

*Transportation Analysis*

**Summit Jodeco  
DRI# 1931  
Henry County, Georgia**

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## EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts associated with the proposed Summit Jodeco development, a proposed approximate 163.2-acre mixed-use planned development located in Henry County. The site is located in the southwest quadrant of the I-75 at Jodeco Road Interchange, and is bounded by Jodeco Road to the north, Mt. Olive Road to the south, I-75 to the east, and Chambers Road to the west. The proposed mixed-use development is expected to consist of approximately 1,100,000 SF of commercial space, 200,000 SF of office space, 236 multi-family residential units, and 400 hotel units.

The project has applied for Concept Plan Review with Henry County (a necessary prelude to the formal rezoning application for the property). The mixed-use planned development also exceeds 400,000 gross square feet (SF), therefore the proposed development is considered a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and Atlanta Regional Commission (ARC) review. This document is being submitted under GRTA's non-expedited review criteria.

The current zoning is RA (Residential Agricultural) and C-2 (General Commercial). The site is currently comprised of one single-family residential unit, and wooded, vacant property. The proposed zoning is PD (Planned Development). The proposed Henry County 2030 Comprehensive Plan identifies the project site as a Suburban Employment Activity Center. Henry County indicated the current Future Lane Use Plan indicates the site as Commercial and Services and Low Density Residential. The ARC Unified Growth Policy Map identifies the project site as "Mega Corridors". A Mega Corridor is described as an intensely developed radial corridor in the region.

The development is scheduled to be completed in phases. The first phase, consisting of a portion of the commercial space, is expected to open in 2011 with full buildout of the development expected by 2017. Capacity analyses for weekday AM peak, weekday PM peak, and SAT. peak hours were performed for the Existing 2008 Conditions, Projected 2017 No-Build Conditions, and Projected 2017 Build Conditions at the following intersections:

Summit Jodeco DRI Study Intersections			
Intersection		Intersection	
1	Hudson Bridge Road at Flippen Road	15	Jodeco Road at SR 42/ US 23
2	Jodeco Road at Hudson Bridge Rd/ Jodeco Station Dr	16	SR 42/ US 23 at Campground Road
3	Jodeco Road at Flippen Road	17	Jonesboro Road at Chambers Road*
4	Jodeco Road at Mt Olive Road	18	Jonesboro Road at Mt Olive Road*
5	Jodeco Road at Chambers Road*	19	Jonesboro Road at Mill Road*
6	Jodeco Road at New Connector*	20	Jonesboro Road at I-75 Southbound Ramp*
7	Jodeco Road at Mt Olive Road (East)*	21	Jonesboro Road at I-75 Northbound Ramp*
8	Jodeco Road at I-75 Southbound Ramp*	22	Jonesboro Road at Dailey Mill Road
9	Jodeco Road at I-75 Northbound Ramp*	23	Jonesboro Road at McDonough Parkway
10	Jodeco Road at Patrick Henry Parkway*	24	Chambers Road at Church Driveway*
11	Jodeco Road at Tunis Drive*	25	Chambers Road at Mt Olive Road*
12	Jodeco Road at Peach Drive*	26	Chambers Road at McCullough Road*
13	Jodeco Road at Oak Grove Road*	27	Pond Drive at Mt Olive Road*
14	Jodeco Road at Dailey Mill Road*	28	Mt Olive Road at New Connector *

\* Includes a Saturday Analysis

Each of the above listed intersections was analyzed for the Existing 2008 Conditions, the 2017 No-Build Conditions, and the 2017 Build Conditions, as appropriate. Additionally, the proposed project driveways were analyzed for the 2017 Build Conditions. The Projected 2017 No-Build Conditions represent the existing traffic volumes grown at 4% per year for the first three years and 2.5% per year for the following six years along all roadway links. The Projected 2017 Build Conditions adds the project trips associated with the Summit Jodeco development to the Projected 2017 No-Build Conditions.

For the Existing 2008 Conditions analysis, nine intersections were found to operate below the GRTA Level of Service (LOS) standard. Recommended improvements were made to provide GRTA's LOS at these intersections.

For the 2017 No-Build analysis, 19 intersections are projected to operate below the GRTA LOS standard. The 2017 No-Build conditions include background traffic growth, but exclude the Summit Jodeco DRI project traffic. Recommended improvements were made to provide GRTA's LOS at these intersections.

For the 2017 Build analysis, 21 intersections are projected to operate below the GRTA LOS standard. The 2017 Build conditions include background traffic growth and include the Summit Jodeco DRI project traffic. Recommended improvements were made to provide GRTA's LOS at these intersections.

The recommended improvements are listed below by study intersection and each improvement is identified as either an Existing, No-Build, or Build improvement (these improvements are also illustrated in Figures 8A-8C):

#### Hudson Bridge Road at Flippen Road (Int. #1)

- No-Build - Widen Hudson Bridge Road from 2 to 4 lanes in the vicinity of this intersection (provide an additional thru lane along the eastbound and westbound approach).
- No-Build - Construct a northbound right-turn lane along Flippen Road.

Note: ARC HE 110 (GDOT #0006927) is projected to widen Hudson Bridge Road from two to four lanes for approximately 1.1 miles from Jodeco Road to I-75 South and listed as having a completion date of 2010.

#### Jodeco Road at Hudson Bridge Road (Int. #2)

- Existing – Install a traffic signal.
- No-Build - Construct a westbound receiving lane on the east leg of the intersection so that the southbound right-turn lane can operate under free-flow conditions.
- No-Build - Construct an additional eastbound thru lane along Jodeco Road. Note: This improvement will require an additional eastbound receiving lane along Jodeco Road.
- No-Build - Construct an additional eastbound left-turn lane, creating dual left-turn lanes along Jodeco Road. Note: This improvement will require an additional northbound receiving lane along Hudson Bridge Road.

Note: ARC HE 110 (GDOT #0006927) is projected to widen Hudson Bridge Road from two to four lanes for approximately 1.1 miles from Jodeco Road to I-75 South and listed as having a completion date of 2010.

- No-Build - Construct a westbound right-turn lane along Jodeco Road.

#### Jodeco Road at Flippen Road (Int. #3)

- No-Build - Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection (provide an additional thru lane along the eastbound and westbound approach).
- No-Build - Construct an additional southbound left-turn lane, creating dual left-turn lanes along Flippen Road.

Jodeco Road at Mt. Olive Road (Int. #4)

- Existing - Install a traffic signal.
- Existing - Construct a northbound right-turn lane along Mt. Olive Road.
- Existing - Construct an eastbound right-turn lane along Jodeco Road.
- Existing - Construct a westbound left-turn lane along Jodeco

Jodeco Road at Chambers Road (Int. #5)

- Existing - install a traffic signal.
- Existing - Construct a northbound right-turn lane along Chambers Road.
- Existing - Construct an eastbound left-turn lane along Jodeco Road.
- Existing - Construct a westbound left-turn lane along Jodeco Road.
- Build - Construct an additional eastbound thru-lane along Jodeco Road.

Jodeco Road at New Connector (Int. #6)

- Build - Construct the northbound approach along the New Connector forming dual left-turn lanes and dual right-turn lanes.
- Build - Construct an additional eastbound and westbound thru-lane along Jodeco Road.
- Build - Construct an eastbound right-turn lane along Jodeco Road.
- Build - Construct two westbound left-turn lanes along Jodeco Road to form dual left-turn lanes.  
Note: The New Connector is proposed to have two southbound receiving lanes.

Jodeco Road at Mt. Olive Road (Int. #7)

- Build - Mt. Olive Road will be closed and traffic rerouted to the New Connector.

Jodeco Road at I-75 Southbound Ramp (Int. #8)

- Existing - Construct an eastbound right-turn lane along Jodeco Road.
- Existing - Construct a westbound left-turn lane along Jodeco Road.
- Existing - Construct a southbound right-turn lane along the I-75 Southbound ramp.

Note: The Existing analysis indicates a three-lane bridge over I-75 would accommodate the existing traffic. The additional center lane would provide a dedicated left-turn at each ramp.

- No-Build - Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection.

Note: The No-Build analysis indicates a six-lane bridge over I-75 would accommodate the projected traffic. The bridge would provide two westbound through lanes, one dedicated westbound left-turn lane (entire length of bridge), one dedicated eastbound left-turn lane (entire length of bridge), and two eastbound through lanes.

- Build - Construct an additional southbound lane forming an exclusive left-turn lane, a shared left-turn/thru/right-turn lane, and an exclusive right-turn lane along the I-75 Southbound Ramp.
- Build - Construct an additional eastbound thru lane, creating three thru lanes.

Note: The Build analysis indicates a six-lane bridge over I-75 would accommodate the projected traffic. The bridge would provide two westbound through lanes, one dedicated westbound left-

turn lane (half length of bridge), one dedicated eastbound left-turn lane (entire length of bridge) and a half length westbound left-turn lane, and two eastbound through lanes.

Note: ARC HE-AR-216 (GDOT #312160-) includes extensive interchange improvements including a ten-lane bridge and ramp improvements. The expected completion date is 2011.

#### Jodeco Road at I-75 Northbound Ramp (Int. #9)

- Existing - Construct an eastbound left-turn lane along Jodeco Road.
- Existing - Construct a northbound right-turn lane along the I-75 Northbound ramp.
- Note: The Existing analysis indicates a three-lane bridge over I-75 would accommodate the existing traffic. The additional center lane would provide a dedicated left-turn at each ramp.
- No-Build - Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection.

Note: The No-Build analysis indicates a six-lane bridge over I-75 would accommodate the projected traffic. The bridge would provide two westbound through lanes, one dedicated westbound left-turn lane (entire length of bridge), one dedicated eastbound left-turn lane (entire length of bridge), and two eastbound through lanes.

- Build - Construct an additional eastbound left-turn lane along Jodeco Road to form dual left-turn lanes.
- Build - Construct an additional northbound left turn lane forming an exclusive left-turn lane, a shared thru/left-turn lane, and an exclusive right-turn lane along the I-75 Northbound Ramp.

Note: The Build analysis indicates a six-lane bridge over I-75 would accommodate the projected traffic. The bridge would provide two westbound through lanes, one dedicated westbound left-turn lane (half length of bridge), one dedicated eastbound left-turn lane (entire length of bridge) and a half length westbound left-turn lane, and two eastbound through lanes.

Note: ARC HE-AR-216 (GDOT #312160-) includes extensive interchange improvements including a ten-lane bridge and ramp improvements. The expected completion date is 2011.

#### Jodeco Road at Patrick Henry Parkway (Int. #10)

- No-Build - Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection (provide an additional thru lane along the eastbound and westbound approach).
- No-Build - Construct a westbound left-turn lane along Jodeco Road.

Note: ARC HE-110 is projected to widen Jodeco Road from two to four lanes between Meadowbrook Drive to Peach Drive and an extension/realignment from Peach Drive to Campground Road for approximately 3.0 miles and listed as having a completion date of 2013.

#### Jodeco Road at Tunis Road (Int. #11)

- No-Build - Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection.

Note: ARC HE-110 is projected to widen Jodeco Road from two to four lanes between Meadowbrook Drive to Peach Drive and an extension/realignment from Peach Drive to Campground Road for approximately 3.0 miles and listed as having a completion date of 2013.

#### Jodeco Road at Peach Drive (Int. #12)

- No-Build - Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection.



Note: ARC HE-110 is projected to widen Jodeco Road from two to four lanes between Meadowbrook Drive to Peach Drive and an extension/realignment from Peach Drive to Campground Road for approximately 3.0 miles and listed as having a completion date of 2013.

- No-Build - Construct an eastbound left-turn lane along Jodeco Road.

#### Jodeco Road at Oak Grove Road (Int. #13)

- Existing - Install a traffic signal.
- Existing - Construct a northbound right-turn lane along Oak Grove Road.
- Existing - Construct an eastbound right-turn lane along Jodeco Road.
- Existing - Construct a westbound left-turn lane along Jodeco Road.
- No-Build – Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection.

Note: ARC HE-110 is projected to widen Jodeco Road from two to four lanes between Meadowbrook Drive to Peach Drive and an extension/realignment from Peach Drive to Campground Road for approximately 3.0 miles and listed as having a completion date of 2013.

#### Jodeco Road at Dailey Mill Road (Int. #14)

- Existing - Construct a northbound right-turn lane along Dailey Mill Road.
- No-Build - Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection.
- No-Build – Construct a westbound left-turn lane along Jodeco Road
- No-Build – Install a traffic signal

#### Jodeco Road at SR 42/US 23 (Int. #15)

- No-Build - Construct an additional southbound thru- lane along SR 42/US 23. Note: This improvement will require an additional southbound receiving lane along SR 42/US 23.

Note: ARC HE-110 is projected to widen Jodeco Road from two to four lanes between Meadowbrook Drive to Peach Drive and an extension/realignment from Peach Drive to Campground Road for approximately 3.0 miles and listed as having a completion date of 2013.

#### SR 42/US 23 at Campground Road (Int. #16)

- No-Build - Construct a westbound right-turn lane along Campground Road.
- No-Build - Construct a northbound right-turn lane along SR 42/US 23.

Note: ARC HE-110 is projected to widen Jodeco Road from two to four lanes between Meadowbrook Drive to Peach Drive and an extension/realignment from Peach Drive to Campground Road for approximately 3.0 miles and listed as having a completion date of 2013.

#### Jonesboro Road at Chambers Road (Int. #17)

- No-Build – Construct a westbound right-turn lane along Jonesboro Road.

#### Jonesboro Road at Mt. Olive Road (Int. #18)

- Build - Install a traffic signal.
- Build - Construct two southbound left-turn lanes along Mt. Olive Road to form dual left-turn lanes. Note: This improvement will require an additional eastbound receiving lane along Jonesboro Road.
- Build - Widen Jonesboro Road from two to four lanes in the vicinity of this intersection.

Note: ARC HE-920B (GDOT 342970-) is projected to widen Jonesboro Road (SR 920) from two to four lanes for approximately 7.4 miles between US 19/US 41 in Clayton County to I-75 in Henry County and listed as having a completion date of 2020.

Jonesboro Road at Mill Road (Int. #19)

- No-Build - Construct an additional southbound lane along Mill Road and restripe forming dual southbound left-turn lanes and a shared thru/right-turn lane.
- No-Build - Construct an additional northbound lane along Mill Road and restripe forming dual northbound left-turn lanes, an exclusive thru lane, and an exclusive right-turn lane.
- Build - Construct an additional eastbound thru-lane along Jonesboro Road.

Jonesboro Road at I-75 Southbound Ramp (Int. #20)

- No-Build - Construct an additional southbound right-turn lane along the I-75 Southbound Ramp, to form dual right-turn lanes.

Jonesboro Road at I-75 Northbound Ramp (Int. #21)

- Build - Construct an additional northbound left-turn lane along the I-75 Northbound Ramp to form dual left-turn lanes.

Chambers Road at Church Drive/Driveway #14(Int. #24)

- No-Build - Construct an eastbound right-turn lane along Church driveway. (Note: This is a private driveway)
- Build - Construct Driveway #14 directly across from Church Road.
- Build - Provide two westbound egress lanes along Driveway #12 (a shared thru/left-turn lane and an exclusive right-turn lane).

Chambers Road at Mt. Olive Road (Int. #25)

- No-Build - Construct a northbound left-turn lane along Chambers Road.

Chambers Road at McCullough Road (Int. #26)

- Existing - Construct a northbound right-turn lane along Chambers Road.

Mt. Olive Road at Pond Drive/ Driveway #12 (Int. #27)

- Build - Construct Driveway #12 directly across from Pond Drive.

Mt. Olive Road at New Connector (Int. #28)

- Build - Construct a northbound through lane along Mt. Olive Road.
- Build - Construct a southbound right-turn lane and through lane along the New Connector.
- Build - Construct an exclusive eastbound left-turn lane along Mt. Olive Road.
- Build - Traffic volumes are not expected to warrant a traffic signal.

*Additional 2017 Build Recommendations/comments:*

- The Connector Road, a four-lane divided roadway, is proposed through the site to provided north/south travel between Jodeco Road and Mt. Olive Road. At the north end, the Connector Road will form a new

full-movement signalized intersection with Jodeco Road (approximately 1,000 feet west of the southbound I-75 ramps). At the south end, the Connector Road will tie-into the location where Mt. Olive Road currently makes a 90-degree turn at the south side of the property and travels west.

- Mt. Olive Road, between the Connector Road tie-in and Jonesboro Road is planned to be converted from a gravel road to a paved road, and will provide mobility to/from the south. Mt. Olive Road, between the Connector Road and Jonesboro Road, is expected to accommodate the projected 2017 Build Conditions traffic volumes. The existing two-lane gravel roadway should be paved to accommodate the traffic volumes.
- The 2017 Build Conditions analysis includes the recommendation to coordinate the traffic signals along Jodeco Road, between the new Connector Road and Patrick Henry Parkway. Traffic signal coordination will provide improved traffic operations and provide good traffic progression along the Jodeco Road corridor.

*Proposed project driveway geometry and traffic control are as follows:*

New Connector at Right-in/Right-out Driveway 1 (Int. #29)

- Construct a southbound right-turn lane along the New Connector.
- Provide one eastbound egress lane along Driveway 1 (exclusive right-turn lane).

New Connector at Full-movement Driveway #2/ Driveway #3 (Int. #30)

- Install a traffic signal.
- Construct a northbound left-turn lane and a right-turn lane along the New Connector.
- Construct southbound dual left-turn lanes and a right-turn lane along the New Connector. Note: This improvement will require two eastbound receiving lanes along Driveway #3.
- Provide three eastbound egress lanes along Driveway #2 (dual left-turn lanes and a shared thru/right-turn lane).
- Provide three westbound egress lanes along Driveway #3 (an exclusive left-turn lane, a thru lane, and an exclusive right-turn lane).

New Connector at Right-in/Right-out Driveway #4/ Right-in/Right-out Driveway #5 (Int. #31)

- Provide one eastbound egress lanes along Driveway #4 (exclusive right-turn lane).
- Provide one westbound egress lanes along Driveway #5 (exclusive right-turn lane).

New Connector at Left-in/Right-in/Right-out Driveway #6/ Left-in/Right-in/Right-out Driveway #7 (Int. #32)

- Construct a northbound left-turn lane along the New Connector.
- Construct a southbound left-turn lane and a right-turn lane along the New Connector.
- Provide one eastbound egress lane along Driveway #6 (exclusive right-turn lane).
- Provide one westbound egress lane along Driveway #7 (exclusive right-turn lane).

New Connector at Full-movement Driveway #8/Driveway #9 (Int. #33)

- Install a traffic signal.

- Construct a northbound left-turn lane along the New Connector.
- Construct a southbound left-turn lane along the New Connector.
- Provide two eastbound egress lanes along Driveway #8 (exclusive left-turn lane and shared through/right-turn lane).
- Provide two westbound egress lanes along Driveway #9 (exclusive left-turn lane and shared through/right-turn lane).

New Connector at Left-in/Right-in/Right-out Driveway #10/ Left-in/Right-in/Right-out Driveway #11 (Int. #34)

- Construct a northbound left-turn lane along the New Connector.
- Construct a southbound left-turn lane and a right-turn lane along the New Connector.
- Provide one eastbound egress lane along Driveway #6 (exclusive right-turn lane).
- Provide one westbound egress lane along Driveway #7 (exclusive right-turn lane).

Chambers Road at Full-movement unsignalized Driveway #13 (Int. #35)

- Construct a southbound left-turn lane along Chambers Road.
- Provide one eastbound egress lane along Driveway #13 (shared left-turn/right-turn lane).

Jodeco Road at Right-in/Right-out Driveway #15 (Int. #36)

- Construct an eastbound right-turn lane along Jodeco Road.
- Provide one northbound egress lane along Driveway #15 (exclusive right-turn lane).
- Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection.

