALK, 4 IN

(H) 441-0740 CONC MEDIAN, 4 IN

(J) PAVEMENT EDGE TREATMENT (SEE CONSTRUCTION DETAIL P-7)

LOWE ENGINEERS
990 HAMMOND DRIVE, SUITE 900, ATLANTA, GA 30328
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GDOT

SCALE IN FEET
0 5 10 20

REVISION DATES

TYPICAL SECTIONS
SR 14 SPUR
FROM S OF SR 109 TO SR 14/US 29

CHECKED:		DATE:		DRAWING No.
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CORRECTED:		DATE:		
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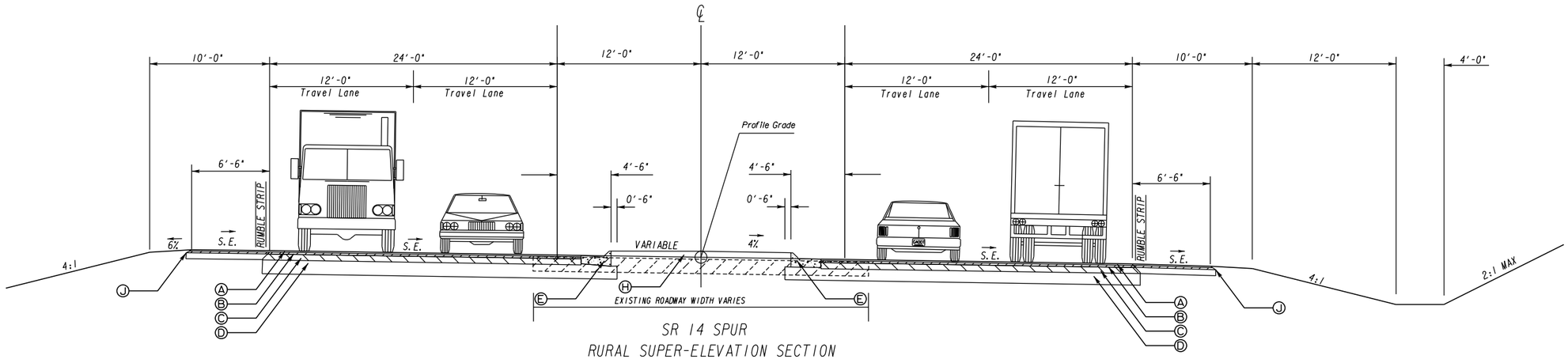
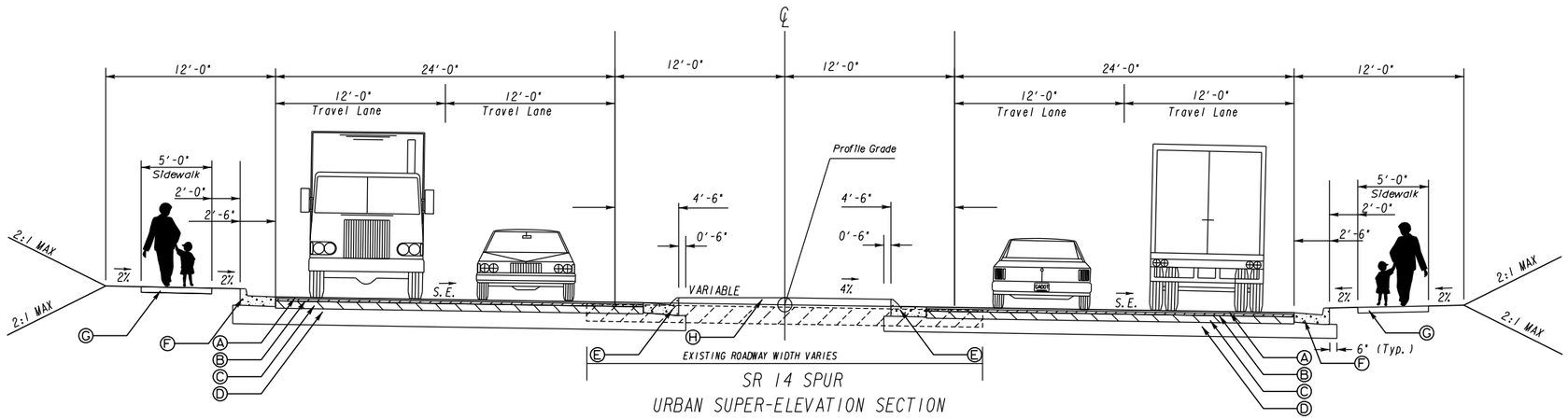


SR 14 SPUR
RURAL SUPER-ELEVATION SECTION



SR 14 SPUR
URBAN SUPER-ELEVATION SECTION

NOTE:
1. SEE ROADWAY PLANS FOR SUPERELEVATION RATES AND TRANSITIONS.

~OB

(A) 402-4510 RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM MATL & H LIME, 165 LB/SY

(B) 402-3190 RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME, 220 LB/SY

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SCALE IN FEET
0 5 10 20

REVISION DATES

TYPICAL SECTIONS
SR 14 SPUR
FROM S OF SR 109 TO SR 14/US 29

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CORRECTED:		DATE:		
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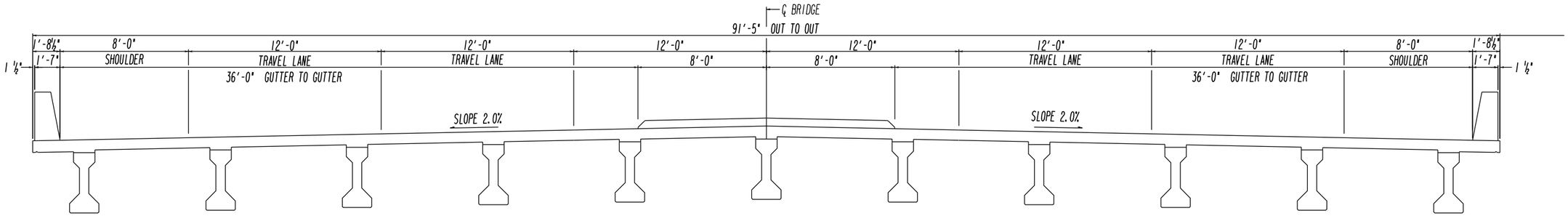
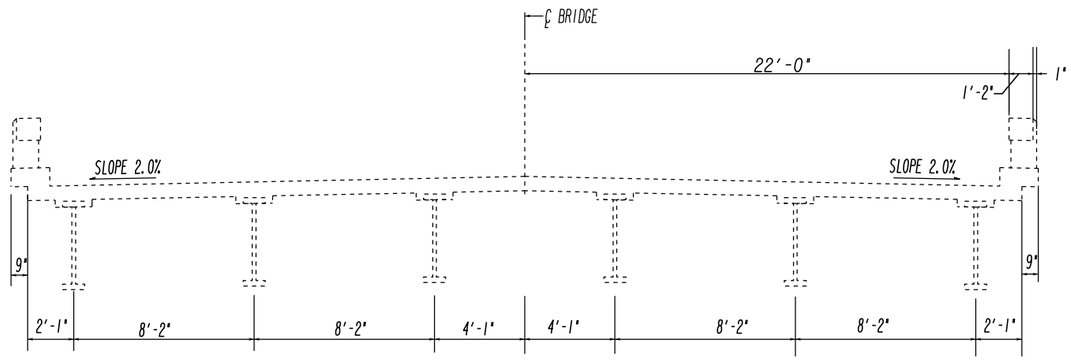


SR 14 SPUR
PROPOSED BRIDGE SECTION



SR 14 SPUR
EXISTING BRIDGE SECTION

LOWE ENGINEERS
990 HAMMOND DRIVE, SUITE 900, ATLANTA, GA 30328
PHONE 770.857.8400 FAX 770.857.8401

NOT TO SCALE

REVISION DATES

TYPICAL SECTIONS
SR 14 SPUR
PREFERRED ALTERNATIVE

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		05-0003
CORRECTED:		DATE:		
VERIFIED:		DATE:		

Detailed Cost Estimate

Time Processed: Mar-09-2020 05:30:59 PM

JOB NUMBER: 0014079_CNCP
SPEC YEAR: 13
ITEM HISTORY: ALL_2019Q3_24MO
DESCRIPTION: SR 14 SPUR
ASSIGNED CONTROL GROUP: LOWE ENGINEERING - CONSULTANTS

FED/STATE PROJECT NUMBER:

ITEMS FOR JOB 0014079_CNCP

Line Number	Item	Quantity	Units	Price	Description	Amount
0005	210-0100	1.00	LS	$1,253,618.33000	GRADING COMPLETE - P.I. 0014079	$1,253,618.33
0010	150-1000	1.00	LS	$650,000.00000	TRAFFIC CONTROL - P.I. 0014079	$650,000.00
0013	620-0100	800.00	LF	$28.98401	TEMP BARRIER, METHOD NO. 1	$23,187.21
0014	150-5010	4.00	EA	$8,896.57769	TRAF CTRL,PORTABLE IMPACT ATTN	$35,586.31
0015	402-3190	7210.00	TN	$75.70666	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	$545,845.02
0020	402-3121	21600.00	TN	$68.37995	RECYL AC 25MM SP,GP1/2,BM&HL	$1,477,006.92
0030	402-4510	4416.00	TN	$105.08044	RECYL AC 12.5 MM SP,GP2ONLY,INC P-MBM&HL	$464,035.22
0035	310-1101	52160.00	TN	$26.64145	GR AGGR BASE CRS, INCL MATL	$1,389,618.03
0036	402-1812	500.00	TN	$97.46931	RECYL AC LEVELING,INC BM&HL	$48,734.65
0037	432-5010	9800.00	SY	$3.91036	MILL ASPH CONC PVMT,VARB DEPTH	$38,321.53
0040	413-0750	10600.00	GL	$1.88159	TACK COAT	$19,944.85
0045	441-0016	17.00	SY	$69.95177	DRIVEWAY CONCRETE, 6 IN TK	$1,189.18
0050	441-0018	670.00	SY	$65.69682	DRIVEWAY CONCRETE, 8 IN TK	$44,016.87
0055	441-0303	7.00	EA	$2,340.07692	CONC SPILLWAY, TP 3	$16,380.54
0060	441-0740	9300.00	SY	$25.60060	CONC MEDIAN, 4 IN	$238,085.58
0065	441-6222	3200.00	LF	$23.48841	CONC CURB & GUTTER/ 8X30TP2	$75,162.91
0070	441-6740	15000.00	LF	$20.13835	CONC CURB & GUTTER/ 8X30 TP7	$302,075.25
0075	441-0104	280.00	SY	$52.32071	CONC SIDEWALK, 4 IN	$14,649.80
0080	456-2015	3.00	GLM	$1,700.95259	INDENT. RUMB. STRIPS - GRND-IN-PL (SKIP)	$5,102.86
0085	550-1180	2400.00	LF	$52.93306	STM DR PIPE 18,H 1-10	$127,039.34
0090	550-1240	2000.00	LF	$59.90433	STM DR PIPE 24,H 1-10	$119,808.66
0095	550-1300	550.00	LF	$83.42757	STM DR PIPE 30,H 1-10	$45,885.16
0100	550-2180	275.00	LF	$40.30528	SIDE DR PIPE 18,H 1-10	$11,083.95
0105	550-2240	440.00	LF	$39.05877	SIDE DR PIPE 24,H 1-10	$17,185.86
0110	668-1100	17.00	EA	$3,307.69374	CATCH BASIN, GP 1	$56,230.79
0115	550-2420	55.00	LF	$112.71512	SIDE DR PIPE 42,H 1-10	$6,199.33
0120	550-3618	10.00	EA	$635.61795	SAFETY END SECTION 18,SD,6:1	$6,356.18
0125	550-3624	16.00	EA	$793.73771	SAFETY END SECTION 24,SD,6:1	$12,699.80
0130	550-3642	2.00	EA	$2,242.68000	SAFETY END SECTION 42,SD,6:1	$4,485.36
0135	634-1200	42.00	EA	$150.80947	RIGHT OF WAY MARKERS	$6,334.00
0139	632-0003	4.00	EA	$8,734.15100	CHANGEABLE MESS SIGN,PORT,TP 3	$34,936.60
0140	636-1033	500.00	SF	$13.91604	HWY SIGNS, TP1MAT,REFL SH TP 9	$6,958.02
0145	636-1036	200.00	SF	$18.58500	HWY SGN,TP1MAT,REFL SH TP 11	$3,717.00
0150	636-2070	1600.00	LF	$6.90436	GALV STEEL POSTS, TP 7	$11,046.98
0155	639-4002	16.00	EA	$9,031.45000	STRAIN POLE, TP II	$144,503.20
0160	668-2100	10.00	EA	$2,785.03867	DROP INLET, GP 1	$27,850.39
0165	641-1100	180.00	LF	$67.10670	GUARDRAIL, TP T	$12,079.21
0170	641-1200	1900.00	LF	$20.40532	GUARDRAIL, TP W	$38,770.11
0175	641-5001	9.00	EA	$1,371.33371	GUARDRAIL ANCHORAGE, TP 1	$12,342.00
0180	641-5015	8.00	EACH	$3,160.57960	GUARDRL ANCHOR, TP 12A, 31 IN, TANG, E/A	$25,284.64
0185	653-1501	26000.00	LF	$0.50282	THERMO SOLID TRAF ST 5 IN, WHI	$13,073.32
0190	653-3501	20000.00	GLF	$0.28275	THERMO SKIP TRAF ST, 5 IN, WHI	$5,655.00
0195	653-1502	18000.00	LF	$0.48934	THERMO SOLID TRAF ST, 5 IN YEL	$8,808.12
0200	653-1804	2000.00	LF	$2.40411	THERM SOLID TRAF STRIPE, 8,WH	$4,808.22
0205	653-1704	700.00	LF	$7.03375	THERM SOLID TRAF STRIPE,24,WH	$4,923.63
0210	653-6004	900.00	SY	$4.45350	THERM TRAF STRIPING, WHITE	$4,008.15
0215	653-6006	700.00	SY	$4.39060	THERM TRAF STRIPING, YELLOW	$3,073.42
0220	653-0110	3.00	EA	$75.30840	THERM PVMT MARK, ARROW, TP 1	$225.93
0225	653-0120	70.00	EA	$76.75383	THERM PVMT MARK, ARROW, TP 2	$5,372.77
0232	653-0160	7.00	EA	$208.32589	THERM PVMT MARK, ARROW, TP 6	$1,458.28
0233	653-0170	2.00	EA	$163.78458	THERM PVMT MARK, ARROW, TP 7	$327.57
0234	653-0180	2.00	EA	$240.00000	THERM PVMT MARK, ARROW, TP 8	$480.00
0235	653-0210	2.00	EA	$158.68281	THERM PVMT MARK, WORD , TP 1	$317.37
0240	654-1001	10.00	EA	$4.57624	RAISED PVMT MARKERS TP 1	$45.76
0245	654-1003	750.00	EA	$4.11330	RAISED PVMT MARKERS TP 3	$3,084.98
0250	647-1000	1.00	LS	$200,000.00000	TRAF SIGNAL INSTALLATION NO - 1	$200,000.00
0255	647-1000	1.00	LS	$200,000.00000	TRAF SIGNAL INSTALLATION NO - 2	$200,000.00
0260	647-1000	1.00	LS	$200,000.00000	TRAF SIGNAL INSTALLATION NO - 3	$200,000.00
0265	163-0240	430.00	TN	$176.28295	MULCH	$75,801.67
0270	163-0232	29.00	AC	$654.00388	TEMPORARY GRASSING	$18,966.11

Line Number	Item	Quantity	Units	Price	Description	Amount
0275	171-0030	32000.00	LF	$3.66609	TEMPORARY SILT FENCE, TYPE C	$117,314.88
0280	165-0030	16000.00	LF	$0.67798	MAINT OF TEMP SILT FENCE, TP C	$10,847.68
0285	163-0300	8.00	EA	$1,905.35726	CONSTRUCTION EXIT	$15,242.86
0295	165-0101	8.00	EA	$736.92005	MAINT OF CONST EXIT	$5,895.36
0305	163-0550	30.00	EA	$206.40847	CONS & REM INLET SEDIMENT TRAP	$6,192.25
0310	165-0105	20.00	EA	$66.44410	MAINT OF INLET SEDIMENT TRAP	$1,328.88
0315	163-0527	80.00	EA	$372.70665	CNST/REM RIP RAP CKDM,STN P RIPRAP/SN BG	$29,816.53
0320	165-0041	400.00	LF	$5.10896	MAINT OF CHECK DAMS - ALL TYPES	$2,043.58
0325	700-6910	18.00	AC	$907.55476	PERMANENT GRASSING	$16,335.99
0330	700-7000	36.00	TN	$7.13311	AGRICULTURAL LIME	$256.79
0335	700-8000	16.00	TN	$643.88717	FERTILIZER MIXED GRADE	$10,302.19
0340	700-8100	880.00	LB	$3.01001	FERTILIZER NITROGEN CONTENT	$2,648.81
0345	716-1000	11500.00	SY	$2.37000	EROSION CONTROL MATS,WATERWAYS	$27,255.00
0350	716-2000	84000.00	SY	$1.00095	EROSION CONTROL MATS, SLOPES	$84,079.80
0355	167-1000	4.00	EA	$279.78710	WATER QUALITY MONITORING AND SAMPLING	$1,119.15
0360	167-1500	36.00	MO	$772.25095	WATER QUALITY INSPECTIONS	$27,801.03
0370	433-1000	610.00	SY	$181.28377	REINF CONC APPROACH SLAB	$110,583.10
0375	543-9000	1.00	LS	$3,628,000.00000	CONSTR OF BRIDGE COMPLETE - 0014079, 265'X 91.25'X$150/SF	$3,628,000.00
0380	540-1101	1.00	LS	$289,755.00000	REM OF EX BR, STA NO - 43+00, 0014079, 137' X 47' X $45/SF	$289,755.00
0390	621-6201	1300.00	LF	$677.13391	CONC SIDE BARRIER, TP 2-SA	$880,274.08
0400	639-2002	3000.00	LF	$3.33747	STEEL WIRE STRAND CABLE, 3/8	$10,012.41
0405	657-1085	530.00	LF	$6.79137	PRF PL SD PVT MKG,8,B/W,TP PB	$3,599.43
0410	657-3085	530.00	GLF	$4.57372	PRF PL SK PVMT MKG,8,B/W,TPPB	$2,424.07
0415	657-6085	530.00	LF	$6.78513	PRF PL SD PVMT MKG,8,B/Y,TPPB	$3,596.12
0420	153-1300	1.00	EA	$92,046.27517	FIELD ENGINEERS OFFICE TP 3	$92,046.28
0430	446-1100	15000.00	LF	$4.07765	PVMT REF FAB STRIPS, TP2,18 INCH WIDTH	$61,164.75
0435	550-4224	2.00	EA	$889.28553	FLARED END SECT 24 IN, ST DR	$1,778.57
0440	318-3000	1000.00	TN	$29.48860	AGGR SURF CRS	$29,488.60
0445	603-2181	18.00	SY	$68.36070	STN DUMPED RIP RAP, TP 3, 18	$1,230.49
0450	603-7000	18.00	SY	$4.74695	PLASTIC FILTER FABRIC	$85.45
Total						**$13,596,307.07**

TOTALS FOR JOB 0014079_CNCP

ITEMS COST:	$13,596,307.07
COST GROUP COST:	$0.00
ESTIMATED COST:	$13,707,394.57
CONTINGENCY PERCENT:	0.00%
ENGINEERING AND INSPECTION:	0.00%
ESTIMATED COST WITH CONTINGENCY AND E&I:	$13,707,394.57

File Location: Div of Preconstruction > CES

Georgia Department of Transportation

Interoffice Memo

FILE

PI NUMBER	0014079	PROJECT DESCRIPTION	SR 14 SPUR FROM SOUTH OF SR 109 TO SR 14/US 29
OFFICE	Office of Program Delivery		
DATE	Thursday, March 5, 2020		

From: Kimberly Nesbitt, State Program Delivery Administrator

To: Erik Rohde, P.E., State Project Review Engineer
via email Mailbox: CostEstimatesandUpdates@dot.ga.gov

Subject: **REVISIONS TO PROGRAMMED COSTS**

Project Manager:	Cherral Dempsey
Management Let Date:	11/15/2022
Management Right of Way Date:	2/1/2021

Cost Estimate Review Iteration

Date of Submittal #1	**03/05/2020**
Date of Submittal #2	
Date of Submittal #3	

Summary of Programmed Costs and Proposed Revised Costs:

Estimate Type	Cost Estimate Amounts (T-Pro Without Inflation)	Last Estimate Date	Revised Cost Estimate
CONSTRUCTION	$16,996,140.00	06/05/2019	$17,072,266.46
RIGHT OF WAY	$11,371,000.00	06/05/2019	$11,397,000.00
UTILITIES	N/A	N/A	$2,318,200.00

Explanation for Cost Change and Contingency Justification:

Project type and current phase (concept). There was no programmed cost for utilities.

Attachments:

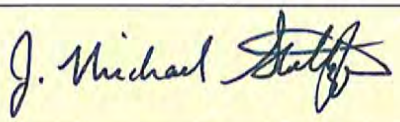
Current PSR print from 411

CES print from 411

Georgia Department of Transportation

Interoffice Memo

Design Phase Leader Validation of Final QC/QA for Construction Cost Estimate Used In This Revision to Programmed Costs:

Consultant Company or GDOT Design Office:	Lowe Engineers, LLC
Printed Name:	J. Michael Stoltzfus, PE
Title:	Project Manager
Signature:	
Date:	3/5/2020

FOR PROJECTS WITH A LOCAL SPONSOR	
If the project has a local sponsor, the project manager should ensure that the local authority completes the following validation indicating that it has reviewed the construction cost estimate and whether it is in concurrence with the construction costs presented.	
Please select the appropriate validation below upon review of the cost estimate: ☐ I acknowledge that I have reviewed the project construction cost estimate and concur with the costs presented. ☐ I acknowledge that I have reviewed the project construction cost estimate but do not concur with the costs presented.	
Please provide an explanation for non-concurrence.	
Local Authority Name and Title:	
Local Authority Signature:	
Date:	

Georgia Department of Transportation

Interoffice Memo

Cost Estimate Worksheet:

CONSTRUCTION COST ESTIMATE (Required base estimate entered from CES and should not include E&I). →	**A**	$ 13,707,394.57
ENGINEERING AND INSPECTION (The default E&I percentage is 5.0%, but may be adjusted per project scope.) →	**D**	$ 685,369.73

Construction Cost	E&I Percentage	E&I Cost
B	C	D = B x C
$ 13,707,394.57	5%	$ 685,369.73

CONTINGENCY (Refer to the Risk and Contingencies Table included in GDOT Policy 3A-9 Cost Estimating Purpose) →	**I**	$ 2,158,914.64

Construction Cost	E&I Cost	Construction + E&I	Contingency Percentage	Contingency Cost
E	F	G = E + F	H	I = G x H
$ 13,707,394.57	$ 685,369.73	$ 14,392,764.30	15%	$ 2,158,914.64

ASPHALT FUEL PRICE ADJUSTMENT (Leave blank if not applicable) →	**Q**	$ 520,587.52

Date	Mar 2020
Regular Unleaded	$2.259/ GAL
Diesel	$2.821/ GAL
Liquid AC	$501.00/ TON

Current Asphalt Fuel Index Prices can be found at the link below:

http://www.dot.ga.gov/PS/Materials/AsphaltFuelIndex

		Tons	Percentage of Asphaltic Concrete	Tons of Asphaltic Concrete	Total Monthly Tonnage of Asphalt Cement (TMT)	Monthly Asphalt Cement Price month project let (APL)	Max. Cap	Monthly Asphalt Cement Price month placed (APM)	Price Adjustment (PA)
					M = Sum of Columns L, T & W				Q = [((P - N) / N)] x M x N
Liquid AC	Description	J	K	L = J x K		N	O	P = (N x O)+N	
	Leveling	500.00 TN	5.00%	25.00 TN	1731.83 TN	$501.00/ TON	60%	$ 801.60	$ 520,587.52
	Patching								
	9.5 mm SP								
	12.5 OGFC								
	12.5 PEM								
	12.5 mm SP	4416.00 TN	5.00%	220.80 TN					
	19 mm SP	7210.00 TN	5.00%	360.50 TN					
	25 mm SP	21600.00 TN	5.00%	1080.00 TN					
Bituminous Tack Coat		Tack Coat	GL/TN	Tons					
	Description	R	S	T = R/S					
	Tack Coat	10600.00 GL	232.8234 GL/TN	45.53 TN					
Bituminous Tack Coat (Surface Treatment)		SY	GL/SY	TN					
	Description	U	V	W = (U x V) / (232.8234 GL/TN)					
	Single Surface Treatment		0.20 Gl/SY						
	Double Surface Treatment		0.44 Gl/SY						
	Triple Surface Treatment		0.71 Gl/SY						

CONSTRUCTION TOTAL COST →	**X = A+D+I+Q**	$ 17,072,266.46
RIGHT OF WAY COST →	**Y**	$ 11,397,000.00
UTILITIES COST (Provided by Utility Office) →	**Z = Sum of Reimbursable Costs**	$ 2,318,200.00

Utility Owner	Reimbursable Cost	Utility Owner	Reimbursable Cost
AT&T/Bellsouth	N/A		
Charter Communication	N/A		
City of LaGrange (Water)	N/A		
City of LaGrange (Sewer)	N/A		
City of LaGrange (Electrical)	$ 345,000.00		
City of LaGrange (Gas)	N/A		
City of LaGrange (Telecom)	N/A		
Diverse Power	$ 1,005,000.00		
Plantation Pipeline (Petroleum)	$ 600,000.00		
Verizon	N/A		
CSX Transportation, Inc.	$ 368,200.00		

GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY

Date: 7/24/2019 Project: SR 14 Spur Widening Preferred ALT
Revised: County: Troup
PI: 14079
Description: SR 14 Spur from South of SR 109 to SR 14/US 29
Project Termini:

Existing ROW: Varies
Parcels: 34 Required ROW: Varies

Land and Improvements		$10,468,650.00
Proximity Damage	*$0.00*	
Consequential Damage	*$1,550,700.00*	
Cost to Cures	*$125,000.00*	
Trade Fixtures	*$176,250.00*	
Improvements	*$475,000.00*	
Valuation Services		$263,750.00
Legal Services		$247,950.00
Relocation		$102,000.00
Demolition		$24,000.00
Administrative		$290,500.00
TOTAL ESTIMATED COSTS		$11,396,850.00
TOTAL ESTIMATED COSTS (ROUNDED)		***$11,397,000.00***

Prepared By: Emory D. Dixon III 7-24-19
Print Name Signature Date

Cost Estimation Supervisor : Valencia Carter 7/20/19
Print Name Signature Date

NOTE: Superviser is only attesting that the estimate was completed using the correct information provided for the the project. The Supervisor is not attesting to property values or the accuracy of the market value estimations provided in this report. No Market Appreciation is included in this Preliminary Cost Estimate.

