DEVELOPMENT OF REGIONAL IMPACT
(DRI #4251)

TRAFFIC STUDY
FOR
STRICKLAND TRACT

HENRY COUNTY, GEORGIA

Prepared for:

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A & R Project # 24-078

EXECUTIVE SUMMARY

Traffic impacts were evaluated for the proposed Strickland Tract Data Center (DRI #4251) that will be located at 276 Strickland Road, in Henry County, Georgia. The development includes four data center buildings with a combined 1,253,754 square feet and proposes one full access driveway on Simpson Mill Road and one emergency access on Walker Road.

Existing and future operations during the AM peak hour (7:00 AM – 9:00 AM) and PM peak hour (4:00 PM – 6:00 PM) before and after completion of the project were analyzed at the following intersections:

1. SR 20 (McDonough Hampton Road) at Simpson Mill Road/ Oakland Road
2. Hampton Locust Grove Road at Simpson Mill Road/ Derek Place
3. Hampton Locust Grove Road at Walker Drive/Windy Oaks Lane
4. Simpson Mill Road at Site Driveway

Traffic Operations Summary

Table E1 below provides a summary of traffic operations for the "No-Build" and "Build" conditions for the year 2028 with and without system improvements. As per GRTA requirements, all approaches that do not meet the level-of-service (LOS) standard (considered failing) are highlighted in Table E1. Table E1 for "Build" conditions also includes the project's total added trip and the respective percentage of overall total "Build" condition approach traffic volume for all failing LOS approaches after all improvements are completed.

Table E1 – Future Intersection Operations at Failing Approaches

	Intersection	*No-Build Condition: LOS (Delay)*				*Build Condition: LOS (Delay)*									
		NO IMPROVEMENTS		SYSTEM IMPROVEMENTS		NO IMPROVEMENTS		SYSTEM IMPROVEMENT ONLY		SITE IMPROVEMENT		SITE VOLUMES AT FAILING APPROACH BUILD WITH IMPROVEMENTS		PERCENT SITE TRIPS OF TOTAL APPROACH TRIPS AT FAILING APPROACHES	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
3	**Hampton Locust Grove Rd @ Walker Dr/ Windy Oaks Lane**														
	-Eastbound Left	A (9.3)	A (8.9)	-	-	A (9.3)	A (8.9)	-	-	-	-	-	-	-	-
	-Westbound Left	A (0.0)	A (8.2)			A (0.0)	A (8.3)					-	-	-	-
	-Northbound Approach	F (63.8)	C (19.5)			F (66.8)	C (19.8)					0	0	0%	0%
	-Southbound Approach	C (16.5)	C (15.9)			C (16.9)	C (16.1)					-	-	-	-

The results of future "No-Build" and "Build" conditions traffic analysis indicate that all study intersections except the northbound approach of Windy Oaks Lane, will continue to operate at satisfactory levels-of-service in all peak hours in both "No-Build" and "Build" conditions.

The stop-controlled northbound approach of Windy Oaks Lane at the un-signalized intersection Hampton Locust Grove Road continues to operate at level-of-service "F" in AM peak hour in both "No-Build" and "Build" conditions as in "Existing" conditions with marginal increase in delays. Windy Oaks Lane is a small local roadway that dead-ends at a cul-de-sac and serves only 13 homes. The average peak hour northbound approaching volume is one car in approximately 10 minutes. It is not unusual for stop-controlled side-streets along arterial roadways to have elevated delays during peak periods as delays caused by side-streets wait times to turn left onto the mainline. Since the wait time is not significant and approaching traffic volumes is insignificant, no system improvements are recommended.

The table below includes 95th percentile Synchro HCM 6 queue length for failing level-of-service approaches for the build condition that had site generated traffic. Queue length reports are included in the Appendix.

TABLE E2 – FUTURE 95TH PERCENTILE SYNCHRO QUEUES (FT) FOR FAILING APPROACHES

	Intersection	Available Storage (ft)	Queue in feet	
			BUILD	
			AM Peak	PM Peak
3	**Hampton Locust Grove Rd @ Walker Dr/ Windy Oaks Lane** -Northbound Approach	-	8'	0'

Recommendation for Site Access Configuration

The following access configuration is recommended for the proposed site driveway intersections.

Intersection 4: Simpson Mill Road at Site Driveway

- One entering and one exiting lane
- Stop-sign controlled on the driveway approach with Simpson Mill Road remaining free flow.
- Left turn lane and right turn lane for entering traffic
- Provide adequate sight distance per AASHTO standards

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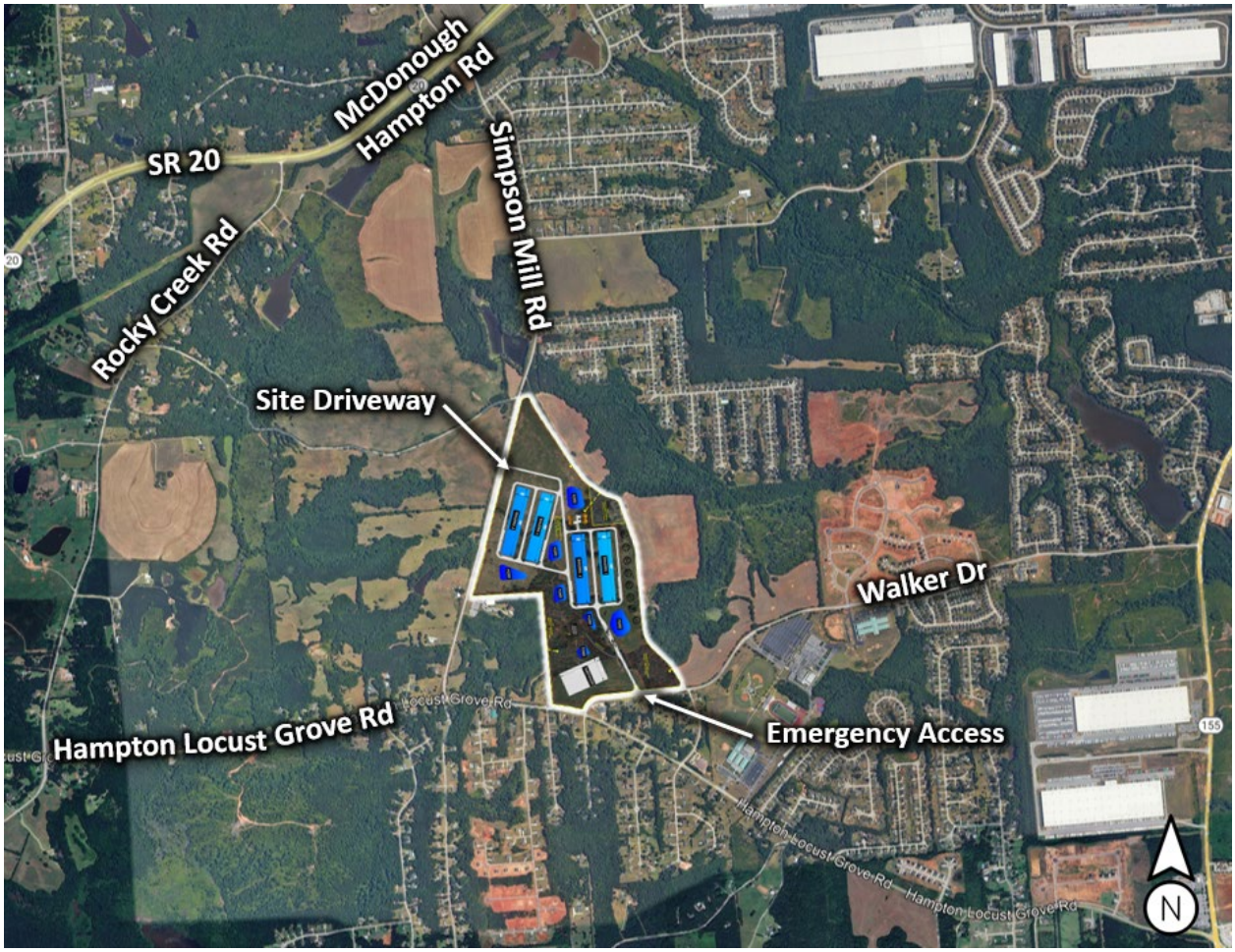
INTRODUCTION

The purpose of this study is to determine the traffic impact for the proposed Strickland Tract Data Center (DRI # 4251) that will be located at 276 Strickland Road, in Henry County, Georgia. The traffic analysis evaluates the current operations and the future conditions with the traffic generated by the development. The development includes four data center buildings with a combined 1,253,754 square feet space.



The development proposes one full access driveway on Simpson Mill Road and one emergency access on Walker Road.

The AM and PM peak hours have been analyzed in this study. In addition to the site access points, this study includes the evaluation of traffic operations at the intersections of:

1. SR 20 (McDonough Hampton Road) at Simpson Mill Road/ Oakland Road
2. Hampton Locust Grove Road at Simpson Mill Road/ Derek Place
3. Hampton Locust Grove Road at Walker Drive/Windy Oaks Lane

Recommendations to improve traffic operations have been identified if needed, and are discussed in detail in the following sections of the report.

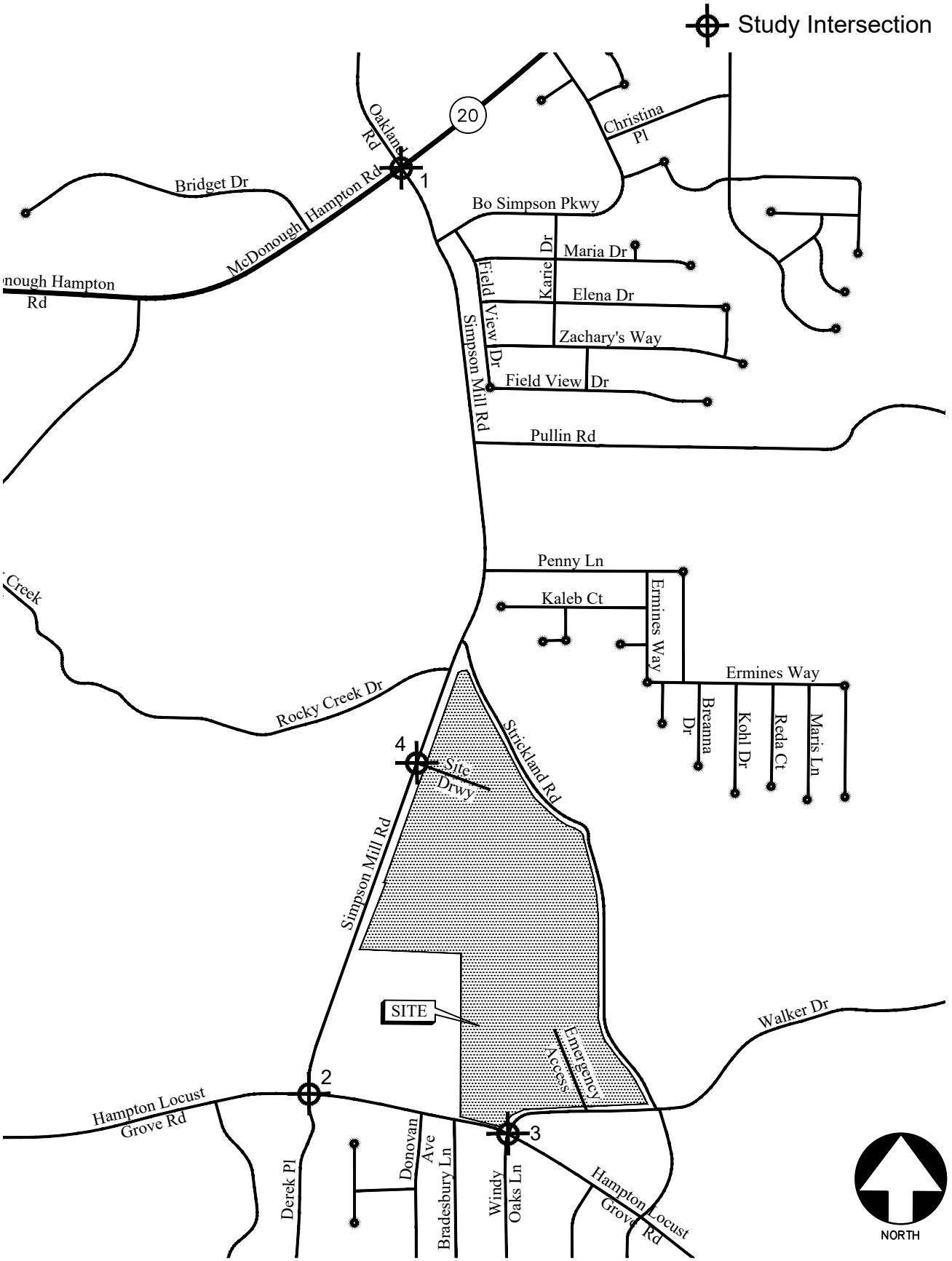
STUDY NETWORK DETERMINATION

The study network was determined by evaluating the amount of traffic that the proposed development will add to each roadway segment in the area. According to GRTA requirements, a roadway segment carries a "significant" amount of traffic if the project contributes 7% or more trips to the two-way daily service volumes of the roadway at the appropriate level of service standard. Upon agreement with GRTA a level of service standard of "D" was used for determining the study area network.

The traffic generated by the proposed project was then assigned to the area roadways using the trip distribution to determine the site-generated traffic on each roadway segment. The boundaries of the study network extend to the most distant intersections where at least 7% of the service volumes on the segment are attributed to project traffic. Although the 7% rule did not identify any intersection being in the study segment, we are proposing to include the following intersections including the site driveway for evaluation in discussions with ARC, GRTA, GDOT and Henry County:

1. SR 20 (McDonough Hampton Road) at Simpson Mill Road/ Oakland Road
2. Hampton Locust Grove Road at Simpson Mill Road/ Derek Place
3. Hampton Locust Grove Road at Walker Drive/Windy Oaks Lane
4. Simpson Mill Road at Site Driveway

The location of the development and the surrounding study network is shown in Figure 1. Other intersections within this corridor, such as unsignalized side streets, right-in / right-out driveways or private driveways have not been included in the study network.



LOCATION MAP FIGURE 1

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EXISTING ROADWAY FACILITIES

The following is a brief description of each of the roadway facilities located in proximity to the site:

SR 20 (McDonough Hampton Road)

SR 20 (McDonough Hampton Road) is an east-west, four-lane, median divided roadway with a speed limit of 60 mph to the east of Farmer Road. Due to limitations of synchro software as it doesn't support speed limit above 55 mph, the speed limit on SR 20 is coded as 55 mph for the analysis purposes. GDOT traffic counts (Station ID: 151-0189) indicate that the daily traffic volume on SR 20 (McDonough Hampton Road) in 2023 was 8,520 vehicles per day northeast of Stone Road. GDOT classifies SR 20 (McDonough Hampton Road) as an urban minor arterial roadway.

Simpson Mill Road

Simpson Mill Road is a north-south, two-lane undivided roadway with a posted speed limit of 45 mph in the vicinity of the site.

Hampton Locust Grove Road

Hampton Locust Grove Road is an east-west, two-lane, undivided roadway with a posted speed limit of 45 mph in the vicinity of the site. GDOT traffic counts (Station ID: 151-0372) indicate that the daily traffic volume on Hampton Locust Grove Road in 2023 was 5,540 vehicles per day west of Ashley Trace Drive. GDOT classifies Hampton Locust Grove Road as an Urban Minor Arterial roadway.

Walker Drive

Walker Drive is a north-south, two-lane, undivided roadway with a posted speed limit of 35 mph in the vicinity of the site.

Oakland Road

Oakland Road is a north-south, two-lane, undivided roadway with a posted speed limit of 45 mph in the vicinity of the site.

Windy Oaks Lane

Windy Oaks Lane is a north-south, two-lane, undivided roadway with a posted speed limit of 25 mph in the vicinity of the site.

Derek Place

Derek Place is a north-south, two-lane, undivided roadway with a posted speed limit of 25 mph in the vicinity of the site

Existing Bicycle and Pedestrian Facilities

- Sidewalks and crosswalks were not present in the study network on GA Highway 20, Simpson Mill Road, Hampton Locust Grove Road and Walker Drive
- Bike lanes and bus stops were not identified in a ½ mile radius of the proposed development

Alternative Modes of Access

- Existing transit routes were not identified in the study network.
- No high-capacity transit stations were identified in the vicinity of the proposed development.

The graphic below includes the location of existing sidewalks in the study network.

Existing Alternative Transportation Map

STUDY METHODOLOGY

In this study, the methodology used for evaluating traffic operations at each of the subject intersections is based on the criteria set forth in the Transportation Research Board's Highway Capacity Manual, 6th edition (HCM 6). Synchro software, which utilizes the HCM methodology, was used for the analysis. The following is a description of the methodology employed for the analysis of unsignalized and signalized intersections.

Unsignalized Intersections

For unsignalized intersections controlled by a stop sign on minor streets, the level-of-service (LOS) for motor vehicles with controlled movements is determined by the computed control delay according to the thresholds stated in Table 1 below. LOS is determined for each minor street movement (or shared movement), as well as major street left turns. LOS is not defined for the intersection as a whole or for major street approaches. The LOS of any controlled movement which experiences a volume to capacity ratio greater than 1 is designed as "F" regardless of the control delay.

Control delay for unsignalized intersections includes initial deceleration delay, queue move-up time, stopped delay and final acceleration delay. Several factors affect the control delay for unsignalized intersections, such as the availability and distribution of gaps in the conflicting traffic stream, critical gaps and follow-up time for a vehicle in the queue.

Level-of-service is assigned a letter designation from "A" through "F". Level-of-service "A" indicates excellent operations with little delay to motorists, while level-of-service "F" exists when there are insufficient gaps of acceptable size to allow vehicles on the side street to cross the main road without experiencing long delays.

TABLE 1 – LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Control Delay (sec/vehicle)	LOS by Volume-to-Capacity Ratio*	
	v/c ≤ 1.0	**v/c > 1.0**
≤ 10	A	F
> 10 and ≤ 15	B	F
> 15 and ≤ 25	C	F
> 25 and ≤ 35	D	F
> 35 and ≤ 50	E	F
> 50	F	F

*The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection.

Source: Highway Capacity Manual, 6th edition, Exhibit 20-2 *LOS Criteria: Motorized Vehicle Mode*

Signalized Intersections

According to HCM procedures, LOS can be calculated for the entire intersection, each intersection approach, and each lane group. HCM uses control delay alone to characterize LOS for the entire intersection or an approach. Control delay per vehicle is composed of initial deceleration delay, queue move-up time, stopped delay and final acceleration delay. Both control delay and volume-to-capacity ratio are used to characterize LOS for a lane group. A volume-to-capacity ratio greater than 1.0 or more for a lane group indicates failure from capacity perspective. Therefore, such a lane group is assigned LOS F regardless of the amount of control delay.

Table 2 below summarizes the LOS criteria from HCM for motorized vehicles at signalized intersections.

TABLE 2 – LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Control Delay (sec/vehicle) *	LOS for Lane Group by Volume-to-Capacity Ratio*	
	v/c ≤ 1.0	**v/c > 1.0**
≤ 10	A	F
> 10 and ≤ 20	B	F
> 20 and ≤ 35	C	F
> 35 and ≤ 55	D	F
> 55 and ≤ 80	E	F
> 80	F	F

*For approach-based and intersection wide assessments, LOS is defined solely by control delay

Source: Highway Capacity Manual, 6th edition, Exhibit 19-8 *LOS Criteria: Motorized Vehicle Mode*

LOS A is typically assigned when the volume-to-capacity (v/c) ratio is low and either progression is exceptionally favorable, or the cycle length is very short. LOS B is typically assigned when the v/c ratio is low and either progression is highly favorable, or the cycle length is short. However, more vehicles are stopped than with LOS A. LOS C is typically assigned when progression is favorable, or the cycle length is moderate. Individual cycle failures (one or more queued vehicles are not able to depart because of insufficient capacity during the cycle) may begin to appear at this level. Many vehicles still pass through the intersection without stopping, but the number of vehicles stopping is significant. LOS D is typically assigned when the v/c ratio is high and either progression is ineffective, or the cycle length is long. There are many vehicle-stops and individual cycle failures are noticeable. LOS E is typically assigned when the v/c ratio is high, progression is very poor, the cycle length is long, and individual cycle failures are frequent. LOS F is typically assigned when the v/c ratio is very high, progression is very poor, the cycle length is long, and most cycles fail to clear the queue.

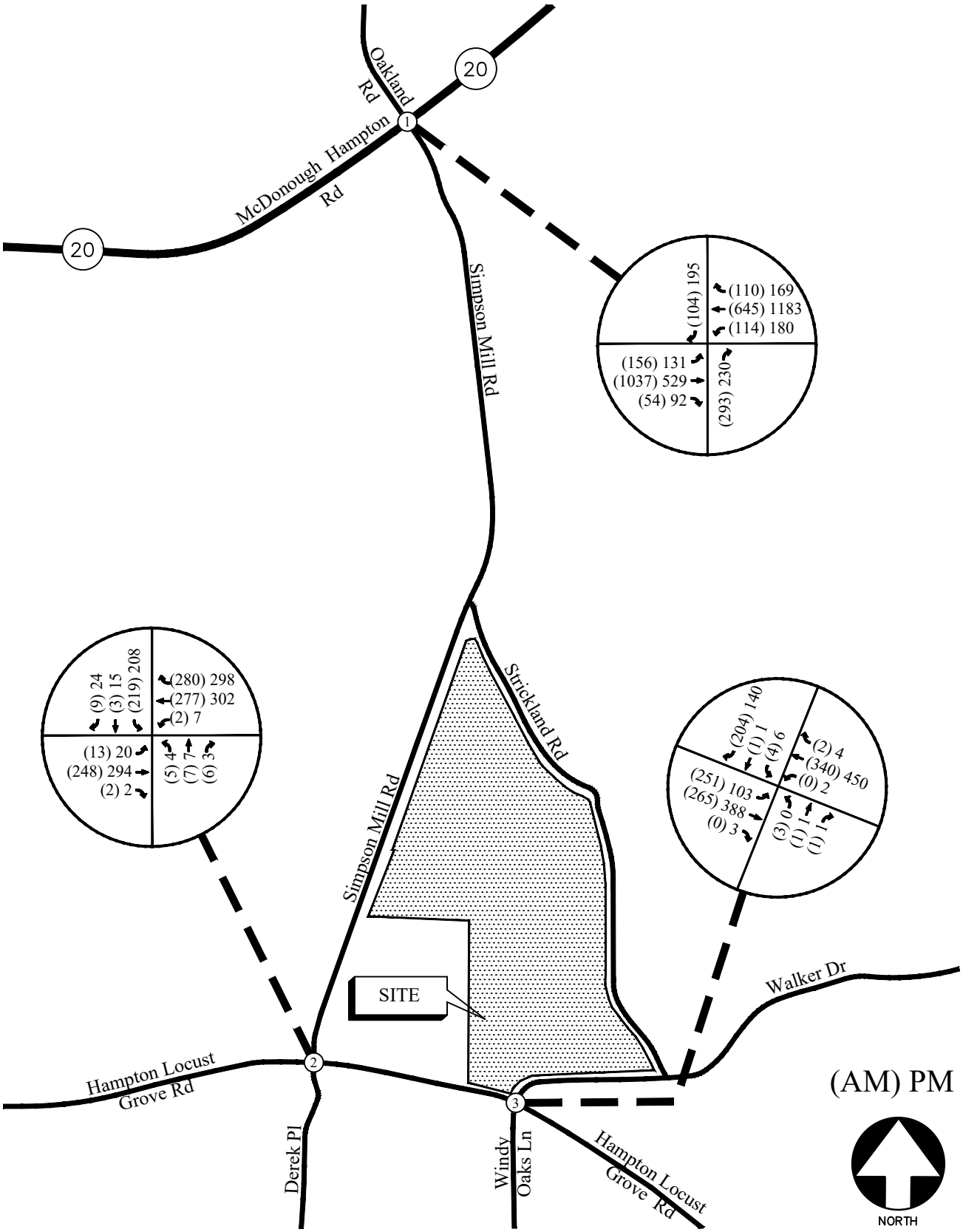
EXISTING 2024 TRAFFIC ANALYSIS

Existing Traffic Volumes

Existing traffic counts were obtained at the following study intersections:

1. SR 20 (McDonough Hampton Road) at Simpson Mill Road/ Oakland Road
2. Hampton Locust Grove Road at Simpson Mill Road/ Derek Place
3. Hampton Locust Grove Road at Walker Drive/Windy Oaks Lane

Turning movement counts were collected on Tuesday, May 05, 2024. All turning movement counts were recorded during the AM and PM peak hours between 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM, respectively. The four consecutive 15-minute interval volumes that summed to produce the highest volume at the intersections were then determined. These volumes make up the peak hour traffic volumes for the intersections counted and are shown in Figure 2. The existing traffic control and lane geometry for the intersections are shown in Figure 3.



