Transportation Analysis - DRAFT

Aventon Park DRI #3734

Gwinnett County, Georgia

August 2022

Prepared for:

Aventon Companies

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EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of the proposed *Aventon Park* development located in Gwinnett County, Georgia. The approximate 57.76-acre site is located along the north side of Athens Highway (SR 10/US 78). 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 2026 (approximately 4 years).

Table 1: Proposed Land Use and Density	
Multifamily Residential	662 dwelling units
Office	7,100 SF
Retail	9,600 SF
Restaurant	5,400 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 included in the trip generation, as outlined in the Georgia Regional Transportation Authority (GRTA) Letter of Understanding (dated March 22, 2022).

Capacity analyses were performed for the study intersections under the Calibrated 2022 conditions, the Projected 2026 No-Build conditions, and the Projected 2026 Build conditions.

- Calibrated 2022 conditions represent current traffic volumes collected in April 2022 that were calibrated to account for COVID-19's impact on traffic.
- Projected 2026 No-Build conditions represent the Calibrated 2022 traffic volumes grown for four (4) years using a 1.5% per year growth rate.
- Projected 2026 Build conditions represent the Projected 2026 No-Build conditions plus the addition of the project trips that are anticipated to be generated by the *Aventon Park* development.

No-Build *(System Improvements)*

There are no recommended system improvements needed to serve background traffic (without the development) for the study network.

Build *(Site Access Improvements)*

The following should be considered to serve the Projected 2026 Build Conditions (needed to serve development traffic):

- Athens Highway (SR 10/US 78) at Midway Plaza Driveway/Driveway B (Intersection 3) – Full Movement
  - Construct Driveway B to operate as a full movement, side-street stop-controlled intersection
  - Construct one (1) ingress lane entering the site and one (1) egress lane exiting the site
  - Construct one (1) westbound right-turn lane along Athens Highway (SR 10/ US 78)
- Athens Highway (SR 10/US 78) at Driveway A (Intersection 6)
  - Construct Driveway A to operate as a full movement, side-street stop-controlled intersection
  - Construct one (1) ingress lane entering the site and one (1) egress lane exiting the site
  - Construct one (1) westbound right-turn lane along Athens Highway (SR 10/ US 78)

Athens Highway (SR 10/US 78) at Midway Plaza Driveway/ Driveway B (Intersection 3) LOS Summary

Overall LOS Standard: D Approach LOS Standard: D			Midway Plaza Driveway			Driveway B			Athens Highway (SR 10/US 78)			Athens Highway (SR 10/US 78)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2026 Build (TWSC)	AM	Overall LOS	B (14.3)											
		Approach LOS	F (55.2)			F (482.1)			A (0.6)			A (0.1)		
		Storage												
		50th Queue												
		95th Queue		40			230		10			3		
	PM	Overall LOS	A (2.5)											
		Approach LOS	E (46.2)			E (47.0)			A (0.4)			A (0.3)		
		Storage												
		50th Queue												
		95th Queue		80			40		10			5		

Athens Highway (SR 10/US 78) at Driveway A (Intersection 6) LOS Summary

Overall LOS Standard: D Approach LOS Standard: D			-			Driveway A			Athens Highway (SR 10/US 78)			Athens Highway (SR 10/US 78)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2026 BUILD (TWSC)	AM	Overall LOS	A (9.8)											
		Approach LOS				F (204.9)			(1.3)			(0.0)		
		Storage												
		50th Queue												
		95th Queue				233							23	
	PM	Overall LOS	A (1.0)											
		Approach LOS				D (26.7)			(0.8)			(0.0)		
		Storage												
		50th Queue												
		95th Queue				33							20	

1.0 PROJECT DESCRIPTION

1.1 Introduction

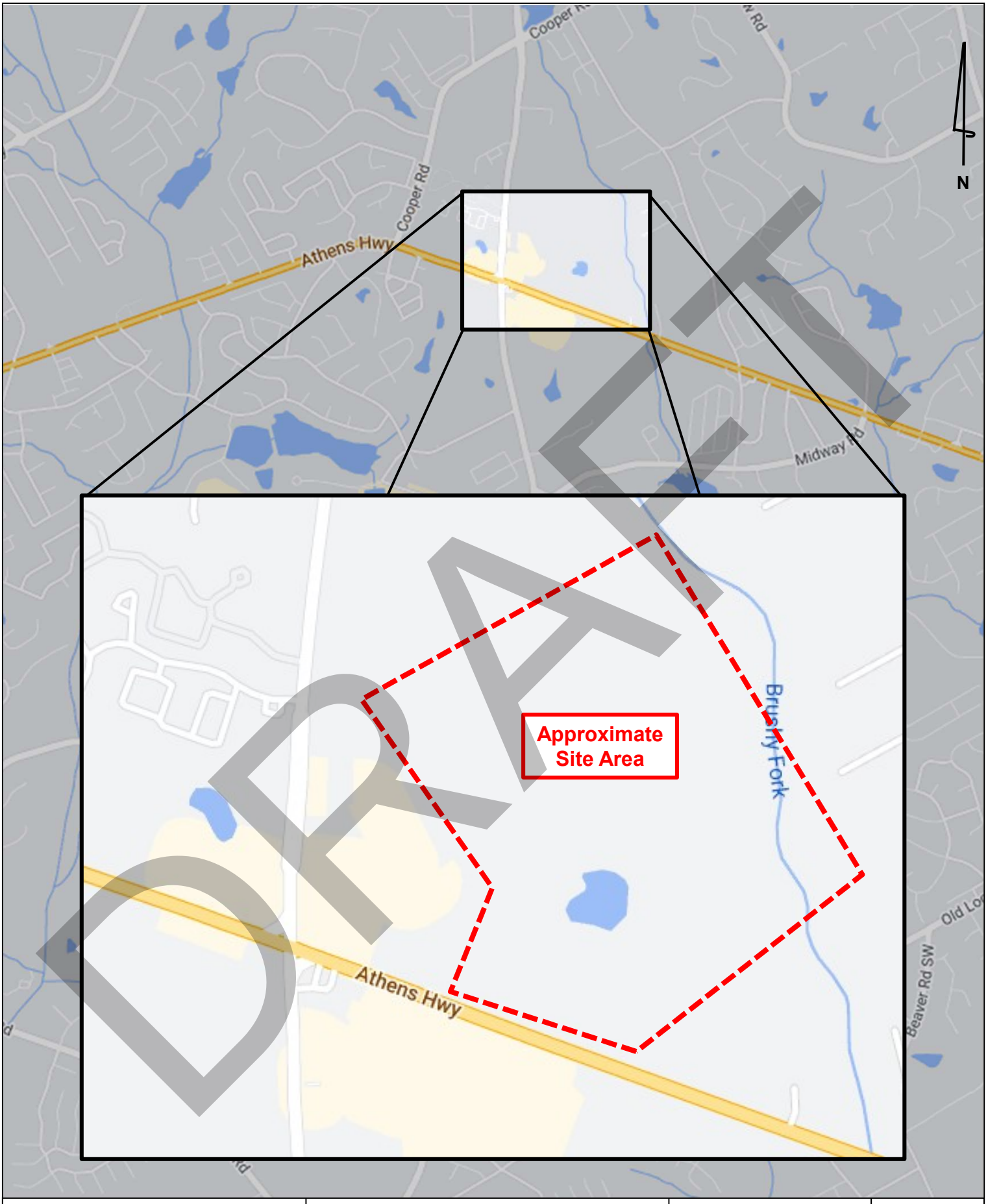
This report presents the analysis of the anticipated traffic impacts of the proposed *Aventon Park* development located in Gwinnett County, Georgia. The approximate 57.76-acre site is located along the north side of Athens Highway (SR 10/US 78). The project site is currently zoned R-100 (Single-Family Residence District). Permit #RZM2022-0035: RZC2022-00029) was filed on May 31, 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 2026 (approximately 4 years).

Table 2: Proposed Land Use and Density	
Land Use	**Proposed**
Multifamily Residential	662 dwelling units
Office	7,100 SF
Retail	9,600 SF
Restaurant	5,400 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 (housing development) or exceeding 500,000 GSF (mixed-use development in a Maturing Developing Suburb (per UGPM). The DRI was formally triggered with the filing of the Initial DRI Information (Form 1) on June 15, 2022 by the City of Atlanta. 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 June 20, 2022.



Kimley»Horn	*Aventon Park DRI 3734* *Transportation Analysis*	Site Location Map	Figure 1
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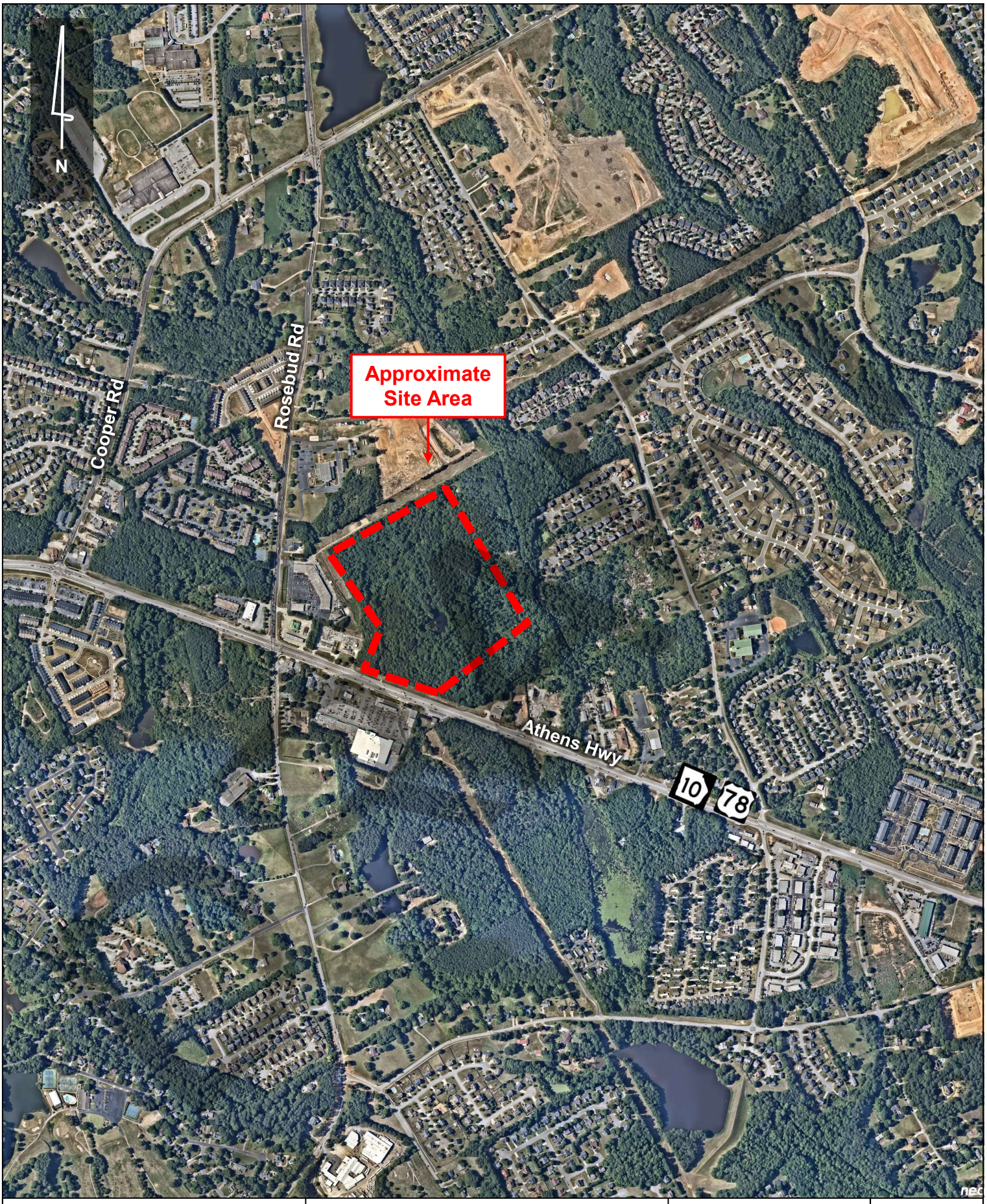

Kimley»Horn	*Aventon Park DRI 3734* *Transportation Analysis*	Site Aerial	Figure 2
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1.2 Site Access

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

1. **Site Driveway A** – a proposed full-movement driveway located along Athens Highway (SR 10/US 78), approximately 850 feet east of Rosebud Road that is proposed to operate under side-street stop control.
2. **Site Driveway B** – a proposed full-movement driveway located along Athens Highway (SR 10/US 78), approximately 1,550 feet east of Rosebud Road that is proposed to operate under side-street stop control.

1.3 Internal Circulation Analysis

The proposed site is to be accessed via both Site Driveway A and Site Driveway B. Internal, private roadways throughout the site provide access to all residential and commercial 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	Minimum	Maximum	Proposed
Residential	Car	993 (1.5 spaces per unit)	1,986 (3.0 spaces per unit)	1,115
Restaurant	Car	36 (1 space per 150 SF)	72 (1 space per 75 SF)	36
Office/Retail	Car	33 (1 space per 150 SF)	84 (1 space per 75 SF)	78
Total	Car	Min: 1,062	Max: 2,142	1,229

Additional parking details are provided on the proposed site plan in Appendix A. In addition to standard vehicle parking, electric vehicle charging stations will be provided in accordance with Gwinnett County Standards and will be coordinated with the County during the permitting process.

1.5 Alternative Transportation Facilities

Pedestrian facilities are currently provided throughout the study network, though sidewalk gaps do exist. Bicycle and transit facilities are currently not provided nearby. Internal pedestrian 5-foot sidewalk facilities are proposed to be included throughout the site.

1.6 Enhanced Focus Area for Dense Urban Environments

Per Section 3.2.4.2 of the GRTA *Development of Regional Impact Review Procedures*, the *Aventon Park* development does not qualify for this enhanced focus area review.

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 five (5) off-site intersections described in **Table 4** and shown in **Figure 3**.