## 1.0 PROJECT DESCRIPTION

### 1.1 Introduction

This report presents the analysis of the anticipated traffic impacts associated with the proposed Summit Jodeco development, a proposed approximate 163.2-acre mixed-use planned development located in Henry County. The site is located in the southwest quadrant of the I-75 at Jodeco Road Interchange, and is bounded by Jodeco Road to the north, Mt. Olive Road to the south, I-75 to the east, and Chambers Road to the west. The proposed mixed-use development is expected to consist of approximately 1,100,000 SF of commercial space, 200,000 SF of office space, 236 multi-family residential units, and 400 hotel units.

A summary of the proposed land-uses and densities is provided below in **Table 1**.

<b>Table 1</b> <b>Summit Jodeco DRI</b> <b>Proposed Land Uses</b>	
Multi-family Residential	236 dwelling units
Hotel	400 rooms
Office	200,000 SF
Commercial	1,100,000 SF

The project has applied for Concept Plan Review with Henry County (a necessary prelude to the formal rezoning application for the property). The mixed-use planned development also exceeds 400,000 gross square feet (SF), therefore the proposed development is considered a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and Atlanta Regional Commission (ARC) review. This document is being submitted under GRTA's non-expedited review criteria.

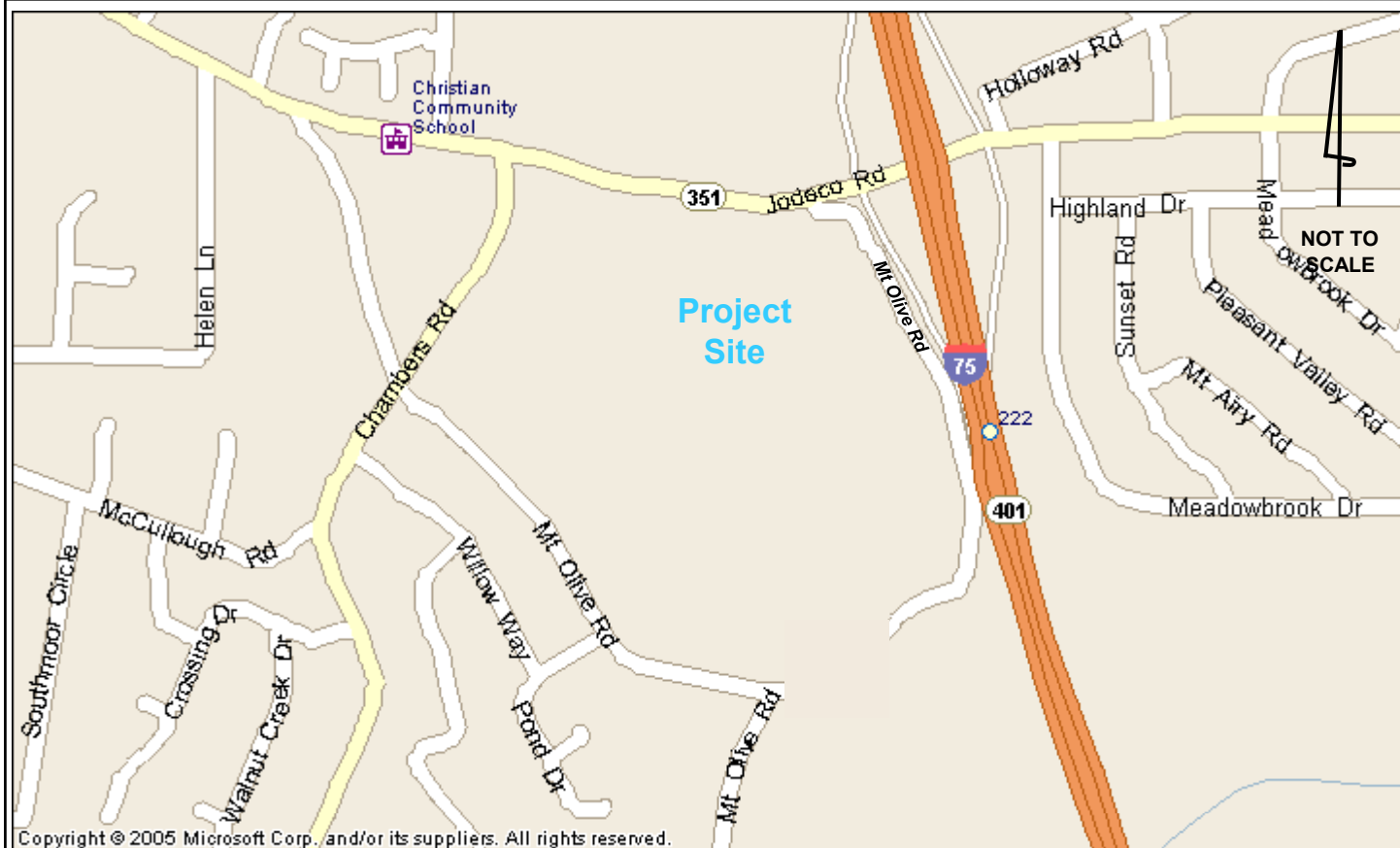
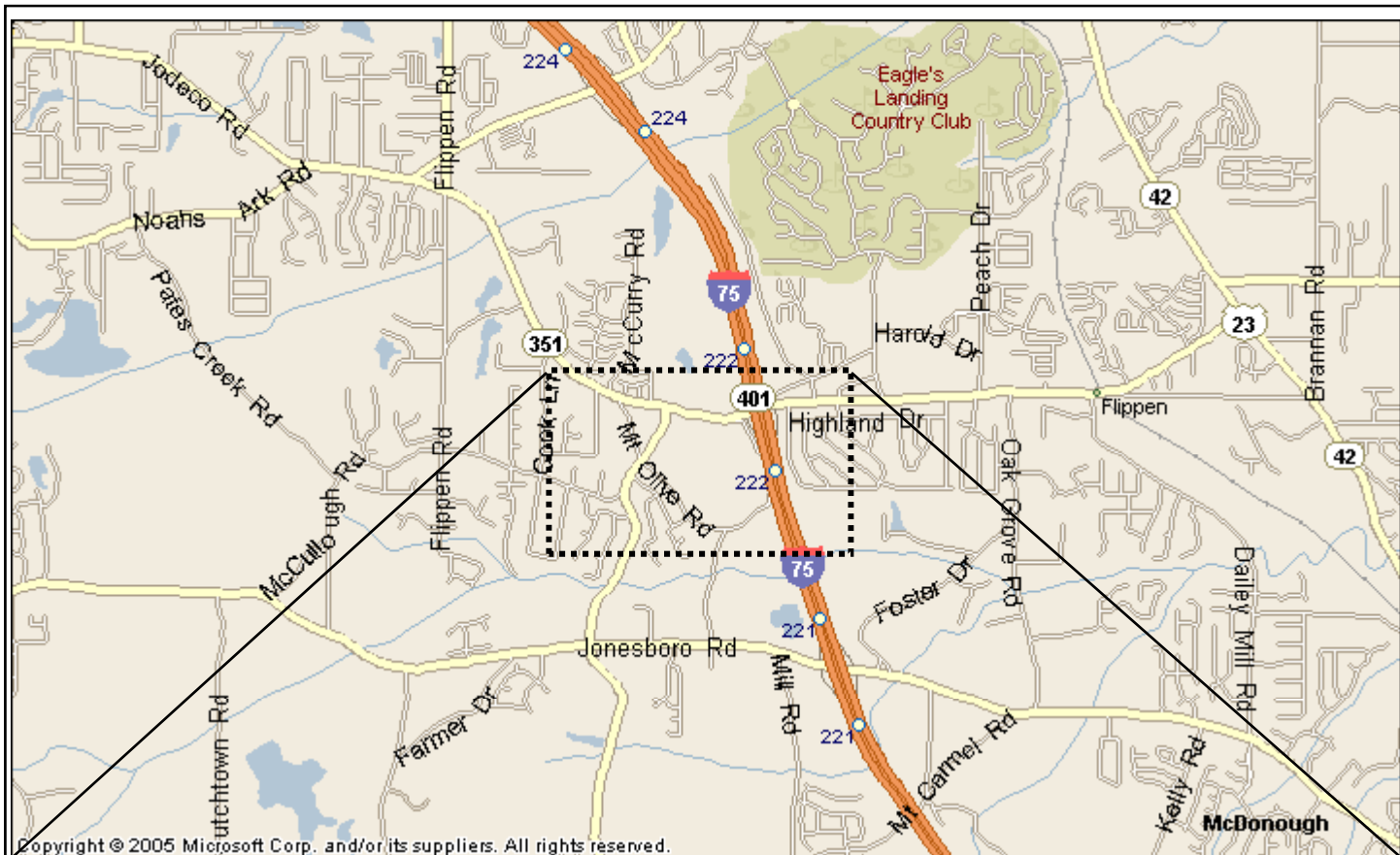
The current zoning is RA (Residential Agricultural) and C-2 (General Commercial). The site is currently comprised of one single-family residential unit, and wooded, vacant property. The proposed zoning is PD (Planned Development). The proposed Henry County 2030 Comprehensive Plan identifies the project site as a Suburban Employment Activity Center. Henry County indicated the current Future Lane Use Plan indicates the site as Commercial and Services and Low Density Residential. The ARC Unified Growth Policy Map identifies the project site as "Mega Corridors". A Mega Corridor is described as an intensely developed radial corridor in the region.

**Figure 1** and **Figure 2** provide a location map and an aerial photograph of the site.

### 1.2 Site Plan Review

The development plan includes a lifestyle shopping center anchored by retail and commercial services and surrounded by other commercial, office, and hotel uses. The lifestyle shopping center is planned to be an architecturally distinctive and walkable area that creates a town center environment and becomes a gathering place for the community. Higher intensity commercial uses will be concentrated on the north, northwest, and east sides of the site. Residential uses will be included on the south and southwest sides near existing residential areas.

**Figure 3** is a small-scale copy of the site plan. A full-size site plan consistent with GRTA's Site Plan Guidelines is also being submitted as part of the DRI Review Package.



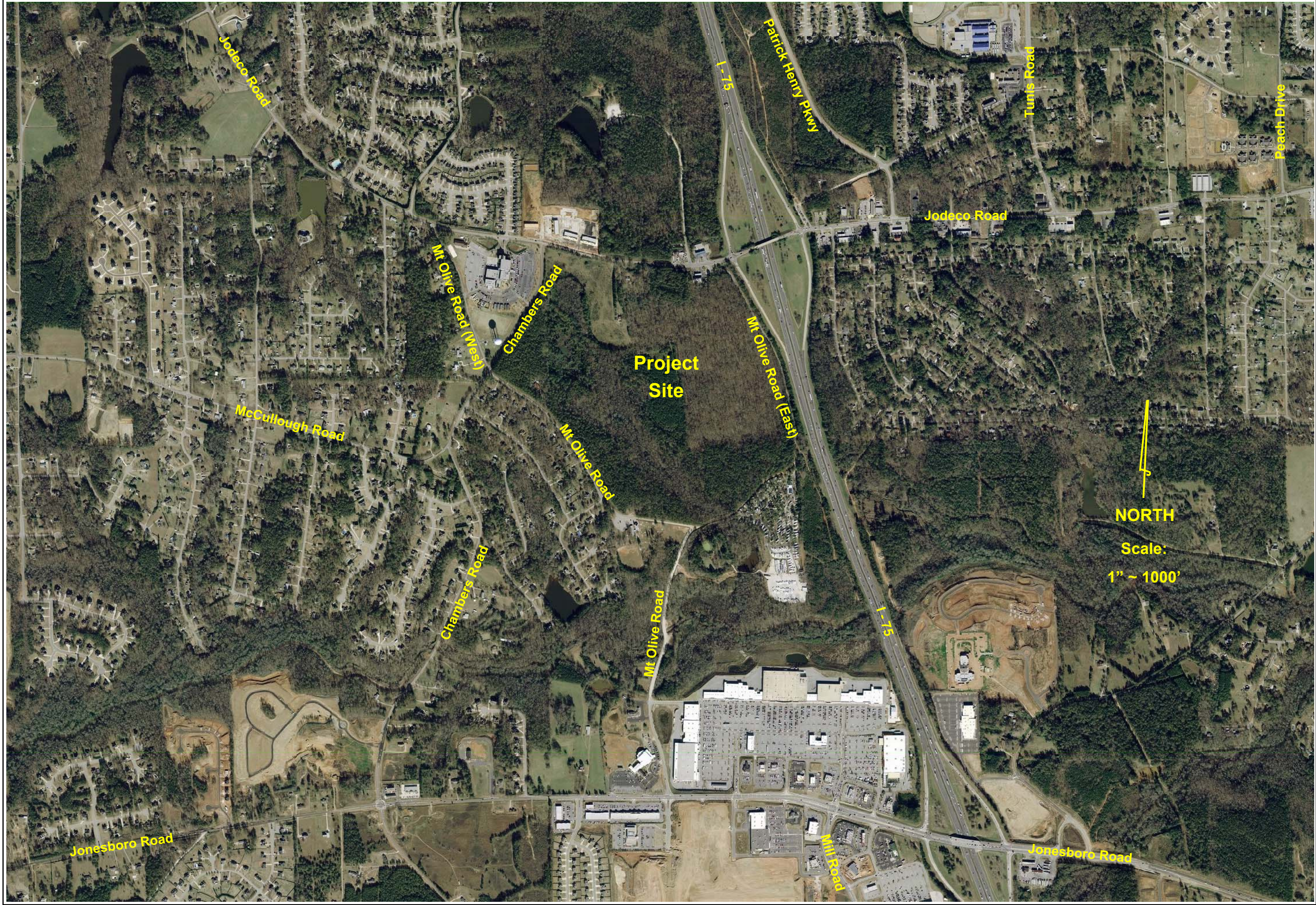
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## Summit Jodeco DRI Transportation Analysis

Site Location

Figure  
1







### 1.3 Site Access

The Connector Road, a four-lane divided roadway, is proposed through the site to provide north/south travel between Jodeco Road and Mt. Olive Road. At the north end, the Connector Road will form a new full-movement signalized intersection with Jodeco Road (approximately 1,000 feet west of the southbound I-75 ramps). At the south end, the Connector Road will tie-into the location where Mt. Olive Road currently makes a 90-degree turn at the south side of the property and travels west. Mt. Olive Road, between the Connector Road tie-in and Jonesboro Road is planned to be converted from a gravel road to a paved road, and will provide mobility to/from the south.

Vehicular access to the Summit Jodeco site is proposed at two (2) locations along Jodeco Road, two (2) locations along Chambers Road, and two (2) locations along Mt. Olive Road. The approximate site frontage along these roadways is as follows:

- Jodeco Road – Approximately 1,950' of frontage
- Chambers Road – Approximately 1,600' of frontage
- Mt. Olive Road – Approximately 3,150' of frontage along the south property line

The two (2) proposed access points along Jodeco Road are proposed to be one (1) full-movement signalized access (the new Connector Road) and one (1) limited access (right-in/right-out). The two (2) access points along Chambers Road and two (2) access points along Mt. Olive Road are proposed as full-movement access.

The new Connector Road is approximately 4,000 feet in length internal to the site. Along the Connector Road, eleven access points will be located along this four-lane divided roadway. **Table 2** summarizes the proposed access locations.

<b>Table 2</b> <b>Summit Jodeco DRI</b> <b>Proposed Access</b>			
<b>Driveway</b>	<b>Access</b>	<b>Along Road</b>	<b>Location</b>
Driveway #1	RIRO	New Connector	Approx. 335' south of Jodeco Road
Driveway #2/3*	Full	New Connector	Approx. 340' south of Driveway #1.
Driveway #4	RIRO	New Connector	Approx. 710' south of Driveway #2/3.
Driveway #5	RIRO	New Connector	Approx. 70' north of Driveway #4.
Driveway #6/7	LIRIRO	New Connector	Approx. 420' south of Driveway #4.
Driveway #8/9*	Full	New Connector	Approx. 640' south of Driveway #6/7.
Driveway #10/11	LIRIRO	New Connector	Approx. 750' south of Driveway #8/9 and 820' north of Mt. Olive Road
Driveway #12	Full	Mt. Olive Road	Directly across from Pond Drive
Driveway #13	Full	Chambers Road	Approx. 265' north of Mt. Olive Road and 450' south of the Church Driveway.
Driveway #14	Full	Chambers Road	Approx. 740' south of Jodeco Road, directly across from the Church driveway.
Driveway #15	RIRO	Jodeco Road	Approx. 635' east of Chambers Road and 595' west of the Connector Road

\* Proposed Traffic Signal

Note: RIRO = Right-In/Right-Out  
LIRIRO = Left-In/Right-In/Right-Out  
Full = Full Movement Access



### *1.4 Bicycle and Pedestrian Facilities*

Pedestrian facilities (sidewalks) do not currently exist along Jodeco Road, Chambers Road, and Mt. Olive Road in the vicinity of the site. Additionally, bicycle facilities are not present along the road frontages. The proposed development will install sidewalks and bicycle lanes along both sides of the proposed connector road. Sidewalks will be provided along adjacent county roads, Jodeco Road, Chambers Road, and Mt. Olive Road per Henry County code. Additionally sidewalks and pedestrian pathways are proposed throughout the site to connect the different parcels and land uses.

### *1.5 Transit Facilities*

Alternative mode reductions were not applied during this analysis; however, it should be noted that there is a GRTA Xpress Park and Ride lot located in Stockbridge at the Interchange of I-75 and SR 138 (exit 228). Route 431 (Midtown Atlanta) runs from this location to the Spring Street/5<sup>th</sup> Street intersection with stops at the Civic Center and Arts Center MARTA stations. Route 432 (Downtown Atlanta) runs from this location to the Civic Center MARTA station with a stop at Five Points MARTA station. This Park & Ride lot is located at 656 Highway 138 West, approximately 6 miles north of the proposed site. For this location, there are 6 departures and 3 arrivals in the morning peak hour and 3 departures and 6 arrivals in the afternoon peak hour.

Additionally, Henry County Transit provides public transportation service for needs such as banking, grocery shopping, personal business affairs, and medical/dental appointments. Reservations for a ride can be made by the rider in advance, and transit will pick the rider up at a specified location. This operates Monday through Friday from 6:00 a.m. to 6:00 p.m.

## **2.0 TRAFFIC ANALYSES METHODOLOGY AND ASSUMPTIONS**

### *2.1 Growth Rate*

Background traffic is defined as expected traffic on the roadway network in future year(s) absent the construction and opening of the proposed project. Historical traffic count data from the Georgia DOT was reviewed for the area surrounding the proposed development, growth rates were discussed during the Pre-Application meeting with GRTA, ARC, and Henry County staff, and the background growth rate for this analysis was finalized in GRTA's Letter of Understanding. A 4% per year background traffic growth rate for the first three years followed by a 2.5% per year background traffic growth rate for the following six years was applied for all roadways within the study network.