EXISTING WEEKDAY PEAK-HOUR VOLUMES FIGURE 2

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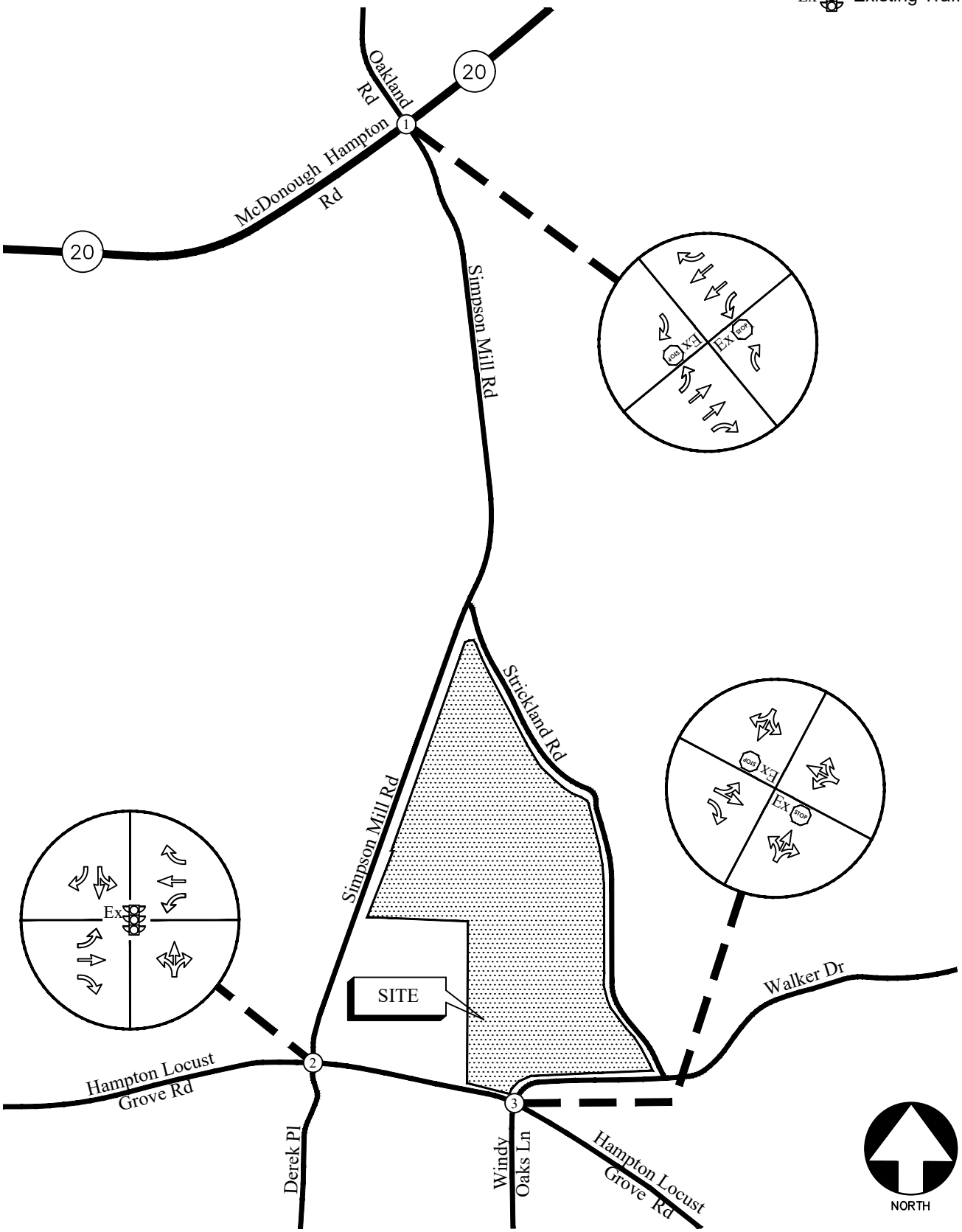


EXISTING TRAFFIC CONTROL AND LANE GEOMETRY FIGURE 3

A&R Engineering Inc.

Existing Traffic Operations

Existing 2024 traffic operations were analyzed at the study intersections in accordance with the HCM methodology. The results of the analyses are shown in Table 3.

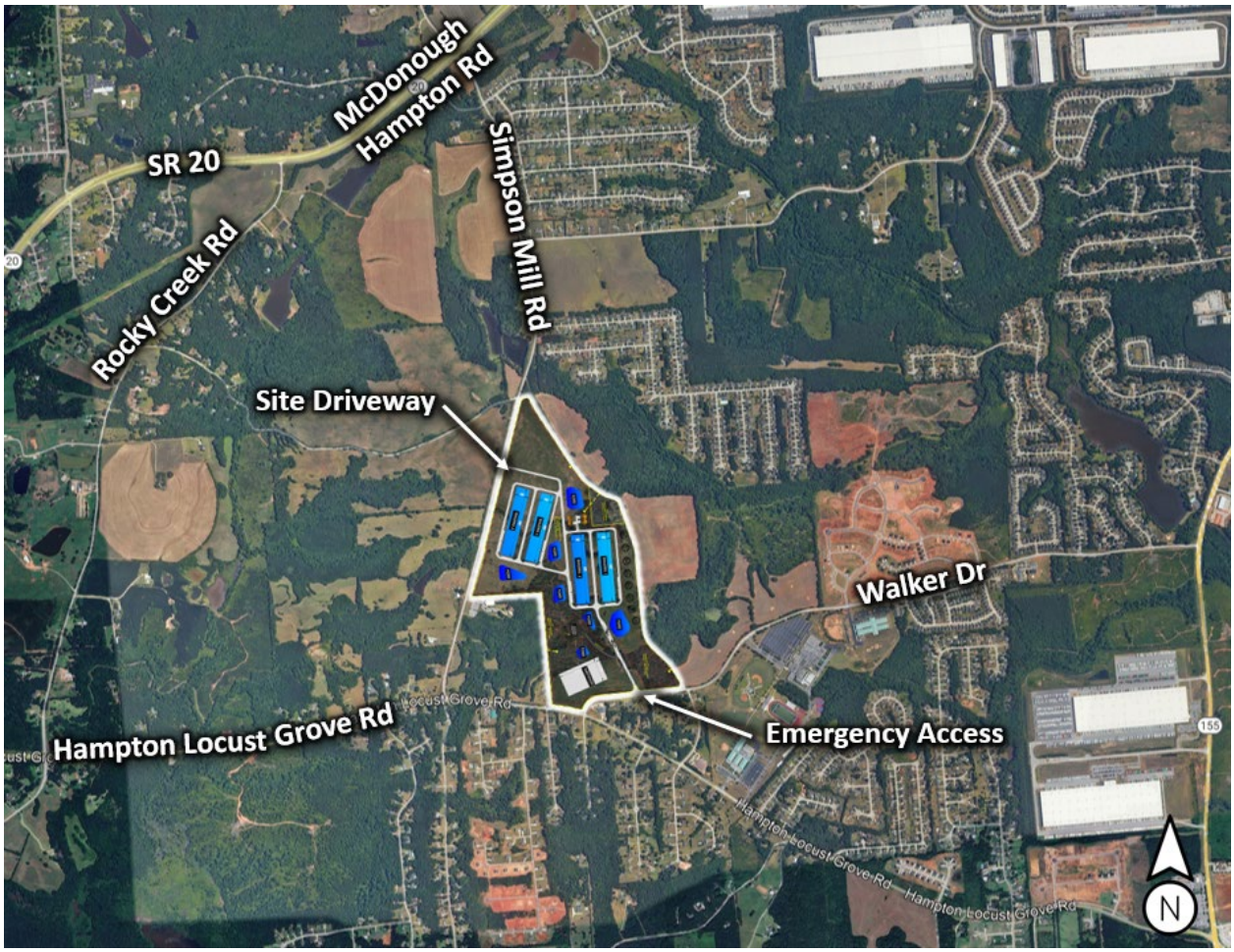
TABLE 3 – EXISTING INTERSECTION OPERATIONS

	Intersection	Traffic Control	AM Peak	PM Peak	LOS Standard
1	**SR 20 @ Simpson Mill Rd/ Oakland Rd**	RCUT			**D/D**
	-Eastbound Left		B (9.9)	B (13.3)	D/D
	-Westbound Left		B (12.1)	A (9.3)	D/D
	-Northbound Approach		D (25.7)	B (12.4)	D/D
	-Southbound Approach		B (11.6)	C (20.1)	D/D
2	**Hampton Locust Grove Rd at Simpson Mill Rd/ Derek Pl**	Signalized	**C (21.5)**	**C (20.3)**	**D/D**
	-Eastbound Approach		A (8.9)	A (8.8)	D/D
	-Westbound Approach		B (10.0)	A (9.5)	D/D
	-Northbound Approach		D (38.4)	D (39.6)	D/D
	-Southbound Approach		D (49.4)	D (50.3)	D/D
3	**Hampton Locust Grove Rd @ Walker Dr/ Windy Oaks Lane**	Stop Controlled on NB and SB Approaches			
	-Eastbound Left		A (9.1)	A (8.8)	D/D
	-Westbound Left		A (0.0)	A (8.2)	D/D
	-Northbound Approach		F (53.5)	C (18.4)	E/D
	-Southbound Approach		C (15.5)	C (15.1)	D/D

The results of existing traffic operations analysis indicate that all study intersections are operating at satisfactory levels-of-service except the stop-controlled northbound approach of Windy Oaks Lane at Hampton Locust Grove Road which is operating at LOS "F" in the AM peak hour. These areas are addressed in the future traffic operations sections.

PROJECT DESCRIPTION

The proposed Strickland Tract Data Center (DRI #4251) will be located at 276 Strickland Road, in Henry County. The development includes four data center buildings with a combined 1,253,754 square feet.



The development proposes one full access driveway on Simpson Mill Road and one emergency access on Walker Road

Site Plan

A site plan is shown in Figure 4. A digital copy of the site plan is also provided with this report.

DATA CENTER CAMPUS - HENRY COUNTY

DRI NUMBER : 4251

DEVELOPER

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CIVIL ENGINEER

SCOTT GREENE
THOMAS & HUTTON
5553 PEACHTREE ROAD, SUITE 175; ATLANTA, GA 30341
TEL: 470-893-1698
e: greene.s@ tandh.com

SITE INFORMATION

LOCATION: 276 STRICKLAND RD, MCDONOUGH, GA 30253
PARCEL NUMBER: 059-01017000, 059-01017002, 059-01043000
LAND LOTS: 239 & 240 - 3RD DISTRICT - HENRY COUNTY, GA
LAND LOTS: 241 & 242 - 6TH DISTRICT - HENRY COUNTY, GA
TOTAL SITE AREA: 249.8 ACRES
LINEAR FOOTAGE (SIMPSON MILL RD): 3,300 FEET
LINEAR FOOTAGE (WALKER DR): 1,600 FEET
LINEAR FOOTAGE (HAMPTON LOCUST GROVE RD): 500 FEET

ZONING:

EXISTING ZONING: RA (AGRICULTURAL/RES.)
PROPOSED ZONING: OI (OFFICE INSTITUTIONAL)

SETBACK REQUIREMENTS:

REQUIRED:	PROVIDED:
FRONT YARD SETBACK: 50 FEET	50 FEET
SIDE YARD SETBACK: 15 FEET	40 FEET
REAR YARD SETBACK: 20 FEET	40 FEET

BUFFER REQUIREMENTS:

REQUIRED:	PROVIDED:
OI TO RA BUFFER: 40 FEET	40 FEET
TOTAL PRESERVED OPEN SPACE AREA :	171 ACRES

PROPOSED BUILDINGS: (4) TOTAL

BUILDING (1&2): 1 STORY - 128 MW
BLDG. (1&2)-AREA PER BLDG (G.S.F.): 253,377 G.S.F.
BLDG. (1&2) - TOTAL AREA (G.S.F.) : 506,754 G.S.F.
BUILDING (3&4): 1 STORY - 192 MV
BLDG. (3&4)-AREA PER BLDG (G.S.F.): 373,500 G.S.F.
BLDG. (3&4) - TOTAL AREA(G.S.F.) : 747,000 G.S.F.
TOTAL OFFICE AREA : 31,600 S.F.
BUILDING (1-4)-TOTAL AREA (G.S.F.) - 320 MW: 1,253,754 S.F.
PERCENTAGE FLOOR AREA : 11.52%
FLOOR AREA RATIO : 1,152: 10,000

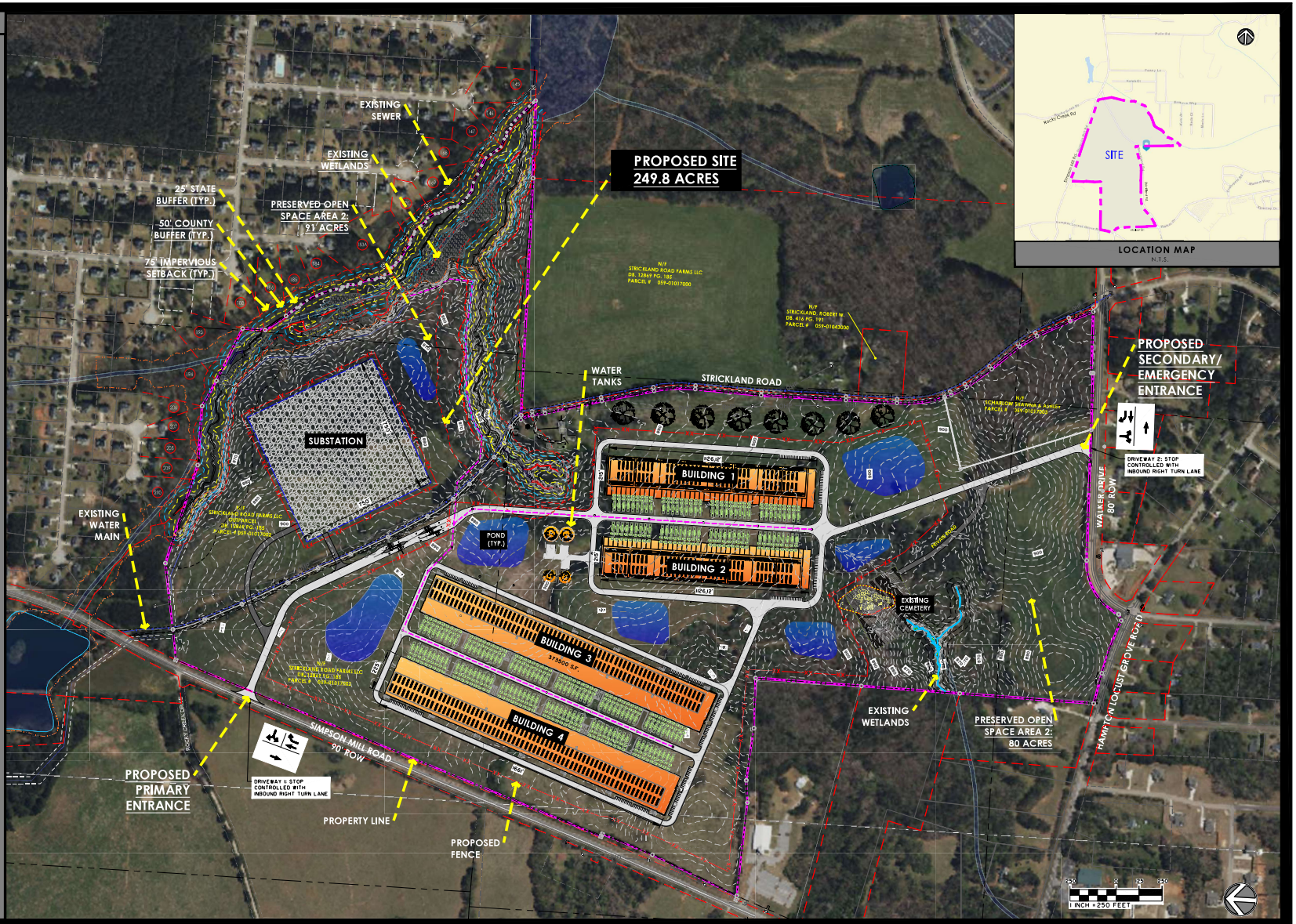
TOTAL PARKING REQUIREMENTS:

REQUIRED:	PROVIDED:
25/37 SPACES PER BUILDING	39/66 SPACES PER BUILDING
TOTAL SPACES= 125	TOTAL SPACES = 210

REFERENCE CODE: 2.01.03-A

THIS SITE IS WITHIN THE TOWALIGA WATERSHED PROTECTION DISTRICT.

BUFFER REFERENCE CODE: 5.02.03



SITE LAYOUT EXHIBIT

STRICKLAND TRACT

HENRY COUNTY, GA

MAY 21, 2024

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

Planned Bicycle and Pedestrian Facilities

Internal sidewalks connecting the proposed buildings to internal parking lots for pedestrian connectivity within the site will be provided throughout the development.

Potential Pedestrian and Bicycle Destinations

Potential pedestrian and bicycle destinations in the vicinity of the proposed development include the following:

- Retail:
  - Auston Gold & Silver Coin Exchange (approximately 0.05 mile)
- Religious Institutions:
  - Harvest Point Church (0.03 mile), Philadelphia Baptist Church (0.2 mile)
- County Facilities:
  - Henry County Fire Station (0.04 mile)

Planned Transit Facilities

There is no existing or planned public transit service near the proposed development.

Consistency with Adopted Comprehensive Plan

The proposed development will include four data center buildings with a combined 1,253,754 square feet. The property includes 249.8 acres of land. The site is currently zoned as RA (Agricultural-Residential) per Henry County standards.

Future Land Use Map

Future Land Use Map Zoning	OI (Office-Institutional)
Character Area Definition for Low Density Suburban Residential	This category consists of single-family homes on fairly large lots (mostly 0.5-1.0 acre in size) to maintain the lower density single-family character of unincorporated Henry County, but with improved aesthetics and roadway connectivity. Henry County's recommended transportation goals and policies as defined in its "Comprehensive Plan 2045" document are: • *Align transportation investments with the Development and Infrastructure Strategy* • *Avoid widening roadways and increasing capacity in areas where additional growth is not envisioned* • *Focus on roadway maintenance, bridge repairs, and safety improvements in more rural areas* • *Pursue and prioritize the creation of a dense multi-modal network of Complete Streets in the Central District* • *Require stronger connectivity in new developments, both internally and external to the development* • *Use technological improvements and travel demand management (TDM) strategies to improve the transportation network, avoiding large capital costs* • *Approach transportation infrastructure and funding incrementally, particularly the use of the SPLOST program* • *Regularly communicate the status of planned roadway and multimodal projects, increasing public confidence*
Relation to Existing Land Use Plans	The area is designated as Low Density Suburban Residential. The proposed amendment to the comprehensive plan to the rezoning efforts of the site for data center use will still keep to the spirit of the site density/low impact requirements due to the limited impacts the data center will have on the community and the property. No impact to county schools, parks and services and low traffic. The development area is less than low density suburban leaving 80 acres undisturbed.

The proposed development is consistent with the land use vision and goals listed above.

Project Phasing

This project has been evaluated for the complete build-out of the development in 2028 (one phase).

Trip Generation

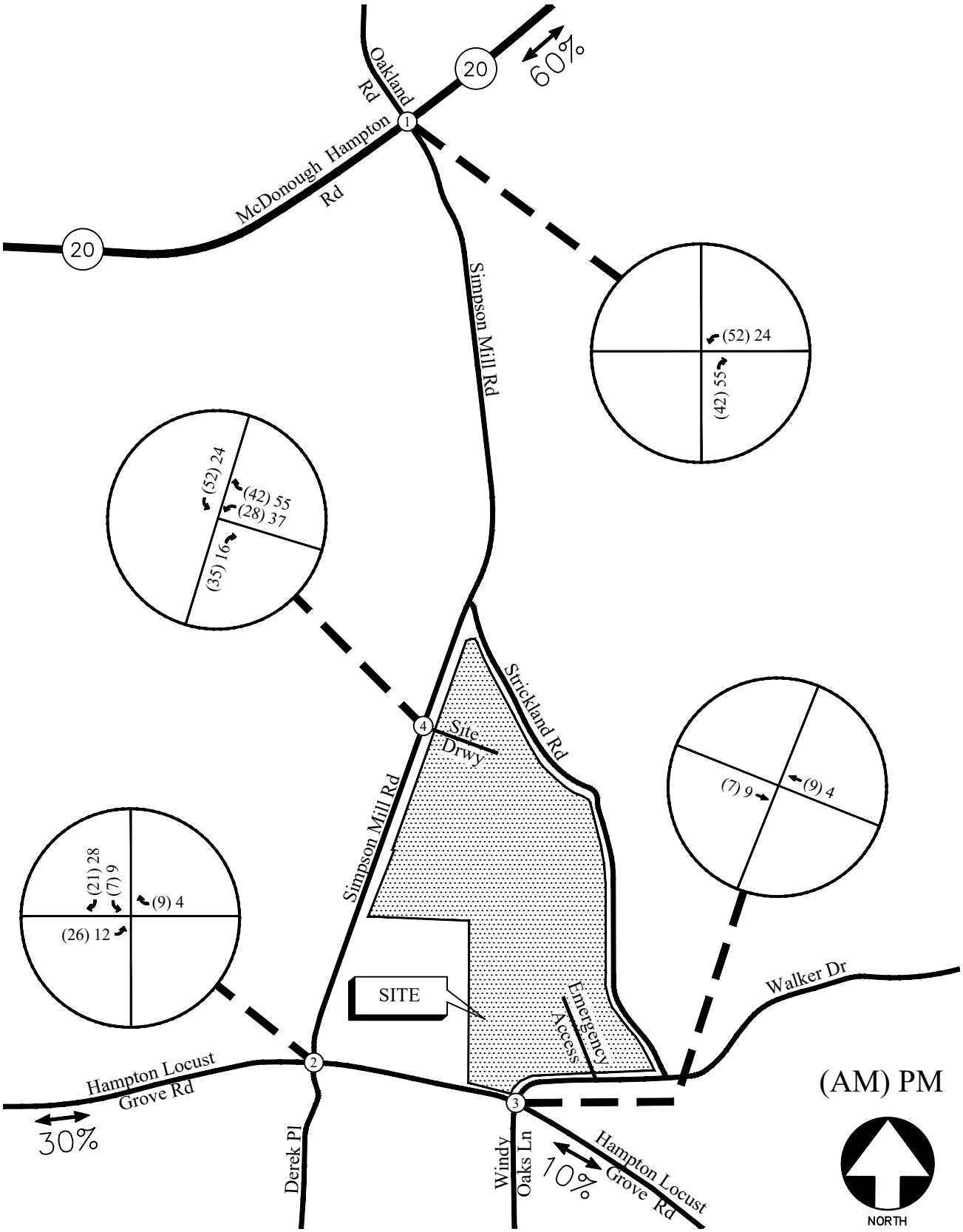
Trip generation estimates for the project were based on the rates and equations published in the 11th edition of the Institute of Transportation Engineers (ITE) Trip Generation report. This reference contains traffic volume count data collected at similar facilities nationwide. The trip generation was based on the following ITE Land Use: *160 – Data Center.* The trip generation for the proposed development is shown in Table 4.

TABLE 4 – TRIP GENERATION

Land Use	Size	AM Peak Hour			PM Peak Hour			24-Hour
		Enter	Exit	Total	Enter	Exit	Total	2-way
ITE 160 – Data Center	1,253,754 sf	87	70	157	40	92	132	1,241

Trip Distribution

The trip distribution describes how traffic arrives and departs from the site. An overall trip distribution was developed for the site based on a review of GDOT ADT volumes and the locations of major roadways and highways that will serve the development. The site-generated peak hour traffic volumes, shown in Table 4, were assigned to the study area intersections based on this distribution. The outer-leg distribution and AM and PM peak hour new traffic generated by the site are shown in Figure 5.



TRIP DISTRIBUTION AND NEW SITE-GENERATED WEEKDAY PEAK HOUR VOLUMES

FIGURE 5

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FUTURE 2028 TRAFFIC ANALYSIS

The future 2028 traffic operations are analyzed for the "No-Build" and "Build" conditions. This provides a basis of reference for determining both the contribution of the site to overall traffic conditions and the additional improvements needed to provide sufficient site access and capacity for passing traffic. Note that survey and construction drawings would be needed to verify the feasibility and extent of additional right-of-way required for any recommended improvements.

Improvements that are identified as "System Improvements" address deficiencies that are found within the existing road network prior to any impacts from the proposed development's added traffic. Improvements that are identified as "Site Mitigation Improvements" address further impacts that are a result of the proposed development's added traffic. If no improvements are identified, this paragraph can be ignored.

Future Conditions

The "No-Build" (or background) conditions provide an assessment of how traffic will operate in the study horizon year without the study site being developed as proposed, with projected increases in through traffic volumes due to normal annual growth and due to other planned developments in the area. The Future "No-Build" volumes consist of the existing traffic volumes (Figure 2) plus increases for annual growth of traffic and traffic from other planned developments.

The "Build" development conditions include the estimated background traffic from the "No-Build" conditions plus the added traffic from the proposed development and adjacent site developments. To evaluate future traffic operations in this area, the additional traffic volumes from the proposed site (Figure 5) were added to base traffic volumes (Figure 6) to calculate the future traffic volumes after the construction of the development.

Annual Traffic Growth

To evaluate future traffic operations in this area, a projection of normal traffic growth was applied to the existing volumes. The Georgia Department of Transportation recorded average daily traffic volumes at several locations in the vicinity of the site. Reviewing the growth over the last five (2017-2019, 2021-2022) years revealed growth of approximately 1.2% in the area. This growth factor was applied to the existing traffic volumes and traffic from the adjacent developments is added to estimate the future year traffic volumes prior to the addition of site-generated traffic. The resulting Future "No-Build" volumes on the roadway are shown in Figure 6.

Planned and Programmed Improvements in Study Area

The following improvements have been identified in the Regional Transportation Plan (Plan 2040), GDOT GeoPI, and/or the local comprehensive transportation plan. These improvements are within the vicinity of the proposed development.

TABLE 5 – PLANNED AND PROGRAMMED IMPROVEMENTS

Project Name	From / To Points	Sponsor	GDOT PI #	ARC ID #	Design FY	ROW / UTL FY	CST FY
Hampton Locust Grove Road Widening	SR 20 to I-75 Southbound Ramps	GDOT/ Henry County	STP-0000-00(562), STP-1577(10) & CSSTP-0006-00(317)	HE-126A1	XX	XX	XX
SR 155 (McDonough Road) Widening	The project begins at the intersection of SR 155 (Hampton Locust Grove Rd/Bill Gardener Parkway and extends 3.75 miles to the intersection of SR 155 and I-75.	GDOT	0015284	HE-189	2026	2028	2030

Programmed Project Design Documents

GDOT PI # 0015284

The project begins at the intersection of SR 155 (Hampton Locust Grove Rd/Bill Gardener Parkway and extends 3.75 miles to the intersection of SR 155 and I-75. Projects design documents are not available yet on GEOPI.