Table 4: Intersection Control Summary

Intersection	Jurisdiction	Control
1. Athens Highway (SR 10/US 78) at Cooper Road	Gwinnett County/GDOT	Signalized
2. Athens Highway (SR 10/US 78) at Rosebud Road	Gwinnett County/GDOT	Signalized
3. Athens Highway (SR 10/US 78) at Midway Plaza Entrance	Gwinnett County/GDOT	Unsignalized (TWSC)
4. Athens Highway (SR 10/US 78) at Langley Road	Gwinnett County/GDOT	Unsignalized (TWSC)
5. Rosebud Road at Cooper Road	Gwinnett County	Signalized

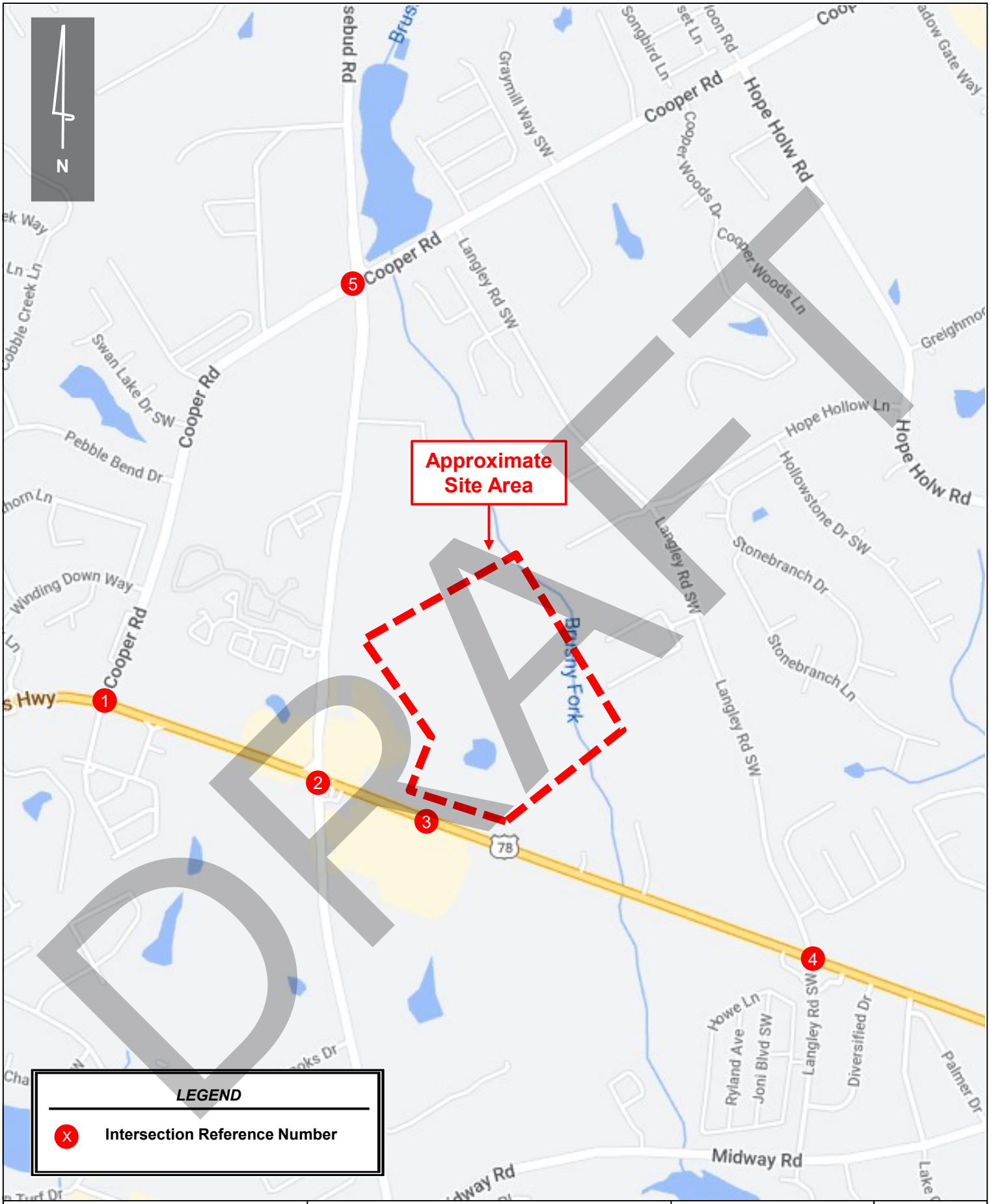
2.2 Existing Roadway Facilities

Roadway classification descriptions and estimated Annual Average Daily Traffic (AADT) for roadway segments within the study network are provided in **Table 5** (bolded roadways are adjacent to the site).

Table 5: Roadway Classifications

Roadway	Lanes	Posted Speed Limit	AADT (GDOT, 2019)	GDOT Functional Classification
Athens Hwy (SR 10/US 78)	**4**	**55 MPH**	**38,800**	**Principal Arterial**
Cooper Road	2	45 MPH	-	Local
Rosebud Road	2	45 MPH	15,700	Minor Arterial
Langley Road	2	30 /40 MPH*	-	Local

*Langley Road is 30 MPH south of Athens Hwy (SR 10/US 78) and 40 MPH north of Athens Hwy (SR 10/US 78).



Kimley»Horn	*Aventon Park DRI 3734 Transportation Analysis*	**Study Intersections**	**Figure 3**
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2.3 Traffic Data Collection and Calibration

Traffic counts were collected at all five (5) existing study intersections on Thursday, April 14, 2022. The collected counts were calibrated using adjustment factors to determine the potential impacts of COVID-19 to typical traffic volumes and patterns.

The peak hour adjustment factors were determined by comparing the AM and PM peak volumes at a newly collected average daily traffic (ADT) count to the AM and PM peak ADT volumes previously collected by GDOT in the same location at Station 135-0061. A comparison was conducted for vehicular volumes along Athens Highway (SR 10/US 78) east of Midway Road.

As a result of the volume comparison between the newly collected ADT and the GDOT Historical ADT, it was determined that an adjustment factor of 1.11 should be used for the existing AM turning movement counts, and an adjustment factor of 1.00 should be used for the existing PM turning movement counts. The methodologies used in this analysis for traffic count calibration were approved by GRTA.

The methodologies used in this analysis for traffic count calibration were approved by GRTA and ARC and included in the methodology meeting packet.

Traffic count peak hours for all the study intersections are shown in **Table 6**. The collected peak hour turning movement traffic counts are available upon request.

Table 6: Traffic Count Summary

Intersection	Count Date	AM Peak Hour	PM Peak Hour
1. Athens Highway (SR 10) at Cooper Road	4/2022	7:30 – 8:30 AM	5:00 – 6:00 PM
2. Athens Highway (SR 10) at Rosebud Road	4/2022	7:15 – 8:15 AM	5:00 – 6:00 PM
3. Athens Highway (SR 10) at Midway Plaza Entrance	4/2022	7:15 – 8:15 AM	5:00 – 6:00 PM
4. Athens Highway (SR 10) at Langley Road	4/2022	7:15 – 8:15 AM	5:00 – 6:00 PM
5. Rosebud Road at Cooper Road	4/2022	7:15 – 8:15 AM	5:00 – 6:00 PM

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 *Aventon Park* development. Background traffic can include a base growth rate, which is based on historical count data and population growth data as well as trips anticipated from nearby or adjacent other projects.

Based on methodology outlined in the GRTA Letter of Understanding (LOU), a 1.5% per year background traffic growth rate from 2022 to 2026 (4 years) was used for all roadways.

The Projected 2026 No-Build conditions represent the Calibrated 2022 traffic volumes grown for four (4) years at 1.5% per year throughout the study network.

The Projected 2026 Build conditions represent the project trips generated by the *Aventon Park* development (discussed in Section 3.0 and 4.0) added to the Projected 2026 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. No programmed or planned projects were identified in the methodology meeting with GRTA, ARC, and other local stakeholders.

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*. Existing traffic signal phasing and timing data were retrieved for available intersections.

LOS for signalized intersections and all-way stop controlled intersections are reported for the overall intersection. One or more movements at an intersection may experience a low LOS while the overall intersection 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, 11th Edition*, using equations where available. Reductions to gross trips including mixed-use reductions and alternative transportation mode reductions are 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. Mixed-use reductions were taken in this analysis per the LOU.

Alternative modes reductions are taken when a site can be accessed by modes other than vehicles (walking, bicycling, transit, etc.). Alternative modes reductions were not 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. Pass-by trips were taken for this analysis per the LOU.

Table 7 summarizes the gross trip generation, reductions, net trip generation, and driveway volumes for the proposed *Aventon Park* development.

Table 7: Trip Generation

Land Use	Density	Daily Traffic			AM Peak Hour		PM Peak Hour	
		Total	Enter	Exit	Enter	Exit	Enter	Exit
Proposed Project Trips								
221 – Multi-family Housing (Mid-Rise)	662 units	3,112	1,556	1,556	64	216	158	101
712 – Small Office Building	7,100 units	102	51	51	10	2	5	10
822 – Strip Retail Plaza	9,600 SF	636	318	318	17	11	38	38
932 – High-Turnover (Sit-Down) Restaurant	5,400 SF	580	290	290	28	24	30	19
Gross Project Trips		**4,430**	**2,215**	**2,215**	**119**	**253**	**231**	**168**
Mixed-Use Reductions		*-286*	*-144*	*-142*	*-15*	*-15*	*-45*	*-45*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Pass-By Reductions		*-412*	*-207*	*-205*	*0*	*0*	*-12*	*-12*
New Trips		**3,732**	**1,864**	**1,868**	**104**	**238**	**174**	**111**

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 assignment of the site project trips throughout the study roadway network is shown in **Figure 4.** 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 5**.

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 Calibrated 2022 conditions, Projected 2026 No-Build conditions, and Projected 2026 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 in Error! Reference source not found.**Figure 6** for Calibrated 2022 conditions, **Figure 7** for Projected 2026 No-Build conditions, and **Figure 8** for Projected 2026 Build conditions.

Sections 5.1 – 5.6 provide the results of the capacity analyses are presented for each study intersection and include projected LOS, delay, and queue lengths.

N

Cooper Rd

⑤ 20%

(20%)

PROJECT SITE

Dwy B

Dwy A

① (50%) 50%

Cooper Spring Rd

② 20% (20%) (50%) (5%) 50% 5%

Rosebud Rd

③ (25%) (15%) STOP 15% (50%) 25% 50%

Midway Plaza Dwy

⑥ (50%) (10%) STOP 10% 15% 50% (15%)

④ STOP (25%) 25% STOP

Langley Rd

Athens Hwy (SR 10/US 78)

LEGEND

- Existing Traffic Signal
- Existing Stop Control
- Proposed Stop Control
- Turning Movement
- Proposed Driveway
- XX% Percent Traffic Entering
- (XX%) Percent Traffic Exiting
- (X) Intersection Reference Number

Project Trip Distribution & Assignment

Aventon Park DRI 3734 Transportation Analysis

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Figure 4

N

Cooper Rd

⑤ 21 (34)

(22) 48

PROJECT SITE

Dwy B

Dwy A

① ② ③ ⑥ ④

120 (56)

(88) 53

21 (34)

11 (22)
120 (56)
48 (6)

(88) 53

(9) 5

59 (31)
35 (20)

STOP

15 (29)
120 (56)

(46) 26
(88) 53

STOP

120 (57)
24 (17)

10 (19)
15 (27)

(94) 53
(17) 35

STOP

26 (43)

(29) 59

STOP

Athens Hwy
(SR 10/US 78)

Cooper Spring Rd

Rosebud Rd

Midway Plaza Dwy

Langley Rd

LEGEND

- Existing Traffic Signal
- Existing Stop Control
- Proposed Stop Control
- Turning Movement
- Proposed Driveway
- XX AM Peak Hour Project Trips
- (XX) PM Peak Hour Project Trips
- (X) Intersection Reference Number

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5.1 Athens Highway (SR 10/US 78) at Cooper Road/Cooper Springs Road (Intersection 1)

Overall LOS Standard: D Approach LOS Standard: D			Cooper Springs Road			Cooper Road			Athens Highway (SR10/US 78)			Athens Highway (SR10/US 78)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2022 CALIBRATED (SIGNAL)	AM	Overall LOS	A (8.3)											
		Approach LOS	D (49.6)			D (53.0)			A (8.5)			A (1.0)		
		Storage				140			100		250	115		115
		50th Queue	17	13		126	146		138	132	0	2	133	1
		95th Queue	49	41		205	279		270	162	1	3	169	0
	PM	Overall LOS	C (28.0)											
		Approach LOS	D (51.8)			D (52.4)			C (27.0)			C (24.7)		
		Storage				140			100		250	115		115
		50th Queue	35	45		56	59		427	485	2	14	308	1
		95th Queue	77	96		102	169		653	556	17	29	356	18
2026 NO-BUILD (SIGNAL)	AM	Overall LOS	A (8.5)											
		Approach LOS	D (49.8)			D (54.1)			A (9.1)			A (0.9)		
		Storage				140			100		250	115		115
		50th Queue	18	14		135	174		151	142	0	3	170	2
		95th Queue	54	42		216	344		297	174	1	3	170	0
	PM	Overall LOS	C (33.1)											
		Approach LOS	D (52.1)			D (52.8)			C (33.8)			C (28.0)		
		Storage				140			100		250	115		115
		50th Queue	37	48		60	80		515	542	3	16	328	1
		95th Queue	85	101		109	199		746	620	18	31	402	22
2026 BUILD (SIGNAL)	AM	Overall LOS	A (8.5)											
		Approach LOS	D (49.8)			D (54.1)			B (10.1)			A (0.8)		
		Storage				140			100		250	115		115
		50th Queue	18	14		135	176		151	155	0	3	196	0
		95th Queue	54	42		216	347		297	188	1	2	164	1
	PM	Overall LOS	D (35.3)											
		Approach LOS	D (52.1)			D (52.8)			D (36.8)			C (29.4)		
		Storage				140			100		250	115		115
		50th Queue	38	52		60	80		540	604	4	14	313	0
		95th Queue	86	106		109	199		770	690	19	28	423	24

The signalized intersection of Athens Highway (SR 10/ US 78) at Cooper Road/Cooper Springs Road (Intersection 1) is projected to operate at an acceptable overall LOS under the Calibrated 2022, No-Build 2025, and Build 2025 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

5.2 Athens Highway (SR 10/US 78) at Rosebud Road (Intersection 2)

Overall LOS Standard: D Approach LOS Standard: D			Rosebud Road			Rosebud Road			Athens Highway (SR 10/US 78)			Athens Highway (SR 10/US 78)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2022 CALIBRATED (SIGNAL)	AM	Overall LOS	D (39.4)											
		Approach LOS	D (53.0)			D (49.2)			B (13.3)			D (43.1)		
		Storage	300		425	240		320			75	280		300
		50th Queue	126	426	0	79	307	0	11	341		50	737	25
		95th Queue	189	616	46	144	471	0	30	410		85	916	74
	PM	Overall LOS	C (28.0)											
		Approach LOS	E (69.8)			E (68.1)			A (6.3)			C (20.1)		
		Storage	300		425	240		320			75	280		300
		50th Queue	104	352	0	126	376	0	33	844		91	343	0
		95th Queue	161	519	53	190	588	0	55	963		231	402	35
2026 NO-BUILD (SIGNAL)	AM	Overall LOS	D (46.6)											
		Approach LOS	E (58.3)			D (53.5)			B (14.6)			D (54.5)		
		Storage	300		425	240		320			75	280		300
		50th Queue	134	461	0	84	334	0	12	368		54	848	32
		95th Queue	200	677	48	200	516	0	33	441		90	1,016	84
	PM	Overall LOS	C (31.2)											
		Approach LOS	E (76.0)			E (73.6)			A (9.6)			C (21.2)		
		Storage	300		425	240		320			75	280		300
		50th Queue	110	380	0	134	407	0	37	940		100	374	0
		95th Queue	175	571	54	243	642	0	55	1070		253	438	36
2026 BUILD (SIGNAL)	AM	Overall LOS	D (51.2)											
		Approach LOS	E (72.2)			E (75.1)			B (11.3)			D (54.9)		
		Storage	300		425	240		320			75	280		300
		50th Queue	141	461	0	102	334	0	12	379		56	954	38
		95th Queue	308	677	49	258	516	0	30	452		92	1091	95
	PM	Overall LOS	C (34.3)											
		Approach LOS	E (75.5)			E (75.6)			B (15.7)			C (23.1)		
		Storage	300		425	240		320			75	280		300
		50th Queue	110	380	0	164	407	0	36	1029		113	402	0
		95th Queue	174	571	56	345	642	0	49	1175		269	470	37

The intersection of Athens Highway (SR10/US 78) at Rosebud Road (Intersection 2) is projected to operate at an acceptable overall LOS under the Calibrated 2022, 2025 No-Build, and 2025 Build conditions. The northbound and southbound approaches are projected to operate at LOS D and LOS E during the AM and PM peak hours, respectively, under the Calibrated 2022 conditions. Additionally, the northbound approach is projected to continue operating at LOS E during the AM and PM peak hours under all future scenarios. Similarly, the southbound approach is projected to operate at LOS E during the PM peak hour under the 2025 No-Build conditions and during the AM and PM peak hours under the 2025 Build conditions.

