

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

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

FILE P.I. # 751420-
STP00-9252-00(007)
Fulton County
GDOT District 7 - Metro Atlanta
Johnson Ferry Road - Corridor Improvements

OFFICE Design Policy & Support

DATE September 23, 2013

FROM 
for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT APPROVED CONCEPT REPORT

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

Attachment

DISTRIBUTION:

Bobby Hilliard, Program Control Administrator
Genetha Rice-Singleton, State Program Delivery Engineer
Glenn Bowman, State Environmental Administrator
Cindy VanDyke, State Transportation Planning Administrator
Ben Rabun, State Bridge Engineer
Kathy Zahul, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Lisa Myers, State Project Review Engineer
Charles "Chuck" Hasty, State Materials Engineer
Mike Bolden, State Utilities Engineer
Jeff Fletcher, Statewide Location Bureau Chief
Rachel Brown, District Engineer
Scott Lee, District Preconstruction Engineer
Patrick Allen, District Utilities Engineer
Merishia Robinson, Project Manager
BOARD MEMBER - 6th Congressional District

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

Project Type: Roadway Widening and Intersection Improvements Including Roundabouts P.I. Number: 751420
 GDOT District: 7 County: Fulton
 Federal Route Number: NA State Route Number: NA

Johnson Ferry Road Corridor Improvements Project Description: This project consists of roadway widening and intersection improvements, including the addition of two Roundabouts along CR 655 Johnson Ferry Road. The improvements include the modification of the one way pair arrangement along CR 655 Johnson Ferry Road and CR 1318 Mt. Vernon Highway to two way operations on the east side of SR 9 Roswell Road, the addition of travel lanes, turn lanes, the addition of Roundabouts at the intersection of CR 655 Johnson Ferry Road, CR 1318 Mt. Vernon Highway and CR 263 Boylston Road, the addition of a Roundabout at the intersection of CR 655 Johnson Ferry Road, CR 1318 Mt. Vernon Highway and CR 2067 Johnson Ferry Road, and the addition of curb and gutter and sidewalks 6 to 9 feet wide on each side of the road.

Submitted for approval:
[Signature] DATE 11-9-12
 Edward J. Oulican, Jr., A.E., Jacobs Engineering Group
[Signature] DATE 9/21/12
 City of Sandy Springs
[Signature] DATE 12/4/2012
 Office Head - Office of Program Delivery
[Signature] DATE 11/19/12
 GDOT Project Manager

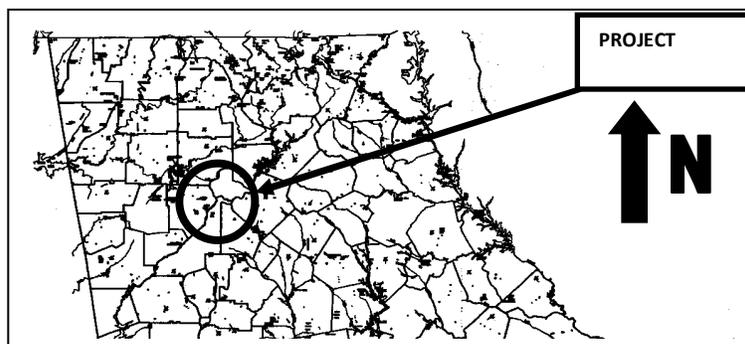
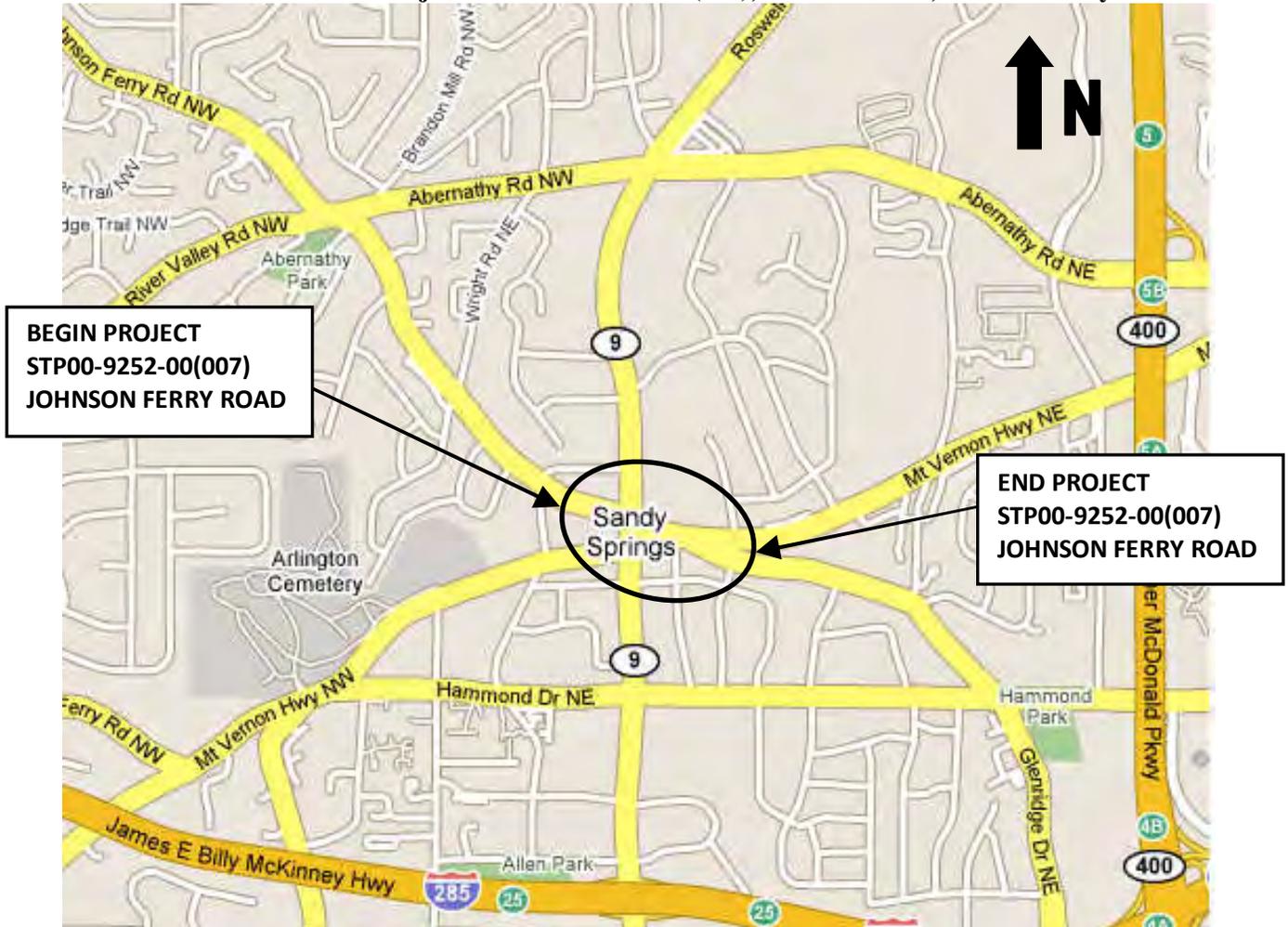
Recommendation for approval:
BOBBY HILLWARD*/EKP DATE 7/9/13
 Program Control Administrator
GUENN BOWMAN*/EKP DATE 8/7/13
 State Environmental Administrator
KOTAH ZAHUL*/EKP DATE 8/19/13
 State Traffic Engineer
LISO MYERS*/EKP DATE 7/10/13
 Project Review Engineer
JUN BIRNKAMMER*/EKP DATE 7/15/13
 State Utilities Engineer
 District Engineer
 State Transportation Financial Management Administrator

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).
CINDY VANDYKE*/EKP DATE 7/11/13
 State Transportation Planning Administrator

Report resubmitted to ODP&S July 2013

PROJECT LOCATION

PROJECT MAP – Project No. STP00-9252-00(007); PI No. 751420; Fulton County



Project Description: This project consists of roadway widening and intersection improvements, including the addition of two Roundabouts along CR 655 Johnson Ferry Road. The improvements include the modification of the one way pair arrangement along CR 655 Johnson Ferry Road and CR 1318 Mt. Vernon Highway to two way operations on the east side of SR 9 Roswell Road, the addition of travel lanes, turn lanes, the addition of Roundabouts at the intersection of CR 655 Johnson Ferry Road, CR 1318 Mt. Vernon Highway and CR 263 Boylston Road, the addition of a Roundabout at the intersection of CR 655 Johnson Ferry Road, CR 1318 Mt. Vernon Highway and CR 2067 Johnson Ferry Road, and the addition of curb and gutter and sidewalks 6 to 9 feet wide on each side of the road.

PLANNING & BACKGROUND DATA

Project Justification Statement: Residential and commercial growth over the past two decades has driven a steady increase in commuter traffic travelling through the City of Sandy Springs. Johnson Ferry Road, Roswell Road, and Mt. Vernon Highway within the study area all experience significant delay and queuing in the peak hours. The convergence of these three heavily travelled arterial roadways serves as a bottleneck which limits mobility for local and regional traffic.

The primary cause of this bottleneck condition is the one-way pair condition which forces all westbound traffic on both Johnson Ferry Road and Mt. Vernon Highway to travel on a single two-lane segment as they approach Roswell Road. Due to the skewed alignment of Johnson Ferry Road as it crosses Roswell Road, through traffic is forced to utilize the right lane while the left lane is used for left turning traffic. This alignment provides limited westbound capacity and forces traffic wishing to travel westbound on Mt. Vernon Highway to turn south onto Roswell Road then right onto Mt. Vernon Highway. This same condition exists for eastbound traffic on Johnson Ferry Road; forcing traffic to turn south onto Roswell Road then left onto Mt. Vernon Highway to travel east. This east-west traffic causes significant delays and queuing for north-south traffic on Roswell Road.

The purpose of the proposed project is to improve vehicular and pedestrian mobility and reduce congestion in downtown Sandy Springs by alleviating the bottleneck conditions that exist for east-west traffic on Johnson Ferry Road and Mt. Vernon Highway and north-south traffic on Roswell Road. The Level of Service (LOS) at three of the six intersections in the corridor currently experiences a LOS E or LOS F, which represents an unacceptable traffic operations condition. Without improvements, the LOS is forecasted to continue to deteriorate, with five of the six intersections projected to operate as a LOS F in design year 2036 based on the traffic projections approved on March 12, 2013. By restoring Johnson Ferry Road and Mt. Vernon Highway to a two-way operation just east of Roswell Road, this project would eliminate the need for east-west traffic to utilize Roswell Road. Thus, allowing Roswell Road to serve the intended north-south traffic demand. This project would also improve study area intersections to provide sufficient capacity to accommodate existing and future traffic volumes. As a result of project improvements, all intersections in the corridor are projected to operate at a LOS D or better.

Increasing safety is also an objective of this project. Crash data from 2007-2009 was obtained for the project corridor. The crash data has been analyzed for Johnson Ferry Road, Roswell Road and Mt. Vernon Highway segments within the project corridor. Based on the analysis, Johnson Ferry Road and Roswell Road experienced significantly higher crash and injury rates than the statewide averages for their respective functional classifications. Johnson Ferry Road experienced crash and injury rates almost three times higher than the statewide average, while this segment of Roswell Road experienced crash rates almost five times higher than the statewide average and injury rates almost three times higher than the statewide average. Mt. Vernon Highway experiences crash and injury rates slightly lower than the statewide averages for this three year period. These high crash rates are most probably a result of the heavily congested conditions on these roadway segments throughout much of the day. The types of collisions were also analyzed for the project corridor. Although rear end collisions were the most common type of crash, the data does reveal a high number of angle type collisions. By providing improved traffic operations and reducing congestion in the project corridor, the proposed project improvements would likely help alleviate and reduce these high crash rates.

Therefore, based on the improved project safety, traffic operations, and congestion reduction benefits that the project will provide to the corridor, it is recommended to proceed with the project. The recommended project limits include Johnson Ferry Road from just east of Sandy Springs Circle to the

intersection of Johnson Ferry Road and Mt Vernon Highway, Roswell Road from Hilderbrand Drive to Sandy Springs Circle, and Mt. Vernon Highway from Roswell Road to Hunting Creek Road.

Description of the proposed project: As part of a phased construction plan for the corridor improvements along Johnson Ferry Road and Glenridge Drive in the City of Sandy Springs, corridor improvements are proposed along CR 655 Johnson Ferry Road. The corridor improvements consist of roadway widening and intersection improvements, including the addition of two Roundabouts along CR 655 Johnson Ferry Road. The improvements include the modification of the one way pair arrangement along CR 655 Johnson Ferry Road and CR 1318 Mt. Vernon Highway to two way operations on the east side of SR 9 Roswell Road, the addition of travel lanes, turn lanes, the addition of Roundabouts at the intersection of CR 655 Johnson Ferry Road, CR 1318 Mt. Vernon Highway and CR 263 Boylston Road, the addition of a Roundabout at the intersection of CR 655 Johnson Ferry Road, CR 1318 Mt. Vernon Highway and CR 2067 Johnson Ferry Road, and the addition of curb and gutter and sidewalks 6 to 9 feet wide on each side of the road. The existing right-of-way width along Johnson Ferry Road varies between 40 and 80 feet and the proposed right-of-way width varies between 70 and 90 feet. The project is located in the City of Sandy Springs, in Fulton County, Georgia. The total length of project improvements is 1.19 miles.

Federal Oversight: Full Oversight Exempt State Funded Other

MPO: N/A MPO - Atlanta Regional Commission (ARC)
MPO Project TIP # FN-221

Regional Commission: N/A RC – Atlanta Regional Commission
RC Project ID # FN-221

Congressional District(s): 6

Projected Traffic: AADT

Current Year (2012): 14,100 Open Year (2016): 14,400 Design Year (2036): 17,100

Functional Classification (Mainline): Urban Collector Street

Is this project on a designated bike route? No YES
SR 9 Roswell Road is a state designated bike route

Is this project located on a pedestrian plan? No YES

Is this project located on or part of a transit network? No YES
MARTA Bus Routes exist on Johnson Ferry Road and Roswell Road

CONTEXT SENSITIVE SOLUTIONS

Issues of Concern:

The following context sensitive impacts have been identified within the project limits:

- The Sandy Springs Branch of Fulton County Library System – The Sandy Springs Library is located at the eastern terminus of the project where a Roundabout is proposed. Design considerations are necessary to ensure that service and access is maintained during construction.
- Mount Vernon Towers Retirement Community – This retirement community is located at the eastern terminus of the project where a Roundabout is proposed. Design

considerations are necessary to ensure that service and access are maintained during construction. Also, since this access point is the single point of access to the community, it is necessary to ensure that these residents are aware of the Roundabout and proper usage of the new facility.

- Sandy Springs Health Center Historical Property – This property has been identified as an eligible resource for listing in the National Register by the Georgia State Historic Preservation Officer (SHPO). Design modifications are necessary to avoid impacts to the historic district boundary.
- Glenwood Forest Historic District – The Glenwood Forest subdivision has been identified as an eligible resource for listing in the National Register by the Georgia State Historic Preservation Officer (SHPO). Design modifications are necessary to minimize impacts to the historic district boundary in compliance with the no adverse impact determination.
- General J.D. Cox’s Division to Old Cross Keys Civil War Historical Marker – This historic marker is located at the eastern terminus of the project where a Roundabout is proposed.

Context Sensitive Solutions: These Issues of Concern listed above are to be addressed by the project.

- The Sandy Springs Branch of Fulton County Library System – Public access will be maintained at all times during construction. Special provisions will be included to stipulate that access is required to be maintained at all times during construction for both vehicular and pedestrian traffic.
- Mount Vernon Towers Retirement Community – Public access will be maintained at all times during construction. Special provisions will be included to stipulate that access is required to be maintained at all times during construction for both vehicular and pedestrian traffic. Further, the City of Sandy Springs is committed to implementing a community outreach program to educate the residents of this retirement community on proper usage of the proposed Roundabouts.
- Sandy Springs Health Center Historical Property – Project impacts do not affect the historic boundary identified for this resource. Driveway modifications are necessary consistent with the proposed improvements, and driveway access will be maintained during construction.
- Glenwood Forest Historic District – Project improvements along the contributing properties of the resource boundary are minimized to be within the existing right-of-way. Non contributing properties within the historic boundary have impacts within the boundary, however these impacts have been reported to SHPO and are consistent with the no adverse impact determination.
- General J.D. Cox’s Division to Old Cross Keys Civil War Historical Marker – The marker, currently located at the intersection of Johnson Ferry Road and Mt. Vernon Highway, will be removed prior to construction, stored during construction, and replaced once construction activities are completed. Special provisions will be included to stipulate proper removal, storage and handling of the sign during construction.

DESIGN AND STRUCTURAL DATA

Mainline Design Features: CR 655 Johnson Ferry Road (MP 0.13-0.23) – Between Roswell Road and Sandy Springs Circle

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	4	4	4
- Lane Width(s)	12'	12'	11'
- Median Width & Type	None	14' Flush	12' Flush

- Outside Shoulder Width & Type	10' Urban	16' Urban	14' Urban
- Outside Shoulder Slope	2%	2%	2%
- Inside Shoulder Width & Type	None	None	None
- Sidewalks	5' (south), none (north)	5'	9'
- Auxiliary Lanes	None	None	12' left turn lane eastbound (in flush median)
- Bike Lanes	None	4'	None
Posted Speed	35 mph		35 mph
Design Speed	35 mph	35 mph	35 mph
Min Horizontal Curve Radius	1000'	371'	2000'
Maximum Superelevation Rate	4%	4%	4%
Maximum Grade	4.66%	9.0%	4.0%
Access Control	Partial	Partial	Partial
Right-of-Way Width	80'	60'-80'	80'-124'
Maximum Grade – Crossroad	4%	7.0%	4%
Design Vehicle	NA	WB-40/Bus-40	WB-40/Bus-40

*According to current GDOT design policy if applicable

Mainline Design Features: CR 655 Johnson Ferry Road (MP 0.04-0.13) – Between Roswell Road and Boylston Road

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	2- WB	NA	4
- Lane Width(s)	12'	12'	11'
- Median Width & Type	NA	NA	NA
- Outside Shoulder Width & Type	10' Urban	16' Urban	14' South side 12' North side
- Outside Shoulder Slope	2%	2%	2%
- Inside Shoulder Width & Type	None	None	None
- Sidewalks	5' (north), none (south)	5'	6' (north) 9' (south)
- Auxiliary Lanes	None	None	11' Left turn
- Bike Lanes	None	None	None
Posted Speed	35 mph		35 mph
Design Speed	35 mph	35 mph	35 mph
Min Horizontal Curve Radius	400'	400'	700'
Maximum Superelevation Rate	4%	4%	4%
Maximum Grade	4.66%	9.0%	4.0%
Access Control	Partial	Partial	Partial
Right-of-Way Width	40'	60'-80'	70'
Maximum Grade – Crossroad	4%	7.0%	4%
Design Vehicle		WB-40/Bus-40	WB-40/Bus-40

*According to current GDOT design policy if applicable

Mainline Design Features:

Roundabout Section - Between CR 263 Boylston Road and CR 2067 Johnson Ferry Road
 CR 655 Johnson Ferry Road (MP 0.00-0.01 & MP 0.03-0.04)

CR 1318 Mt. Vernon Highway (MP 8.62-8.63 & MP 8.65-8.66)

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	NA	4	4
- Lane Width(s)	NA	16'	17' (inside) 15' (outside)
- INSCRIBED DIAMETER		150' TO 220'	174'
- CENTER ISLAND DIAMETER	NA	VARIABLE	80'
- TRUCK APRON WIDTH		VARIABLE	15'
- Outside Shoulder Width & Type	NA	12' Urban	12' Urban
- Outside Shoulder Slope	NA	2%	2%
- Inside Shoulder Width & Type	NA	None	None
- Sidewalks	NA	5'	6'
- Auxiliary Lanes	NA	NA	NA
- Bike Lanes	NA	4'	NA
Posted Speed	NA		35 mph
Design Speed	NA	VARIABLE	35 mph
Min Horizontal Curve Radius	NA	NA	371'
Maximum Superelevation Rate	NA	2%	2%
Maximum Grade	NA	3.0%	3.0%
Access Control	NA	Partial	Partial
Right-of-Way Width	NA	NA	195' to 248'
Maximum Grade – Crossroad	NA	3.0%	3.0%
Design Vehicle	NA	BUS-40/SU to WB-67	WB-50

*According to current GDOT design policy if applicable

Mainline Design Features:

Common Section between Roundabouts - Between Boylston Road and CR 2067 Johnson Ferry Road

CR 655 Johnson Ferry Road (MP 0.01-0.03)

CR 1318 Mt. Vernon Highway (MP 8.63-8.65)

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	2		4
- Lane Width(s)	12'	12'	12'
- Median Width & Type	None	None	10' Raised
- Outside Shoulder Width & Type	10' Urban	16' Urban	12' Urban
- Outside Shoulder Slope	2%	2%	2%
- Inside Shoulder Width & Type	NA	NA	NA
- Sidewalks	5' North side	5'	6'
- Auxiliary Lanes	1-Right Turn	NA	None
- Bike Lanes	None	4'	None
Posted Speed	35 mph		35 mph
Design Speed	35 mph	35 mph	35 mph
Min Horizontal Curve Radius	400'	371'	371'
Maximum Superelevation Rate	4%	4%	4%
Maximum Grade	4.66%	9.0%	4%
Access Control	Partial	Partial	Partial
Right-of-Way Width	80'	NA	96' -162'

Maximum Grade – Crossroad	None	9.0%	NA
Design Vehicle		BUS-40/SU	WB-50

*According to current GDOT design policy if applicable

Mainline Design Features: CR 1318 Mt. Vernon Highway (MP 8.47-8.49) – Between Roswell Road and Sandy Springs Circle

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	2	NA	2
- Lane Width(s)	12'	12'	12'
- Median Width & Type	None	NA	None
- Outside Shoulder Width & Type	10' Urban	16' Urban	14' Urban
- Outside Shoulder Slope	2%	2%	2%
- Inside Shoulder Width & Type	None	NA	None
- Sidewalks	5'	5'	9'
- Auxiliary Lanes	1-Left turn	NA	1-Left turn
- Bike Lanes	None	NA	None
Posted Speed	35 mph		35 mph
Design Speed	35 mph	35 mph	35 mph
Min Horizontal Curve Radius	400'	371'	371'
Maximum Superelevation Rate	4%	4%	4%
Maximum Grade	4.66%	9.0%	4.0%
Access Control	Partial	Partial	Partial
Right-of-Way Width	60'	60'-80'	60'
Maximum Grade – Crossroad	4%	9.0%	4%
Design Vehicle		WB-40/Bus-40	WB-40/Bus-40

*According to current GDOT design policy if applicable

Mainline Design Features: CR 1318 Mt. Vernon Highway (MP 8.49-8.62) – Between Roswell Road and Boylston Road

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	2 EB	NA	2
- Lane Width(s)	12'	12'	11'
- Median Width & Type	None	NA	None
- Outside Shoulder Width & Type	10' Urban	16' Urban	14' Urban
- Outside Shoulder Slope	2%	2%	2%
- Inside Shoulder Width & Type	None	NA	NA
- Sidewalks	6' Southside	5'	9'
- Auxiliary Lanes	Right Turn	NA	1-Left turn
- Bike Lanes	None	NA	None
Posted Speed	35 mph		35 mph
Design Speed	35 mph	35 mph	35 mph
Min Horizontal Curve Radius	400'	371'	371'
Maximum Superelevation Rate	4%	4%	4%
Maximum Grade	4.66%	9.0%	4.0%
Access Control	Partial	Partial	Partial

Right-of-Way Width	40'	60'-80'	70'
Maximum Grade – Crossroad	None	9.0%	NA
Design Vehicle		WB-40/Bus-40	WB-40/Bus-40

*According to current GDOT design policy if applicable

Mainline Design Features: CR 1318 Mt. Vernon Highway (MP 8.66-8.73) – Between CR 2067 Johnson Ferry Road and Hunting Creek Road

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	2	NA	3
- Lane Width(s)	12'	12'	12'
- Median Width & Type	None	NA	None
- Outside Shoulder Width & Type	10' Urban	16' Urban	12' Urban
- Outside Shoulder Slope	2%	2%	2%
- Inside Shoulder Width & Type	None	NA	NA
- Sidewalks	5'	5'	6'
- Auxiliary Lanes	None	NA	NA
- Bike Lanes	None	NA	NA
Posted Speed	35 mph		35 mph
Design Speed	35 mph	35 mph	35 mph
Min Horizontal Curve Radius	1000'	371'	885'
Maximum Superelevation Rate	4%	4%	4%
Maximum Grade	4.66%	9.0%	4.0%
Access Control	Partial	Partial	Partial
Right-of-Way Width	50'	60'-80'	60'
Maximum Grade – Crossroad	None	9.0%	NA
Design Vehicle		WB-40/Bus-40	WB-50

*According to current GDOT design policy if applicable

Mainline Design Features: CR 2067 Johnson Ferry Road (MP 1.40-1.45) – Between Mt. Vernon Highway and Harleston Road

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	2	2	2
- Lane Width(s)	12'	12'	11'
- Median Width & Type	None	NA	None
- Outside Shoulder Width & Type	10' Urban	16' Urban	12' Urban
- Outside Shoulder Slope	2%	2%	2%
- Inside Shoulder Width & Type	None	NA	None
- Sidewalks	5' (north) None (south)	5'	6' (north) None (south)
- Auxiliary Lanes	None	NA	None
- Bike Lanes	None	4'	None
Posted Speed	35 mph		35 mph
Design Speed	NA	35 mph	35 mph
Min Horizontal Curve Radius	50' (at intersection)	371'	150' (at roundabout approach)
Maximum Superelevation Rate	4%	4%	4%

Maximum Grade	4.66%	9.0%	4.0%
Access Control	Partial	Partial	Partial
Right-of-Way Width	50'	NA	50' to 95'
Maximum Grade – Crossroad	None	9.0%	4.0%
Design Vehicle		WB-40/Bus-40	WB-50

*According to current GDOT design policy if applicable

Mainline Design Features: SR 9 Roswell Road (MP 11.06-11.33) – Between Hilderbrand Drive and Sandy Springs Circle

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	4	4	4
- Lane Width(s)	11'	12'	11'
- Median Width & Type	11' Flush	14' Flush	11'-22' Flush
- Outside Shoulder Width & Type	10' Urban	16' Urban	16' Urban
- Outside Shoulder Slope	2%	2%	2%
- Inside Shoulder Width & Type	None	NA	NA
- Sidewalks	5'	5'	9'
- Auxiliary Lanes	Left Turn lanes in flush median at Sandy Springs Circle, Johnson Ferry Road (WB), Mt. Vernon Highway, and Hilderbrand Drive	NA	Left Turns lanes in flush median at Sandy Springs Circle, Johnson Ferry Road (dual lefts WB), Mt. Vernon Highway (WB), and Hilderbrand Drive
- Bike Lanes	None	4'	NA
Posted Speed	35 mph		35 mph
Design Speed	NA	35 mph	35 mph
Min Horizontal Curve Radius	3000'	371'	3000'
Maximum Superelevation Rate	4%	4%	4%
Maximum Grade	4%	9.0%	4%
Access Control	Partial	Partial	Partial
Right-of-Way Width	65'	NA	75'- 90'
Maximum Grade – Crossroad	3%	9.0%	3%
Design Vehicle		WB-40/Bus-40	WB-40/Bus-40

*According to current GDOT design policy if applicable

Major Structures: (If no major structures on project, N/A and delete table below)

Structure	Existing	Proposed
<i>ID # and/or Location</i>	NA	NA
<i>Retaining walls</i>	NA	<i>Northeast Quadrant Johnson Ferry Road and Roswell Road Northeast Quadrant Johnson Ferry Road at Mt. Vernon Highway east</i>

		<i>Roundabout</i>
<i>Other</i>	<i>None</i>	<i>None</i>

Major Interchanges/Intersections: Johnson Ferry Road at Roswell Road, Mt Vernon Highway at Roswell Road, Johnson Ferry Road at Boylston Road, Johnson Ferry Road at Mt. Vernon Highway.

Utility Involvements: Georgia Power Distribution and Transmission (overhead and underground electric and lighting), Charter Communications (overhead and underground telephone and fiber), Atlanta Gas Light (underground gas), Fulton County Water & Sewer (underground water and sewer) and the City of Sandy Springs (underground water and sewer).

Public Interest Determination Policy and Procedure recommended (Utilities)? YES NO

SUE Required: Yes No

The City of Sandy Springs has committed to performing a SUE investigation for the project.

Railroad Involvement: NA

Right-of-Way: Refer to Chapter 3 of GDOT’s Design Policy Manual for guidance.

Required Right-of-Way anticipated: YES NO Undetermined
 Easements anticipated: Temporary Permanent Utility Other

Anticipated number of impacted parcels: 30
 Anticipated number of displacements (Total): 5
 Businesses: 5
 Residences: 0
 Other: 0

Location and Design approval: Not Required Required

Off-site Detours Anticipated: No Yes Undetermined

Transportation Management Plan Anticipated: YES NO

Design Exceptions to FHWA/AASHTO controlling criteria anticipated:

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

13. Bridge Structural Capacity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Design Variances to GDOT standard criteria anticipated:

GDOT Standard Criteria	Reviewing Office	YES	Appvl Date (if applicable)	NO	Undetermined
1. Access Control - Median Opening Spacing	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Median Usage & Width	DP&S	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
3. Intersection Skew Angle	DP&S	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
4. Lateral Offset to Obstruction	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Intersection Sight Distance	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Bike & Pedestrian Accommodations	DP&S	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
7. GDOT Drainage Manual	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Georgia Standard Drawings	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. GDOT Bridge & Structural Manual	Bridge Design	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Roundabout Illumination	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Rumble Strips/Safety Edge	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

A Design Variance for median usage and width is anticipated to allow for the use of a 12-foot flush median on Johnson Ferry Road east of Sandy Springs Circle for this project.

A Design Variance for intersection angle is anticipated for Johnson Ferry Road and Roswell Road intersection.

A Design Variance for Bicycle and Pedestrian Accommodations is anticipated to allow for the use of City of Sandy Springs Main Street and Suburban Overlay District Standards for shoulder and sidewalk widths and to allow for the omission of bike lanes.

VE Study anticipated: No Yes Completed – Date: 9/29/2011

ENVIRONMENTAL DATA

Anticipated Environmental Document:

GEPA: **NEPA:** Categorical Exclusion EA/FONSI EIS

Air Quality:

Is the project located in a PM 2.5 Non-attainment area? No Yes
 Is the project located in an Ozone Non-attainment area? No Yes

A comparison between the project concept and the conforming plan’s model description shows similar features within the project corridor.

Environmental Permits/Variations/Commitments/Coordination anticipated:

Permit/ Variance/ Commitment/ Coordination Anticipated	YES	NO	Remarks
1. U.S. Coast Guard Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Forest Service/Corps Land	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. CWA Section 404 Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Tennessee Valley Authority Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Buffer Variance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

County: Fulton

6. Coastal Zone Management Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. NPDES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. FEMA	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. Cemetery Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Other Permits	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. Other Commitments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	UST/Hazardous Waste testing, removal, storage and replacement of a historic marker sign
12. Other Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Is a PAR required? No Yes Completed – Date: [Click here to enter a date.](#)

NEPA/GEPA: CE has been submitted to GDOT and FHWA. Comments from FHWA were received on May 10, 2012. Currently addressing these comments.

Ecology: None

History: Glenwood Forest Historic District: No Adverse Effect; Sandy Springs Health Center: No Adverse Effect. Assessment of Effects document was concurred with by the SHPO on August 29, 2011.

Archeology: None

Air & Noise:

Noise modeling is not required. PM_{2.5} concurrence for Air Quality received June 27, 2011. The study has been updated for the revised design year traffic. Based on the updated Air Quality Study, the design year (2036) PM predicted one-hour CO concentration at the Johnson Ferry Road/Roswell Road intersection is 4.0 ppm. This value is lower than the NAAQS maximum one-hour average time of 35 ppm. Additionally, this value also does not exceed the NAAQS eight-hour ambient level of 9 ppm.

Public Involvement: Two Public Information Open Houses (PIOHs) were held for the proposed project on November 5, 2007 and June 21, 2010. A total of 25 verbal comments were received at the November 5, 2007 meeting. The major concerns expressed by the public at this meeting included several requests to delay this project until the Abernathy Road widening project is complete to see how traffic in the area would be affected; operational deficiencies in the area between Roswell Road and Johnson Ferry Road/Mt. Vernon Highway adjacent to the Fulton County Library causing routine backups along Mt. Vernon Highway and Glenridge Drive; support for the addition of pedestrian features and operational improvements such as medians and turn lanes along Johnson Ferry Road but not widening the corridor; the speed of traffic increasing if the roadway is widened; drainage concerns to properties; and concerns about the revitalization of the downtown area if Johnson Ferry Road is widened.

The June 2010 PIOH focused on the improvements of Johnson Ferry Road between Sandy Springs Circle and Glenridge Drive, more specifically, the “triangle” section where Mt. Vernon Highway and Johnson Ferry Road become one-way pairs immediately east of Roswell Road. The purpose of the PIOH was to obtain community feedback on two different design alternatives. The first alternative

involved intersection improvements and widening of the roadway, and the second alternative involved traffic circles adjacent to the library and area streets that intersect with one another.

Major concerns expressed by the public included a request for bike lanes along Johnson Ferry Road to access Abernathy Park; requests for Johnson Ferry Road to be widened to four lanes; requests for the design to focus on pedestrians and not vehicles; concerns with constructing a roundabout at the Mt. Vernon Towers intersection and speeding in front of school entrances and the library; a suggestion for special training of roundabouts for older residents; and concerns that a double roundabout will confuse drivers.

Major stakeholders: Traveling public and City of Sandy Springs citizens

ROUNDBABOUTS

Lighting agreement/commitment letter received: No Yes

Planning Level Assessment: The Planning Level Assessment for these Roundabouts has shown that Roundabouts at the two intersections are feasible alternatives. The traffic analysis has shown that the Roundabouts handle traffic operations better than signals, and can accommodate the change in traffic operations of the Johnson Ferry Road and Mt. Vernon Highway one way pair arrangement. Further, the Roundabout Alternative significantly decreases the required right-of-way and construction costs compared to typical intersection improvement project concepts. Therefore, the Roundabout alternative was chosen as the preferred alternative for development.

Feasibility Study: Incorporated as part of the Concept Development and Peer Review process of the project concept. .

Peer Review required: No Yes Completed – Date: 10/31/2011

CONSTRUCTION

Issues potentially affecting constructability/construction schedule: High traffic volumes during morning and evening peak hours may require off-hour construction periods.

Early Completion Incentives recommended for consideration: No Yes

PROJECT RESPONSIBILITIES

Project Activities:

Project Activity	Party Responsible for Performing Task(s)
Concept Development	Georgia DOT, City of Sandy Springs, Jacobs Engineering Group
Design	City of Sandy Springs
Right-of-Way Acquisition	City of Sandy Springs
Utility Relocation	Utility Owners
Letting to Contract	Georgia DOT
Construction Supervision	Georgia DOT
Providing Material Pits	Not Yet Determined
Providing Detours	NA

Environmental Studies, Documents, and Permits	City of Sandy Springs
Environmental Mitigation	NA
Construction Inspection & Materials Testing	Georgia DOT

Lighting required: No Yes

The City of Sandy Springs and Georgia Power are responsible for installation and maintenance of lighting under their current franchise agreement for lighting.

Initial Concept Meeting: N/A

Concept Meeting: Held February 9, 2011. Direction on the requirements for the development of the Roundabout alternative received, including VISSIM modeling and Peer Review requirements received at this meeting.

Other projects in the area:

- PI No. 0006911 (COSS T-0010) – Johnson Ferry Road at Sandy Springs Circle Intersection Improvements – connects to the western terminus of the project.
- PI No. 0006728 & 0009058 (COSS T-0012) – Roswell Road from Johnson Ferry Road to Abernathy Road Streetscape Improvements – connects to the northern terminus of Roswell Road
- COSS T-0011A – Johnson Ferry Road and Glenridge Drive Streetscape Improvements – connects to the eastern terminus of the project
- PI No. 0005910 (COSS T-0006) – Hammond Drive and Sandy Springs Sidewalk Improvements – LCI Project
- PI No. 753300 – Hammond Drive widening from Dekalb County line to SR 400
- COSS T-0024 – Hammond Drive widening from Roswell Road to Barfield
- COSS T-0014 & 0015 – Sandy Springs Circle sidewalk improvements

Other coordination to date:

- Public involvement: A meeting was held on November 5, 2007 (minutes attached). Another public information open house was held on June 21, 2010 (minutes attached).

Project Cost Estimate and Funding Responsibilities:

	Breakdown of PE	ROW	Utility	CST*	Environmental Mitigation	Total Cost
By Whom	GDOT	GDOT	GDOT	GDOT	GDOT	GDOT
\$ Amount	\$1,482,160	\$0	\$0	\$3,430,000	\$0	\$4,912,160
By Whom	COSS	COSS	COSS	COSS	COSS	COSS
\$ Amount	\$0	\$8,045,000	\$1,168,000	\$0	\$0	\$9,213,000
By Whom	Total	Total	Total	Total	Total	Total
\$ Amount	\$1,482,160	\$8,045,000	\$1,168,000	\$3,430,000	\$0	\$14,125,160
Date of Estimate	6/7/2013	6/7/2013	6/7/2013	6/7/2013	6/7/2013	6/7/2013

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

ALTERNATIVES DISCUSSION

Alternative selection:

Preferred Alternative: Roundabout Alternative			
Estimated Property Impacts:	30	Estimated Total Cost:	\$14,25,160 (EX)
Estimated ROW Cost:	\$10,277,899 (EX)	Estimated CST Time:	18-24 months
<p>Rationale: The proposed project includes both traffic operation and pedestrian improvements in the predominately commercial areas of the project corridor. Along Johnson Ferry Road east of Sandy Springs Circle to the eastern intersection of Mt Vernon Highway, traffic operation and pedestrian improvements are proposed. The proposed typical section along Johnson Ferry Road from Sandy Springs Circle to Roswell Road consists of four 11-foot lanes with a 12-foot flush median, curb and gutter and sidewalks on both sides of the roadway. Between Roswell Road and the existing eastern intersection of Johnson Ferry Road and Mt. Vernon Highway, two roundabouts are proposed for the Johnson Ferry Road/Mt. Vernon Highway corridor. The first roundabout is proposed near the west intersection of Johnson Ferry Road and Mt. Vernon Highway and near Boylston Road. The proposed west roundabout will comprise of three legs that include existing Johnson Ferry Road (two directions) and west Mt. Vernon Road. The proposed east roundabout will comprise of four legs that include existing Johnson Ferry Road (two directions), east Mt. Vernon Road, and the driveway to the Vernon Towers development. The common section of Johnson Ferry Road and Mt. Vernon Highway between the two proposed roundabouts has a proposed typical section consisting of four 12-foot lanes with a grassed median along with curb and gutter and sidewalks on both sides of the roadway. The typical section for Johnson Ferry Road from Roswell Road to proposed west roundabout will consist of three 11-foot lanes, curb and gutter and sidewalks on both sides of the roadway. The typical section for Mt. Vernon Highway from Roswell Road to the proposed west roundabout consists of three 11-foot lanes with curb and gutter and sidewalks on both sides of the roadway. Along Roswell Road, improvements include the addition of northbound dual left turn lanes at Johnson Ferry Road westbound traffic along Johnson Ferry Road. Also, a southbound left turn lane is proposed at the intersection of Roswell Road and Johnson Ferry Road for eastbound traffic along the Johnson Ferry Road. Other improvements along Roswell Road include the construction of 9' concrete sidewalks with 2' paver strip, street lighting, and other streetscape improvements along both sides of the corridor. This alternative was selected as the preferred based on several reasons; the number of impacts parcels, a lower ROW expenditure compared to the other alternatives, and lower construction cost.</p>			

No-Build Alternative: No Build			
Estimated Property Impacts:	0	Estimated Total Cost:	0
Estimated ROW Cost:	0	Estimated CST Time:	0
<p>Rationale: This alternative does not meet the capacity and operational needs of the project.</p>			

Alternative 1: Johnson Ferry Road to Mt. Vernon Highway Alternative I			
Estimated Property Impacts:	67	Estimated Total Cost:	\$64,806,532
Estimated ROW Cost:	\$55,123,532	Estimated CST Time:	18-24 months
<p>Rationale: This alternative concept addresses the traffic congestion both along Johnson Ferry Road, Roswell Road, Mount Vernon Road. This alternative will provide a 4-lane section; two 12' travel lanes in each direction and 20' raised median along Johnson Ferry Road between Sandy Spring Circle and east of intersection of Johnson Ferry Road and Mount Vernon along Mount Vernon Road. This alternative also provides a 4-lane section; two 12' travel lanes in each direction and 20' raised median along Mount Vernon Highway</p>			

between Sandy Spring Circle and Johnson Ferry Road. Improvements along Roswell Road are proposed with this alternative, they include widening the existing pavement to provide dual left-turn lanes in both the southbound and northbound directions at the Johnson Ferry Road intersection. One of the major improvements this alternative offers is the realignment of Mount Vernon Highway at Johnson Ferry Road. Another improvement includes realigning Johnson ferry Road near the Fulton County Library such that dual-left turn lanes onto Johnson Ferry Road are provided. This alternative was not selected due to the ROW cost, higher construction costs, and environmental impacts at the gas station located at Boylston Road and Johnson Ferry Road.

Alternative 2: Johnson Ferry Road to Mt. Vernon Highway Minimum Alternative I-A-			
Estimated Property Impacts:	58	Estimated Total Cost:	\$44,094,046
Estimated ROW Cost:	\$36,325,046	Estimated CST Time:	18-24 months

Rationale:
 This alternative concept mainly addresses the traffic congestion along Johnson Ferry Road and Roswell Road. This alternative will provide a 4-lane section; two 12' travel lanes in each direction and a 14' flush, striped median along Johnson Ferry Road. The termini for this alternative are the Johnson Ferry Road and Sandy Springs Road intersection and the intersection Johnson Ferry Road and Mount Vernon Highway near the Fulton County Library. Mount Vernon Highway between Roswell Road and Johnson Ferry Road will be reconstructed to a 3-lane section along with the reconfiguration of the intersection of Johnson Ferry Road, Boylston Drive, and Mount Vernon Road. Improvements along Roswell Road are proposed with this alternative, they include widening the existing pavement to provide dual left-turn lanes in both the southbound and northbound directions at the Johnson Ferry Road intersection. At the intersection of Johnson Ferry Road and Mount Vernon Highway near the Fulton County Library, dual-left turn lanes onto Johnson Ferry Road will be provided. This alternative was not selected due to the ROW cost, and environmental impacts at the gas located at Boylston Road and Johnson Ferry Road. Also, the intersection angles of Johnson Ferry Road, Mt. Vernon Highway, and Boylston Drive are not improved with this alternative.

station

Alternative 3: Mt. Vernon Highway to Mt. Vernon Highway Alternative II			
Estimated Property Impacts:	68	Estimated Total Cost:	\$64,961,041
Estimated ROW Cost:	\$55,292,041	Estimated CST Time:	18-24 months

Rationale:
 This alternative concept addresses the traffic congestion both along Johnson Ferry Road, Roswell Road, Mount Vernon Road. This alternative will provide a 4-lane section; two-12' travel lanes in each direction and 20'raised median along Johnson Ferry Road between Sandy Spring Circle and east of the Johnson Ferry Road and Mount Vernon Highway intersection. This alternative also provides a 4-lane section; two 12' travel lanes in each direction and 20'raised median along Mount Vernon Highway between Sandy Spring Circle and Johnson Ferry Road. Improvements along Roswell Road include widening the existing pavement to provide dual left-turn lanes in both the southbound and northbound directions at the Johnson Ferry Road intersection. The improvements also include widening Johnson ferry Road near the Fulton County Library such that dual-left turn lanes onto Johnson Ferry Road are provided. The intersection of Mount Vernon Highway and Boylston Drive will be reconfigured to accommodate northbound left turns onto Johnson Ferry Road as well as southbound dual left turns onto Mount Vernon Road. This alternative was not selected due to the ROW cost, and environmental impacts at the gas located at Boylston Road and Johnson Ferry Road.

station

Alternative 4: Mt. Vernon Highway to Mt. Vernon Highway Minimum Alternative II-A			
Estimated Property Impacts:	60	Estimated Total Cost:	\$44,355,644

Estimated ROW Cost:	\$36,604,644	Estimated CST Time:	18-24 months
Rationale:			
<p>This alternative concept also addresses the traffic congestion both along Johnson Ferry Road, Roswell Road, Mount Vernon Road. This alternative will provide a 4-lane section; two-12' travel lanes in each direction and 14' flush median along Johnson Ferry Road between Sandy Spring Circle and east of the Johnson Ferry Road and Mount Vernon Highway intersection. This alternative also provides dedicated left turn lanes along Mount Vernon Highway between Roswell Road and Johnson Ferry Road. Improvements along Roswell Road include widening the existing pavement to provide dual left-turn lanes in both the southbound and northbound directions at the Johnson Ferry Road intersection. The improvements also include widening Johnson ferry Road near the Fulton County Library such that dual-left turn lanes onto Johnson Ferry Road are provided. The intersection of Mount Vernon Highway and Boylston Drive will be reconfigured to accommodate northbound left turns onto Johnson Ferry Road as well as southbound dual left turns onto Mount Vernon Road. This alternative was not selected due to the ROW cost, and environmental impacts at the gas station located at Boylston Road and Johnson Ferry Road.</p>			

↑ station

Alternative 5: Grid Network Alternative			
Estimated Property Impacts:	59	Estimated Total Cost:	\$102,361,767
Estimated ROW Cost:	\$88,420,767	Estimated CST Time:	18-24 months
Rationale:			
<p>This alternative is the most expensive to providing improvements within the "triangle" area. The idea of this alternative is to construct two separate east/west corridors that can operate independent of each other. The improvements entail realigning and reconstructing Mount Vernon Highway between Roswell Road and Johnson Ferry Road east of the Fulton County Library which include providing four 12' travel lanes. Johnson Ferry Road will also be realigned between Roswell Road and Mount Vernon Highway east of the Fulton County Library and also provide four 12' travel lanes. Between the two realigned roadways, there are two new north/south roadways proposed east of Roswell Road. Both of the new roadways will have two 12' travel lanes in each direction. For Johnson Ferry Road and Mount Vernon Highway between Sandy Springs Road and Roswell Road, improvements include widening the existing pavement to accommodate four 12' travel lanes and a 14' flush median. Widening along Roswell Road will be done to provide dual left turn lanes in the southbound and northbound directions at Johnson Ferry Road. This alternative was not selected due to the number of impacted parcels resulting in the highest ROW cost of all the alternatives as well as the highest construction cost.</p>			

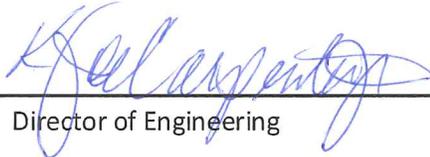
Comments: None.