Planned Projects

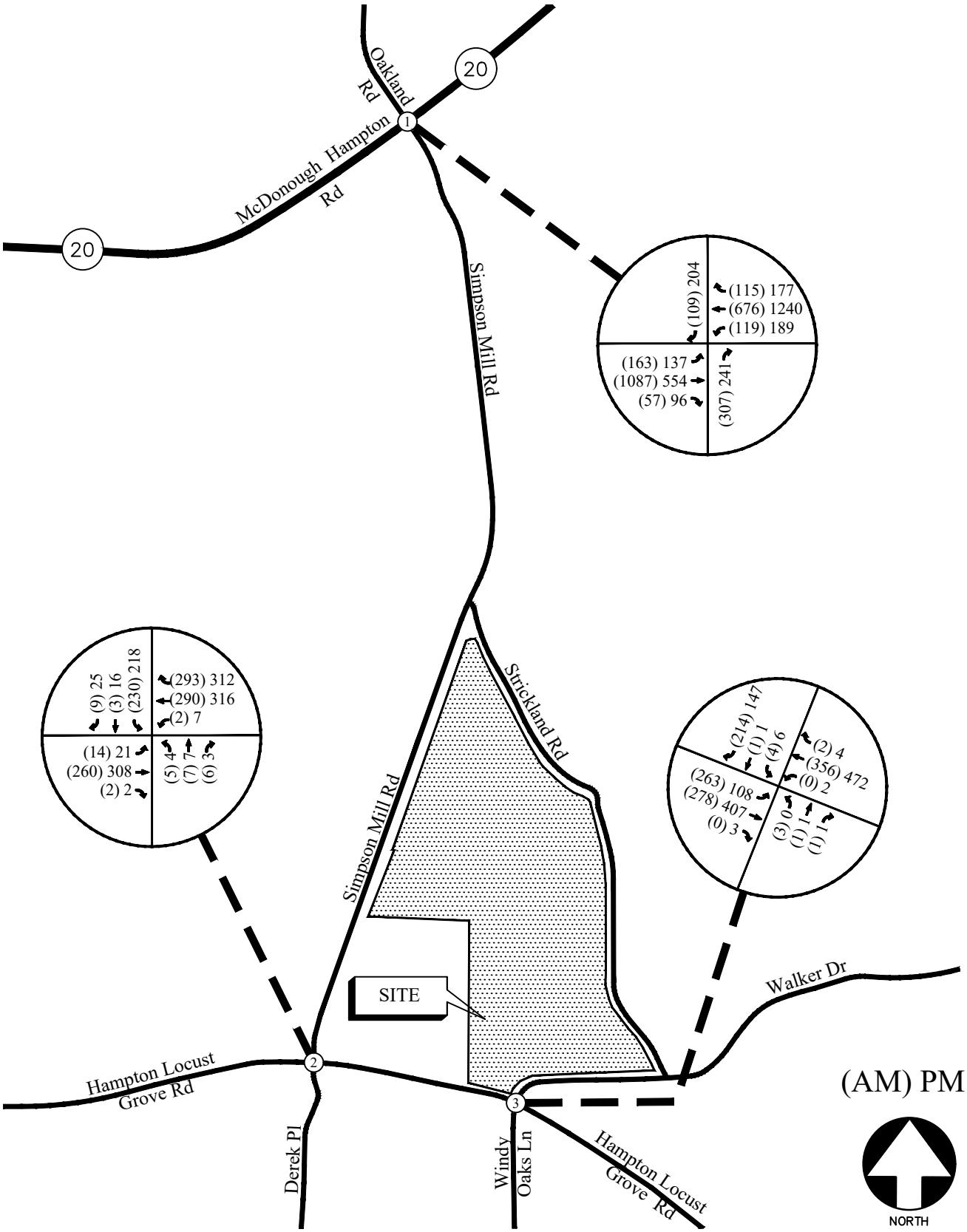
Based on Henry County's adopted Transportation Plan 2022 update, there are no planned projects in the study area in the short-term (2022-2025) and mid-term (2026-2035) range. Following is a list of Aspirational Projects (Beyond 2050) for which funding has not yet been identified.

CTP-R33 – Hampton Locust Grove Road Widening from SR 20 (McDonough Road) to SR 155
LM-22 – Walker Drive Sidewalk Installation from Hampton-Locust Grove Road to SR 155

A list and map of these aspirational projects are included in the Appendix.

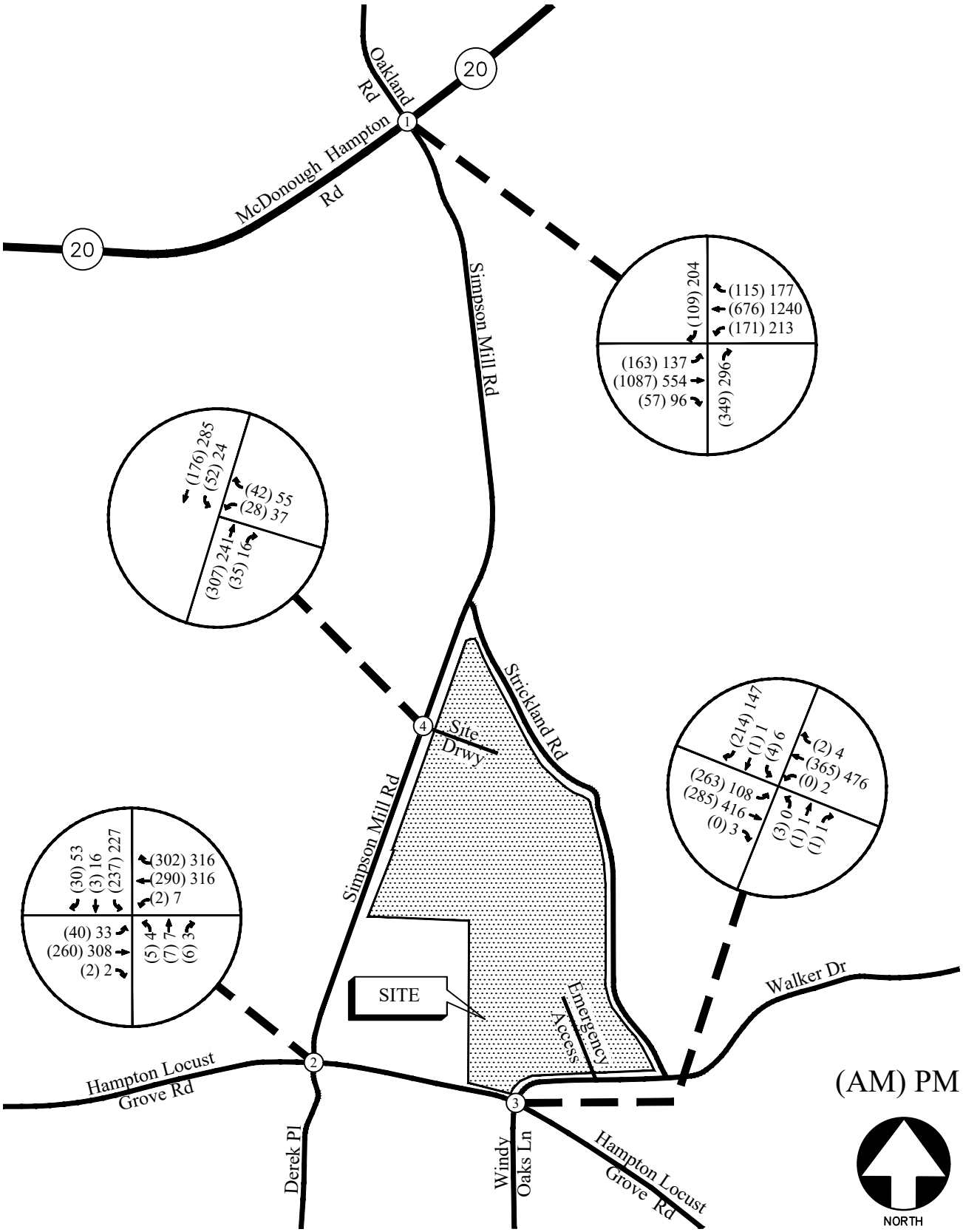
Transportation Project Interaction with DRI

Since the programmed and planned projects are not in the DRI network area, we will not consider them in the traffic analysis.



FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES FIGURE 6

A&R Engineering Inc.



FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES FIGURE 7

A&R Engineering Inc.

Auxiliary Lane Analysis

Included below are analyses for left-turn lanes and deceleration lanes for all site driveways per GDOT standards. The analyses below are based off the trip distribution included in the section "Trip Distribution". According to the trip distribution, the total 24-hour two-way volume entering and exiting the site is 1,241 vehicles. The AADT on Simpson Mill Road is assumed to be less than 6,000 vehicles based on the GDOT volumes on the surrounding roadways.

Left Turn Lane Analysis

For two lane roadways with AADT's less than 6,000 vehicles and a posted speed limit of 45 mph, the daily site generated traffic left-turn movements threshold to warrant a left-turn lane is 250 left-turning vehicles a day, respectively. The projected left-turn volumes per day for each driveway is included in Table 6.

TABLE 7– GDOT REQUIREMENTS FOR LEFT TURN LANES

Intersection	Left turn traffic (% total entering)	Left-turn Volume (vehicles/day)	Roadway Speed/ # lanes / ADT	GDOT Threshold (vehicles/day)	Warrants met?
Simpson Mill Rd @ Site Drwy	60%	**372** (Total Trips) ÷ 2 × 0.6 = (1,241) ÷ 2 x 0.6 = 372	45 mph / 2-Lane / < 6,000	250	Yes

A left turn lane is warranted on Simpson Mill Road at the site driveway as per GDOT standards.

Deceleration Turn Lane Analysis

The daily site generated traffic right-turn movements threshold to warrant a deceleration lane is 150 right turning vehicles a day for two lane roadways with AADT's less than 6,000 vehicles and a posted speed limit of 45 mph. The projected right-turn volumes per day for each driveway is included in Table 7.

TABLE 8 – GDOT REQUIREMENTS FOR DECELERATION LANES

Intersection	Right-turn traffic (% total entering)	Right-turn Volume (vehicles/day)	Roadway Speed/ # lanes / ADT	GDOT Threshold (vehicles/day)	Warrants met?
Simpson Mill Rd @ Site Drwy	40%	**248** (Total Trips) ÷ 2 × 0.4 = (1,241) ÷ 2 x 0.4 = 248	45 mph / 2-Lane / < 6,000	150	Yes

A deceleration lane is warranted on Simpson Mill Road at the site driveway as per GDOT standards.

Future Traffic Operations

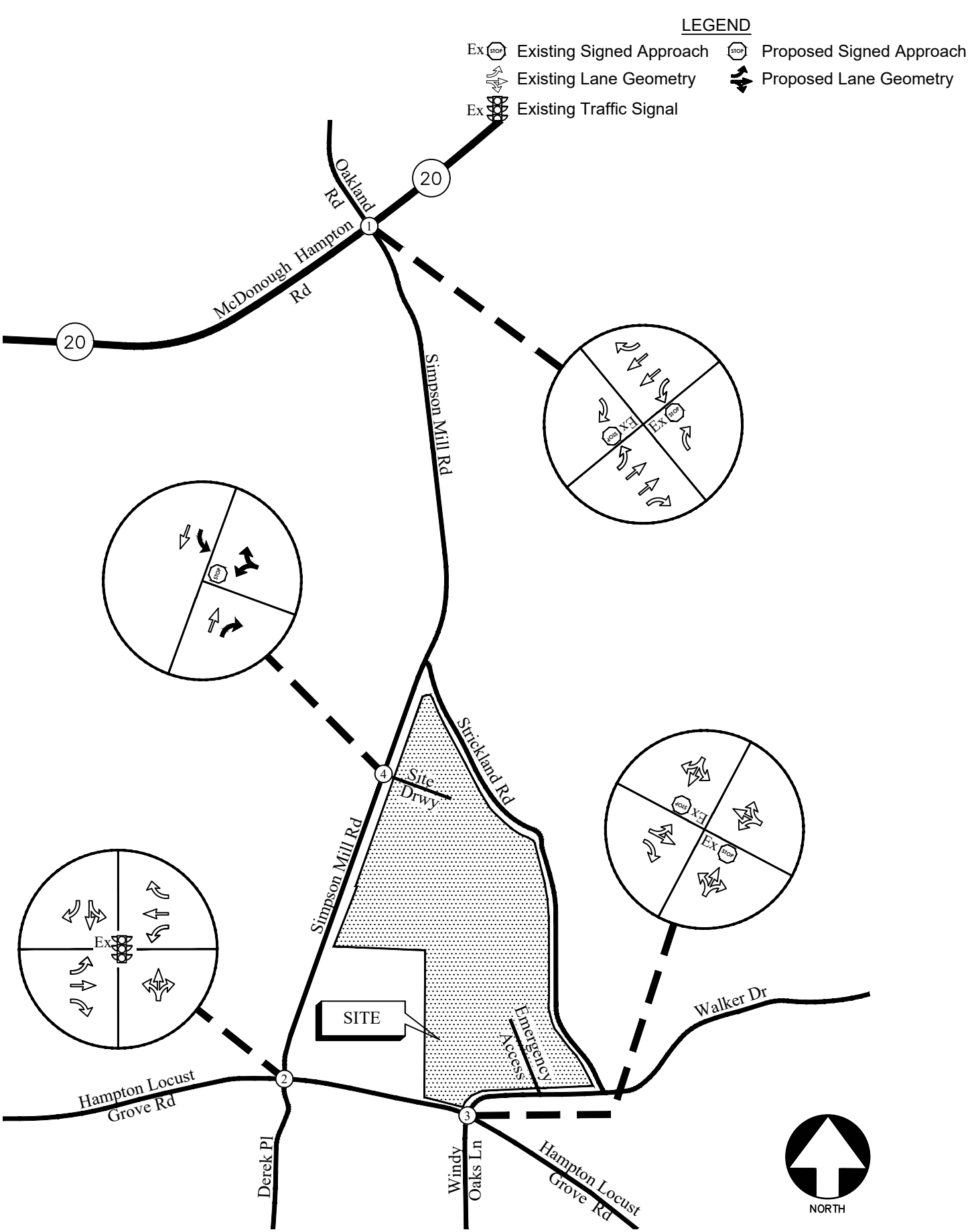
The future "No-Build" and "Build" traffic operations were analyzed using the volumes in Figure 6 and 7 respectively and the results are shown in Table 6. Recommendations for future traffic control and lane geometry are shown in Figure 8.

TABLE 6 – FUTURE INTERSECTION OPERATIONS

	Intersection	Intersection			
		NO-BUILD		BUILD	
		AM Peak	PM Peak	AM Peak	PM Peak
1	**SR 20 @ Simpson Mill Rd/ Oakland Rd**				
	-Eastbound Left	B (10.1)	B (14.0)	B (10.0)	B (14.0)
	-Westbound Left	B (12.6)	A (9.5)	B (13.3)	A (9.6)
	-Northbound Approach	D (29.9)	B (12.8)	D (34.9)	B (13.8)
	-Southbound Approach	B (11.9)	C (21.9)	B (11.8)	C (21.9)
2	**Simpson Mill Rd @ Hampton Locust Grove Rd**	**C (22.0)**	**C (20.6)**	**C (22.3)**	**C (21.0)**
	-Eastbound Approach	A (9.5)	A (9.4)	A (9.7)	A (9.6)
	-Westbound Approach	B (10.7)	B (10.2)	B (12.0)	B (11.0)
	-Northbound Approach	D (37.5)	D (38.7)	D (36.9)	D (38.1)
	-Southbound Approach	D (49.4)	D (49.8)	D (49.5)	D (49.5)
3	**Hampton Locust Grove Rd @ Walker Dr/ Windy Oaks Lane**				
	-Eastbound Left	A (9.3)	A (8.9)	A (9.3)	A (8.9)
	-Westbound Left	A (0.0)	A (8.2)	A (0.0)	A (8.3)
	-Northbound Approach	F (63.8)	C (19.5)	F (66.8)	C (19.8)
	-Southbound Approach	C (16.5)	C (15.9)	C (16.9)	C (16.1)
4	**Simpson Mill Rd @ Site Drwy**				
	-Westbound Approach	-	-	B (12.5)	B (12.3)
	-Southbound Left			A (8.2)	A (7.9)

The results of future "No-Build" and "Build" conditions traffic analysis indicate that all study intersections except the northbound approach of Windy Oaks Lane, will continue to operate at satisfactory levels-of-service in all peak hours in both "No-Build" and "Build" conditions.

The stop-controlled northbound approach of Windy Oaks Lane at the un-signalized intersection Hampton Locust Grove Road continues to operate at level-of-service "F" in AM peak hour in both "No-Build" and "Build" conditions as in "Existing" conditions with marginal increase in delays. Windy Oaks Lane is a small local roadway that dead-ends at a cul-de-sac and serves only 13 homes. The average peak hour northbound approaching volume is one car in approximately 10 minutes. It is not unusual for stop-controlled side-streets along arterial roadways to have elevated delays during peak periods as delays caused by side-streets wait times to turn left onto the mainline. Since the wait time is not significant and approaching traffic volumes is insignificant, no system improvements are recommended.



FUTURE TRAFFIC CONTROL AND LANE GEOMETRY FIGURE 8

A&R Engineering Inc.

CONCLUSIONS AND RECOMMENDATIONS

Traffic impacts were evaluated for the proposed Strickland Tract Data Center (DRI #XXXX) that will be located at 276 Strickland Road, in Henry County, Georgia. The development includes four data center buildings with a combined 1,253,754 square feet. The development proposes one full access driveway on Simpson Mill Road and one emergency access on Walker Road.

The AM and PM peak hours have been analyzed in this study. In addition to the site access points, this study includes the evaluation of traffic operations at the intersections of:

1. SR 20 (McDonough Hampton Road) at Simpson Mill Road/ Oakland Road
2. Hampton Locust Grove Road at Simpson Mill Road/ Derek Place
3. Hampton Locust Grove Road at Walker Drive/Windy Oaks Lane
4. Simpson Mill Road at Site Driveway

The results of future "No-Build" and "Build" conditions traffic analysis indicate that all study intersections except the northbound approach of Windy Oaks Lane, will continue to operate at satisfactory levels-of-service in all peak hours in both "No-Build" and "Build" conditions.

The stop-controlled northbound approach of Windy Oaks Lane at the un-signalized intersection Hampton Locust Grove Road continues to operate at level-of-service "F" in AM peak hour in both "No-Build" and "Build" conditions as in "Existing" conditions with marginal increase in delays. Windy Oaks Lane is a small local roadway that dead-ends at a cul-de-sac and serves only 13 homes. The average peak hour northbound approaching volume is one car in approximately 10 minutes. It is not unusual for stop-controlled side-streets along arterial roadways to have elevated delays during peak periods as delays caused by side-streets wait times to turn left onto the mainline. Since the wait time is not significant and approaching traffic volumes is insignificant, no system improvements are recommended.

Recommendation for Site Access Configuration

The following access configuration is recommended for the proposed site driveway intersections.

<u>Intersection 4: Simpson Mill Road at Site Driveway 1</u>

- One entering and one exiting lane
- Stop-sign controlled on the driveway approach with Simpson Mill Road remaining free flow.
- Left turn lane and right turn lane for entering traffic
- Provide adequate sight distance per AASHTO standards

Appendix

Existing Intersection Traffic Counts

A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',

TMC Data
SR 20 (McDonough Hampton Road) @ Simpson
7-9 am | 4-6 pm

File Name : 20240185
Site Code : 20240185
Start Date : 5/7/2024
Page No : 1

Groups Printed- Cars, Buses & Trucks

	Simpson Mill Road Northbound				Oakland Road Southbound				SR 20 (McDonough Hampton Road) Eastbound				SR 20 (McDonough Hampton Road) Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	49	49	0	0	32	32	33	209	21	263	36	139	16	191	535
07:15 AM	0	0	75	75	0	0	25	25	43	268	14	325	31	185	26	242	667
07:30 AM	0	0	74	74	0	0	26	26	49	265	13	327	28	175	32	235	662
07:45 AM	0	0	72	72	0	0	26	26	32	256	13	301	30	145	25	200	599
Total	0	0	270	270	0	0	109	109	157	998	61	1216	125	644	99	868	2463
08:00 AM	0	0	72	72	0	0	27	27	32	248	14	294	25	140	27	192	585
08:15 AM	0	0	71	71	0	0	24	24	21	222	4	247	31	139	14	184	526
08:30 AM	0	0	57	57	0	0	24	24	16	198	18	232	34	144	11	189	502
08:45 AM	0	0	61	61	0	0	16	16	19	168	12	199	21	120	17	158	434
Total	0	0	261	261	0	0	91	91	88	836	48	972	111	543	69	723	2047
*** BREAK ***																	
04:00 PM	0	0	70	70	0	0	56	56	39	133	25	197	49	254	46	349	672
04:15 PM	0	0	83	83	0	0	37	37	36	145	26	207	50	256	46	352	679
04:30 PM	0	0	68	68	0	0	56	56	45	128	26	199	50	290	38	378	701
04:45 PM	0	0	58	58	0	0	28	28	22	136	22	180	40	276	49	365	631
Total	0	0	279	279	0	0	177	177	142	542	99	783	189	1076	179	1444	2683
05:00 PM	0	0	51	51	0	0	50	50	31	129	20	180	42	319	44	405	686
05:15 PM	0	0	53	53	0	0	61	61	33	136	24	193	48	298	38	384	691
05:30 PM	0	0	58	58	0	0	41	41	41	128	26	195	45	268	58	371	665
05:45 PM	0	0	49	49	0	0	42	42	29	133	25	187	46	244	40	330	608
Total	0	0	211	211	0	0	194	194	134	526	95	755	181	1129	180	1490	2650
Grand Total	0	0	1021	1021	0	0	571	571	521	2902	303	3726	606	3392	527	4525	9843
Apprch %	0	0	100		0	0	100		14	77.9	8.1		13.4	75	11.6		
Total %	0	0	10.4	10.4	0	0	5.8	5.8	5.3	29.5	3.1	37.9	6.2	34.5	5.4	46	

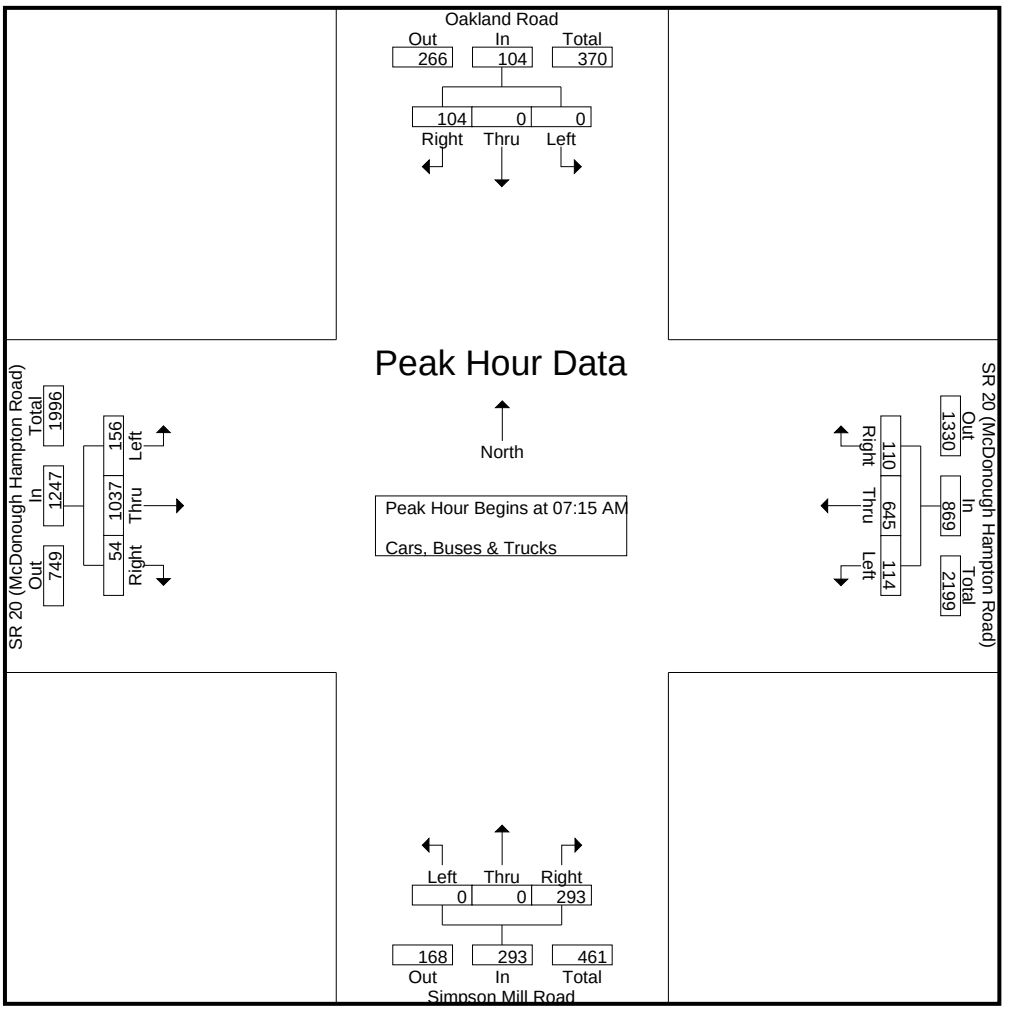
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',

