Transportation Analysis

Kennemore Tract DRI #3404

Forsyth County, Georgia

October 2021

Prepared for:

Northpoint Capital Investment Holdings, LLC.

Prepared by:

Kimley-Horn and Associates, Inc. 11720 Amber Park Drive, Suite 600 Alpharetta, Georgia 30009 014534002

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Available Upon Request

Raw Traffic Count Data *Synchro* Capacity Analyses

EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of the proposed *Kennemore Tract* development located in the Forsyth County, Georgia. The 140.447-acre site is primarily located east of Fowler Road, south of Fowler Hill Road, and north of Union Hill Road. A northern tract is located north of Fowler Hill Road. The site is currently largely undeveloped.

The proposed development will consist of the following land uses and densities contained in **Table 1**. The project is expected to be completed in two (2) phases. Phase 1 is expected to be completed by 2030 (approximately 9 years) and Phase 2 by 2035 (approximately 14 years). Phase 2 considers the full build-out of the site.

Table 1: Proposed L	Table 1: Proposed Land Use and Density									
Pha	ise 1									
Office	16,040 SF									
Townhome	227 units									
Phase 2: Full Build-Out										
Office	16,040 SF (total 32,080 SF)									
Townhome	45 units (total 272 units)									
Single Family	234 SF									
Restaurant	16,658 SF									
Retail	5,553 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 also included in the trip generation, as outlined in the Georgia Regional Transportation Authority (GRTA) Letter of Understanding (dated August 31, 2021).

Capacity analyses were performed for the study intersections under the Estimated 2021, Projected 2030 No-Build (Phase 1), the Projected 2035 No-Build (Phase 2), the Projected 2030 Build (Phase 1), and the Projected 2035 Build (Phase 2) conditions.

- Estimated 2021 conditions represent traffic volumes that were collected in September 2021 with a COVID adjustment factor of 1.02 applied to the PM peak hour. It was determined that no adjustment factor was needed for the AM peak hour.
- Projected 2030 No-Build Conditions (Phase 1) represent the Estimated 2021 traffic volumes grown for nine (9) years using a 1.5% per year growth rate.
- Projected 2035 No-Build Conditions (Phase 2) represent the Estimated 2021 traffic volumes grown for fourteen (14) years using a 1.5% per year growth rate.
- Projected 2030 Build Conditions (Phase 1) represent the Projected 2030 No-Build conditions plus the addition of the project trips that are anticipated to be generated by Phase 1 of the *Kennemore Tract* development.
- Projected 2035 Build Conditions (Phase 2) represent the Projected 2035 No-Build conditions plus the addition of the project trips that are anticipated to be generated by the full-build out of the *Kennemore Tract* development.

The intersection of Union Hill Road at McFarland Parkway (Intersection 1) contains approaches which currently operate at LOS F under the Estimated 2021 conditions.

No-Build (System Improvements)

Due to the low level-of-service (LOS) at the following intersections under the Estimated 2021, Projected 2030 No-Build, and Projected 2035 No-Build conditions, the following intersection improvements are recommended:

- Union Hill Road at McFarland Parkway (Intersection 1)
 - o System Improvements (needed to serve background traffic, without the development)
 - Construct one (1) eastbound through lane along McFarland Parkway (creating 3 through lanes).
 - Construct one (1) additional southbound left turn lane along Union Hill Road (creating 3 left-turn lanes).
 - Construct one (1) additional channelized westbound right-turn lane along McFarland Parkway under yield control (creating dual right-turn lanes).

Union Hill Road at McFarland Parkway (Intersection 1) LOS Summary

		S Standard: D	Unio	on Hill F	Road	Uni	on Hill F	Road	McFa	arland Pa	irkway	McF	arland Pa	rkway		
Approa	ich LC	DS Standard: D	N	orthbou	Ind	S	outhbou	nd	E	Eastbour	nd		Westboun	d		
							R									
_		Overall LOS							D (48.6)						
30)		Approach LOS		D (47.8)		D (43.1)	D (51.9)			D (46.5)				
20	Σ	Storage	350		350	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	TBD									
С Ш С		50th Queue	56	153	69	272	190	0	62	272	0	113	356	46		
PH 1 BUILD (2030) PH 2 NO-BUILD (2035) PH 1 NO-BUILD (2030) IMPROVED IMPROVED (SIGNAL) (SIGNAL) (SIGNAL) (SIGNAL) PM AM PM AM AM		95th Queue	107	218	177	307	243	50	107	325	40	267	439	107		
ยี่ พี่ อี		Overall LOS	D (41.5)													
όΜ S		Approach LOS	D (44.8)				D (48.3)	,	D (37.8)			D (40.2)			
~ ~	M	Storage	350		350	600	Ì	200	200			370		TBD		
Ŧ		50th Queue	86	154	28	133	61	0	88	217	0	90	321	196		
NO-BUILD (2035) IMPROVED (SIGNAL)		95th Queue	147	214	109	167	94	39	130	275	5	140	396	302		
<u> </u>		Overall LOS										•				
35		Approach LOS		D (49.5)		D (47.0))		D (51.4)			
(20	Σ	Storage	350		350	600		200	200		200	370		TBD		
N		50th Queue	60	168	88	301							251	0		
		95th Queue	112	224	193	364	275	54			52	300	301	48		
BI BI		Overall LOS														
Q ₩ S	_	Approach LOS		D (45.3			D (48.2			D (40.2)			D (52.3)			
N	≥ ∠	Storage	350		350									TBD		
H		50th Queue	93	181	36									302		
<u>ц</u>		95th Queue	155	239	126	185	110	50		-	30	134	245	422		
		Overall LOS														
ô	_	Approach LOS		D (47.1												
03	Ā	Storage	350		350									TBD		
L) E		50th Queue	56	158	30			-			-			42		
Z G L		95th Queue	106	213	120	335	255	54			8	219	429	219		
		Overall LOS		- /												
4 ₹ 50	5	Approach LOS		D (50.6			D (55.0			D (37.0)	000	070	D (42.0)	TDD		
H	ā	Storage	350	474	350					005			000	TBD		
-		50th Queue	86	174	34									261		
		95th Queue	148	234	124	177	106	49	-		25	127	3/3	373		
		Overall LOS			· · · ·		D (10.0	、 、	D (51.0			1				
5)	5	Approach LOS		D (52.3		000	D (46.0	í	000	D (54.8)		070	D (53.9)	TDD		
50 G	AM	Storage	350	101	350									TBD		
		50th Queue	60	181	89									75		
PH 2 BUILD (2035) IMPROVED (SIGNAL)		95th Queue	112	240	195	404	285	59			51	318	511	150		
		Overall LOS	ļ					<u>, </u>	<u>ט (52.8</u>				D (50.0)			
~≦ ∞	Σ	Approach LOS		D (54.9	/	000	D (54.6	(ט (48.9) בי		0=0	D (53.8)			
H	Δ	Storage	350		350							4		TBD		
		50th Queue	93	202	22									365		
		95th Queue	156	271	112	201	118	40	212	304	3	143	410	525		

Build (Site Access Improvements)

No additional improvements are recommended to serve the Projected 2030 Build conditions. All site driveways are projected to operate at an acceptable LOS under the Projected 2030 and 2035 conditions.

The following should be considered to serve the projected 2035 Build Conditions (Phase 2):

- Mullinax Road at Fowler Road (Intersection 3)
 - Construct one (1) additional southbound left turn lane along Fowler Road (creating dual left-turn lanes).
- Fowler Road at Fowler Hill Road (Intersection 5)
 - Construct one (1) westbound right turn lane along Fowler Hill Road.

Mullinax Road at Fowler Road (Intersection 3) LOS Summary

	Overall LOS Standard: D			- Northbound			Fowler Road			ullinax R		Mullinax Road			
Approach LOS Standard: D				σπηροι		Southbound			1	Eastbour		Westbound			
			L	T	R	L	T	R	L	T	R	U	T	R	
		Overall LOS		C (24.2)											
		Approach LOS					C (25.3)			B (12.9)		C 34.8)			
(2035) ED L)	AM	Storage						125	250			230		200	
С <u>6</u> 3		50th Queue				153		0	13	314		0	412	36	
		95th Queue				181		33	30	401		0	560	85	
520		Overall LOS							B (10.4)						
2 BL (SI(Approach LOS					C (31.4))		A (3.7)		A (9.7)			
H	Σd	Storage						125	250			230		200	
		50th Queue				52		0	3	43		0	124	17	
		95th Queue				85		23	11	71		0	322	106	

Fowler Road at Fowler Hill Road (Intersection 5) LOS Summary

-		DS Standard: D LOS Standard: D		owler Ro			Fowler Road - Southbound Eastbound		nd	Fowler Hill Road				
			L	T	R	L	T					L T R		
		Overall LOS					•		(1.2)		•			
		Approach LOS		A (0.0))		A (0.3)					C (21.0)		
(2035))	AM	Storage												
л Э́р		50th Queue		-	-	-	-					-		-
S L		95th Queue		-	-	30	-					30		30
BUILD (3		Overall LOS							(1.5)					
2 B	_	Approach LOS		A (0.0))		A (1.5)						C (16.5)	
H	Δ	Storage												
		50th Queue		-	-	-	-					-		-
		95th Queue		-	-	30	-					30		30

- The following site driveway improvements should be constructed as the site driveways are constructed:
 - Fowler Hill Road at Driveway E / Driveway F (Intersection 7)
 - Construct one (1) eastbound right turn lane along Fowler Hill Road entering the site.
 - Fowler Road at Site Driveway B (Intersection 8)
 - Construct one (1) southbound left-turn lane and one (1) northbound right-turn lane along Fowler Road entering the site.
 - Mullinax Road at Site Driveway A (Intersection 9)
 - Construct one (1) westbound right-turn lane along Mullinax Road entering the site.
 - Union Hill Road at Site Driveway C (Intersection 10)
 - Construct one (1) eastbound left-turn lane along Union Hill Road entering the site.

1.0 PROJECT DESCRIPTION

1.1 Introduction

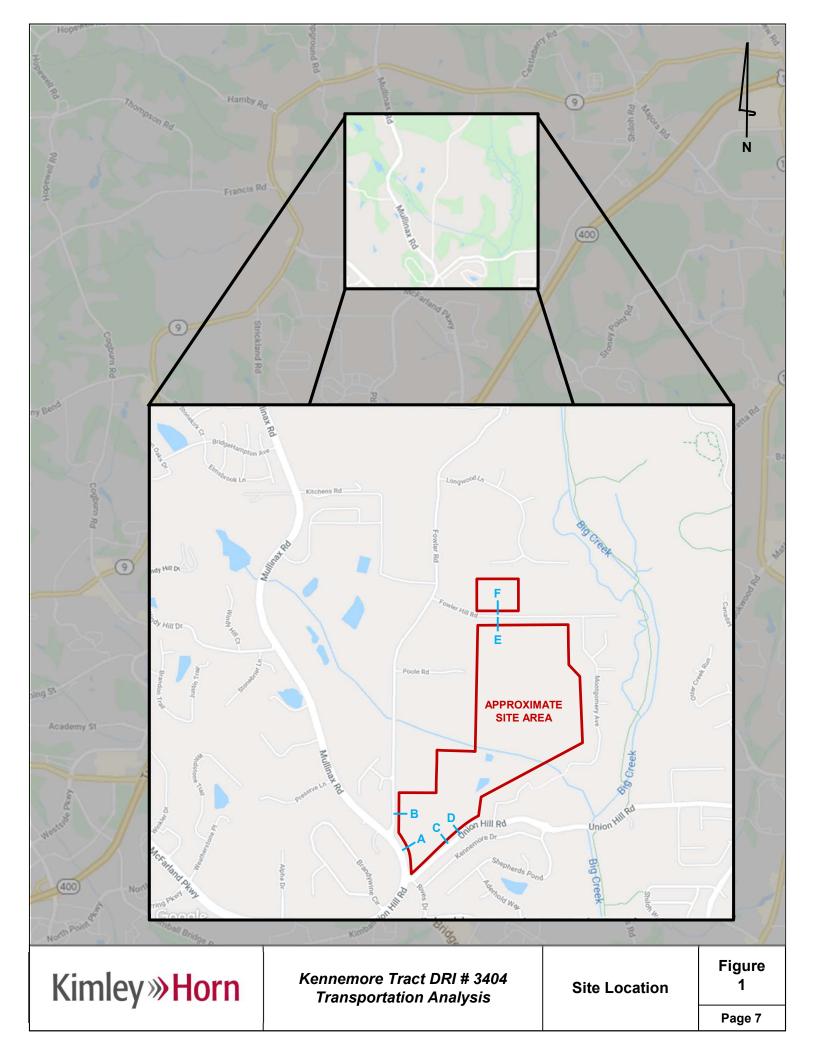
This report presents the analysis of the anticipated traffic impacts of the proposed *Kennemore Tract* development located in the Forsyth County, Georgia. The approximate 140.447-acre site is located east of Fowler Road, south of Fowler Hill Road, and north of Union Hill Road with a northern tract located north of Fowler Hill Road. The site is currently largely undeveloped. The project site is currently zoned NS (Neighborhood Shopping), and A1 (Agricultural). The zoning application was submitted on July 9, 2021. The site is proposed to be rezoned to MPD (Master Plan District). **Figure 1** provides a location map of the project site. **Figure 2** provides an aerial view of the project site and surrounding area.

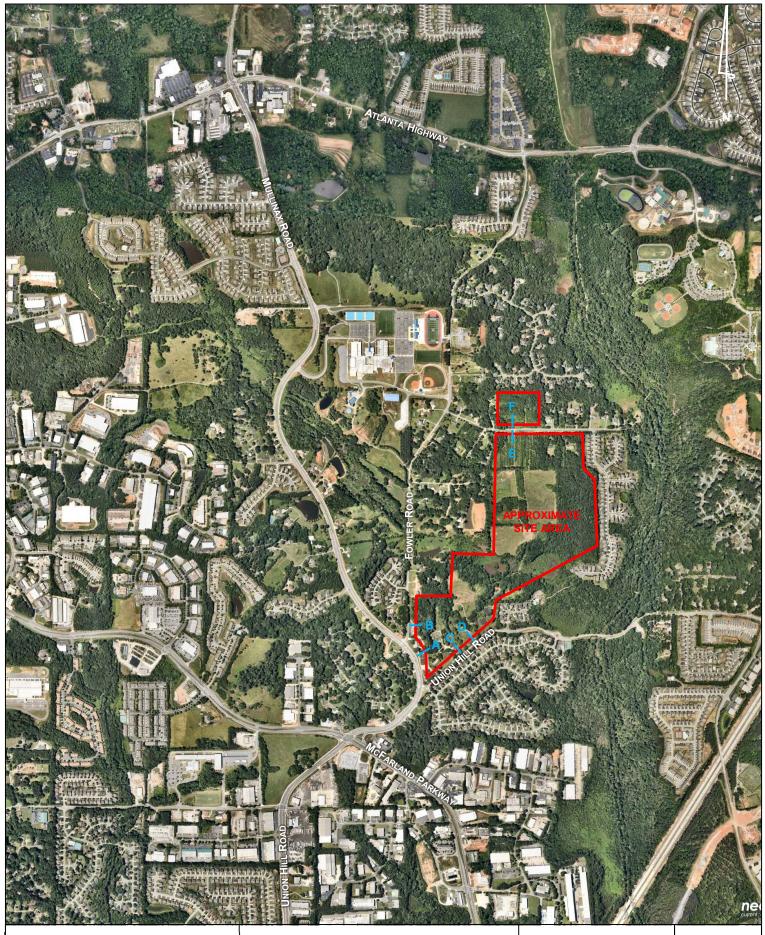
The site is currently largely undeveloped. The proposed development will consist of the following land uses and densities contained in **Table 2**. The project is expected to be completed in two (2) phases. Phase 1 is expected to be completed by 2030 (approximately 9 years) and Phase 2 by 2035 (approximately 14 years). Phase 2 considers the full build-out of the site.

Table 2: Proposed Land Use and Density										
Phase 1										
Office	16,040 SF									
Townhome	227 units									
Phase 2: Full Build-Out										
Office	16,040 SF (total 32,080 SF)									
Townhome	45 units (total 272 units)									
Single Family	234 SF									
Restaurant	16,658 SF									
Retail	5,553 SF									

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

The project is considered a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and Atlanta Regional Commission (ARC) review due to the project size exceeding 500,000 square feet in an established suburb. The DRI was formally triggered with the filing of the Initial DRI Information (Form 1) on July 28, 2021 by Forsyth County. This transportation analysis includes all inputs and methodologies discussed at the DRI Methodology Meeting with GRTA, ARC, and other stakeholders. The inputs and methodologies are outlined in the GRTA Letter of Understanding (LOU), dated August 31, 2021.





Kimley **»Horn**

Kennemore Tract DRI # 3404 Transportation Analysis

Site Aerial

Figure 2

1.2 Site Access

As currently envisioned, the proposed development will be accessible via six (6) new access points:

- Driveway A a proposed right-in/right-out driveway located along Mullinax Road approximately 400 feet north of the intersection of Union Hill Road at Mullinax Road to operate under side street stop control. Driveway A will primarily provide access to the office, retail, restaurant, and townhome residential land uses. The medium-density single family residential land use will also be accessible from Driveway A.
- Driveway B a proposed full-movement driveway located along Fowler Road approximately 400 feet north of the intersection of Mullinax Road at Fowler Road to operate under side street stop control. Driveway B will primarily provide access to the office, retail, restaurant, and townhome residential land uses. The medium-density single family residential land use will also be accessible from Driveway B.
- 3. **Driveway C** a proposed full-movement driveway located along Union Hill Road approximately 600 feet east of the intersection of Union Hill Road at Mullinax to operate under side street stop control. Driveway C will primarily provide access to the office, retail, restaurant, and townhome residential land uses. The medium-density single family residential land use will also be accessible from Driveway C.
- 4. **Driveway D** a proposed full-movement driveway located along Union Hill Road approximately 1,000 feet east of the intersection of Union Hill Road at Mullinax to operate under side street stop control. Driveway D will primarily provide access to the office, retail, restaurant, and townhome residential land uses. The medium-density single family residential land use will also be accessible from Driveway D.
- 5. **Driveway E** a proposed full-movement driveway located along Fowler Hill Road to align with DrivewayF to operate under side street stop control. Driveway E will primarily provide access to the medium-density single family residential land use. The office, retail, and restaurant and townhome residential land uses will also be accessible from Driveway E.
- Driveway F a proposed full-movement driveway located along Fowler Hill Road to align with Driveway E and operate under side street stop control. Site Driveway F will provide access to the low-density single family residential land use in the site.

1.3 Internal Circulation Analysis

The site consists of two (2) separate areas: the main site area and the northern tract.

The proposed main site area is located south of Fowler Hill Road. In the main site area, the office, retail, and restaurant land uses are primarily along the southern site frontage, while the residential land uses make up the northern and central portions of the site. Driveway A, Driveway B, Driveway C, Driveway D, and Driveway E serve the main site area and internal connections are provided to access the entire main area from each driveway.

The proposed northern tract consists of low-density single-family residential land use. It is located north of Fowler Hill Road and is served by Site Driveway F. No internal connections are provided to access the rest of the site from this area.

1.4 Parking

The current number of total site parking spaces to be provided are listed below in **Table 3**. The site development is currently in progress and the number of parking provided is subject to change.

	Table 3: Proposed Parking										
Land Use	Minimum	Maximum	Proposed								
Single Family (attached or detached)	1,012 2 per unit	1,265*	Residential 1,043 parking spaces								
Office	107 1 per 300 SF	134*									
Shopping Center	23 1 per 250 SF	29*	Mixed-Use 325 parking spaces								
Restaurant	167 1 per 100 SF	209*									
Total	1,309	1,637*	1,368 (subject to change)								

*Parking shall not be provided in quantities greater than 25 percent above the required minimum.

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

1.5 Alternative Transportation Facilities

Pedestrian sidewalk facilities are currently provided along Mullinax Road. Pedestrian facilities will be provided throughout the development. Additionally, the Big Creek Greenway is located approximately $\frac{1}{2}$ mile east of the site. The Greenway can be accessed via Union Hill Road and Fowler Hill Road.

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 *Kennemore Tract* development <u>does not</u> qualify for a "Dense Urban Environment Enhanced Focus Area" review, due to its location in Forsyth County.

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 six (6) off-site intersections described in **Table 4** and shown visually in **Figure 3**.

Table 4: Intersection Contro	ol Summary	
Intersection	Jurisdiction	Control
1. Union Hill Road at McFarland Parkway	Forsyth County	Signalized
2. Mullinax Road at Union Hill Road	Forsyth County	Signalized (Green-T)
3. Mullinax Road at Fowler Road	Forsyth County	Signalized
4. Union Hill Road at Shepherds Pond	Forsyth County	Unsignalized (Roundabout)
5. Fowler Road at Fowler Hill Road	Forsyth County	Unsignalized (TWSC)
6. Atlanta Highway (SR 9) at Fowler Road	GDOT	Unsignalized (TWSC)

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	AADT	GDOT Functional Classification							
Mullinax Road	4	-	Local							
Union Hill Road	4/2*	4,490**	Local							
Fowler Road	2	-	Local							
Fowler Hill Road	2	-	Local							
McFarland Parkway	4	23,100	Minor Arterial							
Atlanta Highway (SR 9)	2	15,400	Minor Arterial							
Shepherds Pond	2	-	Local							

*Union Hill Road is 4 lanes south of Mullinax Road and 2 lanes east of Mullinax Road **East of Mullinax Road.

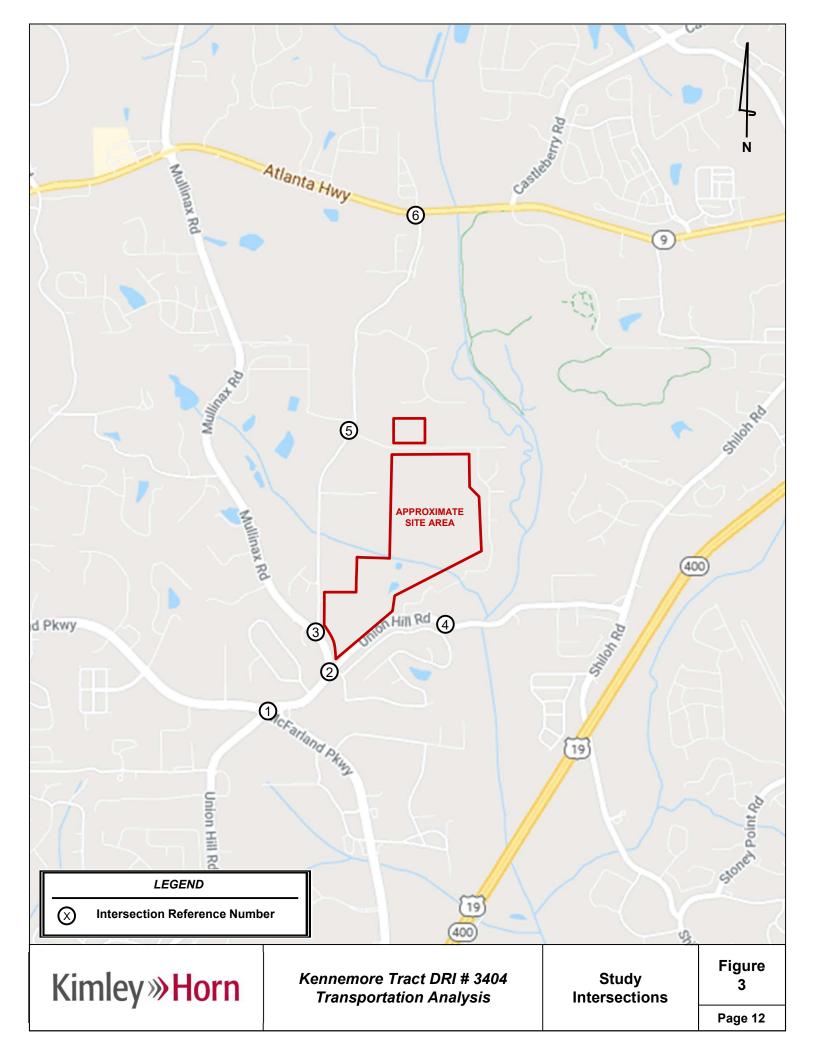


Figure 3: Study Intersections

2.3 Traffic Data Collection and Calibration

New traffic counts were collected at all of the study intersections on Tuesday, September 28, 2021. The newly collected counts were then calibrated using calibration factors to account for the potential impacts of COVID-19 to typical traffic volumes and patterns.

Historical data was used to develop the Estimated 2021 traffic conditions. Average Daily Traffic (ADT) volumes collected in 2021 and Annual Average Daily Traffic (AADT) volumes from GDOT's Traffic Analysis & Data Application (TADA) were used to compare typical traffic volumes in the vicinity of the project site. The volume comparison is shown in **Table 6** based on GDOT TADA count data and 2021 ADT collected for this project. It was determined that <u>no adjustment factor is needed for the AM</u> turning movements and <u>an adjustment factor of 1.02 is needed for the PM</u> turning movement counts. These adjustment factors were determined by taking a weighted average of the directional factors at GDOT Count Station 117-0009 and 117-8052.

	Tab	le 6: Traffic	Count Co	mparisor	n an	d Adj	ustm	ent C	alcula	tior	าร		
Count	Location			GDOT	Collected								
Station		Two-Way AADT	ADT Date	a ADT	-	AM Peak		PM Peak		Peak 2021 ADT		AM Peak	PM Peak
117-0009	Atlanta Highway (SR 9) e/o Mars Hill Road	15,400	Feb 2019	16,999		1,2	1,248 1,5		532 1		5,908	1,063	1,450
117-8052	Union Hill Road e/o Double Branches Drive	5,110	May 2016	6 4,668	8	44	0	464		5	,234	668	502
			•										
Differen	naa Calaulatiana		AM Peak					PM Peak					
Dillere	nce Calculations	Vol	Percent	Factor	١	Vol	Perc	cent	Factor		Vol	Percent	Factor
117-0009	Atlanta Highway (SR 9) e/o Mars Hill Road	-1091	-6%	1.07		185	-15	5%	1.17 -82		-82	-5%	1.06
117-8052	Union Hill Road e/o Double Branches Drive	+566	+12%	0.86 +38 +8% 0.66 +38 +8%		+8%	0.92						
			Average	1.02		Average			0.98		А	verage	1.02

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

	Table 7: Traffic Count Summary												
	Intersection	AM Peak Hour	PM Peak Hour										
1.	McFarland parkway at Union Hill Road	7:45 – 8:45 AM	4:30 – 5:30 PM										
2.	Union Hill Road at Mullinax Road	7:30 – 8:30 AM	4:30 – 5:30 PM										
3.	Mullinax Road at Fowler Road	7:30 – 8:30 AM	4:30 – 5:30 PM										
4.	Union Hill Road at Shepherds Pond	7:30 – 8:30 AM	4:00 – 5:00 PM										
5.	Fowler Road at Fowler Hill Road	7:30 – 8:30 AM	4:30 – 5:30 PM										
6.	Fowler Road at Atlanta Highway (SR 9)	7:30 – 8:30 AM	4:45 – 5:45 PM										

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

2.4 Background Growth

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

Based on methodology outlined in the GRTA Letter of Understanding (LOU), a 1.5% per year background traffic growth rate for Phase 1 from 2021 to 2030 (9 years) and for Phase 2 from 2021 to 2035 (14 years) was used throughout the study network.

2.5 Programmed and Planned Projects

Programmed and planned projects near the project site were researched to account for any improvements or modifications within the study network before or by the build-out year of the development. The programmed and planned projects were discussed in the methodology meeting with GRTA, ARC, and other local stakeholders.

One project was identified to include in the capacity analyses. The Atlanta Highway (SR 9) project includes the widening of Atlanta Highway (SR 9) from existing two (2) lanes to four (4) lanes with raised median and urban shoulders. The intersection of Atlanta Highway (SR 9) at Fowler Road (Intersection 6) is proposed to be converted to an RCUT (sidestreet left-turn restricted). This project is taken into consideration in the analysis of the No-Build 2030, No-Build 2035, Build 2030, and Build 2035 conditions. The project details are outlined in **Table 8**.