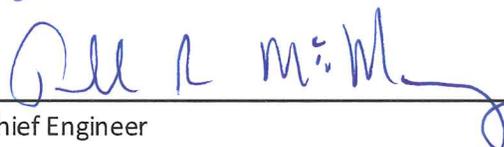
Attachments:

1. Concept Layout
2. Typical sections
3. Detailed Cost Estimates:
 - a. Construction including Engineering and Inspection
 - b. Completed Fuel & Asphalt Price Adjustment forms
 - c. Right-of-Way
 - d. Utilities
 - e. Environmental Mitigation (N/A)
4. Crash Summaries
5. Traffic Diagrams
6. Capacity Analysis Summary
7. Traffic and Safety Study

8. Roundabout Data
 - a. Planning level assessment
 - b. Roundabout feasibility study (N/A)
 - c. Lighting agreement or commitment letter
 - d. Peer Review and responses
 - i. Roundabout Peer Review Report (10-31-11)
 - ii. Roundabout Peer Review Report Responses (01-13-12)
 - iii. Roundabout Peer Review 2nd Review Comments (03-23-12)
 - iv. Roundabout Peer Review 3rd Review Comments (11-05-12)
9. Conforming plan's network schematics showing thru lanes.
10. Concept Team Meeting Minutes (02-09-11)
11. Public Information Meeting Minutes (11-05-07)
12. Public Information Meeting Minutes (06-21-10)
13. PFA's and/or SAA's.
14. Value Engineering Study Implementation Letter (06-12-12)

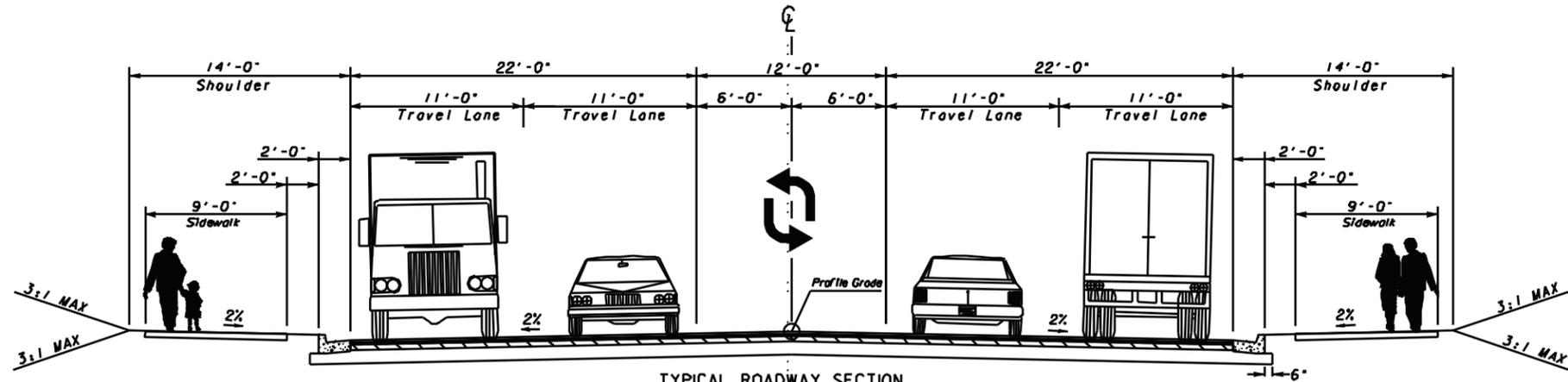
APPROVALS

Concur:  8/29/2013
Director of Engineering

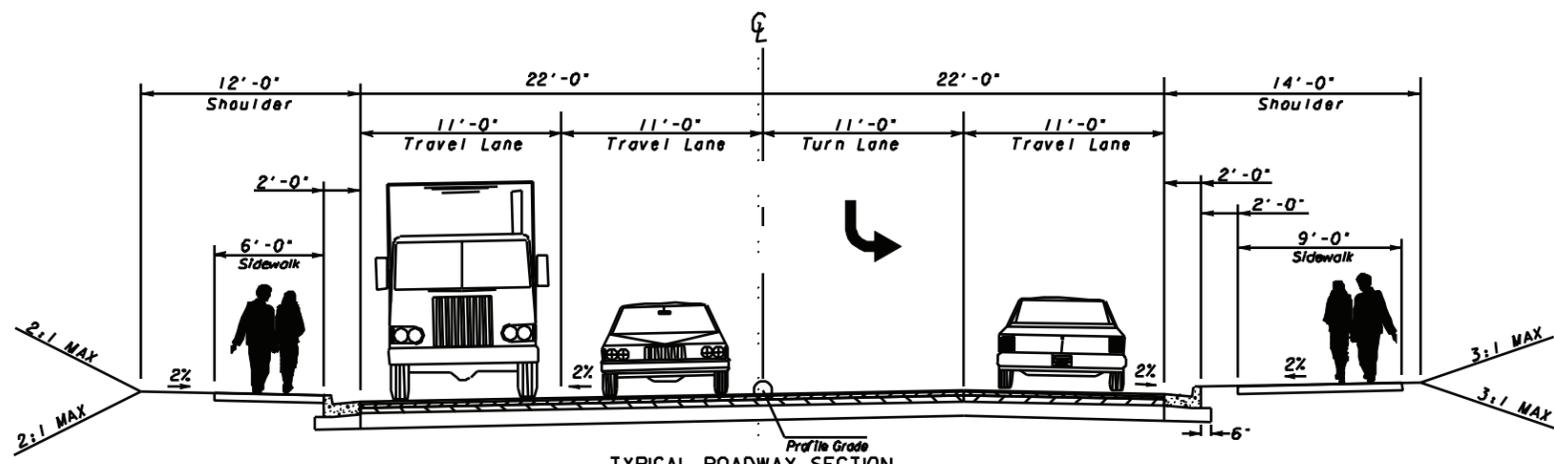
Approve: 
Chief Engineer

9/14/13
Date

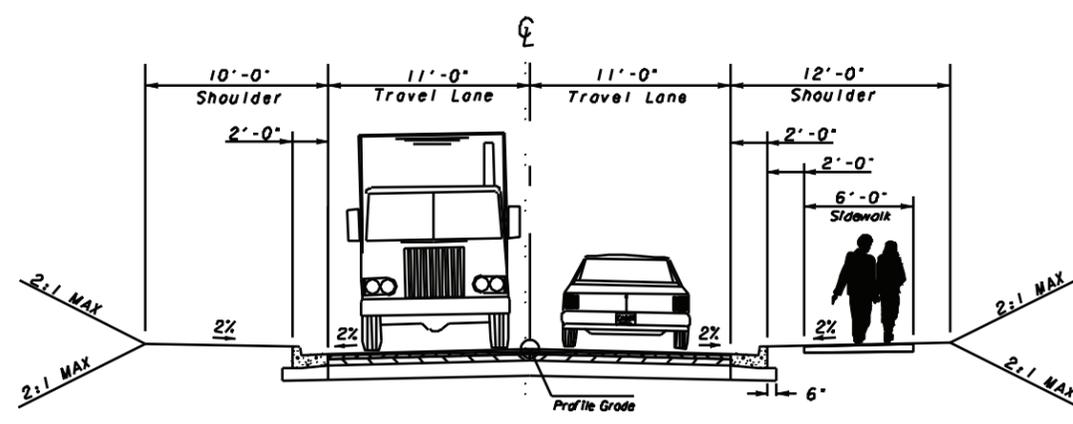




TYPICAL ROADWAY SECTION
CR 655 JOHNSON FERRY ROAD MILE LOG 0.13-0.23
NORMAL CROWN SECTION



TYPICAL ROADWAY SECTION
CR 655 JOHNSON FERRY ROAD MILE LOG 0.04-0.13
NORMAL CROWN SECTION



TYPICAL ROADWAY SECTION
CR 2067 JOHNSON FERRY ROAD MILE LOG 1.40-1.45
NORMAL CROWN SECTION

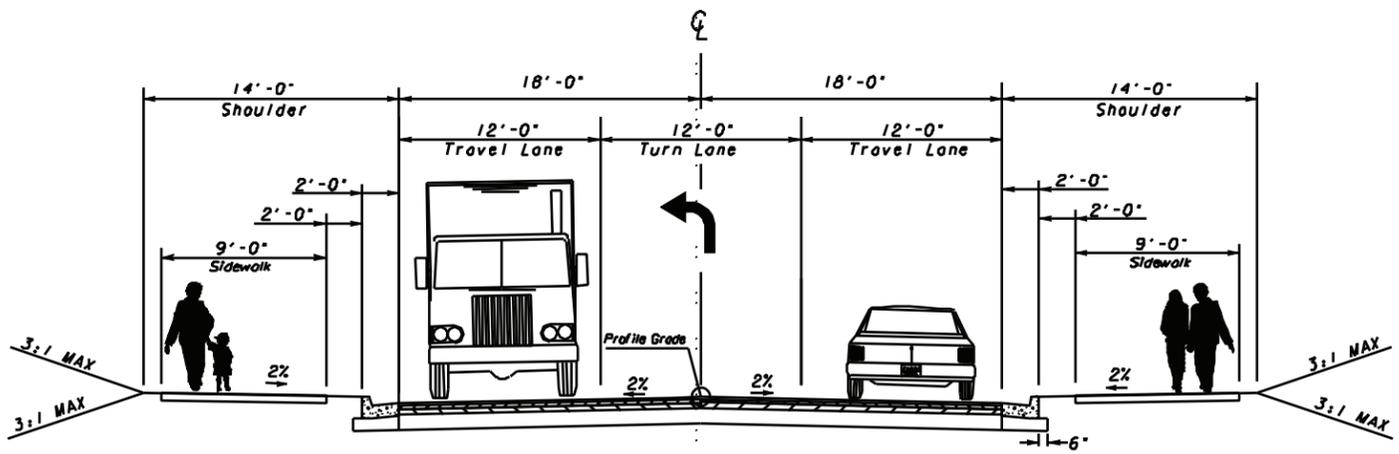
PROPERTY AND EXISTING R/W LINE	— e —
REQUIRED R/W LINE	— — —
CONSTRUCTION LIMITS	— G — F —
EASEMENT FOR CONSTR	▨
& MAINTENANCE OF SLOPES	▩
EASEMENT FOR CONSTR OF SLOPES	▧
EASEMENT FOR CONSTR OF DRIVES	▦

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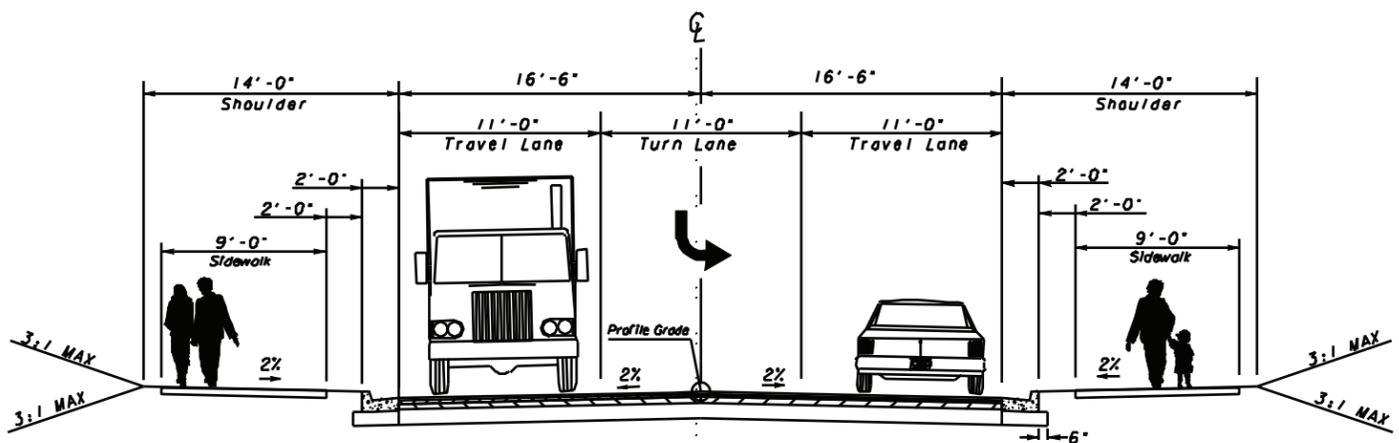


REVISION DATES	

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: DISTRICT 7
TYPICAL SECTIONS
JOHNSON FERRY ROAD AND
GLENRIDGE DR. IMPROVEMENTS
DRAWING No. 5-01



TYPICAL ROADWAY SECTION
CR 1318 MT. VERNON HIGHWAY MILE LOG 8.47-8.49
NORMAL CROWN SECTION



TYPICAL ROADWAY SECTION
CR 1318 MT. VERNON HIGHWAY MILE LOG 8.49-8.62
NORMAL CROWN SECTION

PROPERTY AND EXISTING R/W LINE	— e —
REQUIRED R/W LINE	— — —
CONSTRUCTION LIMITS	— G — F —
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	[Hatched Box]
EASEMENT FOR CONSTR OF SLOPES	[Diagonal Hatched Box]
EASEMENT FOR CONSTR OF DRIVES	[Cross-hatched Box]

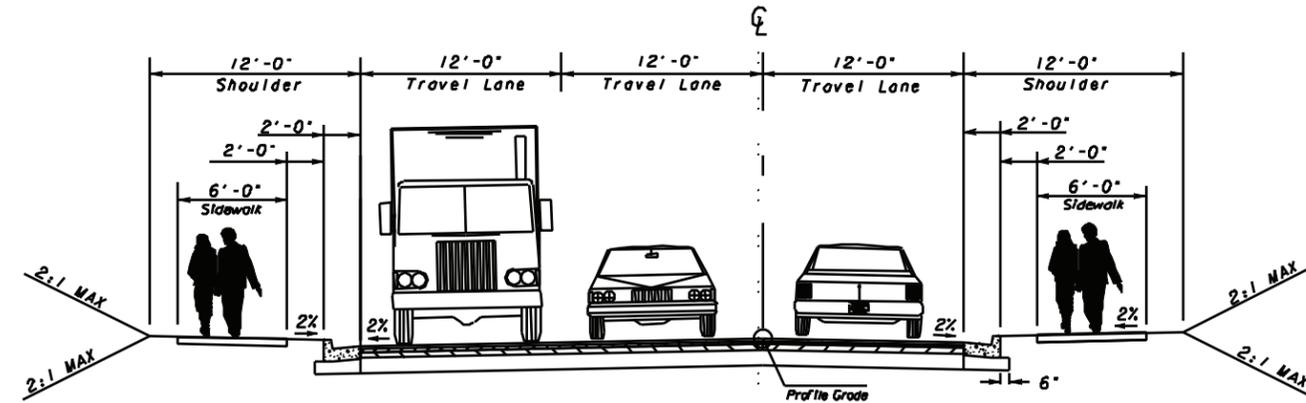
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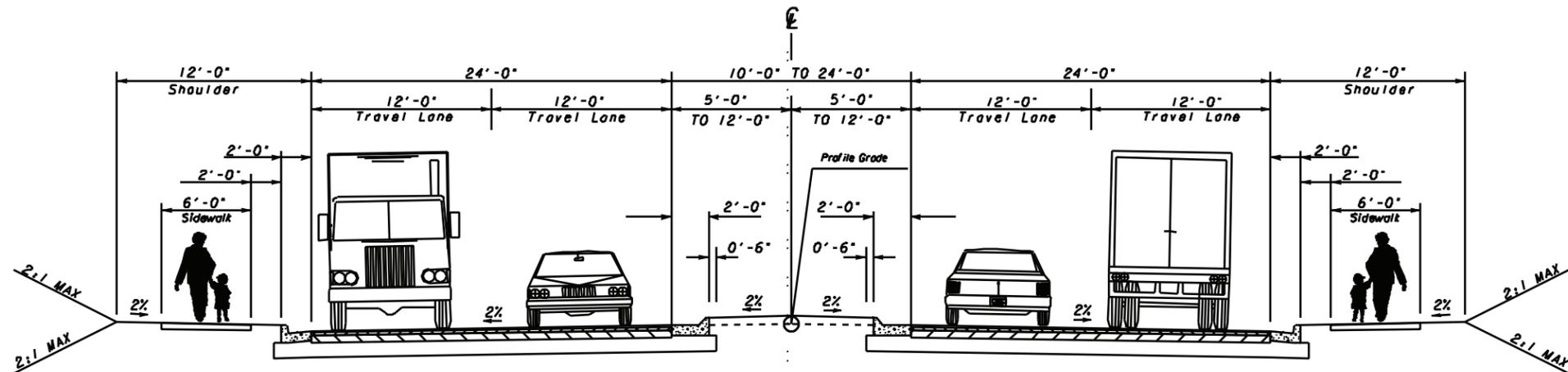
REVISION DATES	

STATE OF GEORGIA
 DEPARTMENT OF TRANSPORTATION
 OFFICE: DISTRICT 7
TYPICAL SECTIONS
 JOHNSON FERRY ROAD AND
 GLENRIDGE DR. IMPROVEMENTS

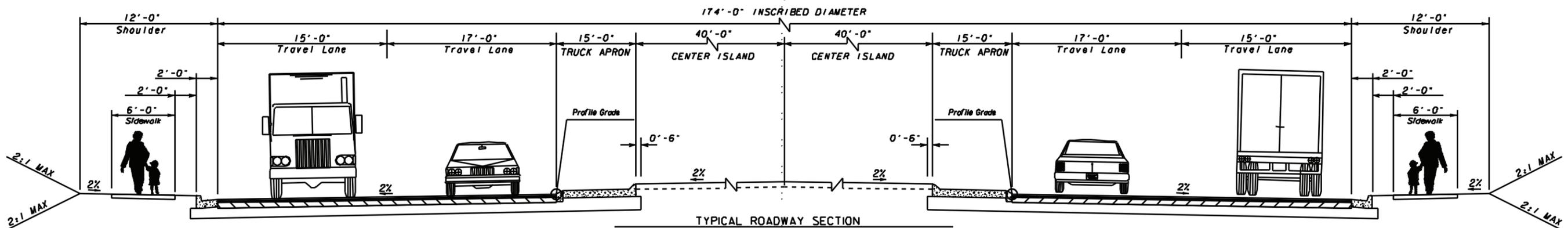
DRAWING No.
5-02



TYPICAL ROADWAY SECTION
CR 1318 MT. VERNON HIGHWAY MILE LOG 8.66-8.73
NORMAL CROWN SECTION



TYPICAL ROADWAY SECTION
COMMON SEGMENT/ DOUBLE ROUNDABOUT SECTION
CR 655 JOHNSON FERRY ROAD MILE LOG 0.01-0.03
CR 1318 MT. VERNON HIGHWAY MILE LOG 8.63-8.65
NORMAL CROWN SECTION



TYPICAL ROADWAY SECTION
DOUBLE ROUNDABOUT SECTIONS
CR 655 JOHNSON FERRY ROAD MILE LOG 0.00-0.01 & 0.03-0.04
CR 1318 MT. VERNON HIGHWAY MILE LOG 8.62-8.63 & 8.65-8.66
NORMAL CROWN SECTION

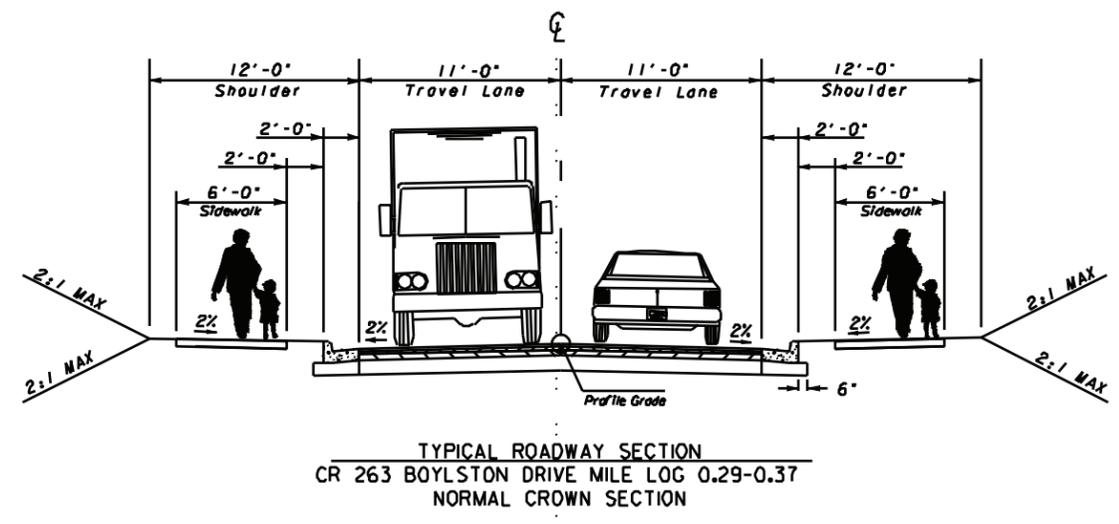
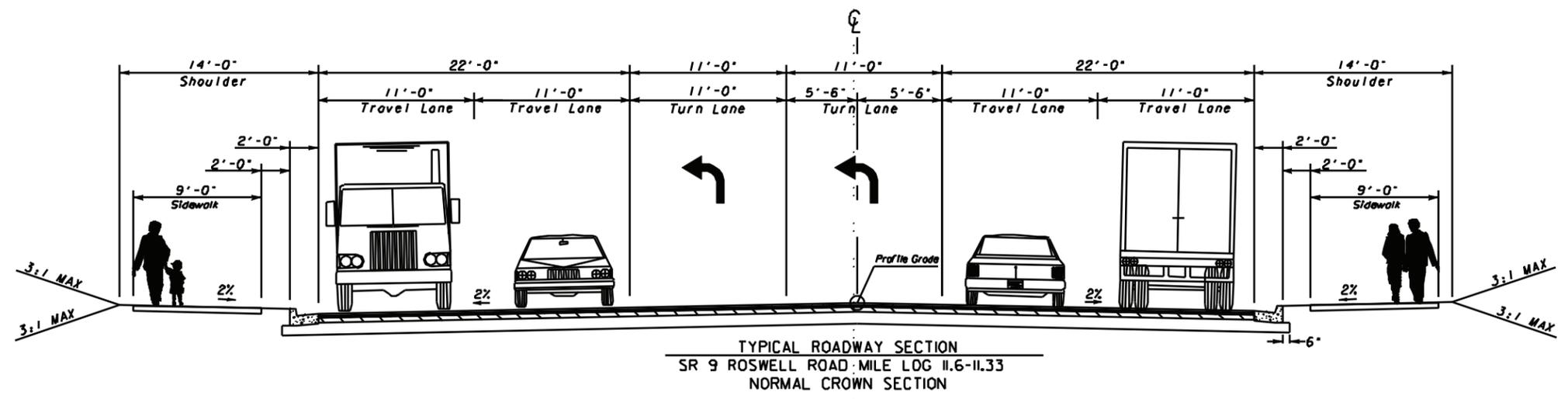
PROPERTY AND EXISTING R/W LINE	— e —
REQUIRED R/W LINE	— — — —
CONSTRUCTION LIMITS	— G — F —
EASEMENT FOR CONSTR	▨
& MAINTENANCE OF SLOPES	▩
EASEMENT FOR CONSTR OF SLOPES	▧
EASEMENT FOR CONSTR OF DRIVES	▦

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REVISION	DATE

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: DISTRICT 7
TYPICAL SECTIONS
JOHNSON FERRY ROAD AND
GLENRIDGE DR. IMPROVEMENTS
DRAWING No. 5-03



PROPERTY AND EXISTING R/W LINE — e —
 REQUIRED R/W LINE — — — — —
 CONSTRUCTION LIMITS — G — F —
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 EASEMENT FOR CONSTR OF SLOPES [cross-hatching]
 EASEMENT FOR CONSTR OF DRIVES [X-hatching]

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 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS — — — — —
 REQ'D R/W & LIMIT OF ACCESS — — — — —



REVISION DATES	

STATE OF GEORGIA
 DEPARTMENT OF TRANSPORTATION
 OFFICE: DISTRICT 7
TYPICAL SECTIONS
 JOHNSON FERRY ROAD AND
 GLENRIDGE DR. IMPROVEMENTS

DRAWING No.
5-04

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE PROJECT No. , **OFFICE**

DATE

P.I. No.

FROM

TO Lisa L. Myers, Project Review Engineer

SUBJECT REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER

MNGT LET DATE

MNGT R/W DATE

PROGRAMMED COST (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION \$

DATE

RIGHT OF WAY \$

DATE

UTILITIES \$

DATE

REVISED COST ESTIMATES

CONSTRUCTION* \$

RIGHT OF WAY \$

UTILITIES \$

* Costs contain % Engineering and Inspection

REASON FOR COST INCREASE

Revised design layout, updated quantities, updated unit prices, revised Right-of-Way calculations spreadsheet

CONTINGENCY SUMMARY

Construction Cost Estimate:	\$ 3,041,138.13	(Base Estimate)
Engineering and Inspection:	\$ 152,056.91	(Base Estimate x 5 %)
Total Liquid AC Adjustment	\$ 236,157.94	(From attached worksheet)
Construction Total:	\$ 3,430,000.00	

REIMBURSABLE UTILITY COST

Utility Owner

Reimbursable Cost

Attachments

JOB DETAIL ESTIMATE

JOB NUMBER : 751420 SPEC YEAR: 01
 DESCRIPTION: JOHNSON FERRY ROAD AND GLENNRIDGE DRIVE CORRIDOR IMPROVEMENT
 ROUNDABOUT

ITEMS FOR JOB 751420

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - STP00-9252-00(007)	1.000	150000.00	150000.00
0010	207-0203		CY	FOUND BKFILL MATL, TP II	50.000	42.62	2131.43
0015	210-0100		LS	GRADING COMPLETE - STP00-9252-00(007)	1.000	175000.00	175000.00
0020	310-1101		TN	GR AGGR BASE CRS, INCL MATL	10600.000	16.57	175655.99
0025	318-3000		TN	AGGR SURF CRS	500.000	16.17	8086.45
0027	402-1812		TN	RECYL AC LEVELING, INC BM&HL	1100.000	65.39	71930.12
0030	402-3121		TN	RECYL AC 25MM SP, GP1/2, BM&HL	7000.000	62.24	435726.83
0035	402-3130		TN	RECYL AC 12.5MM SP, GP2, BM&HL	2800.000	67.25	188305.38
0040	402-3190		TN	RECYL AC 19 MM SP, GP 1 OR 2 , INC BM&HL	2700.000	61.22	165312.95
0050	413-1000		GL	BITUM TACK COAT	3300.000	2.37	7833.80
0060	432-5010		SY	MILL ASPH CONC PVMT, VARB DEPTH	12300.000	2.16	26668.98
0088	441-0016		SY	DRIVEWAY CONCRETE, 6 IN TK	50.000	32.01	1600.70
0089	441-0018		SY	DRIVEWAY CONCRETE, 8 IN TK	400.000	42.06	16824.70
0090	441-0104		SY	CONC SIDEWALK, 4 IN	7100.000	23.05	163669.48
0092	441-0748		SY	CONC MEDIAN, 6 IN	1800.000	35.91	64642.14
0093	441-4020		SY	CONC VALLEY GUTTER, 6 IN	50.000	34.95	1747.59
0094	441-4030		SY	CONC VALLEY GUTTER, 8 IN	400.000	41.39	16558.93
0095	441-5025		LF	CONC HEADER CURB, 4", TP 9	700.000	35.00	24500.00
0100	441-6216		LF	CONC CURB & GUTTER/ 8"X24"TP2	8400.000	8.24	69263.04
0105	441-6740		LF	CONC CURB & GUTTER/ 8"X30" TP7	1200.000	12.53	15037.45
0112	446-1100		LF	PVMT REF FAB STRIPS, TP2, 18 INCH WIDTH	2500.000	3.83	9585.38
0115	500-3101		CY	CLASS A CONCRETE	50.000	414.30	20715.24
0117	500-9999		CY	CL B CONC, BASE OR PVMT WIDEN	100.000	162.25	16226.00
0120	511-1000		LB	BAR REINF STEEL	5000.000	1.18	5909.95
0125	620-0100		LF	TEMP BARRIER, METHOD NO. 1	1000.000	27.32	27328.09
0126	641-1100		LF	GUARDRAIL, TP T	100.000	56.16	5616.72
0127	641-1200		LF	GUARDRAIL, TP W	1000.000	16.45	16451.21
0128	641-5001		EA	GUARDRAIL ANCHORAGE, TP 1	5.000	661.17	3305.87
0129	641-5012		EA	GUARDRAIL ANCHORAGE, TP 12	5.000	1904.96	9524.82
0130	900-0039		SF	BRICK PAVERS	10900.000	5.00	54500.00
0131	550-1180		LF	STM DR PIPE 18", H 1-10	4500.000	29.53	132886.35
0135	550-1240		LF	STM DR PIPE 24", H 1-10	1000.000	38.13	38133.19
0140	550-1300		LF	STM DR PIPE 30", H 1-10	300.000	50.64	15194.51
0145	550-1360		LF	STM DR PIPE 36", H 1-10	200.000	54.32	10864.93
0155	550-4218		EA	FLARED END SECT 18 IN, ST DR	5.000	465.22	2326.10
0160	550-4224		EA	FLARED END SECT 24 IN, ST DR	2.000	598.90	1197.81
0165	550-4230		EA	FLARED END SECT 30 IN, ST DR	2.000	684.93	1369.88
0168	576-1018		LF	SLOPE DRAIN PIPE, 18 IN	100.000	32.84	3284.91
0170	668-1100		EA	CATCH BASIN, GP 1	80.000	2261.26	180901.13
0175	668-1110		LF	CATCH BASIN, GP 1, ADDL DEPTH	5.000	196.17	980.86
0180	668-2100		EA	DROP INLET, GP 1	8.000	1743.90	13951.23

JOB DETAIL ESTIMATE

=====						
0185	668-2110	LF	DROP INLET, GP 1, ADDL DEPTH	2.000	183.76	367.53
0190	668-4300	EA	STORM SEW MANHOLE, TP 1	8.000	1701.17	13609.41
0195	668-4311	LF	ST SEW MANHOLE,TP 1,A DEP,CL 1	2.000	186.75	373.50
0200	163-0232	AC	TEMPORARY GRASSING	1.000	51.79	51.80
0205	163-0240	TN	MULCH	25.000	198.40	4960.20
0210	163-0300	EA	CONSTRUCTION EXIT	2.000	1184.82	2369.65
0215	163-0503	EA	CONSTR AND REMOVE SILT CONTROL GATE,TP 3	5.000	341.58	1707.93
0220	163-0520	LF	CONSTR AND REMOVE TEMP PIPE SLOPE DRAIN	100.000	12.62	1262.78
0225	163-0528	LF	CONSTR AND REM FAB CK DAM -TP C SLT FN	400.000	2.58	1034.32
0230	163-0529	LF	CNST/REM TEMP SED BAR OR BLD STRW CK DM	1000.000	3.83	3832.10
0235	163-0550	EA	CONS & REM INLET SEDIMENT TRAP	65.000	98.97	6433.56
0240	165-0010	LF	MAINT OF TEMP SILT FENCE, TP A	1100.000	0.80	880.94
0245	165-0030	LF	MAINT OF TEMP SILT FENCE, TP C	4400.000	0.65	2899.95
0250	165-0087	EA	MAINT OF SILT CONTROL GATE, TP 3	5.000	99.46	497.32
0255	165-0101	EA	MAINT OF CONST EXIT	6.000	624.67	3748.06
0260	165-0105	EA	MAINT OF INLET SEDIMENT TRAP	65.000	28.24	1836.20
0265	171-0010	LF	TEMPORARY SILT FENCE, TYPE A	2200.000	1.33	2932.56
0270	171-0030	LF	TEMPORARY SILT FENCE, TYPE C	8800.000	2.54	22382.27
0275	441-0204	SY	PLAIN CONC DITCH PAVING, 4 IN	100.000	35.71	3571.05
0280	603-2181	SY	STN DUMPED RIP RAP, TP 3, 18"	100.000	35.58	3558.90
0285	603-7000	SY	PLASTIC FILTER FABRIC	100.000	3.20	320.76
0290	700-6910	AC	PERMANENT GRASSING	2.000	420.61	841.24
0295	700-7000	TN	AGRICULTURAL LIME	2.000	75.71	151.43
0300	700-8000	TN	FERTILIZER MIXED GRADE	3.000	380.50	1141.52
0305	700-8100	LB	FERTILIZER NITROGEN CONTENT	100.000	2.15	215.90
0310	700-9300	SY	SOD	2000.000	3.31	6638.64
0315	716-2000	SY	EROSION CONTROL MATS, SLOPES	5000.000	0.75	3776.25
0320	636-1033	SF	HWY SIGNS, TP1MAT,REFL SH TP 9	300.000	19.14	5744.18
0325	636-2070	LF	GALV STEEL POSTS, TP 7	600.000	7.35	4415.55
0330	653-0110	EA	THERM PVMT MARK, ARROW, TP 1	2.000	70.56	141.13
0335	653-0120	EA	THERM PVMT MARK, ARROW, TP 2	14.000	77.52	1085.35
0340	653-0130	EA	THERM PVMT MARK, ARROW, TP 3	16.000	95.43	1526.99
0345	653-0296	EA	THERMO PVMT MARKING,WORD,TP 15	12.000	90.00	1080.00
0350	653-1501	LF	THERMO SOLID TRAF ST 5 IN, WHI	3700.000	0.51	1899.40
0355	653-1502	LF	THERMO SOLID TRAF ST, 5 IN YEL	6200.000	0.48	2995.10
0360	653-1704	LF	THERM SOLID TRAF STRIPE,24",WH	960.000	4.33	4165.97
0365	653-1804	LF	THERM SOLID TRAF STRIPE, 8",WH	3200.000	1.99	6371.49
0370	653-3501	GLF	THERMO SKIP TRAF ST, 5 IN, WHI	4300.000	0.33	1448.46
0375	653-3502	GLF	THERMO SKIP TRAF ST, 5 IN, YEL	1200.000	0.28	337.96
0380	653-6004	SY	THERM TRAF STRIPING, WHITE	525.000	3.20	1684.92
0385	653-6006	SY	THERM TRAF STRIPING, YELLOW	250.000	3.41	854.15
0390	654-1001	EA	RAISED PVMT MARKERS TP 1	126.000	4.01	506.46
0395	654-1003	EA	RAISED PVMT MARKERS TP 3	328.000	3.41	1119.00
0400	615-1200	LF	DIRECTIONAL BORE - 3 IN	300.000	10.69	3209.66
0405	615-1200	LF	DIRECTIONAL BORE - 5 IN	620.000	9.87	6122.64
0410	639-3004	EA	STEEL STRAIN POLE, TP IV WITH 2-65' MAST ARMS	4.000	12816.86	51267.45
0415	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 1 - JOHNSON FERRY ROAD AT ROSWELL ROAD	1.000	75000.00	75000.00
0420	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 2 - MT.	1.000	75000.00	75000.00

JOB DETAIL ESTIMATE

0425	647-1000	LS	VERNON HIGHWAY AT ROSWELL ROAD	1.000	10000.00	10000.00
			TRAF SIGNAL INSTALLATION NO - 3 - SANDY			
0430	647-1000	LS	SPRINGS CIRCLE AT ROSWELL ROAD	1.000	10000.00	10000.00
			TRAF SIGNAL INSTALLATION NO - 4 -			
0435	647-2160	EA	HILDERBRAND DRIVE AT ROSWELL ROAD	16.000	1069.19	17107.11
			PULL BOX, PB-6			
0440	647-3000	EA	INTERNAL ILLUMIN ST NAME SIGN	8.000	2700.00	21600.00
0445	647-3100	EA	INTERNAL ILLUMIN ST NAME SIGN CONTR	2.000	400.00	800.00
			ASEM			
0450	647-6057	EA	PEDESTAL POLE	1.000	950.00	950.00
0455	682-6120	LF	CONDUIT, RIGID, 2 IN	2200.000	10.59	23302.42
0460	682-6222	LF	CONDUIT, NONMETL, TP 2, 2 IN	840.000	6.27	5272.87
0465	682-6233	LF	CONDUIT, NONMETL, TP 3, 2 IN	400.000	3.58	1433.99
0470	936-1001	EA	CCTV SYSTEM, TYPE B	2.000	5600.65	11201.31
0475	936-8000	LS	TESTING	1.000	1000.00	1000.00
0480	937-6050	EA	INT VIDEO DET SYS ASMBLY, TP A	23.000	4395.11	101087.56
0485	937-6100	EA	OUTPUT EXPANSION MODULE, TP A	2.000	600.00	1200.00
0490	937-8000	LS	TESTING	1.000	1000.00	1000.00
0495	939-1191	EA	VIDEO ENCODER, TYPE B	2.000	3700.00	7400.00
0500	939-2237	EA	GBIC, TYPE D	2.000	500.00	1000.00
0505	939-2305	EA	FIELD SWITCH, TYPE C	2.000	1830.55	3661.10
0510	682-9030	LS	LIGHTING SYSTEM	1.000	135000.00	135000.00

ITEM TOTAL						3041138.07
INFLATED ITEM TOTAL						3041138.07

TOTALS FOR JOB 751420						
ESTIMATED COST:						3041138.13
CONTINGENCY PERCENT (5.0):						152056.91
ESTIMATED TOTAL:						3193195.04

PROJ. NO.

STP00-9252-00(007)

CALL NO.

P.I. NO.

751420

DATE

6/7/2013

INDEX (TYPE)

Link to Fuel and AC Index:

REG. UNLEADED

DATE Jun-13

INDEX

\$ 3.424

DIESEL

\$ 3.805

LIQUID AC

\$ 567.00

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

LIQUID AC ADJUSTMENTS

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

Asphalt

Price Adjustment (PA)

231336

\$

231,336.00

Monthly Asphalt Cement Price month placed (APM)

\$

907.20

Monthly Asphalt Cement Price month project let (APL)

\$

567.00

Total Monthly Tonnage of asphalt cement (TMT)

680

ASPHALT

AC ton

Leveling

1100

55

12.5 OGFC

2800

0

12.5 mm

7000

140

9.5 mm SP

2700

0

25 mm SP

13600

350

19 mm SP

680

135

680

BITUMINOUS TACK COAT

Price Adjustment (PA)

4,821.94

\$

4,821.94

Monthly Asphalt Cement Price month placed (APM)

\$

907.20

Monthly Asphalt Cement Price month project let (APL)

\$

567.00

Total Monthly Tonnage of asphalt cement (TMT)

14.17383304

Bitum Tack

Gals

gals/ton

tons

3300

232.8234

14.173833

GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY

Date: 6/6/2013 Project: STP00-9252-00(007)
 Revised: County: Fulton
 PI: 751420

Description: Johnson Ferry Road Roundabouts and SR 9 Improvements
 Project Termini: JFR from Sandy Springs Circle to Mt. Vernon Hwy

Existing ROW: 0
 Required ROW: 110724
 Parcels: 36

Land and Improvements \$7,252,500.00

Proximity Damage	\$10,000.00
Consequential Damage	\$200,000.00
Cost to Cures	\$200,000.00
Trade Fixtures	\$0.00
Improvements	\$850,000.00

Valuation Services \$90,875.00

Legal Services \$249,300.00

Relocation \$147,000.00

Demolition \$0.00

Administrative \$304,500.00

TOTAL ESTIMATED COSTS \$8,044,175.00

TOTAL ESTIMATED COSTS (ROUNDED) \$8,045,000.00

Preparation Credits	Hours	Signature

Prepared By: Dr. E. Byrd CG#: 00064189(IH) (DATE) 6-18-13
 Approved By: _____ CG#: _____ (DATE) _____

NOTE: No Market Appreciation is included in this Preliminary Cost Estimate



Technical Memorandum

Date: June 7, 2013

Prepared For: File

Prepared By: Ed Culican

Subject: Summary of Utility Conflicts

Project: Johnson Ferry Road Corridor Improvements
Project No. STP00-9252-00(007); PI No. 751420, COSS T-0011

The purpose of this technical memorandum is to summarize the utility involved on the project, and any potential conflicts and/or relocations necessary for the subject project as documentation for the project Concept Report. The following is the utilities involved and a list of potential conflicts for each facility

Georgia Power – Existing facilities located on the project includes overhead electric and underground electric service for pedestrian light fixtures. After a review of known utility features in the project, it appears that 31 poles will need to be relocated, along with approximately 3000 feet of overhead electric lines. Additionally, 18 existing pedestrian lights will need to be relocated, and 1500 feet of underground electric lines may be relocated. Also, a part of this project, approximately 75 additional pedestrian lights will need to be added along with 7500 feet of underground electric service lines for these light fixtures.

Telecommunications – An ATT telecommunications duck bank along Roswell Road has 10 manholes on the project that will need to be adjusted to grade.

Gas – A conflict with an AGL gas line and proposed drainage structures and pipe may exist as part of this project. If the design cannot be adjusted to avoid this conflict, approximately 900 feet of 6" plastic gas line and 1100 feet of 2" plastic gas line will need to be relocated.

Sanitary Sewer – Three potential conflicts with an existing sanitary sewer lines and proposed drainage structures and pipes may exist. Potential design changes may avoid these conflicts. However, it is anticipated that 1500 feet of 8" DIP will need to be relocated. Also, 16 sanitary sewer manholes will need to be adjusted to grade as part of the project.

Water - Three potential conflicts with an existing water lines and proposed drainage structures and pipes may exist. Potential design changes may avoid these conflicts. Also, 22 water meters, 4 water valves, and 2 fire hydrant will need to be relocated as part of the project.

Summary of Quantities and Costs:
Georgia Power

Technical Memorandum – Utility Estimate

June 7, 2013

Page 2

Relocated poles – 31 ea @ \$800/pole = \$24,800
Relocated overhead lines – 3000 LF @ \$50/LF = \$150,000
Relocated ped lights, services lines, and conduit – 18 ea @ \$6000/light = \$108,000
Relocated ped service lines and conduit – 1500 LF (included above)
New ped lights, services lines, and conduit – 75 ea @ \$8500/light = \$637,500
New ped services lines, and conduit – 7500 LF (included above)
Total Electric and Lighting = \$920,300

Telecommunications

Adjust MH to grade – 10 ea @ \$875/MH = \$8,750
Total Telecommunications = \$8,750

Gas

Relocated 6" plastic line – 900 LF @ \$60/LF = \$54,000
Relocated 2" plastic line – 1100 LF @ \$45/LF = \$49,500
Total Gas = \$103,500

Sanitary Sewer

Adjust MH to grade – 16 ea @ \$875/MH = \$14,000
Relocate 8" DIP – 1500 LF @ \$73/LF = \$109,500
Total Sanitary Sewer = \$123,500

Water

Relocated water meter – 22 ea @ \$225/WM = \$4,950
Relocated water valve – 4 ea @ \$300/WV = \$1,200
Relocated fire hydrant – 2 ea @ \$2800/FH = \$5,600
Total Water = \$11,750

Total Project Utility Cost Estimate = \$1,167,800 use \$1,168,000

CRASH SUMMARIES
JOHNSON FERRY ROAD AND GLENRIDGE DRIVE CORRIDOR IMPROVEMENTS
PROJECT STP00-9252-00(007)
COUNTY: FULTON
P.I. NUMBER: 754120
FEDERAL ROUTE NUMBER: NA
STATE ROUTE NUMBER: NA

Project Background

The project corridor is located in the City of Sandy Springs, Georgia and begins east of the intersection of Johnson Ferry Road and Sandy Springs Circle and terminates east of the intersection of Johnson Ferry Road and Mt. Vernon Highway. The project is located in the City of Sandy Springs, in Fulton County, Georgia. The total length of the project corridor is 1.19 miles.

The existing corridor is a mix of two-lane and four-lane facilities. The section of Johnson Ferry Road from Sandy Springs Circle to Mt. Vernon Highway is a four-lane section from Sandy Springs Circle to Roswell Road, and then has one-way pair arrangements along Johnson Ferry Road and Mt. Vernon Highway to the Johnson Ferry Road and Mt. Vernon Highway intersection. After this intersection, Johnson Ferry Road and Mt. Vernon Highway become two-lane facilities. Roswell Road through the project corridor is a four-lane facility with an 11-foot flush median.

Land use within and around the project corridor includes residential, commercial, private and public organizations (i.e. churches, a library and a city park) and undeveloped areas. Along Johnson Ferry Road between Sandy Springs Circle and Glenridge Drive, there are several major commercial and retail developments. Municipal land uses in the corridor include Fire Station #2, near the Sandy Springs Circle intersection, and the Sandy Springs branch of the Fulton County Library near the Johnson Ferry Road and Glenridge Drive intersection. Note, the future Sandy Springs City Hall complex is planned for the old Target building located on the south side of Johnson Ferry Road between Sandy Springs Circle and Roswell Road. Therefore, due to all these existing factors and the traffic generated within the corridor, improvements to enhance the operational capacity of the existing facility are required to handle the future travel demands. A detailed project location map is located on the last page of the document.

Crashes

Increasing safety is also an objective of the Johnson Ferry Road project. Crash data from 2007-2009 was obtained for study area roadways. A summary of the crash data for the project corridor is shown in Tables 3-8. As shown in Tables 3 and 5, Johnson Ferry Road and Roswell Road experienced significantly higher crash and injury rates than statewide averages for their respective functional classification. Johnson Ferry Road experienced crash and injury rates almost three times higher than statewide average, while this segment of Roswell Road experienced crash rates approximately five times higher than statewide average and injury rates approximately three times higher. As shown in Table 7, Mt. Vernon Highway experiences crash and injury rates slightly lower than statewide averages for this three year period. These high

crash rates are most probably a result of the heavily congested conditions on these roadways throughout much of the day.

Tables 4, 6, and 8 present the types of crashes experienced on these roadway for the same time period. Although rear end crashes were the most common type of crash, this data does reveal a high number of angle crashes. By providing improved operation and reducing congestion, this project would likely help alleviate these high crash rates.

Table 3: Crash Analysis – Johnson Ferry Road (2007-2009)

Johnson Ferry Road (Wright Road to Glenridge Drive) – Urban Minor Arterial									
Year	Annual Crashes	Crash Rate (per 100 million vehicle-miles (MVM))		Annual Injuries	Injury Rate (per 100 million vehicle-miles (MVM))		Annual Fatalities	Fatality Rate (per 100 million vehicle-miles (MVM))	
		Road Segment	Statewide Average		Road Segment	Statewide Average		Road Segment	Statewide Average
2007	139	1588	514	34	389	126	0	0	1.47
2008	117	1328	471	25	284	116	0	0	1.46
2009	87	1004	463	33	381	114	0	0	1.07
Average	114	1307	483	31	351	119	0	0	1.33

Source: Georgia Department of Transportation

Table 4: Collisions by Crash Type – Johnson Ferry Road (2007-2009)

Collision Type	2007		2008		2009	
	Number	Number	Number	Number	Percent	Number
Angle	39	28%	33	28%	18	21%
Head On	2	1%	2	2%	1	1%
Rear End	80	58%	69	59%	58	67%
Sideswipe	12	9%	12	10%	7	8%
Other	6	4%	1	1%	3	3%
Total	139		117		87	

Source: Georgia Department of Transportation

Table 5: Crash Analysis – Roswell Road (2007-2009)

Roswell Road (Hilderbrand Dr to Sandy Springs Circle) – Urban Principal Arterial									
Year	Annual Crashes	Crash Rate (per 100 million vehicle-miles (MVM))		Annual Injuries	Injury Rate (per 100 million vehicle-miles (MVM))		Annual Fatalities	Fatality Rate (per 100 million vehicle-miles (MVM))	
		Road Segment	Statewide Average		Road Segment	Statewide Average		Road Segment	Statewide Average
2007	94	2730	549	12	348	133	0	0	1.51
2008	101	3013	524	17	507	125	0	0	1.33
2009	69	2118	536	18	552	131	0	0	1.29
Average	88	2620	536	16	469	130	0	0	1.38

Source: Georgia Department of Transportation

Table 6: Collisions by Crash Type – Roswell Road (2007-2009)

Collision Type	2007		2008		2009	
	Number	Percent	Number	Number	Percent	Number
Angle	36	38%	42	41%	21	30%
Head On	2	2%	2	2%	2	3%
Rear End	40	43%	41	41%	38	55%
Sideswipe	15	16%	14	14%	7	10%
Other	1	1%	2	2%	1	2%
Total	94		101		69	

Source: Georgia Department of Transportation

Table 7: Crash Analysis – Mt. Vernon Highway (2007-2009)

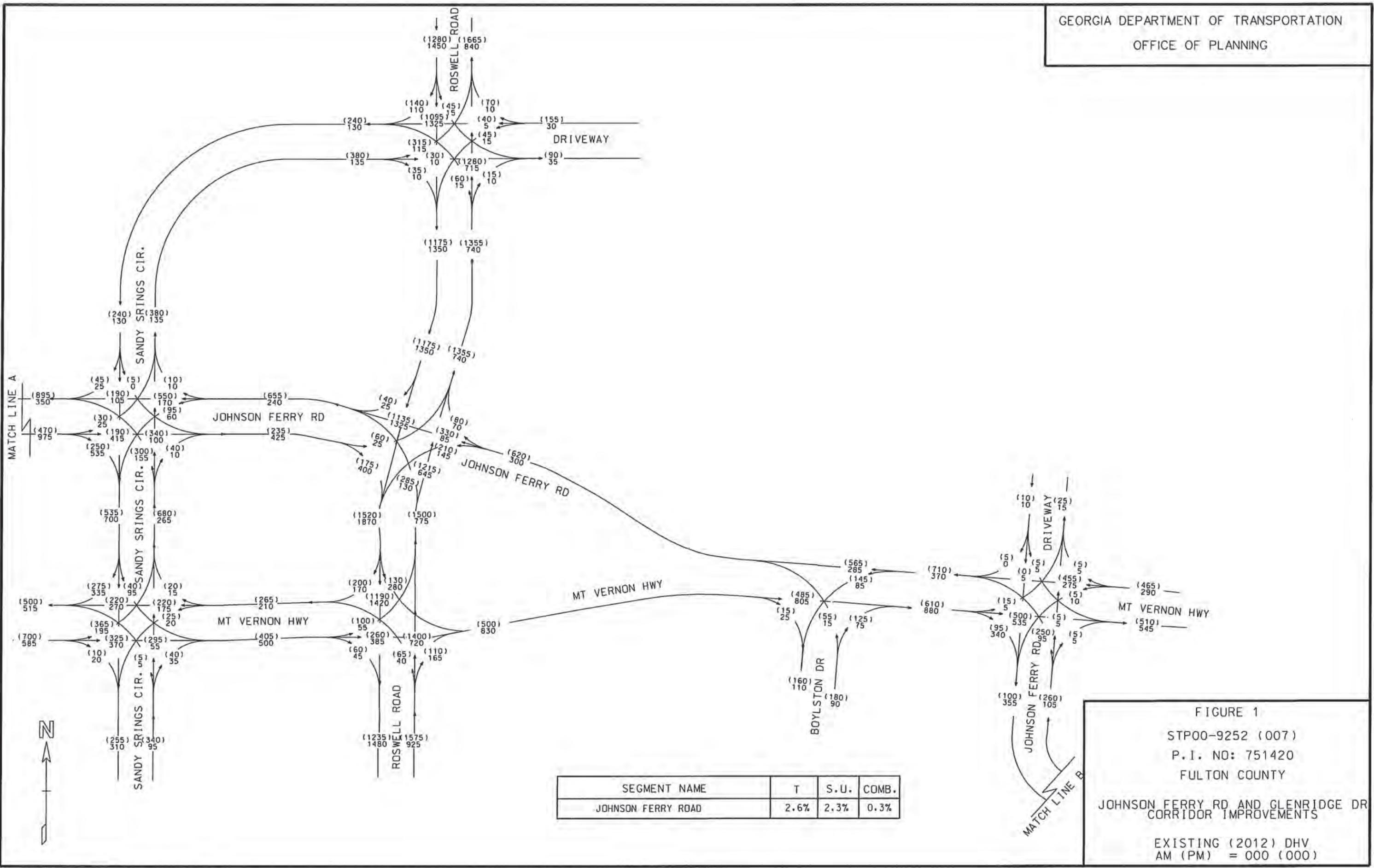
Mount Vernon Road (Sandy Springs Circle to Glenridge Dr) – Urban Minor Arterial									
Year	Annual Crashes	Crash Rate (per 100 million vehicle-miles (MVM))		Annual Injuries	Injury Rate (per 100 million vehicle-miles (MVM))		Annual Fatalities	Fatality Rate (per 100 million vehicle-miles (MVM))	
		Road Segment	Statewide Average		Road Segment	Statewide Average		Road Segment	Statewide Average
2007	22	682	514	4	124	126	0	0	1.47
2008	13	428	471	3	99	116	0	0	1.46
2009	8	271	463	1	34	114	0	0	1.07
Average	14	460	483	3	86	119	0	0	1.33

Source: Georgia Department of Transportation

Table 8: Collisions by Crash Type – Mt. Vernon Highway (2007-2009)

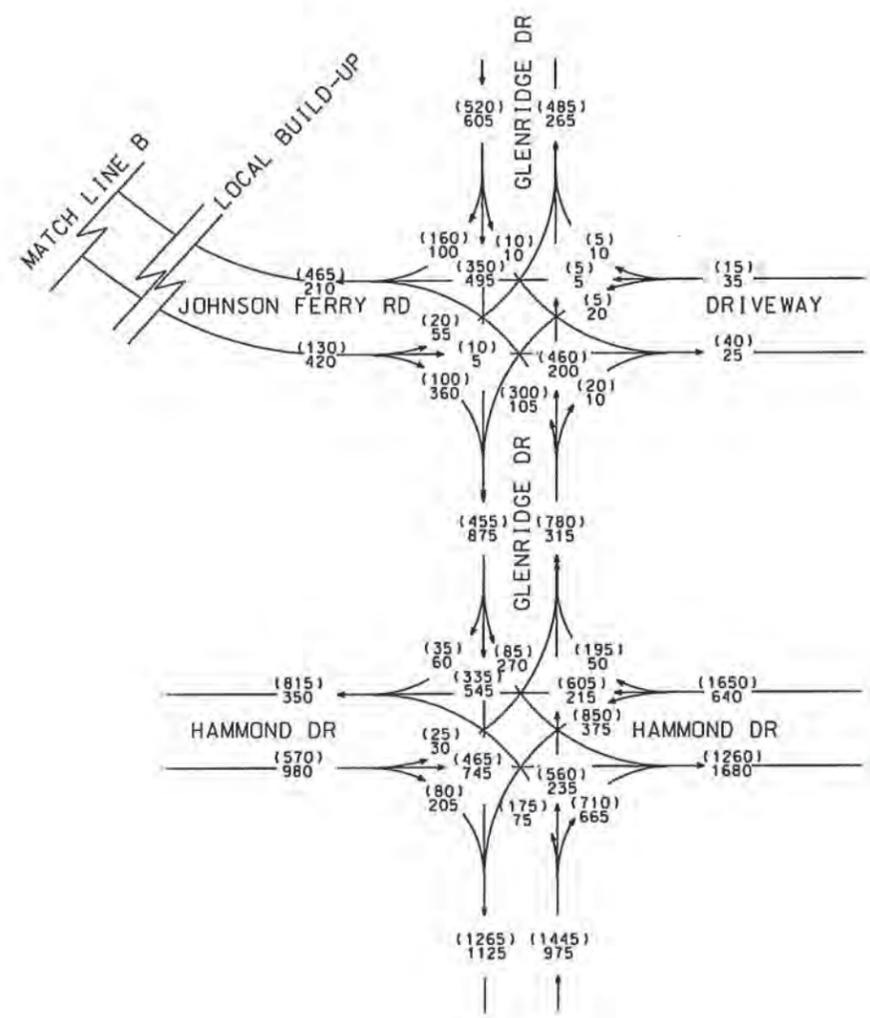
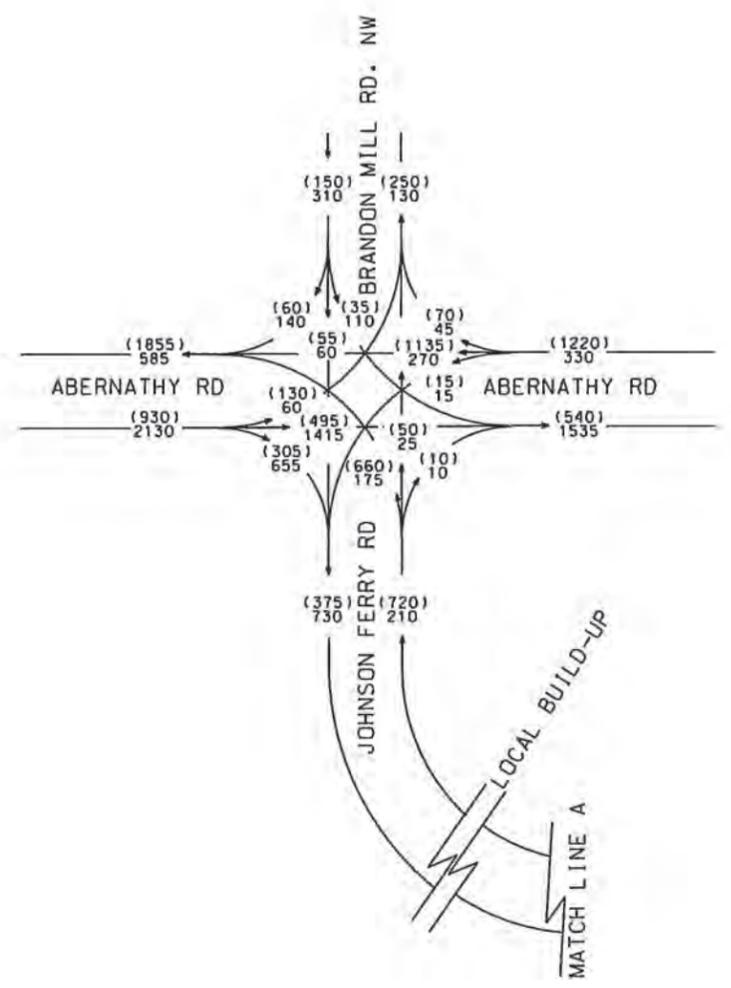
Collision Type	2007		2008		2009	
	Number	Percent	Number	Percent	Number	Percent
Angle	7	32%	7	54%	3	38%
Head On	2	9%	-	-	-	-
Rear End	8	36%	4	31%	3	38%
Sideswipe	5	23%	2	15%	2	24%
Other	-	-	-	-	-	-
Total	22		13		8	

Source: Georgia Department of Transportation



SEGMENT NAME	T	S.U.	COMB.
JOHNSON FERRY ROAD	2.6%	2.3%	0.3%

FIGURE 1
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
EXISTING (2012) DHV
AM (PM) = 000 (000)



SEGMENT NAME	T	S.U.	COMB.
JOHNSON FERRY ROAD	2.6%	2.3%	0.3%

FIGURE 2
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
EXISTING (2012) DHV
AM (PM) = 000 (000)