### *2.2 Traffic Data Collection*

Weekday peak hour turning movement counts were collected in May 2008 and August 2008 at twenty-eight (28) intersections during the AM and PM peak periods. Additionally, Saturday peak hour turning movement counts were collected at thirteen (13) intersections during the Saturday peak period. The morning, afternoon, and Saturday peak hours varied between the intersections and are listed below:

**Table 3  
Summit Jodeco DRI  
Peak Hours**

Intersection	AM Peak Hour	PM Peak Hour	SAT Peak Hour
1. Hudson Bridge Road at Flippen Road	7:15-8:15*	4:45-5:45*	---
2. Jodeco Road at Hudson Bridge Road/ Jodeco Station Drive	7:15-8:15*	5:00-6:00*	---
3. Jodeco Road at Flippen Road	7:15-8:15	5:00-6:00	---
4. Jodeco Road at Mt. Olive Road	7:15-8:15*	5:00-6:00*	---
5. Jodeco Road at Chambers Road	7:00-8:00	5:00-6:00	12:30-1:30*
6. Jodeco Road at New Connector Road	---	---	---
7. Jodeco Road at Mt. Olive Road	7:15-8:15	5:00-6:00	12:45-1:45*
8. Jodeco Road at I-75 Southbound Ramp	7:15-8:15	5:00-6:00	12:45-1:45*
9. Jodeco Road at I-75 Northbound Ramp	7:15-8:15	5:00-6:00	12:30-1:30*
10. Jodeco Road at Patrick Henry Parkway	7:15-8:15*	5:00-6:00*	1:00-2:00*
11. Jodeco Road at Tunis Drive	7:30-8:30*	4:45-5:45*	12:45-1:45*
12. Jodeco Road at Peach Drive	7:45-8:45*	5:00-6:00*	11:30-12:30*
13. Jodeco Road at Oak Grove Road	7:45-8:45*	5:00-6:00*	12:30-1:30*
14. Jodeco Road at Dailey Mill Road	7:45-8:45*	5:00-6:00*	12:30-1:30*
15. Jodeco Road at SR 42/US 23	7:15-8:15	4:00-5:00	---
16. SR 42/US 23 at Campground Road	7:30-8:30*	5:00-6:00*	---
17. Jonesboro Road at Chambers Road	7:15-8:15	5:00-6:00	1:00-2:00*
18. Jonesboro Road at Mt. Olive Road/ Towne Center Village	7:30-8:30	5:00-6:00	1:00-2:00*
19. Jonesboro Road at Mill Road	7:30-8:30*	4:45-5:45	1:00-2:00*
20. Jonesboro Road at I-75 Southbound Ramp	7:45-8:45	4:15-5:15	1:00-2:00*
21. Jonesboro Road at I-75 Northbound Ramp	7:45-8:45	4:15-5:15	1:00-2:00*
22. Jonesboro Road at Dailey Mill Road/Wesley Lakes Boulevard	7:30-8:30*	5:00-6:00*	---
23. Jonesboro Road at McDonough Parkway	7:30-8:30*	5:00-6:00*	---
24. Chambers Road at Church Drive	7:15-8:15	4:45-5:45*	12:45-1:45*
25. Chambers Road at Mt. Olive Road	7:15-8:15	5:00-6:00	12:45-1:45*
26. Chambers Road at McCullough Road	7:15-8:15*	5:00-6:00*	1:00-2:00*
27. Mt. Olive Road at Pond Drive	7:30-8:30*	5:00-6:00*	12:45-1:45*

\* August Counts

Daily traffic volumes along Jodeco Road were collected on two occasions. In August 2006, the Average Daily Traffic (ADT) along Jodeco Road was 15,044 vehicles per day. In May 2008, the ADT was 15,059 vehicles per day.

All raw count data is available upon request.

### 2.3 Detailed Intersection Analysis

Level of Service (LOS) is used to describe the operating characteristics of a road segment or intersection in relation to its capacity. LOS is defined as a qualitative measure that describes operational conditions and motorists' perceptions within a traffic stream. The *Highway Capacity Manual* defines six levels of service, LOS

A through LOS F, with A being the best and F being the worst. Level of service analyses were conducted at all intersections within the study network using *Synchro Professional, Version 6.0*.

Levels of service for signalized intersections are reported for the intersection as a whole. One or more movements at an intersection may experience a low level of service, while the intersection as a whole may operate acceptably.

Levels of service for unsignalized intersections, with stop control on the minor street only, are reported for the side street approaches. Low levels of service for side street approaches are not uncommon, as vehicles may experience delay in turning onto a major roadway.

### 3.0 STUDY NETWORK

#### 3.1 Gross Trip Generation

As stated earlier, the proposed development is expected to consist of approximately 1,100,000 SF of commercial space, 200,000 SF of office space, 236 multi-family residential units, and 400 hotel units. Traffic for these land uses was calculated using equations contained in the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, Seventh Edition, 2003*. Since the ultimate type of housing unit is undetermined, the residential trips were estimated based on apartment trip generation. Average rates were used only when equations were not provided. Gross trips generated are displayed below in **Table 4**.

Table 4 Summit Jodeco DRI Gross Trip Generation											
Land Use	ITE Code	Weekday Traffic		Saturday Traffic		AM Peak Hour		PM Peak Hour		SAT Peak Hour	
		Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit
Build-Out (Year 2017)											
236 Apartment Units	220	784	784	798	798	24	95	96	51	58	58
400 Hotel Rooms	310	1,604	1,604	1,777	1,777	139	89	125	111	157	123
200,000 SF of Office	710	1,138	1,138	223	223	288	39	52	251	35	30
1,100,000 SF of Commercial	820	16,136	16,136	20,927	20,927	403	257	1,463	1,584	2,139	1,974
Total		19,662	19,662	23,725	23,725	854	480	1,736	1,997	2,389	2,185

#### 3.2 Trip Distribution

The directional distribution and assignment of new project trips was based on a review of the land uses in the area (aerial mapping), engineering judgment, and discussions with GRTA, ARC, and Henry County staff.

#### 3.3 Level of Service Standards

For the purposes of this traffic analysis, a level of service standard of D was assumed for all intersections and segments within the study network. If, however, an intersection or segment currently operates at LOS E or LOS F during an existing peak period, the LOS standard for that peak period becomes LOS E, consistent with GRTA's Letter of Understanding. Additionally, all LOS standards shall be constrained by a maximum volume-to-capacity (v/c) ratio of 1.2.

### 3.4 Study Network Determination

A general study area was determined using GRTA's 7% rule. This rule recommends that all intersections and segments be analyzed which are impacted to the extent that the traffic from the proposed site is 7% or more of the service volume of the facility (at a previously established LOS standard, typically LOS D) be considered for analysis. The study area was agreed upon during methodology discussions with GRTA, ARC, and Henry County staff, and includes the following intersections:

<b>Table 5</b> <b>Summit Jodeco DRI</b> <b>Study Intersections</b>	
<b>Intersection</b>	<b>Type</b>
1. Hudson Bridge Road at Flippen Road	Signalized
2. Jodeco Road at Hudson Bridge Road/ Jodeco Station Drive	TWSC
3. Jodeco Road at Flippen Road	Signalized
4. Jodeco Road at Mt. Olive Road	Stop-Controlled
5. Jodeco Road at Chambers Road	TWSC
6. Jodeco Road at New Connector Road	N/A
7. Jodeco Road at Mt. Olive Road	Stop-Controlled
8. Jodeco Road at I-75 Southbound Ramp	Signalized
9. Jodeco Road at I-75 Northbound Ramp	Signalized
10. Jodeco Road at Patrick Henry Parkway	Signalized
11. Jodeco Road at Tunis Drive	Signalized
12. Jodeco Road at Peach Drive	Signalized
13. Jodeco Road at Oak Grove Road	Stop-Controlled
14. Jodeco Road at Dailey Mill Road	Stop-Controlled
15. Jodeco Road at SR 42/US 23	Signalized
16. SR 42/US 23 at Campground Road	Signalized
17. Jonesboro Road at Chambers Road	Signalized
18. Jonesboro Road at Mt. Olive Road/ Towne Center Village	TWSC
19. Jonesboro Road at Mill Road	Signalized
20. Jonesboro Road at I-75 Southbound Ramp	Signalized
21. Jonesboro Road at I-75 Northbound Ramp	Signalized
22. Jonesboro Road at Dailey Mill Road/Wesley Lakes Boulevard	Signalized
23. Jonesboro Road at McDonough Parkway	Signalized
24. Chambers Road at Church Drive	Stop-Controlled
25. Chambers Road at Mt. Olive Road	All-Way Stop
26. Chambers Road at McCullough Road	Stop-Controlled
27. Mt. Olive Road at Pond Drive	Stop-Controlled
28. Mt. Olive Road at Mt. Olive Road	N/A

NOTE: TWSC = Two-Way Stop Control

Each of the above listed intersections was analyzed for the Existing 2008 Conditions, the projected 2017 No-Build Conditions, and the projected 2017 Build Conditions. The projected 2017 No-Build Conditions represent

the existing traffic volumes grown at 4% per year for the first three years and 2.5% per year for the following six years along all roadway links. The projected 2017 Build Conditions adds the project trips associated with the Summit Jodeco development to the projected 2017 No-Build Conditions.

Additionally, all of the proposed project driveways were analyzed for the projected 2017 Build Conditions.

### 3.5 Existing Facilities

The characteristics for roadways in the study area are provided in **Table 6**.

<b>Table 6</b> <b>Summit Jodeco DRI</b> <b>Roadway Classification</b>				
<b>Roadway</b>	<b># of Lanes</b>	<b>Posted Speed Limit (MPH)</b>	<b>GDOT Functional Classification</b>	<b>Henry County Classification</b>
Interstate 75	6	65	Interstate Principal Arterial	Interstate
Jodeco Road	2	45	Minor Arterial	Major Arterial
Chambers Road	2	30/35	Collector Street	Minor Arterial
Mt. Olive Road	2	25/45	Local Street	Local
Jonesboro Road (SR 920)	2/4	45	Principal Arterial	Major Arterial
Hudson Bridge Road	2	45	Minor Arterial	Major Arterial
Mill Road	2	---	Local Street	Collector
McCullough Road	2	35	Local Street	Collector
Patrick Henry Parkway	2	45	Local Street	Collector
Flippen Road	2	---	Minor Arterial	Major Arterial
Campground Road	2	45	Minor Arterial	Major Arterial
US 23/SR 42	2	45	Minor Arterial	Major Arterial
McDonough Parkway	2	35	Collector Street	Major Arterial
Oak Grove Road	2	45	Collector Street	Minor Arterial
Dailey Mill Road	2	45	Collector Street	Minor Arterial
Tunis Drive	2	35	Local Street	Local
Peach Drive	2	40	Local Street	Local
Pond Drive	2	25	Local Street	Local

### 3.6 Planned Facilities

Per GRTA's Letter of Understanding, no public agency planned transportation projects were assumed or included in the analysis. Of the multiple planned transportation projects in the area, one of the critically needed projects is the I-75/Jodeco Road interchange improvement project (GDOT #312160). This project is needed to relieve the existing traffic congestion and poor traffic operations. This project will also provide access for the development. The interchange bridge and ramps were analyzed for the three conditions (2008 Existing, projected 2017 No-Build, and projected 2017 Build) and recommended improvements were made to accommodate these three traffic conditions. (It should be noted the recommendations in this report were made to per GRTA's policies. These recommendations would be a short-term solution that evaluated projected year 2017 conditions. These recommendations are not a long-term solution. GDOT's planned project (GDOT #312160) includes a 10-lane bridge with four-foot bike lanes and five-foot sidewalks, and is considered the appropriate long-term solution that satisfied GDOT and FHWA requirements. Additional information on the GDOT project is included in the appendix.)

The Connector Road, a four-lane divided roadway, is proposed through the site to provide north/south travel between Jodeco Road and Mt. Olive Road. At the north end, the Connector Road will form a new full-movement intersection with Jodeco Road (approximately 1,000 feet west of the southbound I-75 ramps). At the south end, the Connector Road will tie into the location where Mt. Olive Road currently makes a 90-degree turn at the south side of the property and travels west. Mt. Olive Road, between the Connector Road tie-in and southward to Jonesboro Road is planned to be converted from a gravel road to a paved road, and will provide mobility to/from the south.

The Connector Road will provide a new north/south roadway and an alternate route for vehicles currently utilizing McCullough Road, Chambers Road and Mt. Olive Road to travel between Jodeco Road and Jonesboro Road. To account to the expected redistribution of existing traffic from these roads to the new Connector Road, existing traffic volumes were adjusted for the projected 2017 Build Conditions. Providing the new Connector Road is anticipated to reduce traffic volumes along McCullough Road, Chambers Road and Mt. Olive Road.

## 4.0 TRIP GENERATION

As stated earlier, trips associated with the proposed development were estimated using the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, Seventh Edition, 2003*, using equations where available.

Mixed-use vehicle trip reductions were taken according to the *ITE Trip Generation Handbook, June 2004*. Total internal capture and vehicle trip reduction between the proposed land uses is expected to be 10.88% for the weekday, 10.93% for the PM peak hour, 8.07% for Saturday, and 7.96% for the Saturday peak hour.

Per GRTA, alternative transportation mode (walking, bicycle, and transit) reductions were not applied for this project; however some alternative modes of travel are expected.

Pass-by reductions were calculated according to the *ITE Trip Generation Handbook, Second Edition, 2004* and according to GRTA guidelines. For the retail uses, a 20% pass-by reduction was applied for the PM peak hour and an 18.6% pass-by reduction was applied for the Saturday peak hour.

The total (net) trips generated and analyzed in this report are listed in **Table 7**.

**Table 7**  
**Summit Jodeco DRI**  
**Net Trip Generation**

	Weekday Traffic		Saturday Traffic		AM Peak Hour		PM Peak Hour		SAT Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit
<b>Build-Out (Year 2017)</b>										
<b>Gross Project Trips</b>	<b>19,662</b>	<b>19,662</b>	<b>23,724</b>	<b>23,724</b>	<b>854</b>	<b>480</b>	<b>1,736</b>	<b>1,997</b>	<b>2,389</b>	<b>2,185</b>
<i>Mixed-Use Reduction</i>	- 2,139	- 2,139	- 1,915	- 1,915	- 0	- 0	- 204	- 204	- 182	- 182
<i>Alternative Mode Reduction</i>	- 0	- 0	- 0	- 0	- 0	- 0	- 0	- 0	- 0	- 0
<i>Pass-By Reduction</i>	- 2,934	- 2,934	- 2,445	- 2,445	- 0	- 0	- 284	- 283	- 176	- 176
<b>Net New Trips</b>	<b>14,589</b>	<b>14,589</b>	<b>19,364</b>	<b>19,364</b>	<b>854</b>	<b>480</b>	<b>1,248</b>	<b>1,510</b>	<b>2,031</b>	<b>1,827</b>

## 5.0 TRIP DISTRIBUTION AND ASSIGNMENT

New trips were distributed onto the roadway network using the percentages agreed to during methodology discussions with GRTA, ARC, and Henry County staff. **Figure 4A-4C** display the expected residential/hotel, office, and retail trip percentages for the development throughout the roadway network. These percentages were applied to the new trips generated by the development, and the volumes were assigned to the roadway network. The expected peak hour turning movements generated by the proposed development are shown in **Figure 5A-5C**.

## 6.0 TRAFFIC ANALYSIS

### 6.1 Existing 2008 Conditions

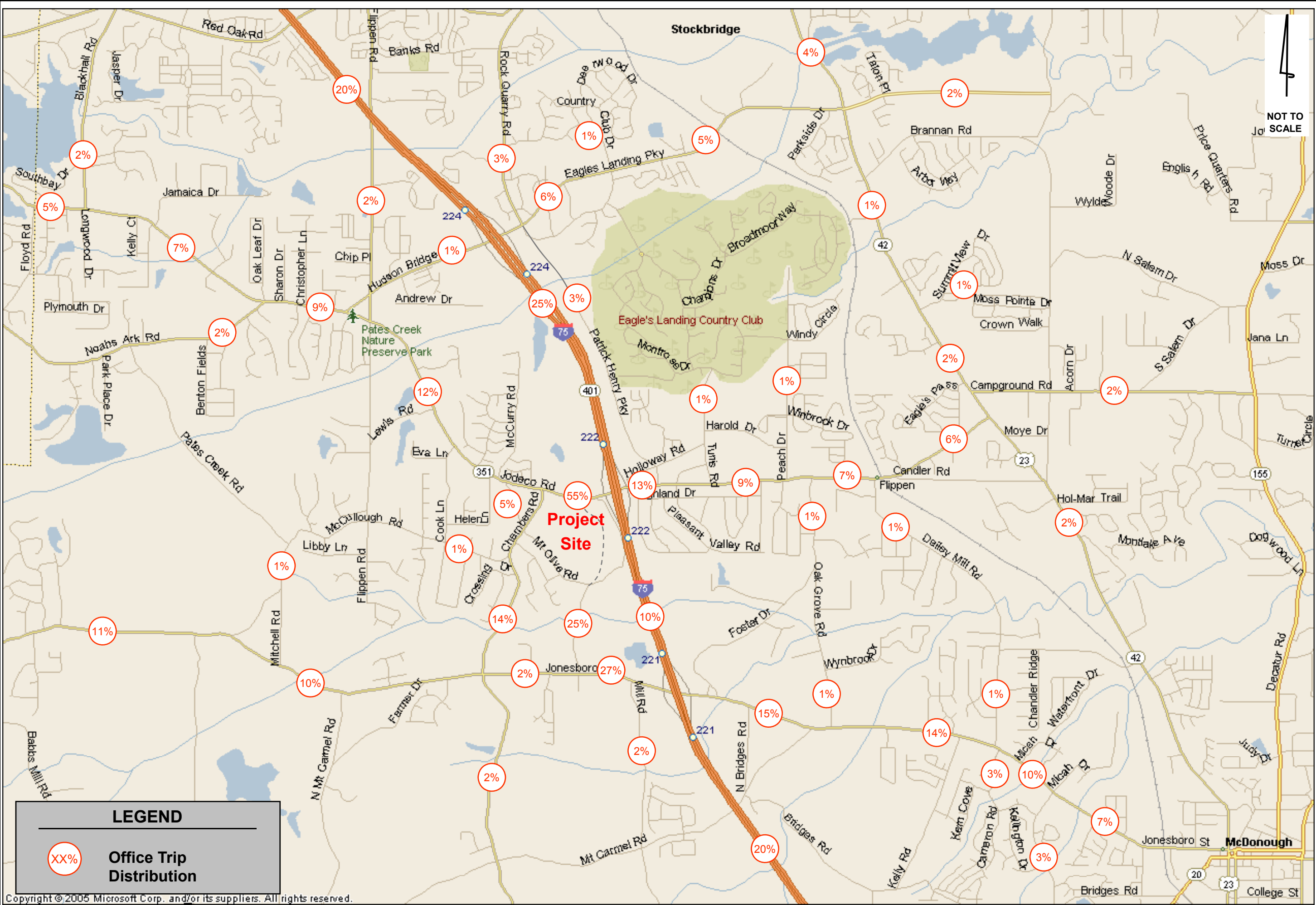
The observed existing peak hour traffic volumes were input in *Synchro 6.0*. An Existing 2008 Conditions analysis was performed, and the results are displayed in **Table 8**. The existing 2008 peak hour traffic volumes are shown in **Figure 6A-6B**.

As shown in table 5, ten (10) of the study intersections currently operate at a Level of Service E or F during the AM Peak Hour, PM Peak Hour, and/or the SAT Peak Hour. Per GRTA's Technical Guidelines and Letter of Understanding, LOS standards are therefore lowered to LOS E for the respective analysis time periods.