It should be noted that per GRTA's DRI guidelines, an improvement should be considered if an approach operates at a failing LOS, even if the overall intersection operates acceptably. The intersection operates at an acceptable overall LOS, and existing signal timings and cycle lengths prioritize vehicular progression on the mainline (Athens Highway / SR 10 / US 78) at the expense of side street operations. In order for all approaches of the intersection of Athens Highway (SR 10/US 78) at Rosebud Road to operate at LOS D or better, Rosebud Road must be widened to provide an additional travel lane. Although the northbound and southbound approaches are projected to operate at LOS E, no feasible improvements exist within the scope of this project. No improvements are recommended to be conditioned.

5.3 Athens Highway (SR 10/US 78) at Midway Plaza Driveway/Driveway B (Intersection 3)

Overall LOS Standard: D Approach LOS Standard: D			Midway Plaza Driveway			Driveway B			Athens Highway (SR 10/US 78)			Athens Highway (SR 10/US 78)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2022 CALIBRATED (TWSC)	AM	Overall LOS	A (0.3)											
		Approach LOS	C (20.8)						A (0.0)			A (0.1)		
		Storage									200			
		50th Queue												
		95th Queue		13								3		
	PM	Overall LOS	A (1.0)											
		Approach LOS	C (23.5)						A (0.0)			A (0.3)		
		Storage									200			
		50th Queue												
		95th Queue		40								5		
2026 NO-BUILD (TWSC)	AM	Overall LOS	A (0.4)											
		Approach LOS	C (22.7)						A (0.0)			A (0.1)		
		Storage									200			
		50th Queue												
		95th Queue		15								3		
	PM	Overall LOS	A (1.1)											
		Approach LOS	D (27.5)						A (0.0)			A (0.3)		
		Storage									200			
		50th Queue												
		95th Queue		50								5		
2026 BUILD (TWSC)	AM	Overall LOS	B (14.3)											
		Approach LOS	F (55.2)			F (482.1)			A (0.6)			A (0.1)		
		Storage									200			
		50th Queue												
		95th Queue		40			230		10			3		
	PM	Overall LOS	A (2.5)											
		Approach LOS	E (46.2)			E (47.0)			A (0.4)			A (0.3)		
		Storage									200			
		50th Queue												
		95th Queue		80			40		10			5		

The intersection of Athens Highway (SR 10/US 78) at Midway Plaza Driveway/Driveway B (Intersection 3) is projected to operate at an acceptable overall LOS under the Calibrated 2022, No-Build 2026, and Build 2026 conditions. The northbound and southbound approaches are projected to operate at LOS F and LOS E during the AM and PM peak hour, respectively. It should be noted that it is not uncommon to have long delays for minor street stop-controlled approaches when there is heavy major street volume.

The following should be considered to serve the Projected 2026 Build Conditions (needed to serve the development traffic):

- Athens Highway (SR 10/US 78) at Midway Plaza Driveway/Driveway B (Intersection 3) – Full Movement
  - Construct Driveway B to operate as a full movement, side-street stop-controlled intersection
  - Construct one (1) ingress lane entering the site and one (1) egress lane exiting the site
  - Construct one (1) westbound right-turn lane along Athens Highway (SR 10/ US 78)

The recommended build improvements are shown in **Figure 8.**

5.4 *Athens Highway (SR 10/US 78) at Langley Road (Intersection 4)*

Overall LOS Standard: D Approach LOS Standard: D			Langley Road			Langley Road			Athens Highway (SR 10/US 78)			Athens Highway (SR 10/US 78)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2022 CALIBRATED (TWSC)	AM	Overall LOS	A (7.2)											
		Approach LOS	F (59.1)			F (126.4)			(0.6)			(0.1)		
		Storage									160			
		50th Queue												
		95th Queue		58			170		8			3		
	PM	Overall LOS	A (7.8)											
		Approach LOS	F (86.9)			F (139.4)			(0.5)			(0.4)		
		Storage									160			
		50th Queue												
		95th Queue		65			185		13			8		
2026 NO-BUILD (TWSC)	AM	Overall LOS	B (11.2)											
		Approach LOS	F (91.3)			F (200.7)			(0.6)			(0.1)		
		Storage									160			
		50th Queue												
		95th Queue		80			218		10			3		
	PM	Overall LOS	B (11.8)											
		Approach LOS	F (127.9)			F (215.8)			(0.6)			(0.4)		
		Storage									160			
		50th Queue												
		95th Queue		85			235		13			8		
2026 BUILD (TWSC)	AM	Overall LOS	B (12.0)											
		Approach LOS	F (102.9)			F (221.6)			(0.6)			(0.1)		
		Storage									160			
		50th Queue												
		95th Queue		88			228		10			3		
	PM	Overall LOS	B (13.5)											
		Approach LOS	F (145.8)			F (256.7)			(0.6)			(0.4)		
		Storage									160			
		50th Queue												
		95th Queue		93		253			15			8		

The intersection of Athens Highway (SR 10/US 78) at Langley Road (Intersection 4) is projected to operate at an acceptable overall LOS under the Calibrated 2022, No-Build 2026, and Build 2026 conditions during the AM and PM peak hours. The northbound and southbound approaches are projected to operate at LOS F under the Calibrated 2022, No-Build 2026, and Build 2026 conditions during the AM and PM peak hours. It should be noted that it is not uncommon to have long delays for minor street stop-controlled approaches when there is heavy major street volume. No improvements are recommended to be conditioned.

5.5 Cooper Road at Rosebud Road (Intersection 5)

Overall LOS Standard: D Approach LOS Standard: D			Rosebud Road Northbound			Rosebud Road Southbound			Cooper Road Eastbound			Cooper Road Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2022 CALIBRATED (Signal)	AM	Overall LOS	D (40.3)											
		Approach LOS	D (43.0)			C (32.4)			D (37.4)			D (45.5)		
		Storage	200		600	575		600	600			600		
		50th Queue	51	628	0	55	323	0	104	206		74	643	
		95th Queue	88	806	31	101	432	49	249	289		117	874	
	PM	Overall LOS	C (32.8)											
		Approach LOS	D (37.4)			C (27.7)			D (36.1)			C (30.3)		
		Storage	200		600	575		600	600			600		
		50th Queue	13	355	16	72	302	8	68	378		86	354	
		95th Queue	34	567	78	133	473	59	120	577		147	543	
2026 NO-BUILD (Signal)	AM	Overall LOS	D (45.1)											
		Approach LOS	D (47.6)			D (35.1)			D (45.0)			D (50.2)		
		Storage	200		600	575		600	600			600		
		50th Queue	54	686	0	58	348	0	148	221		80	704	
		95th Queue	92	921	37	141	462	49	317	307		124	964	
	PM	Overall LOS	D (35.9)											
		Approach LOS	D (41.4)			C (30.0)			D (40.0)			C (32.5)		
		Storage	200		600	575		600	600			600		
		50th Queue	14	419	25	84	355	15	76	431		97	402	
		95th Queue	36	673	92	145	527	68	127	685		157	601	
2026 BUILD (Signal)	AM	Overall LOS	D (48.9)											
		Approach LOS	D (51.8)			D (36.4)			D (51.5)			D (53.8)		
		Storage	200		600	575		600	600			600		
		50th Queue	54	774	0	63	373	0	156	222		80	704	
		95th Queue	92	1048	37	168	494	49	325	309		124	964	
	PM	Overall LOS	D (37.2)											
		Approach LOS	D (42.7)			C (31.4)			D (41.7)			C (33.6)		
		Storage	200		600	575		600	600			600		
		50th Queue	14	450	30	85	397	21	76	431		97	402	
		95th Queue	36	748	100	145	584	75	131	705		162	613	

The intersection of Cooper Road at Rosebud Road (Intersection 5) is projected to operate at an acceptable overall LOS under the Calibrated 2022, No-Build 2025, and Build 2025 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

5.6 Athens Highway (SR 10/US 78) at Driveway A (Intersection 6)

Overall LOS Standard: D Approach LOS Standard: D			-			Driveway A			Athens Highway (SR 10/US 78)			Athens Highway (SR 10/US 78)		
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
2026 BUILD (TWSC)	AM	Overall LOS	A (9.8)											
		Approach LOS				F (204.9)			(1.3)			(0.0)		
		Storage												
		50th Queue												
		95th Queue				233							23	
	PM	Overall LOS	A (1.0)											
		Approach LOS				D (26.7)			(0.8)			(0.0)		
		Storage												
		50th Queue												
		95th Queue				33							20	

The intersection of Athens Highway (SR 10/US 78) at Driveway A (Intersection 6) is projected to operate at an acceptable overall LOS under the Build 2025 scenario during the AM and PM peak hours. The southbound approach of the intersection is projected to operate at LOS F during the AM peak hour. It should be noted that it is not uncommon to have long delays for minor street stop-controlled approaches when there is heavy major street volume.

The following should be considered to serve the Projected 2026 Build Conditions (needed to serve the development traffic):

- Athens Highway (SR 10/US 78) at Driveway A (Intersection 6)
    - Construct Driveway A to operate as a full movement, side-street stop-controlled intersection
    - Construct one (1) ingress lane entering the site and one (1) egress lane exiting the site
    - Construct one (1) westbound right-turn lane along Athens Highway (SR 10/ US 78)

The recommended build improvements are shown in **Figure 8.**

6.0 INTERSECTION CONTROL EVALUATION (ICE)

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

- Athens Highway (SR 10/US 78) at Midway Plaza Driveway/Driveway B (Intersection 3)
- Athens Highway (SR 10/US 78) at Driveway A (Intersection 6)

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, which uses 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 8**.

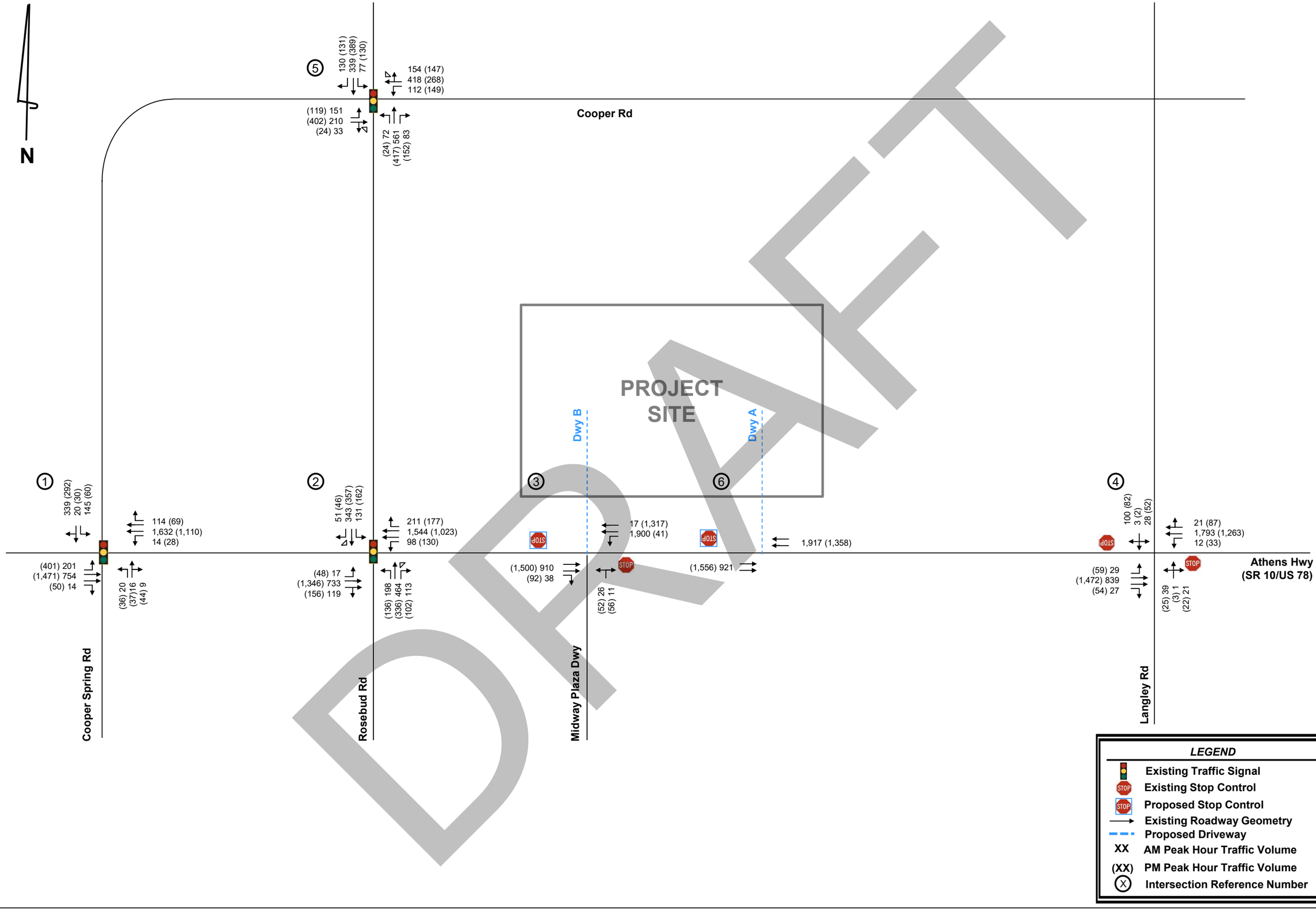
Table 8: ICE Alternative Selection Decision

Athens Highway (SR10/US 78) at Midway Plaza Driveway/Driveway B – Intersection 3			
ICE Stage 2	**Conventional (Minor Stop)**	**RCUT (Stop Control)**	**RIRO w/Down Stream U-Turn**
Score	3.2	4.5	3.7
Rank	3	1	2
Athens Highway (SR10/US 78) at Driveway A – Intersection 6			
ICE Stage 2	**Conventional (Minor Stop)**	**RCUT (Stop Control)**	**RIRO w/Down Stream U-Turn**
Score	3.8	2.6	1.7
Rank	1	2	3

For Athens Highway (SR 10/US 78) at Midway Plaza Driveway/Driveway B (Intersection 3), a waiver is requested to select an alternative that did not rank #1 in ICE Stage 2. A conventional (minor stop) intersection is requested at the proposed site driveway to maintain existing full movement access as well as to match the overall characteristics of the corridor to avoid negatively impacting driver expectancy. A center two-way left-turn lane currently existing along Athens Hwy and no median break is required.