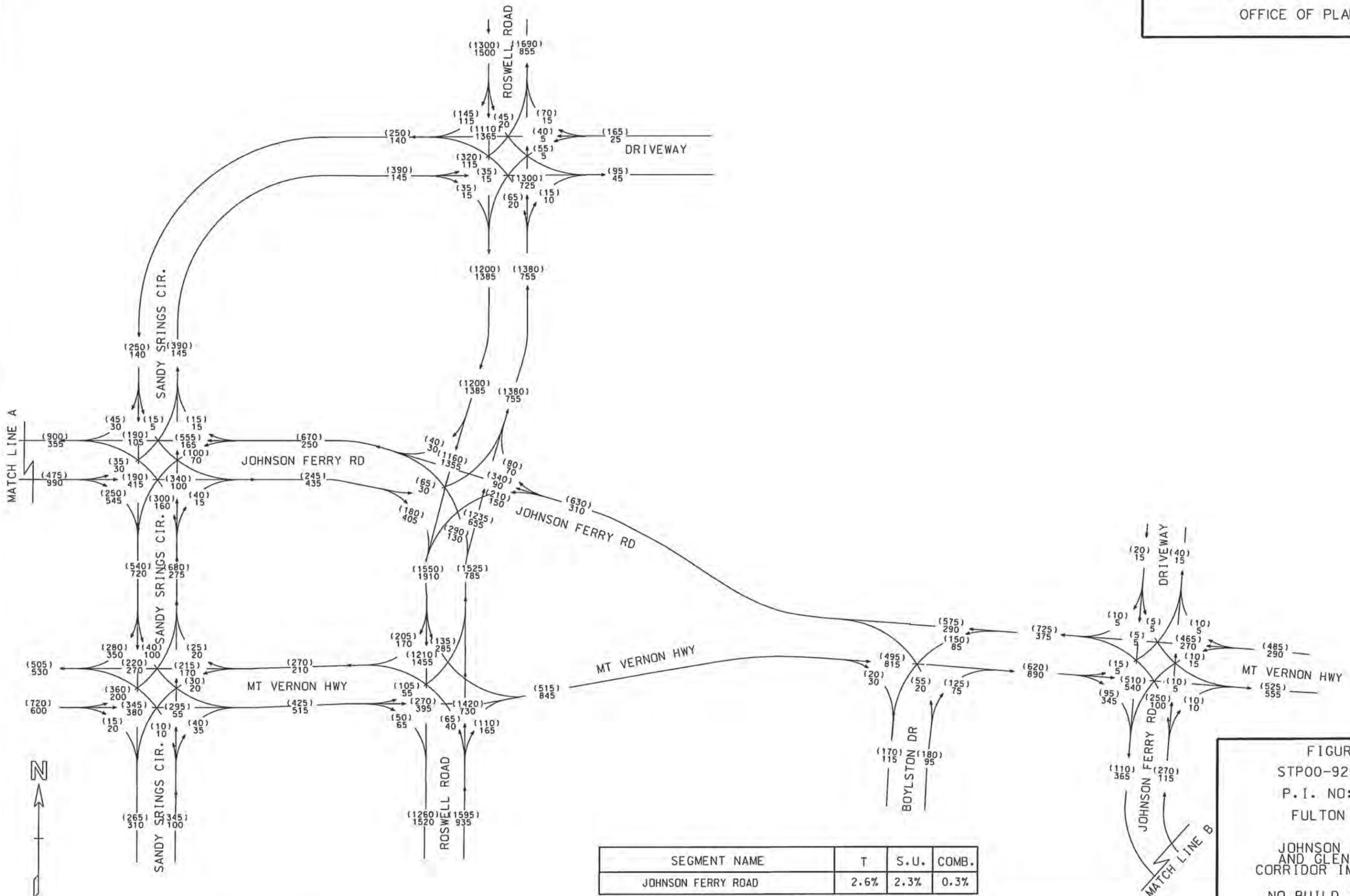
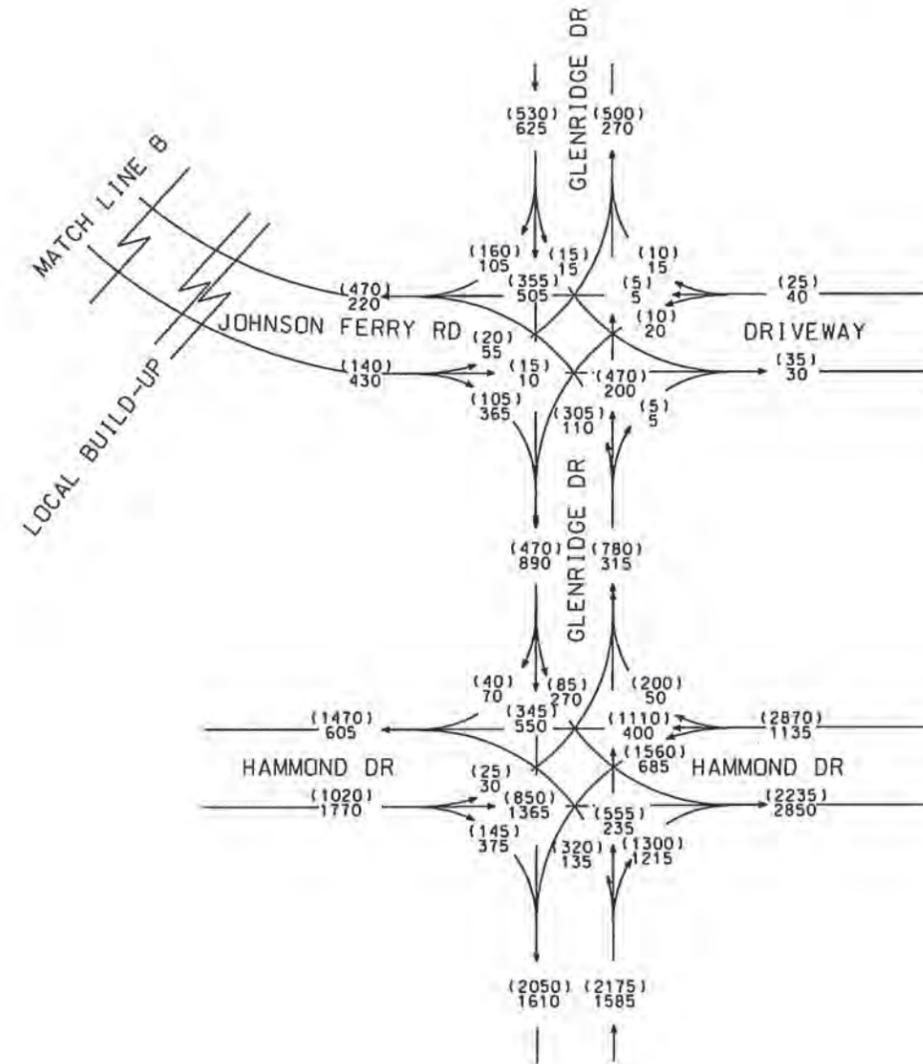
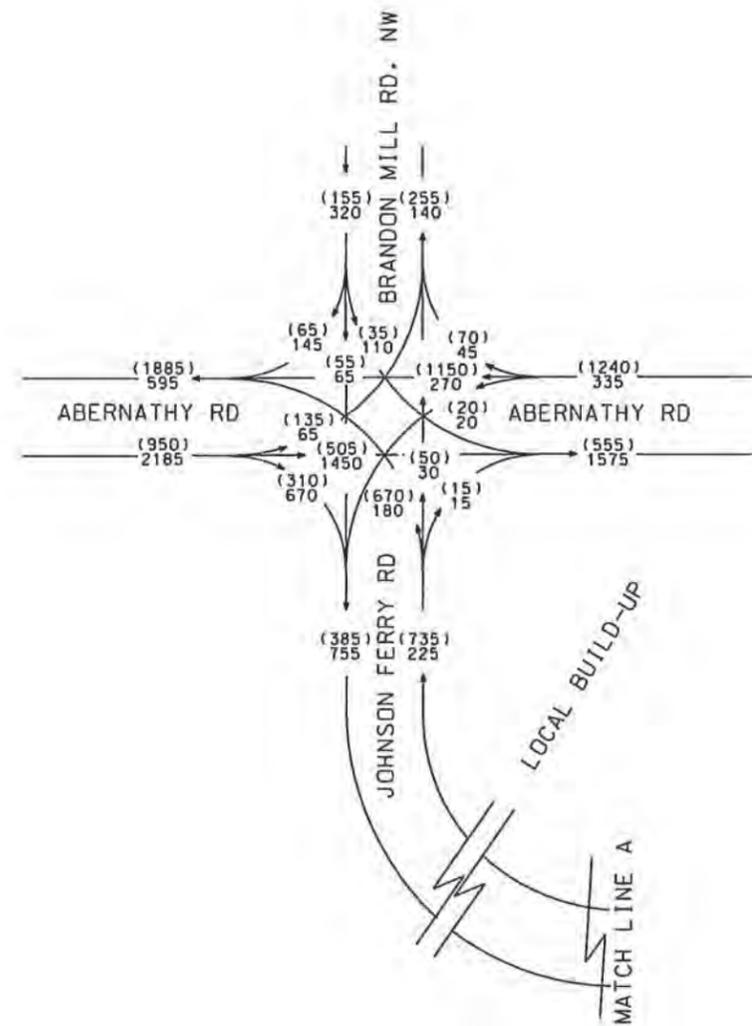


FIGURE 3
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD
AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
NO_BUILD (2016) DHV
AM (PM) = 000 (000)



SEGMENT NAME	T	S.U.	COMB.
JOHNSON FERRY ROAD	2.6%	2.3%	0.3%

FIGURE 4
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
NO-BUILD (2016) DHV
AM (PM) = 000 (000)

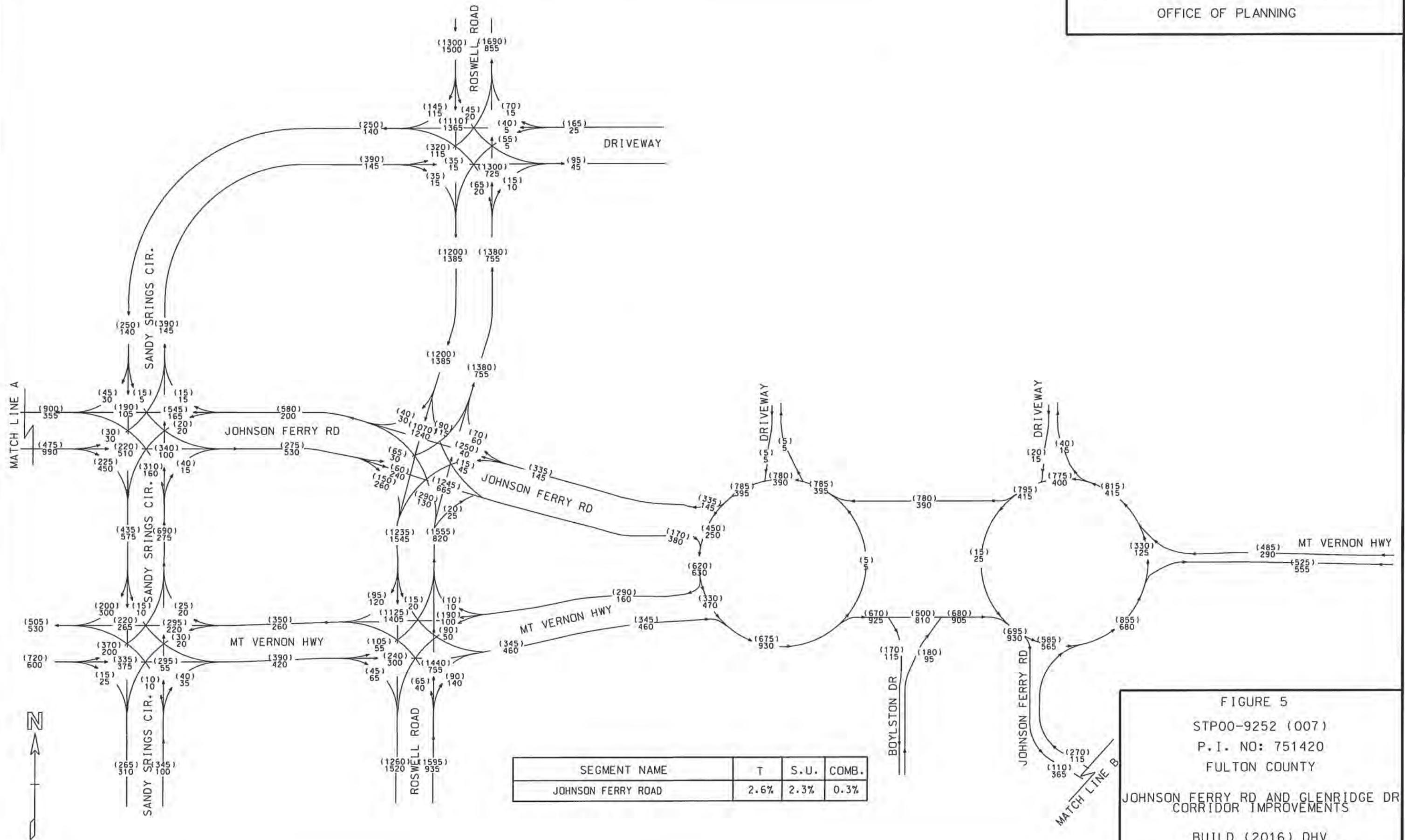
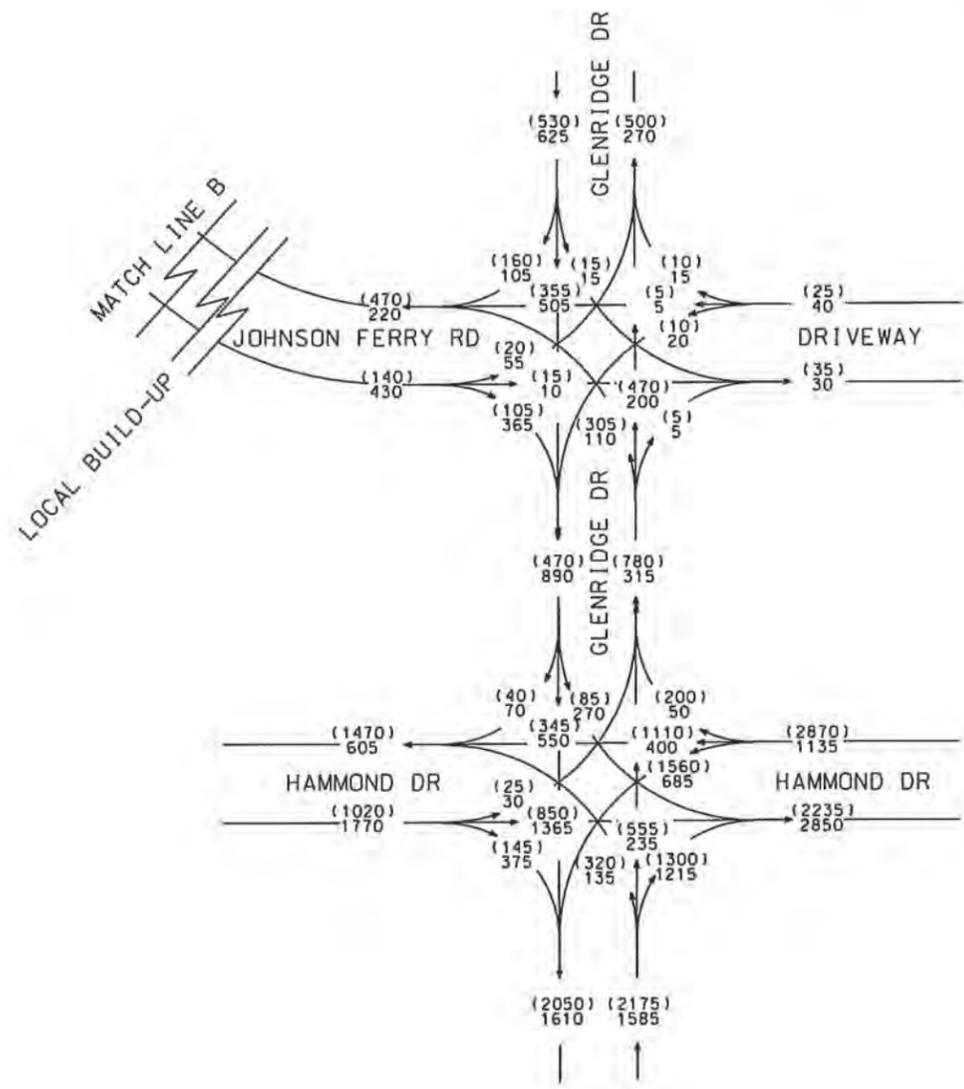
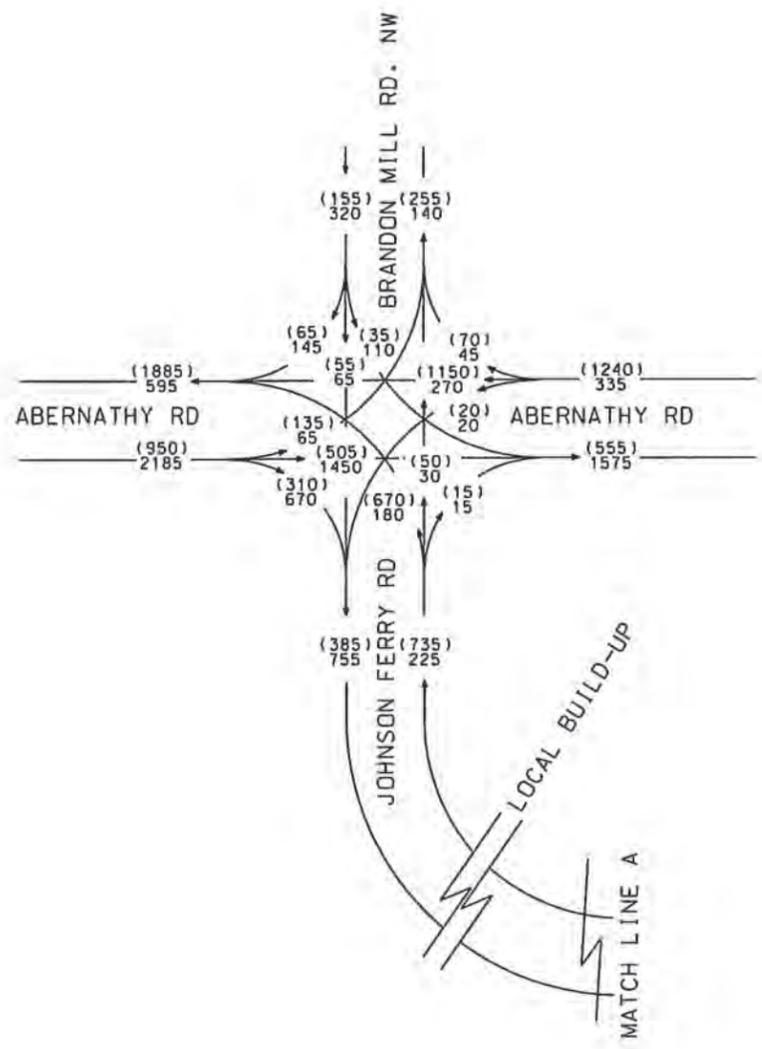
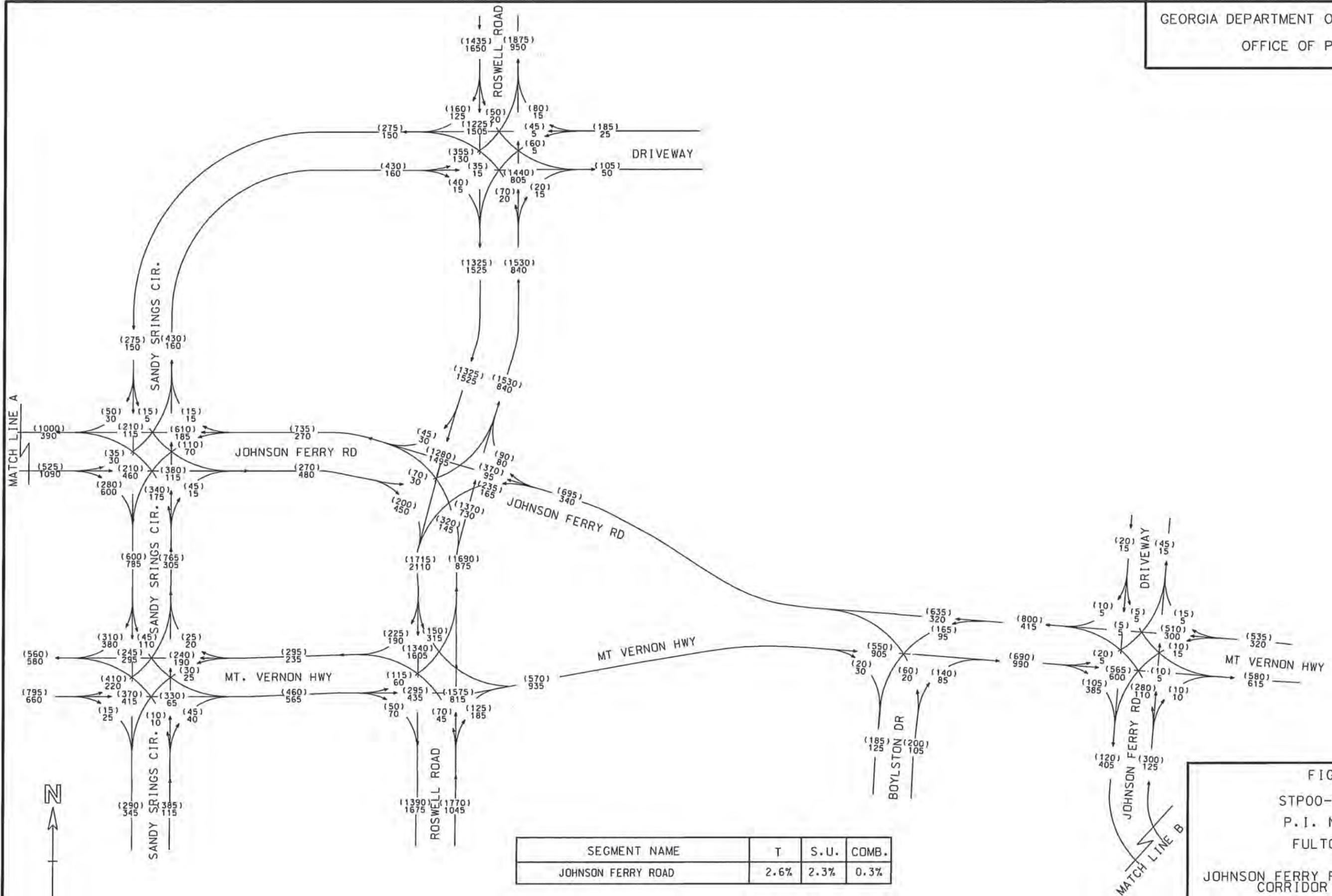


FIGURE 5
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
BUILD (2016) DHV
AM (PM) = 000 (000)



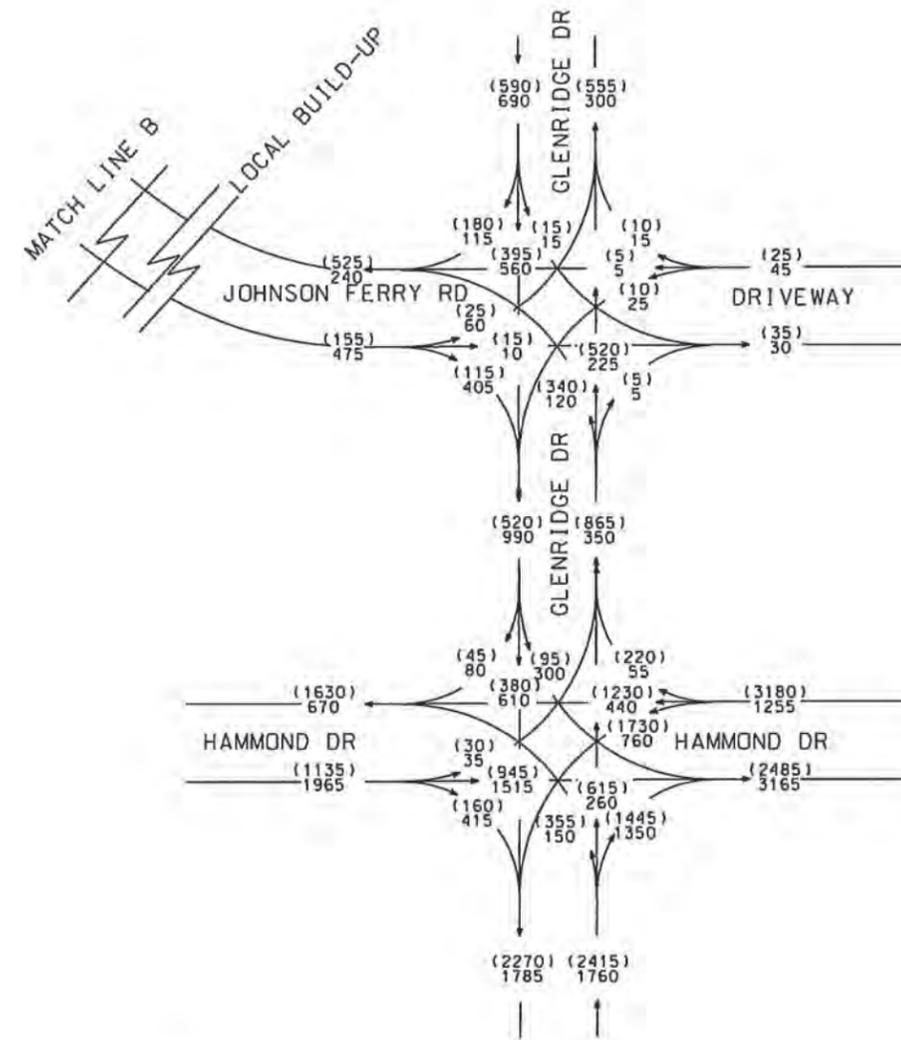
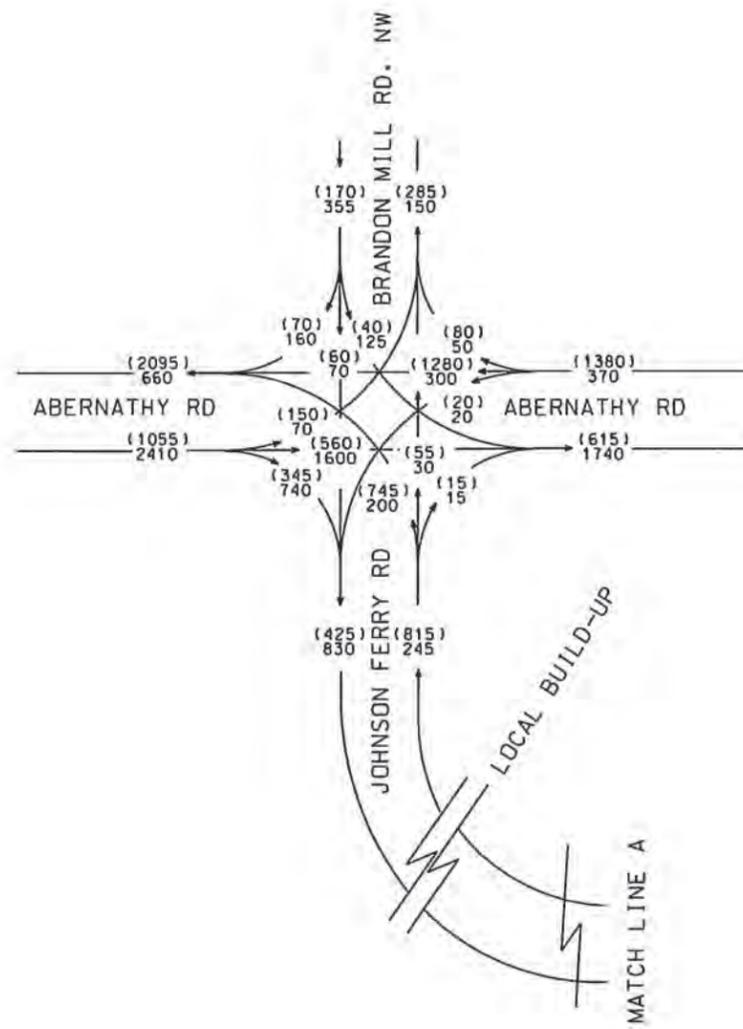
SEGMENT NAME	T	S.U.	COMB.
JOHNSON FERRY ROAD	2.6%	2.3%	0.3%

FIGURE 6
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
BUILD (2016) DHV
AM (PM) = 000 (000)



SEGMENT NAME	T	S.U.	COMB.
JOHNSON FERRY ROAD	2.6%	2.3%	0.3%

FIGURE 7
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
NO BUILD (2036) DHV
AM (PM) = 000 (000)



SEGMENT NAME	T	S.U.	COMB.
JOHNSON FERRY ROAD	2.6%	2.3%	0.3%

FIGURE 8
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
NO BUILD (2036) DHV
AM (PM) = 000 (000)

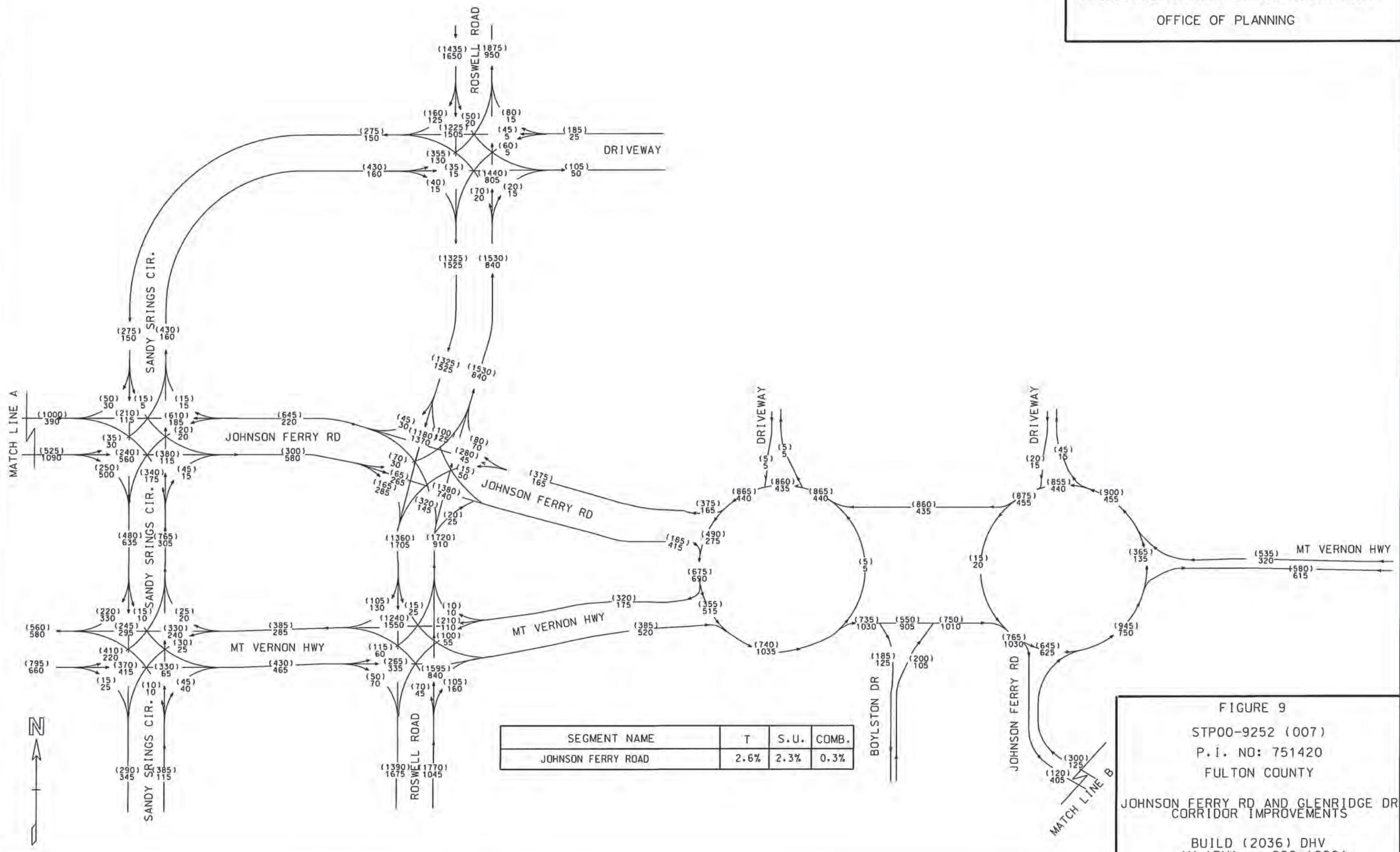
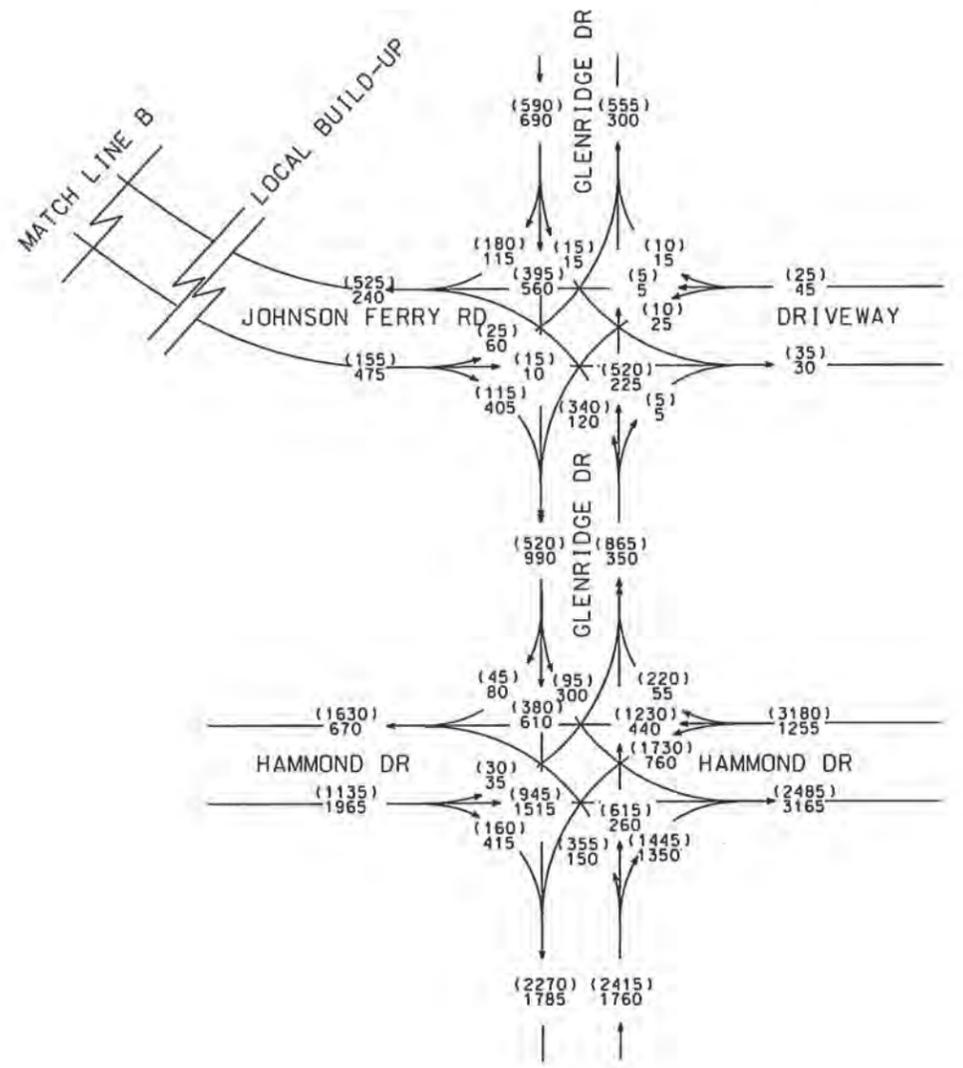
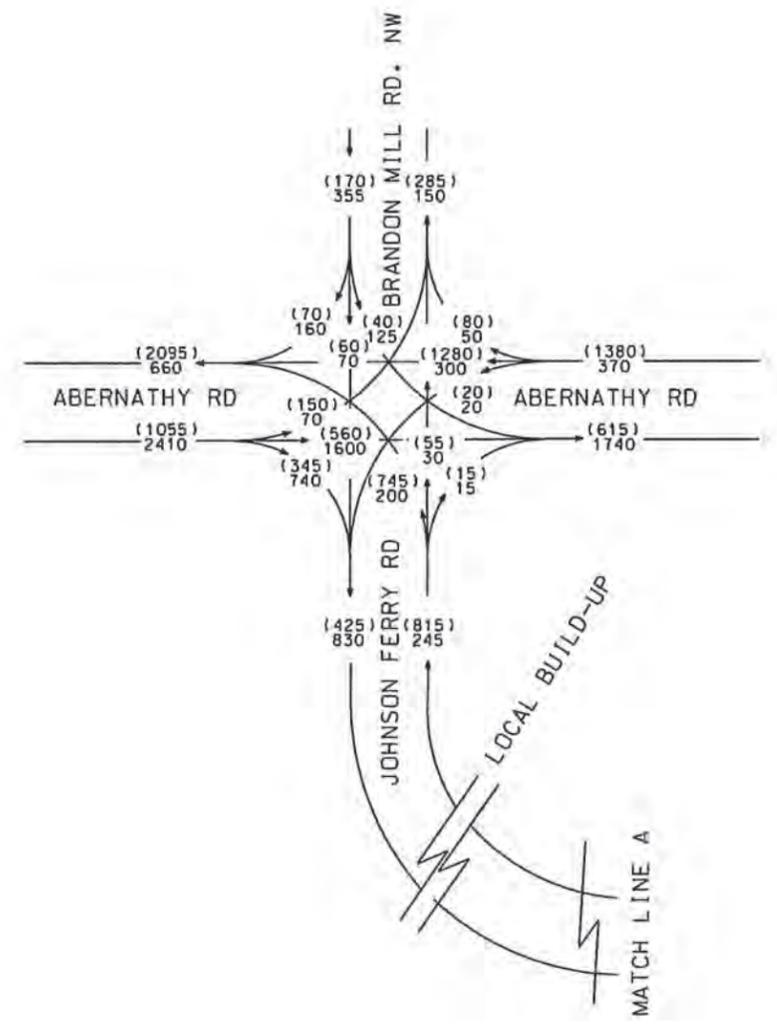


FIGURE 9
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
BUILD (2036) DHV
AM (PM) = 000 (000)



SEGMENT NAME	T	S.U.	COMB.
JOHNSON FERRY ROAD	2.6%	2.3%	0.3%

FIGURE 10
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
BUILD (2036) DHV
AM (PM) = 000 (000)

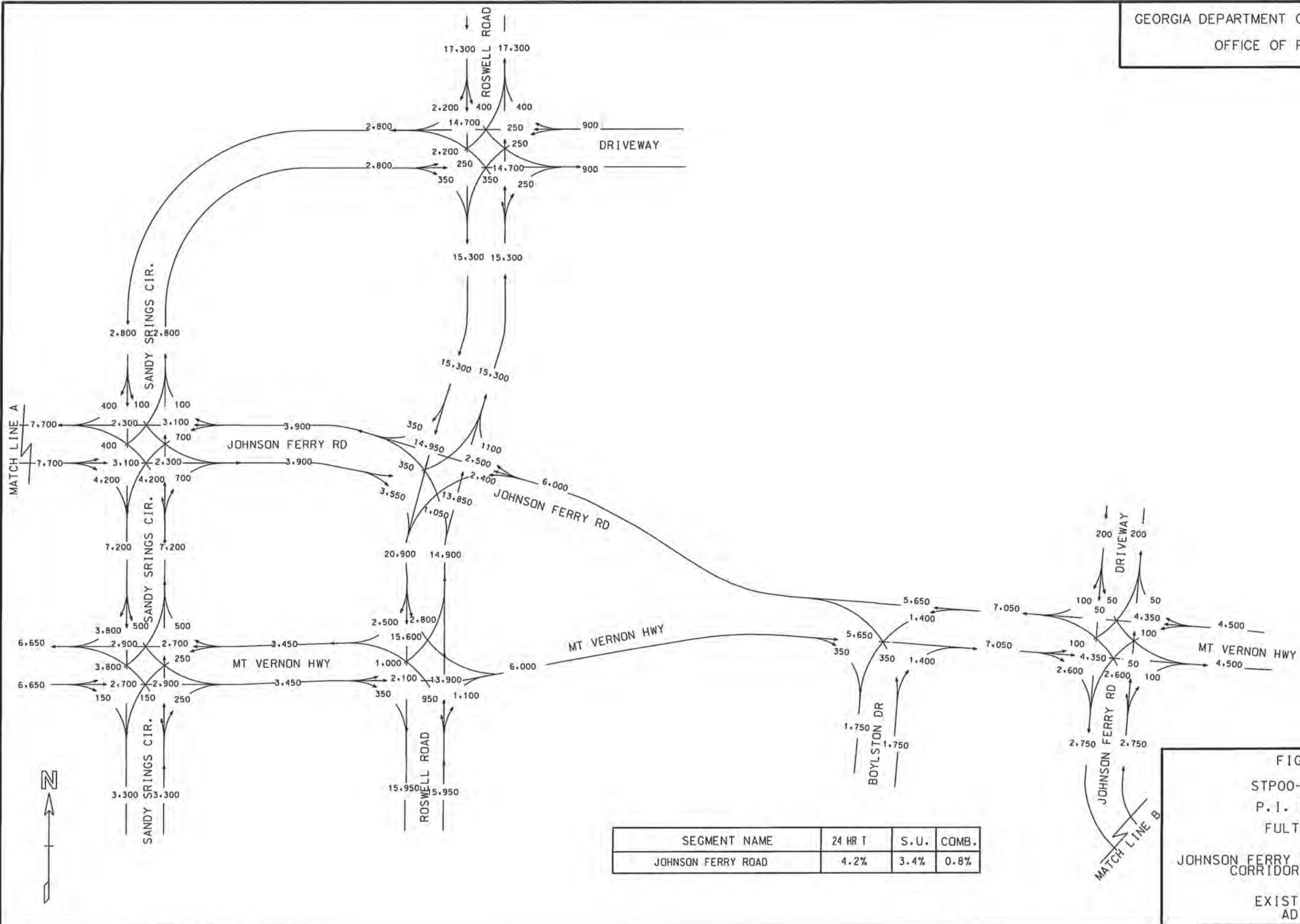
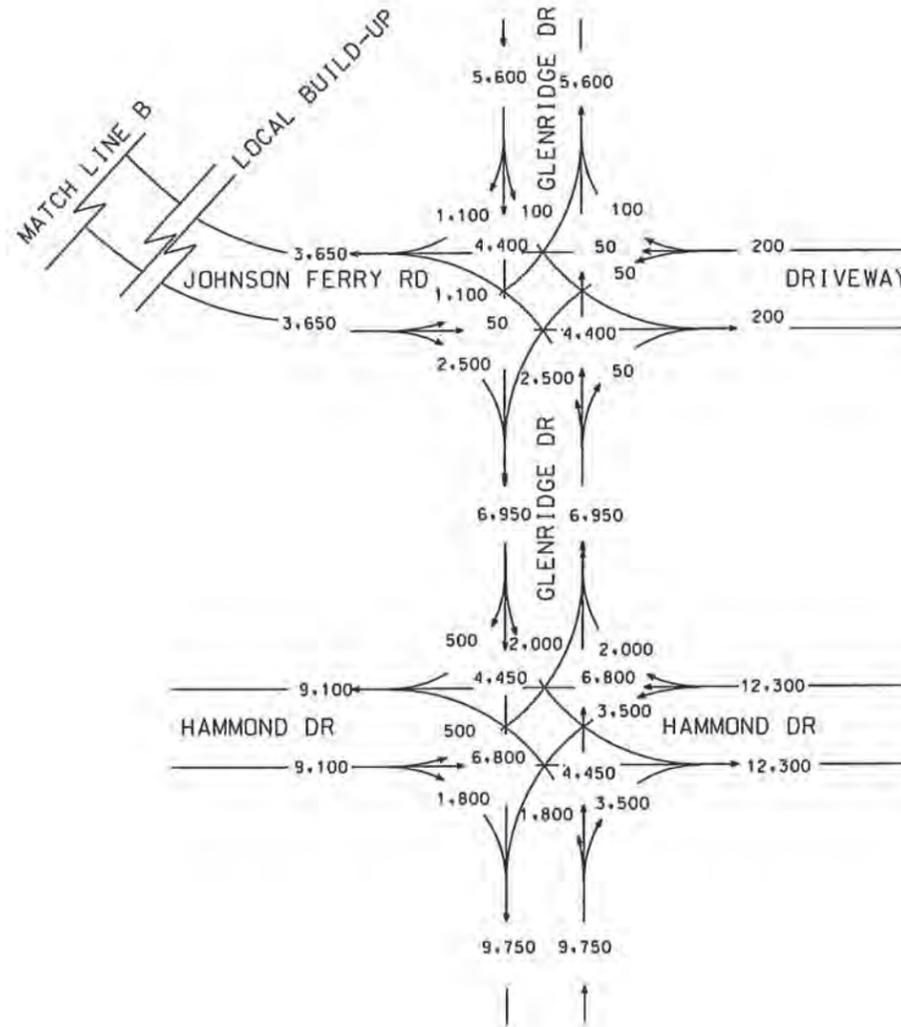
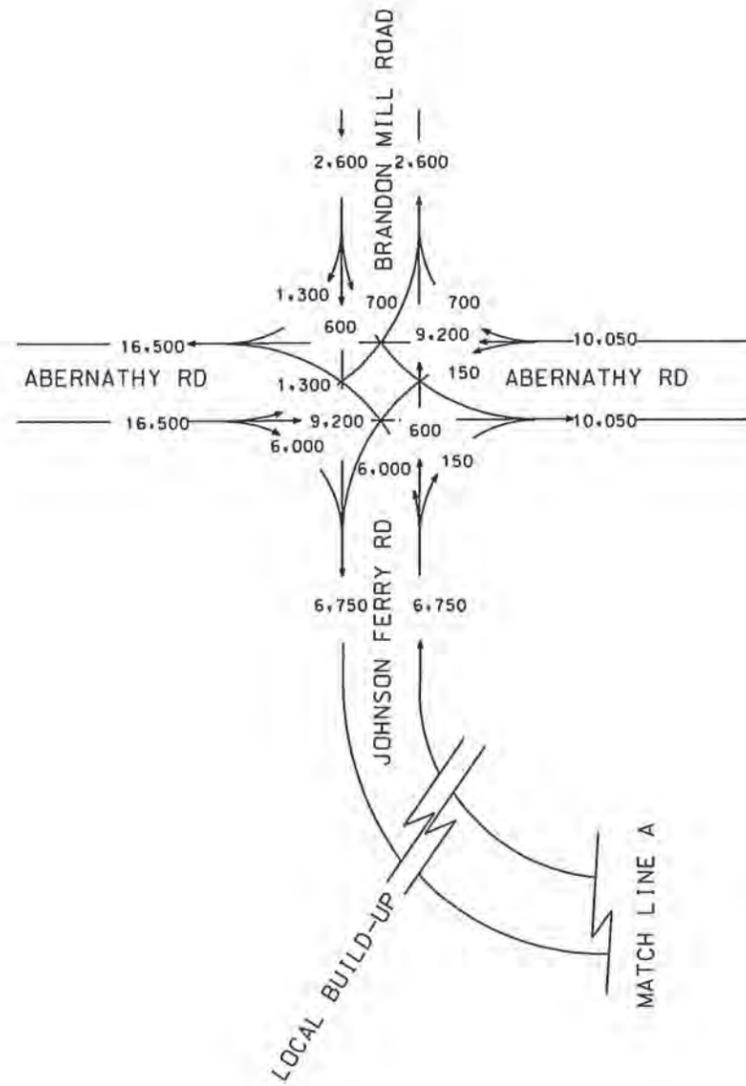


FIGURE 11
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
EXISTING (2012)
ADT = 000



SEGMENT NAME	24 HR T	S. U.	COMB.
JOHNSON FERRY ROAD	4.2%	3.4%	0.8%

FIGURE 12
STP00-9252 (007)
P. I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
EXISTING (2012)
ADT = 000

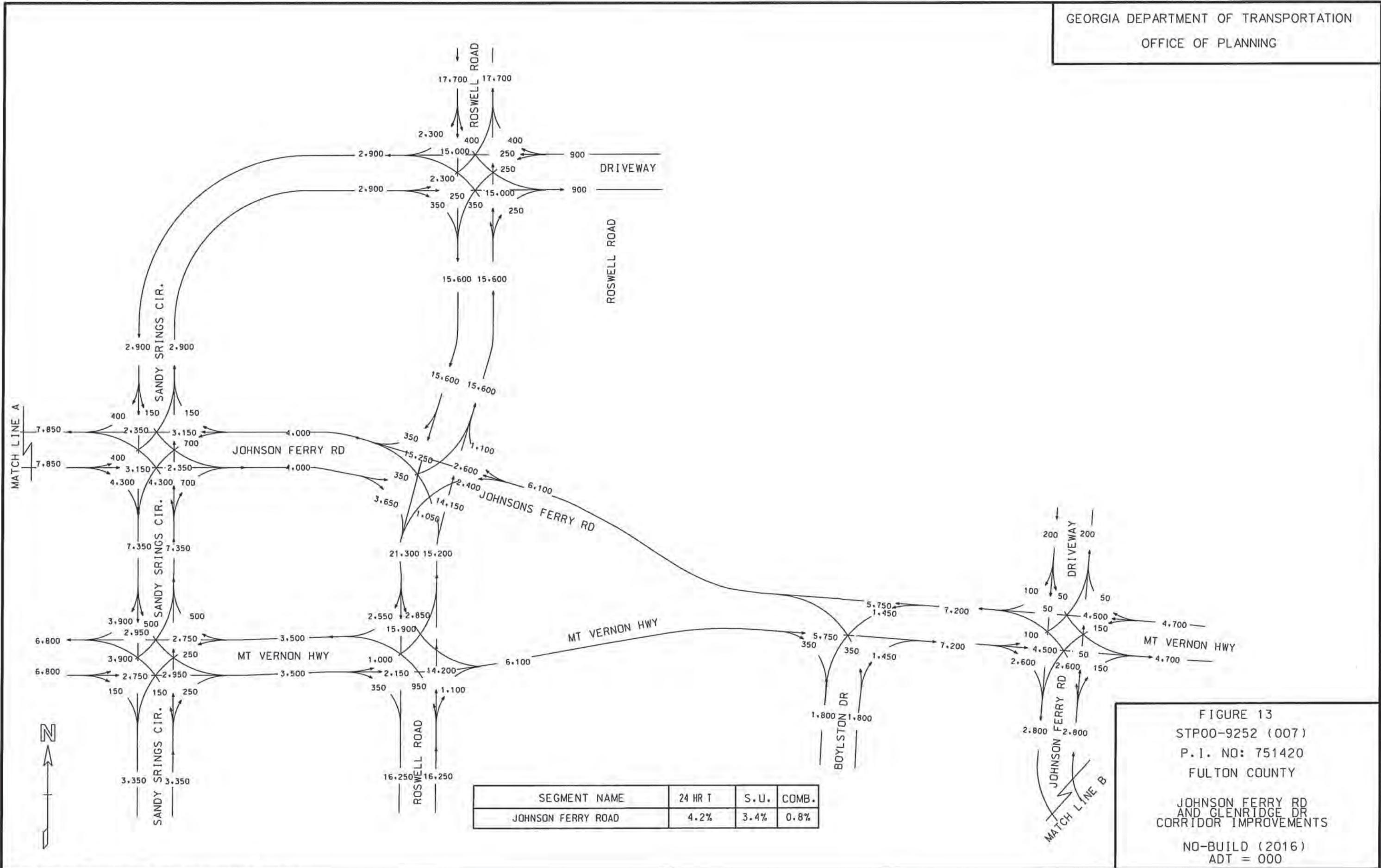
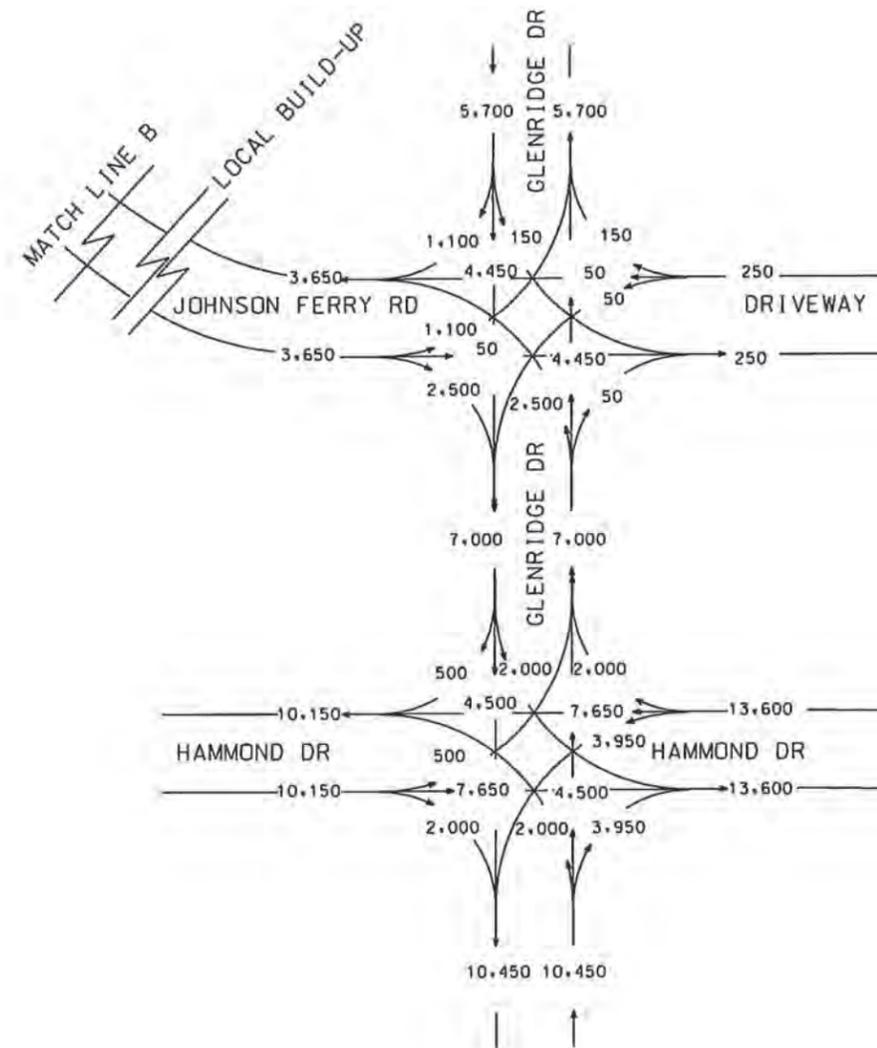
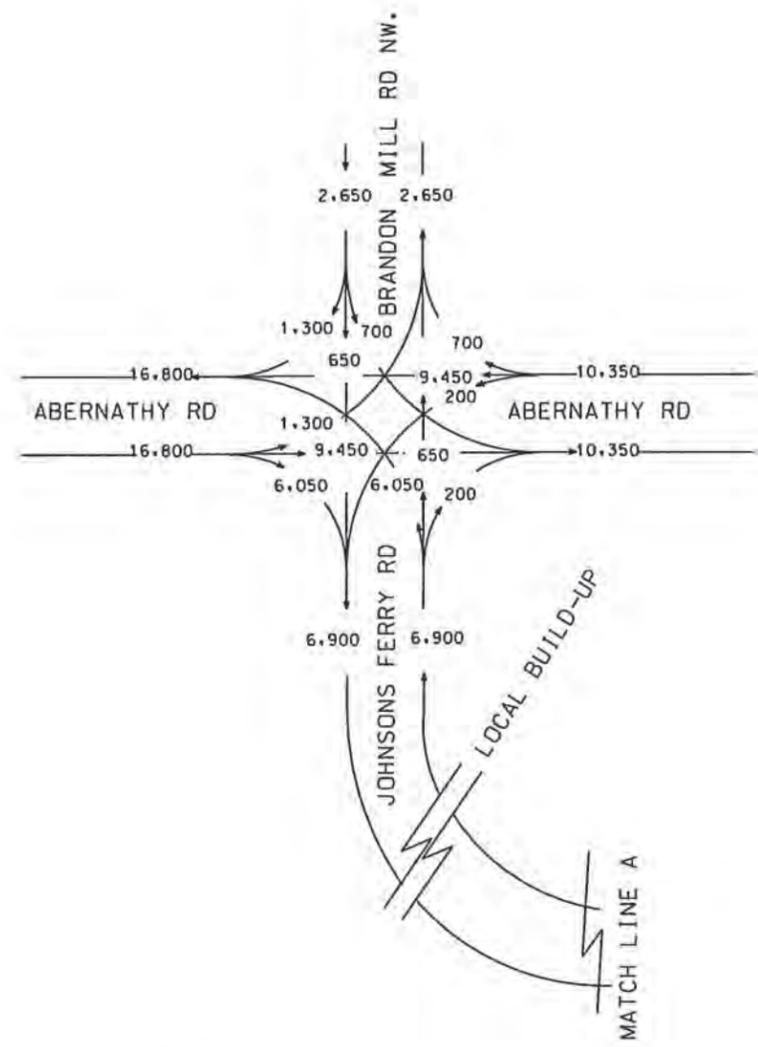
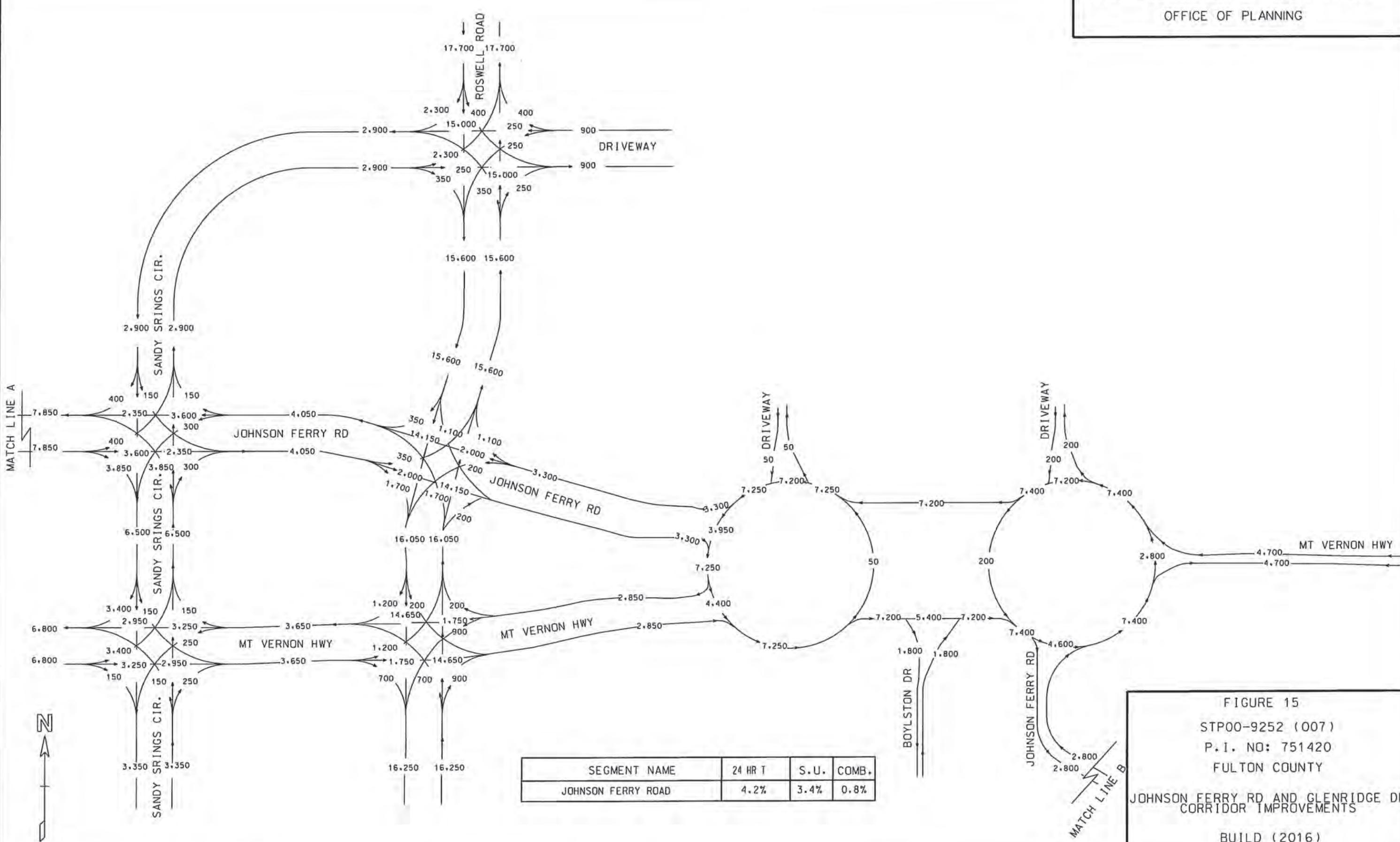


