Transportation Analysis

Palmetto Business Center
DRI #3684

City of Palmetto, Fulton County, Georgia

August 2022

Prepared for:

Seefried Industrial Properties

Prepared by:

Kimley-Horn and Associates, Inc.
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Alpharetta, Georgia 30009
013789002

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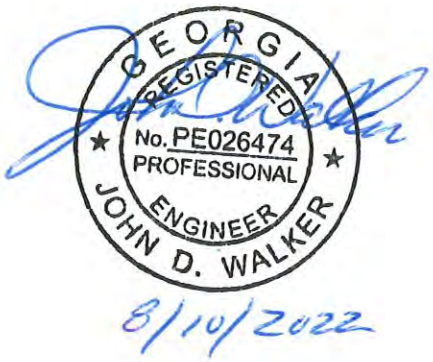

Kimley»Horn

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EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of the proposed *Palmetto Business Center* development located in the City of Palmetto, Fulton County, Georgia. The approximate 128-acre site is located south of Roosevelt Highway (US 29/SR 14) along Tatum Road and Bowen Road. The site is currently vacant.

The proposed development will consist of the following land uses and densities contained in **Table 1**. The project is expected to be completed by 2024 (approximately 2 years).

Table 1: Proposed Land Use and Density	
Warehousing	1,109,160 SF

The DRI analysis includes an estimation of the overall vehicle trips projected to be generated by the development, also known as gross trips. Mixed-use and pass-by reductions to gross trips are not included in the trip generation, while alternative mode reductions are included, as outlined in the Georgia Regional Transportation Authority (GRTA) Letter of Understanding (LOU dated June 22, 2022).

Capacity analyses were performed for the study intersections under the Existing 2022 conditions, the Projected 2024 No-Build conditions, and the Projected 2024 Build conditions.

- Existing 2022 conditions represent current traffic volumes that were collected in May of 2022 and calibrated based on historic GDOT count station data to account for traffic impacts due to COVID-19 (NOTE: Traffic Count methodology was outlined in the Methodology Meeting Packet).
- Projected 2024 No-Build conditions represent the Existing 2022 traffic volumes grown for two (2) years using a 1.5% per year growth rate, plus project trips associated with the *Palmetto Site DRI #3020*, the *Bowen Road Logistics Center DRI #3376*, the *Palmetto Distribution Center DRI #2594*, and the *I-85 South Distribution Center* developments, as outlined in the GRTA LOU.
- Projected 2024 Build conditions represent the Projected 2024 No-Build conditions plus the addition of the project trips that are anticipated to be generated by the *Palmetto Business Center* development.

Projected 2024 No-Build (System Improvements)

The unsignalized intersection of Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road (Intersection 1) is projected to operate at an acceptable overall LOS under the Existing 2022, Projected 2024 No-Build and Projected 2024 Build conditions. The northbound and southbound approaches for the intersection of Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road (Intersection 1) operate at LOS F under Projected 2024 No-Build and Build conditions during both the AM and PM peak hours.

Per GRTA's DRI guidelines, an improvement should be considered if either the overall intersection, or an individual approach operates at a failing LOS. In order to improve the approach LOS under the Projected 2024 No-Build and Projected 2024 Build conditions, Kimley-Horn considered the following system improvements (shown in red on **Figure 15** and **Figure 16**):

- Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road (Intersection 1)
  - Install traffic signal, if and when warranted, and as approved by GDOT.
  - Construct an exclusive northbound left-turn lane along Tatum Road.
  - Construct an exclusive southbound left-turn lane along Wilkerson Mill Road.

The unsignalized intersections of Tatum Road at Bowen Road (Intersection 2) and Johnson Road at Tatum Road (Intersection 3) are projected to operate at an acceptable overall LOS under the Projected 2024 No-Build conditions. Each approach of these intersections is projected to operate acceptably under all studied scenarios. No improvements are recommended at Intersection 2 or Intersection 3. The improved LOS Table for Intersection 1 is provided on the next page.

Projected 2024 Build (Site Access Improvements)

Under Projected 2024 Build conditions, the overall and approach LOS operate acceptably for all study intersections with the proposed installation of a traffic signal at the intersection and turn lanes (noted above) of Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road (Intersection 1).

The intersections of Tatum Road at Site Driveway A (Intersection 4) and Tatum Road at Site Driveway B (Intersection 5) are projected to operate at acceptable overall and approach LOS under the Projected 2024 Build scenario. In order to serve Site Driveway A and Site Driveway B, additional site access improvements needed are listed below:

- Tatum Road at Site Driveway A (Intersection 4)
  - On the site, construct a conventional two-lane driveway with one (1) ingress lane entering the site and one (1) egress lane exiting the site, offset from the existing *I-85 South Distribution Center* driveway with adequate separation.
- Tatum Road at Site Driveway B (Intersection 5)
  - On the site, construct a conventional two-lane driveway with one (1) ingress lane entering the site and one (1) egress lane exiting the site, aligned with the existing *I-85 South Distribution Center* driveway.

Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road (Intersection 1)

Overall LOS Standard: D Approach LOS Standard: D			Tatum Road			Wilkerson Mill Road			Roosevelt Highway (US 29/SR 14)			Roosevelt Highway (US 29/SR 14)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2024 NO-BUILD IMPROVED (SIGNAL)	**AM**	Overall LOS	B (11.7)											
		Approach LOS	B (16.9)			B (17.1)			B (14.0)			A (6.5)		
		Storage	160			235			175		200	225		250
		50th Queue	13	6		19	17		4	73	0	23	22	0
		95th Queue	41	39		54	49		18	125	27	51	41	9
	PM	Overall LOS	B (11.4)											
		Approach LOS	B (16.9)			B (15.9)			B (13.2)			A (7.2)		
		Storage	160			235			175		200	225		250
		50th Queue	24	30		9	6		7	44	0	9	45	0
		95th Queue	68	99		33	32		30	94	11	32	96	15
PROJECTED 2023 BUILD IMPROVED (SIGNAL)	**AM**	Overall LOS	B (12.6)											
		Approach LOS	B (18.6)			B (18.5)			B (15.1)			A (6.9)		
		Storage	160			235			175		200	225		250
		50th Queue	19	7		20	22		5	79	0	33	24	0
		95th Queue	54	44		56	59		19	134	32	72	46	10
	PM	Overall LOS	B (12.7)											
		Approach LOS	B (17.2)			B (16.0)			B (15.0)			A (8.3)		
		Storage	160			235			175		200	225		250
		50th Queue	38	46		10	7		8	48	0	14	51	0
		95th Queue	99	136		35	33		33	106	21	45	112	17

With the noted system improvements, the intersection of Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road (Intersection 1) is projected to operate at an acceptable overall and approach LOS under the Projected 2024 No-Build and Build Improved conditions.

Impacted Queue Lengths Exceeding Storage

The projected queue lengths do not exceed the available storage and are minimally impacted by the proposed development traffic.

1.0 PROJECT DESCRIPTION

1.1 Introduction

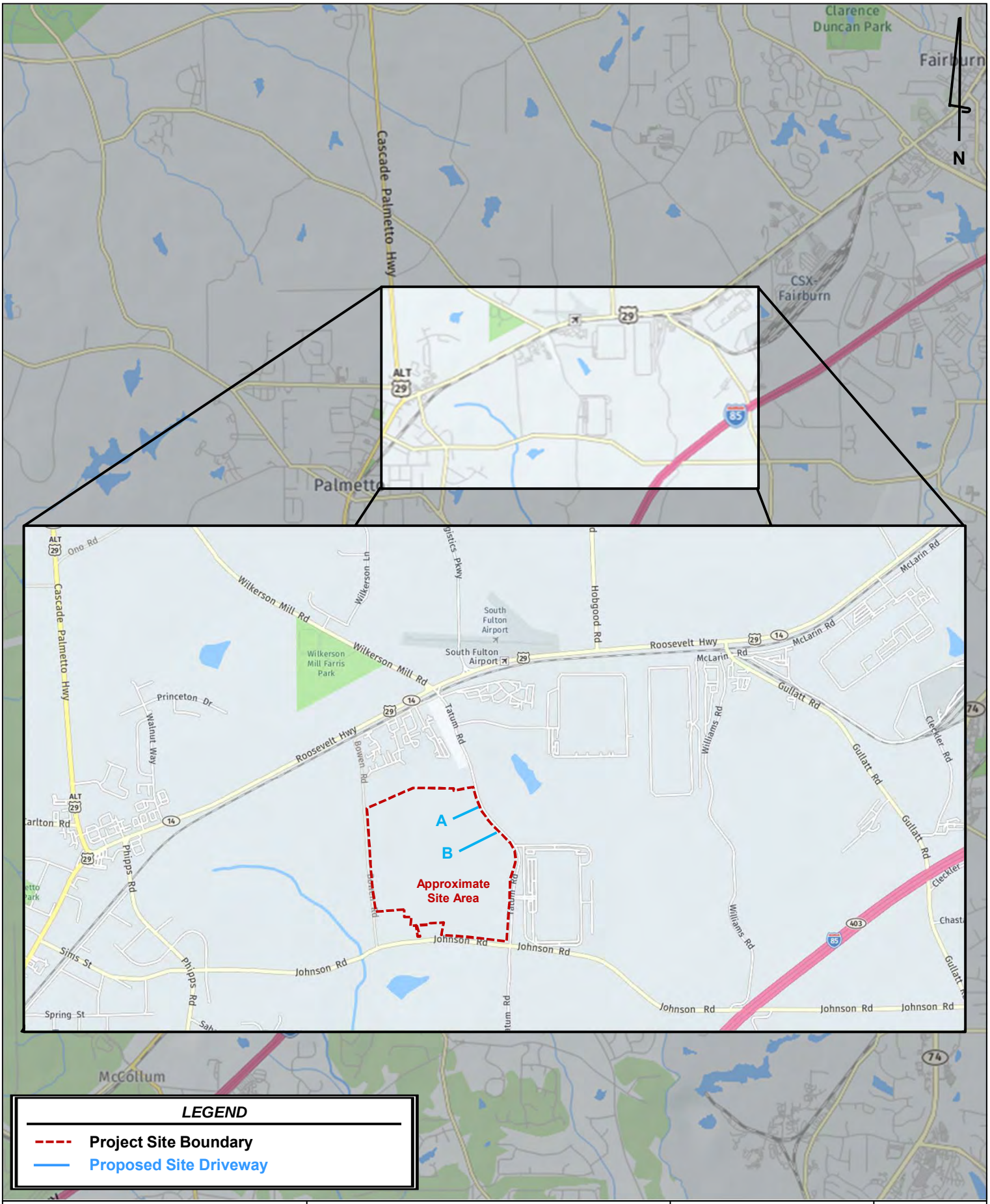
This report presents the analysis of the anticipated traffic impacts of the proposed *Palmetto Business Center* development located in the City of Palmetto, Fulton County, Georgia. The approximate 128-acre site is south of Roosevelt Highway (US 29/SR 14) along Tatum Road and Bowen Road. The project site is currently zoned RR (Rural Residential) and M-1 (Light Industrial). The site is proposed to be rezoned to M-1 (Light Industrial), and the rezoning application was filed on June 30, 2022. **Figure 1** provides a location map of the project site. **Figure 2** provides an aerial view of the project site and surrounding area.

The site is currently undeveloped. The proposed development will consist of the following land uses and densities contained in **Table 2**. The project is expected to be completed by 2024 (approximately 2 years).

Table 2: Proposed Land Use and Density	
Land Use	**Proposed**
Warehousing	1,109,160 SF

A reference of the proposed site plan is provided in **Appendix A**. A full-sized site plan consistent with GRTA's Site Plan Guidelines is also being submitted as part of the review package.

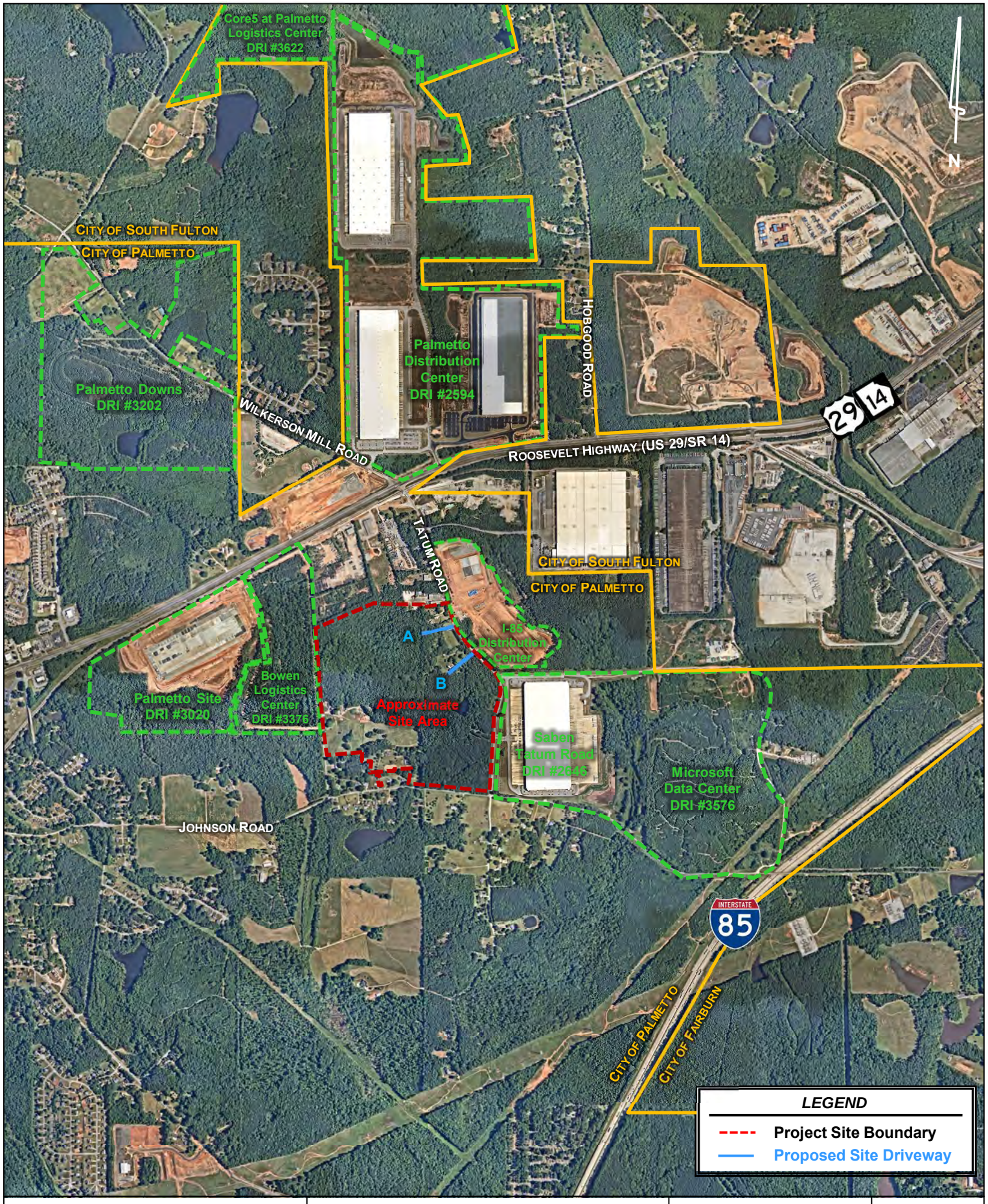
The project is considered a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and Atlanta Regional Commission (ARC) review due to the project size exceeding 500,000 SF of new industrial development within a *Rural Area* per the *ARC Unified Growth Policy Map*. The DRI was formally triggered with the filing of the Initial DRI Information (Form 1) on May 4, 2022 by the City of Palmetto. This transportation analysis includes all inputs and methodologies discussed at the DRI Methodology Meeting conducted with GRTA, ARC, and other stakeholders. The inputs and methodologies are outlined in the GRTA Letter of Understanding (LOU) dated June 22, 2022.



