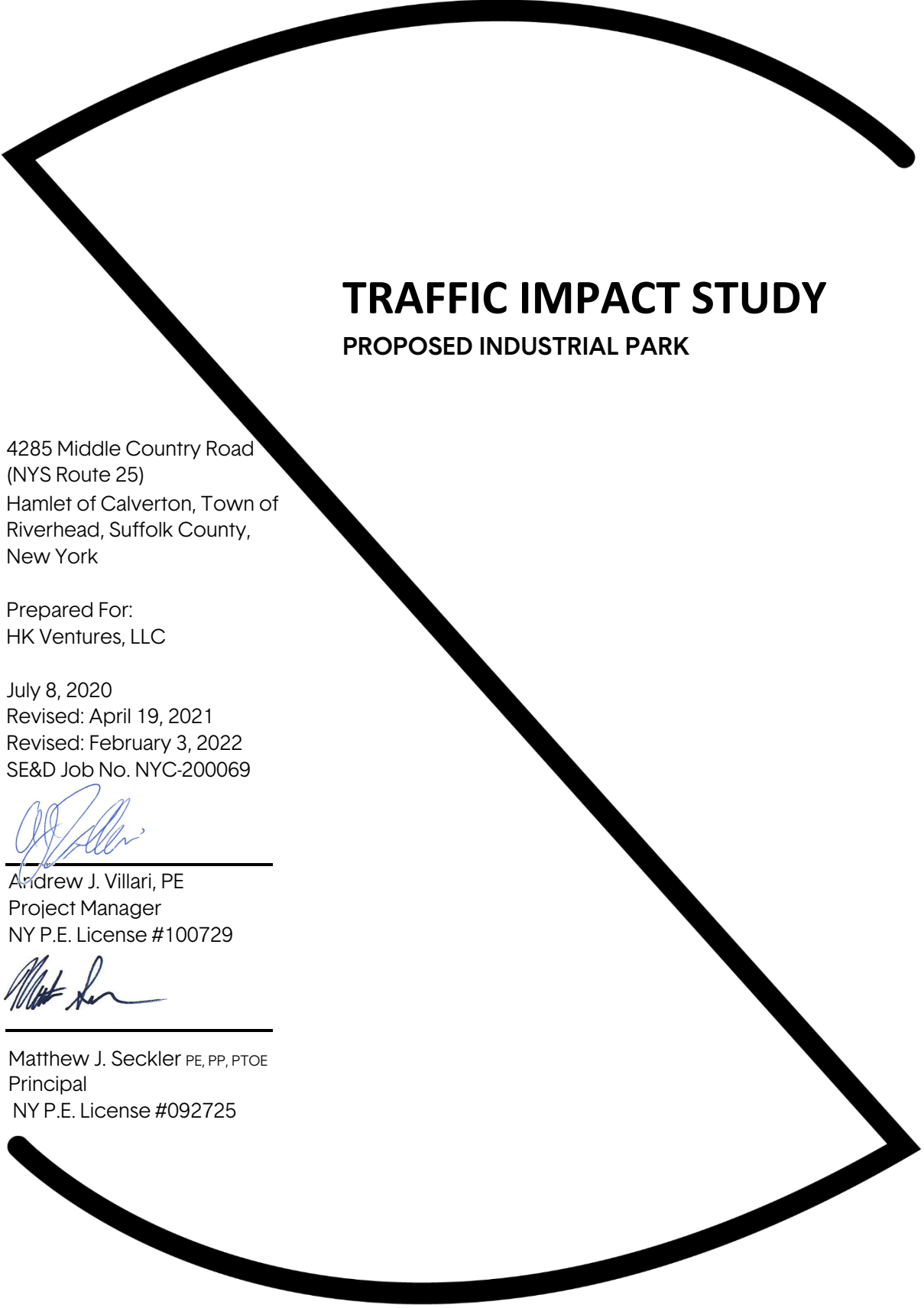




TRAFFIC IMPACT STUDY

PROPOSED INDUSTRIAL PARK

4285 Middle Country Road
(NYS Route 25)
Hamlet of Calverton, Town of
Riverhead, Suffolk County,
New York

Prepared For:
HK Ventures, LLC

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TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	1
INTRODUCTION.....	3
METHODOLOGY.....	3
2020 EXISTING CONDITION	4
2020 Existing Roadway Conditions	4
2020 Existing Transit Service	6
2020 Existing As-Counted Traffic Volumes.....	6
2020 Existing Adjusted Traffic Volumes.....	8
2020 Existing LOS/Capacity Analysis.....	10
Motor Vehicle Collision Analysis	11
2023 PHASE I NO-BUILD CONDITION	14
Background Growth.....	14
Other Planned Development Projects.....	14
2023 Phase I No-Build Traffic Volumes.....	15
2023 Phase I No-Build LOS/Capacity Analysis	15
2023 PHASE I BUILD CONDITION	16
Site Access Conditions	16
Trip Generation.....	19
Trip Assignment/Distribution.....	20
2023 Phase I Build Traffic Volumes	21
2023 Phase IA Build LOS/Capacity Analysis.....	21
2023 Phase IB Build LOS/Capacity Analysis	22
2023 Phase IC Build LOS/Capacity Analysis.....	22
2025 PHASE 2 NO-BUILD CONDITION	23
Background Growth.....	23
Other Planned Development Projects.....	23
2025 Phase 2 No-Build Traffic Volumes.....	23
2025 Phase 2A No-Build LOS/Capacity Analysis	23
2025 Phase 2B No-Build LOS/Capacity Analysis.....	24
2025 Phase 2C No-Build LOS/Capacity Analysis	25
2025 PHASE 2 BUILD CONDITION	25

Phase 2 Trip Generation	25
Trip Assignment/Distribution.....	26
2025 Phase 2 Build Traffic Volumes	26
2025 Phase 2A Build LOS/Capacity Analysis	26
2025 Phase 2B Build LOS/Capacity Analysis	27
2025 Phase 2C Build LOS/Capacity Analysis.....	28
Phase 2 Build Mitigation.....	29
2025 MAXIMUM BUILD-OUT SCENARIO	29
Trip Generation.....	29
Trip Assignment/Distribution.....	31
2025 Maximum Build-Out Traffic Volumes	31
Phase 2D Build LOS/Capacity Analysis	32
Phase 2E Build LOS/Capacity Analysis	32
Phase 2F Build LOS/Capacity Analysis	33
<u>ROUNDABOUT ANALYSIS</u>	34
Trip Assignment/Distribution And Traffic Volumes	34
Phase 2G Build LOS/Capacity Analysis	35
Comparative Level of Service (Delay) Table.....	35
PROJECTED CONSTRUCTION TRIP GENERATION.....	36
SITE CIRCULATION/PARKING SUPPLY	36
CONCLUSIONS	38

TECHNICAL APPENDIX

LEVEL OF SERVICE/AVERAGE CONTROL DELAY CRITERIA

COMPARATIVE LEVEL OF SERVICE (DELAY) TABLES

TURNING MOVEMENT COUNT DATA

Unsignalized intersection of Middle Country Road and Fresh Pond Avenue

Signalized intersection of Middle Country Road and Edwards Avenue

Signalized intersection of Middle Country Road and Burman Boulevard

Unsignalized intersection of Edwards Avenue and the Long Island Expressway eastbound exit-ramp

AUTOMATIC TRAFFIC RECORDER DATA

NYS Route 25 – Stonefield Counts

NYS Route 25 – June 2016 NYSDOT Counts

NYS Route 25 – December 2018 NYSDOT Counts

NYSDOT ADJUSTMENT FACTORS FOR TRAFFIC COUNT PROCESSING 2017

MOTOR VEHICLE COLLISION SUMMARY TABLES

RAW MOTOR VEHICLE COLLISION DATA

NYS ROUTE 25 ACCESS PLAN VIDEO TELE-CONFERENCE MEETING MINUTES

CALVERTON INDUSTRIES, LLC. LETTER OF DENIAL OF CROSS-ACCESS

TRAFFIC SIGNAL WARRANT ANALYSIS

FIGURES

Figure 1 – Site Location Map

Figure 2 – October 2020 Existing As-Counted Traffic Volumes

Figure 3 – December 2020 Existing As-Counted Traffic Volumes

Figure 4 – Existing Adjusted Traffic Volumes

Figure 5 – 2023 Base Traffic Volumes

Figure 6 – Other Planned Projects Future Traffic Volumes

Figure 7 – 2023 Phase I No-Build Traffic Volumes

Figure 8 – Truck Routing for Condition A

Figure 9 – Passenger Vehicle Routing for Condition A

Figure 10 – Phase IA Site-Generated Truck Volumes

Figure 11 – Phase IA Site-Generated Passenger Vehicle Volumes

Figure 12 – Phase IA Total Site-Generated Traffic Volumes

Figure 13 – 2023 Phase IA Build Traffic Volumes

Figure 14 – Truck Routing for Condition B

Figure 15 – Passenger Vehicle Routing for Condition B

Figure 16 – Phase IB Site-Generated Truck Volumes

Figure 17 – Phase IB Site-Generated Passenger Vehicle Volumes

Figure 18 – Phase IB Total Site-Generated Traffic Volumes

Figure 19 – 2023 Phase IB Build Traffic Volumes

Figure 20 – Truck Routing for Condition C

Figure 21 – Passenger Vehicle Routing for Condition C

Figure 22 – Phase IC Site-Generated Truck Volumes

Figure 23 – Phase IC Site-Generated Passenger Vehicle Volumes

Figure 24 – Phase IC Total Site-Generated Traffic Volumes

Figure 25 – 2023 Phase IC Build Traffic Volumes

Figure 26 – 2025 Phase 2A No-Build Traffic Volumes

Figure 27 – 2025 Phase 2B No-Build Traffic Volumes

Figure 28 – 2025 Phase 2C No-Build Traffic Volumes

Figure 29 – Phase 2A Site-Generated Truck Volumes

Figure 30 – Phase 2A Site-Generated Passenger Vehicle Volumes

Figure 31 – Phase 2A Total Site-Generated Traffic Volumes

Figure 32 – 2025 Phase 2A Build Traffic Volumes

Figure 33 – Phase 2B Site-Generated Truck Volumes

Figure 34 – Phase 2B Site-Generated Passenger Vehicle Volumes

Figure 35 – Phase 2B Total Site-Generated Traffic Volumes

Figure 36 – 2025 Phase 2B Build Traffic Volumes

Figure 37 – Phase 2C Site-Generated Truck Volumes

Figure 38 – Phase 2C Site-Generated Passenger Vehicle Volumes

Figure 39 – Phase 2C Total Site-Generated Traffic Volumes

Figure 40 – 2025 Phase 2C Build Traffic Volumes
Figure 41 – Phase 2D Site-Generated Truck Volumes
Figure 42 – Phase 2D Site-Generated Passenger Volumes
Figure 43 – Phase 2D Total Site-Generated Traffic Volumes
Figure 44 – 2025 Phase 2D Build Traffic Volumes
Figure 45 – Phase 2E Site-Generated Truck Volumes
Figure 46 – Phase 2E Site-Generated Passenger Volumes
Figure 47 – Phase 2E Total Site-Generated Traffic Volumes
Figure 48 – 2025 Phase 2E Build Traffic Volumes
Figure 49 – Phase 2F Site-Generated Truck Volumes
Figure 50 – Phase 2F Site-Generated Passenger Volumes
Figure 51 – Phase 2F Total Site-Generated Traffic Volumes
Figure 52 – 2025 Phase 2F Build Traffic Volumes
Figure 53 – Truck Routing for Condition G
Figure 54 – Passenger Vehicle Routing for Condition G
Figure 55 – Phase 1G Site-Generated Truck Volumes
Figure 56 – Phase 1G Site-Generated Passenger Volumes
Figure 57 – Phase 1G Total Site-Generated Traffic Volumes
Figure 58 – 2025 Phase 1G Build Traffic Volumes
Figure 59 – Phase 2G Site-Generated Truck Volumes
Figure 60 – Phase 2G Site-Generated Passenger Volumes
Figure 61 – Phase 2G Total Site-Generated Traffic Volumes
Figure 62 – 2025 Phase 2G Build Traffic Volumes

HIGHWAY CAPACITY ANALYSIS DETAIL SHEETS

2020 Existing Traffic Conditions
2023 Phase I No-Build Traffic Conditions
2023 Phase 1A Build Traffic Conditions
2023 Phase 1B Build Traffic Conditions
2023 Phase 1C Build Traffic Conditions
2025 Phase 2A No-Build Traffic Conditions
2025 Phase 2B No-Build Traffic Conditions
2025 Phase 2C No-Build Traffic Conditions
2025 Phase 2A Build Traffic Conditions
2025 Phase 2B Build Traffic Conditions

2025 Phase 2C Build Traffic Conditions

2025 Phase 2A Mitigation Build Traffic Conditions

2025 Phase 2B Mitigation Build Traffic Conditions

2025 Phase 2C Mitigation Build Traffic Conditions

Phase 2D Build Traffic Conditions

Phase 2E Build Traffic Conditions

Phase 2F Build Traffic Conditions

Phase 2G Build Traffic Conditions

EXECUTIVE SUMMARY

The revised Traffic Impact Study was prepared to update the ~~July 8, 2020 issuance of the Traffic Impact Study and to address the Transportation section of the Final Scope for Draft Environmental Impact Statement (DEIS) for HK Ventures, LLC which was adopted by the Town of Riverhead Planning Board on November 19, 2020~~ the April 19, 2021 issuance of the Traffic Impact Study and to address the Resolution Setting Forth Requirements for Inclusion in a Final Environmental Impact Statement (FEIS) for the Site Plan Application of HK Ventures, which was adopted by the Town of Riverhead Planning Board on August 19, 2021. This issuance addresses comments contained within the review letter prepared by L.K. McLean Associates, P.C., dated May 25, 2021. The following is a summary of the revisions and the analyses contained herein:

1. The application proposes a 412,629-square-foot industrial park which would be constructed in two (2) build phases, defined as Phase 1 Build and Phase 2 Build within the report.
2. The 412,629 square feet includes a 1,500-square-foot commissary as an ancillary offering intended to serve employees of the various tenants. As the commissary is not expected to generate unique traffic or parking, 411,129 square feet has been used for traffic and parking analyses.
3. ~~In order to evaluate existing traffic conditions and potential impacts on a broader study roadway network as identified in the DEIS Final Scope, additional manual turning movement counts and automatic traffic recorder counts were collected in December 2020 at the locations identified within the DEIS Final Scope.~~ In order to assess the calibration measures applied to represent the existing traffic conditions on the study roadway network, additional manual turning movement counts were collected in October 2021 at the intersection of Middle Country Road and Fresh Pond Avenue, and additional historical traffic volume data provided by NYSDOT was reviewed to provide a thorough evaluation of the analysis methods applied to the analysis contained herein.
4. Per the comments contained within the aforementioned review letter prepared by L.K. McLean Associates, a further detailed summary and discussion of the motor vehicle collisions recorded at each intersection and roadway segment within the study roadway network during the study time period has been included within the report, inclusive of the time of day, week, and year of each incident, the weather, pavement, and light conditions, accident severity, accident type, and contributing factors.
5. Pursuant to discussion with NYSDOT and the Town, three (3) access plans have been analyzed which account for off-site improvements to Middle Country Road such as a new traffic signal and roadway widening. ~~Per the subject discussion, a roundabout configuration at the subject intersection has been contemplated within the report but has not been analyzed from a highway capacity standpoint as a~~

fourth access alternative. Per the date of this report, a final access configuration along Middle Country Road which is under the sole jurisdiction of the NYSDOT has not been confirmed. Per the comments contained within the aforementioned review letter prepared by L.K. McLean Associates, a roundabout configuration at the subject intersection has been analyzed from a highway capacity standpoint as a fourth access alternative. Per the date of this report, a traffic signal has been warranted by NYSDOT at the intersection of Middle Country Road and the proposed site driveway, which is analyzed herein as Access Condition B.

6. The analysis findings, which have been based on industry-standard guidelines, indicate that Phase 1 of the proposed development would not have a significant impact on the traffic operations of the adjacent roadway network.
7. Similarly, Phase 2 of the proposed development is not expected to have a significant impact on the traffic operations of the adjacent roadway network. A minor signal timing modification to the nearby signalized intersection of Middle Country Road and Edwards Avenue may be appropriate based on the forecasted ratio of turning movements at the intersection; however, it is important to note that per consultations with NYSDOT, the subject intersection will undergo roadway improvements which may proactively mitigate any increases in delay which are calculated within the analysis contained.
8. The analysis findings, which have been based on industry-standard guidelines, indicate that a roundabout access at the intersection of Middle Country Road and Fresh Pond Avenue would operate adequately under the Phase 2 Build Condition of the proposed development; however, per consultations with the NYSDOT, which maintains jurisdiction of Middle Country Road, a roundabout intersection would not likely be feasible at the subject location due to the large area of land donations required for construction and the existing characteristics of the corridor.

INTRODUCTION

This Traffic Impact Study was prepared to investigate the potential impacts of the proposed industrial park on the adjacent roadway network. This study has been prepared to address the Transportation section of the Final Scope for Draft Environmental Impact Statement (DEIS) for HK Ventures, LLC which was adopted by the Town of Riverhead Planning Board on November 19, 2020. The subject property is located along Middle Country Road in the Hamlet of Calverton, Town of Riverhead, Suffolk County, New York. The site location is shown on appended **Figure 1**.

The subject property is designated as District 600, Section 116, Block 1, Lot 2 as depicted on the Suffolk County Tax Map. The site has approximately 530 feet of frontage along Middle Country Road (NYS Route 25). The existing site is undeveloped. Under the proposed development program, a 411,129-square-foot multi-building industrial park will be constructed in two (2) phases. As part of the analysis contained herein, three (3) access plans have been analyzed.

METHODOLOGY

Stonefield Engineering & Design, LLC has prepared this Traffic Impact Study in accordance with the recommended guidelines and practices outlined by the Institute of Transportation Engineers (ITE) within Transportation Impact Analyses for Site Development. A detailed field investigation was performed to assess the existing conditions of the adjacent roadway network. A data analysis effort was completed to identify the existing traffic volumes at the study intersections to serve as a base for the traffic analyses. Capacity analysis, a procedure used to estimate the traffic-carrying ability of roadway facilities over a range of defined operating conditions, was performed using the Highway Capacity Manual, 6th Edition (HCM), Synchro 10, and Synchro 11 Software for all study conditions to assess the roadway operations.

For an unsignalized intersection, Level of Service (LOS) A indicates operations with delay of less than 10 seconds per vehicle, while LOS F describes operations with delay in excess of 50 seconds per vehicle. For a signalized intersection, LOS A indicates operations with delay of less than 10 seconds per vehicle, while LOS F describes operations with delay in excess of 80 seconds per vehicle. Technical Appendix contains the Highway Capacity Analysis Detail Sheets for the study intersection analyzed in this assessment. The traffic signal timing utilized within the signalized analysis is based on signal timing directives provided by the New York State Department of Transportation (NYSDOT).

2020 EXISTING CONDITION

2020 EXISTING ROADWAY CONDITIONS

The proposed industrial park is located along Middle Country Road in the Hamlet of Calverton, Suffolk County, New York. The subject property is designated as District 600, Section 116, Block 1, Lot 1. The site has approximately 530 feet of frontage along Middle Country Road. Land uses in the area are predominantly residential, commercial, and industrial.

Middle Country Road (NYS Route 25) is classified as a principal arterial roadway with a general east-west orientation, and is under the jurisdiction of the NYSDOT. Along the site frontage, the roadway provides one (1) lane in each direction and has a posted speed limit of 50 mph. Curb and sidewalk are not provided along either side of the roadway, shoulders are generally provided along both sides of the roadway, and on-street parking is not permitted along either side of the roadway. NYS Route 25 provides access between Manhattan and Orient Point for predominantly residential and commercial land uses.

Fresh Pond Avenue is classified as an urban minor arterial roadway with a general north-south orientation, and is under the jurisdiction of the Town of Riverhead. The roadway generally provides one (1) lane in each direction and has a posted speed limit of 45 mph. Curb and sidewalk are not provided along either side of the roadway, shoulders are not provided along either side of the roadway, and on-street parking is not permitted along either side of the roadway. Fresh Pond Avenue provides access between Sound Avenue at its northerly terminus and Middle Country Road at its southerly terminus for predominantly commercial uses along its length.

Edwards Avenue is classified as an urban minor arterial roadway with a general north-south orientation, and is under the jurisdiction of the Town of Riverhead. The roadway generally provides one (1) lane in each direction and has a posted speed limit of 45 mph. Curb and sidewalk are not provided along either side of the roadway, shoulders are generally not provided along either side of the roadway, and on-street parking is not permitted along either side of the roadway. Edwards Avenue provides access between Beach Way and Railroad Avenue to South River Road for predominantly commercial uses along its length.

Burman Boulevard is classified as a local roadway with a general north-south orientation, and is under the jurisdiction of the Town of Riverhead. The roadway generally provides one (1) lane in each direction and has a posted speed limit of 30 mph. Curb, sidewalk, and shoulders are not provided along either side of the roadway, and on-street parking is not regulated along either side of the roadway. Burman Boulevard provides access between Middle Country Road at its northerly terminus and Grumman Boulevard at its southerly terminus for predominantly industrial uses along its length.

At Exit 71, Long Island Expressway (Interstate Route 495) forms an interchange at Edwards Avenue where an eastbound exit ramp and a westbound entrance ramp are provided. The subject interchange is under the jurisdiction of NYSDOT. The eastbound exit ramp of the interchange provides two (2) one-way eastbound lanes and has a posted speed limit of 40 mph. Curb and sidewalk are not provided along either side of the roadway, shoulders are provided along the southerly side of the roadway, and on-street parking is not permitted along either side of the roadway.

Middle Country Road and Edwards Avenue intersect to form a four (4)-leg intersection controlled by a two (2)-phase traffic signal operating on a variable cycle length. The eastbound and westbound approaches of Middle Country Road each provide one (1) shared left-turn/through/right-turn lane. The northbound and southbound approaches of Edwards Avenue each provide one (1) shared left-turn/through/right-turn lane. Crosswalks are not provided across any legs of the intersection and pedestrian signals are provided across the easterly and westerly legs of the intersection. Please note that per consultations with NYSDOT, the intersection of Middle Country Road and Edwards Avenue will undergo roadway improvements inclusive of the addition of exclusive left-turn lanes at all approaches as well as realignment of the northbound and southbound Edwards Avenue approaches to mitigate the current slight offset.

Middle Country Road and Burman Boulevard intersect to form a three (3)-leg T-intersection controlled by a two (2)-phase traffic signal operating on a variable cycle length. The eastbound approach of Middle Country Road provides one (1) exclusive through lane and one (1) exclusive right-turn lane and the westbound approach of Middle Country Road provides one (1) exclusive left-turn lane and one (1) exclusive through lane. The northbound approach of Burman Boulevard provides one (1) exclusive left-turn lane and one (1) exclusive right-turn lane. Crosswalks and pedestrian signals are not provided across any legs of the intersection.

Middle Country Road and Fresh Pond Avenue intersect to form an unsignalized four (4) leg intersection with the southbound approach of Fresh Pond Avenue and the northbound approach of the Tractor Supply Co. driveway operating under stop control. The eastbound and westbound approaches of Middle Country Road each provide one (1) shared left-turn/through/right-turn lane. The southbound approach of Fresh Pond Avenue provides one (1) shared left-turn/through/right-turn lane. The northbound approach of the Tractor Supply Co. driveway provides one (1) shared left-turn/through/right-turn lane. Crosswalks and pedestrian signals are not provided across any legs of the intersection.