Table 8: Programmed Projects												
Project Name	From / To Points:	Sponsor	GDOT PI #	ARC ID # (TIP)	Design FY	ROW / UTL FY	CST FY					
Atlanta Highway (SR 9): Segment 3 - Widening	Post Road (SR 371) / Peachtree Parkway (SR 141)	GDOT	0008357	FT-001C	2019	2018	2022					

*Project information was obtained from GeoPI (GDOT) and the Atlanta Region's Plan (ARC)

Available fact sheets for projects listed in the table above can be found in **Appendix D**.

2.6 Level-of-Service Overview

Level-of-service (LOS) is used to describe the operating characteristics of a road segment or intersection in relation to its capacity. LOS is defined as a qualitative measure that describes operational conditions and motorists' perceptions within a traffic stream. The *Highway Capacity Manual* defines six levels-of-service, LOS A through LOS F, with A being the best and F being the worst. LOS analyses were conducted at all intersections within the study network using *Synchro 11*. Existing traffic signal phasing and timing data were retrieved for available intersections. Roundabouts were analyzed using *SIDRA INTERSECTION 9.0. SIDRA* uses the gap acceptance methodology for the roundabout capacity model.

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

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

2.7 Level-of-Service Standards

For the purposes of this traffic analysis, a LOS standard of D was assumed for all study intersections, per the GRTA Letter of Understanding.

3.0 TRIP GENERATION

Gross trips associated with the proposed development were estimated using the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition, 2017*, using equations where available. Reductions to gross trips are also considered in the analysis, including mixed-use reductions and alternative transportation mode reductions.

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 applied to the analysis.

Alternative modes reductions are taken when a site can be accessed by modes other than vehicles (walking, bicycling, transit, etc.). No alternative modes reductions were taken in this analysis per the LOU.

Pass-by reductions are taken for a site when traffic normally traveling along a roadway may choose to visit a retail or restaurant establishment that is along the vehicle's path. These trips were already on the road and would therefore only be new trips on the driveways. Pass-by trips were taken for the retail and restaurant land-uses based on ITE rates.

Table 9 summarizes the gross trip generation, reductions, net trip generation, and driveway volumes for the proposed *Kennemore Tract* development.

		Table 9: 1	Frip Gene	ration				
Level Here	Densite	D	aily Traffi	с	AM Pea	ak Hour	PM Pea	ak Hour
Land Use	Density	Total	Enter	Exit	Enter	Exit	Enter	Exit
	· · · · · · · · · · · · · · · · · · ·	F	hase 1					
221 – Multi-Family Housing (Mid-Rise)	227 units	1,236	618	618	20	56	59	38
710 – General Office Building	16,040 S.F.	180	90	90	36	6	3	17
Gross Projec	t Trips	1,416	708	708	56	62	62	55
Mixe	ed-Use Reductions	-4	-2	-2	-1	-1	-2	-2
Alternative	Mode Reductions	-0	-0	-0	-0	-0	-0	-0
Pá	ass-By Reductions	-0	-0	-0	-0	-0	-0	-0
Net New T	rips	1,412	706	706	55	61	60	53
	Phase 2:	Full Build	d-Out (Inc	ludes Pha	ise 1)			
210 – Single-Family Detached Housing	234 units	2,274	1,137	1,137	43	128	145	85
221 – Multifamily Housing (Mid-Rise)	272 units	1,480	740	740	24	67	71	45
710 – General Office Building	32,080 S.F.	352	176	176	49	8	6	33
820 – Shopping Center	5,553 S.F.	210	105	105	3	2	10	11
932 – High-Turnover (Sit-Down) Restaurant	16,658 S.F.	1,868	934	934	91	75	101	62
Gross Projec	t Trips	6,184	3,092	3,092	210	280	333	236
Mixed-Use Red	ductions	-552	-276	-276	-37	-37	-45	-45
Alternative Mode	Reductions	-0	-0	-0	-0	-0	-0	-0
Pass-By Red	uctions	-706	-380	-380	-0	-0	-29	-29
Net New T	rips	4,872	2,436	2,436	173	243	259	162

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

4.0 TRIP DISTRIBUTION AND ASSIGNMENT

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

The anticipated distribution and assignment of the trips throughout the study roadway network for residential land uses for Phase 1 and Phase 2 are shown in **Figure 4** and **Figure 5**, respectively. The anticipated assignment of the trips throughout the study roadway network for office land use are shown in **Figure 6**. The anticipated assignment of the trips throughout the study roadway network for retail/restaurant land uses are shown in **Figure 7**. 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 for Phase 1 and Phase 2 are shown by turning movement throughout the study network in **Figure 8** and **Figure 9**, respectively.

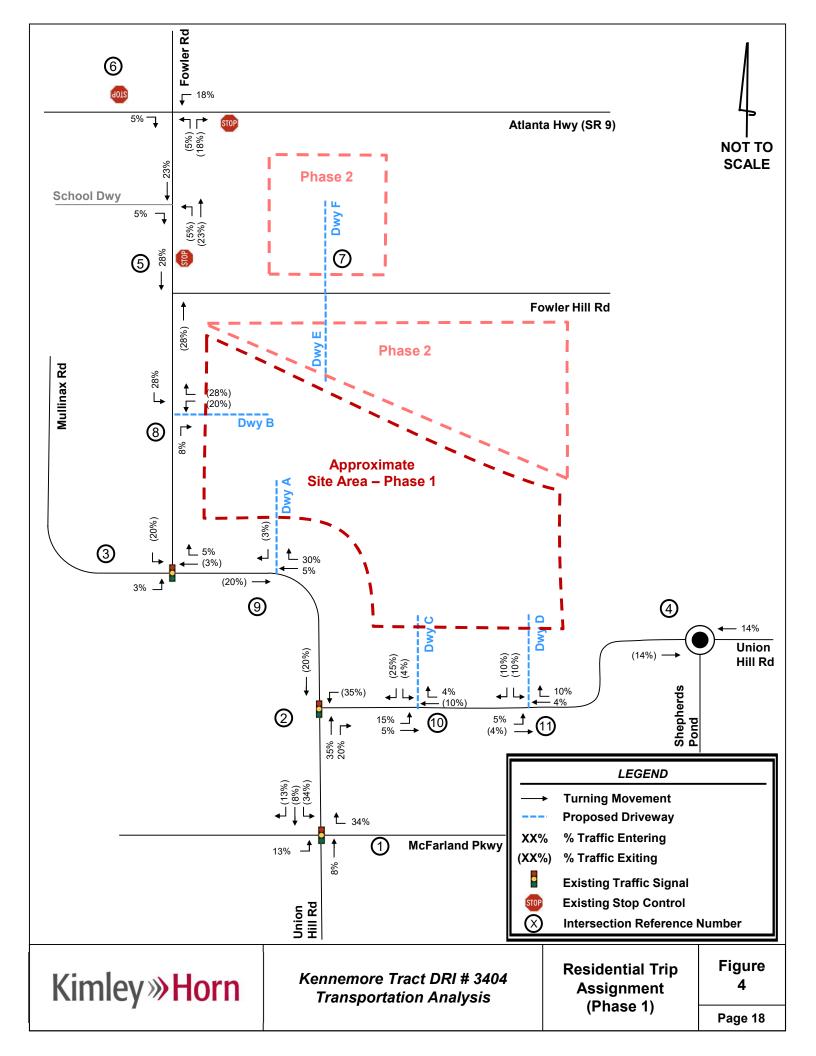
Detailed intersection volume worksheets are provided in **Appendix C**.

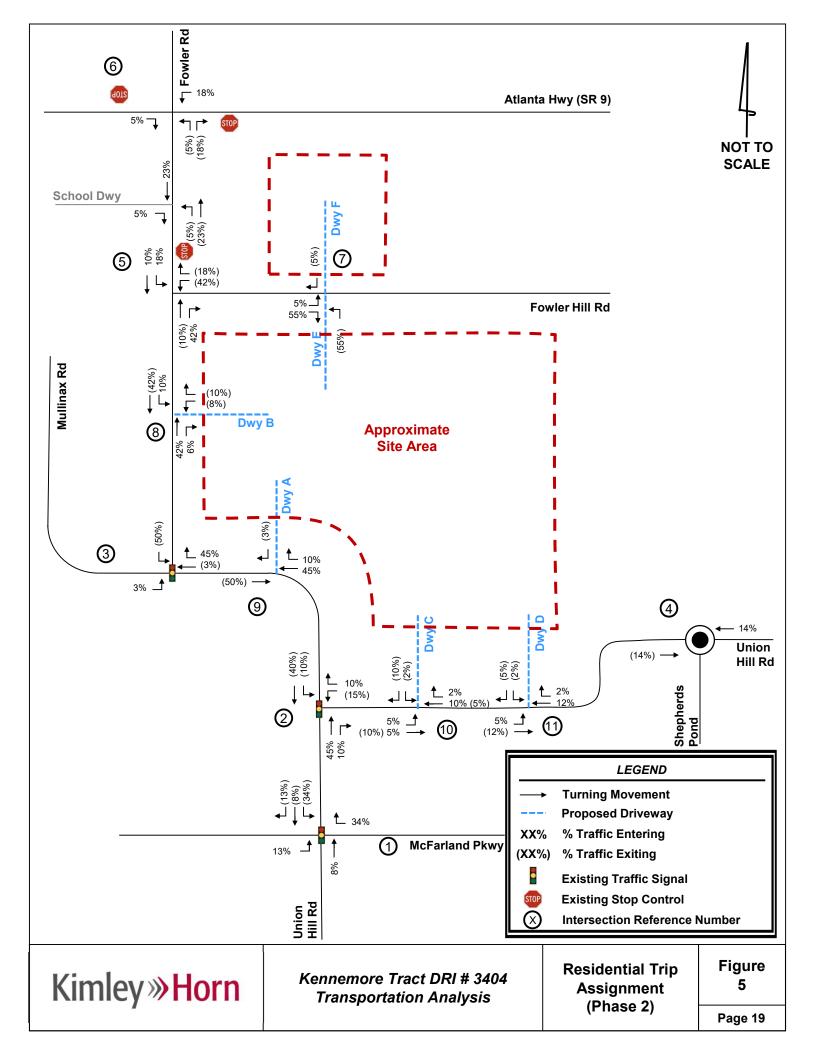
5.0 TRAFFIC ANALYSIS

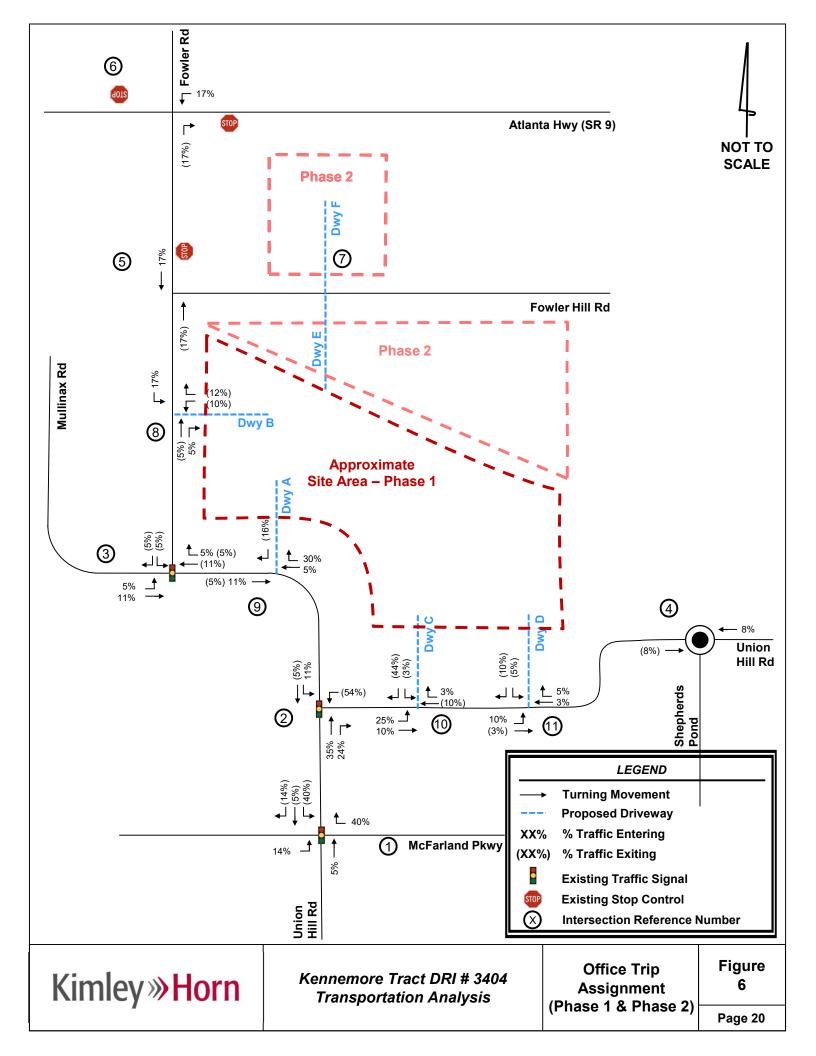
Capacity analyses were performed using *Synchro 11 and SIDRA INTERSECTION 9.0* for the AM and PM peak hours under the Estimated 2021 conditions, Projected 2030 No-Build Conditions (Phase 1), Projected 2035 No-Build Conditions (Phase 2), Projected 2030 Build Conditions (Phase 1), and Projected 2035 Build Conditions (Phase 2). The capacity analyses were performed using methodologies from the *Highway Capacity Manual (HCM), 6th Edition* unless otherwise noted.

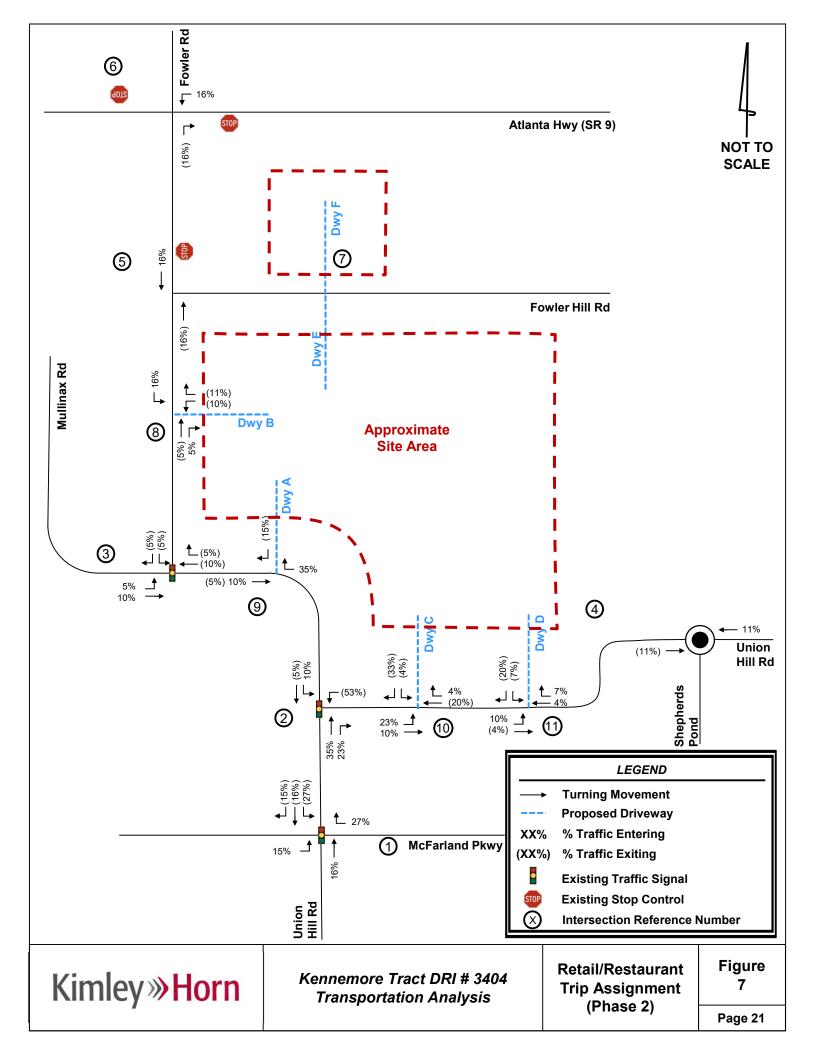
These analyses included existing roadway laneage and signal timing data for each of the scenarios. The traffic volumes and roadway laneage used for each scenario are shown visually in **Figure 10** for Estimated 2021 conditions, **Figure 11** for Projected 2030 No-Build Conditions (Phase 1), **Figure 12** for Projected 2035 No-Build Conditions (Phase 2), **Figure 13** for Projected 2030 Build Conditions (Phase 1), and **Figure 14** for Projected 2035 Build Conditions (Phase 2).

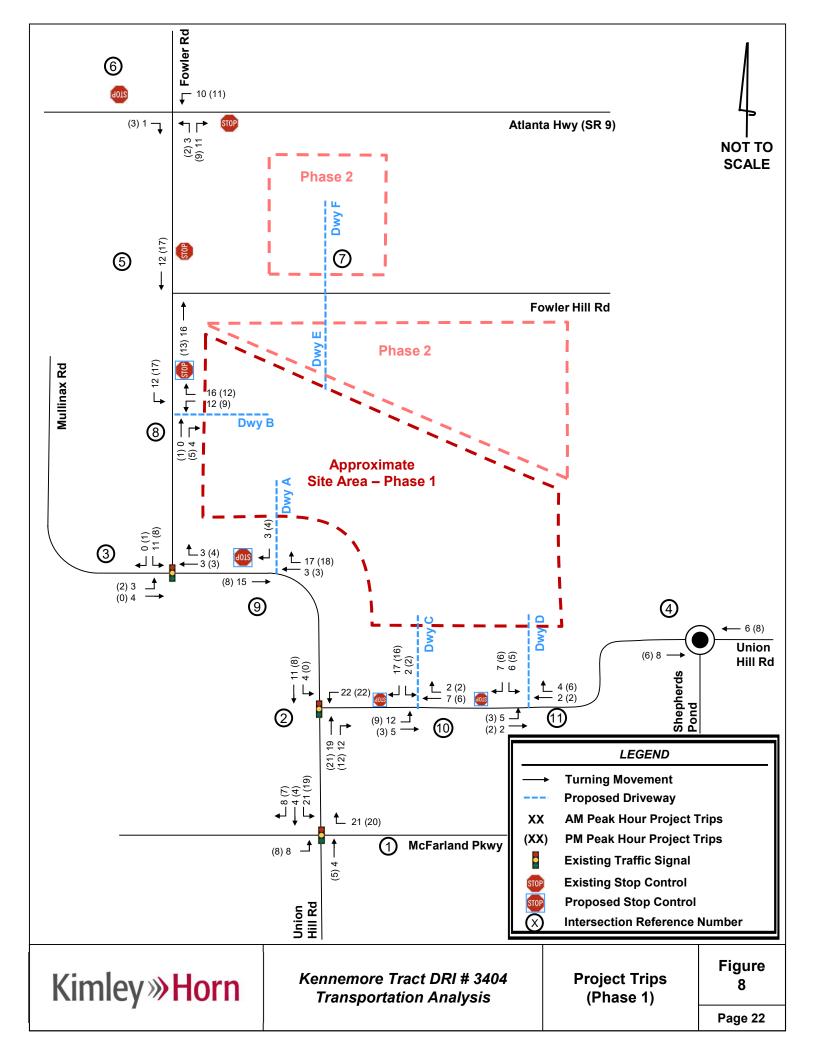
Sections 5.1 – 5.11 provide the results of the capacity analyses are presented for each study intersection and include projected LOS, delay, and queue lengths.

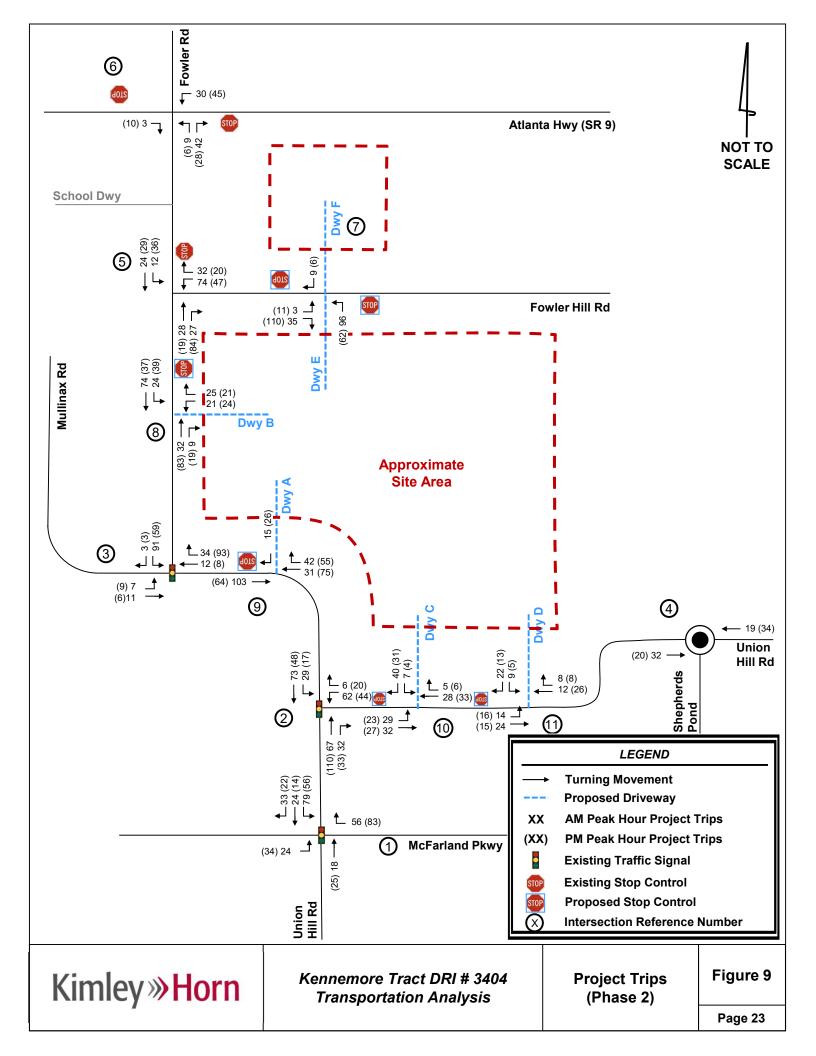












5.1 Union Hill Road at McFarland Parkway (Intersection 1)

-	Overall LOS Standard: D			on Hill F	Road	Uni	on Hill R	Road	McFa	arland Pa	rkway	McFarland Parkway			
Appro	oach L	OS Standard: D	N	orthbou	ind	S	outhbou		E	Eastboun	d		Westboun	d	
			L	Т	R	L	Т	R	L	Т	R	L	T	R	
		Overall LOS				-			D (50.1)			-			
EXISTING (EST 2021) (SIGNAL)		Approach LOS		D (54.1)		D (47.3))		E (58.7)			D (43.1)		
50	AM	Storage	350		350	600		200	200		200	370		200	
ר א		50th Queue	49	142	45	350	166	0	54	361	0	100	294	28	
Iű₹		95th Queue	96	195	137	455	216	49	88	471	25	234	368	147	
ING (EST (SIGNAL)		Overall LOS							D (54.8)						
l E S		Approach LOS		D (39.5)		E (76.4))		E (60.9)			D (41.0)	_	
S S	Σd	Storage	350		350	600		200	200		200	370		200	
Ιŭ		50th Queue	75	155	38	187	63	0	81	235	0	60	207	781	
		95th Queue	134	211	126	292	98	32	161	301	13	95	258	1042	
		Overall LOS							E (59.9)						
30)		Approach LOS		E (64.4)		E (56.0))		E (71.3)			D (50.8)		
50	AM	Storage	350		350	600		200	200		200	370		200	
בסן		50th Queue	56	165	74	423	195	0	61	441	0	125	352	91	
∣╡₹		95th Queue	107	223	196	568	250	52	98	588	39	288	434	265	
O-BUILD		Overall LOS							E (63.6)						
PH 1 NO-BUILD (2030) (SIGNAL)		Approach LOS		D (44.0)	1	F (108.2	2)		E (66.8)			D (39.1)		
-	Δ	Storage	350		350	600		200	200		200	370		200	
H ج		50th Queue	86	181	86	239	73	0	105	285	0	69	247	1051	
		95th Queue	156	253	192	348	111	45	188	354	21	108	305	1316	
		Overall LOS							E (72.2)						
35		Approach LOS		E (68.2)		E (69.5))		F (89.9)			E (58.8)		
5	AM	Storage	350		350	600		200	200		200	370		200	
ļļ		50th Queue	61	180	95	502	213	0	67	523	0	156	388	149	
		95th Queue	122	254	237	636	272	54	108	659	50	324	484	352	
2 NO-BUILD (2035) (SIGNAL)		Overall LOS							E (70.4)						
2 v	5	Approach LOS		D (47.0			F (130.8	ŕ		E (72.1)			D (38.7)		
2	PM	Storage	350	407	350	600	70	200	200	040	200	370	070	200	
H		50th Queue	93	197	118	271	79	0	121	319	0	76	273	1215	
		95th Queue	173	285	261	383	118	54	206	391	26	117	335	1481	
		Overall LOS Approach LOS			<u>, </u>	1				E (60.0) E (71.1)					
) 0	AM	Storage	350	E (64.1	350	600	E (56.7	200	200		200	370	D (51.1)	200	
, 50	◄	50th Queue	56	167	74	451	196	200	65	441	200	125	352	97	
1 BUILD (2030) (SIGNAL)		95th Queue	107	225	196	582	251	53	103	588	39	288	434	280	
		Overall LOS	101	LLU	100	002	201	00	E (68.6)	000	00	288 434 280			
		Approach LOS		D (43.8	3		F (133.3)	<u>_ (00.0)</u>	E (70.1)		D (39.2)			
НЧ	Δ	Storage	350	- (!!!!	350	600	(200	200	/	200	370		200	
L T		50th Queue	86	183	86	257	75	0	112	285	0	69	243	1082	
		95th Queue	156	258	192	369	113	52	196	354	21	108	300	1348	
		Overall LOS							E (75.6)				•		
		Approach LOS		E (69.9)		F (83.7))		F (91.1)			E (60.5)		
35	AM	Storage	350		350	600		200	200		200	370		200	
1 2 1		50th Queue	61	189	95	573	224	5	78	523	0	156	388	173	
₽₹		95th Queue	122	272	237	707	284	62	135	659	50	323	484	457	
150		Overall LOS							F (87.9)						
S B		Approach LOS		D (47.1)		F (191.2	')		F (91.0)		D (38.7)			
PH 2 BUILD (2035) (SIGNAL)	ΡZ	Storage	350		350	600		200	200		200	370		200	
L 🗗	_	50th Queue	93	212	118	331	86	0	157	319	0	76	273	1389	
		95th Queue	173	315	261	447	127	61	247	391	26	117	335	1657	

Under the Estimated 2021 conditions, the eastbound approach of Union Hill Road at McFarland Parkway (Intersection 1) is projected to operate at an unacceptable LOS during the AM peak hour. The eastbound and southbound approaches are projected to operate an unacceptable LOS during the PM peak hour.

The intersection is projected to operate at an unacceptable <u>overall</u> LOS under the No-Build 2030, No-Build 2035, Build 2030, and Build 2035 conditions. Under these scenarios, multiple approaches of the intersection are projected to operate at an unacceptable LOS under all studied scenarios.

In order to improve the <u>overall and approach</u> LOS under the No-Build 2030, No-Build 2035, Build 2030, and Build 2035 conditions, Kimley-Horn recommends the following system improvements (shown in red on **Figure 11, Figure 12, Figure 13**, and **Figure 14**):

- Construct one (1) eastbound through lane along McFarland Parkway
- Construct one (1) additional southbound left turn lane along Union Hill Road, creating triple lefts.
- Construct one (1) additional channelized westbound right-turn lane along McFarland Parkway under yield control. The existing right-turn lane will continue to operate as a free-flow right-turn lane.

The analysis results for the improved conditions at Intersection 1 are shown in the table below.

