Transportation Analysis

Allora Dacula
DRI #3750

City of Dacula, Georgia
(Gwinnett County)

October 2022

Prepared for:

TRC

Prepared by:

Kimley-Horn and Associates, Inc.
817 West Peachtree Street, NW
Suite 601, Atlanta, Georgia 30308
011058035

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EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of the proposed *Allora Dacula* development located in unincorporated Dacula, Georgia. The approximate 110-acre site is located along Winder Highway (SR 8/US 29) and Stanley Road. The site is currently undeveloped.

The proposed development will consist of the following land uses and densities contained in **Table 1**. The project is expected to be completed by 2025 (approximately 3 years).

Table 1: Proposed Land Use and Density	
Multifamily Apartments	378 units
Townhomes	225 units
Industrial Warehousing	473,200 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, as outlined in the Georgia Regional Transportation Authority (GRTA) Letter of Understanding (dated August 25, 2022).

Capacity analyses were performed for the study intersections under the Estimated 2022 conditions, the Projected 2025 No-Build conditions, and the Projected 2025 Build conditions.

- Estimated 2022 conditions represent current traffic volumes collected in May 2022 that were calibrated to account for COVID-19's impact on traffic.
- Projected 2025 No-Build conditions represent the Estimated 2022 traffic volumes grown for three (3) years using a 1.0% per year growth rate.
- Projected 2025 Build conditions represent the Projected 2025 No-Build conditions plus the addition of the project trips that are anticipated to be generated by the *Allora Dacula* development.

The intersection of University Parkway (SR 316/US 29) at Winder Highway (SR 8/US 29) (Intersection 1) is projected to operate at LOS E overall in the AM peak hour for the Estimated 2022 and Projected No-Build 2025 conditions and at LOS F in the AM peak hour for the Projected Build 2025 conditions. The intersection is projected to operate at LOS F overall for the PM peak hour in all scenarios.

It should be noted that a grade separated interchange (GW-394/PI #0013897) is programmed for University Parkway (SR 316/US 29) at Winder Highway (SR 8/US 29). Per the GDOT Approved Concept Report, the interchange is projected to operate at LOS B during both the AM and PM peak hours under 2044 build conditions. A project factsheet and Interchange Concept drawing are included in Appendix D. The interchange is estimated to be completed in 2030, which is after the build-out of the *Allora Dacula* development.

Build 2025 Conditions *(Site Access Improvements)*

The following should be considered to serve the Projected 2025 Build Conditions:

- Winder Highway (SR 8/US 29) at Relocated Stanley Road (Intersection 2B)
    - Construct relocated Stanley Road as a two-lane roadway with one (1) lane in each direction
    - Construct a channelized eastbound right-turn lane along Winder Highway (SR 8/US 29)
    - Construct a westbound left-turn lane along Winder Highway (SR 8/US 29)

- Construct a northbound left-turn lane and a channelized right-turn lane along Stanley Road
- Install a traffic signal when warranted and approved by GDOT

Per GDOT's Policy, Intersection Control Evaluation (ICE) was performed at this intersection. The intent of ICE is to determine the most effective intersection design/traffic control at a given intersection. Subject to GDOT approval, an unsignalized full-movement side-street stop, a single-lane roundabout, or a traffic signal were considered for future intersection control.

Sections 6.1 – 6.2 provide the results of the ICE analysis and preliminary signal warrant analyses for this study intersection. The installation of a traffic signal (when warranted) is recommended at the study intersection of Winder Highway (SR 8/US 29) at Relocated Stanley Road (Intersection 2B). The recommended build laneage and geometry is shown for all study intersections on **Figure 21**.

- Stanley Road at Village Broad Street / Driveway 9 (Intersection 3)
  - Construct Driveway 9 to consist of one (1) ingress lane and one (1) egress lane under side street stop control
- Stanley Road at Driveway 1 (Intersection 4)
  - Construct Driveway 1 to consist of one (1) ingress lane and one (1) egress lane under side street stop control
- Stanley Road at Driveway 2 (Intersection 5)
  - Construct Driveway 2 to consist of one (1) ingress lane and one (1) egress lane under side street stop control
- Pipeline Road at Driveway 3 (Intersection 6)
  - Construct Driveway 3 to consist of one (1) ingress lane and one (1) egress lane under side street stop control
- Pipeline Road at Driveway 4 (Intersection 7)
  - Construct Driveway 4 to consist of one (1) ingress lane and one (1) egress lane under side street stop control
- Stanley Road at Driveway 5 (Intersection 8)
  - Construct Driveway 5 to consist of one (1) ingress lane and one (1) egress lane under side street stop control
- Stanley Road at Driveway 6 (Intersection 9)
  - Construct Driveway 6 to consist of one (1) ingress lane and one (1) egress lane under side street stop control
- Stanley Road at Driveway 7 (Intersection 10)
  - Construct Driveway 7 to consist of one (1) ingress lane and one (1) egress lane under side street stop control
- Stanley Road at Driveway 8 (Intersection 11)
  - Construct Driveway 8 to consist of one (1) ingress lane and one (1) egress lane under side street stop control

1.0 PROJECT DESCRIPTION

1.1 Introduction

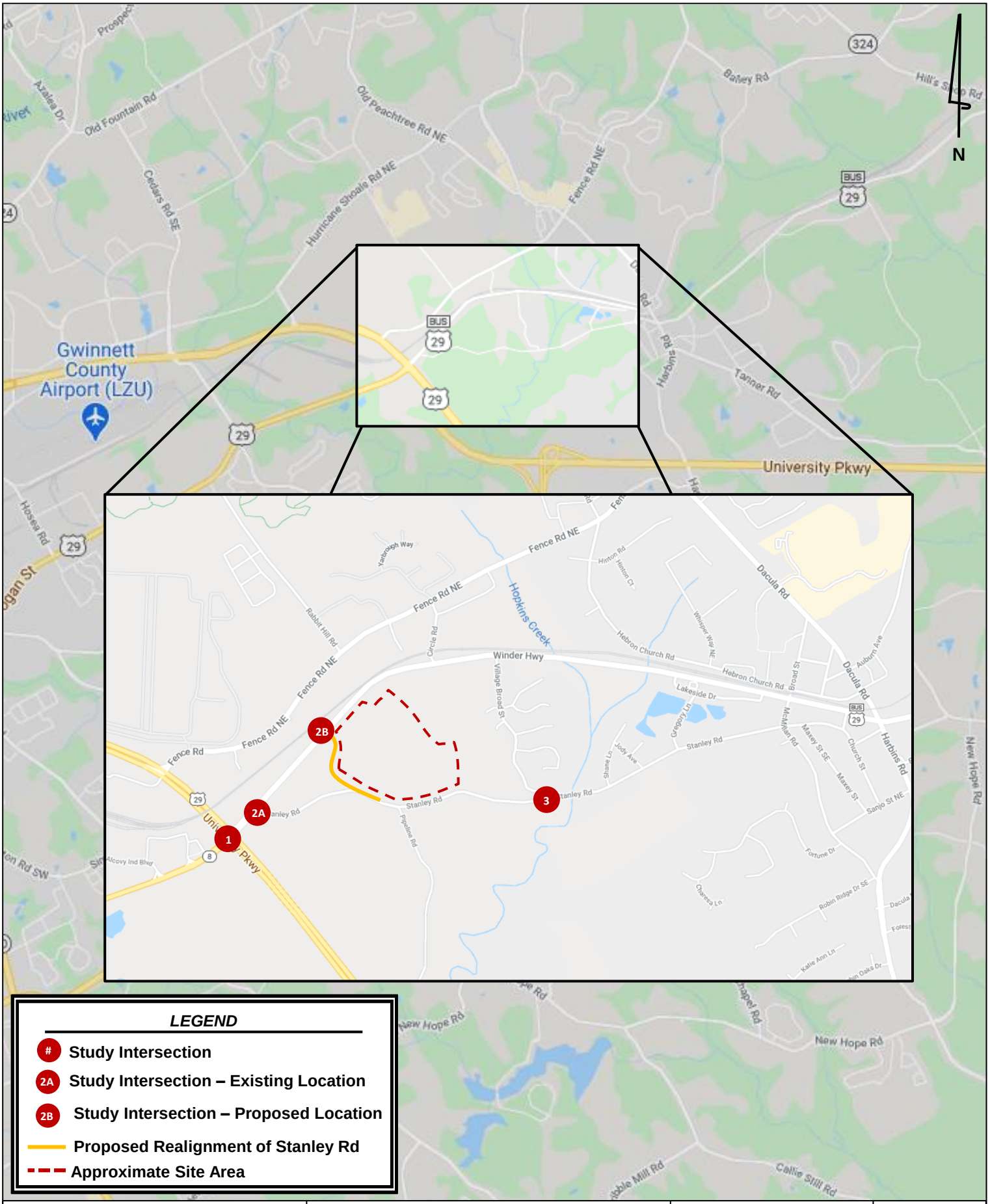
This report presents the analysis of the anticipated traffic impacts of the proposed *Allora Dacula* development located in unincorporated Dacula, Georgia. The approximate 110-acre site is located along Winder Highway (US 29/SR 8) and Stanley Road. The project site is currently zoned PMUD (Panned Mix Use Development). A zoning modification (will remain PMUD with a change in conditions) application was sent on June 21, 2022 and received on June 23, 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 2025 (approximately 3 years).

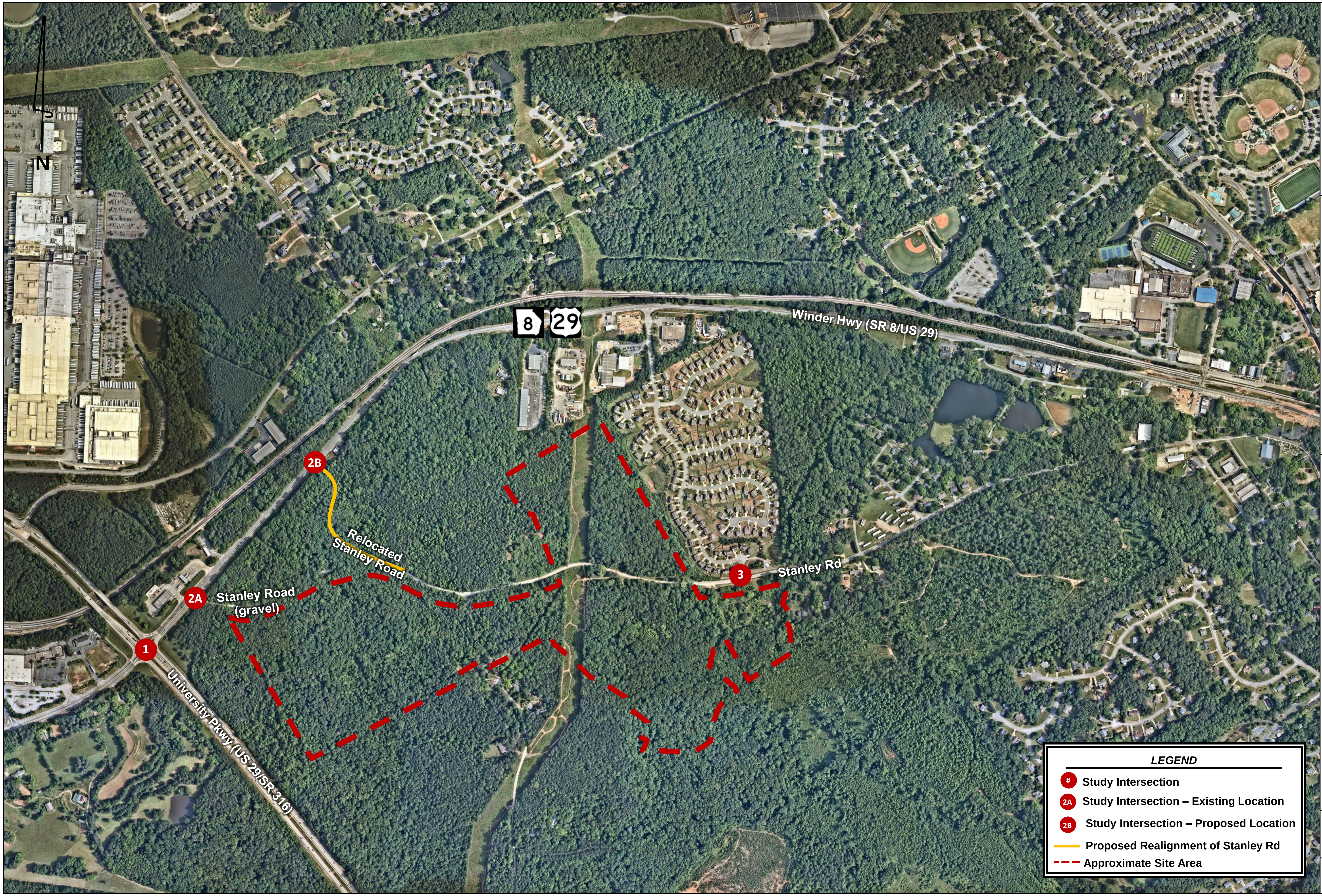
Table 2: Proposed Land Use and Density	
Land Use	**Proposed**
Multifamily Apartments	378 units
Townhomes	225 units
Warehousing	473,200 SF

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 residential units in a new developing suburb development and 500,000 SF in a new industrial development. The DRI was formally triggered with the filing of the Initial DRI Information (Form 1) on June 29, 2022, by the City of Dacula. This transportation analysis includes all inputs and methodologies discussed at the DRI Methodology Meeting with GRTA, ARC, and other stakeholders. The inputs and methodologies are outlined in the GRTA Letter of Understanding (LOU) dated August 25, 2022.



Kimley»Horn	**Allora Dacula DRI #3750** ***Transportation Analysis***	**Site Location Map**	**Figure 1** **Page 4**



Site Aerial

Allora Dacula DRI #3750
Transportation Analysis

Figure 2

1.2 Site Access

As currently envisioned, the proposed development will be accessible via nine (9) new access points:

1. **Site Driveway 1** – a proposed full-movement driveway located along the new alignment of Stanley Road approximately 900 feet west of Pipeline Road that will operate under side-street stop control.
2. **Site Driveway 2** – a proposed full-movement driveway located along the new alignment of Stanley Road approximately 700 feet west of Pipeline Road that will operate under side-street stop control.
3. **Site Driveway 3** – a proposed full-movement driveway located along Pipeline Road approximately 210 feet south of Stanley Road that will operate under side-street stop control.
4. **Site Driveway 4** – a proposed full-movement driveway located along Pipeline Road approximately 330 feet south of Stanley Road that will operate under side-street stop control.
5. **Site Driveway 5** – a proposed full-movement driveway located along Stanley Road approximately 740 feet east of Pipeline Road that will operate under side-street stop control.
6. **Site Driveway 6** – a proposed full-movement driveway located along Stanley Road approximately 1200 feet east of Pipeline Road that will operate under side-street stop control.
7. **Site Driveway 7** – a proposed full-movement driveway located along Stanley Road approximately 1500 feet east of Pipeline Road that will operate under side-street stop control.
8. **Site Driveway 8** – a proposed full-movement driveway located along Stanley Road approximately 1840 feet east of Pipeline Road that will operate under side-street stop control.
9. **Site Driveway 9** – a proposed full-movement driveway located along Stanley Road approximately 2300 feet east of Pipeline Road that will operate under side-street stop control.

1.3 Internal Circulation Analysis

Internal private roadways throughout the site provide access to all of the buildings 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	Parking Type	Proposed
Residences	Car	1,102
Industrial	Loading	319
	Total	**1,421**

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

1.5 Alternative Transportation Facilities

There are no dedicated pedestrian or bicycle facilities along the site frontage. Similarly, there are no transit stops in the vicinity of the site. Pedestrian facilities will be provided throughout the 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 *Allora Dacula* development does not qualify for a "Dense Urban Environment Enhanced Focus Area" review, due to its location in the City Dacula.

1.7 Heavy Vehicle Enhanced Focus Area

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

1.7.1 Heavy Vehicle Routing

As outlined in the Enhanced Focus Area guidance, roadways segments between the site driveways and the nearest study network intersections were studied. The following segments are included in the Enhanced Focus Area, shown in **Figure 3** (highlighted green):

- Pipeline Road between the site and Stanley Road
- Stanley Road between the site (industrial driveways) and Winder Highway (SR 8/US 29)
    - Stanley Road is proposed to be relocated to border the proposed site

It should be noted that the segment of Stanley Road to the east of Pipeline Road was not included in the observation area, as heavy vehicles are not anticipated to travel along this segment.

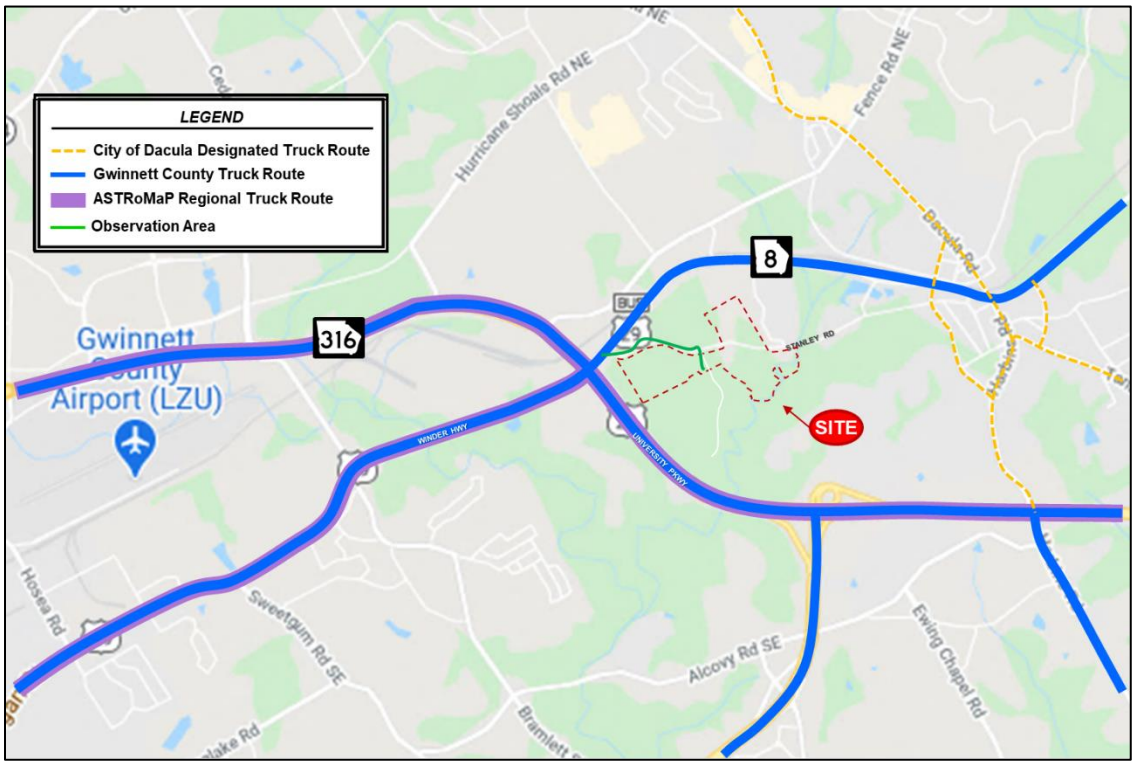


Figure 3: Heavy Vehicle Routing

1.7.2 Pavement Condition

Pavement conditions were observed via Google Earth Street View. The Street View imagery was collected in March 2021.

The pavement along Winder Highway (SR 8/US 29) is generally in good condition. No significant distress was observed. **Figure 4** shows Winder Highway (SR 8/US 29) at the approximate proposed intersection location with relocated Stanley Road. **Figure 5** shows Winder Highway (SR 8/US 29) approximately a half mile east of Stanley Road. These snapshots represent the conditions along Winder Highway (SR 8/US 29) within the observation area.

Stanley Road is currently primarily unpaved. **Figure 6** shows the current conditions of Stanley Road. As part of the *Allora Dacula* development, it is proposed that Stanley Road be relocated to border the site. The new construction of Stanley Road will address the current unpaved conditions between the site and Winder Highway (SR 8/US 29).

Figure 4: Eastbound Winder Highway (SR 8/US 29) – Near Proposed Relocation of Stanley Road

Figure 5: Eastbound Winder Highway (SR 8/US 29) – 0.5 Miles East of Stanley Road

Figure 6: Stanley Road - South of Winder Highway (SR 8/US 29) (to be relocated)

1.7.3 Roadway Width

The lane widths within the study observation area are shown in **Table 4**. The Gwinnett County roadway width standards were taken from the Gwinnett County Street Design Standards (Section 900-60), which specifies roadway width requirements based on street classifications. Lane width dimensions were measured on NearMap.

Table 4: Roadway Widths

Roadway	Roadway Width	Roadway Width Standard (Gwinnett County)
Winder Highway (SR 8/US 29)	35 ft	52 ft to 66 ft desirable (4 through lanes with median)
Stanley Road (Existing – Unimproved)	20 ft	32 ft
Stanley Road (Improved)	36 ft*	32 ft

*Proposed roadway width as part of relocation of Stanley Road.

1.7.4 Corner Radii

The corner radii of four (4) study intersections were analyzed along the Enhanced Focus Area:

1. Winder Highway (SR 8/US 29) at Stanley Road (relocated)
2. Stanley Road at Driveway 1
3. Stanley Road at Driveway 2
4. Pipeline Road at Driveway 3

Note: Gwinnett County Street Design Standards outline minimum roadway radii for arterial roads as 40 feet. The *GDOT Regulations for Driveway and Encroachment Control* outlines minimum corner radii for trucks as 75 feet.

1. Winder Highway (SR 8/US 29) at Stanley Road

Figure 7 outlines the anticipated wheel-path for a WB-67 vehicle entering the site by making an eastbound right-turn from Winder Highway (SR 8/US 29) onto Stanley Road. The proposed curb radius is approximately 75 feet. **Figure 8** outlines the anticipated wheel-path for a WB-67 vehicle exiting the site by making a northbound right-turn from Stanley Road onto Winder Highway (SR 8/US 29). The proposed curb radius is approximately 75 feet. Note: the intersection geometry will likely be modified during the GDOT permitting process to better accommodate heavy vehicles.