LEGEND

- Project Site Boundary
- Proposed Site Driveway

Kimley»Horn	***Palmetto Business Center*** ***DRI #3684*** ***Transportation Analysis***	**Site Location Map**	**Figure 1**
			Page 5



Kimley»Horn	*Palmetto Business Center* *DRI #3684* *Transportation Analysis*	Site Aerial	Figure 2
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1.2 Site Access

As currently envisioned, the proposed development will be accessible via two (2) new access points along Tatum Road:

1. **Site Driveway A** – a proposed, full-movement driveway located along Tatum Road approximately 2,250' south of Roosevelt Highway (US 29/SR 14) that will operate under side-street stop control. Site Driveway A will provide vehicular access to all buildings in the development. Internal, private roadways throughout the site provide access to the building and parking facilities.
2. **Site Driveway B** – a proposed, full-movement driveway located along Tatum Road approximately 2,725' south of Roosevelt Highway (US 29/SR 14) that will operate under side-street stop control. Site Driveway B will provide vehicular access to all buildings in the development. Internal, private roadways throughout the site provide access to the building and parking facilities.

1.3 Internal Circulation Analysis

Internal, private roadways throughout the site provide access to the building and parking facilities.

1.4 Parking

The current number of total site parking spaces to be provided are listed below in **Table 3**.

Table 3: Proposed Parking

Land Use	Minimum	Maximum	Proposed
Warehousing and Storage Buildings	*1 per 1,500 SF* **740 Spaces**	N/A	**740 employee spaces** **251 trailer spaces**

**Parking information obtained from Sec. 17 of the City of Palmetto Zoning Code*

Additional parking details are provided on the proposed site plan in **Appendix A**.

1.5 Alternative Transportation Facilities

An existing transit stop with a bench for MARTA Route #180 is located at the intersection of Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road which includes a concrete pad at the southbound stop for a future bus shelter when ridership warrants. An existing sidewalk along Tatum Road provides pedestrian facilities between the MARTA stop and the project site (approximately 2,875') between the railroad tracks and the *Saben Tatum Road* development.

1.6 Dense Urban Environments Enhanced Focus Area

Per Section 3.2.4.2 of the GRTA *Development of Regional Impact Review Procedures* the *Palmetto Business Center* development does not qualify for a "Dense Urban Environment Enhanced Focus Area" review, due to its location in the City of Palmetto.

1.7 Heavy Vehicle Enhanced Focus Area

Per Section 3.2.4.1 of the GRTA Development of Regional Impact Review Procedures, the *Palmetto Business Center* development qualifies for a "Heavy Vehicle Enhanced Focus Area" review, due to the development generating heavy vehicles.

1.7.1 Heavy Vehicle Routing

Figure 3 depicts the proposed truck routes that will serve project traffic (highlighted blue). The following segments are included in the Enhanced Focus Area (highlighted yellow):

- Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road

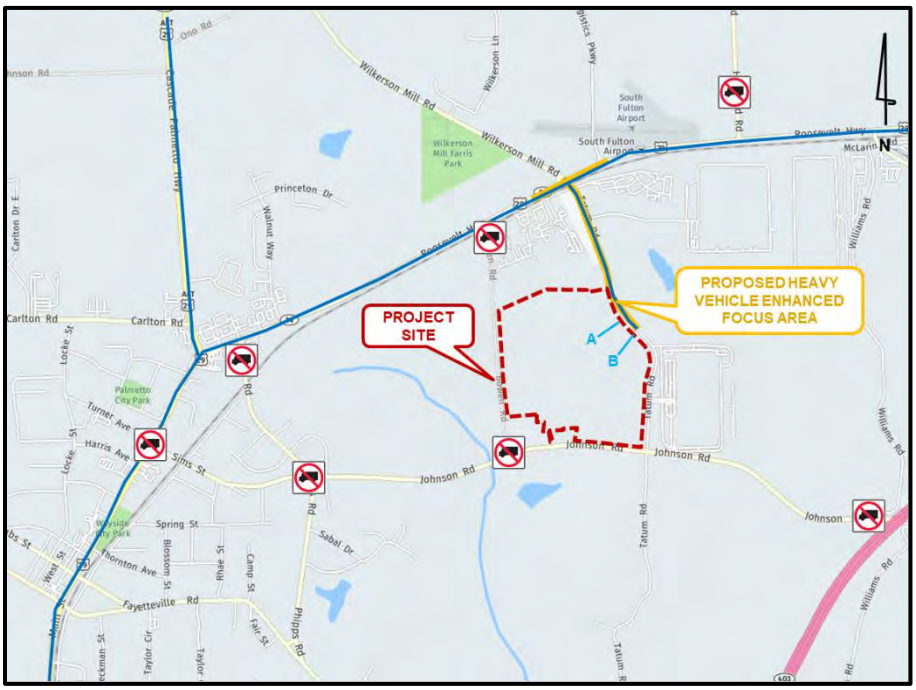


Figure 3: Heavy Vehicle Routing

1.7.2 Pavement Condition

A site visit was conducted on May 27, 2022. Pavement conditions within the Enhanced Focus Area were noted during the site visit. Pavement within the Heavy Vehicle focus area is generally in good condition. Minor pavement rutting was observed in one (1) location, and pavement cracking/rough pavement was observed in two (2) locations, as outlined in **Table 4**. **Figure 4** shows minor rutting of the pavement along Roosevelt Highway (US 29/SR 14). **Figure 5** shows Pavement Cracking along southbound Tatum Road, at a location approximately 150 feet south of Roosevelt Highway (US 29/SR 14). **Figure 6** shows Rough Pavement along northbound/southbound Tatum Road, at the railroad crossing approximately 120 feet south of Roosevelt Highway (US 29/SR 14).

Table 4: Pavement Condition Observations

Number	Roadway	Location	Observed Distress
1	Roosevelt Highway (US 29/SR 14)	Along Roosevelt Highway at Tatum Road	Minor Pavement Rutting
2	Tatum Road	150 feet south of Roosevelt Highway (US 29/SR 14)	Pavement Cracking
3	Tatum Road	120 feet south of Roosevelt Highway (US 29/SR 14)	Rough Pavement

Figure 4: Roosevelt Highway (US 29/SR 14) Minor Rutting of the Pavement

Figure 5: Tatum Road Pavement Cracking

Figure 6: Tatum Road Rough Pavement

1.7.3 Roadway Width

The lane widths for the Enhanced Focus Area are shown in **Table 5**. The City of Palmetto roadway width standards were taken from the City of Palmetto Unified Development Ordinance document, which notes that roadways with arterial classifications, such as Roosevelt Highway (US 29/SR 14) use the minimum roadway width per GDOT standards. Roadways with the local classification have a minimum roadway width of 24 feet.

Lane width dimensions were measured on NearMap.

Table 5: Roadway Widths		
Roadway	**Lane Width**	**Lane Width Standard (City of Palmetto)**
Roosevelt Highway (US 29/SR 14)	12 ft	12 ft desirable
Tatum Road	12 ft	12 ft desirable

1.7.4 Corner Radii

The corner radii of one (1) study intersection was analyzed along the Enhanced Focus Area:

1. Roosevelt Highway (US 29/SR 14) Tatum Road/Wilkerson Mill Road

Note: The *GDOT Regulations for Driveway and Encroachment Control* outlines minimum corner radii for trucks as 75 feet.

1. Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road (Entering)

Figure 7 outlines the anticipated wheel-path for a WB-67 vehicle entering the site by making an eastbound right-turn from Roosevelt Highway (US 29/SR 14) onto Tatum Road. The existing curb radius is approximately 75 feet. The WB-67 truck does not impede with the northbound traffic along Tatum Road to make the maneuver.

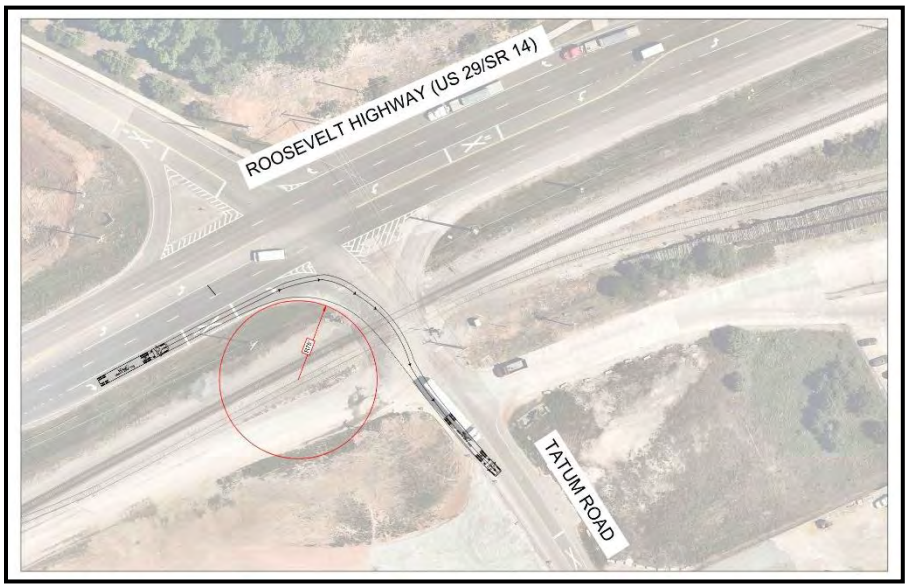


Figure 7: Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road – Eastbound Right (Entering Truck)

2. Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road (Exiting)

Figure 8 outlines the anticipated wheel-path for a WB-67 vehicle exiting the site by making a northbound right-turn from Tatum Road onto Roosevelt Highway (US 29/SR 14). The existing curb radius is approximately 75 feet. The WB-67 truck does not impede traffic to make the maneuver.

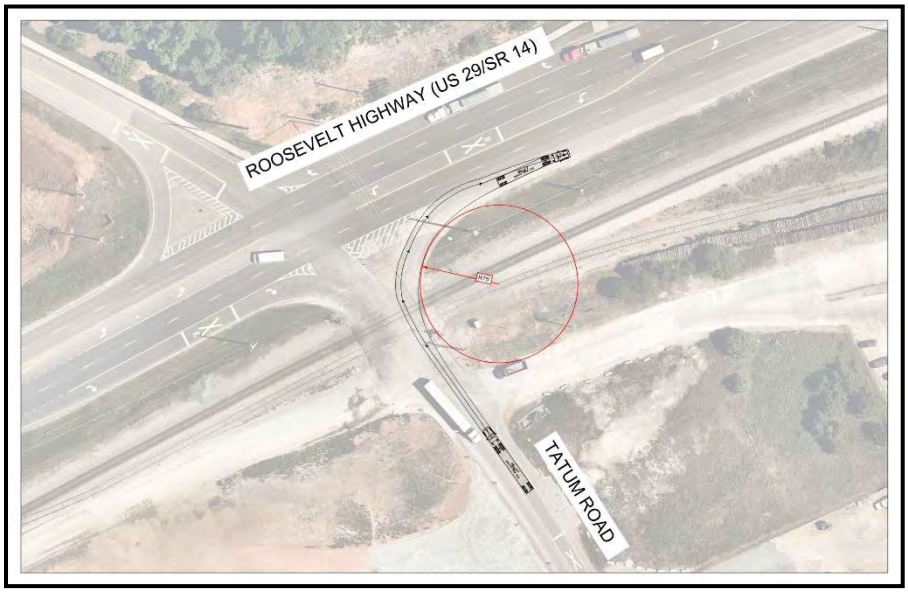


Figure 8: Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road – Northbound Right (Exiting Truck)

1.7.5 Heavy Vehicle Staging

The site plan includes a designated truck court to accommodate heavy vehicle queueing, staging, and overflow. **Figure 9** indicates the designated truck staging/overflow areas on the site plan.