FIGURE 13
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD
AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
NO-BUILD (2016)
ADT = 000



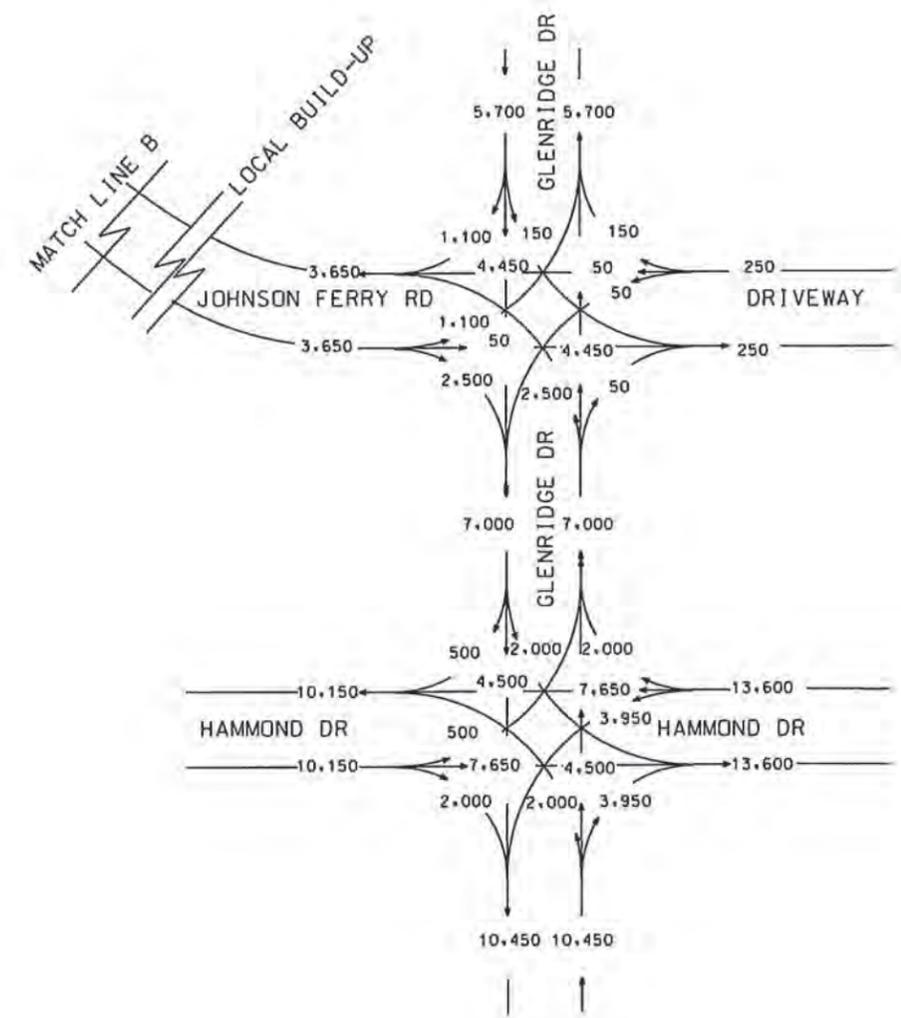
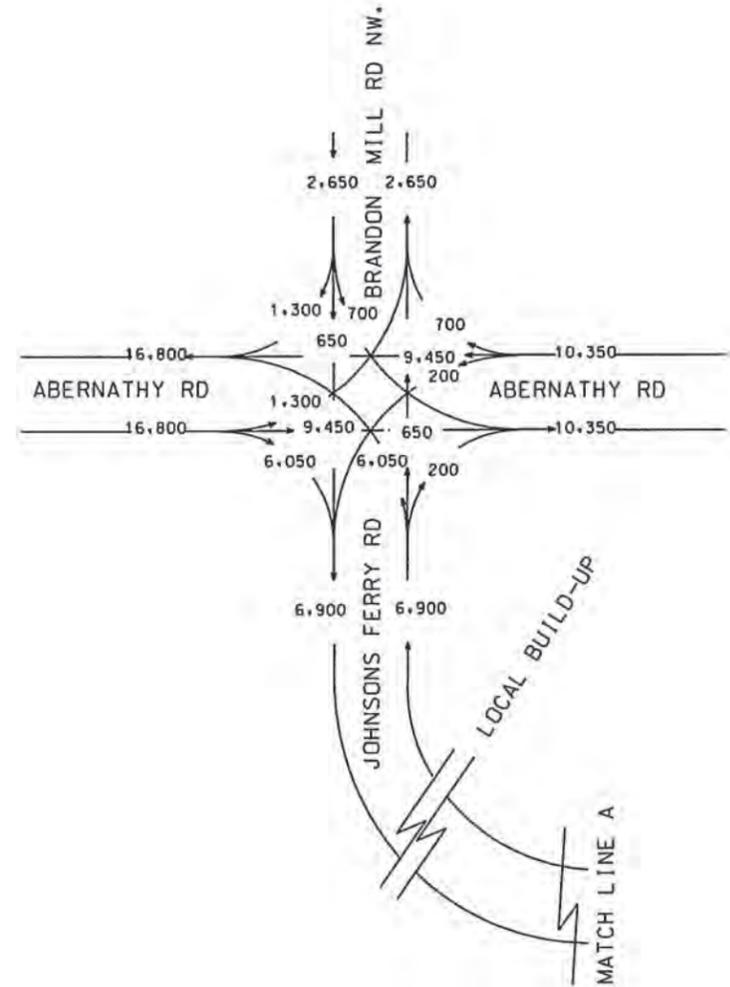
SEGMENT NAME	24 HR T	S. U.	COMB.
JOHNSON FERRY ROAD	4.2%	3.4%	0.8%

FIGURE 14
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
NO-BUILD (2016)
ADT = 000



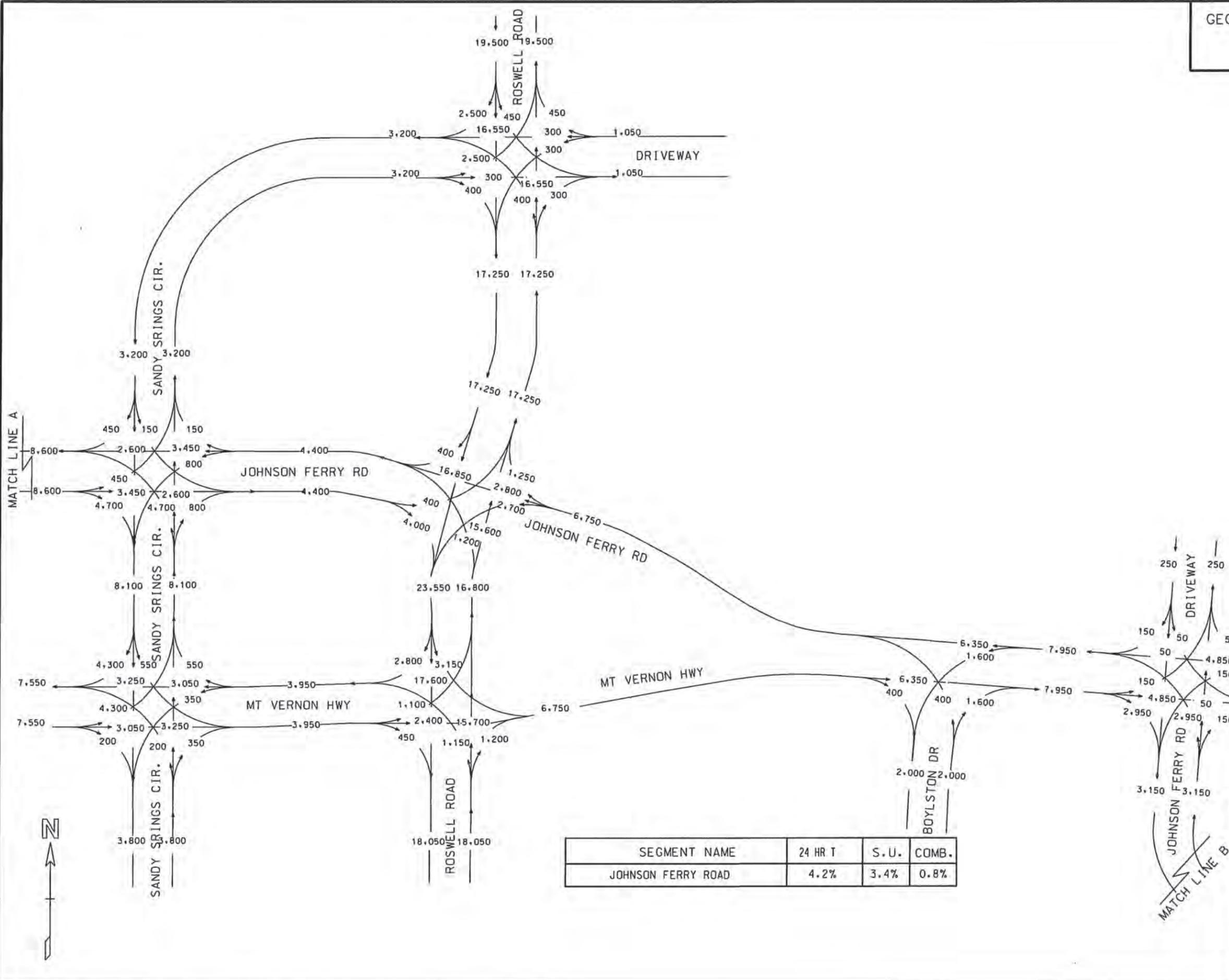
SEGMENT NAME	24 HR T	S.U.	COMB.
JOHNSON FERRY ROAD	4.2%	3.4%	0.8%

FIGURE 15
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
BUILD (2016)
ADT = 000



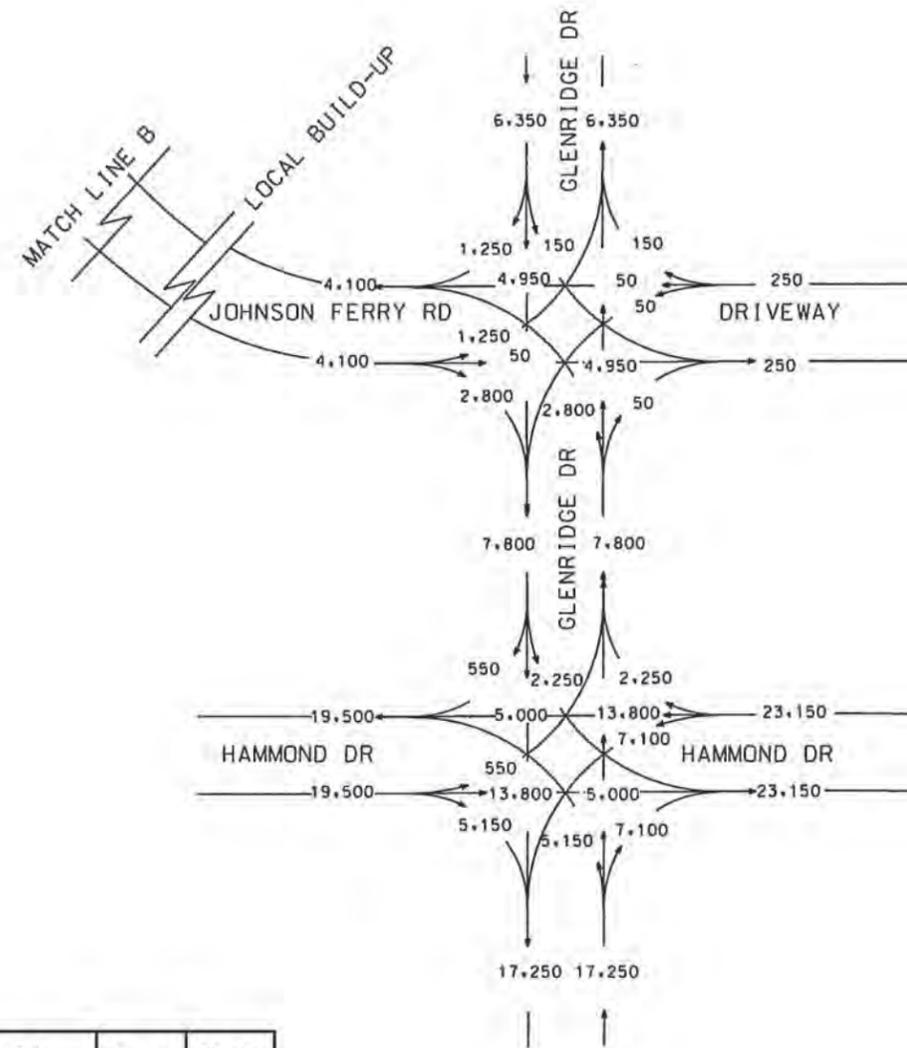
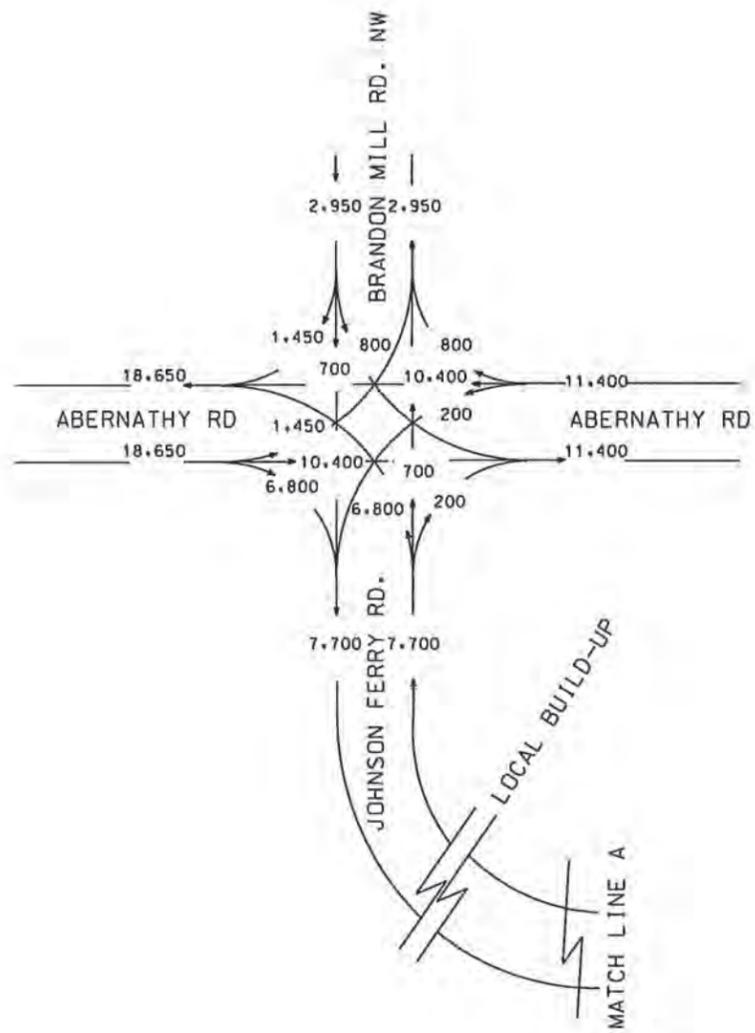
SEGMENT NAME	24 HR T	S. U.	COMB.
JOHNSON FERRY ROAD	4.2%	3.4%	0.8%

FIGURE 16
STP00-9252 (007)
P. I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
BUILD (2016)
ADT = 000



SEGMENT NAME	24 HR T	S. U.	COMB.
JOHNSON FERRY ROAD	4.2%	3.4%	0.8%

FIGURE 17
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
NO BUILD (2036)
ADT = 000



SEGMENT NAME	24 HR T	S.U.	COMB.
JOHNSON FERRY ROAD	4.2%	3.4%	0.8%



FIGURE 18
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
NO BUILD (2036)
ADT = 000

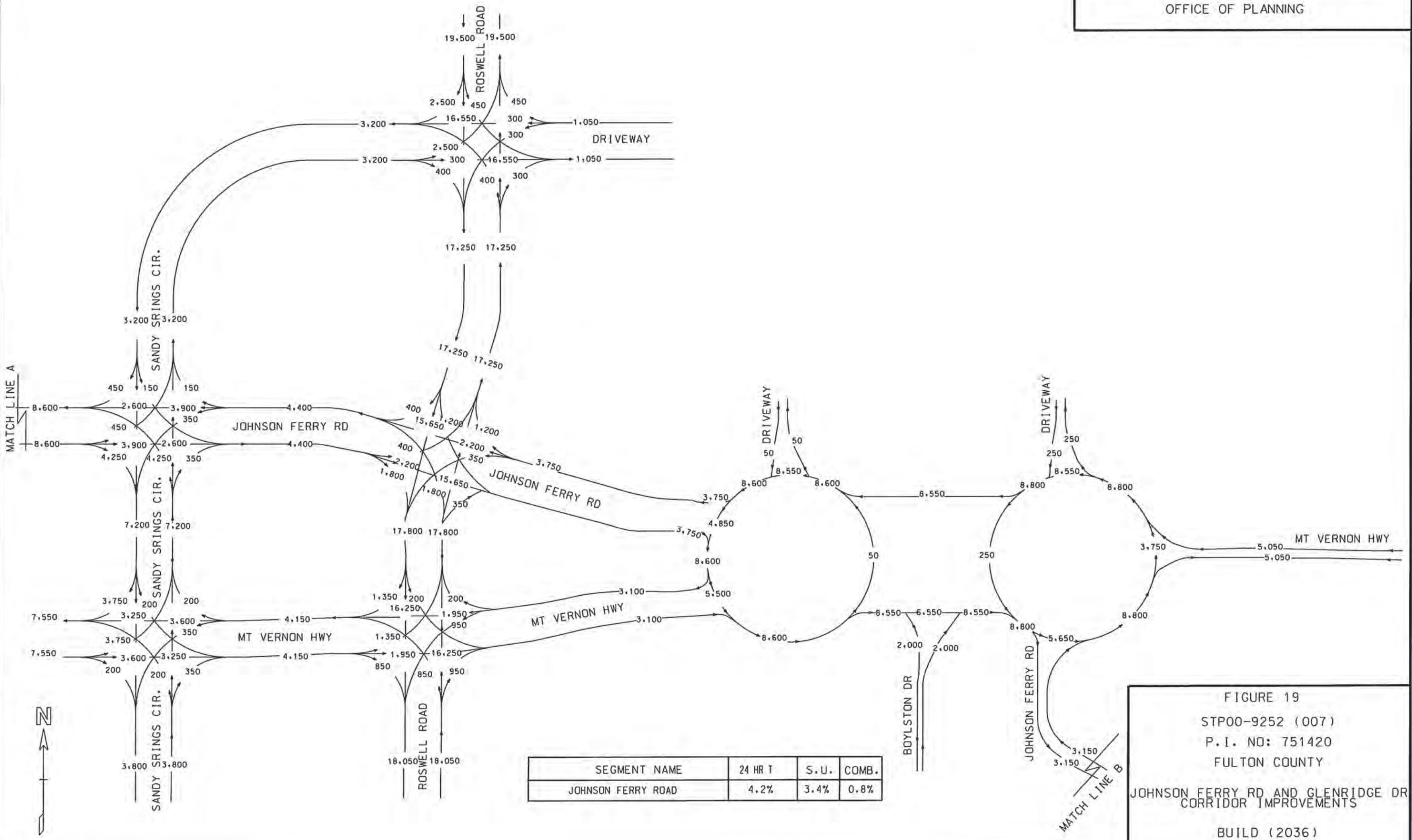
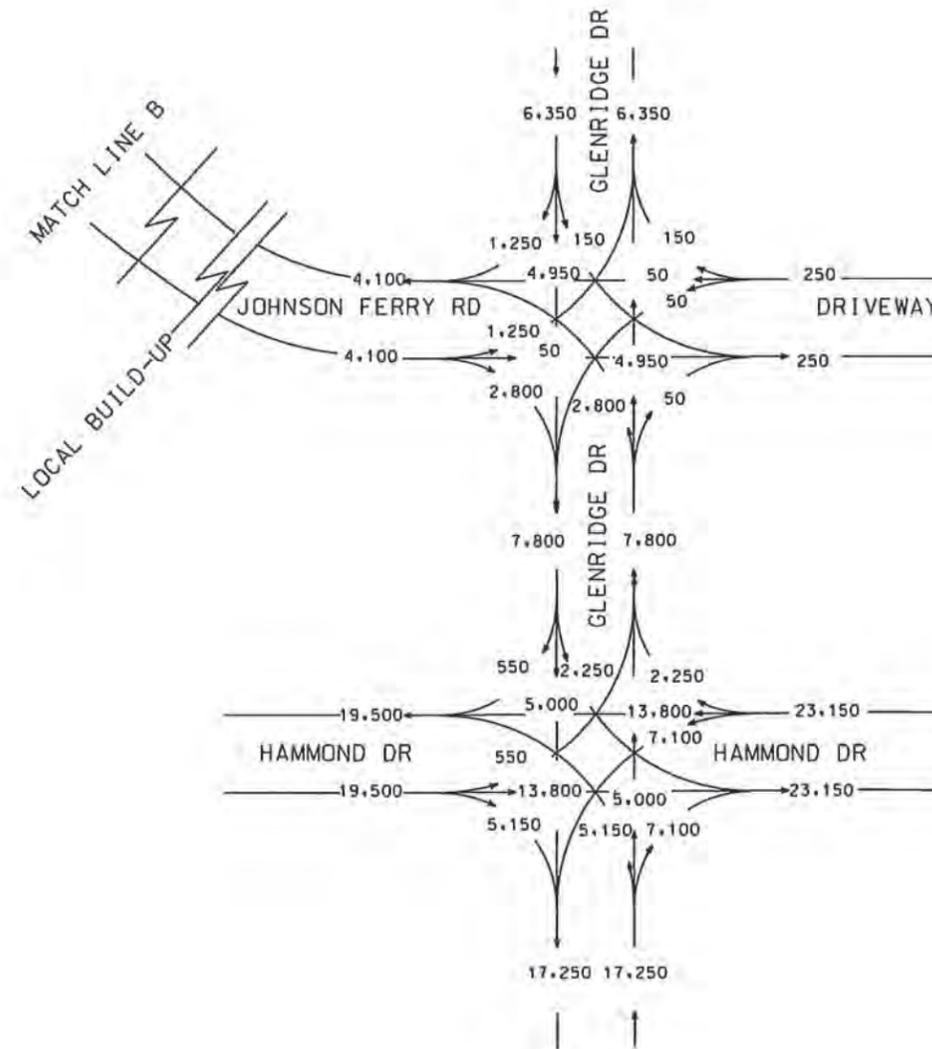
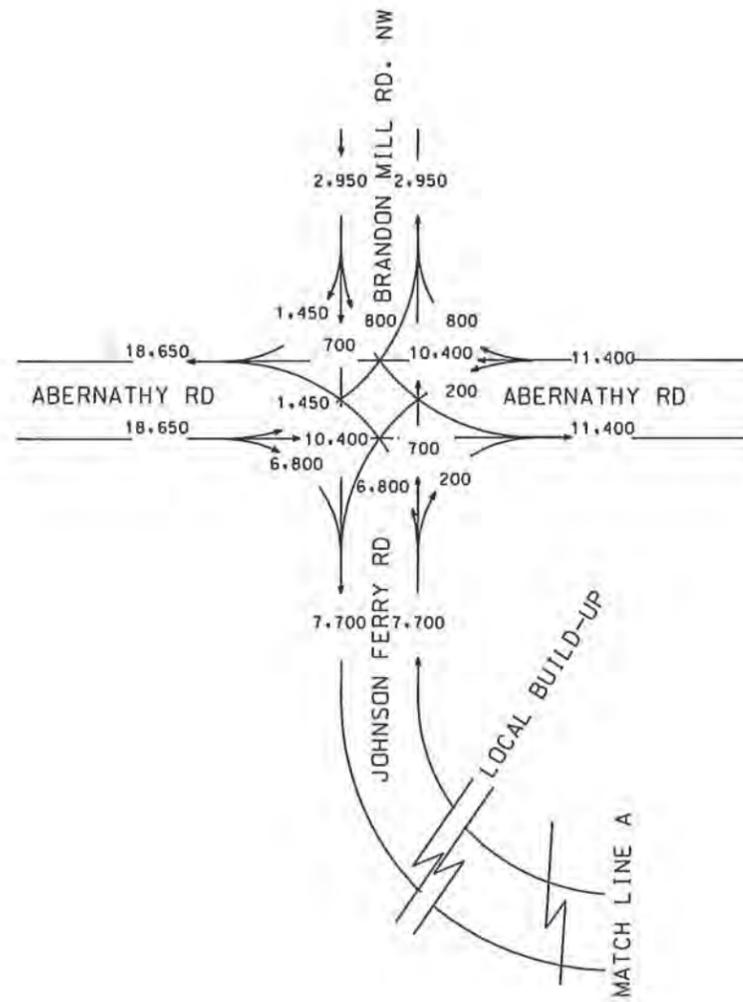


FIGURE 19
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
BUILD (2036)
ADT = 000



SEGMENT NAME	24 HR T	S.U.	COMB.
JOHNSON FERRY ROAD	4.2%	3.4%	0.8%

FIGURE 20
STP00-9252 (007)
P.I. NO: 751420
FULTON COUNTY
JOHNSON FERRY RD AND GLENRIDGE DR
CORRIDOR IMPROVEMENTS
BUILD (2036)
ADT = 000

Johnson Ferry Road and Glenridge Drive Corridor Improvements Project- Intersection Level-of-Service Summary

Intersection	Existing (2012)		No Build (2016)		Build (2016)		No-Build (2036)		Build (2036)	
	AM (Delay/LOS)	PM (Delay/LOS)								
Sandy Springs Circle @ Roswell Road	134.9 (F)	44.8 (D)	134.4 (F)	48.8 (D)	31.2 (C)	44.1 (D)	154.1 (F)	73.4 (E)	41.1 (D)	45.0 (D)
Johnson Ferry Road @ Sandy Springs Cir.	22.8 (C)	40.2 (D)	22.2 (C)	44.9 (D)	21.6 (C)	41.2 (D)	24.1 (C)	44.1 (D)	22.1 (C)	45.1 (D)
Johnson Ferry Road @ Roswell Road	109.5 (F)	67.4 (E)	117.9 (F)	74.1 (E)	44.2 (D)	52.9 (D)	133.0 (F)	100.4 (F)	44.0 (D)	44.9 (D)
Mount Vernon Hwy @ Sandy Springs Cir	27.2 (C)	36.5 (D)	27.1 (C)	36.4 (D)	26.3 (C)	30.3 (C)	27.5 (C)	37.3 (D)	27.1 (C)	31.0 (C)
Mount Vernon Hwy @ Roswell Road	40.9 (D)	87.4 (F)	51.0 (D)	102.2 (F)	31.6 (C)	49.9 (D)	58.1 (E)	105.0 (F)	48.1 (D)	50.7 (D)
Mount Vernon Hwy @ Boylston Road/ Johnson Ferry Road	18.4 (B)	30.7 (C)	32.1 (C)	39.8 (D)	N/A*	N/A*	28.2 (C)	102.0 (F)	N/A*	N/A*
Johnson Ferry Road @ Mount Vernon Hwy	9.3 (A)	26.1 (C)	27.1 (C)	36.7 (D)	N/A*	N/A*	27.2 (C)	96.4 (F)	N/A*	N/A*

**TRAFFIC & SAFETY
STUDY**

**Johnson Ferry Road and Glenridge Drive
Corridor Improvements**

Project Number: STP00-9252-00(007)
P. I. Number: 751420
County: Fulton

Prepared for:
Georgia Department of Transportation

July 2012
Revised May 2013

NEED AND PURPOSE

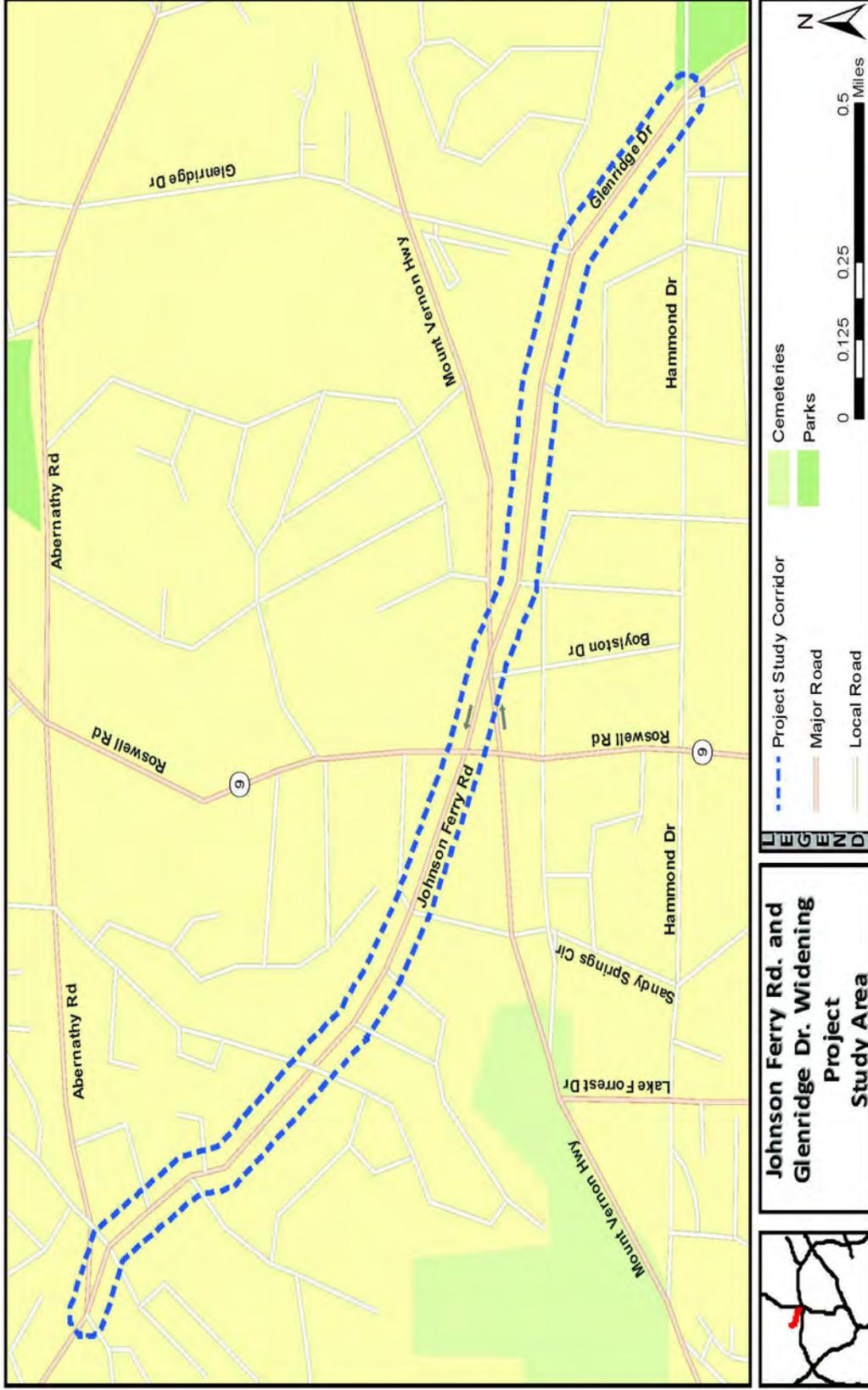
Introduction

The project corridor is located in the City of Sandy Springs, Georgia and begins at the intersection of Johnson Ferry Road and Abernathy Road and terminates at the intersection of Glenridge Drive and Hammond Drive. Land use within and around the project corridor includes residential, commercial, private and public organizations (i.e. churches, a library and a city park) and undeveloped areas. **Figure 1** shows the project location map.

The existing corridor is a mix of two-lane and four-lane facilities. The section of Johnson Ferry Road from Sandy Springs Circle to Mt. Vernon Highway is a four-lane section from Sandy Springs Circle to Roswell Road, and then has one-way pair arrangements along Johnson Ferry Road and Mt. Vernon Highway (refer to **Figure 1**) to the Johnson Ferry Road and Mt. Vernon Highway intersection. After this intersection, Johnson Ferry Road and Mt. Vernon Highway become two-lane facilities. Roswell Road through the project corridor is a four-lane facility with an 11-foot flush median.

The land uses within the existing corridor are typically commercial/retail developments with some residential areas at the eastern terminus. On Johnson Ferry Road between Sandy Springs Circle and Glenridge Drive, there are several major commercial and retail developments. Municipal land uses in the corridor include Fire Station #2, near the Sandy Springs Circle intersection, and the Sandy Springs branch of the Fulton County Library near the Johnson Ferry Road and Glenridge Drive intersection. The future Sandy Springs City Hall complex is planned for the old Target building located on the south side of Johnson Ferry Road between Sandy Springs Circle and Roswell Road. The total length of the corridor improvements is 2.19 miles.

Figure 1: Project Location Map



Project Description

The proposed project includes both traffic operation and pedestrian improvements in the predominately commercial areas of the project corridor. Along Johnson Ferry Road east of Sandy Springs Circle to the eastern intersection of Mt Vernon Highway, traffic operation and pedestrian improvements are proposed. The typical section for Johnson Ferry Road from Sandy Springs Circle to Roswell Road consists of four 11-foot lanes with a 12-foot flush median, curb and gutter and sidewalks on both sides of the roadway. The typical section for Johnson Ferry Road from Roswell Road to Boylston Road consists of three 11-foot lanes, curb and gutter and sidewalks on both sides of the roadway. The typical section for Mt. Vernon Highway from Roswell Road to Boylston Road consists of two 11-foot lanes with curb and gutter on both sides of the roadway.

Between Boylston Road and the eastern intersection of Johnson Ferry Road and Mt. Vernon Highway, two roundabouts are proposed. The first roundabout is proposed at the Johnson Ferry Road, Mt. Vernon Highway and Boylston Road intersection. The second roundabout is proposed at the Johnson Ferry Road, Mt. Vernon Highway and the Vernon Towers driveway. There is a common section of Johnson Ferry Road and Mt. Vernon Highway between the two proposed roundabouts. Along Johnson Ferry Road from Mt. Vernon Highway to Glenridge Drive, streetscape improvements including traffic calming measures and sidewalks are proposed. **Figure 2** shows the proposed roundabouts.

Traffic Analysis and Level of Service (LOS)

VISSIM micro-simulation software was utilized to analyze the traffic conditions of the study intersection under existing, future no-build and build conditions. For future condition, the GDOT Roundabout Analysis Tool was also utilized during the concept development phase. As an analysis tool, the GDOT Roundabout Analysis Tool provides useful measures for roundabouts such as capacity, queue, and delay. As a design tool, it allows the designer to quickly gauge initial geometric constraints (single lane, multilane, bypass lanes, etc.), that could not be known without some level of traffic analysis.

The Roundabout Analysis Tool is most useful when determining the feasibility of a roundabout at an intersection and should accompany any preliminary study.

Table 1 presents the results of the VISSIM analysis of study area signalized intersections for Existing (2012), Future No-Build (2016 and 2036), Future Build (2016 and 2036) conditions. As shown in Table 1, three of the seven study signalized intersections experience failing LOS (LOS E or LOS F) in the existing traffic conditions. By 2036 five of the seven intersections are expected to experience failing LOS (LOS E or LOS F) conditions without improvements. The implementation of this project will result in LOS improvements at the intersections of Johnson Ferry at Sandy Springs Circle and Roswell Road and the intersections of Mt. Vernon at Sandy Springs Circle and Roswell Road. As a result of the proposed project, these intersections are expected to operate at LOS D or better in the 2036 Build Condition. All other study intersections are not proposed to be improved as part of this project.

Table 2 present the results of the roundabout analysis using the GDOT Roundabout Analysis Tool. This tool utilized two roundabout analyses methodologies: Table 2 presents the results using the NCHRP-Report 572 analysis methodology and the UK formula referenced in the 2000 FHWA Roundabout guide. The NCHRP Model is based on an analytical method based on gap acceptance behavior on roundabouts in the United States. The formula yields a lower value for capacity because of source data taken from US roundabouts where driver familiarity is lower. The UK model is based on an empirical method based on the geometric features of the source roundabouts. The formula typically yields a higher value for capacity because the source data taken is taken from roundabouts in the UK where familiarity is higher.

Table 2 presents the results of the roundabout analysis. Per GDOT guidance, the NCHRP-572 model yields a conservative Entry Capacity and is best applied to the present year when driver familiarity is low; while the UK model yields a liberal Entry Capacity and is best applied in the future year when driver familiarity has increased. For these reasons, Table 2 presents the results of the 2036 Build condition at the two roundabouts. Utilizing the UK Model to analyze 2036 Build conditions, all approached are expected to operate at LOS A in 2036.

Table 1: VISSIM Intersection Level-of-Service Results

Intersection	Existing (2012)		No Build (2016)		Build (2016)		No-Build (2036)		Build (2036) with Roundabout	
	AM (Delay/LOS)	PM (Delay/LOS)	AM (Delay/LOS)	PM (Delay/LOS)	AM (Delay/LOS)	PM (Delay/LOS)	AM (Delay/LOS)	PM (Delay/LOS)	AM (Delay/LOS)	PM (Delay/LOS)
Sandy Springs Circle @ Roswell Road	134.9 (F)	44.8 (D)	134.4 (F)	48.8 (D)	31.2 (C)	44.1 (D)	154.1 (F)	73.4 (E)	41.1 (D)	45.0 (D)
Johnson Ferry Road @ Sandy Springs Circle	22.8 (C)	40.2 (D)	22.2 (C)	44.9 (D)	21.6 (C)	41.2 (D)	24.1 (C)	44.1 (D)	22.1 (C)	45.1 (D)
Johnson Ferry Road @ Roswell Road	109.5 (F)	67.4 (E)	117.9 (F)	74.1 (E)	44.2 (D)	52.9 (D)	133.0 (F)	100.4 (F)	44.0 (D)	44.9 (D)
Mount Vernon Road @ Sandy Springs Circle	27.2 (C)	36.5 (D)	27.1 (C)	36.4 (D)	26.3 (C)	30.3 (C)	27.5 (C)	37.3 (D)	27.1 (C)	31.0 (C)
Mount Vernon Road @ Roswell Road	40.9 (D)	87.4 (F)	51.0 (D)	102.2 (F)	31.6 (C)	49.9 (D)	58.1 (E)	105.0 (F)	48.1 (D)	50.7 (D)
Mount Vernon Road @ Boylston Road/Johnson Ferry Road	18.4 (B)	30.7 (C)	32.1 (C)	39.8 (D)	N/A*	N/A*	28.2 (C)	102.0 (F)	N/A*	N/A*
Johnson Ferry Road @ Mount Vernon Road	9.3 (A)	26.1 (C)	27.1 (C)	36.7 (D)	N/A*	N/A*	27.2 (C)	96.4 (F)	N/A*	N/A*

Note: * Refer to the Roundabout Analysis (Table 2) for the capacity analysis results

Table 2: 2036 Build Condition Roundabout Level-of-Service Analysis Summary

GDOT Roundabout Analysis Tool – NCHRP – 572 Model									
Build Conditions (2036)									
Roundabout	Approach	AM Peak				PM Peak			
		LOS	Delay (sec)	V/C Ratio	95% Queue	LOS	Delay (sec)	V/C Ratio	95% Queue
Eastern Roundabout	Johnson Ferry Road - East approach	A	6.5	0.20	18	B	10.2	0.48	66
	Johnson Ferry Road – West approach	E	49.5	1.03	595	B	12.8	0.76	202
	Mount Vernon Road - South approach	A	5.5	0.36	42	B	13.9	0.71	160
	Driveway – North approach	A	4.6	0.02	2	A	6.5	0.04	3
Western Roundabout	Johnson Ferry Road - East approach	A	5.7	0.44	59	C	19.3	0.86	306
	Johnson Ferry Road – West approach	A	8.1	0.52	79	A	6.4	0.27	29
	Mount Vernon Road - West approach	C	19.7	0.78	203	A	8.5	0.51	77
	Driveway – North approach	A	4.5	0.01	1	A	6.3	0.01	1
GDOT Roundabout Analysis Tool – UK Model									
Eastern Roundabout	Johnson Ferry Road - East approach	A	2.0	0.07	6	A	2.3	0.17	16
	Johnson Ferry Road – West approach	A	2.8	0.47	69	A	2.3	0.35	42
	Mount Vernon Road – South approach	A	1.8	0.16	14	A	2.4	0.28	31
	Driveway – North approach	A	1.8	0.01	1	A	2.1	0.01	1
Western Roundabout	Johnson Ferry Road - East approach	A	1.9	0.20	20	A	2.5	0.40	52
	Johnson Ferry Road – West approach	A	2.1	0.21	21	A	2.0	0.10	9
	Mount Vernon Road - West approach	A	2.5	0.29	32	A	2.1	0.20	20
	Driveway – North approach	A	1.7	0.00	0	A	2.1	0.00	0

1.1 Safety

Increasing safety is also an objective of the Johnson Ferry Road project. Crash data from 2007-2009 was obtained for study area roadways. A summary of the crash data for the project corridor is shown in Tables 3-8. As shown in Tables 3 and 5, Johnson Ferry Road and Roswell Road experienced significantly higher crash and injury rates than statewide averages for their respective functional classification. Johnson Ferry Road experienced crash and injury rates almost three times higher than statewide average, while this segment of Roswell Road experienced crash rates approximately five times higher than statewide average and injury rates approximately three times higher. As shown in Table 7, Mt. Vernon Highway experiences crash and injury rates slightly lower than statewide averages for this three year period.

These high crash rates are most probably a result of the heavily congested conditions on these roadways throughout much of the day. Tables 4, 6, and 8 present the types of crashes experienced on these roadway for the same time period. Although rear end crashes were the most common type of crash, this data does reveal a high number of angle crashes. By providing improved operation and reducing congestion, this project would likely help alleviate these high crash rates.

Table 3: Crash Analysis – Johnson Ferry Road (2007-2009)

Johnson Ferry Road (Wright Road to Glenridge Drive) – Urban Minor Arterial									
Year	Annual Crashes	Crash Rate (per 100 million vehicle-miles (MVM))		Annual Injuries	Injury Rate (per 100 million vehicle-miles (MVM))		Annual Fatalities	Fatality Rate (per 100 million vehicle-miles (MVM))	
		Road Segment	Statewide Average		Road Segment	Statewide Average		Road Segment	Statewide Average
2007	139	1588	514	34	389	126	0	0	1.47
2008	117	1328	471	25	284	116	0	0	1.46
2009	87	1004	463	33	381	114	0	0	1.07
Average	114	1307	483	31	351	119	0	0	1.33

Table 4: Collisions by Crash Type – Johnson Ferry Road (2007-2009)

Collision Type	2007		2008		2009	
	Number	Number	Number	Number	Percent	Number
Angle	39	28%	33	28%	18	21%
Head On	2	1%	2	2%	1	1%
Rear End	80	58%	69	59%	58	67%
Sideswipe	12	9%	12	10%	7	8%
Other	6	4%	1	1%	3	3%
Total	139		117		87	

Table 5: Crash Analysis – Roswell Road (2007-2009)

Roswell Road (Hilderbrand Dr to Sandy Springs Circle) – Urban Principal Arterial									
Year	Annual Crashes	Crash Rate (per 100 million vehicle-miles (MVM))		Annual Injuries	Injury Rate (per 100 million vehicle-miles (MVM))		Annual Fatalities	Fatality Rate (per 100 million vehicle-miles (MVM))	
		Road Segment	Statewide Average		Road Segment	Statewide Average		Road Segment	Statewide Average
2007	94	2730	549	12	348	133	0	0	1.51
2008	101	3013	524	17	507	125	0	0	1.33
2009	69	2118	536	18	552	131	0	0	1.29
Average	88	2620	536	16	469	130	0	0	1.38

Table 6: Collisions by Crash Type – Roswell Road (2007-2009)

Collision Type	2007		2008		2009	
	Number	Percent	Number	Percent	Number	Percent
Angle	36	38%	42	41%	21	30%
Head On	2	2%	2	2%	2	3%
Rear End	40	43%	41	41%	38	55%
Sideswipe	15	16%	14	14%	7	10%
Other	1	1%	2	2%	1	2%
Total	94		101		69	

Table 7: Crash Analysis – Mt. Vernon Highway (2007-2009)

Mount Vernon Road (Sandy Springs Circle to Glenridge Dr) – Urban Minor Arterial									
Year	Annual Crashes	Crash Rate (per 100 million vehicle-miles (MVM))		Annual Injuries	Injury Rate (per 100 million vehicle-miles (MVM))		Annual Fatalities	Fatality Rate (per 100 million vehicle-miles (MVM))	
		Road Segment	Statewide Average		Road Segment	Statewide Average		Road Segment	Statewide Average
2007	22	682	514	4	124	126	0	0	1.47
2008	13	428	471	3	99	116	0	0	1.46
2009	8	271	463	1	34	114	0	0	1.07
Average	14	460	483	3	86	119	0	0	1.33

Table 8: Collisions by Crash Type – Mt. Vernon Highway (2007-2009)

Collision Type	2007		2008		2009	
	Number	Percent	Number	Percent	Number	Percent
Angle	7	32%	7	54%	3	38%
Head On	2	9%	-	-	-	-
Rear End	8	36%	4	31%	3	38%
Sideswipe	5	23%	2	15%	2	24%
Other	-	-	-	-	-	-
Total	22		13		8	



Technical Memorandum

Date: July 11, 2012

Prepared For: File

Prepared By: Ed Culican

Subject: Roundabout Planning Level Assessment

Project: Johnson Ferry Road Corridor Improvements
Project No. STP00-9252-00(007); PI No. 751420, COSS T-0011

The purpose of this technical memorandum is to document the Planning Level Assessment for the Roundabout Alternative concept for the referenced project for the Concept Report. The following documents the alternatives analysis and results for the alternatives developed for the project as part of our selection process for the double Roundabout alternative as the preferred concept alternative.

Concept Alternatives and Analysis

As part of the concept alternatives analysis, a variety of alternative were evaluated to determine whether or not a roundabout is the most appropriate alternative. The evaluation included all appropriate conventional intersection forms, including signal controlled. Stop controlled intersections were not evaluated, since the existing intersections where Roundabouts are considered are already signalized. For this project, seven concept alternatives were developed for the corridor. The following is a list of alternatives that have been developed:

- Alternative I – Johnson Ferry Road and Mt. Vernon Highway improved to a 4-lane roadway with a 20-foot raised median, widening of Roswell Road to a 4-lane section with dual left turn lanes at Johnson Ferry Road. East of Roswell Road, a new major intersection with Johnson Ferry Road, Mt. Vernon Highway and Boylston Drive is created, with the major through movement being Johnson Ferry Road (east) to Mt. Vernon Highway (west). Boylston Drive is modified to be a right in/right out access on Mt. Vernon Highway.
- Alternative IA – This alternative is similar to Alternative I, however, Mt. Vernon Highway was modified to a 2-lane section with a center left turn lane.
- Alternative II - Johnson Ferry Road and Mt. Vernon Highway improved to a 4-lane roadway with a 20-foot raised median, widening of Roswell Road to a 4-lane section with dual left turn lanes at Johnson Ferry Road. East of Roswell Road, a new major intersection with Johnson Ferry Road, Mt. Vernon Highway and Boylston Drive is created, with the major through movement being Mt. Vernon Highway (east) to Mt.

Vernon Highway (west). Boylston Drive became the south leg of the intersection and no turning movements were restricted.

- Alternative IIA – This alternative is similar to Alternative II, however, Mt. Vernon Highway was modified to a 2-lane section with a center left turn lane.
- Grid Network Alternative – This alternative maintained the east-west thoroughfares of Johnson Ferry Road and Mt. Vernon Highway on separate alignments, and created new “city blocks” at logical connection points developed at existing north-south roadways. Johnson Ferry Road on the east side of the project connects on the west side to Mt. Vernon Highway near the library along a similar alignment of the existing roadway corridor. Mt. Vernon Highway on the east side would travel on new location and connect to existing Johnson Ferry Road on the west side near the library. Roswell Road is modified to a 4-lane section with dual left turn lanes at Johnson Ferry Road. New blocks would be generated by utilizing Boylston Drive, and a new segment of roadway on the east side of the library parking lot.
- Roundabout Alternative – This alternative created a Roundabout at the intersection of Johnson Ferry Road and Mt. Vernon Highway near the library. Johnson Ferry Road and Mt. Vernon Highway are both modified to 2-way traffic in the one-way pair arrangement. Roswell Road is modified to a 4-lane section with dual left turn lanes at Johnson Ferry Road. Mt. Vernon Highway west of Roswell Road is restricted from westbound travel, and is only allowed to travel southbound on Boylston Drive. Traffic from Mt. Vernon Highway whose destination is westbound must turn left onto Roswell Road and then right onto Johnson Ferry Road to reach its destination.
- Double Roundabout Alternative – This alternative creates two Roundabouts in the corridor – one at each end of the common segment of Johnson Ferry Road and Mt. Vernon Highway. The first Roundabout is at the intersection of Johnson Ferry Road, Mt. Vernon Highway and Boylston Drive, the second at Johnson Ferry Road and Mt. Vernon Highway near the library. Johnson Ferry Road and Mt. Vernon Highway are both modified to two way traffic in the existing one-way pair arrangement. Roswell Road is modified to a 4-lane section with dual left turn lanes at Johnson Ferry Road. The two Roundabouts are multilane, and the common section between the two Roundabouts is a 4-lane section, 2-lanes in each direction.