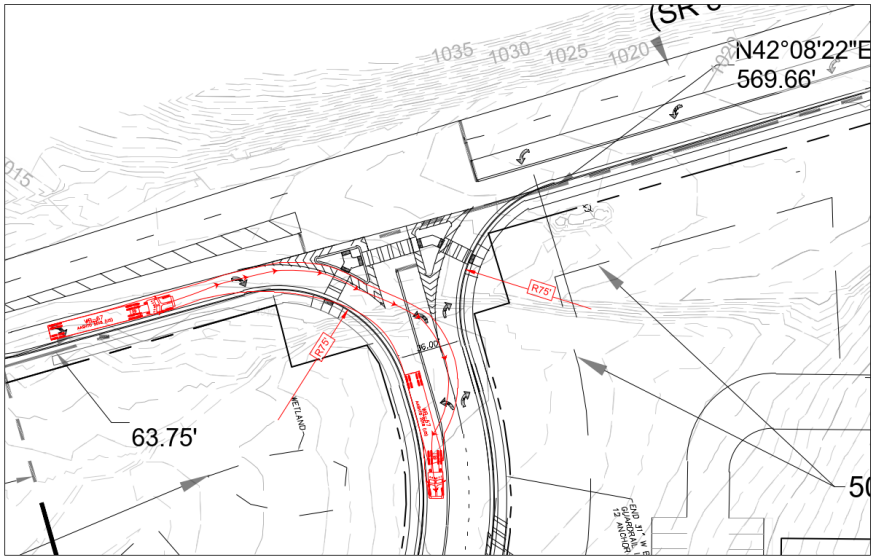


Figure 7: Winder Highway (SR 8/US 29) at Stanley Road – Eastbound Right (Entering Truck)

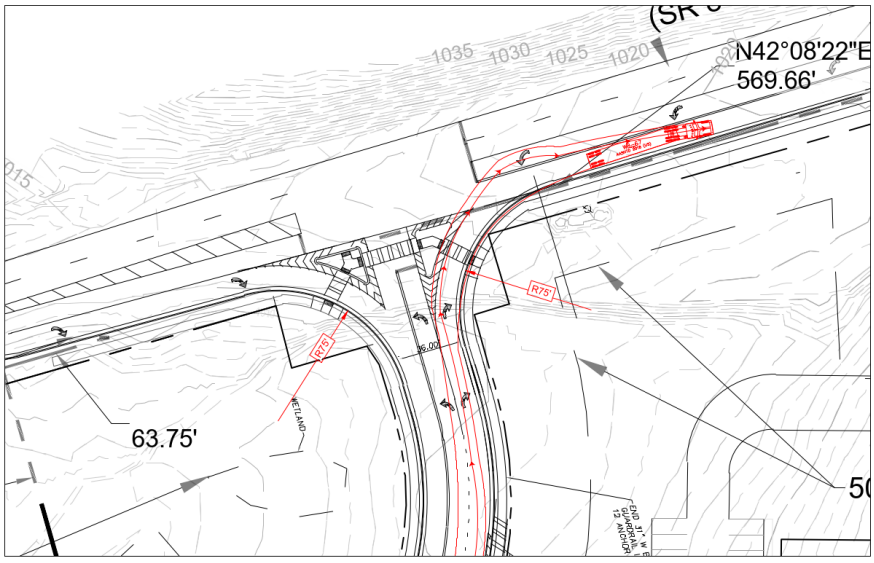


Figure 8: Winder Highway (SR 8/US 29) at Stanley Road – Northbound Right (Exiting Truck)

2. Stanley Road at Driveway 1

Figure 9 outlines the anticipated wheel-path for a WB-67 vehicle entering the site by making an eastbound right-turn from Stanley Road into Driveway 1. The proposed curb radius is approximately 75 feet.

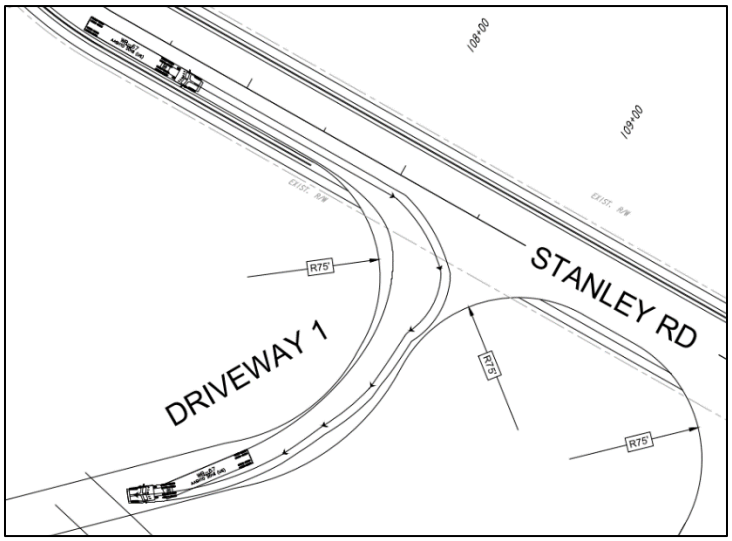


Figure 9: Stanley Road at Driveway 1 – Eastbound Right (Entering Truck)

4. Stanley Road at Driveway 2

Figure 10 outlines the anticipated wheel-path for a WB-67 vehicle entering the site by making an eastbound right-turn from Stanley Road into Driveway 2. The proposed curb radius is approximately 75 feet.

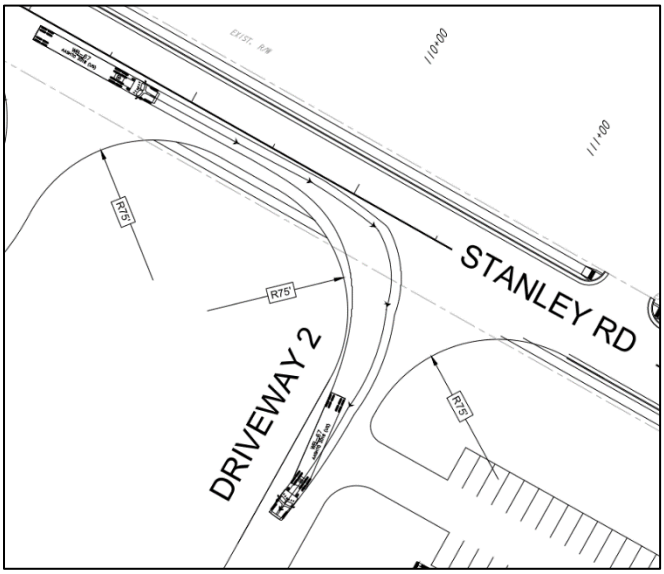


Figure 10: Stanley Road at Driveway 2 – Eastbound Right (Entering Truck)

5. Pipeline Road at Driveway 3

Figure 11 outlines the anticipated wheel-path for a WB-67 vehicle exiting the site by making a southbound right-turn from Pipeline Road into Driveway 3. The proposed curb radius is approximately 75 feet.

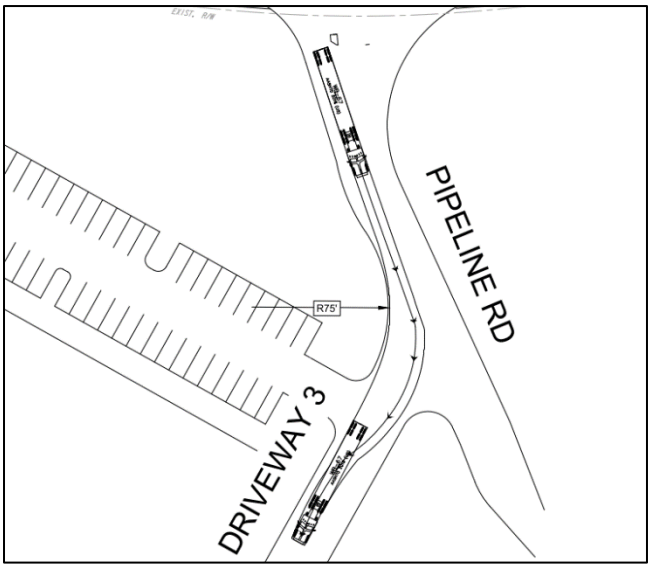


Figure 11: Stanley Road at Driveway C – Southbound Right (Entering Truck)

6. Stanley Road at Pipeline Road

Figure 12 outlines the anticipated wheel-path for a WB-67 vehicle entering the site by making an eastbound right-turn from Stanley Road to Pipeline Road. The proposed curb radius is approximately 50 feet.

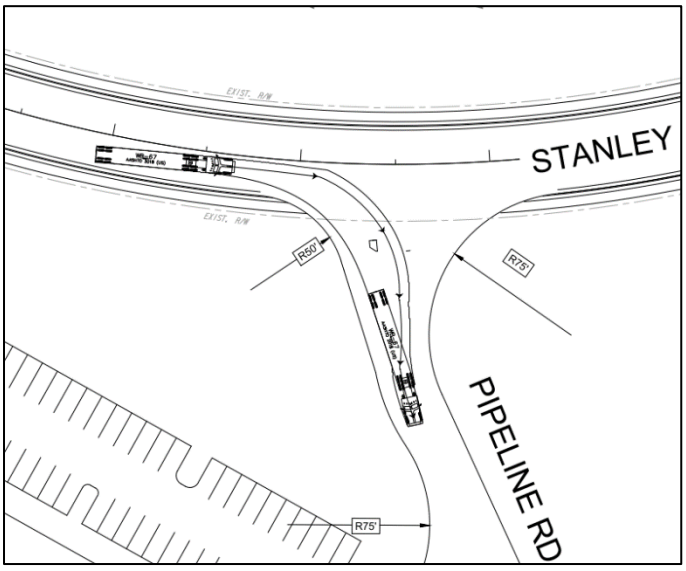


Figure 12: Stanley Road at Pipeline Road – Eastbound Right (Entering Truck)

1.7.5 Heavy Vehicle Staging

The site plan includes a designated truck court to accommodate heavy vehicle queueing, staging, and overflow**.** **Figure 13** indicates the designated truck staging/overflow areas on the site plan.

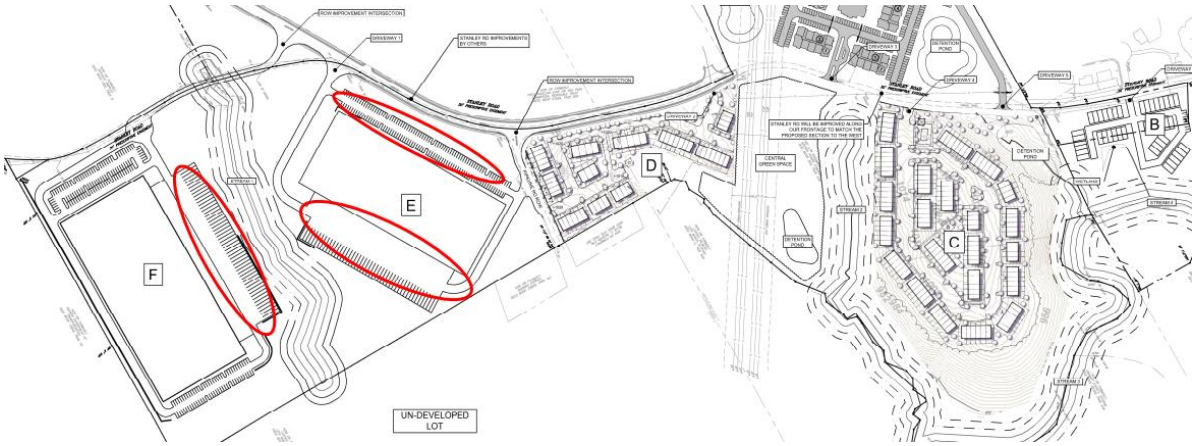


Figure 13: Heavy Vehicle Staging

1.7.6 Pedestrian Safety

The proposed development will include a minimum 5' sidewalk along Stanley Road and along Winder Highway, per City of Dacula and GDOT requirements. 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 and to the right-of-way of Stanley 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 four (4) off-site intersections described in **Table 5** and shown in **Figure 14**.

Table 5: Intersection Control Summary		
Intersection	**Jurisdiction**	**Control**
1. Winder Highway (SR 8/US 29) at University Parkway (SR 316/US 29)	GDOT	Signalized
2a. Winder Highway (SR 8/US 29) at Stanley Road	GDOT	Unsignalized (TWSC)
3. Stanley Road at Village Broad Street	Gwinnett County	Unsignalized (TWSC)

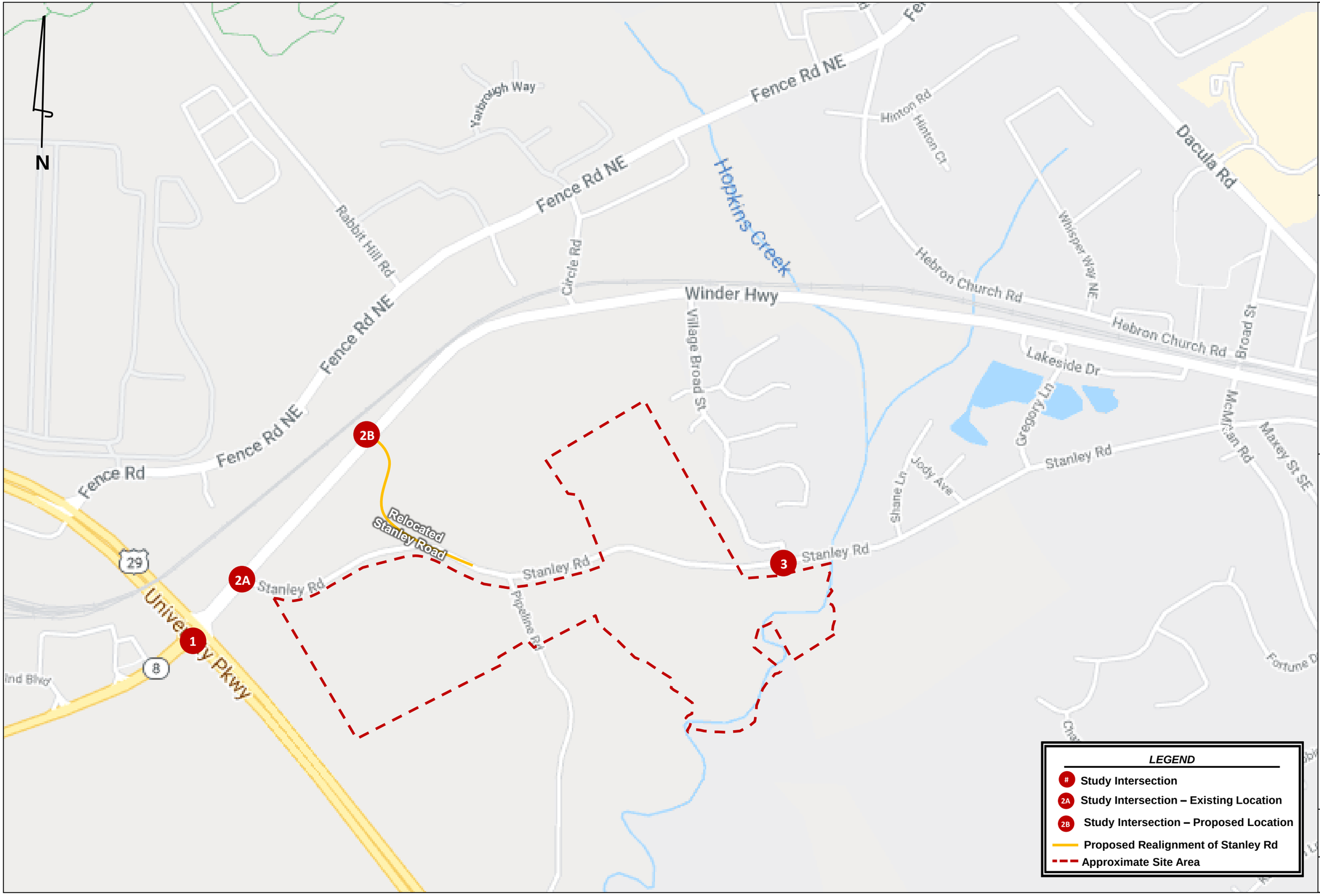
Note: TWSC = Two Way Stop Control, AWSC = All Way Stop Control

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 6** (bolded roadways are adjacent to the site).

Table 6: Roadway Classifications				
Roadway	**Lanes**	**Posted Speed Limit**	**AADT (GDOT, 2019)**	**GDOT Functional Classification**
Winder Highway (SR 8/US 29)	**3**	**45 MPH**	**10,600**	**Minor Arterial**
University Parkway (SR 316/US 29)	4	55 MPH	59,200	Principal Arterial
Stanley Road	**3***	**25 MPH**	**-**	**Local**
Village Broad Street	2	25 MPH	-	Local

*Proposed number of lanes with relocation.



Study Intersections

Allora Dacula DRI #3750
Transportation Analysis

Kimley»Horn

Figure 14

2.3 Traffic Data Collection and Calibration

Traffic counts were collected at all three (3) existing study intersections on Tuesday, May 10, 2022. The collected counts were then calibrated using adjustment factors to account for the potential impacts of COVID-19 to typical traffic volumes and patterns.

The peak hour adjustment factors were determined by comparing the GDOT 2018 AM and PM peak hour volumes collected along Winder Highway (SR 8/US 29) east of Village Broad Street (to align with the GDOT TADA count station 135-0040) to the collected 2022 volumes in the same location. As a result of this comparison, it was determined that no adjustment factor should be used for the existing AM turning movement counts, and an adjustment factor of 1.09 should be used for the existing PM turning movement counts. The methodologies used in this analysis for traffic count calibration were approved by GRTA and ARC.

Traffic count peak hours for all the study intersections are shown in **Table 7**.

Table 7: Traffic Count Summary

Intersection	Count Date	AM Peak Hour	PM Peak Hour
1. Winder Highway (SR 8/US 29) at University Parkway (SR 316/US 29)	5/2022	7:00 AM – 8:00 AM	4:45 PM – 5:45 PM
2a. Winder Highway (SR 8/US 29) at Stanley Road	5/2022	7:00 AM – 8:00 AM	5:00 PM – 6:00 PM
3. Stanley Road at Village Broad Street	5/2022	7:15 AM – 8:15 AM	5:00 PM – 6:00 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 *Allora Dacula* development. Background traffic includes a base growth rate, which is based on historical count data and population growth data. It can also include trips anticipated from nearby or adjacent other projects.

Based on methodology outlined in the GRTA Letter of Understanding (LOU), a 1.0% per year background traffic growth rate from 2022 to 2025 (1 year) was used for all roadways.

The Projected 2025 No-Build conditions represent the Estimated 2022 traffic volumes grown for one (1) year at 1.0% per year throughout the study network.

The Projected 2025 Build conditions represent the project trips generated by the *Allora Dacula* development (discussed in Section 3.0 and 4.0) added to the Projected 2025 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.

The following projects shown in **Table 8** are programmed or planned to occur near the development.

Table 8: Programmed Projects

Project Name	From / To Points:	Sponsor	GDOT PI #	ARC ID # (TIP)	Design FY	ROW / UTL FY	CST FY
ITS Enhancements Phase 2	Nearby: Harbins Road	Gwinnett/ GDOT	PI #0016070	GW-415	--	--	2021-TBD
SR 316 Interchange at US 29/SR 8**	Interchange	Gwinnett/ GDOT	PI #0013897	GW-394	2017	2022	2024-2030
Fence Road Connector	Fence Road to US 29/SR 8	Gwinnett/ GDOT	PI #0013896	GW-184D	2017	2022	2024-2030
SR 316 New Interchange at Hurricane Trail	SR316 to Cedars RD to Fence RD	Gwinnett/ GDOT	PI #0013895	GW-184C	2017	2022	2024-2030

**Project information was obtained from GeoPI (GDOT), the Atlanta Region's Plan (ARC), Gwinnett County Comprehensive Transportation Plan, and Sweetwater Master Plan.*

Although the SR 316 Interchange at US 29/SR 8 will not be completed by the *Allora Dacula* buildout year, it is understood that the project will likely improve operations at the intersection once completed. Available fact sheets for projects listed in the table above can be found in **Appendix D**.

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 and all-way stop controlled intersections are reported for the intersection as a whole. One or more movements at an intersection may 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, alternative transportation mode reductions, and pass-by reductions are not considered in the analysis based on methodology outlined in the GRTA Letter of Understanding (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.). No alternative modes reductions were taken in this analysis 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 per the LOU.

Table 9 summarizes the gross trip generation, reductions, net trip generation, and driveway volumes for the proposed *Allora Dacula* 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	473,200 SF	786	393	393	62	18	23	60
215 – Single-Family Attached Housing	225 d.u.	1,664	832	832	34	77	75	56
221 – Multi-Family Housing (Mid-Rise)	378 d.u.	1,756	878	878	35	119	90	58
Warehousing Gross Project Trips		**1,006**	**503**	**503**	**75**	**23**	**27**	**73**
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Pass-By Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Employee (Car Trips)		*522*	*261*	*261*	*58*	*13*	*16*	*53*
Heavy Vehicle (Trucks)		*264*	*132*	*132*	*4*	*5*	*7*	*7*
Residential Gross Project Trips		***3,420***	***1,710***	***1,710***	***69***	***196***	***188***	***174***
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Pass-By Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
New Trips		***4,206***	***213***	***213***	***131***	***214***	***188***	***174***

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 industrial land uses for heavy vehicles (trucks) in **Figure 15** and for employees (cars) in **Figure 16**. The anticipated distribution and assignment of the trips throughout the study roadway network is shown for residential land uses in **Figure 17.** 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 18**.