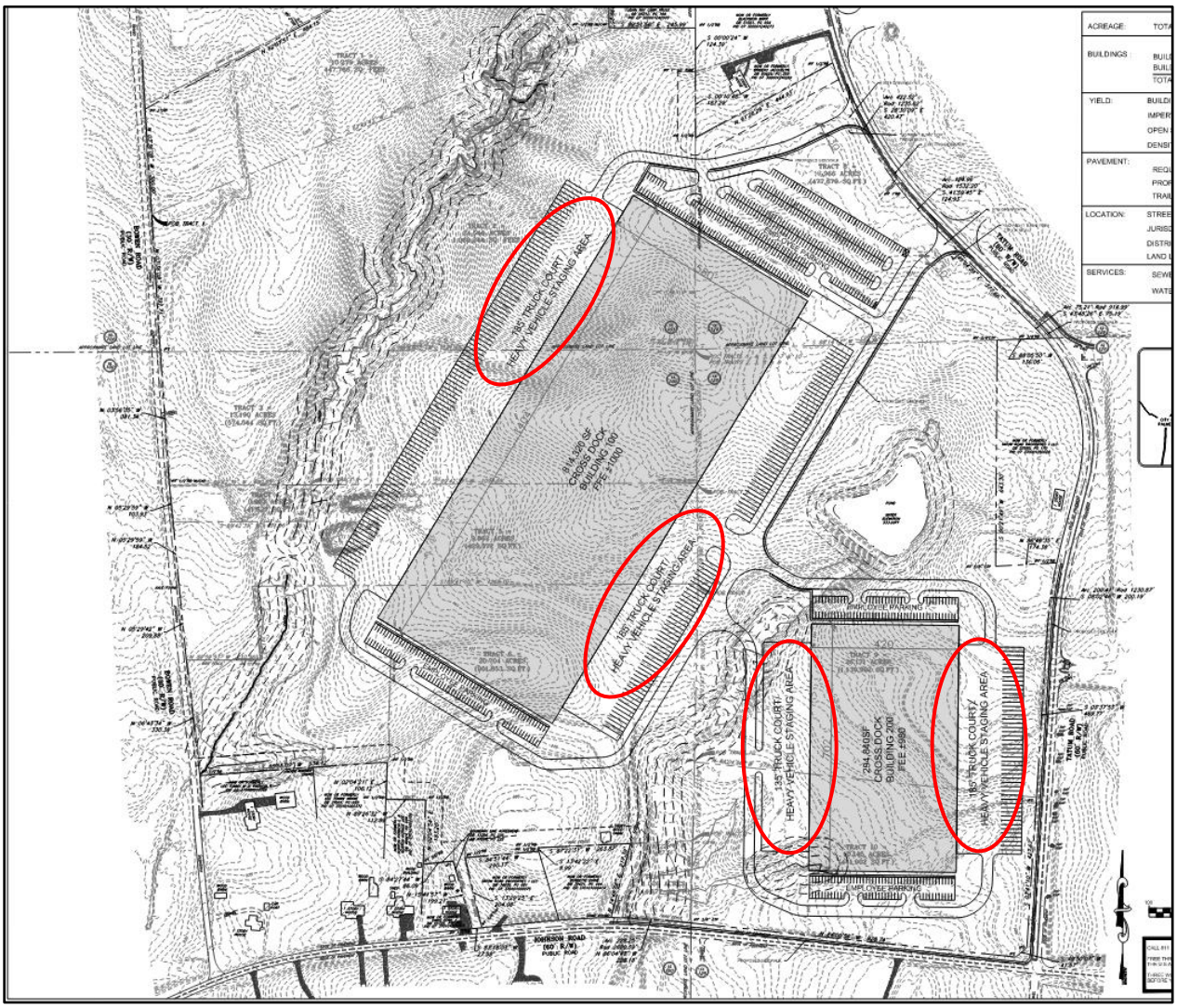


Figure 9: Heavy Vehicle Staging

1.7.6 Pedestrian Safety

The proposed development retains the minimum 5' sidewalk along Tatum Road to the project site, with sidewalks added along the southeast frontage of the site along Johnson Road, per the City of Palmetto Code. ADA compliant curb ramps with detectable warning strips will be located on either side of the driveway at the crosswalk. Sidewalks will also be provided adjacent to the buildings and will connect both accessible and non-accessible spaces to the building entrances.

There is no existing pedestrian crosswalk across Roosevelt Highway (US 29/SR 14) in the vicinity of Tatum Road/Wilkerson Mill Road.

2.0 TRAFFIC ANALYSES, METHODOLOGY AND ASSUMPTIONS

2.1 Study Network Determination

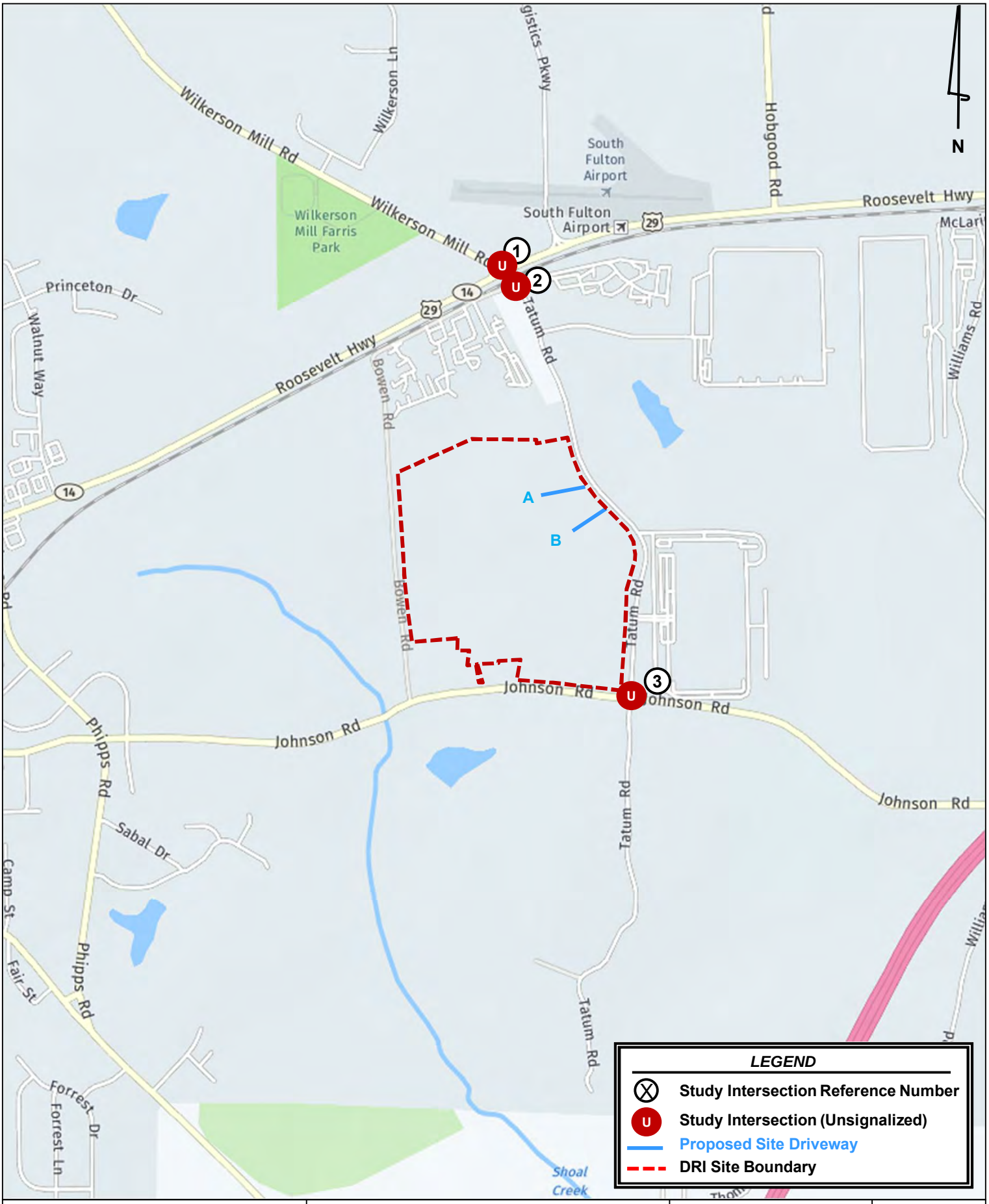
The study area was determined at the methodology meeting with input from GRTA, ARC, and other local agency stakeholders. The study includes the following three (3) off-site intersections described in **Table 6** and shown visually in **Figure 10**.

Table 6: Intersection Control Summary		
Intersection	**Jurisdiction**	**Control**
1. Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road	GDOT	Unsignalized
2. Tatum Road at Bowen Road/Private Driveway	City of Palmetto	Unsignalized
3. Johnson Road at Tatum Road	City of Palmetto	Unsignalized

2.2 Existing Roadway Facilities

Roadway classification descriptions and estimated Annual Average Daily Traffic (AADT) for roadway segments within the study network are provided in **Table 7** (bolded roadways are adjacent to site).

Table 7: Roadway Classifications				
Roadway	**Lanes**	**Posted Speed Limit**	**AADT**	**GDOT Functional Classification**
Roosevelt Highway (US 29/SR 14)	4	55 MPH	10,400	Minor Arterial
Wilkerson Mill Road	2	45 MPH	1,210	Minor Collector
Tatum Road	2	35 MPH	-	Local
Bowen Road	2	25 MPH	-	Local
Johnson Road	2	45 MPH	1,260	Local



Kimley»Horn	*Palmetto Business Center* *DRI #3684* *Transportation Analysis*	**Study Intersections**	**Figure 10** **Page 14**

2.3 Traffic Data Collection and Calibration

Traffic counts for the three (3) existing intersections were collected on Tuesday, May 17, 2022. Additionally, historic traffic count data (collected on Tuesday, May 7, 2019) was available for the intersection of Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road (Intersection 1).

The peak hour adjustment factors were determined by comparing the May 2019 and May 2022 peak hour traffic volumes at the intersection of Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road. Based on the historic May 2019 count data and the May 2022 count data at the intersection, it was determined that no peak hour adjustment factors were required for both the AM and PM peak hours for the entire study network, per the Methodology meeting Packet.

Traffic count peak hours for all the study intersections are shown in **Table 8**.

Table 8: Traffic Count Summary

Intersection	Count Date	AM Peak Hour	PM Peak Hour
1. Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road	5/2022	7:30 AM – 8:30 AM	4:15 PM – 5:15 PM
2. Tatum Road at Bowen Road/Private Driveway	5/2022	7:30 AM – 8:30 AM	4:15 PM – 5:15 PM
3. Johnson Road at Tatum Road	5/2022	7:30 AM – 8:30 AM	4:30 PM – 5:30 PM

The collected peak hour turning movement traffic counts are available upon request.

2.4 Background Growth

Background traffic is defined as expected traffic on the roadway network in future year(s) absent the construction and opening of the proposed *Palmetto Business Center* development. Background traffic can include a base growth rate based on historical count data and population growth data as well as trips anticipated from nearby or adjacent other projects.

Based on methodology outlined in the GRTA Letter of Understanding (LOU), a 1.5% per year background traffic growth rate from 2022 to 2024 (2 years) was used for all roadways.

The Projected 2024 No-Build conditions represent the Existing 2022 traffic volumes grown for two (2) years at 1.5% per year throughout the study network, plus project trips associated with the *Palmetto Site DRI #3020*, the *Bowen Road Logistics Center DRI #3376*, the *Palmetto Distribution Center DRI #2594*, and the *I-85 South Distribution Center* developments. Project trips associated with the *Palmetto Downs DRI #3202* (due to no activity), and the *Microsoft Data Center DRI #3576* and the *Core5 at Palmetto Logistics Center DRI #3622* (both under review) are not included per direction from GRTA.

The Projected 2024 Build conditions represent the project trips generated by the *Palmetto Business Center* development (discussed in Section 3.0 and 4.0) added to the Projected 2024 No-Build Conditions.

2.5 Programmed and Planned Projects

Programmed and planned projects near the project site were researched to account for any improvements or modifications within the study network before or by the build-out year of the development. The programmed and planned projects were discussed in the methodology meeting with GRTA, ARC, and other local stakeholders. No projects are currently programmed by GDOT, Fulton County, or the City of Palmetto in the vicinity of the project site.

The intersection of Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road has been contemplated for the future installation of a traffic signal, based on the increase in traffic expected to be generated by the nearby development planned. No signal has yet been permitted by GDOT, however nearby DRIs have been given the condition: “Install a traffic signal, if and when warranted and if approved by GDOT”. A traffic signal warrant study for this intersection has been submitted to GDOT by the City of Palmetto.

Additionally, there are plans to relocate the intersection of Tatum Road at Bowen Road south, away from the existing railroad tracks and plans to construct a roundabout at the intersection of Johnson Road at Tatum Road. Both projects have no scheduled start date or date of completion.

2.6 Level-of-Service Overview

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. LOS analyses were conducted at all intersections within the study network using *Synchro 11*.

LOS for signalized intersections is reported for the intersection as a whole. One or more movements at an intersection experience a low LOS, while the intersection as a whole may operate acceptably.

LOS for unsignalized intersections, with stop control on the minor street only, is reported for the side street approaches and the major street left-turn movements. Low LOS for side street approaches is not uncommon, as vehicles may experience delays in turning onto a major roadway.

2.7 Level-of-Service Standards

For the purposes of this traffic analysis, a LOS standard of D was assumed for all study intersections per section 3.2.2.1 of the GRTA *Development of Regional Impact Review Procedures* as specified in the LOU.

3.0 TRIP GENERATION

Gross trips associated with the proposed development were estimated using the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition*, *2017*, using equations where available. Reductions to gross trips including mixed-use reductions and pass-by reductions are not considered in the analysis based on methodology outlined in the GRTA Letter of Understanding (LOU). Reductions to gross trips from Alternative Mode reductions were considered in the analysis, based on the methodology outline in the LOU.

Mixed-use reductions occur when a site has a combination of different land uses that interact with one another. For example, people living in a residential development may walk to the restaurants and retail instead of driving off-site or to the site. This reduces the number of vehicle trips that will be made on the roadway, thus reducing traffic congestion. No mixed-use reductions were taken in this analysis per the LOU.