Comments:

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE

Project No: **0014079** Office: **District 3 Thomaston**
County **Troup** Date: **5/28/2019**
P.I. # **0014079**

Description: **SR 14 Spur from SR 109 to SR 14 / US 29**

FROM Scott K. Parker, District Utilities Manager

TO Cherral Dempsey, Project Manager

SUBJECT **PRELIMINARY UTILITY COST ESTIMATE**

A review of utilities located on the above referenced project has been conducted with Concept Layout plans.. Listed below is a breakdown of the anticipated reimbursable and non-reimbursable cost.

Utility Owner	Reimbursable	Non-Reimbursable	Estimate Based on
AT&T/Bellsouth	**$0.00**	**$625,000.00**	**Site Visit / Available Drawings**
Charter Communication	**$0.00**	**$50,000.00**	**Site Visit / Available Drawings**
City of LaGrange (Water)	**$0.00**	**$1,032,000.00**	**Site Visit / Available Drawings**
City of LaGrange (Sewer)	**$0.00**	**$155,000.00**	**Site Visit / Available Drawings**
City of LaGrange (Electrical)	**$345,000.00**	**$0.00**	**Site Visit / Available Drawings**
City of LaGrange (Gas)	**$0.00**	**$245,000.00**	**Site Visit / Available Drawings**
City of LaGrange (Telecom)	**$0.00**	**$300,000.00**	**Site Visit / Available Drawings**
Diverse Power	**$1,005,000.00**	**$0.00**	**Site Visit / Available Drawings**
Plantation Pipeline (Petroleum)	**$600,000.00**	**$0.00**	**Site Visit / Available Drawings**
Verizon	**$0.00**	**$6,000.00**	**Site Visit / Available Drawings**
	$0.00	**$0.00**	
Total 0.00%	**$ 1,950,000.00**	**$ 2,413,000.00**	
Department Responsibility 100.00%	**$ 1,950,000.00**	**$ 0.00**	
Local Sponsor Responsibility 0.00%	**$ 0.00**	**$ 0.00**	**PFA Dated N/A with N/A**

** Indicates Potential Utility Aid Request from Local Gov't

Estimate is based on the best available information at the current stage, unforeseen prior rights information may be provided by the Utility Company at a later date that could cause some non-reimbursable costs to shift to the reimbursable cost column.

If additional information is needed, please contact Bobby Watson at 706-646-7661.

cc: Yulonda Pride-Foster, State Utilities Preconstruction Manager
Patrick Allen, State Utilities Administrator
Adam Smith, District Preconstruction Engineer

Original Version: May 24, 2013
Revision: Feb. April 5, 2018

Concept Utility Report

Project Number: 0014079

District: Thomaston - District 3

County: Troup

Prepared by: Bobby Watson

P.I. # 0014079

Date: 05/28/2019

Project Description: SR 14 Spur from SR 109 to SR 14 / US 29

The information provided herein has been gathered from Georgia811and/or field visits and serves as an estimate. Nothing contained in this report is to be used as a substitute for 1st Submission or SUE.

Are SUE services recommended? Yes

Level: ☐A ☒B ☐C ☐D

Public Interest Determination (PID):

☐Automatic ☐Mandatory ☒Consideration ☐No Use ☐Exempt

Is a separate utility funding phase recommended? No

Potential Project (Schedule/Budget) Impacts: None

Capital Improvement Projects (Utilities) Anticipated in the Area: None

Project Specific Recommendations for Avoidance/Mitigation: Avoid Water Tower at intersection of SR 109, Transmission Power Lines at intersection of SR 109, AT&T Slick Site on right of project (in front of Builders Supply), and Petroleum Pipleline at intersection of SR 109 and also at the intersection of SR 14.

Right of Way Coordination: Include the right to place utilities in all permanent easements.

Environmental Coordination: None

Additional Remarks: None

Original Version: May 24, 2013
Revision: Feb. March 8, 2018

Utilities have facilities within the project limits.

Utilities have been identified using Georgia811 and/or field visits.

Facility Owner	Facility Owner Contact Email Address	Existing Facilities/ Appurtenances	General Description of Location	Facilities to Avoid *approx. limits*	Facilities Retention Recommended *approx. limits*	Comments
AT&T/Bellsouth	Neca Holley nh3237@att.com	Copper, Fiber, Poles and Slick Site	Runs throughout project on New Franklin Road	Slick Site in front of Builders SupplyClick here to enter text.	Click here to enter text.	Click here to enter text.
Charter Communication	Ken York Ken.York@charter.com	Coax	Runs throughout project on New Franklin Road	Click here to enter text.	Click here to enter text.	Click here to enter text.
City of LaGrange Water	Patrick Bowie pbowie@lagrange.net	Water Mains, Fire Hydrants, and Water Tower	Runs throughout project on New Franklin Rd	Water Tower at SR 109	Click here to enter text.	Click here to enter text.
City of LaGrange Gas	Patrick Bowie pbowie@lagrange.net	Gas Main	At intersections of SR 14 Spur and SR 109, River Mill, & SR 14	Click here to enter text.	Click here to enter text.	Click here to enter text.
City of LaGrange Electrical	Patrick Bowie pbowie@lagrange.net	Electrical Distribution poles and lines	From Railroad north to end of project	Click here to enter text.	Click here to enter text.	Click here to enter text.
City of LaGrange Telecom	Patrick Bowie pbowie@lagrange.net	Fiber Telecom	Runs throughout project	Click here to enter text.	Click here to enter text.	Click here to enter text.
City of LaGrange Sewer	Dion Senn DSenn@lagrangega.org	Sewer Line and Man Hole	Sewer line on SR 109 at SR 14 Spur intersection	Click here to enter text.	Click here to enter text.	Click here to enter text.
Diverse Power	Chuck Redmond chuck.redmond@diversepower.com	Electrical Distribution Poles and Lines	Runs throughout project	Click here to enter text.	Click here to enter text.	Click here to enter text.

Plantation Pipeline (Petroleum)	Blair H. Northern, Jr. Blair_Northen@kindermorgan.com	Petroleum Pipeline	Crosses SR 14 Spur at 2 locations and SR 109	Avoid Petroleum line if possible	Click here to enter text.	Click here to enter text.
Verizon	Michael Walker Michael.Walker4@verizon.com	Telecommunication Lines on Railroad Right of Way	Fiber on Railroad Right of Way	Click here to enter text.	Click here to enter text.	Click here to enter text.

Note: *To add additional rows, click the bottom right corner of the box above, then click the blue* + *that will appear. Please add additional rows prior to entering text.*

Michael Stoltzfus

From: Smith, Patrick <Patrick.Smith@kimley-horn.com>
Sent: Thursday, July 18, 2019 2:24 PM
To: Michael Stoltzfus
Subject: Re: 0014079 Troup - Section 404 Mitigation Estimate

Hey Mike,

We don't anticipate any mitigation costs.

Patrick

Get Outlook for iOS

From: Michael Stoltzfus <michael.stoltzfus@loweengineers.com>
Sent: Thursday, July 18, 2019 1:01:41 PM
To: Smith, Patrick <Patrick.Smith@kimley-horn.com>
Subject: 0014079 Troup - Section 404 Mitigation Estimate

Patrick,

Do we anticipate any 404 mitigation for this project? If so, could you provide an estimate for the cost that we could include in the Concept Report?

Let me know what you think.

Mike

J. Michael Stoltzfus, PE
michael.stoltzfus@loweengineers.com
770.857.8400 main
770.857.8417 direct
404.860.0418 cell
990 Hammond Drive, Suite 900
Atlanta, GA 30328
loweengineers.com

Service-Disabled Veteran-Owned Small Business (SDVOSB)

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: PI #0014079, Troup County

OFFICE: State Utilities Office

FROM: Jill Franks for: Patrick Allen, State Utilities Administrator

DATE: October 15, 2019

TO: Kimberly Nesbitt, State Program Delivery Administrator
Attn: Cherral Dempsey, Project Manager

SUBJECT: PRELIMINARY RAILROAD COST (CONCEPT ESTIMATE)

A review of railroads located within the project limits on the above referenced project has been conducted based on the proposed concept report. Listed below is a breakdown of the estimated railroad costs:

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE
CSX Transportation, Inc		
– P.E. review cost for bridge over railroad	$0.00	$ 40,500.00-GDOT
– Const. inspection cost for bridge over railroad	$0.00	$ 127,700.00-GDOT
– Excess Soil in CSX property – Landfill fee	$0.00	$ 200,000.00-GDOT

Subtotal railroad PE reimbursable cost:	**$ 40,500.00**
Subtotal railroad UTIL/CONSTR reimbursable cost:	**$ 327,700.00**
Total Reimbursement Cost:	**$ 368,200.00**

Please note that this amount does not include other reimbursable utility costs that may be associated with this project. This project is GDOT funded.

If you have any questions, please contact Jill Franks, (404) 631-1370, jfranks@dot.ga.gov.

PA:jlf

cc: Marcela Coll, Utilities Preconstruction Manager
Angela Robinson, State Financial Management Administrator
Scott Parker, District 3 Utilities Manager
Kevin Cowan, Utilities Railroad Crossing Manager

DRAFT Crash Summary

SR 14 Spur/S Davis Rd & SR 14/US 29/Hogansville Rd

YEAR	ANGLE	HEAD ON	NOT A COLLISION WITH A MOTOR VEHICLE	REAR END	SIDE SWIPE OPPOSITE DIRECTION	SIDE SWIPE SAME DIRECTION	TOTAL	INJURY			
								CRASHES	INJ. CRASHES PER CRASH	NUMBER	INJURIES PER CRASH
2014	5	0	0	11	1	0	17	5	0.29	8	1.60
2015	3	2	0	19	0	0	24	4	0.17	6	1.50
2016	6	1	1	18	1	2	29	7	0.24	10	1.43
2017	7	0	3	12	0	2	24	10	0.42	26	2.60
2018	8	0	0	9	0	2	19	4	0.21	6	1.50
Total	29	3	4	69	2	6	113	30	0.27	56	1.87
Avg	5.8	0.6	0.8	13.8	0.4	1.2	22.6	6.0		11.2	

SR 14 Spur/S Davis Rd & Mill Creek Pkwy

YEAR	ANGLE	HEAD ON	NOT A COLLISION WITH A MOTOR VEHICLE	REAR END	SIDE SWIPE OPPOSITE DIRECTION	SIDE SWIPE SAME DIRECTION	TOTAL	INJURY			
								CRASHES	INJ. CRASHES PER CRASH	NUMBER	INJURIES PER CRASH
2014	0	0	0	0	0	0	0	0	0.00	0	0.00
2015	0	0	0	2	0	0	2	2	1.00	5	2.50
2016	2	0	0	1	0	1	4	2	0.50	3	1.50
2017	0	0	1	2	0	2	5	0	0.00	0	0.00
2018	0	0	0	3	0	1	4	2	0.50	2	1.00
Total	2	0	1	8	0	4	15	6	0.40	10	1.67
Avg	0.4	0.0	0.2	1.6	0.0	0.8	3.0	1.2		2.0	

SR 14 Spur/S Davis Rd & Commercial Dwy (N)

YEAR	ANGLE	HEAD ON	NOT A COLLISION WITH A MOTOR VEHICLE	REAR END	SIDE SWIPE OPPOSITE DIRECTION	SIDE SWIPE SAME DIRECTION	TOTAL	INJURY			
								CRASHES	INJ. CRASHES PER CRASH	NUMBER	INJURIES PER CRASH
2014	0	0	2	0	0	1	3	0	0.00	0	0.00
2015	0	0	0	0	0	0	0	0	0.00	0	0.00
2016	0	0	0	0	0	0	0	0	0.00	0	0.00
2017	1	0	0	0	0	0	1	0	0.00	0	0.00
2018	0	0	0	1	0	0	1	1	1.00	2	2.00
Total	1	0	2	1	0	1	5	1	0.20	2	2.00
Avg	0.2	0.0	0.4	0.2	0.0	0.2	1.0	0.2		0.4	

SR 14 Spur/S Davis Rd & Commercial Dwy (C)

YEAR	ANGLE	HEAD ON	NOT A COLLISION WITH A MOTOR VEHICLE	REAR END	SIDE SWIPE OPPOSITE DIRECTION	SIDE SWIPE SAME DIRECTION	TOTAL	INJURY			
								CRASHES	INJ. CRASHES PER CRASH	NUMBER	INJURIES PER CRASH
2014	0	0	0	6	0	0	6	5	0.83	13	2.60
2015	0	0	0	2	0	0	2	0	0.00	0	0.00
2016	1	0	0	1	0	0	2	0	0.00	0	0.00
2017	0	0	0	4	0	0	4	1	0.25	1	1.00
2018	0	0	0	6	0	0	6	1	0.17	1	1.00
Total	1	0	0	19	0	0	20	7	0.35	15	2.14
Avg	0.2	0.0	0.0	3.8	0.0	0.0	4.0	1.4		3.0	

SR 14 Spur/S Davis Rd & Commercial Dwy (S)

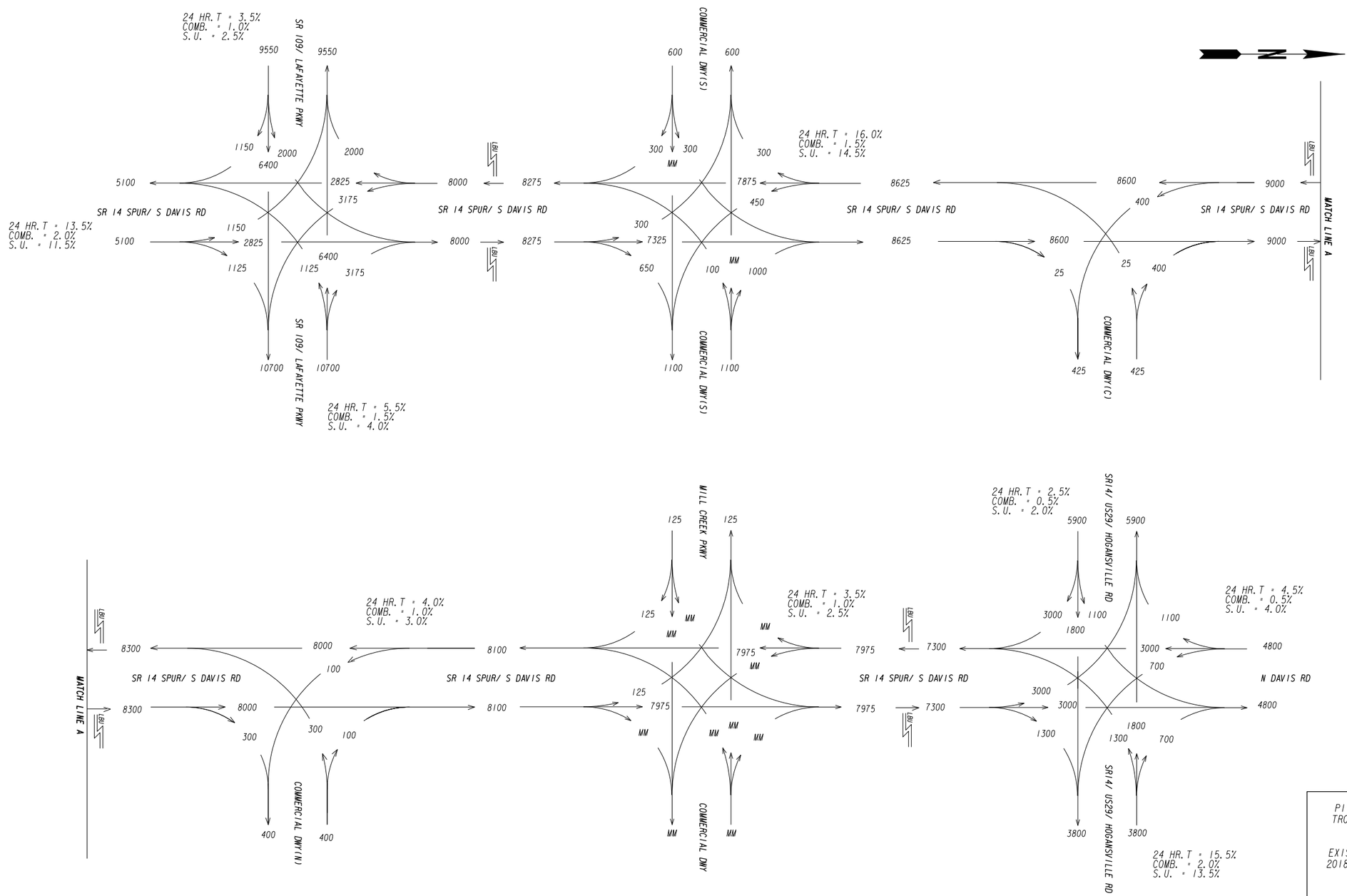
YEAR	ANGLE	HEAD ON	NOT A COLLISION WITH A MOTOR VEHICLE	REAR END	SIDE SWIPE OPPOSITE DIRECTION	SIDE SWIPE SAME DIRECTION	TOTAL	INJURY			
								CRASHES	INJ. CRASHES PER CRASH	NUMBER	INJURIES PER CRASH
2014	2	0	0	2	0	0	4	1	0.25	1	1.00
2015	1	0	0	3	0	0	4	3	0.75	5	1.67
2016	2	0	0	6	0	0	8	5	0.63	6	1.20
2017	3	0	1	8	0	0	12	6	0.50	8	1.33
2018	4	0	0	2	0	0	6	3	0.50	4	1.33
Total	12	0	1	21	0	0	34	18	0.53	24	1.33
Avg	2.4	0.0	0.2	4.2	0.0	0.0	6.8	3.6		4.8	

SR 14 Spur/S Davis Rd & SR 109/Lafayette Pkwy

YEAR	ANGLE	HEAD ON	NOT A COLLISION WITH A MOTOR VEHICLE	REAR END	SIDE SWIPE OPPOSITE DIRECTION	SIDE SWIPE SAME DIRECTION	TOTAL	INJURY			
								CRASHES	INJ. CRASHES PER CRASH	NUMBER	INJURIES PER CRASH
2014	23	1	0	32	0	4	60	18	0.30	25	1.39
2015	18	1	1	48	0	6	74	14	0.19	20	1.43
2016	16	0	1	51	0	1	69	14	0.20	25	1.79
2017	16	0	0	57	0	7	80	17	0.21	27	1.59
2018	14	0	0	36	0	5	55	14	0.25	24	1.71
Total	87	2	2	224	0	23	338	77	0.23	121	1.57
Avg	17.4	0.4	0.4	44.8	0.0	4.6	67.6	15.4		24.2	

SR 14 Spur/S Davis Rd MIDBLOCK

YEAR	ANGLE	HEAD ON	NOT A COLLISION WITH A MOTOR VEHICLE	REAR END	SIDE SWIPE OPPOSITE DIRECTION	SIDE SWIPE SAME DIRECTION	TOTAL	INJURY			
								CRASHES	INJ. CRASHES PER CRASH	NUMBER	INJURIES PER CRASH
2014	0	0	1	10	0	0	11	7	0.64	8	1.14
2015	3	0	4	6	0	2	15	7	0.47	14	2.00
2016	8	0	0	6	0	0	14	3	0.21	3	1.00
2017	6	0	1	11	0	2	20	4	0.20	8	2.00
2018	3	0	1	3	0	1	8	1	0.13	3	3.00
Total	20	0	7	36	0	5	68	22	0.32	36	1.64
Avg	4.0	0.0	1.4	7.2	0.0	1.0	13.6	4.4		7.2	



PI# 0014079
TROUP COUNTY

EXISTING AADT
2018 ADT = 000

LOWE ENGINEERS
990 HAMMOND DRIVE, SUITE 900, ATLANTA, GA 30328
PHONE 770.857.8400 FAX 770.857.8401

N. T. S.

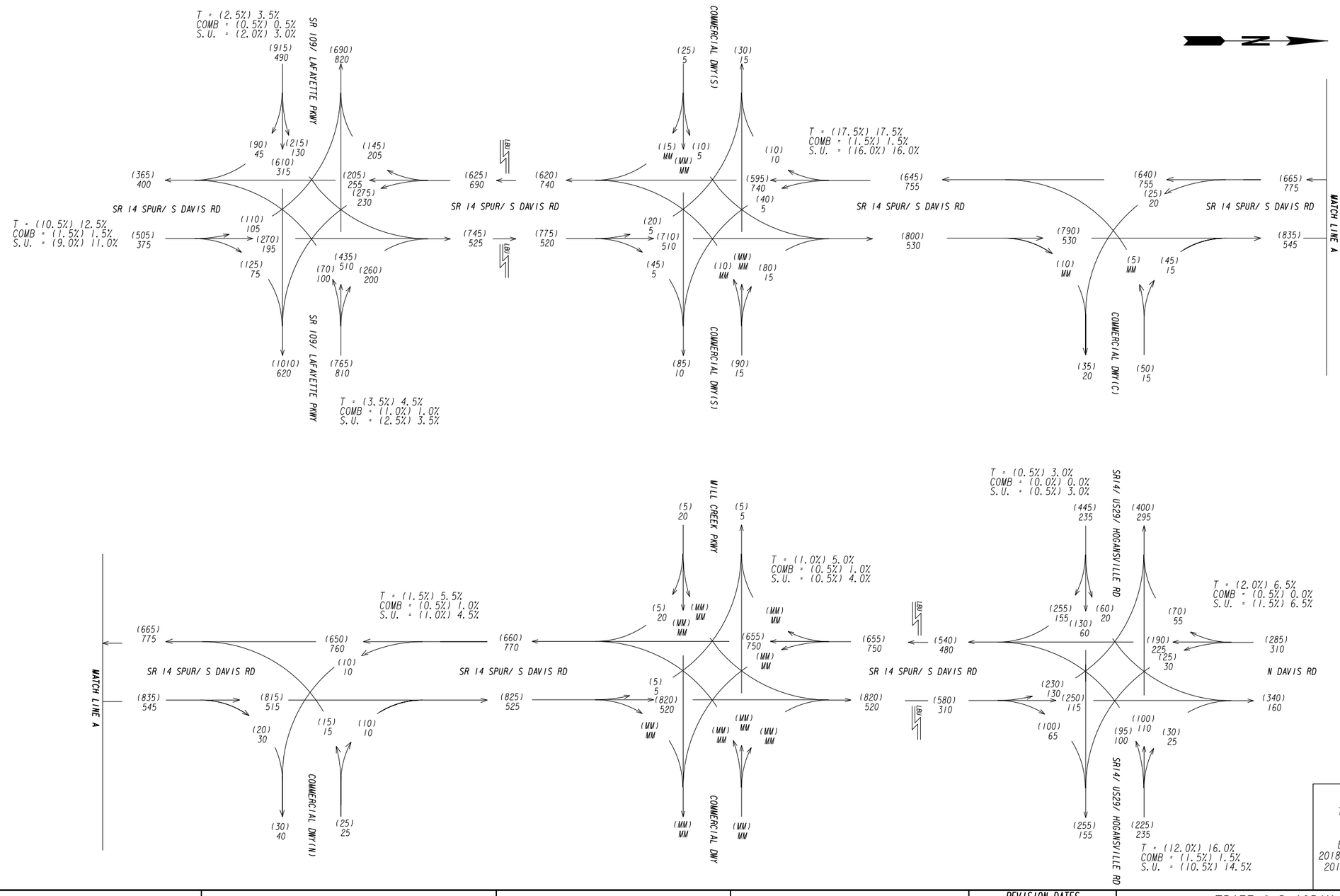
REVISION DATES

TRAFFIC DIAGRAM

SR 14 SPUR
SR 109 TO SR 14/ US 29

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		10-0001
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



PI# 0014079
TROUP COUNTY

EXISTING DHV
2018 DHV PM = (000)
2018 DHV AM = 000

LOWE ENGINEERS
990 HAMMOND DRIVE, SUITE 900, ATLANTA, GA 30328
PHONE 770.857.8400 FAX 770.857.8401

N. T. S.

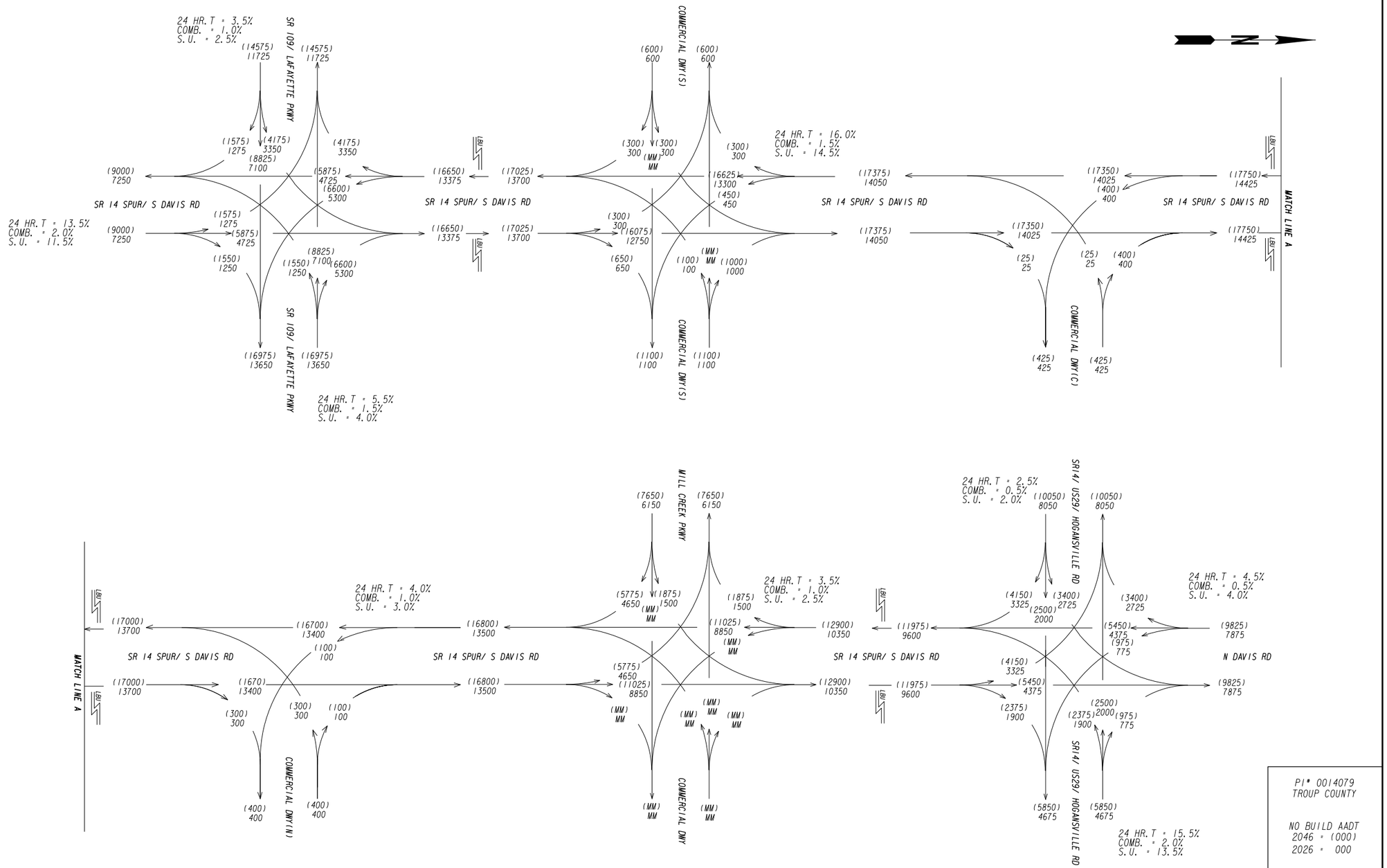
REVISION DATES

TRAFFIC DIAGRAM

SR 14 SPUR
SR 109 TO SR 14/ US 29

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	10-0002
VERIFIED:		DATE:	