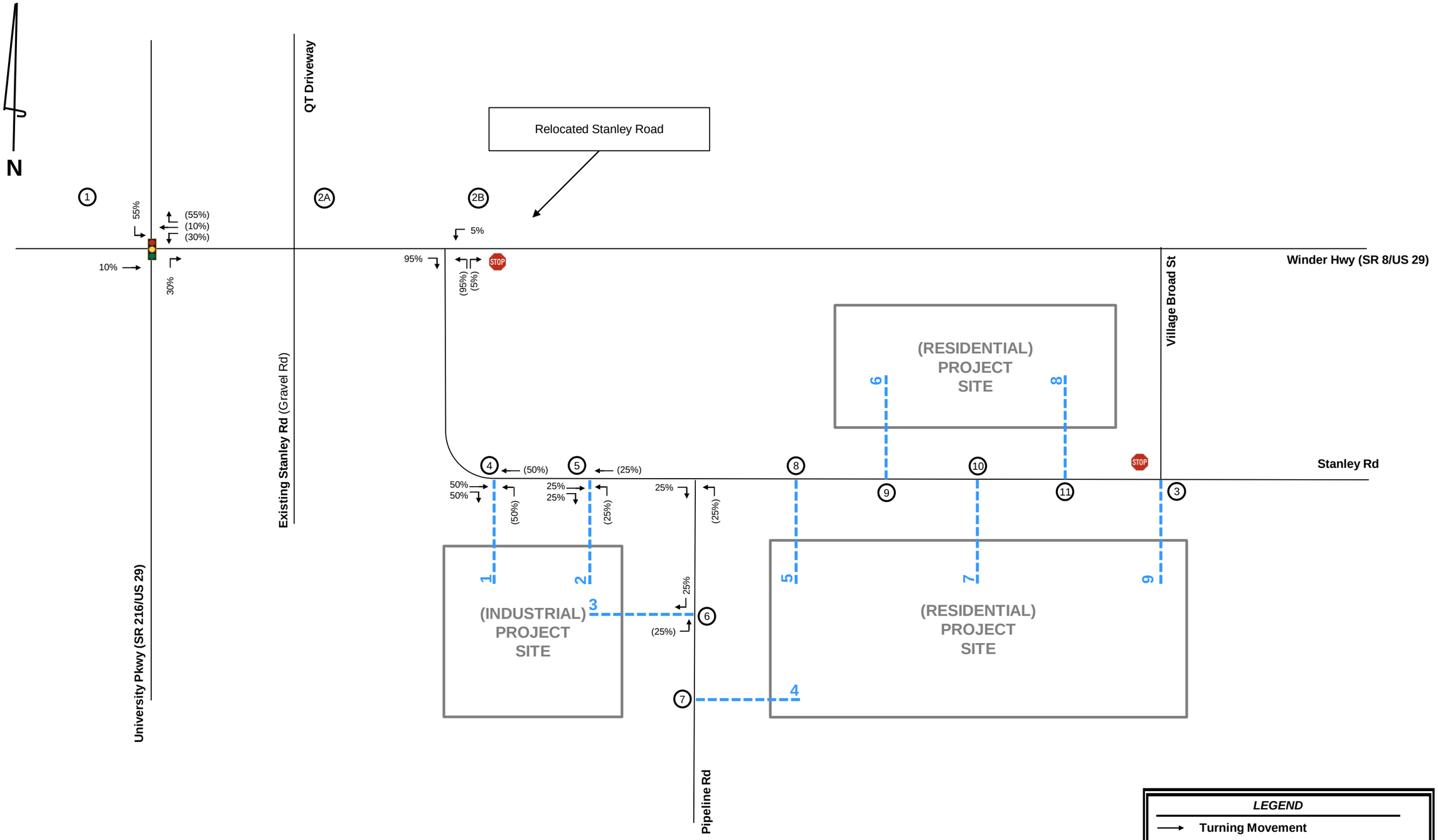
Detailed intersection volume worksheets are provided in Appendix C.

5.0 TRAFFIC ANALYSIS

Capacity analyses were performed using *Synchro 11* for the AM and PM peak hours under the Estimated 2021 conditions, Projected 2025 No-Build conditions, and Projected 2025 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 19** for Estimated 2022 conditions, **Figure 20** for Projected 2025 No-Build conditions, and **Figure 21** for Projected 2025 Build conditions.

Sections 5.1 – 5.8 provide the results of the capacity analyses are presented for each study intersection and include projected LOS, delay, and queue lengths.

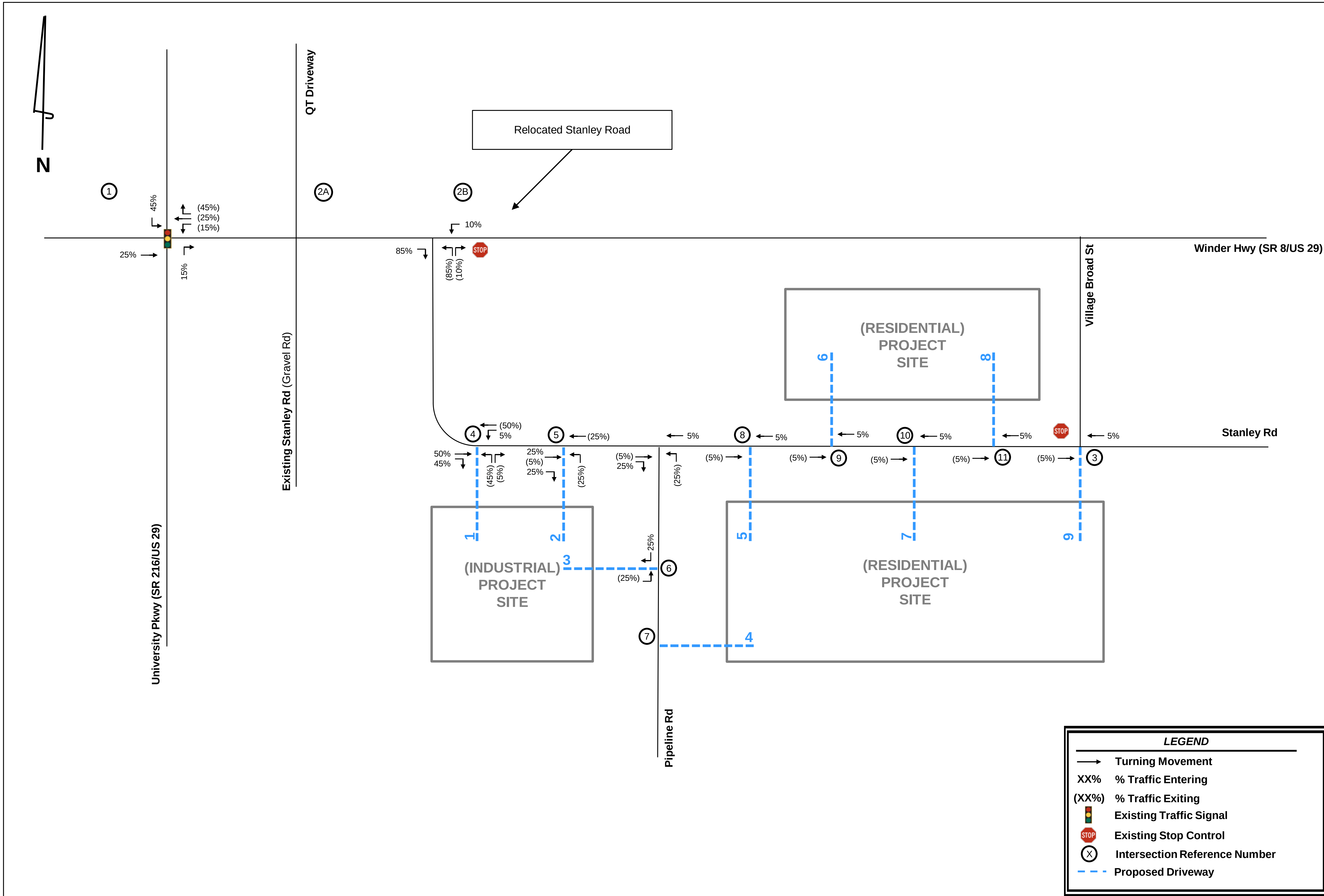


Trip Distribution & Assignment: Industrial Heavy Vehicles

Allora Dacula DRI #3750
Transportation Analysis

Kimley»Horn

Figure 15

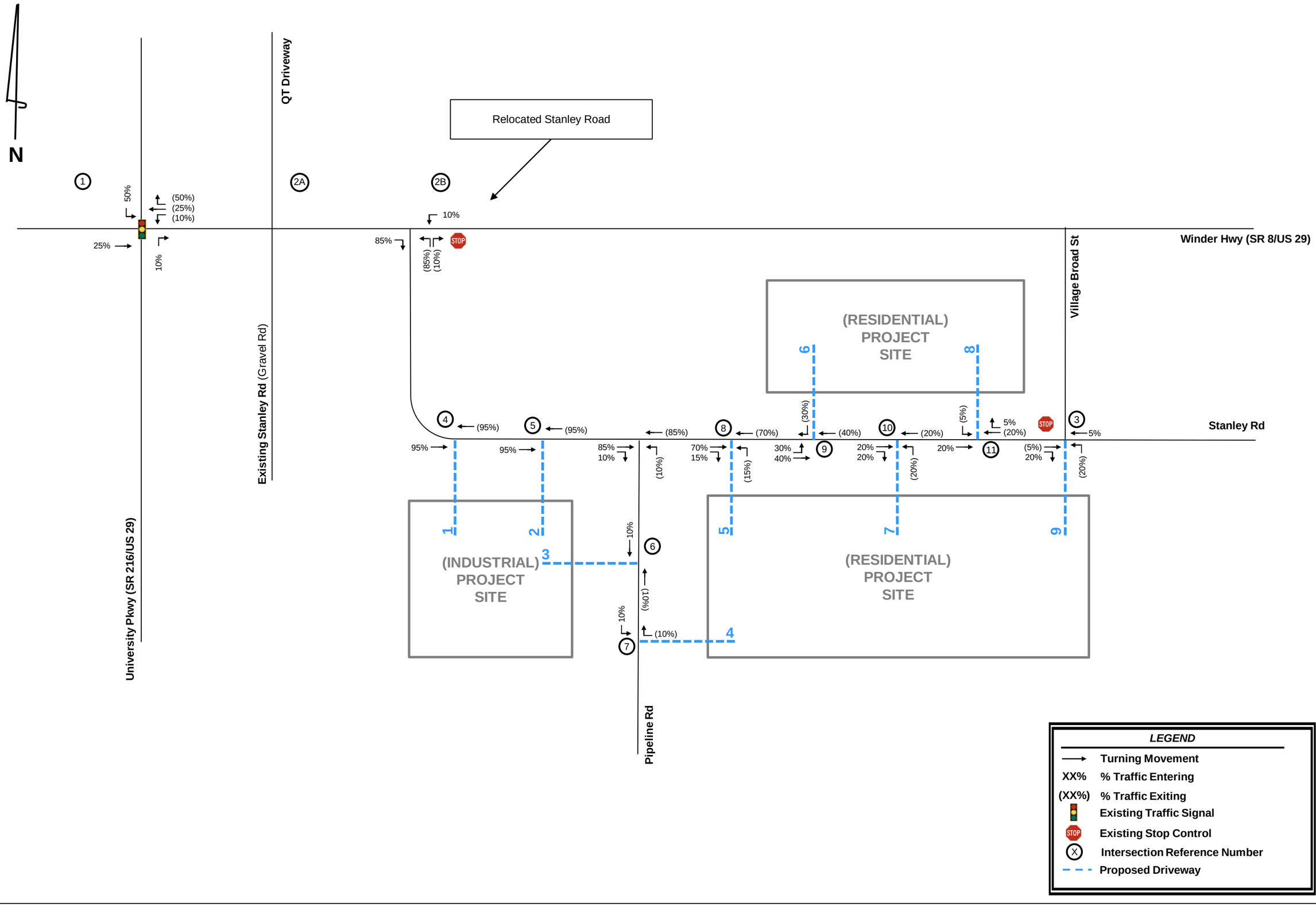


Trip Distribution & Assignment: Industrial Employee

Allora Dacula DRI #3750
Transportation Analysis

Kimley»Horn

Figure 16

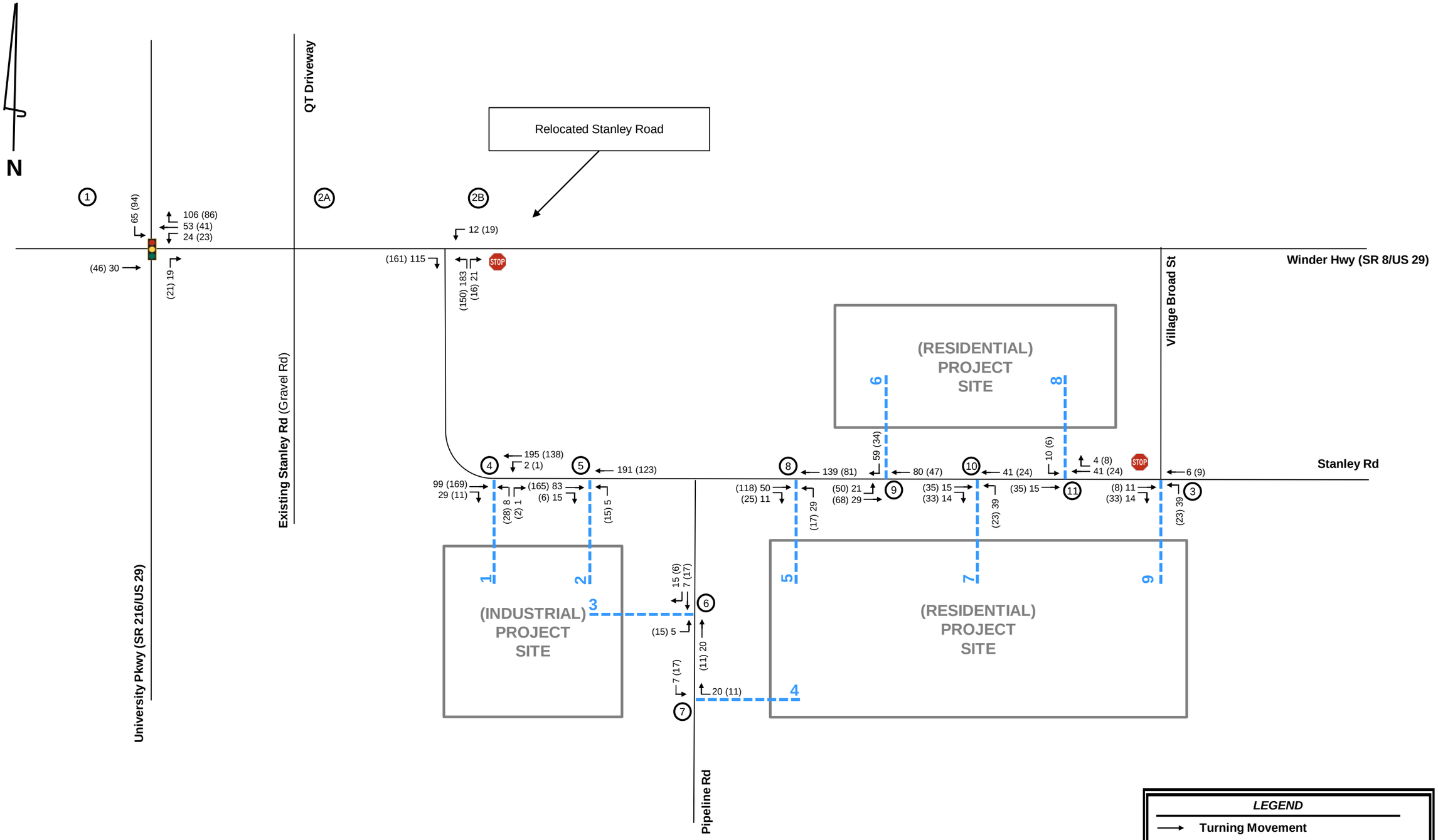


Trip Distribution & Assignment: Residential

Allora Dacula DRI #3750
Transportation Analysis

Kimley»Horn

Figure 17



Project Trips

Allora Dacula DRI #3750
Transportation Analysis

Kimley»Horn

Figure 18

5.1 Winder Highway (SR 8/US 29) at University Parkway (SR 316/US 29) (Intersection 1)

Overall LOS Standard: E Approach LOS Standard: E			University Parkway (SR 316/US 29) Northbound			University Parkway (SR 316/US 29) Southbound			Winder Highway (SR 8/US 29) Eastbound			Winder Highway (SR 8/US 29) Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2022 ESTIMATED (SIGNAL)	**AM**	Overall LOS	E (56.2)											
		Approach LOS	D (41.9)			D (38.8)			F (124.9)			F (103.4)		
		Storage	250		250	350		350	270		270	140		0
		50th Queue	168	897	9	72	690	0	58	275	0	141	439	131
		95th Queue	343	1090	48	109	786	0	101	369	0	206	659	279
	PM	Overall LOS	F (106.6)											
		Approach LOS	C (35.8)			F (147.9)			F (106.5)			F (139.0)		
		Storage	250		250	350		350	270		270	140		0
		50th Queue	66	734	22	194	1622	0	136	422	41	219	310	25
		95th Queue	117	858	67	247	1741	0	210	645	133	340	448	132
2025 NO-BUILD (SIGNAL)	**AM**	Overall LOS	E (61.4)											
		Approach LOS	D (45.5)			D (41.2)			F (122.3)			F (118.7)		
		Storage	250		250	350		350	270		270	140		0
		50th Queue	174	983	20	96	726	0	60	308	0	151	480	163
		95th Queue	357	1184	64	137	826	0	104	415	0	220	706	320
	PM	Overall LOS	F (117.1)											
		Approach LOS	D (37.8)			F (161.6)			F (119.4)			F (154.2)		
		Storage	250		250	350		350	270		270	140		0
		50th Queue	68	786	30	209	1706	0	141	471	53	240	348	81
		95th Queue	119	900	76	265	1822	0	217	692	149	419	525	210
2025 BUILD (SIGNAL)	**AM**	Overall LOS	F (81.7)											
		Approach LOS	D (52.7)			D (46.0)			F (119.3)			F (186.1)		
		Storage	250		250	350		350	270		270	140		0
		50th Queue	196	1075	35	143	726	0	58	350	0	178	630	378
		95th Queue	357	1310	89	189	826	0	104	499	0	334	865	642
	PM	Overall LOS	F (129.6)											
		Approach LOS	D (42.0)			F (160.3)			F (159.3)			F (193.1)		
		Storage	250		250	350		350	270		270	140		0
		50th Queue	68	805	46	279	1706	0	141	599	78	326	429	235
		95th Queue	119	900	97	374	1822	0	230	828	177	513	644	445

The signalized intersection of University Parkway (SR 316/US 29) at Winder Highway (SR 8/US 29) (Intersection 1) is projected to operate at LOS E overall in the AM peak hour for the Estimated 2022 and Projected No-Build 2025 conditions and at LOS F in the AM peak hour for the Projected Build 2025 conditions. The intersection is projected to operate at LOS F overall for the PM peak hour in all scenarios.

It should be noted that a grade separated interchange (GW-394/PI #0013897) is programmed for University Parkway (SR 316/US 29) at Winder Highway (SR 8/US 29). Per the GDOT Approved Concept Report, the interchange is projected to operate at LOS B during both the AM and PM peak hours under 2044 build conditions. A project factsheet and Interchange Concept drawing are included in Appendix D. The interchange is estimated to be completed in 2030, which is after the build-out of the *Allora Dacula* development.

5.2 Winder Highway (SR 8/US 29) at Stanley Road (Intersection 2B)

Overall LOS Standard: D Approach LOS Standard: D			Stanley Road			QT Driveway			Winder Highway (SR 8/US 29)			Winder Highway (SR 8/US 29)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2022 ESTIMATED (TWSC) 2A	**AM**	Overall LOS	A (3.4)											
		Approach LOS	D (27.2)			C (16.0)			A (3.2)			A (0.0)		
		Storage									500			
		50th Queue									0			
		95th Queue	1			49			14		0	0		
	PM	Overall LOS	A (2.7)											
		Approach LOS	C (26.2)			B (12.4)			A (2.0)			A (0.0)		
		Storage									500			
		50th Queue									0			
		95th Queue	15			3			11		0	0		
2025 NO-BUILD (TWSC) 2A	**AM**	Overall LOS	A (4.1)											
		Approach LOS	E (39.6)			C (16.9)			A (3.0)			A (0.2)		
		Storage									500			
		50th Queue									0			
		95th Queue	39			54			15		0	1		
	PM	Overall LOS	A (4.6)											
		Approach LOS	E (42.3)			B (12.8)			A (2.0)			A (0.1)		
		Storage									500			
		50th Queue			`						0			
		95th Queue	164			36			11		0	0		
2025 BUILD (TWSC) 2B*	**AM**	Overall LOS	A (6.0)											
		Approach LOS	E (36.8)						A (0.0)			A (0.3)		
		Storage	225								175	125		
		50th Queue									0	0		
		95th Queue	59		4					0	0	2	0	
	PM	Overall LOS	B (12.9)											
		Approach LOS	F (86.8)						A (0.0)			A (0.4)		
		Storage	225								175	125		
		50th Queue									0	0		
		95th Queue	83		6					0	0	2	0	

*Intersection relocation removes northern leg of intersection

The intersection of Winder Highway (SR 8/US 29) at Stanley Road (Intersection 2) is projected to operate at an acceptable overall LOS under the Estimated 2022, No-Build 2025 and Build 2025 conditions. The northbound approach operates at LOS E under the Projected 2025 No-Build conditions. Under the Projected 2025 Build conditions, the northbound approach is anticipated to operate at LOS E in the AM peak hour and at LOS F in the PM peak hour as a side street stop-controlled intersection. Low LOS for side street approaches is not uncommon, as vehicles may experience delays in turning onto a major roadway.

Per GDOT's Policy, Intersection Control Evaluation (ICE) was performed at this intersection. The intent of ICE is to determine the most effective intersection design/traffic control at a given intersection. Subject to GDOT approval, an unsignalized full-movement side-street stop, a single-lane roundabout, or a traffic signal were considered for future intersection control.