For Athens Highway (SR 10/US 78) at Driveway A (Intersection 6), the conventional (minor stop) ranks #1 and is requested.

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

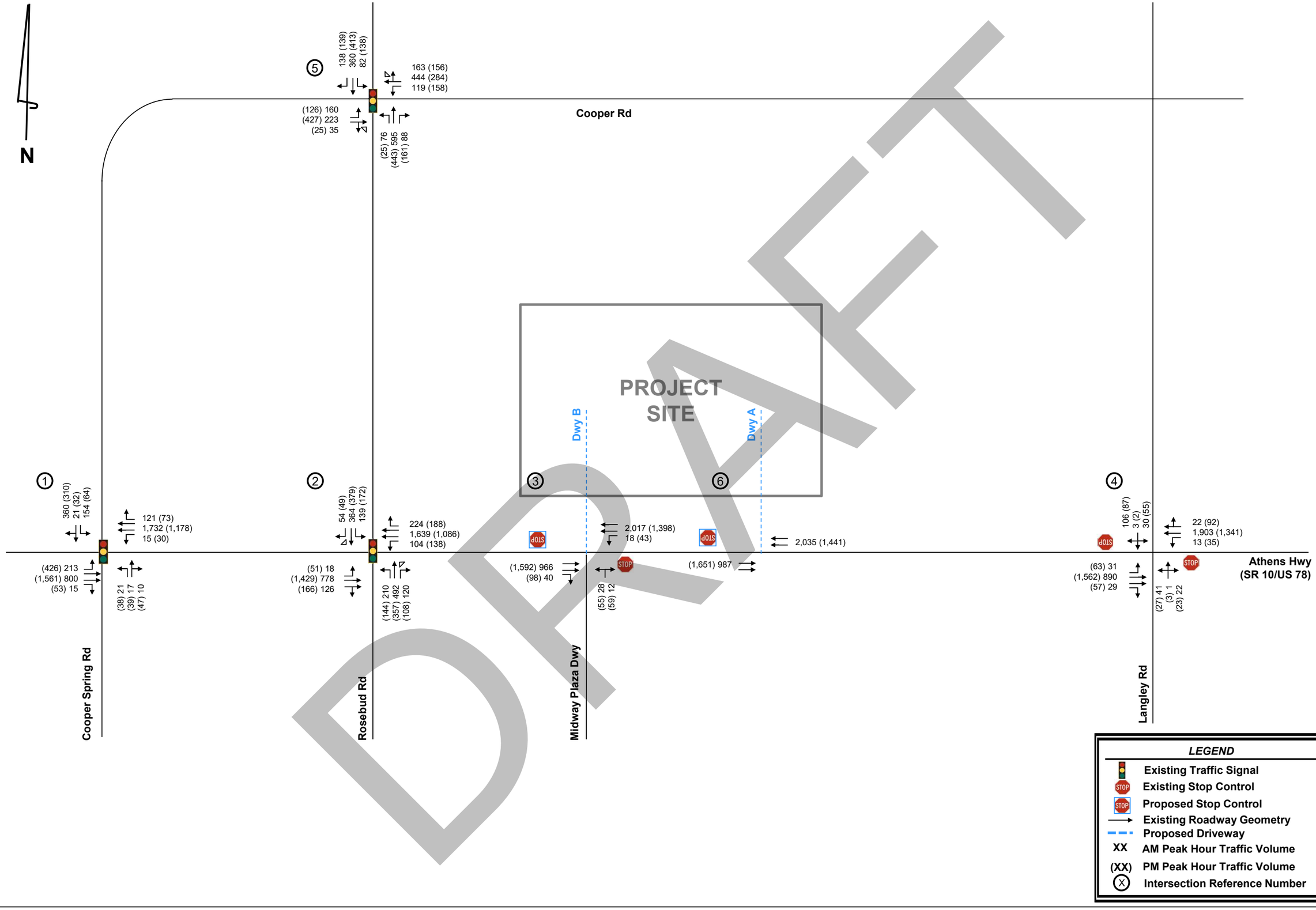


Calibrated 2022
Traffic Conditions

Aventon Park DRI 3734
Transportation Analysis

Kimley»Horn

Figure 6

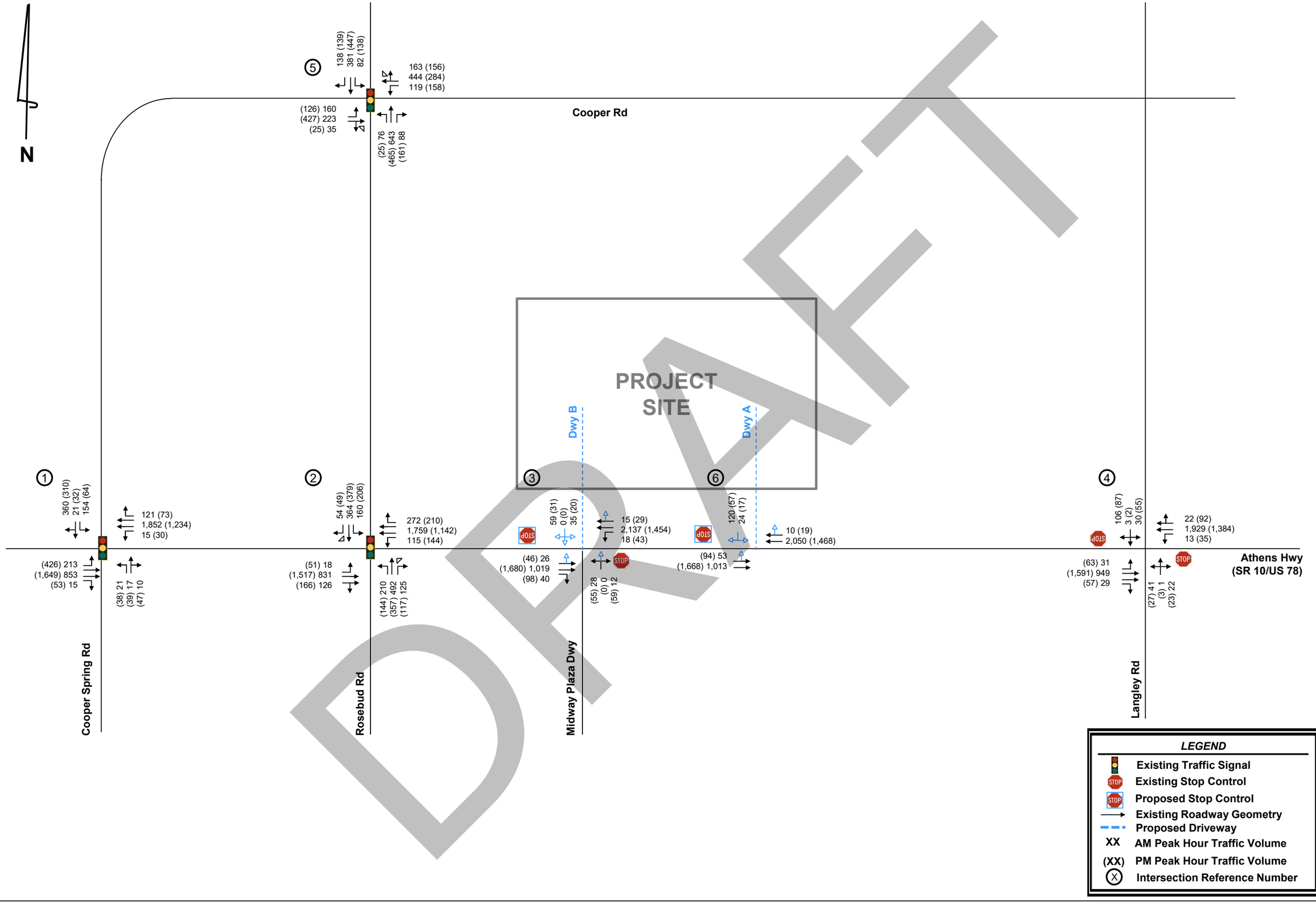


No-Build 2026
Traffic Conditions

Aventon Park DRI 3734
Transportation Analysis

Kimley»Horn

Figure 7



Build 2026
Traffic Conditions

Aventon Park DRI 3734
Transportation Analysis

Kimley»Horn

Figure 8

APPENDIX A

Proposed Site Plan

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* A LAND DISTURBING PERMIT FOR PHASE 2 WILL BE ISSUED A MINIMUM OF 12 MONTHS AFTER THE LAND DISTURBING PERMIT FOR PHASE I
* IF THE ALTERNATE PARK LAYOUT IS APPROVED, IT SHALL BE BUILT CONCURRENT WITH THE PHASE I PROJECT USING PRIVATE FUNDS AND SHALL BE PRIVATELY MAINTAINED. THIS PARK SHALL BE OPEN FOR PUBLIC ACCESS DURING DAYLIGHT HOURS.

OPEN SPACE SUMMARY:
TOTAL PROJECT AREA: 57.76 AC
IMPERVIOUS COVERAGE: ±38%
PROPOSED OPEN SPACE/RESERVED AREA: ±26.97 AC

NOW OR FORMERLY ROSEBUD 78 LAND, LLC. D.B. 59236, PG. 448 PARCEL ID: R5124 366 ZONED: RTH

NOW OR FORMERLY CLOWER J. & MARGARET JEFFREY D.B. 20796, PG. 242 PARCEL ID: R5124 034 ZONED: R100

NOW OR FORMERLY GRACEPOINTE NAZARENE CHURCH D.B. 25073, PG. 266 PARCEL ID: R5124 032 ZONED: R100

NOW OR FORMERLY LANGLEY FARMS HOMEOWNERS ASSOCIATION, INC. D.B. 47009, PG. 167 PARCEL ID: R5124 234 ZONED: R100CSO

NOW OR FORMERLY SAFEWAY PLAZA, INC. D.B. 38579, PG. 174 PARCEL ID: R5101 179 ZONED: C2

NOW OR FORMERLY FELTON PROPERTIES, LLC. D.B. 59518, PG. 503 PARCEL ID: R5124 013 ZONED: RA200

NOW OR FORMERLY FELTON PROPERTIES, LLC. D.B. 59518, PG. 503 PARCEL ID: R5124 007 ZONED: M1

NOW OR FORMERLY WLC PROPERTY INVESTMENTS, LLC. D.B. 53517, PG. 221 PARCEL ID: R5124 024 ZONED: C2

NOW OR FORMERLY NEJRABI SAFOORA D.B. 54988, PG. 288 PARCEL ID: R5124 031 ZONED: C2

NOW OR FORMERLY ANTHONY W. BECK PARCEL ID: R5124 040 ZONED: C2

NOW OR FORMERLY 2970 ROSEBUD PROPERTIES, LLC. D.B. 56168, PG. 10 PARCEL ID: R5100 115 ZONED: C2

NOW OR FORMERLY GEORGIA TRANSMISSION CORP. D.B. 13924, PG. 13 PARCEL ID: R5100 020 ZONED: R100

PHASE 2:
GROSS AREA: 23.12 AC
NET AREA: 22.63 AC
13 UNITS/AC: 294 UNITS
PROPOSED ZONING: RM-13

PHASE I:
GROSS AREA: 29.76 AC
NET AREA: 28.31 AC
13 UNITS/AC: 368 UNITS
PROPOSED ZONING: RM-13

COMMERCIAL AREA: 3.34 AC
PROPOSED ZONING: C-2
FAR: 0.15
NOTE: COMMERCIAL LAYOUT IS CONCEPTUAL. FINAL PROGRAMMING SUBJECT TO CHANGE

PROPOSED POND 3
PROPOSED POND 2
PROPOSED POND 1
WETLANDS/PRESERVED AREA
TRASH COMPACTOR
AMENITY AREA
PHASE 2 CLUBHOUSE/LEASING OFFICE
PHASE I CLUBHOUSE/LEASING OFFICE
PROPOSED FUTURE PROPERTY LINE
LIMIT OF ROAD CONSTRUCTION FOR PHASE I PROJECT
EXISTING SIGNALIZED INTERSECTION AT ATHENS HIGHWAY (HWY 78) AND ROSEBUD ROAD 811' TO THE WEST FROM THE CENTERLINE OF "DRIVEWAY A"
PROPOSED DECEL LANE
ATHENS HIGHWAY A.K.A. U.S. HIGHWAY 78 VARIABLE PUBLIC RIGHT-OF-WAY
GEORGIA POWER COMPANY RIGHT-OF-WAY EASEMENT PER D.B. 401, PG. 34
GEORGIA POWER COMPANY EASEMENT PER D.B. 1079, PG. 111
BRUSHY CREEK
50' UNDISTURBED ZONING BUFFER
20' UNDISTURBED ZONING BUFFER
75' BUFFER
50' BUFFER
25' BUFFER
30' REAR SETBACK
10' SIDE SETBACK
15' FRONT SETBACK
10' LANDSCAPE STRIP
5' SIDEWALK
GARAGE (TYP.)
DRIVEWAY A
DRIVEWAY B
PHASE 2 MONUMENT SIGN
PHASE I MONUMENT SIGN
RI-I (30)30
STOP
60' ROW

(M) N 59°17'24" E 1468.26'
(M) N 59°23'24" E 1467.00'
534.54'
(M) N 30°08'36" W 806.10'
(M) N 30°08'36" W 806.00'
(M) N 16°39'06" E 307.70'
279.27'
(M) N 70°31'00" E 760.00'
(M) N 70°03'55" W 966.75'
(R) S 30°08'36" E 1739.45'
(M) S 30°02'00" E 1739.45'
S 58°31'00" W 1062.00'
S 58°31'00" W 1062.00'
207.56'
207.56'
159.26'

DEVELOPER INFORMATION

AVENTON COMPANIES
1201 EDWARDS MILL ROAD, SUITE 120
RALEIGH, NC 27607
CONTACT: RON PERERA
TEL. 919-451-2093
rperera@aventoncompanies.com

AS-SURVEYED LEGAL DESCRIPTION

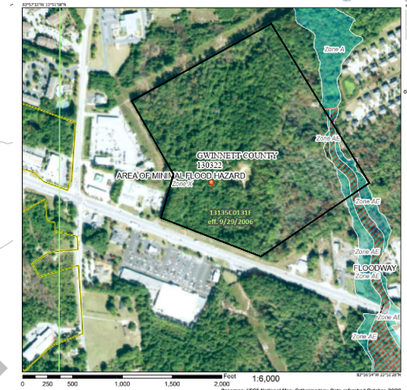
ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING IN THE 5TH DISTRICT, LAND LOTS 100, 125 AND 124 OF GWINNETT COUNTY, GEORGIA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTHWESTERLY SIDE OF U.S. HIGHWAY NO. 78, SAID POINT BEING 752 FEET SOUTHEASTERLY FROM THE INTERSECTION OF U.S. HIGHWAY 78 AND ROSEBUD ROAD. AS MEASURED ALONG THE NORTHWESTERLY SIDE OF U.S. HIGHWAY NO. 78, RUNNING THENCE NORTH 16°39' EAST, 307.7 FEET TO A ½" REBAR FOUND; RUNNING THENCE NORTH 30°38'51" WEST, 800.30 FEET TO A ½" REBAR WITH CAP ("EARTHPRO 0994") FOUND; RUNNING THENCE NORTH 59°23'24" EAST, 1468.26 FEET TO A PAINTED ROCK FOUND; RUNNING THENCE SOUTH 30°02'00" EAST, 1739.48 FEET TO A 1" SQUARE SPIKE FOUND; THENCE SOUTH 58°31'00" WEST, 1062.00 FEET TO A MAGNETIC NAIL SET, SAID POINT BEING 45 FEET NORTHEAST OF THE MID-LINE OF U.S. HIGHWAY NO. 78 AND BEING LOCATED ON THE NORTHEASTERLY SIDE OF SAID ROADWAY; RUNNING THENCE NORTH 70°03'55" WEST, 966.75 FEET, AS MEASURED ALONG THE NORTHERLY SIDE OF U.S. HIGHWAY NO. 78, TO AN IRON PIN SET AND THE POINT OF BEGINNING.