10/23/2015 GPLN



PI# 0014079
TROUP COUNTY

NO BUILD AADT
2046 = (000)
2026 = 000

LOWE ENGINEERS
990 HAMMOND DRIVE, SUITE 900, ATLANTA, GA 30328
PHONE 770.857.8400 FAX 770.857.8401

N. T. S.

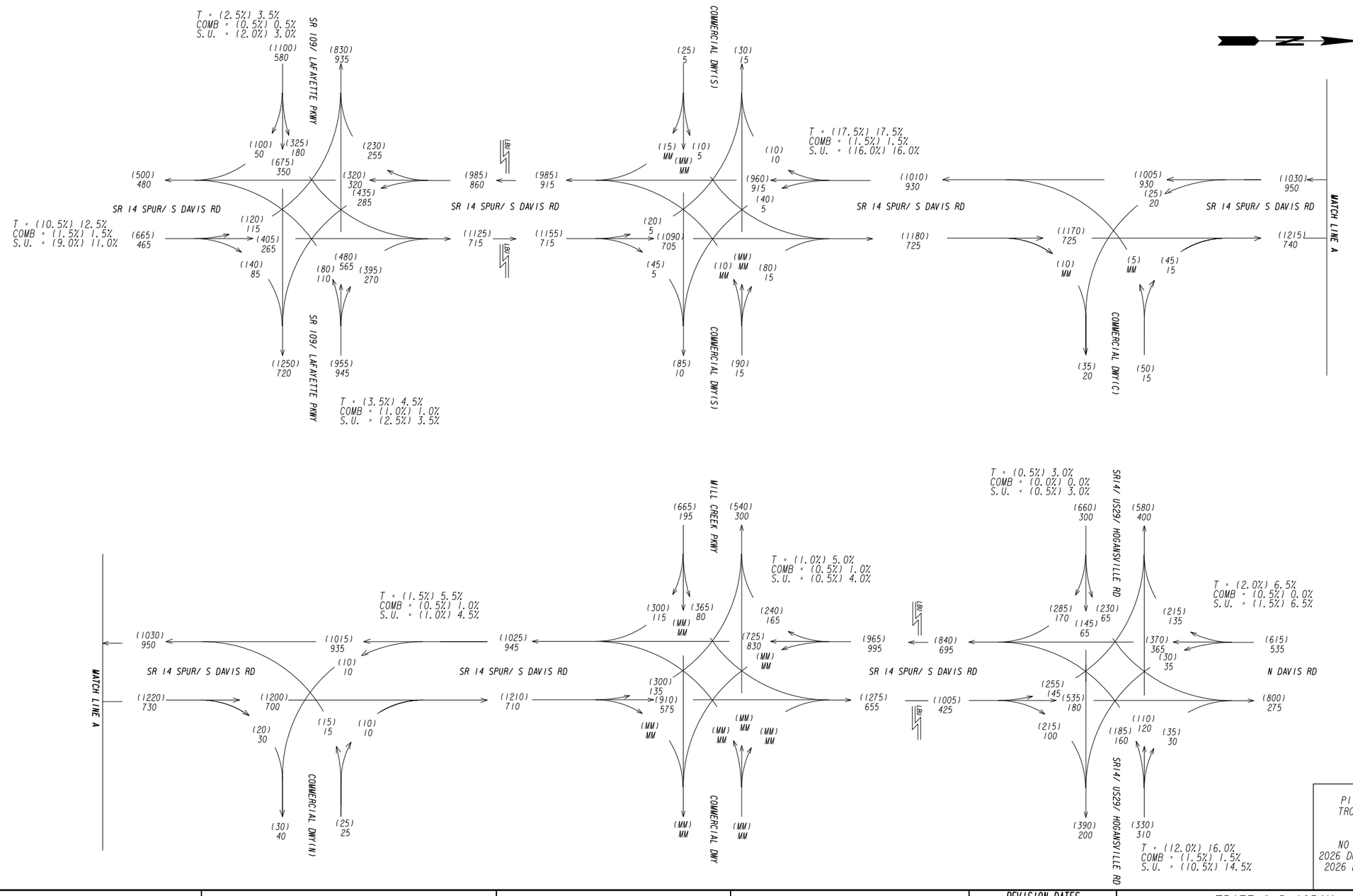
REVISION DATES

TRAFFIC DIAGRAM

SR 14 SPUR
SR 109 TO SR 14/ US 29

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		10-0003
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



10/23/2015 GPLN

LOWE ENGINEERS
990 HAMMOND DRIVE, SUITE 900, ATLANTA, GA 30328
PHONE 770.857.8400 FAX 770.857.8401

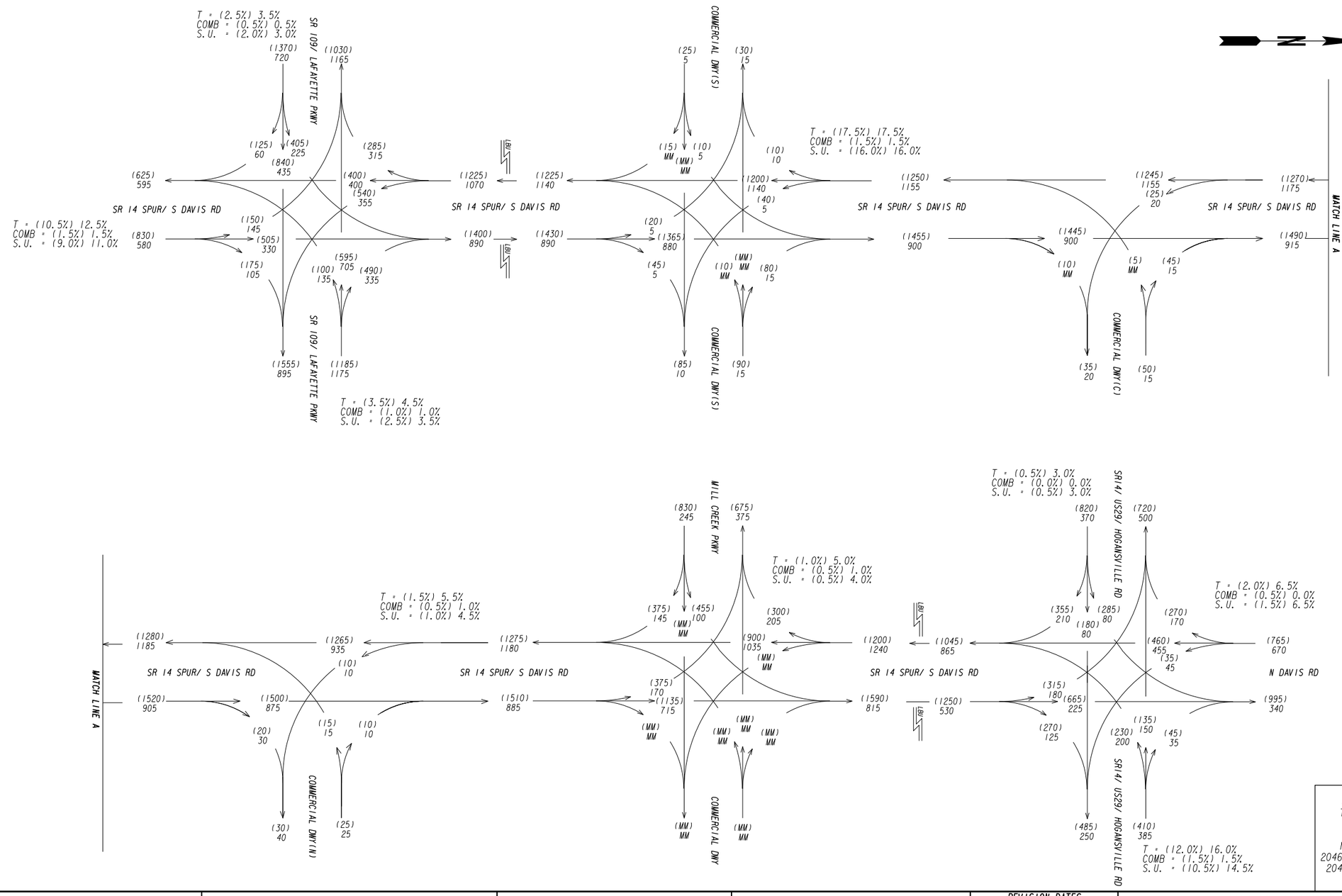
N. T. S.

REVISION DATES

TRAFFIC DIAGRAM

SR 14 SPUR
SR 109 TO SR 14/ US 29

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	10-0004
VERIFIED:		DATE:	



PI# 0014079
TROUP COUNTY

NO BUILD DHV
2046 DHV PM = (000)
2046 DHV AM = 000

LOWE ENGINEERS
990 HAMMOND DRIVE, SUITE 900, ATLANTA, GA 30328
PHONE 770.857.8400 FAX 770.857.8401

N. T. S.

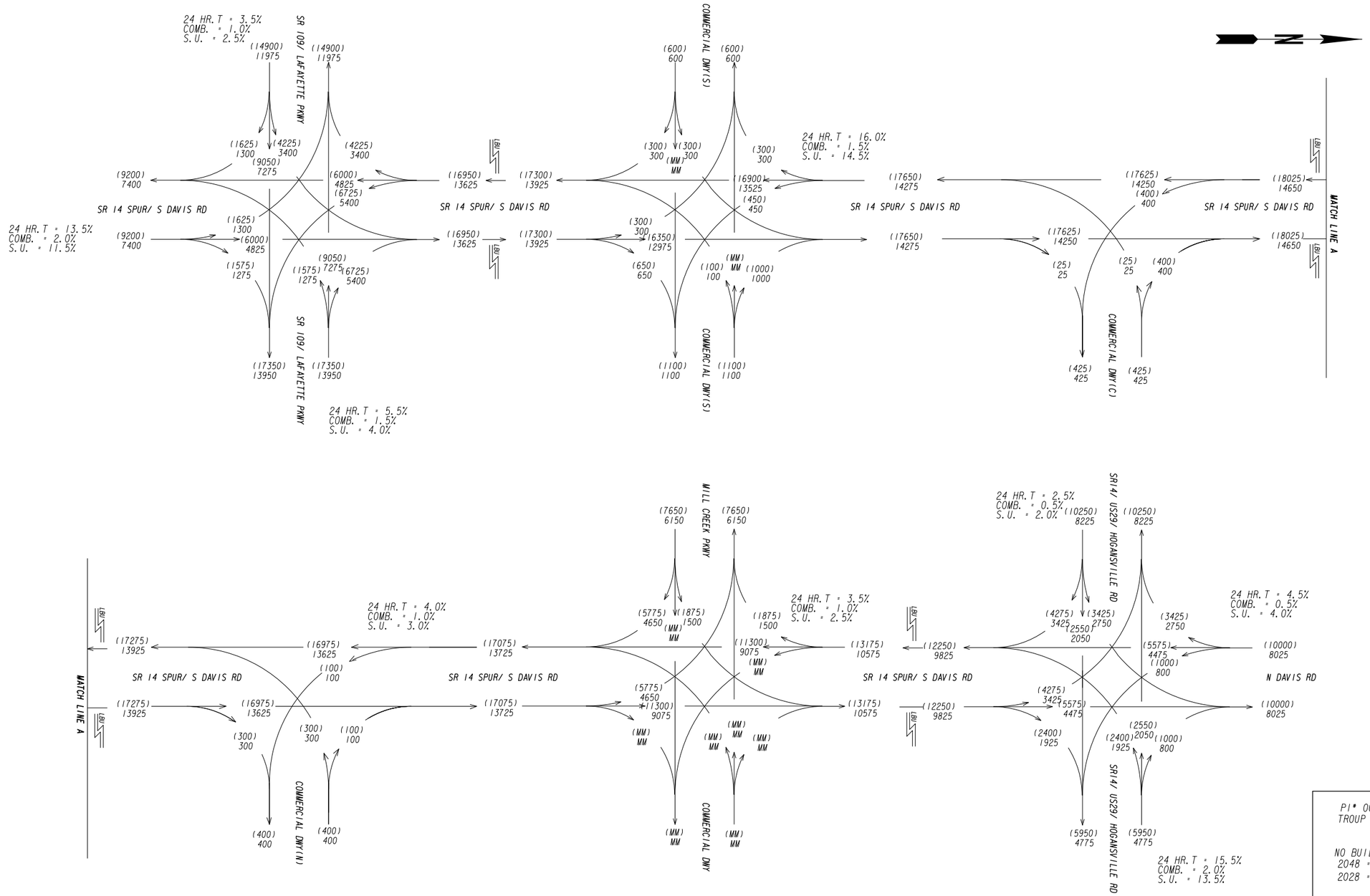
REVISION DATES

TRAFFIC DIAGRAM

SR 14 SPUR
SR 109 TO SR 14/ US 29

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		10-0005
VERIFIED:		DATE:		

10/23/2015 GPLN



PI# 0014079
TROUP COUNTY

NO BUILD AADT
2048 = (000)
2028 = 000

LOWE ENGINEERS
990 HAMMOND DRIVE, SUITE 900, ATLANTA, GA 30328
PHONE 770.857.8400 FAX 770.857.8401

GDOT

N. T. S.

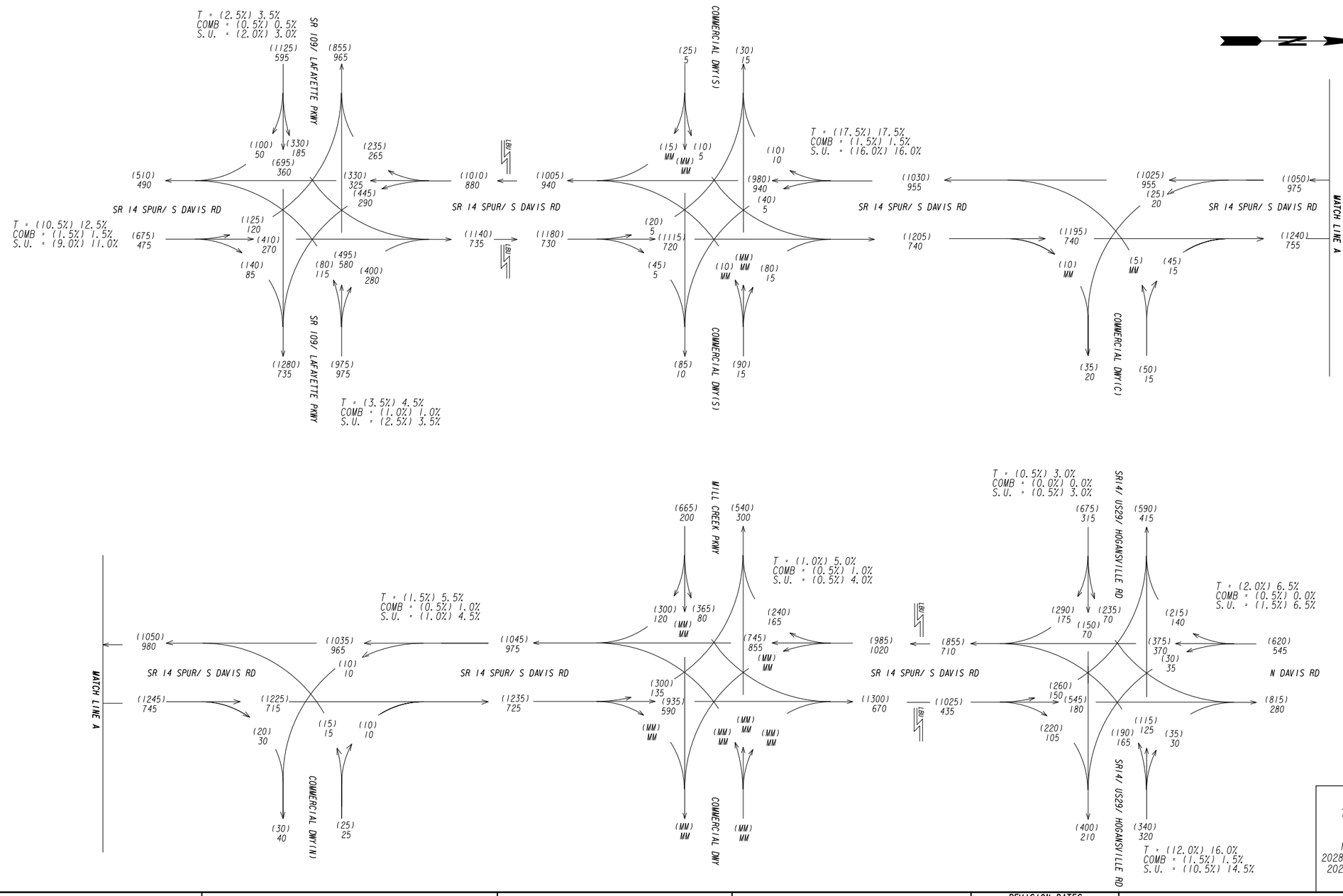
REVISION DATES

TRAFFIC DIAGRAM

SR 14 SPUR
SR 109 TO SR 14/ US 29

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		10-0006
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



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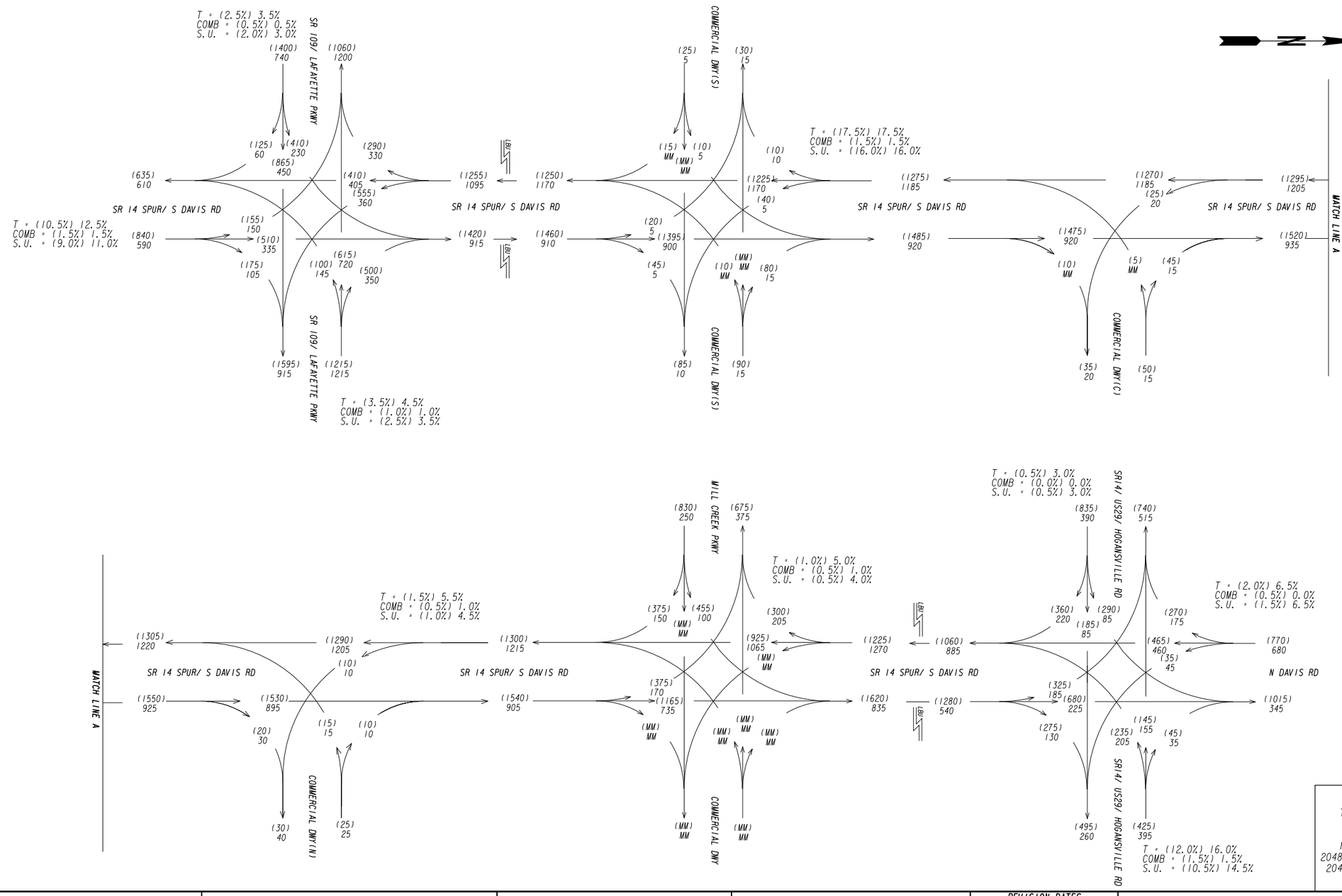
REVISION DATES

TRAFFIC DIAGRAM

SR 14 SPUR
SR 109 TO SR 14/ US 29

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	10-0007
VERIFIED:		DATE:	

10/23/2015 GPLN



PI# 0014079
TROUP COUNTY

NO BUILD DHV
2048 DHV PM = (000)
2048 DHV AM = 000

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REVISION DATES

TRAFFIC DIAGRAM

SR 14 SPUR
SR 109 TO SR 14/ US 29

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BACKCHECKED:		DATE:	
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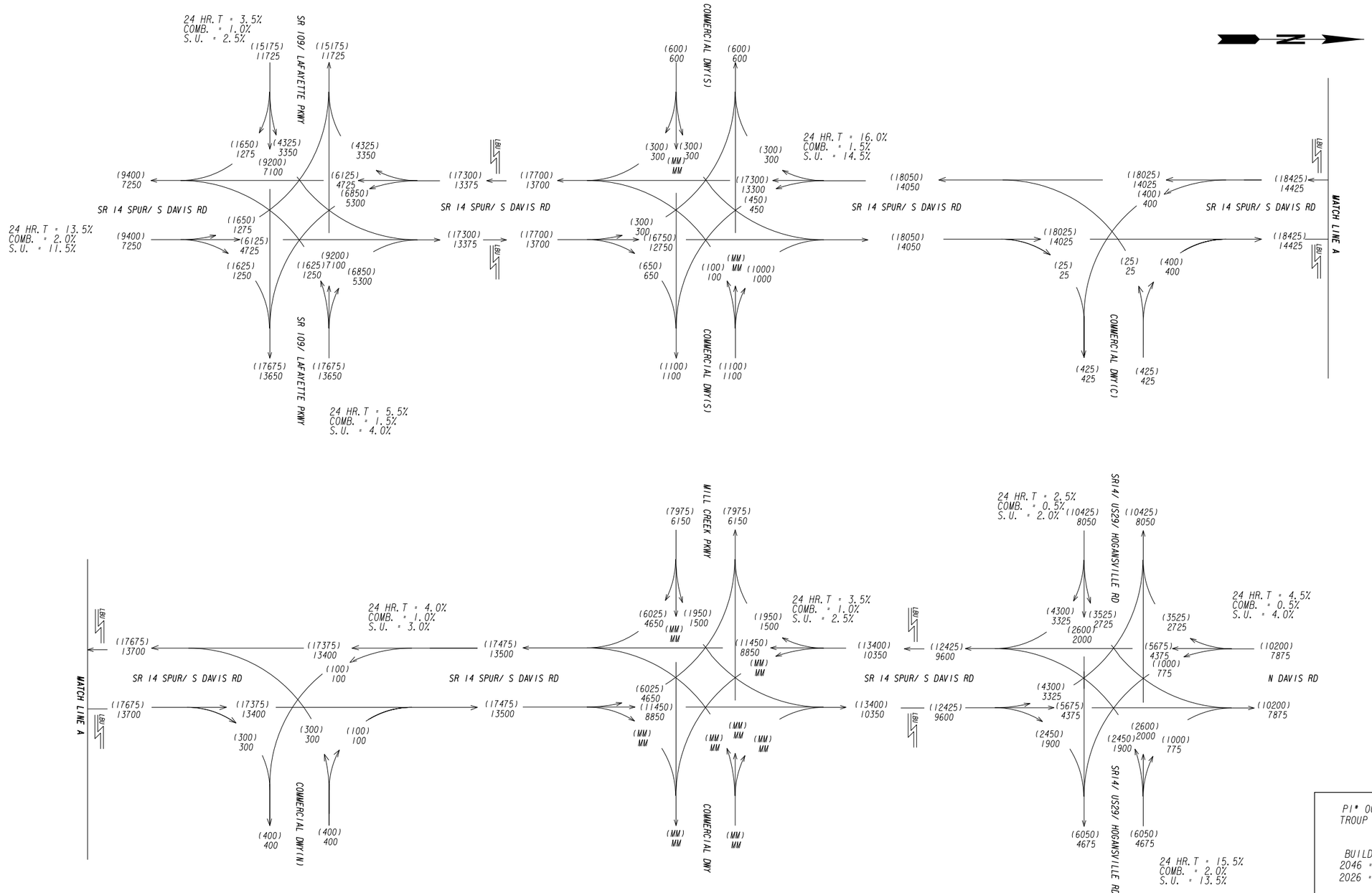
VERIFIED:		DATE:	

10/23/2015 GPLN



PI# 0014079
TROUP COUNTY

BUILD AADT
2046 = (000)
2026 = 000

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REVISION DATES

TRAFFIC DIAGRAM

SR 14 SPUR
SR 109 TO SR 14/ US 29

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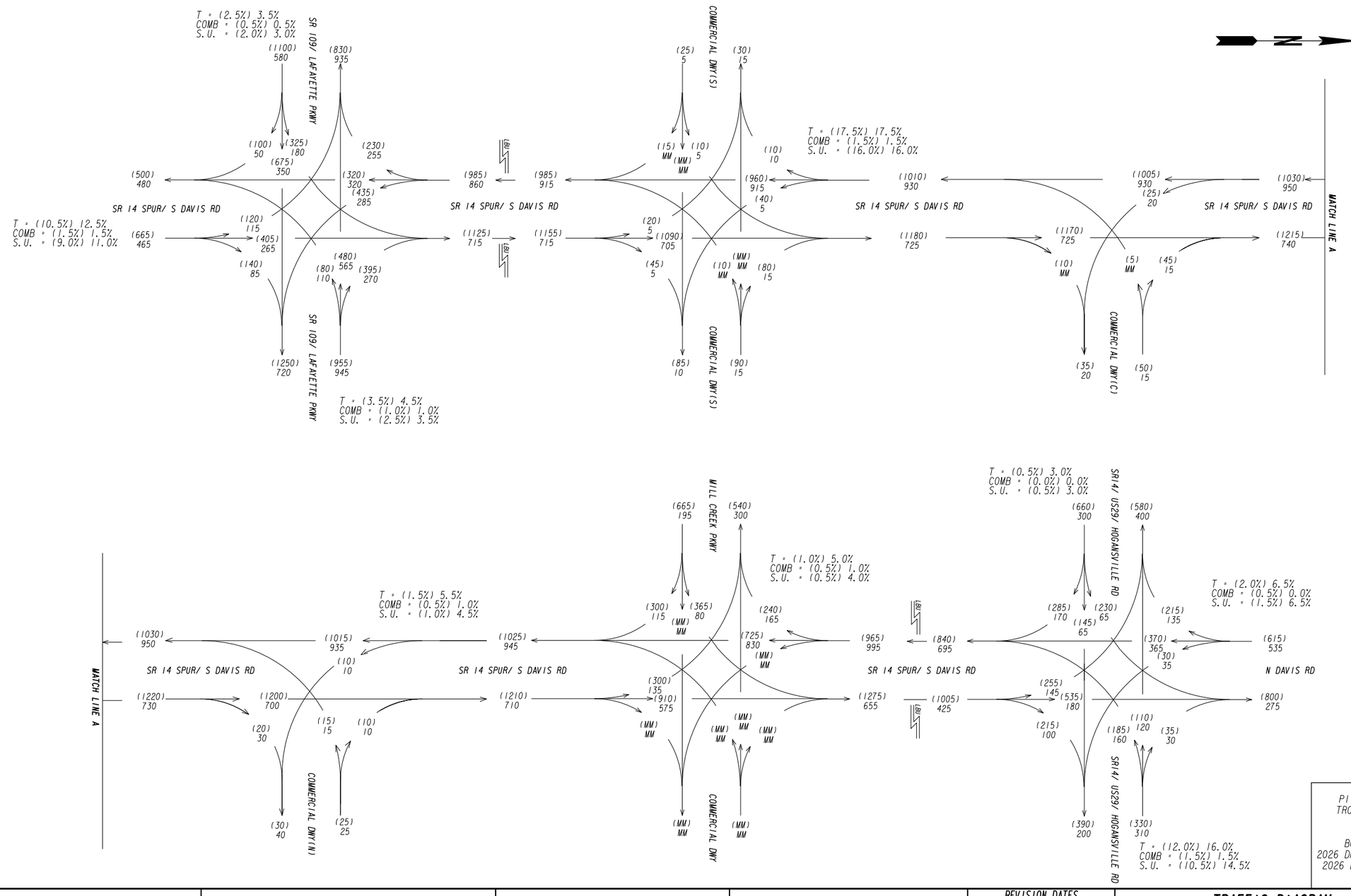
VERIFIED:		DATE:		

10/23/2015 GPLN



PI# 0014079
TROUP COUNTY

BUILD DHV
2026 DHV PM = (000)
2026 DHV AM = 000

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N. T. S.