Sections 6.1 – 6.2 provide the results of the ICE analysis and preliminary signal warrant analyses for this study intersection. The installation of a traffic signal (when warranted) is recommended at the study intersection of Winder Highway (SR 8/US 29) at Relocated Stanley Road (Intersection 2B). Relocated Stanley Road is recommended as a 2-lane section with one (1) travel lane in each direction. Along Winder Highway (SR 8/US 29), a channelized eastbound right-turn lane and a westbound left-turn lane are recommended. On Relocated Stanley Road, a left-turn lane and a channelized right-turn lane are recommended for the northbound approach. The recommended build laneage and geometry is shown on **Figure 21**.

The analysis results shown in the table below are for the improved signalized conditions at Winder Highway (SR 8/US 29) at Relocated Stanley Road (Intersection 2B).

Overall LOS Standard: D Approach LOS Standard: D			Stanley Road			N/A			Winder Highway (SR 8/US 29)			Winder Highway (SR 8/US 29)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2025 BUILD (Signal) 2B*	AM	Overall LOS	B (13.7)											
		Approach LOS	A (7.6)						B (14.8)			B (15.0)		
		Storage	225								175	125		
		50th Queue									0	0		
		95th Queue	53		0					115	0	10	120	
	PM	Overall LOS	B (14.7)											
		Approach LOS	A (12.9)						B (17.3)			B (12.4)		
		Storage	225								175	125		
		50th Queue									0	0		
		95th Queue	93		0					228	0	13	93	

*Intersection relocation removes northern leg of intersection

5.3 Winder Highway (SR 8/US 29) at Village Broad Street / Driveway 9 (Intersection 3)

Overall LOS Standard: D Approach LOS Standard: D			McMillan Road			McMillan Road			Winder Highway (SR 8/US 29)			Winder Highway (SR 8/US 29)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2022 ESTIMATED (TWSC)	AM	Overall LOS	A (3.3)											
		Approach LOS				A (8.7)			A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				1			0			0		
	PM	Overall LOS	A (3.6)											
		Approach LOS				A (8.7)			A (0.9)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				1			0			0		
2025 NO-BUILD (TWSC)	AM	Overall LOS	A (2.8)											
		Approach LOS				A (8.7)			A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				1			0			0		
	PM	Overall LOS	A (3.2)											
		Approach LOS				A (8.7)			A (0.7)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				1			0			0		
2025 BUILD (TWC)	AM	Overall LOS	A (4.4)											
		Approach LOS	A (9.1)			A (9.0)			A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue	5			1			0			0		
	PM	Overall LOS	A (3.1)											
		Approach LOS	A (9.1)			A (9.0)			A (0.1)			A (0.3)		
		Storage												
		50th Queue												
		95th Queue	3			1			0			0		

The intersection of Winder Highway (SR 8/US 29) at Village Broad Street / Driveway 9 is projected to operate at LOS A overall and for all approaches in both the AM and PM peak hours for each of the Estimated 2022, Projected No-Build 2025, and Projected Build 2025 traffic conditions. The recommended lane configuration for the northbound approach of Driveway 9 is one lane entering and one lane exiting as shown on the site plan. The recommended build improvements are shown in blue on **Figure 21**.

5.4 Stanley Rd at Driveway 1 (Intersection 4)

Overall LOS Standard: D Approach LOS Standard: D			Driveway 1			-			Stanley Road			Stanley Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2025 BUILD (TWSC)	AM	Overall LOS	A (0.3)											
		Approach LOS	B (11.1)						A (0.0)			A (0.1)		
		Storage												
		50th Queue												
		95th Queue	1							0		0		
	PM	Overall LOS	A (0.8)											
		Approach LOS	B (11.4)						A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue	4							0		0		

The intersection of Stanley Road at Driveway 1 is projected to operate acceptably overall and for all approaches in both the AM and PM peak hours for the Projected Build 2025 traffic conditions. The recommended lane configuration for the northbound approach of Driveway 1 is one lane entering and one lane exiting as shown on the site plan. The recommended build improvements are shown in blue on **Figure 21**.

5.5 Stanley Road at Driveway 2 (Intersection 5)

Overall LOS Standard: D Approach LOS Standard: D			Driveway 2			-			Stanley Road			Stanley Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2025 BUILD (TWSC)	AM	Overall LOS	A (0.1)											
		Approach LOS	B (11.1)						A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue	1							0		0		
	PM	Overall LOS	A (0.4)											
		Approach LOS	B (11.1)						A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue	2							0		0		

The intersection of Stanley Road at Driveway 2 is projected to operate acceptably overall and for all approaches in both the AM and PM peak hours for the Projected Build 2025 traffic conditions. The recommended lane configuration for the northbound approach of Driveway 2 is one lane entering and one lane exiting as shown on the site plan. The recommended build improvements are shown in blue on **Figure 21**.

5.6 Pipeline Road at Driveway 3 (Intersection 6)

Overall LOS Standard: D Approach LOS Standard: D			Pipeline Road			Pipeline Road			Driveway 3			-		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2025 BUILD (TWSC)	AM	Overall LOS	A (1.0)											
		Approach LOS	A (0.0)			A (0.0)			A (9.1)					
		Storage												
		50th Queue												
		95th Queue	0				0		0					
	PM	Overall LOS	A (2.8)											
		Approach LOS	A (0.0)			A (0.0)			A (9.0)					
		Storage												
		50th Queue												
		95th Queue	0				0		1					

The intersection of Pipeline Road at Driveway 3 is projected to operate acceptably overall and for all approaches in both the AM and PM peak hours for the Projected Build 2025 traffic conditions. The recommended lane configuration for the eastbound approach of Driveway 3 is one lane entering and one lane exiting as shown on the site plan. The recommended build improvements are shown in blue on **Figure 21**.

5.6 Pipeline Road at Driveway 4 (Intersection 7)

Overall LOS Standard: D Approach LOS Standard: D			Pipeline Road Northbound			Pipeline Road Southbound			- Eastbound			Driveway 4 Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2025 BUILD (TWSC)	AM	Overall LOS	A (7.8)											
		Approach LOS	A (0.0)			A (7.2)						A (8.4)		
		Storage												
		50th Queue												
		95th Queue		0		0						2		
	PM	Overall LOS	A (7.4)											
		Approach LOS	A (0.0)			A (7.2)						A (8.4)		
		Storage												
		50th Queue												
		95th Queue		0		1						1		

The intersection of Pipeline Road at Driveway 4 is projected to operate acceptably overall and for all approaches in both the AM and PM peak hours for the Projected Build 2025 traffic conditions. The recommended lane configuration for the westbound approach of Driveway 4 is one lane entering and one lane exiting as shown on the site plan. The recommended build improvements are shown in blue on **Figure 21**.

5.7 Stanley Road at Driveway 5 (Intersection 8)

Overall LOS Standard: D Approach LOS Standard: D			Driveway 5			-			Stanley Road			Stanley Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2025 BUILD (TWSC)	AM	Overall LOS	A (1.2)											
		Approach LOS	A (9.9)						A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue	3							0		0		
	PM	Overall LOS	A (0.7)											
		Approach LOS	B (10.0)						A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue	2							0		0		

The intersection of Stanley Road at Driveway 5 is projected to operate acceptably overall and for all approaches in both the AM and PM peak hours for the Projected Build 2025 traffic conditions. The recommended lane configuration for the northbound approach of Driveway 5 is one lane entering and one lane exiting as shown on the site plan. The recommended build improvements are shown in blue on **Figure 21**.

5.8 Stanley Road at Driveway 6 (Intersection 9)

Overall LOS Standard: D Approach LOS Standard: D			-			Driveway 6			Stanley Road			Stanley Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2025 BUILD (TWSC)	AM	Overall LOS	A (3.5)											
		Approach LOS				A (9.0)			A (2.9)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				5			1				0	
	PM	Overall LOS	A (3.1)											
		Approach LOS				A (8.7)			A (2.9)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				3			3				0	

The intersection of Stanley Road at Driveway 6 is projected to operate acceptably overall and for all approaches in both the AM and PM peak hours for the Projected Build 2025 traffic conditions. The recommended lane configuration for the southbound approach of Driveway 6 is one lane entering and one lane exiting as shown on the site plan. The recommended build improvements are shown in blue on **Figure 21**.

5.9 Stanley Road at Driveway 7 (Intersection 10)

Overall LOS Standard: D Approach LOS Standard: D			Driveway 7			-			Stanley Road			Stanley Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2025 BUILD (TWSC)	AM	Overall LOS	A (3.0)											
		Approach LOS	A (9.1)						A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue	4						0			0		
	PM	Overall LOS	A (1.6)											
		Approach LOS	A (9.1)						A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue	2						0			0		

The intersection of Stanley Road at Driveway 7 is projected to operate acceptably overall and for all approaches in both the AM and PM peak hours for the Projected Build 2025 traffic conditions. The recommended lane configuration for the northbound approach of Driveway 7 is one lane entering and one lane exiting as shown on the site plan. The recommended build improvements are shown in blue on **Figure 21**.

6.0 Stanley Road at Driveway 8 (Intersection 11)

Overall LOS Standard: D Approach LOS Standard: D			-			Driveway 8			Stanley Road			Stanley Road		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2023 BUILD (TWSC)	AM	Overall LOS	A (1.2)											
		Approach LOS				A (8.9)			A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				1			0				0	
	PM	Overall LOS	A (0.6)											
		Approach LOS				A (9.0)			A (0.0)			A (0.0)		
		Storage												
		50th Queue												
		95th Queue				1			0				0	

The intersection of Stanley Road at Driveway 8 is projected to operate acceptably overall and for all approaches in both the AM and PM peak hours for the Projected Build 2025 traffic conditions. The recommended lane configuration for the southbound approach of Driveway 8 is one lane entering and one lane exiting as shown on the site plan. The recommended build improvements are shown in blue on **Figure 21**.

LEGEND

- Existing Roadway Laneage
- XX — AM Peak Hour Traffic Volume
- (XX) — PM Peak Hour Traffic Volume
- Existing Traffic Signal
- Existing Stop Control
- (X) — Intersection Reference Number
- Proposed Driveway

Estimated 2022 Traffic Conditions

Allora Dacula DRI #3750
Transportation Analysis

Kimley»Horn

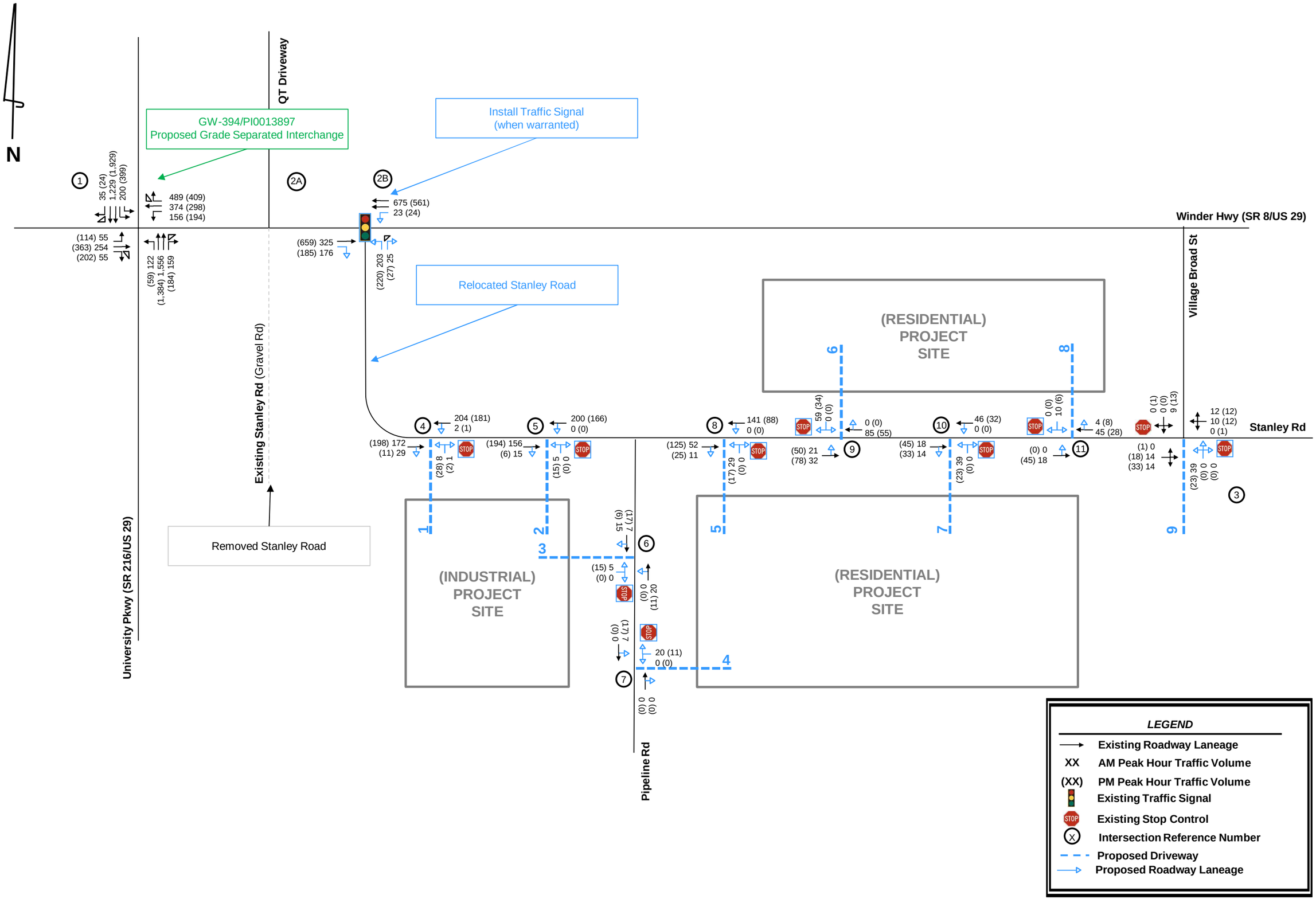
Figure 19

Projected 2025 No-Build Traffic Conditions

Allora Dacula DRI #3750
Transportation Analysis

Kimley»Horn

Figure 20



Projected 2025 Build Traffic Conditions

Allora Dacula DRI #3750
Transportation Analysis

Kimley»Horn

Figure 21

6.0 INTERSECTION CONTROL EVALUATION (ICE)

Per GDOT's Policy, Intersection Control Evaluation (ICE) was performed at the following location:

- Winder Highway (SR 8/US 29) at Relocated Stanley Road (Intersection 2)

The intent of ICE is to determine the most effective intersection design/traffic control at a given intersection.

6.1 ICE Stage 1

Stage 1 is conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves as a screening effort meant to eliminate non-competitive options and identify which alternatives merit further considerations based on their practical feasibility.

6.2 ICE Stage 2

Stage 2 involves a more detailed evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced to detailed design. Stage 2 considers the construction cost, operational efficiency, safety considerations, and public opinion.

The intersection delays and v/c (volume-capacity) ratios were calculated at the study intersections during the AM and PM peak hour using Synchro Professional, Version 11.0 and SIDRA 9.0, which use methodologies contained in the 6th Edition Highway Capacity Manual to determine the operating characteristics of an intersection.

Per ICE Stage 1, the following alternatives were compared, and the ICE Stage 2 scores are shown in **Table 10**.

Table 10: ICE Alternative Selection Decision

Winder Highway (SR 8/US 29) at Stanley Road – Intersection 2

ICE Stage 2	Conventional Minor-Leg Stop (Full Movement)	Multilane Roundabout	Traffic Signal (Full Movement)
Score	6.5	6.8	6.9
Rank	3	2	1

GDOT's ICE Stage 1 and Stage 2 are provided in **Appendix F**.

Based on the results of the GDOT ICE analysis, the preferred alternative is the installation of a traffic signal at the intersection of Winder Highway (SR 8/US 29) at Relocated Stanley Road (Intersection 2B). As shown in **Table 11**, a preliminary traffic signal warrant analysis was conducted based on Projected Build 2025 turning movement volumes. Per MUTCD's Warrant 2, the intersection meets 2 of 4 required hour under the Build 2025 conditions. It is recommended that a full signal warrant analysis be conducted and a traffic signal be installed when warranted and approved by GDOT.

Table 11: Traffic Signal Volume Warrant Analysis Summary

Warrant	Projected Build	
	Hrs Met / Needed	Met?
2	2 / 4	X

Proposed Site Plan

Dacula: Unit Mix and Density Information:

Site Location - Dacula, GA

Structures:

Parcel A
- 3 Story Garden-Style Apartments (14 Total Apartment Buildings)
- Clubhouse for Apartments

Parcel E
- 1 Industrial Building (210,000 SF)

Parcel F
- 1 Industrial Building (263,200 SF)

Parcels B, C, & D
- 3 Story Townhomes

Overall Site Density Information:

Multifamily Residential Development (Parcel A)

Gross Site Area =	26.27	Gross Acres
Total Units =	378	Units
Proposed Density =	14.38	Units/Gross Acre

Industrial Development (Parcels E & F)

Gross Site Area =	40.22	Gross Acres
Total Building SF =	473,200	SF

Townhome Summary: Parcels B, C, & D				
Parcel	# of Buildings	# of Townhomes	Gross Acres	Units/Acre
Parcel B	7	43	7.38	5.83
Parcel C	22	128	22.5	5.69
Parcel D	8	54	13.7	3.94
Total	37	225		

TOTAL UNITS IN PARCELS B,C,D

Unit Mix (Residential Parcel A):

1 Bedroom Units		Type 1 Bldg			14		
Unit Type	Net Area (SF)	Floor 1	Floor 2	Floor 3	Total	Total Area (SF)	Total %
A1	848	1	1	1	3	35,616	11.1%
A1-S	781	3	3	3	9	98,406	33.3%
A2-S	838	2	2	2	6	70,392	22.2%
Subtotal - 1 Bedroom "A" Units					**252**	**204,414**	**66.7%**

2 Bedroom Units		Type 1 Bldg			14		
Unit Type	Net Area (SF)	Floor 1	Floor 2	Floor 3	Total	Total Area (SF)	Total %
B1-S	1190	1	1	1	3	49,980	11.1%
B2-S	1226	2	2	2	6	102,984	22.2%
Subtotal - 2 Bedroom "B" Units					**126**	**152,964**	**33.3%**

Overall Unit Summary: Residential Parcel A	
Total Units (Type 1 Bldg's)	27 Units
Number of Type 1 Bldg's	14 Buildings
Total Units (Entire Development)	378 Units
Total Area (Entire Development)	357,378 SF
Total Beds	504 Beds

TOTAL UNITS IN PARCEL A

TOTAL SITE AREA: 110.07 ACRES

CONTACTS:

CLIENT:	MAPLE MULTI FAMILY LAND, LP 3715 NORTHSIDE PARKWAY BUILDING 200, SUITE 800 ATLANTA, GA 30327
CONTACT:	JUSTIN ADAMS PHONE: (770) 801-1600
TRAFFIC CONSULTANT:	KIMLEY-HORN & ASSOCIATES 817 WEST PEACHTREE STREET, NW THE BILTMORE, SUITE 601 ATLANTA, GA 30308
CONTACT:	MATT FLYNN, P.E. PHONE:(404) 419-8700
CIVIL ENGINEER:	KIMLEY-HORN & ASSOCIATES, INC. 817 WEST PEACHTREE STREET, NW THE BILTMORE, SUITE 601 ATLANTA, GA 30308
CONTACT:	JESSICA HOOVER, P.E. PHONE: (404) 419-8700

PARKING COUNTS:

PARCEL A: 378 MULTI-FAMILY UNITS
- 662 PARKING SPACES (1.75/UNIT)

PARCEL B: 43 TOWNHOME UNITS
- 86 PARKING SPACES (2/UNIT)

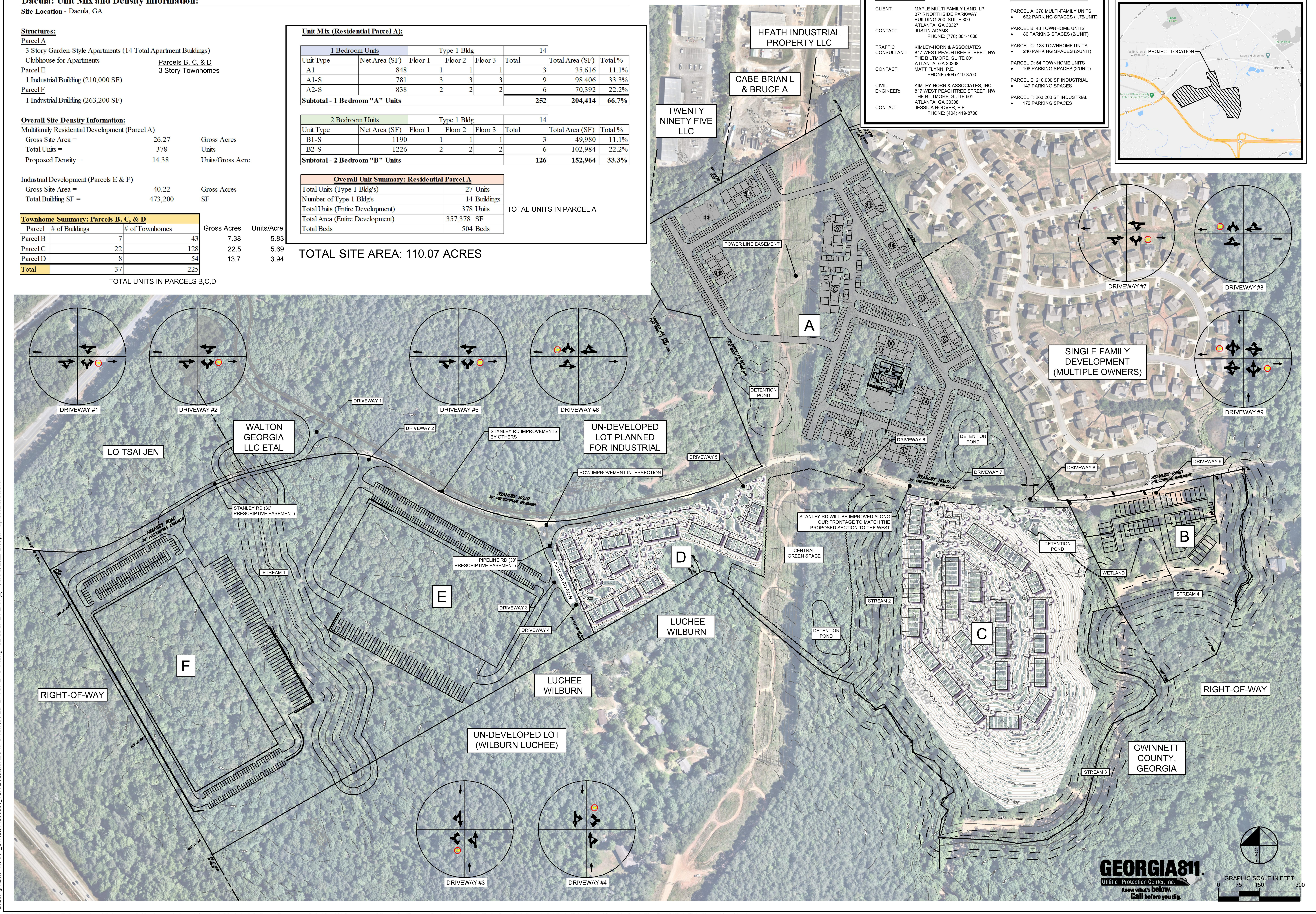
PARCEL C: 128 TOWNHOME UNITS
- 246 PARKING SPACES (2/UNIT)

PARCEL D: 54 TOWNHOME UNITS
- 108 PARKING SPACES (2/UNIT)

PARCEL E: 210,000 SF INDUSTRIAL
- 147 PARKING SPACES

PARCEL F: 263,200 SF INDUSTRIAL
- 172 PARKING SPACES

LOCATION MAP



Drawing name: K:\AMT_CIVIL\011058030_TCR Dacula\CAD\Plansheets\C0-20 -DRI SITE PLAN.dwg C0-20 SITE PLAN (2) Oct 03, 2022 2:09pm by: Jessica.Hoover

PREPARED BY

Kimley»Horn

11720 AMBER PARK DRIVE, SUITE 600
ALPHARETTA, GEORGIA 30009
PHONE (770) 619-4280
WWW.KIMLEY-HORN.COM

PREPARED FOR

MAPLE MULTI-FAMILY LAND SE, LP

3715 NORTHSIDE PKWY, BLDG 200, STE 800
ATLANTA, GA 30327
PHONE: 000.000.0000

No.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

PROJECT

ALLORA DACULA DRI #3750

STANLEY HWY, DACULA, GA 30019
LAND LOT XXX, __ND DISTRICT
PARCEL ID: XXX-XX-XXXXX

GSWCC NO. (LEVEL II)	00000XXXXX
DRAWN BY	MCP
DESIGNED BY	JRH
REVIEWED BY	BWS
DATE	10/03/2022
PROJECT NO.	011058030

TITLE

DRI SITE PLAN

SHEET NUMBER

C0-20

GEORGIA811 Utilities Protection Center, Inc. Know what's below. Call before you dig.