Alternative modes reductions are taken when a site can be accessed by modes other than vehicles (walking, bicycling, transit, etc.). Alternative modes reductions were taken at 5% of the employee trip generation (car trips, excluding heavy vehicles) per the LOU.

Pass-by reductions are taken for a site when traffic normally traveling along a roadway may choose to visit a retail or restaurant establishment that is along the vehicle's path. These trips were already on the road and would therefore only be new trips on the driveways. No pass-by trips were taken for this analysis as per the LOU.

Table 9 summarizes the gross trip generation, reductions, net trip generation, and driveway volumes for the proposed *Palmetto Business Center* development.

Table 9: Trip Generation

Land Use	Density	Daily Traffic			AM Peak Hour		PM Peak Hour	
		Total	Enter	Exit	Enter	Exit	Enter	Exit
150 – Warehousing	1,109,160 SF	1,798	899	899	122	36	43	118
Gross Project Trips		**1,798**	**899**	**899**	**122**	**36**	**43**	**118**
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*-60*	*-30*	*-30*	*-6*	*-1*	*-1*	*-5*
Pass-By Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
New Trips		**1,738**	**869**	**869**	**116**	**35**	**42**	**113**
Employee (Car Trips)		*1,132*	*566*	*566*	*105*	*24*	*25*	*97*
Heavy Vehicle (Trucks)		*606*	*303*	*303*	*11*	*11*	*17*	*16*

A more detailed trip generation analysis summary table is provided in **Appendix B**.

4.0 TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of new project trips was based on the project land uses, a review of land use densities and road facilities in the area, engineering judgement, and methodology discussions with GRTA, ARC, and other local stakeholders.

The anticipated distribution and assignment of the trips throughout the study roadway network is shown for heavy vehicle (truck) trips in **Figure 11.** The anticipated distribution and assignment of the trips throughout the study roadway network is shown for employee (car) trips in **Figure 12**. These trip assignment percentages were applied to the net project trips expected to be generated by the development, and the volumes were assigned to the roadway network. The peak hour project trips are shown by turning movement throughout the study network in **Figure 13**.

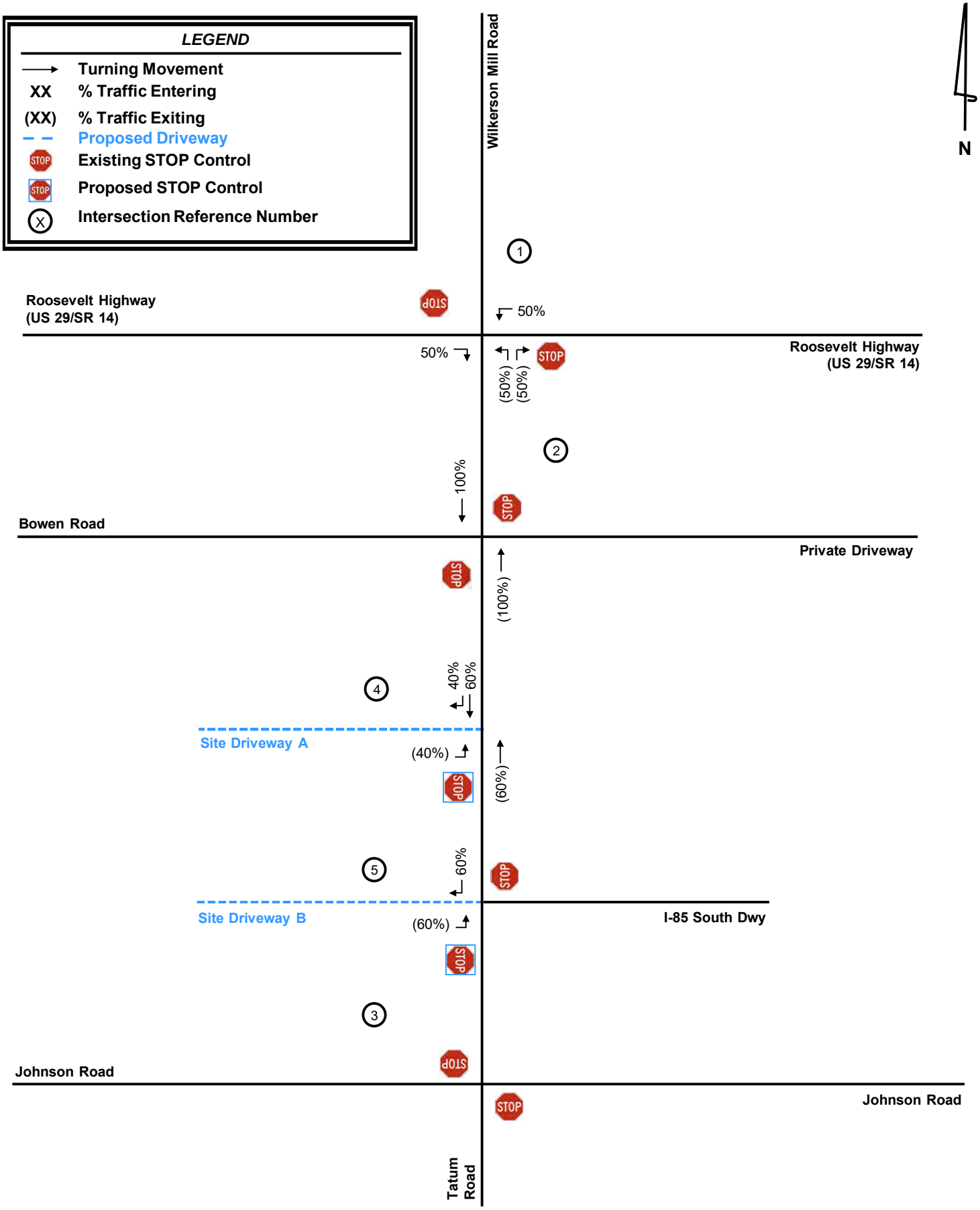
Detailed intersection volume worksheets are provided in **Appendix C**.

5.0 TRAFFIC ANALYSIS

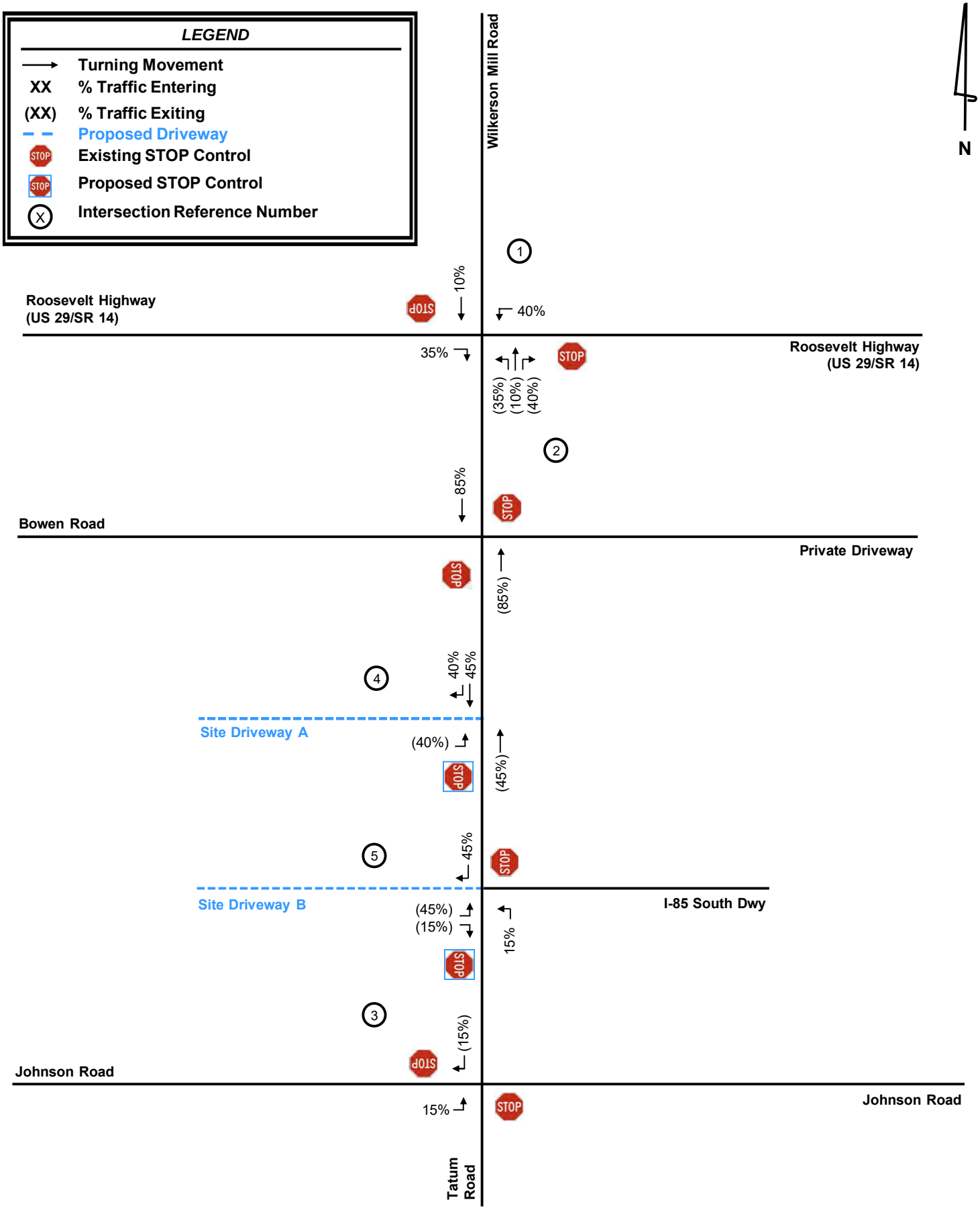
Capacity analyses were performed using *Synchro 11* for the AM and PM peak hours under the Existing 2022 conditions, Projected 2024 No-Build conditions, and Projected 2024 Build conditions. The capacity analyses were performed using methodologies from the *Highway Capacity Manual (HCM), 6th Edition* unless otherwise noted.

These analyses included existing roadway laneage for each of the scenarios. The traffic volumes and roadway laneage used for each scenario are shown visually in **Figure 14** for Existing 2022 conditions, **Figure 15** for Projected 2024 No-Build conditions, and **Figure 16** for Projected 2024 Build conditions.

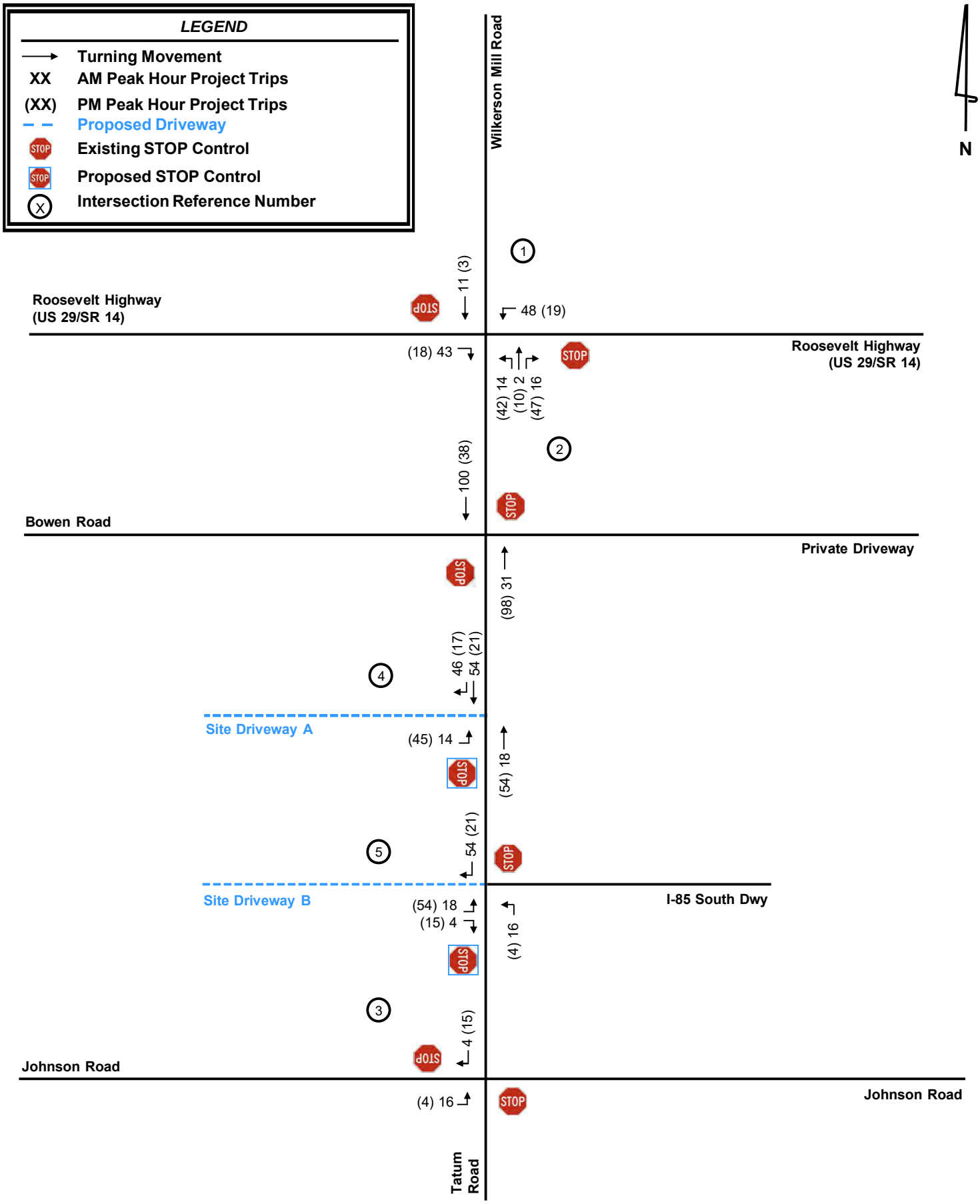
Sections 5.1 -- 5.5 provide the results of the capacity analyses are presented for each study intersection and include projected LOS, delay, and queue lengths.