SAID TRACT OF LAND CONTAINING 57.7557 ACRES OR 2,515,839.02 SQUARE FEET.

PROHIBITED USES:
No portion of the C-2 zoned land shall be utilized for a dry cleaning plant, coin laundry, billboards, drug-related paraphernalia shop, pool room, adult entertainment facility, massage parlor (except to the extent included as part of a day spa), adult book or video store, funeral parlor, flea market, bingo parlor; gaming, arcade, gambling, betting or game of chance business (exclusive of the sale of lottery tickets); sale, rental or lease of automobiles, trucks, other motorized vehicles or trailers; auto retail or repair business, gun or weapon shop, pawn shop, medical and/or recreational marijuana dispensing facility, plant nursery (but a florist or other establishment selling cut flowers or potted plants shall be allowed), or a tattoo parlor.

National Flood Hazard Layer FIRMette



Legend
SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
SPECIAL FLOOD HAZARD AREAS — Without Base Flood Elevation (BFE); With BFE or Depth; Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD — 0.2% Annual Chance Flood Hazard; Areas of 1% annual chance flood with average depth less than one foot or with drainage areas less than one square mile; Future Conditions 1% Annual Chance Flood Hazard; Area with Reduced Flood Risk due to Levee; Area with Flood Risk due to Levee
NO SCREEN — Area of Minimal Flood Hazard; Effective LOMRs
OTHER AREAS — Area of Undetermined Flood Hazard
GENERAL STRUCTURES — Channel, Culvert, or Storm Sewer; Levee, Dike, or Floodwall
OTHER FEATURES — Cross Sections with 1% Annual Chance; Water Surface Elevation; Coastal Transect; Base Flood Elevation Line (BFE); Limit of Study; Jurisdiction Boundary; Coastal Transect Baseline; Profile Baseline; Hydrographic Feature
MAP PANELS — Digital Data Available; No Digital Data Available; Unmapped

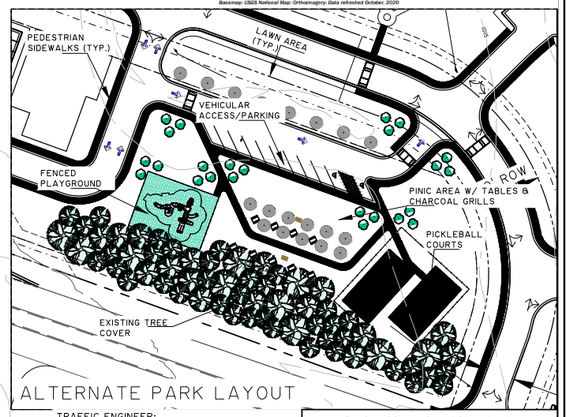
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/5/2022 at 7:04 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



TRAFFIC ENGINEER:
KIMLEY-HORN & ASSOCIATES, INC.
817 WEST PEACHTREE STREET
THE BILLMORE, SUITE 601 ATLANTA, GA 30308
PHONE: (404) 419-8700
CONTACT: MATT FLYNN, P.E.

NOTE: ALL PROPOSED MULTIFAMILY BUILDINGS SHOWN ON PLAN SHALL BE 4 STORIES

Zoning Dimensional Standards

ZONING DISTRICT	RM-13	C-2
MIN. LOT SIZE	18,000 SF	NONE
MIN. LOT WIDTH	100 Ft	NONE
MIN. FRONT SETBACK	15 Ft	15 Ft
MIN. SIDE SETBACK	10 Ft	10 Ft
MIN. REAR SETBACK	30 Ft	30 Ft
MIN. HEATED FLOOR AREA	750 SF	--
MAXIMUM 3 BEDROOMS OR LARGER	PHASE 1: 36 UNITS PHASE 2: 29 UNITS	--
MIN. % COM. AREA	15%	N/A
MAX. NET DENSITY	13 UNITS PER ACRE	NONE
MAX. BLDG. HEIGHT	50 Ft	45 Ft
PROPOSED BLDG. HEIGHT	49'-6 3/4"	--

RM-13 PARKING REQUIREMENTS/PROPOSAL

PHASE	PROPOSED UNITS	MIN. (1.5 X UNITS)	MAX. (3 X UNITS)	PROPOSED PARKING
1	368	552	1,104	623
2	294	441	882	492

C-2 PARKING REQUIREMENTS/PROPOSAL

USE/DEVELOPMENT	AREA	MIN.	MAX.	PROPOSED
RESTAURANT	5,400 SF	1 PER 150 SF= 36 PL	1 PER 75 SF= 72 PL	36
OFFICE/RETAIL	16,700 SF	1 PER 500 SF= 33 PL	1 PER 200 SF =84 PL	78
TOTAL PARKING		69 PL	156 PL	114 PL

SITE DATA

SITE	Athens Highway SW
PARCEL NUMBERS	R5125-005
TOTAL SITE AREA	57.7557 ACRES
ZONING:	
CURRENT ZONING	R-100
PROPOSED ZONING	RM-13, C-2
ZONING JURISDICTION	GWINNETT COUNTY, GA

GRAPHIC SCALE
0 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

REZONING SITE PLAN

DRI #3437
GWINNETT COUNTY, GEORGIA
PREPARED FOR:
AVENTON COMPANIES
PREPARED BY:

THOMAS & HUTTON
5553 Peachtree Road • Suite 175
Chamblee, GA 30341 • 470.893.1700
www.thomasandhutton.com

JOB NO:	J-29887
DRAWN:	NWP
REVIEWED:	GP
DATE:	08/18/22
SCALE:	1" = 100'
SHEET:	RZ-1

Z:\29887-29687-20000\ENGINEER\DRAWING\CONSTRUCTION PLANS\29887-0000 - REZONING PLAN.DWG - Aug 22, 2022 - 3:46 PM

N W E S

* A LAND DISTURBING PERMIT FOR PHASE 2 WILL BE ISSUED A MINIMUM OF 12 MONTHS AFTER THE LAND DISTURBING PERMIT FOR PHASE 1
* IF THE ALTERNATE PARK LAYOUT IS APPROVED, IT SHALL BE BUILT CONCURRENT WITH THE PHASE 1 PROJECT USING PRIVATE FUNDS AND SHALL BE PRIVATELY MAINTAINED. THIS PARK SHALL BE OPEN FOR PUBLIC ACCESS DURING DAYLIGHT HOURS.

OPEN SPACE SUMMARY:
TOTAL PROJECT AREA: 57.76 AC
IMPERVIOUS COVERAGE: ±38%
PROPOSED OPEN SPACE/RESERVED AREA: ±26.97 AC

NOW OR FORMERLY ROSEBUD 78 LAND, LLC. D.B. 59236, PG. 448 PARCEL ID: R5124 366 ZONED: RTH

NOW OR FORMERLY CLOWER J. & MARGARET JEFFREY D.B. 20796, PG. 242 PARCEL ID: R5124 034 ZONED: R100

NOW OR FORMERLY GRACEPOINTE NAZARENE CHURCH D.B. 25073, PG. 266 PARCEL ID: R5124 032 ZONED: R100

NOW OR FORMERLY LANGLEY FARMS HOMEOWNERS ASSOCIATION, INC. D.B. 47009, PG. 167 PARCEL ID: R5124 234 ZONED: R100CSO

NOW OR FORMERLY SAFEWAY PLAZA, INC. D.B. 38579, PG. 174 PARCEL ID: R5101 179 ZONED: C2

NOW OR FORMERLY FELTON PROPERTIES, LLC. D.B. 59518, PG. 503 PARCEL ID: R5124 013 ZONED: RA200

NOW OR FORMERLY WLC PROPERTY INVESTMENTS, LLC. D.B. 53917, PG. 221 PARCEL ID: R5124 024 ZONED: C2

NOW OR FORMERLY NEJRABI SAFOORA D.B. 54988, PG. 088 PARCEL ID: R5124 031 ZONED: C2

NOW OR FORMERLY ANTHONY W. BECK PARCEL ID: R5124 040 ZONED: C2

NOW OR FORMERLY FELTON PROPERTIES, LLC. D.B. 59518, PG. 503 PARCEL ID: R5124 007 ZONED: M1

NOW OR FORMERLY GEORGIA TRANSMISSION CORP. D.B. 13924, PG. 13 PARCEL ID: R5100 020 ZONED: R100

NOW OR FORMERLY 2970 ROSEBUD PROPERTIES, LLC. D.B. 56168, PG. 10 PARCEL ID: R5100 115 ZONED: C2

GEORGIA POWER COMPANY RIGHT-OF-WAY EASEMENT PER D.B. 401, PG. 34

GEORGIA POWER COMPANY EASEMENT PER D.B. 1079, PG. 111

PHASE 2:
GROSS AREA: 23.12 AC
NET AREA: 22.63 AC
13 UNITS/AC: 294 UNITS
PROPOSED ZONING: RM-13

PHASE 1:
GROSS AREA: 29.76 AC
NET AREA: 28.31 AC
13 UNITS/AC: 368 UNITS
PROPOSED ZONING: RM-13

COMMERCIAL AREA: 3.34 AC
PROPOSED ZONING: C-2
FAR: 0.15
NOTE: COMMERCIAL LAYOUT IS CONCEPTUAL. FINAL PROGRAMMING SUBJECT TO CHANGE

30' REAR SETBACK
20' UNDISTURBED ZONING BUFFER
50' UNDISTURBED ZONING BUFFER
(M) N 59°17'24" E 1468.26'
(R) N 59°23'24" E 1467.00'
534.54'
1168.26'
1172.48'
(M) S 30°02'00" E 1739.48'
(R) S 30°02'00" E 1740.00'
(M) N 30°08'51" W 800.30'
(R) N 30°08'51" W 800.00'
279.27'
N 16°39'06" E 307.70'
402.36'
S 58°31'00" W 1062.00'
189.28'
PROPOSED POND 3
PROPOSED POND 2
PROPOSED POND 1
PROPOSED FUTURE PROPERTY LINE
10' SIDE SETBACK
15' FRONT SETBACK
10' LANDSCAPE STRIP
75' BUFFER
50' BUFFER
25' BUFFER
BRUSHY CREEK
WETLANDS/PRESERVED AREA
TRASH COMPACTOR
AMENITY AREA
PHASE 2 CLUBHOUSE/LEASING OFFICE
PHASE 2 MONUMENT SIGN
PHASE 1 CLUBHOUSE/LEASING OFFICE
PHASE 1 MONUMENT SIGN
LIMIT OF ROAD CONSTRUCTION FOR PHASE 1 PROJECT
EXISTING SIGNALIZED INTERSECTION AT ATHENS HIGHWAY (HWY 78) AND ROSEBUD ROAD 811' TO THE WEST FROM THE CENTERLINE OF "DRIVEWAY A"
DRIVEWAY A
DRIVEWAY B
PROPOSED DECEL LANE
ATHENS HIGHWAY S.R.8 / U.S. HIGHWAY 78 VARIABLE PUBLIC RIGHT-OF-WAY
50' ROW
GARAGE (TYP.)
5' SIDEWALK
STOP
RI-1 (30)30

DEVELOPER INFORMATION
AVENTON COMPANIES
1201 EDWARDS MILL ROAD, SUITE 120
RALEIGH, NC 27607
CONTACT: RON PERERA
TEL. 919-451-2093
rperera@aventoncompanies.com

AS-SURVEYED LEGAL DESCRIPTION

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING IN THE 5TH DISTRICT, LAND LOTS 100, 125 AND 124 OF GWINNETT COUNTY, GEORGIA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTHWESTERLY SIDE OF U.S. HIGHWAY NO. 78, SAID POINT BEING 752 FEET SOUTHEASTERLY FROM THE INTERSECTION OF U.S. HIGHWAY 78 AND ROSEBUD ROAD. AS MEASURED ALONG THE NORTHWESTERLY SIDE OF U.S. HIGHWAY NO. 78, RUNNING THENCE NORTH 16°39' EAST, 307.7 FEET TO A ½" REBAR FOUND; RUNNING THENCE NORTH 30°08'51" WEST, 800.30 FEET TO A ½" REBAR WITH CAP ("EARTHPRO 0994") FOUND; RUNNING THENCE NORTH 59°23'24" EAST, 1468.26 FEET TO A PAINTED ROCK FOUND; RUNNING THENCE SOUTH 30°02'00" EAST, 1739.48 FEET TO A 1" SQUARE SPIKE FOUND; THENCE SOUTH 58°31'00" WEST, 1062.00 FEET TO A MAGNETIC NAIL SET, SAID POINT BEING 45 FEET NORTHEAST OF THE MID-LINE OF U.S. HIGHWAY NO. 78 AND BEING LOCATED ON THE NORTHEASTERLY SIDE OF SAID ROADWAY; RUNNING THENCE NORTH 70°03'55" WEST, 966.75 FEET, AS MEASURED ALONG THE NORTHERLY SIDE OF U.S. HIGHWAY NO. 78, TO AN IRON PIN SET AND THE POINT OF BEGINNING.

SAID TRACT OF LAND CONTAINING 57.7557 ACRES OR 2,515,839.02 SQUARE FEET.

PROHIBITED USES:
No portion of the C-2 zoned land shall be utilized for a dry cleaning plant, coin laundry, billboards, drug-related paraphernalia shop, pool room, adult entertainment facility, massage parlor (except to the extent included as part of a day spa), adult book or video store, funeral parlor, flea market, bingo parlor; gaming, arcade, gambling, betting or game of chance business (exclusive of the sale of lottery tickets); sale, rental or lease of automobiles, trucks, other motorized vehicles or trailers; auto retail or repair business, gun or weapon shop, pawn shop, medical and/or recreational marijuana dispensing facility, plant nursery (but a florist or other establishment selling cut flowers or potted plants shall be allowed), or a tattoo parlor.