Trip Generation Analysis

Trip Generation Analysis (10th Ed. With *2nd Edition Handbook* Daily IC & *3rd Edition* AM/PM IC)
Allora Dacula DRI #3750
City of Dacula/ Gwinnett County, Georgia

Land Use		Setting	Density		Daily Trips			AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out	Total	In	Out
Proposed Project Trips													
LUC	Land Use	Setting	Density	Units	**HIDE THIS ROW**	Column1	Column2	Column3	Column4	Column5	Column6	Column7	Column8
150	Warehousing	General Urban/Suburban	473,200	Sq. Ft. GFA	786	393	393	80	62	18	83	23	60
215	Single-Family Attached Housing	General Urban/Suburban	225	dwelling units	1,664	832	832	111	34	77	131	75	56
221	Multifamily Housing (Mid-Rise)	General Urban/Suburban	378	dwelling units	1,756	878	878	155	36	119	148	90	58
Gross Project Trips					**4,206**	**2,103**	**2,103**	**346**	**132**	**214**	**362**	**188**	**174**
Warehouse Trips					786	393	393	80	62	18	83	23	60
	Truck Trips (33% of Warehousing Trips)				264	132	132	27	21	6	28	8	20
	Car Trips (67% of Warehousing Trips)				522	261	261	53	41	12	55	15	40
	Alternative Mode Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Adjusted Car Trips				*522*	261	261	53	41	12	55	15	40
Residential Trips					3,420	1,710	1,710	266	70	196	279	165	114
	Mixed-Use Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Alternative Mode Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Adjusted Residential Trips				3,420	1,710	1,710	266	70	196	279	165	114
Hotel Trips					0	0	0	0	0	0	0	0	0
	Mixed-Use Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Alternative Mode Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Adjusted Hotel Trips				0	0	0	0	0	0	0	0	0
Office Trips					0	0	0	0	0	0	0	0	0
	Mixed-Use Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Alternative Mode Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Adjusted Office Trips				0	0	0	0	0	0	0	0	0
Retail Trips					0	0	0	0	0	0	0	0	0
	Mixed-Use Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Alternative Mode Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Pass By Reductions (Based on ITE Rates)				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Adjusted Retail Trips				0	0	0	0	0	0	0	0	0
Restaurant Trips					0	0	0	0	0	0	0	0	0
	Mixed-Use Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Alternative Mode Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Pass By Reductions (Based on ITE Rates)				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Adjusted Restaurant Trips				0	0	0	0	0	0	0	0	0
Other Non-Residential Trips					0	0	0	0	0	0	0	0	0
	Alternative Mode Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Adjusted Other Non-Residential Trips				0	0	0	0	0	0	0	0	0
Mixed-Use Reductions - TOTAL					*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions - TOTAL					*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Pass-By Reductions - TOTAL					*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
New Trips					**4,206**	**2,103**	**2,103**	**346**	**132**	**214**	**362**	**188**	**174**
Driveway Volumes													

Intersection Volume Worksheets

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #1

GA-8 Winder Hwy at GA-316 University Pkwy

AM PEAK HOUR

	GA-316 University Pkwy Northbound				GA-316 University Pkwy Southbound				GA-8 Winder Hwy Eastbound				GA-8 Winder Hwy Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	2	116	1,510	124	0	101	1,193	34	0	53	200	53	0	124	307	363
Count Balancing																
Heavy Vehicles	0	8	62	9	0	14	221	9	0	10	21	8	0	11	24	39
Heavy Vehicle %	2%	7%	4%	7%	2%	14%	19%	26%	2%	19%	11%	15%	2%	9%	8%	11%
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2022 Volumes	2	116	1,510	124	0	101	1,193	34	0	53	200	53	0	124	307	363
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	4	46	4	0	3	36	1	0	2	6	2	0	4	9	11
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1				10		28					17			2	4	6
Approved Development Trips 2 (Truck Trips)				2		3					1			2	1	3
Total Approved Development Trips	0	0	0	12	0	31	0	0	0	0	18	0	0	4	5	9
2025 No-Build Traffic	2	120	1,556	140	0	135	1,229	35	0	55	224	55	0	132	321	383
2025 No-Build Heavy Vehicle %	2%	7%	4%	8%	2%	13%	19%	26%	2%	19%	10%	15%	2%	10%	8%	11%
2025 No-Build Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Trip Distribution IN				30%		55%					10%					
Trip Distribution OUT														(30%)	(10%)	(55%)
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	6	0	12	0	0	0	0	2	0	0	2	1	3
Trip Distribution IN				15%		45%					25%					
Trip Distribution OUT														(15%)	(25%)	(45%)
Balancing Adjustment																
Warehouse Car Trips	0	0	0	6	0	18	0	0	0	0	10	0	0	2	3	5
Trip Distribution IN				10%		50%					25%					
Trip Distribution OUT														(10%)	(25%)	(50%)
Balancing Adjustment																
Residential Trips	0	0	0	7	0	35	0	0	0	0	18	0	0	20	49	98
Total Vehicular Project Trips	0	0	0	19	0	65	0	0	0	0	30	0	0	24	53	106
2025 Build Traffic	2	120	1,556	159	0	200	1,229	35	0	55	254	55	0	156	374	489
2025 Build Heavy Vehicle %	2%	7%	4%	11%	2%	15%	19%	26%	2%	19%	10%	15%	2%	10%	7%	9%

PM PEAK HOUR

	GA-316 University Pkwy Northbound				GA-316 University Pkwy Southbound				GA-8 Winder Hwy Eastbound				GA-8 Winder Hwy Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	2	50	1,232	139	0	260	1,717	21	0	102	277	180	0	141	214	261
Count Balancing																
Pedestrians		0				0				0				0		
Conflicting Pedestrians		0		0		0		0		0		0		0		0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Bicycles				0				0				0				0
Heavy Vehicles	0	1	51	2	0	9	47	6	0	5	7	4	0	3	14	9
Heavy Vehicle %	2%	2%	4%	2%	2%	3%	3%	29%	2%	5%	3%	2%	2%	2%	7%	3%
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adjustment Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Adjusted 2022 Volumes	2	55	1,343	152	0	283	1,872	23	0	111	302	196	0	154	233	284
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	2	41	5	0	9	57	1	0	3	9	6	0	5	7	9
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1				3		8					5			9	16	26
Approved Development Trips 2 (Truck Trips)				3		5					1			3	1	4
Total Approved Development Trips	0	0	0	6	0	13	0	0	0	0	6	0	0	12	17	30
2025 No-Build Traffic	2	57	1,384	163	0	305	1,929	24	0	114	317	202	0	171	257	323
2025 No-Build Heavy Vehicle %	2%	2%	4%	3%	2%	5%	3%	28%	2%	5%	3%	2%	2%	4%	7%	4%
2025 No-Build Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Trip Distribution IN				30%		55%					10%					
Trip Distribution OUT														(30%)	(10%)	(55%)
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	2	0	4	0	0	0	0	1	0	0	6	2	11
Trip Distribution IN				15%		45%					25%					
Trip Distribution OUT														(15%)	(25%)	(45%)
Balancing Adjustment																
Warehouse Car Trips	0	0	0	2	0	7	0	0	0	0	4	0	0	6	10	18
Trip Distribution IN				10%		50%					25%					
Trip Distribution OUT														(10%)	(25%)	(50%)
Balancing Adjustment																
Residential Trips	0	0	0	17	0	83	0	0	0	0	41	0	0	11	29	57
Total Vehicular Project Trips		0	0	21	0	94	0	0	0	0	46	0	0	23	41	86
2025 Build Traffic	2	57	1,384	184	0	399	1,929	24	0	114	363	202	0	194	298	409
2025 Build Heavy Vehicle %	2%	2%	4%	4%	2%	5%	3%	28%	2%	5%	3%	2%	2%	6%	6%	6%

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #2

GA-8 Winder Hwy at Stanley Rd/QT Driveway

AM PEAK HOUR

	Stanley Rd Northbound				QT Driveway Southbound				GA-8 Winder Hwy Eastbound				GA-8 Winder Hwy Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	1	0	0	0	9	0	175	0	117	307	1	0	0	618	37
Count Balancing																
Pedestrians			0				0				0				0	
Conflicting Pedestrians		0		0		0		0		0		0		0		0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Bicycles				0				0				0				0
Heavy Vehicles	0	0	0	0	0	0	0	35	0	8	35	1	0	0	39	1
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	20%	2%	7%	11%	100%	2%	2%	6%	3%
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2022 Volumes	0	1	0	0	0	9	0	175	0	117	307	1	0	0	618	37
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	5	0	4	9	0	0	0	19	1
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1		14		3								54		10		
Approved Development Trips 2 (Trucks)		5		1								6		1		
Total Approved Development Trips	0	19	0	4	0	0	0	0	0	0	0	60	0	11	0	0
2025 No-Build Traffic	0	20	0	4	0	9	0	180	0	121	316	61	0	11	637	38
2025 No-Build Heavy Vehicle %	2%	25%	2%	25%	2%	2%	2%	20%	2%	7%	11%	12%	2%	9%	6%	3%
2025 No-Build Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Trip Distribution IN												95%		5%		
Trip Distribution OUT		(95%)		(5%)												
Balancing Adjustment																
Warehouse Truck Trips	0	6	0	0	0	0	0	0	0	0	0	20	0	1	0	0
Trip Distribution IN												85%		10%		
Trip Distribution OUT		(85%)		(10%)												
Balancing Adjustment																
Warehouse Car Trips	0	10	0	1	0	0	0	0	0	0	0	35	0	4	0	0
Trip Distribution IN												85%		10%		
Trip Distribution OUT		(85%)		(10%)												
Balancing Adjustment																
Residential Trips	0	167	0	20	0	0	0	0	0	0	0	60	0	7	0	0
Total Vehicular Project Trips	0	183	0	21	0	0	0	0	0	0	0	115	0	12	0	0
2025 Build Traffic	0	203	0	25	0	0	0	0	0	0	325	176	0	23	675	0
2025 Build Heavy Vehicle %	2%	5%	2%	4%	2%	2%	2%	2%	2%	2%	11%	15%	2%	9%	6%	2%

PM PEAK HOUR

	Stanley Rd Northbound				QT Driveway Southbound				GA-8 Winder Hwy Eastbound				GA-8 Winder Hwy Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	10	4	0	0	9	0	153	0	114	578	1	0	1	466	34
Count Balancing																
Pedestrians			0				0				0				0	
Conflicting Pedestrians		0		0		0		0		0		0		0		0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Bicycles				0				0				0				0
Heavy Vehicles	0	0	0	0	0	1	0	11	0	3	18	0	0	0	15	0
Heavy Vehicle %	2%	2%	2%	2%	2%	11%	2%	7%	2%	3%	3%	2%	2%	2%	3%	2%
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adjustment Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Adjusted 2022 Volumes	0	11	4	0	0	10	0	167	0	124	630	1	0	1	508	37
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	5	0	4	19	0	0	0	15	1
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1		51		10								15		3		
Approved Development Trips 2 (Trucks)		8		1								8		1		
Total Approved Development Trips	0	59	0	11	0	0	0	0	0	0	0	23	0	4	0	0
2025 No-Build Traffic	0	70	4	11	0	10	0	172	0	128	649	24	0	5	523	38
2025 No-Build Heavy Vehicle %	2%	11%	2%	9%	2%	11%	2%	7%	2%	3%	3%	33%	2%	20%	3%	2%
2025 No-Build Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Trip Distribution IN												95%		5%		
Trip Distribution OUT		(95%)		(5%)												
Balancing Adjustment																
Warehouse Truck Trips	0	19	0	1	0	0	0	0	0	0	0	8	0	0	0	0
Trip Distribution IN												85%		10%		
Trip Distribution OUT		(85%)		(10%)												
Balancing Adjustment																
Warehouse Car Trips	0	34	0	4	0	0	0	0	0	0	0	13	0	2	0	0
Trip Distribution IN												85%		10%		
Trip Distribution OUT		(85%)		(10%)												
Balancing Adjustment																
Residential Trips	0	97	0	11	0	0	0	0	0	0	0	140	0	17	0	0
Total Vehicular Project Trips		150	0	16	0	0	0	0	0	0	0	161	0	19	0	0
2025 Build Traffic	0	220	0	27	0	0	0	0	0	0	659	185	0	24	561	0
2025 Build Heavy Vehicle %	2%	12%	2%	7%	2%	2%	2%	2%	2%	2%	3%	9%	2%	4%	3%	2%

INTERSECTION VOLUME DEVELOPMENT
DRIVEWAY #1
Stanley Rd at Driveway 1

AM PEAK HOUR

	Driveway 1 Northbound				Southbound				Stanley Rd Eastbound				Stanley Rd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles											1				0	
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	100%	2%	2%	2%	2%	2%
Peak Hour Factor																
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1											66				7	
Approved Development Trips 2 (Trucks)											6				1	
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	72	0	0	0	8	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	73	0	0	0	9	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	10%	2%	2%	2%	11%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN											50%	50%				
Trip Distribution OUT		(50%)													(50%)	
Balancing Adjustment																
Warehouse Truck Trips	0	3	0	0	0	0	0	0	0	0	11	11	0	0	3	0
Trip Distribution IN											50%	45%		5%		
Trip Distribution OUT		(45%)		(5%)											(50%)	
Balancing Adjustment																
Warehouse Car Trips	0	5	0	1	0	0	0	0	0	0	21	18	0	2	6	0
Trip Distribution IN											95%					
Trip Distribution OUT															(95%)	
Balancing Adjustment																
Residential Trips	0	0	0	0	0	0	0	0	0	0	67	0	0	0	186	0
Total Vehicular Project Trips	0	8	0	1	0	0	0	0	0	0	99	29	0	2	195	0
2025 Build Traffic	0	8	0	1	0	0	0	0	0	0	172	29	0	2	204	0
2025 Build Heavy Vehicle %	2%	38%	2%		2%	2%	2%	2%	2%	2%	10%	38%	2%		2%	2%

PM PEAK HOUR

	Driveway 1 Northbound				0 Southbound				Stanley Rd Eastbound				Stanley Rd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes											2				14	
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles											0				0	
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor																
Adjustment Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	2	0	0	0	15	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1											20				26	
Approved Development Trips 2 (Trucks)											7				2	
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	27	0	0	0	28	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	29	0	0	0	43	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	24%	2%	2%	2%	5%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN											50%	50%				
Trip Distribution OUT		(50%)													(50%)	
Balancing Adjustment																
Warehouse Truck Trips	0	10	0	0	0	0	0	0	0	0	4	4	0	0	10	0
Trip Distribution IN											50%	45%		5%		
Trip Distribution OUT		(45%)		(5%)											(50%)	
Balancing Adjustment																
Warehouse Car Trips	0	18	0	2	0	0	0	0	0	0	8	7	0	1	20	0
Trip Distribution IN											95%					
Trip Distribution OUT															(95%)	
Balancing Adjustment																
Residential Trips	0	0	0	0	0	0	0	0	0	0	157	0	0	0	108	0
Total Vehicular Project Trips		28	0	2	0	0	0	0	0	0	169	11	0	1	138	0
2025 Build Traffic	0	28	0	2	0	0	0	0	0	0	198	11	0	1	181	0
2025 Build Heavy Vehicle %	2%	36%	2%		2%	2%	2%	2%	2%	2%	6%	36%	2%		7%	2%

INTERSECTION VOLUME DEVELOPMENT
DRIVEWAY #2
Stanley Rd at Driveway 2

AM PEAK HOUR

	Driveway 2 Northbound				Southbound				Stanley Rd Eastbound				Stanley Rd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles											1				0	
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	100%	2%	2%	2%	2%	2%
Peak Hour Factor																
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1											66				7	
Approved Development Trips 2 (Trucks)											6				1	
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	72	0	0	0	8	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	73	0	0	0	9	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	10%	2%	2%	2%	11%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN											25%	25%				
Trip Distribution OUT		(25%)													(25%)	
Balancing Adjustment																
Warehouse Truck Trips	0	2	0	0	0	0	0	0	0	0	5	5	0	0	2	0
Trip Distribution IN											25%	25%				
Trip Distribution OUT		(25%)									(5%)				(25%)	
Balancing Adjustment																
Warehouse Car Trips	0	3	0	0	0	0	0	0	0	0	11	10	0	0	3	0
Trip Distribution IN											95%					
Trip Distribution OUT															(95%)	
Balancing Adjustment																
Residential Trips	0	0	0	0	0	0	0	0	0	0	67	0	0	0	186	0
Total Vehicular Project Trips	0	5	0	0	0	0	0	0	0	0	83	15	0	0	191	0
2025 Build Traffic	0	5	0	0	0	0	0	0	0	0	156	15	0	0	200	0
2025 Build Heavy Vehicle %	2%	40%	2%	2%	2%	2%	2%	2%	2%	2%	8%	33%	2%	2%	2%	2%

PM PEAK HOUR

	Driveway 2 Northbound				0 Southbound				Stanley Rd Eastbound				Stanley Rd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes											2				14	
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles											0				0	
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor																
Adjustment Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	2	0	0	0	15	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1											20				26	
Approved Development Trips 2 (Trucks)											7				2	
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	27	0	0	0	28	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	29	0	0	0	43	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	24%	2%	2%	2%	5%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN											25%	25%				
Trip Distribution OUT		(25%)													(25%)	
Balancing Adjustment																
Warehouse Truck Trips	0	5	0	0	0	0	0	0	0	0	2	2	0	0	5	0
Trip Distribution IN											25%	25%				
Trip Distribution OUT		(25%)									(5%)				(25%)	
Balancing Adjustment																
Warehouse Car Trips	0	10	0	0	0	0	0	0	0	0	6	4	0	0	10	0
Trip Distribution IN											95%					
Trip Distribution OUT															(95%)	
Balancing Adjustment																
Residential Trips	0	0	0	0	0	0	0	0	0	0	157	0	0	0	108	0
Total Vehicular Project Trips		15	0	0	0	0	0	0	0	0	165	6	0	0	123	0
2025 Build Traffic	0	15	0	0	0	0	0	0	0	0	194	6	0	0	166	0
2025 Build Heavy Vehicle %	2%	33%	2%	2%	2%	2%	2%	2%	2%	2%	5%	33%	2%	2%	4%	2%

INTERSECTION VOLUME DEVELOPMENT
DRIVEWAY #3
Driveway 3 at Pipeline Rd

AM PEAK HOUR

	Pipeline Rd Northbound				Pipeline Rd Southbound				Driveway 3 Eastbound				Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles			0				0									
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor																
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1																
Approved Development Trips 2 (Trucks)																
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN								25%								
Trip Distribution OUT										(25%)						
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	0	0	0	0	5	0	2	0	0	0	0	0	0
Trip Distribution IN								25%								
Trip Distribution OUT										(25%)						
Balancing Adjustment																
Warehouse Car Trips	0	0	0	0	0	0	0	10	0	3	0	0	0	0	0	0
Trip Distribution IN							10%									
Trip Distribution OUT			(10%)													
Balancing Adjustment																
Residential Trips	0	0	20	0	0	0	7	0	0	0	0	0	0	0	0	0
Total Vehicular Project Trips	0	0	20	0	0	0	7	15	0	5	0	0	0	0	0	0
2025 Build Traffic	0	0	20	0	0	0	7	15	0	5	0	0	0	0	0	0
2025 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	33%	2%	40%	2%	2%	2%	2%	2%	2%