TMC Data
SR 20 (McDonough Hampton Road) @ Simpson
7-9 am | 4-6 pm

File Name : 20240185
Site Code : 20240185
Start Date : 5/7/2024
Page No : 2

	Simpson Mill Road Northbound				Oakland Road Southbound				SR 20 (McDonough Hampton Road) Eastbound				SR 20 (McDonough Hampton Road) Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	**75**	**75**	0	0	25	25	43	**268**	**14**	325	**31**	**185**	26	**242**	**667**
07:30 AM	0	0	74	74	0	0	26	26	**49**	265	13	**327**	28	175	**32**	235	662
07:45 AM	0	0	72	72	0	0	26	26	32	256	13	301	30	145	25	200	599
08:00 AM	0	0	72	72	0	0	**27**	**27**	32	248	14	294	25	140	27	192	585
Total Volume	0	0	293	293	0	0	104	104	156	1037	54	1247	114	645	110	869	2513
% App. Total	0	0	100		0	0	100		12.5	83.2	4.3		13.1	74.2	12.7		
PHF	.000	.000	.977	.977	.000	.000	.963	.963	.796	.967	.964	.953	.919	.872	.859	.898	.942



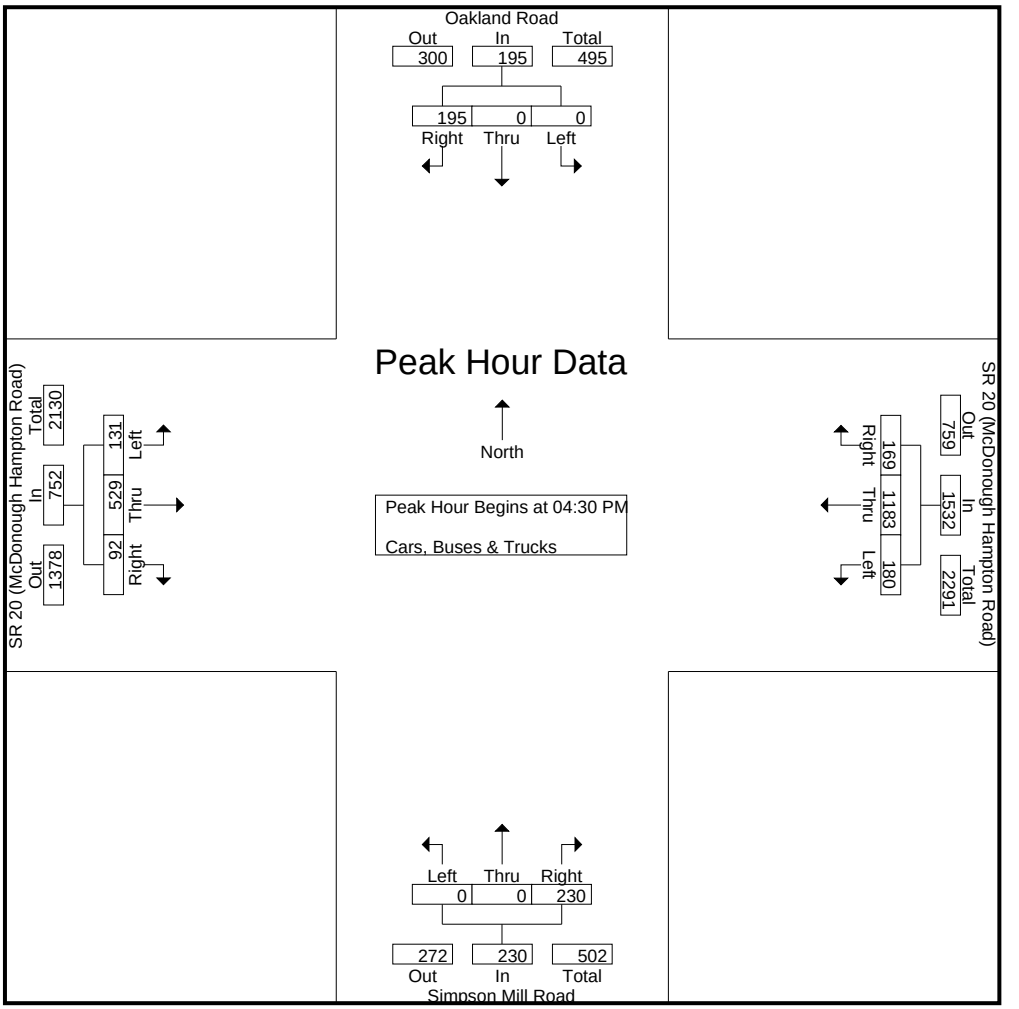
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',

TMC Data
SR 20 (McDonough Hampton Road) @ Simpson
7-9 am | 4-6 pm

File Name : 20240185
Site Code : 20240185
Start Date : 5/7/2024
Page No : 3

	Simpson Mill Road Northbound				Oakland Road Southbound				SR 20 (McDonough Hampton Road) Eastbound				SR 20 (McDonough Hampton Road) Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	**68**	**68**	0	0	56	56	**45**	128	**26**	**199**	**50**	290	38	378	**701**
04:45 PM	0	0	58	58	0	0	28	28	22	**136**	22	180	40	276	**49**	365	631
05:00 PM	0	0	51	51	0	0	50	50	31	129	20	180	42	**319**	44	**405**	686
05:15 PM	0	0	53	53	0	0	**61**	**61**	33	136	24	193	48	298	38	384	691
Total Volume	0	0	230	230	0	0	195	195	131	529	92	752	180	1183	169	1532	2709
% App. Total	0	0	100		0	0	100		17.4	70.3	12.2		11.7	77.2	11		
PHF	.000	.000	.846	.846	.000	.000	.799	.799	.728	.972	.885	.945	.900	.927	.862	.946	.966



A & R Engineering, Inc.

2160 Kingston Court Suite '0'
Marietta, GA 30067

TMC Data
Simpson Mill Rd @ Hampton Locust Grove Road
7-9 am | 4-6 pm

File Name : 20240187
Site Code : 20240187
Start Date : 05-07-2024
Page No : 1

Groups Printed- Cars, Buses & Trucks

	Derek Pl Northbound				Simpson Mill Road Southbound				Hampton Locust Grove Road Eastbound				Hampton Locust Grove Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	0	1	2	35	0	2	37	3	41	0	44	1	45	48	94	177
07:15 AM	0	1	2	3	65	1	3	69	2	71	1	74	0	81	87	168	314
07:30 AM	2	1	1	4	59	1	2	62	4	66	0	70	1	85	83	169	305
07:45 AM	1	2	2	5	46	0	1	47	3	57	1	61	0	55	51	106	219
Total	4	4	6	14	205	2	8	215	12	235	2	249	2	266	269	537	1015
08:00 AM	2	3	1	6	49	1	3	53	4	54	0	58	1	56	59	116	233
08:15 AM	3	3	3	9	36	1	2	39	5	47	1	53	1	65	69	135	236
08:30 AM	0	6	3	9	51	2	5	58	2	49	2	53	1	42	47	90	210
08:45 AM	2	4	0	6	41	0	2	43	2	30	0	32	0	42	44	86	167
Total	7	16	7	30	177	4	12	193	13	180	3	196	3	205	219	427	846
*** BREAK ***																	
04:00 PM	0	1	1	2	60	1	6	67	6	73	1	80	0	79	97	176	325
04:15 PM	1	3	1	5	62	6	6	74	3	67	0	70	2	69	83	154	303
04:30 PM	1	1	1	3	46	5	5	56	5	78	0	83	4	68	67	139	281
04:45 PM	2	2	0	4	40	3	7	50	6	76	1	83	1	86	51	138	275
Total	4	7	3	14	208	15	24	247	20	294	2	316	7	302	298	607	1184
05:00 PM	3	2	0	5	47	5	4	56	3	76	1	80	1	76	39	116	257
05:15 PM	1	2	1	4	48	2	9	59	7	82	1	90	3	90	54	147	300
05:30 PM	0	0	2	2	53	2	7	62	2	92	3	97	2	66	47	115	276
05:45 PM	0	1	0	1	48	5	2	55	2	64	1	67	3	77	41	121	244
Total	4	5	3	12	196	14	22	232	14	314	6	334	9	309	181	499	1077
Grand Total	19	32	19	70	786	35	66	887	59	1023	13	1095	21	1082	967	2070	4122
Apprch %	27.1	45.7	27.1		88.6	3.9	7.4		5.4	93.4	1.2		1	52.3	46.7		
Total %	0.5	0.8	0.5	1.7	19.1	0.8	1.6	21.5	1.4	24.8	0.3	26.6	0.5	26.2	23.5	50.2	

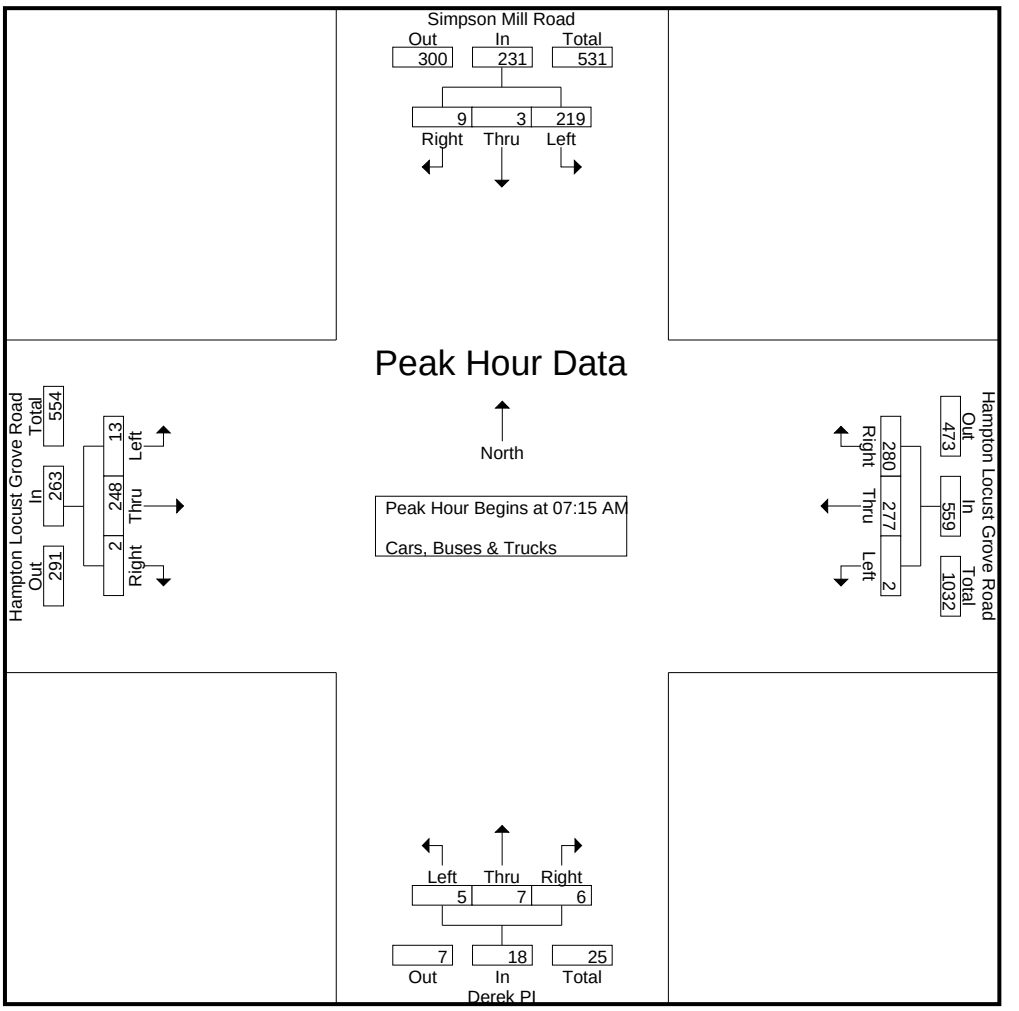
A & R Engineering, Inc.

2160 Kingston Court Suite '0'
Marietta, GA 30067

TMC Data
Simpson Mill Rd @ Hampton Locust Grove Road
7-9 am | 4-6 pm

File Name : 20240187
Site Code : 20240187
Start Date : 05-07-2024
Page No : 2

	Derek PI Northbound				Simpson Mill Road Southbound				Hampton Locust Grove Road Eastbound				Hampton Locust Grove Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	1	**2**	3	**65**	**1**	**3**	**69**	2	**71**	**1**	**74**	0	81	**87**	168	**314**
07:30 AM	**2**	1	1	4	59	1	2	62	**4**	66	0	70	**1**	**85**	83	**169**	305
07:45 AM	1	2	2	5	46	0	1	47	3	57	1	61	0	55	51	106	219
08:00 AM	2	**3**	1	**6**	49	1	3	53	4	54	0	58	1	56	59	116	233
Total Volume	5	7	6	18	219	3	9	231	13	248	2	263	2	277	280	559	1071
% App. Total	27.8	38.9	33.3		94.8	1.3	3.9		4.9	94.3	0.8		0.4	49.6	50.1		
PHF	.625	.583	.750	.750	.842	.750	.750	.837	.813	.873	.500	.889	.500	.815	.805	.827	.853



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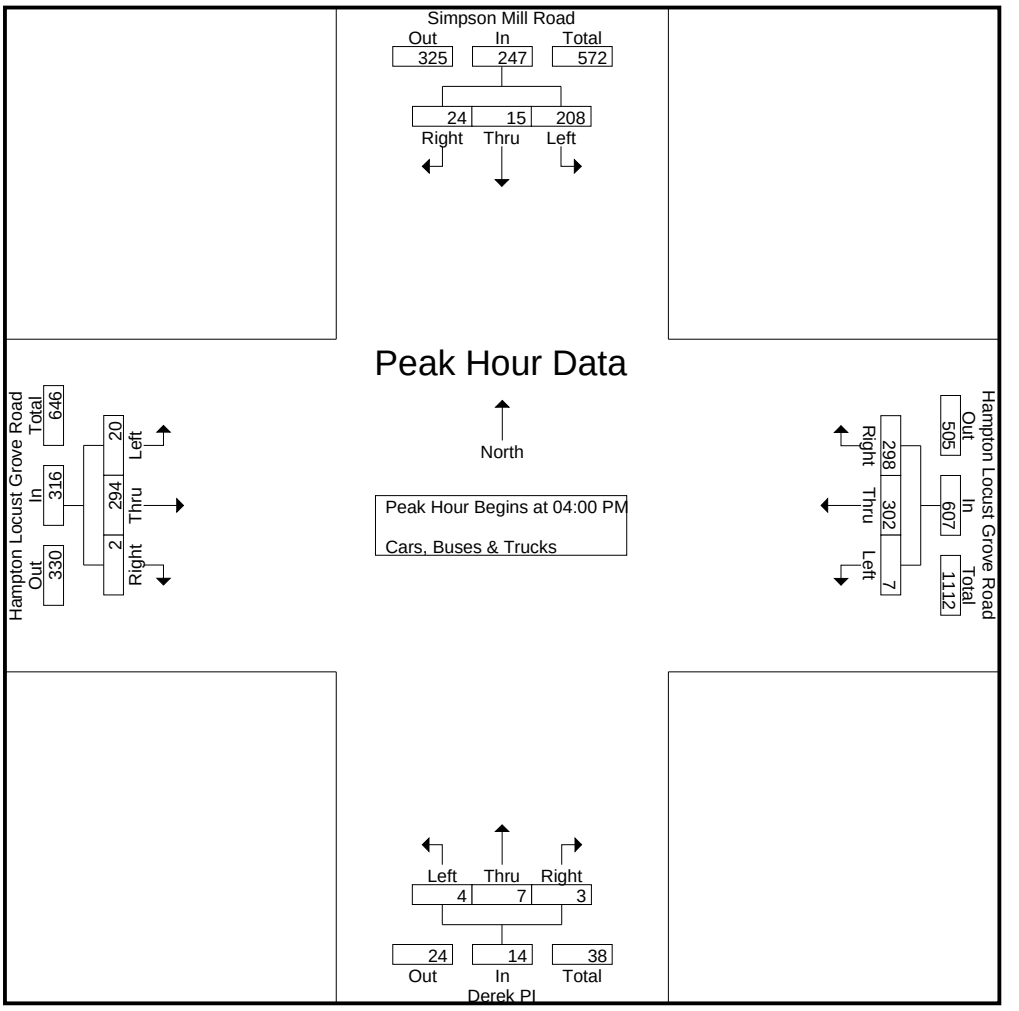
Marietta, GA 30067

TMC Data
Simpson Mill Rd @ Hampton Locust Grove Road
7-9 am | 4-6 pm

File Name : 20240187
Site Code : 20240187
Start Date : 05-07-2024
Page No : 3

	Derek PI Northbound				Simpson Mill Road Southbound				Hampton Locust Grove Road Eastbound				Hampton Locust Grove Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	1	**1**	2	60	1	6	67	**6**	73	**1**	80	0	79	**97**	**176**	**325**
04:15 PM	1	**3**	1	**5**	**62**	**6**	6	**74**	3	67	0	70	2	69	83	154	303
04:30 PM	1	1	1	3	46	5	5	56	5	**78**	0	**83**	**4**	68	67	139	281
04:45 PM	**2**	2	0	4	40	3	**7**	50	6	76	1	83	1	**86**	51	138	275
Total Volume	4	7	3	14	208	15	24	247	20	294	2	316	7	302	298	607	1184
% App. Total	28.6	50	21.4		84.2	6.1	9.7		6.3	93	0.6		1.2	49.8	49.1		
PHF	.500	.583	.750	.700	.839	.625	.857	.834	.833	.942	.500	.952	.438	.878	.768	.862	.911



A & R Engineering, Inc.

2160 Kingston Court Suite '0'
Marietta, GA 30067

TMC Data
Hampton Locust Grove Road @ Walker Drive
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240189
Site Code : 20240189
Start Date : 05-07-2024
Page No : 1

Groups Printed- Cars, Buses & Trucks

	Windy Oaks Ln Northbound				Walker Drive Southbound				Hampton Locust Grove Road Eastbound				Hampton Locust Grove Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	1	0	29	30	36	50	0	86	0	67	0	67	183
07:15 AM	1	0	0	1	2	0	64	66	81	61	0	142	0	101	0	101	310
07:30 AM	1	1	1	3	1	1	74	76	60	72	0	132	0	92	2	94	305
07:45 AM	1	0	0	1	1	0	36	37	43	78	0	121	0	79	0	79	238
Total	3	1	1	5	5	1	203	209	220	261	0	481	0	339	2	341	1036
08:00 AM	0	0	0	0	0	0	30	30	67	54	0	121	0	68	0	68	219
08:15 AM	0	0	0	0	3	0	40	43	50	59	1	110	0	90	1	91	244
08:30 AM	0	1	1	2	2	0	17	19	21	72	0	93	1	69	2	72	186
08:45 AM	0	0	1	1	0	0	25	25	17	65	0	82	0	73	1	74	182
Total	0	1	2	3	5	0	112	117	155	250	1	406	1	300	4	305	831
*** BREAK ***																	
02:00 PM	1	0	1	2	0	0	19	19	31	50	1	82	1	73	2	76	179
02:15 PM	1	0	0	1	1	0	45	46	25	66	0	91	0	71	3	74	212
02:30 PM	1	0	0	1	0	0	39	39	33	73	1	107	0	90	0	90	237
02:45 PM	0	0	0	0	0	0	22	22	17	72	0	89	0	92	1	93	204
Total	3	0	1	4	1	0	125	126	106	261	2	369	1	326	6	333	832
03:00 PM	0	0	0	0	0	0	27	27	25	70	0	95	0	88	3	91	213
03:15 PM	0	0	0	0	0	0	53	53	34	65	0	99	0	100	1	101	253
03:30 PM	2	0	0	2	1	1	72	74	28	87	0	115	0	89	1	90	281
03:45 PM	0	0	1	1	2	0	36	38	25	98	0	123	0	97	0	97	259
Total	2	0	1	3	3	1	188	192	112	320	0	432	0	374	5	379	1006
04:00 PM	0	0	0	0	2	0	34	36	22	96	0	118	0	131	0	131	285
04:15 PM	0	1	0	1	1	0	46	47	32	103	0	135	1	114	0	115	298
04:30 PM	0	0	0	0	2	0	30	32	22	95	1	118	1	101	2	104	254
04:45 PM	0	0	1	1	1	1	30	32	27	94	2	123	0	104	2	106	262
Total	0	1	1	2	6	1	140	147	103	388	3	494	2	450	4	456	1099
05:00 PM	0	0	0	0	1	0	32	33	21	83	0	104	0	96	1	97	234
05:15 PM	0	0	0	0	1	0	39	40	24	98	0	122	0	93	0	93	255
05:30 PM	0	0	0	0	0	0	24	24	18	116	2	136	0	81	0	81	241
05:45 PM	0	0	1	1	1	0	26	27	21	102	1	124	0	76	1	77	229
Total	0	0	1	1	3	0	121	124	84	399	3	486	0	346	2	348	959
Grand Total	8	3	7	18	23	3	889	915	780	1879	9	2668	4	2135	23	2162	5763
Apprch %	44.4	16.7	38.9		2.5	0.3	97.2		29.2	70.4	0.3		0.2	98.8	1.1		
Total %	0.1	0.1	0.1	0.3	0.4	0.1	15.4	15.9	13.5	32.6	0.2	46.3	0.1	37	0.4	37.5	

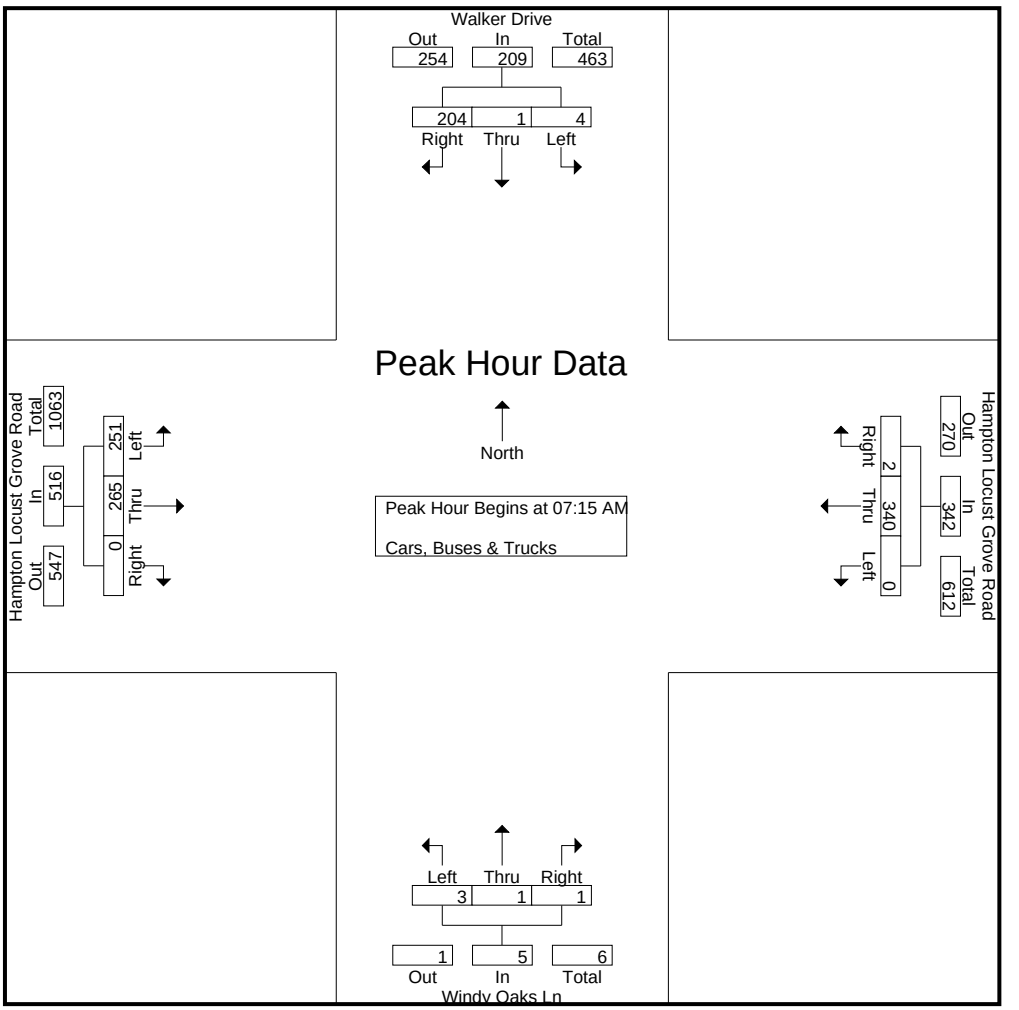
A & R Engineering, Inc.