National Flood Hazard Layer FIRMette

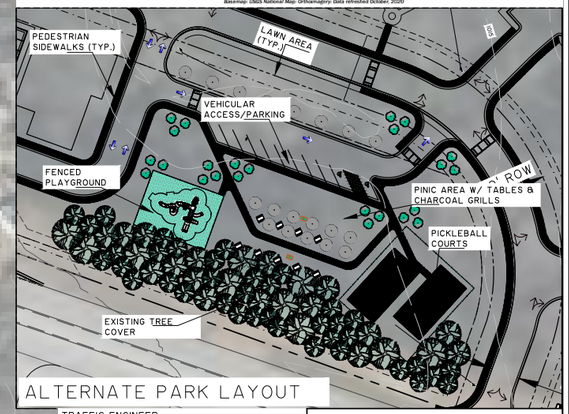
Legend
SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
SPECIAL FLOOD HAZARD AREAS — Without Base Flood Elevation (BFE); With BFE or Depth; Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD — 0.2% Annual Chance Flood Hazard; Areas of 1% annual chance flood with average depth less than one foot or with drainage areas less than one square mile; Area of Undetermined Flood Hazard; Area with Reduced Flood Risk due to Levee; Area with Flood Risk due to Levee
OTHER AREAS — Area of Minimal Flood Hazard; Effective LOMRs; Area of Undetermined Flood Hazard
GENERAL STRUCTURES — Channel, Culvert, or Storm Sewer; Levee, Dike, or Floodwall
OTHER FEATURES — Cross Sections with 1% Annual Chance; Water Surface Elevation; Coastal Transect; Base Flood Elevation Line (BFE); Limit of Study; Jurisdiction Boundary; Coastal Transect Baseline; Profile Baseline; Hydrographic Feature
MAP PANELS — Digital Data Available; No Digital Data Available; Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap used complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/5/2022 at 7:04 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



ALTERNATE PARK LAYOUT

TRAFFIC ENGINEER:
KIMLEY-HORN & ASSOCIATES, INC.
817 WEST PEACHTREE STREET
THE BILMORE, SUITE 601 ATLANTA, GA 30308
PHONE: (404) 419-8700
CONTACT: MATT FLYNN, P.E.

NOTE: ALL PROPOSED MULTIFAMILY BUILDINGS SHOWN ON PLAN SHALL BE 4 STORIES

Zoning Dimensional Standards

ZONING DISTRICT	RM-13	C-2
MIN. LOT SIZE	18,000 SF	NONE
MIN. LOT WIDTH	100 Ft	NONE
MIN. FRONT SETBACK	15 Ft	15 Ft
MIN. SIDE SETBACK	10 Ft	10 Ft
MIN. REAR SETBACK	30 Ft	30 Ft
MIN. HEATED FLOOR AREA	750 SF	--
MAXIMUM 3 BEDROOMS OR LARGER	PHASE 1: 36 UNITS PHASE 2: 29 UNITS	--
MIN. % COM. AREA	15%	N/A
MAX. NET DENSITY	13 UNITS PER ACRE	NONE
MAX. BLDG. HEIGHT	50 Ft	45 Ft
PROPOSED BLDG. HEIGHT	49'-6 3/4"	--

RM-13 PARKING REQUIREMENTS/PROPOSAL

PHASE	PROPOSED UNITS	MIN. (1.5 X UNITS)	MAX. (3 X UNITS)	PROPOSED PARKING
1	368	552	1,104	623
2	294	441	882	492

C-2 PARKING REQUIREMENTS/PROPOSAL

USE/DEVELOPMENT	AREA	MIN.	MAX.	PROPOSED
RESTAURANT	5,400 SF	1 PER 150 SF= 36 PL	1 PER 75 SF= 72 PL	36
OFFICE/RETAIL	16,700 SF	1 PER 500 SF= 33 PL	1 PER 200 SF =84 PL	78
TOTAL PARKING		69 PL	156 PL	114 PL

SITE DATA

SITE	Athens Highway SW
PARCEL NUMBERS	R5125-005
TOTAL SITE AREA	57.7557 ACRES
ZONING:	
CURRENT ZONING	R-100
PROPOSED ZONING	RM-13, C-2
ZONING JURISDICTION	GWINNETT COUNTY, GA

GRAPHIC SCALE
0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

REZONING SITE PLAN

DRI #3437
GWINNETT COUNTY, GEORGIA
PREPARED FOR:
AVENTON COMPANIES
PREPARED BY:

THOMAS & HUTTON
5553 Peachtree Road • Suite 175
Chamblee, GA 30341 • 470.893.1700
www.thomasandhutton.com

JOB NO:	J-29887
DRAWN:	NWP
REVIEWED:	GP
DATE:	08/18/22
SCALE:	1" = 100'
SHEET:	RZ-1

APPENDIX B

Trip Generation Analysis

Trip Generation Analysis (10th Ed. With *2nd Edition Handbook* Daily IC & *3rd Edition* AM/PM IC)
Aventon Park DRI
Gwinnett Co,

Land Use		Setting	Density		Daily Trips			AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out	Total	In	Out
Proposed Project Trips													
221	Multifamily Housing (Mid-Rise)	General Urban/Suburban	662	dwelling units	3,112	1,556	1,556	280	64	216	259	158	101
712	Small Office Building	General Urban/Suburban	7,100	Sq. Ft. GFA	102	51	51	12	10	2	15	5	10
822	Strip Retail Plaza (<40k)	General Urban/Suburban	9,600	Sq. Ft. GFA	636	318	318	28	17	11	76	38	38
932	High-Turnover (Sit-Down) Restaurant	General Urban/Suburban	5,400	Sq. Ft. GFA	580	290	290	52	28	24	49	30	19
Gross Project Trips					**4,430**	**2,215**	**2,215**	**372**	**119**	**253**	**399**	**231**	**168**
	Residential Trips				3,112	1,556	1,556	280	64	216	259	158	101
	Mixed-Use Reductions				*-123*	*-62*	*-61*	*-10*	*-2*	*-8*	*-24*	*-13*	*-11*
	Alternative Mode Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Adjusted Residential Trips				2,989	1,494	1,495	270	62	208	235	145	90
	Office Trips				102	51	51	12	10	2	15	5	10
	Mixed-Use Reductions				*-22*	*-11*	*-11*	*-3*	*-1*	*-2*	*-7*	*-5*	*-2*
	Alternative Mode Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Adjusted Office Trips				80	40	40	9	9	0	8	0	8
	Retail Trips				636	318	318	28	17	11	76	38	38
	Mixed-Use Reductions				*-74*	*-37*	*-37*	*-6*	*-4*	*-2*	*-34*	*-14*	*-20*
	Alternative Mode Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Pass By Reductions (Based on ITE Rates)				*-191*	*-96*	*-95*	*0*	*0*	*0*	*-14*	*-7*	*-7*
	Adjusted Retail Trips				371	185	186	22	13	9	28	17	11
	Restaurant Trips				580	290	290	52	28	24	49	30	19
	Mixed-Use Reductions				*-67*	*-34*	*-33*	*-11*	*-8*	*-3*	*-25*	*-13*	*-12*
	Alternative Mode Reductions				*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Pass By Reductions (Based on ITE Rates)				*-221*	*-111*	*-110*	*0*	*0*	*0*	*-10*	*-5*	*-5*
	Adjusted Restaurant Trips				292	145	147	41	20	21	14	12	2
Mixed-Use Reductions - TOTAL					*-286*	*-144*	*-142*	*-30*	*-15*	*-15*	*-90*	*-45*	*-45*
Alternative Mode Reductions - TOTAL					*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Pass-By Reductions - TOTAL					*-412*	*-207*	*-205*	*0*	*0*	*0*	*-24*	*-12*	*-12*
New Trips					**3,732**	**1,864**	**1,868**	**342**	**104**	**238**	**285**	**174**	**111**
Driveway Volumes					**4,144**	**2,071**	**2,073**	**342**	**104**	**238**	**309**	**186**	**123**

APPENDIX C

Intersection Volume Worksheets

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #1

GA-10 Athens Hwy (West) at Cooper Spring Rd/Cooper Rd

AM PEAK HOUR

	Cooper Spring Rd Northbound				Cooper Rd Southbound				GA-10 Athens Hwy (West) Eastbound				GA-10 Athens Hwy (West) 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	18	14	8	0	131	18	305	0	181	679	13	0	13	1,470	103
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	2	1	0	6	0	7	0	10	30	2	0	0	51	7
Heavy Vehicle %	2%	2%	14%	13%	2%	5%	2%	2%	2%	6%	4%	15%	2%	2%	3%	7%
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adjustment Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Calibrated 2022 Volumes	**0**	**20**	**16**	**9**	**0**	**145**	**20**	**339**	**0**	**201**	**754**	**14**	**0**	**14**	**1,632**	**114**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2026 No-Build Traffic	**0**	**21**	**17**	**10**	**0**	**154**	**21**	**360**	**0**	**213**	**800**	**15**	**0**	**15**	**1,732**	**121**
Trip Distribution IN											50%					
Trip Distribution OUT															(50%)	
Balancing Adjustment																
Residential Trips	0	0	0	0	0	0	0	0	0	0	31	0	0	0	104	0
Trip Distribution IN											50%					
Trip Distribution OUT															(50%)	
Balancing Adjustment																
Retail Trips	0	0	0	0	0	0	0	0	0	0	7	0	0	0	5	0
Trip Distribution IN											50%					
Trip Distribution OUT															(50%)	
Balancing Adjustment																
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	10	0	0	0	11	0
Total Primary Site Trips	0	0	0	0	0	0	0	0	0	0	53	0	0	0	120	0
Pass-By Distribution IN																
Pass-By Distribution OUT																
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Vehicular Project Trips	0	0	0	0	0	0	0	0	0	0	53	0	0	0	120	0
2026 Build Traffic	**0**	**21**	**17**	**10**	**0**	**154**	**21**	**360**	**0**	**213**	**853**	**15**	**0**	**15**	**1,852**	**121**
2026 Build Heavy Vehicle %	**2%**	**2%**	**14%**	**13%**	**2%**	**5%**	**2%**	**2%**	**2%**	**6%**	**4%**	**15%**	**2%**	**2%**	**3%**	**7%**

PM PEAK HOUR

	Cooper Spring Rd Northbound				Cooper Rd Southbound				GA-10 Athens Hwy (West) Eastbound				GA-10 Athens Hwy (West) 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	36	37	44	0	60	30	292	0	401	1,471	50	0	28	1,110	69
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	2	3	0	0	1	0	0	0	9	35	0	0	0	27	4
Heavy Vehicle %	2%	6%	8%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Calibrated 2022 Volumes	**0**	**36**	**37**	**44**	**0**	**60**	**30**	**292**	**0**	**401**	**1,471**	**50**	**0**	**28**	**1,110**	**69**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2026 No-Build Traffic	**0**	**38**	**39**	**47**	**0**	**64**	**32**	**310**	**0**	**426**	**1,561**	**53**	**0**	**30**	**1,178**	**73**
2026 No-Build Heavy Vehicle %	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Trip Distribution IN											50%					
Trip Distribution OUT															(50%)	
Balancing Adjustment																
Residential Trips	0	0	0	0	0	0	0	0	0	0	73	0	0	0	45	0
Trip Distribution IN											50%					
Trip Distribution OUT															(50%)	
Balancing Adjustment																
Retail Trips	0	0	0	0	0	0	0	0	0	0	9	0	0	0	6	0
Trip Distribution IN											50%					
Trip Distribution OUT															(50%)	
Balancing Adjustment																
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0
Total Primary Site Trips	0	0	0	0	0	0	0	0	0	0	88	0	0	0	56	0
Pass-By Distribution IN																
Pass-By Distribution OUT																
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Vehicular Project Trips		0	0	0	0	0	0	0	0	0	88	0	0	0	56	0
2026 Build Traffic	**0**	**38**	**39**	**47**	**0**	**64**	**32**	**310**	**0**	**426**	**1,649**	**53**	**0**	**30**	**1,234**	**73**
2026 Build Heavy Vehicle %	**2%**	**6%**	**8%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**6%**

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #2

GA-10 Athens Hwy (West) at Rosebud Rd

AM PEAK HOUR

	Rosebud Rd Northbound				Rosebud Rd Southbound				GA-10 Athens Hwy (West) Eastbound				GA-10 Athens Hwy (West) 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	178	418	102	0	118	309	46	0	15	660	107	0	88	1,391	190
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	10	8	2	0	4	10	4	0	1	20	12	0	1	45	17
Heavy Vehicle %	2%	6%	2%	2%	2%	3%	3%	9%	2%	7%	3%	11%	2%	2%	3%	9%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adjustment Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Calibrated 2022 Volumes	**0**	**198**	**464**	**113**	**0**	**131**	**343**	**51**	**0**	**17**	**733**	**119**	**0**	**98**	**1,544**	**211**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2026 No-Build Traffic	**0**	**210**	**492**	**120**	**0**	**139**	**364**	**54**	**0**	**18**	**778**	**126**	**0**	**104**	**1,639**	**224**
Trip Distribution IN				5%		20%					50%					
Trip Distribution OUT														(5%)	(50%)	(20%)
Balancing Adjustment																
Residential Trips	0	0	0	3	0	12	0	0	0	0	31	0	0	10	104	42
Trip Distribution IN				5%		20%					50%					
Trip Distribution OUT														(5%)	(50%)	(20%)
Balancing Adjustment																
Retail Trips	0	0	0	1	0	3	0	0	0	0	7	0	0	0	5	2
Trip Distribution IN				5%		20%					50%					
Trip Distribution OUT														(5%)	(50%)	(20%)
Balancing Adjustment																
Restaurant Trips	0	0	0	1	0	4	0	0	0	0	10	0	0	1	11	4
Total Primary Site Trips	0	0	0	5	0	21	0	0	0	0	53	0	0	11	120	48
Pass-By Distribution IN																
Pass-By Distribution OUT																
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Vehicular Project Trips	0	0	0	5	0	21	0	0	0	0	53	0	0	11	120	48
2026 Build Traffic	**0**	**210**	**492**	**125**	**0**	**160**	**364**	**54**	**0**	**18**	**831**	**126**	**0**	**115**	**1,759**	**272**
2026 Build Heavy Vehicle %	**2%**	**6%**	**2%**	**2%**	**2%**	**3%**	**3%**	**9%**	**2%**	**7%**	**3%**	**11%**	**2%**	**2%**	**3%**	**9%**

PM PEAK HOUR

	Rosebud Rd Northbound				Rosebud Rd Southbound				GA-10 Athens Hwy (West) Eastbound				GA-10 Athens Hwy (West) 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	136	336	102	0	162	357	46	0	48	1,346	156	0	130	1,023	177
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	2	4	2	0	0	11	0	0	4	29	2	0	3	29	8
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	3%	2%	2%	8%	2%	2%	2%	2%	3%	5%
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	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Calibrated 2022 Volumes	**0**	**136**	**336**	**102**	**0**	**162**	**357**	**46**	**0**	**48**	**1,346**	**156**	**0**	**130**	**1,023**	**177**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2026 No-Build Traffic	**0**	**144**	**357**	**108**	**0**	**172**	**379**	**49**	**0**	**51**	**1,429**	**166**	**0**	**138**	**1,086**	**188**
2026 No-Build Heavy Vehicle %	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Trip Distribution IN				5%		20%					50%					
Trip Distribution OUT														(5%)	(50%)	(20%)
Balancing Adjustment																
Residential Trips	0	0	0	7	0	29	0	0	0	0	73	0	0	5	45	18
Trip Distribution IN				5%		20%					50%					
Trip Distribution OUT														(5%)	(50%)	(20%)
Balancing Adjustment																
Retail Trips	0	0	0	1	0	3	0	0	0	0	9	0	0	1	6	2
Trip Distribution IN				5%		20%					50%					
Trip Distribution OUT														(5%)	(50%)	(20%)
Balancing Adjustment																
Restaurant Trips	0	0	0	1	0	2	0	0	0	0	6	0	0	0	1	0
Total Primary Site Trips	0	0	0	9	0	34	0	0	0	0	88	0	0	6	56	22
Pass-By Distribution IN																
Pass-By Distribution OUT																
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Vehicular Project Trips		0	0	9	0	34	0	0	0	0	88	0	0	6	56	22
2026 Build Traffic	**0**	**144**	**357**	**117**	**0**	**206**	**379**	**49**	**0**	**51**	**1,517**	**166**	**0**	**144**	**1,142**	**210**
2026 Build Heavy Vehicle %	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**3%**	**2%**	**2%**	**8%**	**2%**	**2%**	**2%**	**2%**	**3%**	**5%**