PM PEAK HOUR

	Pipeline Rd Northbound				Pipeline Rd Southbound				Driveway 3 Eastbound				0 Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes			0				0									
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles			0				0									
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor																
Adjustment Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1																
Approved Development Trips 2 (Trucks)																
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN								25%								
Trip Distribution OUT										(25%)						
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	0	0	0	0	2	0	5	0	0	0	0	0	0
Trip Distribution IN								25%								
Trip Distribution OUT										(25%)						
Balancing Adjustment																
Warehouse Car Trips	0	0	0	0	0	0	0	4	0	10	0	0	0	0	0	0
Trip Distribution IN							10%									
Trip Distribution OUT			(10%)													
Balancing Adjustment																
Residential Trips	0	0	11	0	0	0	17	0	0	0	0	0	0	0	0	0
Total Vehicular Project Trips		0	11	0	0	0	17	6	0	15	0	0	0	0	0	0
2025 Build Traffic	0	0	11	0	0	0	17	6	0	15	0	0	0	0	0	0
2025 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	33%	2%	33%	2%	2%	2%	2%	2%	2%

INTERSECTION VOLUME DEVELOPMENT
DRIVEWAY #4
Driveway 4 at Pipeline Rd

AM PEAK HOUR

	Pipeline Rd Northbound				Pipeline Rd Southbound				Eastbound				Driveway 4 Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles						0										0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor																
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1																
Approved Development Trips 2																
Approved Development Trips 3																
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN																
Trip Distribution OUT																
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN																
Trip Distribution OUT																
Balancing Adjustment																
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN						10%										
Trip Distribution OUT																(10%)
Balancing Adjustment																
Residential Trips	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	20
Total Vehicular Project Trips	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	20
2025 Build Traffic	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	20
2025 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

PM PEAK HOUR

	Pipeline Rd Northbound				Pipeline Rd Southbound				0 Eastbound				Driveway 4 Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes						0										0
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles						0										0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor																
Adjustment Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1																
Approved Development Trips 2																
Approved Development Trips 3																
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN																
Trip Distribution OUT																
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN																
Trip Distribution OUT																
Balancing Adjustment																
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN						10%										
Trip Distribution OUT																(10%)
Balancing Adjustment																
Residential Trips	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	11
Total Vehicular Project Trips		0	0	0	0	17	0	0	0	0	0	0	0	0	0	11
2025 Build Traffic	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	11
2025 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

INTERSECTION VOLUME DEVELOPMENT
DRIVEWAY #5
Stanley Rd at Driveway 5

AM PEAK HOUR

	Driveway 5 Northbound				Southbound				Stanley Rd Eastbound				Stanley Rd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles											1				1	
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	50%	2%	2%	2%	50%	2%
Peak Hour Factor																
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1																
Approved Development Trips 2 (Trucks)																
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	52%	2%	2%	2%	52%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN																
Trip Distribution OUT																
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN															5%	
Trip Distribution OUT											(5%)					
Balancing Adjustment																
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
Trip Distribution IN											70%	15%				
Trip Distribution OUT		(15%)													(70%)	
Balancing Adjustment																
Residential Trips	0	29	0	0	0	0	0	0	0	0	49	11	0	0	137	0
Total Vehicular Project Trips	0	29	0	0	0	0	0	0	0	0	50	11	0	0	139	0
2025 Build Traffic	0	29	0	0	0	0	0	0	0	0	52	11	0	0	141	0
2025 Build Heavy Vehicle %	2%		2%	2%	2%	2%	2%	2%	2%	2%	2%		2%	2%	2%	2%

PM PEAK HOUR

	Driveway 5 Northbound				0 Southbound				Stanley Rd Eastbound				Stanley Rd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes											6				6	
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles											0				0	
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor																
Adjustment Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1																
Approved Development Trips 2 (Trucks)																
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN																
Trip Distribution OUT																
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN															5%	
Trip Distribution OUT											(5%)					
Balancing Adjustment																
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0
Trip Distribution IN											70%	15%				
Trip Distribution OUT		(15%)													(70%)	
Balancing Adjustment																
Residential Trips	0	17	0	0	0	0	0	0	0	0	116	25	0	0	80	0
Total Vehicular Project Trips		17	0	0	0	0	0	0	0	0	118	25	0	0	81	0
2025 Build Traffic	0	17	0	0	0	0	0	0	0	0	125	25	0	0	88	0
2025 Build Heavy Vehicle %	2%		2%	2%	2%	2%	2%	2%	2%	2%	2%		2%	2%	2%	2%

INTERSECTION VOLUME DEVELOPMENT
DRIVEWAY #6
Stanley Rd at Driveway 6

AM PEAK HOUR

	Northbound				Driveway 6 Southbound				Stanley Rd Eastbound				Stanley Rd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles											1				1	
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	50%	2%	2%	2%	50%	2%
Peak Hour Factor																
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1											1				3	
Approved Development Trips 2											0				0	
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	3	0	0	0	5	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	34%	2%	2%	2%	21%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN																
Trip Distribution OUT																
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN															5%	
Trip Distribution OUT											(5%)					
Balancing Adjustment																
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
Trip Distribution IN										30%	40%					
Trip Distribution OUT								(30%)							(40%)	
Balancing Adjustment																
Residential Trips	0	0	0	0	0	0	0	59	0	21	28	0	0	0	78	0
Total Vehicular Project Trips	0	0	0	0	0	0	0	59	0	21	29	0	0	0	80	0
2025 Build Traffic	0	0	0	0	0	0	0	59	0	21	32	0	0	0	85	0
2025 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%		2%		3%	2%	2%	2%	2%	2%

PM PEAK HOUR

	0 Northbound				Driveway 6 Southbound				Stanley Rd Eastbound				Stanley Rd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes											6				6	
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles											0				0	
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor																
Adjustment Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1											3				1	
Approved Development Trips 2											0				0	
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	10	0	0	0	8	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN																
Trip Distribution OUT																
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN															5%	
Trip Distribution OUT											(5%)					
Balancing Adjustment																
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0
Trip Distribution IN										30%	40%					
Trip Distribution OUT								(30%)							(40%)	
Balancing Adjustment																
Residential Trips	0	0	0	0	0	0	0	34	0	50	66	0	0	0	46	0
Total Vehicular Project Trips		0	0	0	0	0	0	34	0	50	68	0	0	0	47	0
2025 Build Traffic	0	0	0	0	0	0	0	34	0	50	78	0	0	0	55	0
2025 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%		2%		2%	2%	2%	2%	2%	2%

INTERSECTION VOLUME DEVELOPMENT
DRIVEWAY #7
Stanley Rd at Driveway 7

AM PEAK HOUR

	Driveway 7 Northbound				Southbound				Stanley Rd Eastbound				Stanley Rd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles											1				1	
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	50%	2%	2%	2%	50%	2%
Peak Hour Factor																
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1											1				3	
Approved Development Trips 2 (Trucks)											0				0	
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	3	0	0	0	5	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	34%	2%	2%	2%	21%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN																
Trip Distribution OUT																
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN															5%	
Trip Distribution OUT											(5%)					
Balancing Adjustment																
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
Trip Distribution IN											20%	20%				
Trip Distribution OUT		(20%)													(20%)	
Balancing Adjustment																
Residential Trips	0	39	0	0	0	0	0	0	0	0	14	14	0	0	39	0
Total Vehicular Project Trips	0	39	0	0	0	0	0	0	0	0	15	14	0	0	41	0
2025 Build Traffic	0	39	0	0	0	0	0	0	0	0	18	14	0	0	46	0
2025 Build Heavy Vehicle %	2%		2%	2%	2%	2%	2%	2%	2%	2%	6%		2%	2%	2%	2%

PM PEAK HOUR

	Driveway 7 Northbound				0 Southbound				Stanley Rd Eastbound				Stanley Rd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes											6				6	
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles											0				0	
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor																
Adjustment Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1											3				1	
Approved Development Trips 2 (Trucks)											0				0	
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	10	0	0	0	8	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN																
Trip Distribution OUT																
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN															5%	
Trip Distribution OUT											(5%)					
Balancing Adjustment																
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0
Trip Distribution IN											20%	20%				
Trip Distribution OUT		(20%)													(20%)	
Balancing Adjustment																
Residential Trips	0	23	0	0	0	0	0	0	0	0	33	33	0	0	23	0
Total Vehicular Project Trips		23	0	0	0	0	0	0	0	0	35	33	0	0	24	0
2025 Build Traffic	0	23	0	0	0	0	0	0	0	0	45	33	0	0	32	0
2025 Build Heavy Vehicle %	2%		2%	2%	2%	2%	2%	2%	2%	2%	2%		2%	2%	2%	2%

INTERSECTION VOLUME DEVELOPMENT
DRIVEWAY #8
Stanley Rd at Driveway 8

AM PEAK HOUR

	Northbound				Driveway 8 Southbound				Stanley Rd Eastbound				Stanley Rd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles											1				0	
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	50%	2%	2%	2%	2%	2%
Peak Hour Factor																
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1											1				3	
Approved Development Trips 2 (Trucks)											0				0	
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	34%	2%	2%	2%	2%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN																
Trip Distribution OUT																
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN															5%	
Trip Distribution OUT											(5%)					
Balancing Adjustment																
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
Trip Distribution IN											20%					5%
Trip Distribution OUT						(5%)									(20%)	
Balancing Adjustment																
Residential Trips	0	0	0	0	0	10	0	0	0	0	14	0	0	0	39	4
Total Vehicular Project Trips	0	0	0	0	0	10	0	0	0	0	15	0	0	0	41	4
2025 Build Traffic	0	0	0	0	0	10	0	0	0	0	18	0	0	0	45	4
2025 Build Heavy Vehicle %	2%	2%	2%	2%	2%		2%	2%	2%	2%	6%	2%	2%	2%	2%	

PM PEAK HOUR

	0 Northbound				Driveway 8 Southbound				Stanley Rd Eastbound				Stanley Rd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes											6				3	
Count Balancing																
Pedestrians																
Conflicting Pedestrians																
Bicycles																
Conflicting Bicycles																
Heavy Vehicles											0				0	
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor																
Adjustment Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Adjusted 2022 Volumes	0	0	0	0	0	0	0	0	0	0	7	0	0	0	3	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1											3				1	
Approved Development Trips 2 (Trucks)											0				0	
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	10	0	0	0	4	0
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
2025 No-Build Peak Hour Factor																
Trip Distribution IN																
Trip Distribution OUT																
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN															5%	
Trip Distribution OUT											(5%)					
Balancing Adjustment																
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0
Trip Distribution IN											20%					5%
Trip Distribution OUT						(5%)									(20%)	
Balancing Adjustment																
Residential Trips	0	0	0	0	0	6	0	0	0	0	33	0	0	0	23	8
Total Vehicular Project Trips		0	0	0	0	6	0	0	0	0	35	0	0	0	24	8
2025 Build Traffic	0	0	0	0	0	6	0	0	0	0	45	0	0	0	28	8
2025 Build Heavy Vehicle %	2%	2%	2%	2%	2%		2%	2%	2%	2%	2%	2%	2%	2%	2%	

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #3

Stanley Rd at Driveway 9/Village Broad St

AM PEAK HOUR

	Driveway 9 Northbound				Village Broad St Southbound				Stanley Rd Eastbound				Stanley Rd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	0	9	0	0	0	0	2	0	0	0	1	12
Count Balancing																
Pedestrians			0				0				0				0	
Conflicting Pedestrians		0		0		0		0		0		0		0		0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Bicycles				0				0				0				0
Heavy Vehicles	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	3
Heavy Vehicle %	2%	2%	2%	2%	2%	11%	2%	2%	2%	2%	50%	2%	2%	2%	2%	25%
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2022 Volumes	0	0	0	0	0	9	0	0	0	0	2	0	0	0	1	12
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1											1				3	
Approved Development Trips 2 (Trucks)											0				0	
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0
2025 No-Build Traffic	0	0	0	0	0	9	0	0	0	0	3	0	0	0	4	12
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	11%	2%	2%	2%	2%	34%	2%	2%	2%	2%	26%
2025 No-Build Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Trip Distribution IN																
Trip Distribution OUT																
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN															5%	
Trip Distribution OUT											(5%)					
Balancing Adjustment																
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
Trip Distribution IN												20%			5%	
Trip Distribution OUT		(20%)									(5%)					
Balancing Adjustment																
Residential Trips	0	39	0	0	0	0	0	0	0	0	10	14	0	0	4	0
Total Vehicular Project Trips	0	39	0	0	0	0	0	0	0	0	11	14	0	0	6	0
2025 Build Traffic	0	39	0	0	0	9	0	0	0	0	14	14	0	0	10	12
2025 Build Heavy Vehicle %	2%	2%	2%	2%	2%	11%	2%	2%	2%	2%	7%	2%	2%	2%	2%	26%

PM PEAK HOUR

	Driveway 9 Northbound				Village Broad St Southbound				Stanley Rd Eastbound				Stanley Rd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2022 Traffic Volumes	0	0	0	0	3	9	0	1	1	0	6	0	1	0	2	11
Count Balancing																
Pedestrians			0				0				0				0	
Conflicting Pedestrians		0		0		0		0		0		0		0		0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Bicycles				0				0				0				0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Adjustment Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Adjusted 2022 Volumes	0	0	0	0	3	10	0	1	1	0	7	0	1	0	2	12
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Annual Growth Rate (Design Year)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Factor (Design Year)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Road Adjustment																
Approved Development Trips 1											3				1	
Approved Development Trips 2 (Trucks)											0				0	
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0
2025 No-Build Traffic	0	0	0	0	3	10	0	1	1	0	10	0	1	0	3	12
2025 No-Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
2025 No-Build Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Trip Distribution IN																
Trip Distribution OUT																
Balancing Adjustment																
Warehouse Truck Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN															5%	
Trip Distribution OUT											(5%)					
Balancing Adjustment																
Warehouse Car Trips	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0
Trip Distribution IN												20%			5%	
Trip Distribution OUT		(20%)									(5%)					
Balancing Adjustment																
Residential Trips	0	23	0	0	0	0	0	0	0	0	6	33	0	0	8	0
Total Vehicular Project Trips		23	0	0	0	0	0	0	0	0	8	33	0	0	9	0
2025 Build Traffic	0	23	0	0	3	10	0	1	1	0	18	33	1	0	12	12
2025 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

Growth Rate Considerations

NDOT Recommended Growth Rate	1.0%

Population Data

County (ARC) Population Annual Growth Projection (2015-2050)	X%
County (Census) Population Annual Growth (2010-2019)	X%
City (Census) Population Annual Growth (2010-2019)	X%

Nearby Developments

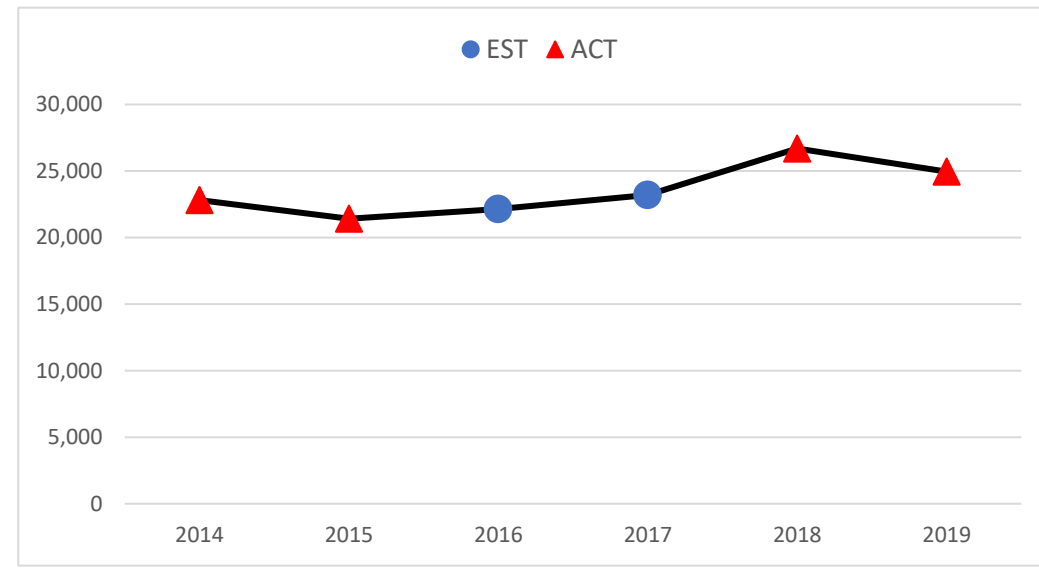
No nearby developments with known growth rates were identified.

Historical ADT Count Data

Source:	TDOT
Location:	Church St
	w/o 15th Ave
Route #:	
Route Type:	Minor Arterial
Station:	19000324

Count Type	Count Year	Volume	Growth Rate
ACT	2014	22,815	
ACT	2015	21,419	-6.12%
EST	2016	22,143	3.38%
EST	2017	23,193	4.74%
ACT	2018	26,692	15.09%
ACT	2019	24,964	-6.47%

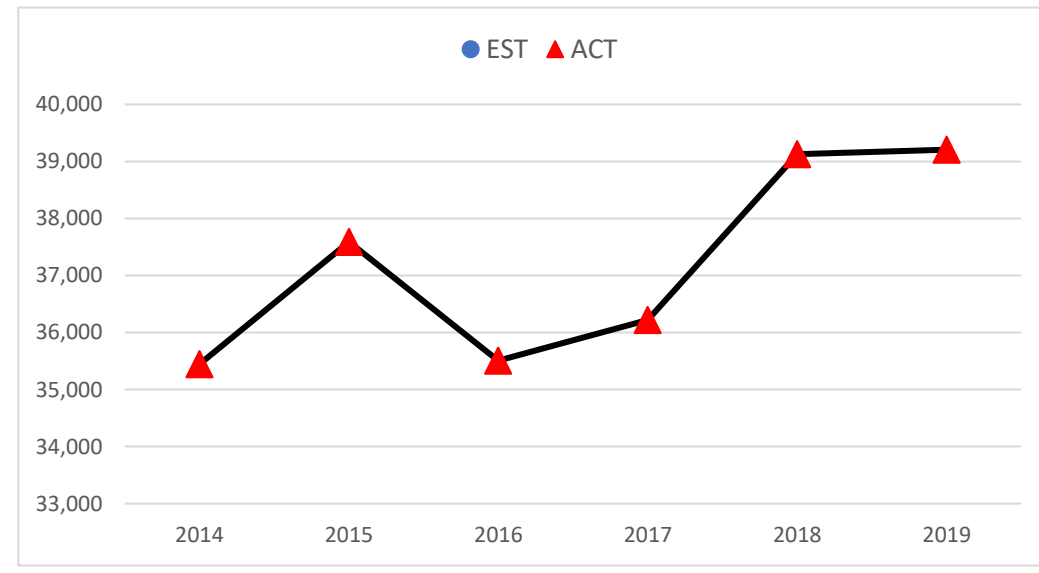
5 Year Growth Rate	**1.82%**
Avg. 1 Year Growth Rate	**2.12%**
Most Recent Actual Count Growth Rate	**-6.47%**



Source:	TDOT
Location:	Charlotte Ave
	e/o 15th Ave
Route #:	
Route Type:	Other Principal Arterial
Station:	19000323

Count Type	Count Year	Volume	Growth Rate
ACT	2014	35,444	
ACT	2015	37,589	6.05%
ACT	2016	35,509	-5.53%
ACT	2017	36,220	2.00%
ACT	2018	39,129	8.03%
ACT	2019	39,206	0.20%

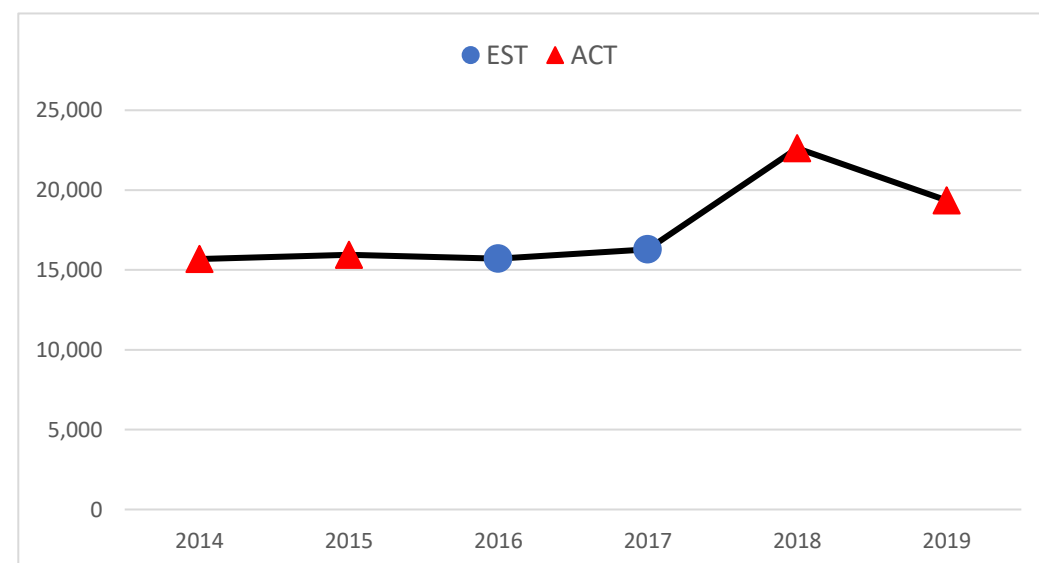
5 Year Growth Rate	**2.04%**
Avg. 1 Year Growth Rate	**2.15%**
Most Recent Actual Count Growth Rate	**0.20%**



Source:	TDOT
Location:	Church St
	e/o 11th Ave
Route #:	
Route Type:	Minor Arterial
Station:	19000174

Count Type	Count Year	Volume	Growth Rate
ACT	2014	15,684	
ACT	2015	15,952	1.71%
EST	2016	15,710	-1.52%
EST	2017	16,298	3.74%
ACT	2018	22,618	38.78%
ACT	2019	19,364	-14.39%