Given the adjusted LOS standards, nine (9) intersections currently operate below the operational standards during at least one peak hour. Intersections timing improvements were made to appropriate study intersections and operational improvements were made to specific intersections until each intersection's operation was elevated to an appropriate range, as described above. Based on the Existing 2008 Conditions, the following geometric improvements result in the following nine (9) intersections operating at the acceptable standards:







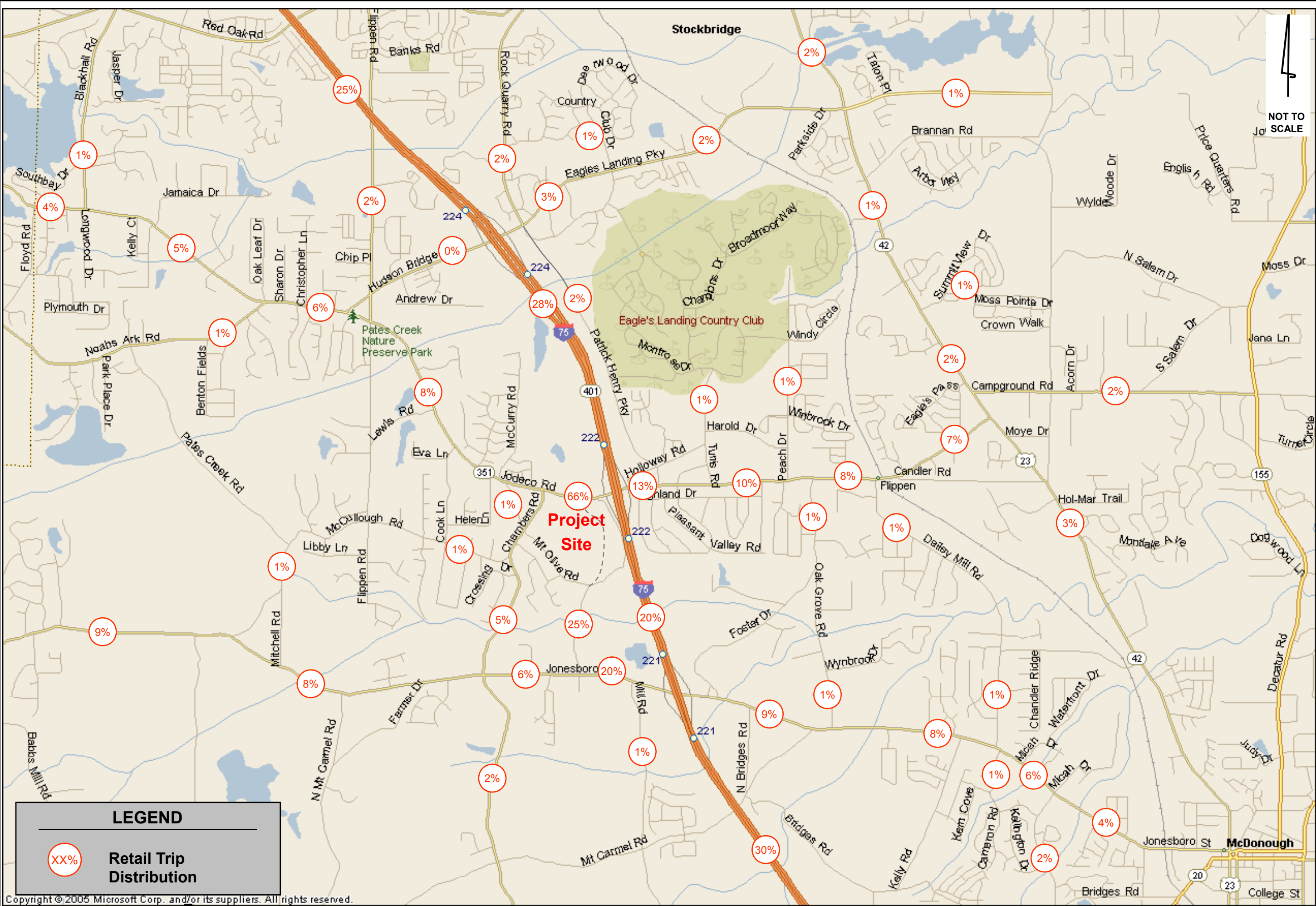


Figure 4C

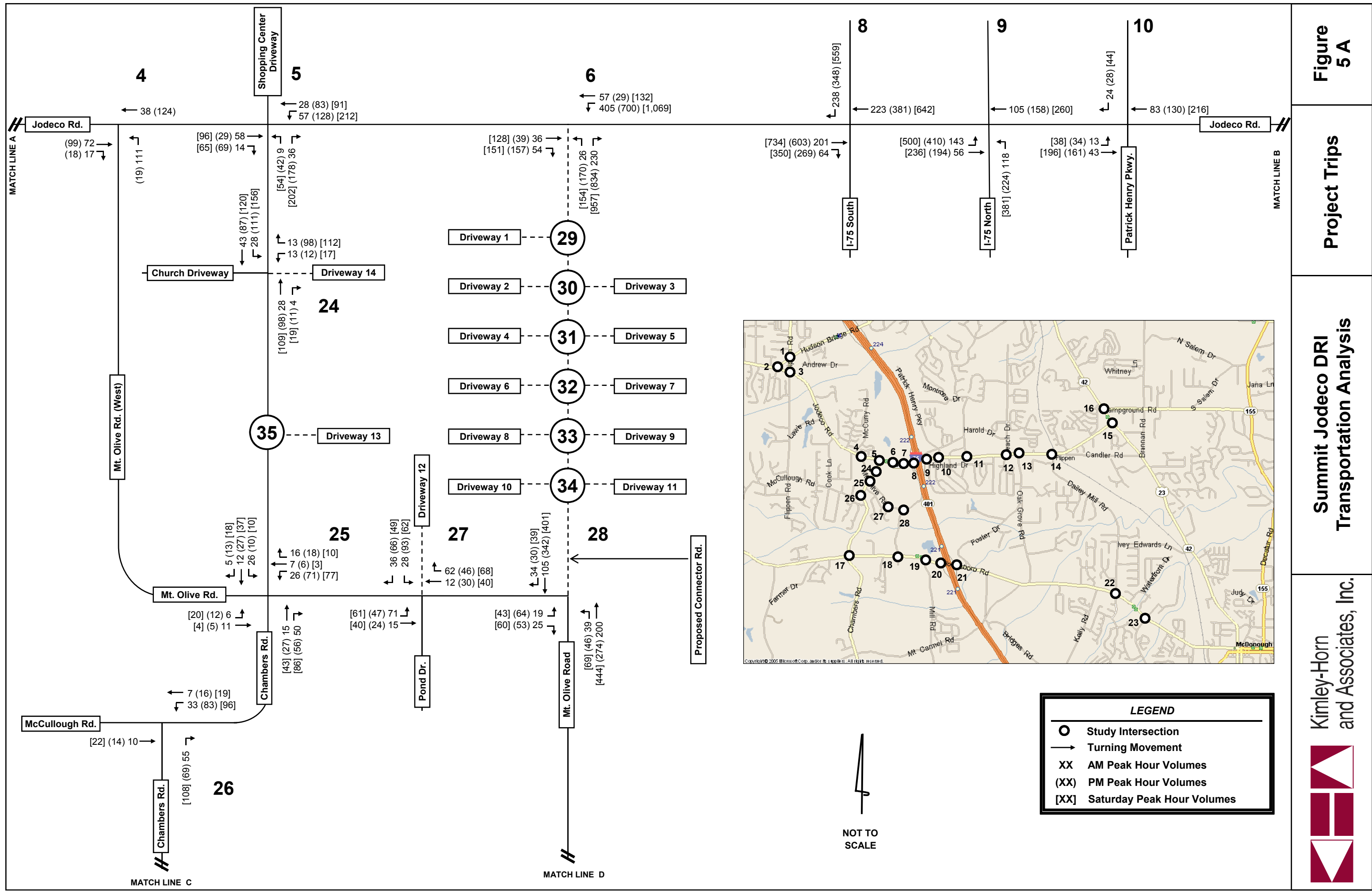
Retail Distribution

Summit Jodeco DRI Transportation Analysis

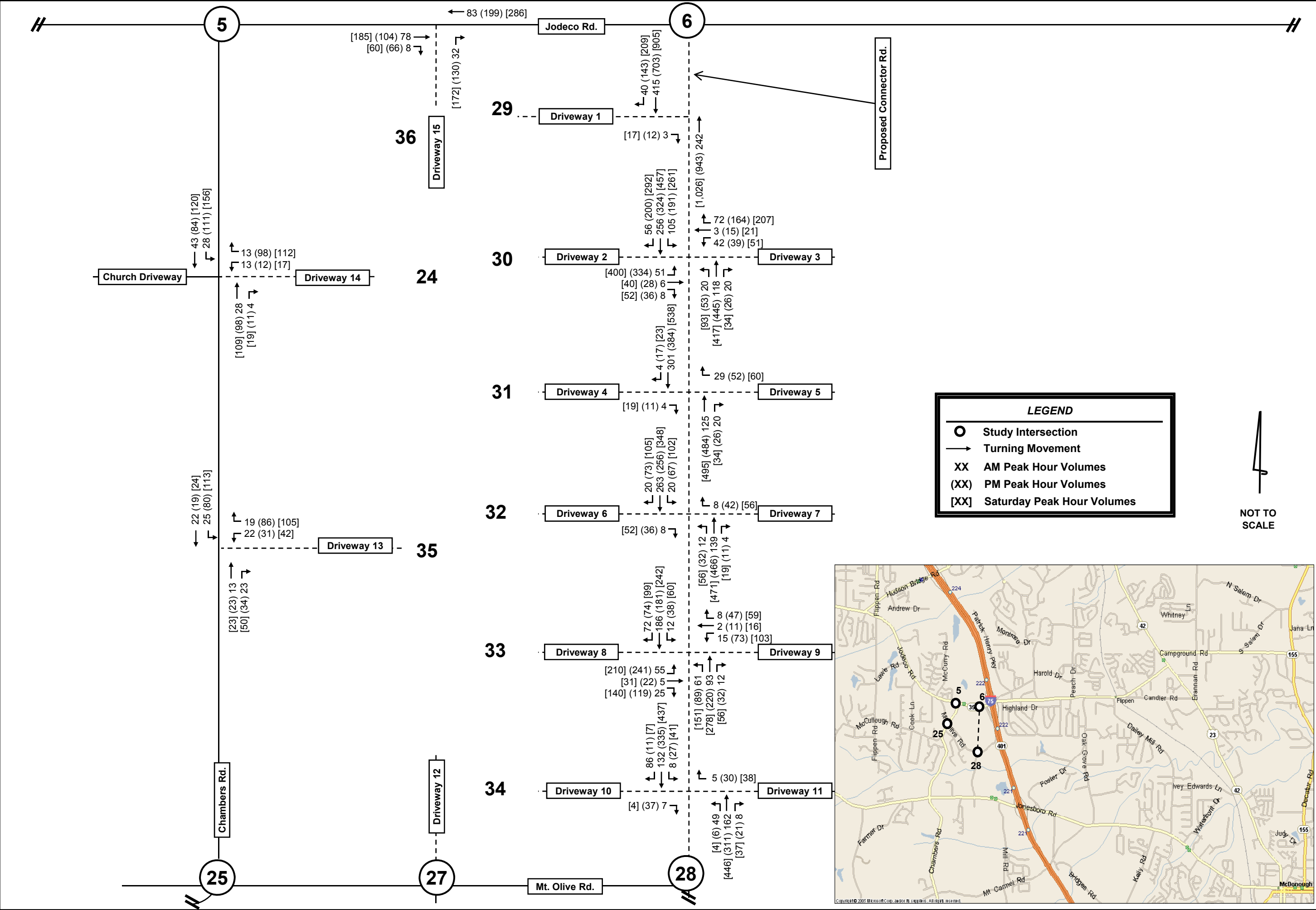
Kimley-Horn and Associates, Inc.