Kimley»Horn	*Palmetto Business Center DRI #3684 Transportation Analysis*	Heavy Vehicle (Truck) Trip Distribution & Assignment	Figure 11
			Page 19



Kimley»Horn	*Palmetto Business Center DRI #3684 Transportation Analysis*	**Employee (Car) Trip Distribution & Assignment**	**Figure 12**
			Page 20



Kimley»Horn	*Palmetto Business Center* *DRI #3684* *Transportation Analysis*	**Project Trips**	**Figure 13** **Page 21**

5.1 Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road (Intersection 1)

Overall LOS Standard: D Approach LOS Standard: D			Tatum Road			Wilkerson Mill Road			Roosevelt Highway (US 29/SR 14)			Roosevelt Highway (US 29/SR 14)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (TWSC)	AM	Overall LOS	(5.1)											
		Approach LOS	C (20.1)			D (32.7)			A (8.2)			A (9.1)		
		Storage							175		200	225		250
		50th Queue												
		95th Queue		25			60		0			8		
	PM	Overall LOS	(3.9)											
		Approach LOS	C (15.6)			C (24.7)			A (8.8)			A (8.6)		
		Storage							175		200	225		250
		50th Queue												
		95th Queue		35			33		3			3		
PROJECTED 2024 NO-BUILD (TWSC)	AM	Overall LOS	(45.8)											
		Approach LOS	F (256.7)			F (233.9)			A (8.5)			B (10.4)		
		Storage							175		200	225		250
		50th Queue												
		95th Queue		250			233		3			23		
	PM	Overall LOS	(33.4)											
		Approach LOS	F (135.4)			F (72.1)			A (9.1)			A (8.9)		
		Storage							175		200	225		250
		50th Queue												
		95th Queue		370			100		3			8		
PROJECTED 2024 BUILD (TWSC)	AM	Overall LOS	(188.2)											
		Approach LOS	F ($)			F ($)			A (8.5)			B (10.8)		
		Storage							175		200	225		250
		50th Queue												
		95th Queue		#			335		3			30		
	PM	Overall LOS	(116.4)											
		Approach LOS	F ($)			F (144.9)			A (9.1)			A (9.1)		
		Storage							175		200	225		250
		50th Queue												
		95th Queue		#			148		3			8		

($) = delay exceeds 300s
(#) = northbound queue exceeds 500'

The unsignalized intersection of Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road (Intersection 1) is projected to operate at an acceptable overall LOS under the Existing 2022 and Projected 2024 No-Build conditions. Under Projected 2024 Build conditions, the intersection operates unacceptably. Additionally, the northbound and southbound approaches for the intersection of Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road (Intersection 1) operate at LOS F under Projected 2024 No-Build and Build conditions.

Per GRTA's DRI guidelines, an improvement should be considered if either the overall intersection, or an individual approach operates at a failing LOS. In order to improve the approach LOS under the Projected 2024 No-Build and Projected 2024 Build conditions, Kimley-Horn considered the following system improvements (shown in red on **Figure 15** and **Figure 16**):

- Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road (Intersection 1)
  - Install traffic signal, if and when warranted, and as approved by GDOT
  - Construct an exclusive northbound left-turn lane along Tatum Road.
  - Construct an exclusive southbound left-turn lane along Wilkerson Mill Road.

The analysis results shown in the table below are for the improved conditions at Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road (Intersection 1), which assume the noted geometric changes.

Overall LOS Standard: D Approach LOS Standard: D			Tatum Road			Wilkerson Mill Road			Roosevelt Highway (US 29/SR 14)			Roosevelt Highway (US 29/SR 14)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2024 NO-BUILD IMPROVED (SIGNAL)	AM	Overall LOS	B (11.7)											
		Approach LOS	B (16.9)			B (17.1)			B (14.0)			A (6.5)		
		Storage	160			235			175		200	225		250
		50th Queue	13	6		19	17		4	73	0	23	22	0
		95th Queue	41	39		54	49		18	125	27	51	41	9
	PM	Overall LOS	B (11.4)											
		Approach LOS	B (16.9)			B (15.9)			B (13.2)			A (7.2)		
		Storage	160			235			175		200	225		250
		50th Queue	24	30		9	6		7	44	0	9	45	0
		95th Queue	68	99		33	32		30	94	11	32	96	15
PROJECTED 2023 BUILD IMPROVED (SIGNAL)	AM	Overall LOS	B (12.6)											
		Approach LOS	B (18.6)			B (18.5)			B (15.1)			A (6.9)		
		Storage	160			235			175		200	225		250
		50th Queue	19	7		20	22		5	79	0	33	24	0
		95th Queue	54	44		56	59		19	134	32	72	46	10
	PM	Overall LOS	B (12.7)											
		Approach LOS	B (17.2)			B (16.0)			B (15.0)			A (8.3)		
		Storage	160			235			175		200	225		250
		50th Queue	38	46		10	7		8	48	0	14	51	0
		95th Queue	99	136		35	33		33	106	21	45	112	17

With the noted system improvements, the intersection of Roosevelt Highway (US 29/SR 14) at Tatum Road/Wilkerson Mill Road (Intersection 1) is projected to operate at an acceptable overall and approach LOS under the Projected 2024 No-Build Improved and Build Improved conditions.

5.2 *Tatum Road at Bowen Road/Private Driveway (Intersection 2)*

Overall LOS Standard: D Approach LOS Standard: D			Tatum Road Northbound			Tatum Road Southbound			Bowen Road Eastbound			Private Driveway Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (TWSC)	AM	Overall LOS	(1.1)											
		Approach LOS	A (8.1)			A (7.8)			B (12.0)			A (9.5)		
		Storage												
		50th Queue												
		95th Queue		0			0			0			3	
	PM	Overall LOS	(1.7)											
		Approach LOS	A (0.0)			A (8.7)			B (10.7)			A (9.7)		
		Storage												
		50th Queue												
		95th Queue		0			0			5			3	
PROJECTED 2024 NO-BUILD (TWSC)	AM	Overall LOS	(1.8)											
		Approach LOS	A (8.1)			A (7.9)			B (13.9)			A (9.7)		
		Storage												
		50th Queue												
		95th Queue		3			0			8			3	
	PM	Overall LOS	(4.2)											
		Approach LOS	A (7.6)			A (9.0)			B (14.5)			B (10.4)		
		Storage												
		50th Queue												
		95th Queue		0			0			30			3	
PROJECTED 2024 BUILD (TWSC)	AM	Overall LOS	(*1.6)											
		Approach LOS	A (8.5)			A (8.0)			C (17.2)			B (10.0)		
		Storage												
		50th Queue												
		95th Queue		3			0			10			3	
	PM	Overall LOS	(*4.1)											
		Approach LOS	A (7.7)			A (9.5)			C (19.4)			B (11.8)		
		Storage												
		50th Queue												
		95th Queue		0			0			43			3	

**Due to increase in through movement volumes, overall delay improves as the through movement experiences no delay.*

The unsignalized intersection of Tatum Road at Bowen Road (Intersection 2) is projected to operate at an acceptable overall LOS under the Existing 2022, Projected 2024 No-Build, and Projected 2024 Build conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

5.3 Johnson Road at Tatum Road (Intersection 3)

Overall LOS Standard: D Approach LOS Standard: D			Tatum Road Northbound			Tatum Road Southbound			Johnson Road Eastbound			Johnson Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
EXISTING 2022 (TWSC)	AM	Overall LOS	(3.1)											
		Approach LOS	B (10.1)			B (12.1)			A (7.6)			A (7.4)		
		Storage												
		50th Queue												
		95th Queue		0			10			3			0	
	PM	Overall LOS	(2.8)											
		Approach LOS	B (10.9)			B (10.6)			A (7.7)			A (7.4)		
		Storage												
		50th Queue												
		95th Queue		0			10			0			0	
PROJECTED 2024 NO-BUILD (TWSC)	AM	Overall LOS	(3.5)											
		Approach LOS	B (10.4)			B (12.5)			A (7.6)			A (7.4)		
		Storage												
		50th Queue												
		95th Queue		0			13			3			0	
	PM	Overall LOS	(3.3)											
		Approach LOS	B (11.3)			B (10.8)			A (7.7)			A (7.4)		
		Storage												
		50th Queue												
		95th Queue		0			13			3			0	
PROJECTED 2024 BUILD (TWSC)	AM	Overall LOS	(4.0)											
		Approach LOS	B (10.8)			B (13.0)			A (7.7)			A (7.4)		
		Storage												
		50th Queue												
		95th Queue		0			13			5			0	
	PM	Overall LOS	(3.8)											
		Approach LOS	B (11.6)			B (10.9)			A (7.7)			A (7.4)		
		Storage												
		50th Queue												
		95th Queue		0			15			3			0	

The unsignalized intersection of Johnson Road at Tatum Road (Intersection 3) is projected to operate at an acceptable overall LOS under the Existing 2022, Projected 2024 No-Build, and Projected 2024 Build conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

5.4 Tatum Road at Site Driveway A (Intersection 4)

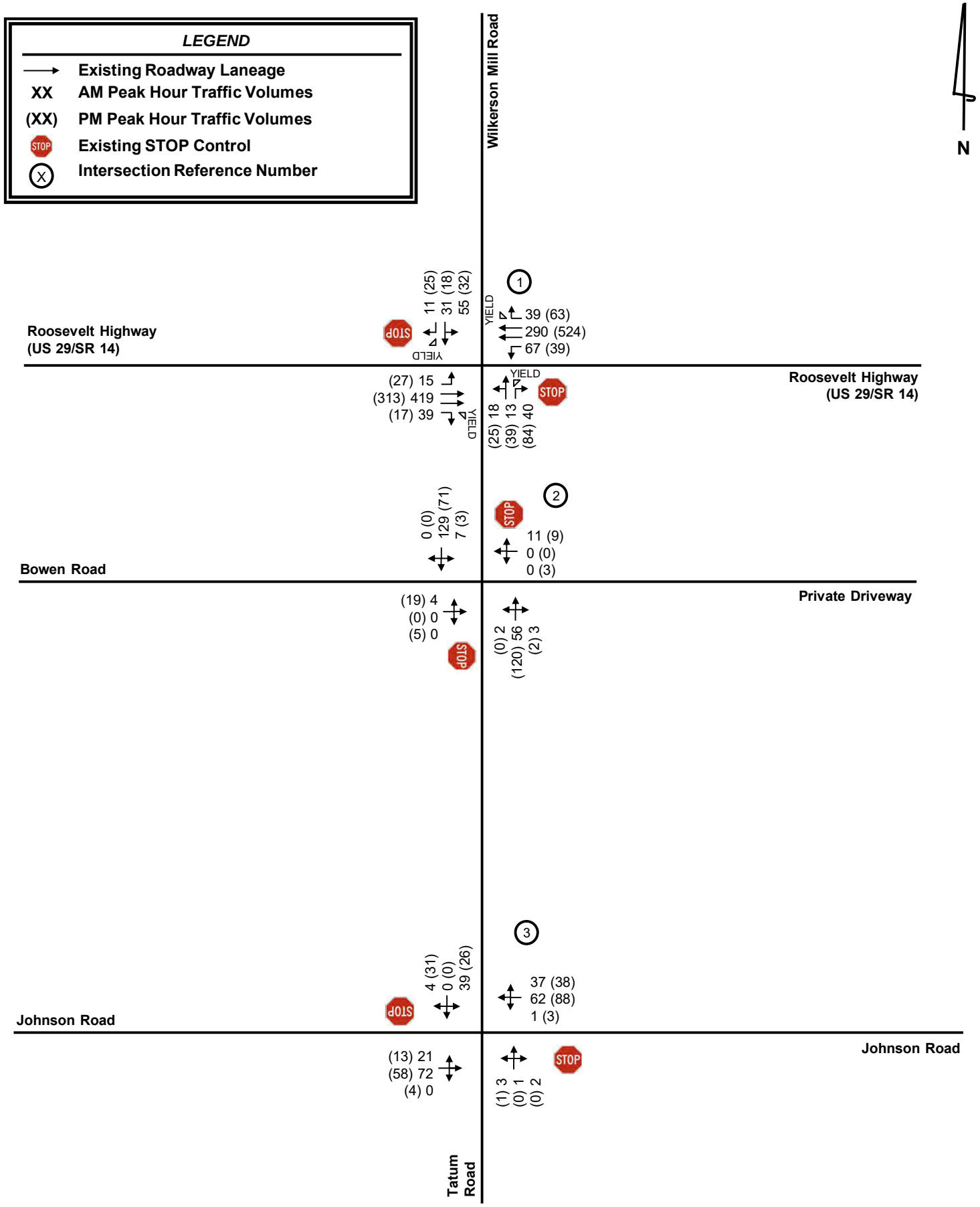
Overall LOS Standard: D Approach LOS Standard: D			Joel Cowan Parkway (SR 74)			Joel Cowan Parkway (SR 74)			Site Driveway A					
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R			
PROJECTED 2024 BUILD (TWSC)	AM	Overall LOS	(0.5)											
		Approach LOS	A (0.0)			A (0.0)			B (12.2)					
		Storage												
		50th Queue												
		95th Queue							3					
	PM	Overall LOS	(1.5)											
		Approach LOS	A (0.0)			A (0.0)			B (12.4)					
		Storage												
		50th Queue												
		95th Queue							10					

The intersection of Tatum Road at Site Driveway A (Intersection 4) is projected to operate at an acceptable overall LOS under the Projected Build 2024 scenario. Additionally, each approach of the intersection is projected to operate acceptably under the studied scenario. The recommended lane configuration for Site Driveway A is one lane entering the site and one lane exiting the site. The recommended build improvements are shown in blue on Figure **16.**