5 Year Growth Rate	**4.31%**
Avg. 1 Year Growth Rate	**5.67%**



APPENDIX D

Programmed Project Fact Sheets

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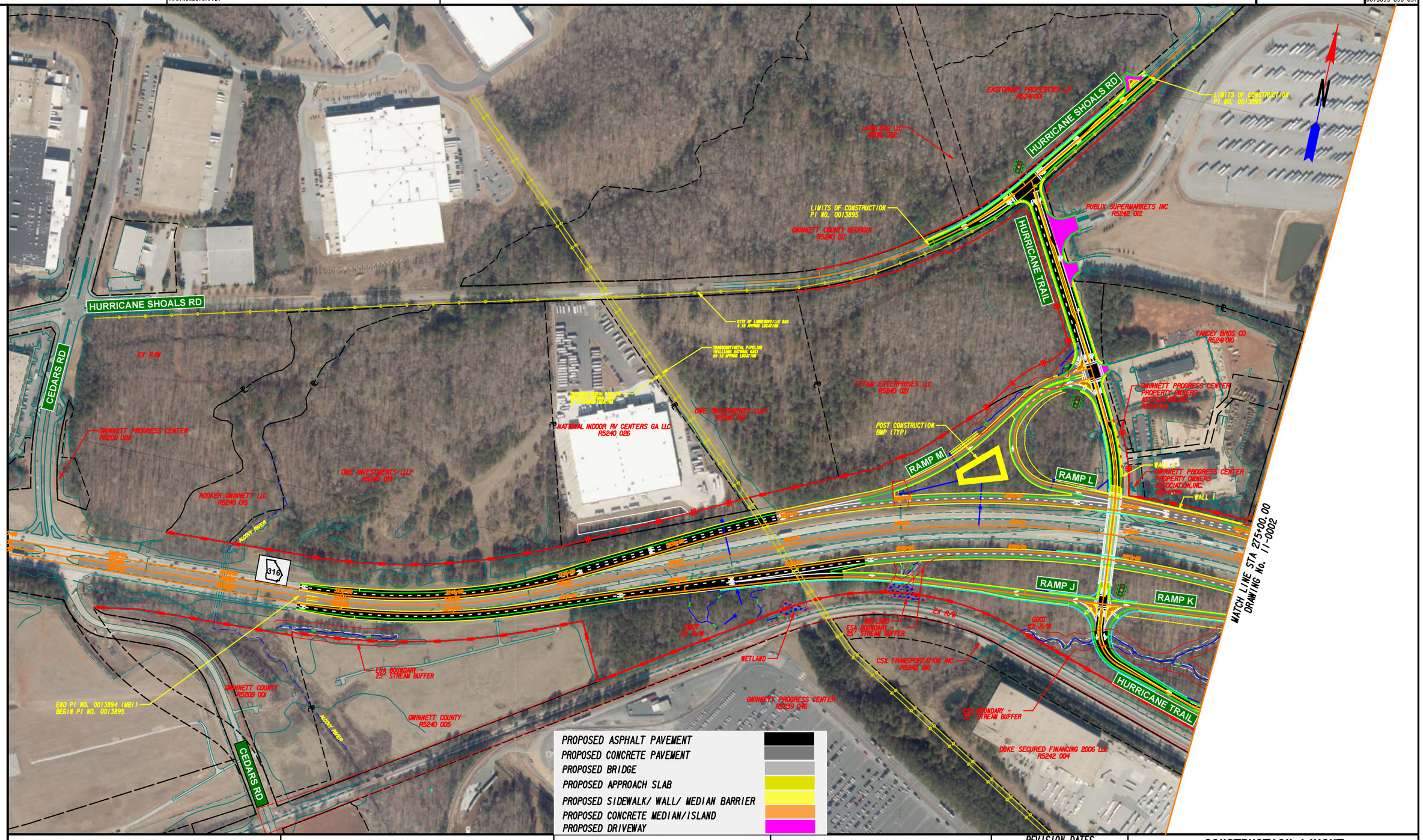

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE

PROPOSED SIGNAL

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

ATKINS
Member of the SNC-Lavalin Group
1600 RiverEdge Parkway, NW
Suite 700
Atlanta, GA 30328
Tel: (770)933-0280
Fax: (770)933-1920

SCALE IN FEET
0 200 400 800

REVISION DATES

CONSTRUCTION LAYOUT

SR 316 FM CEDARS RD TO SUGARLOAF PWKY
PI 0013895

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	11-0001
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10/23/2015 GPLN

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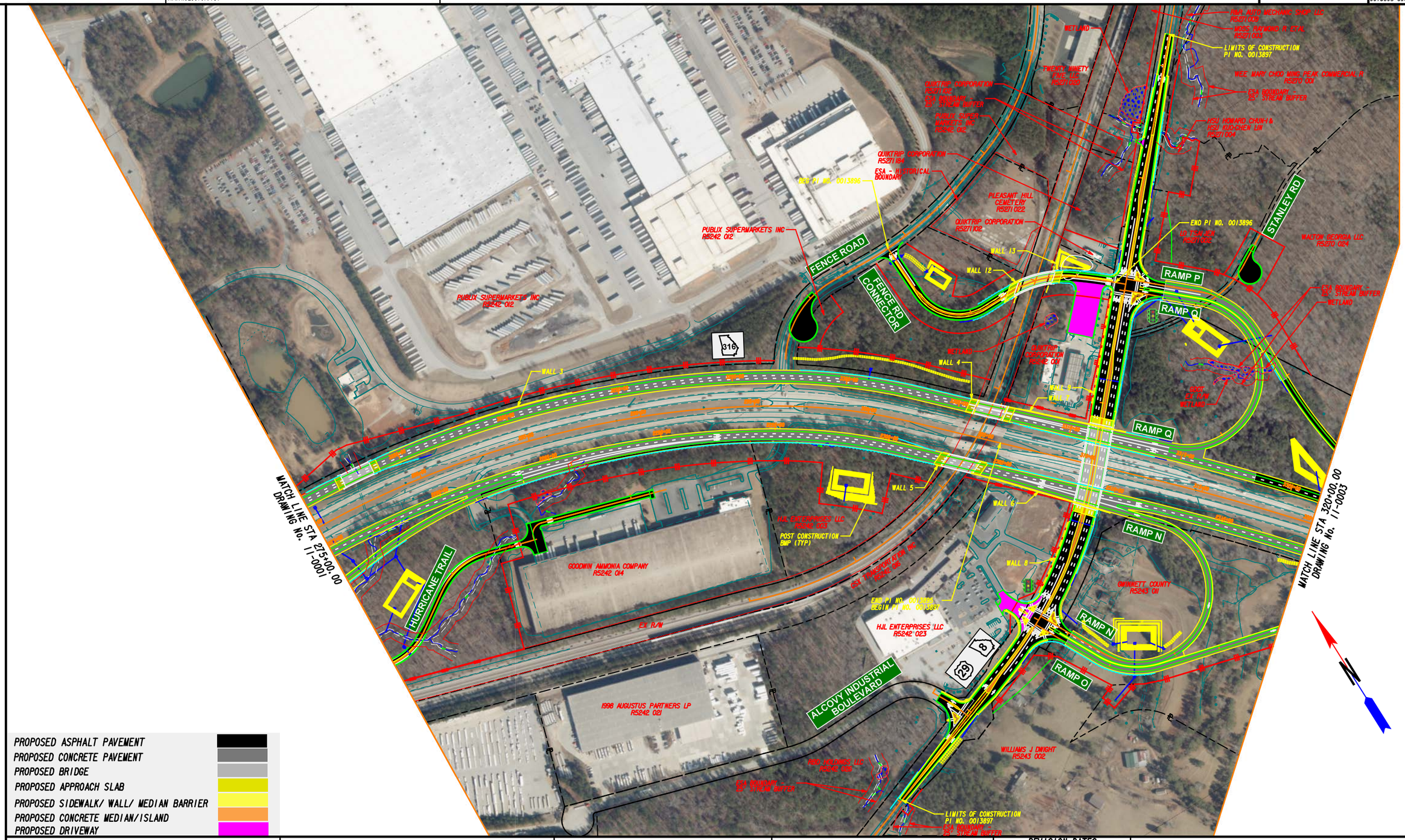

PROPOSED ASPHALT PAVEMENT	
PROPOSED CONCRETE PAVEMENT	
PROPOSED BRIDGE	
PROPOSED APPROACH SLAB	
PROPOSED SIDEWALK/ WALL/ MEDIAN BARRIER	
PROPOSED CONCRETE MEDIAN/ISLAND	
PROPOSED DRIVEWAY	

PROPERTY AND EXISTING R/W LINE	—— ℄ ——
REQUIRED R/W LINE	
PROPOSED SIGNAL	

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

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Atlanta, GA 30328
Tel: (770)933-0280
Fax: (770)933-1920

SCALE IN FEET
0 200 400 800

REVISION DATES

CONSTRUCTION LAYOUT

SR 316 FM CEDARS RD TO SUGARLOAF PWKY
PI 0013895 PI 0013896 PI 0013897

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		11-0002
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

10/29/2019 5:33:52 PM
USER:TSEP5307

GPLOT-V81
Atkins_Color.tbl

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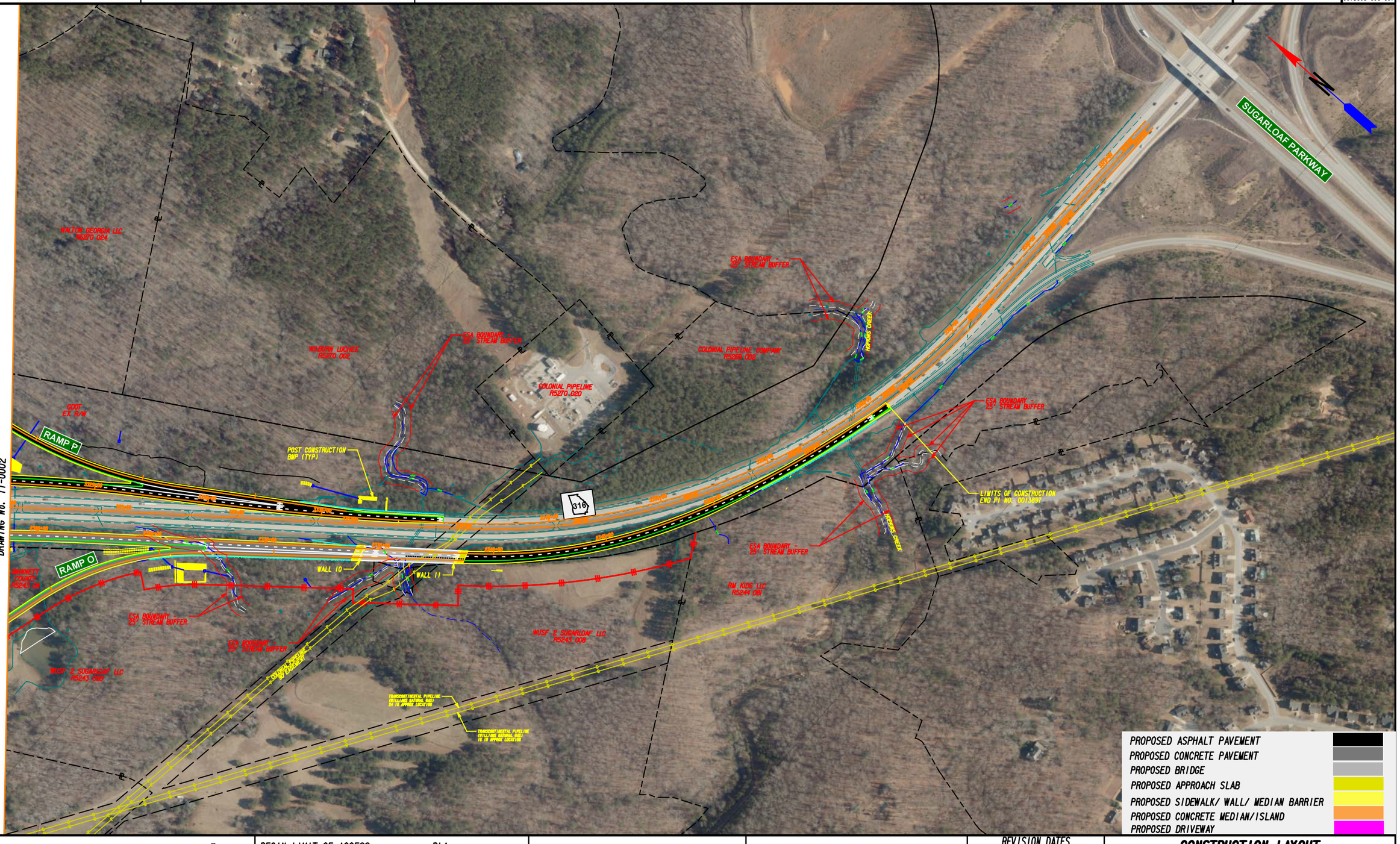
GDOT

P.I. No.
0013895-896-897

MATCH LINE STA 320+00.00
DRAWING No. 11-0002



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE

PROPOSED SIGNAL

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

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Atlanta, GA 30328
Tel: (770)933-0280
Fax: (770)933-1920

SCALE IN FEET
0 200 400 800

REVISION DATES

CONSTRUCTION LAYOUT

SR 316 FM CEDARS RD TO SUGARLOAF PWKY
PI 0013897

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		11-0003
VERIFIED:		DATE:		

10/23/2015 GPLN

GW-184C

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	SR 316 - NEW INTERCHANGE AT HURRICANE TRAIL - INCLUDES CD SYSTEM TO FENCE ROAD
GDOT Project No.	0013895
Federal ID No.	N/A
Status	Programmed
Service Type	Roadway / Operations & Safety
Sponsor	Gwinnett County
Jurisdiction	Gwinnett County
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	4	**LCI**		**Network Year**	2030
Planned Thru Lane	4	**Flex**		**Corridor Length**	N/A miles

Detailed Description and Justification

This project includes the construction of SR 316 east of Cedars Road to approx 0.1 mile west of Fence Road. This section of limited access arterial includes the interchange at Hurricane Trail, Hurricane Shoals Road and the private road to provide access for the commercial property within the project limits. Hurricane Trail Bridge will span over existing SR 316 and proposed C-D lanes. The Hurricane Trail at SR 316 interchange is a partial diamond/clover interchange configuration. Diamond portions south side of SR 316, provides a compact interchange format to provide access between existing SR 316 and the CSX rail line/yard to the south. SR 316 will remain at its current grade, and requires two bridges (SR 316 EB and WB) spanning over CSX Railroad. Hurricane Trail will be raised approximately 27 ft and widened to include two - 12 ft lanes with a raised 20 ft median. The project length is approx 1.5 miles.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	Transportation Funding Act (HB 170)	AUTH	2017	**$288,800**	~~$0,000~~	~~$288,800~~	~~$0,000~~	~~$0,000~~
PE	Transportation Funding Act (HB 170)	AUTH	2021	**$5,132,750**	~~$0,000~~	~~$5,132,750~~	~~$0,000~~	~~$0,000~~
ROW	Transportation Funding Act (HB 170)		2022	**$3,969,000**	$0,000	$3,969,000	$0,000	$0,000
UTL	Transportation Funding Act (HB 170)		2024	**$4,000,000**	$0,000	$4,000,000	$0,000	$0,000
CST	Transportation Funding Act (HB 170)		2024	**$43,500,000**	$0,000	$43,500,000	$0,000	$0,000
				$56,890,550	**$0,000**	**$56,890,550**	**$0,000**	**$0,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

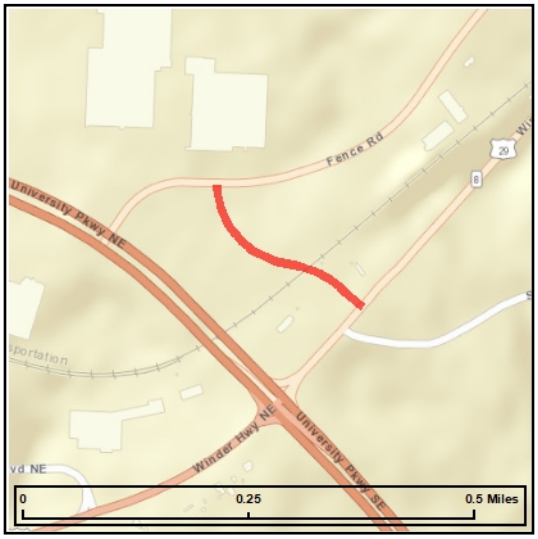
? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 6/14/2022

GW-184D

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	FENCE ROAD CONNECTOR - NEW ALIGNMENT FROM FENCE ROAD TO US 29 (WINDER HIGHWAY) APPROXIMATELY 0.25 MILES NORTH OF SR 316
GDOT Project No.	0013896
Federal ID No.	N/A
Status	Programmed
Service Type	Roadway / Operations & Safety
Sponsor	Gwinnett County
Jurisdiction	Gwinnett County
Analysis Level	In the Region's Air Quality Conformity Analysis



Existing Thru Lane	0	**LCI**		**Network Year**	2030
Planned Thru Lane	2	**Flex**		**Corridor Length**	0.5 miles

Detailed Description and Justification

This project includes the closure of the existing Fence Road intersection with SR 316 and construction of Fence Road Connector between existing Fence Road to the west and the ramp terminus of SR 316 ramps with US 29/SR 8 Winder Hwy to the east. Fence Road Connector aligns with the existing QT driveway access to US 29/SR 8 Winder Hwy. The Fence Road Connector Bridge will span over existing CSX Railroad. MSE walls will be used at both bridge approaches due to the alignment proximity to the existing cemetery and businesses. The project length is approximately 0.2 mile.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	Transportation Funding Act (HB 170)	AUTH	2017	**$168,000**	~~$0,000~~	~~$168,000~~	~~$0,000~~	~~$0,000~~
PE	Transportation Funding Act (HB 170)	AUTH	2021	**$448,477**	~~$0,000~~	~~$448,477~~	~~$0,000~~	~~$0,000~~
ROW	Transportation Funding Act (HB 170)		2022	**$3,000,000**	$0,000	$3,000,000	$0,000	$0,000
UTL	Transportation Funding Act (HB 170)		2024	**$400,000**	$0,000	$400,000	$0,000	$0,000
CST	Transportation Funding Act (HB 170)		2024	**$5,000,000**	$0,000	$5,000,000	$0,000	$0,000
				$9,016,477	**$0,000**	**$9,016,477**	**$0,000**	**$0,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 6/14/2022

GW-308B

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	SUGARLOAF PARKWAY EXTENSION: PHASE 2 - NEW ALIGNMENT FROM SR 316 EAST OF LAWRENCEVILLE TO I-85
GDOT Project No.	0006924
Federal ID No.	CSSTP-0006-00(924)
Status	Long Range
Service Type	Roadway / General Purpose Capacity
Sponsor	Gwinnett County
Jurisdiction	Regional - Northeast
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	0	**LCI**		**Network Year**	2030
Planned Thru Lane	4	**Flex**		**Corridor Length**	6.8 miles

Detailed Description and Justification

This Buford/Dacula/East-Cross County Connector project consists of constructing a new 6.8 miles roadway from SR 316 east of Lawrenceville to I 85. The road will include a 4 lane divided highway with a raised median, bicycle and pedestrian facilities, turn lanes as well as grade separation at I-85, SR 124, Old Fountain Rd., Old Peachtree Rd, Fence Rd, SR 8, and SR 316. The project will add need roadway capacity and address peak period congestion in the northern part of the county experiencing rapid population and employment growth.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	Local Jurisdiction/Municipality Funds	AUTH	2006	**$10,000,000**	~~$0,000~~	~~$0,000~~	~~$0,000~~	~~$10,000,000~~
PE	Federal Earmark Funding	AUTH	2018	**$9,450,000**	~~$4,499,500~~	~~$0,000~~	~~$0,000~~	~~$4,950,500~~
PE-OV	STP - Statewide Flexible (GDOT)	AUTH	2011	**$50,000**	~~$40,000~~	~~$10,000~~	~~$0,000~~	~~$0,000~~
ROW	Local Jurisdiction/Municipality Funds	AUTH	2020	**$60,000,000**	~~$0,000~~	~~$0,000~~	~~$0,000~~	~~$60,000,000~~
UTL	Local Jurisdiction/Municipality Funds		LR 2026-2030	**$6,414,500**	$0,000	$0,000	$0,000	$6,414,500
CST	General Federal Aid - 2026-2050		LR 2026-2030	**$300,000,000**	$165,427,567	$41,356,892	$0,000	$93,215,541
				$385,914,500	**$169,967,067**	**$41,366,892**	**$0,000**	**$174,580,541**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 6/14/2022

GW-394

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	SR 316 INTERCHANGE AT US 29
GDOT Project No.	0013897
Federal ID No.	N/A
Status	Programmed
Service Type	Roadway / Interchange Capacity
Sponsor	Gwinnett County
Jurisdiction	Regional - Northeast
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	N/A	**LCI**		**Network Year**	2030
Planned Thru Lane	N/A	**Flex**		**Corridor Length**	0.8 miles

Detailed Description and Justification

This is a grade-seperated diamond interchange project along SR 316 at US 29.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	Transportation Funding Act (HB 170)	AUTH	2017	**$1,016,000**	~~$0,000~~	~~$1,016,000~~	~~$0,000~~	~~$0,000~~
PE	Transportation Funding Act (HB 170)	AUTH	2020	**$1,750,000**	~~$0,000~~	~~$1,750,000~~	~~$0,000~~	~~$0,000~~
PE	Transportation Funding Act (HB 170)	AUTH	2021	**$10,159,568**	~~$0,000~~	~~$10,159,568~~	~~$0,000~~	~~$0,000~~
ROW	Transportation Funding Act (HB 170)		2022	**$20,806,000**	$0,000	$20,806,000	$0,000	$0,000
UTL	Transportation Funding Act (HB 170)		2024	**$4,000,000**	$0,000	$4,000,000	$0,000	$0,000
CST	Transportation Funding Act (HB 170)		2024	**$47,000,000**	$0,000	$47,000,000	$0,000	$0,000
				$84,731,568	**$0,000**	**$84,731,568**	**$0,000**	**$0,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 6/14/2022

GW-415

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	GWINNETT COUNTY ITS ENHANCEMENTS - PHASE 2
GDOT Project No.	0016070
Federal ID No.	N/A
Status	Completed
Service Type	Roadway / Operations & Safety
Sponsor	Gwinnett County
Jurisdiction	Gwinnett County
Analysis Level	Exempt from Air Quality Analysis (40 CFR 93)

Existing Thru Lane	N/A	**LCI**		**Network Year**	TBD
Planned Thru Lane	N/A	**Flex**		**Corridor Length**	N/A miles

Detailed Description and Justification

This project supports regional mobility objectives by expanding the fiber optic network, provide additional video surveillance of major intersections, monitor and adjust traffic signal timing schemes and broadcast important messages to drivers along these corridors.