2160 Kingston Court Suite '0'
Marietta, GA 30067

TMC Data
Hampton Locust Grove Road @ Walker Drive
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240189
Site Code : 20240189
Start Date : 05-07-2024
Page No : 2

	Windy Oaks Ln Northbound				Walker Drive Southbound				Hampton Locust Grove Road Eastbound				Hampton Locust Grove Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**1**	0	0	1	**2**	0	64	66	**81**	61	0	**142**	0	**101**	0	**101**	**310**
07:30 AM	1	**1**	**1**	**3**	1	**1**	**74**	**76**	60	72	0	132	0	92	**2**	94	305
07:45 AM	1	0	0	1	1	0	36	37	43	**78**	0	121	0	79	0	79	238
08:00 AM	0	0	0	0	0	0	30	30	67	54	0	121	0	68	0	68	219
Total Volume	3	1	1	5	4	1	204	209	251	265	0	516	0	340	2	342	1072
% App. Total	60	20	20		1.9	0.5	97.6		48.6	51.4	0		0	99.4	0.6		
PHF	.750	.250	.250	.417	.500	.250	.689	.688	.775	.849	.000	.908	.000	.842	.250	.847	.865



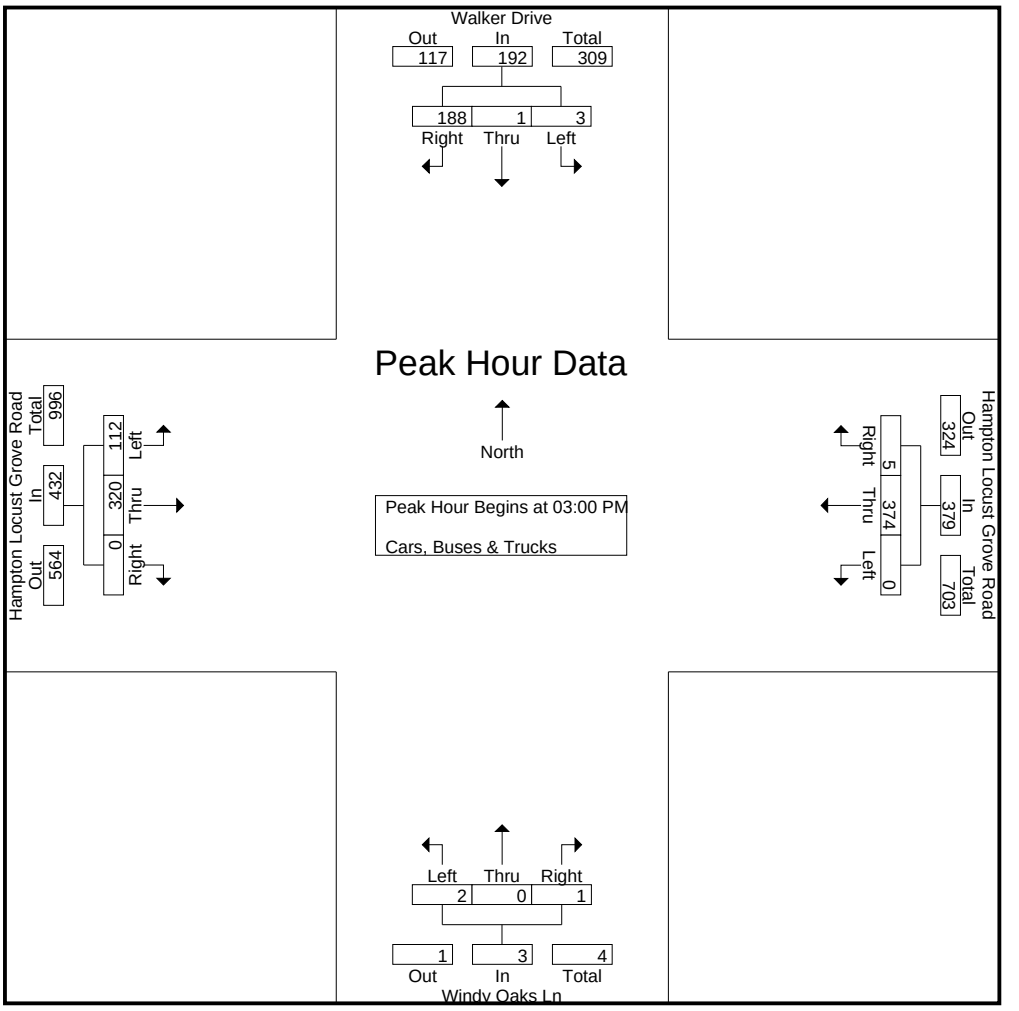
A & R Engineering, Inc.

2160 Kingston Court Suite '0'
Marietta, GA 30067

TMC Data
Hampton Locust Grove Road @ Walker Drive
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240189
Site Code : 20240189
Start Date : 05-07-2024

	Windy Oaks Ln Northbound				Walker Drive Southbound				Hampton Locust Grove Road Eastbound				Hampton Locust Grove Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	0	0	0	0	0	0	27	27	25	70	0	95	0	88	**3**	91	213
03:15 PM	0	0	0	0	0	0	53	53	**34**	65	0	99	0	**100**	1	**101**	253
03:30 PM	**2**	0	0	**2**	1	**1**	**72**	**74**	28	87	0	115	0	89	1	90	**281**
03:45 PM	0	0	**1**	1	**2**	0	36	38	25	**98**	0	**123**	0	97	0	97	259
Total Volume	2	0	1	3	3	1	188	192	112	320	0	432	0	374	5	379	1006
% App. Total	66.7	0	33.3		1.6	0.5	97.9		25.9	74.1	0		0	98.7	1.3		
PHF	.250	.000	.250	.375	.375	.250	.653	.649	.824	.816	.000	.878	.000	.935	.417	.938	.895



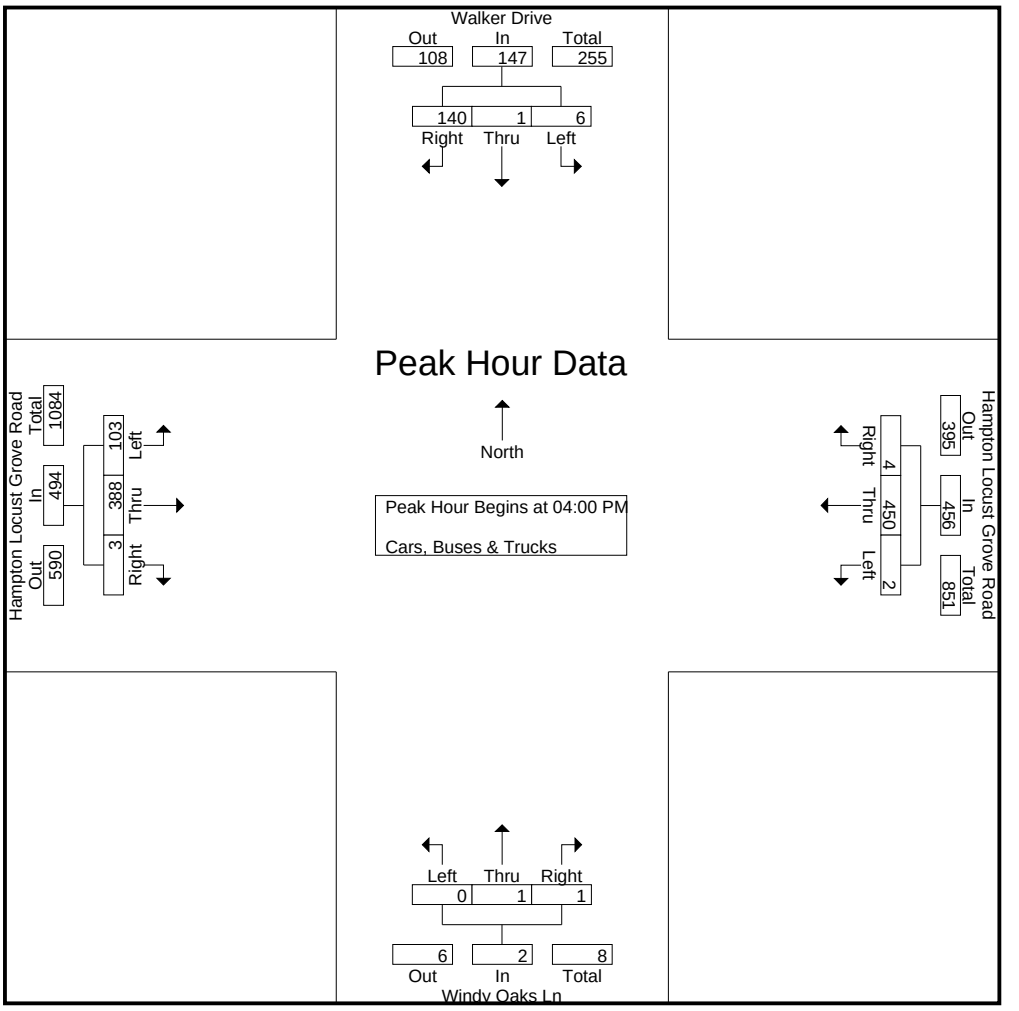
A & R Engineering, Inc.

2160 Kingston Court Suite '0'
Marietta, GA 30067

TMC Data
Hampton Locust Grove Road @ Walker Drive
7-9 am | 2-4 pm | 4-6 pm

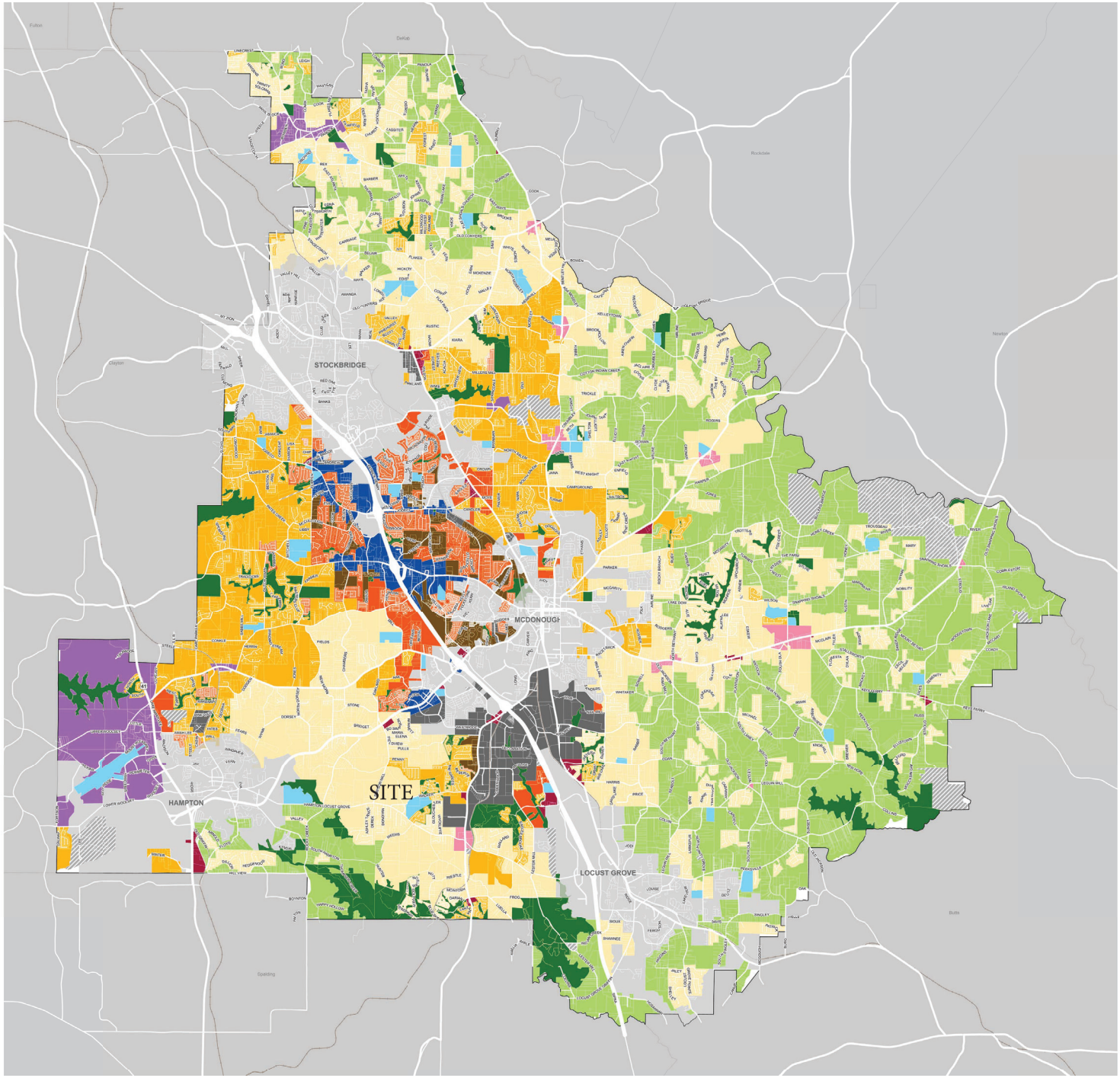
File Name : 20240189
Site Code : 20240189
Start Date : 05-07-2024

	Windy Oaks Ln Northbound				Walker Drive Southbound				Hampton Locust Grove Road Eastbound				Hampton Locust Grove Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	**2**	0	34	36	22	96	0	118	0	**131**	0	**131**	285
04:15 PM	0	**1**	0	**1**	1	0	**46**	**47**	**32**	**103**	0	**135**	**1**	114	0	115	**298**
04:30 PM	0	0	0	0	2	0	30	32	22	95	1	118	1	101	**2**	104	254
04:45 PM	0	0	**1**	1	1	**1**	30	32	27	94	**2**	123	0	104	2	106	262
Total Volume	0	1	1	2	6	1	140	147	103	388	3	494	2	450	4	456	1099
% App. Total	0	50	50		4.1	0.7	95.2		20.9	78.5	0.6		0.4	98.7	0.9		
PHF	.000	.250	.250	.500	.750	.250	.761	.782	.805	.942	.375	.915	.500	.859	.500	.870	.922



Character Areas

Henry County Future Land Use Map



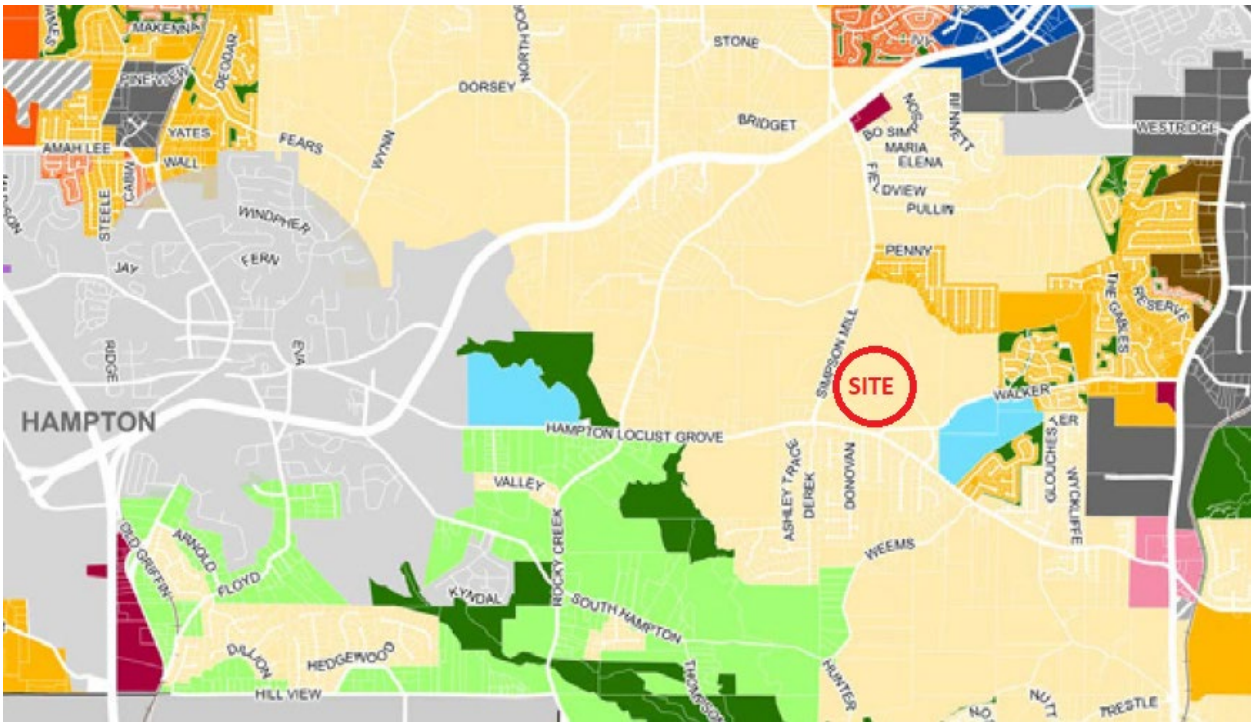
- Railroads
- Incorporated Area

2023 FLUM

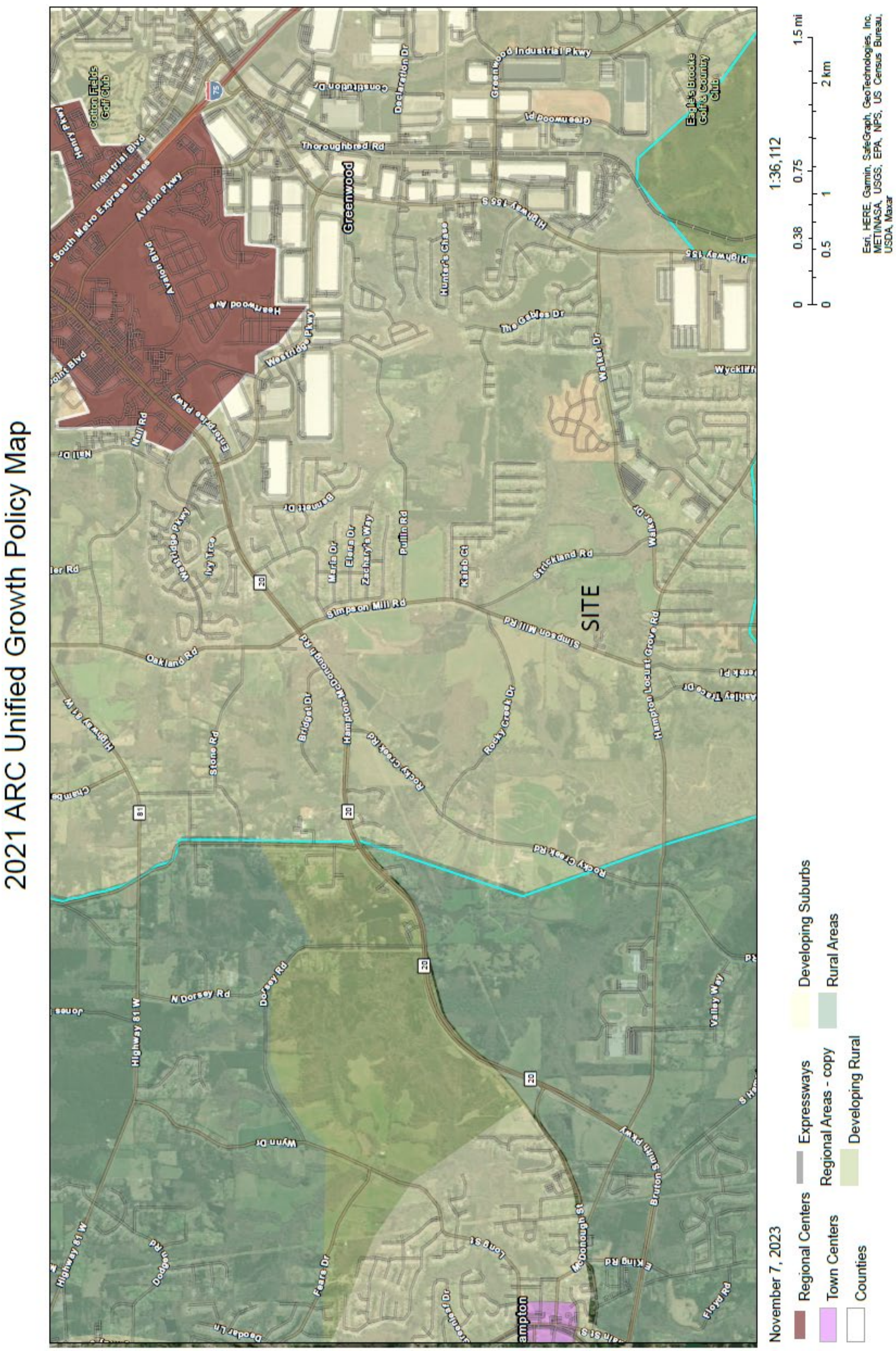
Future Land Use

- Greenspace
- Rural Residential
- Low Density Suburban
- Medium Density Suburban
- High Density Suburban
- Urban Residential
- Commercial
- Village
- Low Density Mixed Use
- High Density Mixed Use
- Industrial
- Public-Institutional
- Utilities
- Office-Institutional

0 1 2 4 Miles



The location of the site is shown above on Henry County's future land-use map.



2021 ARC Unified Growth Policy Map
SITE
Strickland Rd
Simpson Mill Rd
Walker Dr
Hampton Locust Grove Rd
Rocky Creek Rd
Hampton McDonough Rd
Highway 81 W
Greenwood
Greenwood Industrial Pkwy
Thoroughbred Rd
Highway 155
Westridge Pkwy
Enterprise Pkwy
Avalon Pkwy
Industrial Blvd
South Metro Express Lanes
Oakland Rd
N Dorsey Rd
Dorsey Rd
Wynn Dr
Bruton Smith Pkwy
McDonough St
Cotton Fields Golf Club
Eagle's Brooke Golf & Country Club
November 7, 2023
Regional Centers
Town Centers
Counties
Expressways
Regional Areas - copy
Developing Rural
Developing Suburbs
Rural Areas
1:36,112
0 0.38 0.75 1.5 mi
0 0.5 1 2 km
Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Maxar

GRTA Letter of Understanding

LETTER OF UNDERSTANDING

August 27nd, 2024

Christy Swearingen
Swearingen Consulting
Red Wold DCD Properperties, LLC
1427 East 7 Street
Brooklyn, NY 11230

RE: **Strickland Tract** (**DRI#: 4251)**

Dear Christy Swearingen:

The purpose of this Letter of Understanding is to document the discussions during the Methodology Meeting held virtually on August 19th, 2024 regarding **Strickland Tract** Development of Regional Impact (DRI). The *GRTA DRI Review Procedures*, as well as the inputs and parameters documented in this Letter of Understanding and the revised Methodology Meeting Packet, shall be adhered to in preparing the GRTA required Transportation Study.

PROJECT OVERVIEW

- The proposed site is located at (GPS Coordinates: 33°22'56"N 84°12'48.28"W) 276 Strickland Road, in Henry County, Georgia. The site is located to the east of Simpson Mill Road between Simpson Mill, Strickland Road and Walker Drive.
- The proposed development includes four data center buildings for a total of 1,253,754 Square Feet including 31,600 Square Feet of office space. The property includes 249.8 acres of land.
- The projected build-out is one phase to be completed by 2028.
- The proposed development includes (2) site accesses. One full access driveway on Simpson Mill Road and one emergency access on Walker Road.
- The DRI trigger for this development is a Rezoning.
- The vehicular trip generation is estimated to be 1,241 net daily trips based on the *ITE Trip Generation Manual 11th edition.*
- The applicant is applying for approval under GRTA's expedited Traffic Impact Study review process.

STUDY NETWORK

1. SR 20 (McDonough Hampton Road) @ Simpson Mill Road/Oakland Road
2. Simpson Mill Road @ Hampton Locust Grove Road
3. Hampton Locust Grove Road @ Walker Drive/Windy Oaks Lane
4. Simpson Mill Road @ Site Driveway 1
5. Walker Drive @ Site Drive 2 (Emergency Access Only).

METHODOLOGY MEETING PACKET INPUTS & PARAMETERS

- The Site Plan shall meet all the applicable requirements in Section 7.1 of the *GRTA DRI Review Procedures*.
- All Study Network intersections shall be analyzed during the AM and PM peak hours for (1) existing conditions, (2) future "no-build" conditions, and (3) future "build" conditions as specified in the *GRTA DRI Review Procedures*.
- This DRI shall be modeled and reviewed in one phase to be completed by 2028.
- The Level of Service (LOS) standard for all analysis shall be LOS D unless specified otherwise in Section 3.2.2.1. For example, a LOS E standard is allowed if the existing LOS for the intersection or approach is a LOS F.
- Default values should not be assumed in the traffic modeling. Existing conditions shall be taken into account as required in Section 3.2.2.
- The trip generation calculations in the revised Methodology Meeting Packet shall be used in the Transportation Study. Mixed-use and pass-by reductions are not allowed for this site. Pass-by reductions shall not exceed 15% of a roadway's traffic volume standard established in Appendix 7.2.
- The trip assignment approach in the revised Methodology Meeting Packet shall be utilized for all Study Network intersection movements.
- The applicant shall research TIP, STIP, RTP and GDOT's construction work program, as well as any local government and transit operator plans (SPLOST, CIP, etc.), to determine the open date, sponsor, cost of the project, funding source(s), for future roadway projects in the project vicinity. Programmed transportation projects anticipated to open on or before the Build Out year of the DRI Project shall be modeled as completed in the No-Build and Build conditions unless approved otherwise.
- A 1.2% annual traffic Background Growth Rate shall be used for all roadways.
- Capacity analysis shall be based on turning movement counts collected not more than 12-months prior to the date of the actual DRI submittal to GRTA, unless specified otherwise. As specified in Section 2.3, turning movement counts shall be collected while local schools are in session, on a Tuesday, Wednesday or Thursday (unless approved otherwise) and not during holiday periods (weeks of July 4th, Thanksgiving and +/- 5 days of Christmas).
- COVID-19: The transportation analysis shall utilize existing turning movement count data when available during COVID. All counts older than a year shall be grown by the Background Growth Rate unless approved otherwise. If new counts are required, a control count location where existing count data is available shall be used for developing traffic growth extrapolation rates. The traffic engineer shall submit the proposed growth rates to GRTA, GDOT and local government stakeholders for input and GRTA approval before submitting the Transportation Study.
- If the *GRTA DRI Review Procedures* requires an Enhanced Focus Area for Heavy Vehicles or an Enhanced Focus Area for Dense Urban Environments, the Transportation Study shall incorporate the inputs and parameters agreed to at the Methodology Meeting and documented in the revised Methodology Meeting Packet. These inputs may include a Heavy Vehicle modeling percentages, a Heavy Vehicle route map, a pedestrian crosswalk delay adjustment and a bus blockage adjustment factor.

ADDITIONAL REQUIREMENTS

All applicable requirements of the *GRTA DRI Review Procedures* must be met for the Transportation Study to be considered complete. The *GRTA DRI Review Procedures* are located on GRTA's DRI website: https://www.srta.ga.gov/programs-projects/dev-of-regional-impact/ Contact GRTA staff if you have any questions on these requirements.