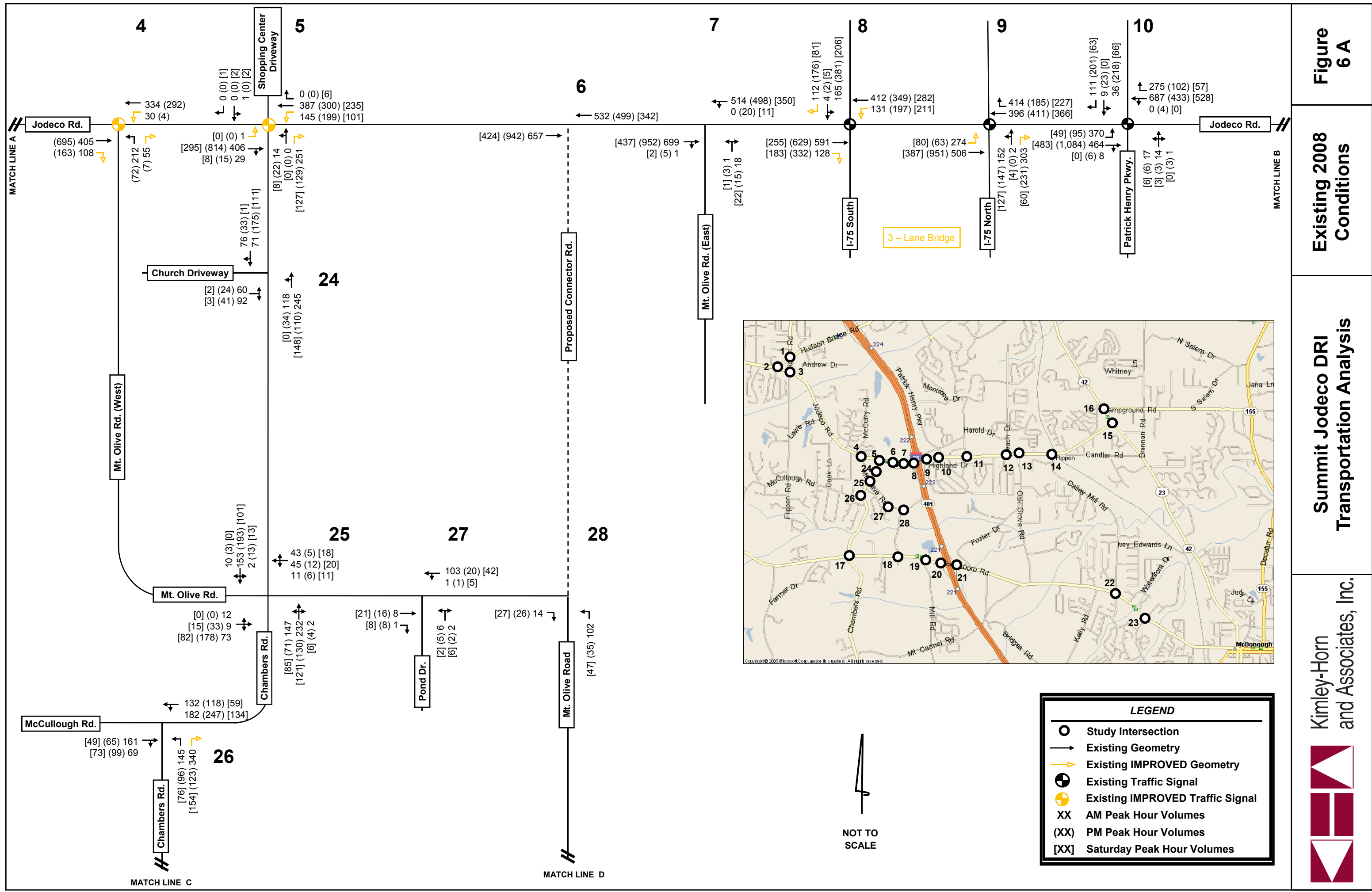


Figure 6 A

Existing 2008 Conditions

Summit Jodeco DRI Transportation Analysis



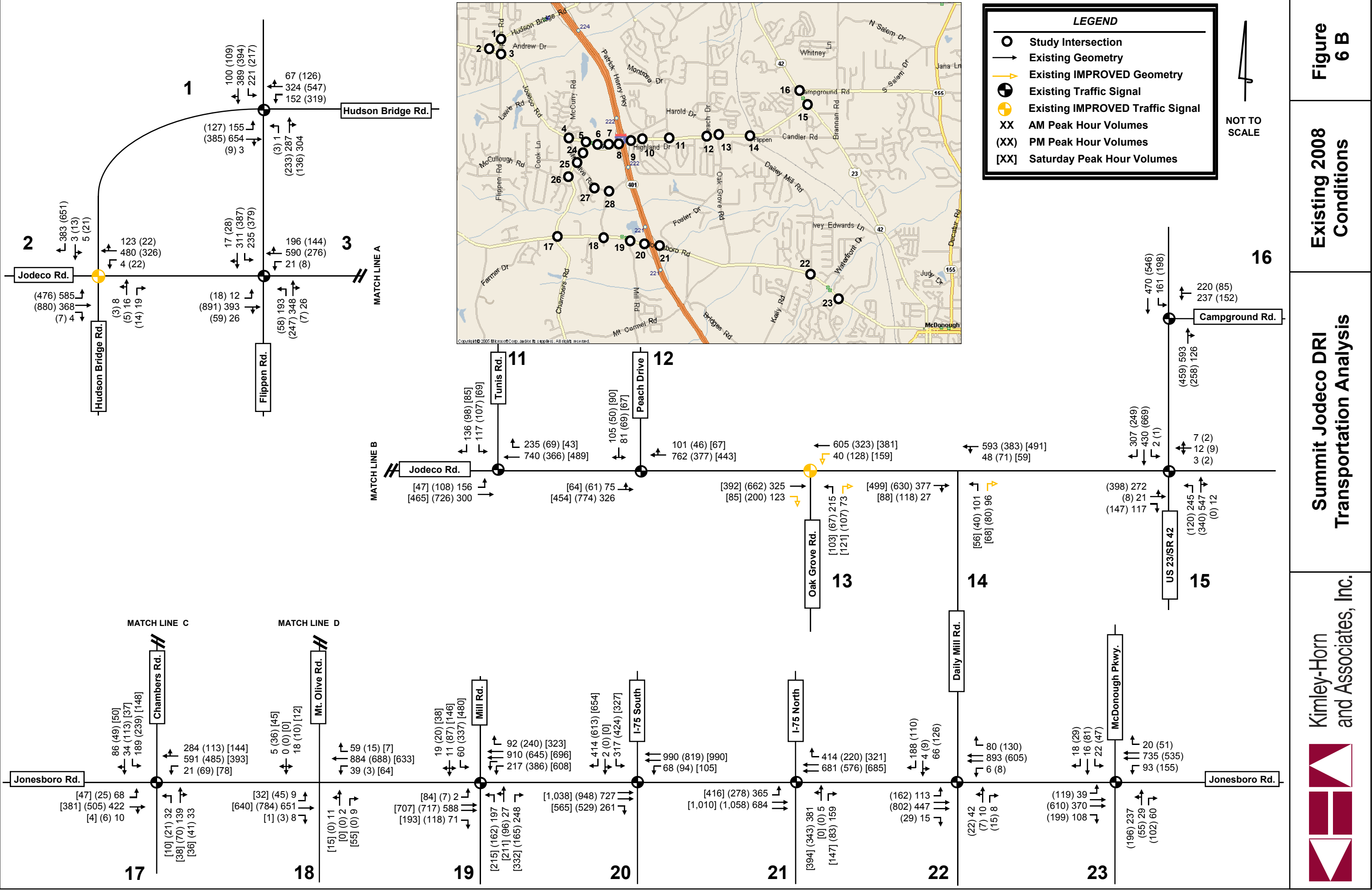


Figure 6 B

Existing 2008 Conditions

Summit Jodeco DRI Transportation Analysis



**Table 8**  
**Summit Jodeco DRI**  
**Existing 2008 Intersection Levels of Service**

	Intersection	Control	LOS Std.	AM Peak Hour		PM Peak Hour		SAT Peak Hour	
				LOS	v/c	LOS	v/c	LOS	v/c
1	Hudson Bridge Rd at Flippen Rd	Signal	E/D	E (79.2)	1.11	D (52.5)	0.97	Not Analyzed	
2	Jodeco Rd at Hudson Bridge Rd	NB Stop	D/D	**	**	**	**	Not Analyzed	
		SB Stop	E/E	E (44.1)	0.83	F (*)	1.55		
3	Jodeco Rd at Flippen Rd	Signal	D/D	D (50.9)	1.02	D (46.8)	1.00	Not Analyzed	
4	Jodeco Rd at Mt. Olive Rd	NB Stop	E/E	F (*)	1.19	E (45.2)	0.53	Not Analyzed	
5	Jodeco Rd at Chambers Rd	NB Stop	E/E/D	E (40.0)	0.81	F (97.4)	0.94	B (12.7)	0.26
		SB Stop	E/D/D	F (*)	0.16	**	**	C (21.7)	0.03
6	Jodeco Rd at New Connector	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7	Jodeco Rd at Mt. Olive Rd	NB Stop	D/D/D	C (16.3)	0.07	C (24.5)	0.13	B (11.6)	0.04
8	Jodeco Rd at I-75 SB Ramp	Signal	D/E/D	D (40.3)	0.99	F (*)	2.30	C (21.8)	0.83
9	Jodeco Rd at I-75 NB Ramp	Signal	E/D/D	F (*)	1.23	C (29.2)	0.95	B (13.1)	0.55
10	Jodeco Rd at Patrick Henry Pkwy	Signal	D/D/D	C (21.4)	0.77	C (29.6)	0.96	B (11.2)	0.58
11	Jodeco Rd at Tunis Drive	Signal	D/D/D	B (16.0)	0.72	A (9.8)	0.56	B (10.0)	0.54
12	Jodeco Rd at Peach Drive	Signal	D/D/D	B (13.0)	0.74	A (9.4)	0.66	A (9.0)	0.54
13	Jodeco Rd at Oak Grove Rd	NB Stop	E/E/E	F (*)	1.53	F (*)	2.24	F (*)	1.37
14	Jodeco Rd at Dailey Mill Rd	NB Stop	E/E/E	F (64.5)	0.85	E (39.0)	0.57	E (36.1)	0.54
15	Jodeco Rd at SR 42/US 23	Signal	D/D	B (19.7)	0.78	D (38.8)	0.96	Not Analyzed	
16	SR 42/US 23 at Campground Rd	Signal	D/D	D (53.4)	1.02	B (16.4)	0.75	Not Analyzed	
17	Jonesboro Rd at Chambers Rd	Signal	D/D/D	D (38.7)	0.96	B (18.2)	0.67	B (14.8)	0.53
18	Jonesboro Rd at Mt. Olive Rd	NB Stop	E/D/D	F (98.7)	0.64	**	**	D (28.0)	0.28
		SB Stop	E/D/D	F (*)	0.58	D (30.3)	0.28	D (32.4)	0.43
19	Jonesboro Rd at Mill Rd	Signal	D/D/D	C (21.6)	0.54	C (29.3)	0.70	D (42.6)	0.87
20	Jonesboro Rd at I-75 SB Ramp	Signal	D/D/D	B (15.2)	0.64	C (22.3)	0.84	C (27.4)	0.91
21	Jonesboro Rd at I-75 NB Ramp	Signal	D/D/D	C (22.8)	0.76	B (15.9)	0.63	C (21.2)	0.76
22	Jonesboro Rd at Dailey Mill Rd	Signal	D/D	B (12.6)	0.50	B (12.1)	0.49	Not Analyzed	
23	Jonesboro Rd at McDonough Prkwy	Signal	D/D	B (15.7)	0.56	B (15.2)	0.54	Not Analyzed	
24	Chambers Rd at Church Drive	EB Stop	D/D/D	C (21.7)	0.59	B (11.2)	0.17	A (9.5)	0.02
25	Chambers Rd at Mt. Olive Rd	All-Way	D/D/D	B (14.3)	***	B (10.3)	***	A (9.0)	---
26	Chambers Rd at McCullough Rd	NB Stop	E/D/D	F (*)	1.21	C (24.1)	0.59	B (12.8)	0.36
27	Mt. Olive Rd at Pond Drive	NB Stop	D/D/D	A (9.5)	0.03	A (8.7)	0.01	A (8.7)	0.02

\* Long delays for side-street traffic

\*\* No calculation due to no traffic during the peak hour.

\*\*\* v/c not provided for all-way stop control intersection configuration.



- Jodeco Road at Hudson Bridge Road (Int. #2)
  - Install a traffic signal.
- Jodeco Road at Mt. Olive Road (Int. #4)
  - Install a traffic signal.
  - Construct a northbound right-turn lane along Mt. Olive Road.
  - Construct an eastbound right-turn lane along Jodeco Road.
  - Construct a westbound left-turn lane along Jodeco Road.
- Jodeco Road at Chambers Road (Int. #5)
  - Install a traffic signal.
  - Construct a northbound right-turn lane along Chambers Road.
  - Construct an eastbound left-turn lane along Jodeco Road.
  - Construct a westbound left-turn lane along Jodeco Road.
- Jodeco Road at I-75 Southbound Ramp (Int. #8)
  - Construct an eastbound right-turn lane along Jodeco Road.
  - Construct a westbound left-turn lane along Jodeco Road.
  - Construct a southbound right-turn lane along the I-75 Southbound ramp.

Note: The analysis indicates a three-lane bridge over I-75 would accommodate the existing traffic. The additional center lane would provide a dedicated left-turn at each ramp.
- Jodeco Road at I-75 Northbound Ramp (Int. #9)
  - Construct an eastbound left-turn lane along Jodeco Road.
  - Construct a northbound right-turn lane along the I-75 Northbound ramp.

Note: The analysis indicates a three-lane bridge over I-75 would accommodate the existing traffic. The additional center lane would provide a dedicated left-turn at each ramp.
- Jodeco Road at Oak Grove Road (Int. #13)
  - Install a traffic signal.
  - Construct a northbound right-turn lane along Oak Grove Road.
  - Construct an eastbound right-turn lane along Jodeco Road.
  - Construct a westbound left-turn lane along Jodeco Road.
- Jodeco Road at Dailey Mill Road (Int. #14)
  - Construct a northbound right-turn lane along Dailey Mill Road.
- Jonesboro Road at Mt. Olive Road (Int. #18)
  - No improvements recommended based on low side-street traffic volumes. Also, existing peak hour traffic volumes do not meet peak hour traffic signal warrants.
- Chambers Road at McCullough Road (Int. #26)

- Construct a northbound right-turn lane along Chambers Road.

The improved levels of service with the improvements stated above are shown in **Table 9**.

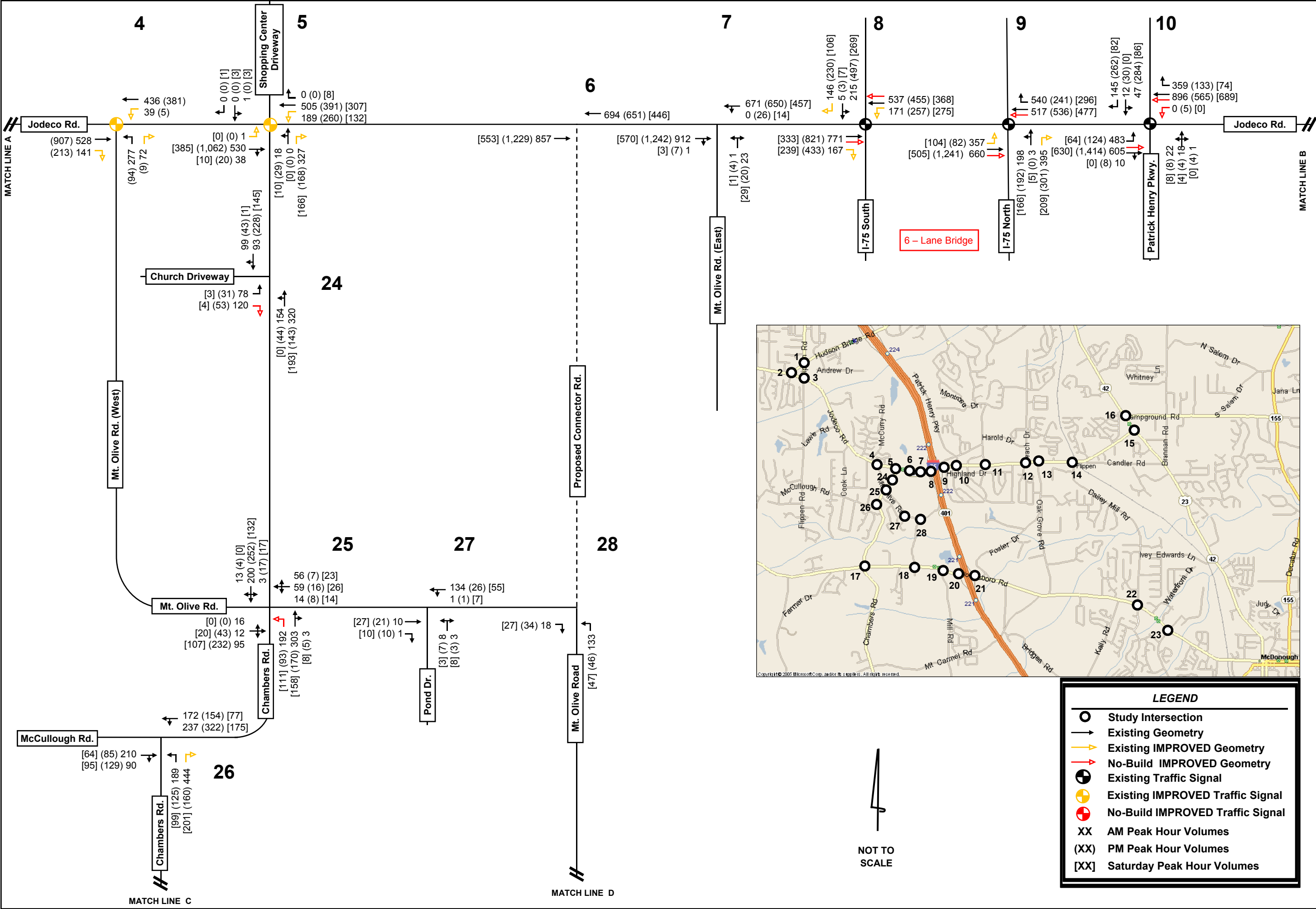
<b>Table 9</b> <b>Summit Jodeco DRI</b> <b>Existing 2008 Intersection Levels of Service IMPROVED</b>									
Intersection		Control	LOS Std.	AM Peak Hour		PM Peak Hour		SAT Peak Hour	
				LOS	v/c	LOS	v/c	LOS	v/c
2	Jodeco Rd at Hudson Bridge Rd	Signal	D/D	C (31.7)	0.99	C (20.2)	0.85	Not Analyzed	
4	Jodeco Rd at Mt. Olive Rd	Signal	E/E	A (8.6)	0.53	A (5.8)	0.57	Not Analyzed	
5	Jodeco Rd at Chambers Rd	Signal	E/D/D	A (7.8)	0.49	A (7.7)	0.58	A (5.9)	0.25
8	Jodeco Rd at I-75 SB Ramp	Signal	D/E/D	B (14.5)	0.67	C (22.2)	0.81	B (11.4)	0.47
9	Jodeco Rd at I-75 NB Ramp	Signal	E/D/D	B (14.4)	0.58	B (12.6)	0.76	B (10.8)	0.48
13	Jodeco Rd at Oak Grove Rd	Signal	E/E/E	A (9.6)	0.62	A (6.4)	0.49	A (7.4)	0.38
14	Jodeco Rd at Dailey Mill Rd	NB Stop	E/E/E	E (37.2)	0.67	D (26.8)	0.34	D (27.2)	0.39
18	Jonesboro Rd at Mt. Olive Rd	NB Stop	E/D/D	F (98.7)	0.64	**	**	D (28.0)	0.28
		SB Stop	E/D/D	F (*)	0.58	D (30.3)	0.28	D (32.4)	0.43
26	Chambers Rd at McCullough Rd	NB Stop	E/D/D	D (25.7)	0.73	C (17.6)	0.43	B (11.1)	0.18

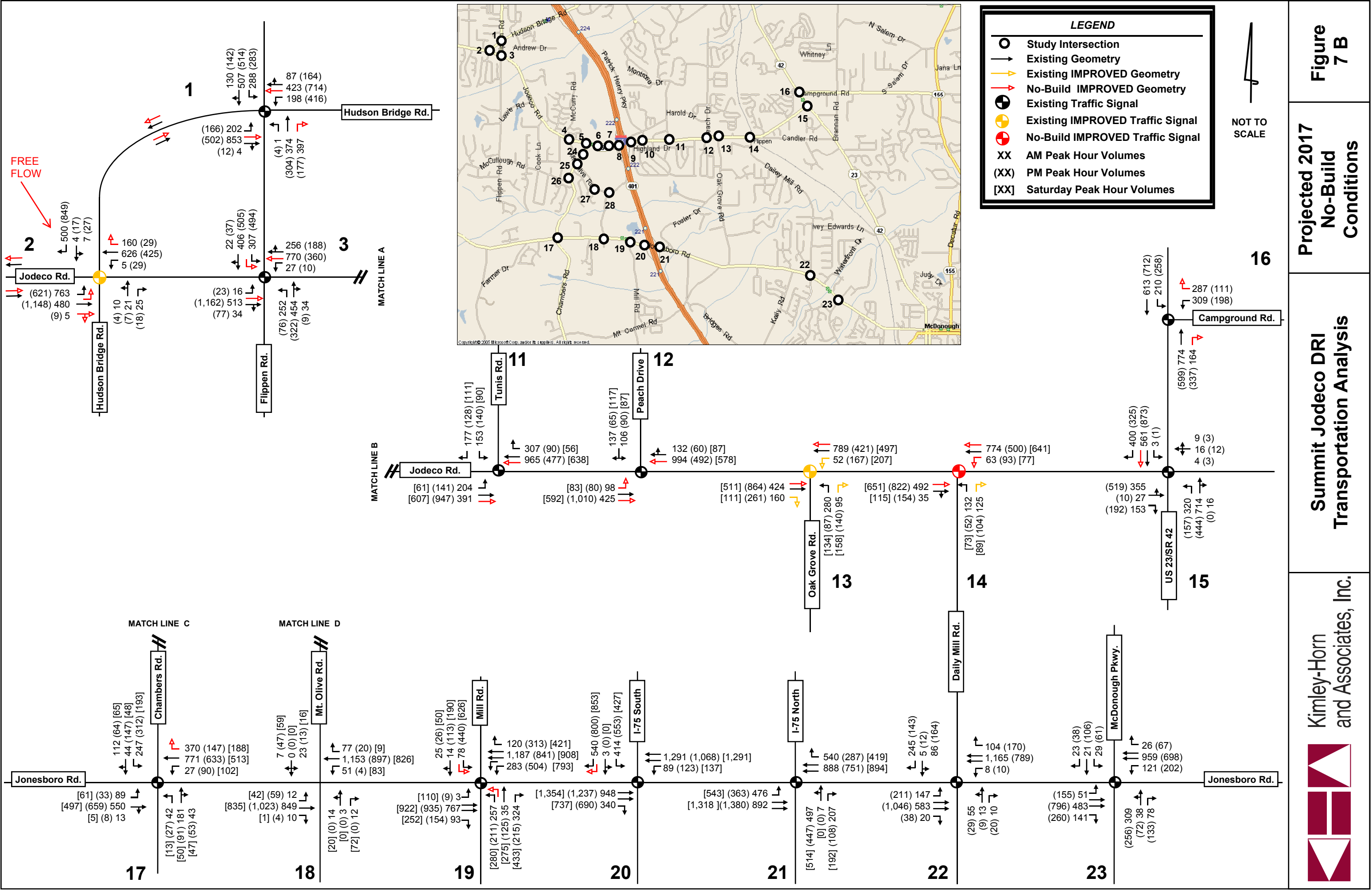
\*\* No calculation due to no traffic during the peak hour

## 6.2 Projected 2017 No-Build Conditions

To account for growth in the vicinity of the proposed development, the existing traffic volumes were increased at 4% per year for the first three years and 2.5% per year for the following six years along all roadway links. These volumes were input into *Synchro 6.0* and an analysis of the projected No-Build Conditions was performed. The results are displayed in **Table 10**. The intersection laneage and traffic volumes for the projected 2017 No-Build Conditions are shown in **Figure 7A-7B**.

Twenty-one (21) intersections are projected to operate below the acceptable Level of Service standard during the AM Peak Hour, PM Peak Hour, and/or the SAT Peak Hour. Following implementation of the improvements recommended in the 2008 Existing Conditions analysis, nineteen (19) intersections are still projected to operate below the acceptable Level of Service standard. Therefore, roadway improvement recommendations are made at twenty (20) intersections as follows (Note: recommendations were made at one additional intersection, Intersection #11 - Jodeco Road at Tunis Road, to provide consistent corridor recommendations):





**Table 10**  
**Summit Jodeco DRI**  
**No-Build 2017 Intersection Levels of Service**

Intersection		Control	LOS Std.	AM Peak Hour		PM Peak Hour		SAT Peak Hour	
				LOS	v/c	LOS	v/c	LOS	v/c
1	Hudson Bridge Rd at Flippen Rd	Signal	E/D	F (*)	1.42	F (*)	1.28	Not Analyzed	
2	Jodeco Rd at Hudson Bridge Rd	NB Stop	D/D	F (*)	*	F (*)	1.46	Not Analyzed	
		SB Stop	E/E	F (*)	2.10	F (*)	1.67		
3	Jodeco Rd at Flippen Rd	Signal	D/D	F (*)	1.33	F (*)	1.25	Not Analyzed	
4	Jodeco Rd at Mt. Olive Rd	NB Stop	E/E	F (*)	2.42	F (*)	1.21	Not Analyzed	
5	Jodeco Rd at Chambers Rd	NB Stop	E/E/D	F (*)	1.49	F (*)	2.62	C (16.5)	0.41
		SB Stop	E/D/D	F (*)	*	**	**	E (38.4)	0.09
6	Jodeco Rd at New Connector	---	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7	Jodeco Rd at Mt. Olive Rd	NB Stop	D/D/D	C (22.7)	0.13	F (67.9)	0.40	B (13.3)	0.07
8	Jodeco Rd at I-75 SB Ramp	Signal	D/E/D	F (*)	2.20	F (*)	2.82	E (77.6)	1.11
9	Jodeco Rd at I-75 NB Ramp	Signal	E/D/D	F (*)	1.83	F (*)	1.40	B (19.5)	0.80
10	Jodeco Rd at Patrick Henry Pkwy	Signal	D/D/D	D (50.0)	1.03	F (89.1)	1.20	B (12.7)	0.71
11	Jodeco Rd at Tunis Drive	Signal	D/D/D	C (30.3)	0.88	B (12.3)	0.71	B (11.8)	0.65
12	Jodeco Rd at Peach Drive	Signal	D/D/D	E (70.2)	1.19	B (14.1)	0.83	B (14.3)	0.75
13	Jodeco Rd at Oak Grove Rd	NB Stop	E/E/E	F (*)	3.81	F (Err)	Err	F (Err)	4.09
14	Jodeco Rd at Dailey Mill Rd	NB Stop	E/E/E	F (*)	1.85	F (*)	1.30	F (*)	1.22
15	Jodeco Rd at SR 42/US 23	Signal	D/D	D (42.6)	1.00	F (99.5)	1.19	Not Analyzed	
16	SR 42/US 23 at Campground Rd	Signal	D/D	F (*)	1.28	D (42.1)	0.96	Not Analyzed	
17	Jonesboro Rd at Chambers Rd	Signal	D/D/D	F (*)	1.31	D (35.5)	0.88	B (17.7)	0.68
18	Jonesboro Rd at Mt. Olive Rd	NB Stop	E/D/D	F (*)	2.29	**	**	F (*)	0.98
		SB Stop	E/D/D	F (*)	2.45	F (*)	0.74	F (*)	1.17
19	Jonesboro Rd at Mill Rd	Signal	D/D/D	C (26.0)	0.66	D (48.1)	0.89	F (84.7)	1.08
20	Jonesboro Rd at I-75 SB Ramp	Signal	D/D/D	C (23.2)	0.83	D (53.4)	1.05	E (69.2)	1.14
21	Jonesboro Rd at I-75 NB Ramp	Signal	D/D/D	D (41.5)	1.00	C (24.3)	0.81	D (38.1)	0.99
22	Jonesboro Rd at Dailey Mill Rd	Signal	D/D	B (15.7)	0.69	B (14.6)	0.58	Not Analyzed	
23	Jonesboro Rd at McDonough Parkway	Signal	D/D	B (19.7)	0.72	B (19.0)	0.75	Not Analyzed	
24	Chambers Rd at Church Drive	EB Stop	D/D/D	F (83.9)	1.02	B (12.9)	0.26	A (10.0)	0.03
25	Chambers Rd at Mt. Olive Rd	All-Way	D/D/D	E (37.2)	***	B (13.3)	***	B (10.2)	***
26	Chambers Rd at McCullough Rd	NB Stop	E/D/D	F (*)	2.27	F (*)	1.10	B (13.0)	0.30
27	Mt. Olive Rd at Pond Drive	NB Stop	D/D/D	A (9.8)	0.04	A (8.8)	0.02	A (8.8)	0.02

\* Long delays for side-street traffic

\*\* No calculation due to no traffic during the peak hour.