Edwards Avenue and the Long Island Expressway eastbound off-ramp intersect to form an unsignalized three (3) leg T-intersection with the eastbound approach of the Long Island Expressway off-ramp operating under stop control. The northbound and southbound approaches of Edwards Avenue each provide two (2) exclusive through lanes. The eastbound approach of the Long Island Expressway off-ramp provides one (1)

exclusive left-turn lane and one (1) exclusive right-turn lane. Crosswalks and pedestrian signals are not provided across any legs of the intersection.

2020 EXISTING TRANSIT SERVICE

The subject site is located within six (6) miles of the Riverhead Long Island Rail Road (LIRR) Station which is serviced by the Ronkonkoma Branch of the LIRR, providing service to New York City and various points of interest throughout Nassau County and Suffolk County. Further, the proposed development is located within two (2) miles from bus stops that service three (3) Suffolk County Transit (SCT) bus routes, with the nearest stop located approximately 300 feet west of the subject site. SCT Bus Routes S62, S58, and 8A provide service to various points of interest throughout Suffolk County. The public transportation modes available in the general vicinity of the subject site are summarized on **Table I**.

TABLE I – PUBLIC TRANSPORTATION OPTIONS

Travel Mode	Proximity to Site	Destination(s)
Riverhead LIRR Station	6.0 miles	New York City Nassau County Suffolk County
Suffolk County Transit Bus Route S62	700 feet	Smith Haven Mall Port Jefferson Station County Center Riverhead LIRR Station
Suffolk County Transit Bus Route S58	300 feet	Huntington Square Mall Smith Haven Mall Riverhead Tanger Outlet Center Riverhead County Center
Suffolk County Transit Bus Route 8A	2.0 miles	County Center Riverhead LIRR Station

2020 EXISTING AS-COUNTED TRAFFIC VOLUMES

Manual turning movement counts were collected during the typical weekday morning, weekday evening, and Saturday midday time periods to evaluate existing traffic conditions and identify the specific hours when traffic activity on the adjacent roadways is at a maximum and could be potentially impacted by the development of the site. Turning movement counts were collected at the following intersections:

- ◆ Signalized intersection of Middle Country Road and Edwards Avenue
- ◆ Unsignalized intersection of Middle Country Road and Fresh Pond Avenue

Specifically, manual turning movement counts were conducted on the following dates and during the following times which represent the peak seasonal traffic period:

- ◆ Wednesday, October 14, 2020, from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 7:00 p.m.
- ◆ Saturday, October 17, 2020, from 11:00 a.m. to 2:00 p.m.

The study time periods were chosen as they are representative of the peak periods of both the adjacent roadway network and the proposed development. The traffic volume data was collected and analyzed to identify the design peak hour in accordance with HCM and ITE guidelines. Based on the review of the count data the weekday morning peak hour occurred from 7:30 a.m. to 8:30 a.m.; the weekday evening peak hour occurred from 4:00 p.m. to 5:00 p.m.; and the Saturday midday peak hour occurred from 12:15 p.m. to 1:15 p.m.

Additionally, in order to evaluate existing traffic conditions and potential impacts on a broader study roadway network as identified in the DEIS Final Scope, manual turning movement counts were collected at the following intersections:

- ◆ Signalized intersection of Middle Country Road and Edwards Avenue
- ◆ Unsignalized intersection of Middle Country Road and Fresh Pond Avenue
- ◆ Signalized intersection of Middle Country Road and Burman Boulevard
- ◆ Unsignalized intersection of Edwards Avenue and the Long Island Expressway East exit ramp

Specifically, manual turning movement counts were conducted on the following dates and during the following times:

- ◆ Saturday, December 12, 2020, from 11:00 a.m. to 2:00 p.m.
- ◆ Tuesday, December 15, 2020, from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 7:00 p.m.
- ◆ Tuesday, December 22, 2020, from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 7:00 p.m.

The study time periods were chosen as they are representative of the peak periods of both the adjacent roadway network and the proposed development. Please note that due to technical difficulties, the intersection of Middle Country Road and Fresh Pond Avenue was not included within the Tuesday, December 15, 2020 count, and therefore the subject intersection was counted on Tuesday, December 22, 2020; the remaining intersections within the study network were collected on Tuesday, December 15, 2020. The traffic volume data was collected and analyzed to identify the design peak hour in accordance with HCM and ITE guidelines. Based on the review of the count data the weekday morning peak hour occurred from 7:30 a.m. to 8:30 a.m.; the weekday evening peak hour occurred from 4:15 p.m. to 5:15 p.m.; and the Saturday midday peak hour occurred from 12:15 p.m. to 1:15 p.m. The Technical Appendix contains a summary of the turning movement count data. The October 2020 Existing As-Counted and December 2020 Existing As-Counted weekday morning, weekday evening, and Saturday midday peak-hour volumes are summarized on appended **Figures 2** and **3**, respectively.

2020 EXISTING ADJUSTED TRAFFIC VOLUMES

Please note that gathering and travel restrictions as part of Governor Cuomo's Executive Orders associated with the COVID-19 pandemic remain in effect as of the date of this report. Therefore, current roadway operating conditions may not be considered typical.

As such, in addition to turning movement counts, Automatic Traffic Recorder (ATR) data was collected along Middle Country Road approximately 490 feet west of Service Lane on Tuesday, December 15, 2020. The 24-hour collected ATR data was compared to ATR data published by the NYSDOT, which was collected at the same location on Tuesday, December 4, 2018, to evaluate existing traffic conditions and identify the impacts of COVID-19 restrictions on traffic volumes within the study network. The Technical Appendix contains a summary of the 2020 collected ATR count data and the 2018 published NYSDOT ATR count data.

Based on a comparison of the ATR data, traffic volumes along Middle Country Road were approximately 15% lower than the published 2018 NYSDOT traffic volumes during the weekday morning peak hour and approximately 12% greater during the weekday evening peak hour. Therefore, the December 2020 turning movement counts were increased accordingly during the weekday morning peak hour to represent typical traffic volumes along the study network. Turning movement counts collected during the weekday evening peak hour were not adjusted due to the increase in volumes observed from the published 2018 NYSDOT data. It is important to note that historical NYSDOT ATR data was not available for Saturday and therefore this methodology could not be utilized to calibrate the existing as-counted Saturday volumes.

A comparison of the turning movement counts collected at the intersections of Middle Country Road and Fresh Pond Avenue and Middle Country Road and Edwards Avenue on Saturday, October 17, 2020 and Saturday, December 12, 2020 showed that the subject intersections experienced approximately 11% greater traffic volumes during the October count versus the December count. Therefore, the turning movement counts collected at the intersection of Middle Country Road and Burman Boulevard and the intersection of Edwards Avenue and the Long Island Expressway East exit ramp on Saturday, December 12, 2020 were increased accordingly to reflect the more conservative October 2020 count volumes; turning movement counts collected on October 17, 2020 were maintained at the study intersections of Middle Country Road and Fresh Pond Avenue and Middle Country Road and Edwards Avenue.

It is important to note that in addition to the published December 2018 NYSDOT ATR data, published NYSDOT ATR data collected at the same count station in June of 2016, which is typically accepted as the peak month of the year for an urban region based on seasonal adjustment factors contained within the NYSDOT's 'Adjustment Factors for Traffic Count Processing 2017' (appended within this report), was reviewed for comparison purposes. Based on a comparison of the published NYSDOT data from June 2016 and December 2018, the weekday daily traffic volumes along Middle Country Road were generally greater in June 2016;

however, the weekday morning peak hour traffic volumes recorded in December 2018, which were utilized to calibrate the 2020 as-counted weekday morning peak hour traffic volumes, were greater than the peak hour traffic volumes recorded in June 2016. Further, based on a comparison of the published June 2016 NYSDOT data and the 2020 collected ATR data, the as-counted traffic volumes were greater than the published June 2016 traffic volumes during the weekday evening peak hour. Therefore, the 2020 Adjusted Existing traffic volumes utilized within the analyses contained herein are a conservative representation of traffic volumes along the study roadway network and further calibration is not warranted. The Technical Appendix contains a summary of the 2016 published NYSDOT ATR count data. **Tables 2 and 3** summarize the comparison of the weekday morning and weekday evening peak hour traffic volumes recorded in the historical June 2016 NYSDOT ATR count data, the historical December 2018 NYSDOT ATR count data, and the December 2020 ATR count data.

TABLE 2 – ATR VOLUME COMPARISON – WEEKDAY MORNING PEAK HOUR

	June 2016	December 2018	December 2020	Existing Adjusted Volume Utilized in Traffic Impact Analysis
Agency	NYSDOT	NYSDOT	Stonefield	--
Eastbound Volumes	404	414	359	414
Westbound Volumes	209	214	177	214
Total Volumes	613	628	536	628

TABLE 3 – ATR VOLUME COMPARISON – WEEKDAY EVENING PEAK HOUR

	June 2016	December 2018	December 2020	Existing Adjusted Volume Utilized in Traffic Impact Analysis
Agency	NYSDOT	NYSDOT	Stonefield	--
Eastbound Volumes	308	285	298	298
Westbound Volumes	441	445	522	522
Total Volumes	749	730	820	820

In addition to a comparison of historical NYSDOT ATR data, turning movement counts were collected at the intersection of Middle Country Road and Fresh Pond Avenue on Thursday, October 7, 2021, from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 7:00 p.m. The traffic volume data was collected and analyzed to identify the design peak hour in accordance with HCM and ITE guidelines. Based on the review of the count data the weekday morning peak hour occurred from 7:15 a.m. to 8:15 a.m. and the weekday evening peak hour occurred from 4:30 p.m. to 5:30 p.m. The Technical Appendix contains a summary of the turning movement count data. The October 2021 as-counted volumes were compared to the 2020 Adjusted Existing volumes. Based on a comparison of the data, the 2020 Adjusted Existing traffic volumes are greater than the 2021 existing as-

counted traffic volumes collected at the study intersection. Therefore, the 2020 Adjusted Existing traffic volumes utilized within the analyses contained herein are a conservative representation of traffic volumes along the study roadway network and further calibration is not warranted.

The 2020 Existing Adjusted weekday morning, weekday evening, and Saturday midday peak hour volumes are summarized on appended **Figure 4**.

2020 EXISTING LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was conducted for the 2020 Existing Condition during the weekday morning, weekday evening, and Saturday midday peak hours at the study intersections.

Under the 2020 Existing Condition, the signalized intersection of Middle Country Road and Burman Boulevard is calculated to operate at overall Level of Service A during the weekday morning and Saturday midday peak hours and overall Level of Service B during the weekday evening peak hour. The turning movements at the signalized intersection are calculated to operate at acceptable Level of Service D or better during the study peak hours.

The signalized intersection of Middle Country Road and Edwards Avenue is calculated to operate at overall Level of Service B during the weekday morning, weekday evening, and Saturday midday peak hours. The turning movements at the signalized intersection are calculated to operate at acceptable Level of Service C or better during the study peak hours.

The turning movements at the unsignalized intersection of Middle Country Road and Fresh Pond Avenue are calculated to operate at acceptable Level of Service D or better during the weekday morning peak hour. Please note that the northbound left movement, which operates as part of a private driveway for the Tractor Supply Co., are calculated to operate at Level of Service F during the weekday evening and Saturday midday peak hours. Also note that the southbound approach of Fresh Pond Avenue is calculated to operate at Level of Service F during the weekday evening peak hour and Level of Service E during the Saturday midday peak hour. Turning movements at the intersection are otherwise calculated to operate at Level of Service C or better during the weekday evening and Saturday midday peak hours.

The turning movements at the unsignalized intersection of Edwards Avenue and the Long Island Expressway East exit ramp are calculated to operate at Level of Service A during the weekday morning and weekday evening peak periods and Level of Service B during the Saturday midday peak hour.

A complete summary of the 2020 Existing Condition Level of Service and Delay is provided on appended **Table A1**.

MOTOR VEHICLE COLLISION ANALYSIS

In order to assess the safety of the intersections and roadway segments within the study network, the three (3) most recent years of available motor vehicle collision data were obtained from the NYSDOT. The raw motor vehicle collision data received from the NYSDOT is appended to this report. The study time period spans from February 1, 2017 to January 31, 2020, which is unaffected by COVID-19. Appended **Table B1** provides a summary of the manner and severity of the motor vehicle collisions reported within the study network.

As shown in appended **Table B1**, a total 181 collisions were reported within the study network over the 36-month period; this equates to approximately five (5) collisions per month. Additionally, appended Tables B2 through B14 provide a further detailed summary the motor vehicle collisions recorded at each intersection and roadway segment within the study roadway network during the study time period, inclusive of the time of day, week, and year of each incident, the weather, pavement, and light conditions, accident severity, accident type, and contributing factors.

Based on a review of the data, 67 of the 181 collisions within the study network were rear end collisions, which is a common collision type along a signalized corridor and is the most frequent collision type observed along the roadway network. Following rear end collisions, right angle and animal collisions were the most frequent collision types reported along the study network. The most common contributing factors to the reported incidents were driver inattention, failure to yield right-of-way, following too closely, and animal's action, all of which are characteristic of the reported frequent collision types. In an effort to reduce animal-related conditions along the corridor, NYSDOT and the Town of Riverhead may consider roadway lighting improvements to increase driver visibility in the evening hours, as well as measures such as physical barriers and/or sensory controls to help prevent animals from crossing into the roadway. It is important to note that this potential mitigation measure is unrelated to the proposed development as the collision history indicates these collisions are an existing occurrence. The majority of accidents occurred from 10:00 a.m. to 4:00 p.m., during daylight hours with dry, clear conditions, though a portion of the accidents were reported to occur in dark conditions on lighted and unlighted roadways. It is important to note that zero (0) fatalities occurred as a result of the reported motor vehicle collisions in the study network. Accident rates within the study network are not anticipated to be adversely impacted due to the proposed development.

At the intersection of Middle Country Road and Burman Boulevard, a total of three (3) collisions occurred during the study time period which is not frequent enough to discern a repeatable pattern. It is important to note that zero (0) fatalities occurred as a result of the reported motor vehicle collisions at the study intersection. Accident rates at the study intersection are not anticipated to be adversely impacted due to the proposed development.

Along the segment of Middle Country Road between Burman Boulevard and NYS Route 25A, a total of 11 collisions occurred during the study time period. The most common collision type was rear end collisions, which is a common collision type along a signalized corridor. The most common contributing factors to the reported incidents were driver inattention and animal's action. It is important to note that zero (0) fatalities occurred as a result of the reported motor vehicle collisions along the study roadway segment. Accident rates at the study roadway segment are not anticipated to be adversely impacted due to the proposed development.

At the intersection of Middle Country Road and NYS Route 25A, a total of 15 collisions occurred during the study time period. The most common collision type was rear end collisions, which is a common collision type along a signalized corridor. The most common contributing factors to the reported incidents were driver inattention and animal's action. It is important to note that zero (0) fatalities occurred as a result of the reported motor vehicle collisions at the study intersection. Accident rates at the study intersection are not anticipated to be adversely impacted due to the proposed development.

Along the segment of Middle Country Road between NYS Route 25A and Timber Drive, a total of eight (8) collisions occurred during the study time period which is not frequent enough to discern a repeatable pattern. It is important to note that zero (0) fatalities occurred as a result of the reported motor vehicle collisions along the study roadway segment. Accident rates at the study roadway segment are not anticipated to be adversely impacted due to the proposed development.

At the intersection of Middle Country Road and Timber Drive, a total of two (2) collisions occurred during the study time period which is not frequent enough to discern a repeatable pattern. It is important to note that zero (0) fatalities occurred as a result of the reported motor vehicle collisions at the study intersection. Accident rates at the study intersection are not anticipated to be adversely impacted due to the proposed development.

Along the segment of Middle Country Road between Timber Drive and Fresh Pond Avenue, a total of 10 collisions occurred during the study time period. The most common collision types were collisions with fixed objects (4) and rear end collisions (3). The most common contributing factors to the reported incidents were driver inattention and animal's action. It is important to note that zero (0) fatalities occurred as a result of the reported motor vehicle collisions along the study roadway segment. Accident rates at the study roadway segment are not anticipated to be adversely impacted due to the proposed development.

At the intersection of Middle Country Road and Fresh Pond Avenue, a total of three (3) collisions occurred during the study time period which is not frequent enough to discern a repeatable pattern. It is important to note that zero (0) fatalities occurred as a result of the reported motor vehicle collisions at the study

intersection. Accident rates at the study intersection are not anticipated to be adversely impacted due to the proposed development.

Along the segment of Middle Country Road between Fresh Pond Avenue and Edwards Avenue, a total of 31 collisions occurred during the study time period. The most common collision types were rear end collisions (10) and collisions with animals (10). The most common contributing factors to the reported incidents were animal's action and following too closely. It is important to note that zero (0) fatalities occurred as a result of the reported motor vehicle collisions along the study roadway segment. Accident rates at the study roadway segment are not anticipated to be adversely impacted due to the proposed development.

At the intersection of Middle Country Road and Edwards Avenue, a total of 35 collisions occurred during the study time period. The most common collision type was rear end collisions, which is a common collision type along a signalized corridor. The most common contributing factor to the reported incidents was following too closely. It is important to note that zero (0) fatalities occurred as a result of the reported motor vehicle collisions at the study intersection. Accident rates at the study intersection are not anticipated to be adversely impacted due to the proposed development.

Along the segment of Edwards Avenue between Middle Country Road and River Road, a total of 13 collisions occurred during the study time period. The most common collision types were rear end collisions (4) and collisions with animals (3). The most common contributing factors to the reported incidents were following too closely and driver inattention. It is important to note that zero (0) fatalities occurred as a result of the reported motor vehicle collisions along the study roadway segment. Accident rates at the study roadway segment are not anticipated to be adversely impacted due to the proposed development.

At the intersection of Edwards Avenue and River Road, a total of 15 collisions occurred during the study time period. The most common collision types were rear end collisions (4) and right-angle collisions (4). The most common contributing factor to the reported incidents was failure to yield right-of-way. It is important to note that zero (0) fatalities occurred as a result of the reported motor vehicle collisions at the study intersection. Accident rates at the study intersection are not anticipated to be adversely impacted due to the proposed development.

At the intersection of Edwards Avenue and Mill Road, a total of two (2) collisions occurred during the study time period which is not frequent enough to discern a repeatable pattern. It is important to note that zero (0) fatalities occurred as a result of the reported motor vehicle collisions at the study intersection. Accident rates at the study intersection are not anticipated to be adversely impacted due to the proposed development.

At the intersection of Edwards Avenue and the LIE Eastbound Exit Ramp, a total of 33 collisions occurred during the study time period. The most common collision types were right-angle collisions (12), which is a common collision type at an unsignalized intersection, and rear end collisions (10). The most common contributing factors to the reported incidents were failure to yield right-of-way and driver inattention. It is important to note that zero (0) fatalities occurred as a result of the reported motor vehicle collisions at the study intersection. Accident rates at the study intersection are not anticipated to be adversely impacted due to the proposed development.

2023 PHASE I NO-BUILD CONDITION

BACKGROUND GROWTH

The 2020 Existing Condition traffic volume data was grown to a future horizon year of 2023, which is when Phase I of the proposed industrial park is expected to be constructed. Based on data provided by the NYSDOT Office of Technical Services' Traffic Monitoring Section, the roadway network is anticipated to experience an ambient annual growth of approximately 1%. However, the existing traffic volumes at the study intersections were conservatively increased by 1.5% annually for three (3) years to generate the 2023 Base Traffic Volumes. These volumes are summarized on appended **Figure 5**.

OTHER PLANNED DEVELOPMENT PROJECTS

To evaluate the future traffic conditions, it is important to consider the potential site-generated traffic of other projects that could influence the traffic volume at the study intersections. Other planned development projects include those that are either in the entitlement process or have recently been approved for building permits in proximity to the proposed development. Based on consultations with the Town of Riverhead Planning Department, the following developments are contemplated in the site vicinity:

- ◆ Enterprise Park at Calverton (EPCAL) – located approximately one (1) mile west of the subject site – 2,000+ acre subdivision to facilitate a mixed-use development which will include a combination of commercial, retail, industrial, government, energy park, recreation, utilities, and residential uses – Under review by Town of Riverhead Planning Department. It is Stonefield's understanding that the Town of Riverhead is in the process of determining a suitable developer for the EPCAL property and per the date of this report, none has been identified. Based on discussions with the Town of Riverhead Planning Department, it is understood that a development application for the EPCAL property has not yet have been submitted to the Town of Riverhead and therefore, it is expected that the subject industrial park application will likely precede EPCAL. Therefore, traffic volumes associated with EPCAL are not included in this analysis.
- ◆ Island Water Park – located at 5835 Middle Country Road, approximately three (3) miles west of the subject site – amended proposal to a previously approved plan to construct a mixed-use facility consisting of approximately 9,400 sq. ft. of indoor recreation/entertainment space,

a 3,000 sq. ft. health and fitness center, a 232-seat restaurant/dining facility, as well as the use of an approximately 490,000 sq. ft. lake to be utilized for recreational purposes – Under review by the Town of Riverhead Town Board. Given the use and time of day/day of week when peak traffic would likely be generated, the blanket annual growth rate is assumed to include potential build-out of the subject planned development.

- ◆ Tractor Supply Co. – located at 4331 Middle Country Road, westerly adjacent to the subject site – note that a portion of the previously approved development program has already been constructed. The remaining portion will include a 17,450-square-foot retail space to be constructed on the same parcel as the previously constructed Tractor Supply retail store. Trips associated with the future retail development were routed through the study network during the weekday evening and Saturday midday peak hours based on the analysis contained within the Traffic Impact Study prepared by Atlantic Traffic and Design, dated May 22, 2018. Note that said Traffic Impact study does not include trip generation for the weekday morning peak hour and as such trip generation projections for the future retail space during the weekday morning peak hour were prepared utilizing data from ITE's Trip Generation Manual, 10th Edition for Land Use 820 "Shopping Center" and routed through the study network accordingly.
- ◆ Calverton Industrial Subdivision – located at 3511 Middle Country Road, approximately 1.5 miles east of the subject site – the application proposes a subdivision of two existing parcels totaling 135 acres for industrial use to be determined. No site plan is currently proposed and therefore the blanket annual growth rate is assumed to include potential build-out of the subject planned development.
- ◆ NYS Route 25 at Edwards Avenue Safety Enhancements (PIN 081001) – The intersection of Middle Country Road and Edwards Avenue will undergo intersection widening and an addition of exclusive left-turn lanes at all approaches. Construction is anticipated to be completed before the anticipated Phase I build-out of the subject site and as such the proposed improvements were included within the analysis herein. Note that signal timing and phasing have not been altered as detailed modifications are currently unknown.

Appended **Figure 6** illustrates the site-generated traffic associated with the other planned developments assigned to the study area network.

2023 PHASE I NO-BUILD TRAFFIC VOLUMES

The site-generated trips associated with the other planned developments were added to the 2023 Base Traffic Volumes to calculate the 2023 No-Build Traffic Volumes for the weekday morning, weekday evening, and Saturday midday peak hours. These volumes are summarized on appended **Figure 7**.

2023 PHASE I NO-BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was conducted for the 2023 Phase I No-Build Condition during the weekday morning, weekday evening, and Saturday midday peak hours at the study intersections.

Please note that per consultations with NYSDOT, the intersection of Middle Country Road and Edwards Avenue will undergo roadway improvements inclusive of the addition of an exclusive left-turn lane at all

approaches, which has been included in the analysis herein. Under the 2023 Phase I No-Build Condition, the overall intersection of Middle Country Road and Edwards Avenue is calculated to operate generally consistent with the findings of the 2020 Existing Condition, and the exclusive left-turn movements are calculated to operate at Level of Service D or better during the weekday morning peak hour and Level of Service C or better during the weekday evening and Saturday midday peak hours.