Overa	all I O	S Standard: D	Uni	on Hill F	Road	Uni	on Hill F	Road	McFa	arland Pa	irkwav	McFarland Parkway			
Approa	ich LO	DS Standard: D		orthbou			outhbou			Eastbour			Westboun		
			L	Т	R	L	Т	R	L	Т	R	L	Т	R	
		Overall LOS		•					D (48.6	D (48.6)					
PH 1 NO-BUILD (2030) IMPROVED (SIGNAL)		Approach LOS	1	D (47.8	5)		D (43.1)		D (51.9)			D (46.5)		
20:	AM	Storage	350		350	600		200	200		200	370		TBD	
		50th Queue	56	153	69	272	190	0	62	272	0	113	356	46	
O-BUILD MPROVEI (SIGNAL)		95th Queue	107	218	177	307	243	50	107	325	40	267	439	107	
la R G		Overall LOS	1	•					D (41.5)		•			
NO-BUILD (IMPROVED (SIGNAL)		Approach LOS		D (44.8	5)		D (48.3)		D (37.8))		D (40.2)		
~ ~	Δ	Storage	350		350	600		200	200		200	370		TBD	
Ŧ		50th Queue	86	154	28	133	61	0	88	217	0	90	321	196	
<u>ц</u>		95th Queue	147	214	109	167	94	39	130	275	5	140	396	302	
		Overall LOS		•	•		•		D (47.8)		•			
35	_	Approach LOS		D (49.5	5)		D (47.0)	``	D (54.2))		D (51.4)		
(50	AM	Storage	350		350	600		200	200		200	370		TBD	
		50th Queue	60	168	88	301	214	0	65	305	0	138	251	0	
		95th Queue	112	224	193	364	275	54	103	363	52	300	301	48	
PH 2 NO-BUILD (2035) IMPROVED (SIGNAL)		Overall LOS							D (47.6						
Q ₩ S	_	Approach LOS		D (45.3			D (48.2		D (40.2)				D (52.3)		
5	Μd	Storage	350		350	600		200	200		200	370		TBD	
H		50th Queue	93	181	36	144	71	0	94	216	0	87	204	302	
	-	95th Queue	155	239	126	185	110	50	139	279	30	134	245	422	
		Overall LOS							D (47.7						
0	5	Approach LOS		D (47.1			D (44.4			D (53.7))		D (46.9)		
030	ΑM	Storage	350	1=0	350	600	100	200	200		200	370		TBD	
		50th Queue	56	158	30	281	198	0	65	283	0	116	347	42	
1 BUILD (2030) IMPROVED (SIGNAL)		95th Queue	106	213	120	335	255	54	117	343	8	219	429	219	
BR BR		Overall LOS		- /			- /		D (43.0	/		r			
1 1 2 3	5	Approach LOS		D (50.6			D (55.0			D (37.0)	000	070	D (42.0)	TDD	
Н	ΜЧ	Storage	350	474	350	600	60	200	200	005	200	370	200	TBD	
-		50th Queue	86	174	34	139	69	0 49	91	205	0	82	302	261	
		95th Queue	148	234	124	177	106	49	134	254	25	127	373	373	
		Overall LOS		D (50.0	1	1	D (40 0	\ \	D (51.0	/		1	D (52 0)		
5)	5	Approach LOS		D (52.3		000	D (46.0		000	D (54.8)	000	070	D (53.9)	TDD	
	AM	Storage	350	101	350	600	004	200	200	000	200	370	000	TBD	
VE(1		50th Queue	60	181	89	328	224	2	81	302	0	151	393	75	
2 BUILD (2035) IMPROVED (SIGNAL)		95th Queue	112	240	195	404	285	59	153	358	51	318	511	150	
BBU		Overall LOS				1		`	D (52.8	,		- (55.5)			
∾≦೮	5	Approach LOS		D (54.9		000	D (54.6		000	D (48.9)		070	D (53.8)	TDD	
Н	ΜЧ	Storage	350	000	350	600	70	200	200	000	200	370	000	TBD	
		50th Queue	93	202	22	162	78	0	122	233	0	93	333	365	
		95th Queue	156	271	112	201	118	40	212	304	3	143	410	525	

With the improvements listed above, the intersection of Union Hill Road at McFarland Parkway (Intersection 1) is projected to operate at or above its overall and approach LOS standards under both Estimated 2021, No-Build 2030, No-Build 2035, Build 2030, and Build 2035 conditions.

5.2 Mullinax Road at Union Hill Road (Intersection 2)*

-		OS Standard: D		on Hill I			ullinax R			-		Union Hill Road		
Appro	bach L	OS Standard: D	N	lorthbou		S	outhbou			Eastbou			Westbound	
			L	T	R	L	Т	R	L	T	R	L	T	R
		Overall LOS				1			C (21.8)			_		
EXISTING (EST 2021) (SIGNAL)		Approach LOS		B (18.5			B (19.0)			•		C (34.7)	
50	AM	Storage			360	250								100
		50th Queue		211	0	141	0					143		55
I ≌¥		95th Queue		272	31	267	0					208		126
ING (EST SIGNAL)		Overall LOS							B (14.0)					
N N		Approach LOS	1	B (14.8	5)		A (5.2)						C (31.9)	
I SI	ΡZ	Storage			360	250		1			1			100
		50th Queue		249	0	39	0				1	59		0
-		95th Queue		383	37	86	0					113		40
		Overall LOS					-		C (28.1)					
Ô		Approach LOS		C (21.3	5)		C (28.7)		, 			D (38.9)	
l õ	AA	Storage			360	250		Í						100
	◄	50th Queue		168	97	279	0					190		0
F⊑		95th Queue		240	181	325	32				-	310		0
		Overall LOS		210	101	020	02		B (16.3)			010		Ŭ
PH 1 NO-BUILD (2030) (SIGNAL)		Approach LOS	1	B (18.2	2)	1	A (5.6)						C (32.2)	
zŬ	Σd	Storage		D (10.2	360	250	(J.0)	Ì		1	1		0 (02.2)	100
Ξ	–	50th Queue		326	1	45						69		0
□		95th Queue		543	42	97	0					126		42
		Overall LOS		043	42	97	0		C (22 C)			120		42
2				C (22 E	.)	1	D (25 0	\	C (32.6))			D (42 0)	
33	AM	Approach LOS		C (23.5	360	250	D (35.0)			1		D (42.9)	100
		Storage 50th Queue		316		250	0					184		100 124
PH 2 NO-BUILD (2035) (SIGNAL)		95th Queue		362	0 33	335	0					266		214
D N N		Overall LOS		302	55	333	0		B (18.8)			200		214
5		Approach LOS		C (21.9)		A (5.9)		D (10.0)				C (32.0)	
ž	Σd	Storage		0 (21.3	360	250	A (3.3)						0 (32.0)	100
	–	50th Queue		384	7	49	0					76		0
ā		95th Queue		623	52	104	0					134		43
		Overall LOS		020	02	101	Ū		C (29.8)			101		10
		Approach LOS		C (22.2	2)		C (31.3)	0 (20.0)				D (40.1)	
30	AM	Storage			360	250								100
- <u>5</u>	◄	50th Queue		291	0	198	0					185		98
<u></u> <u>A</u>		95th Queue		334	33	317	0					268		182
1 BUILD (2030) (SIGNAL)		Overall LOS			00	• • •	Ū		B (17.4)	1				
<u>S</u> B		Approach LOS		B (19.7	')		A (5.6)						C (32.3)	
PH1	Σd	Storage			360	250	/ (0.0/						0 (02.0)	100
ᆂ	–	50th Queue		346	2	46	0					80		0
		95th Queue		573	46	99	0					142		42
		Overall LOS			-				D (41.6)					
		Approach LOS		C (27.5	5)		D (49.1)					D (49.1)	
35	¥	Storage		0 (2.10	360	250		Í		1				100
- 20	◄	50th Queue		355	0	260	0					245		133
ĕ 0		95th Queue		403	35	384	0					386		237
S L		Overall LOS		1 400	00	TOT	0		D (36.0)			000		201
PH 2 BUILD (2035) (SIGNAL)		Approach LOS		D (48.5	5)		A (6.3)		5 (00.0)			C (32.7)		
~ ~ ~	Σd	Storage			360	250	7 (0.3)						0 (02.1)	100
L L	L L	50th Queue		348	0	250	0					234		131
		95th Queue		396	34	254 378	0					367		235
		Sour Queue		290	34	3/0	U					307		235

*Intersection was analyzed with HCM 2000 due to intersection timing sequencing.

The intersection of Mullinax Road at Union Hill Road (Intersection 2) is projected to operate at an acceptable <u>overall</u> LOS under the Estimated 2021, No-Build 2030, No-Build 2035, Build 2030, and Build 2035 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

5.3 Mullinax Road at Fowler Road (Intersection 3)

Overall LOS Standard: D
Approach LOS Standard: D

Overall LOS Standard: D				-		F	owler Ro	ad	M	ullinax Ro	bad	Mullinax Road		
Appro	bach L	OS Standard: D	Nor	thbou	Ind	S	outhbou	nd	E	Eastbour	ld	,	Westbound	b
			L	Т	R	L	Т	R	L	Т	R	U	Т	R
		Overall LOS							B (19.9)					
.		Approach LOS					D (36.4)		B (13.0)			B (19.5)	
502	AM	Storage						125	250			230		200
μγ	4	50th Queue				209		12	10	251		0	312	15
IAI		95th Queue				270		44	23	288		0	364	47
NG (EST SIGNAL)		Overall LOS							A (8.8)			-		
EXISTING (EST 2021) (SIGNAL)		Approach LOS					D (35.7))		A (3.4)			A (7.9)	
ST	Μ	Storage					2 (0011	125	250			230		200
X I	ш	50th Queue				60		0	2	34		0	94	3
		95th Queue				112		20	8	63		0	247	48
		Overall LOS							C (25.6)			Ū		
Ô		Approach LOS					D (40.2)	0 (20.0)	B (17.5)	1		C (27.1)	
503	AM	Storage					D (10.2	125	250	0 (11.0)		230		200
	∢	50th Queue				251		23	12	345	0	0	417	28
F		95th Queue				320		58	25	353	0	0	486	63
O-BUILD		Overall LOS				020		00	A (9.9)	000		U	400	00
PH 1 NO-BUILD (2030) (SIGNAL)		Approach LOS					D (35.0)		A (3.8)			A (9.2)	
z	Σd	Storage					D (00.0	125	250	/(0.0)		230	/((0.2)	200
Т Т	₽	50th Queue				70		0	200	42		0	121	10
٩		95th Queue				126		21	10	76		0	312	74
		Overall LOS				120		21	C (32.5)	10		U	012	74
35)		Approach LOS					D (43.3))	0 (02.0)	C (21.4)	1		D (38.3)	
203	AM	Storage					0 (+0.0	125	250	0 (21.4)	/	230	D (30.3)	200
ο γ		50th Queue				278		31	13	396		0	520	36
I		95th Queue				382		69	27	400		0	551	75
O-BUILD (SIGNAL)		Overall LOS			-									
2 NO-BUILD (2035) (SIGNAL)		Approach LOS					C (34.2)	A (8.3)	A (3.1)			A (7.3)	
Z N	Σd	Storage						125	250			230		200
H	-	50th Queue												
<u>д</u>		95th Queue												
		Overall LOS							C (26.8)					
6	_	Approach LOS					D (45.6))		B (18.0)			C (28.7)	
03	AM	Storage						125	250			230		200
Г ³		50th Queue				261		26	13	347		0	424	29
A L		95th Queue				354		61	27	356		0	489	64
PH 1 BUILD (2030) (SIGNAL)		Overall LOS							B (10.1)			1		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-	Approach LOS			1		D (35.5			A (4.0)			A (9.5)	
Ŧ	РМ	Storage						125	250	1.5		230		200
ш.		50th Queue				73		0	3	43		0	123	11
	-	95th Queue				132		21	11	78		0	317	77
		Overall LOS				î.	- (0 - 0)		D (44.0)	<u> </u>				
2	5	Approach LOS			1		F (85.2)		050	C (23.0))		D (46.7)	000
503	AM	Storage						125	250	100		230		200
F C		50th Queue				411		45	15	402		0	532	43
ž Ľ		95th Queue				510		86	30	405		0	562	85
л ЭС		Overall LOS				1	0 (0 :		B (12.8)	A /= =:			D (/ 2 = 1	
21	5	Approach LOS			1		C (34.7			A (5.2)			B (12.5)	
PH 2 BUILD (2035) (SIGNAL)	ΡM	Storage				1.6-		125	250			230	16.	200
-		50th Queue				105		0	4	55		0	161	22
		95th Queue				176		22	16	100		0	401	134

The intersection of Mullinax Road at Fowler Road (intersection 3) is projected to operate at an acceptable <u>overall</u> LOS. The southbound approach is projected to operate at LOS F under the 2035 Build conditions.

In order to improve the <u>approach</u> LOS under the Build 2035 conditions, Kimley-Horn recommends the following (shown in blue on **Figure 14**):

• Construct one (1) additional southbound left turn lane along Fowler Road, creating dual lefts.

The analysis results for the improved conditions at Intersection 3 are shown in the table below.

Over	Overall LOS Standard: D				_			Fowler Road			aad	Mullinax Road		
• • • •				-						ullinax Re				
Appro	ach L(DS Standard: D	Northbound			Southbound			Eastbound			Westbound		
			L	Т	R	L	Т	R	L	T	R	U	Т	R
		Overall LOS							C (24.2)					
		Approach LOS				C (25.3)			B (12.9)				C 34.8)	
(2035) ED L)	AA	Storage						125	250			230		200
		50th Queue				153		0	13	314		0	412	36
3 95		95th Queue				181		33	30	401		0	560	85
BUIL MPRO (SIGN		Overall LOS		B (10.4)										
2 BUI IMPR (SIG		Approach LOS					C (31.4))	A (3.7)			A (9.7)		
H H H H H H H H H H H H H H H H H H H		Storage						125	250			230		200
		50th Queue				52		0	3	43		0	124	17
		95th Queue				85		23	11	71		0	322	106

With the improvements listed above, the intersection of Mullinax Road at Fowler Road (Intersection 3) is projected to operate at or above its overall and approach LOS standards under 2035 Build conditions.

5.4 Union Hill Road at Shepherds Pond (Intersection 4)

		OS Standard: D		epherds		0	-			ion Hill R		Union Hill Road		
Appro	Dach L	OS Standard: D		lorthbou		- 5	outhbou	und R		Eastbour			Westbound	
		0 11 00	L		R	L	Т	R		Т	R	L	Т	R
\sim		Overall LOS		A (4 O)					A (6.8)			1	A (7 C)	
EXISTING (EST 2021) (ROUNDABOUT)	5	Approach LOS		A (4.3)			1	1		A (5.8)			A (7.6)	
2 %	AM	Storage	-			-							44	ļ
BC		50th Queue	2		-	-				22	-	-	41	ļ
(ISTING (EST 202 (ROUNDABOUT)		95th Queue	4		-					54	-	-	102	<u> </u>
βŻ		Overall LOS							A (4.8)			1		
	5	Approach LOS		A (4.2)			1	1		A (4.9)			A (4.6)	
S S	M	Storage												
ΠÛ		50th Queue	1		-					15	-	-	13	
		95th Queue	3		-					36	-	-	31	
		Overall LOS							A (7.7)					
8	_	Approach LOS		A (4.5)						A (6.4)	-		A (8.7)	
	AM	Storage												
		50th Queue	2		-					27	-	-	53	
		95th Queue	5		-					67	-	-	132	
PH 1 NO-BUILD (2030) (ROUNDABOUT)		Overall LOS							A (5.1)					
ļ ģ Ž		Approach LOS		A (4.4))					A (5.3)			A (4.9)	
	ΡM	Storage												
Ŧ		50th Queue	2		-					17	-	-	15	
		95th Queue	4		-					42	-	-	36	
		Overall LOS							A (8.3)					
PH 2 NO-BUILD (2035) (ROUNDABOUT)		Approach LOS		A (4.7)						A (6.7)			A (9.5)	
Ϊ ÄÊ	AM	Storage												
50	◄	50th Queue	3		-					30	-	-	63	
		95th Queue	6		-					75	-	-	154	
щġ		Overall LOS							A (5.3)					
2 NO-BUILD (20 (ROUNDABOUT)		Approach LOS		A (4.5)						A (5.5)			A (5.1)	
	ΡM	Storage												
ΞĒ	-	50th Queue	2		-					19	-	-	16	
		95th Queue	4		-					47	-	-	40	
		Overall LOS							A (7.8)					
6-		Approach LOS		A (4.6))					A (6.4)			A (8.8)	
IZE	AM	Storage												
ଅଁତ୍		50th Queue	2		-					28	-	-	55	
9 ₩		95th Queue	6		-					69	-	-	136	
1 3 9		Overall LOS							A (5.1)			•		
PH 1 BUILD (2030) (ROUNDABOUT)		Approach LOS		A (4.4)						A (5.3)			A (5.0)	
ΗΞŇ	Μ	Storage												
	-	50th Queue	2		-					18	-	-	15	
		95th Queue	4		-					43	-	-	38	
		Overall LOS							A (8.6)					
		Approach LOS		A (4.8))					A (7.1)			A (9.8)	
135	AM	Storage						1			Ì			
20	4	50th Queue	3		-					34	-	-	67	
PH 2 BUILD (2035) (ROUNDABOUT)		95th Queue	6		-					85	-	-	166	
I ∃ĝ		Overall LOS	Ť						A (5.5)		1	1		
BA		Approach LOS		A (4.6)						A (5.7)		1	A (5.4)	
\$P	Σd	Storage		/ (1.0)										
1 2 2	Ъ	50th Queue	2		-					21	-	-	19	
		95th Queue	4		-					51	-	-	47	
			-		-						-	-	1	

The intersection of Union Hill Road at Shepherd Pond (Intersection 4) is projected to operate at an acceptable <u>overall</u> LOS under the Estimated 2021, No-Build 2030, No-Build 2035, Build 2030, and Build 2035 conditions. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

5.5 Fowler Road at Fowler Hill Road (Intersection 5)

	Overall LOS Standard: D Approach LOS Standard: D			owler Ro			owler Ro			-			wler Hill Ro	
Appro	bach L	LOS Standard: D	N N	orthbou			outhbou			Eastbour			Westbound	
			L	Т	R	L	T	R	L	T	R	L	T	R
		Overall LOS				۰ ۰			(1.9)			-		
EXISTING (EST 2021) (TWSC)	-	Approach LOS		A (0.0))		A (0.4)	1		•	1		C (16.9)	
20	AM	Storage												
с Ц		50th Queue		-	-	-	-					-		-
ы S		95th Queue		-	-	3	-					23		-
NG (ES1 (TWSC)		Overall LOS							(0.8)					
		Approach LOS		A (0.0))		A (0.5)						B (11.6)	
IS.	Δ	Storage												
Ц Х Ш		50th Queue		-	-	-	-					-		-
_		95th Queue		-	-	0	-					5		-
		Overall LOS							(2.3)					
30)		Approach LOS		A (0.0))	1	A (0.4)						C (20.6)	
203	AM	Storage						1			1			
<u></u>	◄	50th Queue		-	-	-	-					-		-
N L		95th Queue		-	_	3	-					35		-
)-BUILE (TWSC)		Overall LOS			_	0	_		(0.8)			00		
PH 1 NO-BUILD (2030) (TWSC)		Approach LOS		A (0.0))	1	A (0.5)		(0.0)				B (12.4)	
Ż	Σd	Storage		<u> </u>	/		<u> </u>			1	1		D (12.4)	
Ť	٩	50th Queue												
đ				-	-	-	-					-		-
		95th Queue		-	-	0	-		(0, 0)			10		-
5)		Overall LOS		A (0.0)		1	A (0, 4)		(2.6)				0 (00 7)	
03	5	Approach LOS		A (0.0))		A (0.4)				[_	C (23.7)	
3	AM	Storage												
G L		50th Queue		-	-	-	-					-		-
NS N		95th Queue		-	-	3	-		(0, 0)			43		-
PH 2 NO-BUILD (2035) (TWSC)		Overall LOS		A (0.0)		1	A (0 E)		(0.8)				D (40.0)	
ž	5	Approach LOS		A (0.0))		A (0.5)			1	1		B (12.9)	
7	PM	Storage												
H H		50th Queue		-	-	-	-					-		-
		95th Queue		-	-	0	-		(0.0)			13		-
		Overall LOS		A (0.0)		1	A (0.4)		(2.3)				0 (04 5)	
0)	5	Approach LOS		A (0.0))		A (0.4)			1	1		C (21.5)	
503	AM	Storage												
ີ ວິບີ		50th Queue		-	-	-	-					-		-
S ILI		95th Queue		-	-	3	-		(0, 0)			35		-
BUILD (2030) (TWSC)		Overall LOS		A (0.0)		1	A (0 E)		(0.8)					
-	⋝	Approach LOS		A (0.0))		A (0.5)						B (12.6)	
PH 1	ΡM	Storage		-										
-		50th Queue		-	-	-	-					-		-
		95th Queue		-	-	0	-		((0.0))			10		-
		Overall LOS		. /2		1	. / . =:		(16.3)			1		
5)	5	Approach LOS		A (0.0))		A (0.5)	1		1	1		F (91.9)	
03	AM	Storage		-										
PH 2 BUILD (2035) (TWSC)		50th Queue		-	-	-	-					-		-
l S		95th Queue		-	-	3	-					230		-
ĽΣ		Overall LOS				1			(2.5)			-		
2 E	_	Approach LOS		A (0.0))		A (1.6)						C (18.3)	
I	Μ	Storage												
Ф.		50th Queue		-	-	-	-					-		-
		95th Queue		-	-	5	-					35		-

The intersection of Fowler Road at Fowler Hill Road (intersection 5) is projected to operate at an acceptable <u>overall</u> LOS. The westbound approach is projected to operate at LOS F under the 2035 Build conditions.

In order to improve the <u>approach</u> LOS under the Build 2035 conditions, Kimley-Horn recommends the following (shown in blue on **Figure 14**):

• Construct one (1) westbound right turn lane along Fowler Hill Road.

The analysis results for the improved conditions at Intersection 5 are shown in the table below.

	Overall LOS Standard: D		Fowler Road			Fowler Road			-	-		Fowler Hill Road		
Appro	Approach LOS Standard: D		Northbound		Southbound			E	Eastbour	ld	Westbound			
			L	Т	R	L	Т	R	L	Т	R	L	Т	R
		Overall LOS							(1.2)					
		Approach LOS		A (0.0))		A (0.3)						C (21.0)	
(2035)	AM	Storage												
, ⁵		50th Queue		-	-	-	-					-		-
		95th Queue		-	-	30	-					30		30
BUILD ((TWSC)		Overall LOS							(1.5)					
		Approach LOS		A (0.0))		A (1.5)						C (16.5)	
H	Μ	Storage												
6		50th Queue		-	-	-	-					-		-
		95th Queue		-	-	30	-					30		30

With the improvements listed above, the intersection of Fowler Road at Fowler Hill Road (Intersection 5) is projected to operate at or above its overall and approach LOS standards under 2035 Build conditions.

5.6 Atlanta Highway (SR 9) at Fowler Road (Intersection 6)

-		OS Standard: D		owler Ro			n Hollow			Highway			a Highway	
Appro	bach L	OS Standard: D	N	lorthbou		S	outhbou		1	Eastbour			Westboun	
			L	T	R	L	T	R	L	T	R	L	T	R
		Overall LOS				-			(11.2)					
EXISTING (EST 2021) (TWSC)	_	Approach LOS		F (65.8)		F (61.4))		A (0.0)			A (3.6)	
Sö	AM	Storage			75				340		200	275		290
		50th Queue	-	-	-	-	-	-	_	-	-	-	-	-
Ι ΨΩ		95th Queue	-	98	45	-	13	-	0	-	-	35	-	-
NG (EST (TWSC)		Overall LOS							(18.2)					
		Approach LOS		F (99.0)		F*			A (0.0)			A (1.7)	
ี เร	Δ	Storage			75				340		200	275		290
Ιŭ	-	50th Queue	-	-	-	-	-	-	-	-	-	-	-	-
		95th Queue	-	28	315	-	*	-	0	-	-	15	-	-
		Overall LOS							(5.8)					
) (g		Approach LOS		B (14.7	['])		B (13.2)		A (0.0)			A (4.0)	
I ä£	AM	Storage		T,	-			-	340		200	275		290
	1	50th Queue			-			-	-	-	-	-	-	-
1 40		95th Queue			53			3	0	-	-	50	-	-
و ق		Overall LOS			-			-	(4.6)				1	
PH 1 NO-BUILD (2030) (RCUT by GDOT)		Approach LOS		E (39.3)		B (11.0)		A (0.0)			A (1.8)	
	Δ	Storage			-			-	340		200	275		290
Ŧ		50th Queue			-			-	-	-	-	-	-	-
		95th Queue			213			0	0	-	-	20	-	-
		Overall LOS			_			_	(4.5)			-		
35)		Approach LOS		C (15.9)		B (10.8)		A (0.0)			A (4.3)	
Ĩ Ŝ E	AM	Storage			-			-	340		200	275		290
	1	50th Queue			-			-	-	-	-	-	-	-
PH 2 NO-BUILD (2035) (RCUT by GDOT)		95th Queue			63			3	0	-	-	60	-	-
ا م م		Overall LOS							(11.6)					
195		Approach LOS		F (60.9)		B (11.3)		A (0.0)			A (2.0)	
2 N N	Σd	Storage			-			-	340		200	275		290
ਸ਼ ੑ	_	50th Queue			-			-	-	-	-	-	-	-
		95th Queue			300			0	0	-	-	25	-	-
		Overall LOS				-			(4.4)					
6.	_	Approach LOS		C (15.0)		B (10.6)		A (0.0)			A (4.2)	
80	AM	Storage			-			-	340		200	275		290
20		50th Queue			-			-	-	-	-	-	-	-
РН 1 ВUILD (2030) (RCUT by GDOT)		95th Queue			55			3	0	-	-	50	-	-
		Overall LOS							(8.5)					
5	5	Approach LOS		<u>E (42.3</u>)		B (11.0)		A (0.0)			A (2.0)	
ਸ <u>ਲ</u>	Μd	Storage			-			-	340		200	275		290
		50th Queue			-			-	-	-	-	-	-	-
		95th Queue			93			0	0	-	-	48	-	-
		Overall LOS		0 (17 0			D (10.0)		(5.3)	A (0.0)			A (1.0)	
<u>_</u>	5	Approach LOS		C (17.6	ſ		B (10.8	(0.40	A (0.0)		075	A (4.8)	
80	AM	Storage			-			-	340		200	275		290
		50th Queue			-			-	-	-	-	-	-	-
РН 2 ВИІLD (2035) (RCUT by GDOT)		95th Queue			85			3	0	-	-	70	-	-
D ^B T		Overall LOS		- /		1	<u> </u>		(15.9)	. /		1	:	
2 I C U	-	Approach LOS		F (79.9	í .		B (11.3	í		A (0.0)	.	0==	A (2.6)	
H R	PM	Storage			-			-	340		200	275		290
-		50th Queue			-			-	-	-	-	-	-	-
		95th Queue			378			30	0	-	-	38	-	-

The intersection of Atlanta Highway (SR 9) at Fowler Road (Intersection 6) is projected to operate at an acceptable <u>overall</u> LOS under the Estimated 2021, No-Build 2030, No-Build 2035, and Build 2030, Build 2035 scenarios. Each approach of the intersection is projected to operate acceptably under all studied scenarios. No improvements are recommended to be conditioned.

The intersection has been designed as an RCUT as a part of a greater GDOT corridor improvement project. As a result, no further improvements are feasible to improve the LOS of the northbound approach at this intersection. It is not uncommon for a sidestreet approach to experience delay at an unsignalized intersection with a major roadway.