\*\*\* v/c not provided for all-way stop control intersection configuration.

*Please note that the following improvements are IN ADDITION TO the improvements needed in the Existing 2008 Conditions for the study intersections to operate at LOS D or better.*

- Hudson Bridge Road at Flippen Road (Int. #1)
  - Widen Hudson Bridge Road from 2 to 4 lanes in the vicinity of this intersection (provide an additional thru lane along the eastbound and westbound approach).
  - Construct a northbound right-turn lane along Flippen Road.

Note: ARC HE 110 (GDOT #0006927) is projected to widen Hudson Bridge Road from two to four lanes for approximately 1.1 miles from Jodeco Road to I-75 South and listed as having a completion date of 2010.
- Jodeco Road at Hudson Bridge Road (Int. #2)
  - Improvements listed for the Existing 2008 Conditions plus:
  - Construct a westbound receiving lane on the east leg of the intersection so that the southbound right-turn lane can operate under free-flow conditions.
  - Construct an additional eastbound thru lane along Jodeco Road. Note: This improvement will require an additional eastbound receiving lane along Jodeco Road.
  - Construct an additional eastbound left-turn lane, creating dual left-turn lanes along Jodeco Road. Note: This improvement will require an additional northbound receiving lane along Hudson Bridge Road.

Note: ARC HE 110 (GDOT #0006927) is projected to widen Hudson Bridge Road from two to four lanes for approximately 1.1 miles from Jodeco Road to I-75 South and listed as having a completion date of 2010.

  - Construct a westbound right-turn lane along Jodeco Road.
- Jodeco Road at Flippen Road (Int. #3)
  - Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection (provide an additional thru lane along the eastbound and westbound approach).
  - Construct an additional southbound left-turn lane, creating dual left-turn lanes along Flippen Road.
- Jodeco Road at Mt. Olive Road (Int. #4)
  - Improvements listed for the Existing 2008 Conditions.
- Jodeco Road at Chambers Road (Int. #5)
  - Improvements listed for the Existing 2008 Conditions.
- Jodeco Road at Mt. Olive Rd (Int. #7)
  - No improvements recommended as traffic volumes do not warrant improvement.
- Jodeco Road at I-75 Southbound Ramp (Int. #8)
  - Improvements listed for the Existing 2008 Conditions plus:
  - Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection.

Note: The analysis indicates a six-lane bridge over I-75 would accommodate the projected traffic. The bridge would provide two westbound through lanes, one dedicated westbound left-turn lane (entire length of bridge), one dedicated eastbound left-turn lane (entire length of bridge), and two eastbound through lanes.

Note: ARC HE-AR-216 (GDOT #312160-) includes extensive interchange improvements including a ten-lane bridge and ramp improvements. The expected completion date is 2011.

- Jodeco Road at I-75 Northbound Ramp (Int. #9)
  - Improvements listed for the Existing 2008 Conditions plus:
  - Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection.

Note: The analysis indicates a six-lane bridge over I-75 would accommodate the projected traffic. The bridge would provide two westbound through lanes, one dedicated westbound left-turn lane (entire length of bridge), one dedicated eastbound left-turn lane (entire length of bridge), and two eastbound through lanes.

Note: ARC HE-AR-216 (GDOT #312160-) includes extensive interchange improvements including a ten-lane bridge and ramp improvements. The expected completion date is 2011.

- Jodeco Road at Patrick Henry Parkway (Int. #10)
  - Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection (provide an additional thru lane along the eastbound and westbound approach).
  - Construct a westbound left-turn lane along Jodeco Road.

Note: ARC HE-110 is projected to widen Jodeco Road from two to four lanes between Meadowbrook Drive to Peach Drive and an extension/realignment from Peach Drive to Campground Road for approximately 3.0 miles and listed as having a completion date of 2013.

- Jodeco Road at Tunis Road (Int. #11)
  - Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection.

Note: ARC HE-110 is projected to widen Jodeco Road from two to four lanes between Meadowbrook Drive to Peach Drive and an extension/realignment from Peach Drive to Campground Road for approximately 3.0 miles and listed as having a completion date of 2013.

- Jodeco Road at Peach Drive (Int. #12)
  - Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection.

Note: ARC HE-110 is projected to widen Jodeco Road from two to four lanes between Meadowbrook Drive to Peach Drive and an extension/realignment from Peach Drive to Campground Road for approximately 3.0 miles and listed as having a completion date of 2013.

- Construct an eastbound left-turn lane along Jodeco Road.
- Jodeco Road at Oak Grove Road (Int. #13)
  - Improvements listed for the Existing 2008 Conditions plus:
  - Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection.

Note: ARC HE-110 is projected to widen Jodeco Road from two to four lanes between Meadowbrook Drive to Peach Drive and an extension/realignment from Peach Drive to Campground Road for approximately 3.0 miles and listed as having a completion date of 2013.

- Jodeco Road at Dailey Mill Road (Int. #14)

- Improvements listed for the Existing 2008 Conditions plus:
- Install a traffic signal.
- Construct a westbound left-turn lane along Jodeco Road.
- Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection.

Note: ARC HE-110 is projected to widen Jodeco Road from two to four lanes between Meadowbrook Drive to Peach Drive and an extension/realignment from Peach Drive to Campground Road for approximately 3.0 miles and listed as having a completion date of 2013.

- Jodeco Road at SR 42/US 23 (Int. #15)
  - Construct an additional southbound thru- lane along SR 42/US 23. Note: This improvement will require an additional southbound receiving lane along SR 42/US 23.

Note: ARC HE-110 is projected to widen Jodeco Road from two to four lanes between Meadowbrook Drive to Peach Drive and an extension/realignment from Peach Drive to Campground Road for approximately 3.0 miles and listed as having a completion date of 2013.
- SR 42/US 23 at Campground Road (Int. #16)
  - Construct a westbound right-turn lane along Campground Road.
  - Construct a northbound right-turn lane along SR 42/US 23.

Note: ARC HE-110 is projected to widen Jodeco Road from two to four lanes between Meadowbrook Drive to Peach Drive and an extension/realignment from Peach Drive to Campground Road for approximately 3.0 miles and listed as having a completion date of 2013.
- Jonesboro Road at Chambers Road (Int. #17)
  - Construct a westbound right-turn lane along Jonesboro Road.
- Jonesboro Road at Mt. Olive Road (Int. #18)
  - No improvements recommended based on low side-street traffic volumes. Also, the projected peak hour traffic volumes do not meet peak hour traffic signal warrants.
- Jonesboro Road at Mill Road (Int. #19)
  - Construct an additional southbound lane along Mill Road and restripe forming dual southbound left-turn lanes and a shared thru/right-turn lane.
  - Construct an additional northbound lane along Mill Road and restripe forming dual northbound left-turn lanes, an exclusive thru lane, and an exclusive right-turn lane.
- Jonesboro Road at I-75 Southbound Ramp (Int. #20)
  - Construct an additional southbound right-turn lane along the I-75 Southbound Ramp, to form dual right-turn lanes.
- Chambers Road at Church Drive (Int. #24)
  - Construct an eastbound right-turn lane along Church driveway. (Note: This is a private driveway)
- Chambers Road at Mt. Olive Road (Int. #25)
  - Construct a northbound left-turn lane along Chambers Road.
- Chambers Road at McCullough Road (Int. #26)
  - Improvements listed for the Existing 2008 Conditions.



- Traffic volumes are not expected to warrant a traffic signal.

The improved levels of service with the improvements stated above are shown in **Table 11**.

<b>Table 11</b> <b>Summit Jodeco DRI</b> <b>No-Build 2017 Intersection Levels of Service IMPROVED</b>									
Intersection		Control	LOS Std.	AM Peak Hour		PM Peak Hour		SAT Peak Hour	
				LOS	v/c	LOS	v/c	LOS	v/c
1	Hudson Bridge Rd at Flippen Rd	Signal	E/D	D (44.6)	0.89	D (48.8)	0.93	Not Analyzed	
2	Jodeco Rd at Hudson Bridge Rd	Signal	D/D	B (15.8)	0.75	A (8.5)	0.61	Not Analyzed	
3	Jodeco Rd at Flippen Rd	Signal	D/D	D (38.0)	0.87	C (28.1)	0.80	Not Analyzed	
4	Jodeco Rd at Mt. Olive Rd	Signal	E/E	A (11.4)	0.66	A (8.2)	0.73	Not Analyzed	
5	Jodeco Rd at Chambers Rd	Signal	E/D/D	A (17.5)	0.75	C (34.9)	0.88	A (8.9)	0.40
7	Jodeco Rd at Mt. Olive Rd	NB Stop	D/D/D	C (21.9)	0.12	E (47.4)	0.31	B (13.2)	0.07
8	Jodeco Rd at I-75 SB Ramp	Signal	D/E/D	C (20.9)	0.51	C (31.9)	0.76	B (13.0)	0.51
9	Jodeco Rd at I-75 NB Ramp	Signal	E/D/D	C (21.8)	0.72	B (14.6)	0.62	B (10.9)	0.41
10	Jodeco Rd at Patrick Henry Pkwy	Signal	D/D/D	C (24.0)	0.76	B (19.0)	0.80	A (9.0)	0.43
11	Jodeco Rd at Tunis Drive	Signal	D/D/D	B (16.6)	0.63	A (9.1)	0.42	A (10.0)	0.47
12	Jodeco Rd at Peach Drive	Signal	D/D/D	B (19.6)	0.68	A (7.8)	0.44	B (11.4)	0.53
13	Jodeco Rd at Oak Grove Rd	Signal	E/E/E	A (8.7)	0.54	A (6.1)	0.47	A (7.1)	0.47
14	Jodeco Rd at Dailey Mill Rd	NB Stop	E/E/E	A (6.6)	0.42	A (5.2)	0.41	A (5.5)	0.34
15	Jodeco Rd at SR 42/US 23	Signal	D/D	C (23.6)	0.83	D (38.2)	0.94	Not Analyzed	
16	SR 42/US 23 at Campground Rd	Signal	D/D	D (39.9)	0.96	B (12.8)	0.67	Not Analyzed	
17	Jonesboro Rd at Chambers Rd	Signal	D/D/D	D (44.1)	0.98	C (26.3)	0.78	B (15.9)	0.58
18	Jonesboro Rd at Mt. Olive Rd	NB Stop	E/D/D	F (*)	2.29	**	**	F (*)	0.98
		SB Stop	E/D/D	F (*)	2.45	F (*)	0.74	F (*)	1.17
19	Jonesboro Rd at Mill Rd	Signal	D/D/D	C (22.3)	0.63	C (34.3)	0.80	D (52.2)	0.97
20	Jonesboro Rd at I-75 SB Ramp	Signal	D/D/D	B (16.2)	0.69	C (24.1)	0.79	C (24.3)	0.88
24	Chambers Rd at Church Drive	EB Stop	D/D/D	D (29.0)	0.72	B (11.8)	0.12	A (9.9)	0.02
25	Chambers Rd at Mt. Olive Rd	All-Way	D/D/D	C (15.8)	***	B (12.3)	***	A (9.3)	***
26	Chambers Rd at McCullough Rd	NB Stop	E/D/D	F (*)	2.02	E (45.4)	0.87	B (13.0)	0.30

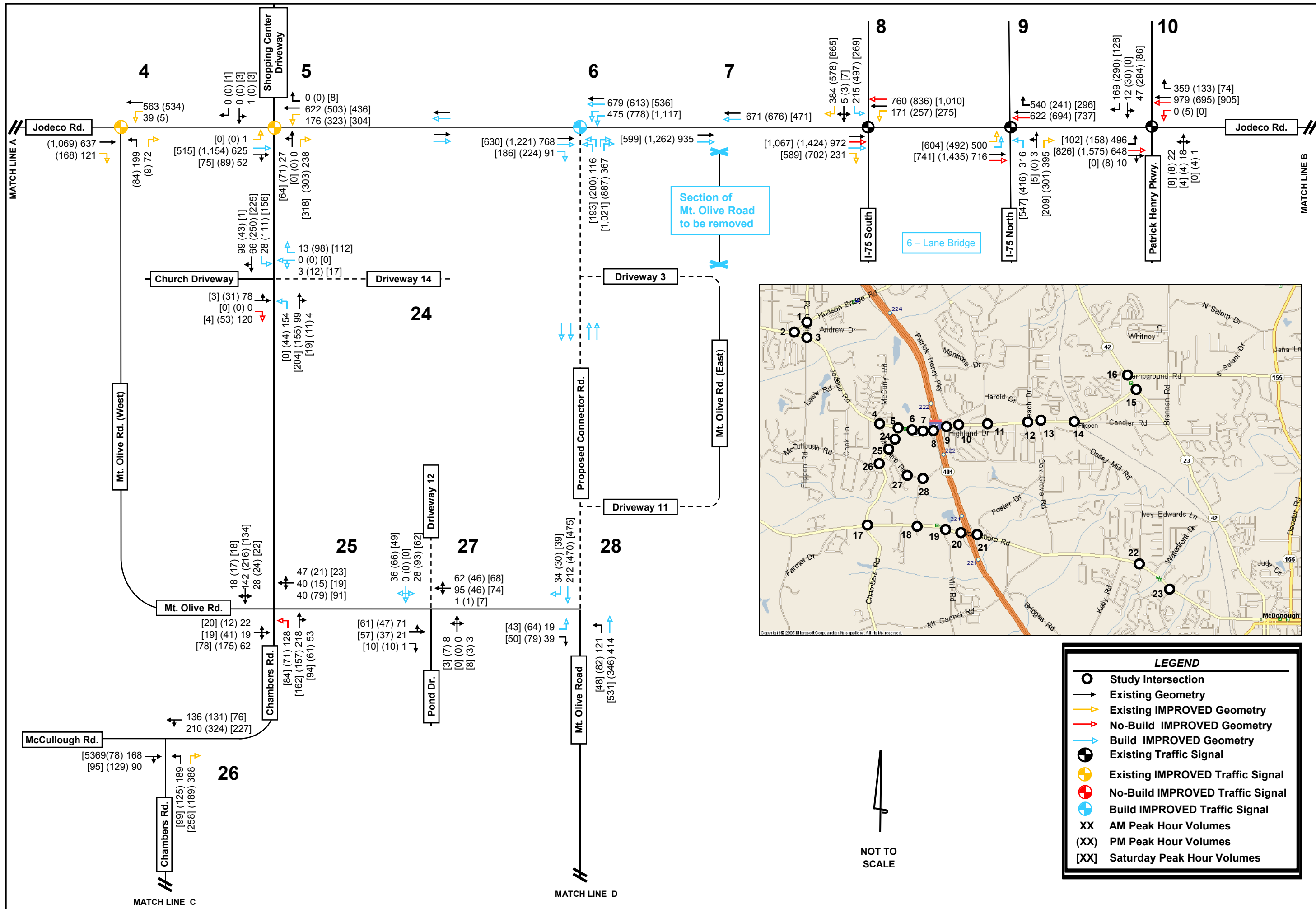
\* Long delays for side-street traffic

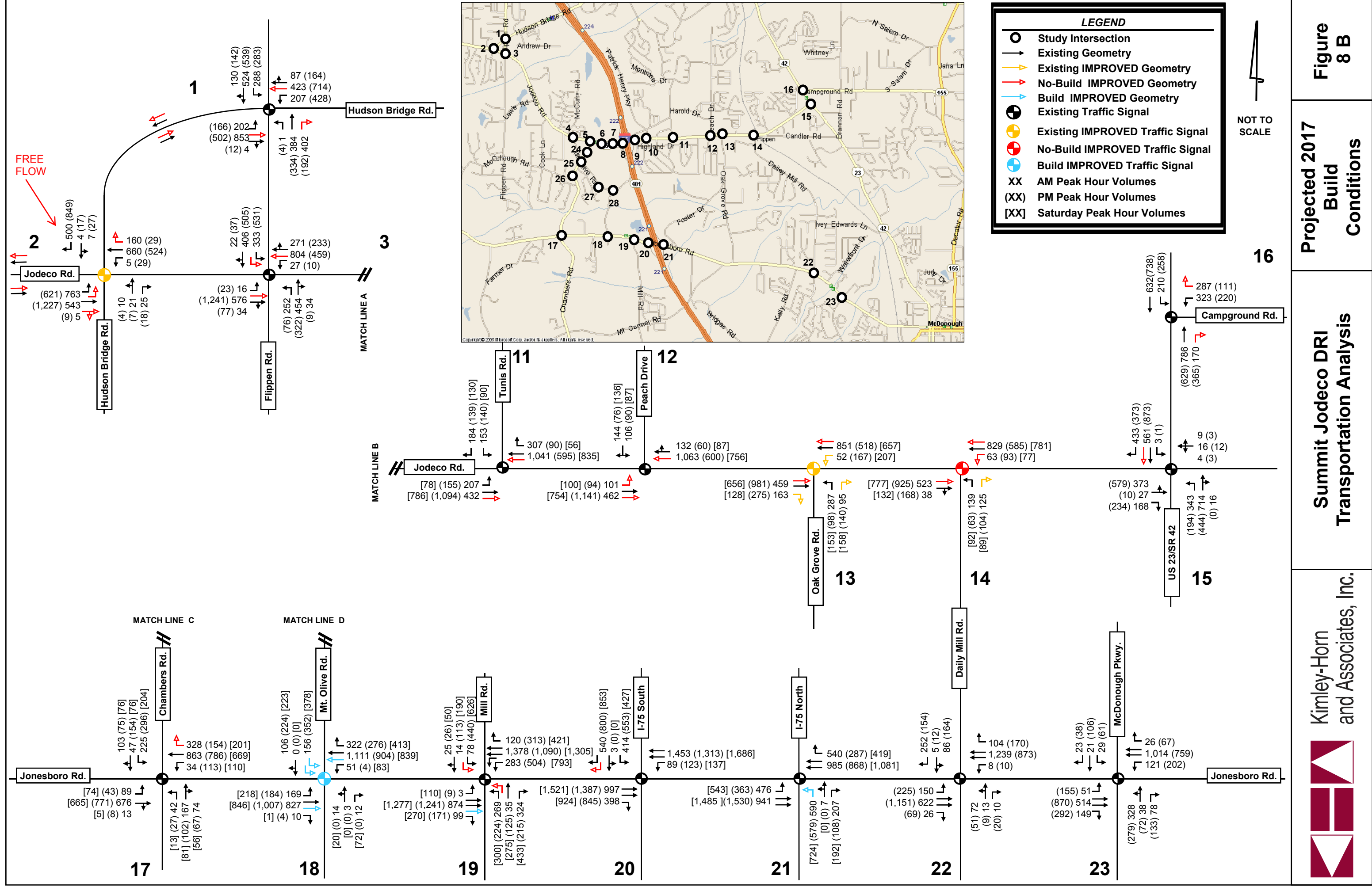
### 6.3 *Projected 2017 Build Conditions*