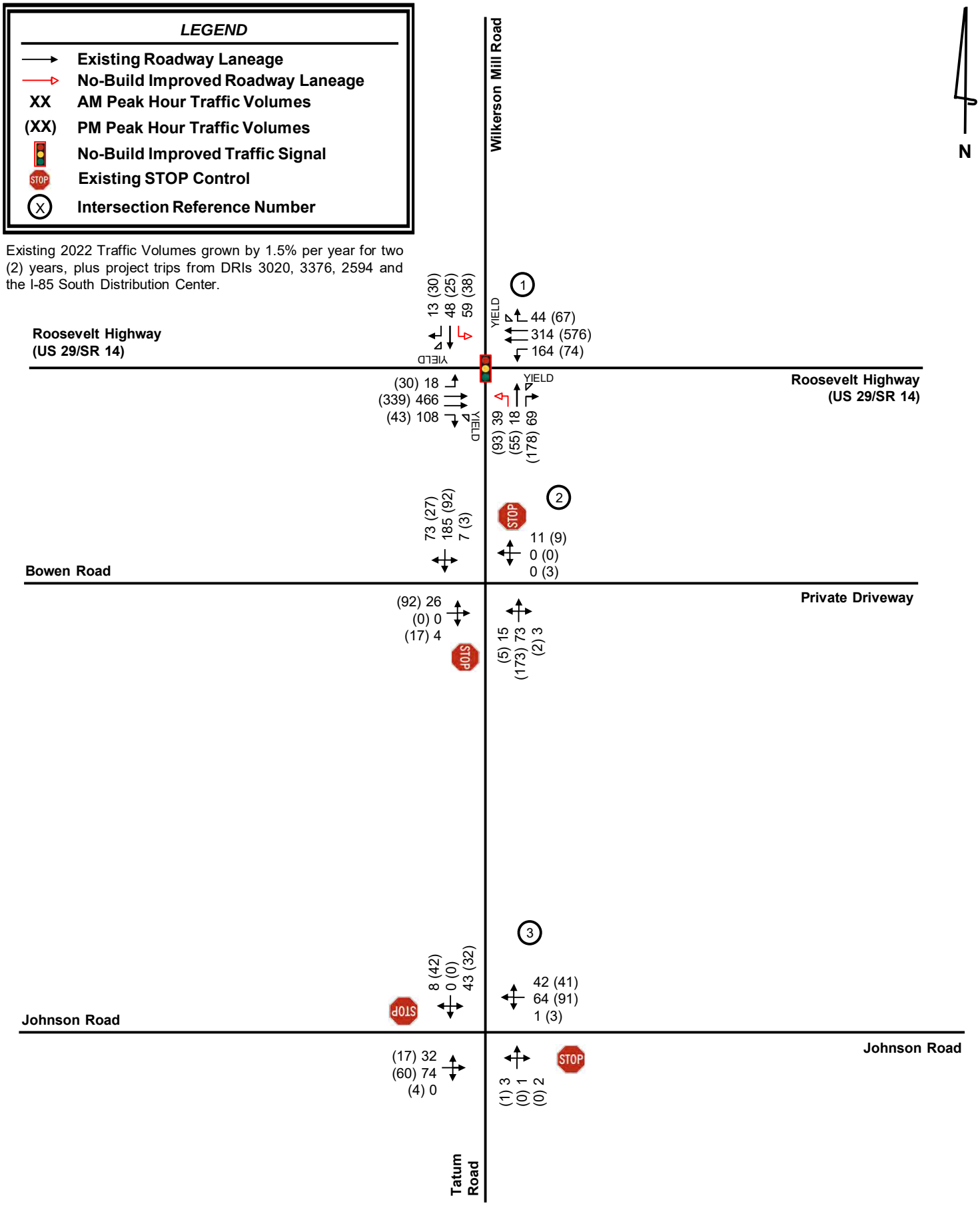
5.5 Tatum Road at Site Driveway B/I-85 South Dwy (Intersection 5)

Overall LOS Standard: D Approach LOS Standard: D			Joel Cowan Parkway (SR 74)			Joel Cowan Parkway (SR 74)			Site Driveway B			I-85 South Dwy		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
PROJECTED 2024 BUILD (TWSC)	AM	Overall LOS	(1.8)											
		Approach LOS	A (7.8)			A (7.7)			B (12.5)			A (9.5)		
		Storage												
		50th Queue												
		95th Queue		3			0			5			3	
	PM	Overall LOS	(2.9)											
		Approach LOS	A (7.5)			A (7.9)			B (12.0)			B (10.3)		
		Storage												
		50th Queue												
		95th Queue		0			0			15			0	

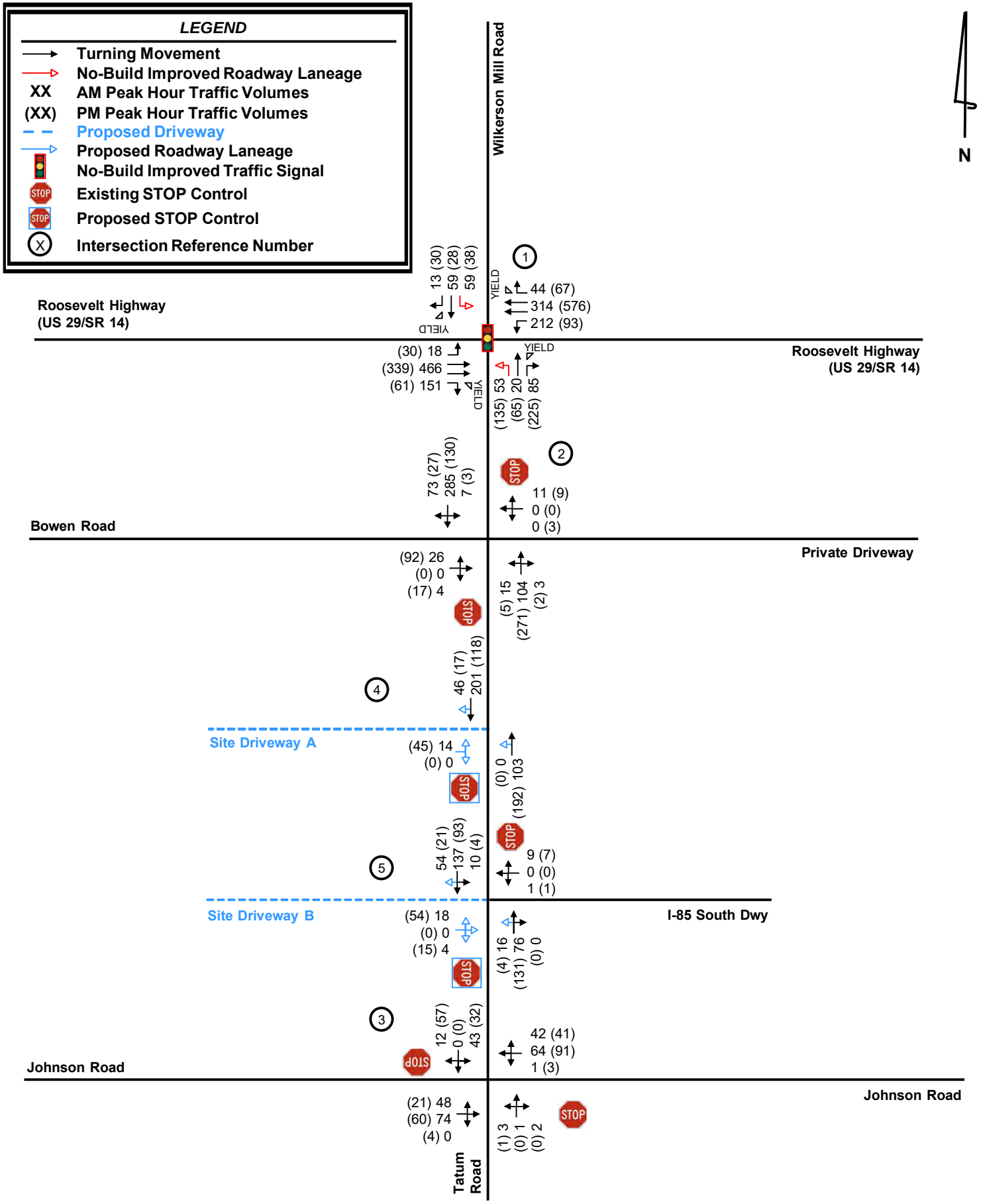
The intersection of Tatum Road at Site Driveway B/I-85 South Dwy (Intersection 5) is projected to operate at an acceptable overall LOS under the Projected Build 2024 scenario. Additionally, each approach of the intersection is projected to operate acceptably under the studied scenario. The recommended lane configuration for Site Driveway B is one lane entering the site and one lane exiting the site. The recommended build improvements are shown in blue on **Figure 16**.



Kimley»Horn	*Palmetto Business Center DRI #3684 Transportation Analysis*	**Existing 2022 Conditions**	**Figure 14**
			Page 28



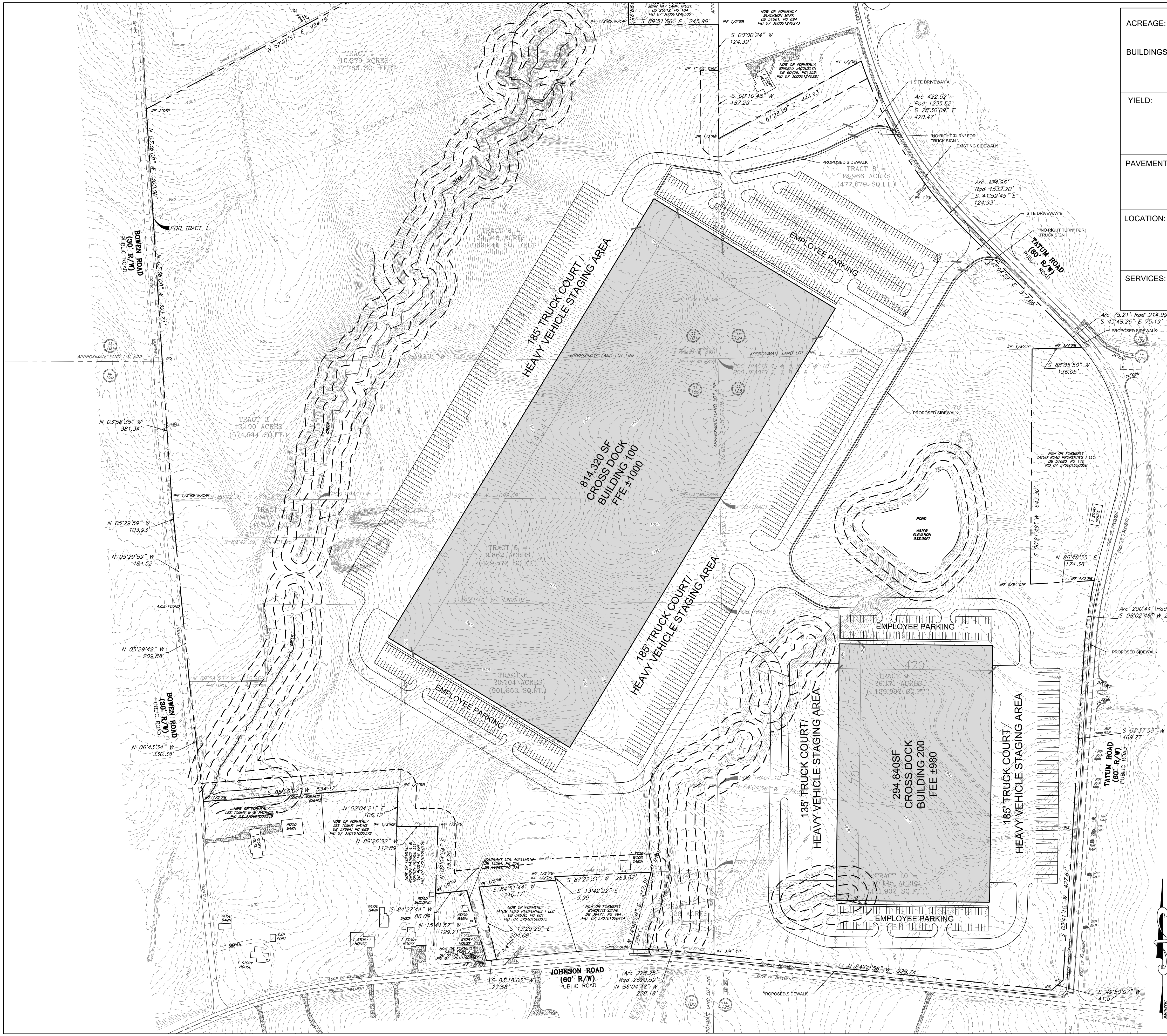
Kimley»Horn	*Palmetto Business Center DRI #3684 Transportation Analysis*	**Projected 2024 No-Build Conditions**	**Figure 15**
			Page 29



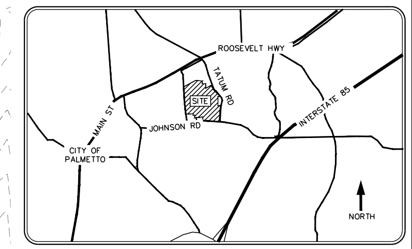
Kimley»Horn	*Palmetto Business Center DRI #3684 Transportation Analysis*	**Projected 2024 Build Conditions**	**Figure 16**
			Page 30

APPENDIX A

Proposed Site Plan



ACREAGE:	TOTAL	127.841 AC
BUILDINGS :	BUILDING 100	814,320 S.F.
	BUILDING 200	294,840 S.F.
	TOTAL	1,109,160 S.F.
YIELD:	BUILDING COVER	19.9%
	IMPERVIOUS COVER	39.9%
	OPEN SPACE	60.1%
	DENSITY:	8,676 SF/ACRE
PAVEMENT:	REQUIRED PARKING SPACES	740
	PROPOSED PARKING SPACES	786
	TRAILER SPACES	251
LOCATION:	STREET	TATUM ROAD
	JURISDICTION	PALMETTO, GA
	DISTRICT	7
	LAND LOT	100, 101, 124 & 125
SERVICES:	SEWER DEMAND	13,875 GPD
	WATER DEMAND	13,875 GPD



LOCATION MAP
N.T.S.