Overall LOS Standard: D Approach LOS Standard: D		Driveway E				Driveway I	F	Fov	vler Hill R	oad	Fow	ler Hill R	oad	
			N	lorthbour	nd	S	Southboun	d	E	Eastbound	ł	W	/estboun	d
			L	Т	R	L	Т	R	L	Т	R	L	Т	R
		Overall LOS												
		Approach LOS												
33	AM	Storage												
о ^б		50th Queue												
1 <u>3 </u>		95th Queue												
BUILD (2030) (TWSC)		Overall LOS				-			-			-		
	_	Approach LOS		1			1						<u>.</u>	
PH 1	Μ	Storage												
		50th Queue												
		95th Queue												
		Overall LOS						(4.	0)					
<u>í</u>	_	Approach LOS		B (10.7)			A (8.9)	,		A (0.2)			A (0.0)	
03	AM	Storage	-	-	-	-	-	-	-	-	-	-	-	-
<u>ی</u> ک		50th Queue	-	-	-	-	-	-	-	-	-	-	-	-
BUILD (2035) (TWSC)		95th Queue	-	18	-	-	0	-	0	-	-	0	-	-
ן≥ֿב		Overall LOS	(4.8)											
2 E	_	Approach LOS		A (9.5)			A (8.5)	r		A (0.4)			A (0.0)	
H	PA	Storage	-	-	-	-	-	-	-	-	-	-	-	-
		50th Queue	-	-	-	-	-	-	-	-	-	-	-	-
		95th Queue	-	8	-	-	0	-	0	-	-	0	-	-

5.7 Fowler Hill Road at Driveway E / Driveway F (Intersection 7)

The intersection of Fowler Hill Road at Driveway E/Driveway F (Intersection 7) is projected to operate at an acceptable LOS overall and for each approach under the build conditions. The intersection is proposed to operate under two-way stop control with stop control for the northbound and southbound approaches. The recommended lane configuration for Driveway E and Driveway F is one lane entering the site and one lane exiting the site. It is recommended that one (1) eastbound right turn lane is constructed along Fowler Road to serve traffic entering the site.

-	Overall LOS Standard: D Approach LOS Standard: D		F	owler Roa	ad	F	owler Roa	ad		-		D	riveway E	3
			N	lorthbour	nd	S	Southboun	d	E	Eastboun	d	N	/estbound	ł
			L	Т	R	L	Т	R	L	Т	R	L	Т	R
		Overall LOS						(0.	6)					
		Approach LOS		A (0.0)			A (0.2)						C (14.9)	
(2030) ;)	AM	Storage		-	-	-	-					-		-
) ³		50th Queue		-	-	-	-					-		-
BUILD ((TWSC)		95th Queue		-	-	0	-					8		-
<u>5</u> ≰		Overall LOS						(0.	6)					
		Approach LOS		A (0.0)			A (0.7)						B (12.5)	
H	Σd	Storage		-	-	-	-					-		-
L &		50th Queue		-	-	-	-					-		-
		95th Queue		-	-	0	-					3		-
		Overall LOS						(1.	1)					
6		Approach LOS		A (0.0)			A (0.3)						C (20.2)	
(2035))	AM	Storage		-	-	-	-					-		-
		50th Queue		-	-	-	-					-		-
SC D		95th Queue		-	-	3	-					23		-
BUILD ((TWSC)		Overall LOS						(1.	2)					
2 E	_	Approach LOS		A (0.0)	1		A (1.2)				,		C (16.2)	
H	Μ	Storage		-	-	-	-					-		-
<u>ц</u>		50th Queue		-	-	-	-					-		-
		95th Queue		-	-	5	-					15		-

5.8 Fowler Road at Driveway B (Intersection 8)

The intersection of Fowler Road at Driveway B (Intersection 8) is projected to operate at an acceptable LOS overall and for each approach under the build conditions. The intersection is proposed to operate under two-way stop control with stop control for the westbound approach only. The recommended lane configuration for Driveway B is one lane entering the site and one lane exiting the site. It is recommended that one (1) southbound left turn lane and one (1) northbound right turn lane are constructed along Fowler Road to serve traffic entering the site.

-	Overall LOS Standard: D Approach LOS Standard: D		- Northbound			C	Driveway /	٩	Mullinax Road			Mullinax Road		
			N	lorthbour	nd	S	outhboun	d	E	Eastbound	Ł	W	lestbound	k
			L	Т	R	L	Т	R	L	Т	R	L	Т	R
		Overall LOS						(0.	0)					
		Approach LOS					C (19.2)			A (0.0)			A (0.0)	
330	AM	Storage						-		-			-	-
<u> </u>		50th Queue						-		-			-	-
1 3 8		95th Queue						0		-			-	-
BUILD (2030) (RIRO)		Overall LOS						(0.	0)					
		Approach LOS					C (18.4)			A (0.0)			A (0.0)	
Ŧ	Storage							-		-			-	-
		50th Queue						-		-			-	-
		95th Queue						0		-			-	-
		Overall LOS						(0.	1)					
		Approach LOS					C (22.7)			A (0.0)			A (0.0)	
03{	AM	Storage						-		-			-	-
<u></u>		50th Queue						-		-			-	-
		95th Queue						15		-			-	-
BUILD (2035) (RIRO)		Overall LOS						(0.	2)			-		
	_	Approach LOS					C (23.3)			A (0.0)			A (0.0)	
PH 2	Μ	Storage						-		-			-	-
		50th Queue						-		-			-	-
		95th Queue						15		-			-	-

5.9 Mullinax Road at Driveway A (Intersection 9)

The intersection of Mullinax Road at Driveway A (Intersection 9) is projected to operate at an acceptable LOS overall and for each approach under the build conditions. The intersection is proposed as a right-in/right-out intersection, to operate under two-way stop control with stop control for the southbound approach only. The recommended lane configuration for Driveway A is one lane entering the site and one right-turn lane exiting the site. It is recommended that one (1) westbound right turn lane is constructed along Mullinax Road to serve traffic entering the site.

	Overall LOS Standard: D Approach LOS Standard: D			-		[Oriveway (C	Union Hill Road			Union Hill Road		
			N	orthbour	nd	S	Southboun	d	E	Eastbound	b	V	Vestboun	d
			L	Т	R	L	Т	R	L	Т	R	L	Т	R
		Overall LOS						(0.	4)					
â	_	Approach LOS					C (15.8)			A (0.3)			A (0.0)	
(2030)	AΜ	Storage				-		-		-	-	-	-	
) ³		50th Queue				-		-		-	-	-	-	
N P		95th Queue				5		-		-	-	3	-	
BUILD ((TWSC)		Overall LOS						(0.	4)					
		Approach LOS		B (10.3)					A (0.2)			A (0.0)		
H	Δ	Storage				-		-		-	-	-	-	
		50th Queue				-		-		-	-	-	-	
		95th Queue				3		-		-	-	0	-	
		Overall LOS						(1.	0)					
6	_	Approach LOS					C (20.7)			A (0.6)			A (0.0)	
(2035))	AM	Storage				-		-		-	-	-	-	
Ξ.		50th Queue				-		-		-	-	-	-	
SC		95th Queue				23		-		-	-	5	-	
BUILD ((TWSC)		Overall LOS						(0.	7)					
2 8	_	Approach LOS					B (11.0)			A (0.4)			A (0.0)	
H	Ρ	Storage				-		-		-	-	-	-	
		50th Queue				-		-		-	-	-	-	
		95th Queue				5		-		-	-	3	-	

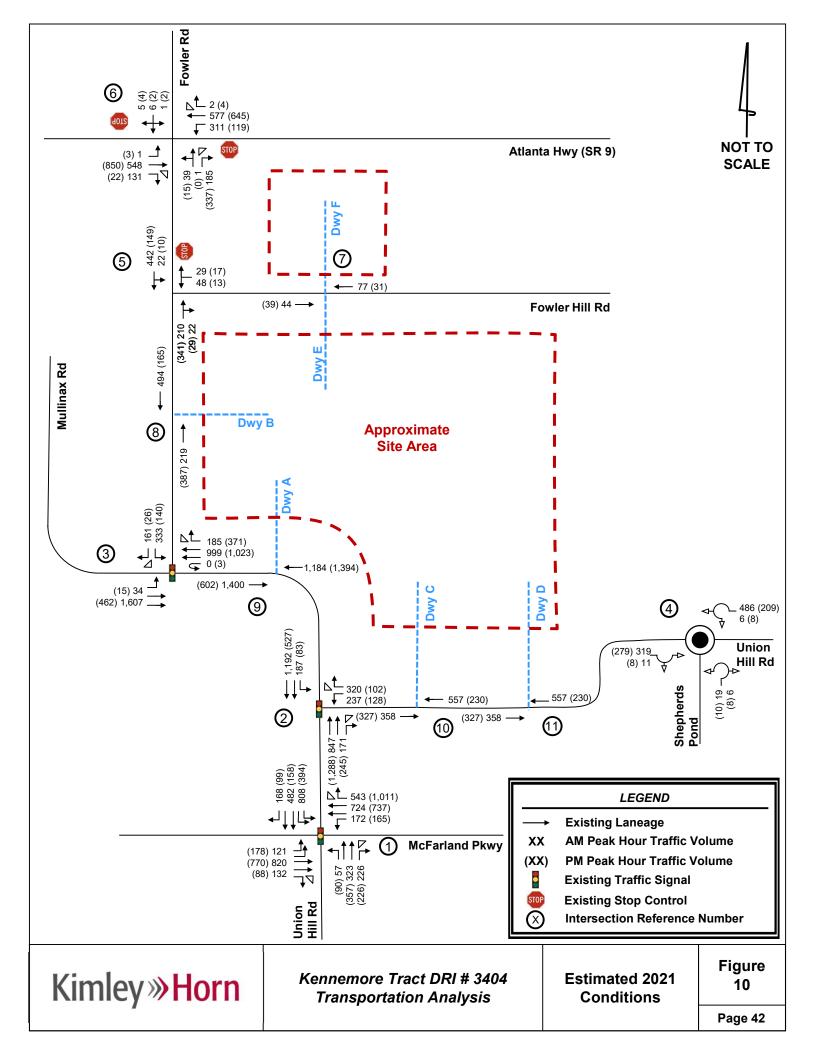
5.10 Union Hill Road at Driveway C (Intersection 10)

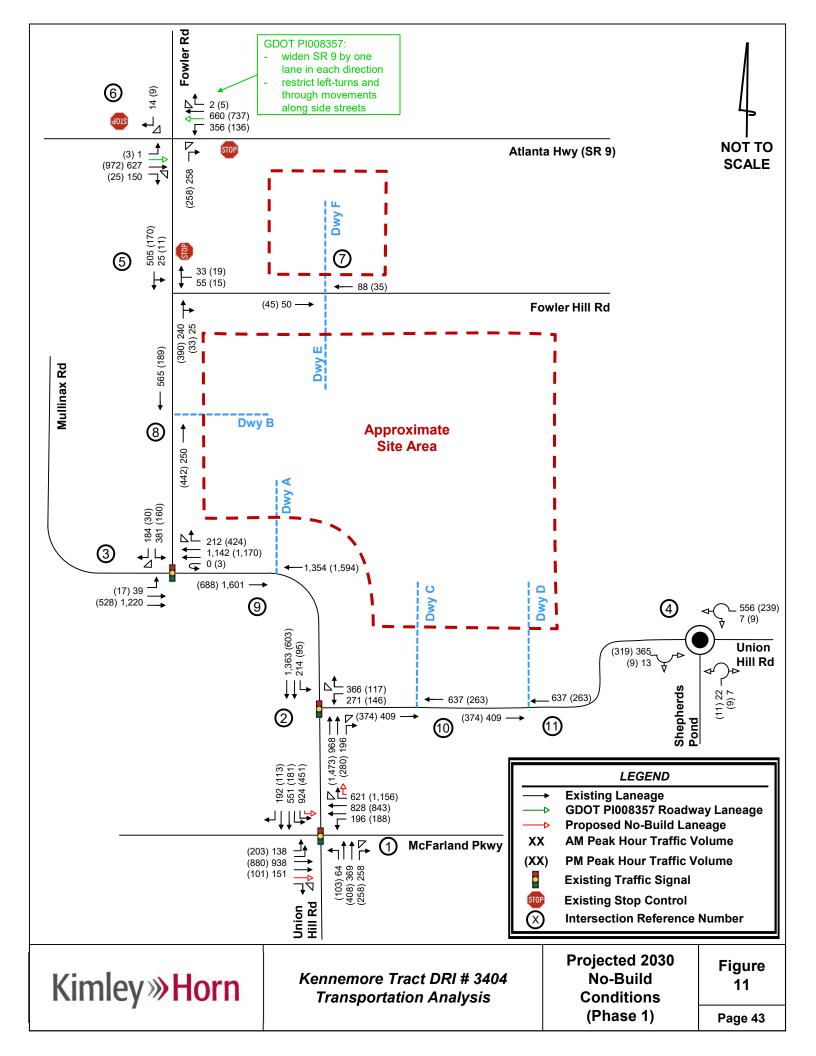
The intersection of Union Hill Road at Driveway C (Intersection 10) is projected to operate at an acceptable LOS overall and for each approach under the build conditions. The intersection is proposed to operate under two-way stop control with stop control for the southbound approach only. The recommended lane configuration for Driveway C is one lane entering the site and one lane exiting the site. It is recommended that one (1) eastbound left turn lane is constructed along Union Hill Road to serve traffic entering the site.

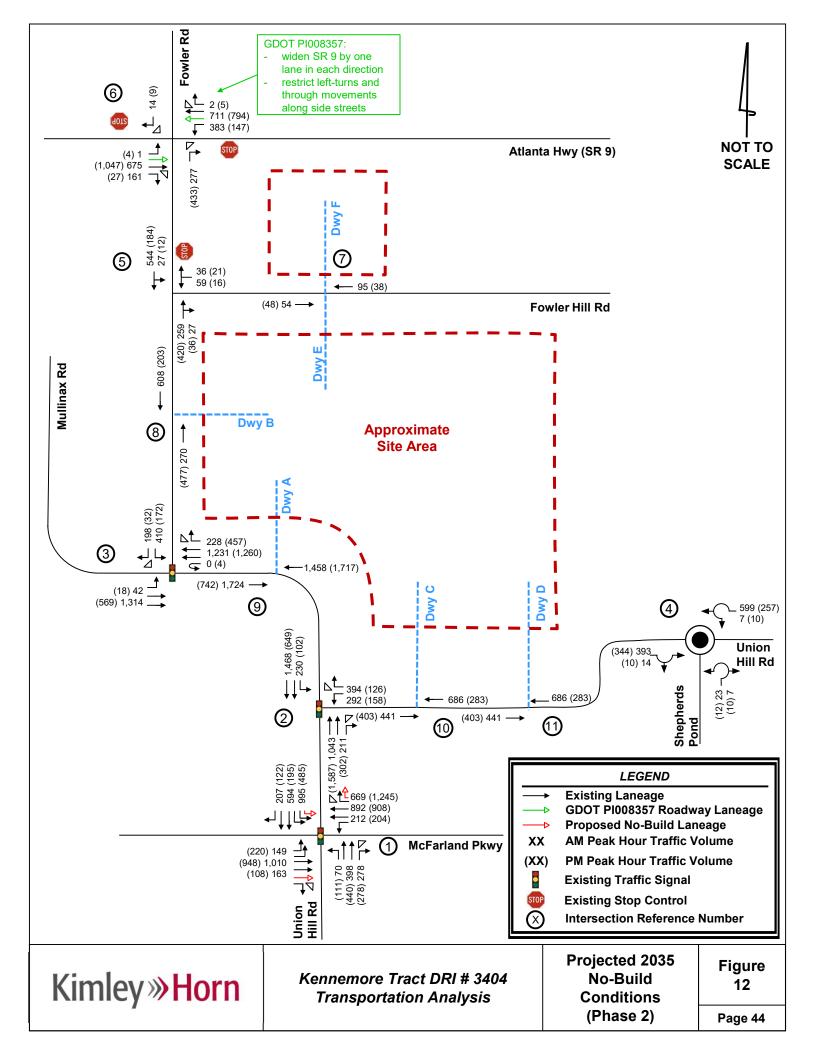
-	Overall LOS Standard: D Approach LOS Standard: D		-				Driveway I	=	Union Hill Road			Union Hill Road		
			N	lorthbour	nd		Southboun	d	E	Eastbound	ł	V V	/estboun	d
			L	Т	R	L	Т	R	L	Т	R	L	Т	R
		Overall LOS						(0.	3)					
		Approach LOS					C (19.7)			A (0.1)			A (0.0)	
(2030) 5)	AM	Storage				-		-		-	-	-	-	
) ³		50th Queue				-		-		-	-	-	-	
N C C		95th Queue				5		-		-	-	0	-	
BUILD ((TWSC)		Overall LOS						(0.	2)					
1 B		Approach LOS					B (11.5)			A (0.1)			A (0.0)	
Η	Σd	Storage				-		-		-	-	-	-	
~	-	50th Queue				-		-		-	-	-	-	
		95th Queue				3		-		-	-	0	-	
		Overall LOS						(0.	7)					
		Approach LOS					C (21.6)			A (0.3)			A (0.0)	
335	AM	Storage				-		-		-	-	-	-	
BUILD (2035) (TWSC)		50th Queue				-		-		-	-	-	-	
BUILD ((TWSC)		95th Queue				15		-		-	-	3	-	
5≥		Overall LOS						(0.	4)					
		Approach LOS					B (11.5)			A (0.1)			A (0.0)	
H	Σd	Storage				-		-		-	-	-	-	
		50th Queue				-		-		-	-	-	-	
		95th Queue				3		-		-	-	0	-	

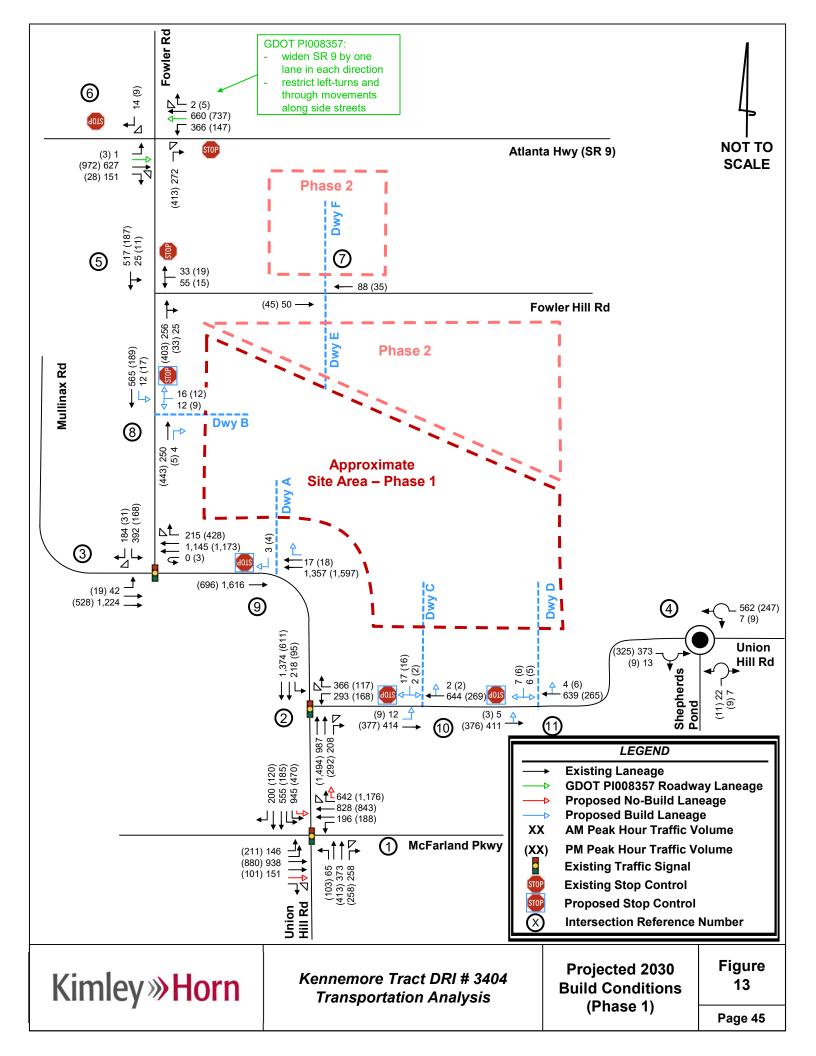
5.11 Union Hill Road at Driveway D (Intersection 11)

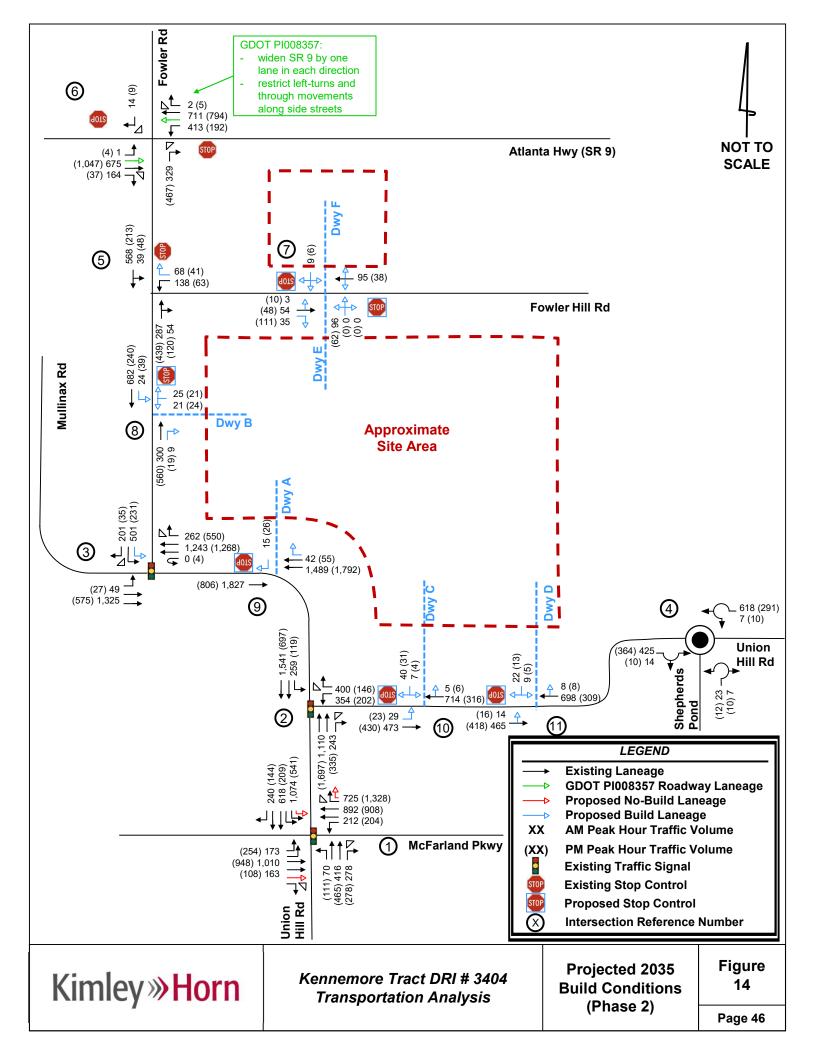
The intersection of Union Hill Road at Driveway D (Intersection 11) is projected to operate at an acceptable LOS overall and for each approach under the build conditions. The intersection is proposed to operate under two-way stop control with stop control for the southbound approach only. The recommended lane configuration for Driveway D is one lane entering the site and one lane exiting the site.



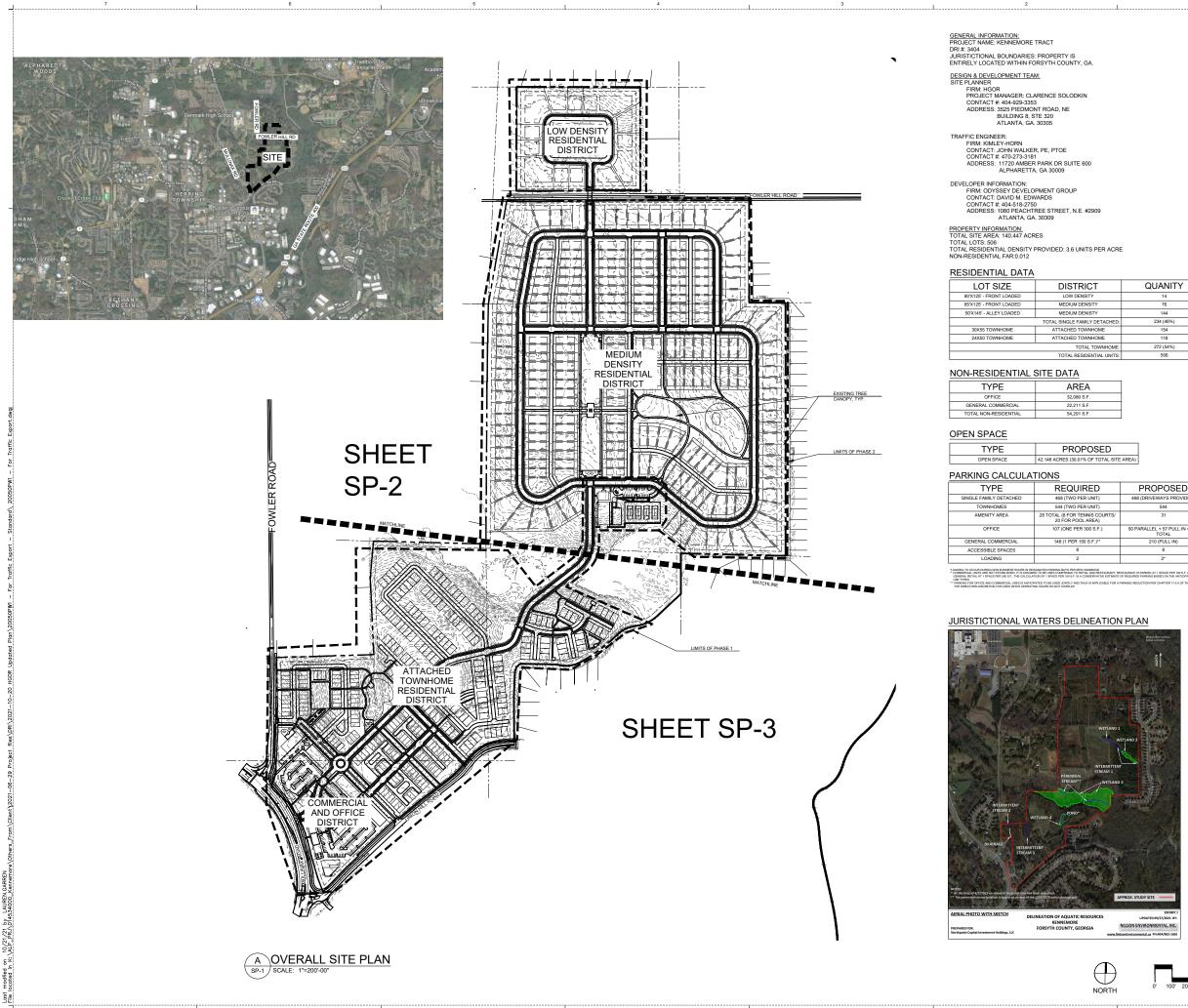








Proposed Site Plan



4

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2

RICT	QUANITY
INSITY	14
DENSITY	76
DENISTY	144
AMILY DETACHED:	234 (46%)
TOWNHOME	154
TOWNHOME	118
OTAL TOWNHOME:	272 (54%)
SIDENTIAL UNITS:	506

ΞA	
S.F.	
S.F.	
S.F.	