REVISION DATES

TRAFFIC DIAGRAM

SR 14 SPUR
SR 109 TO SR 14/ US 29

CHECKED:		DATE:	DRAWING No.
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VERIFIED:		DATE:	

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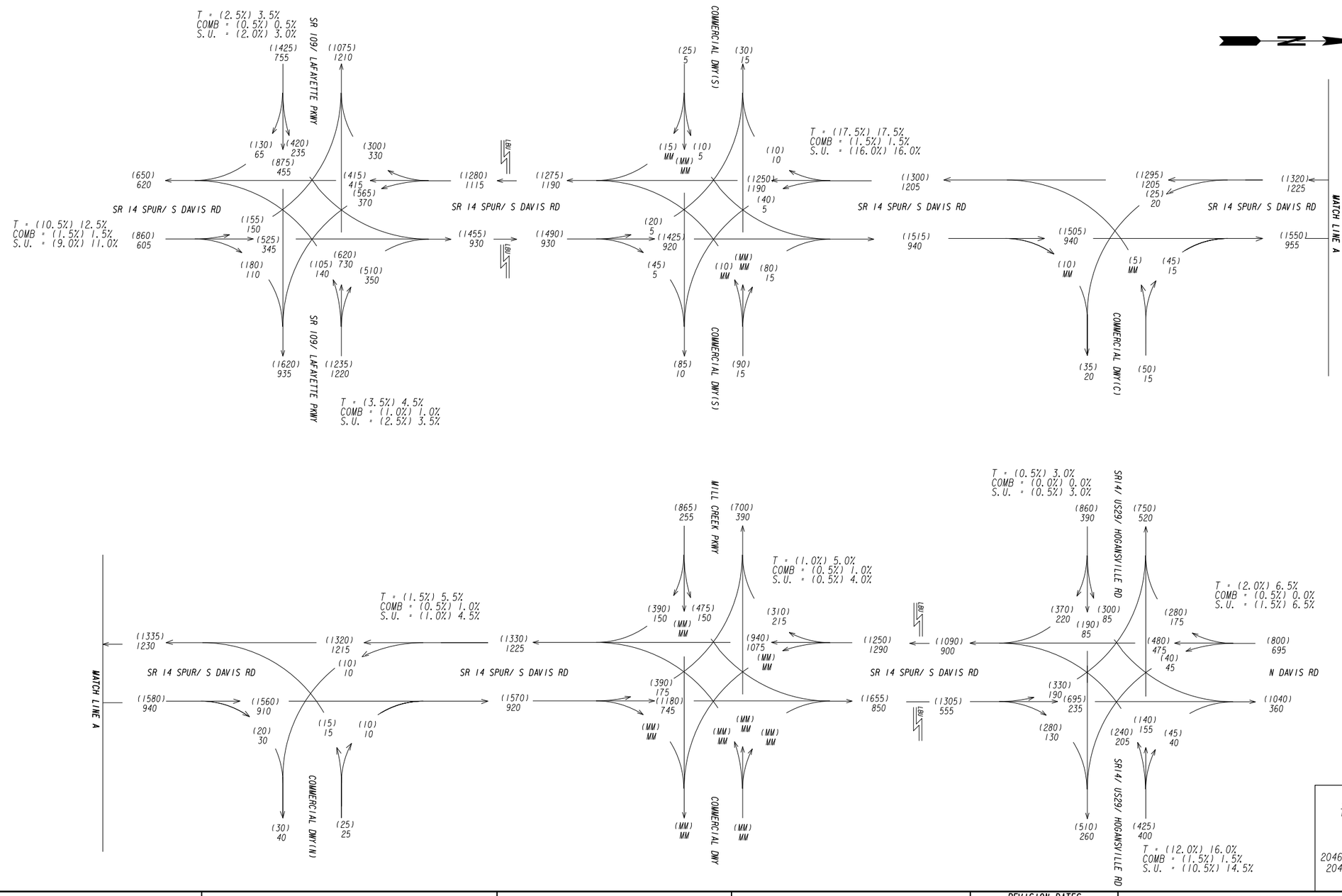

PI# 0014079
TROUP COUNTY

BUILD DHV
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2046 DHV AM = 000

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REVISION DATES

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SR 14 SPUR
SR 109 TO SR 14/ US 29

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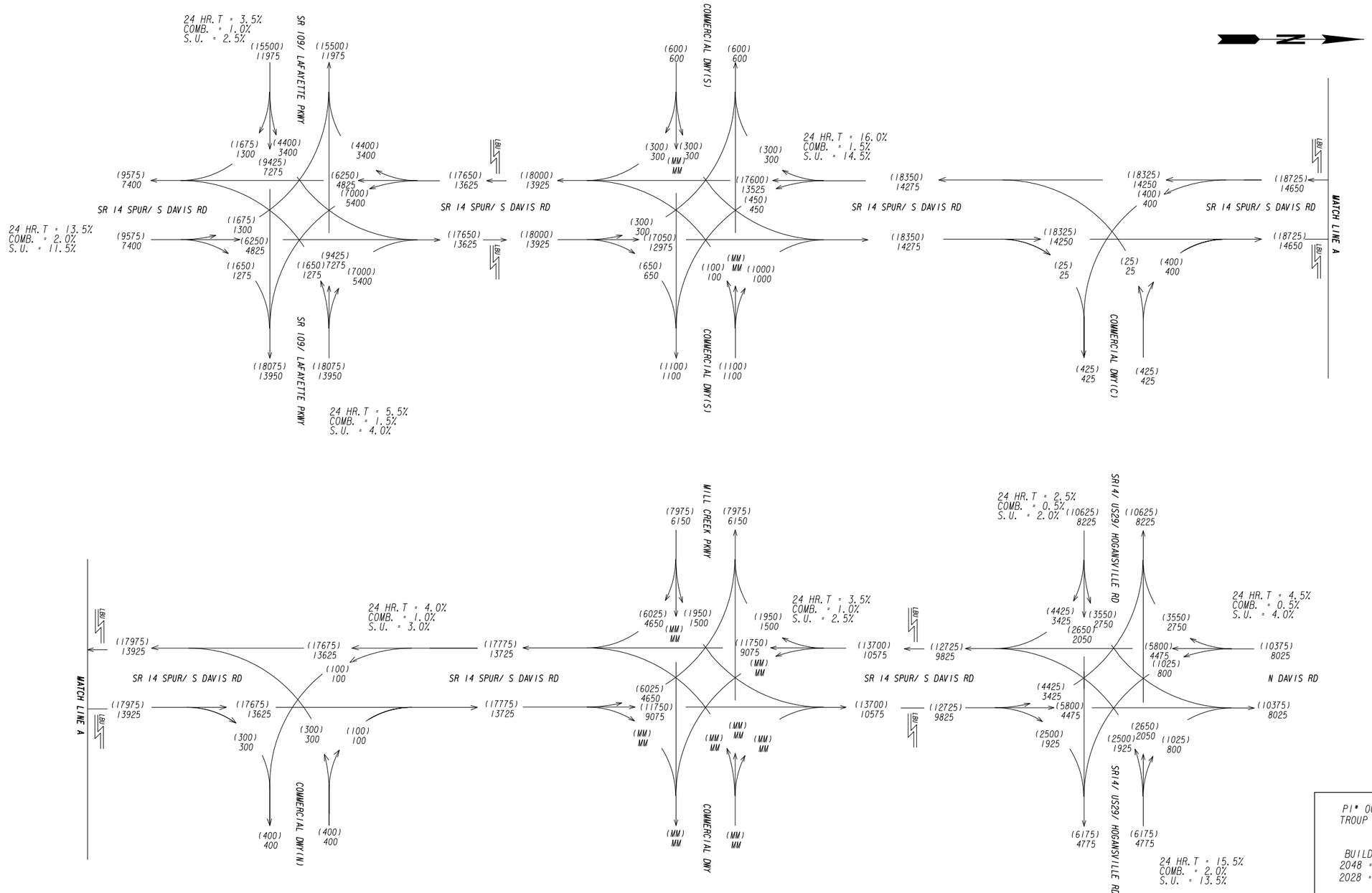
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	10-0011
VERIFIED:		DATE:	

10/23/2015 GPLN



PI# 0014079
TROUP COUNTY

BUILD AADT
2048 = (000)
2028 = 000

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REVISION DATES

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SR 14 SPUR
SR 109 TO SR 14/ US 29

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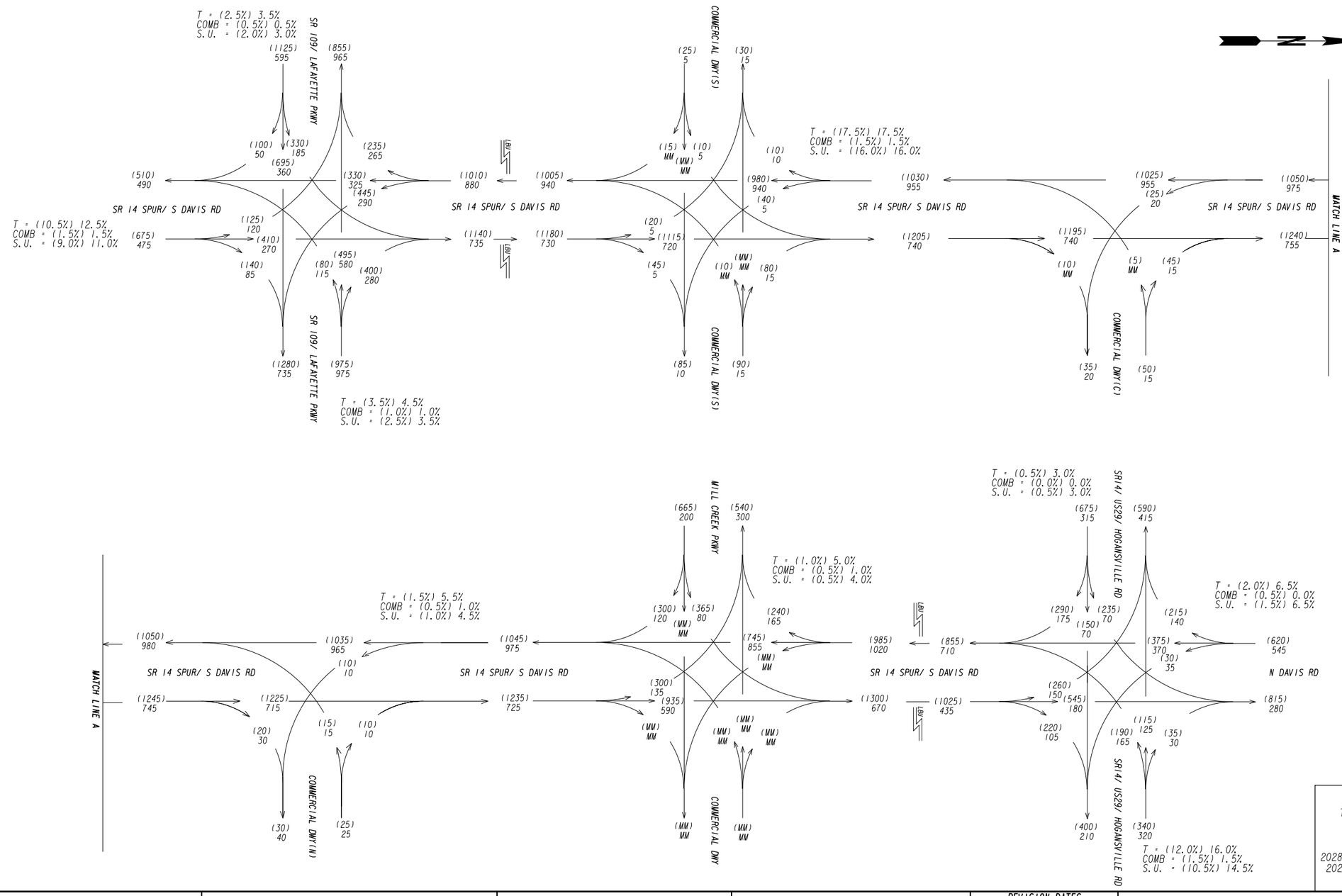
BACKCHECKED:		DATE:		10-0012
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



PI# 0014079
TROUP COUNTY

BUILD DHV
2028 DHV PM = (000)
2028 DHV AM = 000

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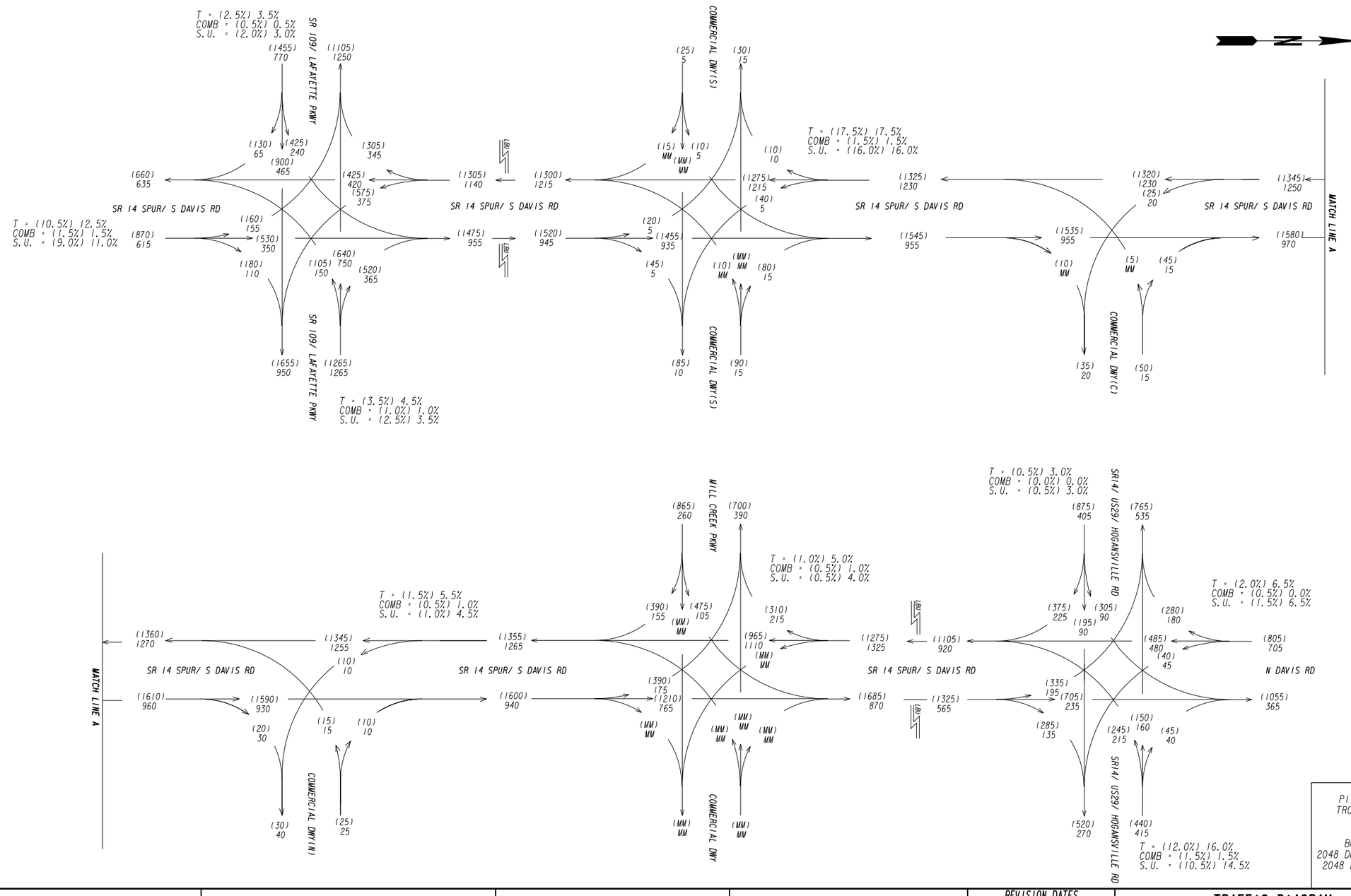
REVISION DATES

TRAFFIC DIAGRAM

SR 14 SPUR
SR 109 TO SR 14/ US 29

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	10-0013
VERIFIED:		DATE:	

10/23/2015 GPLN



P.I.# 0014079
TROUP COUNTY

BUILD DHV
2048 DHV PM = (000)
2048 DHV AM = 000

10/23/2015 GPLN

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REVISION DATES

TRAFFIC DIAGRAM

SR 14 SPUR
SR 109 TO SR 14/ US 29

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CORRECTED:		DATE:	10-0014
VERIFIED:		DATE:	

GDOT

GDOT ICE Tool: Summary Report for Multiple Locations

ICE Version 2.14 | Revised 08/22/2018

Stage 1 Decision Document PI# 0014079

			UNSIGNALIZED													SIGNALIZED										
Study Intersection	**Existing Intersection Type**	**Waiver Request Type**	Conventional (Mir Stop)	Conventional (All-Way Stop)	Mini Roundabout	Single Lane Roundabout	Multilane Roundabout	RCUT (stop control)	RIRO w/down stream U-Turn	High-T (unsignalized)	Offset-T Intersections	Diamond Interch (Stop Control)	Diamond Interch (RAB Control)	Add Turn Ln/Median (Unsig)	Other Unsignalized	Traffic Signal	Median U-Turn (Indirect Left)	RCUT (signalized)	Displaced Left Turn (CFI)	Continuous Green-T	Jughandle	Quadrant Roadway	Diamond Interch (Signal Control)	Diverging Diamond	Single Point Interchange	Add Turn Ln/Median (Signal)	Other Signalized
SR 14 Spur at SR 109	Traffic Signal						x									x			x								
SR 14 Spur at Commercial Dwy S	Conventional Mir Stop							x	x																		
SR 14 Spur at Commercial Dwy C	Conventional Mir Stop		x					x	x																		
SR 14 Spur at Commercial Dwy N	Conventional Mir Stop	RIRO Waiver							x																		
SR 14 Spur at Mill Creek Pkwy	Conventional Mir Stop		x				x	x		x						x				x							
SR 14 Spur at SR 14/US 29	Traffic Signal						x									x											
SR 14 Spur at Home Depot Dwy	Conventional Mir Stop							x	x																		
SR 14 Spur at Auto Dealer Dwy	Conventional Mir Stop		x					x	x																		

Concur with: _____ Date: 8/15/19 Name: Andrew Heath, P.E.

Chief Engineer or (Approved Delegate)

Memorandum

To:	Daniel J. Trevorrow, P.E., GDOT
From:	Richard Meehan, P.E., J. Michael Stoltzfus, P.E.
CC:	Xavier James, GDOT, Akissi D. Kouame, GDOT, Andrew C. Pearson, GDOT
Date:	June 7, 2019
Re:	P.I. No. 0014079 SR 14 Spur from South of SR 109 to SR 14/US 29 – ICE Stage 1

Introduction

SR 14 Spur is proposed to be widened from a two-lane undivided roadway to a four-lane median-divided highway from SR 109/Lafayette Parkway to SR 14/US 29/Hogansville Road in Troup County, Georgia, near the City of LaGrange. The Opening Year of the project is 2026 and the Design Year of the project is 2046.

Due to the corridor being a state-maintained corridor, Intersection Control Evaluation (ICE) became a requirement. The Georgia Department of Transportation's (GDOT) ICE Spreadsheet Tool was used for the analysis. ICE analysis is performed in two stages. Stage 1 is entitled Screening Decision Record and Stage 2 is entitled Alternative Selection Decision Record. This memo summarizes the results of the GDOT ICE Stage 1 analysis for the subject project.

LOWE Engineers performed the Design Traffic for the corridor for Existing Year 2018, Opening Year 2026, Opening Year Plus Two Years 2028, Design Year 2046, and Design Year Plus Two Years 2048 for both Build and No-Build conditions. The Design Traffic is contained within the Traffic Data Report, which is attached to this memo. The following six intersections (along with existing intersection control in parentheses) are being studied along the corridor:

1. SR 109/Lafayette Parkway and SR 14 Spur/South Davis Road (traffic signal)
2. SR 14 Spur/South Davis Road and commercial driveway south (plaza and mall entrance south) (conventional minor stop)
3. SR 14 Spur/South Davis Road and commercial driveway central (mall entrance north) (conventional minor stop)
4. SR 14 Spur/South Davis Road and commercial driveway north (just south of Mill Creek Parkway) (conventional minor stop)
5. SR 14 Spur/South Davis Road and Mill Creek Parkway (conventional minor stop)
6. SR 14 Spur/South Davis Road and SR 14/US 29/Hogansville Road (traffic signal).

In the Build condition, the layout of some of these intersections, particularly the commercial driveways, may differ from what is shown in the traffic flow diagrams.

Two intersections were added for inclusion in the ICE, Home Depot driveway south of SR 109, and the auto dealer driveway south of SR 109. There were originally no traffic counts or traffic projections performed for these intersections. Due to schools releasing in late May, counts and therefore projections may not be able to be performed until school resumes in August. However, in the meantime, a Stage 1 Screening was performed for these two intersections, and the screening summary for each of these two intersections is provided below.

Analysis

The six intersections were screened using the seven questions provided in the GDOT ICE Tool. The seven questions are listed below:

1. Does alternative address the project need in a balanced manner and in scale with the project?
2. Does alternative improve safety performance in terms of reducing severe crashes?
3. Does alternative incorporate safety, convenience, and accessibility for pedestrians and/or bicyclists?
4. Does alternative improve (or preserve) traffic operations (congestion, delay, reliability, etc.)?
5. Does alternative appear feasible given the site characteristics, constraints, and location context?
6. Does alternative appear feasible with respect to other project factors?
7. Overall feasible alternative (select alternative for further evaluation in Stage 2)?

ICE Stage 2 will evaluate up to five alternatives. ICE Stage 2 will evaluate project cost, traffic operations, safety analysis, environmental impacts, and political factors for each of the alternatives selected and approved in ICE Stage 1.

For SR 109/Lafayette Parkway and SR 14 Spur/South Davis Road, the following three alternatives were selected for further analysis in ICE Stage 2:

1. Multi-Lane Roundabout
2. Traffic Signal
3. Displaced Left Turn (Continuous Flow Intersection (CFI)).

A multi-lane roundabout will be considered for this intersection. There are some Right-of-Way (ROW) constraints/concerns, but per aerial views, a 190-foot inscribed center diameter may be reasonable without significant impacts. There is commercial property on three of the four quadrants of the intersection and public utility with accompanying aesthetic in the form of a water tower and a brick “Welcome to LaGrange” sign on the southwest quadrant of the intersection. A CFI may present some ROW constraints/concerns, but a CFI may not present ROW constraints/concerns to all four quadrants like a roundabout typically does. A CFI was considered primarily due its capability to manage heavy left-turning volumes in conflict with heavy through volumes. There is currently heavy eastbound left turn volume onto South Davis Road from SR 109/Lafayette Parkway and through volume westbound on SR 109/Lafayette Parkway (215 and 435, respectively, in the Existing PM peak hour). The ICE Stage 1 spreadsheet for SR 109/Lafayette Parkway and SR 14 Spur/South Davis Road with screening selections is attached to this memo.

For SR 14 Spur/South Davis Road and commercial driveway south, the following two alternatives were selected for further analysis in ICE Stage 2:

1. Restricted Crossing U-Turn (RCUT) (stop control)
2. Right-in/Right-out (RIRO) with downstream U-Turn.

The existing traffic control at this intersection is a conventional minor stop with full access from SR 14 Spur/South Davis Road. However, a full access conventional minor stop was not considered for ICE Stage 2 due to insufficient spacing between commercial driveway south and SR 109/Lafayette Parkway. The minimum spacing requirement for consideration of a full access median opening on a state route is 1,000 feet. There is approximately 550 feet between SR 109/Lafayette Parkway and commercial driveway south. Therefore, only intersection layouts and controls without a full median opening were considered. Despite selection of an RCUT for further analysis in ICE Stage 2, it may be recommended that a northbound left turn lane not be installed due to expected length and capacity needed for the southbound left turn onto SR 109/Lafayette Parkway from SR 14 Spur/South Davis Road. The ICE Stage 1 spreadsheet for SR 14 Spur and commercial driveway south with screening selections is attached to this memo.

For SR 14 Spur/South Davis Road and commercial driveway central, the following three alternatives were selected for further analysis in ICE Stage 2:

1. Conventional Minor Stop
2. Restricted Crossing U-Turn (RCUT) (stop control)
3. Right-in/Right-out (RIRO) with downstream U-Turn.

The existing traffic control at this intersection is a conventional minor stop with full access from SR 14 Spur/South Davis Road. The minimum spacing requirement for consideration of a full access median opening on a state route is 1,000 feet. There is approximately 1400 feet between SR 109/Lafayette Parkway and commercial driveway central; therefore, a full access median opening is eligible for consideration at this location. The ICE Stage 1 spreadsheet for SR 14 Spur and commercial driveway central with screening selections is attached to this memo.