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GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 INCH = 100 FT.

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LAND PLANNING
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE

PROJECT:
PALMETTO BUSINESS CENTER PALMETTO, GA
LAND LOT 100, 101, 124 & 125
7TH DISTRICT
TATUM ROAD
CITY OF PALMETTO/FULTON COUNTY, GEORGIA

REVISIONS:

DRI SITE PLAN

SCALE:	1"=100'
DATE:	07/28/22
DRAWN BY:	T. PATEL
PROJECT MANAGER:	W. REED
QA/QC CHECK:	

PROJECT NO.
22-060

SHEET NO.
DRI
#3684
NOT ISSUED FOR CONSTRUCTION

G:\PROJECTS\2022\22-060 Seefried Palmetto Business Center\5.0 Drawing\30x42 Base.dwg July 28, 2022

ACREAGE:	TOTAL	127.841 AC
BUILDINGS :	BUILDING 100	814,320 S.F.
	BUILDING 200	294,840 S.F.
	TOTAL	1,109,160 S.F.
YIELD:	BUILDING COVER	19.9%
	IMPERVIOUS COVER	39.9%
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	JURISDICTION	PALMETTO, GA
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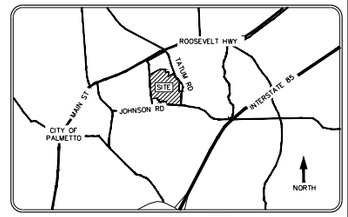
	WATER DEMAND	13,875 GPD



LOCATION MAP
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PROJECT:
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PALMETTO, GA
LAND LOT 100, 101, 124 & 125
7TH DISTRICT
TATUM ROAD
CITY OF PALMETTO/FULTON COUNTY, GEORGIA

REVISIONS:

DRI SITE PLAN

SCALE: 1"=100'
DATE: 07/28/22
DRAWN BY: T. PATEL
PROJECT MANAGER: W. REED
QA/QC CHECK:

PROJECT NO.
22-060

SHEET NO.
DRI
#3684
NOT ISSUED FOR CONSTRUCTION

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APPENDIX B

Trip Generation Analysis

Trip Generation Analysis (10th Ed. with *2nd Edition Handbook* Daily IC & 3rd Edition AM/PM IC)
Palmetto Business Center DRI #3684
Palmetto, Fulton County, GA

Land Use	Intensity	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Proposed Site Traffic								
150 Warehousing	1,109,160 s.f.	1,798	158	122	36	161	43	118
Gross Trips		**1,798**	**158**	**122**	**36**	**161**	**43**	**118**
Truck Trips (ITE 10th Edition Supplement)		606	22	11	11	33	17	16
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Truck Trips		606	22	11	11	33	17	16
Car Trips (Total Non-Truck Trips)		1,192	136	111	25	128	26	102
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*-60*	*-7*	*-6*	*-1*	*-6*	*-1*	*-5*
Adjusted Car Trips		1,132	129	105	24	122	25	97
Mixed-Use Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions - TOTAL		*-60*	*-7*	*-6*	*-1*	*-6*	*-1*	*-5*
Pass-By Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
New Trips		**1,738**	**151**	**116**	**35**	**155**	**42**	**113**
Driveway Volumes		**1,738**	**151**	**116**	**35**	**155**	**42**	**113**

Intersection Volume Worksheets

INTERSECTION VOLUME DEVELOPMENT

Intersection #1: Roosevelt Highway (US 29/SR 14) @ Tatum Road / Wilkerson Mill Road

AM PEAK HOUR

	Tatum Road			Wilkerson Mill Road			oosevelt Highway (US 29/SR 1			oosevelt Highway (US 29/SR 1		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	18	13	40	55	31	11	15	419	39	67	290	39
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	14	0	20	3	0	5	2	53	17	12	38	5
Heavy Vehicle %	78%	2%	50%	5%	2%	45%	13%	13%	44%	18%	13%	13%
Peak Hour Factor		0.84			0.84			0.84			0.84	
Covid Calibration Factor												
Adjusted 2022 Volumes	**18**	**13**	**40**	**55**	**31**	**11**	**15**	**419**	**39**	**67**	**290**	**39**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
Palmetto Site DRI #3020	5	2	7		6				17	23		
Palmetto Site DRI #3020 (Truck)	2		4						8	12		
Bowen Road Logistics Center DRI #3376	5	2	6		5				16	22		
Bowen Road Logistics Center DRI #3376 (Truck)	2		3						7	11		
Palmetto Distribution Center DRI #2594				1		1	1	14			6	2
Palmetto Distribution Center DRI #2594 (Truck)				1		1	2	20			9	2
I-85 South Distribution Center	4	1	5		5				14	18		
I-85 South Distribution Center (Truck)	2		3						6	9		
2024 Background Traffic	**39**	**18**	**69**	**59**	**48**	**13**	**18**	**466**	**108**	**164**	**314**	**44**
2024 No-Build Heavy Vehicle %	52%	2%	44%	7%	2%	47%	23%	16%	36%	27%	15%	16%
Project Trips												
Trip Distribution IN									50%	50%		
Trip Distribution OUT	50%		50%									
Truck Trips	6	0	6	0	0	0	0	0	6	6	0	0
Trip Distribution IN					10%				35%	40%		
Trip Distribution OUT	35%	10%	40%									
Car Trips	8	2	10	0	11	0	0	0	37	42	0	0
Total Project Trips	**14**	**2**	**16**	**0**	**11**	**0**	**0**	**0**	**43**	**48**	**0**	**0**
2024 Buildout Total	**53**	**20**	**85**	**59**	**59**	**13**	**18**	**466**	**151**	**212**	**314**	**44**
2024 Build Heavy Vehicle %	50%	2%	43%	7%	2%	47%	23%	16%	29%	24%	15%	16%

PM PEAK HOUR

	Tatum Road			Wilkerson Mill Road			oosevelt Highway (US 29/SR 1			oosevelt Highway (US 29/SR 1		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	25	39	84	32	18	25	27	313	17	39	524	63
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	2	2	4	2	0	0	1	36	5	12	38	2
Heavy Vehicle %	8%	5%	5%	6%	2%	2%	4%	12%	29%	31%	7%	3%
Peak Hour Factor		0.92			0.92			0.92			0.92	
Covid Calibration Factor												
Adjusted 2022 Volumes	**25**	**39**	**84**	**32**	**18**	**25**	**27**	**313**	**17**	**39**	**524**	**63**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
Palmetto Site DRI #3020	17	6	23		2				6	8		
Palmetto Site DRI #3020 (Truck)	8		11						3	4		
Bowen Road Logistics Center DRI #3376	16	5	21		2				6	8		
Bowen Road Logistics Center DRI #3376 (Truck)	7		10						3	4		
Palmetto Distribution Center DRI #2594				2		2	1	7			14	1
Palmetto Distribution Center DRI #2594 (Truck)				3		2	1	10			22	1
I-85 South Distribution Center	13	4	17		2				5	6		
I-85 South Distribution Center (Truck)	6		9						2	4		
2024 Background Traffic	**93**	**55**	**178**	**38**	**25**	**30**	**30**	**339**	**43**	**74**	**576**	**67**
2024 No-Build Heavy Vehicle %	25%	4%	19%	13%	2%	8%	7%	14%	31%	33%	11%	5%
Project Trips												
Trip Distribution IN									50%	50%		
Trip Distribution OUT	50%		50%									
Truck Trips	8	0	8	0	0	0	0	0	9	9	0	0
Trip Distribution IN					10%				35%	40%		
Trip Distribution OUT	35%	10%	40%									
Car Trips	34	10	39	0	3	0	0	0	9	10	0	0
Total Project Trips	**42**	**10**	**47**	**0**	**3**	**0**	**0**	**0**	**18**	**19**	**0**	**0**
2024 Buildout Total	**135**	**65**	**225**	**38**	**28**	**30**	**30**	**339**	**61**	**93**	**576**	**67**
2024 Build Heavy Vehicle %	23%	3%	19%	13%	2%	8%	7%	14%	36%	36%	11%	5%

INTERSECTION VOLUME DEVELOPMENT

Intersection #2: Tatum Road @ Bowen Road / Private Driveway
AM PEAK HOUR

Description	Tatum Road Northbound			Tatum Road Southbound			Bowen Road Eastbound			Private Driveway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	2	56	3	7	129	0	4	0	0	0	0	11
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	1	23	0	3	25	0	3	0	0	0	0	8
Heavy Vehicle %	50%	41%	2%	43%	19%	0%	75%	0%	0%	0%	0%	73%
Peak Hour Factor		0.72			0.72			0.72			0.72	
Covid Calibration Factor												
Adjusted 2022 Volumes	**2**	**56**	**3**	**7**	**129**	**0**	**4**	**0**	**0**	**0**	**0**	**11**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
Palmetto Site DRI #3020	12					46	14		3			
Palmetto Site DRI #3020 (Truck)						20	6					
Bowen Road Logistics Center DRI #3376	1					5	1		1			
Bowen Road Logistics Center DRI #3376 (Truck)						2	1					
Palmetto Distribution Center DRI #2594												
Palmetto Distribution Center DRI #2594 (Truck)												
I-85 South Distribution Center		10			37							
I-85 South Distribution Center (Truck)		5			15							
2024 Background Traffic	**15**	**73**	**3**	**7**	**185**	**73**	**26**	**0**	**4**	**0**	**0**	**11**
2024 No-Build Heavy Vehicle %	7%	39%	2%	44%	22%	30%	39%	0%	2%	0%	0%	75%
Project Trips												
Trip Distribution IN					100%							
Trip Distribution OUT		100%										
Truck Trips	0	11	0	0	11	0	0	0	0	0	0	0
Trip Distribution IN					85%							
Trip Distribution OUT		85%										
Car Trips	0	20	0	0	89	0	0	0	0	0	0	0
Total Project Trips	**0**	**31**	**0**	**0**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2024 Buildout Total	**15**	**104**	**3**	**7**	**285**	**73**	**26**	**0**	**4**	**0**	**0**	**11**
2024 Build Heavy Vehicle %	7%	38%	2%	44%	18%	30%	39%	0%	2%	0%	0%	75%

PM PEAK HOUR

Description	Tatum Road Northbound			Tatum Road Southbound			Bowen Road Eastbound			Private Driveway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	120	2	3	71	0	19	0	5	3	0	9
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	4	2	3	14	0	4	0	2	1	0	0
Heavy Vehicle %	0%	3%	100%	100%	20%	0%	21%	0%	40%	33%	0%	2%
Peak Hour Factor		0.72			0.72			0.72			0.72	
Covid Calibration Factor												
Adjusted 2022 Volumes	**0**	**120**	**2**	**3**	**71**	**0**	**19**	**0**	**5**	**3**	**0**	**9**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
Palmetto Site DRI #3020	4					17	46		11			
Palmetto Site DRI #3020 (Truck)						7	19					
Bowen Road Logistics Center DRI #3376	1					2	5		1			
Bowen Road Logistics Center DRI #3376 (Truck)						1	2					
Palmetto Distribution Center DRI #2594												
Palmetto Distribution Center DRI #2594 (Truck)												
I-85 South Distribution Center		34			13							
I-85 South Distribution Center (Truck)		15			6							
2024 Background Traffic	**5**	**173**	**2**	**3**	**92**	**27**	**92**	**0**	**17**	**3**	**0**	**9**
2024 No-Build Heavy Vehicle %	2%	11%	100%	100%	22%	30%	27%	0%	12%	34%	0%	2%
Project Trips												
Trip Distribution IN					100%							
Trip Distribution OUT		100%										
Truck Trips	0	16	0	0	17	0	0	0	0	0	0	0
Trip Distribution IN					85%							
Trip Distribution OUT		85%										
Car Trips	0	82	0	0	21	0	0	0	0	0	0	0
Total Project Trips	**0**	**98**	**0**	**0**	**38**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2024 Buildout Total	**5**	**271**	**2**	**3**	**130**	**27**	**92**	**0**	**17**	**3**	**0**	**9**
2024 Build Heavy Vehicle %	2%	13%	100%	100%	29%	30%	27%	0%	12%	34%	0%	2%

INTERSECTION VOLUME DEVELOPMENT

Intersection #3: Johnson Road @ Tatum Road
AM PEAK HOUR

Description	Tatum Road Northbound			Tatum Road Southbound			Johnson Road Eastbound			Johnson Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	3	1	2	39	0	4	21	72	0	1	62	37
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	0	25	0	2	2	1	0	0	4	26
Heavy Vehicle %	2%	2%	2%	64%	0%	50%	10%	2%	0%	2%	6%	70%
Peak Hour Factor		0.70			0.70			0.70			0.70	
Covid Calibration Factor												
Adjusted 2022 Volumes	**3**	**1**	**2**	**39**	**0**	**4**	**21**	**72**	**0**	**1**	**62**	**37**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
Palmetto Site DRI #3020				1		3	9					3
Palmetto Site DRI #3020 (Truck)												
Bowen Road Logistics Center DRI #3376				1		1	1					1
Bowen Road Logistics Center DRI #3376 (Truck)												
Palmetto Distribution Center DRI #2594												
Palmetto Distribution Center DRI #2594 (Truck)												
I-85 South Distribution Center				1								
I-85 South Distribution Center (Truck)												
2024 Background Traffic	**3**	**1**	**2**	**43**	**0**	**8**	**32**	**74**	**0**	**1**	**64**	**42**
2024 No-Build Heavy Vehicle %	2%	2%	2%	60%	0%	26%	6%	2%	0%	2%	6%	64%
Project Trips												
Trip Distribution IN												
Trip Distribution OUT												
Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN							15%					
Trip Distribution OUT						15%						
Car Trips	0	0	0	0	0	4	16	0	0	0	0	0
Total Project Trips	**0**	**0**	**0**	**0**	**0**	**4**	**16**	**0**	**0**	**0**	**0**	**0**
2024 Buildout Total	**3**	**1**	**2**	**43**	**0**	**12**	**48**	**74**	**0**	**1**	**64**	**42**
2024 Build Heavy Vehicle %	2%	2%	2%	60%	0%	17%	4%	2%	0%	2%	6%	64%