While each of the concepts developed improved the traffic operations, there were significant differences in the costs for implementation. The four signalized intersection improvement concepts (Alternatives I, IA, II and IIA) resulted in significant right-of-way costs and the relocation of many businesses in the area. These costs were well outside the available budget for the project. The Grid Network Alternative resulted in even greater right-of-way costs and required relocation of even more properties than the intersection improvement alternatives, and also had significantly greater construction costs due to the increased limits of the project.

However, the two Roundabout Alternatives developed did provide the required improvements to the traffic operations within the network, and the construction and right-of-way costs were within budget. Therefore, the Roundabout Alternatives were considered as viable alternatives for the project. The major difference between the two alternatives is the elimination of the eastern

roundabout, and the restriction of east-west traffic along Mt. Vernon Highway east of Roswell Road. Because of the restriction of traffic on Mt. Vernon Highway, this alternative was eliminated from consideration, and the Double Roundabout concept alternative was ultimately chosen as the preferred alternative for the project.

Planning Level Assessment

The Planning Level Assessment for Roundabouts begins with evaluating the suitability of constructing a Roundabout at an intersection. Several criteria, including Safety, Operations, and Aesthetics, are used to evaluate whether the Roundabout may be advantageous over typical intersection improvements. The following is our assessment of these criteria for the project:

Safety

Historical Crash Rates – Johnson Ferry Road, as documented in the Traffic and Safety Study report, experiences significantly higher crash and injury rates than the statewide average for the functional classification for the roadway. Based on the 2007-2009 crash data received, Johnson Ferry Road experiences crash and injury rates almost three times higher than the statewide average. Most of these crashes are rear-end and angle type crashes, commonly found on highly congested roadways similar to the existing traffic operations found on Johnson Ferry Road. Implementing the Double Roundabout Alternative will improve traffic operations and reduce traffic congestion at the intersections proposed, which will likely help alleviate these high crash rates.

Excessive Speed – Johnson Ferry Road, due to geometric constraints and heavily congested conditions especially at peak hours, does not typically have an issue with excessive speeding in the corridor.

Intersection Geometry – At the two intersections where Roundabouts are proposed, approach skew angles are deficient. The Roundabouts will help to improve safety by providing improved approach angles.

Operations

Turning Movements – The Double Roundabout alternative, combined with the modification of the one way pair arrangement on Johnson Ferry Road and Mt. Vernon Highway to two-way operations, will require the accommodation of a high percentage of turning movements. The Roundabout at this intersection will be projected to operate at a better level of service than the intersection improvement alternatives.

High Peak Hour Traffic Volumes – The Johnson Ferry Road corridor has a significant increase of traffic in the peak hours, and it is projected that the roundabouts will operate at a better level of service than the intersection improvement alternatives.

Reducing Impacts on Approaches – One of the major benefits of the Double Roundabout alternative is the reduced impacts along the corridor. The reduced impacts significantly reduced

the right-of-way costs and the number of displaced businesses as compared to the intersection improvement alternatives.

Future Traffic Considerations – The Double Roundabout alternative is able to accommodate future traffic growth in the corridor, and is flexible to accommodate changes in traffic patterns. The future traffic projections predict that the Roundabouts will continue to operate at satisfactory levels of service on all approaches to the design year traffic levels.

Signalization Delays – Existing delays at the two signalized intersections show that the intersections operate at unacceptable levels of service. While concept alternatives have been developed to construct improvements to bring the intersection to acceptable levels of service, the costs for right-of-way, displaced businesses and construction are significantly greater than the available budget. The Double Roundabout alternative significantly reduces these costs within the budget available for the project.

Existing Stop Controlled Intersections – Existing stop controlled intersections do not exist at the proposed Roundabout locations, and therefore this item was not under consideration.

Corridor Transitions – The corridor in the location of the Roundabouts transitions from the City of Sandy Springs Overlay Main Street District to the Suburban District. The Roundabouts provide a natural feature to easily change the roadway environment from an urban type facility to the residential areas of the City.

Traffic Calming – Another benefit which fits in with the City's vision for the corridor is the natural traffic calming features associated with the Roundabouts. The City of Sandy Springs has incorporated other traffic calming features in the area, and the Roundabouts will continue to build upon the traffic calming elements that now exist in the corridor and in the surrounding roadway network.

Aesthetics

Gateway Intersections – The Roundabouts lead to the planned new City Hall Development located on the western end of the project. The Roundabouts will provide the City with the ability to create a gateway or entry feature for traffic leading to City Hall.

Community Enhancement – The Roundabouts will provide community enhancement features, including more pedestrian friendly mobility from the residential areas of the City to the business district. Several residents, at the most recent PIOH, expressed their support for this alternative for its ability to promote a more walkable community.

Unfavorable Conditions

Proximity to Signalized Intersections – While the western Roundabout is located 300 feet east of Roswell Road, the traffic analysis predicts that queuing from the signalized intersections of Roswell Road and Johnson Ferry Road and Roswell Road at Mt. Vernon Highway will not spill back into the roundabout. This issue was a concern during the design modifications identified during the Peer Review process, and has been analyzed to show that the Roundabout operations will not be affected by intersection queuing.

Unfavorable Topography – The topography along the corridor is not a significant factor in the construction of the Roundabouts, and steep grades or unfavorable topography will not limit the visibility of the Roundabout from a distance.

Delays on Approaches – Roundabouts, as part of the design for speed control through the Roundabout, introduce some geometric delay for all through and left turning traffic entering the intersection. Based on the traffic analysis, the delays on the approaches will not create unacceptable delays on any of the approaches.

Interconnected Signal Systems – Interconnected signals are not present at the two intersections where the Roundabouts are proposed, and therefore, this item does not apply.

Pedestrian Traffic Signals – Pedestrian traffic signal warrant is not met on any of the approaches to the proposed Roundabouts, and therefore, this item does not apply.

Railroad Crossings – The corridor improvements proposed under the double Roundabout Alternative do not impact any at grade railroad crossings, and therefore, this item does not apply.

Through the analysis of the concept alternatives developed, and considering the Planning Level Assessment criteria discussed above, the Double Roundabout Alternative was ultimately chosen as the preferred alternative for the project. The Double Roundabout alternative provides the necessary traffic operation improvements to ease traffic congestion, improves pedestrian mobility, increases vehicle and pedestrian safety, and reduces impacts to adjacent properties. The improvements are also able to be made within the available budget established for the project. This alternative has been presented to the public at a Public Information Open House held June 21, 2010, and received favorable support from residents and business owners in the corridor. Therefore, the Double Roundabout alternative has been selected for further development for this project.



Technical Memorandum

Date: July 11, 2012

Prepared For: File

Prepared By: Ed Culican

Subject: Roundabout Lighting Commitment

Project: Johnson Ferry Road Corridor Improvements
Project No. STP00-9252-00(007); PI No. 751420, COSS T-0011

The purpose of this technical memorandum is to document the Lighting commitment by the City of Sandy Springs for the project as part of the required documentation for the Concept Report.

Per the City of Sandy Springs Overlay District requirements, all new or upgraded pedestrian facilities in the Main Street District and Suburban District shall install pedestrian lighting when these facilities are upgraded. Since this project will reconstruct all sidewalks within the corridor, pedestrian lighting will be installed as part of the improvements. Therefore, the City of Sandy Springs is committed to providing pedestrian lighting for the Roundabouts on the project.

Attached, please see the City of Sandy Springs Overlay District Standards, section 12B.4.C for specific pedestrian lighting requirements for all sidewalk improvements within the corridor, including the Roundabouts.

12B.4. C. Pedestrian Lighting (amended 10/21/08, RZ08-028, Ord. 2008-10-55):

1. Pedestrian lighting shall be installed when new or upgraded sidewalks are constructed.
2. Pedestrian lighting shall be spaced 90 to 100 feet apart and shall be equal distance from required street trees, in accordance with the Georgia Power Area-wide Pedestrian Lighting Plan.
3. If designed with the fixture extending at an angle from the pole, the light fixture shall overhang the sidewalk.
4. Pole shall be a maximum height of fifteen (15) feet.
5. On intra-parcel sidewalks, fixtures shall be installed to maintain a minimum lighting level on the pathway of six foot-candles and may be of any style appropriate to the architecture of the project.
6. Pedestrian lighting shall be located behind the required sidewalk.

Streetscape Standards for Each District		
Elements	Main Street District	Suburban District ³
Strip between street and sidewalk - Material and Width	Two-foot wide Brick paver	2 Foot wide Planted Strip (groundcovers, grass)
Sidewalks	Required in all districts	
Width of Sidewalk	Nine feet	Six Feet
Pedestrian Lights - Distance Apart	90 – 100	
Pedestrian Lights –Pole Height	15 feet maximum	

³ The Fulton County Impact Fee Ordinance permits a 10.5 foot right-of-way dedication. However, Sandy Springs is interested in pursuing a six foot planting strip and a six foot sidewalk in the Suburban District. This standard is 1.5 feet greater than the law currently permits. The County cannot require the 12 foot right-of-way but developers can donate easements for the additional 1.5 feet. Sandy Springs will investigate changing the law along the fast paced Roswell Road north of Abernathy Road to the Chattahoochee River.



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TECHNICAL MEMORANDUM

Johnson Ferry Road @ Mt Vernon Highway (Sandy Springs, Georgia)

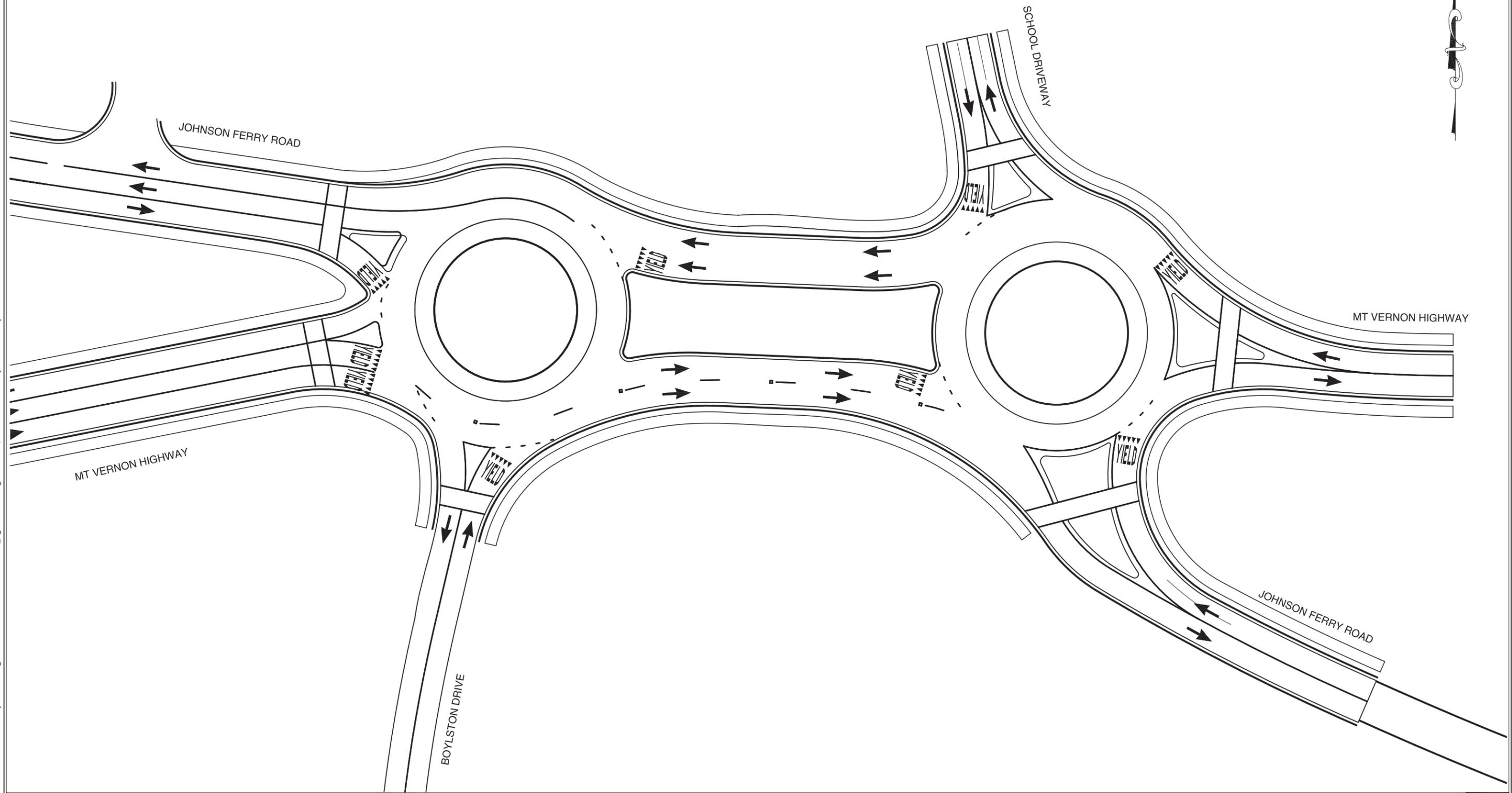
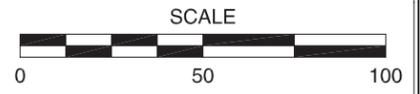
Roundabout Peer Review

Date: October 31, 2011 **Project #:** 11979
To: Georgia Department of Transportation
From: Justin Bansen, Lee Rodegerdts, P.E, Shing Tsoi, and Alex Kiheri

Kittelison & Associates, Inc. (KAI) reviewed conceptual roundabout designs for the intersections of Johnson Ferry Road/Mt Vernon Highway-Boylston Drive and Johnson Ferry Road/Mt Vernon Highway in Sandy Springs, Georgia. The designs were developed by Jacobs Engineering Group and were received by KAI on October 4, 2011. The roundabout designs are illustrated in Figure 1.

Our review has been conducted in general accordance with the guidance provided in NCHRP Report 672, Roundabouts: An Informational Guide, Second Edition and our experience with peer reviews of this type. We believe that the geometry and striping should be further enhanced to improve navigation through the roundabout. The intent of our recommendations is to improve vehicle yielding, reduce vehicle speeds, clarify entry paths, recommend alternative lane configurations to meet operational need, and improve pedestrian facilities. It is recognized that the intersection site presents a number of challenges, including skewed entry approaches, and limited right-of-way. As such, some of the potential issues identified in this peer review may not be able to be addressed without further impacts to right-of-way.

While improvements are recommended for both roundabouts, the improvements needed at the western roundabout are anticipated to be more substantial. At the western roundabout, the skew angle between the eastbound Johnson Ferry Road and Mt. Vernon Highway approaches limits visibility between the two entries creating potential safety and operational issues. Our review identified additional potential issues with speed control, path overlap, heavy vehicle accommodation, and lack of raised splitter islands. The alignment of the various approaches at the western roundabout prevents improvement to address these issues with the current roundabout size and location. Relocation of the roundabout further to the west may be necessary to improve visibility and separation between the entries. The remainder of this memorandum presents more detailed discussion of our review findings for both proposed roundabouts.



CONCEPTUAL ROUNDABOUT DESIGNS (DEVELOPED BY JACOBS ENGINEERING)
SANDY SPRINGS, GEORGIA

FIGURE
1

H:\profile\11979 - Johnson Ferry at Glenridge Roundabout\From PDX\11979_fig5revised.dwg Oct 28, 2011 - 11:50am - jhansen Layout Tab-01

TRAFFIC OPERATIONS AND LANE NEEDS

KAI conducted an independent review of projected traffic operations under 2034 design year conditions using traffic volumes provided by Jacobs Engineering Group (see Attachment A). The first part of the traffic operations review includes analyses performed using Highway Capacity Manual (HCM) 2010 methodologies. The second part includes a review of the VISSIM model of the roundabouts as prepared by Jacobs Engineering Group.

Operations Analysis Review

KAI evaluated each roundabout utilizing the HCM 2010 analysis procedures. Operational results are summarized below. Analysis worksheets are provided in Attachment A. Based upon domestic and international experience, a volume-to-capacity (v/c) threshold of 0.85 to 0.9 is targeted for providing satisfactory operations. While a 0.85 v/c is not an absolute threshold, smaller increments of additional volume can have more dramatic impacts on delay and queues as the v/c ratio approaches 1.0. In some cases a higher v/c ratio, may be acceptable; however, the broader system impacts from vehicle queuing need to be considered.

Western Roundabout

For the western roundabout, the AM peak hour will be the critical analysis period due to the high demand volumes on the two eastbound entries. Table 1 provides a summary of the AM and PM peak hour operations based upon the HCM 2010 analysis methodology.

Table 1 2034 PM Peak Hour Traffic Operations at Johnson Ferry Rd/Mt Vernon Hwy/Boylston Dr (Western Roundabout)

	AM Peak Hour			PM Peak Hour		
	Critical Lane v/c	Critical Lane Delay (sec)	Critical Lane 95 th Queue	Critical Lane v/c	Critical Lane Delay (sec)	Critical Lane 95 th Queue
Johnson Ferry Road (Eastbound)	0.88	31.2	11	0.38	10.9	2
Mt Vernon Highway (Eastbound)	0.76	34	7	0.30	9.1	1
Boylston Drive (Northbound)	0.35	14.7	2	0.29	8.5	1
Mt Vernon Highway (Westbound)	0.24	5.7	1	0.63	12.4	5

During the Design Year 2034 AM Peak Hour, HCM 2010 results identify a v/c ratio of 0.88 for the eastbound Johnson Ferry Road entry and 0.76 for the critical lane of the eastbound Mt. Vernon Highway entry. However, the skew angle and short separation between the eastbound Johnson Ferry

Road and Mt Vernon Highway approaches may result in non-typical yielding behavior due to limited sight distance and poor driver view angles, thus reducing the effective capacity. Drivers on the eastbound Mt. Vernon Highway approach may not consistently yield to upstream vehicles coming from the Johnson Ferry Road approach, which could result in a reduced safety performance and increase delays and queuing on the eastbound Johnson Ferry Road entrance.

Another factor that may impact the actual performance of the western roundabout is the extent to which weaving occurs between the two roundabouts. During the a.m. peak hour, there are heavy eastbound traffic flows coming from both Johnson Ferry Road and Mt. Vernon Highway that blend together at the eastbound exit of the western roundabout. The eastern roundabout has two exclusive lanes on the downstream eastbound entry (one left-through lane and one right-turn only lane) which could result in weaving from drivers changing lanes. The eastern roundabout is projected to have a 95th percentile queue of 9 cars during the a.m. peak hour, which is sufficient to fill the available queue storage between the two roundabouts. This would make it more difficult for lane changes to occur and could result in queue spillback into the western roundabout. Increasing the distance between the roundabouts and/or providing appropriate signing to get vehicles into the correct lane upstream of the western roundabout may help to reduce impacts associated to lane changes between roundabouts. However, actual delays and queues for the western roundabout may be worse than indicated in Table 1 as a result of the geometry shown in Figure 1 and the potential for weaving between roundabouts.

Eastern Roundabout

At the eastern roundabout, the westbound Mt. Vernon Highway approach is forecast to operate with a volume-to-capacity ratio greater than 1.0 during the 2034 p.m. peak hour. Table 2 provides the HCM 2010 analysis results for the eastern roundabout lane configurations illustrated in Figure 1.

Table 2 2034 AM and PM Peak Hour Traffic Operations - Eastern Roundabout – Original Design

	AM Peak Hour			PM Peak Hour		
	Critical Lane v/c	Critical Lane Delay (sec)	Critical Lane 95 th Queue	Critical Lane v/c	Critical Lane Delay (sec)	Critical Lane 95 th Queue
Johnson Ferry Road (Eastbound)	0.79	19	9	0.54	10.1	3
Mt Vernon Highway (Westbound)	0.38	8.3	2	1.09	86.2	21
Johnson Ferry Road (Northbound)	0.39	14.9	2	0.73	24.8	6
School Driveway (Southbound)	0.02	5	1	0.07	8.6	1

For the existing 2008 traffic volumes the HCM 2010 analysis results indicate that a single-lane westbound entry at the eastern roundabout would provide a v/c ratio of 0.74 with 21 seconds of delay and a 7 car queue during the PM Peak Hour. While the single-lane westbound entry would provide sufficient capacity for 2008 peak hour conditions, the v/c is expected to exceed the desired maximum of 0.85 by approximately 2016.

Modifying the design to provide two westbound entry lanes at the eastern roundabout is expected to provide sufficient capacity through the 2034 design year, as shown in Table 3. The addition of a second entry lane also provides improved lane continuity with the rest of the roundabout system since the design already has two receiving lanes within the circulatory roadway. However, in order to fit the second westbound entry lane into the design, the exit lane on the same Mt Vernon Highway approach may need to be shifted further south. This is expected to further impact the accommodation of the design vehicle to make the northbound right-turn and may result in additional right-of-way impacts. If the single-lane westbound entry remains (additional right-of-way impacts are not feasible or if the City is willing to accept the delay and queuing during the PM peak hour) then additional modifications to the westbound entry are still recommended to improve yielding of entering vehicles and improve speed control as outlined in the geometric design discussion.

Table 3 2034 AM and PM Peak Hour Traffic Operations - Eastern Roundabout – Alternative Lane Configuration*

	AM Peak Hour			PM Peak Hour		
	Critical Lane v/c	Critical Lane Delay (sec)	Critical Lane 95% Queue	Critical Lane v/c	Critical Lane Delay (sec)	Critical Lane 95% Queue
Johnson Ferry Road (Eastbound)	0.79	19	9	0.54	10.1	3
Mt Vernon Highway (Westbound)	0.20	6.0	1	0.63	17.1	5
Johnson Ferry Road (Northbound)	0.39	14.9	2	0.73	24.78	6
School Driveway (Southbound)	0.02	5	1	0.07	8.6	1

* Modifications includes a second entry lane in the westbound approach on Mt Vernon Highway

VISSIM Model Review

KAI reviewed the 2034 a.m. and p.m. build condition VISSIM models for both roundabouts. The following is a summary of key observations.

General Model Settings and Parameters

KAI noted the following observation regarding general model settings and parameters:

- Model time resolution is set to 2 steps per seconds (one model step per 0.5 seconds)
 - Due to the observed congestion, it is suggested that the model resolution be set to 5 or higher. This will enable smoother lane changes and reduce conflicts at unsignalized approaches.
- Driver behavior settings have been changed from the default values, and the resulting saturation flow rate is approximately 2500 vehicles per hour per lane.
 - Data should be provided to justify the use of these values or the resulting saturation flow rate.
- Review of the error file for the a.m. model (seed set to 1) suggests that between 2-3% of vehicles in the model are being diffused due to excessive dwelling, or leaving the model while searching for the next routing decision. This is atypical in most VISSIM models.
 - Further review is needed to determine if this diffusion is occurring at specific locations in the model and thus is underestimating the impact to specific movements.
- The truck types used within the models are the default European heavy vehicle types.
 - These truck types are inconsistent with AASHTO design vehicles. Update the heavy vehicle 3D model composition to include AASHTO based truck types.

Roundabout Review

KAI noted the following observations regarding the modeling of the roundabout:

- The yield control method employed for the eastbound approach on Mt. Vernon Highway at the western roundabout is not producing reasonable results. Specifically, we observed that the model is routinely allowing vehicles to enter the roundabout when conflicting vehicles are present. Vehicles from Mt. Vernon Highway were frequently observed to enter the roundabout without slowing or stopping at the same time as a platoon of vehicles would be entering from the upstream Johnson Ferry Road approach. The lack of yielding to conflicting vehicles is producing delay and queuing results for the Mt. Vernon Highway approach that are lower than would be expected if the model parameters were providing more reasonable yielding characteristics.
- The yield control method employed for the eastbound approach on Johnson Ferry Road at the western roundabout is also intermittently producing unreasonable results. We observed situations where vehicles would enter the roundabout despite conflicting vehicles being present on the circulatory roadway.

- At the eastern roundabout, the coding of the southbound approach results in right-turning vehicles yielding to only the outside lane of the circulatory roadway. It appears that southbound right-turning vehicles are not required to yield to vehicles within the inner lane of the circulatory roadway which may result in a slight over-estimation of capacity.
- In general drivers aggressively enter the roundabout.
 - Further review of the employed conflict areas and priority rules should be undertaken to refine the vehicle gap acceptance parameters to more closely match available data and adopted research.

Due to the issues listed above, the model does not appear to produce results which are consistent with US field data for roundabouts (as documented in NCHRP Report 572, *Roundabouts in the United States*). Calibration to US conditions is recommended for improving the reasonableness of the roundabout operations within the VISSIM model.

DESIGN FEATURES

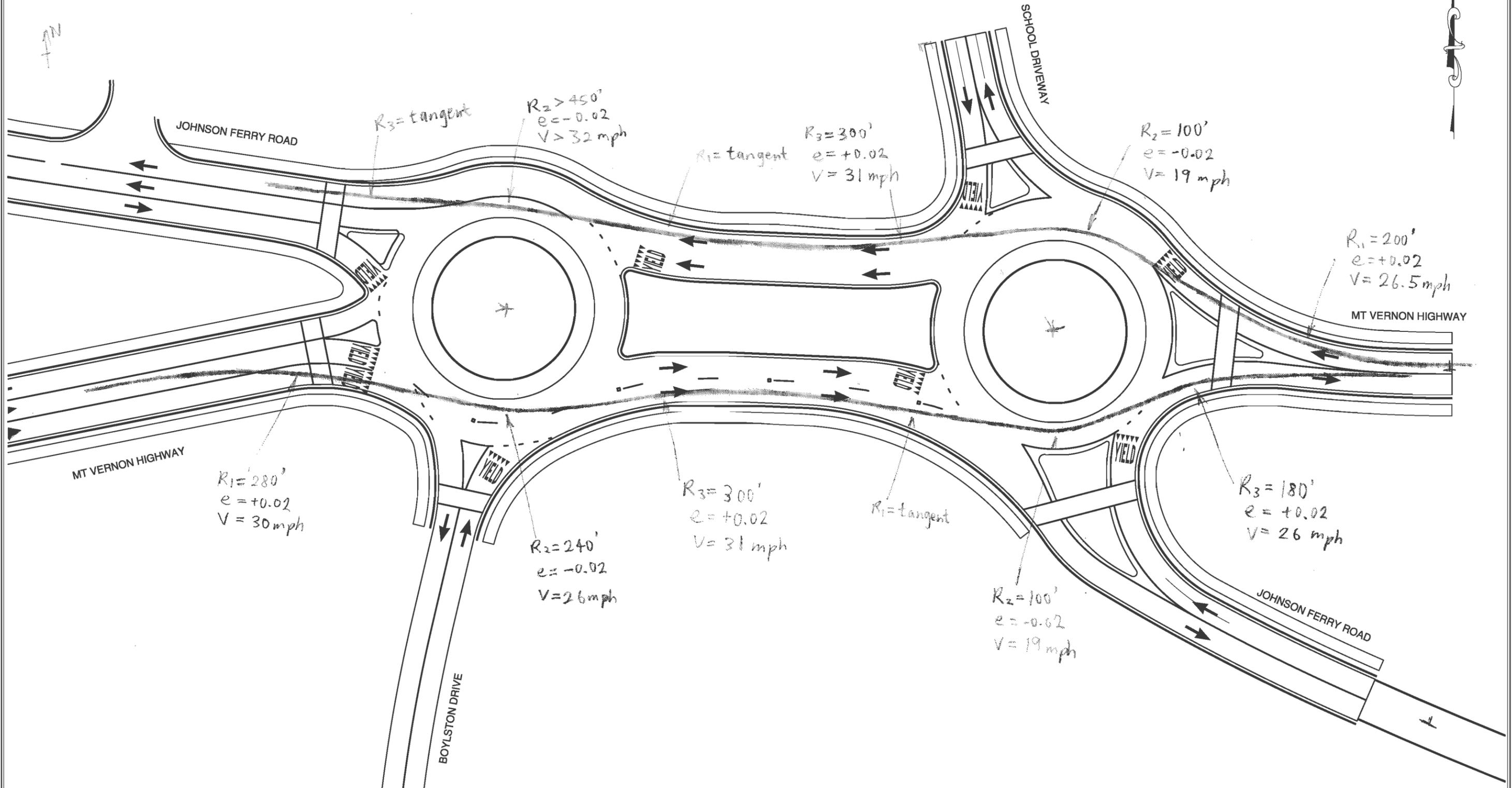
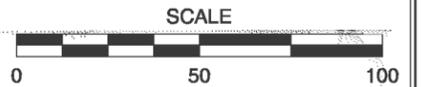
As described in the NCHRP Report 672 *Roundabouts: An Informational Guide – 2nd Edition*, roundabout design follows a principles based design process. This process is focused on achieving several key objectives including: speed control entering and navigating the roundabout, adequate channelization to provide vehicle deflection and path alignment, design vehicle accommodation, providing adequate sight distance and visibility, and accommodating non-motorized users. These design principle must then be balanced with other physical and environmental constraints. Additionally, some of these objectives (such as speed control and design vehicle accommodation) commonly compete with each other.

The following discussion outlines KAI's reviews of the individual design principles; however, each of the principles is interrelated and therefore design modifications to address one comment may have an unintended consequence of negatively impacting other aspects of the design. Modification to the two roundabouts may require iteration to produce an overall balanced design.

Fastest Path Speeds (Figures 2 through 4)

KAI performed a check of fastest path speeds for the proposed roundabouts; these checks are shown in Figures 2, 3 and 4 for east-west through movements, north-south through movements, and right-turn movements, respectively. Key findings are as follows:

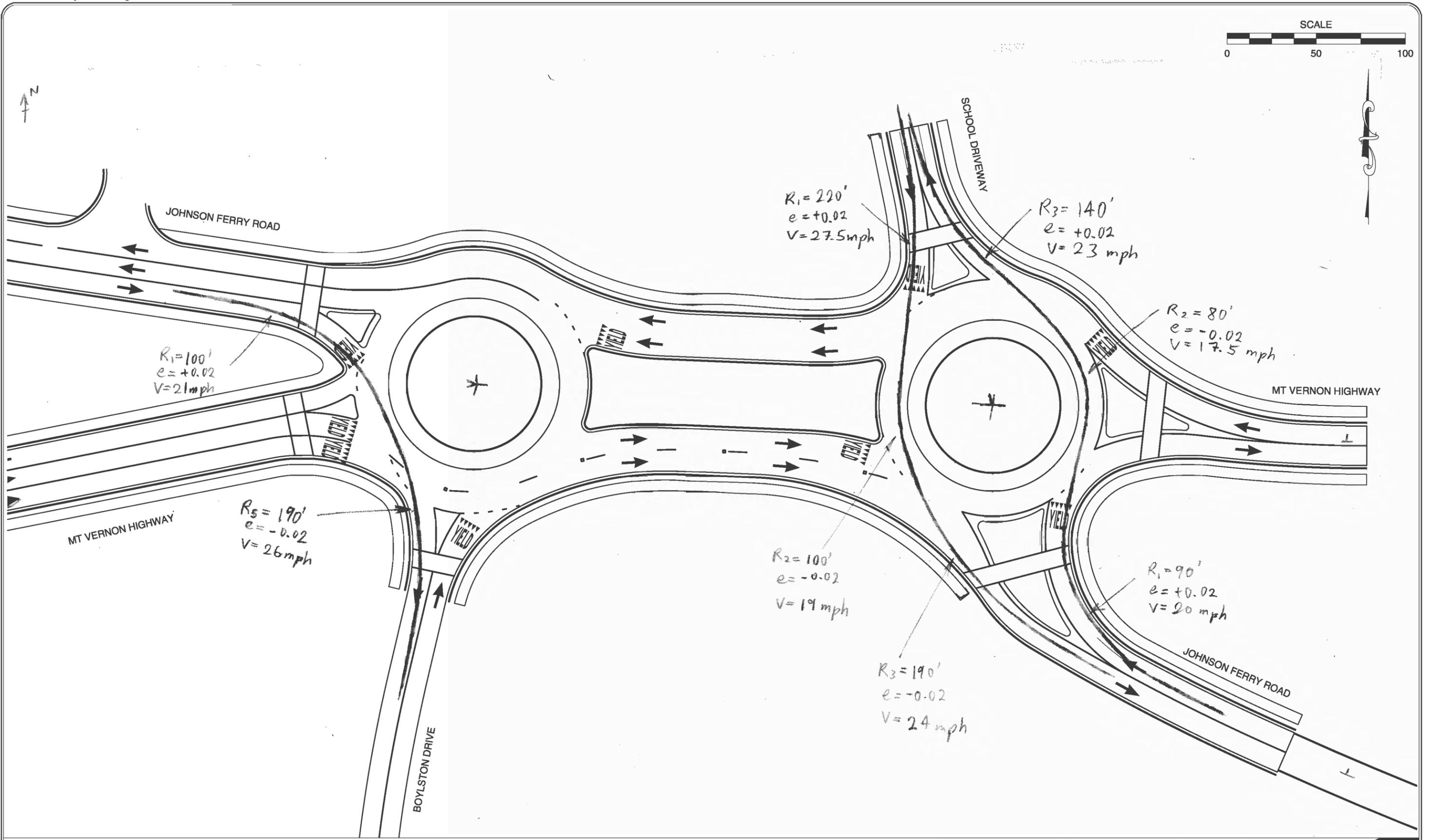
- The designs allow for speeds that exceed the thresholds identified in NCHRP Report 672 for portions of the eastbound and westbound through movements through the series of roundabouts.
 - The eastbound entry at the eastern roundabout and the westbound entry at the western roundabout allow entry speeds that exceed 30 mph. While the upstream roundabouts will influence the speeds on these approaches, the tangent section between the roundabouts will allow for acceleration that could result in higher than desirable entry speeds.
 - The eastbound Mt. Vernon Highway entry at the western roundabout meets the recommendation for a maximum entry speed of 30 mph for a two-lane approach. However, modifications to the eastbound Mt. Vernon Highway entrance at the western roundabout to address other design principles (including natural vehicle paths and heavy vehicles) may further reduce the speed control on this approach. A combination of modifications, including potential adjustments to the approach alignment, roundabout size, or roundabout position may be needed.
 - The westbound approach (single-lane entry) of the eastern roundabout is estimated to allow entering speeds of over 25 mph, including 31 mph for right-turning vehicles. Once a driver has entered the roundabout, there is then nearly a straight path that can be navigated between the eastern roundabout and the westbound exit onto Johnson Ferry Road at the western roundabout. This may result in higher than desired speeds through the series of roundabouts. Modification to a two-lane entry will further impact the potential speed control of the westbound entry.
- The southbound entry at the eastern roundabout does not provide the desirable deflection to achieve speed control, although the approach originates in a parking lot and thus is not as likely to generate the maximum entry speed.
- The remaining approaches generally provide fastest speed control that meets the recommendations of NCHRP Report 672.



H:\projfile\11979 - Johnson Ferry Roundabout\11979_fig.dwg Oct 31, 2011 - 6:25pm - sbsai Layout Tab: 02

FASTEST PATHS - EAST-WEST THROUGH MOVEMENTS SANDY SPRINGS, GEORGIA

FIGURE 2



$R_1 = 100'$
 $e = +0.02$
 $V = 21 \text{ mph}$

$R_1 = 220'$
 $e = +0.02$
 $V = 27.5 \text{ mph}$

$R_3 = 140'$
 $e = +0.02$
 $V = 23 \text{ mph}$

$R_2 = 80'$
 $e = -0.02$
 $V = 17.5 \text{ mph}$

$R_5 = 190'$
 $e = -0.02$
 $V = 26 \text{ mph}$

$R_2 = 100'$
 $e = -0.02$
 $V = 19 \text{ mph}$

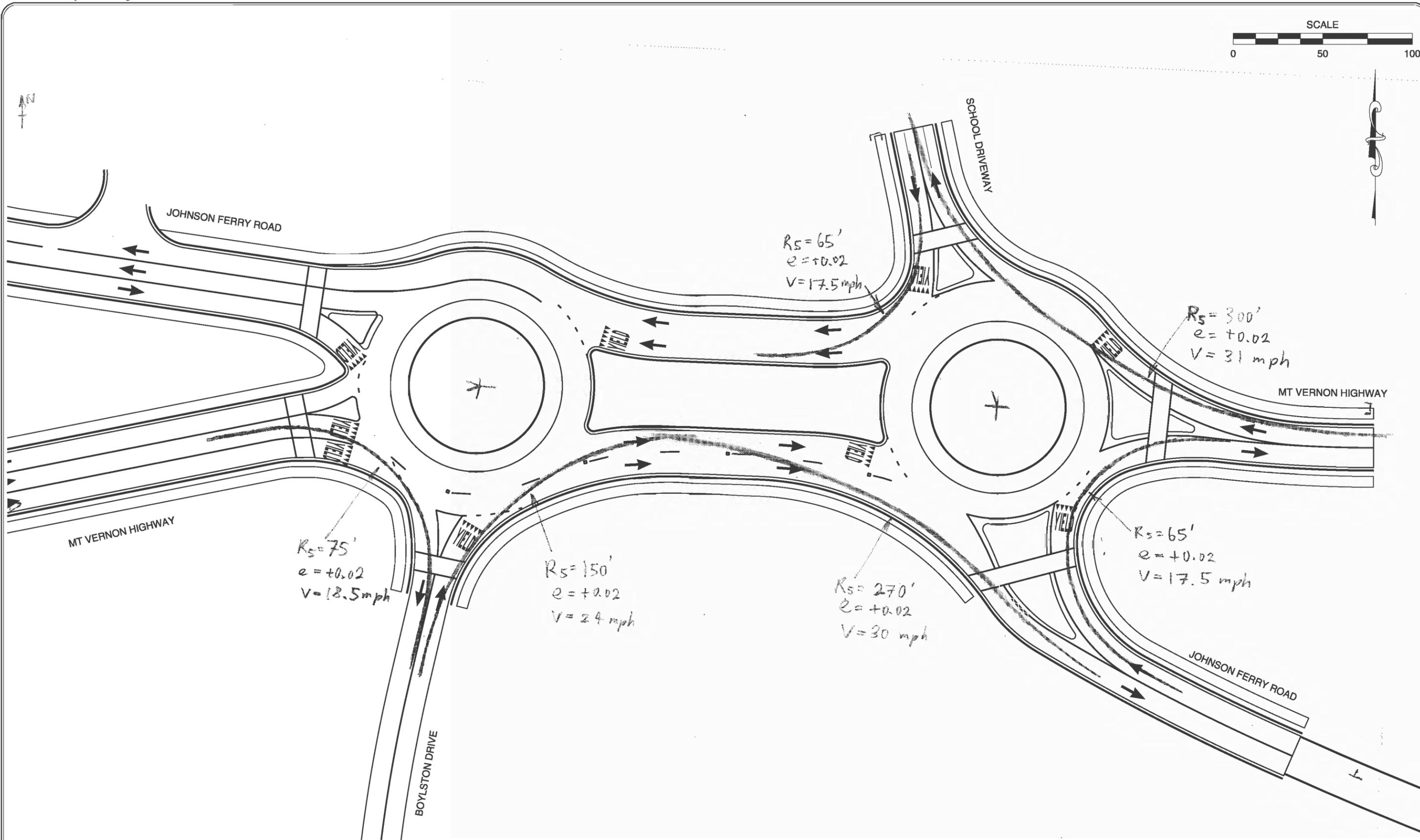
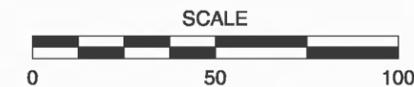
$R_1 = 90'$
 $e = +0.02$
 $V = 20 \text{ mph}$

$R_3 = 190'$
 $e = -0.02$
 $V = 24 \text{ mph}$

FASTEST PATHS - NORTH-SOUTH THROUGH MOVEMENTS
SANDY SPRINGS, GEORGIA

FIGURE
3

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FASTEST PATHS - RIGHT-TURN MOVEMENTS SANDY SPRINGS, GEORGIA

FIGURE 4

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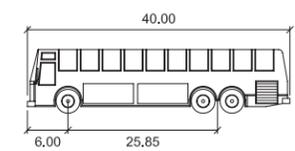
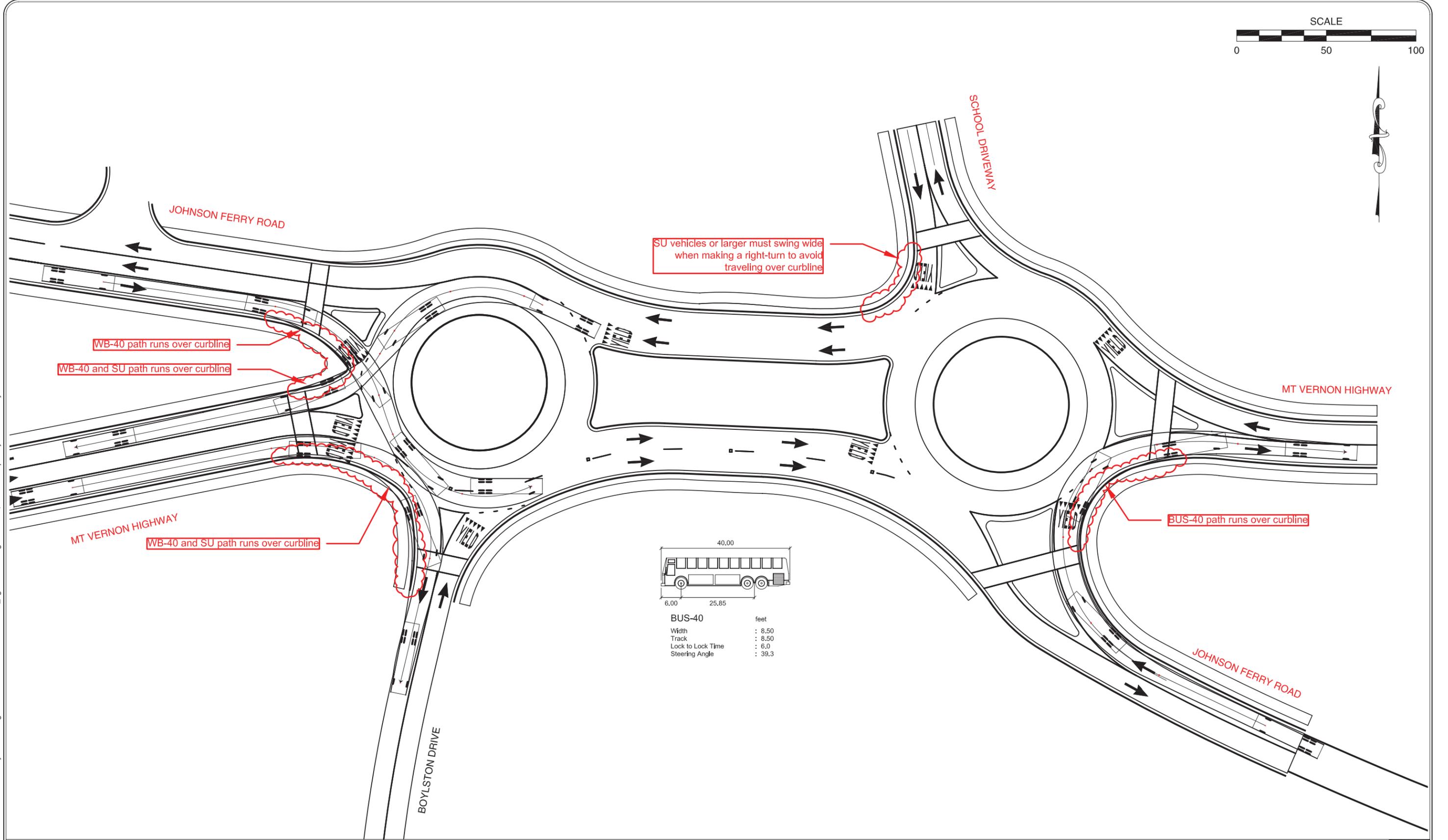
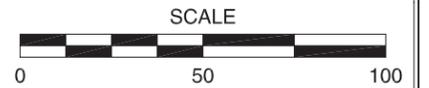
Design Vehicle Accommodation (Figures 5 through 7)

KAI reviewed truck turning templates for the proposed roundabouts prepared by Jacobs Engineering Group. Jacobs Engineering Group used BUS-40 and SU-30 as the design vehicles for both roundabouts. GDOT typically requires all roundabouts to accommodate a WB-67 design vehicle unless an alternative vehicle is justified for a specific project. While a BUS-40 vehicle may represent the majority of the larger vehicles using the intersection, the design should accommodate moving trucks, fire trucks, etc. that may be larger than a BUS-40. These larger vehicles should also be checked to verify that the design will accommodate them for each movement.

A review of the BUS-40 and SU-30 design vehicle turning templates provided by Jacobs shows that these design vehicles cannot be accommodated at multiple locations. Very limited shy distance is available at other locations. Shy distance allows for variations in vehicle paths from different drivers. NCHRP Report 672 recommends a minimum of 1 to 2 feet of shy distance between the swept path of design vehicles and each curblineline. Figure 4 summarizes the locations where BUS-40 and SU vehicles are not accommodated or shy distance is not sufficient.

KAI also created truck turning templates using WB-50 design vehicle for certain key movements, as shown in Figures 5 and 6. This was done to evaluate where the designs may have issues with accommodating a vehicle larger than a bus. The turning templates indicate that the roundabouts are not able to accommodate WB-50 design vehicle at multiple locations. However, these locations are largely the same as those identified for the BUS-40 vehicle in Figure 4.

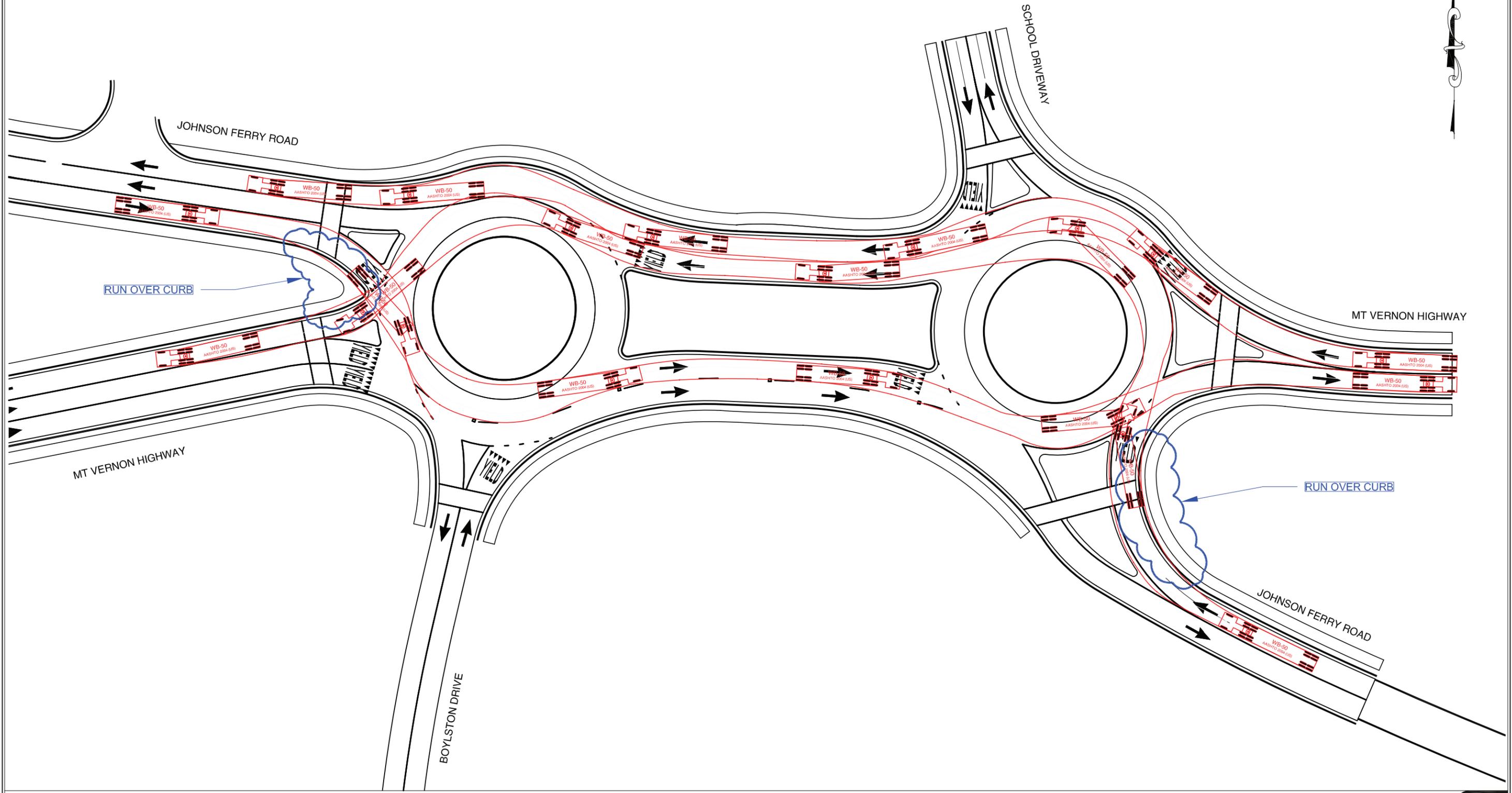
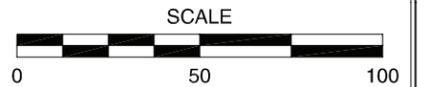
In general, the issues related the heavy vehicle accommodation is due to 'tight' geometry. As shown in Figure 9, the entry, exit, and circulating lane widths are consistently narrower than the typical ranges identified in NCHRP Report 672. Increasing the lane widths into the recommended ranges provided in NCHRP Report 672 is expected to address many of the identified heavy vehicle accommodation issues. However, it will also impact the fastest path speed control. Therefore, some iteration in the design will be necessary to balance the truck accommodation with vehicle speeds. Consideration should also be given to provide sufficient space for a passenger car to travel adjacent to the design vehicle through the roundabout.



BUS-40	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 39.3

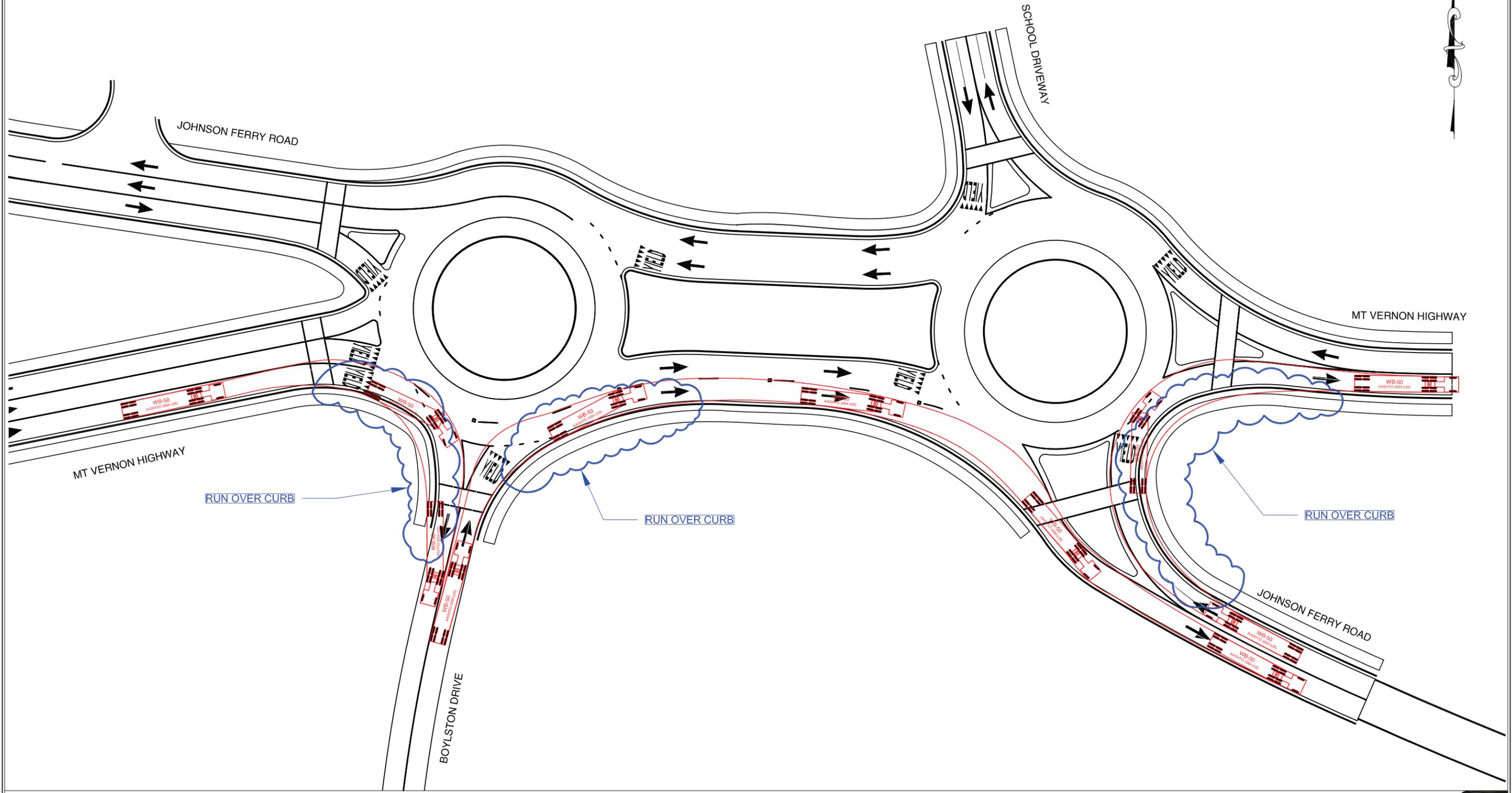
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BUS-40 DESIGN VEHICLE PATHS FOR SELECTED TURN MANEUVERS SANDY SPRINGS, GEORGIA



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WB-50 VEHICLE PATHS - THROUGH AND LEFT-TURN MOVEMENTS SANDY SPRINGS, GEORGIA



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WB-50 VEHICLE PATHS - RIGHT-TURN MOVEMENTS SANDY SPRINGS, GEORGIA

Natural Vehicle Paths

Design of multilane roundabout entries requires a consideration of the path alignment of vehicles traveling side-by-side. These path alignments are drawn by assuming vehicles stay within their lane up to the entrance line of the roundabout. Beyond this point, vehicles are assumed to maintain their trajectory when entering the roundabout. If the trajectories do not carry side-by-side vehicles into the appropriate circulating lanes of the roundabout, path overlap may occur. Exhibits 6-28 and 6-29 of the Roundabout Guide illustrate path overlap concepts.