For SR 14 Spur/South Davis Road and commercial driveway north, a RIRO is proposed due to proximity to Mill Creek Parkway and the relatively low volumes entering and existing commercial driveway north (40 entering and 25 exiting during the AM peak hour). The existing traffic control at this intersection is a conventional minor stop with full access from SR 14 Spur/South Davis Road. The minimum spacing requirement for consideration of a full access median opening on a state route is 1,000 feet. There is approximately 300 feet between Mill Creek Parkway and commercial driveway north; therefore, a full access median opening is ineligible for consideration at this location. With the proposed Mill Creek Station (MCS) development discussed in the Traffic Data Report attached to this memo, traffic from Mill Creek Parkway is expected to rise significantly sometime in the future; therefore, Mill Creek Parkway is a likelier candidate for a full access median opening than commercial driveway north. The ICE Stage 1 spreadsheet for SR 14 Spur and commercial driveway north with screening selections is attached to this memo.

For SR 14 Spur/South Davis Road and Mill Creek Parkway, the following five alternatives were selected for further analysis in ICE Stage 2:

1. Conventional Minor Stop
2. Multi-Lane Roundabout

3. Restricted Crossing U-Turn (RCUT) (stop control)
4. High-T/Continuous Green-T
5. Traffic Signal.

The existing traffic control at this intersection is a conventional minor stop with full access from SR 14 Spur/South Davis Road. The minimum spacing requirement for consideration of a full access median opening on a state route is 1,000 feet. There is approximately 1900 feet between Mill Creek Parkway and the closest proposed full access point; SR 14/US 29/Hogansville Road to the north; therefore, a full access median opening is eligible for consideration at this location. Analysis will be performed under the assumption that MCS will be constructed between the Existing Year 2018 and the Opening Year 2026. If MCS is not constructed between the Existing Year 2018 and the Opening Year 2026, a multi-lane roundabout should not be considered due to the mainline carrying greater than 90% of the intersection volume. A traffic signal likely would also not be warranted should MCS not be constructed. A full traffic signal warrant with the assumption of the construction of MCS will be performed in ICE Stage 2. The ICE Stage 1 spreadsheet for SR 14 Spur and Mill Creek Parkway with screening selections is attached to this memo.

For SR 14 Spur/South Davis Road and SR 14/US 29/Hogansville Road, the following two alternatives were selected for further analysis in ICE Stage 2:

1. Multi-Lane Roundabout
2. Traffic Signal.

The existing traffic control at this intersection is a traffic signal and was therefore considered for analysis in ICE Stage 2. A multi-lane roundabout was considered for this intersection due to evenly distributed traffic volumes on every approach and merely moderate Right-of-Way (ROW) constraints/concerns. There are commercial properties in the northwest and southeast quadrants of the intersection, but each property is approximately 100 feet from its respective right turn radius at the intersection. Unlike at SR 109/Lafayette Parkway, a CFI was not considered primarily due to lower traffic volumes. Neither an RCUT nor a MUT were considered because SR 14/US 29/Hogansville Road is a two-lane undivided roadway, making U-turns impossible. The ICE Stage 1 spreadsheet for SR 14 Spur/South Davis Road and SR 14/US 29/Hogansville Road with screening selections is attached to this memo.

For SR 14 Spur/South Davis Road and Home Depot driveway, the following two alternatives were selected for further analysis in ICE Stage 2:

1. Restricted Crossing U-Turn (RCUT) (stop control)
2. Right-in/Right-out (RIRO) with downstream U-Turn.

The existing traffic control at this intersection is a conventional minor stop with full access from SR 14 Spur/South Davis Road. However, a full access conventional minor stop was not considered for ICE Stage 2 due to insufficient spacing between commercial driveway south and SR 109/Lafayette Parkway. The minimum spacing requirement for consideration of a full access median opening on a state route is 1,000 feet. There is approximately 600 feet between SR 109/Lafayette Parkway and Home Depot driveway. Therefore, only intersection layouts and controls without a full median opening were considered. The ICE Stage 1 spreadsheet for SR 14 Spur and commercial driveway south with screening selections is attached to this memo.

For SR 14 Spur/South Davis Road and auto dealer driveway, the following two alternatives were selected for further analysis in ICE Stage 2:

1. Restricted Crossing U-Turn (RCUT) (stop control)
2. Right-in/Right-out (RIRO) with downstream U-Turn.

The existing traffic control at this intersection is a conventional minor stop with full access from SR 14 Spur/South Davis Road. However, a full access conventional minor stop was not considered for ICE Stage 2 due to insufficient spacing between auto dealer driveway and SR 109/Lafayette Parkway. The minimum spacing requirement for consideration of a full access median opening on a state route is 1,000 feet. There is approximately 750 feet between SR 109/Lafayette Parkway and Home Depot driveway. Therefore, only intersection layouts and controls without a full median opening were considered. A mid-block U-turn location would likely need to be installed south of this intersection to accommodate eastbound right turns that would ultimately desire to head back north. The ICE Stage 1 spreadsheet for SR 14 Spur and auto dealer driveway with screening selections is attached to this memo.

GDOT INTERSECTION CONTROL EVALUATION (ICE) TOOL

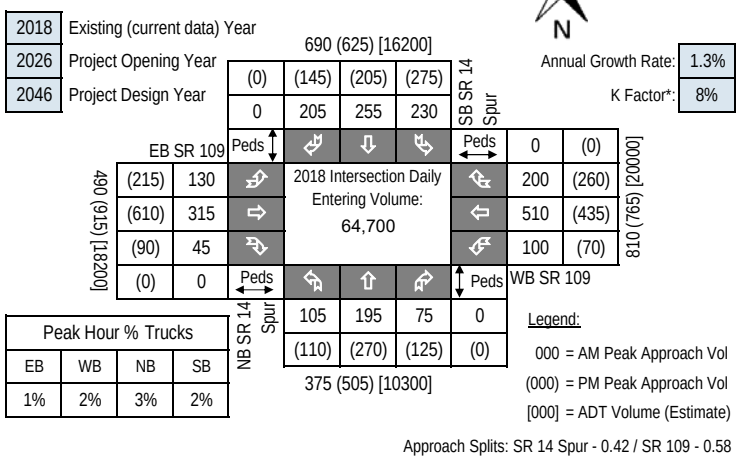
ICE Version 2.14 | Revised 08/03/2018

GDOT PI # (or N/A):	0014079	Request By:	District Engineer
County:	Troup	GDOT District:	3 - Thomaston
Major (State) Road:	SR 14 Spur	Speed Limit:	55 mph
Minor (Crossing) ST:	SR 109	Speed Limit:	45 mph
Major ST Direction:	North/South	Area Type:	Urban
Intersection Control:	Signal (turn lanes on mainline)		
Prepared By:	Lowe Engineers	Analyst:	JP
Date:	3/29/2019	Project ID:	14079
Project Purpose:	Widening/Reconstruction - Analyze alternatives for study intersection due to delay.		

2018	Existing (current data) Year
2026	Project Opening Year
2046	Project Design Year

Annual Growth Rate: 1.3%

K Factor*: 8%



Peak Hour % Trucks			
EB	WB	NB	SB
1%	2%	3%	2%

Legend:

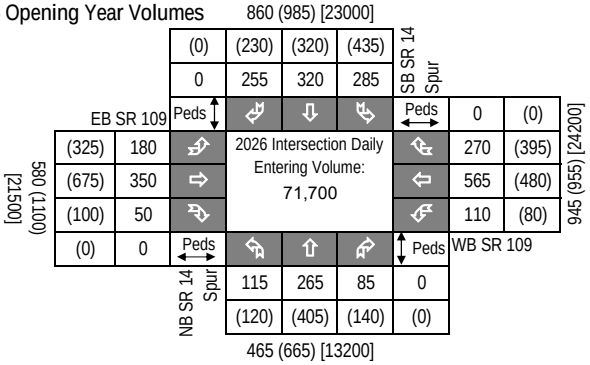
000 = AM Peak Approach Vol

(000) = PM Peak Approach Vol

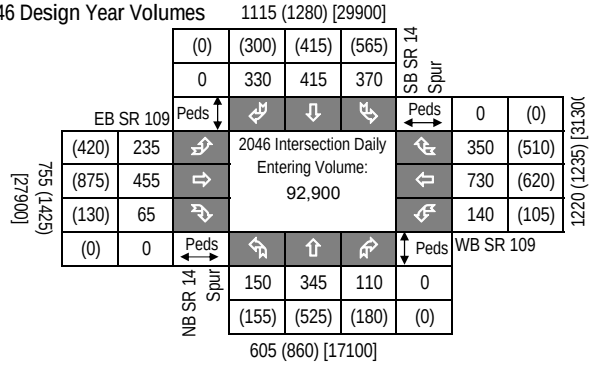
[000] = ADT Volume (Estimate)

Approach Splits: SR 14 Spur - 0.42 / SR 109 - 0.58

2026 Opening Year Volumes



2046 Design Year Volumes



Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the *Toward Zero Deaths* vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

Tool Goal: The goal of this ICE tool is to provide a simplified and consistent way of importing traffic, safety, cost, environmental impact and stakeholder posture data to assess and quantify intersection control improvement benefits. The tool supports the ICE policy and procedures to provide traceability, transparency, consistency and accountability when identifying and selecting an intersection control solution that both meets project purpose and reflects overall best value in terms of specific performance-based criteria.

Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage Process: A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Screening Decision Record Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves as a screening effort meant to *eliminate* non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column.

Stage 2: Alternative Selection Decision Record Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.

Documentation: A complete ICE document consists of the combination of the outputs from either a completed and signed waiver form or both Stage 1 and Stage 2 worksheets (along with supporting costing and/or environmental documentation), to be included in the approved project Concept Report (or equivalent) or as a stand-alone document.

GDOT ICE STAGE 1: SCREENING DECISION RECORD

ICE Version 2.14 | Revised 08/03/2018

GDOT PI #	0014079
Project Location:	SR 14 Spur @ SR 109
Prepared by:	Lowe Engineers
Analyst:	JP
Date:	6/6/2019

Answer "Yes" or "No" to each policy question for each control type to identify which alternatives should be evaluated in the Stage 2 Decision Record; enter justification in the rightmost column

Note: Up to 5 alternatives may be selected and evaluated; Use this ICE Stage 1 to screen 5 or fewer alternatives to evaluate in Stage 2

	Intersection Alternative (see "Intersections" tab for detailed description of intersection/interchange type)	1. Does alternative address the project need in a balanced manner and in scale with the project?	2. Does alternative improve safety performance in terms of reducing severe crashes?	3. Does alternative incorporate safety, convenience and accessibility for pedestrians and/or bicyclists?	4. Does alternative improve (or preserve) traffic operations (congestion, delay, reliability, etc.)?	5. Does alternative appear feasible given the site characteristics, constrains & location context?	6. Does alternative appear feasible with respect to other project factors?	7. Overall feasible alternative (select alternative for further evaluation in Stage 2)?	Screening Decision Justification:
Unsignalized Intersections	Conventional (Minor Stop)	No	No	No	No	No	No	No	Too much conflicting volume; presents safety and operations deficiencies
	Conventional (All-Way Stop)	No	No	No	No	No	No	No	Not suitable on multi-lane highway
	Mini Roundabout	No	No	No	No	No	No	No	Not suitable on multi-lane highway
	Single Lane Roundabout	No	No	No	No	No	No	No	Not suitable on multi-lane highway
	Multilane Roundabout	Yes	Yes	Yes	No	No	Yes	Yes	Handles conflicting traffic; ROW impact manageable
	RCUT (stop control)	No	No	No	No	No	No	No	Not on median-divided highway
	RIRO w/down stream U-Turn	No	No	No	No	No	No	No	Not on median-divided highway
	High-T (unsignalized)	No	No	No	No	No	No	No	Not a T-intersection
	Offset-T Intersections	No	No	No	No	No	No	No	Too much through volume
	Diamond Interch (Stop Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diamond Interch (RAB Control)	No	No	No	No	No	No	No	Not an interchange situation
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	Intersection signalized and meets warrants
	Other unignalized (provide description):	No	No	No	No	No	No	No	Intersection signalized and meets warrants
Signalized Intersections	Traffic Signal	Yes	No	Yes	No	Yes	Yes	Yes	Will add necessary turn lanes for acceptable LOS D
	Median U-Turn (Indirect Left)	No	Yes	Yes	No	No	No	No	Not on median-divided highway
	RCUT (signalized)	No	Yes	No	No	No	No	No	Not Feasible due to high left+through volume & not median divided highway
	Displaced Left Turn (CFI)	Yes	Yes	Yes	Yes	No	Yes	Yes	Can handle left-turn + through conflicting volumes
	Continuous Green-T	No	No	No	No	No	No	No	Not a T-intersection
	Jughandle	No	No	No	No	No	No	No	Cost and impact too significant to justify operations and safety benefits
	Quadrant Roadway	No	No	No	No	No	No	No	Cost and impact too significant to justify operations and safety benefits
	Diamond Interch (Signal Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diverging Diamond	No	No	No	No	No	No	No	Not an interchange situation
	Single Point Interchange	No	No	No	No	No	No	No	Not an interchange situation
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	Addressed as part of Traffic Signal alternative
	Other Signalized (provide description):	No	No	No	No	No	No	No	No other alternatives considered

= Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record

GDOT INTERSECTION CONTROL EVALUATION (ICE) TOOL

ICE Version 2.14 | Revised 08/03/2018

GDOT PI # (or N/A): 0014079 Request By: District Engineer

County: Troup GDOT District: 3 - Thomaston

Major (State) Road: SR 14 Spur Speed Limit: 55 mph

Minor (Crossing) ST: Commercial S Speed Limit: < 35 mph

Major ST Direction: North/South Area Type: Urban

Intersection Control: Conventional (Minor Stop)

Prepared By: Lowe Engineers Analyst: JP

Date: 3/29/2019 Project ID: 14079

Project Purpose: Widening/Reconstruction

2018 Existing (current data) Year

2026 Project Opening Year

2046 Project Design Year

Annual Growth Rate: 1.3%

K Factor*: 8%

N

755 (645) [17100]

	(0)	(10)	(595)	(40)
	0	10	740	5

SB SR 14 Spur

EB Commercial S

Peds					Peds	0	(0)
(10)	5		2018 Intersection Daily Entering Volume: #VALUE!			15	(80)
MM	MM					MM	MM
(15)	MM					MM	(10)
(0)	0	Peds			Peds	WB Commercial S	

#VALUE! #VALUE!

NB SR 14 Spur

5	510	5	0
(20)	(710)	(45)	(0)

#VALUE!

Peak Hour % Trucks			
EB	WB	NB	SB
0%	1%	2%	2%

Legend:

000 = AM Peak Approach Vol

(000) = PM Peak Approach Vol

[000] = ADT Volume (Estimate)

Approach Splits: SR 14 Spur - 0.95 / Commercial S - 0.05

2026 Opening Year Volumes

930 (1010) [24000]

	(0)	(10)	(960)	(40)
	0	10	915	5

SB SR 14 Spur

EB Commercial S

Peds					Peds	0	(0)
(10)	5		2026 Intersection Daily Entering Volume: #VALUE!			15	(80)
MM	MM					MM	MM
(15)	MM					MM	(10)
(0)	0	Peds			Peds	WB Commercial S	

#VALUE! #VALUE!

NB SR 14 Spur

5	705	5	0
(20)	(1090)	(45)	(0)

#VALUE!

2046 Design Year Volumes

1205 (1300) [31000]

	(0)	(10)	(1250)	(40)
	0	10	1,190	5

SB SR 14 Spur

EB Commercial S

Peds					Peds	0	(0)
(10)	5		2046 Intersection Daily Entering Volume: #VALUE!			15	(80)
MM	MM					MM	MM
(15)	MM					MM	(10)
(0)	0	Peds			Peds	WB Commercial S	

#VALUE! #VALUE!

NB SR 14 Spur

5	920	5	0
(20)	(1425)	(45)	(0)

#VALUE!

Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the *Toward Zero Deaths* vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

Tool Goal: The goal of this ICE tool is to provide a simplified and consistent way of importing traffic, safety, cost, environmental impact and stakeholder posture data to assess and quantify intersection control improvement benefits. The tool supports the ICE policy and procedures to provide traceability, transparency, consistency and accountability when identifying and selecting an intersection control solution that both meets project purpose and reflects overall best value in terms of specific performance-based criteria.

Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage Process: A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Screening Decision Record Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves as a screening effort meant to *eliminate* non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column.

Stage 2: Alternative Selection Decision Record Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.

Documentation: A complete ICE document consists of the combination of the outputs from either a completed and signed waiver form or both Stage 1 and Stage 2 worksheets (along with supporting costing and/or environmental documentation), to be included in the approved project Concept Report (or equivalent) or as a stand-alone document.

GDOT ICE STAGE 1: SCREENING DECISION RECORD

ICE Version 2.14 | Revised 08/03/2018

GDOT PI #	0014079
Project Location:	SR 14 Spur @ Commercial S
Prepared by:	Lowe Engineers
Analyst:	JP
Date:	6/6/2019

Answer "Yes" or "No" to each policy question for each control type to identify which alternatives should be evaluated in the Stage 2 Decision Record; enter justification in the rightmost column

Note: Up to 5 alternatives may be selected and evaluated; Use this ICE Stage 1 to screen 5 or fewer alternatives to evaluate in Stage 2

	Intersection Alternative (see "Intersections" tab for detailed description of intersection/interchange type)	1. Does alternative address the project need in a balanced manner and in scale with the project?	2. Does alternative improve safety performance in terms of reducing severe crashes?	3. Does alternative incorporate safety, convenience and accessibility for pedestrians and/or bicyclists?	4. Does alternative improve (or preserve) traffic operations (congestion, delay, reliability, etc.)?	5. Does alternative appear feasible given the site characteristics, constrains & location context?	6. Does alternative appear feasible with respect to other project factors?	7. Overall feasible alternative (select alternative for further evaluation in Stage 2)?	Screening Decision Justification:
Unsignalized Intersections	Conventional (Minor Stop)	No	No	No	No	Yes	Yes	No	Does not meet spacing requirements from SR 109 for median break
	Conventional (All-Way Stop)	No	No	No	No	No	No	No	Not suitable on multi-lane highway
	Mini Roundabout	No	No	No	No	No	No	No	Mainline volumes >90%, not suitable on multi-lane highway
	Single Lane Roundabout	No	No	No	No	No	No	No	Mainline volumes >90%, not suitable on multi-lane highway
	Multilane Roundabout	No	No	No	No	No	No	No	Mainline volumes >90%
	RCUT (stop control)	Yes	Yes	No	Yes	Yes	No	Yes	Selected; Left-in only for SB approach due to proximity to SR 109
	RIRO w/down stream U-Turn	Yes	Yes	No	Yes	Yes	Yes	Yes	Selected due to low side street volume and nearby U-turn locations
	High-T (unsignalized)	No	No	No	No	No	No	No	Not a T-intersection
	Offset-T Intersections	No	No	No	No	No	No	No	Proximity to SR 109
	Diamond Interch (Stop Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diamond Interch (RAB Control)	No	No	No	No	No	No	No	Not an interchange situation
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	No turn lanes anticipated
	Other unignalized (provide description):	No	No	No	No	No	No	No	No other alternatives considered
Signalized Intersections	Traffic Signal	No	No	No	No	No	No	No	Does not meet spacing requirements from SR 109 or signal warrants
	Median U-Turn (Indirect Left)	No	No	No	No	No	No	No	Does not meet spacing requirements from SR 109 or signal warrants
	RCUT (signalized)	No	No	No	No	No	No	No	Does not meet spacing requirements from SR 109 or signal warrants
	Displaced Left Turn (CFI)	No	No	No	No	No	No	No	Does not meet spacing requirements from SR 109 or signal warrants
	Continuous Green-T	No	No	No	No	No	No	No	Does not meet spacing requirements from SR 109 or signal warrants
	Jughandle	No	No	No	No	No	No	No	Does not meet spacing requirements from SR 109 or signal warrants
	Quadrant Roadway	No	No	No	No	No	No	No	Does not meet spacing requirements from SR 109 or signal warrants
	Diamond Interch (Signal Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diverging Diamond	No	No	No	No	No	No	No	Not an interchange situation
	Single Point Interchange	No	No	No	No	No	No	No	Not an interchange situation
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	Does not meet warrants
	Other Signalized (provide description):	No	No	No	No	No	No	No	Does not meet warrants

☐ = Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record

GDOT INTERSECTION CONTROL EVALUATION (ICE) TOOL

ICE Version 2.14 | Revised 08/03/2018

GDOT PI # (or N/A): 0014079 Request By: District Engineer

County: Troup GDOT District: 3 - Thomaston

Major (State) Road: SR 14 Spur Speed Limit: 55 mph

Minor (Crossing) ST: Commercial C Speed Limit: < 35 mph

Major ST Direction: North/South Area Type: Urban

Intersection Control: Conventional (Minor Stop)

Prepared By: Lowe Engineers Analyst: JP

Date: 3/29/2019 Project ID: 14079

Project Purpose: Widening/Reconstruction

2018 Existing (current data) Year
2026 Project Opening Year
2046 Project Design Year

Annual Growth Rate: 1.3%
K Factor*: 8%

775 (665) [17600]

	(0)	(0)	(640)	(25)
	0	0	755	20

SB SR 14 Spur

EB Commercial C

Peds					Peds	0	(0)
(0)	0		2018 Intersection Daily Entering Volume: #VALUE!			15	(45)
(0)	0					0	(0)
(0)	0					MM	(5)
(0)	0	Peds			Peds	WB Commercial C	

[0] (0) 0 #VALUE!

NB SR 14 Spur

0	530	MM	0
(0)	(790)	(10)	(0)

#VALUE!

Peak Hour % Trucks			
EB	WB	NB	SB
0%	0%	2%	2%

Legend:
000 = AM Peak Approach Vol
(000) = PM Peak Approach Vol
[000] = ADT Volume (Estimate)

Approach Splits: SR 14 Spur - 0.97 / Commercial C - 0.03

2026 Opening Year Volumes

950 (1030) [24600]

	(0)	(0)	(1005)	(25)
	0	0	930	20

SB SR 14 Spur

EB Commercial C

Peds					Peds	0	(0)
(0)	0		2026 Intersection Daily Entering Volume: #VALUE!			15	(45)
(0)	0					0	(0)
(0)	0					MM	(5)
(0)	0	Peds			Peds	WB Commercial C	

[0] (0) 0 #VALUE!

NB SR 14 Spur

0	725	MM	0
(0)	(1170)	(10)	(0)

#VALUE!

2046 Design Year Volumes

1225 (1320) [31600]

	(0)	(0)	(1295)	(25)
	0	0	1,205	20

SB SR 14 Spur

EB Commercial C

Peds					Peds	0	(0)
(0)	0		2046 Intersection Daily Entering Volume: #VALUE!			15	(45)
(0)	0					0	(0)
(0)	0					MM	(5)
(0)	0	Peds			Peds	WB Commercial C	

[0] (0) 0 #VALUE!

NB SR 14 Spur

0	940	MM	0
(0)	(1505)	(10)	(0)

#VALUE!

Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the *Toward Zero Deaths* vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

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Two-Stage Process: A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

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Documentation: A complete ICE document consists of the combination of the outputs from either a completed and signed waiver form or both Stage 1 and Stage 2 worksheets (along with supporting costing and/or environmental documentation), to be included in the approved project Concept Report (or equivalent) or as a stand-alone document.

GDOT ICE STAGE 1: SCREENING DECISION RECORD

ICE Version 2.14 | Revised 08/03/2018

GDOT PI #	0014079
Project Location:	SR 14 Spur @ Commercial C
Prepared by:	Lowe Engineers
Analyst:	JP
Date:	6/6/2019

Answer "Yes" or "No" to each policy question for each control type to identify which alternatives should be evaluated in the Stage 2 Decision Record; enter justification in the rightmost column

Note: Up to 5 alternatives may be selected and evaluated; Use this ICE Stage 1 to screen 5 or fewer alternatives to evaluate in Stage 2

	Intersection Alternative (see "Intersections" tab for detailed description of intersection/interchange type)	1. Does alternative address the project need in a balanced manner and in scale with the project?	2. Does alternative improve safety performance in terms of reducing severe crashes?	3. Does alternative incorporate safety, convenience and accessibility for pedestrians and/or bicyclists?	4. Does alternative improve (or preserve) traffic operations (congestion, delay, reliability, etc.)?	5. Does alternative appear feasible given the site characteristics, constrains & location context?	6. Does alternative appear feasible with respect to other project factors?	7. Overall feasible alternative (select alternative for further evaluation in Stage 2)?	Screening Decision Justification:
Unsignalized Intersections	Conventional (Minor Stop)	Yes	No	No	No	Yes	Yes	Yes	Meets spacing from SR 109
	Conventional (All-Way Stop)	No	No	No	No	No	No	No	Not suitable on multi-lane highway
	Mini Roundabout	No	No	No	No	No	No	No	Mainline volumes >90%, not suitable on multi-lane highway
	Single Lane Roundabout	No	No	No	No	No	No	No	Mainline volumes >90%, not suitable on multi-lane highway
	Multilane Roundabout	No	Yes	Yes	No	No	No	No	Mainline volumes >90%
	RCUT (stop control)	Yes	Yes	No	Yes	No	Yes	Yes	Meets spacing from SR 109; NB approach would be U-turn only
	RIRO w/down stream U-Turn	Yes	Yes	No	Yes	Yes	Yes	Yes	Meets spacing from SR 109
	High-T (unsignalized)	No	No	No	No	No	No	No	Not a T-intersection
	Offset-T Intersections	No	No	No	No	No	No	No	Only one T-intersection
	Diamond Interch (Stop Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diamond Interch (RAB Control)	No	No	No	No	No	No	No	Not an interchange situation
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	No turn lanes anticipated
	Other unignalized (provide description):	No	No	No	No	No	No	No	No other alternatives considered
Signalized Intersections	Traffic Signal	No	No	No	No	No	No	No	Does not meet warrants
	Median U-Turn (Indirect Left)	No	No	No	No	No	No	No	Does not meet warrants
	RCUT (signalized)	No	No	No	No	No	No	No	Does not meet warrants
	Displaced Left Turn (CFI)	No	No	No	No	No	No	No	Does not meet warrants
	Continuous Green-T	No	No	No	No	No	No	No	Does not meet warrants
	Jughandle	No	No	No	No	No	No	No	Does not meet warrants
	Quadrant Roadway	No	No	No	No	No	No	No	Does not meet warrants
	Diamond Interch (Signal Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diverging Diamond	No	No	No	No	No	No	No	Not an interchange situation
	Single Point Interchange	No	No	No	No	No	No	No	Not an interchange situation
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	Does not meet warrants
	Other Signalized (provide description):	No	No	No	No	No	No	No	Does not meet warrants

☐ = Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record

GDOT INTERSECTION CONTROL EVALUATION (ICE) TOOL

ICE Version 2.14 | Revised 08/03/2018

GDOT PI # (or N/A): 0014079 Request By: District Engineer

County: Troup GDOT District: 3 - Thomaston

Major (State) Road: SR 14 Spur Speed Limit: 55 mph

Minor (Crossing) ST: Commercial N Speed Limit: < 35 mph

Major ST Direction: North/South Area Type: Urban

Intersection Control: Conventional (Minor Stop)

Prepared By: Lowe Engineers Analyst: JP

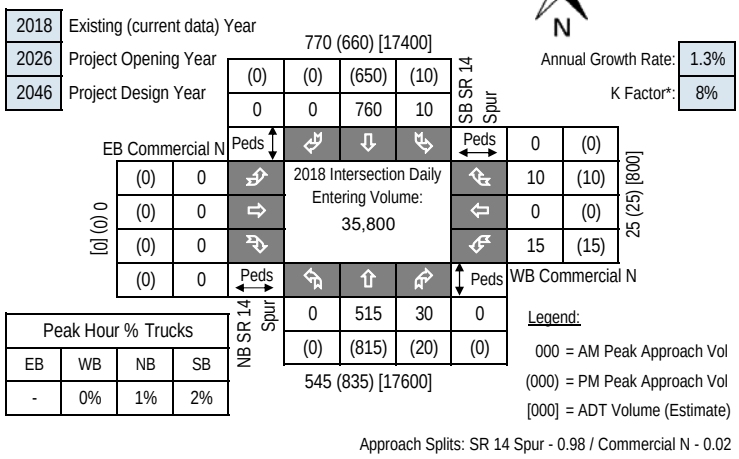
Date: 3/29/2019 Project ID: 14079

Project Purpose: Widening/Reconstruction

2018	Existing (current data) Year
2026	Project Opening Year
2046	Project Design Year

Annual Growth Rate: 1.3%

K Factor*: 8%



Peak Hour % Trucks			
EB	WB	NB	SB
-	0%	1%	2%

Legend:

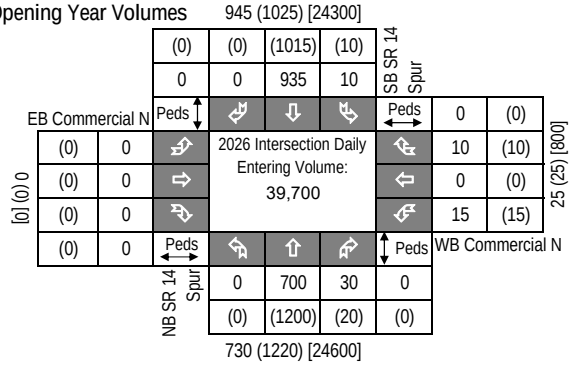
000 = AM Peak Approach Vol

(000) = PM Peak Approach Vol

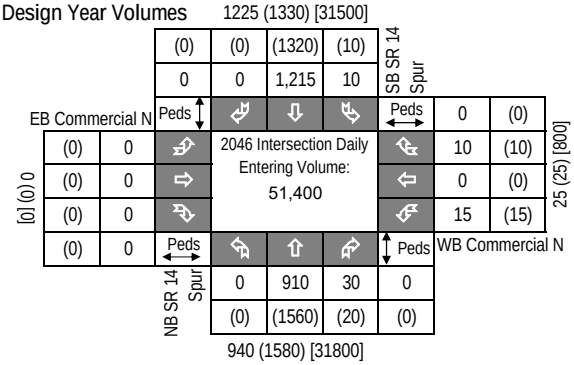
[000] = ADT Volume (Estimate)

Approach Splits: SR 14 Spur - 0.98 / Commercial N - 0.02

2026 Opening Year Volumes



2046 Design Year Volumes



Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the *Toward Zero Deaths* vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

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Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage Process: A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Screening Decision Record Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves as a screening effort meant to *eliminate* non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column.