It should also be noted that under the 2023 Phase I No-Build Condition, the southbound approach of the intersection of Middle Country Road and Fresh Pond Avenue is calculated to degrade from Level of Service E to Level of Service F, experiencing a 25.4 second increase in delay during the Saturday midday peak hour. Further, the northbound movements at the subject intersection, which were calculated to operate at Level of Service F during the weekday evening and Saturday midday peak hours under the 2020 Existing Condition, experience a significant increase in delay during the subject peak hours under the 2023 Phase I No-Build Condition.

Please also note that the turning movements at the unsignalized intersection of Middle Country Road and Fresh Pond Avenue are calculated to continue to operate with capacity issues during the weekday evening and Saturday midday peak hours.

Under the 2023 Phase I No-Build Condition, the study intersections are otherwise calculated to operate generally consistent with the findings of the 2020 Existing Condition. A complete summary of the 2023 Phase I No-Build Condition Level of Service and Delay is provided on appended **Table AI**.

2023 PHASE I BUILD CONDITION

The site-generated traffic volume of the proposed development was estimated to identify the potential impacts of the project. For the purpose of this analysis, Phase I “build out” is assumed by 2023.

SITE ACCESS CONDITIONS

As part of this application, improvements in the public right-of-way will be needed to permit access to the subject property. It is important to note that a virtual meeting was held with the NYSDOT, the Town of Riverhead, the Town’s consultants, L.K. McLean Associates (LKMA), and the applicant on December 16, 2020 to discuss the potential access plans. A copy of the meeting minutes is provided the appendix. Pursuant to the subject discussion with NYSDOT and the Town, it was requested that several potential site access conditions be analyzed. Per the date of this report, a final access configuration has not been confirmed. As Middle Country Road is under the jurisdiction of the NYSDOT, a Highway Work Permit is required and Stonefield will continue to coordinate with the State regarding access.

CONDITION A

Site access Condition A considers cross access with the property immediately to the west of the subject site. In Condition A, access would be provided via a signalized access point at the intersection of Middle Country Road and Fresh Pond Avenue and an unsignalized access point along the site's Middle Country Road frontage. Additionally, Condition A considers widening Middle Country Road to provide a westbound left-turn lane at the westbound approach to the traffic signal at Fresh Pond Avenue and a two-way left-turn lane extending between the aforementioned left-turn lane and the eastern extent of the site's Middle Country Road frontage. The subject proposed signal was analyzed to operate on a two (2)-phase, 110-second cycle length signal timing during the weekday morning, weekday evening, and Saturday midday peak hours. In Condition A, trucks would be restricted from executing left turn movements into and out of the unsignalized driveway while passenger vehicles would have the option to execute left turn movements at either access point. Please note that Condition A assumes that the applicant and the owner of the property to the west of the subject site come to a cross access agreement. Per the date of this report, Calverton Industries, the owner of a portion of the property to the west of the subject site, issued a letter dated March 9, 2021, which has been appended to the report and denies the proposal for a cross-access agreement with the applicant; therefore Condition A as proposed may not be feasible.

CONDITION B

In Condition B, access would be provided via a full-movement signalized access point along the site's Middle Country Road frontage. The subject proposed signal was analyzed to operate on a two (2)-phase, 108.5-second cycle length signal timing during the weekday morning, weekday evening, and Saturday midday peak. To assist in determining whether a traffic signal should be installed, Stonefield has prepared a Traffic Signal Warrant Analysis, dated April 19, 2021, which is appended hereto. Based on the adjacent roadway volumes and site-generated traffic, a traffic signal is warranted at the subject location per MUTCD standards. Note that the NYSDOT retains jurisdiction over improvements in the Middle Country Road Right-of-Way. Review with the NYSDOT is on-going per the date of this report. No improvements would be provided at the adjacent intersection with Fresh Pond Avenue which would remain unsignalized. Cross access to the property to the west would not be provided.

CONDITION C

In Condition C, access would be provided via an unsignalized access point along the site's Middle Country Road frontage. Additionally, Condition C considers widening Middle Country Road to provide a westbound left-turn lane at the westbound approach to the traffic signal at Fresh Pond Avenue and a two-way left-turn

lane extending between the aforementioned left-turn lane and the eastern extent of the site's Middle Country Road frontage.

ALTERNATIVE ACCESS VIA ROUNDABOUT

An alternative access condition which may be considered is the implementation of a roundabout at the intersection of Middle Country Road with Fresh Pond Avenue. The advantages and disadvantages of a roundabout configuration at the subject intersection are summarized below:

ADVANTAGES

- ◆ Safety – Roundabouts typically operate under reduced vehicular speeds which results in traffic calming effects and provide motorists with extra time to evaluate and correct decisions, thereby potentially reducing severity and frequency of collisions. Additionally, roundabouts generally have fewer points of conflict and specifically eliminate left-turn conflicts, thus contributing to a reduction in multiple-vehicle collisions.
- ◆ Improvements to Delay/Queuing – The continuous movement of traffic within a roundabout may result in lower delay and queuing lengths compared to other types of intersection control.
- ◆ Operational Cost and Maintenance – Roundabouts do not require traffic signal equipment construction or maintenance, which can be costly for the responsible developers and/or agencies.

DISADVANTAGES

- ◆ Intersection Space – Roundabouts often require more intersection space for proper construction than is available in typical Right-of-Way and would likely require land donation from several surrounding properties to the north and south of the roadway.
- ◆ Gap Reduction – Continuous flow of traffic through a roundabout may reduce the number of available gaps for motorists at unsignalized intersections and driveways along the corridor, such as the subject site driveway.
- ◆ Equal Approach Priority – Roundabouts offer equal priority for all intersection approaches which may result in reduced vehicular progression for intersections with high volume approaches along the mainline. Additionally, the equal-priority approach of a roundabout does not allow for explicit priority for emergency vehicles or pedestrians unless supplemental traffic control devices are provided.

- ◆ NYSDOT Review/Approval – The subject intersection is within the NYSDOT Right-of-Way and therefore the intersection configuration is subject to the agency's review and approval. Per consultations with the NYSDOT, preference for a traffic signal over a roundabout was stated based on the corridor characteristics and subject intersection geometry.

As detailed in the appended meeting minutes, the subject access design was discussed in depth at the December 16, 2020 virtual meeting with the Town and NYSDOT. It is important to note that the NYSDOT was open to assessing the advantages and disadvantages of a roundabout but that a roundabout will likely not be considered given the requisite property taking. ~~Therefore, Stonefield prepared the aforementioned assessment but a roundabout has not been analyzed from a highway capacity standpoint as a fourth access alternative.~~ However, for comparison purposes a Level of Service Analysis was also conducted for a typical roundabout at the intersection of Middle Country Road and Fresh Pond Avenue and is contained in the report herein.

TRIP GENERATION

Trip generation projections for the proposed industrial park were prepared utilizing the ITE's Trip Generation Manual, 10th Edition. Trip generation rates associated with Land Use 130 "Industrial Park" were cited for the initial 224,969 square feet of the total 411,129-square-foot industrial park to be constructed during Phase I of the proposed development. Phase I consists of four (4) buildings to be occupied by various tenants and a 1,500-square-foot commissary as an ancillary offering intended to serve employees of the various tenants. ITE characterizes an industrial park as "a mix of manufacturing, service, and warehouse facilities," which is an appropriate definition based on the applicant's expected tenants. It is important to note that the four (4) buildings to be constructed as part of Phase I would be occupied by as many as 32 separate tenants in the future, each consisting of 5,600 square feet, 9,072 square feet, or 9,445 square feet. Note that specific tenants for the development have not yet been identified.

As shown on the Site Plan, a 1,500-square-foot commissary is proposed on the northerly end of Building 2. This is typical of industrial parks and is intended to be patronized by the employees of the various tenants. Providing a commissary on the premises also reduces the overall traffic impact of the project as employee vehicles may not need to exit the property as frequently to get lunch, coffee, or other convenience items. The commissary would not generate traffic or parking demand separate from the tenanted industrial park space. **Table 4** provides the weekday morning, weekday evening, and Saturday midday trip generation volumes associated with Phase I of the proposed development.

TABLE 4 – PROJECTED PHASE I TRIP GENERATION

Land Use		Weekday Morning Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
224,969 SF Industrial Park <i>Land Use 130</i>	Passenger Vehicles	68	11	79	16	65	81	28	61	89
	Trucks	5	6	11	3	6	9	4	6	10
	Total	73	17	90	19	71	90	32	67	99

Phase I of the proposed development is expected to generate 90 trips during the weekday morning and weekday evening peak hours and 99 trips during the Saturday midday peak hour. Based on Transportation Impact Analysis for Site Development published by ITE, a trip increase of less than 100 vehicle trips would likely not change the level of service of the adjacent roadway system or appreciably increase the volume-to-capacity ratio of an intersection approach. Therefore, Phase I of the proposed development is not anticipated to significantly impact the operations of the adjacent roadway network. The truck trip generation was evaluated with respect to data published within the ITE's Trip Generation Manual, 10th Edition Supplement, for Land Use 130 "Industrial Park." According to Appendix C, 12% of site-generated traffic during the weekday morning peak hour and 10% of site-generated traffic during the weekday evening peak hour is comprised of trucks. Please note that the ITE does not provide data for truck trip generation during the Saturday midday peak hour. However, it is assumed that a portion of the Saturday midday peak hour traffic would be comprised of trucks. Therefore, the truck percentage for the weekday evening peak hour was applied to the Saturday midday peak hour.

TRIP ASSIGNMENT/DISTRIBUTION

The trips generated by the proposed development were distributed based on the expected travel patterns of the development's various tenants' employees and patrons along with the access management plan of the site. Separate distributions have been prepared for truck traffic and for passenger vehicles, as is explained herein.

Truck traffic has been routed based on the following macroscopic patterns:

- 75% destined to/from the Long Island Expressway – traveling along Edwards Avenue and the segment of Middle Country between the subject site and Edwards Avenue.
- 25% destined to/from NYS Routes 25 and 25A and roadways that connect to these routes including but not limited to William Floyd Parkway and NYS Route 112 – traveling along the segment of Middle Country Road west of the subject site.

Passenger vehicle traffic has been routed based on the following macroscopic patterns:

- 50% destined to/from the Long Island Expressway – traveling along Edwards Avenue and the segment of Middle Country between the subject site and Edwards Avenue.
- 12.5% destined to/from locations along Long Island's north shore in Suffolk County – traveling along NYS Routes 25A and Middle Country Road west of the subject site.
- 12.5% destined to/from locations along Long Island's south shore in Suffolk County – traveling along William Floyd Parkway and Middle Country Road west of the subject site.
- 12.5% destined to/from locations along Long Island's north fork – traveling along Sound Avenue, Fresh Pond Avenue, and Middle Country Road in the immediate site vicinity.
- 12.5% destined to/from locations along Long Island's south fork – traveling along NYS Route 24 to Edwards Avenue and the segment of Middle Country between the subject site and Edwards Avenue.

It is important to note that multiple routes to/from the subject site and the Long Island Expressway are possible; however, in order to provide a conservative analysis, traffic has been assigned to the roadway network via the one (1) aforementioned route. This assumption concentrates the traffic at the study intersections as opposed to dispersing traffic over multiple routes. Additionally, considering the multiple potential access configurations, traffic has been routed into/out of the site given the respective allowable turning movements under access conditions A, B, and C. The Truck Routing, Passenger Vehicle Routing, Site-Generated Truck Volumes, Site-Generated Passenger Vehicle Volumes, and Total Site Generated Traffic Volumes for Phase I Access Conditions A, B, and C are illustrated on the appended **Figures 8 through 12**, **Figures 14 through 18**, and **Figures 20 through 24**, respectively.

2023 PHASE I BUILD TRAFFIC VOLUMES

The total site-generated trips for Phase I were added to the 2023 No-Build Traffic Volumes to calculate the 2023 Phase I Build Traffic Volumes. The 2023 Phase IA Build Traffic Volumes, 2023 Phase IB Build Traffic Volumes, and 2023 Phase IC Build Traffic Volumes and are shown on appended **Figures 13, 19, and 25**, respectively.

2023 PHASE IA BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was conducted for the study intersections and the intersection created by Middle Country Road and the proposed site driveway during the 2023 Phase IA Build Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Under the 2023 Phase IA Build Condition, the turning movements at the unsignalized intersection of Middle Country Road and the proposed site driveway are calculated to operate at acceptable Level of Service C or better during the study peak hours.

Please note that under the 2023 Phase IA Build Condition, the intersection of Middle Country Road and Fresh Pond Avenue is analyzed as a signalized intersection with an exclusive westbound left turn lane. The signalized intersection of Middle Country Road and Fresh Pond Avenue is calculated to operate at overall Level of Service A and the turning movements at the subject intersection are calculated to operate at Level of Service D or better during the study peak hours.

Under the 2023 Phase IA Build Condition, the study intersections are otherwise calculated to operate generally consistent with the findings of the 2023 Phase I No-Build Condition during the study peak hours. A complete summary of the 2023 Phase IA Build Condition Level of Service and Delay is provided on appended **Table AI**.

2023 PHASE IB BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was conducted for the study intersections and the intersection created by Middle Country Road and the proposed site driveway during the 2023 Phase IB Build Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Under the 2023 Phase IB Build Condition, the signalized intersection of Middle Country Road and the proposed site driveway is calculated to operate at overall Level of Service A and the turning movements at the subject intersection are calculated to operate at Level of Service D or better during the study peak hours.

Please also note that the turning movements at the unsignalized intersection of Middle Country Road and Fresh Pond Avenue are calculated to continue to operate with capacity issues during the weekday evening and Saturday midday peak hours.

Under the 2023 Phase IB Build Condition, the study intersections are calculated to operate generally consistent with the findings of the 2023 Phase I No-Build Condition during the study peak hours. A complete summary of the 2023 Phase IB Build Condition Level of Service and Delay is provided on appended **Table AI**.

2023 PHASE IC BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was conducted for the study intersections and the intersection created by Middle Country Road and the proposed site driveway during the 2023 Phase IC Build Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Under the 2023 Phase IC Build Condition, the turning movements at the unsignalized intersection of Middle Country Road and the proposed site driveway are calculated to operate at acceptable Level of Service C or better during the study peak hours.

Please also note that the turning movements at the unsignalized intersection of Middle Country Road and Fresh Pond Avenue are calculated to continue to operate with capacity issues during the weekday evening and Saturday midday peak hours.

Under the 2023 Phase 1C Build Condition, the study intersections are calculated to operate generally consistent with the findings of the 2023 Phase 1 No-Build Condition during the study peak hours. A complete summary of the 2023 Phase 1C Build Condition Level of Service and Delay is provided on appended **Table AI**.

2025 PHASE 2 NO-BUILD CONDITION

BACKGROUND GROWTH

The 2023 Phase 1 Build Condition traffic volume was grown to a future horizon year of 2025, which is when Phase 2 of the proposed industrial park is expected to be fully constructed. Based on data provided by the NYSDOT Office of Technical Services' Traffic Monitoring Section, the existing traffic volumes at the study intersections were increased by 1.0% annually for two (2) years.

OTHER PLANNED DEVELOPMENT PROJECTS

To evaluate the future traffic conditions, it is important to consider the potential site-generated traffic of other projects that could influence the traffic volume at the study intersections. Other planned development projects include those that are either in the entitlement process or have recently been approved for building permits in proximity to the proposed development. Based on consultations with the Town of Riverhead Planning Department, there are no planned developments in the vicinity that are anticipated to impact Phase 2 build out. It is anticipated that Phase 2 of the subject development will also precede the EPCAL development.

2025 PHASE 2 NO-BUILD TRAFFIC VOLUMES

The background growth rate was applied to the 2023 Phase 1 Build Condition Traffic Volumes to calculate the 2025 Phase 2 No-Build Traffic Volumes for the weekday morning and evening peak hours. The 2025 Phase 2A No-Build Traffic Volumes, 2025 Phase 2B No-Build Traffic Volumes, and 2025 Phase 2C No-Build Traffic Volumes are summarized on appended **Figures 26, 27, and 28**, respectively.

2025 PHASE 2A NO-BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the study intersections and the intersection created by Middle Country Road and the proposed site driveway during the 2025 Phase 2A No-Build Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Under the 2025 Phase 2A No-Build Condition, the turning movements at the unsignalized intersection of Middle Country Road and the proposed site driveway are calculated to operate generally consistent with the findings of the 2023 Phase 1A Build Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Please note that under the 2025 Phase 2A No-Build Condition, the northbound left turn movement of the signalized intersection of Middle Country Road and Edwards Avenue exceeds Level of Service threshold D-E by 5.9 seconds during the weekday morning peak hour. The subject intersection is otherwise calculated to operate generally consistent with the findings of the 2023 Build 1A Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Under the 2025 Phase 2A No-Build Condition, the study intersections are otherwise calculated to operate generally consistent with the findings of the 2023 Phase 1A Build Condition during the study peak hours. A complete summary of the 2025 Phase 2A No-Build Condition Level of Service and Delay is provided on appended **Table A2**.

2025 PHASE 2B NO-BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the study intersections and the intersection created by Middle Country Road and the proposed site driveway during the 2025 Phase 2B No-Build Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Under the 2025 Phase 2B No-Build Condition, the signalized intersection of Middle Country Road and the proposed site driveway are calculated to operate generally consistent with the findings of the 2023 Phase 1B Build Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Please note that under the 2025 Phase 2B No-Build Condition, the northbound left turn movement of the signalized intersection of Middle Country Road and Edwards Avenue exceeds Level of Service threshold D-E by 5.9 seconds during the weekday morning peak hour. The subject intersection is otherwise calculated to operate generally consistent with the findings of the 2023 Build 1B Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Please also note that the turning movements at the unsignalized intersection of Middle Country Road and Fresh Pond Avenue are calculated to continue to operate with capacity issues during the weekday evening and Saturday midday peak hours.

Under the 2025 Phase 2B No-Build Condition, the study intersections are otherwise calculated to operate generally consistent with the findings of the 2023 Phase 1B Build Condition during the study peak hours. A

complete summary of the 2025 Phase 2B No-Build Condition Level of Service and Delay is provided on appended **Table A2**.

2025 PHASE 2C NO-BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the study intersections and the intersection created by Middle Country Road and the proposed site driveway during the 2025 Phase 2C No-Build Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Under the 2025 Phase 2C No-Build Condition, the turning movements at the unsignalized intersection of Middle Country Road and the proposed site driveway are calculated to operate generally consistent with the findings of the 2023 Phase 1C Build Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Please note that under the 2025 Phase 2C No-Build Condition, the northbound left turn movement of the signalized intersection of Middle Country Road and Edwards Avenue exceeds Level of Service threshold D-E by 5.9 seconds during the weekday morning peak hour. The subject intersection is otherwise calculated to operate generally consistent with the findings of the 2023 Build 1C Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Please also note that the turning movements at the unsignalized intersection of Middle Country Road and Fresh Pond Avenue are calculated to continue to operate with capacity issues during the weekday evening and Saturday midday peak hours.

Under the 2025 Phase 2C No-Build Condition, the study intersections are otherwise calculated to operate generally consistent with the findings of the 2023 Phase 1C Build Condition during the study peak hours. A complete summary of the 2025 Phase 2C No-Build Condition Level of Service and Delay is provided on appended **Table A2**.

2025 PHASE 2 BUILD CONDITION

The site-generated traffic volume of the proposed development was estimated to identify the potential impacts of the project. For the purpose of this analysis, a complete project “build out” of Phase 2 is assumed by 2025.

PHASE 2 TRIP GENERATION

Trip generation projections for the proposed industrial park were prepared utilizing the ITE's Trip Generation Manual, 10th Edition. Trip generation rates associated with Land Use 130 “Industrial Park” were

cited for the remaining 186,160 square feet of the total 411,129-square-foot industrial park to be constructed during Phase 2 of the proposed development. **Table 5** provides the weekday morning, weekday evening, and Saturday midday total trip generation volumes associated with Phase 1 and Phase 2 of the proposed development.

TABLE 5 – PROJECTED TRIP GENERATION

			Weekday Morning Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Phase 1	224,969 SF Industrial Park <i>Land Use 130</i>	Passenger Vehicles	68	11	79	16	65	81	28	61	89
		Trucks	5	6	11	3	6	9	4	6	10
		Total	73	17	90	19	71	90	32	67	99
Phase 2	186,160 SF Industrial Park <i>Land Use 130</i>	Passenger Vehicles	56	9	65	12	55	67	23	51	74
		Trucks	4	5	9	3	4	7	3	5	8
		Total	60	14	74	15	59	74	26	56	82
Total	411,129 SF Industrial Park	Passenger Vehicles	124	20	144	28	120	148	51	112	163
		Trucks	9	11	20	6	10	16	7	11	18
		Total	133	31	164	34	130	164	58	123	181

Please note that the applicant intends to tenant Phase 2 with similar tenants as described for Phase 1. The commissary build under Phase 1 would support employees of tenants from both Phases of the development.

TRIP ASSIGNMENT/DISTRIBUTION

The trips generated by Phase 2 of the proposed development were distributed based on the assignments described for Phase 1 of the development. The Site-Generated Truck Volumes, Site-Generated Passenger Vehicle Volumes, and Total Site Generated Traffic Volumes for Phase 2 Access Conditions A, B, and C are illustrated on the appended **Figures 29** through **31**, **Figures 33** through **35**, and **Figures 37** through **39**, respectively.

2025 PHASE 2 BUILD TRAFFIC VOLUMES

The site-generated trips were added to the 2025 Phase 2 No-Build Traffic Volumes to calculate the 2025 Phase 2 Build Traffic Volumes. The 2025 Phase 2A Build Traffic Volumes, 2025 Phase 2B Build Traffic Volumes, and 2025 Phase 2C Build Traffic Volumes and are shown on appended **Figures 32**, **36**, and **40**, respectively.

2025 PHASE 2A BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the 2025 Phase 2A Build Condition during the study peak hours at the proposed site driveway and study intersections.

Under the 2025 Phase 2A Build Condition, the turning movements at the unsignalized intersection of Middle Country Road and the proposed site driveway are calculated to operate generally consistent with the findings of the 2025 Phase 2A No-Build Condition during the study peak hours.

It is important to note that under the 2025 Phase 2A No-Build Condition, the northbound left turn movement of the signalized intersection of Middle Country Road and Edwards Avenue exceeds Level of Service threshold E-F by 15.4 seconds during the weekday morning peak hour. Additionally, please note that the overall intersection is calculated to exceed the LOS C-D threshold by 1.0 second during the weekday morning peak hour, however this change is minimal and is therefore not anticipated to be perceptible to motorists traversing the roadway. The subject intersection is otherwise calculated to operate generally consistent with the findings of the 2025 No-Build 2A Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Under the 2025 Phase 2A Build Condition, the study intersections are otherwise calculated to operate generally consistent with the findings of the 2025 Phase 2A No-Build Condition during the study peak hours. A complete summary of the 2025 Phase 2A Build Condition Level of Service and Delay is provided on appended **Table A2**.

2025 PHASE 2B BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the 2025 Phase 2B Build Condition during the study peak hours at the proposed site driveway and study intersections.

Under the 2025 Phase 2B Build Condition, the turning movements at the signalized intersection of Middle Country Road and the proposed site driveway are calculated to operate generally consistent with the findings of the 2025 Phase 2B No-Build Condition during the study peak hours.