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #3

GA-10 Athens Hwy (West) at Midway Plaza Dwy/Dwy B

AM PEAK HOUR

	Midway Plaza Dwy Northbound				Dwy B Southbound				GA-10 Athens Hwy (West) Eastbound				GA-10 Athens Hwy (West) 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	23	0	10	0	0	0	0	0	0	820	34	0	15	1,712	0
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	26	1	0	0	65	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	2%	2%	4%	2%
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	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Calibrated 2022 Volumes	**0**	**26**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**910**	**38**	**0**	**17**	**1,900**	**0**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2026 No-Build Traffic	**0**	**28**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**966**	**40**	**0**	**18**	**2,017**	**0**
Trip Distribution IN										25%	50%					15%
Trip Distribution OUT						(15%)		(25%)							(50%)	
Balancing Adjustment																
Residential Trips	0	0	0	0	0	31	0	52	0	16	31	0	0	0	104	9
Trip Distribution IN										25%	50%					15%
Trip Distribution OUT						(15%)		(25%)							(50%)	
Balancing Adjustment																
Retail Trips	0	0	0	0	0	1	0	2	0	3	7	0	0	0	5	2
Trip Distribution IN										25%	50%					15%
Trip Distribution OUT						(15%)		(25%)							(50%)	
Balancing Adjustment																
Restaurant Trips	0	0	0	0	0	3	0	5	0	5	10	0	0	0	11	3
Total Primary Site Trips	0	0	0	0	0	35	0	59	0	26	53	0	0	0	120	15
Pass-By Distribution IN										25%						15%
Pass-By Distribution OUT						(25%)		(15%)								
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Vehicular Project Trips	0	0	0	0	0	35	0	59	0	26	53	0	0	0	120	15
2026 Build Traffic	**0**	**28**	**0**	**12**	**0**	**35**	**0**	**59**	**0**	**26**	**1,019**	**40**	**0**	**18**	**2,137**	**15**
2026 Build Heavy Vehicle %	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**3%**	**3%**	**2%**	**2%**	**4%**	**2%**

PM PEAK HOUR

	Midway Plaza Dwy Northbound				Dwy B Southbound				GA-10 Athens Hwy (West) Eastbound				GA-10 Athens Hwy (West) 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	52	0	56	0	0	0	0	0	0	1,500	92	1	40	1,317	0
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	29	2	0	1	41	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	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	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Calibrated 2022 Volumes	**0**	**52**	**0**	**56**	**0**	**0**	**0**	**0**	**0**	**0**	**1,500**	**92**	**1**	**40**	**1,317**	**0**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2026 No-Build Traffic	**0**	**55**	**0**	**59**	**0**	**0**	**0**	**0**	**0**	**0**	**1,592**	**98**	**1**	**42**	**1,398**	**0**
2026 No-Build Heavy Vehicle %	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Trip Distribution IN										25%	50%					15%
Trip Distribution OUT						(15%)		(25%)							(50%)	
Balancing Adjustment																
Residential Trips	0	0	0	0	0	14	0	23	0	36	73	0	0	0	45	22
Trip Distribution IN										25%	50%					15%
Trip Distribution OUT						(15%)		(25%)							(50%)	
Balancing Adjustment																
Retail Trips	0	0	0	0	0	2	0	3	0	4	9	0	0	0	6	3
Trip Distribution IN										25%	50%					15%
Trip Distribution OUT						(15%)		(25%)							(50%)	
Balancing Adjustment																
Restaurant Trips	0	0	0	0	0	0	0	1	0	3	6	0	0	0	1	2
Total Primary Site Trips	0	0	0	0	0	17	0	29	0	43	88	0	0	0	56	27
Pass-By Distribution IN										25%						15%
Pass-By Distribution OUT						(25%)		(15%)								
Pass-By Trips	0	0	0	0	0	3	0	2	0	3	0	0	0	0	0	2
Total Vehicular Project Trips		0	0	0	0	20	0	31	0	46	88	0	0	0	56	29
2026 Build Traffic	**0**	**55**	**0**	**59**	**0**	**20**	**0**	**31**	**0**	**46**	**1,680**	**98**	**1**	**42**	**1,454**	**29**
2026 Build Heavy Vehicle %	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**3%**	**3%**	**2%**

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #4

GA-10 Athens Hwy (West) at Langley Rd

AM PEAK HOUR

	Langley Rd Northbound				Langley Rd Southbound				GA-10 Athens Hwy (West) Eastbound				GA-10 Athens Hwy (West) 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	35	1	19	0	25	3	90	0	26	756	24	1	10	1,615	19
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	4	0	0	24	5	0	0	67	3
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	4%	2%	2%	3%	21%	2%	2%	4%	16%
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	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Calibrated 2022 Volumes	**0**	**39**	**1**	**21**	**0**	**28**	**3**	**100**	**0**	**29**	**839**	**27**	**1**	**11**	**1,793**	**21**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2026 No-Build Traffic	**0**	**41**	**1**	**22**	**0**	**30**	**3**	**106**	**0**	**31**	**890**	**29**	**1**	**12**	**1,903**	**22**
Trip Distribution IN															25%	
Trip Distribution OUT											(25%)					
Balancing Adjustment																
Residential Trips	0	0	0	0	0	0	0	0	0	0	52	0	0	0	16	0
Trip Distribution IN															25%	
Trip Distribution OUT											(25%)					
Balancing Adjustment																
Retail Trips	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0
Trip Distribution IN															25%	
Trip Distribution OUT											(25%)					
Balancing Adjustment																
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0
Total Primary Site Trips	0	0	0	0	0	0	0	0	0	0	59	0	0	0	26	0
Pass-By Distribution IN																
Pass-By Distribution OUT																
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Vehicular Project Trips	0	0	0	0	0	0	0	0	0	0	59	0	0	0	26	0
2026 Build Traffic	**0**	**41**	**1**	**22**	**0**	**30**	**3**	**106**	**0**	**31**	**949**	**29**	**1**	**12**	**1,929**	**22**
2026 Build Heavy Vehicle %	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**4%**	**2%**	**2%**	**3%**	**21%**	**2%**	**2%**	**4%**	**16%**

PM PEAK HOUR

	Langley Rd Northbound				Langley Rd Southbound				GA-10 Athens Hwy (West) Eastbound				GA-10 Athens Hwy (West) 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	25	3	22	0	52	2	82	0	59	1,472	54	0	33	1,263	87
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	3	0	3	18	9	0	0	39	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	4%	2%	5%	2%	17%	2%	2%	3%	2%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Calibrated 2022 Volumes	**0**	**25**	**3**	**22**	**0**	**52**	**2**	**82**	**0**	**59**	**1,472**	**54**	**0**	**33**	**1,263**	**87**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2026 No-Build Traffic	**0**	**27**	**3**	**23**	**0**	**55**	**2**	**87**	**0**	**63**	**1,562**	**57**	**0**	**35**	**1,341**	**92**
2026 No-Build Heavy Vehicle %	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Trip Distribution IN															25%	
Trip Distribution OUT											(25%)					
Balancing Adjustment																
Residential Trips	0	0	0	0	0	0	0	0	0	0	23	0	0	0	36	0
Trip Distribution IN															25%	
Trip Distribution OUT											(25%)					
Balancing Adjustment																
Retail Trips	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0
Trip Distribution IN															25%	
Trip Distribution OUT											(25%)					
Balancing Adjustment																
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0
Total Primary Site Trips	0	0	0	0	0	0	0	0	0	0	29	0	0	0	43	0
Pass-By Distribution IN																
Pass-By Distribution OUT																
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Vehicular Project Trips		0	0	0	0	0	0	0	0	0	29	0	0	0	43	0
2026 Build Traffic	**0**	**27**	**3**	**23**	**0**	**55**	**2**	**87**	**0**	**63**	**1,591**	**57**	**0**	**35**	**1,384**	**92**
2026 Build Heavy Vehicle %	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**4%**	**2%**	**5%**	**2%**	**17%**	**2%**	**2%**	**3%**	**2%**

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #5

Cooper Rd at Rosebud Rd

AM PEAK HOUR

	Rosebud Rd Northbound				Rosebud Rd Southbound				Cooper Rd Eastbound				Cooper 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	65	505	75	0	69	305	117	0	136	189	30	0	101	377	139
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	4	19	2	0	2	14	5	0	15	14	1	0	3	20	5
Heavy Vehicle %	2%	6%	4%	3%	2%	3%	5%	4%	2%	11%	7%	3%	2%	3%	5%	4%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adjustment Factor	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Calibrated 2022 Volumes	**0**	**72**	**561**	**83**	**0**	**77**	**339**	**130**	**0**	**151**	**210**	**33**	**0**	**112**	**418**	**154**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2026 No-Build Traffic	**0**	**76**	**595**	**88**	**0**	**82**	**360**	**138**	**0**	**160**	**223**	**35**	**0**	**119**	**444**	**163**
Trip Distribution IN							20%									
Trip Distribution OUT			(20%)													
Balancing Adjustment																
Residential Trips	0	0	42	0	0	0	12	0	0	0	0	0	0	0	0	0
Trip Distribution IN							20%									
Trip Distribution OUT			(20%)													
Balancing Adjustment																
Retail Trips	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0
Trip Distribution IN							20%									
Trip Distribution OUT			(20%)													
Balancing Adjustment																
Restaurant Trips	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0
Total Primary Site Trips	0	0	48	0	0	0	21	0	0	0	0	0	0	0	0	0
Pass-By Distribution IN																
Pass-By Distribution OUT																
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Vehicular Project Trips	0	0	48	0	0	0	21	0	0	0	0	0	0	0	0	0
2026 Build Traffic	**0**	**76**	**643**	**88**	**0**	**82**	**381**	**138**	**0**	**160**	**223**	**35**	**0**	**119**	**444**	**163**
2026 Build Heavy Vehicle %	**2%**	**6%**	**4%**	**3%**	**2%**	**3%**	**5%**	**4%**	**2%**	**11%**	**7%**	**3%**	**2%**	**3%**	**5%**	**4%**

PM PEAK HOUR

	Rosebud Rd Northbound				Rosebud Rd Southbound				Cooper Rd Eastbound				Cooper 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	24	417	152	0	130	389	131	0	119	402	24	0	149	268	147
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	17	0	0	2	10	4	0	2	6	0	0	1	4	0
Heavy Vehicle %	2%	2%	4%	2%	2%	2%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%
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
Calibrated 2022 Volumes	**0**	**24**	**417**	**152**	**0**	**130**	**389**	**131**	**0**	**119**	**402**	**24**	**0**	**149**	**268**	**147**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2026 No-Build Traffic	**0**	**25**	**443**	**161**	**0**	**138**	**413**	**139**	**0**	**126**	**427**	**25**	**0**	**158**	**284**	**156**
2026 No-Build Heavy Vehicle %	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Trip Distribution IN							20%									
Trip Distribution OUT			(20%)													
Balancing Adjustment																
Residential Trips	0	0	18	0	0	0	29	0	0	0	0	0	0	0	0	0
Trip Distribution IN							20%									
Trip Distribution OUT			(20%)													
Balancing Adjustment																
Retail Trips	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0
Trip Distribution IN							20%									
Trip Distribution OUT			(20%)													
Balancing Adjustment																
Restaurant Trips	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Total Primary Site Trips	0	0	22	0	0	0	34	0	0	0	0	0	0	0	0	0
Pass-By Distribution IN																
Pass-By Distribution OUT																
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Vehicular Project Trips		0	22	0	0	0	34	0	0	0	0	0	0	0	0	0
2026 Build Traffic	**0**	**25**	**465**	**161**	**0**	**138**	**447**	**139**	**0**	**126**	**427**	**25**	**0**	**158**	**284**	**156**
2026 Build Heavy Vehicle %	**2%**	**2%**	**4%**	**2%**	**2%**	**2%**	**3%**	**3%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #6

GA-10 Athens Hwy (West) at Dwy A

AM PEAK HOUR

	Northbound				Dwy A Southbound				GA-10 Athens Hwy (West) Eastbound				GA-10 Athens Hwy (West) 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	830	0	0	0	1,727	0
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	26	0	0	0	65	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	4%	2%
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	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Calibrated 2022 Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**921**	**0**	**0**	**0**	**1,917**	**0**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2026 No-Build Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**978**	**0**	**0**	**0**	**2,035**	**0**
Trip Distribution IN										50%					15%	10%
Trip Distribution OUT						(10%)		(50%)			(15%)					
Balancing Adjustment																
Residential Trips	0	0	0	0	0	21	0	104	0	31	31	0	0	0	9	6
Trip Distribution IN										50%					15%	10%
Trip Distribution OUT						(10%)		(50%)			(15%)					
Balancing Adjustment																
Retail Trips	0	0	0	0	0	1	0	5	0	7	1	0	0	0	2	1
Trip Distribution IN										50%					15%	10%
Trip Distribution OUT						(10%)		(50%)			(15%)					
Balancing Adjustment																
Restaurant Trips	0	0	0	0	0	2	0	11	0	10	3	0	0	0	3	2
Total Primary Site Trips	0	0	0	0	0	24	0	120	0	53	35	0	0	0	15	10
Pass-By Distribution IN										50%						10%
Pass-By Distribution OUT						(50%)		(10%)								
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Vehicular Project Trips	0	0	0	0	0	24	0	120	0	53	35	0	0	0	15	10
2026 Build Traffic	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**120**	**0**	**53**	**1,013**	**0**	**0**	**0**	**2,050**	**10**
2026 Build Heavy Vehicle %	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**3%**	**2%**	**2%**	**2%**	**4%**	**2%**

PM PEAK HOUR

	0 Northbound				Dwy A Southbound				GA-10 Athens Hwy (West) Eastbound				GA-10 Athens Hwy (West) 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	1,556	0	0	0	1,358	0
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	29	0	0	0	42	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	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	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Calibrated 2022 Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,556**	**0**	**0**	**0**	**1,358**	**0**
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
2026 No-Build Traffic	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,651**	**0**	**0**	**0**	**1,441**	**0**
2026 No-Build Heavy Vehicle %	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Trip Distribution IN										50%					15%	10%
Trip Distribution OUT						(10%)		(50%)			(15%)					
Balancing Adjustment																
Residential Trips	0	0	0	0	0	9	0	45	0	73	14	0	0	0	22	15
Trip Distribution IN										50%					15%	10%
Trip Distribution OUT						(10%)		(50%)			(15%)					
Balancing Adjustment																
Retail Trips	0	0	0	0	0	1	0	6	0	9	2	0	0	0	3	2
Trip Distribution IN										50%					15%	10%
Trip Distribution OUT						(10%)		(50%)			(15%)					
Balancing Adjustment																
Restaurant Trips	0	0	0	0	0	0	0	1	0	6	0	0	0	0	2	1
Total Primary Site Trips	0	0	0	0	0	11	0	56	0	88	17	0	0	0	27	18
Pass-By Distribution IN										50%						10%
Pass-By Distribution OUT						(50%)		(10%)								
Pass-By Trips	0	0	0	0	0	6	0	1	0	6	0	0	0	0	0	1
Total Vehicular Project Trips		0	0	0	0	17	0	57	0	94	17	0	0	0	27	19
2026 Build Traffic	**0**	**0**	**0**	**0**	**0**	**17**	**0**	**57**	**0**	**94**	**1,668**	**0**	**0**	**0**	**1,468**	**19**
2026 Build Heavy Vehicle %	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**2%**	**3%**	**2%**