IRED	PROPOSED
ER UNIT)	468 (DRIVEWAYS PROVIDED)
ER UNIT)	544
ENNIS COURTS/ DL AREA)	31
R 300 S.F.)	50 PARALLEL + 57 PULL IN = 107 TOTAL
150 S.F.)**	210 (PULL IN)
	8
	2*

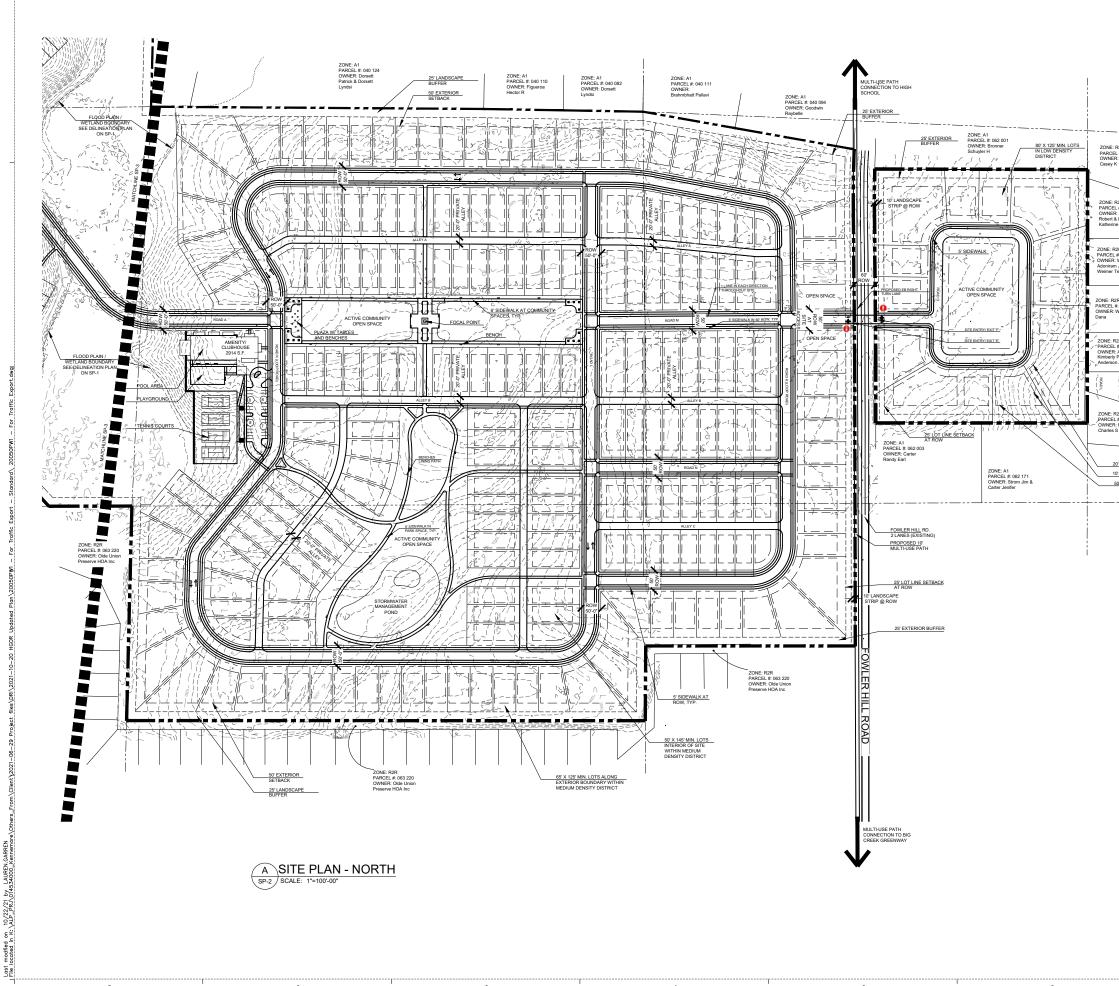
IRANT. RESTAURANT IS PARKED AT 1 SPACE PER 100 S.F. AND STIMATE OF RECURPT PARKING RASED ON THE ANTICIPATED MIX OF

1

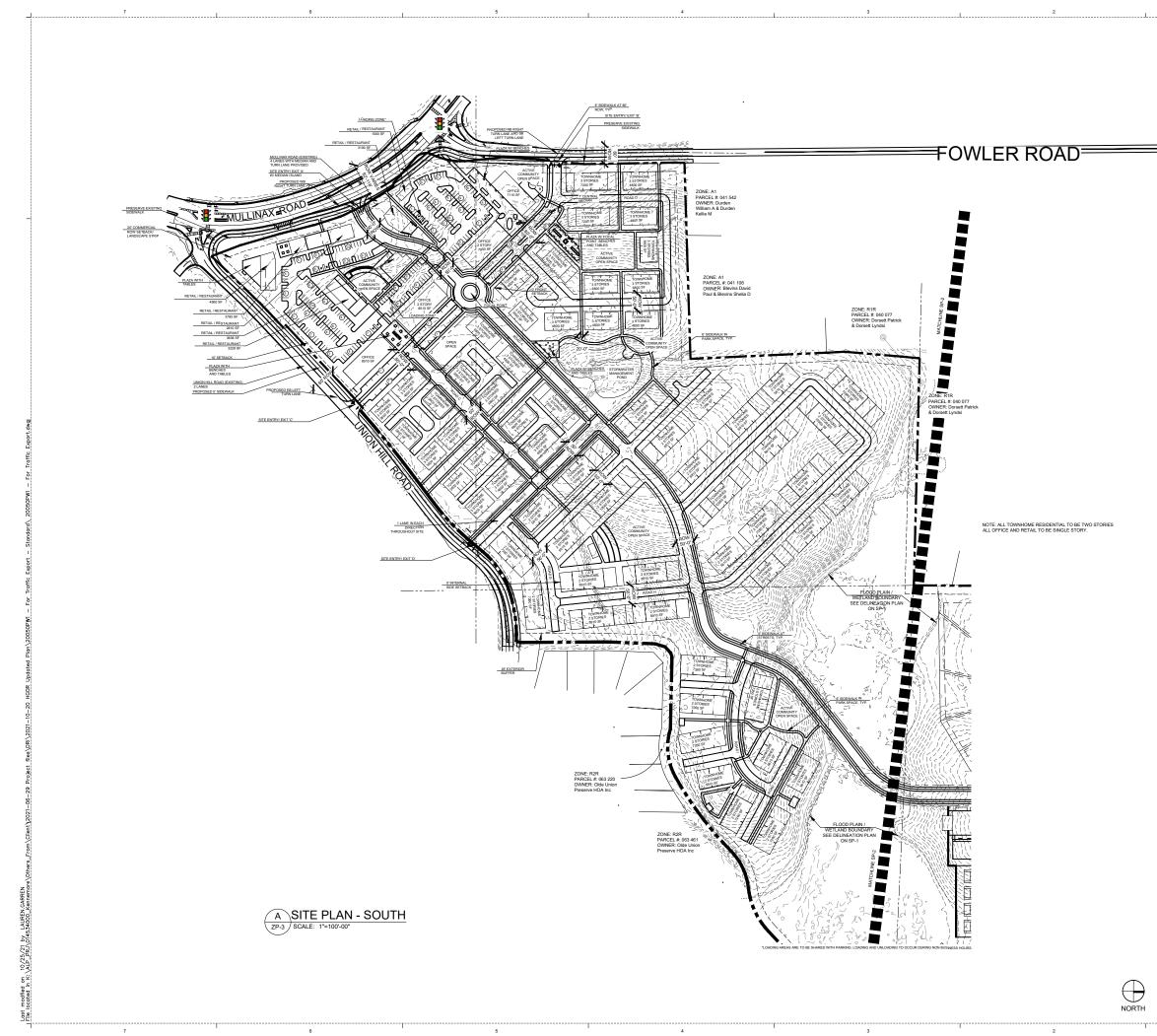
HGOR 3445 Peachtree RD NE 3445 Peachtree RD NE Suite 1425 Atlanta, Georgia 30326 www.hgor.com p. 404-248-1960 f. 404-248-1092 CONSULTANT LOGO: PROJECT TITLE: GROUP TRACT 1175 MULLINAX ROAD. ALPHARETTA GA. 30004 ODYSSEY DEVELOPMENT G 1080 FEACHTREE STREET, NE #2009 ATLANTA, GA. 30309 KENNEMORE PROJECT NO: 20050 PRINCIPAL IN CHARGE: PROJECT ARCHITECT: DRAWN BY: ISSUE AND DATE: OCTOBER 13, 202 DRI SITE PLAN REVISIONS:

NO. DATE DESCRIPTIC

SHEET TITLE: DRI SITE PLAN SP-1



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IE: R2R CEL #: 02 139			E	HGGOR 3445 Peachtree RD NE Suite 1425 Atdnata, Georgia 30326 www.hgor.com p. 404–248–1960 f. 404–248–1960 f. 404–248–1092
E: R2R E: R2R do2 140 URE Powers rrine E: R2R E: # 2082 141 ER: Womes er Teresa Ann E: R2R E: # 6082 142 R: Wolfe				PROJECT TITLE:
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			в	ISSUE AND DATE: OCTORER 13, 2021 DRI SITE PLAN REVISIONS: NO. DATE DESCRIPTION
			A	SHEET TITLE DRI SITE PLAN
	0' 50' 100'	200'		SHEET NO: SPEET NO: SPEET NO:





E	Suite 1425 Atlanta, G www.hgor.c p. 404–24	eorgia 3 com 48–1960 8–1092	50326	
D	PROJECT TITLE:			
c	KENNEMORE TRACT	1175 MULLINAX ROAD, ALPHARETTA GA. 30004	ODYSSEY DEVELOPMENT GROUP	1080 PEACHTREE STREET, NE #2909 ATI ANTA_GA_30309
в	PROJECT NO: 20050 PRINCIPAL IN CHARGE PROJECT ARCHTECT. DRAWN SY: ISSUE AND DATE OCTOBER 13, 2 DRI SITE PLAN REVISIONS: NO. DATE	CS CS	IPTION	
A	SEAL:	PLAN		JCTION
 _	SHEET NO.: SF	p- 3		NOT RELEASED FOR CONSTRUCTION





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Trip Generation Analysis

	ation Analysis (10th Ed. With 2nd	d Edition Handbook Dail	VIC & 3rd Editio	n AM/DM							
The Genera		re Tract DRI #3404	y ic a siù Eulio		10)						
		th County, GA									
and Use		Density	D	aily Trips		AM	Peak Hou	r	PM	Peak Hou	r
		Density	Total	In	Out	Total	In	Out	Total	In	Out
Proposed Project Trips =- Phase 1											
221 Multifamily Housing (Mid-Rise)	227	dwelling units	1,236	618	618	76	20	56	97	59	38
710 General Office Building	16,040	Sq. Ft. GFA	180	90	90	42	36	6	20	3	17
• • • • • •											
Gross Project Trips			1,416	708	708	118	56	62	117	62	55
Residential Trips			1,236	618	618	76	20	56	97	59	38
Mixed-Use Reductions			-2	-1	-1	-1	0	-1	-2	0	-2
Alternative Mode Reductions			0	0	0	0	0	0	0	0	0
Adjusted Residential Trips			1,234	617	617	75	20	55	95	59	36
Office Trips			180	90	90	42	36	6	20	3	17
Mixed-Use Reductions			-2	-1	-1	-1	-1	0	-2	-2	0
Alternative Mode Reductions			0	0	0	0	0	0	0	0	0
Adjusted Office Trips			178	89	89	41	35	6	18	1	17
/ixed-Use Reductions - TOTAL			-4	-2	-2	-2	-1	-1	-4	-2	-2
Alternative Mode Reductions - TOTAL			, o	0	0	0	0	, 0	0	0	0
Pass-By Reductions - TOTAL			0	0	0	0	0	0	0	0	0
lew Trips			1,412	706	706	116	55	61	113	60	53
Driveway Volumes			.,								

Trip Gen	eration Analysis (10th Ed. With 2nd	d Edition Handbook Dai	IV IC & 3rd Editio	n AM/PM	IC)						
		re Tract DRI #3404			10)						
	Fors	yth County, GA									
Land Use		Density		aily Trips			Peak Hou			Peak Hou	
		,	Total	In	Out	Total	In	Out	Total	In	Out
Proposed Project Trips - Phase 2											
210 Single-Family Detached Housing	234	dwelling units	2,274	1,137	1,137	171	43	128	230	145	85
221 Multifamily Housing (Mid-Rise)	272	dwelling units	1,480	740	740	91	24	67	116	71	45
710 General Office Building	32,080	Sq. Ft. GFA	352	176	176	57	49	8	39	6	33
820 Shopping Center	5,553	Sq. Ft. GFA	210	105	105	5	3	2	21	10	11
932 High-Turnover (Sit-Down) Restaurant	16,658	Sq. Ft. GFA	1,868	934	934	166	91	75	163	101	62
Gross Project Trips			6.184	3,092	3.092	490	210	280	569	333	236
			0,104	3,092	3,092	490	210	200	505	333	230
Residential Trips			3,754	1,877	1,877	262	67	195	346	216	130
Mixed-Use Reductions			-212	-106	-106	-23	-3	-20	-33	-15	-18
Alternative Mode Reductions			0	0	0	0	0	0	0	0	0
Adjusted Residential Trips			3,542	1,771	1,771	239	64	175	313	201	112
Office Trips			352	176	176	57	49	8	39	6	33
Mixed-Use Reductions			-68	-34	-34	-15	-9	-6	-8	-5	-3
Alternative Mode Reductions			-00	-54	-34	-13	-9	0	-0	-5	-5
Adjusted Office Trips			284	142	142	42	40	2	31	1	30
			201							•	
Retail Trips			210	105	105	5	3	2	21	10	11
Mixed-Use Reductions			-28	-14	-14	-3	-2	-1	-13	-7	-6
Alternative Mode Reductions			0	0	0	0	0	0	0	0	0
Pass By Reductions (Based on ITE Rates)			-62	-31	-31	0	0	0	-4	-2	-2
Adjusted Retail Trips			120	60	60	2	1	1	4	1	3
Restaurant Trips			1,868	934	934	166	91	75	163	101	62
Mixed-Use Reductions			-244	-122	-122	-33	-23	-10	-36	-18	-18
Alternative Mode Reductions			-244	-122	0	-55	-23	0	-50	-10	0
Pass By Reductions (Based on ITE Rates)			-698	-349	-349	0	0	0	-54	-27	-27
Adjusted Restaurant Trips			926	463	463	133	68	65	73	56	17
Mixed-Use Reductions - TOTAL			-552	-276	-276	-74	-37	-37	-90	-45	-45
Alternative Mode Reductions - TOTAL			0	0	0	0	0	0	0	0	0
Pass-By Reductions - TOTAL			-760	-380	-380	0	0	0	-58	-29	-29
New Trips			4,872	2,436	2,436	416	173	243	421	259	162
Driveway Volumes											

Intersection Volume Worksheets

INTERSECTION #1	
McFarland Pkwy (West)/McFarland Pkwy (East) at Union Hill Rd (South)/Union Hill F	Rd (North)

						AM PEAK H	IOUR									
		Union Hill	Rd (South)			Union Hill			1	McFarland	kwy (West)		1	McFarland	Pkwy (East)	
		North	bound			South	bound			Easti	ound			West	bound	
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2021 Traffic Volumes	1	56	323	226	8	800	482	168	0	121	820	132	17	155	724	543
Pedestrians			0))				0	
Conflicting Pedestrians		0		0		D		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	6	10	27	1	28	6	7	0	5	71	7	0	13	53	31
Heavy Vehicle %	2%	11%	3%	12%	13%	4%	2%	4%	2%	4%	9%	5%	2%	8%	7%	6%
Peak Hour Factor		. 0	.96			0.	96			0.	96			0	.96	
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2021 Volumes	1	56	323	226	8	800	482	168	0	121	820	132	17	155	724	543
					-				-				-			
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	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Annual Growth Rate (Design Year)	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 (Design Year)	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Background Growth Trips	1	64	369	258	9	915	551	192	0	138	938	151	19	177	828	621
Background Growth Trips (Design Year)	1	69	398	278	10	985	594	207	0	149	1010	163	21	191	892	669
2030 No-Build Traffic	1	64	369	258	9	915	551	192	0	138	938	151	19	177	828	621
2035 No-Build Traffic (Design Year)	1	69	398	278	10	985	594	207	0	149	1,010	163	21	191	892	669
											-,					
Phase 1																
Trip Distribution IN	1	I	8%		1				1	13%			1	1	1	34%
Trip Distribution OUT						(34%)	(8%)	(13%)								
Residential Trips	0	0	2	0	0	19	4	7	0	3	0	0	0	0	0	7
nearacteria mpa		, i	-	Ū	Ū	15	-	,	Ŭ		0	Ū	v	0		,
Trip Distribution IN	1		5%						I.	14%			1		1	40%
Trip Distribution OUT			314			(40%)	(5%)	(14%)		1470						40%
Office Trips	0	0	2	0	0	2	0	(14%)	0	5	0	0	0	0	0	14
Onice mps	, v		2	Ū	U	2	0	1	Ů	, ,	U	0	Ŭ	0	Ū	14
Total Vehicular Project Trips	0	0	4	0	0	21	4	8	0	8	0	0	0	0	0	21
Total Venedia Hojeet Hips	0		-	0	0	**	-	0	0		0	v	Ū	0	0	**
2030 Build Traffic	1	64	373	258	9	936	555	200	0	146	938	151	19	177	828	642
2030 Build Heavy Vehicle %	2%	11%	3%	12%	13%	3%	2%	4%	2%	4%	9%	5%	2%	8%	7%	6%
Phase 2																
Trip Distribution IN	1	I	8%		r				1	13%			1	1	1	34%
Trip Distribution OUT						(34%)	(8%)	(13%)								
Residential Trips	0	0	5	0	0	60	14	23	0	8	0	0	0	0	0	22
nearacteriar mpa						3	17	23			0		, v			**
Trip Distribution IN	1		5%						I.	14%			1		1	40%
Trip Distribution OUT			34			(40%)	(5%)	(14%)		14/6						40%
Office Trips	0	Ó	2	Ó	0	1	0	0	0	6	0	0	0	0	Ó	16
once mps	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	10
Trip Distribution IN		T	16%	1				1	T	15%			T	1	1	27%
Trip Distribution IN Trip Distribution OUT			10%			(27%)	(16%)	(15%)	l	15%			 		I	2170
Trip Distribution OUT	0	0	0	0	0	(27%)	(10%)	(15%)	0	0	0	0	0	0	0	0
Botail Tring	0	Ū	Ū	U	0	0	0	U	Ū	U	U	U	U	U	U	U
Retail Trips								r	i	15%			1	n	1	27%
	-1		169/							1076					1	2170
Trip Distribution IN			16%			(2.2%)	(450)	(454/)								
Trip Distribution IN Trip Distribution OUT						(27%)	(16%)	(15%)		40						40
Trip Distribution IN	0	0	16%	0	0	(27%) 18	(16%) 10	(15%) 10	0	10	0	0	0	0	0	18
Trip Distribution IN Trip Distribution OUT Restaurant Trips	0	0		0	0				0	10	0	0	0	0	0	18
Trip Distribution IN Trip Distribution OUT Restaurant Trips Pass-By Distribution IN	0	0		0	0				0	10	0	0	0	0	0	18
Trip Distribution IN Trip Distribution OUT Restaurant Trips Pass-By Distribution OUT Pass-By Distribution OUT			11			18	10	10								
Trip Distribution IN Trip Distribution OUT Restaurant Trips Pass-By Distribution IN	0	0		0	0				0	10	0	0	0	0	0	18
Trip Distribution IN Trip Distribution OUT Retational Trips Pass-By Distribution IN Pass-By Otstribution OUT Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN Trip Distribution OUT Restaurant Trips Pass-By Distribution OUT Pass-By Distribution OUT			11			18	10	10								
Trip Distribution IN Trip Distribution DUT Restaurant Trips Pass-By Otstribution IN Pass-By Otstribution OUT Pass-By Trips Total Vehicular Project Trips	0	0	11 0 18	0	0	18 0 79	10 0 24	10 0 33	0	0	0	0	0	0	0	0
Trip Distribution IN Trip Distribution OUT Restaurant Trips Pass-By Otstribution IN Pass-By Otstribution OUT Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

						PM PEAK I	HOUR									
		Union Hill	Rd (South)			Union Hill	Rd (North)			McFarland	Pkwy (West)			McFarland	Pkwy (East)	
			bound				bound				ound				bound	
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2021 Traffic Volumes	1	87	350	222	5	381	155	97	3	172	755	86	16	146	723	991
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	6	9	0	17	5	6	0	8	35	3	2	15	38	34
Heavy Vehicle %	2%	5%	2%	4%	2%	4%	3%	6%	2%	5%	5%	3%	13%	10%	5%	3%
Peak Hour Factor			983				98				98				.98	
Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Adjusted 2021 Volumes	1	89	357	226	5	389	158	99	3	175	770	88	16	149	737	1,011
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	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Annual Growth Rate (Design Year)	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 (Design Year)	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Background Growth Trips	1	102	408	258	6	445	181	113	3	200	880	101	18	170	843	1156
Background Growth Trips (Design Year)	1	110	440	278	6	479	195	122	4	216	948	108	20	184	908	1245
2030 No-Build Traffic	1	102	408	258	6	445	181	113	3	200	880	101	18	170	843	1,156
2035 No-Build Traffic (Design Year)	1	110	440	278	6	479	195	122	4	216	948	108	20	184	908	1,245
Phase 1														1		
Trip Distribution IN			8%							13%						34%
Trip Distribution OUT						(34%)	(8%)	(13%)								
Residential Trips	0	0	5	0	0	12	3	5	0	8	0	0	0	0	0	20
Trip Distribution IN			5%				(5%)	(14%)		14%						40%
Trip Distribution OUT Office Trips	0	0	0	0	0	(40%)	(5%)	(14%)	0	0	0	0	0	0	0	0
Office Trips	U	U	U	U	U		1	2	U	U	U	U	U	U	U	U
Total Vehicular Project Trips	0	0	5	0	0	19	4	7	0	8	0	0	0	0	0	20
Total Venedia Hojee Hips	0	Ū	3	Ū	0	15		,	0	U	Ū	Ū	Ū	Ū	Ū	20
2030 Build Traffic	1	102	413	258	6	464	185	120	3	208	880	101	18	170	843	1,176
2030 Build Heavy Vehicle %	2%	5%	2%	4%	2%	4%	3%	6%	2%	4%	5%	3%	13%	10%	5%	3%
•																
Phase 2																
Trip Distribution IN			8%							13%						34%
Trip Distribution OUT						(34%)	(8%)	(13%)								
Residential Trips	0	0	16	0	0	38	9	15	0	26	0	0	0	0	0	68
	-				-				-				-			
Trip Distribution IN			5%							14%						40%
Trip Distribution OUT						(40%)	(5%)	(14%)								
Office Trips	0	0	0	0	0	12	2	4	0	0	0	0	0	0	0	0
Trip Distribution IN			16%							15%						27%
Trip Distribution OUT						(27%)	(16%)	(15%)								
Retail Trips	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	-	-			-		-		-					-	•	•
Trip Distribution IN			16%							15%						27%
Trip Distribution OUT						(27%)	(16%)	(15%)								
Restaurant Trips	0	0	9	0	0	5	3	3	0	8	0	0	0	0	0	15
			r	r		r		r		r	r	r				
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	25	0	0	56	14	22	0	34	0	0	0	0	0	83
2035 Build Traffic (Design Year)	1	110	465	278	6	535	209	144	4	250	948	108	20	184	908	1,328
2035 Build Heavy Vehicle % (Design Year)	2%	5%	2%	4%	2%	4%	3%	5%	2%	4%	5%	3%	13%	10%	5%	3%

INTERSECTION #2 Union Hill Rd (East) at Union Hill Rd (South)/Mullinax Rd

						AM PEAK I										
	-	Union Hill	Rd (South)				nax Rd		1				1	Union Hil	Rd (East)	
			bound				bound			East	ound				bound	
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2021 Traffic Volumes	0	0	847	171	0	187	1,192	0	0	0	0	0	0	237	0	320
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	27	11	0	11	30	0	0	0	0	0	0	7	0	6
Heavy Vehicle %	2%	2%	3%	6%	2%	6%	3%	2%	2%	2%	2%	2%	2%	3%	2%	2%
Peak Hour Factor Adjustment Factor	1	1	.84	1	1	1	.84	1	1	1	84	1	1	1	84	1
Adjustment Factor Adjusted 2021 Volumes	0	0	847	1 171	0	1 187	1,192	0	0	0	0	0	0	237	0	320
Adjusted 2021 Volumes	U	U	847	1/1	U	18/	1,192	U	U	U	U	U	U	23/	U	320
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	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Annual Growth Rate (Design Year)	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 (Design Year)	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Background Growth Trips	0	0	968	196	0	214	1363	0	0	0	0	0	0	271	0	366
Background Growth Trips (Design Year)	0	0	1043	211	0	230	1468	0	0	0	0	0	0	292	0	394
2030 No-Build Traffic	0	0	968	196	0	214	1,363	0	0	0	0	0	0	271	0	366
2035 No-Build Traffic (Design Year)	0	0	1,043	211	0	230	1,468	0	0	0	0	0	0	292	0	394
Phase 1																
Trip Distribution IN			35%	20%												
Trip Distribution OUT							(20%)							(35%)		
Residential Trips	0	0	7	4	0	0	11	0	0	0	0	0	0	19	0	0
Trip Distribution IN			35%	24%		11%										
Trip Distribution OUT							(5%)							(54%)		
Office Trips	0	0	12	8	0	4	0	0	0	0	0	0	0	3	0	0
Total Vehicular Project Trips	0	0	19	12	0	4	11	0	0	0	0	0	0	22	0	0
Total venicular project Trips	U	U	19	12	U	4	11	U	U	U	U	U	U	22	U	0
2030 Build Traffic	0	0	987	208	0	218	1,374	0	0	0	0	0	0	293	0	366
2030 Build Heavy Vehicle %	2%	2%	3%	6%	2%	6%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%
Phase 2																
Trip Distribution IN			45%	10%												10%
Trip Distribution OUT						(10%)	(40%)							(15%)		
Residential Trips	0	0	29	6	0	18	70	0	0	0	0	0	0	26	0	6
			-		-		-		-				-	-		
Trip Distribution IN			35%	24%		11%										
Trip Distribution OUT							(5%)							(54%)		
Office Trips	0	0	14	10	0	4	0	0	0	0	0	0	0	1	0	0
Trip Distribution IN	L	l	35%	23%		10%		l				l				
Trip Distribution OUT	0	0	0	0	0	0	(5%)	0	0	0	0	0	0	(53%)	0	0
Retail Trips	U	U	U	U	U	U	U	U	U	U	U	U	U	1	U	
Trip Distribution IN	1		35%	23%		10%										
Trip Distribution IN Trip Distribution OUT			3378	23/0		10%	(5%)							(53%)		
Restaurant Trips	0	0	24	16	0	7	(5%)	0	0	0	0	0	0	(53%)	0	0
inclusion mps	0		24	10	0	,	3		0		5	0	0	34	5	
Pass-By Distribution IN	1		1				1									
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	67	32	0	29	73	0	0	0	0	0	0	62	0	6
2035 Build Traffic (Design Year)	0	0	1,110	243	0	259	1,541	0	0	0	0	0	0	354	0	400
2035 Build Heavy Vehicle % (Design Year)	2%	2%	3%	6%	2%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
																-