The eastbound and westbound approach on Mt Vernon Highway at the western roundabout exhibits potential for path overlap. At the yield line, the entry aligns vehicles in the outside entry lane with the inside lane of the circulatory roadway as shown in Figure 10. Similarly, the eastbound right-turn only lane at the eastern roundabout aligns vehicles at the yield line such that they are aimed towards the circulatory roadway and drivers may mistakenly try to enter the roundabout from the outside lane creating a conflict with vehicles in the inside lane. Adjustments to improve the alignment of entering vehicles need to be balanced with other design objectives.

General Layout, Geometry, Striping, and Multimodal Accommodation

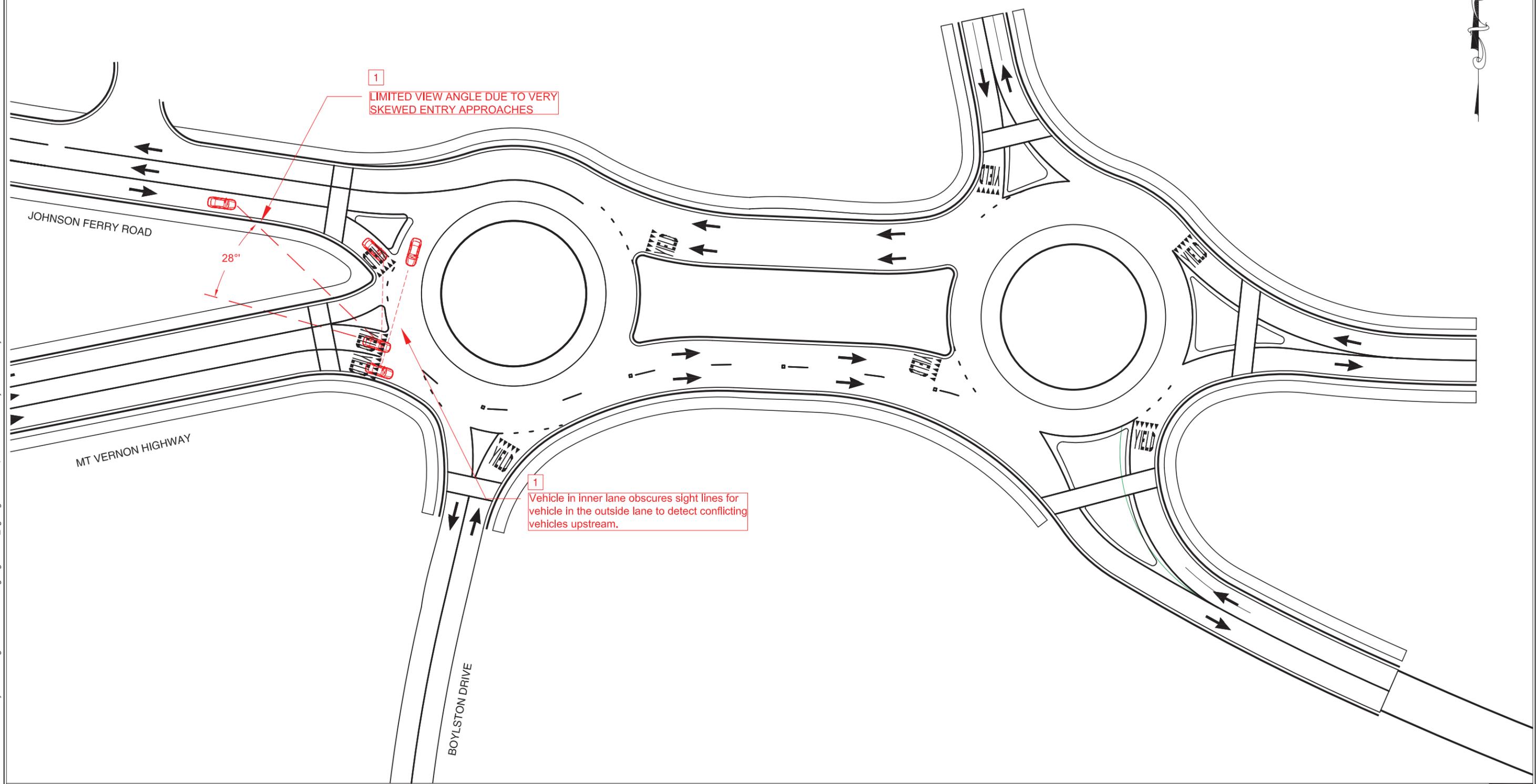
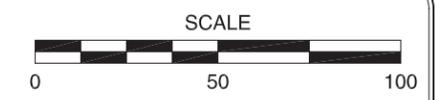
Our observations on the two roundabout concepts are indicated with redline mark-ups on Figures 8 through 12. Comments are also described below.

General Layout and Geometric Elements (Figures 8 and 9)

1. The two skewed eastbound approaches at the western roundabout do not provide sufficient separation for proper entry designs and vehicle yielding. As discussed previously, this may have both operational and safety implications. The angle between the two approaches does not permit the Mt. Vernon Highway entry to have proper visibility angles to the left. A view angle of less than 30 degrees is created as a result of the approach skew angle. As discussed in NCHRP 672, a minimum desirable intersection view angle of 75 degrees is recommended in order to allow drivers to comfortably turn their head to the left to view conflicting traffic on the immediate upstream entry. The angle of the entry also results in vehicles within the inner lane of the eastbound Mt. Vernon entry blocking visibility of the upstream entry and circulatory roadway for vehicles in the outside lane of the entry as illustrated in Figure 8. Relocation of the roundabout approximately 150 feet or more to the west may be needed to provide sufficient separation between entries. However, this pushes the roundabouts closer

to the existing traffic signals which may increase the potential for queue storage issues between the signals and roundabout.

2. At the western roundabout, relatively heavy through volumes from the eastbound approaches on Johnson Ferry Road and Mt. Vernon Highway may create weaving issues in the short section of roadway between the two roundabouts without additional guidance to drivers. As currently designed, the eastbound Johnson Ferry Road approach also seems to direct vehicles into the inside lane of the circulatory roadway, which would require a lane change for any vehicles wanting to make a right-turn at the downstream eastern roundabout. As discussed in the operational analysis portion of this report, weaving has operational implications that could increase the risk of queue spillback between roundabouts. Providing adequate signing to sort vehicles into the appropriate lane along Mt Vernon Highway prior to entering the western roundabout is important to minimize weaving. The signing will need to direct motorists into the appropriate lane (prior to entering the western roundabout) so that they can get to their desired exit downstream without additional lane changes.
3. The lane widths used for both roundabouts are smaller than desirable, which creates problems as noted in accommodating design vehicles. Some circulatory roadway widths are only 14 feet for single-lane portions of the circulatory roadway and 23 feet for two-lane portions of circulatory roadway. Typically, 18 to 22 feet and 28 to 32 feet are designed for single and double circulatory roadways, respectively, to accommodate heavy vehicles and allow comfortable maneuvers of vehicles through the roundabouts. Similar issues on the entry and exits were noted. NCHRP Report 672 provides additional information on typical ranges of entry, exit, and circulating lane widths.
4. As mentioned in the operational analysis, consideration should be given to widening the westbound approach at the eastbound roundabout to a two-lane entry.
5. Widen the northbound Johnson Ferry Road entrance at the eastern roundabout to improve heavy vehicle accommodation. The widening can primarily be implemented by reducing the width of the splitter island.



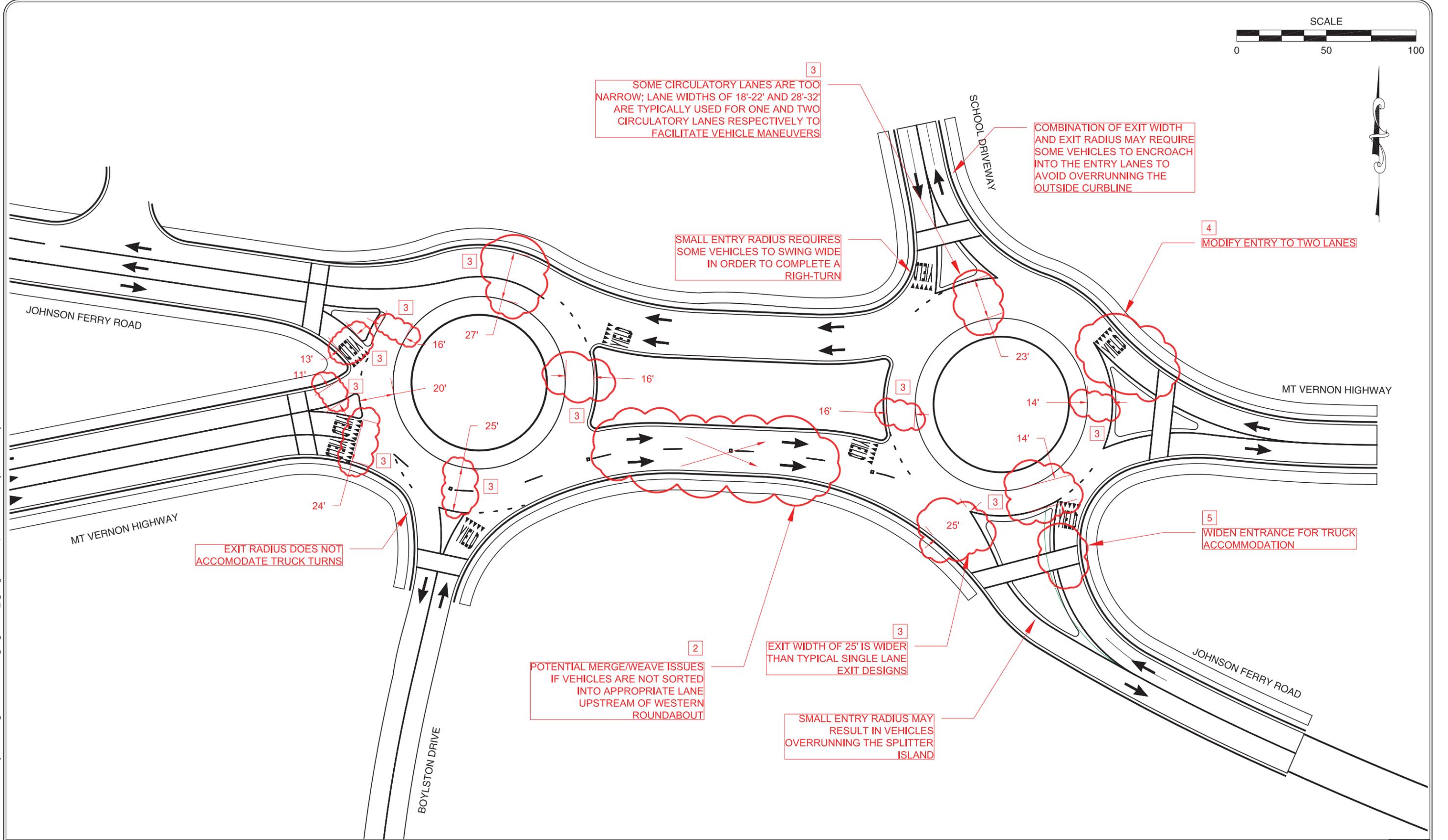
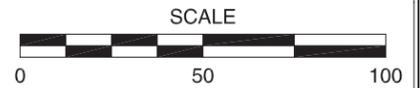
1
LIMITED VIEW ANGLE DUE TO VERY
SKEWED ENTRY APPROACHES

28°

1
Vehicle in inner lane obscures sight lines for
vehicle in the outside lane to detect conflicting
vehicles upstream.

POTENTIAL VIEW ANGLE AND SIGHT DISTANCE ISSUES
SANDY SPRINGS, GEORGIA

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3 SOME CIRCULATORY LANES ARE TOO NARROW; LANE WIDTHS OF 18'-22' AND 28'-32' ARE TYPICALLY USED FOR ONE AND TWO CIRCULATORY LANES RESPECTIVELY TO FACILITATE VEHICLE MANEUVERS

COMBINATION OF EXIT WIDTH AND EXIT RADIUS MAY REQUIRE SOME VEHICLES TO ENCRANCH INTO THE ENTRY LANES TO AVOID OVERRUNNING THE OUTSIDE CURBLINE

SMALL ENTRY RADIUS REQUIRES SOME VEHICLES TO SWING WIDE IN ORDER TO COMPLETE A RIGH-TURN

4 MODIFY ENTRY TO TWO LANES

EXIT RADIUS DOES NOT ACCOMMODATE TRUCK TURNS

5 WIDEN ENTRANCE FOR TRUCK ACCOMMODATION

2 POTENTIAL MERGE/WEAVE ISSUES IF VEHICLES ARE NOT SORTED INTO APPROPRIATE LANE UPSTREAM OF WESTERN ROUNDABOUT

3 EXIT WIDTH OF 25' IS WIDER THAN TYPICAL SINGLE LANE EXIT DESIGNS

SMALL ENTRY RADIUS MAY RESULT IN VEHICLES OVERRUNNING THE SPLITTER ISLAND

GENERAL GEOMETRIC DESIGN COMMENTS SANDY SPRINGS, GEORGIA

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Natural Vehicle Paths (Figure 10)

6. The eastbound Mt Vernon Highway entry at the western roundabout has the potential for entry path overlap. The entry geometry at the yield line positions vehicles in the outside lane such that they are aimed towards the inner lane of the circulatory roadway. NCHRP Report 672 provides additional guidance on entry design to improve the natural path alignment of vehicles. Modifications to the overall roundabout design (enlarged inscribed circle diameter or relocation of roundabout to the west) is likely necessary in order to implement changes to the approach alignment and geometry to meet design objectives.
7. The eastbound right-turn at the eastern roundabout utilizes a large curb radius that may cause drivers to mistakenly perceive the right-turn to be free-flow. However, given that there is only a single exit lane southbound on Johnson Ferry Road, the eastbound right-turn must be yield controlled in order to give priority to circulating traffic to exit. The alignment of the eastbound entry also results in the outside lane being slightly ambiguous as to whether vehicles can continue straight (enter the roundabout) versus being required to turn right. It is desirable for the right-turn only lane to be aimed more towards the splitter island on the south leg such that the vehicle path is clearly blocked and it is intuitive to drivers that they must turn right. Modifications to improve the eastbound entry should balance vehicle yielding, accommodation of trucks making the right-turn, driver view angles, and path alignment.
8. On the westbound entry at the eastern roundabout, the entry aligns vehicles into the outside lane of the circulatory roadway. Meanwhile, the single-lane portion of the circulatory roadway aligns vehicles such that they stay within the inner lane as the circulatory roadway widens out to two lanes. This suggests to drivers that the westbound entry is “free-flow” and isn’t required to yield. However, a conflict is created for drivers that are trying to exit onto the driveway on the north leg of the roundabout if westbound vehicles do not yield. Design modifications should emphasize yielding of entering vehicles to all vehicles circulating past the westbound entry.

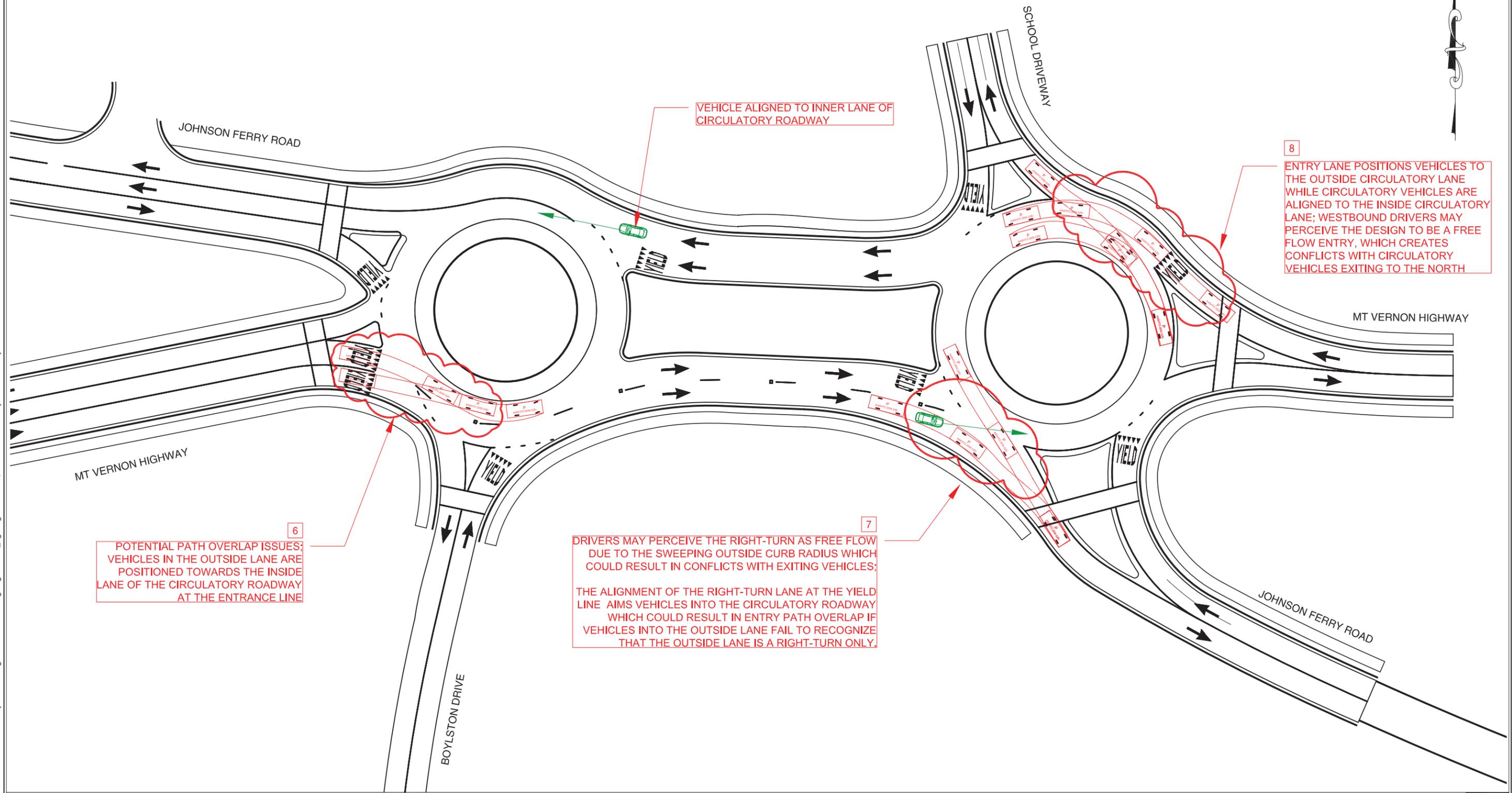
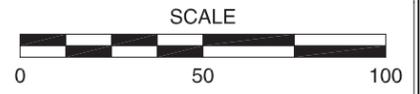
Striping (Figure 11)

9. For all approaches, the dotted entrance line should extend across all entry lanes to meet the requirements of the 2009 Manual on Uniform Traffic Control Devices (MUTCD). If yield line markings are used, they should be staggered on the multilane entries to allow for improved driver visibility from both lanes.

10. Provide lane-use arrow markings on the circulatory roadways and approach lanes help clarify lane intended lane use.
11. Some striping appears to be missing from the provided design. The pavement markings play an important role in the operations of the multilane roundabouts and should be included as part of the horizontal concept design.

Pedestrian and Bicycle Accommodation (Figure 12)

12. Splitter islands are not provided on two approaches at the western roundabout. Splitter islands provide pedestrian refuge area for safe and accessible pedestrian crossings, and prevent vehicles from making left-turns at the entries. It is essential that splitter islands and pedestrian refuge areas are provided. In particular, it is important for the eastbound entry of Mt. Vernon Highway to have raised splitter islands for speed control and for vehicle channelization. The two-lane entries and exits should be designed to allow possible pedestrian signalization to accommodate proposed draft rulemaking by the United States Access Board.
13. The splitter island on the southbound approach at the eastern roundabout is too short to provide physical protection to pedestrians in the refuge area. The splitter island on the eastbound approach on Johnson Ferry Road at the western roundabout ends before the crosswalk, leaving no pedestrian refuge area.



6
POTENTIAL PATH OVERLAP ISSUES;
VEHICLES IN THE OUTSIDE LANE ARE
POSITIONED TOWARDS THE INSIDE
LANE OF THE CIRCULATORY ROADWAY
AT THE ENTRANCE LINE

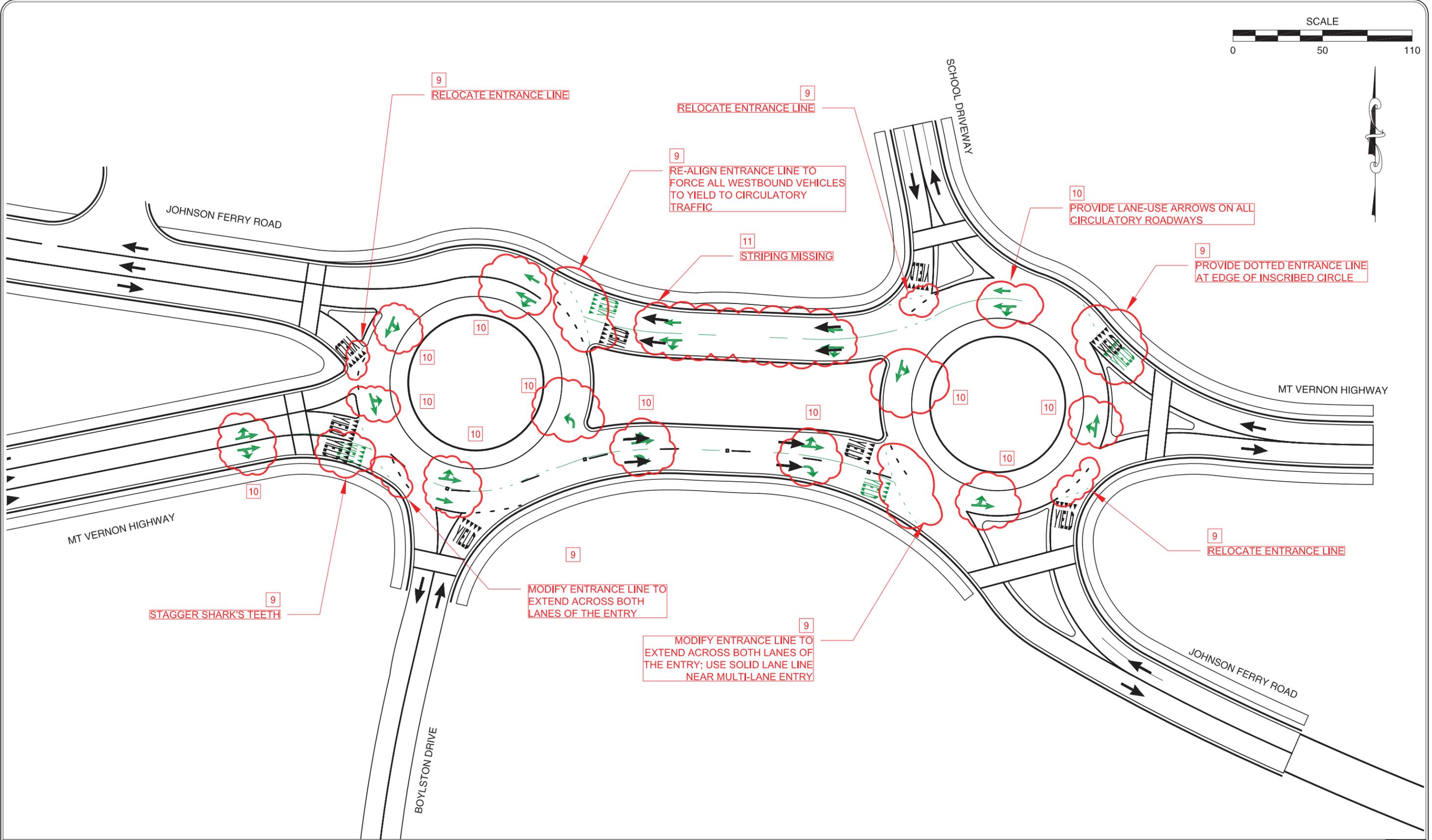
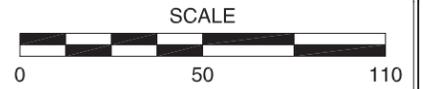
7
DRIVERS MAY PERCEIVE THE RIGHT-TURN AS FREE FLOW
DUE TO THE SWEEPING OUTSIDE CURB RADIUS WHICH
COULD RESULT IN CONFLICTS WITH EXITING VEHICLES;

THE ALIGNMENT OF THE RIGHT-TURN LANE AT THE YIELD
LINE AIMS VEHICLES INTO THE CIRCULATORY ROADWAY
WHICH COULD RESULT IN ENTRY PATH OVERLAP IF
VEHICLES INTO THE OUTSIDE LANE FAIL TO RECOGNIZE
THAT THE OUTSIDE LANE IS A RIGHT-TURN ONLY.

8
ENTRY LANE POSITIONS VEHICLES TO
THE OUTSIDE CIRCULATORY LANE
WHILE CIRCULATORY VEHICLES ARE
ALIGN TO THE INSIDE CIRCULATORY
LANE; WESTBOUND DRIVERS MAY
PERCEIVE THE DESIGN TO BE A FREE
FLOW ENTRY, WHICH CREATES
CONFLICTS WITH CIRCULATORY
VEHICLES EXITING TO THE NORTH

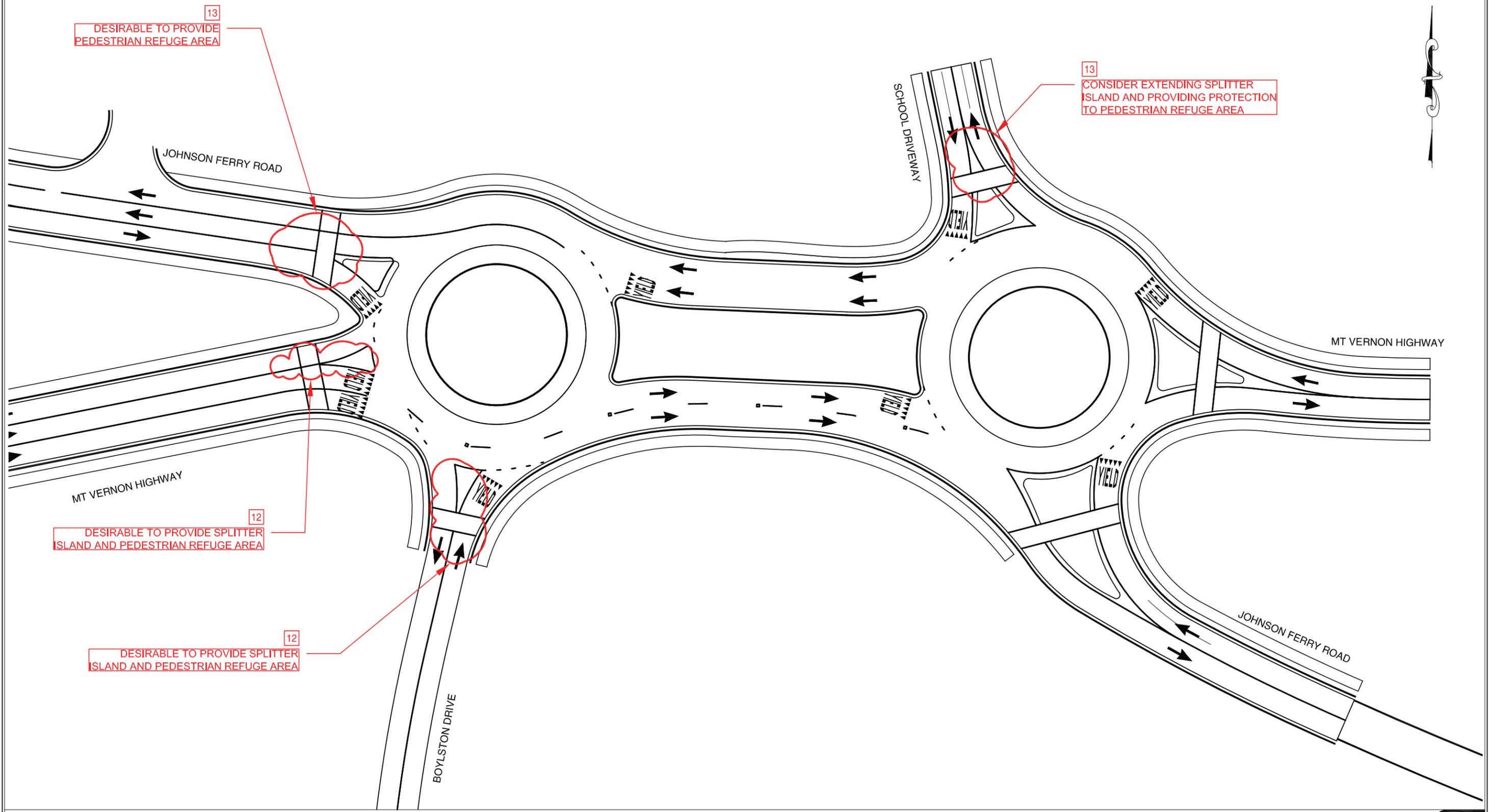
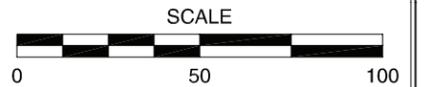
POTENTIAL NATURAL VEHICLE PATH ISSUES, AND RECOMMENDED IMPROVEMENTS
SANDY SPRINGS, GEORGIA

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POTENTIAL STRIPING IMPROVEMENTS SANDY SPRINGS, GEORGIA



13
DESIRABLE TO PROVIDE PEDESTRIAN REFUGE AREA

13
CONSIDER EXTENDING SPLITTER ISLAND AND PROVIDING PROTECTION TO PEDESTRIAN REFUGE AREA

12
DESIRABLE TO PROVIDE SPLITTER ISLAND AND PEDESTRIAN REFUGE AREA

12
DESIRABLE TO PROVIDE SPLITTER ISLAND AND PEDESTRIAN REFUGE AREA

POTENTIAL MULTIMODAL ACCOMMODATION ISSUES, AND RECOMMENDED IMPROVEMENTS SANDY SPRINGS, GEORGIA

FIGURE 12

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POTENTIAL OPTIONS FOR CONSIDERATION

The preceding comments outlined areas of the designs where additional refinement is needed in order to meet the principles outlines in NCHRP Report 672. The following are a couple of potential options that could be considered as starting points in refining the designs, recognizing that additional iteration may be needed to produce an overall balanced design.

- At the western roundabout potential options for addressing the skew angle between the two eastbound approaches includes:
 - Relocate the western roundabout approximately 150 feet or more to the west. Doing so may allow for sufficient separation between the two eastbound entries to provide improved safety operations. This will not completely eliminate the view angle issues, but will help to separate out some of the conflict points. In addition, it will provide increased separation between the roundabouts to reduce the potential operational impact of weaving between the roundabouts. However, it will also reduce the storage distance between the roundabout and adjacent signalized intersections to the west, which will need to be further evaluated. If the roundabout was relocated, Boylston Drive would become a right-in/right-out stop-controlled intersection and northbound left-turns would be facilitated by vehicles turning right and then making a u-turn through the roundabout.
 - Alternatively, the existing one-way couplet for Johnson Ferry Road and Mt Vernon Highway could be maintained. This would essentially create a three-legged roundabout that would eliminate the skew conflicts and allow additional space for the Mt Vernon Highway entrance to be improved without relocation of the roundabout. It is recognized that this option may not be feasible due to the larger systemwide traffic needs.
 - Another possible option with the one-way couplet maintained would be to eliminate the west roundabout all-together. Under this scenario, Boylston Drive would become a right-in/right-out stop controlled intersection. This would eliminate the design issues associated with the western roundabout and provide additional distance from the signals for vehicles to get into the correct lane upstream of the eastern roundabout.
- To improve speed control for eastbound and westbound through movements, consider offsetting the approach alignments to the left of the roundabout center for the eastbound approach at the eastern roundabout and the westbound approach at the western roundabout. This would reduce

the width of the median to better utilize the existing design footprint. The offset approach alignment may also provide opportunities to enhance vehicle path alignment.

- The addition of a second entry lane to the westbound approach of the eastern roundabout will further reduce the speed control unless additional geometric modifications are provided (such as offsetting the approach alignment to the left of the roundabout center, increasing the inscribed circle diameter, etc.). Offsetting the approach alignment to the left of the roundabout center and using a larger radius or tangential exit is one option to explore to provide additional space for adding another westbound entry lane while also potentially maintaining entry speed control. However, modifications to the exit on the east leg may also exacerbate the issues for accommodating the design vehicle making a northbound right-turn at the eastern roundabout. Reducing the width of the splitter island on the northbound approach may assist in improving the northbound right-turn truck accommodation.

CONCLUSIONS

A variety of observations and suggestions for both roundabouts are offered in this technical memorandum. In general, the eastern roundabout can likely be improved with minor additional right-of-way needs beyond the footprint of the current design. However, more substantial improvements should be explored for the western roundabout to mitigate the potential issues associated with the skew angle between approaches.

We trust these review comments and observations are helpful in enhancing these roundabout designs. Please feel free to contact us if you have comments or questions.

ATTACHMENTS

- A. Roundabout Operations Analysis Worksheets

ROUNABOUT REPORT																	
General Information									Site Information								
Analyst	TST								Intersection	Johnson Ferry@Boylston-Mt Ver							
Agency or Co.	KAI								E/W Street Name	Mt Vernon							
Date Performed	10/4/2011								N/S Street Name	Boylston							
Time Period	AM								Analysis Year	2034							
									Project ID	11979							
Project Description:																	
Volume Adjustment and Site Characteristics																	
	EB				WB				NB				SB				
	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	U	
Number of Lanes(N)	0	2	0		0	1	1		0	1	0		0	1	0		
Volume (V), veh/h	0	545	25	0	110	135	205	0	0	15	125	0	660	25	0	0	
Heavy Veh. Adj. (f_{HV}), %	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Peak Hour Factor (PHF)	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
No. of Pedestrians Crossing Entry	0				0				0				0				
Critical and Follow-Up Headway Adjustment																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Critical Headway (sec)	5.1929	5.1929	5.1929	5.1929	5.1929	5.1929	4.2929	4.1129	5.1929	5.1929	5.1929	5.1929					
Follow-Up Headway (sec)	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858					
Flow Computations																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Circulating Flow (V_c), pc/h	879			17			1331			271							
Exiting Flow (V_{ex}), pc/h	1469			149			244			178							
Entry Flow (V_e), pc/h	359	271		271	227			155			757						
Entry Volume veh/h	342	258		258	216			148			721						
Capacity and v/c Ratios																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Capacity (c_{PCE}), pc/h	469	469		1111	1111			445			862						
Capacity (c), veh/h	447	447		1058	1058			424			821						
v/c Ratio (X)	0.76	0.58		0.24	0.20			0.35			0.88						
Delay and Level of Service																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Lane Control Delay (d), s/veh	33.6	21.4		5.7	5.3			14.7			31.2						
Lane LOS	D	C		A	A			B			D						
Lane 95% Queue	6.5	3.6		1.0	0.8			1.5			11.3						
Approach Delay, s/veh	28.35			5.53			14.70			31.20							
Approach LOS, s/veh	D			A			B			D							
Intersection Delay, s/veh	22.80																
Intersection LOS	C																

ROUNDBABOUT REPORT																	
General Information									Site Information								
Analyst	TST								Intersection	Johnson Ferry@Boylston-Mt Ver							
Agency or Co.	KAI								E/W Street Name								
Date Performed	10/4/2011								N/S Street Name								
Time Period	PM								Analysis Year	2034							
									Project ID	11979							
Project Description:																	
Volume Adjustment and Site Characteristics																	
	EB				WB				NB				SB				
	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	U	
Number of Lanes(N)	0	2	0		0	1	1		0	1	0		0	1	0		
Volume (V), veh/h	0	320	30	0	190	270	625	0	0	30	165	0	210	25	0	0	
Heavy Veh. Adj. (f_{HV}), %	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Peak Hour Factor (PHF)	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
No. of Pedestrians Crossing Entry	0				0				0				0				
Critical and Follow-Up Headway Adjustment																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Critical Headway (sec)	5.1929	5.1929	5.1929	5.1929	5.1929	5.1929	4.2929	4.1129	5.1929	5.1929	5.1929	5.1929					
Follow-Up Headway (sec)	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858					
Flow Computations																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Circulating Flow (V_c), pc/h	470			33			586			508							
Exiting Flow (V_{ex}), pc/h	768			298			724			271							
Entry Flow (V_e), pc/h	209	178		508	691			215			260						
Entry Volume veh/h	199	170		484	658			205			248						
Capacity and v/c Ratios																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Capacity (c_{PCE}), pc/h	706	706		1093	1093			750			680						
Capacity (c), veh/h	672	672		1041	1041			714			648						
v/c Ratio (X)	0.30	0.25		0.46	0.63			0.29			0.38						
Delay and Level of Service																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Lane Control Delay (d), s/veh	9.1	8.4		8.7	12.4			8.5			10.9						
Lane LOS	A	A		A	B			A			B						
Lane 95% Queue	1.2	1.0		2.5	4.7			1.2			1.8						
Approach Delay, s/veh	8.77			10.83			8.49			10.86							
Approach LOS, s/veh	A			B			A			B							
Intersection Delay, s/veh	10.20																
Intersection LOS	B																

ROUNDBABOUT REPORT																	
General Information									Site Information								
Analyst	TST								Intersection	Johnson Ferry@Mt Vernon							
Agency or Co.	KAI								E/W Street Name	Mt Vernon							
Date Performed	10/4/2011								N/S Street Name	JohnsonFerry							
Time Period	AM								Analysis Year	2034							
									Project ID	11979							
Project Description:																	
Volume Adjustment and Site Characteristics																	
	EB				WB				NB				SB				
	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	U	
Number of Lanes(N)	0	1	1		0	1	0		0	1	0		0	1	0		
Volume (V), veh/h	5	775	550	0	20	300	5	0	145	5	15	0	5	5	5	0	
Heavy Veh. Adj. (f_{HV}), %	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Peak Hour Factor (PHF)	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
No. of Pedestrians Crossing Entry	0				0				0				0				
Critical and Follow-Up Headway Adjustment																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Critical Headway (sec)	5.1929	5.1929	5.1929	5.1929	5.1929	5.1929	5.1929	5.1929	5.1929	5.1929	4.2929	4.1129	5.1929				
Follow-Up Headway (sec)	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858				
Flow Computations																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Circulating Flow (V_c), pc/h	34			172			869			514							
Exiting Flow (V_{ex}), pc/h	880			498			18			636							
Entry Flow (V_e), pc/h	863	608			360			183			18						
Entry Volume veh/h	822	579			343			174			17						
Capacity and v/c Ratios																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Capacity (c_{PCE}), pc/h	1092	1092			951			474			789						
Capacity (c), veh/h	1040	1040			906			451			751						
v/c Ratio (X)	0.79	0.56			0.38			0.39			0.02						
Delay and Level of Service																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Lane Control Delay (d), s/veh	19.0	10.5			8.3			14.9			5.0						
Lane LOS	C	B			A			B			A						
Lane 95% Queue	8.6	3.5			1.8			1.8			0.1						
Approach Delay, s/veh	15.50			8.26			14.85			5.02							
Approach LOS, s/veh	C			A			B			A							
Intersection Delay, s/veh	14.07																
Intersection LOS	B																

ROUNDBABOUT REPORT																
General Information								Site Information								
Analyst	TST							Intersection	Johnson Ferry@Mt Vernon							
Agency or Co.	KAI							E/W Street Name	Mt Vernon							
Date Performed	10/4/2011							N/S Street Name	JohnsonFerry							
Time Period	PM							Analysis Year	2034							
								Project ID	11979							
Project Description:																
Volume Adjustment and Site Characteristics																
	EB				WB				NB				SB			
	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	U
Number of Lanes(N)	0	1	1		0	1	0		0	1	0		0	1	0	
Volume (V), veh/h	20	520	355	0	10	680	15	0	385	10	15	0	5	5	20	0
Heavy Veh. Adj. (f_{HV}), %	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Peak Hour Factor (PHF)	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
No. of Pedestrians Crossing Entry	0				0				0				0			
Critical and Follow-Up Headway Adjustment																
	EB			WB			NB			SB						
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass				
Critical Headway (sec)	5.1929	5.1929	5.1929	5.1929	5.1929	5.1929	5.1929	5.1929	5.1929	4.2929	4.1129	5.1929				
Follow-Up Headway (sec)	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858				
Flow Computations																
	EB			WB			NB			SB						
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass				
Circulating Flow (V_c), pc/h	23			459			603			1189						
Exiting Flow (V_{ex}), pc/h	598			1200			50			409						
Entry Flow (V_e), pc/h	597	392			780			454			34					
Entry Volume veh/h	569	373			743			432			32					
Capacity and v/c Ratios																
	EB			WB			NB			SB						
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass				
Capacity (c_{PCE}), pc/h	1104	1104			714			618			492					
Capacity (c), veh/h	1051	1051			680			589			469					
v/c Ratio (X)	0.54	0.36			1.09			0.73			0.07					
Delay and Level of Service																
	EB			WB			NB			SB						
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass				
Lane Control Delay (d), s/veh	10.1	7.1			86.2			24.8			8.6					
Lane LOS	B	A			F			C			A					
Lane 95% Queue	3.3	1.6			21.1			6.3			0.2					
Approach Delay, s/veh	8.90			86.18			24.78			8.59						
Approach LOS, s/veh	A			F			C			A						
Intersection Delay, s/veh	38.81															
Intersection LOS	E															

ROUNDBABOUT REPORT																	
General Information									Site Information								
Analyst	TST								Intersection	Johnson Ferry@Mt Vernon							
Agency or Co.	KAI								E/W Street Name	Mt Vernon							
Date Performed	10/4/2011								N/S Street Name	JohnsonFerry							
Time Period	PM with 2 WB Lanes								Analysis Year	2034							
									Project ID	11979							
Project Description:																	
Volume Adjustment and Site Characteristics																	
	EB				WB				NB				SB				
	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	U	
Number of Lanes(N)	0	1	1		0	2	0		0	1	0		0	1	0		
Volume (V), veh/h	20	520	355	0	10	680	15	0	385	10	15	0	5	5	20	0	
Heavy Veh. Adj. (f_{HV}), %	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Peak Hour Factor (PHF)	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
No. of Pedestrians Crossing Entry	0				0				0				0				
Critical and Follow-Up Headway Adjustment																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Critical Headway (sec)	5.1929	5.1929	5.1929	5.1929	5.1929	5.1929	5.1929	5.1929	5.1929	4.2929	4.1129	5.1929					
Follow-Up Headway (sec)	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858	3.1858					
Flow Computations																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Circulating Flow (V_c), pc/h	23			459			603			1189							
Exiting Flow (V_{ex}), pc/h	598			1200			50			409							
Entry Flow (V_e), pc/h	597	392		328	452			454			34						
Entry Volume veh/h	569	373		312	430			432			32						
Capacity and v/c Ratios																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Capacity (c_{PCE}), pc/h	1104	1104		714	714			618			492						
Capacity (c), veh/h	1051	1051		680	680			589			469						
v/c Ratio (X)	0.54	0.36		0.46	0.63			0.73			0.07						
Delay and Level of Service																	
	EB			WB			NB			SB							
	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass					
Lane Control Delay (d), s/veh	10.1	7.1		12.0	17.1			24.8			8.6						
Lane LOS	B	A		B	C			C			A						
Lane 95% Queue	3.3	1.6		2.4	4.5			6.3			0.2						
Approach Delay, s/veh	8.90			14.98			24.78			8.59							
Approach LOS, s/veh	A			B			C			A							
Intersection Delay, s/veh	14.19																
Intersection LOS	B																

January 13, 2012

Georgia Department of Transportation
Engineering Division – Design Policy & Support Office
Attn: Mr. Albert Shelby
One Georgia Center
600 West Peachtree Street
Atlanta, Georgia 30308

Subject: RESPONSE TO ROUNDABOUT PEER REVIEW COMMENTS
Project No. STP00-9252-00(007)
P.I. No. 754120, Fulton County
COSS Project No. T-0011
Johnson Ferry Road and Glennridge Drive Connector Improvements

Dear Mr. Shelby:

As you are aware, Jacobs Engineering Group (JEG) is in receipt of the Roundabout Peer Review Report for the referenced project. By way of this letter, JEG has prepared the following responses to the project Peer Review Comments:

Traffic Operations:

VISSIM Model:

1. Recommend setting model time resolution to 5 or higher.
Response: VISSIM model time resolution will be set to resolution 5 or higher to enable smoother lane changes and reduce conflicts at unsignalized approaches.

2. Driver Behavior Setting; Data should be provided to justify the resulting saturation flow rate of 2500 vphpl.
Response:
The following driver behavior settings were adjusted during model calibration so that VISSIM model output volumes matched the actual traffic volumes on the study area roadways.
 - ***Look ahead distance***
 - ***Look back distance***
 - ***No of observed vehicles***
 - ***Average standstill time***
 - ***Additive part of safety distance***
 - ***Multiplicity part of safety distance***
 - ***Minimum headway***
 - ***Safety reduction factor***
 - ***Max deceleration for cooperative braking***

In addition to the above driver behavior settings, existing VISSIM model input volumes were also increased at various locations to ensure that the resulting VISSIM model output volumes closely matched the actual traffic volumes on the study area roadways.

3. Diffuse setting (seed set to 1); further review is needed to determine if this diffusion is occurring at specific locations in the model and thus is underestimating the impact to specific movements.

Response: Waiting time before diffusion setting will be adjusted to reduce number vehicles diffused from the model.

4. Truck Types; update the heavy vehicle 3D model composition to include AASHTO based truck types.

Response: Truck types will be updated to AASHTO based truck types.

5. Mt. Vernon Highway Eastbound Approach at Western Roundabout; revise the yield control method such that results are more reflective of typical roundabout yielding characteristics.

Response: The yield control settings for the Mt. Vernon Highway Eastbound Approach at Western Roundabout will be revised.

6. Southbound Approach at Eastern Roundabout; the model yield control parameters should be revised such that the southbound right-turning vehicles yield to both the outside and inner lanes of the circulatory roadway.

Response: The yield control settings for the southbound approach at Eastern Roundabout will be revised.

7. Further review of the employed conflict areas and priority rules should be undertaken to refine the vehicle gap acceptance parameters to more closely match available data and adopted research.

Response: For the conflict areas and priority rules at the roundabouts, vehicle gap acceptance parameters will be adjusted per US field data for roundabouts (NCHRP Report 572, Roundabouts in the United States).

Design Features and Geometrics:

Fastest Path Speeds:

1. The eastbound entry at the eastern roundabout and the westbound entry at the western roundabout allow entry speeds that exceed 30 mph. A combination of modifications, including potential adjustments to the approach alignment, roundabout size, or roundabout position may be needed.

Response: With modifications to the alignment of the approaches, median width reductions, the size and location of the two roundabouts, the entry speeds will be adjusted to meet NCHRP 672 recommendations.

2. The southbound entry at the eastern roundabout does not provide the desirable deflection to achieve speed control, although the approach originates in a parking lot and thus is not as likely to generate the maximum entry speed.

Response: The southbound approach to the eastern roundabout will be modified with the addition of the second westbound entry lane along Mt. Vernon Highway.

Design Vehicle Accommodation:

1. NCHRP Report 672 recommends a minimum of 1 to 2 feet of shy distance between the swept path of design vehicles and each curbline.

Response: The roundabout lane widths and design vehicle swept paths will be adjusted to provide the recommended shy distance.

2. The design should accommodate moving trucks, fire trucks, etc. that may be larger than a BUS-40. These larger vehicles should also be checked to verify that the design will accommodate them for each movement.

Response: Utilizing a WB-40 design vehicle, the vehicle paths will be adjusted.

3. Consideration should also be given to provide sufficient space for a passenger car to travel adjacent to the design vehicle through the roundabout.

Response: The roundabout lane widths and vehicle swept paths will be adjusted to provide sufficient room for a passenger car to travel adjacent to the design vehicle through the roundabouts.

Natural Vehicle Paths:

1. The eastbound and westbound approach on Mt. Vernon Highway at the western roundabout exhibits potential for path overlap. At the yield line, the entry aligns vehicles in the outside entry lane with the inside lane of the circulatory roadway as shown in Figure 10. Similarly, the eastbound right-turn only lane at the eastern roundabout aligns vehicles at the yield line such that they are aimed towards the circulatory roadway and drivers may mistakenly try to enter the roundabout from the outside lane creating a conflict with vehicles in the outside lane. Adjustments to improve the alignment of entering vehicles need to be balanced with other design objectives.

Response: The roundabout approaches will be realigned along with other design modifications to address lane assignments.

General Layout, Geometry, Striping, and Multimodal Accommodation:

1. The two skewed eastbound approaches at the western roundabout do not provide sufficient separation for proper entry designs and vehicle yielding. As discussed in NCHRP 672, a minimum desirable intersection view angle of 75 degrees is recommended in order to allow drivers to comfortably turn their head to the left to view conflicting traffic on the immediate upstream entry. The angle of the entry also results in vehicles within the inner lane of the eastbound Mt. Vernon entry blocking visibility of the upstream entry and circulatory roadway for vehicles in the outside lane of the entry as illustrated in Figure 8. Relocation of the

roundabout approximately 150 feet or more to the west may be needed to provide sufficient separation between entries.

Response: The western roundabout will be shifted to the west, and the type of entry/exit for Johnson Ferry Road and Mt. Vernon Highway will be modified to address these issues and provide improved separation from the two approaches and an improved skew angle for vehicles entering the roundabout.

2. Vehicle Weaving Between The Roundabouts; Providing adequate signing to sort vehicles into the appropriate lane along Mt. Vernon Highway prior to entering the western roundabout is important to minimize weaving. The signing will need to direct motorists into the appropriate lane (prior to entering the western roundabout) so that they can get to their desired exit downstream without additional lane changes.

Response: The signing and marking will be designed to provide information pertaining to lane assignment at the entries and exits to minimize weaving.

3. The lane widths used for both roundabouts are smaller than desirable, which creates problems as noted in accommodating design vehicles. Typically, 18 to 22 feet and 28 to 32 feet are designed for single and double circulatory roadways, respectively, to accommodate heavy vehicles and allow comfortable maneuvers of vehicles through the roundabouts.

Response: The lane widths will be revised to provide the recommended widths for single and double circulatory roadways.

4. Add additional second entry lane to the westbound approach of the eastern roundabout along Mt. Vernon Highway.

Response: An additional entry lane will be added.

5. Widen the northbound Johnson Ferry Road entrance at the eastern roundabout to improve heavy vehicle accommodation. The widening can primarily be implemented by reducing the width of the splitter island.

Response: The proposed lane widths and splitter island will be adjusted to provide heavy vehicle accommodations.

6. The eastbound Mt. Vernon Highway entry at the western roundabout has the potential for entry path overlap. The entry geometry at the yield line positions vehicles in the outside lane such that they are aimed towards the inner lane of the circulatory roadway.

Response: The lane assignment/alignment will be addressed during the redesign of the western roundabout.

7. The eastbound right-turn at the eastern roundabout utilizes a large curb radius that may cause driver to mistakenly perceive the right-turn to be free-flow. However, given that there is only a single exit lane southbound on Johnson Ferry Road, the eastbound right-turn must be yield controlled in order to give priority to circulating traffic to exit. The alignment of the eastbound entry also results in the outside lane being slightly ambiguous as to whether vehicles can continue straight (enter the roundabout) versus being required to turn right. It is desirable for the right-turn only lane to be aimed more towards the splitter island on the south leg such that the vehicle path is clearly blocked and it is intuitive to drivers that they must turn right.

Modifications to improve the eastbound entry should balance vehicle yielding, accommodation of trucks making the right turn, driver view angles, and path alignment.

Response: The curb radius along with the eastbound approach alignment will be modified such that the right-turn only lane will be aimed more toward to the splitter island.

8. On the westbound entry at the eastern roundabout, the entry aligns vehicles into the outside lane of the circulatory roadway. Meanwhile, the single-lane portion of the circulatory roadway aligns vehicles such that they stay within the inner lane as the circulatory widens out to two lanes. This suggests to drivers that the westbound entry is "free flow" and isn't required to yield. However, a conflict is created for drivers that are trying to exit onto the driveway on the north leg of the roundabout if westbound vehicles do not yield. Design modifications should emphasize yielding of entering vehicles to all vehicles circulating past the westbound entry.

Response: With the addition of the second entry lane along the Mt. Vernon approach, the lane assignment and yielding control will be addressed.

Striping:

1. For all approaches, the dotted entrance line should extend across all entry lanes to meet the requirements of the 2009 Manual on Uniform traffic control Devices (MUTCD). If yield line markings are used, they should be staggered on the multilane entries to allow for improved driver visibility from both lanes.

Response: The proposed striping will be revised to follow the current MUTCD regarding roundabout entry lanes for yielding control conditions.