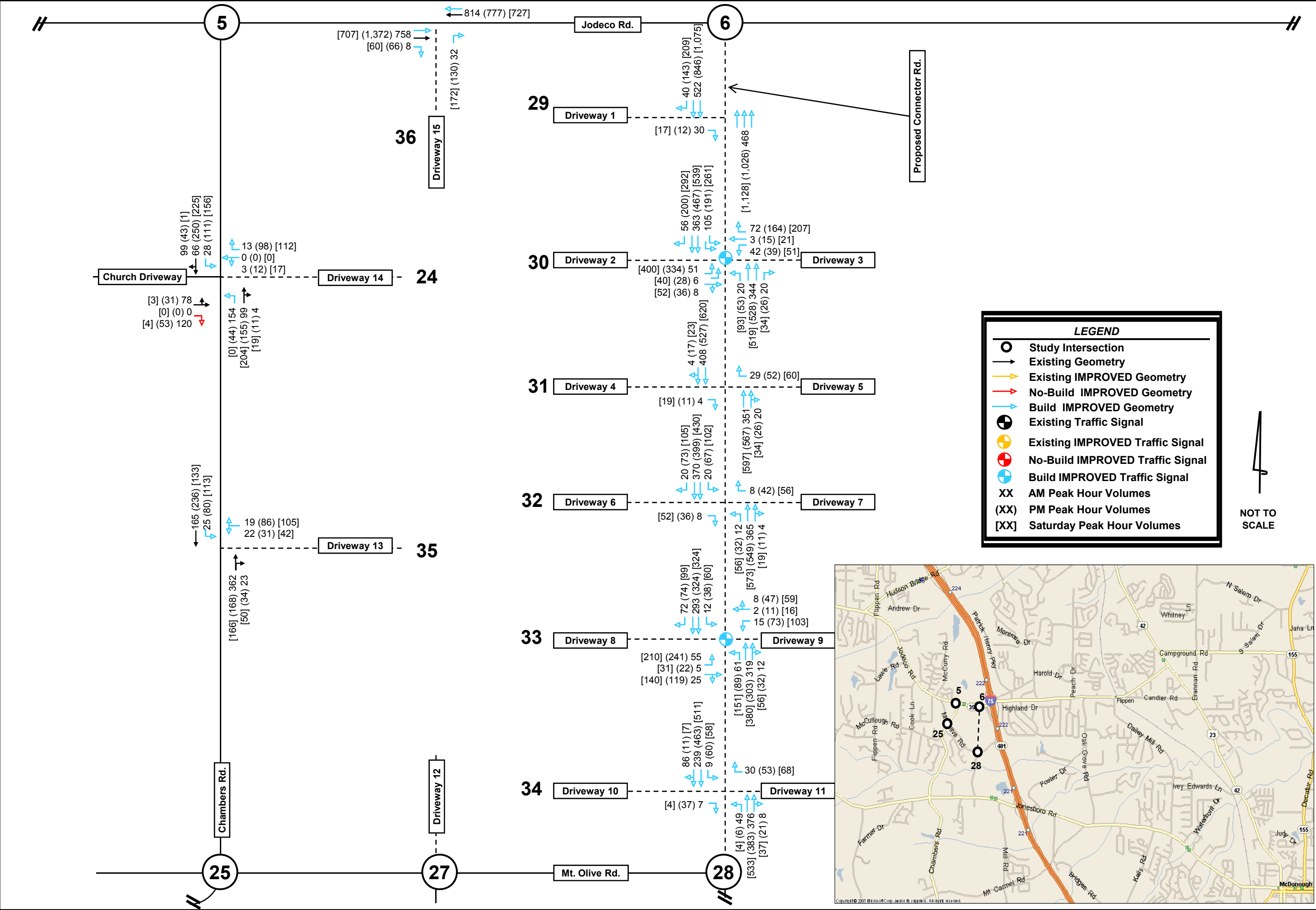
The traffic associated with the proposed Summit Jodeco development was added to the projected 2017 No-Build volumes. These volumes were then input into *Synchro 6.0*, and the optimized signal timings and existing roadway geometry were maintained. The results of the analysis for the existing intersections are displayed in **Table 12**, and the results for the proposed driveways are displayed in **Table 13**. The intersection laneage and traffic volumes for the projected 2017 Build Conditions, as well as the recommended driveway configurations, are shown in **Figure 8A-8C**.

Twenty-one (21) intersections are projected to operate below the acceptable Level of Service standard during the AM Peak Hour, PM Peak Hour, and/or the SAT Peak Hour. Following implementation of the improvements recommended in the projected 2017 No-Build Conditions analysis, twelve (12) intersections are still projected to operate below the acceptable Level of Service standard. Based on the projected 2017 Build Conditions, the following improvements result in the following twelve (12) intersections operating at LOS D or better:

The improved levels of service with the improvements stated above are shown in **Table 14**.







**Table 12**  
**Summit Jodeco DRI**  
**Build 2017 Intersection Levels of Service**

	Intersection	Control	LOS Std.	AM Peak Hour		PM Peak Hour		SAT Peak Hour	
				LOS	v/c	LOS	v/c	LOS	v/c
1	Hudson Bridge Rd at Flippen Rd	Signal	E/D	F (*)	1.43	F (*)	1.29	Not Analyzed	
2	Jodeco Rd at Hudson Bridge Rd	NB Stop	D/D	F (*)	*	F (*)	20.53	Not Analyzed	
		SB Stop	E/E	F (*)	2.39	F (*)	2.08		
3	Jodeco Rd at Flippen Rd	Signal	D/D	F (*)	1.34	F (*)	1.33	Not Analyzed	
4	Jodeco Rd at Mt. Olive Rd	NB Stop	E/E	F (*)	2.60	F (*)	1.77	Not Analyzed	
5	Jodeco Rd at Chambers Rd	NB Stop	E/E/D	F (*)	2.41	F (*)	19.44	F (*)	4.44
		SB Stop	E/D/D	F (*)	5.69	**	**	F (*)	2.13
6	Jodeco Rd at New Connector	Signal	D/D/D	C (34.6)	0.92	F(*)	1.39	E (68.7)	1.13
7	Jodeco Rd at Mt. Olive Rd	NB Stop	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8	Jodeco Rd at I-75 SB Ramp	Signal	D/E/D	F (*)	3.83	F (*)	2.88	F (*)	5.96
9	Jodeco Rd at I-75 NB Ramp	Signal	E/D/D	F (*)	2.73	F (*)	4.06	F (*)	3.35
10	Jodeco Rd at Patrick Henry Pkwy	Signal	D/D/D	E (64.1)	1.10	F (*)	1.30	B (16.0)	0.84
11	Jodeco Rd at Tunis Drive	Signal	D/D/D	D (37.3)	0.94	B (15.6)	0.79	B (15.3)	0.77
12	Jodeco Rd at Peach Drive	Signal	D/D/D	F (*)	3.11	C (26.1)	0.96	E (61.4)	1.12
13	Jodeco Rd at Oak Grove Rd	NB Stop	E/E/E	F (*)	5.16	F (*)	*	F (*)	10.96
14	Jodeco Rd at Dailey Mill Rd	NB Stop	E/E/E	F (*)	2.22	F (*)	2.04	F (*)	2.30
15	Jodeco Rd at SR 42/US 23	Signal	D/D	D (47.5)	1.06	F (*)	1.27	Not Analyzed	
16	SR 42/US 23 at Campground Rd	Signal	D/D	F (*)	1.31	D (54.0)	1.04	Not Analyzed	
17	Jonesboro Rd at Chambers Rd	Signal	D/D/D	F (*)	1.29	D (53.5)	0.98	C (27.0)	0.87
18	Jonesboro Rd at Mt. Olive Rd	NB Stop	E/D/D	F (*)	17.30	**	**	F (*)	*
		SB Stop	E/D/D	F (*)	62.42	F (*)	27.11	F (*)	51.0
19	Jonesboro Rd at Mill Rd	Signal	D/D/D	C (28.6)	0.75	E (57.5)	0.97	F (*)	1.20
20	Jonesboro Rd at I-75 SB Ramp	Signal	D/D/D	C (25.4)	0.89	E (60.6)	1.12	F (88.6)	1.23
21	Jonesboro Rd at I-75 NB Ramp	Signal	D/D/D	E (60.5)	1.09	C (38.3)	0.95	E (76.1)	1.19
22	Jonesboro Rd at Dailey Mill Rd	Signal	D/D	B (16.6)	0.72	B (15.4)	0.62	Not Analyzed	
23	Jonesboro Rd at McDonough Parkway	Signal	D/D	C (21.3)	0.75	C (20.7)	0.80	Not Analyzed	
24	Chambers Rd at Church Drive/ Driveway #14	EB Stop	D/D/D	F (*)	1.08	D (26.3)	0.48	C (18.1)	0.08
		WB Stop	D/D/D	C (15.1)	0.03	B (12.0)	0.08	B (12.3)	0.08
25	Chambers Rd at Mt. Olive Rd	All-Way	D/D/D	C (17.1)	***	B (14.4)	***	B (12.3)	***
26	Chambers Rd at McCullough Rd	NB Stop	E/D/D	F (*)	1.72	F (*)	1.10	C (24.1)	0.69
27	Mt. Olive Rd at Pond Drive/ Driveway #12	NB Stop	D/D/D	B (12.6)	0.07	B (10.7)	0.03	B (10.1)	0.03
		SB Stop	D/D/D	B (11.7)	0.11	B (11.1)	0.23	B (12.3)	0.20
28	Mt. Olive Road at New Connector	EB Stop	D/D/D	C (18.8)	0.30	C (23.8)	0.45	F (*)	*

\* Long delays for side-street traffic

\*\* No calculation due to no traffic during the peak hours

\*\*\* v/c not provided for all-way stop control intersection configuration.



<b>Table 13</b> <b>Summit Jodeco DRI</b> <b>Build 2017 Intersection Levels of Service – Driveways</b>									
Intersection		Control	LOS Std.	AM Peak Hour		PM Peak Hour		SAT Peak Hour	
				LOS	v/c	LOS	v/c	LOS	v/c
29	New Connector at Driveway #1	EB STOP	D/D/D	B (10.1)	0.10	B (11.7)	0.02	B (13.3)	0.04
30	New Connector at Driveway #2/Driveway #3	Signal	D/D/D	B (11.9)	0.24	B (18.0)	0.50	C (20.1)	0.52
31	New Connector at Driveway #4/Driveway #5	EB STOP	D/D/D	A (9.6)	0.01	A (9.7)	0.02	A (9.9)	0.03
		WB STOP	D/D/D	A (9.7)	0.04	B (10.8)	0.08	B (11.1)	0.10
32	New Connector at Driveway #6/Driveway #7	EB STOP	D/D/D	A (9.5)	0.01	A (9.8)	0.05	B (10.1)	0.07
		WB STOP	D/D/D	A (9.5)	0.01	B (10.6)	0.07	B (10.9)	0.11
33	New Connector at Driveway #8/Driveway #9	Signal	D/D/D	A (5.3)	0.17	A (7.9)	0.38	A (8.1)	0.42
34	New Connector at Driveway #10/Driveway #11	EB STOP	D/D/D	A (9.3)	0.01	B (10.1)	0.05	B (10.1)	0.01
		WB STOP	D/D/D	A (9.7)	0.04	A (10.0)	0.07	B (10.9)	0.11
35	Chambers Road at Driveway #13	WB STOP	D/D/D	C (15.0)	0.11	B (12.1)	0.20	B (12.5)	0.25
36	Jodeco Road at Driveway #15	NB STOP	D/D/D	B (11.5)	0.06	C (13.3)	0.24	B (12.6)	0.28

**Table 14**  
**Summit Jodeco DRI**  
**Build 2017 Intersection Levels of Service IMPROVED**

Intersection		Control	LOS Std.	AM Peak Hour		PM Peak Hour		SAT Peak Hour	
				LOS	v/c	LOS	v/c	LOS	v/c
1	Hudson Bridge Rd at Flippen Rd	Signal	E/D	D (45.1)	0.91	D (55.0)	0.94	Not Analyzed	
2	Jodeco Rd at Hudson Bridge Rd	Signal	D/D	B (16.9)	0.75	A (9.9)	0.65	Not Analyzed	
3	Jodeco Rd at Flippen Rd	Signal	D/D	D (40.3)	0.86	D (35.6)	0.81	Not Analyzed	
4	Jodeco Rd at Mt. Olive Rd	Signal	E/E	B (10.8)	0.68	B (11.3)	0.83	Not Analyzed	
5	Jodeco Rd at Chambers Rd	Signal	E/D/D	B (10.5)	0.51	C (20.9)	0.71	B (12.3)	0.51
6	Jodeco Rd at New Connector	Signal	D/D/D	C (25.8)	0.54	C (31.9)	0.80	C (22.4)	0.77
8	Jodeco Rd at I-75 SB Ramp	Signal	D/E/D	C (21.0)	0.51	C (30.1)	0.78	D (41.2)	0.70
9	Jodeco Rd at I-75 NB Ramp	Signal	E/D/D	C (26.6)	0.67	C (20.6)	0.70	C (23.2)	0.65
10	Jodeco Rd at Patrick Henry Pkwy	Signal	D/D/D	C (29.0)	0.83	B (18.3)	0.84	B (10.3)	0.45
12	Jodeco Rd at Peach Drive	Signal	D/D/D	B (19.2)	0.71	A (8.2)	0.49	B (14.3)	0.62
13	Jodeco Rd at Oak Grove Rd	Signal	E/E/E	A (9.0)	0.56	A (6.5)	0.53	A (7.4)	0.56
14	Jodeco Rd at Dailey Mill Rd	Signal	E/E/E	A (6.7)	0.45	A (5.5)	0.46	A (5.8)	0.41
15	Jodeco Rd at SR 42/US 23	Signal	D/D	C (26.4)	0.84	D (49.4)	1.01	Not Analyzed	
16	SR 42/US 23 at Campground Rd	Signal	D/D	D (44.0)	0.96	B (17.1)	0.73	Not Analyzed	
17	Jonesboro Rd at Chambers Rd	Signal	D/D/D	D (49.8)	1.07	D (37.4)	0.89	B (19.9)	0.73
18	Jonesboro Rd at Mt. Olive Rd	Signal	E/D/D	B (19.2)	0.65	B (13.8)	0.60	C (25.1)	0.64
19	Jonesboro Rd at Mill Rd	Signal	D/D/D	C (23.3)	0.68	C (33.9)	0.75	D (50.6)	0.96
20	Jonesboro Rd at I-75 SB Ramp	Signal	D/D/D	B (17.7)	0.70	C (28.3)	0.86	C (33.4)	0.93
21	Jonesboro Rd at I-75 NB Ramp	Signal	D/D/D	C (31.0)	0.88	C (21.3)	0.75	D (37.0)	0.94
24	Chambers Rd at Church Drive/ Driveway #14	EB Stop	D/D/D	E (35.6)	0.80	C (20.8)	0.35	C (17.8)	0.06
		WB Stop	D/D/D	C (15.1)	0.03	B (12.0)	0.13	B (12.3)	0.16
25	Chambers Rd at Mt. Olive Rd	All-Way	D/D/D	B (12.8)	***	B (13.3)	***	B (11.0)	***
26	Chambers Rd at McCullough Rd	NB Stop	E/D/D	F (*)	1.36	E (38.6)	0.83	B (14.6)	0.38
28	Mt. Olive Road at New Connector	EB Stop	D/D/D	C (18.8)	0.30	C (23.8)	0.45	F (Err)	*

\* Long delays for side-street traffic

*Please note that the following improvements are IN ADDITION TO the improvements needed in the 2008 Existing Conditions and the 2017 No-Build Conditions for the study intersections to operate at LOS D or better.*

- Hudson Bridge Road at Flippen Road (Int. #1)
  - Improvements listed for the 2017 No-Build Conditions.
- Jodeco Road at Hudson Bridge Road (Int. #2)



- Improvements listed for the 2008 Existing Conditions and 2017 No-Build Conditions.
- Jodeco Road at Flippen Road (Int. #3)
  - Improvements listed for the 2017 No-Build Conditions.
- Jodeco Road at Mt. Olive Road (Int. #4)
  - Improvements listed for the 2008 Existing Conditions.
- Jodeco Road at Chambers Road (Int. #5)
  - Improvements listed for the Existing 2008 Conditions plus:
  - Construct an additional eastbound thru-lane along Jodeco Road.
- Jodeco Road at New Connector (Int. #6)
  - Construct the northbound approach along the New Connector forming dual left-turn lanes and dual right-turn lanes.
  - Construct an additional eastbound and westbound thru-lane along Jodeco Road.
  - Construct an eastbound right-turn lane along Jodeco Road.
  - Construct two westbound left-turn lanes along Jodeco Road to form dual left-turn lanes. Note: The New Connector is proposed to have two southbound receiving lanes.
- Jodeco Road at Mt. Olive Road (East) (Int. #7)
  - Mt. Olive Road will be closed and traffic rerouted to the New Connector.
- Jodeco Road at I-75 Southbound Ramp (Int. #8)
  - Improvements listed for the Existing 2008 Conditions and the 2017 No-Build Conditions plus:
  - Construct an additional southbound lane forming an exclusive left-turn lane, a shared left-turn/thru/right-turn lane, and an exclusive right-turn lane along the I-75 Southbound Ramp.
  - Construct an additional eastbound thru-lane, creating three thru- lanes.

Note: The analysis indicates a six-lane bridge over I-75 would accommodate the projected traffic. The bridge would provide two westbound through lanes, one dedicated westbound left-turn lane (half length of bridge), one dedicated eastbound left-turn lane (entire length of bridge) and a half length westbound left-turn lane, and two eastbound through lanes.

Note: ARC HE-AR-216 (GDOT #312160-) includes extensive interchange improvements including a ten-lane bridge and ramp improvements. The expected completion date is 2011.
- Jodeco Road at I-75 Northbound Ramp (Int. #9)
  - Improvements listed for the Existing 2008 Conditions and the 2017 No-Build Conditions plus:
  - Construct an additional eastbound left-turn lane along Jodeco Road to form dual left-turn lanes.
  - Construct an additional northbound left turn lane forming an exclusive left-turn lane, a shared thru/left-turn lane, and an exclusive right-turn lane along the I-75 Northbound Ramp.

Note: The analysis indicates a six-lane bridge over I-75 would accommodate the projected traffic. The bridge would provide two westbound through lanes, one dedicated westbound left-turn lane (half length of bridge), one dedicated eastbound left-turn lane (entire length of bridge) and a half length westbound left-turn lane, and two eastbound through lanes.

Note: ARC HE-AR-216 (GDOT #312160-) includes extensive interchange improvements including a ten-lane bridge and ramp improvements. The expected completion date is 2011.

- Jodeco Road at Patrick Henry Parkway (Int. #10)
  - Improvements listed for the 2017 No-Build Conditions.
- Jodeco Road at Peach Drive (Int. #12)
  - Improvements listed for the 2017 No-Build Conditions.
- Jodeco Road at Oak Grove Road (Int. #13)
  - Improvements listed for the 2008 Existing Conditions and 2017 No-Build Conditions.
- Jodeco Road at Dailey Mill Road (Int. #14)
  - Improvements listed for the 2008 Existing Conditions and 2017 No-Build Conditions.
- Jodeco Road at SR 42/US 23 (Int. #15)
  - Improvements listed for the 2017 No-Build Conditions.
- SR 42/US 23 at Campground Road (Int. #16)
  - Improvements listed for the 2017 No-Build Conditions.
- Jonesboro Road at Chambers Road (Int. #17)
  - Improvements listed for the 2017 No-Build Conditions.
- Jonesboro Road at Mt. Olive Road (Int. #18)
  - Install a traffic signal.
  - Construct two southbound left-turn lanes along Mt. Olive Road to form dual left-turn lanes. Note: This improvement will require an additional eastbound receiving lane along Jonesboro Road.
  - Widen Jonesboro Road from two to four lanes in the vicinity of this intersection.