						PM PEAK I	HOUR									
	1	Union Hill	Rd (South)			Mulli	nax Rd						1	Union Hil	I Rd (East)	
		North	bound			South	bound			East	ound			West	bound	
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2021 Traffic Volumes	0	0	1.263	240	0	81	517	0	0	0	0	0	0	125	0	100
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	38	7	0	0	18	0	0	0	0	0	0	11	0	3
Heavy Vehicle %	2%	2%	3%	3%	2%	2%	3%	2%	2%	2%	2%	2%	2%	9%	2%	3%
Peak Hour Factor			976				98				98				98	
Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Adjusted 2021 Volumes	0	0	1.288	245	0	83	527	0	0	0	0	0	0	128	0	102
															-	
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	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Annual Growth Rate (Design Year)	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 (Design Year)	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Background Growth Trips	0	0	1473	280	0	95	603	0	0	0	0	0	0	146	0	117
Background Growth Trips (Design Year)	0	0	1587	302	0	102	649	0	0	0	0	0	0	158	0	126
2030 No-Build Traffic	0	0	1,473	280	0	95	603	0	0	0	0	0	0	146	0	117
2035 No-Build Traffic (Design Year)	0	0	1,587	302	0	102	649	0	0	0	0	0	0	158	0	126
Phase 1																
Trip Distribution IN	1		35%	20%									1			
Trip Distribution OUT							(20%)							(35%)		
Residential Trips	0	0	21	12	0	0	7	0	0	0	0	0	0	13	0	0
					Ŧ						, i	÷				
Trip Distribution IN	1		35%	24%		11%										
Trip Distribution OUT							(5%)							(54%)		
Office Trips	0	0	0	0	0	0	1	0	0	0	0	0	0	9	0	0
														•		
Total Vehicular Project Trips	0	0	21	12	0	0	8	0	0	0	0	0	0	22	0	0
2030 Build Traffic	0	0	1,494	292	0	95	611	0	0	0	0	0	0	168	0	117
2030 Build Heavy Vehicle %	2%	2%	3%	3%	2%	2%	3%	2%	2%	2%	2%	2%	2%	8%	2%	3%
Phase 2	1														·	
Trip Distribution IN			45%	10%												10%
Trip Distribution OUT						(10%)	(40%)							(15%)		
Residential Trips	0	0	90	20	0	11	45	0	0	0	0	0	0	17	0	20
			r	-												
Trip Distribution IN			35%	24%		11%										
Trip Distribution OUT							(5%)							(54%)		
Office Trips	0	0	0	0	0	0	2	0	0	0	0	0	0	16	0	0
					-								-			
Trip Distribution IN			35%	23%		10%							l			
Trip Distribution OUT	L					l	(5%)	l			l		I	(53%)		
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
					-											
Trip Distribution IN	L		35%	23%		10%	(2011)	l			l		I	(2001)		
Trip Distribution OUT	L						(5%)						I	(53%)		
Restaurant Trips	0	0	20	13	0	6	1	0	0	0	0	0	0	9	0	0
Pass-By Distribution IN													l			
Pass-By Distribution OUT	<u> </u>	<u> </u>					<u> </u>					-	<u> </u>			-
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	r -				-			-			-			·	-	
Total Vehicular Project Trips	0	0	110	33	0	17	48	0	0	0	0	0	0	44	0	20
			4.007	225		440	607							202		445
2035 Build Traffic (Design Year)	0	0	1,697	335	0	119	697	0	0	0	0	0	0	202	0	146 3%
2035 Build Heavy Vehicle % (Design Year)	2%	2%	3%	3%	2%	2%	3%	2%	2%	2%	2%	2%	2%	7%	2%	3%

INTERSECTION #3 Mullinax Rd (West)/Mullinax Rd (East) at Fowler Rd

						AM PEAK H	IOUR									
						Fowl			1	Mullinax	Rd (West)		1	Mullinax	Rd (East)	
			bound				bound				ound				bound	
Observed 2021 Traffic Volumes	U-Turn	Left 0	Through	Right	U-Turn 0	Left 333	Through	Right 161	U-Turn 0	Left 34	Through 1,067	Right 0	U-Turn 0	Left 0	Through 999	Right 185
Observed 2021 Traffic Volumes Pedestrians	0		0	0	0		0	161	0		1,067	0	0		999	185
Conflicting Pedestrians		0	1	0		n		0		0	0	0		D	1	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Encycles Conflicting Bicycles	U	U	0	0	U	U	U	0	U	U	0	0	U	U	U	0
Heavy Vehicles	0	0	0	0	0	13	0	12	0	2	28	0	0	0	15	18
Heavy Vehicles	2%	2%	2%	2%	2%	4%	2%	7%	2%	6%	3%	2%	2%	2%	2%	10%
Peak Hour Factor	276		.80	276	276		276	/%	276		376	276	276		.80	10%
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	0	0	0				0							0		
Adjusted 2021 Volumes	0	0	0	0	0	333	0	161	0	34	1,067	0	0	0	999	185
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	1.5%	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%
	1.14	1.14	1.14	1.14			1.14	1.14		1.14	1.14		1.14		1.14	1.14
Annual Growth Rate (Design Year)					1.5%	1.5%			1.5%			1.5%		1.5%		
Growth Factor (Design Year)	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Background Growth Trips	0	0	0	0	0	381	0		0	39	1220	0		0	1142	212
Background Growth Trips (Design Year)	0	0	0	0	0	410	0	198	0	42	1314	0	0	0	1231	228
2030 No-Build Traffic	0	0	0	0	0	381	0	184	0	39	1,220	0	0	0	1,142	212
2035 No-Build Traffic (Design Year)	0	0	0	0	0	410	0	198	0	42	1,314	0	0	0	1,231	228
Phase 1														· · · · ·		
Trip Distribution IN										3%						5%
Trip Distribution OUT						(20%)									(3%)	
Residential Trips	0	0	0	0	0	11	0	0	0	1	0	0	0	0	2	1
						-	-				r					
Trip Distribution IN										5%	11%					5%
Trip Distribution OUT						(5%)		(5%)							(11%)	(5%)
Office Trips	0	0	0	0	0	0	0	0	0	2	4	0	0	0	1	2
						-	-				r					
Total Vehicular Project Trips	0	0	0	0	0	11	0	0	0	3	4	0	0	0	3	3
	-															
2030 Build Traffic																
	0	0	0	0	0	392	0	184	0	42	1,224	0	0	0	1,145	215
2030 Build Heavy Vehicle %	0 2%	0 2%	0 2%	0 2%	0 2%	392 4%	0 2%	184 7%	0 2%	42 5%	1,224 3%	0 2%	0 2%	0 2%	1,145 2%	215 10%
2030 Build Heavy Vehicle %																
2030 Build Heavy Vehicle % Phase 2										5%						10%
2030 Build Heavy Vehicle % Phase 2 Trip Distribution IN						4%									2%	
2030 Build Heavy Vehicle % Phase 2 Trip Distribution IN Trip Distribution OUT	2%	2%	2%	2%	2%	4%	2%	7%	2%	5% 3%	3%	2%	2%	2%	2%	10% 45%
2030 Build Heavy Vehicle % Phase 2 Trip Distribution IN						4%				5%					2%	10%
2030 Build Heavy Vehicle % Phase 2 Trip Distribution IN Trip Distribution OUT Residential Trips	2%	2%	2%	2%	2%	4%	2%	7%	2%	3% 2	3%	2%	2%	2%	2%	10% 45% 29
2020 Build Heavy Vehicle % Phase 2 Trip Distribution IN Trip Distribution OUT Besidential Trips Trip Distribution IN Trip Distribution IN	2%	2%	2%	2%	2%	4% (50%) 88	2%	7%	2%	5% 3%	3%	2%	2%	2%	2% (3%) 5	10% 45% 29 5%
2030 Build Heavy Vehicle % Phase 2 Trip Distribution N Trip Distribution OUT Residential Trips Trip Distribution N Trip Distribution N Trip Distribution OUT	0	0	0	0	2% 0	4% (50%) 88 (5%)	0	7% 0 (5%)	2% 0	5% 3% 2 5%	3% 0 11%	2%	0	0	2% (3%) 5 (11%)	10% 45% 29 5% (5%)
2030 Build Heavy Vehicle % Phase 2 Trip Distribution IN Trip Distribution RUT Residential Trips Trip Distribution IN Trip Distribution IN	2%	2%	2%	2%	2%	4% (50%) 88	2%	7%	2%	3% 2	3%	2%	2%	2%	2% (3%) 5	10% 45% 29 5%
2030 Build Heavy Vehicle % Phase 2 Trip Distribution N Trip Distribution OUT Readertuit Trips Trip Distribution IN Trip Distribution N Trip Distribution N Trip Distribution OUT Office Trips	0	0	0	0	2% 0	4% (50%) 88 (5%)	0	7% 0 (5%)	2% 0	5% 3% 2 5% 2	3% 0 11% 4	2%	0	0	2% (3%) 5 (11%)	10% 45% 29 5% (5%)
2030 Build Heavy Vehicle % Phase 2 Trip Distribution N Trip Distribution N Residential Trip Trip Distribution N Trip Distribution N Trip Distribution N Trip Distribution N Trip Distribution OUT	0	0	0	0	2% 0	4% (50%) 88 (5%) 0	0	7% 0 (5%) 0	2% 0	5% 3% 2 5%	3% 0 11%	2%	0	0	2% (3%) 5 (11%) 0	10% 45% 29 5% (5%) 2
2030 Build Heavy Vehicle % Phase 2 Trip Distribution N Trip Distribution OUT Residential Trips Trip Distribution N Trip Distribution N Trip Distribution N Trip Distribution OUT Office Trips	2% 0	2% 0	2% 0	0	2% 0	4% (50%) 88 (5%)	0	7% 0 (5%)	2% 0	5% 3% 2 5% 2 5%	3% 0 11% 4	2% 0 0	0	0	2% (3%) 5 (11%)	10% 45% 29 5% (5%)
2020 Build Heavy Vehide % Phase 2 Trip Distribution N	0	0	0	0	2% 0	4% (50%) 88 (5%) 0	0	7% 0 (5%) 0	2% 0	5% 3% 2 5% 2	3% 0 11% 4	2%	0	0	2% (3%) 5 (11%) 0	10% 45% 29 5% (5%) 2
2020 Build Heavy Vehicle % Phase 2 Trip Distribution N Trip Distri	2% 0	2% 0	2% 0	2% 0	2% 0	4% (50%) 88 (5%) 0	0	7% 0 (5%) 0	2% 0	5% 3% 2 5% 2 5% 0	3% 0 11% 4 10% 0	2% 0 0	0	2% 0 0	2% (3%) 5 (11%) 0 (10%)	10% 45% 29 5% (5%) 2 (5%)
2020 Build Heavy Vehide % Phase 2 Trip Distribution N	2% 0	2% 0	2% 0	2% 0	2% 0	4% (50%) 88 (5%) 0 (5%) 0	0	7% 0 (5%) 0 (5%) 0	2% 0	5% 3% 2 5% 2 5%	3% 0 11% 4 10%	2% 0 0	0	2% 0 0	2% (3%) 5 (11%) 0 (10%) 0	10% 45% 29 5% (5%) 2 (5%) 0
2020 Build Heavy Vehicle % Phase 2 Phase 2 Trip Distribution NT Residential Trips Trip Distribution NT Trip Distri	2% 0 0	2% 0 0	2% 0 0	2% 0 0	2%	4% (50%) 88 (5%) 0 (5%) 0	2% 0 0	7% 0 (5%) 0 (5%) 0	2%	5% 3% 2 5% 2 5% 5% 5%	3% 0 11% 4 10% 0	2% 0 0	2% 0 0	2% 0 0	2% (3%) 5 (11%) 0 (10%) 0	10% 45% 29 5% (5%) 2 (5%) 0
2020 Build Heavy Vehide % Phase 2 Trip Distribution N	2% 0	2% 0	2% 0	2% 0	2% 0	4% (50%) 88 (5%) 0 (5%) 0	0	7% 0 (5%) 0 (5%) 0	2% 0	5% 3% 2 5% 2 5% 0	3% 0 11% 4 10% 0	2% 0 0	0	2% 0 0	2% (3%) 5 (11%) 0 (10%) 0	10% 45% 29 5% (5%) 2 (5%) 0
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2020 Build Heavy Vehicle % Phase 2 Trip Distribution NI Trip Distributio	2% 0 0	2% 0 0	2% 0 0	2% 0 0	2%	4% (50%) 88 (5%) 0 (5%) 0	2% 0 0	7% 0 (5%) 0 (5%) 0	2%	5% 3% 2 5% 2 5% 5% 5%	3% 0 11% 4 10% 0	2% 0 0	2% 0 0	2% 0 0	2% (3%) 5 (11%) 0 (10%) 0	10% 45% 29 5% (5%) 2 (5%) 0
2030 Build Heavy Vehide % Phase 2 Trip Distribution N Trip Distrib	2% 0 0	2% 0 0	2% 0 0	2% 0 0	2%	4% (50%) 88 (5%) 0 (5%) 0	2% 0 0	7% 0 (5%) 0 (5%) 0	2%	5% 3% 2 5% 2 5% 5% 5%	3% 0 11% 4 10% 0	2% 0 0	2% 0 0	2% 0 0	2% (3%) 5 (11%) 0 (10%) 0	10% 45% 29 5% (5%) 2 (5%) 0
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2020 Build Heavy Vehicle % Phase 2 Trip Distribution NI Pass-By Ostribution NI Pass-By Ostribution OUT		2%	2% 0 0	2% 0 0		4% (50%) 88 (5%) 0 (5%) 0 (5%) 3	2% 0 0 0	7% 0 (5%) 0 (5%) 0 (5%) 3		5% 3% 2 5% 2 5% 5% 3	3% 0 11% 4 10% 0 10% 7	2% 0 0 0	2% 0 0	2% 0 0 0	2% (3%) 5 (11%) 0 (10%) 0 (10%) 7	10% 45% 29 5% (5%) 2 (5%) 0 0 (5%) 3
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2020 Build Heavy Vehicle % Phase 2 Trip Distribution NI Passib Postribution NI Pass Postribution OUT Pass Postribution OU		2%	2% 0 0 0	2% 0 0 0		4% (50%) 88 (5%) 0 (5%) 0 (5%) 3 0	2% 0 0 0	7% 0 (5%) 0 (5%) 0 (5%) 3 0		5% 3% 2 5% 0 5% 0 0 0	3% 0 11% 4 10% 0 10% 7 0	2% 0 0 0 0	2% 0 0 0	2% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2% (3%) 5 (11%) 0 (10%) 7 (10%) 7 0	10% 45% 29 5% (5%) 2 (5%) 0 (5%) 3 3

Normal problem Normal							PM PEAK H	IOUR									
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UnitU			North	bound			South	bound			East	bound			West	bound	
Channel ControlO0001001001001000		U-Turn			Right	U-Turn			Right	U-Turn			Right	U-Turn			Right
NeedingII </td <td>Observed 2021 Traffic Volumes</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>137</td> <td></td> <td></td> <td></td> <td>15</td> <td></td> <td></td> <td>3</td> <td>0</td> <td>1.003</td> <td></td>	Observed 2021 Traffic Volumes	0	0	0	0	0	137				15			3	0	1.003	
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Geomb Factor110114<	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%
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neidentity Trip: 0 0 0 0 0 0 0 0 0 0 0 0 1 3 Trip Darkputon N - - - - - 5% 11% - - 5% 11% - - 5% 11% - - 11% 5% 11% - - 11% 5% 11% - - 11% 5% 11% 5% 11% - - 11% 5% 11% 5% 11% 5% 11% 5% 11% 5% 11% 5% 11%							(201/)				370					(20)	370
Trip Darkbalon OUT Image: Constraint of the Trips Image: Constraint o									0				0			(3%)	
mp Darkbadon OUT mp Darkbadon OUT<	Residential Trips	U	U	U	U	U	/	U	U	U	2	U	U	U	U	1	3
mp Darkbadon OUT mp Darkbadon OUT<	Take Presidentia Br	-									500	440/		-			50/
Office Frigs O <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>(50()</td><td></td><td>(50()</td><td></td><td>576</td><td>11%</td><td></td><td></td><td></td><td>(440)</td><td></td></t<>							(50()		(50()		576	11%				(440)	
Inclusion Project Trips 0 1.07 428 2030 Build Traffic 21K 25K 25K 25K 22K 25K 25K </td <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td>0</td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td></td>		0	0	0	0	0		0		0	0	0	0	0	0		
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Phase 2 Phase 3 Phase 3 <t< td=""><td>2030 Build Heavy Vehicle %</td><td>2%</td><td>2%</td><td>2%</td><td>2%</td><td>2%</td><td>3%</td><td>2%</td><td>2%</td><td>2%</td><td>6%</td><td>3%</td><td>2%</td><td>2%</td><td>2%</td><td></td><td>4%</td></t<>	2030 Build Heavy Vehicle %	2%	2%	2%	2%	2%	3%	2%	2%	2%	6%	3%	2%	2%	2%		4%
Imp Outbodie N Tip Outbodie OUT Imp Outbodie Network Imp Outbodie Network <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>																	
Implication OUT Implication N Implic	Phase 2																
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Beidenkin Mign 0							(50%)									(3%)	
Implementation OUT Impleme		0	0	0	0	0		0	0	0	6	0	0	0	0		90
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Implementation OUT Impleme	Trip Distribution IN									1	5%	11%					5%
Office Friging O							(5%)		(5%)							(11%)	
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Betal Trigs 0 <th< td=""><td>Trip Distribution IN</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>5%</td><td>10%</td><td></td><td></td><td></td><td></td><td></td></th<>	Trip Distribution IN										5%	10%					
Betal Trigs 0 <th< td=""><td></td><td></td><td>1</td><td>1</td><td></td><td></td><td>(5%)</td><td></td><td>(5%)</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td>(10%)</td><td>(5%)</td></th<>			1	1			(5%)		(5%)	1						(10%)	(5%)
Trip Darthputon N Image: Construction OUT Image: Construction		0	0	0	0	0		0		0	0	0	0	0	0		
Thip Datribution OUT Implementation OUT Imple																	
Thip Datribution OUT Implementation OUT Imple	Trip Distribution IN										5%	10%					
Besturant Trips: 0 0 0 0 0 0 0 1 0 1 0 3 6 0 0 2 1 Pase by Distribution IN Image: Market Trips: Image: Market Trips: Image: Market Trips:							(5%)		(5%)	1						(10%)	(5%)
Pars-by Ostribution N Image: Set of Stribution N Image: Set of Set		0	0	0	0	0		0		0	3	6	0	0	0		
Pas-by Opic Marchardson OUT Pa																	
Pas-by Opic Marchardson OUT Pa	Pass-By Distribution IN																
Pass-By Trips 0 <				1						1	1					1	
O O O O O Sign of the second secon		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 2025 Build Traffic (Design Year) 0 0 0 0 0 231 0 35 0 27 575 0 4 0 1.268 550										•							
2 2025 Build Traffic (Design Year) 0 0 0 0 0 231 0 35 0 27 575 0 4 0 1.268 550	Total Vehicular Project Trips	0	0	0	0	0	59	0	3	0	9	6	0	0	0	8	93
	2035 Build Traffic (Design Year)	0	0	0	0	0	231	0	35	0	27	575	0	4	0	1,268	550
	2035 Build Heavy Vehicle % (Design Year)													2%			

INTERSECTION #4 Shepherds Pond at Union Hill Rd (West)/Union Hill Rd (East)

						AM PEAK I	HOUR									
			rds Pond							Union Hill	Rd (West)			Union Hil	ll Rd (East)	
			nbound				bound				bound				bound	
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2021 Traffic Volumes	0	19	0	6	0	0	0	0	0	0	319	11	0	6	486	0
Pedestrians			0				0	r			0				0	
Conflicting Pedestrians		0		0		0		0		0		0		0		0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Bicycles				0				0				0		-		0
Heavy Vehicles	0	1	0	0	0	0	0	0	0	0	19	0	0	1	12	0
Heavy Vehicle %	2%	5%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	17%	2%	2%
Peak Hour Factor			.84				.84	r			.84				.84	
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2021 Volumes	0	19	0	6	0	0	0	0	0	0	319	11	0	6	486	0
	1							· · · · ·								
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	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Annual Growth Rate (Design Year)	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 (Design Year)	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Background Growth Trips	0	22	0	7	0	0	0	0	0	0	365	13	0	7	556	0
Background Growth Trips (Design Year)	0	23	0	7	0	0	0	0	0	0	393	14	0	7	599	0
2030 No-Build Traffic	0	22	0	7	0	0	0	0	0	0	365	13	0	7	556	0
2035 No-Build Traffic (Design Year)	0	23	0	7	0	0	0	0	0	0	393	14	0	7	599	0
Phase 1													-			
Trip Distribution IN															14%	
Trip Distribution OUT											(14%)					
Residential Trips	0	0	0	0	0	0	0	0	0	0	8	0	0	0	3	0
Trip Distribution IN															8%	
Trip Distribution OUT											(8%)					
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
		-		•		•	-			•	-	-	-	-		
Total Vehicular Project Trips	0	0	0	0	0	0	0	0	0	0	8	0	0	0	6	0
																-
2030 Build Traffic	0	22	0	7	0	0	0	0	0	0	373	13	0	7	562	0
2030 Build Heavy Vehicle %	2%	5%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	16%	2%	2%
Phase 2																
Trip Distribution IN															14%	
Trip Distribution OUT											(14%)					
Residential Trips	0	0	0	0	0	0	0	0	0	0	25	0	0	0	9	0
																r
Trip Distribution IN															8%	
Trip Distribution OUT											(8%)					
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
	r	r		r			r	1			r	r				1
Trip Distribution IN					l				l					L	11%	
Trip Distribution OUT											(11%)					
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN															11%	
Trip Distribution OUT			I		I				I		(11%)			L	<u> </u>	
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	0
Pass-By Distribution IN														L	L	
Pass-By Distribution OUT			I		I				I					L	<u> </u>	
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	r	r		r			r	1			r	r				1
Total Vehicular Project Trips	0	0	0	0	0	0	0	0	0	0	32	0	0	0	19	0
2035 Build Traffic (Design Year)	0	23	0	7	0	0	0	0	0	0	425	14	0	7	618	0
2035 Build Heavy Vehicle % (Design Year)	2%	5%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	18%	2%	2%
						PM PEAK										
	r	Chonho	rds Pond		-	THIPEAK	IOUN		-	Union Hill	Rd (West)		-	Union Hil	II Rd (Fast)	

		Shepher									Rd (West)				ll Rd (East)	
			bound				bound				bound				bound	
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2021 Traffic Volumes	0	10	0	8	0	0	0	0	0	0	274	8	0	8	205	0
Pedestrians			0				0				0				0	
Conflicting Pedestrians		1		0		0		0		0		0		0	1	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	U	0		0	0	0		0	0	0		0	0	0	
Conflicting Bicycles				0		1		0		1		0		1		0
Heavy Vehicles	0	2	0	0	0	0	0	0	0	0	11	1	0	0	18	0
Heavy Vehicle %	2%	20%	2%	2%	2%	2%	2%	2%	2%	2%	4%	13%	2%	2%	9%	2%
Peak Hour Factor			.96				.96				.96				.96	
Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Adjusted 2021 Volumes	0	10	0	8	0	0	0	0	0	0	279	8	0	8	209	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	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Annual Growth Rate (Design Year)	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 (Design Year)	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Background Growth Trips	0	11	0	9	0	0	0	0	0	0	319	9	0	9	239	0
Background Growth Trips (Design Year)	0	12	0	10	0	0	0	0	0	0	344	10	0	10	257	0
2030 No-Build Traffic	0	11	0	9	0	0	0	0	0	0	319	9	0	9	239	0
2035 No-Build Traffic (Design Year)	0	12	0	10	0	0	0	0	0	0	344	10	0	10	257	0
Phase 1																
Trip Distribution IN															14%	
Trip Distribution OUT											(14%)					
Residential Trips	0	0	0	0	0	0	0	0	0	0	5	0	0	0	8	0
Residential Trips	U	U	U	U	U	U	U	U	U	U	2	U	U	U	8	U
			r		1	1			1	1				1		
Trip Distribution IN															8%	
Trip Distribution OUT											(8%)					
Office Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Total Vehicular Project Trips	0	0	0	0	0	0	0	0								
		0	0	0	0	0	0	0	0	0	6	0	0	0	8	0
2030 Build Traffic	0	11	0	9	0	0	0	0	0	0	325	9	0	9	8 247	0
2030 Build Traffic 2030 Build Heavy Vehicle %																
	0	11	0	9	0	0	0	0	0	0	325	9	0	9	247	0
	0	11	0	9	0	0	0	0	0	0	325	9	0	9	247	0
2030 Build Heavy Vehicle % Phase 2	0	11	0	9	0	0	0	0	0	0	325	9	0	9	247 8%	0
2030 Build Heavy Vehicle % Phase 2 Trip Distribution IN	0	11	0	9	0	0	0	0	0	0	325 4%	9	0	9	247	0
2030 Build Heavy Vehicle % Phase 2 Trip Distribution IN Trip Distribution OUT	0 2%	11 21%	0 2%	9 2%	0 2%	0 2%	0 2%	0 2%	0 2%	0 2%	325 4% (14%)	9 13%	0 2%	9 2%	247 8%	0 2%
2030 Build Heavy Vehicle % Phase 2 Trip Distribution IN	0	11	0	9	0	0	0	0	0	0	325 4%	9	0	9	247 8%	0
2030 Build Heavy Vehicle % Phase 2 Trip Distribution IN Trip Distribution OUT Residential Trips	0 2%	11 21%	0 2%	9 2%	0 2%	0 2%	0 2%	0 2%	0 2%	0 2%	325 4% (14%)	9 13%	0 2%	9 2%	247 8% 14% 28	0 2%
2030 Build Heavy Vehide % Phase 2 Trip Distribution IN Trip Distribution OUT Residential Trips Trip Distribution IN Trip Distribution IN	0 2%	11 21%	0 2%	9 2%	0 2%	0 2%	0 2%	0 2%	0 2%	0 2%	325 4% (14%) 16	9 13%	0 2%	9 2%	247 8%	0 2%
2030 Build Heavy Vehicle % Phase 2 Trip Distribution N Trip Distribution OUT Residential Trips Trip Distribution N Trip Distribution N Trip Distribution OUT	0 2% 0	11 21% 0	0 2%	9 2% 0	0 2%	0 2%	0 2%	0 2%	0 2%	0 2%	325 4% (14%) 16 (8%)	9 13% 0	0 2%	9 2%	247 8% 14% 28 8%	0 2% 0 0
2020 Build Heavy Vehicle % Phase 2 Trip Distribution N Trip Distribution N Residential Trips Trip Distribution N Trip Distribution N	0 2%	11 21%	0 2%	9 2%	0 2%	0 2%	0 2%	0 2%	0 2%	0 2%	325 4% (14%) 16	9 13%	0 2%	9 2%	247 8% 14% 28	0 2%
2030 Build Heavy Vehicle % Phase 2 Trip Distribution N Trip Distribution OUT Residential Trips Trip Distribution N Trip Distribution N Trip Distribution OUT	0 2% 0	11 21% 0	0 2%	9 2% 0	0 2%	0 2%	0 2%	0 2%	0 2%	0 2%	325 4% (14%) 16 (8%)	9 13% 0	0 2%	9 2%	247 8% 14% 28 8%	0 2% 0 0
2030 Build Heavy Vehicle % Phase 2 Trip Distribution N Trip Distribution OUT Residential Trips Trip Distribution N Trip Distribution N Trip Distribution OUT	0 2% 0	11 21% 0	0 2%	9 2% 0	0 2%	0 2%	0 2%	0 2%	0 2%	0 2%	325 4% (14%) 16 (8%)	9 13% 0	0 2%	9 2%	247 8% 14% 28 8%	0 2% 0 0
2030 Build Heavy Vehide % Phase 2 Trip Distribution N Trip Distribution OUT Residential Trips Trip Distribution N Trip Distribution N Trip Distribution OUT Childre Trips Trip Distribution N Trip Distribution N	0 2% 0	11 21% 0	0 2%	9 2% 0	0 2%	0 2%	0 2%	0 2%	0 2%	0 2%	325 4% (14%) 16 (8%) 2	9 13% 0	0 2%	9 2%	247 8% 14% 28 8% 0	0 2% 0 0
2030 Build Heavy Vehicle % Phase 2 Trip Distribution N Trip Distribution OUT Reademit Trips Trip Distribution N Trip Distribution OUT Office Trips Trip Distribution N Trip Distribution OUT	0 2% 0	11 21% 0	0 2% 0	9 2% 0	0 2%	0 2%	0 2% 0 0 0	0 2%	0 2% 0	0 2%	325 4% (14%) 16 (8%) 2 (11%)	9 13% 0	0 2% 0	9 2% 0	247 8% 14% 28 8% 0 11%	0 2% 0
2020 Bulk Heavy Vehicle % Phase 2 Trip Distribution N Trip Distribution OUT Residential Trips Trip Distribution N Trip Distribution OUT Office Trips Trip Distribution N Trip Distribution N Trip Distribution N	0 2% 0	11 21% 0	0 2%	9 2% 0	0 2%	0 2%	0 2%	0 2%	0 2%	0 2%	325 4% (14%) 16 (8%) 2	9 13% 0	0 2%	9 2%	247 8% 14% 28 8% 0	0 2% 0 0
2020 Build Heavy Vehicle % Phase 2 Trip Distribution NI Trip Distribution NI Readential Trips Trip Distribution NI	0 2% 0	11 21% 0	0 2% 0	9 2% 0	0 2%	0 2%	0 2% 0 0 0	0 2%	0 2% 0	0 2%	325 4% (14%) 16 (8%) 2 (11%)	9 13% 0	0 2% 0	9 2% 0	247 8% 14% 28 8% 0 11% 0	0 2% 0
2020 Bulk Heavy Vehicle % Phase 2 Trip Distribution N	0 2% 0	11 21% 0	0 2% 0	9 2% 0	0 2%	0 2%	0 2% 0 0 0	0 2%	0 2% 0	0 2%	325 4% (14%) 16 (8%) 2 (11%) 0	9 13% 0	0 2% 0	9 2% 0	247 8% 14% 28 8% 0 11%	0 2% 0
2020 Build Heavy Vehicle % Phase 2 Trip Distribution N Trip Distribution OUT Retail Trips Trip Distribution N Trip Distribution OUT	0 2% 0 0	11 21% 0 0	0 2% 0 0	9 2% 0 0	0 2% 0 0 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	325 4% (14%) 16 (8%) 2 (11%) 0 0	9 13% 0 0	0 2% 0 0	9 2% 0	247 8% 14% 28 8% 0 11% 0 11%	0 2% 0 0
2020 Bulk Heavy Vehicle % Phase 2 Trip Distribution N	0 2% 0	11 21% 0	02%	9 2% 0	0 2%	0 2%	0 2% 0 0 0	0 2%	0 2% 0	0 2%	325 4% (14%) 16 (8%) 2 (11%) 0	9 13% 0	0 2% 0	9 2% 0	247 8% 14% 28 8% 0 11% 0	0 2% 0
2020 Build Heavy Vehicle % Phase 2 Trip Distribution NI Trip Distributio	0 2% 0 0	11 21% 0 0	0 2% 0 0	9 2% 0 0	0 2% 0 0 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	325 4% (14%) 16 (8%) 2 (11%) 0 0	9 13% 0 0	0 2% 0 0	9 2% 0	247 8% 14% 28 8% 0 11% 0 11%	0 2% 0 0
2020 Build Heavy Vehicle % Phase 2 Trip Distribution N Trip Distribution OUT Retail Trips Trip Distribution N Trip Distribution OUT	0 2% 0 0	11 21% 0 0	0 2% 0 0	9 2% 0 0	0 2% 0 0 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	325 4% (14%) 16 (8%) 2 (11%) 0 0	9 13% 0 0	0 2% 0 0	9 2% 0	247 8% 14% 28 8% 0 11% 0 11%	0 2% 0 0
2020 Build Heavy Vehicle % Phase 2 Trip Distribution NI Trip Distributio	0 2% 0 0	11 21% 0 0	0 2% 0 0	9 2% 0 0	0 2% 0 0 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	325 4% (14%) 16 (8%) 2 (11%) 0 0	9 13% 0 0	0 2% 0 0	9 2% 0	247 8% 14% 28 8% 0 11% 0 11%	0 2% 0 0
2020 Build Heavy Vehicle % Phase 2 Trip Distribution NN Pass-Pro Statibution OUT Pass-Pro Statibution OUT	0 2% 0 0	11 21% 0 0 0	0 2% 0 0	9 2% 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	325 4% (14%) 16 (8%) 2 (11%) 0 0	9 13% 0 0	0 2% 0 0	9 2% 0 0	247 8% 14% 28 8% 0 11% 0 11% 6	0 2% 0 0 0
2020 Bulk Heavy Vehicle % Phase 2 Trip Distribution N	0 2% 0 0	11 21% 0 0	0 2% 0 0	9 2% 0 0	0 2% 0 0 0 0	0 2% 0 0	0 2% 0 0 0 0 0 0 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	325 4% (14%) 16 (8%) 2 (11%) 0 (11%) 2	9 13% 0 0 0	0 2% 0 0	9 2% 0	247 8% 14% 28 8% 0 11% 0 11%	0 2% 0 0
2020 Build Heavy Vehicle % Phase 2 Trip Distribution NI Pass-Po Statubution OUT Pass-Po Statubution Pass-Po Statubution OUT Pass-Po Statubution Pass-Po Statubutio	0 2% 0 0 0	11 21% 0 0 0 0	0 2% 0 0 0	9 2% 0 0 0	0 2% 0 0 0	0 2% 0 0 0	0 2% 0 0 0	0 2% 0 0		0 2% 0 0 0	325 4% (14%) 16 (8%) 2 2 (11%) 0 (11%) 2 2 0	9 13% 0 0 0 0	0 2% 0 0 0	9 2% 0 0 0	247 8% 14% 28 8% 0 0 11% 6 6	0 2% 0 0 0 0
2020 Build Heavy Vehide % Phase 2 Trip Distribution NN Trip Distribution NT Trip Distribution NT Trip Distribution NT Prip Distribution NT Prip Distribution NT Pass-by Distribution NT Pass-by Distribution OUT	0 2% 0 0	11 21% 0 0 0	0 2% 0 0	9 2% 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0 0 0 0 0 0 0 0	0 2% 0 0	0 2% 0 0	0 2% 0 0	325 4% (14%) 16 (8%) 2 (11%) 0 (11%) 2	9 13% 0 0 0	0 2% 0 0	9 2% 0 0	247 8% 14% 28 8% 0 11% 0 11% 6	0 2% 0 0 0
2030 Build Heavy Vehide % Phase 2 Trip Distribution N Trip Distribution OUT Restaurant Trips Pass-Np Ostribution OUT Pass Np Ostribution OUT Pass Np Trips Total Vehicular Project Trips	0 2% 0 0 0 0	11 21% 0 0 0 0 0 0	0 2% 0 0 0	9 2% 0 0 0 0	0 2% 0 0 0	0 2% 0 0 0	0 2% 0 0 0	0 2% 0 0 0 0	0 2% 0 0 0 0	0 2% 0 0 0 0	325 4% (14%) 16 (8%) 2 (11%) 0 (11%) 2 2 (11%) 0 0 0 20	9 13% 0 0 0 0 0	0 2% 0 0 0	9 2% 0 0 0 0	247 8% 14% 28 8% 0 0 11% 0 11% 6 6	0 2% 0 0 0 0 0 0 0 0
2030 Build Heavy Vehide % Phase 2 Trip Distribution N Pass-NP Distribution N Pass-NP Distribution OUT Pass-NP StripUtion OUT Pa	0 2% 0 0 0	11 21% 0 0 0 0	0 2% 0 0 0	9 2% 0 0 0	0 2% 0 0 0	0 2% 0 0 0	0 2% 0 0 0	0 2% 0 0		0 2% 0 0 0	325 4% (14%) 16 (8%) 2 2 (11%) 0 (11%) 2 2 0	9 13% 0 0 0 0	0 2% 0 0 0	9 2% 0 0 0	247 8% 14% 28 8% 0 0 11% 6 6	0 2% 0 0 0 0 0