2. Provide lane-use arrow markings on the circulatory roadways and approach lanes help clarify lane intended lane use.

Response: The proposed striping will be revised to follow the current MUTCD regarding roundabouts.

3. Some striping appears to be missing from the provided design. The pavement marking play an important role in the operations of the multilane roundabouts and should be included as part of the horizontal concept design.

Response: The proposed striping will be revised to follow the current MUTCD regarding roundabouts.

Pedestrian and Bicycle Accommodation:

1. Splitter islands are not provided on two approaches at the western roundabout. It is essential that splitter islands and pedestrian refuge areas are provided. In particular, it is important for the eastbound entry of Mt. Vernon Highway to have raised splitter islands for speed control and for vehicle channelization. The two-lane entries and exits should be designed to allow possible pedestrian signalization to accommodate proposed draft rulemaking by the United States Access Board.

Response: The proposed roundabout design layout will be revised to provide additional splitter islands with pedestrian refuge.

2. The splitter island on the southbound approach at the eastern roundabout is too short to provide physical protection to pedestrians in the refuge area. The splitter island on the eastbound approach on Johnson Ferry Road at the western roundabout ends before the crosswalk, leaving no pedestrian refuge area.

Response: The proposed roundabout design layout will be revised such that splitter island sizes will be increased to provide pedestrian refuge areas.

Potential Options for Consideration:

Western Roundabout:

1. At the western roundabout potential options for addressing the skew angle between the two eastbound approaches includes:
 - a. Relocate the western roundabout approximately 150 feet or more to the west to improve view angle issues.
Response: The western roundabout will be shifted to the west as recommended to address view angle issues.
 - b. Construct Boylston Drive as a right-in /right-out stop controlled intersection based on the relocated western roundabout.
Response: Boylston Drive will be revised to reflect a right-in/ right-out intersection east of the western roundabout.
 - c. Maintain the existing one-way couplet for Johnson Ferry Road and Mt. Vernon Highway into/from the proposed western roundabout.
Response: By maintaining the existing one-way couplet, the traffic congestion and LOS will not be effectively addressed.
 - d. Maintain the existing one-way couplet for Johnson Ferry Road and Mt. Vernon Highway and eliminate the western roundabout. Reconstruct Boylston Drive as a right-in /right-out stop controlled intersection.
Response: By maintaining the existing one-way couplet, the traffic congestion and LOS will not be effectively addressed.
2. Offset approach alignment to the left of the roundabout center for the westbound approach at the western roundabout.
Response: The approach alignments for both roundabouts will be revisited for possible realignment to the left of the roundabout center.

Eastern Roundabout:

1. Offset approach alignment to the left of the roundabout center for the eastbound approach at the eastern roundabout.
Response: Response: The approach alignments for both roundabouts will be revisited for possible realignment to the left of the roundabout center.

Western and Eastern Roundabouts:

1. Reduce the median width between the two roundabouts to facilitate the offset of the approaches to the roundabouts.

Response: The median width will be revised along the alignment of the approaches between the two roundabouts.

2. Increase the inscribed circle diameter to improve to vehicle paths and entry speed control.

Response: The size and location of the two roundabout as well as the lane widths will be addressed to improve vehicle paths and entry speed control.

As always, JEG appreciates the opportunity to serve the Department and the City of Sandy Springs on this very important project. If you have any questions, or require any additional information, please do not hesitate to contact me at 678.296.5027. We look forward to the successful completion of this project.

Sincerely,
JACOBS ENGINEERING GROUP INC.



Edward F. Culican, Jr., PE
Senior Project Manager

cc: Garrin Coleman, P.E., L.S.I.T
Andrew Thompson, P.E.
Ken Anderson, P.E.
John Jenkins, P.E.

Culican, Ed

From: Justin Bansen [jbansen@kittelson.com]
Sent: Friday, March 23, 2012 5:34 PM
To: Culican, Ed
Subject: RE: Peer Review back Check
Attachments: 11979_RBT 1ST REVISITON 2.pdf

Ed,

Attached are some quick mark-ups to highlight some thoughts that I have. Fastest path speeds on both roundabouts are still a concern. While the relocation of the western roundabout has improved some of the sight lines (they still aren't ideal, but are better), the gas station is preventing the two EB entries from achieving appropriate entry speed control.

All of the entries appear to be on the fast side. In particular the entry coming from the NW at the western roundabout has almost no deflection. Some small reverse curvature has been used on the SE entry at the western roundabout which may help the speed some. However, it is more likely that the additional curvature is going to make it awkward for vehicles to maneuver into the inside lane of that entry and therefore you probably aren't going to get very high utilization out of the inside lane.

It appears that the design has been relaxed to better accommodate trucks. Things might have been pushed to far where the design may now be too focused on a large design vehicle, which is preventing other objectives (such as speed control) from being met. What is the expected size and frequency of tractor trailer trucks? Given the site constraints, if the truck volumes are low enough, it may be a location where the design is set up for a WB-67 to straddle both lanes going through the roundabout instead of trying to maintain both lanes. I also don't know that a WB-67 needs to make every turn maneuver. The likely paths that a large design vehicle is likely to take should be identified so that trucks can be accommodated for those movements, but the design may be able to be tightened up for some other movements.

I've been trying to block out time to develop some sketches to send back so that you would have some better direction on potential fixes, but as you can tell, several weeks have gone by and I haven't been able to accomplish that task. Hopefully, this at least gives you some initial feedback to work from.

Justin Bansen, PE
Associate Engineer

[Kittelson & Associates, Inc.](#)
Transportation Engineering / Planning

From: Culican, Ed [mailto:Edward.Culican@jacobs.com]
Sent: Friday, March 23, 2012 4:50 PM
To: Justin Bansen
Subject: Re: Peer Review back Check

Justin, can you please give me an update so I can report back to. The City? We got comments back on our environmental document and design is getting more and more on the critical path... Thanks for your help... Ed

From: Culican, Ed
Sent: Monday, March 19, 2012 09:30 AM
To: Justin Bansen (jbansen@kittelson.com) <jbansen@kittelson.com>
Subject: RE: Peer Review back Check

Justin – any progress? Let me know when you can...

Thanks

Ed

From: Culican, Ed
Sent: Thursday, March 08, 2012 1:48 PM
To: Justin Bansen (jbansen@kittelso.com)
Subject: Peer Review back Check

Justin

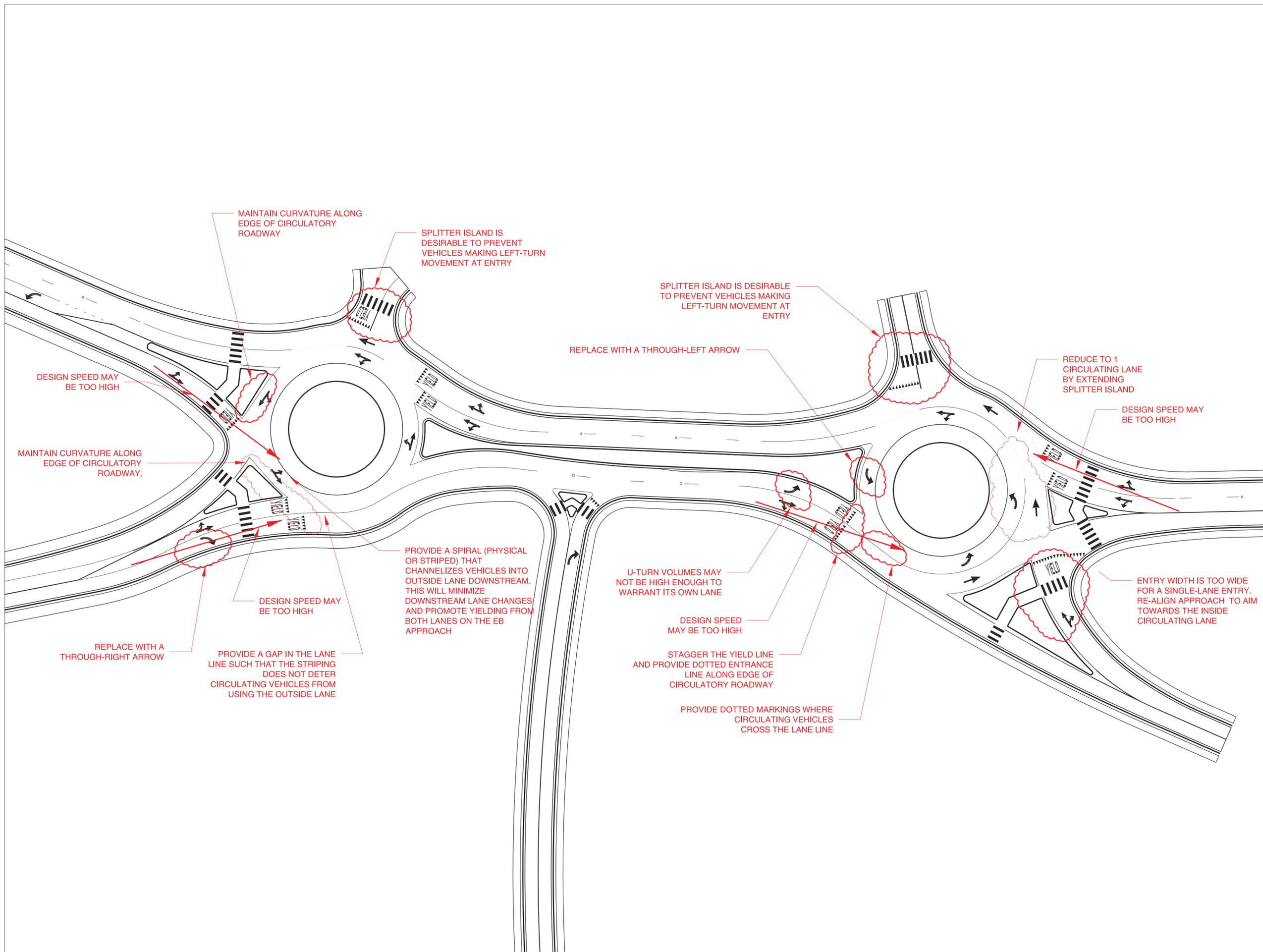
Just wanted to follow up with you regarding the review of the changes to the roundabout. Can you give me an expected completion date when you get a chance?

Thanks

Ed Culican, P.E.
Jacobs Engineering Group
Sr. Project Manager | Transportation
770.455.8555 (office)
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MAINTAIN CURVATURE ALONG
EDGE OF CIRCULATORY
ROADWAY

SPLITTER ISLAND IS
DESIRABLE TO PREVENT
VEHICLES MAKING LEFT-TURN
MOVEMENT AT ENTRY

SPLITTER ISLAND IS DESIRABLE
TO PREVENT VEHICLES MAKING
LEFT-TURN MOVEMENT AT
ENTRY

REPLACE WITH A THROUGH-LEFT ARROW

DESIGN SPEED MAY
BE TOO HIGH

REDUCE TO 1
CIRCULATING LANE
BY EXTENDING
SPLITTER ISLAND

DESIGN SPEED MAY
BE TOO HIGH

MAINTAIN CURVATURE ALONG
EDGE OF CIRCULATORY
ROADWAY.

PROVIDE A SPIRAL (PHYSICAL
OR STRIPED) THAT
CHANNELIZES VEHICLES INTO
OUTSIDE LANE DOWNSTREAM.
THIS WILL MINIMIZE
DOWNSTREAM LANE CHANGES
AND PROMOTE YIELDING FROM
BOTH LANES ON THE EB
APPROACH

U-TURN VOLUMES MAY
NOT BE HIGH ENOUGH TO
WARRANT ITS OWN LANE

DESIGN SPEED
MAY BE TOO HIGH

STAGGER THE YIELD LINE
AND PROVIDE DOTTED ENTRANCE
LINE ALONG EDGE OF
CIRCULATORY ROADWAY

ENTRY WIDTH IS TOO WIDE
FOR A SINGLE-LANE ENTRY.
RE-ALIGN APPROACH TO AIM
TOWARDS THE INSIDE
CIRCULATING LANE

DESIGN SPEED MAY
BE TOO HIGH

PROVIDE A GAP IN THE LANE
LINE SUCH THAT THE STRIPING
DOES NOT DETER
CIRCULATING VEHICLES FROM
USING THE OUTSIDE LANE

PROVIDE DOTTED MARKINGS WHERE
CIRCULATING VEHICLES
CROSS THE LANE LINE

REPLACE WITH A
THROUGH-RIGHT ARROW

Culican, Ed

From: Justin Bansen [jbansen@kittelson.com]
Sent: Monday, November 05, 2012 10:59 AM
To: Culican, Ed
Cc: Shing Tsoi
Subject: RE: Follow Up - Sandy Springs
Attachments: Concept Sketches.dgn; East Roundabout.tif; West Roundabout2.tif

Ed,

See attached. I've provided the image files for the roundabout concept sketches. These have been loaded into Microstation so that you can reference in the attached DGN file and the sketches should pull in to the correct location over your CAD linework.

Per our discussion last week, I've spent a little time trying to play around with different options for further refining the designs. My hope is that these sketches help to give you better guidance/direction on one set of potential options that you could consider to help get closer to meeting the performance objectives (speed control, truck accommodation, vehicle alignment, multimodal accommodations, view angles, etc.). Please keep in mind that these sketches are simply for providing guidance. They are not fully verified designs. We did some spot checks for speeds and trucks as we were preparing them. However, further refinement to the sketches may still be necessary as you lay them out in Microstation in order to meet the performance objectives outlined in NCHRP Report 672 as well as to address any additional site constraints that have not been previously communicated to us.

I have not yet had a chance to get back in and update our comments memo as I spent most of my available time on Friday updating the sketch concepts based upon the additional constraints information that you had provide in our conference call Thursday afternoon. We'll try to get that wrapped up here as soon as possible.

Justin Bansen, PE
Associate Engineer

[Kittelson & Associates, Inc.](#)
Transportation Engineering / Planning

From: Culican, Ed [mailto:Edward.Culican@jacobs.com]
Sent: Monday, November 05, 2012 10:08 AM
To: Justin Bansen
Subject: Follow Up - Sandy Springs

Hey Justin

Just following up on the sketches you are providing for the double roundabout peer review. Can you let me know the progress when you get a chance?

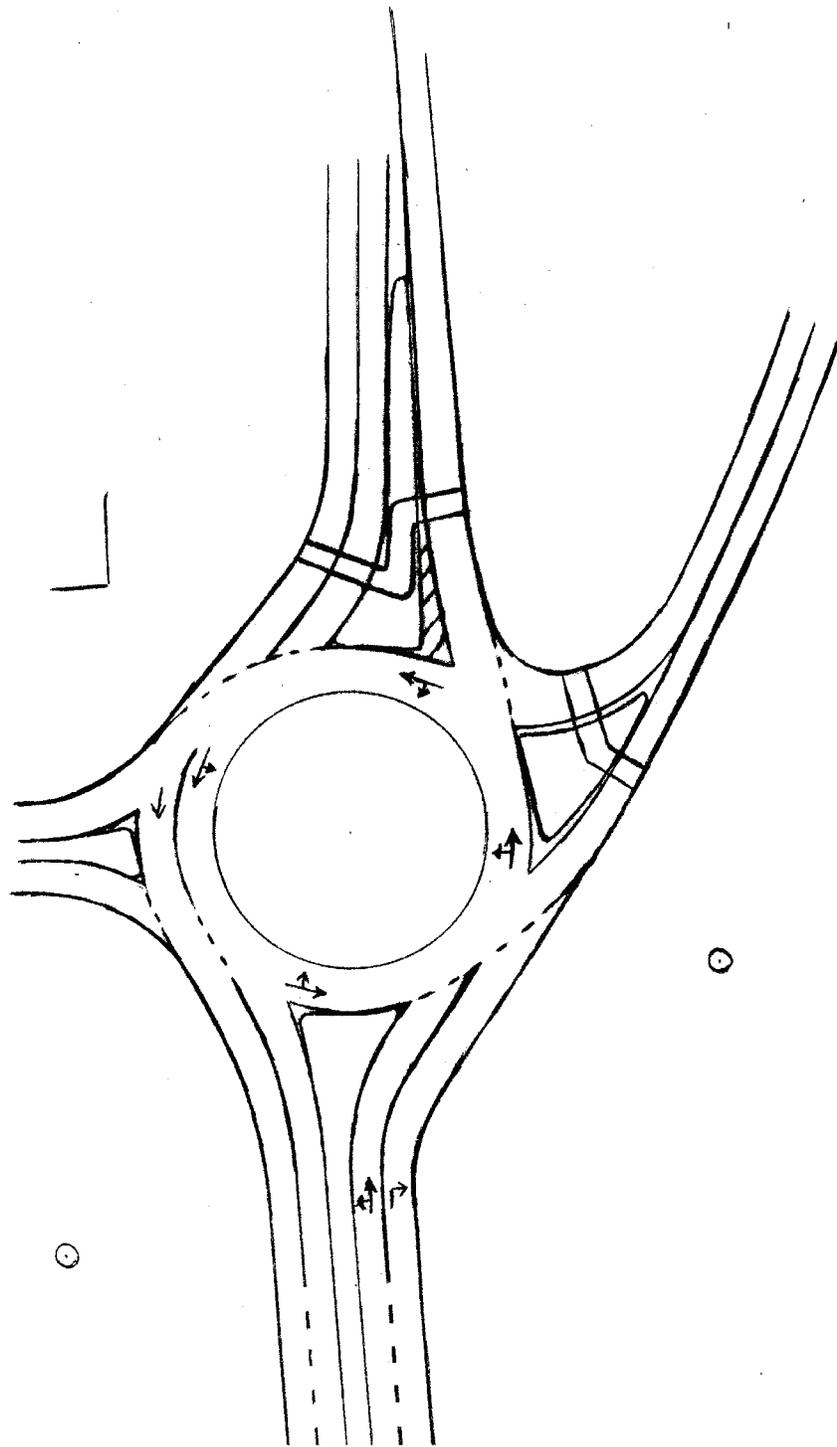
Thanks

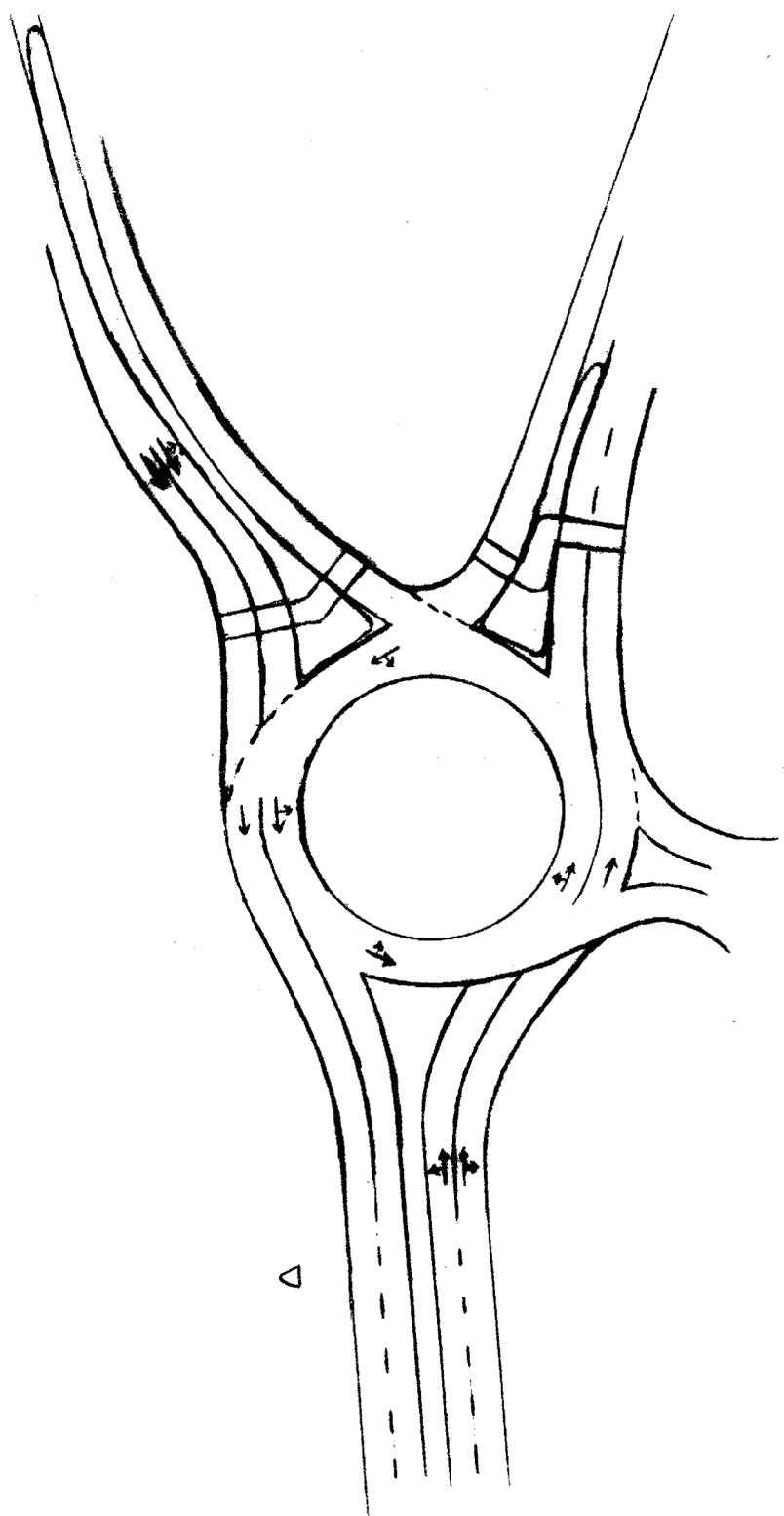
Ed Culican, P.E.
Jacobs Engineering Group
Sr. Project Manager | Transportation
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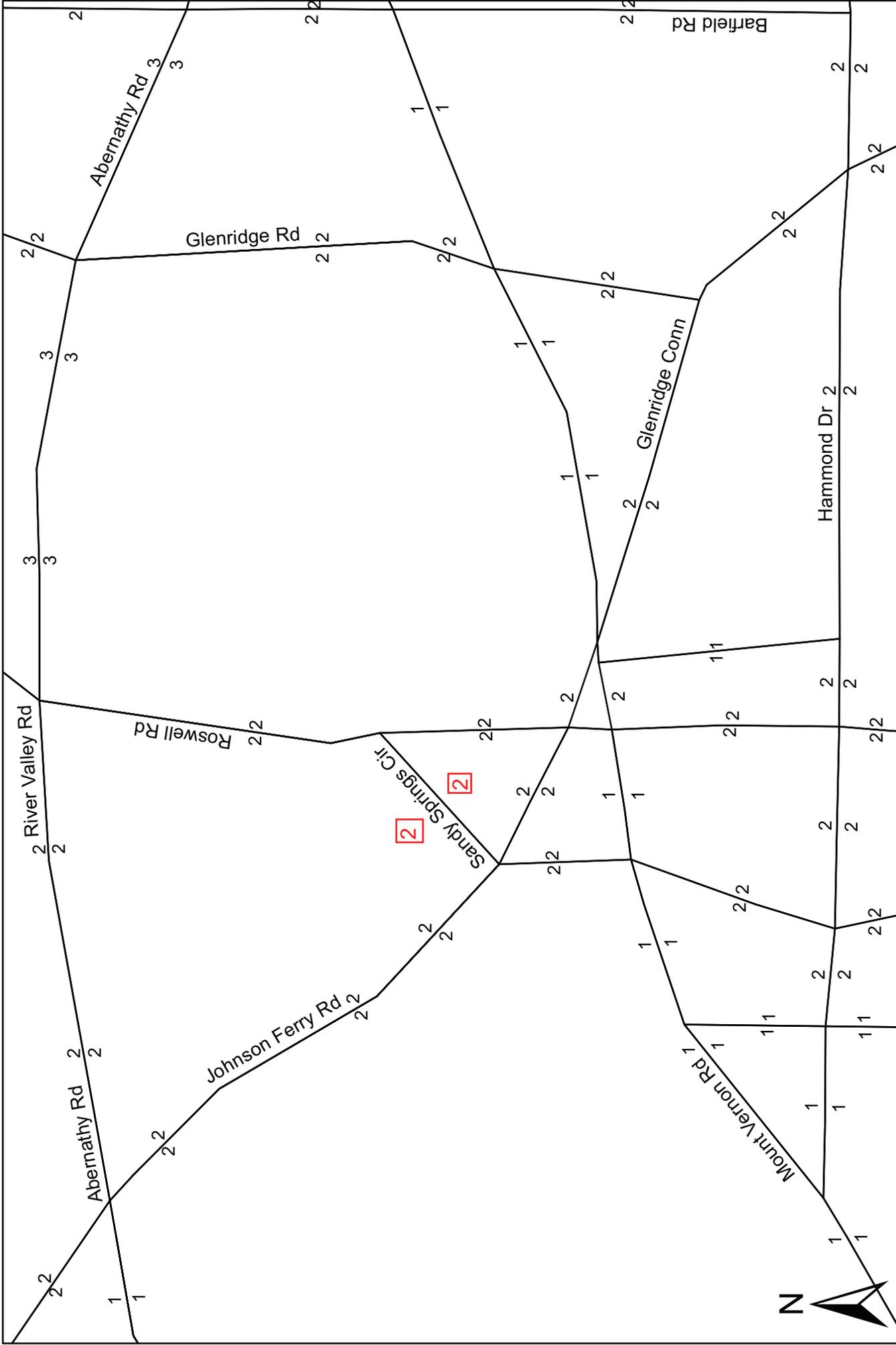
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1,000 500 0 1,000 Feet

Source: ARC 2030 Travel Demand Model

Meeting Minutes

Date: February 17, 2011

Location: GDOT Office of Environmental Services Conference Room, 16th Floor

Meeting Date: February 9, 2011

Time: 9:00 am – 11:00 am

Prepared By: Ed Culican

Subject: Concept Team Meeting Minutes

Project: Johnson Ferry Road Glenridge Drive Improvements
Project No. STP00-9252-00(007); PI No. 751420, COSS T-0011

The purpose of these meeting minutes is to document the Concept Team Meeting discussion held for the referenced project and identify action items required from the discussion. The following are the meeting minutes for the Concept Team Meeting:

Albert Shelby opened the meeting and passed around a sign in sheet (attached). Then all attendees went around the room for introductions with name and office/firm representing.

Mr. Shelby then passed the discussion to Ed Culican for the project description. Mr. Culican then proceeded to discuss the history of the project concepts developed up to the current concept alternative. The project consists of corridor improvements along Johnson Ferry Road from Sandy Springs Circle to the intersection of Mt. Vernon Highway and Johnson Ferry Road near the Fulton County Library.

As part of the traffic studies completed for the corridor, several existing deficiencies within the corridor have been identified which will require improvements to decrease delays and improve traffic operations to acceptable levels of service. The following deficiencies were identified during the traffic study:

First, the left turn storage for northbound Roswell Road traffic turning left onto Johnson Ferry is inadequate. Due to this deficiency, left turning vehicles queue into the inside northbound lane during the PM Peak Hour period, blocking northbound traffic from travelling north using this lane through the intersection. This deficiency results in significant delays experienced for northbound traffic at this intersection, as well as left turning vehicles at the intersection. Also, this deficiency has a ripple effect throughout the network, and increased delays are experienced at other intersections as a result.

Second, the one way pair arrangement along Johnson Ferry Road and Mt. Vernon Highway hinders east-west traffic movements in the network, resulting in additional delays for east-west traffic and north-south traffic. Specifically, eastbound Johnson Ferry Road traffic must turn right and travel southbound on Roswell Road, merge over to the left turn lane to turn left onto Mt. Vernon Highway, and then travel eastbound on Mt. Vernon Highway to connect back into Johnson Ferry Road near Boylston Drive. Similarly, westbound Mt. Vernon Highway traffic must turn onto Johnson Ferry Road westbound to Roswell Road, then turn left and travel southbound on Roswell Road, and then turn right onto Mt. Vernon Highway westbound. Essentially, all eastbound and westbound traffic on Johnson Ferry Road and Mt. Vernon Highway must use the northbound/southbound Roswell Road arterial in order to continue to their destinations, compounding delays within the network.

Third, there is a common segment of Johnson Ferry Road and Mt. Vernon Highway on the east side of Roswell Road, east of the one way pair arrangement, between Boylston Drive, and the intersection of Mt. Vernon highway and Johnson Ferry Road near the Fulton County library. This segment of roadway connects two significant east-west thoroughfares with a two lane roadway, which is inadequate for the travel demand for this section, and results in increased delays experienced within the network.

Several alternatives were developed to improve traffic operations in the network.

Alternative I – Johnson Ferry Road and Mt. Vernon Highway improved to a 4-lane roadway with a 20-foot raised median, widening of Roswell Road to a 4-lane section with dual left turn lanes at Johnson Ferry Road. East of Roswell Road, a new major intersection with Johnson Ferry Road, Mt. Vernon Highway and Boylston Drive is created, with the major through movement being Johnson Ferry Road (east) to Mt. Vernon Highway (west). Boylston Drive is modified to be a right in/right out access on Mt. Vernon Highway. This alternative improved traffic operations in the corridor, however the construction and right-of-way costs were significantly out of budget.

Alternative IA – This alternative is similar to Alternative I, however, Mt. Vernon Highway was modified to a 2-lane section with a center left turn lane. While construction and right-of-way costs decreased, the costs were still out of budget.

Alternative II - Johnson Ferry Road and Mt. Vernon Highway improved to a 4-lane roadway with a 20-foot raised median, widening of Roswell Road to a 4-lane section with dual left turn lanes at Johnson Ferry Road. East of Roswell Road, a new major intersection with Johnson Ferry Road, Mt. Vernon Highway and Boylston Drive is created, with the major through movement being Mt. Vernon Highway (east) to Mt. Vernon Highway (west). Boylston Drive became the south leg of the intersection and no turning movements were restricted. This alternative improved traffic operations in the corridor, however the construction and right-of-way costs were significantly out of budget.

Alternative IIA – This alternative is similar to Alternative II, however, Mt. Vernon Highway was modified to a 2-lane section with a center left turn lane. While construction and right-of-way costs decreased, the costs were still out of budget.

Grid Network Alternative – This alternative maintained the east-west thoroughfares of Johnson Ferry Road and Mt. Vernon Highway on separate alignments, and created new “city blocks” at logical connection points developed at existing north-south roadways. Johnson Ferry Road on the east side of the project connects on the west side to Mt. Vernon Highway near the library along a similar alignment of the existing roadway corridor. Mt. Vernon Highway on the east side would travel on new location and connect to existing Johnson Ferry Road on the west side near the library. Roswell Road is modified to a 4-lane section with dual left turn lanes at Johnson Ferry Road. New blocks would be generated by utilizing Boylston Drive, and a new segment of roadway on the east side of the library parking lot. This alternative created many positive traffic operation improvements, and options for future development, however the costs were significantly out of budget.

Roundabout Alternative – This alternative created a Roundabout at the intersection of Johnson Ferry Road and Mt. Vernon Highway near the library. Johnson Ferry Road and Mt. Vernon Highway are both modified to 2-way traffic in the one-way pair arrangement. Roswell Road is modified to a 4-lane section with dual left turn lanes at Johnson Ferry Road. Mt. Vernon Highway west of Roswell Road is restricted from westbound travel, and is only allowed to travel southbound on Boylston Drive. Traffic from Mt. Vernon Highway whose destination is westbound must turn left onto Roswell Road and then right onto Johnson Ferry Road to reach its destination. Due to this issue, this alternative did not meet the operational needs of the project.

Double Roundabout Alternative – This alternative creates two Roundabouts in the corridor – one at each end of the common segment of Johnson Ferry Road and Mt. Vernon Highway. The first Roundabout is at the intersection of Johnson Ferry Road, Mt. Vernon Highway and Boylston Drive, the second at Johnson Ferry Road and Mt. Vernon Highway near the library. Johnson Ferry Road and Mt. Vernon Highway at both modified to two way traffic in the existing one-way pair arrangement. Roswell Road is modified to a 4-lane section with dual left turn lanes at Johnson Ferry Road. This alternative improves the level of service within the network and significantly reduces the construction and right-of-way costs for the project within the budget available for the project. This alternative was also well received at the recent PIOH held June 21, 2010. Therefore, this alternative has been chosen as the preferred alternative for the project.

Mr. Culican then opened up the discussion for comments and questions.

Mr. Scott Zehngraff asked about the traffic analysis completed to date and what software package was used. Mr. Culican stated that the corridor had been modeled in CORSIM, with modifications to show the Roundabouts accurately based on outside traffic analysis completed since CORSIM does not handle Roundabout sufficiently. Mr. Zehngraff stated that all Roundabouts in Georgia must be modeled using VISSIM, which would need to be completed before the Concept Report could be approved.

Mr. Zehngraff asked if the Roundabout Design and Analysis had gone through Peer Review. Mr. Culican said the Roundabout alternative has not gone through Peer Review. Mr. Zehngraff stated that GDOT policy requires that all Roundabout projects must be Peer Reviewed by a GDOT prequalified Peer Reviewer, and JJG should contact his office for the list of prequalified Peer Reviewers. Mr. Culican stated that he would contact the Office of Traffic Operations for the list of prequalified Roundabout Peer Reviewers.

Mr. Shelby then opened up the discussion for any other comments.

Design – Mr. Tony Jones noted that he had provided several comments before the CTM, which must be addressed in the Concept Report. Mr. Culican stated that he had received the comments and has addressed these items in the Concept Report package.

ROW - No comment (none present)

Utilities - Georgia Power to relocate within the right-of-way. This will include pedestrian lighting. The City has a franchise agreement with GA Power to resolve this issue. Also, the City of Sandy Springs has committed to completing a SUE investigation for the corridor.

Environmental - Special Studies underway. Ecology Report has been approved, Archaeology Report has been approved. The Historic Resource Survey has been approved, and the Assessment of Effects is underway. Air and Noise Studies are on hold pending final concept configuration.

Traffic Operations – Mr. Zehngraff stated that his comments have already been discussed and had no further comments.

Action Items:

- Prepare a traffic model for the proposed concept using VISSIM.
- Obtain the list of prequalified GDOT Roundabout Peer Reviewers.
- Contact a GDOT prequalified Peer Reviewer about performing a Roundabout Peer Review for the project concept. This will include a review of the VISSIM traffic model and the project design. Once complete, JJG will be required to respond to the Peer Review comments and revise the design as necessary to address the comments.
- Revise the Concept Report to include the revised traffic study, and peer review report.

This is my understanding of the items discussed at the meeting. If there are any questions, please contact Ed Culican for clarification.

Attachments

Sign In Sheet

OFFICE OF ENVIRONMENTAL SERVICES
MEETING SIGN-IN SHEET

Date: 2/9/11

Project Number (if applicable): JF/Glenridge improvements CTM

Meeting Purpose: 751420

Name	Organization	Phone Number	E-mail Address
Albert Shelby	GDOT-OPD	4) 631-1758	ashelby@dot.ga.gov
RON WISHEN	GDOT-ENG SRVS.	4) 631-1753	rwishen@dot.ga.gov
Greg Ramsey	Sandy Springs	7) 206-2554	greg.ramsey@sandy-springs.ga.org
Jennifer Giersch	FHWA	4) 562-3653	jennifer.giersch@dot.gov
Garrin Coleman	City of Sandy Springs	7) 206 2017	garrin.coleman@sandy-springs.ga.org
RAM VADAREM	JACOBS	678-333-0478	Ramona.Vadaremu@jacobs.com
Scott Moore	JACOBS	678-333-0353	Scott.moore@jacobs.com
Lynette Baker	JACOBS	678-333-0489	Lynette.baker@jacobs.com
Ed Culican	JACOBS	770-455-8555	ed.culican@jacobs.com
Christa Wilkinson	GDOT-NEPA	404-631-1979	christawilkinson@dot.ga.gov
Scott Zehngraff	GDOT-NEPA	4) 631-1271	scotzzehngraff@dot.ga.gov
Jon Drysdale	GDOT-TRAFFIC OPS	4) 635-8127	jon.drysdale@sandy-springs.ga.org
Earl Burrell	SMOY SPRINGS	7) 206-2552	earl.burrell@fulton-county.ga.gov
Tony Jones	Fulton County-Public Works	(4) 617-7462	Tony.Jones@DOT.GA.GOV
Lucre Cunningham	GDOT-CONCEPT + DESIGN	(4) 699-4464	lucrecunningham@dot.ga.gov
Jacob Ziliak	GDOT-DIVISIONS	7) 986-1117	jziliak@agresources.com
Keisha Jackson	AGL	4) 584-3738	keijackson@dot.ga.gov
	GDOT-OES	4) 631-1160	



**Johnson Ferry Road & Glenridge Corridor Improvements
Public Information Meeting**

**November 5, 2007
Meeting Minutes**

Add: Transcribed by: Bridgette Gray, Transcriber
Community Development

CALL to Order	Jon Drysdale called the meeting to order at 6:30 p.m.
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I.	Andre Gregory – Dorothy C. Benson Senior Multi-Purpose Complex, Facility Manager
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Good evening everyone. My name is Andre Gregory. I am the facility manager of the Dorothy C. Benson Senior Multi-Purpose Complex and on behalf of Fulton County Board of Commissioners and Fulton County Manager; I would like to welcome you to the Dorothy C. Benson Senior Multi-Purpose Complex. A lot of people don't know that you are actually sitting in the building that is the largest known day facility for seniors in the nation. We have been recognized by the Clinton administration. We have had delegations from across the world from Japan and all the way to Africa, to come and see us here at the Benson Complex. Just so you will know we are here Monday through Friday. Actually Monday through Saturday now. From 8:30 to 5 and on Tuesdays and Thursdays we are here from 5:30 to 9 so we have extended our hours and we are also open on Saturday. Those extended hours are for those senior adults 55 and older who are interested in using our facility but you may still work. So if any of you are interested in our facility and what we do here, I have some schedules out there on the table there and please come and ask me and I will be more than happy to give you some more information on the Benson Complex. Once again, welcome.

Deputy Director - Jon Drysdale

Good evening. I am Jon Drysdale of Public Works in Sandy Springs and we thank you all for coming tonight. We are going to stress this a few times. This is a fact finding meeting. We are basically trying to collect information and input from the citizens and the public. Particularly those who live and drive and work along the corridor. We are going to have an opportunity for you to stand up and talk into the microphone so we can get it recorded. We are going to get the whole thing transcribed and have that available.

But first before we get started I would like to introduce Councilwoman Ashley Jenkins. She is the representative for most of this project area and she would like to talk first.

Councilwoman - Ashley Jenkins

Thank you Jon. Thanks for coming out tonight. Everybody knows there is a triangle and the roads around the triangle are one of our worst intersections in Sandy Springs. So I am very excited that we are kicking off the T-11, and it is called the T-11, the T-11 project tonight. Several of you over the last couple of years have e-mailed me your thoughts, comments, questions about this. I went to Georgia not Georgia Tech. I have no engineering experience but what I do with your comments and questions is send it to these guys and I want you to continue thinking when he talks about fact finding we mean go ask us some questions and give us your comments. JJ and these engineers are going to take those under consideration. When they start trying to figure out how we are fix this horrible pretzel or triangle, however you call it. But we do want your input and that is why we have done a project advisory team to make sure that we have representatives from each of the effected areas.

We have Jane Saperstein who runs Sandy Springs Plaza. We have Al Reddeck from Mt. Vernon Towers, Bruce McLean from Mt. Vernon Woods, Bruce Morreen from Mt. Vernon Presbyterian School, Doug Faglicia

from Glenridge Hammond Subdivision and Bruce Tuttle from Aberdeen Forest. Bridget Lawler is going to be here from Mt. Air and Linda Steger is her from Johnson-Ferry as well.

We wanted to make sure that the stakeholders were involved and they will be meeting in small groups with engineers as well and then we will come back to the big groups. But we didn't want to have to have these big huge meetings once a month that you all had to attend. So we asked representatives from the neighborhoods to attend those. So if you live in one of those neighborhoods and want to stay informed I would certainly get with those individuals so that you can stay on top of what is going on. But we do want your comments and questions and concerns. You can air them tonight or you can always e-mail me, you can e-mail John but you are more than welcome to e-mail and I will make sure that they get into hands. Again, I really appreciate you guys coming out tonight. This is going to be a very important development in Sandy Springs. Thank you.

Deputy Director - Jon Drysdale

I am sorry that we ran out of copies. We estimated a hundred people and I think that we have more than that. So if you want a copy of this handout make sure you let us know up front.

A little about it is that the front page tells you some key information and key addresses. Also we would like to have written comments by November 19th if possible but we will take them whenever you have them. That is kind of a goal to collect as much of the input as we can by the 19th. There is a third page in here that is a project data sheet that is basically talking about the purpose and the description. This project starts at the Abernathy-Johnson Ferry intersection on the west and then it moves through the triangle area at Roswell Road and continues east and then into Glenridge and then all the way to the Hammond-Glenridge intersection. This is a federal funded project. It has got several funds and city funds associated with it. So we go through the Georgia DOT planning and development process which is rigorous but it allows for lots of opportunities for public input and involvement. Plus GDOT gets opportunities to review the findings too.

The preliminary schedule is down at the bottom of the third page and Ed is going to talk a little bit more about the schedule in a minute. This page that shows the map, it has got an inset that shows the red line. The red line shows the starting and ending points of the corridor. The next page, if you want to tear this off and give us your ideas about how to drive through the triangle area and we will take those plus the comment sheet. The comment sheet at the back, please remove that and write your comments and turn them into Dana. She is sitting by the back door over there.

The city went through a competitive process of collecting consulting engineers and we selected JJ and Goulding and this is one of the most complicated projects that we have. We are glad to have Ed Culican here as our Project Manager who will speak next.

Ed Culican – Jordan, Jones & Goulding

Thanks Jon. Like Jon said, my name is Ed Culican and I am with Jordan, Jones & Golding. We are doing the design for this project. John has talked a little bit about the corridor starting on Johnson-Ferry at the Abernathy Road intersection which is going east towards Roswell Road, through the triangle area and gets to the Johnson-Ferry Glenridge Drive intersection near the library. Then follows Glenridge Drive southward towards Hammond Drive. That is where the projects ends and ties into another project that the city is also looking at.

What we are looking at right now is that we are starting off the concept development. What we are engaged in right now with the city is concept, database, preparation and environmental screening. This is all part of the federal process that we have to go through with federally funded projects like this one. Currently we are in the database collection phase right now. If you look in the handout, there is a flow chart that kind of goes through the process of developing a concept at the beginning. Right now we are collecting traffic data as well as survey data and some of the environmental data including some of the ecology field work and some of the history field work.

Some of the traffic collection you might have seen in traffic. There are two counters out there. Some of the other things that you have might not have seen is some video recording. We are actually looking at actual movements through the triangle so that we can get accurate count of who is actually making that one-way movement and what how we can study that see what the best options are through there.

Schedule, right now if you look at the sheet right now, we are in the data collection. We will continue that through December. Most of our traffic data has been collected but we are still collecting survey data. Some of the things that you might have seen out there, we did go out there and look and identify potentially specimen trees with white ribbons. Those white ribbons are indicative of anything. Right now other than it being a specimen tree. It doesn't mean that it is going to be cut down and it doesn't mean that it is going to be saved. We are just right now getting the information so that we can accurately identify what it is and what type of tree it is and then proceed forward with that. We have fielded a lot of phone calls about that. I think the city staff has also fielded a lot of phone calls about the white ribbons and we conveyed that same information.

Some other things that we have done is fielded other phones, some of the things that has been told. Some people talked about having septic systems in their front yards and if you can convey that to us at this meeting that would be great. Just any kind of information that you can give to us at this point so that we can have a database of what kind of issues that you see so we can fully develop our concept.

Deputy Director - Jon Drysdale

What we would like to do now, so that we can get it recorded, we would like to form a line and make comments into this microphone and we will document a few bullets while we are going. We are going to transcribe it word for word and have it as a regular document. Again, we don't have any answers tonight unfortunately. We just got mainly, if you have any questions or comments we really want all of those so feel free to come up here and we are going to allow about thirty minutes for that. Then we will hang around after that if anybody wants to talk about particular pieces of property.

PUBLIC COMMENTS

Joe Cleveland: My name is Joe Cleveland (inaudible to low) and I can remember part of the history of this project. The sidewalk portion between Sandy Springs Circle and Johnson's Ferry and Abernathy were intended to be pedestrian oriented sidewalks with possibilities of weekend bike lanes and I support that. I also support the ??? of the intersection. In terms of the intersection I think you have to live with this option in terms of making an impact. However, do you really consider taking the road under Roswell Road and making it into an underpass? It helps the flow on Roswell Road and cut the flow around Johnson-Ferry and just in general given the hilly nature of Sandy Springs any opportunities for an underpass would be welcomed. My main concern that is that there is a lack of institutional memory. Many of the neighborhoods that supported the widening of Abernathy did so because we were told that Johnson-Ferry would remain a two-lane road between Johnson-Ferry (Applause – inaudible). Our support for Abernathy was conditional and one of the options here was why was Johnson-Ferry four lane (inaudible). That I guarantee would be a fight. That will affect neighborhoods, large neighborhoods that would impact the fringes of some neighborhoods. It is really not what we fought for Abernathy for twelve years and then the certainty didn't just actually come up on the agenda, even for discussion.

But I do support the bike lanes and the median and just as a general rule and staff are trying to put a light at every intersection. Try to find a way to eliminate the light because the lights stop traffic where the roundabout, the under passes or any alternative form of design to keep the traffic flowing. Thank you.

Jon Drysdale: I have one comment on that, we have stressed that Post Buckley I am sorry J J & G, I got my consultants mixed up. They are going to study the situation in the future. They are going to study the Abernathy being improved and the re-alignment of Abernathy Johnson-Ferry intersection. Not taking into consideration the way it is right now.

Mike Stolarski: Hi my name is Mike Stolarski and I live at 730 Glen Ferry Trail. This as a point, Glen Ferry Subdivision was not notice, we were not given notice. So in the future if we could be given a heads up I would appreciate it. Our concern, my concern and I am also the President of (inaudible – to low) and one of the things that I am concerned about is that corridor improvement is really going to be a nice euphemism for let's say one thing but let's flow a lot of traffic through this area in the future. We have six children in our community. Well four right now and two on the way, in a nine home cul-de-sac that under the age of four. So

the last thing we need is to have more cars coming flowing that area. We need fewer cars that are in front of our homes. These children deserve our attention.

On the environmental fund I am concerned with lots of apartments. I do not know what is going to be taken out but that is a concern that isn't irreplaceable and just for property rights (inaudible) Drainage is another issue. If we go and add another two or three whatever lanes it would be a flood. We already have soupy backyards to begin with and it is going to get even (inaudible) for the rain to have a good source so that the waters will run off into our backyards. Thank you.

Alice Elizabeth Knight: My name is M. Elizabeth Knight and I live 61 Ferry Drive at the corner of Ferry Drive and Johnson Ferry Road. I am here tonight with my neighbor Mary Beth (inaudible) who owns the house across the street at the other corner of Ferry Drive and Johnson Ferry Road. Speaking for myself, I am here in entirety on opposition to any widening or additional lanes on Johnson Ferry Road. I considered this first of all I would like to second what the other speaker said concerning neighborhood support for the widening of Abernathy. That was entirely depending upon no changes, no four lanes, or turn lanes on Johnson Ferry Road. Second, from my own perspective I believe that any change or any study of change between Roswell Road and Abernathy along Johnson Ferry Road is premature until the project concerning Abernathy Road is complete. Only then could know how traffic ties are truly affected by suddenly having four lanes instead of two to what is a long end bottleneck in our city. So I would like to see any decisions about Johnson Ferry Road completely stopped and taken of the block until (inaudible). At the intersection, that is not really a major concern but I do feel very strongly about Johnson Ferry Road. Also an owner of more than a dozen of fifty plus year old (inaudible) trees would be necessarily chopped down (applause – inaudible).

Jon Drysdale: Thank you.

Michael Nolan: Hi my name is Michael Nolan of 210 Marsh Glen Point. I am slightly out of the triangle area and I am right off of Johnson Ferry near Riverside and anything that you do to Johnson Ferry is going to affect me. I was almost in a car accident today trying to get here. Because trying to get out of my subdivision, Breakwater, at this time is virtually impossible. I called to ask if the light can be retimed between Berkshire and Sandy Springs Circle. I was told the answer is no and I was told the reason why is because the lights are more than a quarter of a mile apart. I don't understand that but that is what I was told. There is no evidence now that it can take between 10 to 15 minutes to get out of my subdivision and then you literally have to risk your life trying to take a left unto Johnson Ferry Road in the direction of Sandy Springs Circle. If you widened that road that lane already people consider Johnson Ferry their personal speed strip. If you would add some more lanes there is going to be more people going even faster which would make it even more dangerous and it would take even longer to get out. So unless you can either retime the lights or maybe even have a light at the intersection where the subdivision is, then I would strongly oppose any widening.

Jon Drysdale: Thank you. One other project (applause) the city is undertaking is a traffic control center where we will be able to deal with control signals at different times of the day remotely by observing traffic so that all the signals that we have are in a plan to bring in the mode to be able to control them remotely and observe them through cameras.

Gary Drisdeck: Hi my name is Gary Drisdeck and I am also from the Glen Ferry Subdivision. I live at 40 Glen Ferry Trail. I hope that the point of the gentlemen that just spoke and coming out of our subdivision at Johnson Ferry (inaudible) that is a two lane however. I think that the points that were made it was a four lane road (inaudible echoing sound) I just don't know how that would be possible. (inaudible – echoing sound) Thank you for your consideration.

Bridgett Lawler: Hi my name is Bridget Lawler and I live on Long Island Drive in the Mountain Air Springs neighborhood. My concern was the areas that were looking at is along Johnson Ferry a good portion of the traffic is mostly through traffic and if we are trying to do revitalization of downtown Sandy Springs, I don't see how it's a possibility to increase Johnson Ferry from two to four lanes and how additional traffic would help in the revitalization of our downtown. It is not going to make that be more pedestrian friendly or biker friendly or for families to get to the restaurants, to the shops, when the traffic is too heavy for us to get out of our neighborhoods.

Jon Drysdale: Thank you.

George Shukis. – Good evening. My name is George Shukis. I am the President of Lyndon Ferry Homeowner's Association and I realize that I am the third person from the neighborhood to come up here.

We did not get notice and I would like to reiterate that point. We would appreciate your courtesy and are not too impressed about this requirement for being noticed. Number one, I think that you could have made a discussion and need to come to the fact that the reason you need to widen this road is to widen the bridges of the Chattahoochee. This project is the primary beneficiary of the residents of Cobb County, not for Fulton County, not for Sandy Springs. (Applause). I have a real problem with subsidizing those people who have decline in the quality of life and the increase of the emissions, carbons (inaudible - echoing sound) at a greater concentrate rate of speed. I am insulted by the fact that the City of Sandy Springs do not care about the safety of our children. They don't care about the increase of the present day conditions of pedestrians and bikers and everybody else that have a right to use the thoroughfare in this city and in the state.

Secondly, I think there is going to be a tremendous evaluation of property values along Johnson Ferry. Nobody wants to have a house along the four-lane highway. We did not buy houses along a four-lane highway. (Applause). I think your project although, I think there is a lot merit in terms of what its intention is. But I want to recall the fact that the road to hell was paved with good intentions and this is going to be a four-lane road going to hell and don't you think you are really exacerbating and already bad problem? We are not going to get any benefit out this project outside of getting more construction (inaudible – echoing sound) and I will also reaffirm the fact that whatever resources it takes to hinder the delay or to hinder this project trust me they will be there. Thank you.

Mayo J. Elliott – I am Mayo Jack Elliot my lovely wife and I have lived in the Sandy Springs area at 25 River Points Drive and that is on the other side of Brandon Mills Road. From Sandy Springs we have said goodbye to eight of our children. Two of them live in the Atlanta area not in Sandy Springs. I am in favor of your project and the progress. When we first came, when I first came to Sandy Springs area, Roswell Road was just two lanes wide on Abernathy. Surely, no one will argue that Roswell Road shouldn't still be two lanes but we need to realize there will be traffic problems surely. But let's get with it and move on.

Jon Drysdale: Thank you.

Bruce MacLane. – Hi my name is Bruce MacLane. I am in the Aberdeen Forest Subdivision and our concern is the getting in and out of our neighborhood as well. Particularly through south bound on Glenridge trying to hang a left into our neighborhood currently that is extremely dangerous given that the light was put in about ten years ago. If we have four lanes going through there our concerns is the cars going faster and the problems that go along with that.

Jennifer Nichols: Hi my name is Jennifer Nichols and I live on the corner Johnson Ferry and Glen Ferry. I have two small children and expecting a third and on a daily basis I am worried for my two children going more than ten feet from my front door because the traffic is so bad from Johnson Ferry. I have never in three years seen a police officer out there trying to manage speed or just activity of the drivers which sometime can be extremely erratic. I would like to propose that somebody do some sort of traffic analysis and speeding, and clock their speeding on that road during this project. Some of these things can be avoided with (inaudible) as oppose to widening the road and driving people crazier and making it a more unsafe environment.

Jon Drysdale: The city has some speed trailers. You may have seen them around. The one that points out your speed. We control those and we can probably move those in quicker and collect data from that in addition to data that they are collecting and we will pass this information on to the police department to about not seeing any police protection in there.

Julie Squires: Thank you for presenting tonight. I am Julie Squires and I live at 180 River Springs Drive just off of Abernathy River Valley Johnson Ferry intersection. I would just like to give a philosophical appeal. Having integrated the Abernathy Road Way I would like to see Sandy Springs evolved into, we had a very special (inaudible – echoing sound) and I see that is user friendly (inaudible – to low) a library, there is a community theater.

Tracey Stolarski: Hi I am Tracey Stolarski and I live at 730 Glen Ferry Trail on the corner of Glen Ferry and Johnson Ferry. I just have a question and a point of clarification on your plan, we are not clear on what the green ban means. We notice that there are a lot of houses that have numbers on them and there are red markings with names on them. But then it progresses in our subdivisions that have nine homes. There are three homes that are not in the green ban but only two homes directly listed as to make us believe that is something to be taken down. So I think that you would probably appreciate one more clarification of that. We came in here (inaudible) what the plans means, what these mean and it is not very self-explanatory.