The Transportation Study shall also include as attachments the native LOS modeling file (i.e., Synchro modeling files) as well as the modeling reports (PDFs) for all Study Network intersections for the Existing, No-Build and Build conditions for all phases. The PDF reports shall be numbered (in page headers) and organized in order according to the Study Network numbering sequence in this Letter of Understanding. The reports shall also be organized in the following sequence: *Existing condition AM, Existing condition PM, No-build condition AM, No-Build condition PM, Build condition AM, Build condition PM*. If improvements are modeled, those PDFs shall be labeled as such and follow the appropriate condition's applicable peak period.

The Transportation Study appendices shall also include all turning movement count data, regardless of if using historic data or newly collected turning movement counts.

When documenting any Queue Length impacts required in Section 3.2.3.6, the TIS Executive Summary shall also note any individual *movements* not meeting the LOS standard where the DRI Project adds trips in the Build condition and exceeds available storage capacity for that movement.

When identifying mitigations in the existing, no-build and build conditions, the mitigations identified in preceding conditions shall not be modeled as complete when conducting the LOS analysis. The same mitigation may still be proposed as mitigation in the subsequent condition but it shall not be included as completed in the default analysis. For example, a turn lane may be identified as a needed improvement in the no-build condition. The turn lane should not be modeled as completed in the build condition. The turn lane should only be modeled as complete in the no-build with improvements condition and the build with improvements condition.

DRI REVIEW PACKAGE SUBMITTAL

GRTA will begin reviewing the DRI once the DRI Review Package is submitted and deemed complete. The DRI Review Package includes: the permitting Local Government inputting both Department of Community Affairs (DCA) forms into the DCA DRI website; and the **Traffic Engineer submittal of the GRTA Transportation Study (including LOS appendices, traffic count data and any other required attachments) and Site Plan to GRTA staff and ALL stakeholders included in the CC list of this Letter of Understanding**.

All DRI Review Packages shall be submitted electronically via email to all stakeholders in the CC list of the Letter of Understanding. If the DRI Review Package total file size is greater than 10 MB, the DRI Review Package shall be submitted via email with a FTP link provided for downloading the files.

Please contact me if you have any questions about the Letter of Understanding or the *GRTA DRI Review Procedures*.

Sincerely,

Brittany Williams
Program Manager

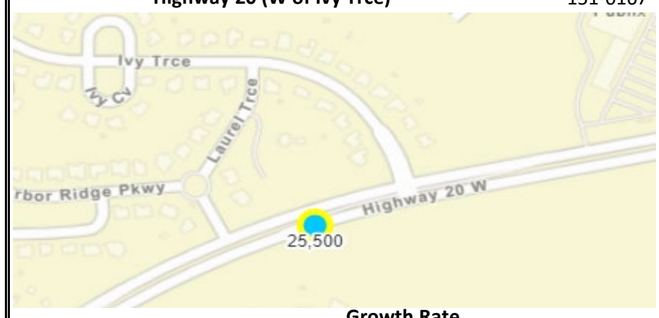
Cc:

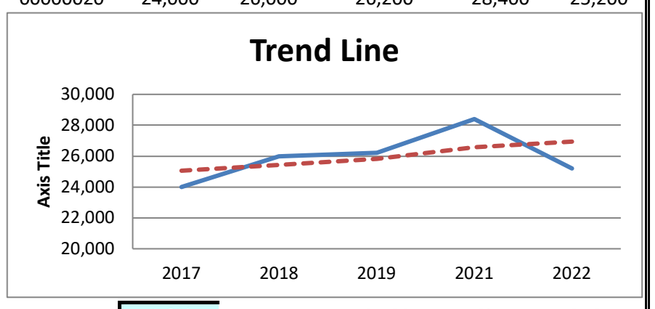
Zane Grennell, DCA
Donald Shockey, ARC
Brittany Williams, GRTA/SRTA
Kenta Lanham, Henry County
Josh Fenn, Henry County
David Simmons, Henry County DOT
Shamsul Baker, Henry County
Daniel Trevarrow, GDOT District 3
Donald Wilkerson, GDOT District 3
Duante Gibbs, Locust Grove
Bert Foster, Locust Grove
Tim Young, Locust Grove
Celine Benoit, ARC
Abdul Amer, A&R Engineering, INC
Naseer Omer, A&R Engineering, INC
Naila Amer, A&R Engineering, INC
Scott Greene, Thomas & Hutton
Christy Swearingen, Swearingen Consultants
Julia Billings, Modern Mobility Partners, LLC

Linear Regression of Daily Traffic

Location	Growth Rate	R Squared	Station ID	Route	2017	2018	2019	2021	2022
Highway 20 (W of Ivy Trce)	1.8%	0.23	151-0167	00000020	24,000	26,000	26,200	28,400	25,200
Highway 20 (W of Dorsey Rd)	4.0%	0.86	151-0163	00002000	14,800	14,800	16,500	16,800	17,200
Rocky Creek Rd (S of Rocky Cre	-5.2%	0.74	151-8116	00028500	2,650	2,690	2,740	2,210	2,260
Hampton Locust Grove Rd (W (	-5.5%	0.71	151-0372	00065000	7,480	6,340	6,380	6,360	5,480
McDonough St (E of Hampton	1.9%	0.98	151-0162	00055401	2,330	2,370	2,410	2,460	2,520
Weighted Average	**1.2%**	0.32	Sum of Count Stations =		51,260	52,200	54,230	56,230	52,660

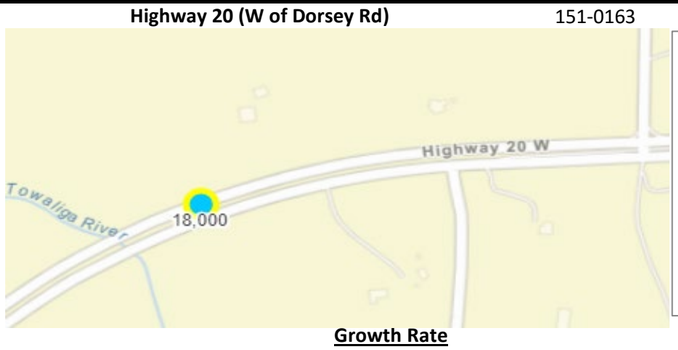
Location	Traffic Counter	RCLINK	2017	2018	2019	2021	2022
Highway 20 (W of Ivy Trce)	151-0167	00000020	24,000	26,000	26,200	28,400	25,200

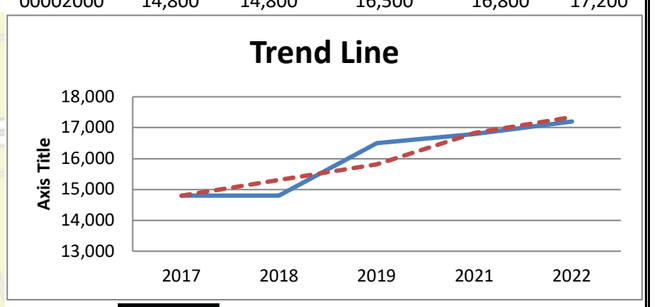




Growth Rate	1.8%	Intercept	-734,837	Slope	376.74
Trend Line	25,056	25,433	25,809	26,563	26,940

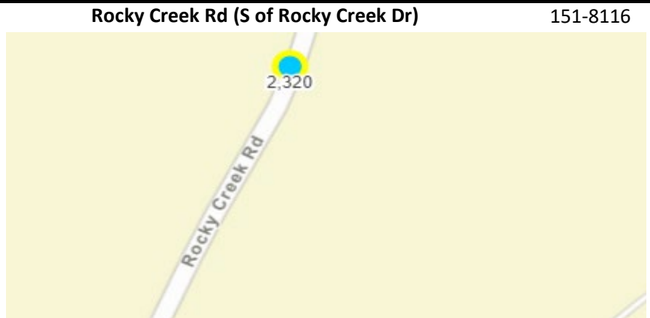
Location	Traffic Counter	RCLINK	2017	2018	2019	2021	2022
Highway 20 (W of Dorsey Rd)	151-0163	00002000	14,800	14,800	16,500	16,800	17,200

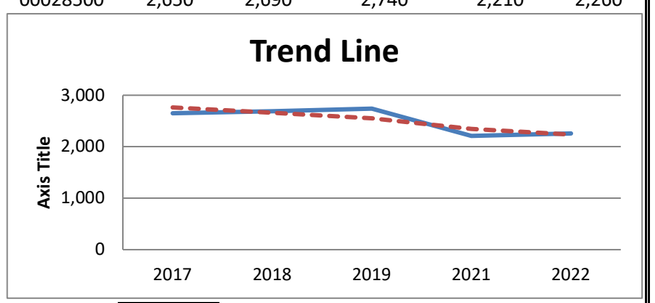




Growth Rate	4.0%	Intercept	-1,012,465	Slope	509.30
Trend Line	14,798	15,307	15,816	16,835	17,344

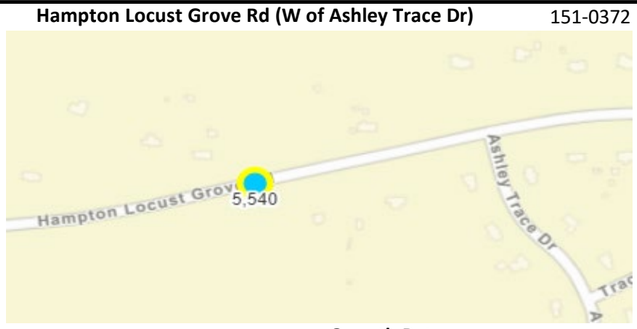
Location	Traffic Counter	RCLINK	2017	2018	2019	2021	2022
Rocky Creek Rd (S of Rocky Creek Dr)	151-8116	00028500	2,650	2,690	2,740	2,210	2,260

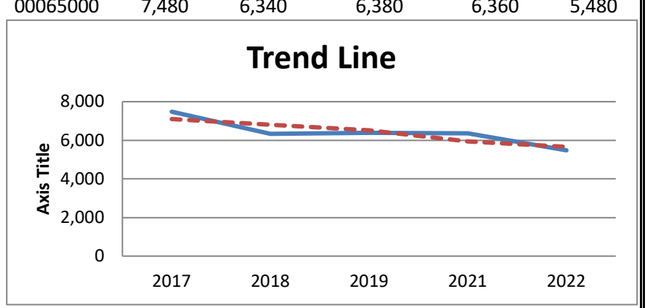




Growth Rate	-5.2%	Intercept	215,017	Slope	-105.23
Trend Line	2,763	2,657	2,552	2,342	2,236

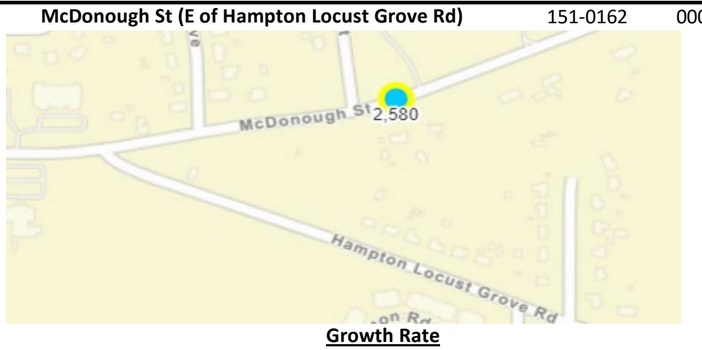
Location	Traffic Counter	RCLINK	2017	2018	2019	2021	2022
Hampton Locust Grove Rd (W of Ashley Trace Dr)	151-0372	00065000	7,480	6,340	6,380	6,360	5,480

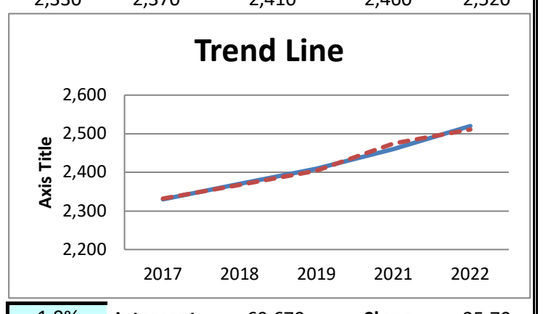




Growth Rate	-5.5%	Intercept	588,277	Slope	-288.14
Trend Line	7,100	6,811	6,523	5,947	5,659

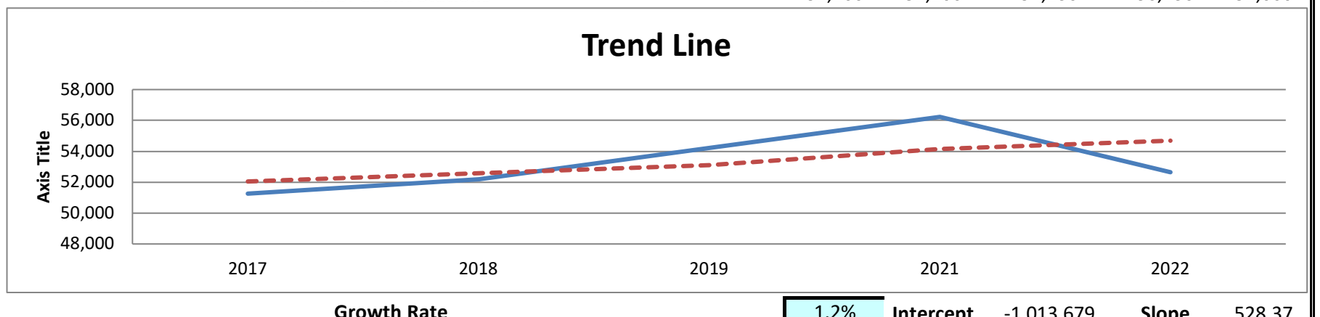
Location	Traffic Counter	RCLINK	2017	2018	2019	2021	2022
McDonough St (E of Hampton Locust Grove Rd)	151-0162	00055401	2,330	2,370	2,410	2,460	2,520





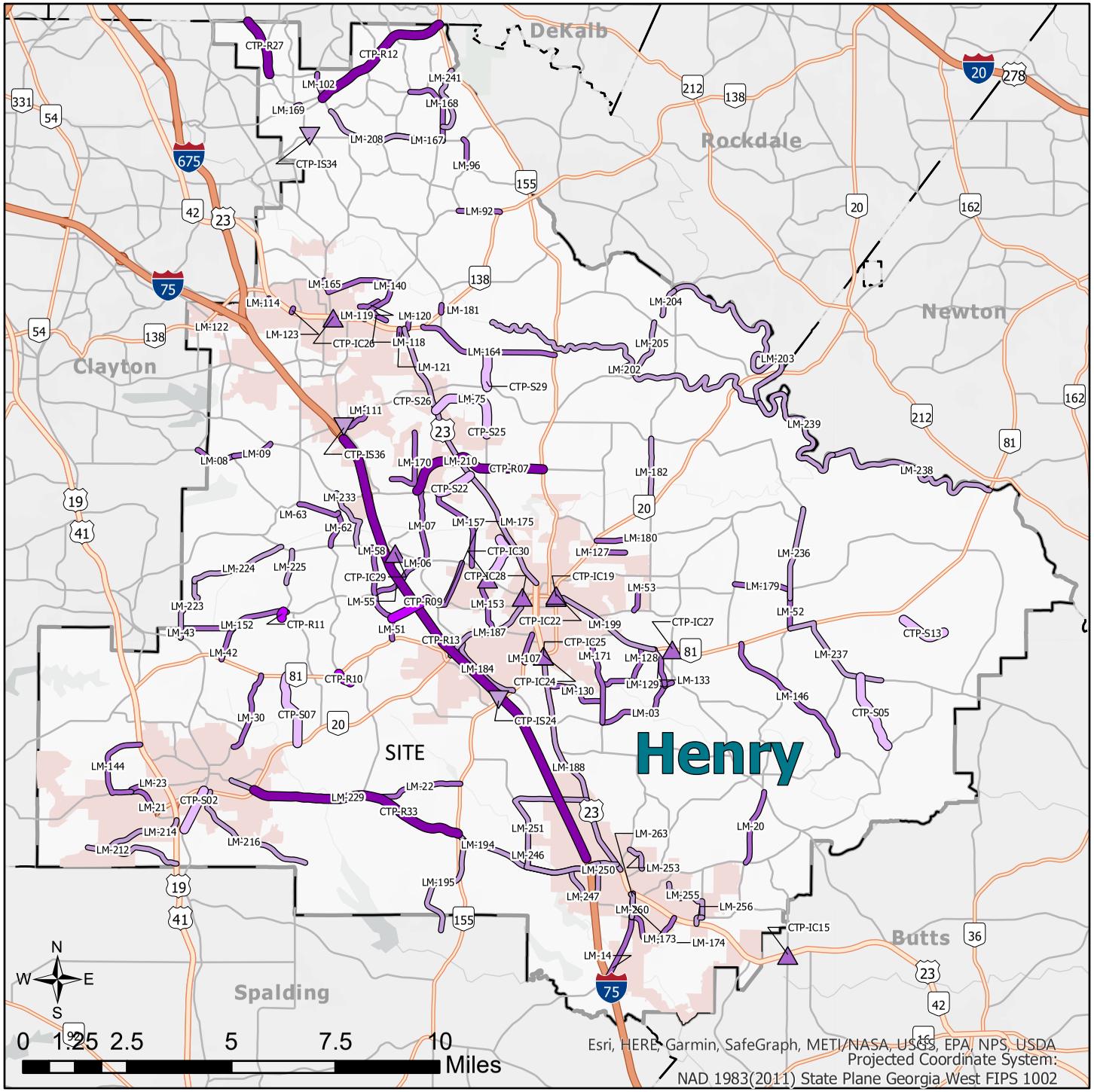
Growth Rate	1.9%	Intercept	-69,670	Slope	35.70
Trend Line	2,332	2,368	2,404	2,475	2,511

Weighted Average	2017	2018	2019	2021	2022
Sum of Count Stations	51,260	52,200	54,230	56,230	52,660



Growth Rate	1.2%	Intercept	-1,013,679	Slope	528.37
Trend Line	52,048	52,576	53,105	54,161	54,690

Fact Sheets for Planned and Programmed Improvements



Aspirational Projects (2050+)

Key

- Aspirational Roadway Widening
- Aspirational New Roadway
- Aspirational Arterial Upgrade
- Aspirational Sidewalk
- Aspirational Trail
- Aspirational Intersection Capacity
- Aspirational Intersection Safety
- Interstate Highways
- US Highways
- State Highways
- Roadway
- Henry County City Boundaries
- Henry County Border

HENRY COUNTY
TRANSPORTATION PLAN
HAMPTON, LOCUST GROVE, MCDONOUGH, STOCKBRIDGE

HENRY COUNTY GOVERNMENT

Henry County Transportation Plan: 2022 Update

Aspirational Projects (2050+)

Roadway Widening	Name	CTP ID	ARC ID	Extents	Project Classification	Sponsor	GDOT PI	Existing Lanes	Proposed Lanes	Preliminary Engineering (PE)	Right of Way Acquisition (ROW)	Construction (CST)	Contingency (CONT)	Total
	Campground Road Widening	CTP-R07	n/a	From the end of the 4-lane section near Jodeco Road to SR 155	Widening	Henry County	n/a	2	4	$4,707,000	$3,513,000	$55,070,000	$11,669,000	$74,959,000
	Panola Road Widening	CTP-R12	n/a	From Fairview Road to SR 155	Widening	Henry County	n/a	2	4	$2,918,000	$5,094,000	$34,141,000	$7,251,000	$49,404,000
	I-75 Widening	CTP-R13	n/a	From just south of the Bill Gardner Parkway interchange to the Eagles Landing Parkway interchange	Widening	GDOT	n/a	6	8	$56,685,000	$32,572,000	$663,129,000	$241,416,000	$993,802,000
	Fairview Road Widening: Phase III	CTP-R27	HE-134C	From the Dekalb County Line to Cook Road	Widening	Henry County	n/a	2	4	$3,589,000	$1,051,000	$41,988,000	$9,065,000	$55,693,000
	Hampton-Locust Grove Road Widening	CTP-R33	HE-126A1	From SR 20 (McDonough Road) to SR 155	Widening	Henry County	n/a	2	4	$6,672,000	$3,877,000	$78,053,000	$16,768,000	$105,370,000

New Roadway	Name	CTP ID	ARC ID	Extents	Project Classification	Sponsor	GDOT PI	Existing Lanes	Proposed Lanes	PE	ROW	CST	CONT	Total
	Bridges Road Extension	CTP-R09	n/a	New bridge over I-75 between the end of Bridges Road to Mill Road	New Roadway	Henry County	n/a	0	2	$1,579,000	$15,586,000	$18,472,000	$3,207,000	$38,844,000
	Chambers Road Extension	CTP-R10	n/a	New connection between SR 81 and Oakland Road	New Roadway	Henry County	n/a	0	2	$1,250,000	$14,939,000	$14,626,000	$2,389,000	$33,204,000
	North Mount Carmel Road Extension	CTP-R11	n/a	New connection between North Mount Carmel Road at South Mount Carmel Road at Mount Carmel Road	New Roadway	Henry County	n/a	0	2	$300,000	$14,190,000	$3,513,000	$676,000	$18,679,000

Arterial Upgrade	Name	CTP ID	Description	Project Classification	From	To	PE	ROW	CST	CONT	Total
	Old Highway 3	CTP-S02	Perform an arterial upgrade	Arterial Upgrade	Old Griffin Road	SR 20	$918,000	$1,570,000	$10,743,000	$1,907,000	$15,138,000
	Peeksville Road	CTP-S05	Install shoulders and rumble strips	Arterial Upgrade	Keys Ferry Road	Ellistown Road	$113,850	$82,080	$888,000	$174,000	$1,257,930
	Dorsey Road	CTP-S07	Install shoulders and rumble strips, convert southern intersection to RCUT control, install signage where appropriate due to sight distance	Arterial Upgrade	SR 20	SR 81	$113,850	$82,080	$888,000	$174,000	$1,257,930
	Mount Bethel Road	CTP-S13	Repave and restore pavement markings, install shoulders and rumble strips	Arterial Upgrade	Sandy Ridge Road	Stroud Road	$113,850	$82,080	$888,000	$174,000	$1,257,930
	McDonough Parkway	CTP-S20	Provide TWTL for vehicles turning left from Ivey Edwards Lane	Arterial Upgrade	Jonesboro Road	Ivey Edwards Lane	$37,950	$13,680	$148,000	$29,000	$228,630
	Jodeco Road	CTP-S22	Perform an arterial upgrade	Arterial Upgrade	Dailey Mill Road	SR 42	$953,000	$1,668,000	$11,144,000	$1,954,000	$15,719,000
	Bannan Road	CTP-S25	Restore pavement markings and install signage indicating intersections ahead	Arterial Upgrade	North Salem Drive	Springdale Road	$37,950	$13,680	$148,000	$29,000	$228,630
	Brannan Road	CTP-S26	Restore pavement markings and install signage indicating intersections ahead	Arterial Upgrade	Springdale Road	SR 42	$37,950	$13,680	$148,000	$29,000	$228,630
	Springdale Road	CTP-S29	Resurface and install rumble strips	Arterial Upgrade	East Lake Parkway	Millers Mill Road	$113,850	$82,080	$888,000	$174,000	$1,257,930

Intersection Capacity	CTP ID	Location	Project Classification	Sponsor	Project Scale	PE	ROW	CST	CONT	Total
	CTP-IC15	US 23/SR 42 at Burg Road/England Chapel Road	Intersection Capacity	GDOT	Mid	$200,000	$100,000	$600,000	$100,000	$1,000,000
	CTP-IC19	SR 81 at SR 155/SR 20/Zach Hinton Parkway	Intersection Capacity	GDOT	Major	$1,000,000	$500,000	$3,000,000	$500,000	$5,000,000
	CTP-IC22	John Frank Ward Boulevard West at SR 20(Zach Hinton Parkway)	Intersection Capacity	GDOT	Major	$1,000,000	$500,000	$3,000,000	$500,000	$5,000,000
	CTP-IC24	SR 155 at US 23/SR 42 (Macon Street)	Intersection Capacity	GDOT	Mid	$200,000	$100,000	$600,000	$100,000	$1,000,000
	CTP-IC25	SR 155 at US 23/SR 42(Macon Street)	Intersection Capacity	GDOT	Mid	$200,000	$100,000	$600,000	$100,000	$1,000,000
	CTP-IC26	East Atlanta Road at US 23/SR 42/SR 138 (North Henry Boulevard)	Intersection Capacity	GDOT	Major	$1,000,000	$500,000	$3,000,000	$500,000	$5,000,000
	CTP-IC27	SR 81 at North/South Bethany Road	Intersection Capacity	GDOT	Mid	$200,000	$100,000	$600,000	$100,000	$1,000,000
	CTP-IC28	Jonesboro Road at SR 20, Geranium Drive	Intersection Capacity	GDOT	Major	$1,000,000	$500,000	$3,000,000	$500,000	$5,000,000
	CTP-IC29	Jonesboro Road at I-75 Toll Ramps	Intersection Capacity	GDOT	Major	$1,000,000	$500,000	$3,000,000	$500,000	$5,000,000
	CTP-IC30	Jonesboro Road at McDonough Parkway	Intersection Capacity	City of McDonough	Major	$1,000,000	$500,000	$3,000,000	$500,000	$5,000,000

Intersection Safety	CTP ID	Location	Project Classification	Sponsor	Project Scale	PE	ROW	CST	CONT	Total
	CTP-IS24	SR 155 at I-75 southbound exit	Intersection Safety	GDOT/Henry County	Minor	$100,000	$50,000	$300,000	$50,000	$500,000
	CTP-IS34	East Atlanta Road at Rex Road	Intersection Safety	Henry County	Mid	$200,000	$100,000	$600,000	$100,000	$1,000,000
	CTP-IS36	Patrick Henry Parkway at Country Club Drive	Intersection Safety	City of Stockbridge	Mid	$200,000	$100,000	$600,000	$100,000	$1,000,000