Note: ARC HE-920B (GDOT 342970-) is projected to widen Jonesboro Road (SR 920) from two to four lanes for approximately 7.4 miles between US 19/US 41 in Clayton County to I-75 in Henry County and listed as having a completion date of 2020.
- Jonesboro Road at Mill Road (Int. #19)
  - Improvements listed for the 2017 No-Build Conditions plus:
  - Construct an additional eastbound thru-lane along Jonesboro Road.
- Jonesboro Road at I-75 Southbound Ramp (Int. #20)
  - Improvements listed for the 2017 No-Build Conditions.
- Jonesboro Road at I-75 Northbound Ramp (Int. #21)
  - Construct an additional northbound left-turn lane along the I-75 Northbound Ramp to form dual left-turn lanes.
- Chambers Road at Church Drive/ Driveway #14 (Int. #24)
  - Improvements listed for the 2017 No-Build Conditions plus:
  - Projected traffic volumes are not expected to meet warrants for a traffic signal.

- Construct Driveway #14 directly across from Church Road.
  - Provide two westbound egress lanes along Driveway #14 (a shared thru/left-turn lane and an exclusive right-turn lane).
- Chambers Road at Mt. Olive Road (Int. #25)
  - Improvements listed for the 2017 No-Build Conditions.
- Chambers Road at McCullough Road (Int. #26)
  - Improvements listed for the Existing 2008 Conditions.
  - Projected traffic volumes are not expected to meet warrants for a traffic signal.
- Mt. Olive Road at Pond Drive/Driveway #12 (Int. #27)
  - Construct Driveway #12 directly across from Pond Drive.
- Mt. Olive Road at New Connector (Int. #28)
  - Construct a northbound through lane along Mt. Olive Road.
  - Construct a southbound through lane and right-turn lane along the New Connector.
  - Construct an exclusive eastbound left-turn lane along Mt. Olive Road.
  - Traffic volumes are not expected to warrant a traffic signal.

*Additional 2017 Build Recommendations/comments:*

- The Connector Road, a four-lane divided roadway, is proposed through the site to provide north/south travel between Jodeco Road and Mt. Olive Road. At the north end, the Connector Road will form a new full-movement signalized intersection with Jodeco Road (approximately 1,000 feet west of the southbound I-75 ramps). At the south end, the Connector Road will tie-into the location where Mt. Olive Road currently makes a 90-degree turn at the south side of the property and travels west.
- Mt. Olive Road, between the Connector Road tie-in and Jonesboro Road is planned to be converted from a gravel road to a paved road, and will provide mobility to/from the south. Mt. Olive Road, between the Connector Road and Jonesboro Road, is expected to accommodate the projected 2017 Build Conditions traffic volumes. The existing two-lane gravel roadway should be paved to accommodate the traffic volumes.
- The 2017 Build Conditions analysis includes the recommendation to coordinate the traffic signals along Jodeco Road, between the new Connector Road and Patrick Henry Parkway. Traffic signal coordination will provide improved traffic operations and provide good traffic progression along the Jodeco Road corridor.

*The following are the recommended project site driveway improvements:*

- New Connector at Right-in/Right-out Driveway 1 (Int. #29)
  - Construct a southbound right-turn lane along the New Connector.
  - Provide one eastbound egress lane along Driveway 1 (exclusive right-turn lane).
- New Connector at Full-movement Driveway #2/ Driveway #3 (Int. #30)
  - Install a traffic signal.

- Construct a northbound left-turn lane and a right-turn lane along the New Connector.
  - Construct southbound dual left-turn lanes and a right-turn lane along the New Connector. Note: This improvement will require two eastbound receiving lanes along Driveway #3.
  - Provide three eastbound egress lanes along Driveway #2 (dual left-turn lanes and a shared thru/right-turn lane).
  - Provide three westbound egress lanes along Driveway #3 (an exclusive left-turn lane, a thru lane, and an exclusive right-turn lane).
- New Connector at Right-in/Right-out Driveway #4/ Right-in/Right-out Driveway #5 (Int. #31)
  - Provide one eastbound egress lanes along Driveway #4 (exclusive right-turn lane).
  - Provide one westbound egress lanes along Driveway #5 (exclusive right-turn lane).
- New Connector at Left-in/Right-in/Right-out Driveway #6/ Left-in/Right-in/Right-out Driveway #7 (Int. #32)
  - Construct a northbound left-turn lane along the New Connector.
  - Construct a southbound left-turn lane and a right-turn lane along the New Connector.
  - Provide one eastbound egress lane along Driveway #6 (exclusive right-turn lane).
  - Provide one westbound egress lane along Driveway #7 (exclusive right-turn lane).
- New Connector at Full-movement Driveway #8/Driveway #9 (Int. #33)
  - Install a traffic signal.
  - Construct a northbound left-turn lane along the New Connector.
  - Construct a southbound left-turn lane along the New Connector.
  - Provide two eastbound egress lanes along Driveway #8 (exclusive left-turn lane and shared through/right-turn lane).
  - Provide two westbound egress lanes along Driveway #9 (exclusive left-turn lane and shared through/right-turn lane).
- New Connector at Left-in/Right-in/Right-out Driveway #10/ Left-in/Right-in/Right-out Driveway #11 (Int. #34)
  - Construct a northbound left-turn lane along the New Connector.
  - Construct a southbound left-turn lane and a right-turn lane along the New Connector.
  - Provide one eastbound egress lane along Driveway #6 (exclusive right-turn lane).
  - Provide one westbound egress lane along Driveway #7 (exclusive right-turn lane).
- Chambers Road at Full-movement unsignalized Driveway #13 (Int. #35)
  - Construct a southbound left-turn lane along Chambers Road.
  - Provide one eastbound egress lane along Driveway #13 (shared left-turn/right-turn lane).
- Jodeco Road at Right-in/Right-out Driveway #15 (Int. #36)
  - Construct an eastbound right-turn lane along Jodeco Road.
  - Provide one northbound egress lane along Driveway #15 (exclusive right-turn lane).
  - Widen Jodeco Road from 2 to 4 lanes in the vicinity of this intersection.



## 7.0 IDENTIFICATION OF PROGRAMMED PROJECTS

The *TIP*, *STIP*, *RTP*, and *GDOT's Construction Work Program* were searched for currently programmed transportation projects within the vicinity of the proposed development. The identified projects are listed below:

	<u>Year</u>	<u>Project Number</u>	<u>Project Description</u>
1	2010	ARC AR-941	Metro Arterial Connector (MAC) Corridor Development Study. This study will analyze a network of 180 miles in length encircling the Atlanta region, including SR 920.
2	2020	ARC HE-920B GDOT 342970-	Widening of SR 920 (Jonesboro Road/McDonough Road) from 2 to 4 lanes between US 19/US 41 in Clayton County to I-75 in Henry County. This is listed as a proposed corridor in the MAC.
3	2020	ARC AR-H-051 GDOT 0003167	Addition of two managed lanes in both directions along I-75 between Jonesboro Road (SR 54) and Eagles Landing Parkway. This project will be 8.2 miles in length and may include barrier separation, occupancy restrictions, and/or tolling levels.
4	2030	ARC AR-H-052 GDOT 0003436	Addition of one or two managed lanes in both directions along I-75 between Eagles Landing Parkway and SR 155. This project will be 7.8 miles in length and may include barrier separation, occupancy restrictions, and/or tolling levels.
5	2013	ARC HE-110 GDOT 0000561	<b>Widening of Jodeco Road and extension/realignment of Campground Road. Jodeco Road will be widened from 2 to 4 lanes between Meadowbrook Drive and Peach Drive. Campground Road will be extended/realigned from Peach Drive to Brannan Road as a 4-lane cross section. This project will extend 3.0 miles in length.</b>
6	2010	ARC HE-132A GDOT 0006927 Henry SPLOST 3	<b>Widening of Hudson Bridge Road from 2 to 4 lanes between Jodeco Road and I-75. This project will be 1.1 miles in length.</b>
7	2009	ARC HE-132B GDOT 0002638 Henry SPLOST 3	Widening of Eagles Landing Parkway from 4 to 6 lanes between Eagles Pointe Parkway and US 23/SR 42. This project will be 2.6 miles in length. East of US 23/SR 42, the roadway typical section will be reduced to 4 lanes which matches the configuration of Phase 1 of the Eagles Landing Parkway Extension that currently terminates at Springdale Road.
8	2030	ARC HE-132C Henry SPLOST 3	Widening of Eagles Landing Parkway from 4 to 6 lanes between Eagles Pointe Parkway and US 23/SR 42. This project will be 2.2 miles in length.
9	2012	ARC HE-161A GDOT 0004432 Henry SPLOST 3	Widening of Rock Quarry Road from 2 to 4 lanes between Eagles Landing Parkway and US 23/SR 42. This project will be 1.5 miles in length.
10	2020	ARC HE-165B	Widening of Patrick Henry Parkway (Segment 2) from 2 to 4 lanes between Jodeco Road and Eagles Landing Parkway. This



	<u>Year</u>	<u>Project Number</u>	<u>Project Description</u>
			project will be 2.0 miles in length.
11	2011	ARC HE-AR-216 GDOT 312160-	<b>Very extensive interchange improvement to provide more capacity for the ingress and egress of the I-75 at Jodeco Road interchange. The interchange will be widened, additional signals may be installed along Jodeco Road, and approaches will be modified to eliminate the congestion that builds up in the morning.</b>
12	2010	ARC HE-AR-232 GDOT 0008274	I-75 at I-675 auxiliary lanes (southbound only) from I-675 on-ramp to Eagles Landing Parkway. This 2.6-mile long project provides one additional lane along this section of I-75 southbound.
13	LR	ARC HE-119 GDOT 363860-	Expansion of the Jodeco Road Park & Ride Lot along I-75.
14		Henry County SPLOST III	Intersection Improvement for Jodeco Road/Blackhall Road

Information on the proposed improvements is included in the Appendix. **Figure 9** shows the locations of the programmed transportation projects.

## 8.0 INGRESS/EGRESS ANALYSIS

Vehicular access to the Summit Jodeco site is proposed at fifteen locations, as described in Section 1.3. The multiple proposed access locations are expected to provide options to the traveling public for ingress and egress. The capacity analysis was performed to provide the recommended driveway geometry and traffic control for the projected full buildout traffic conditions. Additional right-in/right-out access locations along the proposed Connector Road for uses along the east side of the road may be proposed as those uses are proposed. It is anticipated Henry County will consider those requests at that time.

## 9.0 INTERNAL CIRCULATION ANALYSIS

The proposed site includes a network of internal streets and pedestrian paths to connect uses. Vehicles, pedestrians, and cyclists have multiple paths to connect between uses within the site.

Mixed-use reductions were calculated according to the *ITE Trip Generation Handbook, June 2004*. Total internal capture and vehicle trip reduction between the proposed land uses is expected to be 10.88% for the weekday, 10.93% for the PM peak hour, 8.07% for Saturday, and 7.96% for the Saturday peak hour. This is the interaction between the residential, office, and retail land uses.

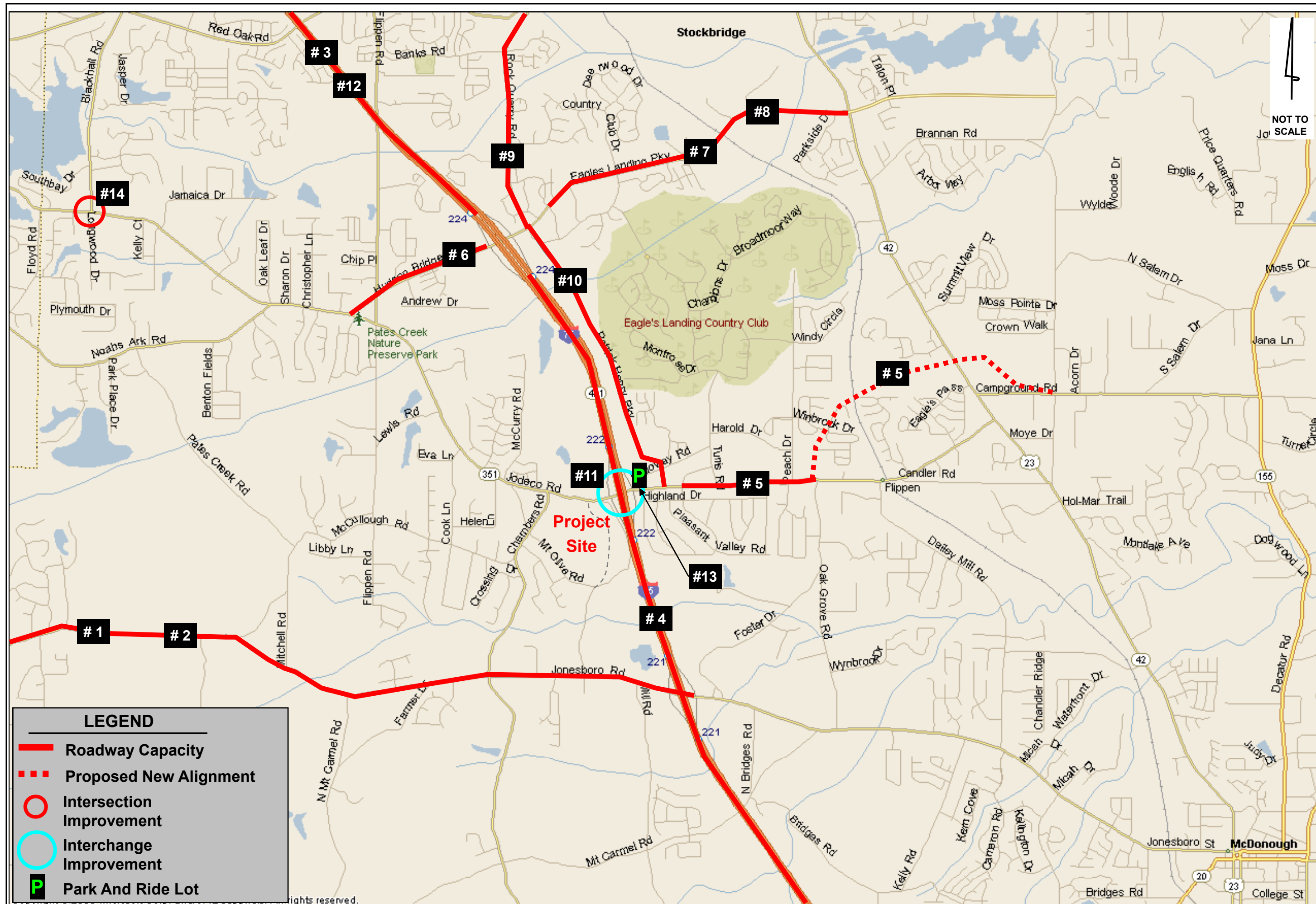


Figure 9

Future Roadway Improvements

Summit Jodeco DRI Transportation Analysis

## 10.0 COMPLIANCE WITH COMPREHENSIVE PLAN ANALYSIS

The current zoning is RA (Residential Agricultural) and C-2 (General Commercial). The site is currently comprised of one single-family residential unit, and wooded, vacant property. The proposed zoning is PD (Planned Development). The proposed Henry County 2030 Comprehensive Plan identifies the project site as a Suburban Employment Activity Center. Henry County indicated the existing Future Lane Use Plan indicates the site as Commercial and Services and Low Density Residential. The ARC Unified Growth Policy Map identifies the project site as “Mega Corridors”. A Mega Corridor is described as an intensely developed radial corridor in the region.

The proposed mixed-use planned development will consist of residential, hotel, office, retail, and restaurant components.

## 11.0 NON-EXPEDITED CRITERIA

### 11.1 Vehicle Miles of Travel

The proposed development is expected to reduce vehicle miles traveled and proposes a mix of land uses. The on-site pedestrian network is designed to encourage walking between uses. Additionally, the development anticipates providing an on-site shuttle between uses once a substantial portion of the development has been constructed. An on-site shuttle is expected to reduce vehicular traffic within the site. No alternative mode reductions were applied in the analysis; however, pedestrian and bicycle travel is anticipated within and to/from the development.

**Table 15** displays the anticipated reduction in off-site traffic generation due to internal capture and pass-by reductions.

<b>Table 15 Vehicle Mile Reductions</b>		
	Weekday	Saturday
Daily Gross Trip Generation:	<b>39,324</b>	<b>47,449</b>
(-)Mixed-use reductions (internal capture)	- 4,278	- 3,830
(-)Alternative modes	- 0	- 0
(-)Pass-by trips	- 5,868	- 4,890
Net Trips:	<b>29,178</b>	<b>38,729</b>

### 11.2 Transportation and Traffic Analysis

#### 11.2.1 Planned and Programmed Improvements

The proposed development is not anticipated to preclude any transportation infrastructure improvement projects as identified by Henry County. The development is planned so as to provide for the planned I-75/Jodeco Road interchange improvement project and the desired four-lane divided Connector Road through the site.

#### 11.2.2 Preserving Regional Mobility

This project is located at the Interstate 75 at Jodeco Road interchange (Exit 222). The interchange provides for regional access to/from the north and south. Jodeco Road and Jonesboro Road provide

mobility and access to/from the west and east. The Connector Road, a four-lane divided roadway, is proposed through the site to provide north/south travel between Jodeco Road and Mt. Olive Road. Mt. Olive Road, between the Connector Road and Jonesboro Road is planned to be converted from a gravel road to a paved road, and will provide mobility to/from the south.

The planned I-75/Jodeco Road interchange improvement project (GDOT #312160) will greatly improve traffic operations and reduce congestion. This improvement will benefit local mobility as well as regional mobility.

The nearest GRTA Xpress Park & Ride lot is the Stockbridge location at I-75 @ SR 138 (exit 228). This lot is located approximately 6 miles to the north of the site.

Henry County Transit provides public transportation services for needs such as banking, grocery shopping, personal business affairs, and medical/dental appointments. Reservations for a ride can be made by the rider in advance, and transit will pick the rider up at a specified location. This operates Monday through Friday from 6:00am to 6:00pm.

### *11.2.3 Safe and Efficient Operations*

Pedestrians and bicyclists were taken into consideration when formulating and testing recommended improvements as outlined in this report. The results of this traffic study represent a list of recommendations that not only address transportation enhancements for vehicular traffic, but also provide for pedestrians and bicyclists. The recommendations are intended to provide solutions that are context sensitive and create safe conditions and aim at balancing the mobility needs of all modes.

### *11.2.4 Minimize Congestion*

The recommended transportation improvements as described in this report are targeted at reducing vehicular congestion to standards as described earlier in this report. Recommendations reflect the goal of vehicular congestion mitigation, while also providing for pedestrian and bicycle safety. The on-site residential, hotel, office, and retail uses are proposed to be walk-able via pedestrian paths throughout the entire site.

## *11.3 Relationship of Existing Development and Infrastructure*

The development is located in an area where the existing and planned infrastructure is expected to be adequate to serve the needs of the development upon build-out (2017).

## 12.0 ARC'S AIR QUALITY BENCHMARK

The proposed development is approximately 1,100,000 SF of commercial space (lifestyle shopping center), 200,000 SF of office space, 236 multi-family residential units, and 400 hotel units.

The proposed development consists of a mix of uses with retail serving as the dominant use. Approximately 20% of the floor area is residential, and approximately 10% of the floor area is office. Therefore, the mix of uses meets the ARC criteria (2b) for a 9% VMT reduction.

The proposed development will contain a pedestrian network within the site, and connections to pedestrian and bicycle paths as deemed appropriate by Henry County. The proposed Connector Road is expected to include both sidewalks and bicycle lanes. Pedestrians will be able to access other uses within the proposed development via the pedestrian network and crosswalks across the proposed Connector Road. Additionally, because the project site is nearly entirely bounded by public roadways, providing connections to land uses adjoining the site may not be feasible. This anticipated pedestrian and bicycle internal network that connects to adjoining uses meets the ARC criteria (6c) for a 4% VMT reduction.

The proposed development earns a score of 13% VMT reduction for the ARC criteria. These reductions are displayed in **Table 16**.

<b>Table 16 ARC VMT Reductions</b>	
<b>Projects where Retail is the dominant use</b>	
Mix of uses such that of the entire site, at least 10% of the floor area is residential space and at least 10% of the floor area is office space	-9%
Bike/ped networks in development that connect to adjoining uses	-4%
<b>Total Reductions</b>	<b>13%</b>