It is important to note that under the 2025 Phase 2B No-Build Condition, the northbound left turn movement of the signalized intersection of Middle Country Road and Edwards Avenue exceeds Level of Service threshold E-F by 15.4 seconds during the weekday morning peak hour. Additionally, please note that the overall intersection is calculated to exceed the LOS C-D threshold by 1.0 second during the weekday morning peak hour, however this change is minimal and is therefore not anticipated to be perceptible to motorists traversing the roadway. The subject intersection is otherwise calculated to operate generally consistent with the findings of the 2025 No-Build 2B Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Please also note that the turning movements at the unsignalized intersection of Middle Country Road and Fresh Pond Avenue are calculated to continue to operate with capacity issues during the weekday evening and Saturday midday peak hours.

Under the 2025 Phase 2B Build Condition, the study intersections are otherwise calculated to operate generally consistent with the findings of the 2025 Phase 2B No-Build Condition during the study peak hours. A complete summary of the 2025 Phase 2B Build Condition Level of Service and Delay is provided on appended **Table A2**.

2025 PHASE 2C BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the 2025 Phase 2C Build Condition during the study peak hours at the proposed site driveway and study intersections.

Under the 2025 Phase 2C Build Condition, the turning movements at the unsignalized intersection of Middle Country Road and the proposed site driveway are calculated to operate generally consistent with the findings of the 2025 Phase 2C No-Build Condition during the study peak hours.

It is important to note that under the 2025 Phase 2C No-Build Condition, the northbound left turn movement of the signalized intersection of Middle Country Road and Edwards Avenue exceeds Level of Service threshold E-F by 15.4 seconds during the weekday morning peak hour. Additionally, please note that the overall intersection is calculated to exceed the LOS C-D threshold by 1.0 second during the weekday morning peak hour, however this change is minimal and is therefore not anticipated to be perceptible to motorists traversing the roadway. The subject intersection is otherwise calculated to operate generally consistent with the findings of the 2025 No-Build 2C Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Please also note that the turning movements at the unsignalized intersection of Middle Country Road and Fresh Pond Avenue are calculated to continue to operate with capacity issues during the weekday evening and Saturday midday peak hours.

Under the 2025 Phase 2C Build Condition, the study intersections are otherwise calculated to operate generally consistent with the findings of the 2025 Phase 2C No-Build Condition during the study peak hours. A complete summary of the 2025 Phase 2C Build Condition Level of Service and Delay is provided on appended **Table A2**.

PHASE 2 BUILD MITIGATION

Please note that under the 2025 Phase 2A, 2B, and 2C Build Conditions, the northbound left turn movement at the signalized intersection of Middle Country Road and Edwards Avenue is to operate with capacity constraints during the weekday morning peak hour. In order to provide a potential mitigation measure, Stonefield recommends minor signal timing modifications for the NYSDOT's consideration. The following modification would mitigate the calculated increase in delay and create more favorable operating conditions in the 2025 Phase 2A, 2B, and 2C Build Conditions.

- ◆ Weekday Morning Peak Hour: Reduction in cycle length from 113 seconds to 90 seconds, with a maximum split of 59 seconds allocated to the eastbound and westbound Middle Country Road approaches and a maximum split of 31 seconds allocated to the northbound and southbound Edwards Avenue approaches. It should be noted that under the proposed mitigation the eastbound right turn movement would exceed the LOS C-D threshold with a 12.9 second increase in delay from the 2025 Phase 2 Build Conditions. As discussed, the NYSDOT is presently in the design phase for improvements at the subject intersection. It should be noted that Stonefield is offering a potential signal timing mitigation; however, it is possible that the State accounts for additional capacity and the calculated increase in delay is never realized.

A complete summary of the 2025 Mitigation Build Level of Service and Delay for Conditions A, B and C is provided on appended **Table A3**.

2025 MAXIMUM BUILD-OUT SCENARIO

In addition to analysis of Phase 1 and Phase 2 of the proposed development, the site-generated traffic volume of the most intense trip generating uses permitted on the subject property under the current zoning was estimated to identify the potential impacts of the "maximum build-out" scenario. For the purpose of this analysis, a review of the Maximum Build Out Plan with As-Of-Right Uses prepared by Key Civil Engineering, dated April 2, 2021, was performed, and complete project "build out" of the maximum build-out scenario is assumed by 2025.

TRIP GENERATION

Please note that Phase 1 of the maximum build-out scenario is consistent with the Phase 1 build-out proposed for the proposed development. Trip generation projections for the Phase 2 maximum build-out scenario were prepared utilizing the ITE's Trip Generation Manual, 10th Edition. Trip generation rates associated with Land Use 495 "Recreational Community Center," Land Use 860 "Wholesale Market," Land Use 925 "Drinking Place," and Land Use 140 "Manufacturing" were cited for the 50,990-square-foot recreation

center, 48,704-square-foot wholesale space, and 48,704-square-foot indoor manufacturing/commercial brewery space, respectively. **Table 6** provides the weekday morning, weekday evening, and Saturday midday total trip generation volumes associated with Phase 1 and Phase 2 of the maximum build-out scenario.

TABLE 6 – PROJECTED TRIP GENERATION

			Weekday Morning Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Phase 1	224,969 SF Industrial Park <i>Land Use 130</i>	Passenger Vehicles	68	11	79	16	65	81	28	61	89
		Trucks	5	6	11	3	6	9	4	6	10
		Total	73	17	90	19	71	90	32	67	99
Phase 2 (Maximum Build-Out)	50,990 SF Commercial Sports and Recreation Facility <i>Land Use 495</i>	Total	59	31	90	55	63	118	29	26	55
	48,704 SF Wholesale Business <i>Land Use 860</i>	Passenger Vehicles	17	9	26	42	38	80	41	38	79
		Trucks	1	0	1	3	3	6	4	3	7
		Total	18	9	27	45	41	86	45	41	86
	48,704 SF Indoor Manufacturing/ Commercial Brewery <i>Land Uses 140 and 925</i>	Passenger Vehicles	19	5	24	43	37	80	70	42	112
		Trucks	2	1	3	3	3	6	4	3	7
		Total	21	6	27	46	40	86	74	45	119
Total	Maximum Build-Out Scenario	Passenger Vehicles	163	56	219	156	203	359	168	167	335
		Trucks	8	7	15	9	12	21	12	12	24
		Total	171	63	234	165	215	380	180	179	359

The maximum build-out scenario is anticipated to generate a total of 234 trips during the weekday morning peak hour, 380 trips during the weekday evening peak hour, and 359 trips during the Saturday midday peak hour. The truck trip generation was evaluated with respect to data published within the ITE's Trip Generation Manual, 10th Edition Supplement, for Land Use 140 "Manufacturing" and applied to the wholesale and indoor manufacturing/commercial brewery projected trips. According to Appendix C, 8% of site-generated traffic during the weekday morning peak hour and 7% of site-generated traffic during the weekday evening peak hour is comprised of trucks. Please note that the ITE does not provide data for truck trip generation during the Saturday midday peak hour. However, it is assumed that a portion of the Saturday midday peak hour traffic

would be comprised of trucks. Therefore, the truck percentage for the weekday evening peak hour was applied to the Saturday midday peak hour.

Table 7 provides a net comparison of the proposed Phase 2 trip generation and maximum build-out scenario Phase 2 trip generation volumes. Please note that Phase 1 of the maximum build-out scenario is consistent with the Phase 1 build-out proposed for the proposed development and is therefore not applicable when considering the net trip increment.

TABLE 7 – PHASE 2 TRIP GENERATION COMPARISON

	Land Use	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Phase 2	186,160 SF Industrial Park <i>Land Use 130</i>	60	14	74	15	59	74	26	56	82
Phase 2 (Maximum Build-Out)	50,990 SF Commercial Sports and Recreational Facility <i>Land Use 495</i>	59	31	90	55	63	118	29	26	55
	48,704 SF Wholesale Business <i>Land Use 860</i>	18	9	27	45	41	86	45	41	86
	48,704 SF Indoor Manufacturing/Commercial Brewery <i>Land Uses 140 and 925</i>	21	6	27	46	40	86	74	45	119
NET		+38	+32	+70	+131	+85	+216	+122	+56	+178

TRIP ASSIGNMENT/DISTRIBUTION

The trips generated by Phase 1 and Phase 2 of the maximum build-out scenario were distributed based on the assignments described for Phase 1 and Phase 2 of the proposed development. The Site-Generated Truck Volumes, Site-Generated Passenger Vehicle Volumes, and Total Site Generated Traffic Volumes for the maximum build-out scenario for Access Conditions A, B and C, which are herein referred to as Conditions D, E, and F, respectively, are illustrated on the appended **Figures 41** through **43**, **Figures 45** through **47**, and **Figures 49** through **51**, respectively.

2025 MAXIMUM BUILD-OUT TRAFFIC VOLUMES

The site-generated trips were added to the 2025 Phase 2 No-Build Traffic Volumes to calculate the 2025 Maximum Build-Out Scenario Traffic Volumes. The 2025 Phase 2D Build Traffic Volumes, 2025 Phase 2E Build

Traffic Volumes, and 2025 Phase 2F Build Traffic Volumes and are shown on appended **Figures 44, 48, and 52**, respectively.

PHASE 2D BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the 2025 Phase 2D Build Condition during the study peak hours at the proposed site driveway and study intersections.

Under the 2025 Phase 2D Build Condition, the northbound left movement at the unsignalized intersection of Middle Country Road and the proposed site driveway exceeds the LOS C-D threshold during the weekday evening peak hour. The turning movements at the subject intersection are otherwise calculated to operate generally consistent with the findings of the 2025 Phase 2A No-Build Condition during the study peak hours.

The signalized intersection of Middle Country Road and Fresh Pond Avenue is calculated to exceed the overall LOS A-B threshold during the weekday evening and Saturday midday peak hours. The subject intersection is otherwise calculated to operate generally consistent with the findings of the 2025 Phase 2A No-Build Condition during the study peak hours.

The signalized intersection of Middle Country Road and Edwards Avenue is calculated to exceed the overall LOS C-D threshold during the weekday morning peak hour and the overall LOS B-C threshold during the weekday evening and Saturday midday peak hours. It is important to note that the northbound left turn movement of the subject intersection increases in delay to a Level of Service F, E, and D during the weekday morning, weekday evening, and Saturday midday peak hours, respectively. Additionally, please note that the westbound left turn movement of the subject intersection is calculated to exceed the LOS D-E threshold during the weekday morning peak hour and the LOS C-D threshold during the Saturday midday peak hour. The subject intersection is otherwise calculated to operate generally consistent with the findings of the 2025 No-Build 2A Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Under the 2025 Phase 2D Build Condition, the study intersections are otherwise calculated to operate generally consistent with the findings of the 2025 Phase 2A No-Build Condition during the study peak hours. A complete summary of the 2025 Phase 2D Build Condition Level of Service and Delay is provided on appended **Table A3**.

PHASE 2E BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the 2025 Phase 2E Build Condition during the study peak hours at the proposed site driveway and study intersections.

Under the 2025 Phase 2E Build Condition, the signalized intersection of Middle Country Road and the proposed site driveway are calculated to exceed the overall LOS A-B threshold during the weekday morning peak hour. Further, the overall intersection is calculated to increase from LOS A to LOS D during the weekday evening peak hour and is calculated to increase from LOS A to LOS C during the weekday evening peak hour. It is also important to note that the westbound left turn movement is calculated to increase from LOS A during all study hours to LOS B, LOS F, and LOS C during the weekday morning, weekday evening, and Saturday midday peak hours, respectively. The subject intersection is otherwise calculated to operate generally consistent with the findings of the 2025 Phase 2B No-Build Condition.

The signalized intersection of Middle Country Road and Edwards Avenue is calculated to exceed the overall LOS C-D threshold during the weekday morning peak hour and the overall LOS B-C threshold during the weekday evening and Saturday midday peak hours. It is important to note that the northbound left turn movement of the subject intersection increases in delay to a Level of Service F, E, and D during the weekday morning, weekday evening, and Saturday midday peak hours, respectively. Additionally, please note that the westbound left movement of the subject intersection is calculated to exceed the LOS D-E threshold during the weekday morning peak hour and the LOS C-D threshold during the Saturday midday peak hour. The subject intersection is otherwise calculated to operate generally consistent with the findings of the 2025 No-Build 2B Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Please also note that the turning movements at the unsignalized intersection of Middle Country Road and Fresh Pond Avenue are calculated to continue to operate with capacity issues during the weekday evening and Saturday midday peak hours.

Under the 2025 Phase 2E Build Condition, the study intersections are otherwise calculated to operate generally consistent with the findings of the 2025 Phase 2B No-Build Condition during the study peak hours. A complete summary of the 2025 Phase 2E Build Condition Level of Service and Delay is provided on appended **Table A3**.

PHASE 2F BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the 2025 Phase 2F Build Condition during the study peak hours at the proposed site driveway and study intersections.

Under the 2025 Phase 2F Build Condition, the northbound left turn movement at the unsignalized intersection of Middle Country Road and the proposed site driveway is calculated to increase from LOS C to LOS F during the weekday evening peak hour and from LOS C to LOS E during the Saturday midday peak hour.

The turning movements at the subject intersection are otherwise calculated to operate generally consistent with the findings of the 2025 Phase 2C No-Build Condition during the study peak hours.

The signalized intersection of Middle Country Road and Edwards Avenue is calculated to exceed the overall LOS C-D threshold during the weekday morning peak hour and the overall LOS B-C threshold during the weekday evening and Saturday midday peak hours. It is important to note that the northbound left turn movement of the subject intersection increases in delay to a Level of Service F, E, and D during the weekday morning, weekday evening, and Saturday midday peak hours, respectively. Additionally, please note that the westbound left movement of the subject intersection is calculated to exceed the LOS D-E threshold during the weekday morning peak hour and the LOS C-D threshold during the Saturday midday peak hour. The subject intersection is otherwise calculated to operate generally consistent with the findings of the 2025 No-Build 2C Condition during the weekday morning, weekday evening, and Saturday midday peak hours.

Please also note that the turning movements at the unsignalized intersection of Middle Country Road and Fresh Pond Avenue are calculated to continue to operate with capacity issues during the weekday evening and Saturday midday peak hours.

Under the 2025 Phase 2F Build Condition, the study intersections are otherwise calculated to operate generally consistent with the findings of the 2025 Phase 2C No-Build Condition during the study peak hours. A complete summary of the 2025 Phase 2F Build Condition Level of Service and Delay is provided on appended **Table A3**.

ROUNABOUT ANALYSIS

In addition to Site Access Conditions A, B, and C and the Maximum Build-Out Scenario Conditions D, E, and F, a Level of Service analysis was prepared to examine the aforementioned alternative roundabout access condition, referred to as “Condition G” herein. Under Condition G, the existing unsignalized two (2)-way stop-controlled intersection of Middle Country Road and Fresh Pond Avenue is replaced with a typical one (1)-lane roundabout intersection which provides one (1) shared left-turn/through/right-turn lane throughout at each approach.

TRIP ASSIGNMENT/DISTRIBUTION AND TRAFFIC VOLUMES

Please note that per consultations with the NYSDOT, which maintains jurisdiction of Middle Country Road, a roundabout intersection would not likely be feasible at the subject location due to the large area of land donations required for construction and the existing characteristics of the corridor. Therefore, a complete build-out is not included in the roundabout analysis. However, for comparison purposes, the roundabout analysis includes traffic volumes and trip distributions previously utilized for the 2025 Phase 2A Condition,

which is a conservative analysis of the maximum number of vehicles projected at the study intersection associated with the proposed development program. Truck routing and passenger vehicle routing distributions for Condition G are illustrated on the appended **Figures 53 and 54**. The Site-Generated Truck Volumes, Site-Generated Passenger Vehicle Volumes, and Total Site Generated Traffic Volumes for the Phase 1G Condition are illustrated on the appended **Figures 55 through 57**, respectively, and the 2025 Phase 1G Build Traffic Volumes are shown on appended **Figure 58**. The Site-Generated Truck Volumes, Site-Generated Passenger Vehicle Volumes, and Total Site Generated Traffic Volumes for the Phase 2G Condition are illustrated on the appended **Figures 59 through 61**, respectively, and the 2025 Phase 1G Build Traffic Volumes are shown on appended **Figure 62**.

PHASE 2G BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the 2025 Phase 2G Build Condition during the study peak hours at the study intersection of Middle Country Road and Fresh Pond Avenue. **Table 8** provides a summary of the Level of Service and Delay values at the roundabout intersection during the weekday morning, weekday evening, and Saturday midday peak hours.

Under the 2025 Phase 2G Build Condition, all the turning movements at the roundabout intersection of Middle Country Road and Fresh Pond Avenue are calculated to operate at Level of Service B or better during the weekday morning and Saturday midday peak hours and Level of Service C or better during the weekday evening peak hour.

COMPARATIVE LEVEL OF SERVICE (DELAY) TABLE

MIDDLE COUNTRY ROAD & FRESH POND AVENUE

EB (Eastbound) and WB (Westbound) approaches are the Middle Country Road approaches

NB (Northbound) approach is the Tractor Supply Co. driveway approach

SB (Southbound) approach is the Fresh Pond Avenue approach

X (n) = Level of Service (seconds of delay)

TABLE 8 – PHASE 2G BUILD CONDITION

Lane Group	Weekday Morning Peak Hour	Weekday Evening Peak Hour	Saturday Midday Peak Hour
EB Left/Through/Right	B (14.9)	A (9.4)	B (11.8)
WB Left/Through/Right	A (6.9)	C (18.4)	B (12.7)
NB Left/Through/Right	A (9.3)	A (7.4)	A (8.5)
SB Left/Through/Right	A (5.4)	A (9.5)	A (8.2)

Per consultations with the NYSDOT, which maintains jurisdiction of Middle Country Road, a roundabout intersection would not likely be feasible at the subject location due to the large area of land donations required for construction and the existing characteristics of the corridor.

PROJECTED CONSTRUCTION TRIP GENERATION

Trip generation associated with site construction has been approximated to assess the short-term impacts of the project. Please note that the project will be constructed over 3 phases – Phase 1A, Phase 1B, and Phase 2. Trip volumes have been projected for each phase, as detailed below. Trips are associated with the following construction activities: removal of material associated with clearing and grubbing, removal of topsoil, transporting of fill material, construction equipment delivery, and debris removal. It is important to note that the roadways in the site vicinity, such as Middle Country Road, Edwards Avenue, etc. permit truck traffic. Any carting of debris or deliveries of material and equipment via heavy vehicle will be required to comply with State and local regulations on truck traffic.

Phase 1A includes the construction of the recharge basin and associated drywell network in the southerly extent of the property and also includes the clearing and grading of the temporary access road. Phase 1A is anticipated to be completed over 6 months. Phase 1A is projected to generate: 30 trucks for removal of material associated with clearing and grubbing, 1,917 trucks associated with the removal of topsoil, and approximately 10 construction equipment deliveries. This equates to approximately 10-15 trucks per day.

Phase 1B includes the clearing and grading of the northern half of the site to construct the improvements associated with buildings 1, 2, 3, and 4. Phase 1B is anticipated to be completed over 18 months. Phase 1B is projected to generate: 35 trucks for removal of material associated with clearing and grubbing, approximately 10 construction equipment deliveries, and 75-90 roll off dumpsters associated with debris removal. Note that the cut material from Phase 1 will be stored within Phase 2 area and used for Phase 2 construction. Therefore, no construction traffic is associated with the Phase 1 cut material. This equates to approximately 1-2 trucks per week.

Phase 2 includes the clearing and grading of the remaining southern half of the site to construct improvements associated with buildings 5, 6, 7, and 8. Phase 2 is anticipated to be completed over 18 months. Phase 2 is projected to generate: 13 trucks for removal of material associated with clearing and grubbing, 309 trucks associated with the removal of topsoil, 314 trucks associated with exporting cut material, approximately 10 construction equipment deliveries, and 62-75 roll off dumpsters associated with debris removal. This equates to approximately 2 trucks per day.

SITE CIRCULATION/PARKING SUPPLY

A review was conducted of the proposed industrial park using the Site Plan prepared by Key Civil Engineering, last revised December 15, 2021. In completing this review, particular attention was focused on the site access, circulation, and parking supply.

Access is proposed via one (1) driveway along Middle Country Road. Construction of the site will be completed in two phases. Phase 1 of the project will be constructed on the northern portion of the subject property and will consist of four (4) buildings to be occupied by various tenants with a total of 224,969 square feet of gross floor area and a 1,500-square-foot commissary located to the north of Building 2 as an ancillary offering intended to serve employees of the various tenants. Phase 2 of the project will be constructed on the southern portion of the subject property and will consist of an additional four (4) buildings with a total of 186,160 square feet of gross floor area. The complete build-out will result in a 411,129-square-foot industrial park with anticipated tenants to include warehouse, wholesale, and indoor manufacturing facilities. Each of the buildings will be subdivided into spaces to be occupied by various tenants; the buildings constructed on the westerly side of the site will each provide space for ten (10) tenants and the buildings constructed on the easterly side of the property will each provide space for five (5) to six (6) tenants. The site will provide a total of 101 loading spaces located on the outer extents of the property, between the lot lines and the buildings. Passenger vehicle parking will be provided in the central portion of the property, between the two rows of buildings. The parking field will be separated by a 26-foot, two (2)-way drive aisle. Approximately 40 feet of landscape buffer will be provided along the eastern and western borders of the subject property.

The Town of Riverhead ordinance requires one (1) parking stall per 400 square feet of gross floor area for a manufacturing establishment and one (1) parking stall per 1,000 square feet up to 5,000 square feet of gross floor area plus one (1) parking stall per additional 10,000 square feet of gross floor area for a warehouse. For both phases of the proposed industrial park, this equates to 324 required spaces. The site would provide 326 total parking spaces, inclusive of sixteen (16) ADA accessible parking spaces, which meets the parking requirement. The spaces would be 10 feet wide by 20 feet deep in accordance with the Town ordinance and industry standards. Please note that the 1,500-square-foot commissary is excluded from the parking requirement calculation as it is an ancillary use to the industrial park and is anticipated to be patronized by employees of the same.

CONCLUSIONS

This report was prepared to examine the potential traffic impact of the proposed industrial park. The analysis findings, which have been based on industry-standard guidelines, indicate that Phase I of the proposed development would not have a significant impact on the traffic operations of the adjacent roadway network. Phase 2 of the proposed development would not have a significant impact on the traffic operations of the adjacent roadway network with minor signal timing modifications to the nearby signalized intersection of Middle Country Road and Edwards Avenue; however, it is important to note that per consultations with NYSDOT, the subject intersection will undergo roadway improvements which may proactively mitigate any increases in delay which are calculated within the analysis contained. The site driveway and on-site layout have been designed to provide for effective access to and from the subject property and access condition. Access Conditions A, B, and C are anticipated to provide acceptable Levels of Service at the subject site driveway while generally maintaining or improving the existing roadway conditions within the study network. Based on the Town of Riverhead Zoning Ordinance, the parking supply would be sufficient to support this project.

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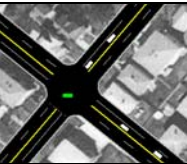
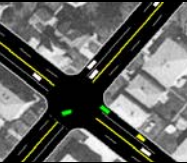
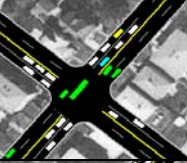
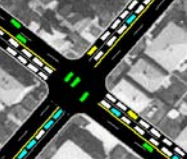
TECHNICAL APPENDIX

LEVEL OF SERVICE/AVERAGE CONTROL DELAY CRITERIA

LEVEL OF SERVICE /AVERAGE CONTROL DELAY CRITERIA

The ability of a roadway to effectively accommodate traffic demand is determined through an assessment of the volume-to-capacity ratio, delay and Level of Service of the lane group and/or intersection. The volume-to-capacity ratio is the ratio of traffic flow rate to capacity for a given transportation facility. As defined within the Highway Capacity Manual, 6th Edition (HCM), intersection delay is the total additional travel time experienced by drivers, passengers, or pedestrians as a result of control measures and interaction with other users of the facility, divided by the volume departing from the corresponding cross section of the facility. Level of service is a qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience.