Stage 2: Alternative Selection Decision Record Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.

Documentation: A complete ICE document consists of the combination of the outputs from either a completed and signed waiver form or both Stage 1 and Stage 2 worksheets (along with supporting costing and/or environmental documentation), to be included in the approved project Concept Report (or equivalent) or as a stand-alone document.

GDOT ICE STAGE 1: SCREENING DECISION RECORD

ICE Version 2.14 | Revised 08/03/2018

GDOT PI #	0014079
Project Location:	SR 14 Spur @ Commercial N
Prepared by:	Lowe Engineers
Analyst:	JP
Date:	6/6/2019

Answer "Yes" or "No" to each policy question for each control type to identify which alternatives should be evaluated in the Stage 2 Decision Record; enter justification in the rightmost column

Note: Up to 5 alternatives may be selected and evaluated; Use this ICE Stage 1 to screen 5 or fewer alternatives to evaluate in Stage 2

	Intersection Alternative (see "Intersections" tab for detailed description of intersection/interchange type)	1. Does alternative address the project need in a balanced manner and in scale with the project?	2. Does alternative improve safety performance in terms of reducing severe crashes?	3. Does alternative incorporate safety, convenience and accessibility for pedestrians and/or bicyclists?	4. Does alternative improve (or preserve) traffic operations (congestion, delay, reliability, etc.)?	5. Does alternative appear feasible given the site characteristics, constrains & location context?	6. Does alternative appear feasible with respect to other project factors?	7. Overall feasible alternative (select alternative for further evaluation in Stage 2)?	Screening Decision Justification:
Unsignalized Intersections	Conventional (Minor Stop)	No	No	No	No	Yes	Yes	No	Proximity to Mill Creek Parkway
	Conventional (All-Way Stop)	No	No	No	No	No	No	No	Not suitable on multi-lane highway
	Mini Roundabout	No	No	No	No	No	No	No	Not suitable on multi-lane highway
	Single Lane Roundabout	No	No	No	No	No	No	No	Not suitable on multi-lane highway
	Multilane Roundabout	No	Yes	Yes	No	No	No	No	Mainline volumes >90%, proximity to Mill Creek Parkway
	RCUT (stop control)	Yes	Yes	No	Yes	No	No	No	Proximity to Mill Creek Parkway
	RIRO w/down stream U-Turn	Yes	Yes	No	Yes	Yes	Yes	Yes	Selected; low side street volume and can U-turn at Mill Creek Parkway
	High-T (unsignalized)	Yes	Yes	No	Yes	No	No	No	Proximity to Mill Creek Parkway
	Offset-T Intersections	No	No	No	No	No	No	No	Only one T-intersection
	Diamond Interch (Stop Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diamond Interch (RAB Control)	No	No	No	No	No	No	No	Not an interchange situation
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	No turn lanes anticipated
	Other unignalized (provide description):	No	No	No	No	No	No	No	No other alternatives considered
Signalized Intersections	Traffic Signal	No	No	No	No	No	No	No	Does not meet warrants
	Median U-Turn (Indirect Left)	No	No	No	No	No	No	No	Does not meet warrants
	RCUT (signalized)	No	No	No	No	No	No	No	Does not meet warrants
	Displaced Left Turn (CFI)	No	No	No	No	No	No	No	Does not meet warrants
	Continuous Green-T	No	No	No	No	No	No	No	Does not meet warrants
	Jughandle	No	No	No	No	No	No	No	Does not meet warrants
	Quadrant Roadway	No	No	No	No	No	No	No	Does not meet warrants
	Diamond Interch (Signal Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diverging Diamond	No	No	No	No	No	No	No	Not an interchange situation
	Single Point Interchange	No	No	No	No	No	No	No	Not an interchange situation
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	Does not meet warrants
	Other Signalized (provide description):	No	No	No	No	No	No	No	Does not meet warrants

☐ = Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record

GDOT INTERSECTION CONTROL EVALUATION (ICE) WAIVER FORM

ICE Version 2.14 | Revised 08/03/2018

Waiver Request - Level 1

In certain circumstances where an ICE would otherwise be required, an ICE may be waived based on appropriate evidence presented with a written request. Scenarios in which an ICE waiver request may be considered include:

1. Proposed improvements do not substantially alter the character of the intersection, and are considered minor in nature, such as extending existing turn lane(s) or modifying signal phasing at an existing traffic signal
2. The intersection consists of a public roadway intersecting a divided, multilane roadway where the access will be limited to a closed median with only right-in/right-out access that will operate acceptably; or
3. The intersection is along an undivided, two-lane roadway that will not be widened and meets the following criteria:
   - Low risk in terms of exposure (total intersection entering volume less than 1,000 vehicles /day)
   - Latest 5 years of crash history is not indicative of a crash problem (no discernible crash patterns coupled with low crash frequency and severity)
   - Layout has no unusual or undesirable geometric features (such as restricted sight distance)
   - The proposed changes are not expected to adversely affect safety

If only one alternative is determined to be feasible from the ICE Stage 1, then a waiver may be submitted in lieu of completing ICE Stage 2. The waiver must clearly explain why there is no other feasible alternative. A Waiver Form should also be submitted to document an agreed upon decision to select a preferred alternative other than the highest scoring alternative in Stage 2.

ICE waiver forms with supporting documentation should be submitted for approval to the Office of Traffic Operations or District Engineer (depending on Waiver level). Questions regarding the waiver process should be routed to the State Traffic Engineer.

Project Information:

Location: SR 14 Spur @ Commercial N
County: Troup
GDOT District: 3 - Thomaston
Area Type: Urban
Existing Intersection Control: Conventional (Minor Stop)

GDOT PI # (or N/A): 0014079
Requested By: District Engineer
Prepared By: Lowe Engineers
Analyst: JP
Date: 3/29/2019
Waiver Request Type: GDOT PDP Project

Traffic and Operations Data:[1]

Intersection meets signal/AWS warrants?	None	
Traffic Analysis Type:	Intersection Delay	
Existing Avg Daily Traffic (Major Street):	16,000	
Existing Avg Daily Traffic (Minor Street):	800	
Analysis Period:	AM Peak	PM Peak
2026 Opening Yr Peak Hour Intersection Delay:	11.1 sec	14.5 sec
2026 Opening Yr Peak Hour Intersection V/C:	0.05	0.07
2046 Design Yr Peak Hour Intersection Delay:	12.4 sec	18.2 sec
2046 Design Yr Peak Hour Intersection V/C:	0.05	0.09

[1]Crash data required for all existing intersections. ADT's required if available (from data collected or nearest GDOT count station site). Capacity data is optional unless needed to justify basis of the waiver request.

Crash Data (Required):[1]

Crash Data :Enter 5 most recent years of intersection crash data		*Crash Severity*	
Crash Type	PDO	Injury Crash*	Fatal Crash*
Angle	1	0	0
Head-On	0	0	0
Rear End	0	1	0
Sideswipe - same	1	0	0
Sideswipe - opposite	0	0	0
Not Collision w/Motor Veh	2	0	0
TOTALS:	**4**	**1**	**0**

* Number of crashes resulting in injuries / fatalities, not number of persons

Description of Work / Justification for Waiver (Required): The intersection consists of a public roadway intersecting a divided, multilane roadway where the access will be limited to a closed median with only right-in/right-out access that will operate acceptably. The proximity to Mill Creek Parkway limits the alternative types at commercial driveway north.

Proposed Intersection Control: RIRO w/down stream U-Turn

REQUESTED BY: LOWE Engineers Date: 3/29/2019

Title: _____

APPROVED BY: _____ Date: 8/8/19

Name: Andrew Heath, P.E.

Chief Engineer or (Approved Delegate)

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	25	700	40	0	960
Future Vol, veh/h	0	25	700	40	0	960
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	635	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	28	778	44	0	1067

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	389	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	615	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	615	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	615	-
HCM Lane V/C Ratio	-	-	0.045	-
HCM Control Delay (s)	-	-	11.1	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	25	1200	30	0	1040
Future Vol, veh/h	0	25	1200	30	0	1040
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	635	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	28	1333	33	0	1156

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	667	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	406	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	406	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	406	-
HCM Lane V/C Ratio	-	-	0.068	-
HCM Control Delay (s)	-	-	14.5	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	25	910	40	0	1240
Future Vol, veh/h	0	25	910	40	0	1240
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	635	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	28	1011	44	0	1378

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	506	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	517	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	517	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	517	-
HCM Lane V/C Ratio	-	-	0.054	-
HCM Control Delay (s)	-	-	12.4	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	25	1560	30	0	1345
Future Vol, veh/h	0	25	1560	30	0	1345
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	635	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	28	1733	33	0	1494

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	867	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	300	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	300	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	300	-
HCM Lane V/C Ratio	-	-	0.093	-
HCM Control Delay (s)	-	-	18.2	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.3	-

GDOT INTERSECTION CONTROL EVALUATION (ICE) TOOL

ICE Version 2.14 | Revised 08/03/2018

GDOT PI # (or N/A): 0014079 Request By: District Engineer

County: Troup GDOT District: 3 - Thomaston

Major (State) Road: SR 14 Spur Speed Limit: 55 mph

Minor (Crossing) ST: Mill Creek Pkwy Speed Limit: < 35 mph

Major ST Direction: North/South Area Type: Urban

Intersection Control: Conventional (Minor Stop)

Prepared By: Lowe Engineers Analyst: JP

Date: 3/29/2019 Project ID: 14079

Project Purpose: Widening/Reconstruction

2018	Existing (current data) Year
2026	Project Opening Year
2046	Project Design Year

Annual Growth Rate: 1.3%

K Factor*: 8%

N

#VALUE!

(0)	MM	(655)	MM	SB SR 14 Spur
0	MM	750	MM	

EB Mill Creek Pkwy

Peds					Peds	0	(0)
MM	MM		2018 Intersection Daily Entering Volume: #VALUE!		MM	MM	#VALUE!
MM	MM				MM	MM	
(5)	20				MM	MM	
(0)	0	Peds			Peds	WB Mill Creek Pkwy	

#VALUE!

NB SR 14 Spur	5	520	MM	0
	(5)	(820)	MM	(0)

#VALUE!

Peak Hour % Trucks			
EB	WB	NB	SB
0%	0%	1%	2%

Legend:

000 = AM Peak Approach Vol

(000) = PM Peak Approach Vol

[000] = ADT Volume (Estimate)

Approach Splits: SR 14 Spur - 0.99 / Mill Creek Pkwy - 0.01

2026 Opening Year Volumes

#VALUE!

(0)	(24)	(725)	MM	SB SR 14 Spur
0	165	830	MM	

EB Mill Creek Pkwy

Peds					Peds	0	(0)
(365)	80		2026 Intersection Daily Entering Volume: #VALUE!		MM	MM	#VALUE!
MM	MM				MM	MM	
(300)	115				MM	MM	
(0)	0	Peds			Peds	WB Mill Creek Pkwy	

#VALUE!

NB SR 14 Spur	135	575	MM	0
	(300)	(910)	MM	(0)

#VALUE!

2046 Design Year Volumes

#VALUE!

(0)	(310)	(940)	MM	SB SR 14 Spur
0	215	1,075	MM	

EB Mill Creek Pkwy

Peds					Peds	0	(0)
(475)	150		2046 Intersection Daily Entering Volume: #VALUE!		MM	MM	#VALUE!
MM	MM				MM	MM	
(390)	150				MM	MM	
(0)	0	Peds			Peds	WB Mill Creek Pkwy	

#VALUE!

NB SR 14 Spur	175	745	MM	0
	(390)	(1180)	MM	(0)

#VALUE!

Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the *Toward Zero Deaths* vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

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GDOT ICE STAGE 1: SCREENING DECISION RECORD

ICE Version 2.14 | Revised 08/03/2018

GDOT PI #	0014079
Project Location:	SR 14 Spur @ Mill Creek Pkwy
Prepared by:	Lowe Engineers
Analyst:	JP
Date:	6/6/2019

Answer "Yes" or "No" to each policy question for each control type to identify which alternatives should be evaluated in the Stage 2 Decision Record; enter justification in the rightmost column

Note: Up to 5 alternatives may be selected and evaluated; Use this ICE Stage 1 to screen 5 or fewer alternatives to evaluate in Stage 2

	Intersection Alternative (see "Intersections" tab for detailed description of intersection/interchange type)	1. Does alternative address the project need in a balanced manner and in scale with the project?	2. Does alternative improve safety performance in terms of reducing severe crashes?	3. Does alternative incorporate safety, convenience and accessibility for pedestrians and/or bicyclists?	4. Does alternative improve (or preserve) traffic operations (congestion, delay, reliability, etc.)?	5. Does alternative appear feasible given the site characteristics, constrains & location context?	6. Does alternative appear feasible with respect to other project factors?	7. Overall feasible alternative (select alternative for further evaluation in Stage 2)?	Screening Decision Justification:
Unsignalized Intersections	Conventional (Minor Stop)	Yes	No	No	Yes	Yes	Yes	Yes	Existing Condition
	Conventional (All-Way Stop)	No	No	No	No	No	No	No	Not Feasible due to high mainline volumes
	Mini Roundabout	No	No	No	No	No	No	No	Not suitable on multi-lane highway
	Single Lane Roundabout	No	No	No	No	No	No	No	Not suitable on multi-lane highway
	Multilane Roundabout	No	Yes	Yes	No	Yes	Yes	Yes	Selected based on potential/expected vols; >90% mainline existing vols
	RCUT (stop control)	Yes	Yes	No	Yes	Yes	Yes	Yes	Would likely require mid-block U-turn locations
	RIRO w/down stream U-Turn	Yes	Yes	No	No	No	No	No	Potential/expected left turn volumes, Proximity to Commercial N
	High-T (unsignalized)	Yes	Yes	No	Yes	Yes	Yes	Yes	T-intersection
	Offset-T Intersections	No	No	No	No	No	No	No	Only one T-intersection
	Diamond Interch (Stop Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diamond Interch (RAB Control)	No	No	No	No	No	No	No	Not an interchange situation
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	Intersection expected to meet warrants
	Other unignalized (provide description):	No	No	No	No	No	No	No	No other alternatives considered
Signalized Intersections	Traffic Signal	Yes	No	Yes	Yes	Yes	Yes	Yes	Expected to meet opening year signal warrants with proposed development
	Median U-Turn (Indirect Left)	No	No	No	No	No	No	No	Expected high left turn volumes with proposed development
	RCUT (signalized)	No	No	No	No	No	No	No	Expected high left turn volumes with proposed development
	Displaced Left Turn (CFI)	No	No	No	No	No	No	No	Cost and impact too significant to justify operations and safety benefits
	Continuous Green-T	Yes	Yes	Yes	Yes	Yes	Yes	Yes	T-intersection, expected to meet warrants with development
	Jughandle	No	No	No	No	No	No	No	Cost and impact too significant to justify operations and safety benefits
	Quadrant Roadway	No	No	No	No	No	No	No	Cost and impact too significant to justify operations and safety benefits
	Diamond Interch (Signal Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diverging Diamond	No	No	No	No	No	No	No	Not an interchange situation
	Single Point Interchange	No	No	No	No	No	No	No	Not an interchange situation
	Add LT Lanes on Both Roads Add RT Lanes on Both Roads	No	No	No	No	No	No	No	Turn lane additions on all approaches with accompanying signal phasing
	Other Signalized (provide description):	No	No	No	No	No	No	No	No other alternatives considered

= Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record

GDOT INTERSECTION CONTROL EVALUATION (ICE) TOOL

ICE Version 2.14 | Revised 08/03/2018

GDOT PI # (or N/A): 0014079 Request By: District Engineer

County: Troup GDOT District: 3 - Thomaston

Major (State) Road: SR 14 Spur Speed Limit: 55 mph

Minor (Crossing) ST: SR 14/US 29 Speed Limit: 45 mph

Major ST Direction: North/South Area Type: Urban

Intersection Control: Signal (turn lanes on mainline)

Prepared By: Lowe Engineers Analyst: JP

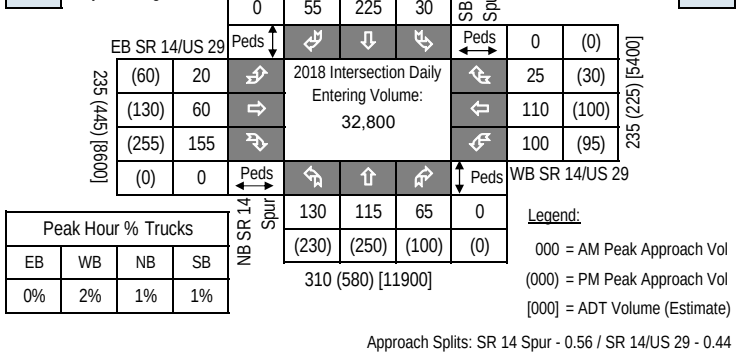
Date: 3/29/2019 Project ID: 14079

Project Purpose: Widening/Reconstruction

2018	Existing (current data) Year
2026	Project Opening Year
2046	Project Design Year

Annual Growth Rate: 1.3%

K Factor*: 8%



(0)	(70)	(190)	(25)				
0	55	225	30				
				Peds	0	(0)	
(60)	20				25	(30)	
(130)	60				110	(100)	
(255)	155				100	(95)	
(0)	0			Peds			
				Peds			
130	115	65	0				
(230)	(250)	(100)	(0)				

Peak Hour % Trucks			
EB	WB	NB	SB
0%	2%	1%	1%

Legend:

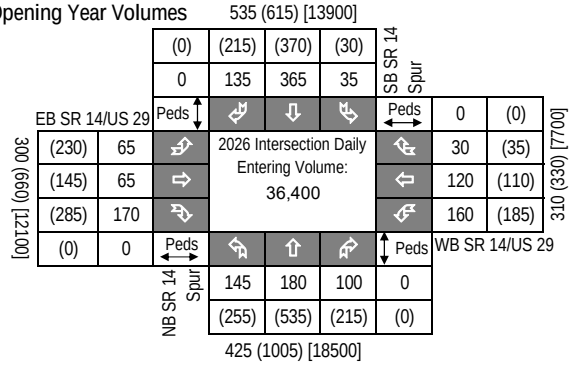
000 = AM Peak Approach Vol

(000) = PM Peak Approach Vol

[000] = ADT Volume (Estimate)

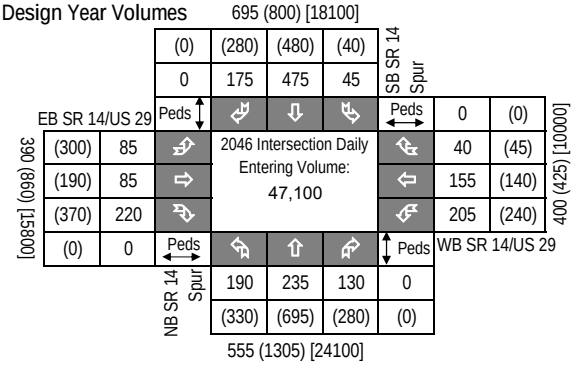
Approach Splits: SR 14 Spur - 0.56 / SR 14/US 29 - 0.44

2026 Opening Year Volumes



(0)	(215)	(370)	(30)				
0	135	365	35				
				Peds	0	(0)	
(230)	65				30	(35)	
(145)	65				120	(110)	
(285)	170				160	(185)	
(0)	0			Peds			
				Peds			
145	180	100	0				
(255)	(535)	(215)	(0)				

2046 Design Year Volumes



(0)	(280)	(480)	(40)				
0	175	475	45				
				Peds	0	(0)	
(300)	85				40	(45)	
(190)	85				155	(140)	
(370)	220				205	(240)	
(0)	0			Peds			
				Peds			
190	235	130	0				
(330)	(695)	(280)	(0)				

Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the *Toward Zero Deaths* vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

Tool Goal: The goal of this ICE tool is to provide a simplified and consistent way of importing traffic, safety, cost, environmental impact and stakeholder posture data to assess and quantify intersection control improvement benefits. The tool supports the ICE policy and procedures to provide traceability, transparency, consistency and accountability when identifying and selecting an intersection control solution that both meets project purpose and reflects overall best value in terms of specific performance-based criteria.

Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage Process: A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Screening Decision Record Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves as a screening effort meant to *eliminate* non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column.

Stage 2: Alternative Selection Decision Record Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.

Documentation: A complete ICE document consists of the combination of the outputs from either a completed and signed waiver form or both Stage 1 and Stage 2 worksheets (along with supporting costing and/or environmental documentation), to be included in the approved project Concept Report (or equivalent) or as a stand-alone document.

GDOT ICE STAGE 1: SCREENING DECISION RECORD

ICE Version 2.14 | Revised 08/03/2018

GDOT PI #	0014079
Project Location:	SR 14 Spur @ SR 14/US 29
Prepared by:	Lowe Engineers
Analyst:	JP
Date:	6/6/2019

Answer "Yes" or "No" to each policy question for each control type to identify which alternatives should be evaluated in the Stage 2 Decision Record; enter justification in the rightmost column

Note: Up to 5 alternatives may be selected and evaluated; Use this ICE Stage 1 to screen 5 or fewer alternatives to evaluate in Stage 2

	Intersection Alternative (see "Intersections" tab for detailed description of intersection/interchange type)	1. Does alternative address the project need in a balanced manner and in scale with the project?	2. Does alternative improve safety performance in terms of reducing severe crashes?	3. Does alternative incorporate safety, convenience and accessibility for pedestrians and/or bicyclists?	4. Does alternative improve (or preserve) traffic operations (congestion, delay, reliability, etc.)?	5. Does alternative appear feasible given the site characteristics, constrains & location context?	6. Does alternative appear feasible with respect to other project factors?	7. Overall feasible alternative (select alternative for further evaluation in Stage 2)?	Screening Decision Justification:
Unsignalized Intersections	Conventional (Minor Stop)	No	No	No	No	No	No	No	Too much conflicting volume; presents safety and operations deficiencies
	Conventional (All-Way Stop)	No	No	No	No	No	No	No	Not suitable on multi-lane highway
	Mini Roundabout	No	No	No	No	No	No	No	Not suitable on multi-lane highway
	Single Lane Roundabout	No	No	No	No	No	No	No	Not suitable on multi-lane highway
	Multilane Roundabout	No	Yes	Yes	No	Yes	Yes	Yes	Handles conflicting traffic; ROW impact manageable
	RCUT (stop control)	No	No	No	No	No	No	No	Not on median-divided highway
	RIRO w/down stream U-Turn	No	No	No	No	No	No	No	Not on median-divided highway
	High-T (unsignalized)	No	No	No	No	No	No	No	Not a T-intersection
	Offset-T Intersections	No	No	No	No	No	No	No	Too much through volume
	Diamond Interch (Stop Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diamond Interch (RAB Control)	No	No	No	No	No	No	No	Not an interchange situation
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	Intersection signalized and meets warrants
	Other unignalized (provide description):	No	No	No	No	No	No	No	Intersection signalized and meets warrants
Signalized Intersections	Traffic Signal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Existing Condition
	Median U-Turn (Indirect Left)	No	No	No	No	No	No	No	Not on median-divided highway
	RCUT (signalized)	No	No	No	No	No	No	No	Not Feasible due to high left+through volume & not median divided highway
	Displaced Left Turn (CFI)	No	Yes	Yes	No	No	No	No	Insufficient expected traffic volumes
	Continuous Green-T	No	No	No	No	No	No	No	Not a T-intersection
	Jughandle	No	No	No	No	No	No	No	Cost and impact too significant to justify operations and safety benefits
	Quadrant Roadway	No	No	No	No	No	No	No	Cost and impact too significant to justify operations and safety benefits
	Diamond Interch (Signal Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diverging Diamond	No	No	No	No	No	No	No	Not an interchange situation
	Single Point Interchange	No	No	No	No	No	No	No	Not an interchange situation
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	No additional turn lanes expected
	Other Signalized (provide description):	No	No	No	No	No	No	No	No other alternatives considered

= Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record

GDOT INTERSECTION CONTROL EVALUATION (ICE) TOOL

ICE Version 2.14 | Revised 08/03/2018

GDOT PI # (or N/A): 0014079 Request By: District Engineer

County: Troup GDOT District: 3 - Thomaston

Major (State) Road: SR 14 Spur Speed Limit: 55 mph

Minor (Crossing) ST: Home Depot Dwy Speed Limit: < 35 mph

Major ST Direction: North/South Area Type: Urban

Intersection Control: Conventional (Minor Stop)

Prepared By: Lowe Engineers Analyst: JP

Date: 6/6/2019 Project ID: 14079

Project Purpose: Widening/Reconstruction

2018	Existing (current data) Year
2026	Project Opening Year
2046	Project Design Year

Annual Growth Rate: 1.3%

K Factor*:

#DIV/0!