Sidewalk Projects	Name	ID	Extents	Description	PE	ROW	CST	CONT	Total
	King Mill Road	LM-03	Iris Lake Road to South Bethany Road	Install sidewalk along both sides of King Mill Road	$425,000	$875,467	$4,967,000	$588,000	$6,855,467
	Mount Carmel Road	LM-06	I-75 to Jonesboro Road	Install sidewalk along both sides of Mount Carmel Road	$136,000	$283,439	$1,595,000	$187,000	$2,201,439
	Oak Grove Road	LM-07	Jodeco Road to Jonesboro Road	Install sidewalk along both sides of Oak Grove Road	$322,000	$663,983	$3,763,000	$442,000	$5,190,983
	Noahs Arc Road	LM-08	Floyd Road to Crown Oaks Drive	Install sidewalk along both sides of Noahs Arc Road	$188,000	$390,672	$2,199,000	$258,000	$3,035,672
	Noahs Arc Road	LM-09	Crown Oaks Drive to Jodeco Road	Install sidewalk along both sides of Noahs Arc Road	$186,000	$384,582	$2,174,000	$255,000	$2,999,582
	Locust Grove-Griffin Road	LM-14	I-75 to Tanger Boulevard	Install sidewalk along both sides of Locust Grove-Griffin Road	$299,000	$623,791	$3,502,000	$411,000	$4,835,791
	South Ola Road	LM-20	Peeksville Road to Old Jackson Road	Install sidewalk along both sides of South Ola Road	$343,000	$715,210	$4,017,000	$475,000	$5,550,210
	Lower Woolsey Road	LM-21	Richard Petty Boulevard to SR 20 West Ramp	Install sidewalk along both sides of Lower Woolsey Road	$1,801,000	$263,164	$1,479,000	$175,000	$3,718,164
	Walker Drive	LM-22	Hampton-Locust Grove Road to SR 155	Install sidewalk along both sides of Walker Drive	$388,000	$804,372	$4,540,000	$537,000	$6,269,372
	Richard Petty Boulevard	LM-23	Lower Woolsey Road to US 19/US 41	Install sidewalk along both sides of Richard Petty Boulevard	$168,000	$350,322	$1,968,000	$233,000	$2,719,322
	Elm Street	LM-30	Bridgemill Drive to SR 81	Install sidewalk along both sides of Elm Street	$365,000	$762,837	$4,275,000	$506,000	$5,908,837

Existing Intersection Analysis

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	156	1037	54	114	645	110	0	0	293	0	0	104
Future Vol, veh/h	156	1037	54	114	645	110	0	0	293	0	0	104
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	365	-	385	480	-	425	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	5	2	2	5	2	2	2	2	2	2	2
Mvmt Flow	166	1103	57	121	686	117	0	0	312	0	0	111

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	686	0	0	1103	0	0	-	-	552	-	-	343
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	904	-	-	629	-	-	0	0	477	0	0	653
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	904	-	-	629	-	-	-	-	477	-	-	653
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	1.6	25.7	11.6
HCM LOS			D	B

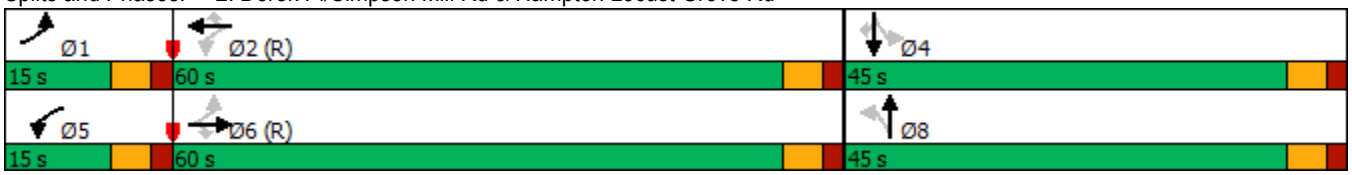
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	477	904	-	-	629	-	-	653
HCM Lane V/C Ratio	0.653	0.184	-	-	0.193	-	-	0.169
HCM Control Delay (s)	25.7	9.9	-	-	12.1	-	-	11.6
HCM Lane LOS	D	A	-	-	B	-	-	B
HCM 95th %tile Q(veh)	4.6	0.7	-	-	0.7	-	-	0.6

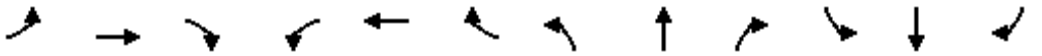
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	13	248	2	2	277	280	5	7	219	3	9
Future Volume (vph)	13	248	2	2	277	280	5	7	219	3	9
Lane Group Flow (vph)	15	292	2	2	326	329	0	21	0	262	11
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases	1	6		5	2			8		4	
Permitted Phases	6		6	2		2	8		4		4
Detector Phase	1	6	6	5	2	2	8	8	4	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	15.0	23.5	23.5	15.0	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	15.0	60.0	60.0	15.0	60.0	60.0	45.0	45.0	45.0	45.0	45.0
Total Split (%)	12.5%	50.0%	50.0%	12.5%	50.0%	50.0%	37.5%	37.5%	37.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5		5.5		5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None
v/c Ratio	0.02	0.25	0.00	0.00	0.29	0.30		0.05		0.82	0.03
Control Delay	9.1	11.6	0.0	9.5	13.7	2.5		23.4		62.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay	9.1	11.6	0.0	9.5	13.7	2.5		23.4		62.1	0.1
Queue Length 50th (ft)	4	83	0	1	95	0		8		192	0
Queue Length 95th (ft)	13	183	0	4	211	37		25		245	0
Internal Link Dist (ft)		1429			2198			363		4813	
Turn Bay Length (ft)	235		160	215		220					235
Base Capacity (vph)	698	1172	1051	748	1132	1113		539		437	570
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0
Reduced v/c Ratio	0.02	0.25	0.00	0.00	0.29	0.30		0.04		0.60	0.02

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: Derek Pl/Simpson Mill Rd & Hampton Locust Grove Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	248	2	2	277	280	5	7	6	219	3	9
Future Volume (veh/h)	13	248	2	2	277	280	5	7	6	219	3	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1826	1870	1870	1826	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	292	2	2	326	0	6	8	7	258	4	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	5	2	2	5	2	2	2	2	2	2	2
Cap, veh/h	682	1195	1037	704	1170		124	162	123	347	4	
Arrive On Green	0.02	0.65	0.65	0.00	0.64	0.00	0.21	0.21	0.21	0.21	0.21	0.00
Sat Flow, veh/h	1781	1826	1585	1781	1826	1585	414	786	600	1400	22	1585
Grp Volume(v), veh/h	15	292	2	2	326	0	21	0	0	262	0	0
Grp Sat Flow(s),veh/h/ln	1781	1826	1585	1781	1826	1585	1800	0	0	1422	0	1585
Q Serve(g_s), s	0.3	7.9	0.1	0.0	9.4	0.0	0.0	0.0	0.0	20.3	0.0	0.0
Cycle Q Clear(g_c), s	0.3	7.9	0.1	0.0	9.4	0.0	1.1	0.0	0.0	21.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.29		0.33	0.98		1.00
Lane Grp Cap(c), veh/h	682	1195	1037	704	1170		408	0	0	352	0	
V/C Ratio(X)	0.02	0.24	0.00	0.00	0.28		0.05	0.00	0.00	0.75	0.00	
Avail Cap(c_a), veh/h	794	1195	1037	840	1170		609	0	0	525	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.5	8.5	7.2	7.8	9.4	0.0	38.3	0.0	0.0	46.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.6	0.0	0.1	0.0	0.0	3.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.9	0.0	0.0	3.5	0.0	0.5	0.0	0.0	7.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.5	9.0	7.2	7.8	10.0	0.0	38.4	0.0	0.0	49.4	0.0	0.0
LnGrp LOS	A	A	A	A	B		D	A	A	D	A	
Approach Vol, veh/h		309			328			21			262	
Approach Delay, s/veh		8.9			10.0			38.4			49.4	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	82.4		30.2	5.8	84.0		30.2				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	54.5		39.5	9.5	54.5		39.5				
Max Q Clear Time (g_c+I1), s	2.3	11.4		23.5	2.0	9.9		3.1				
Green Ext Time (p_c), s	0.0	4.0		1.2	0.0	3.5		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		21.5	
HCM 6th LOS		C	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	251	265	0	0	340	2	3	1	1	4	1	204
Future Vol, veh/h	251	265	0	0	340	2	3	1	1	4	1	204
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	120	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	292	308	0	0	395	2	3	1	1	5	1	237

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	397	0	0	308	0	0	1407	1289	308	1289	1288	396
Stage 1	-	-	-	-	-	-	892	892	-	396	396	-
Stage 2	-	-	-	-	-	-	515	397	-	893	892	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1162	-	-	1253	-	-	117	164	732	141	164	653
Stage 1	-	-	-	-	-	-	337	360	-	629	604	-
Stage 2	-	-	-	-	-	-	543	603	-	336	360	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1162	-	-	1253	-	-	57	114	732	107	114	653
Mov Cap-2 Maneuver	-	-	-	-	-	-	57	114	-	107	114	-
Stage 1	-	-	-	-	-	-	235	251	-	438	604	-
Stage 2	-	-	-	-	-	-	345	603	-	233	251	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.4	0	53.5	15.5
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	80	1162	-	-	1253	-	-	583
HCM Lane V/C Ratio	0.073	0.251	-	-	-	-	-	0.417
HCM Control Delay (s)	53.5	9.1	0	-	0	-	-	15.5
HCM Lane LOS	F	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	1	-	-	0	-	-	2

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	131	529	92	180	1183	169	0	0	230	0	0	195
Future Vol, veh/h	131	529	92	180	1183	169	0	0	230	0	0	195
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	365	-	385	480	-	425	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	5	2	2	5	2	2	2	2	2	2	2
Mvmt Flow	135	545	95	186	1220	174	0	0	237	0	0	201

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1220	0	0	545	0	0	-	-	273	-	-	610
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	567	-	-	1020	-	-	0	0	725	0	0	437
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	567	-	-	1020	-	-	-	-	725	-	-	437
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.3	1.1	12.4	20.1
HCM LOS			B	C

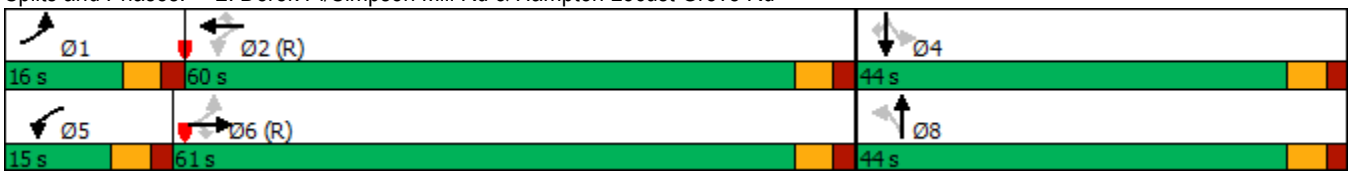
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	725	567	-	-	1020	-	-	437
HCM Lane V/C Ratio	0.327	0.238	-	-	0.182	-	-	0.46
HCM Control Delay (s)	12.4	13.3	-	-	9.3	-	-	20.1
HCM Lane LOS	B	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1.4	0.9	-	-	0.7	-	-	2.4

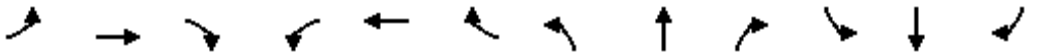
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	20	294	2	7	302	298	4	7	208	15	24
Future Volume (vph)	20	294	2	7	302	298	4	7	208	15	24
Lane Group Flow (vph)	22	323	2	8	332	327	0	15	0	245	26
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases	1	6		5	2			8		4	
Permitted Phases	6		6	2		2	8		4		4
Detector Phase	1	6	6	5	2	2	8	8	4	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	15.0	23.5	23.5	15.0	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	16.0	61.0	61.0	15.0	60.0	60.0	44.0	44.0	44.0	44.0	44.0
Total Split (%)	13.3%	50.8%	50.8%	12.5%	50.0%	50.0%	36.7%	36.7%	36.7%	36.7%	36.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5		5.5		5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None
v/c Ratio	0.03	0.27	0.00	0.01	0.30	0.30		0.04		0.80	0.06
Control Delay	8.2	11.0	0.0	8.6	13.9	2.4		27.9		62.8	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay	8.2	11.0	0.0	8.6	13.9	2.4		27.9		62.8	0.3
Queue Length 50th (ft)	5	88	0	2	125	0		7		180	0
Queue Length 95th (ft)	17	212	0	9	224	46		23		252	0
Internal Link Dist (ft)		1429			2198			363		4813	
Turn Bay Length (ft)	235		160	215		220					235
Base Capacity (vph)	707	1201	1075	749	1124	1106		541		435	557
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0
Reduced v/c Ratio	0.03	0.27	0.00	0.01	0.30	0.30		0.03		0.56	0.05

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: Derek Pl/Simpson Mill Rd & Hampton Locust Grove Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	294	2	7	302	298	4	7	3	208	15	24
Future Volume (veh/h)	20	294	2	7	302	298	4	7	3	208	15	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1826	1870	1870	1826	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	323	2	8	332	0	4	8	3	229	16	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	5	2	2	5	2	2	2	2	2	2	2
Cap, veh/h	698	1208	1049	698	1186		109	206	69	315	18	
Arrive On Green	0.02	0.66	0.66	0.01	0.65	0.00	0.19	0.19	0.19	0.19	0.19	0.00
Sat Flow, veh/h	1781	1826	1585	1781	1826	1585	369	1075	361	1346	94	1585
Grp Volume(v), veh/h	22	323	2	8	332	0	15	0	0	245	0	0
Grp Sat Flow(s),veh/h/ln	1781	1826	1585	1781	1826	1585	1805	0	0	1440	0	1585
Q Serve(g_s), s	0.5	8.7	0.1	0.2	9.3	0.0	0.0	0.0	0.0	19.1	0.0	0.0
Cycle Q Clear(g_c), s	0.5	8.7	0.1	0.2	9.3	0.0	0.8	0.0	0.0	19.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.27		0.20	0.93		1.00
Lane Grp Cap(c), veh/h	698	1208	1049	698	1186		383	0	0	333	0	
V/C Ratio(X)	0.03	0.27	0.00	0.01	0.28		0.04	0.00	0.00	0.74	0.00	
Avail Cap(c_a), veh/h	815	1208	1049	822	1186		598	0	0	518	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.9	8.4	6.9	7.2	9.0	0.0	39.6	0.0	0.0	47.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.6	0.0	0.0	0.0	0.0	3.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.2	0.0	0.1	3.5	0.0	0.4	0.0	0.0	7.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.0	8.9	6.9	7.2	9.6	0.0	39.6	0.0	0.0	50.3	0.0	0.0
LnGrp LOS	A	A	A	A	A		D	A	A	D	A	
Approach Vol, veh/h		347			340			15			245	
Approach Delay, s/veh		8.8			9.5			39.6			50.3	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	83.5		28.4	6.7	84.9		28.4				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	10.5	54.5		38.5	9.5	55.5		38.5				
Max Q Clear Time (g_c+I1), s	2.5	11.3		21.9	2.2	10.7		2.8				
Green Ext Time (p_c), s	0.0	4.1		1.1	0.0	4.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		20.3	
HCM 6th LOS		C	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	103	388	3	2	450	4	0	1	1	6	1	140
Future Vol, veh/h	103	388	3	2	450	4	0	1	1	6	1	140
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	120	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	112	422	3	2	489	4	0	1	1	7	1	152

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	493	0	0	425	0	0	1218	1143	422	1144	1144	491
Stage 1	-	-	-	-	-	-	646	646	-	495	495	-
Stage 2	-	-	-	-	-	-	572	497	-	649	649	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1071	-	-	1134	-	-	157	200	632	177	200	578
Stage 1	-	-	-	-	-	-	460	467	-	556	546	-
Stage 2	-	-	-	-	-	-	505	545	-	458	466	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1071	-	-	1134	-	-	103	172	632	157	172	578
Mov Cap-2 Maneuver	-	-	-	-	-	-	103	172	-	157	172	-
Stage 1	-	-	-	-	-	-	397	403	-	480	545	-
Stage 2	-	-	-	-	-	-	371	544	-	394	402	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0	18.4	15.1
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	270	1071	-	-	1134	-	-	514
HCM Lane V/C Ratio	0.008	0.105	-	-	0.002	-	-	0.311
HCM Control Delay (s)	18.4	8.8	0	-	8.2	0	-	15.1
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0.3	-	-	0	-	-	1.3

Future “No-Build” Intersection Analysis

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	163	1087	57	119	676	115	0	0	307	0	0	109
Future Vol, veh/h	163	1087	57	119	676	115	0	0	307	0	0	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	365	-	385	480	-	425	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	5	2	2	5	2	2	2	2	2	2	2
Mvmt Flow	173	1156	61	127	719	122	0	0	327	0	0	116

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	719	0	0	1156	0	0	-	-	578	-	-	360
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	878	-	-	600	-	-	0	0	459	0	0	637
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	878	-	-	600	-	-	-	-	459	-	-	637
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	1.6	29.9	11.9
HCM LOS			D	B

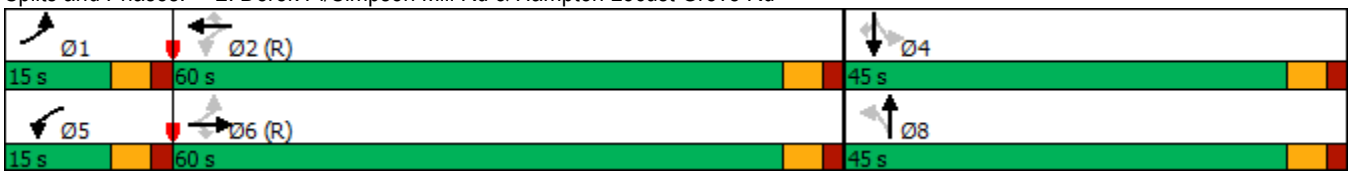
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	459	878	-	-	600	-	-	637
HCM Lane V/C Ratio	0.712	0.197	-	-	0.211	-	-	0.182
HCM Control Delay (s)	29.9	10.1	-	-	12.6	-	-	11.9
HCM Lane LOS	D	B	-	-	B	-	-	B
HCM 95th %tile Q(veh)	5.5	0.7	-	-	0.8	-	-	0.7

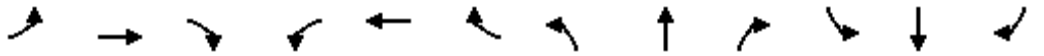
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	14	260	2	2	290	293	5	7	230	3	9
Future Volume (vph)	14	260	2	2	290	293	5	7	230	3	9
Lane Group Flow (vph)	16	306	2	2	341	345	0	21	0	275	11
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases	1	6		5	2			8		4	
Permitted Phases	6		6	2		2	8		4		4
Detector Phase	1	6	6	5	2	2	8	8	4	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	15.0	23.5	23.5	15.0	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	15.0	60.0	60.0	15.0	60.0	60.0	45.0	45.0	45.0	45.0	45.0
Total Split (%)	12.5%	50.0%	50.0%	12.5%	50.0%	50.0%	37.5%	37.5%	37.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5		5.5		5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None
v/c Ratio	0.02	0.26	0.00	0.00	0.31	0.31		0.05		0.83	0.02
Control Delay	9.4	12.2	0.0	10.0	14.4	2.6		22.9		62.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay	9.4	12.2	0.0	10.0	14.4	2.6		22.9		62.2	0.1
Queue Length 50th (ft)	4	90	0	1	103	0		8		202	0
Queue Length 95th (ft)	14	195	0	4	225	38		25		255	0
Internal Link Dist (ft)		1429			2198			363		4813	
Turn Bay Length (ft)	235		160	215		220					235
Base Capacity (vph)	673	1157	1038	725	1116	1108		539		437	570
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0
Reduced v/c Ratio	0.02	0.26	0.00	0.00	0.31	0.31		0.04		0.63	0.02

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: Derek Pl/Simpson Mill Rd & Hampton Locust Grove Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	260	2	2	290	293	5	7	6	230	3	9
Future Volume (veh/h)	14	260	2	2	290	293	5	7	6	230	3	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1826	1870	1870	1826	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	306	2	2	341	0	6	8	7	271	4	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	5	2	2	5	2	2	2	2	2	2	2
Cap, veh/h	658	1178	1022	679	1151		128	168	129	360	4	
Arrive On Green	0.02	0.65	0.65	0.00	0.63	0.00	0.21	0.21	0.21	0.21	0.21	0.00
Sat Flow, veh/h	1781	1826	1585	1781	1826	1585	418	783	600	1400	21	1585
Grp Volume(v), veh/h	16	306	2	2	341	0	21	0	0	275	0	0
Grp Sat Flow(s),veh/h/ln	1781	1826	1585	1781	1826	1585	1801	0	0	1420	0	1585
Q Serve(g_s), s	0.4	8.6	0.1	0.0	10.2	0.0	0.0	0.0	0.0	21.4	0.0	0.0
Cycle Q Clear(g_c), s	0.4	8.6	0.1	0.0	10.2	0.0	1.1	0.0	0.0	22.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.29		0.33	0.99		1.00
Lane Grp Cap(c), veh/h	658	1178	1022	679	1151		425	0	0	365	0	
V/C Ratio(X)	0.02	0.26	0.00	0.00	0.30		0.05	0.00	0.00	0.75	0.00	
Avail Cap(c_a), veh/h	768	1178	1022	816	1151		611	0	0	525	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.0	9.1	7.6	8.3	10.1	0.0	37.4	0.0	0.0	45.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.7	0.0	0.0	0.0	0.0	3.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	3.2	0.0	0.0	3.9	0.0	0.5	0.0	0.0	8.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.0	9.6	7.6	8.3	10.7	0.0	37.5	0.0	0.0	49.4	0.0	0.0
LnGrp LOS	A	A	A	A	B		D	A	A	D	A	
Approach Vol, veh/h		324			343			21			275	
Approach Delay, s/veh		9.5			10.7			37.5			49.4	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	81.2		31.3	5.8	82.9		31.3				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	54.5		39.5	9.5	54.5		39.5				
Max Q Clear Time (g_c+I1), s	2.4	12.2		24.6	2.0	10.6		3.1				
Green Ext Time (p_c), s	0.0	4.2		1.2	0.0	3.7		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		22.0	
HCM 6th LOS		C	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	263	278	0	0	356	2	3	1	1	4	1	214
Future Vol, veh/h	263	278	0	0	356	2	3	1	1	4	1	214
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	120	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	306	323	0	0	414	2	3	1	1	5	1	249

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	416	0	0	323	0	0	1475	1351	323	1351	1350	415
Stage 1	-	-	-	-	-	-	935	935	-	415	415	-
Stage 2	-	-	-	-	-	-	540	416	-	936	935	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1143	-	-	1237	-	-	104	150	718	127	150	637
Stage 1	-	-	-	-	-	-	318	344	-	615	592	-
Stage 2	-	-	-	-	-	-	526	592	-	318	344	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1143	-	-	1237	-	-	47	101	718	94	101	637
Mov Cap-2 Maneuver	-	-	-	-	-	-	47	101	-	94	101	-
Stage 1	-	-	-	-	-	-	214	232	-	415	592	-
Stage 2	-	-	-	-	-	-	320	592	-	213	232	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.5	0	63.8	16.5
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	67	1143	-	-	1237	-	-	564
HCM Lane V/C Ratio	0.087	0.268	-	-	-	-	-	0.452
HCM Control Delay (s)	63.8	9.3	0	-	0	-	-	16.5
HCM Lane LOS	F	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	0.3	1.1	-	-	0	-	-	2.3

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	137	554	96	189	1240	177	0	0	241	0	0	204
Future Vol, veh/h	137	554	96	189	1240	177	0	0	241	0	0	204
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	365	-	385	480	-	425	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	5	2	2	5	2	2	2	2	2	2	2
Mvmt Flow	141	571	99	195	1278	182	0	0	248	0	0	210

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1278	0	0	571	0	0	-	-	286	-	-	639
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	539	-	-	998	-	-	0	0	711	0	0	419
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	539	-	-	998	-	-	-	-	711	-	-	419
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	1.1	12.8	21.9
HCM LOS			B	C

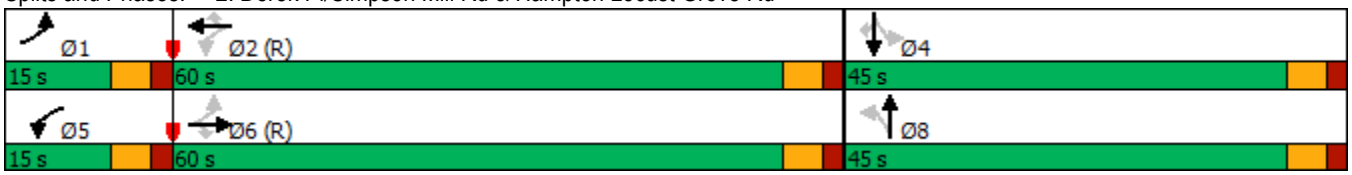
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	711	539	-	-	998	-	-	419
HCM Lane V/C Ratio	0.349	0.262	-	-	0.195	-	-	0.502
HCM Control Delay (s)	12.8	14	-	-	9.5	-	-	21.9
HCM Lane LOS	B	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1.6	1	-	-	0.7	-	-	2.7