For an unsignalized intersection, LOS A indicates operations with delay less than 10 seconds per vehicle, while LOS F describes operations with delay in excess of 50 seconds per vehicle. For a signalized intersection, LOS A indicates operations with delay less than 10 seconds per vehicle and LOS F denotes operations with delay in excess of 80 seconds per vehicle.

	Level Of Service (LOS)	Signalized Delay Range (average control delay in sec/veh)	Unsignalized Delay Range (average control delay in sec/veh)
	A	≤ 10	≤ 10
	B	> 10 and ≤ 20	> 10 and ≤ 15
	C	> 20 and ≤ 35	> 15 and ≤ 25
	D	> 35 and ≤ 55	> 25 and ≤ 35
	E	> 55 and ≤ 80	> 35 and ≤ 50
	F	> 80	> 50

Source: Highway Capacity Manual, 6th Edition

COMPARATIVE LEVEL OF SERVICE (DELAY) TABLES

STONEFIELD

Table A1
Comparative Level of Service (Delay) Tables
X (n) = Level of Service (seconds of delay)

Intersection	Lane Group	2020 Existing Condition			2023 No-Build Condition Phase I			2023 Build Condition A - Phase I			2023 Build Condition B - Phase I			2023 Build Condition C - Phase I		
		AM Peak LOS (Delay)	PM Peak LOS (Delay)	SAT Peak LOS (Delay)	AM Peak LOS (Delay)	PM Peak LOS (Delay)	SAT Peak LOS (Delay)	AM Peak LOS (Delay)	PM Peak LOS (Delay)	SAT Peak LOS (Delay)	AM Peak LOS (Delay)	PM Peak LOS (Delay)	SAT Peak LOS (Delay)	AM Peak LOS (Delay)	PM Peak LOS (Delay)	SAT Peak LOS (Delay)
Middle Country Road (E/W) & Burman Boulevard (N/S)	EB Through	A (3.5)	A (4.0)	A (3.0)	A (3.7)	A (4.2)	A (3.2)	A (3.7)	A (4.3)	A (3.2)	A (3.7)	A (4.3)	A (3.2)	A (3.7)	A (4.3)	A (3.2)
	EB Right	A (2.5)	A (3.1)	A (2.2)	A (2.6)	A (3.3)	A (2.2)	A (2.6)	A (3.3)	A (2.2)	A (2.6)	A (3.3)	A (2.2)	A (2.6)	A (3.3)	A (2.2)
	WB Left	A (4.2)	A (4.5)	A (3.3)	A (4.5)	A (4.9)	A (3.5)	A (4.6)	A (4.9)	A (3.5)	A (4.6)	A (4.9)	A (3.5)	A (4.6)	A (4.9)	A (3.5)
	WB Through	A (3.0)	A (4.8)	A (3.0)	A (3.1)	A (5.1)	A (3.2)	A (3.1)	A (5.2)	A (3.2)	A (3.1)	A (5.2)	A (3.2)	A (3.1)	A (5.2)	A (3.2)
	NB Left	D (38.3)	D (38.2)	D (36.0)	D (38.2)	D (38.0)	D (35.9)	D (38.2)	D (38.0)	D (35.9)	D (38.2)	D (38.0)	D (35.9)	D (38.2)	D (38.0)	D (35.9)
	NB Right	D (36.7)	D (41.0)	D (36.1)	D (36.8)	D (41.1)	D (36.1)	D (36.8)	D (41.1)	D (36.1)	D (36.8)	D (41.1)	D (36.1)	D (36.8)	D (41.1)	D (36.1)
	Overall	A (5.8)	B (12.6)	A (4.8)	A (6.0)	B (12.8)	A (5.0)	A (6.0)	B (12.6)	A (5.0)	A (6.0)	B (12.6)	A (5.0)	A (6.0)	B (12.6)	A (5.0)
Middle Country Road (E/W) & Edwards Avenue (N/S)	EB Left				B (11.4)	C (29.1)	B (19.5)	B (11.4)	C (29.8)	C (30.5)	B (11.4)	C (29.8)	C (30.5)	B (11.4)	C (29.8)	C (30.5)
	EB Left/Through/Right	B (17.2)	B (10.2)	B (12.1)	C (22.1)	B (12.0)	B (11.4)	C (29.8)	B (13.3)	B (13.2)	C (29.8)	B (13.3)	B (13.2)	C (29.8)	B (13.3)	B (13.2)
	WB Left				D (38.2)	B (18.4)	B (18.7)	D (48.7)	C (21.3)	C (22.4)	D (48.7)	C (21.3)	C (22.4)	D (48.7)	C (21.3)	C (22.4)
	WB Left/Through/Right	A (8.6)	B (13.4)	B (12.1)	A (8.9)	B (16.2)	B (11.5)	B (10.9)	B (17.2)	B (12.5)	B (10.9)	B (17.2)	B (12.5)	B (10.9)	B (17.2)	B (12.5)
	NB Left				D (39.8)	C (31.1)	C (29.5)	D (53.4)	C (32.6)	C (29.7)	D (53.4)	C (32.6)	C (29.7)	D (53.4)	C (32.6)	C (29.7)
	NB Left/Through/Right	C (30.7)	C (27.1)	C (27.2)	C (29.7)	C (21.7)	C (25.3)	C (33.3)	C (22.3)	C (24.5)	C (33.3)	C (22.3)	C (24.5)	C (33.3)	C (22.3)	C (24.5)
	SB Left				C (34.4)	C (24.5)	C (30.1)	D (38.9)	C (25.2)	C (29.3)	D (38.9)	C (25.2)	C (29.3)	D (38.9)	C (25.2)	C (29.3)
Middle Country Road (E/W) & Fresh Pond Avenue (N/S)	SB Left/Through/Right	C (28.4)	C (25.1)	C (24.0)	C (30.8)	C (23.2)	C (23.6)	C (34.5)	C (23.8)	C (23.0)	C (34.5)	C (23.8)	C (23.0)	C (34.5)	C (23.8)	C (23.0)
	Overall	B (19.2)	B (15.8)	B (16.1)	C (30.8)	B (17.6)	B (16.0)	C (29.7)	B (18.7)	B (16.9)	C (29.7)	B (18.7)	B (16.9)	C (29.7)	B (18.7)	B (16.9)
	EB Left	A (8.0)	A (9.7)	A (9.2)	A (8.1)	A (9.8)	A (9.3)				A (8.1)	A (9.9)	A (9.4)	A (8.1)	A (9.9)	A (9.4)
	EB Left/Through/Right							A (6.5)	A (5.6)	A (6.5)						
	WB Left	A (9.7)	A (8.8)	A (9.0)	A (9.9)	A (9.0)	A (9.3)	A (3.1)	A (3.3)	A (3.6)	A (9.9)	A (9.0)	A (9.3)	A (9.9)	A (9.0)	A (9.3)
	WB Through/Right							A (3.8)	A (7.7)	A (5.9)						
	NB Left	D (28.9)	F (69.9)	F (60.1)	D (33.0)	F (124.4)	F (120.0)	D (36.3)	D (35.1)	D (35.1)	D (34.1)	F (147.3)	F (130.0)	D (33.9)	F (135.0)	F (123.2)
LIE Off-Ramp (N) & Edwards Avenue	NB Through/Right	C (15.6)	C (19.5)	C (19.6)	C (16.3)	C (20.1)	C (20.8)	D (36.2)	D (36.0)	D (36.4)	C (16.6)	C (20.6)	C (21.2)	C (16.6)	C (20.2)	C (20.8)
	SB Left/Through/Right	C (17.1)	F (53.4)	E (43.2)	C (19.1)	F (76.6)	F (68.6)	D (39.1)	D (35.9)	D (36.4)	C (23.2)	F (94.3)	F (88.8)	C (23.1)	F (89.0)	F (82.7)
	Overall							A (7.9)	A (9.4)	A (9.2)						
	NB Left	A (9.1)	A (8.7)	B (12.1)	A (9.2)	A (8.7)	B (12.7)	A (9.4)	A (8.9)	B (13.1)	A (9.4)	A (8.9)	B (13.1)	A (9.4)	A (8.9)	B (13.1)
	NB Right	A (8.5)	A (8.4)	B (10.2)	A (8.5)	A (8.4)	B (10.3)	A (8.5)	A (8.4)	B (10.3)	A (8.5)	A (8.4)	B (10.3)	A (8.5)	A (8.4)	B (10.3)
	WB Left							A (9.5)	A (9.0)	A (9.3)				A (10.0)	A (9.4)	A (9.7)
	WB Left/Through										A (3.2)	A (8.2)	A (5.9)			
Middle Country Road & Site Driveway	EB Through/Right										A (5.1)	A (5.4)	A (5.8)			
	NB Left							C (16.8)	C (21.2)	C (19.4)	D (36.0)	C (34.9)	C (34.9)	C (18.5)	C (23.5)	C (21.3)
	NB Right							C (16.8)	B (14.7)	C (15.6)	D (41.4)	D (37.2)	D (37.2)	C (16.8)	B (14.7)	C (15.6)
	Overall										A (4.9)	A (8.3)	A (7.2)			

STONEFIELD

Table A2
Comparative Level of Service (Delay) Tables
X (n) = Level of Service (seconds of delay)

Intersection	Lane Group	2025 No-Build Condition A - Phase 2			2025 No-Build Condition B - Phase 2			2025 No-Build Condition C - Phase 2			2025 Build Condition A - Phase 2			2025 Build Condition B - Phase 2			2025 Build Condition C - Phase 2		
		AM Peak LOS (Delay)	PM Peak LOS (Delay)	SAT Peak LOS (Delay)	AM Peak LOS (Delay)	PM Peak LOS (Delay)	SAT Peak LOS (Delay)	AM Peak LOS (Delay)	PM Peak LOS (Delay)	SAT Peak LOS (Delay)	AM Peak LOS (Delay)	PM Peak LOS (Delay)	SAT Peak LOS (Delay)	AM Peak LOS (Delay)	PM Peak LOS (Delay)	SAT Peak LOS (Delay)	AM Peak LOS (Delay)	PM Peak LOS (Delay)	SAT Peak LOS (Delay)
Middle Country Road (E/W) & Burman Boulevard (N/S)	EB Through	A (3.8)	A (4.3)	A (3.2)	A (3.8)	A (4.3)	A (3.2)	A (3.8)	A (4.3)	A (3.2)	A (3.9)	A (4.3)	A (3.3)	A (3.9)	A (4.3)	A (3.3)	A (3.9)	A (4.3)	A (3.3)
	EB Right	A (2.6)	A (3.3)	A (2.2)	A (2.6)	A (3.3)	A (2.2)	A (2.6)	A (3.3)	A (2.2)	A (2.6)	A (3.3)	A (2.2)	A (2.6)	A (3.3)	A (2.2)	A (2.6)	A (3.3)	A (2.2)
	WB Left	A (4.7)	A (5.0)	A (3.6)	A (4.7)	A (5.0)	A (3.6)	A (4.7)	A (5.0)	A (3.6)	A (4.8)	A (5.0)	A (3.6)	A (4.8)	A (5.0)	A (3.6)	A (4.8)	A (5.0)	A (3.6)
	WB Through	A (3.1)	A (5.4)	A (3.3)	A (3.1)	A (5.4)	A (3.3)	A (3.1)	A (5.4)	A (3.3)	A (3.1)	A (5.5)	A (3.3)	A (3.1)	A (5.5)	A (3.3)	A (3.1)	A (5.5)	A (3.3)
	NB Left	D (38.3)	D (38.0)	D (35.9)	D (38.3)	D (38.0)	D (35.9)	D (38.3)	D (38.0)	D (35.9)	D (38.3)	D (38.0)	D (35.9)	D (38.3)	D (38.0)	D (35.9)	D (38.3)	D (38.0)	D (35.9)
	NB Right	D (36.8)	D (41.1)	D (36.1)	D (36.8)	D (41.1)	D (36.1)	D (36.8)	D (41.1)	D (36.1)	D (36.8)	D (41.1)	D (36.1)	D (36.8)	D (41.1)	D (36.1)	D (36.8)	D (41.1)	D (36.1)
	Overall	A (6.1)	B (12.7)	A (5.0)	A (6.1)	B (12.7)	A (5.0)	A (6.1)	B (12.7)	A (5.0)	A (6.1)	B (12.7)	A (5.0)	A (6.1)	B (12.6)	A (5.0)	A (6.1)	B (12.6)	A (5.0)
Middle Country Road (E/W) & Edwards Avenue (N/S)	EB Left	B (13.7)	C (32.9)	C (22.3)	B (13.7)	C (32.9)	C (22.3)	B (13.7)	C (32.9)	C (22.3)	B (13.6)	C (34.5)	C (23.6)	B (13.6)	C (34.5)	C (23.6)	B (13.6)	C (34.5)	C (23.6)
	EB Left/Through/Right	C (30.9)	B (13.9)	B (13.8)	C (30.9)	B (13.9)	B (13.8)	C (30.9)	B (13.9)	B (13.8)	C (32.5)	B (15.3)	B (15.8)	C (32.5)	B (15.3)	B (15.8)	C (32.5)	B (15.3)	B (15.8)
	WB Left	D (50.6)	C (22.6)	C (23.8)	D (50.6)	C (22.6)	C (23.8)	D (50.6)	C (22.6)	C (23.8)	D (52.4)	C (25.8)	C (27.6)	D (52.4)	C (25.8)	C (27.6)	D (52.4)	C (25.8)	C (27.6)
	WB Left/Through/Right	B (10.7)	B (18.8)	B (13.0)	B (10.7)	B (18.8)	B (13.0)	B (10.7)	B (18.8)	B (13.0)	B (10.6)	B (19.9)	B (13.8)	B (10.6)	B (19.9)	B (13.8)	B (10.6)	B (19.9)	B (13.8)
	NB Left	E (60.9)	C (35.0)	C (29.8)	E (60.9)	C (35.0)	C (29.8)	E (60.9)	C (35.0)	C (29.8)	F (95.4)	D (36.6)	C (30.0)	F (95.4)	D (36.6)	C (30.0)	F (95.4)	D (36.6)	C (30.0)
	NB Left/Through/Right	C (34.9)	C (23.6)	C (24.4)	C (34.9)	C (23.6)	C (24.4)	C (34.9)	C (23.6)	C (24.4)	D (35.3)	C (24.2)	C (23.8)	D (35.3)	C (24.2)	C (23.8)	D (35.3)	C (24.2)	C (23.8)
	SB Left	D (40.9)	C (26.8)	C (29.4)	D (40.9)	C (26.8)	C (29.4)	D (40.9)	C (26.8)	C (29.4)	D (41.3)	C (27.5)	C (28.9)	D (41.3)	C (27.5)	C (28.9)	D (41.3)	C (27.5)	C (28.9)
Middle Country Road (E/W) & Fresh Pond Avenue (N/S)	SB Left/Through/Right	D (36.4)	C (25.3)	C (22.9)	D (36.4)	C (25.3)	C (22.9)	D (36.4)	C (25.3)	C (22.9)	D (36.8)	C (25.9)	C (22.4)	D (36.8)	C (25.9)	C (22.4)	D (36.8)	C (25.9)	C (22.4)
	Overall	C (31.2)	B (20.0)	B (17.3)	C (31.2)	B (20.0)	B (17.3)	C (31.2)	B (20.0)	B (17.3)	D (36.0)	C (21.1)	B (18.3)	D (36.0)	C (21.1)	B (18.3)	D (36.0)	C (21.1)	B (18.3)
	EB Left				A (8.1)	B (10.0)	A (9.5)	A (8.1)	B (10.0)	A (9.5)				A (8.1)	B (10.1)	A (9.6)	A (8.1)	B (10.1)	A (9.6)
	EB Left/Through/Right	A (6.6)	A (5.7)	A (6.7)							A (6.9)	A (5.7)	A (6.8)						
	WB Left	A (3.1)	A (3.3)	A (3.6)	B (10.0)	A (9.1)	A (9.4)	B (10.0)	A (9.1)	A (9.4)	A (3.6)	A (3.4)	A (3.8)	B (10.1)	A (9.1)	A (9.4)	B (10.1)	A (9.1)	A (9.4)
	WB Through/Right	A (3.9)	A (7.9)	A (6.1)							A (3.9)	A (8.1)	A (6.1)						
	NB Left	D (36.3)	D (35.1)	D (35.1)	E (35.4)	F (166.9)	F (145.8)	E (35.4)	F (151.9)	F (137.5)	D (36.4)	D (35.3)	D (35.5)	E (36.4)	F (172.5)	F (155.0)	E (36.2)	F (161.6)	F (145.8)
LIE Off-Ramp (N) & Edwards Avenue	NB Through/Right	D (36.2)	D (36.0)	D (36.4)	C (16.9)	C (21.4)	C (22.0)	C (16.9)	C (20.8)	C (21.6)	D (36.2)	D (36.3)	D (36.7)	C (17.1)	C (21.9)	C (22.5)	C (17.1)	C (21.2)	C (22.0)
	SB Left/Through/Right	D (39.1)	D (36.0)	D (36.6)	C (24.2)	F (108.3)	F (101.1)	C (24.2)	F (101.7)	F (97.2)	D (39.4)	D (36.2)	D (36.9)	D (28.3)	F (132.1)	F (129.8)	D (28.2)	F (117.5)	F (121.3)
	Overall	A (8.0)	A (9.5)	A (9.3)							A (8.3)	A (9.8)	A (9.7)						
	NB Left	A (9.4)	A (8.9)	B (13.4)	A (9.4)	A (8.9)	B (13.4)	A (9.4)	A (8.9)	B (13.4)	A (9.6)	A (9.0)	B (13.8)	A (9.6)	A (9.0)	B (13.8)	A (9.6)	A (9.0)	B (13.8)
	NB Right	A (8.5)	A (8.4)	B (10.4)	A (8.5)	A (8.4)	B (10.4)	A (8.5)	A (8.4)	B (10.4)	A (8.5)	A (8.4)	B (10.5)	A (8.5)	A (8.4)	B (10.5)	A (8.5)	A (8.4)	B (10.5)
	WB Left	A (9.6)	A (9.1)	A (9.3)				B (10.0)	A (9.5)	A (9.7)	A (9.7)	A (9.1)	A (9.4)				B (10.3)	A (9.6)	A (9.8)
	WB Left/Through				A (3.3)	A (8.5)	A (6.1)							A (6.0)	A (9.6)	A (7.0)			
Middle Country Road & Site Driveway	EB Through/Right				A (5.3)	A (5.5)	A (6.0)							A (6.4)	A (6.0)	A (6.6)			
	NB Left	C (17.0)	C (21.6)	C (19.7)	D (36.0)	C (34.9)	C (34.9)	C (18.8)	C (24.1)	C (21.7)	C (17.8)	C (22.7)	C (20.7)	D (35.2)	D (35.3)	D (35.2)	C (20.7)	D (27.7)	C (24.9)
	NB Right	C (17.0)	B (14.9)	C (15.9)	D (41.4)	D (37.2)	D (37.2)	C (17.0)	B (14.9)	C (15.9)	C (17.5)	C (16.2)	C (17.3)	D (39.5)	D (40.4)	D (40.1)	C (17.5)	C (16.1)	C (17.3)
	Overall				A (5.0)	A (8.5)	A (7.3)							A (7.0)	B (10.4)	A (9.2)			

STONEFIELD

Table A3
Comparative Level of Service (Delay) Tables
X (n) = Level of Service (seconds of delay)

Intersection	Lane Group	2025 Mitigation Build	2025 Mitigation Build	2025 Mitigation Build	2025 Build Condition D - Max Build Out			2025 Build Condition E - Max Build Out			2025 Build Condition F - Max Build Out		
		Condition A AM Peak LOS (Delay)	Condition B AM Peak LOS (Delay)	Condition C AM Peak LOS (Delay)	AM Peak LOS (Delay)	PM Peak LOS (Delay)	SAT Peak LOS (Delay)	AM Peak LOS (Delay)	PM Peak LOS (Delay)	SAT Peak LOS (Delay)	AM Peak LOS (Delay)	PM Peak LOS (Delay)	SAT Peak LOS (Delay)
Middle Country Road (E/W) & Burman Boulevard (N/S)	EB Through				A (3.9)	A (4.5)	A (3.4)	A (3.9)	A (4.5)	A (3.4)	A (3.9)	A (4.5)	A (3.4)
	EB Right				A (2.6)	A (3.3)	A (2.2)	A (2.6)	A (3.3)	A (2.2)	A (2.6)	A (3.3)	A (2.2)
	WB Left				A (4.9)	A (5.3)	A (3.7)	A (4.9)	A (5.3)	A (3.7)	A (4.9)	A (5.3)	A (3.7)
	WB Through				A (3.1)	A (5.6)	A (3.4)	A (3.1)	A (5.6)	A (3.4)	A (3.1)	A (5.6)	A (3.4)
	NB Left				D (38.3)	D (38.0)	D (35.9)	D (38.3)	D (38.0)	D (35.9)	D (38.3)	D (38.0)	D (35.9)
	NB Right				D (36.8)	D (41.1)	D (36.1)	D (36.8)	D (41.1)	D (36.1)	D (36.8)	D (41.1)	D (36.1)
	Overall				A (6.0)	B (12.4)	A (5.0)	A (6.0)	B (12.4)	A (5.0)	A (6.0)	B (12.4)	A (5.0)
Middle Country Road (E/W) & Edwards Avenue (N/S)	EB Left	B (13.4)	B (13.4)	B (13.4)	B (13.6)	D (38.9)	C (30.3)	B (13.6)	D (38.9)	C (30.3)	B (13.6)	D (38.9)	C (30.3)
	EB Left/Through/Right	D (45.4)	D (45.4)	D (45.4)	D (36.8)	B (19.7)	C (23.7)	D (36.8)	B (19.7)	C (23.7)	D (36.8)	B (19.7)	C (23.7)
	WB Left	D (50.6)	D (50.6)	D (50.6)	E (56.9)	C (33.1)	D (39.0)	E (56.9)	C (33.1)	D (39.0)	E (56.9)	C (33.1)	D (39.0)
	WB Left/Through/Right	B (10.4)	B (10.4)	B (10.4)	B (10.6)	C (23.2)	B (17.8)	B (10.6)	C (23.2)	B (17.8)	B (10.6)	C (23.2)	B (17.8)
	NB Left	E (58.6)	E (58.6)	E (58.6)	F (130.2)	E (60.4)	D (44.1)	F (130.2)	E (60.4)	D (44.1)	F (130.2)	E (60.4)	D (44.1)
	NB Left/Through/Right	C (27.2)	C (27.2)	C (27.2)	D (35.3)	C (25.6)	C (27.5)	D (35.3)	C (25.6)	C (27.5)	D (35.3)	C (25.6)	C (27.5)
	SB Left	C (31.8)	C (31.8)	C (31.8)	D (41.3)	C (29.1)	C (33.7)	D (41.3)	C (29.1)	C (33.7)	D (41.3)	C (29.1)	C (33.7)
	SB Left/Through/Right	C (28.3)	C (28.3)	C (28.3)	D (36.8)	C (27.2)	C (26.0)	D (36.8)	C (27.2)	C (26.0)	D (36.8)	C (27.2)	C (26.0)
	Overall	D (36.5)	D (36.5)	D (36.5)	D (42.5)	C (27.1)	C (25.1)	D (42.5)	C (27.1)	C (25.1)	D (42.5)	C (27.1)	C (25.1)
Middle Country Road (E/W) & Fresh Pond Avenue (N/S)	EB Left							A (8.2)	B (10.3)	A (9.7)	A (8.2)	B (10.3)	A (9.7)
	EB Left/Through/Right				A (7.1)	A (6.0)	A (7.1)						
	WB Left				A (3.9)	A (4.2)	A (4.8)	B (10.1)	A (9.2)	A (9.5)	B (10.1)	A (9.2)	A (9.5)
	WB Through/Right				A (4.0)	A (8.3)	A (6.2)						
	NB Left				D (36.4)	D (36.1)	D (36.1)	E (37.6)	F (221.4)	F (189.0)	E (37.3)	F (198.1)	F (176.4)
	NB Through/Right				D (36.3)	D (36.8)	D (37.0)	C (17.3)	C (23.4)	C (24.0)	C (17.3)	C (22.7)	C (23.5)
	SB Left/Through/Right				D (39.5)	D (37.3)	D (38.0)	D (32.1)	F (288.7)	F (282.3)	D (32.1)	F (264.7)	F (260.4)
LIE Off-Ramp (N) & Edwards Avenue	Overall				A (8.6)	B (10.5)	B (10.3)						
	NB Left				A (9.8)	A (9.4)	C (15.9)	A (9.8)	A (9.4)	C (15.9)	A (9.8)	A (9.4)	C (15.9)
	NB Right				A (8.5)	A (8.4)	B (10.5)	A (8.5)	A (8.4)	B (10.5)	A (8.5)	A (8.4)	B (10.5)
Middle Country Road & Site Driveway	WB Left				A (9.8)	A (9.3)	A (9.6)				B (10.4)	A (9.8)	B (10.3)
	WB Left/Through							B (11.8)	F (56.4)	C (28.0)			
	EB Through/Right							A (7.8)	A (8.1)	A (8.1)			
	NB Left				C (18.5)	D (29.0)	C (24.4)	C (34.4)	C (34.8)	D (35.1)	C (21.6)	F (62.3)	E (40.4)
	NB Right				C (16.9)	C (18.3)	C (19.0)	D (36.8)	D (42.1)	D (42.3)	C (16.9)	C (18.3)	C (19.0)
	Overall							B (10.5)	D (36.8)	C (20.5)			