Ed Culican: The green is more just an outline of what the study area is. We haven't looked at any improvements yet. We haven't gotten to that point yet. So to say that what we are going to do right now is a four-lane or a two-lane; we haven't gotten to that point yet. We are just collecting data. The red property owner names are just a property owner name just to help you to out to identify where your property is.

Jon Drysdale: Let me add to that. The red property line is based on initial research done by the surveyors and that was before they started doing their complete data collection. So there are some lines on there that have changed and ownership that has changed and that would be reflected more when we get more into the concept stage. But this was prepared at the early part of the project before they got all that data collection done.

Robert Harville: My name is Robert Harville. I reside at 570 Valley Lane. The study area cuts through or by many single family residential neighborhoods that are well established. Any significant alterations or improvements will increase in capacity and bring significant pressure on potentially affecting the rezoning pressures in Sandy Springs. I think that the effect on land use planning and comprehensive planning and therefore future rezoning should be considered as part of the study because one affects the other. Our land use planning and the effect that it may have and if it is pertinent to have greater neighborhoods in the future, I think that would be giving them a disservice.

Jane Whiteman: Good evening. I am Jane Whiteman I live at 6590 Long Acres Drive. Which is between Johnson Ferry and Abernathy; one block long I feel that we have been side-winded by this plan. For those who are aware of that area when Abernathy has finished, along Long Acres Drive we will only be able to turn right not left going onto Abernathy. We have given up a lot of (inaudible) in that area. We thought that when we became a city that we were going to be secured by all politicians and that you would look out for our well being and we feel like we have gotten a slight (inaudible) with this program right here. Because once that this been developed we would not be able to get out of our street on Johnson Ferry. We will have to turn right on Johnson Ferry towards Cobb County if we don't want to get killed turning to get into Sandy Springs.

I think that need to be looked at very seriously and a little more consideration for the people have lived here for many years, paid taxes, support the City of Sandy Springs becoming a city and I am glad that you are listening to us tonight. Thank you.

Jon Drysdale: One thing to point out is all the side streets and the intersecting side streets. Data is being collected on them too and they are part of the model that will be built for seeing the operations.

Dick Farmer: I am Dick Farmer 80 Glendrige Drive. I have two questions. One is what is the origin of the project? Who and when did this project come to be? Who proposed and when was that proposal made? The second question I have is From the very beginning of Sandy Springs, the origin of the city of Sandy Springs we were assured that there would be attention paid to the citizen's input. Yet from the first major project of the city, the undertaking of the tree ordinance, the city ignored its own consultant. They ignored the Citizen's Advisory the meeting had put together and they ignored the citizen's input and produce a tree ordinance different than what was recommended. Subsequently we have had the same type of process happen on the Comprehensive Plan. Many, many recommendations of the Citizen's Advisory were ignored when the city approved the comprehensive plan.

What assurance do we have if any that this project is going to be any different that the city council has already made up their mind to do something and this is a sham process what we are going through tonight?

Jon Drysdale: We don't see it as a sham process. The project was started by the City Council. There was an earmark so it was provided by federal funds to study this area. That earmark was started basically before the city became a city.

Dick Farmer: That means someone has had to ask for that one before Sandy Springs even came to can be.

Jon Drysdale: Right.

Dick Farmer: We were told that it was Sandy Springs project.

Jon Drysdale: Well the money was turned and the control of the project was turned over to the City of

Sandy Springs as a local sponsor as opposed to a GDOT project.

Dick Farmer: GDOT came up with this project as (inaudible)?

Jon Drysdale: Not the federal earmark.

Dick Farmer: (Inaudible - to low). But who asked for it? Someone had to originate that.

Jon Drysdale: We don't have a lot of detail on that. The federal procedures are pretty sketchy. There is like one page of information to Congress. They don't sort of tie the local jurisdictions tremendously.

Dick Farmer: (Inaudible - to low), initially denied involvement in that. Only subsequently after Sandy Springs became the City of Sandy Springs did it admit its involvement. That is why I am skeptical.

Jon Drysdale: There is a House earmark and a Senate earmark. Both of them were by the local representatives .

Dick Farmer: Yeah but someone had to ask for it. That is the question. Someone out of Cobb County discussed with someone out of Dekalb County.

Jon Drysdale: I think that it is Fulton County. But again we don't have a whole lot of history on that one. I think it is Fulton County

Dick Farmer: I think that you owe us the city of Sandy Springs owes us a sense of the history of this project, where it came from, who is asking for it. A lot of people here indicate that they are not confident with the new project of the city. So if we had some sense of where it came from. . . .

Jon Drysdale: We will dig into as much as we can. Again, we can't get a whole lot of information about some of the previous stuff that was done.

Dick Farmer: Thank you.

Walter Ilgenfritz: (sp). – I am Walter Ilgenfritz and I live on River Wood Drive and thank God I am no longer in the vicinity of this mess that you all are trying to sneak off on us this ridiculous plan. Look at your little map see if can maybe answer some question for me. I see a red line going through where Johnson Ferry, there is a nice big line where there is two lanes and this gets red. Well, if that thing is expanded, at the cost of several of our Sandy Springs (inaudible) maybe millions of dollars of construction and property (inaudible) then those people out in Cobb County would say we can get it going faster. Where is it going? The problem with the red line is when you get down here on Glendridge Parkway it goes off the map like this and it goes into

Jon Drysdale: This project stops at Hammond and Glenridge.

Walter Ilgenfritz: It stops at Hammond? The (inaudible – echoing sound) Hammond Drive that is going to be the worst intersection in the whole city. I think what you are saying is crazy and before you could get into agreement on that I think what you better is, let's wait and see what the widening of Abernathy Road is going to do. That is already underway (Applause) I will fight like a tiger to get you guys to lay off of this thing.

Michael Weber: Good evening my name is Michael Weber and I live in Bright Point in a condo (inaudible) and that in the city council district and I am nowhere near this but then again I might be the next one around the corner from a project. We don't even know what the intentions are. I appreciate you explaining the fact that, that green slot is definitive of removal of any those homes but it is still there. The thing about it is, like the gentlemen before and a few others said who is getting the benefit here? We basically talked about grid benefit, let's talk about cost benefit. What is it going to cost? I am not talking about dollars and cents so much as land value and who is it going to benefit? You already have got things in place. The Hammond

Drive is going through changes finishing on Abernathy Road. Let's see what that does and maybe you are. Maybe there are some things you are not telling all of us. Not that you are hiding anything but this is being recorded and I have got it rewritten to terms of the city. Let's see what the project do before any potential. . . One person comes here and asks a question and that is like yelling fire in a quiet room and the fireman don't

think that. I understand you know, the threat might have compounded more by our thoughts from what we have seen in past. If you are saying and you are trying to prove that, then great. One thing that can make a suggestion when you talk about the evil triangle, let's get rid of the triangle you know what I mean. I was firefighter here for 15 of my twenty years. I know what it is like in all types of fire apparatus when those vehicles are making a right on Roswell then that quick left on Mt. Vernon what that can do to a fire truck and not wreck you fire chief or whatever. Let's a look at doing what improvements we can that won't affect the citizen's, the homeowner's okay. Then you rid of some of business I have heard that from Council Paul (inaudible) let's take a look at that study about getting rid of what we call the "Snake Trail". Turning right on Roswell and an immediate left on Mt. Vernon to get back on Johnson Ferry and follow Johnson Ferry all the way through.

David Davondi: My name is David Davondi and I live at 42 Johnson Ferry Road. I have a suggestion. Behind the river and the city of Roswell they have three lanes which is dedicated to traffic coming out during the morning or night and much of the traffic is created by the morning or the night users of Cobb County. (Inaudible- hard to understand) We have children and there is a lot of people (inaudible difficult to understand)

Jon Drysdale: Thank you. We have got five more minutes for open mike.

Susan Delgado – Hi I am Susan Delgado and I live at 710 Glen Ferry Trail and wasn't living in Sandy Springs at the time when the (inaudible) citizens came together. But clearly I felt the strains of that (inaudible). One of the key things that I heard about Sandy Springs was that we were interested in conserving our neighborhood and the citizens would focus on it. Although I heard recently that Sandy Springs is something like the seventh most wonderful city in the state. It is important to grow the community. I understand that we need to protect the citizens, the property and green space. I just want to also comment that I agree we need to wait until the Abernathy project has been completed and delayed that is a long time. Also I think that what we are doing rather than protecting the City of Sandy Springs we are fueling the (inaudible) for Cobb County. (Applause).

Michael Nolan: Michael Nolan again with a different mission. I am a little disturbed when you mentioned that you didn't know who started the project and it just raises the question, I am not making any accusations but raising a logical question. Who is selecting the contractors to do the work and what might be the relationship between those contractors and the mystery person who asked that the project be done? Thank you.

Wesley Johnson – Hi guys. My name is Wesley Johnson and I live at 529 Johnson Ferry. That is at the corner of Karron and that is the intersection of Karron and Johnson Ferry near the Presbyterian Elementary School. I bought that house three years ago and I have worked in the dairy for many years. All my friends live here and specifically that area because there is not really a lot of traffic on that part of Johnson Ferry. In fact, it seems to me that less traffic goes on the other of that train where Mt. Vernon is than in the Dunwoody area everybody is going and Abernathy. To take through there doesn't really make too much sense other than I guess making one Johnson Ferry. That is what the firefighter was saying but I would like to keep that because I have got two children three and one and a half and I would really like to keep that kind of traffic from being right next to school. I am right next to that school although kids go down that street without their parents. People might speed down there and I don't have the problems that some of my friends have at the other side where people are (inaudible). Thank you.

Jon Drysdale: Okay thank you.

Tom Williams: My name is Tom Williams and I live on (inaudible) Road which is one of the side streets right there near Abernathy Park. I think what has a lot of people really concerned here is the (inaudible) on this whole project has remarkable similarities that is identical to DOT a project that was being advanced and studied back in 1970s and on into the 1980s. Which was the capital project that steered the community toward the Abernathy Road Corridor which was the most viable solution to channel all of the traffic (inaudible). (inaudible) wasn't responsible for that. To the GA 400 interchange to the business districts and

so forth for the traffic. Johnson Ferry road on the other hand is even worse than the Sandy Springs revitalization of the community for the next ten years or more (inaudible - echoing sound) to be improved with pedestrian lanes and bikes and maintaining the same characters of roads to have a pleasant neighborhood streets.

I think that what we really need to be considering here in Sandy Springs is to have an alternate route of different styles and categories. We are going to have the almost super highway of Abernathy Road. With this interchange that is thrown in, evidently at Hammond Drive and 400 and on Hammond Drive that is taking on super highway and all the way on up to Mt. Vernon through the heart of Sandy Springs, there is a lot of traffic on that road. Let's leave the Johnson Ferry Corridor a pleasant neighborhood street that is an alternate route when traffic gets heavy. Because the other thing that is going to happen as we are all aware of, the lights along Abernathy and Johnson Ferry (inaudible). There is traffic along the (inaudible) Johnson Ferry back to Sandy Springs Circle with Roswell Road (inaudible) which we are going to sit waiting for lights to change, just like it does now, because the original capacity to get cars over the river and move them on the other side. That is all I have to say.

Jon Drysdale: Thank you.

Mr. Chairman I want to thank you for coming out tonight and giving the people an opportunity to hear what the proposal is. I am not sure of your proposal is going to solve anything and I am not a newcomer. I have been seventy-seven years. I was just sitting back there thinking, you know our government is concerned about holes in the border between Mexico and the United States to keep them from coming over. I suggested that we close that bridge to keep Cobb County out (inaudible – applause). I was born in Tulsa County and reared most of my life right here in Sandy Springs. But there is a, absolutely no win situation to what you are presenting to this group here tonight. The people that have worked all of their lives to have a home and if you bring that highway through Sandy Springs, you are doing a disservice to these people. Running them out of their homes to where they can not . . . They are already buying them now and the prices of homes sold that the people can't afford. The working class of people and I am not saying the Cobb County people don't work but there is not a person over there that is still coming over here to work that didn't know about the traffic problems before they came. I appreciate (applause) to end here tonight and I appreciate the Council of Sandy Springs working to try and solve something but let's don't throw the baby out with the bath water. (Applause).

Jon Drysdale: Last one.

Susan Beard: Thank you. My name is Susan Beard and I live in Mt. Vernon Woods and grew up in Mt. Vernon Woods. My mother lives in Mt. Vernon Towers so she is another area that has been affected by this. I consider it sort of a (inaudible) between the area of Mt. Vernon (inaudible). Actually I didn't come here with any suggestions but actually the comments there is some that really made sense. Someone suggested maybe we should keep the character of the Johnson Ferry and others at Mt. Vernon Highway may be different from Hammond and Abernathy. Maybe think of making Mt. Vernon and the Johnson Road at least on the east side of Roswell Road walking friendly. More pedestrian friendly. That is where the library is, that is where the school is and maybe some of the designs can be made so they are not contusive to so much traffic going that route. (Inaudible) which is already getting to be a major thoroughfare into Abernathy. We should make the streets be more pedestrian and neighborhood friendly. (Applause).

Jon Drysdale: Can I get a show of hands, how many people read about this in the newspaper? Read about the meeting? We are trying to see the effectiveness of our outreach? Okay and how many people saw the signs? Okay and how many got personal letters or anything like that? Okay.

Michael Stolarski: Michael Stolarski 730 Glen Ferry Trail. My basic point is this we pay a premium to live to live in Sandy Springs and we are the ones who are being harmed potentially by this scenario and it is really only benefiting those who are out in Cobb County. Who didn't pay a premium who pay about half the taxes that we do and relatively speaking and it is for the benefit of them and not for the benefit of us and we the people of Sandy Springs who it is incumbent upon our elected officials here in Sandy Springs. To not defend those good friends of ours out in Cobb County but to defend you know we the people their elected representatives in Sandy Springs. Thank you.

Bob Beard: Bob Beard 6326 Vernon Wood Drive. A suggestion to the planners is to consider making both Johnson Ferry and Mt. Vernon Highway on the east side of Roswell Road two lanes again like they were many years ago and then don't allow, if they make those two lanes in both directions, do not allow a left turn onto Roswell Road from Johnson Ferry. There is one small intersection would have to be dealt with near the

library where everything comes together. But that most alleviates the triangle issue itself and not have to deal with two lane roads through the rest of the project. Thank you.

Again we really thank you for coming and we thank you for input. The City Council has not given any specific direction at all. They have given data collection and we have not made any decisions. We really appreciate the input so full out a comment card for Dana. If you want to give another comment we still have a transcriber person here that could take your comments verbally if you like. We will stay around a few more minutes. Thank you.

Meeting Adjournment

The meeting was adjourned at 7:42 p.m.



October 19, 2010

**Johnson Ferry Road and Glenridge Drive Corridor Improvements
Project STP00-9252-00(007), Fulton County
P.I. No. 751420**

Public Information Open House (PIOH) Summary of Comments

COMMENT TOTALS:

A total of 64 people attended the public information open house held for the subject project on June 21, 2010 from 5:00 to 7:00 PM at the Benson Center.

From those attending, 28 comment forms, 0 letters and 0 verbal statements were received. An additional 8 comments (2 comment forms, 1 letter, and 5 e-mail responses) were received during the ten-day comment period following the public information open house, for a total of 36 comments. They are summarized as follows:

No. Opposed	No. In Support	Uncommitted	Conditional
<u>1</u>	<u>20</u>	<u>3</u>	<u>12</u>

MAJOR CONCERNS:

Improving traffic flow - positive comments regarding two-way traffic flow on Johnson Ferry Rd. (JFR) and Mt. Vernon Hwy. Some commenters feel that JFR and Mt. Vernon Hwy. must be widened to four lanes for traffic to improve. Roundabout concepts received mixed comments, some feel they would slow traffic too much and confuse drivers, others like the safety and traffic calming provided by roundabouts. A few comments had concerns about project costs and property acquisitions. A few comments expressed concern that pedestrian facilities had not been given adequate consideration in the proposed designs.

OFFICIALS:

Officials attending included the following:
Chip Collins, City Council

*Public
Works*

Summary of Comments
STP00-9252-00(007), PI No. 751420, Fulton County
October 19, 2010
Page 2

MEDIA:

Sandy Springs Reporter (Newspaper)
Northside Neighbor (Newspaper)

DISPOSITION OF COMMENTS:

JJG/Jacobs will respond to all comments on behalf of the City of Sandy Springs. The comments have been reviewed and will be responded to as follows:

COMMENT TYPE	COMMENT #	NATURE OF COMMENT	PROPOSED RESPONSE
Design	2	Request for bike lanes along Johnson Ferry Road to access Abernathy Park. Supporter of better traffic flow at intersections and not widening.	Bike lanes are not proposed as this roadway segment is not within the GDOT Bike Plan corridor. To improve traffic flow at intersections, the addition of auxiliary turn lanes is necessary to reduce delays. Also, to improve traffic flow within the triangle area, two way operations are proposed on the segments between Roswell Road and Boylston Road and the addition of the Double Roundabout configuration. In predominate residential areas of the corridor, widening is not proposed.
	3, 30*	Prefers Alt. 1A	Noted
	4, 9	Prefers Alt. 1B or 2B	Noted
	5, 6, 7, 8*, 17*, 21, 23, 24, 25, 28, 29*, 34*	Prefers Alt. 2B	Noted
	8*	Prefers Alt. 2B with modifications to remove one of the traffic circles. Requests a left-hand turn movement onto Hildebrand going south of Roswell Rd.	Both roundabouts are necessary to maintain connectivity with all existing traffic flow movements and achieving acceptable Levels of Service. Hildebrand Drive is outside the project corridor under Alt 2B.
	10	Supports removing triangle which houses Eddie Auto, mattress store, and rug store.	Noted. The proposed project alternatives meet the project's purpose and need while maintaining most of the properties within the triangle area.
	11*, 12*, 14, 26*, 27	Prefers Alt. 1B.	Noted.
	13	Requests a stop sign at the Johnson Ferry/Glenridge intersection.	Traffic control improvements will be evaluated at this intersection during project development.
	15*, 22*	Requests JFR be 4-laned.	The 4-lane option for JFR was evaluated and considered as part of the concept development process for the corridor. It was determined that streetscape improvements within predominate residential areas of the corridor met the purpose and need of the project and is consistent with the Comprehensive Transportation Plan developed by the City of Sandy Springs.

Design (continued)	16	Concerned with putting a roundabout at the Mt Vernon Towers intersection. Requests "speed tables" between Mt. Vernon High School and Vernon Woods Dr. and in front of school entrances and the library.	Roundabout at Mt. Vernon Towers is necessary for traffic at this intersection under each of the roundabout alternatives. Placing a signal at this intersection in lieu of the roundabout under the double roundabout concept is not recommended as it will cause traffic flow disruption at the west roundabout at Johnson Ferry Road and Boylston Road. It appears that the speed tables requested are outside of the project corridor.
	17*	Two-way traffic on JFR and Mt. Vernon Hwy. is needed. Supports Alt. 2B if it moves traffic effectively.	Noted. Alt 2B has been evaluated to operate at a LOS "A" based on current traffic projections.
	18	Supports Alt. 1A or 1B but questions their safety.	Noted. Safety is evaluated for each project alternative and is developed into the project design.
	19, 29*, 31*	Request for the design to focus on pedestrians and not cars.	The alternatives have been developed to improve traffic and pedestrian operations within the corridor. Additional pedestrian operation improvements are under consideration as part of the concept development.
	20	Request to make JFR and Mt. Vernon Hwy. two-way streets.	Johnson Ferry Road and Mt. Vernon Hwy. are proposed as two-way operations under each alternative. Making these two segments two-way only as a start is not feasible as the improvements will "snow ball" away from the area noted and improvements will be necessary to provide connectivity to this area.
	22*	Requests Mt. Vernon Hwy. be 4-laned from SR 400 to Roswell Road.	Most of this area is outside the project corridor.

Design (continued)	30*	Concern about design at Sandy Springs Circle intersection. Supports bike lanes, sidewalks and landscaping within the corridor.	The extended right turn lane on Sandy Springs Circle is necessary based on the projected traffic for this movement. The extended through lane on Johnson Ferry Road is necessary based on the projected traffic for this movement. This through lane is reduced 500 feet west of the intersection to allow for traffic to merge from two lanes to one lane west of the intersection. It is projected that this lane extension will not affect the right turn movement from Sandy Springs Circle. Bike lanes are not proposed as this roadway segment is not within the GDOT Bike Plan corridor. Sidewalks will be added within the corridor improvements and landscaping will be considered.
	31*	Concerned about the width of the JFR and Roswell Rd. intersection and speed of traffic in this area. Suggests placing trees in the median to encourage drivers to slow down and provide a refuge for pedestrians.	The lane configuration at the Johnson Ferry Road and Roswell Road intersection are necessary for the traffic projected at the intersection. Installing a median for pedestrian refuge may be considered for additional pedestrian safety at crossings. Placing trees in the median is not encouraged as the trees may restrict pedestrians from driver sight lines. Landscaping on shoulders may be considered.
	32*	Likes all four designs shown at the meeting.	Noted
	33	Requests a median between Sandy Springs Circle and Brusters establishment on JFR as well as mid-block crossings or pedestrian island in the Wright Road and Bonnie Lane area. Provided comments on other Sandy Springs projects.	A raised median and mid-block crossings between Sandy Springs Circle and Roswell Road will be considered. Pedestrian improvements at the Wright Road/Bonnie Lane intersection with JFR will be considered.

Design (continued)	34*	Recommends reworking Alt. 2B to allow access to Boylston and combine into one large roundabout.	The double roundabout alternative maintains connectivity for each of the six independent traffic connections in this area while minimizing the costs of the project. Combining to one large roundabout and moving the Mt. Vernon Towers connection may still provide the same connectivity, but will require additional right-of-way to build the larger roundabout, may result in additional displacements of businesses and residential properties and increase the cost of construction.
	35	Concerned about Mt. Vernon Towers intersection. Suggests special training for older residents on how to use traffic circles.	Noted. Public outreach to Mt. Vernon Towers concerning the use of the roundabouts will be considered.
	36	Does not support the use of roundabouts – believes they are only effective for low volumes of traffic.	The traffic analysis shows that the double roundabout concept is projected to operate at a Level of Service “A” based on current traffic projections.

COMMENT TYPE	COMMENT #	NATURE OF COMMENT	PROPOSED RESPONSE
Right-of-Way	26*, 30*	Request to keep Eddie’s Garage.	The proposed project alternatives meet the project purpose and need while maintaining most of the properties within the triangle area.

COMMENT TYPE	COMMENT #	NATURE OF COMMENT	PROPOSED RESPONSE
Traffic Operations	1	Unhappy with signal timing along Roswell Road.	The timing of signals along Roswell Road is predominately outside the project corridor and beyond the scope of this project.
	11*	Believes traffic circles/roundabouts slow traffic considerably.	The traffic analysis shows that the double roundabout concept is projected to operate at a Level of Service "A" based on current traffic projections.
	12*	Concerned with placing a roundabout at the library intersection.	A roundabout at this intersection is necessary for each of the roundabout alternatives to maintain connectivity for all approaches to this intersection.
	15*, 32*	Concerned that the double roundabout will confuse people.	Public outreach concerning the use of the roundabout may be considered.
	26*	Requests a right-turn lane on east Johnson Ferry Road turning north and a left-turn signal on Glenridge to Aberdeen Forest.	Currently, a joint use through/right turn lane is present on Johnson Ferry for right turning traffic to Roswell Road north. Will consider a dedicated right turn lane at this location. Traffic operational improvements will be evaluated at the Glenridge Drive intersection with Aberdeen Forest during project development.

REVIEWING OFFICE	COMMENT #	NATURE OF COMMENT	PROPOSED RESPONSE
Environment			

Summary of Comments
STP00-9252-00(007), PI No. 751420, Fulton County
October 11, 2010
Page 8

Attached is the PIOH Sign-In Sheet, a complete transcript of the comments received during the comment period and a copy of the public information open house handout for review.

If you have any questions about the comments or proposed responses, please either email or call Jennifer Mathis (JJG/Jacobs) at (704) 527-4106 or jennifer.mathis@jacobs.com.

Attachments



October 19, 2010

Ms. Barbara Giles
307 Greyfield Lane
Sandy Springs, GA 30350

Dear Ms. Giles,

Thank you for attending the Public Information Open House (PIOH) for the Johnson Ferry Road and Glenridge Drive Corridor Improvements (GDOT Project Number: STP00-9252-00(007), Fulton County. P.I. No. 751420, COSS Proj. No. T-0011) held on June 21, 2010 at the Benson Center.

As a brief reminder, the project proposes to do the following:

- Improve traffic congestion and safety, and
- Improve vehicular and pedestrian operations.

Approximately 64 people attended the meeting. Of the 28 comments received at the meeting, 15 were FOR the project, three were UNCOMMITTED, and 10 were CONDITIONAL.

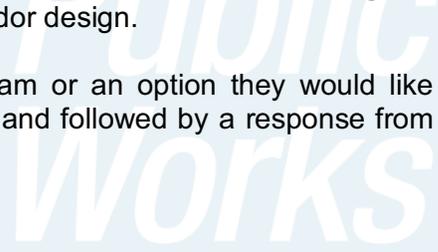
Within the 10-day comment period following the meeting, two additional written comments, one letter, and five e-mail comments were received. Of these eight comments, five were FOR the project, one was OPPOSED, and two gave CONDITIONAL support of the project. Therefore, a total of 36 comments were received.

Four concept alternatives were shown at the PIOH: Alternatives 1A, 1B, 2A and 2B. The table below provides the number of people who supported each concept alternative.

Alternative	Number of People who Support the Alternative
Alternative 1A	3
Alternative 1B	8
Alternative 2A	0
Alternative 2B	17

The main concerns received related to improving traffic flow and were positive for providing two-way traffic flow along Johnson Ferry Road and Mt. Vernon Highway. Some commenters felt that Johnson Ferry Road and Mt. Vernon Highway must be widened to four lanes for traffic to improve. The roundabout concepts received mixed comments. Some commenters felt the traffic circles would slow traffic too much and confuse drivers, while others like the safety and traffic calming provided by the roundabouts. Several other comments expressed concern that pedestrian facilities had not been given adequate consideration and should be the focus of the proposed corridor design.

A few comments received posed direct questions to the project team or an option they would like considered. As such, those specific comments are described below and followed by a response from the City:



- One commenter requested that bike lanes be included in the project design along Johnson Ferry Road to access Abernathy Park and supports better traffic flow at intersections instead of widening.

Bike lanes are not proposed as part of the roadway design since this area of Johnson Ferry Road is not within the GDOT Bike Plan corridor. To improve traffic flow at intersections, the addition of auxiliary turn lanes is necessary to reduce delays. Also, to improve traffic flow within the triangle area, two way operations are proposed on the segments between Roswell Road and Boylston Road along with the addition of the Double Roundabout configuration. In predominate residential areas of the corridor, widening is not proposed.

- One commenter requested that one of the two roundabouts shown in Alternative 2B be removed and that a left-hand turn movement be added to Hildebrand going south of Roswell Rd.

Both roundabouts are necessary to maintain connectivity with all existing traffic flow movements and achieving acceptable Levels of Service (LOS). Hildebrand Drive is outside the project corridor under Alternative 2B.

- One commenter supported the removal of the triangle which houses Eddie's Auto, a mattress store, and a rug store.

The proposed project alternatives meet the project's purpose and need while maintaining most of the properties within the triangle area.

- One commenter requested a stop sign at the Johnson Ferry Road/Glenridge Drive intersection.

Traffic control improvements will be evaluated at this intersection during project development.

- Two commenters requested that Johnson Ferry Road be widened to four-lanes.

A four-lane option for Johnson Ferry Road was evaluated and considered as part of the concept development process for the corridor. It was determined that streetscape improvements within predominate residential areas of the corridor met the purpose and need of the project and is consistent with the Comprehensive Transportation Plan developed by the City of Sandy Springs.

- One commenter expressed concern with placing a roundabout at the Mt Vernon Towers intersection and requested "speed tables" between Mt. Vernon High School and Vernon Woods Drive and in front of school entrances and the library.

The placement of a roundabout at Mt. Vernon Towers is necessary for traffic at this intersection under each of the roundabout alternatives. Placing a signal at this intersection in lieu of the roundabout under the double roundabout concept is not recommended as it will cause traffic flow disruption at the west roundabout of Johnson Ferry Road and Boylston Road. It appears that the speed tables requested are outside of the project corridor.

- Three commenters requested that the design focus on pedestrians and not cars.

The alternatives have been developed to improve traffic and pedestrian operations within the corridor. Additional pedestrian operation improvements are under consideration as part of the concept development.

- One commenter stated that the only improvements necessary were to convert both Johnson Ferry Road and Mt. Vernon Highway to two-way streets.

Johnson Ferry Road and Mt. Vernon Highway are proposed as two-way operations under each alternative. Making these two segments two-way, only as a start, is not feasible as the improvements will “snow ball” away from the area noted and improvements will be necessary to provide connectivity to this area.

- One commenter requested that Mt. Vernon Highway be widened to four lanes from SR 400 to Roswell Road.

Most of this area is located outside of the project corridor and is not considered a part of the proposed improvements.

- One commenter expressed concern about the design at the Sandy Springs Circle intersection and supports the addition of bike lanes, sidewalks and landscaping within the corridor.

The extended right-turn lane on Sandy Springs Circle is necessary based on the projected traffic for this movement. The extended through-lane on Johnson Ferry Road is necessary based on the projected traffic for this movement. This through-lane is reduced 500 feet west of the intersection to allow for traffic to merge from two-lanes to one-lane west of the intersection. It is projected that this lane extension will not affect the right-turn movement from Sandy Springs Circle. Bike lanes are not proposed as this roadway segment is not within the GDOT Bike Plan corridor. Sidewalks will be added as part of the corridor improvements and landscaping will be considered.

- One commenter expressed concern about the width of the Johnson Ferry Road and Roswell Road intersection and the speed of traffic in this area. A suggestion was made to place trees in the median to encourage drivers to slow down and provide a refuge for pedestrians.

The lane configuration proposed at the Johnson Ferry Road and Roswell Road intersection is necessary for the traffic projected at the intersection. Installing a median for pedestrian refuge may be considered for additional pedestrian safety at crossings. Placing trees in the median is not encouraged as the trees may restrict pedestrians from driver sight lines. Landscaping on shoulders may be considered.

- One commenter requested a median between Sandy Springs Circle and the Bruster's establishment on Johnson Ferry Road as well as mid-block crossings or a pedestrian island in the Wright Road and Bonnie Lane area.

A raised median and mid-block crossings between Sandy Springs Circle and Roswell Road will be considered. Pedestrian improvements at the Wright Road/Bonnie Lane intersection with Johnson Ferry Road will also be considered.

- One commenter recommended reworking Alternative 2B to allow access to Boylston Road and combine the two proposed roundabouts into one large roundabout.

The double roundabout alternative maintains connectivity for each of the six independent traffic connections in this area while minimizing the cost of the project. Combining to one large roundabout and moving the Mt. Vernon Towers connection may still provide the same connectivity, but will require additional right-of-way to build the larger roundabout, may result in additional displacements of businesses and residential properties and increase the cost of construction.

- One commenter expressed concern about the Mt. Vernon Towers intersection and suggested special training for older residents on how to use traffic circles.

Public outreach to Mt. Vernon Towers residents concerning the use of the roundabouts will be considered.

- One commenter expressed unhappiness with the signal timing along Roswell Road.

The timing of signals along Roswell Road is predominately outside the project corridor and beyond the scope of this project.

- One commenter believes traffic circles/roundabouts slow traffic considerably.

The traffic analysis performed for the proposed project shows that the double roundabout concept is projected to operate at a Level of Service "A" (i.e. free flow conditions) based on current traffic projections.

- One commenter expressed concern about placing a roundabout at the library intersection.

A roundabout at the library intersection is necessary for each of the roundabout alternatives to maintain connectivity for all approaches at this intersection.

- Two commenters expressed concern that the double roundabout will confuse people.

Public outreach concerning the use of the roundabout may be considered.

- One commenter requested a right-turn lane on east Johnson Ferry Road turning north and a left-turn signal on Glenridge Drive to Aberdeen Forest.

Currently, a joint use through/right-turn lane is present on Johnson Ferry Road for right turning traffic to Roswell Road north. The design team will investigate and consider a dedicated right-turn lane at this location. Traffic operational improvements will be evaluated at the Glenridge Drive intersection with Aberdeen Forest during project development.

Project T-0011, Open House
Response to Citizen Comments
April 15, 2011
Page 5 of 5

All comments have been made a part of the project record.

Again, thank you for attending this public information open house and for giving us your comments. If you should have any questions or need additional information, please contact the Project Manager Greg Ramsey, P.E. at (770) 730-5600.

Sincerely,

Thomas Black
Public Works Director



RECEIVED

NOV 15 2007

OFFICE OF
THE CITY CLERK

Department of Transportation

State of Georgia

#2 Capitol Square, S.W.

Atlanta, Georgia 30334-1002

HAROLD E. LINNENKOHL
COMMISSIONER
(404) 656-5206

GERALD M. ROSS, P.E.
CHIEF ENGINEER
(404) 656-5277

BUDDY GRATTON, P.E.
DEPUTY COMMISSIONER
(404) 656-5212

EARL L. MAHFUZ
TREASURER
(404) 656-5224

November 13, 2007

The Honorable Eva Galambos, Mayor
City of Sandy Springs
7840 Roswell Road, Building 500
Sandy Springs, Georgia 30350

Dear Mayor Galambos:

I am returning for your files an executed agreement between the Georgia Department of Transportation and the City of Sandy Springs for the following project:

PROJECT#: STP00-9252-00(007) Fulton County, P.I. #751420

We look forward to working with you on the successful completion of the joint project. Should you have any questions, please contact the Project Manager Mike Lobdell at (770)986-1258.

Sincerely,

A handwritten signature in cursive script that reads "James T. Simpson".

James T. Simpson,
Financial Management Administrator

JTS:rm
Enclosure

c: Bob Rogers
Bryant Poole - District 7
Jeff Baker - Utilities

**AGREEMENT
BETWEEN
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
AND
THE CITY OF SANDY SPRINGS
FOR
TRANSPORTATION FACILITY IMPROVEMENTS**

This Framework Agreement is made and entered into this 23 day of October, 2007, by and between the DEPARTMENT OF TRANSPORTATION, an agency of the State of Georgia, hereinafter called the "DEPARTMENT", and the **CITY OF SANDY SPRINGS**, acting by and through its Mayor and/or Board of Commissioners, hereinafter called the "LOCAL GOVERNMENT".

WHEREAS, the LOCAL GOVERNMENT has represented to the DEPARTMENT a desire to improve the transportation facility described in Attachment A, attached and incorporated herein by reference and hereinafter referred to as the "PROJECT"; and

WHEREAS, the LOCAL GOVERNMENT has represented to the DEPARTMENT a desire to participate in certain activities including the funding of certain portions of the PROJECT and the DEPARTMENT has relied upon such representations; and

WHEREAS, the DEPARTMENT has expressed a willingness to participate in certain activities of the PROJECT as set forth in this Agreement; and

WHEREAS, the Constitution authorizes intergovernmental agreements whereby state and local entities may contract with one another “for joint services, for the provision of services, or for the joint or separate use of facilities or equipment; but such contracts must deal with activities, services or facilities which the parties are authorized by law to undertake or provide.” Ga. Const. Art. IX, §III, ¶I(a).

NOW THEREFORE, in consideration of the mutual promises made and of the benefits to flow from one to the other, the DEPARTMENT and the LOCAL GOVERNMENT hereby agree each with the other as follows:

1. The LOCAL GOVERNMENT shall contribute to the PROJECT by funding all or certain portions of the PROJECT costs for the preconstruction engineering (design), utility relocations, right of way acquisitions and construction, as specified in Attachment A, attached hereto and incorporated herein by reference. Expenditures incurred by the LOCAL GOVERNMENT and eligible for reimbursement by the DEPARTMENT shall not be considered reimbursible to the LOCAL GOVERNMENT until the LOCAL GOVERNMENT receives a written notice to proceed for each phase of the PROJECT.

2. The DEPARTMENT shall contribute to the PROJECT by funding all or certain portions of the PROJECT costs for the preconstruction engineering (design) activities, right of way acquisitions or construction as specified in Attachment A.

3. It is understood and agreed by the DEPARTMENT and the LOCAL GOVERNMENT that the funding portion as identified in Attachment "A" of this Agreement only applies to the Preconstruction Engineering Activities.

4. The LOCAL GOVERNMENT shall be responsible for all costs for the continual maintenance and the continual operations of any and all sidewalks and the grass strip between the curb and gutter and the sidewalk within the PROJECT limits.

5. Both the LOCAL GOVERNMENT and the DEPARTMENT hereby acknowledge that Time is of the Essence. It is agreed that both parties shall adhere to the schedule of activities currently established in the approved Transportation Improvement Program/State Transportation Improvement Program (TIP/STIP). Furthermore, all parties shall adhere to the detailed project schedule as approved by the DEPARTMENT, attached as Attachment B and incorporated herein by reference. In the completion of respective commitments contained herein, if a change in the schedule is needed, the LOCAL GOVERNMENT shall notify the DEPARTMENT in writing of the proposed schedule change and the DEPARTMENT shall acknowledge the change through written response letter; provided that the DEPARTMENT shall have final authority for approving any change.

If, for any reason, the LOCAL GOVERNMENT does not produce acceptable deliverables in accordance with the approved schedule, the DEPARTMENT reserves the right to delay the project's implementation until funds can be re-identified for construction or right of way, as applicable.

6. The LOCAL GOVERNMENT shall certify that they have read and understands the regulations for "CERTIFICATION OF COMPLIANCES WITH FEDERAL PROCUREMENT REQUIREMENTS, STATE AUDIT REQUIREMENTS, AND FEDERAL AUDIT REQUIREMENTS" and will comply in full with said provisions.

7. The LOCAL GOVERNMENT shall accomplish all of the design activities for the PROJECT. The design activities shall be accomplished in accordance with the DEPARTMENT's Plan Development Process, the applicable guidelines of the American Association of State Highway and Transportation Officials, hereinafter referred to as "AASHTO", the DEPARTMENT'S Standard Specifications Construction of Transportation Systems, the DEPARTMENT'S Plan Presentation Guide, PROJECT schedules, and applicable guidelines of the DEPARTMENT. The LOCAL GOVERNMENT responsibility for design shall include, but is not limited to the following items:

a. Prepare the PROJECT concept report in accordance with the format used by the DEPARTMENT. The concept for the PROJECT shall be developed to accommodate the future traffic volumes as generated by the LOCAL GOVERNMENT as provided for in paragraph 7b and approved by the

DEPARTMENT. The concept report shall be approved by the DEPARTMENT prior to the LOCAL GOVERNMENT beginning further development of the PROJECT plans. It is recognized by the parties that the approved concept may be modified by the LOCAL GOVERNMENT as required by the DEPARTMENT and re-approved by the DEPARTMENT during the course of design due to public input, environmental requirements, or right of way considerations.

b. Develop the PROJECT base year (year facility is expected to be open to traffic) and design year (base year plus 20 years) traffic volumes. This shall include average daily traffic (ADT) and morning (am) and evening (pm) peak hour volumes. The traffic shall show all through and turning movement volumes at intersections for the ADT and peak hour volumes and shall indicate the percentage of trucks expected on the facility.

c. Validate (check and update) the approved PROJECT concept and prepare a PROJECT Design Book for approval by the DEPARTMENT prior to the beginning of preliminary plans.

d. Prepare environmental studies, documentation, and reports for the PROJECT that show the PROJECT is in compliance with the provisions of the National Environmental Protection Act and Georgia Environmental Protection Act, as appropriate to the PROJECT funding. This shall include any and all archaeological, historical, ecological, air, noise, underground storage tanks (UST), and hazardous waste site studies required as well as any environmental reevaluations required. The LOCAL GOVERNMENT shall

submit to the DEPARTMENT all environmental documents and reports for review and approval by the DEPARTMENT and the FHWA.

e. Prepare all public hearing and public information displays and conduct all required public hearings and public information meetings in accordance with DEPARTMENT practice.

f. Perform all surveys, mapping, soil investigation studies and pavement evaluations needed for design of the PROJECT.

g. Perform all work required to obtain project permits, including, but not limited to, US Army Corps of Engineers 404 and Federal Emergency Management Agency (FEMA) approvals. These efforts shall be coordinated with the DEPARTMENT.

h. Prepare the PROJECT drainage design including erosion control plans and the development of the hydraulic studies for the Federal Emergency Management Agency Floodways and acquisition of all necessary permits associated with the drainage design.

i. Prepare traffic studies, preliminary construction plans including a cost estimate for the Preliminary Field Plan Review, preliminary and final utility plans, preliminary and final right of way plans, staking of the required right of way, and final construction plans including a cost estimate for the Final Field Plan Review, erosion control plans, lighting plans, traffic handling plans, and construction sequence plans and specifications including special provisions for the PROJECT.

j. Provide certification, by a Georgia Registered Professional Engineer, that the construction plans have been prepared under the guidance of the

professional engineer and are in accordance with AASHTO and DEPARTMENT guidelines.

k. Failure of the LOCAL GOVERNMENT to follow the DEPARTMENT's Plan Development Process will jeopardize the use of Federal funds in some or all of the categories outlined in this Agreement, and it shall be the responsibility of the LOCAL GOVERNMENT to make up the loss of that funding.

8. All Primary Consultant firms hired by the LOCAL GOVERNMENT to provide services on the PROJECT shall be prequalified with the DEPARTMENT in the appropriate area-classes. The DEPARTMENT shall, on request, furnish the LOCAL GOVERNMENT with a list of prequalified consultant firms in the appropriate area-classes.

9. The PROJECT construction and right of way plans shall be prepared in English units.

10. All drafting and design work performed on the project shall be done utilizing Microstation and CAiCE software respectively, and shall be organized as per the Department's guidelines on electronic file management.

11. The DEPARTMENT shall review and has approval authority for all aspects of the PROJECT provided however this review and approval does not relieve the LOCAL GOVERNMENT of its responsibilities under the terms of this

agreement. The DEPARTMENT will work with the FHWA to obtain all needed approvals as deemed necessary with information furnished by the LOCAL GOVERNMENT.

12. The LOCAL GOVERNMENT shall be responsible for the design of all bridge(s) and preparation of any required hydraulic and hydrological studies within the limits of this PROJECT in accordance with the DEPARTMENT'S policies and guidelines. The LOCAL GOVERNMENT shall perform all necessary survey efforts in order to complete the design of the bridge(s) and prepare any required hydraulic and hydrological studies. The final bridge plans shall be incorporated into this PROJECT as a part of this Agreement.

13. The LOCAL GOVERNMENT shall follow the DEPARTMENT'S procedures for identification of existing and proposed utility facilities on the PROJECT. These procedures, in part, require all requests for existing, proposed, or relocated facilities to flow through the DEPARTMENT'S Project Liaison and the District Utilities Engineer.

14. The LOCAL GOVERNMENT shall address all railroad concerns, comments, and requirements to the satisfaction of the DEPARTMENT.

15. If the right of way phase is 100% local funding with no Federal or State reimbursement, upon the DEPARTMENT's approval of the project right of way plans, verification that the approved environmental document is current, which shall

mean that the approval of the environmental document occurred within six (6) months of the approval notice by the DEPARTMENT's for project right of way plans, and delivery of a written notice to proceed, the LOCAL GOVERNMENT may proceed with the acquisition of the necessary right of way for the PROJECT. If the right of way phase involves federal and/or state funding reimbursement, upon the Department's approval of the project right of way plans, the Local Government may proceed with all pre-acquisition right of way activities, however, property negotiation and acquisition cannot commence until right of way funding authorization is approved. Right of way acquisition shall be in accordance with the law and the rules and regulations of the FHWA including, but not limited to, Title 23, United States Code; 23 CFR 710, et. Seq., and 49 CFR Part 24 and the rules and regulations of the DEPARTMENT and in accordance with the "Contract for the Acquisition of Right of Way" to be prepared by the Office of Right of Way and executed between the LOCAL GOVERNMENT and the DEPARTMENT prior to the commencement of any right of way activities. Failure of the LOCAL GOVERNMENT to adhere to the provisions and requirements specified in the acquisition contract may result in the loss of Federal funding for the PROJECT and it will be the responsibility of the LOCAL GOVERNMENT to make up the loss of that funding. In the event the LOCAL GOVERNMENT is to receive reimbursement of all or part of the acquisition funding, reimbursable right of way costs are to include land and improvement costs, property damage values, relocation assistance expenses and contracted property management costs. Non reimbursable costs include administrative expenses such as appraisal, consultant, attorney fees and any in-house property management or staff expenses. All required right of way shall be obtained and cleared of

obstructions, including underground storage tanks, prior to advertising the PROJECT for bids. The LOCAL GOVERNMENT shall further be responsible for making all revisions to the approved right of way plans, as deemed necessary by the DEPARTMENT, for whatever reason, as needed to purchase the required right of way.

16. Upon completion and approval of the PROJECT plans, certification that all needed rights of way have been obtained and cleared of obstructions, and certification that all needed permits for the PROJECT have been obtained by the LOCAL GOVERNMENT the PROJECT shall be let for construction. The DEPARTMENT, unless shown otherwise on Attachment A, shall be solely responsible for securing and awarding the construction contract for the PROJECT.

17. The LOCAL GOVERNMENT shall review and make recommendations concerning all shop drawings prior to submission to the DEPARTMENT. The DEPARTMENT shall have final authority concerning all shop drawings.

18. The LOCAL GOVERNMENT agrees that all reports, plans, drawings, studies, specifications, estimates, maps, computations, computer diskettes and printouts, and any other data prepared under the terms of this Agreement shall become the property of the DEPARTMENT if required. This data shall be organized, indexed, bound, and delivered to the DEPARTMENT no later than the advertisement of the PROJECT for letting. The DEPARTMENT shall have the right to use this

material without restriction or limitation and without compensation to the LOCAL GOVERNMENT.

19. The LOCAL GOVERNMENT shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, and other services furnished by or on behalf of the LOCAL GOVERNMENT pursuant to this Agreement. The LOCAL GOVERNMENT shall correct or revise, or cause to be corrected or revised, any errors or deficiencies in the designs, drawings, specifications, and other services furnished for this PROJECT. Failure by the LOCAL GOVERNMENT to address the errors or deficiencies within 30 days shall cause the LOCAL GOVERNMENT to assume all responsibility for construction delays caused by the errors and deficiencies. All revisions shall be coordinated with the DEPARTMENT prior to issuance. The LOCAL GOVERNMENT shall also be responsible for any claim, damage, loss or expense, to the extent allowed by law that is attributable to errors, omissions, or negligent acts related to the designs, drawings, specifications, and other services furnished by or on behalf of the LOCAL GOVERNMENT pursuant to this Agreement.

This Agreement is made and entered into in FULTON COUNTY, GEORGIA, and shall be governed and construed under the laws of the State of Georgia.

The covenants herein contained shall, except as otherwise provided, accrue to the benefit of and be binding upon the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the DEPARTMENT and the LOCAL GOVERNMENT have caused these presents to be executed under seal by their duly authorized representatives.

RECOMMENDED:

THE CITY OF SANDY SPRINGS

Bryant Poole
BRYANT POOLE, DISTRICT
ENGINEER

BY: [Signature]
Name Theris D. Dulio
Title Mayor Pro Tem

[Signature]
TODD LONG, PRECONSTRUCTION
ENGINEER

Signed, sealed and delivered this 23
day of October, 2007 in
the presence of:

[Signature]
Chief Engineer

[Signature]
Witness

DEPARTMENT OF
TRANSPORTATION

[Signature]
Notary Public **Notary Public**
DeKalb County, Georgia
My Commission Expires June 24, 2011

BY: [Signature]
Commissioner

This Agreement approved on the
16 day of October, 2007.

ATTEST:
[Signature]
Treasurer

[Signature]
City/County Clerk (as appropriate)

REVIEWED AS TO LEGAL FORM:
[Signature]
Office of Legal Services

FEIN: 20-3767758

THE CITY OF SANDY SPRINGS

ATTACHMENT "A"
PROJECT NUMBER: STP00-9252-00(007) – SANDY SPRINGS

Project (PI#, Project # ,Description)	Work Type	Preliminary Engineering		Right of Way		Construction		Utilities	
		Funding	Design	Funding	Acquisition	Funding	Letting	Relocation Costs	
PI# 751420 STP00-9252-00(007) JOHNSON FERRY/GLENRIDGE FM ABERNATHY-HAMMOND.INCL. 1-WAY PAIR	WIDENING	\$1,184,800 FEDERAL \$296,200 STATE	LOCAL	\$700,000 LOCAL	LOCAL	\$7,900,000 FED \$1,975,000 STATE	GDOT	LOCAL	LOCAL

Note: 1. Maximum allowable GDOT reimbursible amount may be shown above in lieu of percentages when applicable. Local Government will only be reimbursed the percentage of the accrued invoiced amounts up to but not to exceed the maximum amount indicated.
 2. Cash participation limits may be shown above in lieu of percentages when applicable.

ATTACHMENT "B" 751420 – SANDY SPRINGS

Proposed Project Schedule

<p>Concept and Environmental Phase</p>		<p>06 / 08 Month/Year (Approve Concept and Env. Documents)</p>
<p>Preliminary Plan Phase</p>		<p>11 / 09 Month/Year (Authorize Right of Way)</p>
<p>Right of Way Phase</p>		<p>07 / 11 Month/Year (Authorize Construction)</p>

Deadlines for Responsible Parties **Execute Agreement**

Annual Reporting Requirements

The Local Government shall provide a written status report to the Department's Project Manager with the actual phase completion date(s) and the percent complete/proposed completion date of incomplete phases. The written status report shall be received by the Department no later than the first day of February of every calendar year until all phases have been completed.

Training Certification Requirement

The Local Government shall provide a written certification that all appropriate staff (employees and consultants) involved in the Project have attended or are scheduled to attend the Department's Plan Development Process Training Course. The written certification shall be received by the Department no later than the first day of February of every calendar year until all phases have been completed.

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: STP00-9252-00(007) Fulton **OFFICE:** Engineering Services
P.I. No.: 751420-
Johnson Ferry Rd/Glenridge Drive **DATE:** June 12, 2012
From Abernathy-Hammond/Including 1-Way Pair

FROM: Lisa L. Myers, State Project Review Engineer *llm*

TO: Bobby K. Hilliard, PE, State Program Delivery Engineer
Attn.: Albert Shelby

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

The VE Study for the above project was held September 12-15, 2011. Revised responses were received on June 11, 2012. Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. The Project Manager shall incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project. Please note, if the implementation of a VE recommendation requires a Design Exception or Design Variance, it (DE or DV) must be requested separately.

ALT #	Description	Potential Savings/ LCC	Implement	Comments
A-2	Combine the dual roundabouts into a single large oval roundabout and shift the eastern roundabout 75 feet to the west.	Proposed = \$136,000 Actual = \$124,000	Yes, with modifications	Based on the Roundabout peer review the entire recommendation will not be implemented, because it is a necessity to maintain the interior circulation. However, the design team agreed to shift the eastern roundabout to the west to reduce the right of way impacts to an adjacent parking lot.
A-4	Shift Johnson Ferry Road alignment south to avoid taking Right of Way from the strip mall on the north side.	\$351,000	Yes	This will be done.
A-8	Construct a 12-foot center turn lane in lieu of a 14-foot center turn lane on Johnson Ferry Road to match the width of the other center turn lanes.	\$156,000	Yes	This will be done.
A-10	Eliminate the Roswell Road NB outside lane north of Johnson Ferry Road.	\$1,000,000	Yes	This will be done.

A-11	Acquire all the Right of Way for the proposed 6-lane Roswell Road section and the intersection approaches from the west side of the existing roadway.	\$725,000	Yes	This will be done.
B-1	Eliminate the SB Roswell Road left turn at Mount Vernon Highway and use the lane for additional NB left turn storage at Johnson Ferry Road.	\$0	No	While the SB left turn lane was not originally included in the concept, the city of Sandy Springs (the local sponsor) has requested that it be added to provide necessary access to businesses in the SE quadrant of this intersection.
B-2	Eliminate the SB Roswell Road left turn lane at Mount Vernon Highway and make Roswell Road 5-lanes wide with a single NB left turn lane at Johnson Ferry Road.	\$1,196,000	No	Removing the second NB left turn lane at Roswell Road and Johnson Ferry Road will not address the demand which causes the northbound traffic to back up. The dual NB left turns will eliminate the current condition which has projected traffic volumes of 430 VPH for this left turn movement.
B-2.1	Eliminate the Roswell Road SB and NB left turn lanes at Mount Vernon Highway and make Roswell Road 5 lanes wide with an extended single NB left turn lane at Johnson Ferry Road.	\$1,176,000	No	Removing the second NB left turn lane at Roswell Road and Johnson Ferry Road will not address the demand which causes the northbound traffic to back up. The dual NB left turns will eliminate the current condition which has projected traffic volumes of 430 VPH for this left turn movement.
I-6	Construct a six foot sidewalk with a three foot grass area in lieu of a nine foot sidewalk with a three foot grass area.	\$731,000	No	The nine foot sidewalk width adheres to the constraints of the current City of Sandy Springs Main Street and Suburban Overlay District Standards. This is the only section of Johnson Ferry Road which requires the wider section for pedestrians between Sandy Springs Circle and Roswell Road.
I-7	Construct a two-foot wide brick area in-lieu-of a 3-foot wide grass area between the sidewalk and the curb and gutter.	\$202,000	No	The proposed nine-foot shoulder with a six foot sidewalk and three foot grass strip adheres to the constraints of the current City of Sandy Springs Main Street and Suburban Overlay District Standards for this network of roads.

The Office of Engineering Services concurs with the Project Manager's responses.

Approved:  Date: 6/12/12
Gerald M. Ross, PE, Chief Engineer

LLM/MJS

Attachments

c: Russell McMurry
Bobby Hilliard/Stanley Hill/Albert Shelby
Cindy Treadway
Melissa Harper
Lee Upkins
Ken Werho/Nabil Raad
Matt Sanders