This project a countywide upgrade of ITS and related infrastructure. There are three major components to the project:

Video surveillance system upgrades - This component will upgrade approximately 180 CCTV cameras (at the time this ITS Master Plan update is published) throughout Gwinnett County with Ethernet capable, high definition, IP-based, CCTV cameras. Any upgrades or expansion to the TCC required to support the expansion will be provided.

Network upgrades and operational enhancements - This component will provide Cisco IE-4000 hardened Layer 2 switches or equivalent with appropriate power supplies as directed by the County in existing traffic cabinets and CCTV camera cabinets throughout the County. Existing switches will be removed and disposed of as directed by the County. Project would also replace some selected Layer 3 switches that are in need of upgrade/replacement.

ITS communications upgrades - This project will provide consistent (standardized) fiber count / size throughout the County (minimum 72-strand single-mode). Project will include an evaluation of the overall fiber infrastructure using the ITS Communications and Asset Management Software tool and database to determine "pinch" or "choke" points in the fiber count along the corridors and recommend for providing additional

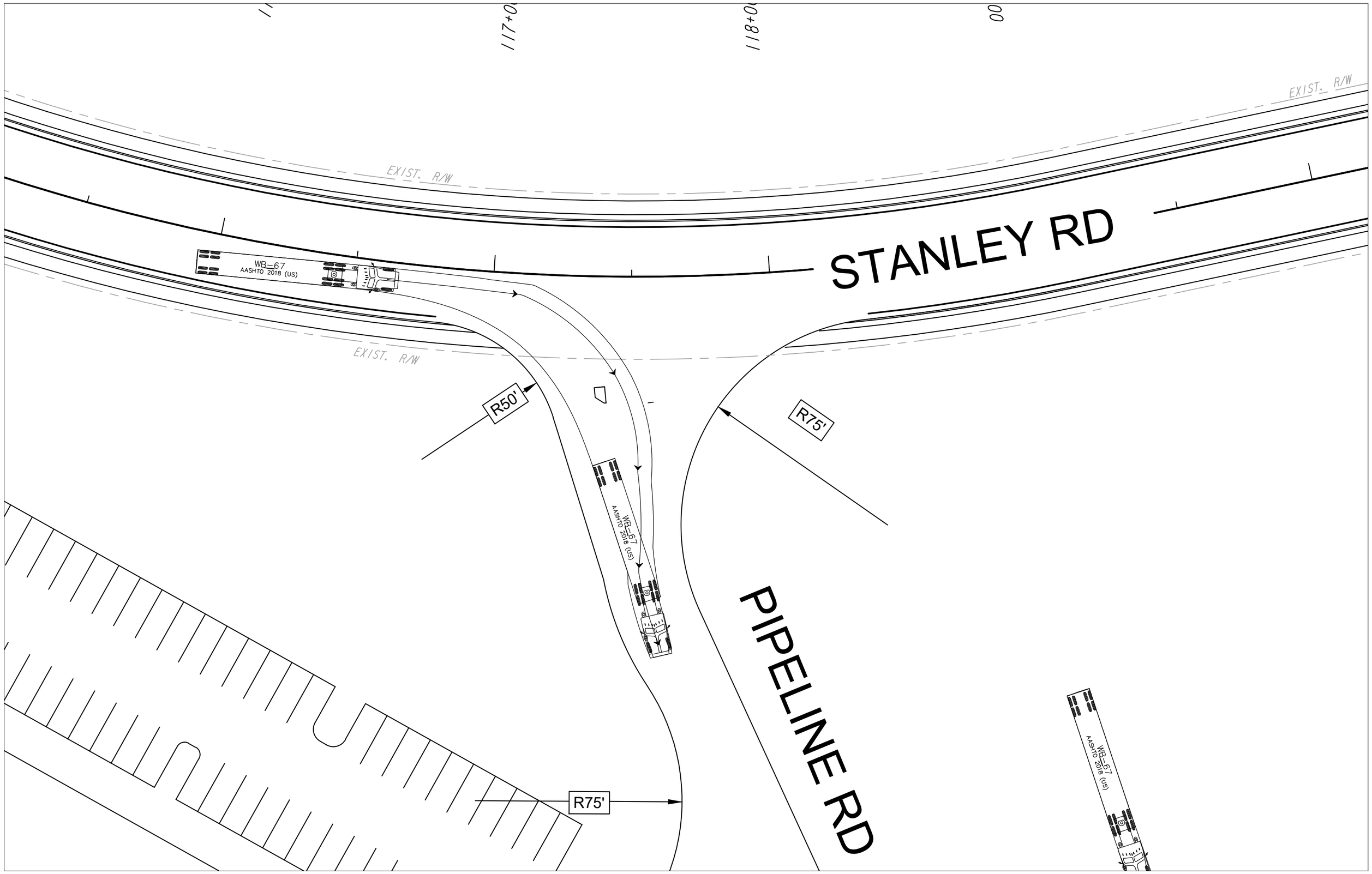
Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
CST	Surface Transportation Block Grant (STBG) Program - Urban (>200K) (ARC)	AUTH	2021	**$2,818,537**	~~$2,000,000~~	~~$0,000~~	~~$0,000~~	~~$818,537~~
				$2,818,537	**$2,000,000**	**$0,000**	**$0,000**	**$818,537**

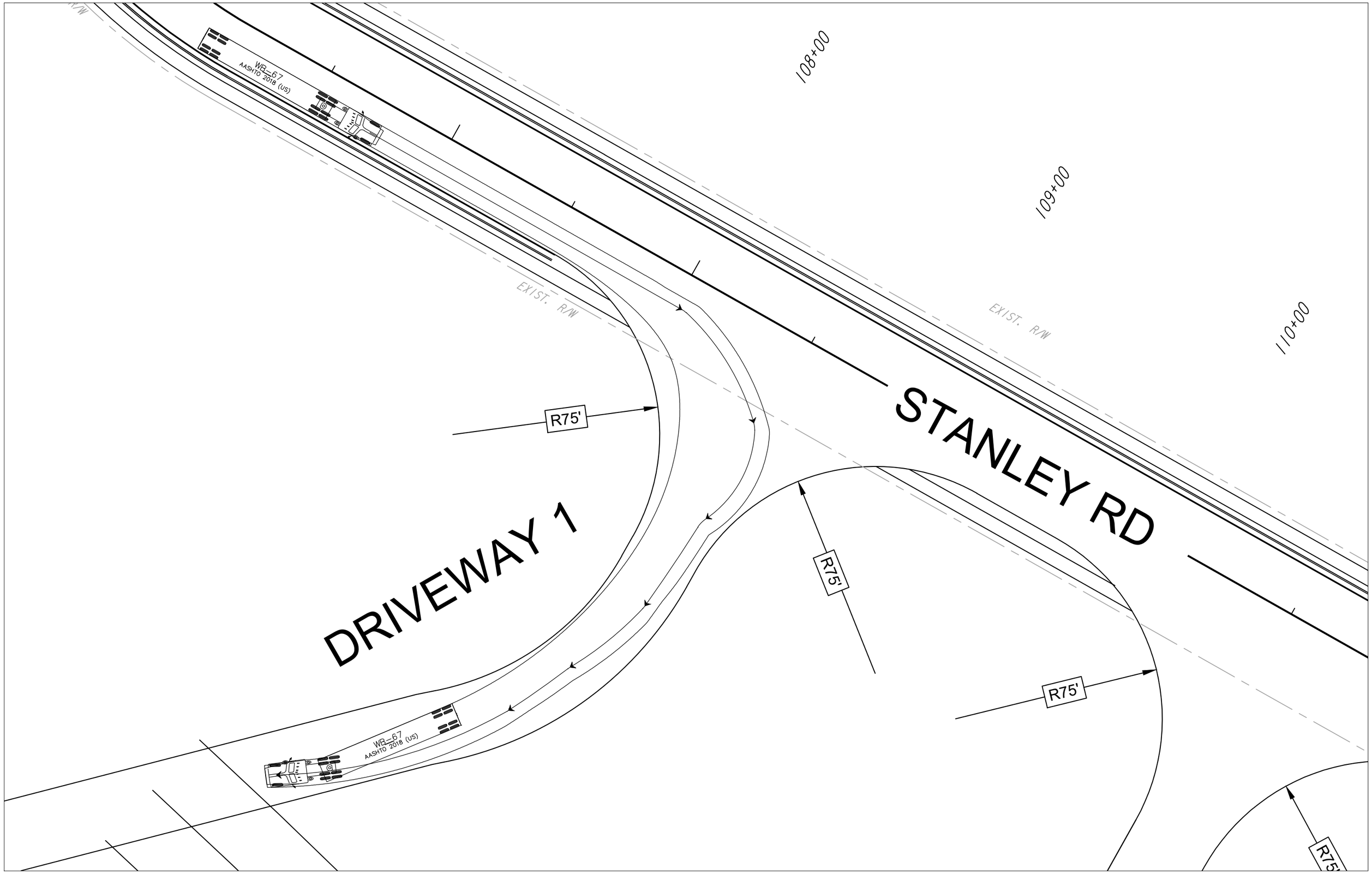
SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 8/25/2021

Full Page Truck Exhibits


EXIST. R/W
EXIST. R/W
STANLEY RD
WB-67
AASHTO 2018 (US)
R50'
R75'
PIPELINE RD
WB-67
AASHTO 2018 (US)
R75'
WB-67
AASHTO 2018 (US)


108+00
109+00
110+00
EXIST. R/W
EXIST. R/W
STANLEY RD
DRIVEWAY 1
R75'
R75'
R75'
R75'
WB-67
AASHTO 2018 (US)
WB-67
AASHTO 2018 (US)

EXIST. R/W

EXIST. R/W

110+00

111+00

112+00

STANLEY RD

DRIVEWAY 2

R75'

R75'

R75'

R75'

WB-67
AASHTO 2018 (US)

WB-67
AASHTO 2018 (US)

EXIST. R/W

EXIST. R/W

EXIST. R/W

WB-67
AASHTO 2018 (US)

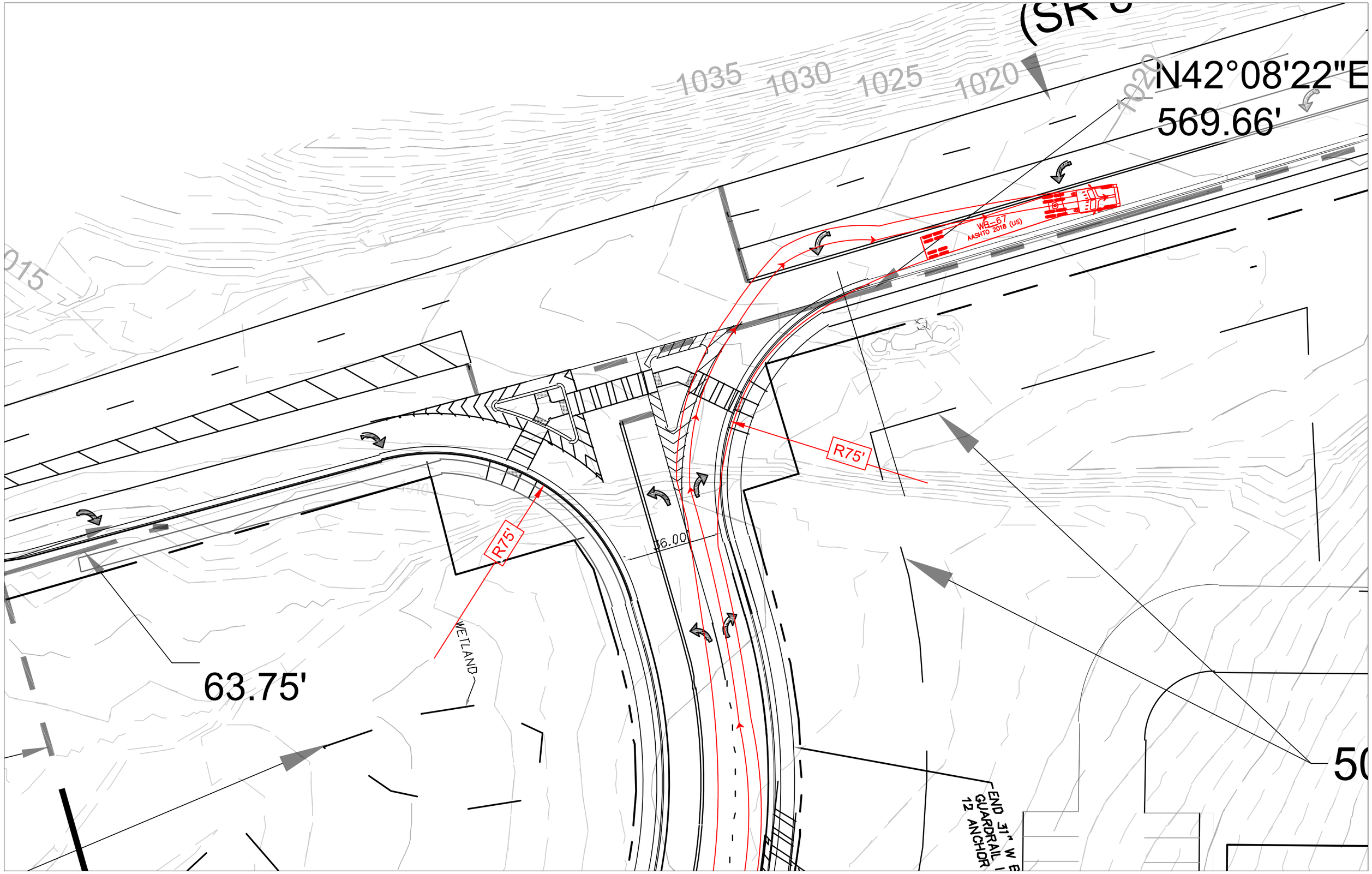
PIPELINE RD

R75'

DRIVEWAY 3

WB-67
AASHTO 2018 (US)

1035
1030
1025
1020
1015
N42°08'22"E
569.66'
63.75'
R75'
R75'
36.00'
WB-67
AASHTO 2018 (US)
WB-67
AASHTO 2018 (US)
WETLAND
END 31" W
GUARDRAIL
12 ANCHOR


(SR
1035
1030
1025
1020
1015
N42°08'22"E
569.66'
WB-67
AASHTO 2018 (US)
R75'
R75'
36.00'
63.75'
WETLAND
END 31" W
GUARDRAIL
12 ANCHOR
50

APPENDIX F

ICE Analysis Stage 1 and Stage 2

GDOT ICE STAGE 1: SCREENING DECISION RECORD

ICE Version 2.22 | Revised 5/6/2022

GDOT PI #	N/A
Project Location:	SR 8 @ Stanley Road
Existing Control:	Conventional (Minor Stop)
Prepared by:	Kimley-Horn
Date:	9/29/2022

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

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

	Intersection Alternative (see "Intersections" tab for detailed description of intersection/interchange type)	1. Does alternative address the project need in a balanced manner and in scale with the project?	2. Does alternative improve safety performance in terms of reducing severe crashes?	3. Does alternative incorporate safety, convenience and accessibility for pedestrians and/or bicyclists?	4. Does alternative improve (or preserve) traffic operations (congestion, delay, reliability, etc.)?	5. Does alternative appear feasible given the site characteristics, constrains & location context?	6. Does alternative appear feasible with respect to other project factors?	7. Overall feasible alternative (select alternative for further evaluation in Stage 2)?	Screening Decision Justification:
Unsignalized Intersections	Conventional (Minor Stop)	Yes	No	No	No	Yes	Yes	Yes	Existing Conditions / See stage 2
	Conventional (All-Way Stop)	No	No	No	No	No	No	No	Major street ADT too high
	Mini Roundabout	No	No	No	No	No	No	No	Mainline has multiple approach lanes
	Single Lane Roundabout	No	No	No	No	No	No	No	Mainline has multiple approach lanes
	Multilane Roundabout	No	Yes	No	Yes	Yes	Yes	Yes	See stage 2
	RCUT (stop control)	No	No	No	No	No	No	No	Restricts access/Limited U-turn opportunities/Sends trucks to
	RIRO w/down stream U-Turn	No	No	No	No	No	No	No	Restricts access/Limited U-turn opportunities/Sends trucks to
	High-T (unsignalized)	No	No	No	No	No	No	No	Required widening along SR into existing guardrail where grade change
	Offset-T Intersections	No	No	No	No	No	No	No	additional minor street to offset from does not exist and is not proposed
	Diamond Interch (Stop Control)	No	No	No	No	No	No	No	Not a grade separated intersection
	Diamond Interch (RAB Control)	No	No	No	No	No	No	No	Not a grade separated intersection
	Add LT Lanes on SR 22 No RT Lane Improvements	No	No	No	No	No	No	No	N/A
	Other unsignalized (provide description):	No	No	No	No	No	No	No	N/A
Signalized Intersections	Traffic Signal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	See stage 2
	Median U-Turn (Indirect Left)	No	No	No	No	No	No	No	No Median exists/limited U-turn opportunities
	RCUT (signalized)	No	No	No	No	No	No	No	Restricts access/Limited U-turn opportunities/Sends trucks to
	Displaced Left Turn (CFI)	No	No	No	No	No	No	No	Three leg intersection with low volume major street left-turn volume
	Continuous Green-T	No	No	No	No	No	No	No	Required widening along SR into existing guardrail where grade change
	Jughandle	No	No	No	No	No	No	No	Major street left-turn volume low / provides little to no benefit at this
	Quadrant Roadway	No	No	No	No	No	No	No	Major street left-turn volume low / provides little to no benefit at this
	Diamond Interch (Signal Control)	No	No	No	No	No	No	No	Not a grade separated intersection
	Diverging Diamond	No	No	No	No	No	No	No	Not a grade separated intersection
	Single Point Interchange	No	No	No	No	No	No	No	Not a grade separated intersection
	No LT Lane Improvements No RT Lane Improvements	No	No	No	No	No	No	No	N/A
	Other Signalized (provide description):	No	No	No	No	No	No	No	N/A

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

GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.22 | Revised 5/6/2022

Project Location: SR 8 @ Stanley Road
Existing Intersection Control: Conventional (Minor Stop)
Type of Analysis: Conventional Non-Safety Funded Project

District: 1 - Gainesville
County: Gwinnett
Area: Suburb/Transitic

GDOT PI #: N/A
Prepared by: Kimley-Horn
Date: 9/29/2022

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	Synchro	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2025 Opening Yr No-Build Peak Hr Intersection Delay	0.0 sec	0.0 sec
2025 Opening Yr No-Build Peak Hr Intersection V/C	0.00	0.00
2025 Design Yr No-Build Peak Hr Intersection Delay	0.0 sec	0.0 sec
2025 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets Warrants Met?

- ☐ PEDESTRIANS
- ☐ BICYCLES
- ☐ TRANSIT

Crash Data: Enter most recent 5 years of crash data	*Crash Severity* K*	A*	B*	C*	O	Years: 5
Crash Type Angle	0	0	7	0	27	65%
Head-On	0	0	2	0	0	4%
Rear End	0	0	3	0	6	17%
Sideswipe - same	0	0	0	0	4	8%
Sideswipe - opposite	0	0	0	0	1	2%
Not Collision w/Motor Veh	0	0	0	0	2	4%
TOTALS:	0	0	12	0	40	52

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

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	Conventional (Minor Stop)	Multilane Roundabout	Traffic Signal	N/A	N/A
Project Cost: (From CostEst Worksheet)	*Additional description here*	*Additional description here*	*Add LT bays all approaches*	*Additional description here*	*Additional description here*
Construction Cost	$0	$1,019,000	$458,000		
ROW Cost	$0	$538,000	$0		
Environmental Cost	$0	$0	$0		
Reimbursable Utility Cost	$0	$12,000	$9,000		
Design & Contingency Cost	$0	$218,000	$114,000		
Cost Adjustment (justification req'd)	0%	0%	0%		
Total Cost	$0	$1,787,000	$581,000		
Traffic Operations:					
Traffic Analysis Software Used	Synchro	Sidra	Synchro		
Analysis Period	AM Peak Hr / PM Peak Hr	AM Peak Hr / PM Peak Hr	AM Peak Hr / PM Peak Hr		
2025 Design Yr Build Intersection Delay	6.0 sec / 12.9 sec	4.9 sec / 6.3 sec	13.7 sec / 14.7 sec		
2025 Design Yr Build Intersection V/C	0.13 / 0.17	0.30 / 0.47	0.50 / 0.46		
Safety Analysis:					
Predefined CRF: PDO	0%	32%	39%		
Predefined CRF: Fatal/Inj	0%	71%	40%		
Predefined CRF Source:	CRF unavailable; provide user defined CRF below	FHWA Clearinghouse #s 236 / 237	FHWA Clearinghouse #s 7982 / 7984		
User Defined CRF: PDO					
User Defined CRF: Fatal/Inj					
User Defined CRF Source (write in if applicable):					
Environmental Impacts:[1]					
Historic District/Property	None	None	None		
Archaeology Resources	None	None	None		
Graveyard	None	None	None		
Stream	None	None	None		
Underground Tank/Hazmat	None	None	None		
Park Land	None	None	None		
EJ Community	None	None	None		
Wooded Area	None	None	None		
Wetland	None	None	None		

*Note: If environmental impact is significant (**RED**), provide justification impact won't jeopardize project delivery using "Env" worksheet*

[1] *Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report*

Stakeholder Posture:					
Local Community Support	Unknown	Unknown	Unknown		
GDOT Support	Unknown	Unknown	Unknown		
Final ICE Stage 2 Score:	**6.5**	**6.8**	**6.9**		
Rank of Control Type Alternatives:	**3**	**2**	**1**		
Final Intersection Control Selection:					

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):