INTERSECTION #5 Fowler Rd (South)/Fowler Rd (North) at Driveway/Fowler Hill Rd

						AM PEAK H		iy/Fowler Hil								
Г		Ecurior P	td (South)		,		d (North)		-	Drive	214/21/			Ecula	r Hill Rd	
			bound				bound				ound				bound	
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2021 Traffic Volumes	0	0	210	22	0	22	442	0	0	0	0	0	0	48	0	29
Pedestrians			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	22	1	0	2	23	0	0	0	0	0	0	2	0	2
Heavy Vehicle %	2%	2%	10%	5%	2%	9%	5%	2%	2%	2%	2%	2%	2%	4%	2%	7%
Peak Hour Factor			.81				81			0.					.81	
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2021 Volumes	0	0	210	22	0	22	442	0	0	0	0	0	0	48	0	29
		-				-				r			•	-		
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	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Annual Growth Rate (Design Year)	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 (Design Year)	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Background Growth Trips	0	0	240	25	0	25	505	0	0	0	0	0	0	55	0	33
Background Growth Trips (Design Year)	0	0	259	27	0	27	544	0	0	0	0	0	0	59	0	36
2030 No-Build Traffic	0	0	240	25	0	25	505	0	0	0	0	0	0	55	0	33
2035 No-Build Traffic (Design Year)	0	0	259	27	0	27	544	0	0	0	0	0	0	59	0	36
Phase 1																
Trip Distribution IN					1		28%						-		1	1
Trip Distribution IN Trip Distribution OUT			(28%)				28%									
Residential Trips	0	0	(28%)	0	0	0	6	0	0	0	0	0	0	0	0	0
Residential Trips	U	U	15	U	U	U	0	U	0	U	U	U	U	U	U	U
Trip Distribution IN			-		1		17%			1			1	r	1	1
Trip Distribution OUT			(17%)				1776									
Office Trips	0	0	1	0	0	0	6	0	0	0	0	0	0	0	0	0
once mps	0				, v				Ū				0	0		
Total Vehicular Project Trips	0	0	16	0	0	0	12	0	0	0	0	0	0	0	0	0
															, ÷	-
2030 Build Traffic	0	0	256	25	0	25	517	0	0	0	0	0	0	55	0	33
2030 Build Heavy Vehicle %	2%	2%	10%	5%	2%	9%	5%	2%	2%	2%	2%	2%	2%	4%	2%	7%
													-			
Phase 2																
Trip Distribution IN				42%		18%	10%									
Trip Distribution OUT			(10%)											(42%)		(18%)
Residential Trips	0	0	18	27	0	12	6	0	0	0	0	0	0	74	0	32
													-			
Trip Distribution IN							17%									
Trip Distribution OUT			(17%)													
Office Trips	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0
r																
Trip Distribution IN					l		16%	l				l			I	
Trip Distribution OUT			(16%)		<u> </u>		<u> </u>	L	<u> </u>			<u> </u>	L		<u> </u>	<u> </u>
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tele Planck stars Bi					1		450/						-	1	1	1
Trip Distribution IN			(4500)		H		16%		l						1	+
Trip Distribution OUT			(16%)													-
Restaurant Trips	0	0	10	0	0	0	11	0	0	0	0	0	0	0	0	0
Pass-By Distribution IN			1		1		1	1	l	1		1	1	1	1	1
Pass-By Distribution IN Pass-By Distribution OUT					 										I	+
Pass-By Distribution OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
i uu uy inpa	v	U	U	v		U			v		U		U			1 V
Total Vehicular Project Trips	0	0	28	27	0	12	24	0	0	0	0	0	0	74	0	32
		-						-								
2035 Build Traffic (Design Year)	0	0	287	54	0	39	568	0	0	0	0	0	0	133	0	68

PM PEAK HOUR er Rd (South) vler Hill Rd Driveway Eastbound Westbound Northbound Left Through Southbound Left Through U-Turn Right U-Turn Right U-Turn Left Through Right
0 0 0 0 U-Turr Left Through Right Observed 2021 Traffic Volumes Pedestrians Conflicting Pedestrians Bicycles Conflicting Bicycles Heavy Vehicles Heavy Vehicle % Peak Hour Factor Adiustment Factor 0 0 334 28 0 10 146 0 0 13 0 17 0 ľ 0 0 0 0 12 3 2% 2% 4% 11% 0 0 3 0 2% 2% 2% 2% 0 0 2% 0 0 2% 2% 0 0 0 2 2% 2% 2% 12%
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 1 Adjusted 2021 Volumes nmual Growth Rate srowth Factor srowth Factor srowth Factor (Design Year) srowth Factor (Design Year) lackground Growth Trips (Design Year) 2030 No-Build Traffic (Design Year)
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 rip Distribution OUT 0 0 0 0 0 0 0 sidential Trips 0 Ţ rip Distribution IN rip Distribution OUT Т Т 17% Т Т (17%) <u>3</u>000 0 0 0 0 0 0 0 0 ffice Trips 0 0 t otal Vehicular Project Trips 0 0 13 0 0 17 0 0 0 0 0 0 0 0
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INTERSECTION #6 GA-9 Atlanta Hwy (West)/GA-9 Atlanta Hwy (East) at Fowler Rd/Wren Hollow Ct

			GR 5	- clainta i i i i i	(West)/GA-	AM PEAK H		inci na) inc	in nonow et							
		Fow	er Rd		-		ollow Ct		1	GA-9 Atlanta	a Hwy (West)		1	GA-9 Atlant	ta Hwy (East)	
			bound				bound				bound				bound	
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2021 Traffic Volumes	0	39	1	185	0	1	6	5	0	1	548	131	0	311	577	2
Pedestrians			0				0				0				0	
Conflicting Pedestrians		0		0		D		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	0	27	0	0	0	0	0	0	21	2	0	17	50	0
Heavy Vehicle %	2%	5%	2%	15%	2%	2%	2%	2%	2%	2%	4%	2%	2%	5%	9%	2%
Peak Hour Factor			.97				97				.97				.97	
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2021 Volumes	0	39	1	185	0	1	6	5	0	1	548	131	0	311	577	2
	-				-				-				-			
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	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Annual Growth Rate (Design Year)	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 (Design Year)	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Background Growth Trips	0	45	1	212	0	1	7	6	0	1	627	150	0	356	660	2
Background Growth Trips (Design Year)	0	48	1	228	0	1	7	6	0	1	675	161	0	383	711	2
2030 No-Build Traffic	0	45	1	212	0	1	7	6	0	1	627	150	0	356	660	2
2035 No-Build Traffic (Design Year)	0	48	1	228	0	1	7	6	0	1	675	161	0	383	711	2
Phase 1														· · · ·		
Trip Distribution IN												5%		18%		
Trip Distribution OUT		(5%)		(18%)												
Residential Trips	0	3	0	10	0	0	0	0	0	0	0	1	0	4	0	0
														17%		
Trip Distribution IN Trip Distribution OUT				(17%)										1/%		
	-	-	-		-		-	-		-	-	-	-			-
Office Trips	0	0	0	1	0	0	0	0	0	0	0	0	0	6	0	0
Total Vehicular Project Trips	0	3	0	11	0	0	0	0	0	0	0	1	0	10	0	0
Total vehicular Project Trips	U	3	U	11	U	U	U	U	U	U	U	1	U	10	U	0
2030 Build Traffic	0	48	1	223	0	1	7	6	0	1	627	151	0	366	660	2
2030 Build Heavy Vehicle %	2%	5%	2%	14%	2%	2%	2%	2%	2%	2%	4%	2%	2%	5%	9%	2%
			-				-									
Phase 2																
Trip Distribution IN												5%		18%	1	
Trip Distribution OUT		(5%)		(18%)												
Residential Trips	0	9	0	32	0	0	0	0	0	0	0	3	0	12	0	0
	•				•								•	-		
Trip Distribution IN														17%		
Trip Distribution OUT				(17%)												
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0
Trip Distribution IN														16%		
Trip Distribution OUT				(16%)												
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-				-				-				-			
Trip Distribution IN														16%		
Trip Distribution OUT				(16%)											I	
Restaurant Trips	0	0	0	10	0	0	0	0	0	0	0	0	0	11	0	0
	-	r	1	1	-		1	1	-	1	r	1	-			
Pass-By Distribution IN															I	
Pass-By Distribution OUT			l	l			l	l				l			I	<u> </u>
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Vehicular Project Trips	0	9	0	42	0	0	0	0	0	0	0	3	0	30	0	0
2025 Dutid Teeff's (Desting Vees)	0	57	1	270	0	1	7	6	0	1	675	164	0	413	711	2
2035 Build Traffic (Design Year) 2035 Build Heavy Vehicle % (Design Year)	2%	57	2%	270	2%	2%	2%	6 2%	2%	2%	675	2%	2%	413	9%	2 2%
Loss band meavy vehicle // (Design rear)	2/0	4/0	2/6	12/0	2/0	270	2./6	270	2./6	2/6	4/0	270	276	370	3/6	270

PM PEAK HOUR Fowler Rd Northbound Left Thro GA-9 Atlanta Hwy (West) Eastbound U-Turn Left Through Right 0 3 833 22 A-9 Atlanta Hwy (East Westbound Left Three Southbound Left Through Through U-Turn Through U-Turn Right U-Turr Right Right Observed 2021 Traffic Volumes Pedestrians Conflicting Pedestrians Bicycles Conflicting Bicycles Heavy Vehicles Heavy Vehicle % Peak Hour Factor Adiustment Factor 0 117 632 4 0 15 0 330 0 2 2 4 0 9 2% 2% 2% 3% 0 0 0 0 0 2% 2% 2% 2% 0 0 28 0 2% 2% 3% 2% 0 2 5 0 2% 2% 2% 2% 0.548 0.95 0.95 0.95 1.02 1 Adjusted 2021 Volumes nmual Growth Rate srowth Factor srowth Factor srowth Factor (Design Year) srowth Factor (Design Year) lackground Growth Trips (Design Year) 2030 No-Build Traffic (Design Year) 15% 15% 15% 15% 1.14 1.14 1.14 1.14 1.5% 1.5% 1.5% 1.5% 1.23 1.23 1.23 1.23 0 1.7 0 385 0 1.8 0 415 0 1.7 0 385 0 1.7 0 385 0 1.7 0 385 0 1.8 0 415 15% 15% 15% 15% 114 114 114 114 15% 15% 15% 15% 123 123 123 123 0 3 972 25 0 4 1047 27 0 3 972 25 0 4 1047 27 0 3 972 25 0 4 1047 27 1.5% 1.5% 1.5% 1.5% 1.14 1.14 1.14 1.14 1.5% 1.5% 1.5% 1.5% 1.13 1.23 1.23 1.23 0 2 2 5 0 2 2 5 0 2 2 5 0 2 2 5 0 2 2 5 0 2 2 5 1.5% 1.5% 1.5% 1.5% 1.14 1.14 1.14 1.14 1.5% 1.23 0 0 1.5% 1.23 136 147 1.5% 1.23 737 794 737 1.5% 1.23 5 5 5 0 0 136 136 737 147 794 2 2 5 5 Phase 1 Trip Distribution IN (5%) (18%) 0 2 0 6 0 0 0 0 5% 18% rip Distribution OUT 0 0 0 3 0 11 0 sidential Trips 0 rip Distribution IN rip Distribution OUT 0 0 3 0 0 0 T Т 17% T Т 0 0 0 0 ffice Trips 0 0 0 otal Vehicular Project Trips 0 2 0 9 0 0 0 0 0 0 3 0 11 0 030 Build Traffic 0 19 0 394 0 2 2 5 0 3 972 28 0 147 737 5 2% 2% 2% 3% 2% 2% 2% 2% 2% 3% 2% 030 Build Heavy Vehicle % hase 2 5% 18% (5%) (18%) 0 6 0 20 rip Distribution OUT 0 0 0 10 36 0 0 0 0 0 0 esidential Trips 0 0 0 5 rin Distribution IN 17% rip Distribution OUT 0 0 0 0 0 0 0 0 fice Trips 0 0 0 0 rip Distribution IN rip Distribution OUT tetail Trips 16% (16%) 0 0 0 0 0 0 0 0 0 Trip Distribution IN Trip Distribution OUT Restaurant Trips 0 0 3 16% 0 0 0 0 0 0 0 0 0 9 0 ass-By Distribution IN ass-By Distribution OUT O 0 0 0 0 0 0 0 iss-By Trips 0 0 6 0 28 0 0 0 0 0 0 10 0 45 0 0 otal Vehicular Project Trips 2035 Build Traffic (Design Year) 2035 Build Heavy Vehicle % (Design Year) 0 24 0 443 0 2 2 5 0 4 1,047 37 0 192 794 2%

INTERSECTION #7 Fowler Hill Rd at Driveway E/Driveway F

						Kd at Drivev		ay.								
	r		way E			AM PEAK I			r		Hill Rd		r		Hill Rd	
			way E bound				way F bound				Hill Kd				bound	
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2021 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	44	0	0	0	77	0
Pedestrians			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	3	0	0	0	4	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	7%	2%	2%	2%	5%	2%
Peak Hour Factor			80				80			0.					.80	
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2021 Volumes	0	0	0	0	0	0	0	0	0	0	44	0	0	0	77	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	1.5%	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%
Annual Growth Rate (Design Year)	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Growth Factor (Design Year)	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.23	1.3.%	1.3%	1.3 %	1.3%	1.23
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	50	0	0	0	88	0
Background Growth Trips Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	54	0	0	0	95	0
2030 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	50	0	0	0	88	0
2035 No-Build Traffic (Design Year)	0	0	0	0	0	0	0	0	0	0	54	0	0	0	95	0
Phase 1																
Trip Distribution IN																
Trip Distribution OUT																
Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN																
Trip Distribution OUT																
Office 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	0	0	0	0	0	0
Total venicular Project Trips	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	. 0
2030 Build Traffic	0	0	0	Ö	Ö	Ö	0	0	0	0	50	0	0	0	88	0
2030 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	7%	2%	2%	2%	5%	2%
Phase 2																
Trip Distribution IN										5%		55%				
Trip Distribution OUT		(55%)						(5%)								
Residential Trips	0	96	0	0	0	0	0	9	0	3	0	35	0	0	0	0
Trip Distribution IN																
Trip Distribution OUT											-					
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN			1				1	1		1		1				
Trip Distribution IN																
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
incluir mps	v	Ū	0	0	Ū	0	0	Ŭ	v	0	0	v	v	0	v	
Trip Distribution IN																
Trip Distribution OUT																
Restaurant Trips	0	0	0	0	0	0	0	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
		r	1				1	1				1			r	
Total Vehicular Project Trips	0	96	0	0	0	0	0	9	0	3	0	35	0	0	0	0
2035 Build Traffic (Design Year) 2035 Build Heavy Vehicle % (Design Year)	0 2%	96 2%	0 2%	0 2%	0 2%	0 2%	0 2%	9 2%	0 2%	3 2%	54 7%	35 2%	0 2%	0 2%	95 5%	0 2%
2055 build neavy venicle % (Design fear)	2%	276	276	276	2%	276	276	276	2%	276	/%	276	2%	276	5%	276

PM PEAK HOUR Driveway E Northbound Left Through wler Hill Rd vler Hill Rd Eastbound U-Turn Left Through Right 0 0 38 0 Southbound Left Through Westbound U-Turn U-Turn Right U-Turr Right Left Thro Right Observed 2021 Traffic Volumes Pedestrians Conflicting Pedestrians Bicycles Conflicting Bicycles Heavy Vehicles Heavy Vehicle % Peak Hour Factor Adiustment Factor 0 0 0 0 0 0 0 0 0 0 30 2% 2% 2% 2% 0 0 2 0 2% 2% 7% 2% 0 0 0 0 0 2% 2% 2% 2% 0 0 3 0 2% 2% 8% 2%
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 1. Adjusted 2021 Volumes nmual Growth Rate srowth Factor srowth Factor srowth Factor (Design Year) srowth Factor (Design Year) lackground Growth Trips (Design Year) 2030 No-Build Traffic (Design Year)
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 2030 Build Heavy Vehicle % hase 2 5% 55% (5%) (55%) 0 62 0 0 rip Distribution OUT 0 0 0 0 10 0 111 0 esidential Trips rin Distribution IN 0 0 0 rip Distribution OUT 0 0 0 0 0 0 0 fice Trips 0 0 0 t 0 0 0 rip Distribution IN rip Distribution OUT tetail Trips 0 0 0 0 0 0 0 Trip Distribution IN Trip Distribution OUT Restaurant Trips 0 0 0 0 0 0 0 0 0 0 0 t 0 0 0 ass-By Distribution IN ass-By Distribution OUT 0 0 0 0 0 0 0 iss-By Trips 0 0 62 0 0 0 0 6 0 10 0 111 0 0 0 0 otal Vehicular Project Trips 2035 Build Traffic (Design Year) 2035 Build Heavy Vehicle % (Design Year)
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INTERSECTION #8 Driveway B at Fowler Rd

	-	Fowl	ler Rd		r i	AM PEAK I	HOUR ler Rd		r				1	Drive	eway B	
			bound				bound			Fasti	ound				tbound	
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	R
Observed 2021 Traffic Volumes	0	0	219	0	0	0	494	0	0	0	0	0	0	0	0	
Pedestrians			0				0				0				0	-
Conflicting Pedestrians		0		0		0		0		0		0		0	I	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Conflicting Bicycles				0				0				0				
Heavy Vehicles	0	0	20	0	0	0	25	0	0	0	0	0	0	0	0	
Heavy Vehicle %	2%	2%	9%	2%	2%	2%	5%	2%	2%	2%	2%	2%	2%	2%	2%	
Peak Hour Factor		0.	.80			0	.80			0.	80				.80	
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Adjusted 2021 Volumes	0	0	219	0	0	0	494	0	0	0	0	0	0	0	0	
					-				-				-			
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	
Growth Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	
Annual Growth Rate (Design Year)	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 (Design Year)	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	
Background Growth Trips	0	0	250	0	0	0	565	0	0	0	0	0	0	0	0	
Background Growth Trips (Design Year)	0	0	270	0	0	0	608	0	0	0	0	0	0	0	0	
2030 No-Build Traffic	0	0	250	0	0	0	565	0	0	0	0	0	0	0	0	
2035 No-Build Traffic (Design Year)	0	0	270	0	0	0	608	0	0	0	0	0	0	0	0	
Phase 1					1				i					1		.
Trip Distribution IN				8%		28%								(2.2.1)		-
Trip Distribution OUT														(20%)		1
Residential Trips	0	0	0	2	0	6	0	0	0	0	0	0	0	11	0	
Trip Distribution IN				5%		17%			1						1	1
Trip Distribution OUT	-		(5%)	370		1770								(10%)		
Office Trips	0	0	0	2	0	6	0	0	0	0	0	0	0	1	0	
Total Vehicular Project Trips	0	0	0	4	0	12	0	0	0	0	0	0	0	12	0	
2030 Build Traffic	0	Ö	250	4	0	12	565	Ö	0	Ö	0	0	0	12	0	1
2030 Build Heavy Vehicle %	2%	2%	9%	2%	2%	2%	5%	2%	2%	2%	2%	2%	2%	2%	2%	
· · · · ·																
Phase 2																
Trip Distribution IN			42%	6%		10%										
Trip Distribution OUT							(42%)							(8%)		-
Residential Trips	0	0	27	4	0	6	74	0	0	0	0	0	0	14	0	
Trip Distribution IN				5%		17%										
Trip Distribution OUT			(5%)		I								1	(10%)		1
Office Trips	0	0	0	2	0	7	0	0	0	0	0	0	0	0	0	
		1	r	1		1	r			1	1				r	-
Trip Distribution IN				5%	l	16%								I	-	1
Trip Distribution OUT			(5%)		l									(10%)	-	
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Tota Providentia at an IN	-		1	50/	1	4.5%	1		1		1	1	1		1	-
Trip Distribution IN			(5%)	5%		16%								(4.0%)	-	-
Trip Distribution OUT Restaurant Trips	0	0	(5%)	3	0	11	0	0	0	0	0	0	0	(10%)	0	
vestaurant mpS	U	U	3	3	U		U	U	U	U	U	U	U	. /	U	
Pass-By Distribution IN		1	-15%	15%	1	35%	-35%		1	1	1	1	1	1	1	T
Pass-By Distribution IN Pass-By Distribution OUT			-13/0	13/6	l	33/0	-33/0		l – – – – – – – – – – – – – – – – – – –			<u> </u>	1	(35%)	+	
Pass-By Distribution OD 1 Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	(35%)	0	+
and all other		ı	1 V	ı v		ı v	1 V	, v		ı	ı				1 V	-1
Total Vehicular Project Trips	0	0	30	9	0	24	74	0	0	0	0	0	0	21	0	
				-		-				-			-		-	1
2035 Build Traffic (Design Year)	0	0	300	9	0	24	682	0	0	0	0	0	0	21	0	