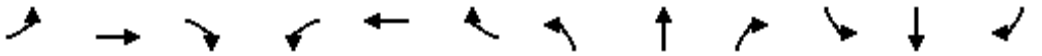
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	21	308	2	7	316	312	4	7	218	16	25
Future Volume (vph)	21	308	2	7	316	312	4	7	218	16	25
Lane Group Flow (vph)	23	338	2	8	347	343	0	15	0	258	27
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases	1	6		5	2			8		4	
Permitted Phases	6		6	2		2	8		4		4
Detector Phase	1	6	6	5	2	2	8	8	4	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	15.0	23.5	23.5	15.0	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	15.0	60.0	60.0	15.0	60.0	60.0	45.0	45.0	45.0	45.0	45.0
Total Split (%)	12.5%	50.0%	50.0%	12.5%	50.0%	50.0%	37.5%	37.5%	37.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5		5.5		5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None
v/c Ratio	0.04	0.29	0.00	0.01	0.31	0.31		0.04		0.81	0.06
Control Delay	8.7	11.7	0.0	9.0	14.8	2.5		27.0		62.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay	8.7	11.7	0.0	9.0	14.8	2.5		27.0		62.0	0.3
Queue Length 50th (ft)	5	96	0	2	135	0		7		190	0
Queue Length 95th (ft)	18	229	0	9	243	49		23		262	0
Internal Link Dist (ft)		1429			2198			363		4813	
Turn Bay Length (ft)	235		160	215		220					235
Base Capacity (vph)	673	1184	1061	724	1106	1100		555		447	570
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0
Reduced v/c Ratio	0.03	0.29	0.00	0.01	0.31	0.31		0.03		0.58	0.05

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: Derek Pl/Simpson Mill Rd & Hampton Locust Grove Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	308	2	7	316	312	4	7	3	218	16	25
Future Volume (veh/h)	21	308	2	7	316	312	4	7	3	218	16	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1826	1870	1870	1826	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	338	2	8	347	0	4	8	3	240	18	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	5	2	2	5	2	2	2	2	2	2	2
Cap, veh/h	674	1191	1034	674	1168		113	214	72	326	20	
Arrive On Green	0.02	0.65	0.65	0.01	0.64	0.00	0.20	0.20	0.20	0.20	0.20	0.00
Sat Flow, veh/h	1781	1826	1585	1781	1826	1585	374	1070	361	1340	100	1585
Grp Volume(v), veh/h	23	338	2	8	347	0	15	0	0	258	0	0
Grp Sat Flow(s),veh/h/ln	1781	1826	1585	1781	1826	1585	1805	0	0	1440	0	1585
Q Serve(g_s), s	0.5	9.5	0.1	0.2	10.1	0.0	0.0	0.0	0.0	20.1	0.0	0.0
Cycle Q Clear(g_c), s	0.5	9.5	0.1	0.2	10.1	0.0	0.8	0.0	0.0	20.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.27		0.20	0.93		1.00
Lane Grp Cap(c), veh/h	674	1191	1034	674	1168		400	0	0	347	0	
V/C Ratio(X)	0.03	0.28	0.00	0.01	0.30		0.04	0.00	0.00	0.74	0.00	
Avail Cap(c_a), veh/h	775	1191	1034	798	1168		613	0	0	530	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.4	8.9	7.3	7.7	9.6	0.0	38.7	0.0	0.0	46.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.6	0.0	0.0	0.0	0.0	3.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.5	0.0	0.1	3.8	0.0	0.4	0.0	0.0	7.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.4	9.5	7.3	7.7	10.3	0.0	38.7	0.0	0.0	49.8	0.0	0.0
LnGrp LOS	A	A	A	A	B		D	A	A	D	A	
Approach Vol, veh/h		363			355			15			258	
Approach Delay, s/veh		9.4			10.2			38.7			49.8	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	82.3		29.5	6.7	83.8		29.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	54.5		39.5	9.5	54.5		39.5				
Max Q Clear Time (g_c+I1), s	2.5	12.1		22.9	2.2	11.5		2.8				
Green Ext Time (p_c), s	0.0	4.3		1.1	0.0	4.2		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		20.6
HCM 6th LOS		C

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	108	407	3	2	472	4	0	1	1	6	1	147
Future Vol, veh/h	108	407	3	2	472	4	0	1	1	6	1	147
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	120	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	117	442	3	2	513	4	0	1	1	7	1	160

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	517	0	0	445	0	0	1276	1197	442	1198	1198	515
Stage 1	-	-	-	-	-	-	676	676	-	519	519	-
Stage 2	-	-	-	-	-	-	600	521	-	679	679	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1049	-	-	1115	-	-	144	186	615	162	186	560
Stage 1	-	-	-	-	-	-	443	453	-	540	533	-
Stage 2	-	-	-	-	-	-	488	532	-	441	451	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1049	-	-	1115	-	-	91	158	615	142	158	560
Mov Cap-2 Maneuver	-	-	-	-	-	-	91	158	-	142	158	-
Stage 1	-	-	-	-	-	-	377	386	-	460	531	-
Stage 2	-	-	-	-	-	-	347	530	-	374	384	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0	19.5	15.9
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	251	1049	-	-	1115	-	-	495
HCM Lane V/C Ratio	0.009	0.112	-	-	0.002	-	-	0.338
HCM Control Delay (s)	19.5	8.9	0	-	8.2	0	-	15.9
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0.4	-	-	0	-	-	1.5

Future “Build” Intersections Analysis

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	163	1087	57	171	676	115	0	0	349	0	0	109
Future Vol, veh/h	163	1087	57	171	676	115	0	0	349	0	0	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	365	-	385	480	-	425	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	5	2	2	5	2	2	2	2	2	2	2
Mvmt Flow	170	1132	59	178	704	120	0	0	364	0	0	114

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	704	0	0	1132	0	0	-	-	566	-	-	352
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	890	-	-	613	-	-	0	0	467	0	0	644
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	890	-	-	613	-	-	-	-	467	-	-	644
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	2.4	34.9	11.8
HCM LOS			D	B

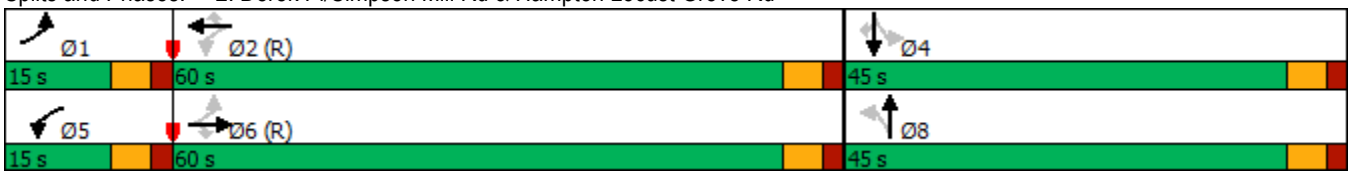
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	467	890	-	-	613	-	-	644
HCM Lane V/C Ratio	0.778	0.191	-	-	0.291	-	-	0.176
HCM Control Delay (s)	34.9	10	-	-	13.3	-	-	11.8
HCM Lane LOS	D	A	-	-	B	-	-	B
HCM 95th %tile Q(veh)	6.9	0.7	-	-	1.2	-	-	0.6

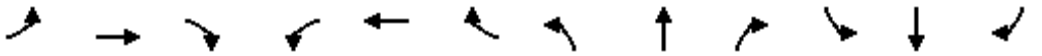
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	40	260	2	2	290	302	5	7	237	3	30
Future Volume (vph)	40	260	2	2	290	302	5	7	237	3	30
Lane Group Flow (vph)	47	306	2	2	341	355	0	21	0	283	35
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases	1	6		5	2			8		4	
Permitted Phases	6		6	2		2	8		4		4
Detector Phase	1	6	6	5	2	2	8	8	4	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	15.0	23.5	23.5	15.0	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	15.0	60.0	60.0	15.0	60.0	60.0	45.0	45.0	45.0	45.0	45.0
Total Split (%)	12.5%	50.0%	50.0%	12.5%	50.0%	50.0%	37.5%	37.5%	37.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5		5.5		5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None
v/c Ratio	0.08	0.27	0.00	0.00	0.33	0.34		0.05		0.84	0.08
Control Delay	9.6	12.4	0.0	10.0	17.7	2.8		22.7		62.7	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay	9.6	12.4	0.0	10.0	17.7	2.8		22.7		62.7	0.9
Queue Length 50th (ft)	12	92	0	1	143	0		8		207	0
Queue Length 95th (ft)	30	195	0	4	233	40		25		265	1
Internal Link Dist (ft)		1429			2198			363		4515	
Turn Bay Length (ft)	235		160	215		220					235
Base Capacity (vph)	632	1149	1031	726	1021	1048		538		437	570
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0
Reduced v/c Ratio	0.07	0.27	0.00	0.00	0.33	0.34		0.04		0.65	0.06

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: Derek Pl/Simpson Mill Rd & Hampton Locust Grove Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	260	2	2	290	302	5	7	6	237	3	30
Future Volume (veh/h)	40	260	2	2	290	302	5	7	6	237	3	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1826	1870	1870	1826	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	306	2	2	341	0	6	8	7	279	4	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	5	2	2	5	2	2	2	2	2	2	2
Cap, veh/h	659	1167	1013	672	1112		131	172	132	368	4	
Arrive On Green	0.03	0.64	0.64	0.00	0.61	0.00	0.22	0.22	0.22	0.22	0.22	0.00
Sat Flow, veh/h	1781	1826	1585	1781	1826	1585	421	781	601	1400	20	1585
Grp Volume(v), veh/h	47	306	2	2	341	0	21	0	0	283	0	0
Grp Sat Flow(s),veh/h/ln	1781	1826	1585	1781	1826	1585	1802	0	0	1420	0	1585
Q Serve(g_s), s	1.2	8.7	0.1	0.1	10.8	0.0	0.0	0.0	0.0	22.1	0.0	0.0
Cycle Q Clear(g_c), s	1.2	8.7	0.1	0.1	10.8	0.0	1.1	0.0	0.0	23.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.29		0.33	0.99		1.00
Lane Grp Cap(c), veh/h	659	1167	1013	672	1112		436	0	0	373	0	
V/C Ratio(X)	0.07	0.26	0.00	0.00	0.31		0.05	0.00	0.00	0.76	0.00	
Avail Cap(c_a), veh/h	741	1167	1013	808	1112		612	0	0	525	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.4	9.4	7.8	9.2	11.3	0.0	36.9	0.0	0.0	45.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.7	0.0	0.0	0.0	0.0	4.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.3	0.0	0.0	4.2	0.0	0.5	0.0	0.0	8.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.4	9.9	7.8	9.2	12.0	0.0	36.9	0.0	0.0	49.5	0.0	0.0
LnGrp LOS	A	A	A	A	B		D	A	A	D	A	
Approach Vol, veh/h		355			343			21			283	
Approach Delay, s/veh		9.7			12.0			36.9			49.5	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	78.6		32.0	5.8	82.2		32.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	54.5		39.5	9.5	54.5		39.5				
Max Q Clear Time (g_c+I1), s	3.2	12.8		25.2	2.1	10.7		3.1				
Green Ext Time (p_c), s	0.0	4.2		1.2	0.0	3.7		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		22.3	
HCM 6th LOS		C	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	263	285	0	0	365	2	3	1	1	4	1	214
Future Vol, veh/h	263	285	0	0	365	2	3	1	1	4	1	214
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	120	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	306	331	0	0	424	2	3	1	1	5	1	249

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	426	0	0	331	0	0	1493	1369	331	1369	1368	425
Stage 1	-	-	-	-	-	-	943	943	-	425	425	-
Stage 2	-	-	-	-	-	-	550	426	-	944	943	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1133	-	-	1228	-	-	102	146	711	124	147	629
Stage 1	-	-	-	-	-	-	315	341	-	607	586	-
Stage 2	-	-	-	-	-	-	519	586	-	315	341	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1133	-	-	1228	-	-	45	98	711	91	98	629
Mov Cap-2 Maneuver	-	-	-	-	-	-	45	98	-	91	98	-
Stage 1	-	-	-	-	-	-	211	228	-	406	586	-
Stage 2	-	-	-	-	-	-	313	586	-	209	228	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.5	0	66.8	16.9
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	64	1133	-	-	1228	-	-	555
HCM Lane V/C Ratio	0.091	0.27	-	-	-	-	-	0.459
HCM Control Delay (s)	66.8	9.3	0	-	0	-	-	16.9
HCM Lane LOS	F	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	0.3	1.1	-	-	0	-	-	2.4

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	42	307	35	52	176
Future Vol, veh/h	28	42	307	35	52	176
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	175	235	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	46	334	38	57	191

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	639	334	0	0	372	0
Stage 1	334	-	-	-	-	-
Stage 2	305	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	440	708	-	-	1186	-
Stage 1	725	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	419	708	-	-	1186	-
Mov Cap-2 Maneuver	419	-	-	-	-	-
Stage 1	725	-	-	-	-	-
Stage 2	712	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	1.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	555	1186	-
HCM Lane V/C Ratio	-	-	0.137	0.048	-
HCM Control Delay (s)	-	-	12.5	8.2	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	137	554	96	213	1240	177	0	0	296	0	0	204
Future Vol, veh/h	137	554	96	213	1240	177	0	0	296	0	0	204
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	365	-	385	480	-	425	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	5	2	2	5	2	2	2	2	2	2	2
Mvmt Flow	141	571	99	220	1278	182	0	0	305	0	0	210

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1278	0	0	571	0	0	-	-	286	-	-	639
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	539	-	-	998	-	-	0	0	711	0	0	419
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	539	-	-	998	-	-	-	-	711	-	-	419
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	1.3	13.8	21.9
HCM LOS			B	C

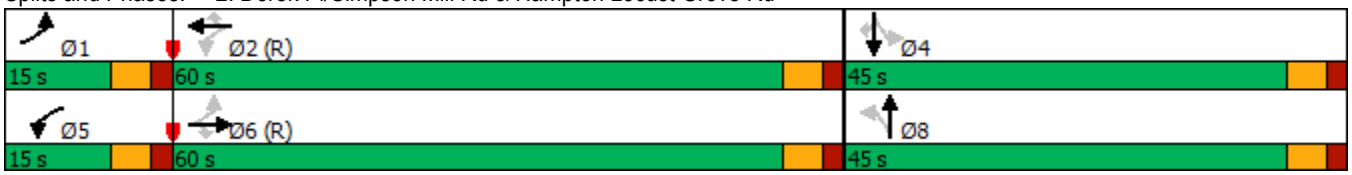
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	711	539	-	-	998	-	-	419
HCM Lane V/C Ratio	0.429	0.262	-	-	0.22	-	-	0.502
HCM Control Delay (s)	13.8	14	-	-	9.6	-	-	21.9
HCM Lane LOS	B	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	2.2	1	-	-	0.8	-	-	2.7

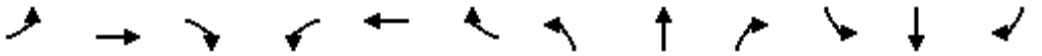
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	33	308	2	7	316	316	4	7	227	16	53
Future Volume (vph)	33	308	2	7	316	316	4	7	227	16	53
Lane Group Flow (vph)	36	338	2	8	347	347	0	15	0	267	58
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases	1	6		5	2			8		4	
Permitted Phases	6		6	2		2	8		4		4
Detector Phase	1	6	6	5	2	2	8	8	4	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	15.0	23.5	23.5	15.0	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	15.0	60.0	60.0	15.0	60.0	60.0	45.0	45.0	45.0	45.0	45.0
Total Split (%)	12.5%	50.0%	50.0%	12.5%	50.0%	50.0%	37.5%	37.5%	37.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5		5.5		5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None
v/c Ratio	0.06	0.29	0.00	0.01	0.32	0.32		0.04		0.82	0.13
Control Delay	8.9	12.1	0.0	9.4	15.5	2.6		26.5		61.8	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay	8.9	12.1	0.0	9.4	15.5	2.6		26.5		61.8	5.1
Queue Length 50th (ft)	9	98	0	2	139	0		7		196	0
Queue Length 95th (ft)	26	232	0	9	249	51		23		270	22
Internal Link Dist (ft)		1429			2198			363		4515	
Turn Bay Length (ft)	235		160	215		220					235
Base Capacity (vph)	661	1172	1051	715	1089	1090		555		447	570
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0
Reduced v/c Ratio	0.05	0.29	0.00	0.01	0.32	0.32		0.03		0.60	0.10

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: Derek Pl/Simpson Mill Rd & Hampton Locust Grove Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	308	2	7	316	316	4	7	3	227	16	53
Future Volume (veh/h)	33	308	2	7	316	316	4	7	3	227	16	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1826	1870	1870	1826	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	338	2	8	347	0	4	8	3	249	18	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	5	2	2	5	2	2	2	2	2	2	2
Cap, veh/h	669	1179	1024	666	1144		116	221	75	336	20	
Arrive On Green	0.03	0.65	0.65	0.01	0.63	0.00	0.21	0.21	0.21	0.21	0.21	0.00
Sat Flow, veh/h	1781	1826	1585	1781	1826	1585	377	1068	361	1342	97	1585
Grp Volume(v), veh/h	36	338	2	8	347	0	15	0	0	267	0	0
Grp Sat Flow(s),veh/h/ln	1781	1826	1585	1781	1826	1585	1806	0	0	1439	0	1585
Q Serve(g_s), s	0.9	9.7	0.1	0.2	10.5	0.0	0.0	0.0	0.0	20.9	0.0	0.0
Cycle Q Clear(g_c), s	0.9	9.7	0.1	0.2	10.5	0.0	0.8	0.0	0.0	21.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.27		0.20	0.93		1.00
Lane Grp Cap(c), veh/h	669	1179	1024	666	1144		412	0	0	356	0	
V/C Ratio(X)	0.05	0.29	0.00	0.01	0.30		0.04	0.00	0.00	0.75	0.00	
Avail Cap(c_a), veh/h	758	1179	1024	789	1144		615	0	0	530	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.7	9.2	7.5	8.2	10.3	0.0	38.1	0.0	0.0	46.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.7	0.0	0.0	0.0	0.0	3.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	3.6	0.0	0.1	4.0	0.0	0.4	0.0	0.0	7.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.8	9.8	7.5	8.2	11.0	0.0	38.1	0.0	0.0	49.5	0.0	0.0
LnGrp LOS	A	A	A	A	B		D	A	A	D	A	
Approach Vol, veh/h		376			355			15			267	
Approach Delay, s/veh		9.6			11.0			38.1			49.5	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	80.7		30.3	6.7	83.0		30.3				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	54.5		39.5	9.5	54.5		39.5				
Max Q Clear Time (g_c+I1), s	2.9	12.5		23.7	2.2	11.7		2.8				
Green Ext Time (p_c), s	0.0	4.3		1.2	0.0	4.2		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		21.0
HCM 6th LOS		C

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	108	416	3	2	476	4	0	1	1	6	1	147
Future Vol, veh/h	108	416	3	2	476	4	0	1	1	6	1	147
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	120	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	117	452	3	2	517	4	0	1	1	7	1	160

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	521	0	0	455	0	0	1290	1211	452	1212	1212	519
Stage 1	-	-	-	-	-	-	686	686	-	523	523	-
Stage 2	-	-	-	-	-	-	604	525	-	689	689	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1045	-	-	1106	-	-	140	182	608	159	182	557
Stage 1	-	-	-	-	-	-	438	448	-	537	530	-
Stage 2	-	-	-	-	-	-	485	529	-	436	446	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1045	-	-	1106	-	-	88	154	608	139	154	557
Mov Cap-2 Maneuver	-	-	-	-	-	-	88	154	-	139	154	-
Stage 1	-	-	-	-	-	-	372	381	-	456	528	-
Stage 2	-	-	-	-	-	-	344	527	-	369	379	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0	19.8	16.1
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	246	1045	-	-	1106	-	-	491
HCM Lane V/C Ratio	0.009	0.112	-	-	0.002	-	-	0.341
HCM Control Delay (s)	19.8	8.9	0	-	8.3	0	-	16.1
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0.4	-	-	0	-	-	1.5

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	37	55	241	16	24	285
Future Vol, veh/h	37	55	241	16	24	285
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	175	235	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	60	262	17	26	310

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	624	262	0	0	279	0
Stage 1	262	-	-	-	-	-
Stage 2	362	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	449	777	-	-	1284	-
Stage 1	782	-	-	-	-	-
Stage 2	704	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	440	777	-	-	1284	-
Mov Cap-2 Maneuver	440	-	-	-	-	-
Stage 1	782	-	-	-	-	-
Stage 2	690	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.3	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	594	1284	-
HCM Lane V/C Ratio	-	-	0.168	0.02	-
HCM Control Delay (s)	-	-	12.3	7.9	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

Traffic Volume Worksheets

24-078 - Strickland Road Data Center DRI - Henry County

Traffic Volumes

A&R Engineering
August 2024

1. SR 20 @ Simpson Mill Rd

A.M. Peak Hour

	Simpson Mill Road Northbound				Oakland Road Southbound				SR 20 (McDonough Hampton Road) Eastbound				SR 20 (McDonough Hampton Road) Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	293	293	0	0	104	104	156	1037	54	1247	114	645	110	869
Growth Factor (%):	1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2	
No-Build 2028 Volumes:	0	0	307	307	0	0	109	109	163	1087	57	1307	119	676	115	910
Total New Trips:	0	0	42	42	0	0	0	0	0	0	0	0	52	0	0	52
Future 2028 Traffic Volumes:	0	0	349	349	0	0	109	109	163	1087	57	1307	171	676	115	962

P.M. Peak Hour

	Simpson Mill Road Northbound				Oakland Road Southbound				SR 20 (McDonough Hampton Road) Eastbound				SR 20 (McDonough Hampton Road) Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	230	230	0	0	195	195	131	529	92	752	180	1183	169	1532
Growth Factor (%):	1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2	
No-Build 2028 Volumes:	0	0	241	241	0	0	204	204	137	554	96	787	189	1240	177	1606
Total New Trips:	0	0	55	55	0	0	0	0	0	0	0	0	24	0	0	24
Future 2028 Traffic Volumes:	0	0	296	296	0	0	204	204	137	554	96	787	213	1240	177	1630

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Traffic Volumes

A&R Engineering
August 2024

2. Simpson Mill @ Hampton

A.M. Peak Hour

	Derrek Place **Northbound**				Simpson Mill Road **Southbound**				Hampton Locust Grove Road **Eastbound**				Hampton Locust Grove Road **Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	5	7	6	18	219	3	9	231	13	248	2	263	2	277	280	559
Growth Factor (%):	1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2	
No-Build 2028 Volumes:	5	7	6	18	230	3	9	242	14	260	2	276	2	290	293	585
Total New Trips:	0	0	0	0	7	0	21	28	26	0	0	26	0	0	9	9
Future 2028 Traffic Volumes:	5	7	6	18	237	3	30	270	40	260	2	302	2	290	302	594

P.M. Peak Hour

	Derrek Place **Northbound**				Simpson Mill Road **Southbound**				Hampton Locust Grove Road **Eastbound**				Hampton Locust Grove Road **Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	4	7	3	14	208	15	24	247	20	294	2	316	7	302	298	607
Growth Factor (%):	1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2	
No-Build 2028 Volumes:	4	7	3	14	218	16	25	259	21	308	2	331	7	316	312	635
Total New Trips:	0	0	0	0	9	0	28	37	12	0	0	12	0	0	4	4
Future 2028 Traffic Volumes:	4	7	3	14	227	16	53	296	33	308	2	343	7	316	316	639

24-078 - Strickland Road Data Center DRI - Henry County

Traffic Volumes

A&R Engineering
August 2024

3. Hampton Locust @ Walker Dr

A.M. Peak Hour

	Windy Oaks Lane **Northbound**				Walker Drive **Southbound**				Hampton Locust Grove Road **Eastbound**				Hampton Locust Grove Road **Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	3	1	1	5	4	1	204	209	251	265	0	516	0	340	2	342
Growth Factor (%):	1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2	
No-Build 2028 Volumes:	3	1	1	5	4	1	214	219	263	278	0	541	0	356	2	358
Total New Trips:	0	0	0	0	0	0	0	0	0	7	0	7	0	9	0	9
Future 2028 Traffic Volumes:	3	1	1	5	4	1	214	219	263	285	0	548	0	365	2	367

P.M. Peak Hour

	Windy Oaks Lane **Northbound**				Walker Drive **Southbound**				Hampton Locust Grove Road **Eastbound**				Hampton Locust Grove Road **Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	1	1	2	6	1	140	147	103	388	3	494	2	450	4	456
Growth Factor (%):	1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2	
No-Build 2028 Volumes:	0	1	1	2	6	1	147	154	108	407	3	518	2	472	4	478
Total New Trips:	0	0	0	0	0	0	0	0	0	9	0	9	0	4	0	4
Future 2028 Traffic Volumes:	0	1	1	2	6	1	147	154	108	416	3	527	2	476	4	482

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Traffic Volumes

A&R Engineering
August 2024

4. Simpson Mill Rd @ Site Drwy

A.M. Peak Hour

	Simpson Mill Road **Northbound**				Simpson Mill Road **Southbound**				- **Eastbound**				Site Driveway **Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	293	0	293	0	168	0	168	0	0	0	0	0	0	0	0
Growth Factor (%):	1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2	
No-Build 2028 Volumes:	0	307	0	307	0	176	0	176	0	0	0	0	0	0	0	0
Total New Trips:	0	0	35	35	52	0	0	52	0	0	0	0	28	0	42	70
Future 2028 Traffic Volumes:	0	307	35	342	52	176	0	228	0	0	0	0	28	0	42	70

P.M. Peak Hour

	Simpson Mill Road **Northbound**				Simpson Mill Road **Southbound**				- **Eastbound**				Site Driveway **Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2024 Traffic Counts:	0	230	0	230	0	272	0	272	0	0	0	0	0	0	0	0
Growth Factor (%):	1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2		1.2	1.2	1.2	
No-Build 2028 Volumes:	0	241	0	241	0	285	0	285	0	0	0	0	0	0	0	0
Total New Trips:	0	0	16	16	24	0	0	24	0	0	0	0	37	0	55	92
Future 2028 Traffic Volumes:	0	241	16	257	24	285	0	309	0	0	0	0	37	0	55	92