	EB	WB	NB	SB
Peak Hour % Trucks	0%	0%	0%	0%

EB Home Depot Dwy | WB Home Depot Dwy | NB SR 14 Spur | SB SR 14 Spur | Peds

2018 Intersection Daily Entering Volume: #DIV/0!

Legend:

000 = AM Peak Approach Vol

(000) = PM Peak Approach Vol

[000] = ADT Volume (Estimate)

#DIV/0!

2026 Opening Year Volumes

#DIV/0!

2026 Intersection Daily Entering Volume: #DIV/0!

#DIV/0!

2046 Design Year Volumes

#DIV/0!

2046 Intersection Daily Entering Volume: #DIV/0!

#DIV/0!

Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the *Toward Zero Deaths* vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

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Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

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Stage 2: Alternative Selection Decision Record Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.

Documentation: A complete ICE document consists of the combination of the outputs from either a completed and signed waiver form or both Stage 1 and Stage 2 worksheets (along with supporting costing and/or environmental documentation), to be included in the approved project Concept Report (or equivalent) or as a stand-alone document.

GDOT ICE STAGE 1: SCREENING DECISION RECORD

ICE Version 2.14 | Revised 08/03/2018

GDOT PI #	0014079
Project Location:	SR 14 Spur @ Home Depot Dwy
Prepared by:	Lowe Engineers
Analyst:	JP
Date:	6/7/2019

Answer "Yes" or "No" to each policy question for each control type to identify which alternatives should be evaluated in the Stage 2 Decision Record; enter justification in the rightmost column

Note: Up to 5 alternatives may be selected and evaluated; Use this ICE Stage 1 to screen 5 or fewer alternatives to evaluate in Stage 2

	Intersection Alternative (see "Intersections" tab for detailed description of intersection/interchange type)	1. Does alternative address the project need in a balanced manner and in scale with the project?	2. Does alternative improve safety performance in terms of reducing severe crashes?	3. Does alternative incorporate safety, convenience and accessibility for pedestrians and/or bicyclists?	4. Does alternative improve (or preserve) traffic operations (congestion, delay, reliability, etc.)?	5. Does alternative appear feasible given the site characteristics, constrains & location context?	6. Does alternative appear feasible with respect to other project factors?	7. Overall feasible alternative (select alternative for further evaluation in Stage 2)?	Screening Decision Justification:
Unsignalized Intersections	Conventional (Minor Stop)	No	No	No	No	Yes	Yes	No	Does not meet spacing requirements from SR 109 for median break
	Conventional (All-Way Stop)	No	No	No	No	No	No	No	Not suitable on multi-lane highway
	Mini Roundabout	No	No	No	No	No	No	No	Mainline volumes >90%, not suitable on multi-lane highway
	Single Lane Roundabout	No	No	No	No	No	No	No	Mainline volumes >90%, not suitable on multi-lane highway
	Multilane Roundabout	No	No	No	No	No	No	No	Mainline volumes >90%
	RCUT (stop control)	Yes	Yes	No	Yes	Yes	No	Yes	Selected due to low side street volume and nearby U-turn location at SR 109
	RIRO w/down stream U-Turn	Yes	Yes	No	Yes	Yes	Yes	Yes	Selected due to low side street volume and nearby U-turn location at SR 109
	High-T (unsignalized)	Yes	Yes	No	Yes	No	No	No	Proximity to Auto Dealer dwy
	Offset-T Intersections	No	No	No	No	No	No	No	Only one T-intersection
	Diamond Interch (Stop Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diamond Interch (RAB Control)	No	No	No	No	No	No	No	Not an interchange situation
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	No turn lanes anticipated
	Other unignalized (provide description):	No	No	No	No	No	No	No	No other alternatives considered
Signalized Intersections	Traffic Signal	No	No	No	No	No	No	No	Does not meet spacing requirements from SR 109 or signal warrants
	Median U-Turn (Indirect Left)	No	No	No	No	No	No	No	Does not meet spacing requirements from SR 109 or signal warrants
	RCUT (signalized)	No	No	No	No	No	No	No	Does not meet spacing requirements from SR 109 or signal warrants
	Displaced Left Turn (CFI)	No	No	No	No	No	No	No	Does not meet spacing requirements from SR 109 or signal warrants
	Continuous Green-T	No	No	No	No	No	No	No	Does not meet spacing requirements from SR 109 or signal warrants
	Jughandle	No	No	No	No	No	No	No	Does not meet spacing requirements from SR 109 or signal warrants
	Quadrant Roadway	No	No	No	No	No	No	No	Does not meet spacing requirements from SR 109 or signal warrants
	Diamond Interch (Signal Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diverging Diamond	No	No	No	No	No	No	No	Not an interchange situation
	Single Point Interchange	No	No	No	No	No	No	No	Not an interchange situation
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	No turn lanes anticipated
	Other Signalized (provide description):	No	No	No	No	No	No	No	Does not meet warrants

= Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record

GDOT INTERSECTION CONTROL EVALUATION (ICE) TOOL

ICE Version 2.14 | Revised 08/03/2018

GDOT PI # (or N/A): 0014079 Request By: District Engineer

County: Troup GDOT District: 3 - Thomaston

Major (State) Road: SR 14 Spur Speed Limit: 55 mph

Minor (Crossing) ST: Auto Dealer Dwy Speed Limit: < 35 mph

Major ST Direction: North/South Area Type: Urban

Intersection Control: Conventional (Minor Stop)

Prepared By: Lowe Engineers Analyst: JP

Date: 6/6/2019 Project ID: 14079

Project Purpose: Widening/Reconstruction

2018	Existing (current data) Year
2026	Project Opening Year
2046	Project Design Year

Annual Growth Rate: 1.3%

K Factor*:

#DIV/0!

(0)	(0)	(0)	(0)
0	0	0	0

SB SR 14 Spur

EB Auto Dealer Dwy

Peds				Peds	0	(0)
(0)	0				0	(0)
(0)	0		2018 Intersection Daily Entering Volume: #DIV/0!		0	(0)
(0)	0				0	(0)
(0)	0	Peds		Peds	WB Auto Dealer Dwy	

#DIV/0! #DIV/0!

NB SR 14 Spur

0	0	0	0
(0)	(0)	(0)	(0)

#DIV/0!

Peak Hour % Trucks			
EB	WB	NB	SB
0%	0%	0%	0%

Legend:

000 = AM Peak Approach Vol

(000) = PM Peak Approach Vol

[000] = ADT Volume (Estimate)

#DIV/0!

2026 Opening Year Volumes

#DIV/0!

(0)	(0)	(0)	(0)
0	0	0	0

SB SR 14 Spur

EB Auto Dealer Dwy

Peds				Peds	0	(0)
(0)	0				0	(0)
(0)	0		2026 Intersection Daily Entering Volume: #DIV/0!		0	(0)
(0)	0				0	(0)
(0)	0	Peds		Peds	WB Auto Dealer Dwy	

#DIV/0! #DIV/0!

NB SR 14 Spur

0	0	0	0
(0)	(0)	(0)	(0)

#DIV/0!

2046 Design Year Volumes

#DIV/0!

(0)	(0)	(0)	(0)
0	0	0	0

SB SR 14 Spur

EB Auto Dealer Dwy

Peds				Peds	0	(0)
(0)	0				0	(0)
(0)	0		2046 Intersection Daily Entering Volume: #DIV/0!		0	(0)
(0)	0				0	(0)
(0)	0	Peds		Peds	WB Auto Dealer Dwy	

#DIV/0! #DIV/0!

NB SR 14 Spur

0	0	0	0
(0)	(0)	(0)	(0)

#DIV/0!

Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the *Toward Zero Deaths* vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

Tool Goal: The goal of this ICE tool is to provide a simplified and consistent way of importing traffic, safety, cost, environmental impact and stakeholder posture data to assess and quantify intersection control improvement benefits. The tool supports the ICE policy and procedures to provide traceability, transparency, consistency and accountability when identifying and selecting an intersection control solution that both meets project purpose and reflects overall best value in terms of specific performance-based criteria.

Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage Process: A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Screening Decision Record Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves as a screening effort meant to *eliminate* non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column.

Stage 2: Alternative Selection Decision Record Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.

Documentation: A complete ICE document consists of the combination of the outputs from either a completed and signed waiver form or both Stage 1 and Stage 2 worksheets (along with supporting costing and/or environmental documentation), to be included in the approved project Concept Report (or equivalent) or as a stand-alone document.

GDOT ICE STAGE 1: SCREENING DECISION RECORD

ICE Version 2.14 | Revised 08/03/2018

GDOT PI #	0014079
Project Location:	SR 14 Spur @ Auto Dealer Dwy
Prepared by:	Lowe Engineers
Analyst:	JP
Date:	8/8/2019

Answer "Yes" or "No" to each policy question for each control type to identify which alternatives should be evaluated in the Stage 2 Decision Record; enter justification in the rightmost column

Note: Up to 5 alternatives may be selected and evaluated; Use this ICE Stage 1 to screen 5 or fewer alternatives to evaluate in Stage 2

	Intersection Alternative (see "Intersections" tab for detailed description of intersection/interchange type)	1. Does alternative address the project need in a balanced manner and in scale with the project?	2. Does alternative improve safety performance in terms of reducing severe crashes?	3. Does alternative incorporate safety, convenience and accessibility for pedestrians and/or bicyclists?	4. Does alternative improve (or preserve) traffic operations (congestion, delay, reliability, etc.)?	5. Does alternative appear feasible given the site characteristics, constrains & location context?	6. Does alternative appear feasible with respect to other project factors?	7. Overall feasible alternative (select alternative for further evaluation in Stage 2)?	Screening Decision Justification:
Unsignalized Intersections	Conventional (Minor Stop)	Yes	No	No	No	Yes	Yes	Yes	Terminus of project; would not require mid-block U-turn
	Conventional (All-Way Stop)	No	No	No	No	No	No	No	Not suitable on multi-lane highway
	Mini Roundabout	No	No	No	No	No	No	No	Mainline volumes >90%, not suitable on multi-lane highway
	Single Lane Roundabout	No	No	No	No	No	No	No	Mainline volumes >90%, not suitable on multi-lane highway
	Multilane Roundabout	No	Yes	Yes	No	No	No	No	Mainline volumes >90%
	RCUT (stop control)	Yes	Yes	No	Yes	No	Yes	Yes	Meets spacing from SR 109; may require mid-block U-turn
	RIRO w/down stream U-Turn	Yes	Yes	No	Yes	Yes	Yes	Yes	Meets spacing from SR 109; may require mid-block U-turn
	High-T (unsignalized)	Yes	Yes	No	Yes	No	No	No	Proximiy to Home Depot dwy
	Offset-T Intersections	No	No	No	No	No	No	No	Only one T-intersection
	Diamond Interch (Stop Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diamond Interch (RAB Control)	No	No	No	No	No	No	No	Not an interchange situation
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	No turn lanes anticipated
	Other unignalized (provide description):	No	No	No	No	No	No	No	No other alternatives considered
Signalized Intersections	Traffic Signal	No	No	No	No	No	No	No	Does not meet warrants
	Median U-Turn (Indirect Left)	No	No	No	No	No	No	No	Does not meet warrants
	RCUT (signalized)	No	No	No	No	No	No	No	Does not meet warrants
	Displaced Left Turn (CFI)	No	No	No	No	No	No	No	Does not meet warrants
	Continuous Green-T	No	No	No	No	No	No	No	Does not meet warrants
	Jughandle	No	No	No	No	No	No	No	Does not meet warrants
	Quadrant Roadway	No	No	No	No	No	No	No	Does not meet warrants
	Diamond Interch (Signal Control)	No	No	No	No	No	No	No	Not an interchange situation
	Diverging Diamond	No	No	No	No	No	No	No	Not an interchange situation
	Single Point Interchange	No	No	No	No	No	No	No	Not an interchange situation
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	No turn lanes anticipated
	Other Signalized (provide description):	No	No	No	No	No	No	No	Does not meet warrants

☐ = Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record

HCS7 Two-Lane Highway Report

Project Information

Analyst	RJM	Date	12/3/2019
Agency	Lowe Engineers, LLC	Analysis Year	2018
Jurisdiction	Troup County	Time Period Analyzed	AM Peak
Project Description	SR 14 Spur from SR 109 to US 29/SR 14	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5700
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	17.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	891	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	17.50
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.52

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	57.9
Speed Slope Coefficient	3.70059	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.31034	PF Power Coefficient	0.75663
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	11.4
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5700	-	-	54.5

Vehicle Results

Average Speed, mi/h	54.5	Percent Followers, %	69.9
Segment Travel Time, minutes	1.19	Followers Density, followers/mi/ln	11.4
Vehicle LOS	D		

HCS7 Two-Lane Highway Report

Project Information

Analyst	RJM	Date	12/3/2019
Agency	Lowe Engineers, LLC	Analysis Year	2018
Jurisdiction	Troup County	Time Period Analyzed	PM Peak
Project Description	SR 14 Spur from SR 109 to US 29/SR 14	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5700
Lane Width, ft	12	Shoulder Width, ft	0
Speed Limit, mi/h	55	Access Point Density, pts/mi	17.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	960	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	17.50
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.56

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	53.7
Speed Slope Coefficient	3.47295	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34080	PF Power Coefficient	0.74505
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	13.9
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5700	-	-	50.4

Vehicle Results

Average Speed, mi/h	50.4	Percent Followers, %	72.8
Segment Travel Time, minutes	1.29	Followers Density, followers/mi/ln	13.9
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	RJM	Date	12/3/2019
Agency	Lowe Engineers, LLC	Analysis Year	2046
Jurisdiction	Troup County	Time Period Analyzed	AM Peak (No Build)
Project Description	SR 14 Spur from SR 109 to US 29/SR 14	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5700
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	17.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	1351	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	17.50
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.79

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	57.9
Speed Slope Coefficient	3.70059	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.31034	PF Power Coefficient	0.75663
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	20.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5700	-	-	53.8

Vehicle Results

Average Speed, mi/h	53.8	Percent Followers, %	80.7
Segment Travel Time, minutes	1.20	Followers Density, followers/mi/ln	20.3
Vehicle LOS	E		

HCS7 Two-Lane Highway Report

Project Information

Analyst	RJM	Date	12/3/2019
Agency	Lowe Engineers, LLC	Analysis Year	2046
Jurisdiction	Troup County	Time Period Analyzed	PM Peak - No Build
Project Description	SR 14 Spur from SR 109 to US 29/SR 14	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	5700
Lane Width, ft	12	Shoulder Width, ft	0
Speed Limit, mi/h	55	Access Point Density, pts/mi	17.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	1713	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.87	Total Trucks, %	17.50
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	1.01

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	53.7
Speed Slope Coefficient	3.47295	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.34080	PF Power Coefficient	0.74505
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	28.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5700	-	-	49.5

Vehicle Results

Average Speed, mi/h	49.5	Percent Followers, %	85.8
Segment Travel Time, minutes	1.31	Followers Density, followers/mi/ln	28.7
Vehicle LOS	F		

HCS7 Multilane Highway Report

Project Information

Analyst	RJM	Date	12/3/2019
Agency	Lowe Engineers, LLC	Analysis Year	2046
Jurisdiction	Troup County	Time Period Analyzed	2046 AM (Build)
Project Description	SR 14 Spur from SR 109 to US 29/SR 14	Unit	United States Customary

Direction 1 Geometric Data

Direction 1	Northbound		
Number of Lanes (N), ln	2	Terrain Type	Rolling
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	11.0
Lane Width, ft	12	Left-Side Lateral Clearance (LC_R), ft	4
Median Type	Divided	Total Lateral Clearance (TLC), ft	10
Free-Flow Speed (FFS), mi/h	51.9		

Direction 1 Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Driver Population SAF	0.975	Final Capacity Adjustment Factor (CAF)	0.968
Driver Population CAF	0.968		

Direction 1 Demand and Capacity

Volume(V) veh/h	955	Heavy Vehicle Adjustment Factor (f_{HV})	0.741
Peak Hour Factor	0.87	Flow Rate (V_p), pc/h/ln	740
Total Trucks, %	17.50	Capacity (c), pc/h/ln	2012
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1948
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38

Direction 1 Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	50.6
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	14.6
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	2.8		

Direction 1 Bicycle LOS

Flow Rate in Outside Lane (v_{OL}),veh/h	549	Effective Speed Factor (S_t)	4.79
Effective Width of Volume (W_v), ft	18	Bicyle LOS Score (BLOS)	9.12
Average Effective Width (W_e), ft	24	Bicycle Level of Service (LOS)	F

HCS7 Multilane Highway Report

Project Information

Analyst	RJM	Date	12/3/2019
Agency	Lowe Engineers, LLC	Analysis Year	2046
Jurisdiction	Troup County	Time Period Analyzed	2046 AM (Build)
Project Description	SR 14 Spur from SR 109 to US 29/SR 14	Unit	United States Customary

Direction 2 Geometric Data

Direction 2	Southbound		
Number of Lanes (N), ln	2	Terrain Type	Rolling
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	8.0
Lane Width, ft	12	Left-Side Lateral Clearance (LC_R), ft	4
Median Type	Divided	Total Lateral Clearance (TLC), ft	10
Free-Flow Speed (FFS), mi/h	52.6		

Direction 2 Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Driver Population SAF	0.975	Final Capacity Adjustment Factor (CAF)	0.968
Driver Population CAF	0.968		

Direction 2 Demand and Capacity

Volume(V) veh/h	1225	Heavy Vehicle Adjustment Factor (f_{HV})	0.741
Peak Hour Factor	0.87	Flow Rate (V_p), pc/h/ln	950
Total Trucks, %	17.50	Capacity (c), pc/h/ln	2026
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1961
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.48

Direction 2 Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	51.3
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	18.5
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	2.0		

Direction 2 Bicycle LOS

Flow Rate in Outside Lane (v_{OL}),veh/h	704	Effective Speed Factor (S_t)	4.79
Effective Width of Volume (W_v), ft	18	Bicyle LOS Score (BLOS)	9.24
Average Effective Width (W_e), ft	24	Bicycle Level of Service (LOS)	F

HCS7 Multilane Highway Report

Project Information

Analyst	RJM	Date	12/3/2019
Agency	Lowe Engineers, LLC	Analysis Year	2046
Jurisdiction	Troup County	Time Period Analyzed	2046 PM (Build)
Project Description	SR 14 Spur from SR 109 to US 29/SR 14	Unit	United States Customary

Direction 1 Geometric Data

Direction 1	Northbound		
Number of Lanes (N), ln	2	Terrain Type	Rolling
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	11.0
Lane Width, ft	12	Left-Side Lateral Clearance (LC_R), ft	4
Median Type	Divided	Total Lateral Clearance (TLC), ft	10
Free-Flow Speed (FFS), mi/h	51.9		

Direction 1 Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Driver Population SAF	0.975	Final Capacity Adjustment Factor (CAF)	0.968
Driver Population CAF	0.968		

Direction 1 Demand and Capacity

Volume(V) veh/h	1550	Heavy Vehicle Adjustment Factor (f_{HV})	0.741
Peak Hour Factor	0.87	Flow Rate (V_p), pc/h/ln	1202
Total Trucks, %	17.50	Capacity (c), pc/h/ln	2012
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1948
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.62

Direction 1 Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	50.6
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	23.8
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	2.8		

Direction 1 Bicycle LOS

Flow Rate in Outside Lane (v_{OL}),veh/h	891	Effective Speed Factor (S_t)	4.79
Effective Width of Volume (W_v), ft	18	Bicyle LOS Score (BLOS)	9.36
Average Effective Width (W_e), ft	24	Bicycle Level of Service (LOS)	F

HCS7 Multilane Highway Report

Project Information

Analyst	RJM	Date	12/3/2019
Agency	Lowe Engineers, LLC	Analysis Year	2046
Jurisdiction	Troup County	Time Period Analyzed	2046 PM (Build)
Project Description	SR 14 Spur from SR 109 to US 29/SR 14	Unit	United States Customary

Direction 2 Geometric Data

Direction 2	Southbound		
Number of Lanes (N), ln	2	Terrain Type	Rolling
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	8.0
Lane Width, ft	12	Left-Side Lateral Clearance (LC_R), ft	4
Median Type	Divided	Total Lateral Clearance (TLC), ft	10
Free-Flow Speed (FFS), mi/h	52.6		

Direction 2 Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Driver Population SAF	0.975	Final Capacity Adjustment Factor (CAF)	0.968
Driver Population CAF	0.968		

Direction 2 Demand and Capacity

Volume(V) veh/h	1320	Heavy Vehicle Adjustment Factor (f_{HV})	0.741
Peak Hour Factor	0.87	Flow Rate (V_p), pc/h/ln	1024
Total Trucks, %	17.50	Capacity (c), pc/h/ln	2026
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1961
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.52

Direction 2 Speed and Density

Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	51.3
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	20.0
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	2.0		

Direction 2 Bicycle LOS

Flow Rate in Outside Lane (v_{OL}),veh/h	759	Effective Speed Factor (S_t)	4.79
Effective Width of Volume (W_v), ft	18	Bicyle LOS Score (BLOS)	9.28
Average Effective Width (W_e), ft	24	Bicycle Level of Service (LOS)	F

Georgia Department of Transportation
Bridge Inventory Data Listing

Processed Date:Nov-18-2019 14:09 PM

Parameters: Bridge Serial Number

Bridge Serial Number: 285-0021-0 **County: Troup** **SUFF. RATING: 78.5**

Location & Geography

Structure ID:	285-0021-0
200 Bridge Information:	06
*6 Feature Intersected:	CSX RAILROAD
*7A Route Number Carried:	SR00014
*7B Facility Carried:	LAGRANGE BYPASS
9 Location:	EAST EDGE OF LAGRANGE
2 GDOT District:	4841300000 - District Three- Thomaston
*91 Inspection Frequency:	24 Date: Dec-12-2017
92A Fracture Critical Insp. Freq:	0 Date: Feb-01-1901
92B Underwater Insp Freq:	0 Date: Feb-01-1901
92C Other Spc. Insp Freq:	0 Date: Feb-01-1901
* 4 Place Code:	44340
*5A Inventory Route(O/U):	1
5B Route Type:	3 - State
5C Service Designation:	4- Spur
5D Route Number:	00014
5E Directional Suffix:	0. Not applicable
*16 Latitude:	33 - 2.9376
*17 Longtitude:	84 - 59.0406
98A Border Bridge:	98B: GA% 00
99 ID Number:	
*100 STRAHNET:	0- The Feature is not a STRAHNET route.
12 Base Highway Network:	Yes
13A LRS Inventory Route:	28510014
13B Sub Inventory Route:	0
101 Parallel Structure:	N. No parallel structure exists
*102 Direction of Traffic:	2- Two Way
*264 Road Inventory Mile Post:	4.38
*208 Inspection Area:	Area 03
*104 Highway System:	0- Inventory Route is not on the NHS
*26 Functional Classification:	16- Urban - Minor Arterial
*204A Federal Route Type:	M - Urban.
*204B Federal Route Number:	02912
105 Federal Lands Highway:	0. Not applicable
*110 Truck Route:	0- The Feature is not part of the National Network for Trucks
217 Benchmark Elevation:	0000.00
* Location ID No:	285-00014P-004.58N

218 Datum:	0- Not Applicable
*19 Bypass Length:	3
*20 Toll:	3- On a Free Road or Non-Highway
*21 Maintenance Responsibility:	01-State Highway Agency.
*22 Owner:	01-State Highway Agency.
*31 Design Load:	6- HS 20 + Mod (2-24,000# Axles @ 4ft Ctrs., when they govern)
37 Historical Significance:	5- Not eligible for the National Register of Historic Places
205 Congressional District:	003
27 Year Constructed:	1969
106 Year Reconstructed:	0
33 Bridge Median:	0-None
34 Skew:	27
35 Structure Flared:	No
38 Navigation Control:	N- Bridge is not over water
213 Special Steel Design:	0- Not applicable or other
267A Type Paint Super Structure:	5- Waterborne System (Type VI or VII) Year : 1999
267B Type Paint Sub Structure:	0- Not Applicable Year : 0000
*42A Type of Service On:	1-Highway
*42B Type of Service Under:	2-Railroad
214A Movable Bridge:	0
214B Operator on Duty:	0
203 Type Bridge:	O - Multiple combinations (be sure the different types are on file). O. Concrete M. Steel O. Concrete
259 Pile Encasement:	3
*43A Structure Type Main material:	3-Steel
*43B Structure Type Main Type:	2-Stringer/Multi-Beam or Girder
45 Number of Main Spans:	3
44 Structure Type Approach:	A:0- Other B: 0- Other
46 Number of Approach Spans:	0
226 Bridge Curve:	A: Vertical: NoB: Horizontal: No
111 Pier Protection:	N - Navigation Control item coded 0, or Feature not a waterway
107 Deck Structure Type:	1 - C-I-P Portland Cement Concrete - Epoxy Coated Rebars
108A Wearing Surface Type:	1. Concrete
108B Membrane Type:	0. None
108C Deck Protection:	8. Unknown
265 Underwater Inspection Area:	0

Signs & Attachments

225 Expansion Joint Type:	15- Evazote Joint.
242 Deck Drains:	0- None.
243A Parapet Location:	0- None present.
243B Parapet Height:	0.00
243C Parapet Width:	0.00
238A Curb Height:	0.8
238B Curb Material:	1- Concrete.
239A Handrail Left:	1- Concrete.
239B Handrail Right:	1- Concrete.
*240 Median Barrier Rail:	0- None.
241A Bridge Median Height:	0
241B Bridge Median Width:	0
*230A Guardrail Location Direction Rear:	3- Both sides.
*230B Guardrail Location Direction Fwrd:	3- Both sides.
*230C Guardrail Location Opposing Rear:	0- None.
*230D Guardrail Location Opposing Fwrd:	0- None.
244 Approach Slab:	3- Forward and Rear.
224 Retaining Wall:	0- None.
233 Posted Speed Limit:	55
236 Warning Sign:	No
234 Delineator:	Yes
235 Hazard Boards:	No
237A Gas:	00- Not Applicable
237B Water:	32- Side Right.
237C Electric:	00- Not Applicable
237D Telephone:	00- Not Applicable
237E Sewer:	00- Not Applicable
247A Lighting: Street:	No
247B Navigation:	No
247C Aerial:	No
*248 County Continuity No.:	00
36A Bridge Railings:	2- Inspected feature meets acceptable construction date standards.
36B Transition:	2- Inspected feature meets acceptable construction date standards.
36C Approach Guardrail:	2- Inspected feature meets acceptable construction date standards.
36D Approach Guardrail Ends:	2- Inspected feature meets acceptable construction date standards.