PM PEAK HOUR

Description	Tatum Road Northbound			Tatum Road Southbound			Johnson Road Eastbound			Johnson Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	1	0	0	26	0	31	13	58	4	3	88	38
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	0	13	0	1	1	0	1	0	4	8
Heavy Vehicle %	2%	0%	0%	50%	0%	3%	8%	2%	25%	2%	5%	21%
Peak Hour Factor		0.72			0.72			0.72			0.72	
Covid Calibration Factor												
Adjusted 2022 Volumes	**1**	**0**	**0**	**26**	**0**	**31**	**13**	**58**	**4**	**3**	**88**	**38**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
Palmetto Site DRI #3020				3		9	3					1
Palmetto Site DRI #3020 (Truck)												
Bowen Road Logistics Center DRI #3376				1		1	1					1
Bowen Road Logistics Center DRI #3376 (Truck)												
Palmetto Distribution Center DRI #2594												
Palmetto Distribution Center DRI #2594 (Truck)												
I-85 South Distribution Center				1								
I-85 South Distribution Center (Truck)												
2024 Background Traffic	**1**	**0**	**0**	**32**	**0**	**42**	**17**	**60**	**4**	**3**	**91**	**41**
2024 No-Build Heavy Vehicle %	2%	0%	0%	42%	0%	2%	6%	2%	26%	2%	5%	20%
Project Trips												
Trip Distribution IN												
Trip Distribution OUT												
Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN							15%					
Trip Distribution OUT						15%						
Car Trips	0	0	0	0	0	15	4	0	0	0	0	0
Total Project Trips	**0**	**0**	**0**	**0**	**0**	**15**	**4**	**0**	**0**	**0**	**0**	**0**
2024 Buildout Total	**1**	**0**	**0**	**32**	**0**	**57**	**21**	**60**	**4**	**3**	**91**	**41**
2024 Build Heavy Vehicle %	2%	0%	0%	42%	0%	2%	5%	2%	26%	2%	5%	20%

INTERSECTION VOLUME DEVELOPMENT

Intersection #4: Tatum Road @ Site Driveway A
AM PEAK HOUR

Description	Tatum Road Northbound			Tatum Road Southbound			Site Driveway A Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	61	0	0	129	0	0	0	0	0	0	0
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	24	0	0	25	0	0	0	0	0	0	0
Heavy Vehicle %	0%	39%	0%	0%	19%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor		0.72			0.72			0.72			0.72	
Covid Calibration Factor												
Adjusted 2022 Volumes	**0**	**61**	**0**	**0**	**129**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
Palmetto Site DRI #3020		12			3							
Palmetto Site DRI #3020 (Truck)												
Bowen Road Logistics Center DRI #3376		1			1							
Bowen Road Logistics Center DRI #3376 (Truck)												
Palmetto Distribution Center DRI #2594												
Palmetto Distribution Center DRI #2594 (Truck)												
I-85 South Distribution Center		6			7							
I-85 South Distribution Center (Truck)		3			3							
2024 Background Traffic	**0**	**85**	**0**	**0**	**147**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2024 No-Build Heavy Vehicle %	0%	33%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%
Project Trips												
Trip Distribution IN					60%	40%						
Trip Distribution OUT		60%					40%					
Truck Trips	0	7	0	0	7	4	4	0	0	0	0	0
Trip Distribution IN					45%	40%						
Trip Distribution OUT		45%					40%					
Car Trips	0	11	0	0	47	42	10	0	0	0	0	0
Total Project Trips	**0**	**18**	**0**	**0**	**54**	**46**	**14**	**0**	**0**	**0**	**0**	**0**
2024 Buildout Total	**0**	**103**	**0**	**0**	**201**	**46**	**14**	**0**	**0**	**0**	**0**	**0**
2024 Build Heavy Vehicle %	0%	34%	0%	0%	18%	9%	29%	0%	0%	0%	0%	0%

PM PEAK HOUR

Description	Tatum Road Northbound			Tatum Road Southbound			Site Driveway A Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	122	0	0	79	0	0	0	0	0	0	0
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	6	0	0	17	0	0	0	0	0	0	0
Heavy Vehicle %	0%	5%	0%	0%	22%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor		0.72			0.72			0.72			0.72	
Covid Calibration Factor												
Adjusted 2022 Volumes	**0**	**122**	**0**	**0**	**79**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
Palmetto Site DRI #3020		4			11							
Palmetto Site DRI #3020 (Truck)												
Bowen Road Logistics Center DRI #3376		1			1							
Bowen Road Logistics Center DRI #3376 (Truck)												
Palmetto Distribution Center DRI #2594												
Palmetto Distribution Center DRI #2594 (Truck)												
I-85 South Distribution Center		2			3							
I-85 South Distribution Center (Truck)		5			1							
2024 Background Traffic	**0**	**138**	**0**	**0**	**97**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2024 No-Build Heavy Vehicle %	0%	8%	0%	0%	19%	0%	0%	0%	0%	0%	0%	0%
Project Trips												
Trip Distribution IN					60%	40%						
Trip Distribution OUT		60%					40%					
Truck Trips	0	10	0	0	10	7	6	0	0	0	0	0
Trip Distribution IN					45%	40%						
Trip Distribution OUT		45%					40%					
Car Trips	0	44	0	0	11	10	39	0	0	0	0	0
Total Project Trips	**0**	**54**	**0**	**0**	**21**	**17**	**45**	**0**	**0**	**0**	**0**	**0**
2024 Buildout Total	**0**	**192**	**0**	**0**	**118**	**17**	**45**	**0**	**0**	**0**	**0**	**0**
2024 Build Heavy Vehicle %	0%	11%	0%	0%	24%	41%	13%	0%	0%	0%	0%	0%

INTERSECTION VOLUME DEVELOPMENT

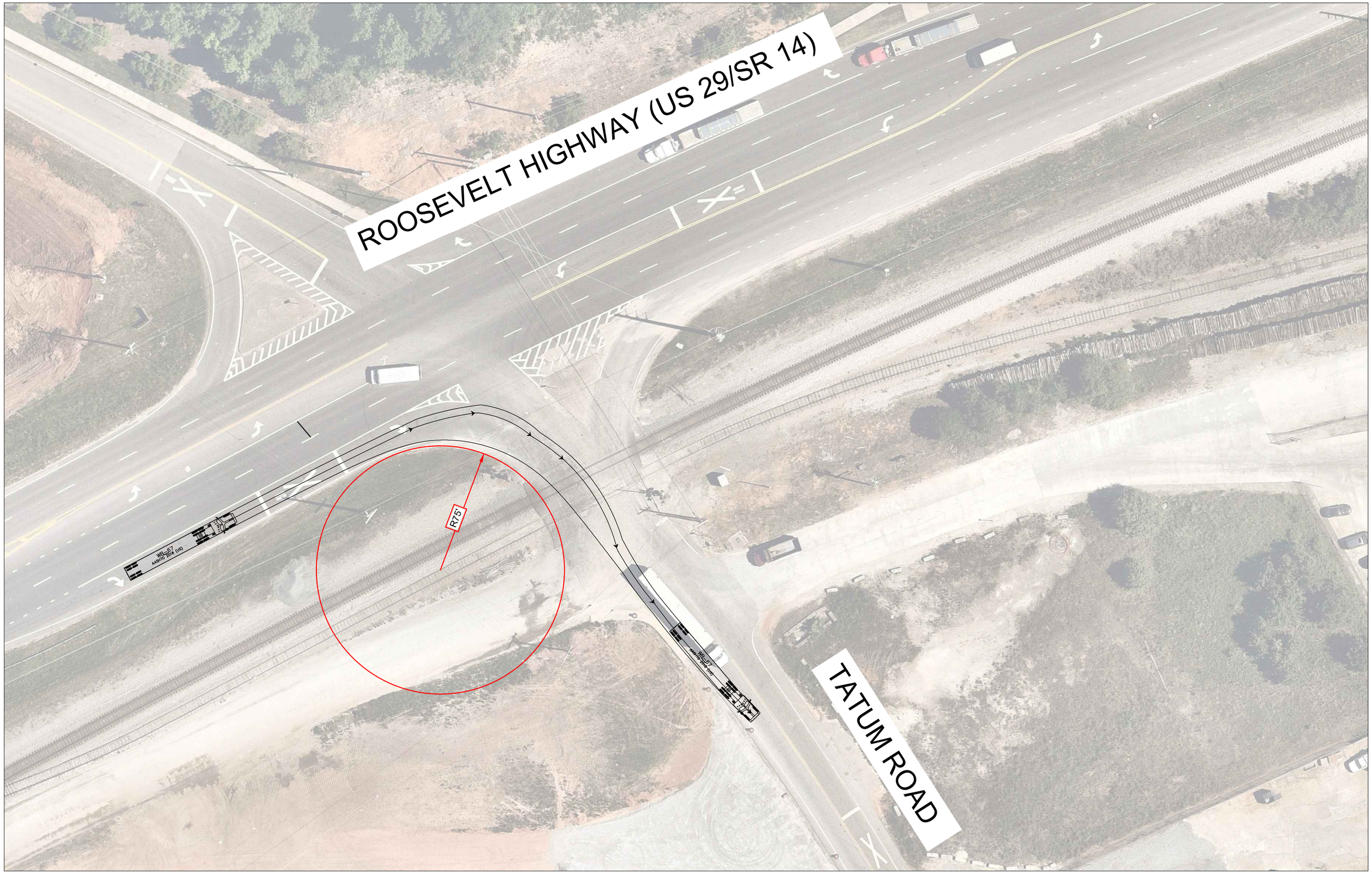
Intersection #5: Tatum Road @ Site Driveway B / I-85 South Dwy
AM PEAK HOUR

Description	Tatum Road Northbound			Tatum Road Southbound			Site Driveway B Eastbound			I-85 South Dwy Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	61	0	0	129	0	0	0	0	0	0	0
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	24	0	0	25	0	0	0	0	0	0	0
Heavy Vehicle %	0%	39%	0%	0%	19%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor		0.72			0.72			0.72			0.72	
Covid Calibration Factor												
Adjusted 2022 Volumes	**0**	**61**	**0**	**0**	**129**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
Palmetto Site DRI #3020		12			3							
Palmetto Site DRI #3020 (Truck)												
Bowen Road Logistics Center DRI #3376		1			1							
Bowen Road Logistics Center DRI #3376 (Truck)												
Palmetto Distribution Center DRI #2594												
Palmetto Distribution Center DRI #2594 (Truck)												
I-85 South Distribution Center				7						1		6
I-85 South Distribution Center (Truck)				3								3
2024 Background Traffic	**0**	**76**	**0**	**10**	**137**	**0**	**0**	**0**	**0**	**1**	**0**	**9**
2024 No-Build Heavy Vehicle %	0%	33%	0%	30%	19%	0%	0%	0%	0%	2%	0%	33%
Project Trips												
Trip Distribution IN						60%						
Trip Distribution OUT							60%					
Truck Trips	0	0	0	0	0	7	7	0	0	0	0	0
Trip Distribution IN	15%					45%						
Trip Distribution OUT							45%		15%			
Car Trips	16	0	0	0	0	47	11	0	4	0	0	0
Total Project Trips	**16**	**0**	**0**	**0**	**0**	**54**	**18**	**0**	**4**	**0**	**0**	**0**
2024 Buildout Total	**16**	**76**	**0**	**10**	**137**	**54**	**18**	**0**	**4**	**1**	**0**	**9**
2024 Build Heavy Vehicle %	2%	33%	0%	30%	19%	13%	39%	0%	2%	2%	0%	33%

PM PEAK HOUR

Description	Tatum Road Northbound			Tatum Road Southbound			Site Driveway B Eastbound			I-85 South Dwy Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2022 Traffic Volumes	0	122	0	0	79	0	0	0	0	0	0	0
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	6	0	0	17	0	0	0	0	0	0	0
Heavy Vehicle %	0%	5%	0%	0%	22%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor		0.72			0.72			0.72			0.72	
Covid Calibration Factor												
Adjusted 2022 Volumes	**0**	**122**	**0**	**0**	**79**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
Palmetto Site DRI #3020		4			11							
Palmetto Site DRI #3020 (Truck)												
Bowen Road Logistics Center DRI #3376		1			1							
Bowen Road Logistics Center DRI #3376 (Truck)												
Palmetto Distribution Center DRI #2594												
Palmetto Distribution Center DRI #2594 (Truck)												
I-85 South Distribution Center				3						1		2
I-85 South Distribution Center (Truck)				1								5
2024 Background Traffic	**0**	**131**	**0**	**4**	**93**	**0**	**0**	**0**	**0**	**1**	**0**	**7**
2024 No-Build Heavy Vehicle %	0%	5%	0%	25%	19%	0%	0%	0%	0%	2%	0%	71%
Project Trips												
Trip Distribution IN						60%						
Trip Distribution OUT							60%					
Truck Trips	0	0	0	0	0	10	10	0	0	0	0	0
Trip Distribution IN	15%					45%						
Trip Distribution OUT							45%		15%			
Car Trips	4	0	0	0	0	11	44	0	15	0	0	0
Total Project Trips	**4**	**0**	**0**	**0**	**0**	**21**	**54**	**0**	**15**	**0**	**0**	**0**
2024 Buildout Total	**4**	**131**	**0**	**4**	**93**	**21**	**54**	**0**	**15**	**1**	**0**	**7**
2024 Build Heavy Vehicle %	2%	5%	0%	25%	19%	48%	19%	0%	2%	2%	0%	71%

Full Page Truck Exhibits


ROOSEVELT HIGHWAY (US 29/SR 14)
R75'
WB-67
AASHTO 2005A (US)
WB-67
AASHTO 2005A (US)
TATUM ROAD

ROOSEVELT HIGHWAY (US 29/SR 14)

TATUM ROAD