TURNING MOVEMENT COUNT DATA

National Data & Surveying Services

Intersection Turning Movement Count

Location: Edwards Ave & Middle Country Rd/New York SR 25
City: Calverton
Control: Signalized

Project ID: 20-370003-001
Date: 10/14/2020

Total

NS/EW Streets:	Edwards Ave				Edwards Ave				Middle Country Rd/New York SR 25				Middle Country Rd/New York SR 25				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	22	22	9	0	12	28	4	0	4	86	33	0	5	49	9	0	283
7:15 AM	18	21	5	0	6	36	8	0	6	107	25	0	6	61	3	0	302
7:30 AM	19	13	3	0	15	42	6	0	7	146	37	0	5	66	8	0	367
7:45 AM	23	36	2	0	6	31	12	0	7	164	28	0	8	64	7	0	388
8:00 AM	15	27	7	0	3	39	5	0	7	98	36	0	12	56	6	0	311
8:15 AM	13	27	8	0	5	27	4	0	12	118	45	0	13	53	3	0	328
8:30 AM	14	41	9	0	6	33	5	0	5	121	49	0	6	52	9	0	350
8:45 AM	14	26	13	0	9	28	10	0	9	147	42	0	2	71	9	0	380
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	138	213	56	0	62	264	54	0	57	987	295	0	57	472	54	0	2709
	33.91%	52.33%	13.76%	0.00%	16.32%	69.47%	14.21%	0.00%	4.26%	73.71%	22.03%	0.00%	9.78%	80.96%	9.26%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	70	103	20	0	29	139	27	0	33	526	146	0	38	239	24	0	1394
PEAK HR FACTOR :	0.761	0.715	0.625	0.000	0.483	0.827	0.563	0.000	0.688	0.802	0.811	0.000	0.731	0.905	0.750	0.000	0.898
	0.791				0.774				0.886				0.953				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	33	23	9	0	10	53	15	0	10	107	23	0	10	178	16	0	487
4:15 PM	39	36	10	0	8	38	12	0	6	97	21	0	4	157	14	0	442
4:30 PM	23	27	6	0	8	66	4	0	12	103	18	0	11	171	6	0	455
4:45 PM	24	33	6	0	8	47	9	0	9	108	19	0	6	128	11	0	408
5:00 PM	27	33	6	0	17	42	8	0	10	104	19	0	6	178	11	0	461
5:15 PM	27	22	4	0	8	61	13	0	8	104	27	0	6	167	7	0	454
5:30 PM	30	33	4	0	7	40	10	0	10	103	21	0	6	142	6	0	412
5:45 PM	28	32	5	0	3	42	8	0	9	87	15	0	8	145	8	0	390
6:00 PM	25	20	8	0	4	31	9	0	8	81	13	0	3	130	7	0	339
6:15 PM	27	21	7	0	9	45	10	0	2	87	17	0	2	122	5	0	354
6:30 PM	21	17	4	0	8	29	4	0	2	59	14	0	5	88	7	0	258
6:45 PM	19	15	4	0	4	19	7	0	2	66	16	0	4	85	7	0	248
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	323	312	73	0	94	513	109	0	88	1106	223	0	71	1691	105	0	4708
	45.62%	44.07%	10.31%	0.00%	13.13%	71.65%	15.22%	0.00%	6.21%	78.05%	15.74%	0.00%	3.80%	90.57%	5.62%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	119	119	31	0	34	204	40	0	37	415	81	0	31	634	47	0	1792
PEAK HR FACTOR :	0.763	0.826	0.775	0.000	0.850	0.773	0.667	0.000	0.771	0.961	0.880	0.000	0.705	0.890	0.734	0.000	0.920
	0.791				0.891				0.952				0.873				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Fresh Pond Ave/Tractor Supply Co Dwy & Middle Country Rd/New York SR 25
City: Calverton
Control: 2-Way Stop (NB/SB)

Project ID: 20-370003-002
Date: 10/14/2020

Total

NS/EW Streets:	Fresh Pond Ave/Tractor Supply Co Dwy				Fresh Pond Ave/Tractor Supply Co Dwy				Middle Country Rd/New York SR 25				Middle Country Rd/New York SR 25				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0.3 NL	0.3 NT	0.3 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	0	0	1	0	3	0	6	0	2	126	1	0	3	55	1	0	198
7:15 AM	0	0	2	0	1	0	3	0	5	136	2	0	3	70	2	0	224
7:30 AM	0	0	1	0	2	0	10	0	4	174	1	0	0	76	1	0	269
7:45 AM	1	0	0	0	6	0	12	0	3	192	2	0	2	79	4	0	301
8:00 AM	0	0	2	0	5	1	11	0	5	132	3	0	1	71	3	0	234
8:15 AM	1	1	1	0	3	1	8	0	3	157	0	0	2	62	2	0	241
8:30 AM	0	0	2	0	7	1	8	0	6	168	1	0	0	66	3	0	262
8:45 AM	0	0	4	0	4	1	3	0	7	173	5	0	1	77	5	0	280
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	2	1	13	0	31	4	61	0	35	1258	15	0	12	556	21	0	2009
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	2	1	4	0	16	2	41	0	15	655	6	0	5	288	10	0	1045
PEAK HR FACTOR :	0.500	0.250	0.500	0.000	0.667	0.500	0.854	0.000	0.750	0.853	0.500	0.000	0.625	0.911	0.625	0.000	0.868
	0.583				0.819				0.858				0.891				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0.3 NL	0.3 NT	0.3 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:00 PM	4	2	4	0	3	0	6	0	9	134	2	0	6	205	6	0	381
4:15 PM	3	0	3	0	2	0	5	0	3	107	6	0	7	204	15	0	355
4:30 PM	2	1	4	0	5	0	13	0	12	129	2	0	1	194	9	0	372
4:45 PM	2	0	5	0	1	0	7	0	3	104	2	0	2	168	8	0	302
5:00 PM	5	0	3	0	2	0	8	0	8	128	1	0	3	197	7	0	362
5:15 PM	1	1	2	0	5	1	12	0	10	123	0	0	2	204	10	0	371
5:30 PM	2	1	2	0	6	0	7	0	7	118	0	0	4	172	11	0	330
5:45 PM	3	0	2	0	2	1	7	0	6	99	0	0	3	170	5	0	298
6:00 PM	1	2	3	0	3	1	9	0	7	95	4	0	1	159	7	0	292
6:15 PM	0	0	2	0	4	0	10	0	8	93	4	0	4	136	7	1	269
6:30 PM	8	0	3	0	1	1	3	0	4	75	1	0	5	130	2	0	233
6:45 PM	4	0	1	0	2	0	0	1	5	76	1	0	3	98	5	0	196
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	35	7	34	0	36	4	87	1	82	1281	23	0	41	2037	92	1	3761
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	11	3	16	0	11	0	31	0	27	474	12	0	16	771	38	0	1410
PEAK HR FACTOR :	0.688	0.375	0.800	0.000	0.550	0.000	0.596	0.000	0.563	0.884	0.500	0.000	0.571	0.940	0.633	0.000	0.925
	0.750				0.583				0.884				0.913				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Edwards Ave & Middle Country Rd/New York SR 25
City: Calverton
Control: Signalized

Project ID: 20-370003-001
Date: 10/17/2020

Total

NS/EW Streets:	Edwards Ave				Edwards Ave				Middle Country Rd/New York SR 25				Middle Country Rd/New York SR 25				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
11:00 AM	25	68	8	0	10	29	3	0	8	118	22	0	7	105	16	0	419
11:15 AM	19	77	15	0	12	34	5	0	11	134	22	0	9	105	11	0	454
11:30 AM	20	75	8	0	10	31	9	0	16	145	19	0	13	103	32	0	481
11:45 AM	25	54	15	0	14	21	8	0	7	147	23	0	15	134	26	0	489
12:00 PM	16	66	9	0	22	42	10	0	8	142	18	0	16	103	22	0	474
12:15 PM	20	46	9	0	20	30	12	0	11	139	26	0	11	142	20	0	486
12:30 PM	21	54	14	0	8	44	11	0	18	128	19	0	8	129	22	0	476
12:45 PM	19	47	11	0	14	41	11	0	4	144	21	0	6	158	15	0	491
1:00 PM	25	61	12	0	6	28	11	0	16	142	26	0	11	162	21	0	521
1:15 PM	22	44	13	0	7	38	6	0	13	95	19	0	14	122	14	0	407
1:30 PM	17	57	11	0	13	39	11	0	7	154	28	0	11	139	20	0	507
1:45 PM	24	60	9	0	11	54	8	0	9	143	21	0	7	139	23	0	508
TOTAL VOLUMES :	NL 253	NT 709	NR 134	NU 0	SL 147	ST 431	SR 105	SU 0	EL 128	ET 1631	ER 264	EU 0	WL 128	WT 1541	WR 242	WU 0	TOTAL 5713
APPROACH %'s :	23.08%	64.69%	12.23%	0.00%	21.52%	63.10%	15.37%	0.00%	6.33%	80.62%	13.05%	0.00%	6.70%	80.64%	12.66%	0.00%	
PEAK HR :	12:15 PM - 01:15 PM																TOTAL
PEAK HR VOL :	85	208	46	0	48	143	45	0	49	553	92	0	36	591	78	0	1974
PEAK HR FACTOR :	0.850	0.852	0.821	0.000	0.600	0.813	0.938	0.000	0.681	0.960	0.885	0.000	0.818	0.912	0.886	0.000	0.947
	0.865				0.894				0.943				0.909				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Fresh Pond Ave/Tractor Supply Co Dwy & Middle Country Rd/New York SR 25
City: Calverton
Control: 2-Way Stop (NB/SB)

Project ID: 20-370003-002
Date: 10/17/2020

Total

NS/EW Streets:	Fresh Pond Ave/Tractor Supply Co Dwy				Fresh Pond Ave/Tractor Supply Co Dwy				Middle Country Rd/New York SR 25				Middle Country Rd/New York SR 25				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0.3 NL	0.3 NT	0.3 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
11:00 AM	8	1	5	0	7	0	9	0	9	146	9	0	7	127	2	0	330
11:15 AM	2	1	6	0	7	1	9	0	8	161	5	0	7	115	13	0	335
11:30 AM	5	3	8	0	5	2	3	0	7	170	6	0	4	114	6	0	333
11:45 AM	5	1	6	0	4	0	5	0	18	159	4	0	5	143	3	0	353
12:00 PM	5	1	4	0	6	3	13	0	10	163	7	0	2	131	10	0	355
12:15 PM	5	1	5	0	5	1	7	0	15	167	8	0	5	152	3	0	374
12:30 PM	4	3	5	0	4	0	4	0	2	138	10	0	6	132	3	0	311
12:45 PM	5	1	7	0	8	0	13	0	8	157	2	0	8	167	7	0	383
1:00 PM	5	1	6	0	7	0	10	0	13	157	5	0	5	173	8	0	390
1:15 PM	7	1	6	0	5	1	9	0	13	129	8	0	10	131	11	0	331
1:30 PM	4	0	12	0	5	1	12	0	14	157	10	0	3	143	4	0	365
1:45 PM	14	1	6	0	7	1	14	0	15	157	5	0	5	153	5	0	383
TOTAL VOLUMES :	NL 69	NT 15	NR 76	NU 0	SL 70	ST 10	SR 108	SU 0	EL 132	ET 1861	ER 79	EU 0	WL 67	WT 1681	WR 75	WU 0	TOTAL 4243
APPROACH %'s :	43.13%	9.38%	47.50%	0.00%	37.23%	5.32%	57.45%	0.00%	6.37%	89.82%	3.81%	0.00%	3.68%	92.21%	4.11%	0.00%	
PEAK HR :	12:15 PM - 1:15 PM																TOTAL
PEAK HR VOL :	19	6	23	0	24	1	34	0	38	619	25	0	24	624	21	0	1458
PEAK HR FACTOR :	0.679	1.500	0.479	0.000	0.750	0.250	0.654	0.000	0.679	0.986	0.625	0.000	0.600	0.902	0.477	0.000	0.935
	0.750				0.702				0.942				0.899				

National Data & Surveying Services Intersection Turning Movement Count

Location: Burman Blvd & Middle Country Rd
City: Calverton
Control: Signalized

Project ID: 20-370009-001
Date: 12/12/2020

Data - Total

NS/EW Streets:	Burman Blvd				Burman Blvd				Middle Country Rd				Middle Country Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	1 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
11:00 AM	2	0	6	0	0	0	0	0	0	77	1	0	7	67	0	0	160
11:15 AM	1	0	2	0	0	0	0	0	0	70	3	0	3	57	0	0	136
11:30 AM	1	0	2	0	0	0	0	0	0	78	4	0	5	72	0	0	162
11:45 AM	4	0	6	0	0	0	0	0	0	99	3	0	3	80	0	0	195
12:00 PM	15	0	17	0	0	0	0	0	0	67	5	0	4	63	0	0	171
12:15 PM	2	0	3	0	0	0	0	0	0	81	3	0	1	72	0	0	162
12:30 PM	2	0	11	0	0	0	0	0	0	76	1	0	1	71	0	0	162
12:45 PM	7	0	1	0	0	0	0	0	0	75	5	0	2	83	0	0	173
1:00 PM	6	0	4	0	0	0	0	0	0	72	3	0	2	79	0	0	166
1:15 PM	1	0	3	0	0	0	0	0	0	73	1	0	3	78	0	0	159
1:30 PM	1	0	0	0	0	0	0	0	0	80	2	0	4	70	0	0	157
1:45 PM	0	0	3	0	0	0	0	0	0	79	1	0	1	92	0	0	176
TOTAL VOLUMES :	NL 42	NT 0	NR 58	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 927	ER 32	EU 0	WL 36	WT 884	WR 0	WU 0	TOTAL 1979
APPROACH %'s :	42.00%	0.00%	58.00%	0.00%					0.00%	96.66%	3.34%	0.00%	3.91%	96.09%	0.00%	0.00%	
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	23	0	37	0	0	0	0	0	0	323	12	0	9	286	0	0	690
PEAK HR FACTOR :	0.383	0.000	0.544	0.000	0.000	0.000	0.000	0.000	0.000	0.816	0.600	0.000	0.563	0.894	0.000	0.000	0.885
			0.469							0.821				0.889			

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Edwards Ave & Middle Country Rd
City: Calverton
Control: Signalized

Project ID: 20-370009-004
Date: 12/12/2020

Data - Total

NS/EW Streets:	Edwards Ave				Edwards Ave				Middle Country Rd				Middle Country Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
11:00 AM	15	12	10	0	14	16	9	0	2	136	14	0	8	114	7	0	357
11:15 AM	14	23	3	0	13	24	15	0	9	138	18	0	11	120	10	0	398
11:30 AM	16	28	11	0	11	25	11	0	5	144	7	0	6	116	17	0	397
11:45 AM	17	19	8	0	11	32	7	0	2	168	13	0	12	129	11	0	429
12:00 PM	14	30	11	0	12	36	5	0	8	134	8	0	9	142	9	0	418
12:15 PM	18	34	14	0	10	26	5	0	8	140	19	0	7	153	14	0	448
12:30 PM	15	23	2	0	14	31	7	0	5	157	16	0	8	139	11	0	428
12:45 PM	9	32	9	0	7	24	9	0	5	140	11	0	2	158	13	0	419
1:00 PM	18	23	4	0	7	27	7	0	7	120	19	0	10	145	8	0	395
1:15 PM	17	30	11	0	11	26	4	0	15	148	17	0	9	135	11	0	434
1:30 PM	17	25	11	0	14	26	6	0	7	126	21	0	12	140	11	0	416
1:45 PM	20	23	7	0	8	27	4	0	4	148	19	0	5	132	10	0	407
TOTAL VOLUMES :	NL 190	NT 302	NR 101	NU 0	SL 132	ST 320	SR 89	SU 0	EL 77	ET 1699	ER 182	EU 0	WL 99	WT 1623	WR 132	WU 0	TOTAL 4946
APPROACH %'s :	32.04%	50.93%	17.03%	0.00%	24.40%	59.15%	16.45%	0.00%	3.93%	86.77%	9.30%	0.00%	5.34%	87.54%	7.12%	0.00%	
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	64	106	35	0	47	125	24	0	23	599	56	0	36	563	45	0	1723
PEAK HR FACTOR :	0.889	0.779	0.625	0.000	0.839	0.868	0.857	0.000	0.719	0.891	0.737	0.000	0.750	0.920	0.804	0.000	0.961
		0.777				0.925				0.926				0.925			

National Data & Surveying Services Intersection Turning Movement Count

Location: Fresh Pond Ave & Middle Country Rd
City: Calverton
Control: 2-Way Stop (NB/SB)

Project ID: 20-370009-003
Date: 12/12/2020

Data - Total

NS/EW Streets:	Fresh Pond Ave				Fresh Pond Ave				Middle Country Rd				Middle Country Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0.3 NL	0.3 NT	0.3 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
11:00 AM	3	2	6	0	3	2	4	0	8	142	9	0	11	112	6	0	308
11:15 AM	7	1	13	0	5	1	6	0	3	133	3	0	10	134	5	0	321
11:30 AM	7	1	13	0	5	1	6	0	8	153	4	0	6	123	4	0	331
11:45 AM	4	1	9	0	3	0	7	0	7	154	9	0	7	151	6	0	358
12:00 PM	6	0	6	0	6	0	3	0	3	133	3	1	1	145	6	0	313
12:15 PM	2	0	3	0	5	2	6	0	6	162	7	0	11	146	12	0	362
12:30 PM	5	2	10	0	11	0	1	0	1	153	7	0	9	139	7	0	345
12:45 PM	8	1	12	0	5	1	6	0	5	142	9	0	13	164	5	0	371
1:00 PM	5	0	13	0	5	1	8	0	6	122	7	0	12	146	3	0	328
1:15 PM	4	1	15	0	5	3	7	0	4	152	6	0	13	139	6	0	355
1:30 PM	3	4	8	0	5	2	11	0	7	143	2	0	6	140	8	0	339
1:45 PM	4	1	15	0	5	1	6	0	3	153	5	0	5	136	7	0	341
TOTAL VOLUMES :	58	14	123	0	63	14	71	0	61	1742	71	1	104	1675	75	0	4072
APPROACH %'s :	29.74%	7.18%	63.08%	0.00%	42.57%	9.46%	47.97%	0.00%	3.25%	92.91%	3.79%	0.05%	5.61%	90.35%	4.05%	0.00%	
PEAK HR :	12:15 PM - 01:15 PM																TOTAL
PEAK HR VOL :	20	3	38	0	26	4	21	0	18	579	30	0	45	595	27	0	1406
PEAK HR FACTOR :	0.625	0.375	0.731	0.000	0.591	0.500	0.656	0.000	0.750	0.894	0.833	0.000	0.865	0.907	0.563	0.000	0.947
	0.726				0.911				0.896				0.916				

National Data & Surveying Services Intersection Turning Movement Count

Location: I-495 NB Off Ramp & Edwards Ave S
City: Calverton
Control: 1-Way Stop (NB)

Project ID: 20-370009-002
Date: 12/12/2020

Data - Total

NS/EW Streets:	I-495 NB Off Ramp				I-495 NB Off Ramp				Edwards Ave S				Edwards Ave S				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	2 ET	0 ER	0 EU	0 WL	2 WT	0 WR	0 WU	
11:00 AM	32	0	42	0	0	0	0	0	0	32	0	0	0	65	0	0	171
11:15 AM	21	0	63	0	0	0	0	0	0	30	0	0	0	69	0	0	183
11:30 AM	37	0	60	0	0	0	0	0	0	34	0	0	0	90	0	0	221
11:45 AM	29	0	54	0	0	0	0	0	0	22	0	0	0	73	0	0	178
12:00 PM	41	0	55	0	0	0	0	0	0	30	0	0	0	81	0	0	207
12:15 PM	30	0	62	0	0	0	0	0	0	24	0	0	0	75	0	0	191
12:30 PM	30	0	61	0	0	0	0	0	0	37	0	0	0	74	0	0	202
12:45 PM	46	0	64	0	0	0	0	0	0	32	0	0	0	67	0	0	209
1:00 PM	35	0	65	0	0	0	0	0	0	22	0	0	0	83	0	0	205
1:15 PM	30	0	60	0	0	0	0	0	0	27	0	0	0	89	0	0	206
1:30 PM	35	0	70	0	0	0	0	0	0	31	0	0	0	93	0	0	229
1:45 PM	29	0	68	0	0	0	0	0	0	31	0	0	0	83	0	0	211
TOTAL VOLUMES :	NL 395	NT 0	NR 724	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 352	ER 0	EU 0	WL 0	WT 942	WR 0	WU 0	TOTAL 2413
APPROACH %'s :	35.30%	0.00%	64.70%	0.00%					0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	01:00 PM - 02:00 PM																TOTAL
PEAK HR VOL :	129	0	263	0	0	0	0	0	0	111	0	0	0	348	0	0	851
PEAK HR FACTOR :	0.921	0.000	0.939	0.000	0.000	0.000	0.000	0.000	0.000	0.895	0.000	0.000	0.000	0.935	0.000	0.000	0.929
			0.933							0.895				0.935			