						PM PEAK H	HOUR									
		Fowl	ler Rd			Fowl	ler Rd							Drive	way B	
		North	bound			South	bound			Eastb	ound			West	bound	
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2021 Traffic Volumes	0	0	379	0	0	0	162	0	0	0	0	0	0	0	0	0
Pedestrians			0				Ó				5				0	
Conflicting Pedestrians		0		0		D		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	15	0	0	0	4	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor			.98				98	1		0.					98	
Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Adjusted 2021 Volumes	0	0	387	0	0	0	165	0	0	0	0	0	0	0	0	0
Adjusted Lot 1 volumes	, u	, v	307	5	ů.		105	ů, ř	, i		J.	, in the second s	, u	, i	, v	, v
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	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Annual Growth Rate (Design Year)	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Growth Factor (Design Year)	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3 %	1.376	1.3 %	1.3%	1.23
	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Background Growth Trips	0	0	442	0	0	0	189 203	0	0	0	0	0	0	0	0	0
Background Growth Trips (Design Year) 2030 No-Build Traffic	0	0	4/7	0	0	0	189	0	0	0	0	0	0	0	0	0
2035 No-Build Traffic (Design Year)	0	0	477	0	0	0	203	0	0	0	0	0	0	0	0	0
Phase 1															r	
Trip Distribution IN				8%		28%										
Trip Distribution OUT														(20%)		(28%)
Residential Trips	0	0	0	5	0	17	0	0	0	0	0	0	0	7	0	10
														-		
Trip Distribution IN				5%		17%										
Trip Distribution OUT			(5%)											(10%)		(12%)
Office Trips	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	2
														-		
Total Vehicular Project Trips	0	0	1	5	0	17	0	0	0	0	0	0	0	9	0	12
		•						•		•		-				
2030 Build Traffic	0	0	443	5	0	17	189	0	0	0	0	0	0	9	0	12
2030 Build Heavy Vehicle %	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Phase 2																
Trip Distribution IN			42%	6%		10%										
Trip Distribution OUT							(42%)							(8%)		(10%)
Residential Trips	0	0	84	12	0	20	47	0	0	0	0	0	0	9	0	11
Trip Distribution IN				5%		17%										
Trip Distribution OUT			(5%)											(10%)		(12%)
Office Trips	0	0	2	0	0	0	0	0	0	0	0	0	0	3	0	4
		_		_	_	_	_	_	_		_			_		
Trip Distribution IN				5%		16%										
Trip Distribution OUT			(5%)											(10%)		(11%)
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	•							•					•			
Trip Distribution IN				5%		16%										
Trip Distribution OUT			(5%)											(10%)		(11%)
Restaurant Trips	0	0	1	3	0	9	0	0	0	0	0	0	0	2	0	2
	•												•			
Pass-By Distribution IN			-15%	15%		35%	-35%									
Pass-By Distribution OUT													1	(35%)	1	(15%)
Pass-By Trips	0	0	-4	4	0	10	-10	0	0	0	0	0	0	10	0	4
Total Vehicular Project Trips	0	0	83	19	0	39	37	0	0	0	0	0	0	24	0	21
- alexandre																
2035 Build Traffic (Design Year)	0	0	560	19	0	39	240	0	0	0	0	0	0	24	0	21
2035 Build Heavy Vehicle % (Design Year)	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
	1/4	270	274	-70	-/4	-/*	2/4	270		274	-/4	2/0		-/*		2.70

INTERSECTION #9 Fowler Rd at Driveway A

						wiel Ku at Di										
						AM PEAK I	HOUR way A		1	Fow	er Rd		1	Fow	ler Rd	
			bound				bound				ound				bound	
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Rij
Observed 2021 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	1,400	0	0	0	1,184	
Pedestrians Conflicting Pedestrians		0	0	0			0	0	(0	0		0	0	
Conflicting Pedestrians Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Conflicting Bicycles	0	U	U	0	U	U	U	0	0	U	U	0	U	U	U	
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	41	0	0	0	33	
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	3%	1 2
Peak Hour Factor	2.70		.80	270	10		.80	2.70	10		80	2.70	10		.80	
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	T
Adjusted 2021 Volumes	0	0	0	0	0	0	0	0	0	0	1,400	0	0	0	1,184	
						-	-			-	-,				-,	
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.
Growth Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1
Annual Growth Rate (Design Year)	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.
Growth Factor (Design Year)	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	1601	0	0	0	1354	1
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	1724	0	0	0	1458	1
2030 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	1,601	0	0	0	1,354	
2035 No-Build Traffic (Design Year)	0	0	0	0	0	0	0	0	0	0	1,724	0	0	0	1,458	
Phase 1					í								í			
Trip Distribution IN															5%	3
Trip Distribution OUT								(3%)			(20%)					
Residential Trips	0	0	0	0	0	0	0	2	0	0	11	0	0	0	1	
Trip Distribution IN	· · · · ·	r	1	1	r		1	r	т – т		11%	r	r	r	5%	3
Trip Distribution IN Trip Distribution OUT								(16%)			(5%)				576	
Office Trips	0	0	0	0	0	0	0	(10%)	0	0	(5%)	0	0	0	2	
once mps		0	0	0	0	0	0	1		U	4	0	0	U	2	
Total Vehicular Project Trips	0	0	0	0	0	0	0	3	0	0	15	0	0	0	3	
2030 Build Traffic	0	0	0	0	0	0	0	3	0	0	1,616	0	0	0	1,357	1
2030 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	3%	2
Phase 2																
Trip Distribution IN														1	45%	1
Trip Distribution OUT								(3%)			(50%)					
Residential Trips	0	0	0	0	0	0	0	5	0	0	88	0	0	0	29	
														-		
Trip Distribution IN											11%				5%	3
Trip Distribution OUT								(16%)			(5%)					
Office Trips	0	0	0	0	0	0	0	0	0	0	5	0	0	0	2	
																-
Trip Distribution IN					l						10%		l	L	<u> </u>	3
Trip Distribution OUT					l			(15%)			(5%)		l	L	<u> </u>	
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	L
Trip Distribution IN			1	1	1		1	1	i ,		10%	1	1	1	1	1 3
Trip Distribution IN Trip Distribution OUT								(15%)			10%					+
Trip Distribution OUT Restaurant Trips	0	0	0	0	0	0	0	(15%)	0	0	(5%)	0	0	0	0	
nestaurant mps	U	U	U	U	U	U	U	10	U	U	10	U	U	U	U	1
	·				1				1				1		-50%	5
			-	-	1			(50%)					1	t	3070	+
Pass-By Distribution IN Pass-By Distribution OLIT			-	0	0	0	0	(30%)	0	0	0	0	0	0	0	
Pass-By Distribution OUT	0	0				, v	. v			ÿ	, v					<u>ــــــــــــــــــــــــــــــــــــ</u>
	0	0	0	Ū												
Pass-By Distribution OUT Pass-By Trips	0	0	0	0	0	0	0	15	0	0	103	0	0	0	31	
Pass-By Distribution OUT Pass-By Trips					0	0	0	15	0	0	103	0	0	0	31	
Pass-By Distribution OUT					0 0 2%	0 0 2%	0 0 2%	15 15 2%	0 0 2%	0	103 1,827 3%	0 0 2%	0 0 2%	0 0 2%	31 1,489 3%	

					1	PM PEAK H	IOUR									
	1					Drive	way A			Fowl	er Rd		1	Fow	ler Rd	
		North	bound			South	bound			Easti	ound			West	bound	
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2021 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	590	0	0	0	1,367	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	18	0	0	0	39	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	3%	2%
Peak Hour Factor			.98	2.15			98	2.0			98				.98	
Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Adjusted 2021 Volumes	0	0	0	0	0	0	0	0	0	0	602	0	0	0	1,394	0
Adjusted Local Volumes	, v				ů.		, i	ů, ř	, i		001	· ·	, u	, j	1,554	Ű
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	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Annual Growth Rate (Design Year)	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 (Design Year)	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	688	0	0	0	1594	0
Background Growth Trips Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	742	0	0	0	1717	0
2030 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	688	0	0	0	1,594	0
2035 No-Build Traffic (Design Year)	0	0	0	0	0	0	0	0	0	0	742	0	0	0	1,334	0
2005 No-balla Hanie (besign rear)	, i	, i	, v		ů.		ů	Ű	ů.	, v	/42	, v	J J	J	2,727	, i
Phase 1																
Trip Distribution IN	1	1	I							I			1	1	5%	30%
Trip Distribution OUT								(3%)			(20%)				3%	30%
Residential Trips	0	0	0	0	0	0	0	1	0	0	7	0	0	0	3	18
incaracteria inpa	v	, i	, ,	0	Ū	0	Ŭ		Ŭ	Ŭ		v				10
Trip Distribution IN	1	1									11%		1	1	5%	30%
Trip Distribution OUT								(16%)			(5%)				3/2	30%
Office Trips	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0
					, , ,											
Total Vehicular Project Trips	0	0	0	0	0	0	0	4	0	0	8	0	0	0	3	18
2030 Build Traffic	0	0	0	0	0	0	0	4	0	0	696	0	0	0	1,597	18
2030 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	3%	2%
Phase 2																
Trip Distribution IN															45%	10%
Trip Distribution OUT								(3%)			(50%)					
Residential Trips	0	0	0	0	0	0	0	3	0	0	56	0	0	0	90	20
Trip Distribution IN											11%				5%	30%
Trip Distribution OUT								(16%)			(5%)					
Office Trips	0	0	0	0	0	0	0	5	0	0	2	0	0	0	0	0
	-															
Trip Distribution IN											10%					35%
Trip Distribution OUT								(15%)			(5%)					
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	1										10%		1			35%
Trip Distribution OUT								(15%)			(5%)					
Restaurant Trips	0	0	0	0	0	0	0	3	0	0	6	0	0	0	0	20
Pass-By Distribution IN				_		_									-50%	50%
Pass-By Distribution OUT								(50%)								
Pass-By Trips	0	0	0	0	0	0	0	15	0	0	0	0	0	0	-15	15
Total Vehicular Project Trips	0	0	0	0	0	0	0	26	0	0	64	0	0	0	75	55
2035 Build Traffic (Design Year)	0	0	0	0	0	0	0	26	0	0	806	0	0	0	1,792	55
2035 Build Heavy Vehicle % (Design Year)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	3%	2%

INTERSECTION #10 Union Hill Rd at Driveway C

U-Turn Left Observed 2021 Traffic Volumes 0 0 Pedestrians 0 0 Giniciting Pedestrians 0 0 Bicycles 0 0 0 Heavy Vehicles 0 0 0 Heavy Vehicles 2% 2% 2%	hbound Through 0 0 2% 134 1.5% 1.14 1.5% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 2% 1.4 1.5% 1.14 1.5% 0 0 0 0 0 0 0 0 0 0 0 0 0	U-Turn 0	South Left 0 0 0 0 2%	HOUR way C bound Through O O O O O O O O O O O O O O O O O O O	Right 0 0 0 0 2% 1 1 0 1.5% 1.23 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	U-Turn 0 0 2% 1 15% 1.5% 1.5% 1.5% 0 0 0 0 0 0	Eastt Left 0 0 0 0 2%	Hill Rd Through 358 0 22 6% 84 1.5% 1.5% 1.5% 1.5% 1.5% 1.5% 1.5% 1.5%	Right 0 0 0 0 2% 1.5% 1.14 1.5% 1.23 0 0 0 0 0 0 0 0	U-Turm 0 0 0 2% 1.5% 1.5% 1.5% 1.5% 1.5% 1.14 1.5% 0 0 0 0 0 0 0	Westi Left 0 0 0 0 2%	Hill Rd bound Through 557 0 1 32% 84 1 557 1.5% 1.14 1.5% 1.23 637 638 637 638 637 638	
U-Turn Left Deckerd 3021 Traffic Volumes 0 0 Pedestrians 0 0 Bicycles 0 0 OccornEring Pedestrians 0 0 Dicycles 0 0 Dearwy Weldes 0 0 Dearwy Weldes 2% 2% Pask Hour Factor 1 1 Adjusted 5221 Volumes 0 0 Annual Growth Rate 15% 15% Growth Factor 1 1 Adjusted 521 Volumes 0 0 Annual Growth Rate (Design Year) 15% 15% Growth Factor 1 15% 15% Growth Factor 1 1 16% Background Growth Frigo 0 0 0 2030 No-bailt Traffic (Design Year) 0 0 0 2030 No-bailt Traffic (Design Year) 0 0 0 Trip Datribution OUT	Through 0 0 0 0 0 2% 84 1.14 1.5% 1.14 1.5% 1.14 1.5% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 2% 1.4 1.5% 1.14 1.5% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 2% 1 1.5% 1.14 1.5% 1.23 0 0 0 0 0 0	South Left 0 0 0 2% 0 1 5% 1.14 1.5% 1.23 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	bound Through 0 0 0 0 2% 84 1 0 1.5% 1.14 1.5% 1.14 1.5% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 2% 1.0 1.5% 1.14 1.5% 1.23 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 2% 1 5% 15% 15% 15% 15% 15% 15% 0 0 0 0 0 0	East Left 0 0 0 0 2% 0 0 1 5% 1.14 1.5% 1.5% 0 0 0 0 0 0 0 0 0 0 3	Jourd Through 358 358 0 0 22 6% 34 1 358 1 1.5% 1.14 1.5% 1.23 409 441 5% 5% 1 1	0 0 0 2% 1.5% 1.5% 1.23 0 0 0 0 0	0 0 2% 1 1.5% 1.5% 1.5% 1.23 0 0 0 0	Westl Left 0 0 0 2% 1 0 1 5% 1.14 1.5% 1.23 0 0 0 0 0	bound Through 557 0 13 2% 84 15% 1.5% 1.5% 1.5% 1.23 637 686 637 686 637 686	
U-Turn Left Deckerd 3021 Traffic Volumes 0 0 Pedestrians 0 0 Bicycles 0 0 OccornEring Pedestrians 0 0 Dicycles 0 0 Dearwy Weldes 0 0 Dearwy Weldes 2% 2% Pask Hour Factor 1 1 Adjusted 5221 Volumes 0 0 Annual Growth Rate 15% 15% Growth Factor 1 1 Adjusted 521 Volumes 0 0 Annual Growth Rate (Design Year) 15% 15% Growth Factor 1 15% 15% Growth Factor 1 1 16% Background Growth Frigo 0 0 0 2030 No-bailt Traffic (Design Year) 0 0 0 2030 No-bailt Traffic (Design Year) 0 0 0 Trip Datribution OUT	Through 0 0 0 0 0 2% 84 1.14 1.5% 1.14 1.5% 1.14 1.5% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 2% 1.4 1.5% 1.14 1.5% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 2% 1 1.5% 1.14 1.5% 1.23 0 0 0 0 0 0	Left 0 0 0 1 0 1 1 5% 1.14 1.5% 1.14 1.5% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Through 0 0 0 0 0 0 2% 84 1 1 5% 1.14 1.5% 1.23 0 0 0 0 0 0 0 0 0 0 0	0 0 0 2% 1.0 1.5% 1.14 1.5% 1.23 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 2% 1 5% 15% 15% 15% 15% 15% 15% 0 0 0 0 0 0	Left 0 0 0 0 0 0 0 1 1 0 1 1 5% 1.14 1.5% 1.23 0 0 0 0 0 1 5% 1.15% 3	Through 358 0 0 0 0 0 0 0 0 22 6% 34 1.5% 1.14 1.5% 1.23 409 441 5% 1 5% 1 1	0 0 0 2% 1.5% 1.5% 1.23 0 0 0 0 0	0 0 2% 1 1.5% 1.5% 1.5% 1.23 0 0 0 0	Left 0 0 0 0 0 1 0 1.5% 1.14 1.5% 1.13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Through 557 0 0 13 2% 54 1 557 557 13 557 15% 1.5% 1.5% 1.5% 1.5% 1.5% 1.5% 1.5%	
0 0 0 0 0 0 Conflicting Podestrians 0 0 Conflicting Podestrians 0 0 Excites 0 0 Conflicting Bicycles 0 0 Excites 0 0 Mask Hour Factor 1 1 Adjustment Factor 1 1 Adjustment Factor 11.4 1.5% Annual Convelt Rate 0 0 Annual Convelt Rate 1.5% 1.5% Convelt Factor 1.14 1.14 Annual Convelt Rate 0 0 Annual Convelt Rate 0 0 Annual Convelt Rate 1.5% 1.5% Annual Convelt Rate 1.22 1.28 Annual Convelt Rate 0 0 Annual Convelt Rate 0 0 Data Status 0 0 0 Data Status 0 0 0 Data Data Data Status 0 0<	0 0 0 0 2% 12% 134 1.5% 1.14 1.5% 1.23 0 0 0 0 0 0	0 0 0 0 2% 1.4 1.5% 1.14 1.5% 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 2% 1 1.5% 1.14 1.5% 1.23 0 0 0 0 0 0	0 0 2% 0 1 1.5% 1.14 1.5% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 2% 84 1.14 1.5% 1.14 1.5% 1.23 0 0 0 0 0 0	0 0 0 2% 1.0 1.5% 1.14 1.5% 1.23 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 2% 1 5% 15% 15% 15% 15% 15% 15% 0 0 0 0 0 0	0 0 0 2% 0 1 5% 1.5% 1.5% 1.23 0 0 0 0 0 0 0 0 3	358 0 22 6% 84 1.5% 1.14 1.5% 1.13 409 441 5% 1	0 0 0 2% 1.5% 1.5% 1.23 0 0 0 0 0	0 0 2% 1 1.5% 1.5% 1.5% 1.23 0 0 0 0	0 0 0 2% 0 1 5% 1.5% 1.5% 1.23 0 0 0 0 0	557 0 13 2% 84 1 557 1.5% 1.23 637 686 637 686 637 686	
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Imp Distribution OUT Imp Trip Distribution N 0 0 Otabl Vehicular Project Trips 0 0 0 Obj Diskid Traffic 0 0 0 0 Phase 2 Trip Distribution NI Imp Imp 0 0 0 Prio Distribution VIT Imp Imp Imp 0 0 0 Price Trips 0 0 0 0 0 0 Prio Distribution NI Imp Imp Imp Imp 0		0		0	0								(10%)	
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2030 Build Traffic 0 0 2030 Build Heavy Vehicle X 2% 2% 275 2% 2% Phase 2	Ū		v		0	17	0	12	5	0	0	0	7	T
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Trip Distribution N	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	2%	2%	
Trip Distribution N							•							
rip Distribution OUT tesidential Trips 0 0 0 0 0 0 0 0 0 0 0 0 0														
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rip Distribution N rip Distribution OUT rip Distribution N rip Distribution N rip Distribution N rip Distribution OUT				(2%)		(10%)			(10%)			1	(5%)	
rip Distribution N rip Distribution OUT rip Distribution N rip Distribution N rip Distribution N rip Distribution OUT	0	0	0	4	0	18	0	3	21	0	0	0	15	1
Irip Distribution OUT														+
Irip Distribution OUT	1		1				1	25%	10%			(1	T
Office Trips O O Trip Distribution IN	+		-	(3%)		(44%)	I	2076	10%				(10%)	
Trip Distribution IN Trip Distribution OUT	l .	-	1 .				<u> </u>					i		+
rip Distribution OUT	0	0	0	0	0	1	0	10	4	0	0	0	0	
rip Distribution OUT			1										1	
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Retail Trips 0 0				(4%)		(33%)						<u> </u>	(20%)	
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estaurant Trips 0 0	0	0	0	3	0	21	0	16	7	0	0	0	13	
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otal venicular Project Trips 0 0													20	1 T
035 Build Traffic (Design Year) 0 0	0	0	0	0	0	40	0	0 29	0 32	0	0	0	28	L
0035 Build Traffic (Design Year) 0 0 1035 Build Heavy Vehicle % (Design Year) 2% 2%					0						0	0	28 714	

						PM PEAK I	HOUR									
						Drive	way C			Union	Hill Rd			Union	Hill Rd	
		North	bound			South	bound			Easti	ound			West	bound	
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2021 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	321	0	0	Ö	225	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	7	0	0	0	14	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%
Peak Hour Factor			.98				.98				98	2.0			.98	2.15
Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Adjusted 2021 Volumes	0	0	0	0	0	0	0	0	0	0	327	0	0	0	230	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	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Annual Growth Rate (Design Year)	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 (Design Year)	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	374	0	0	0	263	0
Background Growth Trips Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	403	0	0	0	203	0
2030 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	374	0	0	0	263	0
2035 No-Build Traffic (Design Year)	0	0	0	ů	0	0	0	0	ő	0	403	0	0	ů	283	0
Loss no baile manie (besign rear)	Ű	, v	v		Ŭ	Ű	, v	J	, i	Ŭ	405	Ŭ	Ŭ	Ŭ	205	Ů
Phase 1																
Trip Distribution IN	1			1					1	15%	5%				1	4%
Trip Distribution OUT						(4%)		(25%)		1570	5%				(10%)	472
Residential Trips	0	0	0	0	0	1	0	9	0	9	3	0	0	0	4	2
Nearentiar mpa	Ū	Ŭ	ů		Ū		, ,		Ŭ			v	Ū	Ū		-
Trip Distribution IN	-								I.	25%	10%			-		3%
Trip Distribution OUT						(3%)		(44%)		2370	1075				(10%)	370
Office Trips	0	0	0	0	0	1	0	7	0	0	0	0	0	0	2	0
									, ř							
Total Vehicular Project Trips	0	0	0	0	0	2	0	16	0	9	3	0	0	0	6	2
2030 Build Traffic	0	0	0	0	0	2	0	16	0	9	377	0	0	0	269	2
2030 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%
Phase 2																
Trip Distribution IN										5%	5%				10%	2%
Trip Distribution OUT						(2%)		(10%)			(10%)				(5%)	
Residential Trips	0	0	0	0	0	2	0	11	0	10	21	0	0	0	26	4
					-								-			
Trip Distribution IN										25%	10%					3%
Trip Distribution OUT						(3%)		(44%)							(10%)	
Office Trips	0	0	0	0	0	1	0	13	0	0	0	0	0	0	3	0
					-								-			
Trip Distribution IN										23%	10%					4%
Trip Distribution OUT						(4%)		(33%)							(20%)	
Retail Trips	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
Trip Distribution IN										23%	10%					4%
Trip Distribution OUT						(4%)		(33%)							(20%)	
Restaurant Trips	0	0	0	0	0	1	0	6	0	13	6	0	0	0	3	2
			•			•		•	•			•				
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	4	0	31	0	23	27	0	0	0	33	6
2035 Build Traffic (Design Year)	0	0	0	0	0	4	0	31	0	23	430	0	0	0	316	6
2035 Build Heavy Vehicle % (Design Year)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%

INTERSECTION #11 Union Hill Rd at Driveway D

						AM PEAK H			-							
						Drive					Hill Rd				Hill Rd	
			bound				bound				ound				bound	
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2021 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	358	0	0	0	557	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		r		0		r		0				0				0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	22	0	0	0	13	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	2%	2%	2%
Peak Hour Factor			84	r			84			0.					.84	
Adjustment Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adjusted 2021 Volumes	0	0	0	0	0	0	0	0	0	0	358	0	0	0	557	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	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Annual Growth Rate (Design Year)	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 (Design Year)	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Background Growth Trips	0	0	0	0	0	0	0	0	0	0	409	0	0	0	637	0
Background Growth Trips (Design Year)	0	0	0	0	0	0	0	0	0	0	441	0	0	0	686	0
2030 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	409	0	0	0	637	0
2035 No-Build Traffic (Design Year)	0	0	0	0	0	0	0	0	0	0	441	0	0	0	686	0
Phase 1	-				-				-				-			
Trip Distribution IN										5%					4%	10%
Trip Distribution OUT						(10%)		(10%)			(4%)					
Residential Trips	0	0	0	0	0	6	0	6	0	1	2	0	0	0	1	2
					-				-							
Trip Distribution IN										10%					3%	5%
Trip Distribution OUT						(5%)		(10%)			(3%)					
Office Trips	0	0	0	0	0	0	0	1	0	4	0	0	0	0	1	2
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Total Vehicular Project Trips	0	0	0	0	0	6	0	7	0	5	2	0	0	0	2	4
					-				-							
2030 Build Traffic	0	0	0	0	0	6	0	7	0	5	411	0	0	0	639	4
2030 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	2%	2%	2%
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Phase 2																
Trip Distribution IN										5%					12%	2%
Trip Distribution OUT						(2%)		(5%)			(12%)					
Residential Trips	0	0	0	0	0	4	0	9	0	3	21	0	0	0	8	1
					-		-		-					-		
Trip Distribution IN										10%					3%	5%
Trip Distribution OUT						(5%)		(10%)			(3%)					
Office Trips	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	2
																1
Trip Distribution IN										10%					4%	7%
Trip Distribution OUT						(7%)		(20%)			(4%)					
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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Trip Distribution IN	1							1		10%		1	1		4%	7%
Trip Distribution OUT	-					(7%)		(20%)			(4%)				1	1
Restaurant Trips	0	0	0	0	0	5	0	13	0	7	3	0	0	0	3	5
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Pass-By Distribution IN	1							1		1		1	1		1	1
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Pass-By Distribution COT Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
i use by impe	v		v		v		U		v		v	v	v	U		. v
Total Vehicular Project Trips	0	0	0	0	0	9	0	22	0	14	24	0	0	0	12	8
rotar venearar Project ITips	U	U	U	U	U	, ,	U		U	14	24	U	v	U	12	- °
2035 Build Traffic (Design Year)	0	0	0	0	0	9	0	22	0	14	465	0	0	0	698	8
2035 Build Harry Vehicle % (Design Year)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	405	2%	2%	2%	2%	2%
		270		2/10	2.77	2/10		2.70			0.0	-/-		-/-		

PM PEAK HOUR on Hill Rd on Hill Rd Northbound Left Thro Southbound Left Through Eastbound Westbound Through U-Turn U-Turn Right U-Turr Right U-Turn Left Through Right 0 0 321 0 Left Thre Right Observed 2021 Traffic Volumes 0 0 0 0 0 0 0 0 0 0 225 0 Adestrians Zonflicting Pedestrians Aicycles Conflicting Bicycles Heavy Vehicles Heavy Vehicle % Peak Hour Factor Adiustment Factor 0 2% 2% 2% 2% 0 0 0 0 0 2% 2% 2% 2% 0 0 7 0 2% 2% 2% 2% 0 0 14 0 2% 2% 6% 2%
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Programmed Project Fact Sheets

Т-001С	Atlanta Region's Plan RTP (20	020) PROJECT FACT SHEET
Short Title	SR 9 (ATLANTA HIGHWAY): SEGMENT 3 - WIDENING FROM SR 371 (POST ROAD) TO SR 141 (PEACHTREE PARKWAY)	Dickeeg 277 5 Polo Golf and Country Club Real Path Real Path Country Club
GDOT Project No.	0008357	141 The Avenue
Federal ID No.	CSSTP-0008-00(357)	Fowler Park 30 mg 400 Forsyth
Status	Programmed	and the second sec
Service Type	Roadway / General Purpose Capacity	
Sponsor	GDOT	
Jurisdiction	Forsyth County	0 = 0.5 1 Miles
Analysis Level	In the Region's Air Quality Conformity Analysis	
Existing Thru Lane	2 LCI	Network Year 2030
Planned Thru Lane	4 Flex	Corridor Length 3.8 miles
Detailed Description	and Justification	

This project involves adding one general purpose lane in each direction along SR 9 (Atlanta Highway) between SR 371 (Post Road) and SR 141 (Peachtree Parkway).

Phas	se Status & Funding	Status	FISCAL	TOTAL PHASE	BREAKDOWN	OF TOTAL PHAS	E COST BY FUN	DING SOURCE
Info	rmation		YEAR	COST	FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	STP - Statewide Flexible (GDOT)	AUTH	2011	\$2,402,166	\$1,921,733	\$480,433	\$0,000	\$0,000
PE	Transportation Funding Act (HB 170)	AUTH	2016	\$2,002,024	\$0,000	\$2,002,024	\$0,000	\$0,000
PE	Transportation Funding Act (HB 170)	AUTH	2019	\$300,000	\$0,000	\$300,000	\$0,000	\$0,000
ROW	Transportation Funding Act (HB 170)	AUTH	2018	\$9,220,000	\$0,000	\$9,220,000	\$0,000	\$0,000
UTL	Transportation Funding Act (HB 170)		2022	\$6,073,170	\$0,000	\$6,073,170	\$0,000	\$0,000
CST	Transportation Funding Act (HB 170)		2022	\$31,660,097	\$0,000	\$31,660,097	\$0,000	\$0,000
				\$51,657,457	\$1,921,733	\$49,735,724	\$0,000	\$0,000

 SCP: Scoping
 PE: Preliminary engineering / engineering / design / planning
 PE-OV: GDOT oversight services for engineering
 ROW: Right-of-way Acquistion

 UTL: Utility relocation
 CST: Construction / Implementation
 ALL: Total estimated cost, inclusive of all phases
 ROW: Right-of-way Acquistion

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

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