Georgia Department of Transportation
Bridge Inventory Data Listing

Processed Date:Nov-18-2019 14:09:28 PM

Bridge Serial Number: 285-0021-0

County: Troup

SUFF. RATING: 78.5

Programming Data

201 Project Number:	S-SG-2647 (1)
202 Plans Available:	4- Plans in InfoImage/GAMS
249 Proposed Project Number:	000000000000000000000000
250A Reconstruction Approval Status:	No
250B Route Approval Status:	No
250C Approval Status Definition:	0
250D Approval Status Federal:	0
251Project Identification Number:	0014079
252 Contract Date:	Feb-01-1901
260 Seismic Number:	00000
75A Type Work Proposed:	0- Not Applicable
75B Work Done by:	0- Initial Inventory
94 Bridge Improvement Cost:(X$1,000)	$535
95 Roadway Improvement Cost: (X$1,000)	$54
96 Total Improvement Cost: (X$1,000)	$803
76 Improvement Length:	0'
97 Year Improvement Cost Based On:	2013
114 Future AADT:	23145
115 Future AADT Year:	2032

Hydraulic Data

113 Scour Critical:	N. Bridge not over waterway.
216A Water Depth:	00.0
216B Bridge Height:	00.0
222 Slope Protection:	4
221A Spur Dike Rear:	
221B Spur Dike Fwd:	
219 Fender System:	0- None.
220 Dolphin:	
223A Culvert Cover:	000
223B Culvert Type:	0- Not Applicable
223C Number of Barrels:	0
223D Barrel Width:	0
223E Barrel Height:	0
223F Culvert Length:	0
223G Culvert Apron:	0
39 Navigation Vertical Clearance:	0'
40 Navigation Horizontal Clearance:	0
116 Navigation Vertical Clear Closed:	0

Measurements:

*29 AADT:	15430
*30 AADT Year:	2012
109 % Truck Traffic:	1
* 28A Lanes On:	2
*28B Lanes Under:	0
210A Tracks On:	00
210B Tracks Under:	1
* 48 Maximum Span Length:	46
* 49 Structure Length:	137
51 Bridge Roadway Width:	42.9'
52 Deck Width:	46.7'
* 47 Total Horizontal Clearance:	42.9'
50A Curb / Sidewalk Width Left:	0.6
50B Curb / Sidewalk Width Right:	0.6
32 Approach Rdwy. Width:	24'

***229 Approach Roadway**

Rear Shoulder Left: Width:	8	*Right Width*:8	Type: 8 - Grass (Dirt).
Fwd Shoulder: Left Width:	8	*Right Width*:8	Type: 8 - Grass (Dirt).
Rear Pavement: Width:	24	*Type*:2- Asphalt.	
Forward Pavement: Width:	24	*Type*:2- Asphalt.	
Intersection Rear:	0	*Forward*:0	

53 Minimum Vertical Clearance Over Rd:	99' 99"
54A Under Reference Feature:	R- Railroad beneath structure.
54B Minimum Clearance Under:	22' 4"

***228 Minimum Vertical Clearance**

228A Actual Odometer Direction:	99'99"
228B Actual Opposing Direction:	99'99"
228C Posted Odometer Direction:	00'00"
228D Posted Opposing Direction:	00'00"
55A Lateral Underclearance Reference:	R- Railroad beneath structure.
55B Lateral Underclearance on Right:	18.2
56 Lateral Underclearance on Left:	0
10A Direction of Travel for Max Min:	0
10B Max Min Vertical Clearance:	99'99"
245A Deck Thickness Main:	7.0
245B Deck Thickness Approach:	0
246 Overlay Thickness:	0

Ratings and Posting

65 Inventory Rating Method:	1-Load Factor (LF)
63 Operating Rating Method:	1-Load Factor (LF)
66A Inventory Type:	2 - HS loading.
66B Inventory Rating:	23
64A Operating Type:	2 - HS loading.
64B Operating Rating:	39

231Calculated Loads		**Posting Required**
231A H-Modified:	21	No
231B Type3/Tandem:	22	No
231C Timber:	27	No
231D HS-Modified:	24	No
231E Type 3S2:	32	No
231F Piggyback:	38	No

261 H Inventory Rating:	20
262 H Operating Rating:	34
67 Structural Evaluation:	5
58 Deck Condition:	6 - Satisfactory Condition
59 Superstructure Condition:	7 - Good Condition
* 227 Collision Damage:	
60A Substructure Condition:	7 - Good Condition
60B Scour Condition:	N - Not Applicable
60C Underwater Condition:	N - Not Applicable
71 Waterway Adequacy:	Not Applicable.
61 Channel Protection Cond.:	Not Applicable.
68 Deck Geometry:	5
69 UnderClr. Horz/Vert:	6
72 Approach Alignment:	8-No reduction of vehicle operating speed required.
62 Culvert:	N - Not Applicable
70 Bridge Posting Required:	5. Equal to or above legal loads
41 Struct Open, Posted, CL:	A. Open, no restriction
* 103 Temporary Structure:	No

232 Posted Loads

232A H-Modified:	00
232B Type3/Tandem:	00
232C Timber:	00
232D HS-Modified:	00
232E Type 3s2:	00
232F Piggyback:	00
253 Notification Date:	Feb-01-1901
258 Federal Notify Date:	Feb-01-1901

Michael Stoltzfus

From: Meyer, Matt <Matt.Meyer@arcadis.com>
Sent: Monday, April 16, 2018 2:00 PM
To: Franks, Jill L.
Cc: Coll, Marcela; Scott Willis ; Pelegrin, Arianne (External); Schofield, Joseph R.; Carter, Harold
Subject: RE: Future tracks request: PINo.0014079, LaGrange, Troup Co., GA, Davis Rd. (SR-14) Bridge Replacement over CSXT, DOT# 050480A, RRMP XXB-68.10, Atlanta Div., AWP W of A Sub.

Hello Jill,

CSXT right-of-way is approximately 210-feet wide roughly centered on the existing mainline track. Provide 100-ft of horizontal clearance over and orthogonal to the mainline. This is to accommodate access roads, utilities, drainage, and two(2) future tracks, one either side of the existing mainline, with 15-ft track centers. Assume top-of-rail elevations to match that of the existing mainline rails. Also, the standard 23-ft minimum vertical clearance will be required over all three tracks, six(6) feet from each centerline. Provide a multi-span structure bridging the entire right-of-way. MSE walls will not be permitted within the right-of-way. Protective fencing will be required along the span over the track.

The current train traffic on the AWP W of A subdivision during a typical day through the limits of this project is Seventeen (17) moves per day at a maximum authorized speed of 50 MPH without passenger service. This represents an average of Ten (10) through trains, Seven(7) night through trains, and zero(0) switching trains.

Let me know if there are any questions.

Thank you,

Matt Meyer | Project Manager - Rail | matt.meyer@arcadis.com
Arcadis | Arcadis U.S., Inc.
1650 Prudential Drive, Suite #400, Jacksonville, FL | 32207 | USA
T: +1.904.861.2875 | M: + 1 904.571.4721

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From: Franks, Jill L. <jfranks@dot.ga.gov>
Sent: Monday, April 16, 2018 12:56 PM
To: Meyer, Matt <Matt.Meyer@arcadis.com>; Scott Willis <Scott_Willis@CSX.com>; Schofield, Joseph R. <Joseph.Schofield@arcadis.com>; Pelegrin, Arianne (External) <Arianne_Pelegrin@csx.com>
Cc: Coll, Marcela <mcoll@dot.ga.gov>
Subject: RE: Future tracks request: PINo.0014079, LaGrange, Troup Co., GA, Davis Rd. (SR-14) Bridge Replacement over CSXT, DOT# 050480A, RRMP XXB-68.10, Atlanta Div., AWP W of A Sub.

PI No. 0014079, Troup County
RR File #: TBD, **RR Inv.#: 050480A, RRMP XXB0068.10**
LaGrange, Georgia
SR 14 SPUR FROM S OF SR 109 TO SR 14/US 29

Matt,
I am checking again on the future track requirement for the above location.

Thanks,

Jill L. Franks, P.E.
Utilities Railroad Liaison Manager
Office of Utilities – 10th floor
Georgia Department of Transportation
600 W. Peachtree Street NW
Atlanta, GA 30308
Desk: 404-631-1370
Cell: 404-694-6570

From: Franks, Jill L.
Sent: Friday, March 16, 2018 8:19 AM
To: Meyer, Matt <Matt.Meyer@arcadis.com>; Scott Willis <Scott_Willis@CSX.com>; Schofield, Joseph R. <Joseph.Schofield@arcadis.com>; Pelegrin, Arianne (External) <Arianne_Pelegrin@csx.com>
Cc: Coll, Marcela <mcoll@dot.ga.gov>
Subject: Future tracks request: PINo.0014079, LaGrange, Troup Co., GA, Davis Rd. (SR-14) Bridge Replacement over CSXT, DOT# 050480A, RRMP XXB-68.10, Atlanta Div., AWP W of A Sub.

PI No. 0014079, Troup County
RR File #: TBD, **RR Inv.#: 050480A, RRMP XXB0068.10**
LaGrange, Georgia
SR 14 SPUR FROM S OF SR 109 TO SR 14/US 29

Matt,
I am checking on the status of the future track requirements at this location.

Thanks,

Jill L. Franks, P.E.
Utilities Railroad Liaison Manager
Office of Utilities – 10th floor
Georgia Department of Transportation
600 W. Peachtree Street NW

Atlanta, GA 30308
Desk: 404-631-1370
Cell: 404-694-6570

From: Coll, Marcela
Sent: Wednesday, December 06, 2017 10:42 AM
To: Meyer, Matt <Matt.Meyer@arcadis.com>
Cc: Franks, Jill L. <jfranks@dot.ga.gov>; Scott Willis <Scott_Willis@CSX.com>; Register, Christina (External) <Christina_Register@csx.com>; Schofield, Joseph R. <Joseph.Schofield@arcadis.com>
Subject: RE: PINo.0014079, LaGrange, Troup Co., GA, Davis Rd. (SR-14) Bridge Replacement over CSXT, DOT# 050480A, RRMP XXB-68.10, Atlanta Div., AWP W of A Sub.

Matt,

Thank you for the Val Map.
Does CSX have future track requirements in this location?

Thank you,

Marcela G. Coll
Utilities Railroad Specialist
Georgia Department of Transportation
Office of Utilities – One Georgia Center
Phone: (404) 631-1372

From: Meyer, Matt [mailto:Matt.Meyer@arcadis.com]
Sent: Wednesday, December 6, 2017 7:04 AM
To: Coll, Marcela <mcoll@dot.ga.gov>
Cc: Franks, Jill L. <jfranks@dot.ga.gov>; Scott Willis <Scott_Willis@CSX.com>; Register, Christina (External) <Christina_Register@csx.com>; Schofield, Joseph R. <Joseph.Schofield@arcadis.com>
Subject: PINo.0014079, LaGrange, Troup Co., GA, Davis Rd. (SR-14) Bridge Replacement over CSXT, DOT# 050480A, RRMP XXB-68.10, Atlanta Div., AWP W of A Sub.

Hello Marcela,

Please see the attached ValMap as requested for the subject project. Let us know if you need anything else.

Thank you,

Matt Meyer | Assistant Project Manager - Rail | matt.meyer@arcadis.com
Arcadis | Arcadis U.S., Inc.
1650 Prudential Drive, Suite #400, Jacksonville, FL | 32207 | USA
T: +1.904.861.2875 | M: + 1 904.571.4721

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ARCADIS

Be green. Save the Bees

From: Coll, Marcela [mailto:mcoll@dot.ga.gov]
Sent: Monday, November 20, 2017 11:18 AM
To: Scott Willis <Scott_Willis@CSX.com>; Register, Christina (External) <Christina_Register@csx.com>; Schofield, Joseph R. <Joseph.Schofield@arcadis.com>; Meyer, Matt <Matt.Meyer@arcadis.com>
Cc: Franks, Jill L. <jfranks@dot.ga.gov>
Subject: Request for a Val Map and Future Track requirements for SR 14 Spur project in LaGrange, PINo.0014079, Troup County

PI No. 0014079, Troup County
RR File #: TBD, **RR Inv.#: 050480A, RRMP XXB0068.10**
LaGrange, Georgia
SR 14 SPUR FROM S OF SR 109 TO SR 14/US 29
CONCEPT PHASE

Scott,

We have a project in concept phase which is a widening and reconstruction along SR 14 SPUR at the above mentioned railroad crossing. It includes a bridge replacement over the Railroad.
Please see attached google pin and Inventory Report for your convenience.

Would you please tell us if CSXT has any future plans of adding additional track(s) at this location? If you do have **future track requirements**, it will be necessary for you to provide us any additional information as to where the new track would be located in relation to the existing track. By providing this information to us it will allow us to accommodate your future needs in these plans early and avoid design issues that could arise later in our roadway design.

You will also need to include a defined plan of when the future track is planned to be constructed, also include general growth data on the railroad line. This is a Federal requirement.

We are also **requesting the Val Map** for this location.

Thank you,

Marcela G. Coll
Utilities Railroad Specialist
Georgia Department of Transportation
Office of Utilities – One Georgia Center
600 W. Peachtree Street NW, 10th Floor
Atlanta, GA 30308
Phone: (404) 631-1372
Email: mcoll@dot.ga.gov

Roadway fatalities in Georgia are up 33% in two years. That's an average of four deaths every single day! Many of these deaths are preventable and related to driver behavior: distracted or impaired driving, driving too fast for conditions, and/or failure to wear a seatbelt. Pledge to **DRIVE ALERT ARRIVE ALIVE**. Buckle up – Stay off the phone and mobile devices – Drive alert. Visit www.dot.ga.gov/DAAA. #ArriveAliveGA

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Meeting Minutes

Project:	**PI 0014079, Troup County** **SR 14 Spur from South of SR 109 to SR 14/US 29**	
Date:	January 3, 2019 at 1:30 PM	
RE:	Initial Concept Team Meeting	
Location:	GDOT – General Office, Room 409	
Participants:	Jason Mobley	*GDOT Project Manager*
	Michael Stoltzfus	*Lowe Engineers – Project Manager*
	(see sign in sheet)	

I. Welcome & Introductions (Jason Mobley, GDOT Project Manager (PM))

II. Project Identification (Jason Mobley, GDOT PM)

III. Need and Purpose Statement (Michael Stoltzfus, PM, Lowe Engineers)

- Troup County and the City of LaGrange expressed a desire for an alternate route for through traffic to avoid going through the center of LaGrange, and this proposed project is part of a larger effort to provide this alternative.

IV. Proposed Project Description (Michael Stoltzfus, PM, Lowe Engineers)

- This project proposes the widening of an existing 1.25 mile long two lane facility connecting SR 109 to SR 14/U.S. 29, which is currently part of the existing LaGrange Bypass/North Davis Road corridor

V. Functional Classification (Richard Meehan, Lowe Engineers)

- SR 14 Spur/S Davis Road – Urban Minor Arterial (55 mph)
- SR 109/Lafayette Parkway – Urban Principal Arterial (45 mph)
- SR 14/US 29/Hogansville Road – Urban Minor Arterial (45 mph)

VI. Traffic Projections (Richard Meehan, Lowe Engineers)

- Existing ADT – 18000 vpd*
- Expected Base Year (2026) – 20,000 vpd*
- Expected Design Year (2046) – 25,900 vpd*
- Growth 1.3%/yr*
- Trucks 16% at south end of project, 3.5% at north end*
- DHV – 2075 vph (D-55%)*

*based on the data presented to GDOT

- Submitted existing counts and forecasting memo to the planning office and awaiting their approval.

VII. Existing & Proposed Design Features (Michael Stoltzfus, PM, Lowe Engineers)

- Existing – two lanes with dedicated right turn lanes at various points along the route
- Proposed – four lanes divided with a 24' raised median as the preferred alternative

VIII. Alternatives Considered and Reasons for Rejection (Michael Stoltzfus, PM, Lowe Engineers)

- Alternative 1 has a 24' raised median throughout;
    - Have not finished ICE stage 1 to know what the intersections will look like.
    - Symmetrical widening to occur.
- Bridge across the railroad could create some staging challenges, so on our second alternative we were looking at different offset. What we are showing [on Alternative 2] is a 70' offset from outside edge of existing to outside edge of new bridge. On further discussions, that's excessive.
- We can probably reduce that down to where we have a 20' offset on the centerline. It still won't work nicely with the tangent to the south, but we can make it work with the curve on the north. It is still going to be not preferable geometry
- For the third alternative, we looked at a 32' depressed median to see how that would affect us on R/W, bridge structures, and for a construction cost comparison.

IX. Preferred Concept Alternative (Michael Stoltzfus, PM, Lowe Engineers)

- We're looking at the 24' raised median as our preferred alternative.

    Kimberly Nesbitt – Can that give you the capacity at a signalized intersection if ICE shows it's warranted for dual left turns in the future?

    Michael Stoltzfus – We will need to widen slightly at the very ends to get the dual left turns. I don't think it will, at this point, on the north end but the south end we're looking at dual left turns on the spur and potentially also on [eastbound] SR 109 and [southbound] SR 14.

Jason Mobley stated that Albert [Shelby] noted that CFI should be considered through the ICE.
KN – If it does show that it [CFI] could work, we would want to know what's the difference between that and the dual lane roundabout or whatever it shows for the preferred.

- Based on the traffic, it might impact right of way (R/W).

KN states that during analysis, limited access is shown. Limited access will change operation and change the cost of the (R/W).

X. Right of Way Displacements and Relocations (Michael Stoltzfus, PM, Lowe Engineers)

- Not looking at excessive R/W takes.
  - The only displacement that we currently see are the two properties on the east side on either side of the railroad tracks.
- Alternative 2 hits the building on the north side. That widening is much wider than we need for that shift and we're going to have a much-reduced shift in Alternative 2 in the final concept report
  - There was discussion regarding potential landlocking of the properties and providing shared access.

XI. Major Structures (David Strickland, Kimley-Horn)

- Existing bridge
  - 3-span
  - Steel beam
  - Roughly 47' wide
  - Roughly 140' long
  - Current sufficiency rating is under 80 today
  - Substandard vertical and horizontal railroad clearance
- Early railroad coordination is asking to design for an additional track. Typically, when we're putting bridges over dual tracks, that starts to put us in that 3-span arrangement with 180' long ballpark for a proposed bridge. Proposed to be a concrete beam bridge.

In Alternative 1, the existing bridge has a 10' shoulder. We would have to reduce the travel way on the existing bridge, remove some of the existing bridge, have our construction offset build what structure we need to get to one way each direction.

We had looked also at cost and it looks like pretty much a wash between doing a single structure with either Alternative 1, 2, or 3 or with two structures that are 8' apart.

XII. Staging/Maintenance of Traffic (Michael Stoltzfus, PM, Lowe Engineers)

- The area around the bridge will be the most difficult, otherwise with a symmetrical widening, 24' raised median where the existing 24' lanes are, and we will be building new on either side so staging will be relatively simple other than providing access to properties and driveway along the route. That doesn't look like an extreme challenge other than the bridge itself.

XIII. Design Variances and Exceptions (Michael Stoltzfus, PM, Lowe Engineers)

- Design Exceptions/Variances (DE/V): Variance needed for curb/gutter at median.
  - Possible DE/V at the north intersection because it doesn't line up going across it. It gets into a little bit more R/W, but no relocation. The deflections are a little problematic on both major intersections.
  - Commercial Driveway close to the railroad bridge. They'll be a little bit steep.

XIV. Environmental Concerns/Level of Environmental Analysis (Patrick Smith, Kimley-Horn)

This is a GEPA project, state-run project, so it does not approach the threshold for a document. There is no environmental document.

a. Stream, Wetlands, Open Waters and other ecology issues
   - Not done the ecology survey in part because of the weather.
     - Must have a stretch of no rain before you can do work.
   - No waters out there that are going to be a problem for the project.
     - On the northern end, there is a detention pond. That'd be an open water, but you're not going to touch that.
     - Running off to the west from that, looks like a dry drainage. There is something on the west side just south of SR 14, but you won't be getting into that.

b. Aquatics
   - Seriously doubt you'll have any aquatics species concerns

c. Air and Noise
   - Depending on what you do at the signalized intersection, you're going to do some air analysis, maybe some modeling. Noise is not an issue for state funded projects unless there is a historic resource that requires some analysis for noise impact.

d. History
   - Report is expected in the next couple of weeks.
   - Had 12 resources, 50 years or older. It seems unlikely that any of those will be considered eligible.

e. Archaeology
   - One previously recorded site that they had to revisit.
   - It's not eligible and it was already recommended as ineligible in the stateside files

f. Hazardous Materials
   - Still working on the Phase 1 ESA report.
   - Screening of the Underground Storage Tanks (USTs) found that everything was clustered on Lafayette.
     - Few sites probably within our environmental survey boundary that are considered leaking underground storage tanks
       - May require phase 2 testing
       - Will be made clear in the Phase 1 ESA.

g. PAR Report
   - This project won't need a PAR.

Jonathan Cox asked if there is any chance to stay out of a permit. **Patrick Smith** doubts they'll need a permit.
JM recommends **JC** plan of going to the Army Corps of Engineers with all three of these projects and just tell them what we're doing and be transparent.
KN – To establish independent utility, traffic could be very helpful since there is a major traffic drop-off as it relates to once it gets to the next state route. For a truck/freight designation bypass, you may able to establish independent utility regardless of the other two.
- Consensus was to present all of them but get the Army Corps of Engineers to agree to the independent utility for the bypass option.

PS – Based on the new regional permit thresholds, PAR not needed if projects are presented together.

Ossie Brewer asked where the new development is. DRI (Development of Regional Impact) and development's driveway permit discussed.
OB – I would recommend overlaying those plans in your concept layout. Plus, it is good for (R/W) and when they are doing their estimate to see if they been donating their (R/W) or not

XV. Utilities (Michael Stoltzfus, PM, Lowe Engineers)
- South end: There is quite a few.
- Electric overhead runs entire length
  - Mostly on the east side
  - Service poles primarily - will need to be relocated.
- Gas line runs north to SR 109, then split east/west on the route. The line also runs north of the railroad to the northern limit of the project.
- Water lines run along the corridor.
- Some buried communication lines south of the railroad
  - Don't remember seeing any on the north side
- Utilities are relatively straight forward other than at the major intersections

XVI. Coordination (Michael Stoltzfus, PM, Lowe Engineers)

a. Public Involvement (Patrick Smith, Kimley-Horn)
   - It depends when we want to schedule the public involvements in which I recommend during the concept development phase.
     JM – What we want to know is what is going on with all three and put something together. I've reached out to the Office of Communication about doing a website for all three projects.

b. FHWA - There is no coordination with FHWA
   KN – The [Army] Corps [of Engineers] is considered the lead agency if there's a need for a permit.

c. GDOT

XVII. Other Projects in Area (Michael Stoltzfus, PM, Lowe Engineers)
- S014892 – Right Runaround SR 14 Spur/ S. Davis Rd @ LaGrange Mall Entrance – Under Construction (PY 2018)
- 0014077 – LaGrange Bypass From CR 282/Youngs Mill Rd to SR 1/US 27 – Construction (PY 2025)
- 0014078 – LaGrange Bypass/N Davis Rd From SR 14/US 29 to Youngs Mill Rd – Construction (PY 2025)

XVIII. Project Development Schedule (Michael Stoltzfus, PM, Lowe Engineers/Patrick Smith, Kimley-Horn)
- Hoping to have concept done in June.
- Then move on into environmental

- Project is five months behind because of late NTP
- Be caught up by (R/W) authorization
- Getting traffic data is our critical path

KN – If you're able to, I would move the pavement into the schedule, get it evaluated, determine what the actual need is and then if there needs to be a discussion with OMAT about life cycle based on what the report says, you'll know up front before you really get involved with staging.

MS – It will be all new pavement if we do symmetrical widening.

KN – If you do symmetrical, I'm assuming you'll save on run and mill existing.

MS – Our plan is to mill the existing pavement, and then put the median on top of that and move forward.

XIX. Comments from Attendees (Jason Mobley, GDOT PM)

- Local Government Officials
  - State
  - Troup County

    James Emery – On the alternative analysis, I don't know if it would make any sense if you shift the alignment slightly to the west at the bridge to try to save the two relocations to the east.

    MS – There are two challenges with that, first, the property on the west side to the north of the railroad, then the church, we got their septic plan back and their septic lines are on the north side of their parking lot coming down to close to where you see their driveway make that little turn. We'll need to be careful to not get into their sewage.

    JE – On the pedestrian, the city of LaGrange has a thread multipurpose trail system. I'm looking to see they had a master plan that included extending out to [SR] 109 to the mall.

    KN – You'll have to evaluate it, but because of the cost, and it includes cost prohibitive, we can have that conversation of not putting it in there because it is not truly apart of the need and purpose of the project.

    JE – Also a general question about the evaluation of the CFI and limited access, how would that affect all those existing access points?

    KN answers that a third-tier analysis determines the limited access. If it shuts off a driveway, it's considered a displacement. A waiver can be submitted to remove CFI as the preferred option because of displacement cost.
  - City of LaGrange was invited but has yet to provide a comment.
- Office of Traffic Operations

  Andrew Pearson – I guess you guys already started on ICE. You'll have stage 1 done by concept?

  Richard Meehan – Yeah, we got our existing counts/traffic memo into planning. That's what we're waiting on right now. We expect to have ICE, at least stage 1, but by June we'll be far along.
- District Preconstruction

  District 3 Preconstruction recommends the following:

  1. Agreement or memo of understanding with Troup County regarding access control along SR 14 Spur, including driveways and minor cross streets on this corridor.
  2. Consider 2 multilane roundabouts for safety and capacity concerns at SR 14 Spur intersecting SR 109, as well as at SR 14 Spur intersecting SR 14/29.
  3. Coordination with Troup County regarding development, pedestrian needs, etc.
  4. Limit access points of business (gas station?) for safety purposes at SR 14 & SR 109 (NE side) where driveways are too close to intersection.
  5. 24' median for limiting environmental footprint.
  6. Slightly realign roadway at bridge (if needed) to the east side, south side of bridge where impact would be less severe than on the north side of bridge.
- Office of Environmental Services, Office of Roadway Design, Office of Planning, Office of Financial Management, Office of Engineering Services, Office of Right of Way, Office of Construction, GDOT Office of Utilities (utilities, railroad, SUE), and Individual Utility Companies (in attendance) was invited but has yet to provide a comment.
- Other Attendees

  OB asked about doing split-profiles along the alignment and it was considered a possibility.
  - Typical section was questioned, and it was discussed that it would have an urban median and a rural shoulder.

Meeting adjourned at 2:17 PM

INITIAL CONCEPT TEAM MEETING
SR 14 Spur from South of SR 14/US 29
P.I. No. 0014079

SIGN-IN SHEET

PLEASE PRINT CLEARLY

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