APPENDIX D

GDOT Intersection Control Evaluation (ICE)

GDOT ICE STAGE 1: SCREENING DECISION RECORD

ICE Version 2.22 | Revised 5/6/2022

GDOT PI #	N/A
Project Location:	SR10 Athens Hwy @ Dwy A
Existing Control:	Conventional (Minor Stop)
Prepared by:	Kimley-Horn
Date:	8/16/2022

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**	**Yes**	**Yes**	**Yes**	**Yes**	See Stage 2
	Conventional (All-Way Stop)	No	**Yes**	**Yes**	No	No	No	No	Major street ADT too high
	Mini Roundabout	No	**Yes**	**Yes**	**Yes**	No	No	No	Major street ADT too high
	Single Lane Roundabout	No	**Yes**	**Yes**	No	No	No	No	Major street ADT too high
	Multilane Roundabout	No	**Yes**	**Yes**	No	No	No	No	Geometry does not allow for this, not in line with project purpose.
	RCUT (stop control)	**No**	**Yes**	**No**	**No**	**Yes**	**No**	**Yes**	See stage 2
	RIRO w/down stream U-Turn	**No**	**Yes**	**No**	**No**	**Yes**	**Yes**	**Yes**	See stage 2
	High-T (unsignalized)	No	No	No	No	No	No	No	Not a T-intersection
	Offset-T Intersections	No	**Yes**	No	No	No	No	No	Geometry does not allow for this, not in line with project purpose.
	Diamond Interch (Stop Control)	No	No	No	No	No	No	No	Not an interchange
	Diamond Interch (RAB Control)	No	No	No	No	No	No	No	Not an interchange
	Add LT Lanes on SR 22 No RT Lane Improvements	**Yes**	No	No	No	**Yes**	**Yes**	No	
	Other unsignalized (provide description):	No	No	No	No	No	No	No	N/A
Signalized Intersections	Traffic Signal	No	**Yes**	**Yes**	No	No	No	No	Volumes not high enough to warrant
	Median U-Turn (Indirect Left)	No	No	No	**Yes**	No	No	No	Not expected to satisfy signal warrants based only on mainline lefts.
	RCUT (signalized)	No	No	No	No	No	No	No	Not expected to satisfy signal warrants based only on mainline lefts.
	Displaced Left Turn (CFI)	No	No	No	**Yes**	No	No	No	Right-of-way not available, not in line with project purpose.
	Continuous Green-T	No	No	No	No	No	No	No	Not a T-intersection
	Jughandle	No	No	No	**Yes**	No	No	No	Right-of-way not available, not in line with project purpose.
	Quadrant Roadway	No	No	No	No	No	No	No	Right-of-way not available, not in line with project purpose.
	Diamond Interch (Signal Control)	No	No	No	No	No	No	No	Not an interchange
	Diverging Diamond	No	No	No	No	No	No	No	Not an interchange
	Single Point Interchange	No	No	No	No	No	No	No	Not an interchange
	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: SR10 Athens Hwy @ Dwy A
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: 8/16/2022

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	None	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	Synchro	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2026 Opening Yr No-Build Peak Hr Intersection Delay	0.0 sec	0.0 sec
2026 Opening Yr No-Build Peak Hr Intersection V/C	0.00	0.00
2026 Design Yr No-Build Peak Hr Intersection Delay	0.0 sec	0.0 sec
2026 Design Yr No-Build Peak Hr Intersection V/C	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	0	0	0	#####
Head-On	0	0	0	0	0	#####
Rear End	0	0	0	0	0	#####
Sideswipe - same	0	0	0	0	0	#####
Sideswipe - opposite	0	0	0	0	0	#####
Not Collision w/Motor Veh	0	0	0	0	0	#####
TOTALS:	0	0	0	0	0	0

* 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)	RCUT (stop control)	RIRO w/down stream U-Turn	N/A	N/A
Project Cost: (From CostEst Worksheet)	*Additional description here*	*Additional description here*	*Additional description here*	*Additional description here*	*Additional description here*
Construction Cost	$200,000	$655,000	$538,000		
ROW Cost	$0	$406,000	$406,000		
Environmental Cost	$0	$0	$0		
Reimbursable Utility Cost	$0	$9,000	$7,000		
Design & Contingency Cost	$0	$170,000	$139,000		
Cost Adjustment (justification req'd)	0%	0%	0%		
Total Cost	$200,000	$1,240,000	$1,090,000		
Traffic Operations:	*User Cost Override*				
Traffic Analysis Software Used	Synchro	Synchro	Synchro		
Analysis Period	AM Peak Hr / PM Peak Hr	AM Peak Hr / PM Peak Hr	AM Peak Hr / PM Peak Hr		
2026 Design Yr Build Intersection Delay	204.9 sec / 26.7 sec	63.1 sec / 29.7 sec	404.0 sec / 157.7 sec		
2026 Design Yr Build Intersection V/C	1.19 / 0.32	0.76 / 0.65	1.47 / 1.09		
Safety Analysis:					
Predefined CRF: PDO	0%	31%	35%		
Predefined CRF: Fatal/Inj	0%	53%	54%		
Predefined CRF Source:	CRF unavailable; provide user defined CRF below	NC/MO Table 4-7	FHWA Clearinghouse #s 5555 / 5556		
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		
Stakeholder Posture:	*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*				
Local Community Support	Unknown	Unknown	Unknown		
GDOT Support	Unknown	Unknown	Unknown		
Final ICE Stage 2 Score:	3.8	2.6	1.7		
Rank of Control Type Alternatives:	1	2	3		
Final Intersection Control Selection:	1 - Conventional (Minor Stop)				

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): Synchro 11 used for analysis. RCUT/RIRO delay and v/c includes weighted average of southbound movement and corresponding displaced u-turn and travel time (worst approach). Conventional minor stop with turn lane delay and v/c represents worst approach (southbound left). Cost override tool used to include cost of conventional driveway.

GDOT ICE STAGE 1: SCREENING DECISION RECORD

ICE Version 2.22 | Revised 5/6/2022

GDOT PI #	N/A
Project Location:	SR10 Athens Hwy @ Dwy B
Existing Control:	Conventional (Minor Stop)
Prepared by:	Kimley-Horn
Date:	8/29/2022

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**	**Yes**	**Yes**	**Yes**	**Yes**	See Stage 2
	Conventional (All-Way Stop)	No	**Yes**	**Yes**	No	No	No	No	Major street ADT too high
	Mini Roundabout	No	**Yes**	**Yes**	**Yes**	No	No	No	Major street ADT too high
	Single Lane Roundabout	No	**Yes**	**Yes**	No	No	No	No	Major street ADT too high
	Multilane Roundabout	No	**Yes**	**Yes**	No	No	No	No	Geometry does not allow for this, not in line with project purpose.
	RCUT (stop control)	**No**	**Yes**	**No**	**No**	**Yes**	**No**	**Yes**	See stage 2
	RIRO w/down stream U-Turn	**No**	**Yes**	**No**	**No**	**Yes**	**Yes**	**Yes**	See stage 2
	High-T (unsignalized)	No	No	No	No	No	No	No	Not a T-intersection
	Offset-T Intersections	No	**Yes**	No	No	No	No	No	Geometry does not allow for this, not in line with project purpose.
	Diamond Interch (Stop Control)	No	No	No	No	No	No	No	Not an interchange
	Diamond Interch (RAB Control)	No	No	No	No	No	No	No	Not an interchange
	Add LT Lanes on SR 22 No RT Lane Improvements	**Yes**	No	No	No	**Yes**	**Yes**	No	
	Other unsignalized (provide description):	No	No	No	No	No	No	No	N/A
Signalized Intersections	Traffic Signal	No	**Yes**	**Yes**	No	No	No	No	Volumes not high enough to warrant
	Median U-Turn (Indirect Left)	No	No	No	**Yes**	No	No	No	Not expected to satisfy signal warrants based only on mainline lefts.
	RCUT (signalized)	No	No	No	No	No	No	No	Not expected to satisfy signal warrants based only on mainline lefts.
	Displaced Left Turn (CFI)	No	No	No	**Yes**	No	No	No	Right-of-way not available, not in line with project purpose.
	Continuous Green-T	No	No	No	No	No	No	No	Not a T-intersection
	Jughandle	No	No	No	**Yes**	No	No	No	Right-of-way not available, not in line with project purpose.
	Quadrant Roadway	No	No	No	No	No	No	No	Right-of-way not available, not in line with project purpose.
	Diamond Interch (Signal Control)	No	No	No	No	No	No	No	Not an interchange
	Diverging Diamond	No	No	No	No	No	No	No	Not an interchange
	Single Point Interchange	No	No	No	No	No	No	No	Not an interchange
	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: SR10 Athens Hwy @ Dwy B
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: 8/29/2022

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	None	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	Synchro	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2026 Opening Yr No-Build Peak Hr Intersection Delay	0.5 sec	2.8 sec
2026 Opening Yr No-Build Peak Hr Intersection V/C	0.17	0.57
2026 Design Yr No-Build Peak Hr Intersection Delay	0.0 sec	0.0 sec
2026 Design Yr No-Build Peak Hr Intersection V/C	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	0	1	13	64%
Head-On	0	0	0	0	2	9%
Rear End	0	0	0	0	2	9%
Sideswipe - same	0	0	0	0	2	9%
Sideswipe - opposite	0	0	0	0	1	5%
Not Collision w/Motor Veh	0	0	0	0	1	5%
TOTALS:	0	0	0	1	21	22

* 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)	RCUT (stop control)	RIRO w/down stream U-Turn	N/A	N/A
Project Cost: (From CostEst Worksheet)	*Additional description here*	*Additional description here*	*Additional description here*	*Additional description here*	*Additional description here*
Construction Cost	$200,000	$658,000	$541,000		
ROW Cost	$0	$406,000	$406,000		
Environmental Cost	$0	$0	$0		
Reimbursable Utility Cost	$0	$9,000	$8,000		
Design & Contingency Cost	$0	$170,000	$140,000		
Cost Adjustment (justification req'd)	0%	0%	0%		
Total Cost	$200,000	$1,243,000	$1,095,000		
Traffic Operations:	*User Cost Override*				
Traffic Analysis Software Used	Synchro	Synchro	Synchro		
Analysis Period	AM Peak Hr / PM Peak Hr	AM Peak Hr / PM Peak Hr	AM Peak Hr / PM Peak Hr		
2026 Design Yr Build Intersection Delay	482.1 sec / 47.0 sec	158.8 sec / 63.1 sec	415.0 sec / 181.6 sec		
2026 Design Yr Build Intersection V/C	1.69 / 0.38	0.83 / 0.70	1.51 / 1.16		
Safety Analysis:					
Predefined CRF: PDO	0%	31%	35%		
Predefined CRF: Fatal/Inj	0%	53%	54%		
Predefined CRF Source:	CRF unavailable; provide user defined CRF below	NC/MO Table 4-7	FHWA Clearinghouse #s 5555 / 5556		
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		
Stakeholder Posture:	*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*				
Local Community Support	Unknown	Unknown	Unknown		
GDOT Support	Unknown	Unknown	Unknown		
Final ICE Stage 2 Score:	3.2	4.5	3.7		
Rank of Control Type Alternatives:	3	1	2		
Final Intersection Control Selection:	**3 - Conventional (Minor Stop)**				

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): Synchro 11 used for analysis. RCUT/RIRO delay and v/c includes weighted average of southbound movement and corresponding displaced u-turn and travel time (worst approach). Conventional minor stop with turn lane delay and v/c represents worst approach (southbound left). Cost override tool used to include cost of conventional driveway.

GDOT INTERSECTION CONTROL EVALUATION (ICE) WAIVER FORM

ICE Version 2.22 | Revised 5/6/2022

Waiver Request - Level 2 / 3

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

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

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

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

Project Information:

Location:	SR10 Athens Hwy @ Dwy B		
County:	Gwinnett	GDOT PI # (or N/A):	N/A
GDOT District:	1 - Gainesville	Requested By:	GDOT
Area Type:	Suburb/Transition	Prepared By:	Kimley-Horn
Existing Intersection Control:	Conventional (Minor Stop)	Date:	8/29/2022
		Waiver Request Type:	Driveway Permit

Traffic and Operations Data:[1,2]

Intersection meets signal/AWS warrants?	None	
Traffic Analysis Type:	Intersection Delay	
Existing Major Street Avg Daily Traffic (ADT):	38,800	
Existing Minor Street Avg Daily Traffic (ADT):	745	
Analysis Period:	AM Peak	PM Peak
2026 Opening Yr Peak Hour Intersection Delay:	482.1 sec	47.0 sec
2026 Opening Yr Peak Hour Intersection V/C:	1.69	0.38
2026 Design Yr Peak Hour Intersection Delay:	482.1 sec	47.0 sec
2026 Design Yr Peak Hour Intersection V/C:	1.69	0.38

Crash Data (Required):[3]

Crash Data: Enter most recent 5 years of crash data	Crash Severity K*	A*	B*	C*	O	Years: 5
Angle	0	0	0	1	13	64%
Head-On	0	0	0	0	2	9%
Rear End	0	0	0	0	2	9%
Sideswipe - same	0	0	0	0	2	9%
Sideswipe - opposite	0	0	0	0	1	5%
Not Collision w/Motor Veh	0	0	0	0	1	5%
TOTALS:	0	0	0	1	21	22

Crash Type

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

Description of Work / Justification for Waiver (Required):	A waiver is requested to select an alternative that did not rank #1 in ICE Stage 2. A conventional (minor stop) intersection is requested at the proposed site driveway to maintain existing full movement access as well as to match the overall characteristics of the corridor to avoid negatively impacting driver expectancy. A center two-way left-turn lane currently existing along Athens Hwy and no median break is required.
Proposed Intersection Control:	Conventional (Minor Stop)

REQUESTED BY: Matt Flynn, P.E. Date: 8/29/2022

Title: Project Engineer

APPROVED BY: _____ Date: _____

Name: _____

District Engineer or (Approved Delegate)

[1] *Analysis data input on this worksheet is for proposed control & configuration on form, not the No-Build data shown on the top of Stage 2*

[2] *ADT's required if available (from data collected or nearest GDOT count station site); Capacity data optional unless needed to justify basis of the waiver request.*

[3] *Crash data (required for all existing intersections) must be entered here independent from Stage 2 worksheet inputs (not linked)*