National Data & Surveying Services Intersection Turning Movement Count

Location: Burman Blvd & Middle Country Rd
City: Calverton
Control: Signalized

Project ID: 20-370009-001
Date: 12/15/2020

Data - Total

NS/EW Streets:	Burman Blvd				Burman Blvd				Middle Country Rd				Middle Country Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	1 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
7:00 AM	6	0	5	0	0	0	0	0	0	52	7	0	11	31	0	0	112
7:15 AM	3	0	8	0	0	0	0	0	0	84	4	0	16	39	0	0	154
7:30 AM	3	0	4	0	0	0	0	0	0	86	10	0	9	50	0	0	162
7:45 AM	3	0	4	0	0	0	0	0	0	80	19	0	9	38	0	0	153
8:00 AM	2	0	5	0	0	0	0	0	0	69	16	0	6	42	0	0	140
8:15 AM	4	0	3	0	0	0	0	0	0	57	4	0	10	43	0	0	121
8:30 AM	2	0	4	0	0	0	0	0	0	83	8	0	12	35	0	0	144
8:45 AM	5	0	10	0	0	0	0	0	0	65	7	0	7	44	0	0	138
TOTAL VOLUMES :	28	0	43	0	0	0	0	0	0	576	75	0	80	322	0	0	1124
APPROACH %'s :	39.44%	0.00%	60.56%	0.00%					0.00%	88.48%	11.52%	0.00%	19.90%	80.10%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																
PEAK HR VOL :	11	0	21	0	0	0	0	0	0	319	49	0	40	169	0	0	609
PEAK HR FACTOR :	0.917	0.000	0.656	0.000	0.000	0.000	0.000	0.000	0.000	0.927	0.645	0.000	0.625	0.845	0.000	0.000	0.940
	0.727									0.929				0.886			
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	1 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
4:00 PM	13	0	11	0	0	0	0	0	0	67	2	0	2	110	0	0	205
4:15 PM	10	0	6	0	0	0	0	0	0	65	4	0	7	94	0	0	186
4:30 PM	29	0	21	0	0	0	0	0	0	83	2	0	3	101	0	0	239
4:45 PM	14	0	8	0	0	0	0	0	0	64	2	0	7	135	0	0	230
5:00 PM	16	0	22	0	0	0	0	0	0	65	4	0	5	109	0	0	221
5:15 PM	7	0	14	0	0	0	0	0	0	68	0	0	5	114	0	0	208
5:30 PM	7	0	10	0	0	0	0	0	0	57	3	0	7	72	0	0	156
5:45 PM	5	0	8	0	0	0	0	0	0	58	4	0	1	102	0	0	178
6:00 PM	2	0	5	0	0	0	0	0	0	44	0	0	2	63	0	1	117
6:15 PM	0	0	6	0	0	0	0	0	0	44	0	0	3	72	0	0	125
6:30 PM	4	0	4	0	0	0	0	0	0	41	1	0	3	68	0	0	121
6:45 PM	3	0	1	0	0	0	0	0	0	34	0	0	2	48	0	0	88
TOTAL VOLUMES :	110	0	116	0	0	0	0	0	0	690	22	0	47	1088	0	1	2074
APPROACH %'s :	48.67%	0.00%	51.33%	0.00%					0.00%	96.91%	3.09%	0.00%	4.14%	95.77%	0.00%	0.09%	
PEAK HR :	04:30 PM - 05:30 PM																
PEAK HR VOL :	66	0	65	0	0	0	0	0	0	280	8	0	20	459	0	0	898
PEAK HR FACTOR :	0.569	0.000	0.739	0.000	0.000	0.000	0.000	0.000	0.000	0.843	0.500	0.000	0.714	0.850	0.000	0.000	0.939
	0.655									0.847				0.843			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Fresh Pond Ave & Middle Country Rd
City: Calverton
Control: 2-Way Stop(NB/SB)

Project ID: 21-370041-001
Date: 10/7/2021

Data - Total

NS/EW Streets:	Fresh Pond Ave				Fresh Pond Ave				Middle Country Rd				Middle Country Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	1	0	7	0	7	0	7	116	0	0	4	63	4	0	209
7:15 AM	0	0	0	0	8	0	6	0	4	153	0	0	1	87	8	0	267
7:30 AM	0	0	1	0	4	0	7	0	5	223	1	0	2	80	1	0	324
7:45 AM	1	0	1	0	8	1	15	0	6	155	0	0	0	81	5	0	273
8:00 AM	0	1	1	0	2	0	15	0	8	142	2	0	5	71	4	0	251
8:15 AM	2	1	2	0	5	1	5	0	8	148	1	0	2	78	3	0	256
8:30 AM	2	0	2	0	10	0	4	0	9	177	2	0	4	75	2	0	287
8:45 AM	2	0	2	0	9	0	7	0	7	183	2	0	1	75	6	0	294
TOTAL VOLUMES :	7	2	10	0	53	2	66	0	54	1297	8	0	19	610	33	0	2161
APPROACH %'s :	36.84%	10.53%	52.63%	0.00%	43.80%	1.65%	54.55%	0.00%	3.97%	95.44%	0.59%	0.00%	2.87%	92.15%	4.98%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	1	1	3	0	22	1	43	0	23	673	3	0	8	319	18	0	1115
PEAK HR FACTOR :	0.250	0.250	0.750	0.000	0.688	0.250	0.717	0.000	0.719	0.754	0.375	0.000	0.400	0.917	0.563	0.000	0.860
	0.625				0.688				0.763				0.898				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	7	1	5	0	1	1	8	0	8	111	4	0	4	183	7	0	340
4:15 PM	3	0	2	0	3	1	11	0	4	114	5	0	2	197	11	0	353
4:30 PM	3	0	3	0	2	1	4	0	17	123	2	0	4	213	9	0	381
4:45 PM	5	0	4	0	5	0	6	0	14	111	5	0	7	182	10	0	349
5:00 PM	4	1	1	0	6	0	7	0	6	107	0	0	7	192	12	0	343
5:15 PM	4	0	5	0	5	0	8	0	6	122	3	0	4	210	3	0	370
5:30 PM	5	0	3	0	5	1	10	0	13	107	3	0	5	154	5	0	311
5:45 PM	8	1	2	0	7	0	9	0	7	107	3	0	3	180	5	0	332
6:00 PM	3	0	5	0	4	0	10	0	7	95	5	0	2	163	8	0	302
6:15 PM	1	0	1	0	7	0	3	0	6	86	4	0	2	136	6	0	252
6:30 PM	6	0	7	0	7	0	5	0	4	93	1	0	5	153	9	0	290
6:45 PM	3	1	1	0	3	0	5	0	1	89	1	0	2	105	4	0	215
TOTAL VOLUMES :	52	4	39	0	55	4	86	0	93	1265	36	0	47	2068	89	0	3838
APPROACH %'s :	54.74%	4.21%	41.05%	0.00%	37.93%	2.76%	59.31%	0.00%	6.67%	90.75%	2.58%	0.00%	2.13%	93.83%	4.04%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	16	1	13	0	18	1	25	0	43	463	10	0	22	797	34	0	1443
PEAK HR FACTOR :	0.800	0.250	0.650	0.000	0.750	0.250	0.781	0.000	0.632	0.941	0.500	0.000	0.786	0.935	0.708	0.000	0.947
	0.833				0.846				0.908				0.944				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Fresh Pond Ave & Middle Country Rd
City: Calverton
Control: 2-Way Stop(NB/SB)

Project ID: 21-370041-001
Date: 10/9/2021

Data - Total

NS/EW Streets:	Fresh Pond Ave				Fresh Pond Ave				Middle Country Rd				Middle Country Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
11:00 AM	6	0	7	0	7	0	6	0	15	134	8	0	8	106	10	0	307
11:15 AM	4	0	10	0	11	0	10	0	21	158	9	0	8	126	7	0	364
11:30 AM	10	1	6	0	13	0	6	0	21	147	12	0	7	117	11	0	351
11:45 AM	6	0	14	0	9	0	14	0	24	136	10	0	11	123	9	0	356
12:00 PM	6	2	6	0	5	0	15	0	18	152	11	0	5	136	15	0	371
12:15 PM	11	1	10	0	7	0	10	0	13	135	11	0	11	140	10	0	359
12:30 PM	11	0	6	0	4	0	17	0	24	141	7	0	9	169	11	0	399
12:45 PM	10	2	8	0	16	1	11	0	13	151	9	0	8	127	12	0	368
1:00 PM	7	2	7	0	12	3	13	0	8	160	5	0	2	141	17	0	377
1:15 PM	6	0	7	0	13	0	15	0	20	154	2	0	3	135	13	0	368
1:30 PM	3	0	2	0	12	0	8	0	22	154	10	0	4	141	10	0	366
1:45 PM	3	1	3	0	5	2	10	0	18	150	7	0	3	151	10	0	363
TOTAL VOLUMES :	83	9	86	0	114	6	135	0	217	1772	101	0	79	1612	135	0	4349
APPROACH %'s :	46.63%	5.06%	48.31%	0.00%	44.71%	2.35%	52.94%	0.00%	10.38%	84.78%	4.83%	0.00%	4.33%	88.28%	7.39%	0.00%	
PEAK HR :	12:30 PM - 01:30 PM																TOTAL
PEAK HR VOL :	34	4	28	0	45	4	56	0	65	606	23	0	22	572	53	0	1512
PEAK HR FACTOR :	0.773	0.500	0.875	0.000	0.703	0.333	0.824	0.000	0.677	0.947	0.639	0.000	0.611	0.846	0.779	0.000	0.947
	0.825				0.938				0.986				0.856				

AUTOMATIC TRAFFIC RECORDER DATA

STATION: 70041

New York State Department of Transportation

Traffic Count Hourly Report

ROUTE #: **NY25** ROAD NAME: **MIDDLE COUNTRY ROAD** FROM : **RT25A** TO: **EDWARDS AVE**
DIRECTION: PLACEMENT: **487ft West of Service Ln** COUNTY: **SUFFOLK** TOWN: **RIVERHEAD**
DATE OF COUNT **Jun-2016** REF MARKER: JURISDICTION: **NYS DOT**

Interval Start Time	EASTBOUND	WESTBOUND	TOTAL
12:00 AM	23	37	60
1:00 AM	17	22	39
2:00 AM	14	20	34
3:00 AM	18	13	31
4:00 AM	33	25	58
5:00 AM	129	53	182
6:00 AM	309	115	424
7:00 AM	404	209	613
8:00 AM	395	202	597
9:00 AM	275	173	448
10:00 AM	271	203	474
11:00 AM	284	246	530
12:00 PM	301	280	581
1:00 PM	287	272	559
2:00 PM	289	311	600
3:00 PM	282	418	700
4:00 PM	308	441	749
5:00 PM	276	435	711
6:00 PM	218	295	513
7:00 PM	136	231	367
8:00 PM	136	185	321
9:00 PM	106	193	299
10:00 PM	79	107	186
11:00 PM	41	67	108

STATION: 70041

New York State Department of Transportation

Traffic Count Hourly Report

ROUTE #: **NY25** ROAD NAME: **MIDDLE COUNTRY ROAD** FROM : **RT25A** TO: **EDWARDS AVE**
DIRECTION: PLACEMENT: **490ft West of Service Ln** COUNTY: **SUFFOLK** TOWN: **RIVERHEAD**
DATE OF COUNT **Dec-2018** REF MARKER: JURISDICTION: **NYS DOT**

Interval Start Time	EASTBOUND	WESTBOUND	TOTAL
12:00 AM	18	29	47
1:00 AM	17	15	32
2:00 AM	12	12	24
3:00 AM	22	12	34
4:00 AM	37	21	58
5:00 AM	116	53	169
6:00 AM	371	106	477
7:00 AM	414	214	628
8:00 AM	368	184	552
9:00 AM	292	176	468
10:00 AM	266	194	460
11:00 AM	280	228	508
12:00 PM	305	287	592
1:00 PM	265	280	545
2:00 PM	262	322	584
3:00 PM	294	450	744
4:00 PM	285	445	730
5:00 PM	255	400	655
6:00 PM	155	274	429
7:00 PM	114	190	304
8:00 PM	84	145	229
9:00 PM	67	126	193
10:00 PM	70	85	155
11:00 PM	37	53	90

**NYSDOT ADJUSTMENT FACTORS FOR TRAFFIC COUNT
PROCESSING 2017**

SEASONAL ADJUSTMENT FACTORS FOR TRAFFIC COUNT PROCESSING 2017

Based on Continuous Count Site Data 2014 – 2016

FULL WEEK

FACTOR GROUP	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
urban - 30	0.879	0.905	0.966	1.016	1.052	1.069	1.047	1.054	1.039	1.033	0.976	0.964
suburban - 40	0.782	0.804	0.868	0.948	1.076	1.132	1.230	1.224	1.097	1.035	0.927	0.876
recreational - 60	0.627	0.669	0.692	0.787	1.059	1.271	1.639	1.598	1.200	0.997	0.762	0.698

Factor Group % Precision with
95% Confidence

urban - 30	0.85%
suburban - 40	1.38%
recreational - 60	5.48%

The FHWA Traffic Monitoring Guide 2016 states (page 3-27):

The reliability levels recommended are 10 percent precision with 95 percent confidence for each individual seasonal group, excluding recreational groups where no precision requirement is specified.

For each factor group, the percent precision value is the maximum value out of all months.

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SEASONAL ADJUSTMENT FACTORS FOR TRAFFIC COUNT PROCESSING 2017

Based on Continuous Count Site Data 2014 – 2016

WEEKEND

FACTOR GROUP	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
urban - 30	0.760	0.794	0.848	0.895	0.944	0.952	0.918	0.937	0.927	0.908	0.864	0.830
suburban - 40	0.709	0.737	0.808	0.887	1.038	1.125	1.253	1.243	1.080	0.987	0.867	0.790
recreational - 60	0.617	0.674	0.679	0.770	1.119	1.412	1.879	1.813	1.337	1.053	0.740	0.656

Factor Group % Precision with
95% Confidence

urban - 30	2.17%
suburban - 40	2.57%
recreational - 60	6.60%

The FHWA Traffic Monitoring Guide 2016 states (page 3-27):

The reliability levels recommended are 10 percent precision with 95 percent confidence for each individual seasonal group, excluding recreational groups where no precision requirement is specified.

For each factor group, the percent precision value is the maximum value out of all months.

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SEASONAL ADJUSTMENT FACTORS FOR TRAFFIC COUNT PROCESSING 2017

Based on Continuous Count Site Data 2014 – 2016

WORK WEEK

FACTOR GROUP	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
urban - 30	0.923	0.944	1.009	1.062	1.093	1.113	1.101	1.100	1.078	1.078	1.018	1.019
suburban - 40	0.808	0.822	0.884	0.958	1.071	1.113	1.201	1.190	1.079	1.035	0.942	0.912
recreational - 60	0.634	0.654	0.696	0.778	1.003	1.170	1.500	1.459	1.086	0.943	0.764	0.718

Factor Group % Precision with
95% Confidence

urban - 30	1.05%
suburban - 40	1.49%
recreational - 60	5.99%

The FHWA Traffic Monitoring Guide 2016 states (page 3-27):

The reliability levels recommended are 10 percent precision with 95 percent confidence for each individual seasonal group, excluding recreational groups where no precision requirement is specified.

For each factor group, the percent precision value is the maximum value out of all months.

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MOTOR VEHICLE COLLISION SUMMARY TABLES

STONEFIELD

Table B1

3-Year Motor Vehicle Collision Summary Table

February 1, 2017 - January 31, 2020

Location	Collision Type	Number of Collisions	Collisions Resulting in Injury	Collisions Resulting in Fatality
Intersection of Middle Country Road and Burman Blvd	Rear End	2	0	0
	Collision with Animal	1	0	0
	Total	3	0	0
Middle Country Road between Burman Blvd and NYS Route 25A	Rear End	4	2	0
	Collision with Animal	3	0	0
	Right Angle	1	0	0
	Right Turn (Against Other Car)	1	0	0
	Right Turn (With Other Car)	1	0	0
	Left Turn (Against Other Car)	1	1	0
	Total	11	3	0
Intersection of Middle Country Road and NYS Route 25A	Rear End	6	2	0
	Collision with Fixed Object	3	0	0
	Collision with Animal	2	0	0
	Right Angle	1	1	0
	Right Turn (Against Other Car)	1	0	0
	Sideswipe	2	1	0
	Total	15	4	0
Middle Country Road between NYS Route 25A and Timber Drive	Rear End	3	1	0
	Collision with Animal	2	0	0
	Right Angle	2	1	0
	Overtaken	1	0	0
	Total	8	2	0
Intersection of Middle Country Road and Timber Drive	Rear End	2	1	0
	Total	2	1	0
Middle Country Road between Timber Drive and Fresh Pond Avenue	Collision with Fixed Object	4	2	0
	Rear End	3	2	0
	Collision with Animal	2	0	0
	Overtaking	1	0	0
	Total	10	4	0
Intersection of Middle Country Road and Fresh Pond Avenue	Rear End	2	2	0
	Right Angle	1	1	0
	Total	3	3	0
Middle Country Road between Fresh Pond Avenue and Edwards Avenue	Rear End	10	4	0
	Collision with Animal	10	0	0
	Collision with Fixed Object	5	1	0
	Left Turn	2	1	0
	Right Angle	2	0	0
	Sideswipe	2	1	0
	Total	31	7	0

STONEFIELD

Table B1 - Cont.

3-Year Motor Vehicle Collision Summary Table

February 1, 2017 - January 31, 2020

Location	Collision Type	Number of Collisions	Collisions Resulting in Injury	Collisions Resulting in Fatality
Intersection of Middle Country Road and Edwards Avenue	Rear End	16	6	0
	Right Angle	7	2	0
	Left Turn (With Other Car)	3	3	0
	Left Turn (Against Other Car)	2	1	0
	Overtaking	2	1	0
	Backing	2	0	0
	Head On	1	0	0
	Right Turn (With Other Car)	1	0	0
	Sideswipe	1	0	0
	Total	35	13	0
Edwards Avenue between Middle Country Road and River Road	Rear End	4	2	0
	Collision with Animal	3	1	0
	Collision with Fixed Object	2	0	0
	Left Turn (With Other Car)	1	0	0
	Overtaking	1	0	0
	Right Angle	1	0	0
	Sideswipe	1	1	0
	Total	13	4	0
Intersection of Edwards Avenue and River Road	Right Angle	4	4	0
	Rear End	4	1	0
	Collision with Fixed Object	3	0	0
	Left Turn (Against Other Car)	1	1	0
	Overtaking	1	0	0
	Collision with Bicyclist	1	1	0
	Sideswipe	1	1	0
	Total	15	8	0
Intersection of Edwards Avenue and Mill Road	Overtaking	1	0	0
	Rear End	1	1	0
	Total	2	1	0
Intersection of Edwards Avenue and LIE East Exit Ramp	Right Angle	12	5	0
	Rear End	10	0	0
	Overtaking	5	0	0
	Left Turn (Against Other Car)	3	0	0
	Collision with Fixed Object	3	0	0
	Total	33	5	0
Network Total		181	55	0

STONEFIELD

Table B2

3-Year Motor Vehicle Collision Summary Table by Location

Intersection/Location Name:

Time Period:

Total Accidents:

Intersection of NYS Route 25 & Burman Boulevard

2/1/2017 - 1/31-2020

3

Day of Week	Number	%
Sunday	1	33
Monday	1	33
Tuesday		0
Wednesday		0
Thursday		0
Friday		0
Saturday	1	34
Time of Day	Number	%
6 am-10 am		0
10 am-4 pm	1	34
4 pm-7 pm	1	33
7 pm-12 am		0
12 am-6 am	1	33
Weather	Number	%
Clear	2	67
Cloudy		0
Fog/Smog/Smoke		0
Rain	1	33
Sleet/Hail/Freezing Rain		0
Snow		0
Light Conditions	Number	%
Dark, Road Lighted		0
Dark, Road Unlighted	2	67
Dawn		0
Daylight	1	33
Dusk		0
Time of Year	Number	%
Winter (Dec-Feb)	1	33
Spring (Mar-May)		0
Summer (June-Aug)		0
Fall (Sep-Nov)	2	67
Severity	Number	%
Fatality		0
Injury		0
Injury and Property Damage		0
Property Damage	2	67
Non-Reportable	1	33

Pavement	Number	%
Dry	2	67
Snow/Ice		0
Wet	1	33
Accident Type	Number	%
Rear End	2	67
Right Angle		0
Overtaking		0
Overtaken		0
Sideswipe		0
Right Turn		0
Left Turn		0
Head On		0
Backing		0
Animal	1	33
Bicyclist		0
Fixed Object		0
Contributing Factors	Number	%
Animal's Action	1	33
Backing Unsafely		0
Brakes Defective		0
Driver Inattention		0
Driver Inexperience		0
Failure to Keep Right		0
Failure to Yield ROW		0
Fell Asleep		0
Following Too Closely	2	67
Glare		0
Passing or Lane Usage Improperly		0
Pavement Slippery		0
Reaction to Uninvolved Vehicle		0
Tire Failure/Inadequate		0
Traffic Control Devices Disregarded		0
Turning Improper		0
Unsafe Lane Change		0
Unsafe Speed		0
View Obstructed/Limited		0
Unknown/Not Entered		0

Accident Rate Calculations

Total Volume	10844	Vehicles per Day
	11.87	Million Entering Vehicles (MEV)
	0.25	Collision Rate per MEV
	0.17	NYSOT Average Collision Rate (Urban 3-Leg Signalized Intersection, 1-4 lanes)

STONEFIELD

Table B3
3-Year Motor Vehicle Collision Summary Table by Location

Intersection/Location Name:

Time Period:

Total Accidents:

NYS Route 25 Between Burman Boulevard & NYS Route 25A

2/1/2017 - 1/31-2020

11

Day of Week	Number	%
Sunday		0
Monday	1	9
Tuesday	1	9
Wednesday	1	9
Thursday	5	46
Friday	2	18
Saturday	1	9
Time of Day	Number	%
6 am-10 am	4	37
10 am-4 pm	1	9
4 pm-7 pm	1	9
7 pm-12 am	1	9
12 am-6 am	4	36
Weather	Number	%
Clear	9	82
Cloudy	1	9
Fog/Smog/Smoke		0
Rain		0
Sleet/Hail/Freezing Rain		0
Snow	1	9
Light Conditions	Number	%
Dark, Road Lighted	1	9
Dark, Road Unlighted	4	36
Dawn		0
Daylight	6	55
Dusk		0
Time of Year	Number	%
Winter (Dec-Feb)	3	27
Spring (Mar-May)	1	9
Summer (June-Aug)	3	27
Fall (Sep-Nov)	4	37
Severity	Number	%
Fatality		0
Injury	1	9
Injury and Property Damage	2	19
Property Damage	4	36
Non-Reportable	4	36

Pavement	Number	%
Dry	10	91
Snow/Ice	1	9
Wet		0
Accident Type	Number	%
Rear End	4	37
Right Angle	1	9
Overtaking		0
Overtaken		0
Sideswipe		0
Right Turn	2	18
Left Turn	1	9
Head On		0
Backing		0
Animal	3	27
Bicyclist		0
Fixed Object		0
Contributing Factors	Number	%
Animal's Action	2	18
Backing Unsafely		0
Brakes Defective		0
Driver Inattention	3	28
Driver Inexperience		0
Failure to Keep Right		0
Failure to Yield ROW	1	9
Fell Asleep		0
Following Too Closely	1	9
Glare		0
Passing or Lane Usage Improperly		0
Pavement Slippery	1	9
Reaction to Uninvolved Vehicle		0
Tire Failure/Inadequate		0
Traffic Control Devices Disregarded		0
Turning Improper		0
Unsafe Lane Change		0
Unsafe Speed	1	9
View Obstructed/Limited	1	9
Unknown/Not Entered	1	9

Accident Rate Calculations

Total Volume	13778	Vehicles per Day
	9.05	Million Vehicle Miles (MVM)
	1.22	Collision Rate per MVM
	2.25	NYSOT Average Collision Rate (Free Control, Undivided, 2 Lanes)

STONEFIELD

Table B4
3-Year Motor Vehicle Collision Summary Table by Location

Intersection/Location Name:

Time Period:

Total Accidents:

Intersection of NYS Route 25 & NYS Route 25A

2/1/2017 - 1/31-2020

15

Day of Week	Number	%
Sunday	3	20
Monday	2	13
Tuesday	1	7
Wednesday	1	7
Thursday	3	20
Friday	2	13
Saturday	3	20
Time of Day	Number	%
6 am-10 am	2	13
10 am-4 pm	5	34
4 pm-7 pm	6	40
7 pm-12 am	2	13
12 am-6 am		0
Weather	Number	%
Clear	11	73
Cloudy	2	13
Fog/Smog/Smoke		0
Rain		0
Sleet/Hail/Freezing Rain	1	7
Snow	1	7
Light Conditions	Number	%
Dark, Road Lighted	3	20
Dark, Road Unlighted	3	20
Dawn	1	7
Daylight	8	53
Dusk		0
Time of Year	Number	%
Winter (Dec-Feb)	3	20
Spring (Mar-May)	4	26
Summer (June-Aug)	1	7
Fall (Sep-Nov)	7	47
Severity	Number	%
Fatality		0
Injury		0
Injury and Property Damage	4	27
Property Damage	7	46
Non-Reportable	4	27

Pavement	Number	%
Dry	13	87
Snow/Ice	2	13
Wet		0
Accident Type	Number	%
Rear End	6	40
Right Angle	1	7
Overtaking		0
Overtaken		0
Sideswipe	2	13
Right Turn	1	7
Left Turn		0
Head On		0
Backing		0
Animal	2	13
Bicyclist		0
Fixed Object	3	20
Contributing Factors	Number	%
Animal's Action	3	20
Backing Unsafely		0
Brakes Defective		0
Driver Inattention	4	27
Driver Inexperience	1	7
Failure to Keep Right		0
Failure to Yield ROW	2	13
Fell Asleep		0
Following Too Closely	2	13
Glare		0
Passing or Lane Usage Improperly		0
Pavement Slippery	1	7
Reaction to Uninvolved Vehicle	2	13
Tire Failure/Inadequate		0
Traffic Control Devices Disregarded		0
Turning Improper		0
Unsafe Lane Change		0
Unsafe Speed		0
View Obstructed/Limited		0
Unknown/Not Entered		0

Accident Rate Calculations

Total Volume	13778	Vehicles per Day
	15.09	Million Entering Vehicles (MEV)
	0.99	Collision Rate per MEV
	0.31	NYSOT Average Collision Rate (Urban 3-Leg Signalized Intersection, 1-4 lanes)

STONEFIELD

Table B5

3-Year Motor Vehicle Collision Summary Table by Location

Intersection/Location Name:

Time Period:

Total Accidents:

NYS Route 25 Between NYS Route 25A & Timber Drive

2/1/2017 - 1/31-2020

8

Day of Week	Number	%
Sunday		0
Monday		0
Tuesday	2	25
Wednesday	1	13
Thursday	3	38
Friday	1	12
Saturday	1	12
Time of Day	Number	%
6 am-10 am	2	25
10 am-4 pm	2	25
4 pm-7 pm	2	25
7 pm-12 am	2	25
12 am-6 am		0
Weather	Number	%
Clear	5	63
Cloudy	1	13
Fog/Smog/Smoke		0
Rain	1	12
Sleet/Hail/Freezing Rain		0
Snow	1	12
Light Conditions	Number	%
Dark, Road Lighted		0
Dark, Road Unlighted	1	13
Dawn		0
Daylight	6	75
Dusk	1	12
Time of Year	Number	%
Winter (Dec-Feb)	3	38
Spring (Mar-May)	1	12
Summer (June-Aug)	2	25
Fall (Sep-Nov)	2	25
Severity	Number	%
Fatality		0
Injury		0
Injury and Property Damage	2	25
Property Damage	5	63
Non-Reportable	1	12

Pavement	Number	%
Dry	6	75
Snow/Ice	1	13
Wet	1	12
Accident Type	Number	%
Rear End	3	38
Right Angle	2	25
Overtaking		0
Overtaken	1	12
Sideswipe		0
Right Turn		0
Left Turn		0
Head On		0
Backing		0
Animal	2	25
Bicyclist		0
Fixed Object		0
Contributing Factors	Number	%
Animal's Action	2	25
Backing Unsafely		0
Brakes Defective		0
Driver Inattention	1	13
Driver Inexperience		0
Failure to Keep Right		0
Failure to Yield ROW	2	25
Fell Asleep		0
Following Too Closely	1	13
Glare		0
Passing or Lane Usage Improperly		0
Pavement Slippery	1	12
Reaction to Uninvolved Vehicle		0
Tire Failure/Inadequate		0
Traffic Control Devices Disregarded		0
Turning Improper		0
Unsafe Lane Change		0
Unsafe Speed		0
View Obstructed/Limited		0
Unknown/Not Entered	1	12

Accident Rate Calculations

Total Volume	18433	Vehicles per Day
	6.06	Million Vehicle Miles (MVM)
	1.32	Collision Rate per MVM
	2.25	NYS DOT Average Collision Rate (Free Control, Undivided, 2 Lanes)

STONEFIELD

Table B6
3-Year Motor Vehicle Collision Summary Table by Location

Intersection/Location Name:

Time Period:

Total Accidents:

Intersection of NYS Route 25 & Timber Drive

2/1/2017 - 1/31-2020

2

Day of Week	Number	%
Sunday		0
Monday		0
Tuesday	2	100
Wednesday		0
Thursday		0
Friday		0
Saturday		0
Time of Day	Number	%
6 am-10 am		0
10 am-4 pm		0
4 pm-7 pm	1	50
7 pm-12 am	1	50
12 am-6 am		0
Weather	Number	%
Clear	2	100
Cloudy		0
Fog/Smog/Smoke		0
Rain		0
Sleet/Hail/Freezing Rain		0
Snow		0
Light Conditions	Number	%
Dark, Road Lighted	1	50
Dark, Road Unlighted		0
Dawn		0
Daylight	1	50
Dusk		0
Time of Year	Number	%
Winter (Dec-Feb)	1	50
Spring (Mar-May)		0
Summer (June-Aug)	1	50
Fall (Sep-Nov)		0
Severity	Number	%
Fatality		0
Injury		0
Injury and Property Damage	1	50
Property Damage	1	50
Non-Reportable		0

Pavement	Number	%
Dry	2	100
Snow/Ice		0
Wet		0
Accident Type	Number	%
Rear End	2	100
Right Angle		0
Overtaking		0
Overtaken		0
Sideswipe		0
Right Turn		0
Left Turn		0
Head On		0
Backing		0
Animal		0
Bicyclist		0
Fixed Object		0
Contributing Factors	Number	%
Animal's Action		0
Backing Unsafely		0
Brakes Defective		0
Driver Inattention		0
Driver Inexperience		0
Failure to Keep Right		0
Failure to Yield ROW		0
Fell Asleep		0
Following Too Closely	1	50
Glare		0
Passing or Lane Usage Improperly		0
Pavement Slippery		0
Reaction to Uninvolved Vehicle		0
Tire Failure/Inadequate		0
Traffic Control Devices Disregarded		0
Turning Improper		0
Unsafe Lane Change		0
Unsafe Speed		0
View Obstructed/Limited		0
Unknown/Not Entered	1	50

Accident Rate Calculations

Total Volume	18433	Vehicles per Day
	20.18	Million Entering Vehicles (MEV)
	0.10	Collision Rate per MEV
	0.18	NYSOT Average Collision Rate (Urban 3-Leg Unsignalized Intersection, 1-3 lanes)

STONEFIELD

Table B7

3-Year Motor Vehicle Collision Summary Table by Location

Intersection/Location Name:

Time Period:

Total Accidents:

NYS Route 25 Between Timber Drive & Fresh Pond Avenue

2/1/2017 - 1/31-2020

10

Day of Week	Number	%
Sunday	2	20
Monday	1	10
Tuesday		0
Wednesday	3	30
Thursday	1	10
Friday	2	20
Saturday	1	10
Time of Day	Number	%
6 am-10 am	2	20
10 am-4 pm	4	40
4 pm-7 pm		0
7 pm-12 am	2	20
12 am-6 am	2	20
Weather	Number	%
Clear	9	90
Cloudy	1	10
Fog/Smog/Smoke		0
Rain		0
Sleet/Hail/Freezing Rain		0
Snow		0
Light Conditions	Number	%
Dark, Road Lighted	3	30
Dark, Road Unlighted		0
Dawn	1	10
Daylight	6	60
Dusk		0
Time of Year	Number	%
Winter (Dec-Feb)	3	30
Spring (Mar-May)	2	20
Summer (June-Aug)	2	20
Fall (Sep-Nov)	3	30
Severity	Number	%
Fatality		0
Injury		0
Injury and Property Damage	4	40
Property Damage	4	40
Non-Reportable	2	20

Pavement	Number	%
Dry	10	100
Snow/Ice		0
Wet		0
Accident Type	Number	%
Rear End	3	30
Right Angle		0
Overtaking	1	10
Overtaken		0
Sideswipe		0
Right Turn		0
Left Turn		0
Head On		0
Backing		0
Animal	2	20
Bicyclist		0
Fixed Object	4	40
Contributing Factors	Number	%
Animal's Action	3	30
Backing Unsafely		0
Brakes Defective		0
Driver Inattention	2	20
Driver Inexperience		0
Failure to Keep Right		0
Failure to Yield ROW		0
Fell Asleep	1	10
Following Too Closely	1	10
Glare		0
Passing or Lane Usage Improperly	2	20
Pavement Slippery		0
Reaction to Uninvolved Vehicle		0
Tire Failure/Inadequate		0
Traffic Control Devices Disregarded		0
Turning Improper	1	10
Unsafe Lane Change		0
Unsafe Speed		0
View Obstructed/Limited		0
Unknown/Not Entered		0

Accident Rate Calculations

Total Volume	17556	Vehicles per Day
	9.61	Million Vehicle Miles (MVM)
	1.04	Collision Rate per MVM
	2.25	NYS DOT Average Collision Rate (Free Control, Undivided, 2 Lanes)

STONEFIELD

Table B8

3-Year Motor Vehicle Collision Summary Table by Location

Intersection/Location Name:

Time Period:

Total Accidents:

Intersection of NYS Route 25 & Fresh Pond Avenue

2/1/2017 - 1/31-2020

3

Day of Week	Number	%
Sunday	1	33
Monday		0
Tuesday		0
Wednesday	2	67
Thursday		0
Friday		0
Saturday		0
Time of Day	Number	%
6 am-10 am		0
10 am-4 pm	1	33
4 pm-7 pm	2	67
7 pm-12 am		0
12 am-6 am		0
Weather	Number	%
Clear	3	100
Cloudy		0
Fog/Smog/Smoke		0
Rain		0
Sleet/Hail/Freezing Rain		0
Snow		0
Light Conditions	Number	%
Dark, Road Lighted		0
Dark, Road Unlighted		0
Dawn		0
Daylight	2	67
Dusk	1	33
Time of Year	Number	%
Winter (Dec-Feb)		0
Spring (Mar-May)	2	67
Summer (June-Aug)		0
Fall (Sep-Nov)	1	33
Severity	Number	%
Fatality		0
Injury		0
Injury and Property Damage	3	100
Property Damage		0
Non-Reportable		0

Pavement	Number	%
Dry	3	100
Snow/Ice		0
Wet		0
Accident Type	Number	%
Rear End	2	67
Right Angle	1	33
Overtaking		0
Overtaken		0
Sideswipe		0
Right Turn		0
Left Turn		0
Head On		0
Backing		0
Animal		0
Bicyclist		0
Fixed Object		0
Contributing Factors	Number	%
Animal's Action		0
Backing Unsafely		0
Brakes Defective		0
Driver Inattention		0
Driver Inexperience		0
Failure to Keep Right		0
Failure to Yield ROW	1	33
Fell Asleep		0
Following Too Closely	1	33
Glare	1	34
Passing or Lane Usage Improperly		0
Pavement Slippery		0
Reaction to Uninvolved Vehicle		0
Tire Failure/Inadequate		0
Traffic Control Devices Disregarded		0
Turning Improper		0
Unsafe Lane Change		0
Unsafe Speed		0
View Obstructed/Limited		0
Unknown/Not Entered		0

Accident Rate Calculations

Total Volume	17556	Vehicles per Day
	19.22	Million Entering Vehicles (MEV)
	0.16	Collision Rate per MEV
	0.15	NYS DOT Average Collision Rate (Urban 3-Leg Signalized Intersection, 1-4 lanes)

STONEFIELD

Table B9

3-Year Motor Vehicle Collision Summary Table by Location

Intersection/Location Name:

Time Period:

Total Accidents:

NYS Route 25 Between Fresh Pond Avenue & Edwards Avenue

2/1/2017 - 1/31-2020

31

Day of Week	Number	%
Sunday	3	10
Monday	8	25
Tuesday	3	10
Wednesday	3	10
Thursday	6	19
Friday	4	13
Saturday	4	13
Time of Day	Number	%
6 am-10 am	9	29
10 am-4 pm	9	29
4 pm-7 pm	1	3
7 pm-12 am	9	29
12 am-6 am	3	10
Weather	Number	%
Clear	24	78
Cloudy	5	16
Fog/Smog/Smoke		0
Rain		0
Sleet/Hail/Freezing Rain		0
Snow	2	6
Light Conditions	Number	%
Dark, Road Lighted	8	25
Dark, Road Unlighted	3	10
Dawn		0
Daylight	20	65
Dusk		0
Time of Year	Number	%
Winter (Dec-Feb)	5	16
Spring (Mar-May)	12	39
Summer (June-Aug)	8	26
Fall (Sep-Nov)	6	19
Severity	Number	%
Fatality		0
Injury		0
Injury and Property Damage	7	22
Property Damage	21	68
Non-Reportable	3	10

Pavement	Number	%
Dry	27	87
Snow/Ice	1	3
Wet	3	10
Accident Type	Number	%
Rear End	10	33
Right Angle	2	6
Overtaking		0
Overtaken		0
Sideswipe	2	6
Right Turn		0
Left Turn	2	6
Head On		0
Backing		0
Animal	10	33
Bicyclist		0
Fixed Object	5	16
Contributing Factors	Number	%
Animal's Action	10	33
Backing Unsafely	1	3
Brakes Defective		0
Driver Inattention	7	23
Driver Inexperience		0
Failure to Keep Right	1	3
Failure to Yield ROW		0
Fell Asleep	2	6
Following Too Closely	5	17
Glare		0
Passing or Lane Usage Improperly	1	3
Pavement Slippery		0
Reaction to Uninvolved Vehicle	1	3
Tire Failure/Inadequate	1	3
Traffic Control Devices Disregarded		0
Turning Improper	2	6
Unsafe Lane Change		0
Unsafe Speed		0
View Obstructed/Limited		0
Unknown/Not Entered		0

Accident Rate Calculations

Total Volume	18433	Vehicles per Day
	28.26	Million Vehicle Miles (MVM)
	1.10	Collision Rate per MVM
	2.25	NYS DOT Average Collision Rate (Free Control, Undivided, 2 Lanes)

STONEFIELD

Table B10

3-Year Motor Vehicle Collision Summary Table by Location

Intersection/Location Name:

Time Period:

Total Accidents:

Intersection of NYS Route 25 & Edwards Avenue

2/1/2017 - 1/31-2020

35

Day of Week	Number	%
Sunday	3	9
Monday	4	11
Tuesday	7	20
Wednesday	6	17
Thursday	4	11
Friday	8	23
Saturday	3	9
Time of Day	Number	%
6 am-10 am	6	17
10 am-4 pm	15	43
4 pm-7 pm	8	23
7 pm-12 am	6	17
12 am-6 am		0
Weather	Number	%
Clear	26	74
Cloudy	7	20
Fog/Smog/Smoke		0
Rain	2	6
Sleet/Hail/Freezing Rain		0
Snow		0
Light Conditions	Number	%
Dark Road-Lighted	3	8
Dark Road-Unlighted	1	3
Dawn	1	3
Daylight	28	80
Dusk	2	6
Time of Year	Number	%
Winter (Dec-Feb)	12	35
Spring (Mar-May)	11	31
Summer (June-Aug)	7	20
Fall (Sep-Nov)	5	14
Severity	Number	%
Fatality		0
Injury	1	3
Injury and Property Damage	12	34
Property Damage	15	43
Non-Reportable	7	20

Pavement	Number	%
Dry	30	85
Snow/Ice	2	6
Wet	3	9
Accident Type	Number	%
Rear End	16	46
Right Angle	7	20
Overtaking	2	5
Overtaken		0
Sideswipe	1	3
Right Turn	1	3
Left Turn	5	14
Head On	1	3
Backing	2	6
Animal		0
Bicyclist		0
Fixed Object		0
Contributing Factors	Number	%
Animal's Action		0
Backing Unsafely	1	3
Brakes Defective		0
Driver Inattention	7	20
Driver Inexperience		0
Failure to Keep Right		0
Failure to Yield ROW	9	25
Fell Asleep		0
Following Too Closely	10	28
Glare		0
Passing or Lane Usage Improperly	2	6
Pavement Slippery		0
Reaction to Uninvolved Vehicle	1	3
Tire Failure/Inadequate		0
Traffic Control Devices Disregarded	1	3
Turning Improper	3	9
Unsafe Lane Change	1	3
Unsafe Speed		0
View Obstructed/Limited		0
Unknown/Not Entered		0

Accident Rate Calculations

Total Volume	21633	Vehicles per Day
	23.69	Million Entering Vehicles (MEV)
	1.48	Collision Rate per MEV
	0.54	NYSOT Average Collision Rate (Urban 4-Leg Signalized Intersection, 1-4 Lanes)

STONEFIELD

Table B11

3-Year Motor Vehicle Collision Summary Table by Location

Intersection/Location Name:

Time Period:

Total Accidents:

Edwards Avenue Between NYS Route 25 & River Road

2/1/2017 - 1/31-2020

13

Day of Week	Number	%
Sunday	1	8
Monday	2	15
Tuesday	1	8
Wednesday	1	8
Thursday	2	15
Friday	3	23
Saturday	3	23
Time of Day	Number	%
6 am-10 am	2	15
10 am-4 pm	3	24
4 pm-7 pm	4	31
7 pm-12 am	2	15
12 am-6 am	2	15
Weather	Number	%
Clear	12	92
Cloudy	1	8
Fog/Smog/Smoke		0
Rain		0
Sleet/Hail/Freezing Rain		0
Snow		0
Light Conditions	Number	%
Dark, Road Lighted		0
Dark, Road Unlighted	4	30
Dawn	1	8
Daylight	7	54
Dusk	1	8
Time of Year	Number	%
Winter (Dec-Feb)	4	31
Spring (Mar-May)	2	15
Summer (June-Aug)	3	23
Fall (Sep-Nov)	4	31
Severity	Number	%
Fatality		0
Injury		0
Injury and Property Damage	4	31
Property Damage	6	46
Non-Reportable	3	23

Pavement	Number	%
Dry	13	100
Snow/Ice		0
Wet		0
Accident Type	Number	%
Rear End	4	30
Right Angle	1	8
Overtaking	1	8
Overtaken		0
Sideswipe	1	8
Right Turn		0
Left Turn	1	8
Head On		0
Backing		0
Animal	3	23
Bicyclist		0
Fixed Object	2	15
Contributing Factors	Number	%
Animal's Action	2	15
Backing Unsafely		0
Brakes Defective		0
Driver Inattention	3	23
Driver Inexperience		0
Failure to Keep Right		0
Failure to Yield ROW	1	8
Fell Asleep	1	8
Following Too Closely	4	30
Glare		0
Passing or Lane Usage Improperly		0
Pavement Slippery		0
Reaction to Uninvolved Vehicle		0
Tire Failure/Inadequate		0
Traffic Control Devices Disregarded		0
Turning Improper		0
Unsafe Lane Change		0
Unsafe Speed		0
View Obstructed/Limited	1	8
Unknown/Not Entered	1	8

Accident Rate Calculations

Total Volume	7050	Vehicles per Day
	10.81	Million Vehicle Miles (MVM)
	1.20	Collision Rate per MVM
	2.25	NYSOT Average Collision Rate (Free Control, Undivided, 2 Lanes)

STONEFIELD

Table B12

3-Year Motor Vehicle Collision Summary Table by Location

Intersection/Location Name:

Time Period:

Total Accidents:

Intersection of Edwards Avenue & River Road

2/1/2017 - 1/31-2020

15

Day of Week	Number	%
Sunday	3	20
Monday	3	20
Tuesday	1	7
Wednesday	7	46
Thursday		0
Friday	1	7
Saturday		0
Time of Day	Number	%
6 am-10 am	2	13
10 am-4 pm	8	53
4 pm-7 pm	1	7
7 pm-12 am	1	7
12 am-6 am	3	20
Weather	Number	%
Clear	11	73
Cloudy	1	7
Fog/Smog/Smoke		0
Rain	2	13
Sleet/Hail/Freezing Rain		0
Snow	1	7
Light Conditions	Number	%
Dark, Road Lighted	2	13
Dark, Road Unlighted	2	13
Dawn		0
Daylight	11	74
Dusk		0
Time of Year	Number	%
Winter (Dec-Feb)	3	20
Spring (Mar-May)	4	27
Summer (June-Aug)	3	20
Fall (Sep-Nov)	5	33
Severity	Number	%
Fatality		0
Injury	1	7
Injury and Property Damage	7	46
Property Damage	6	40
Non-Reportable	1	7

Pavement	Number	%
Dry	12	80
Snow/Ice	1	7
Wet	2	13
Accident Type	Number	%
Rear End	4	26
Right Angle	4	26
Overtaking	1	7
Overtaken		0
Sideswipe	1	7
Right Turn		0
Left Turn	1	7
Head On		0
Backing		0
Animal		0
Bicyclist	1	7
Fixed Object	3	20
Contributing Factors	Number	%
Animal's Action	1	7
Backing Unsafely		0
Brakes Defective	1	7
Driver Inattention	1	7
Driver Inexperience	1	7
Failure to Keep Right		0
Failure to Yield ROW	3	20
Fell Asleep	1	7
Following Too Closely	1	7
Glare	1	7
Passing or Lane Usage Improperly	1	6
Pavement Slippery	2	13
Reaction to Uninvolved Vehicle		0
Tire Failure/Inadequate		0
Traffic Control Devices Disregarded	1	6
Turning Improper		0
Unsafe Lane Change		0
Unsafe Speed		0
View Obstructed/Limited		0
Unknown/Not Entered	1	6

Accident Rate Calculations

Total Volume	7050	Vehicles per Day
	7.72	Million Entering Vehicles (MEV)
	1.94	Collision Rate per MEV
	0.15	NYS DOT Average Collision Rate (Free Control, Undivided, 2 Lanes)

STONEFIELD

Table B13

3-Year Motor Vehicle Collision Summary Table by Location

Intersection/Location Name:

Time Period:

Total Accidents:

Intersection of Edwards Avenue & Mill Road

2/1/2017 - 1/31-2020

2

Day of Week	Number	%
Sunday		0
Monday		0
Tuesday	1	50
Wednesday	1	50
Thursday		0
Friday		0
Saturday		0
Time of Day	Number	%
6 am-10 am		0
10 am-4 pm		0
4 pm-7 pm	1	50
7 pm-12 am	1	50
12 am-6 am		0
Weather	Number	%
Clear	2	100
Cloudy		0
Fog/Smog/Smoke		0
Rain		0
Sleet/Hail/Freezing Rain		0
Snow		0
Light Conditions	Number	%
Dark, Road Lighted		0
Dark, Road Unlighted		0
Dawn		0
Daylight	1	50
Dusk	1	50
Time of Year	Number	%
Winter (Dec-Feb)		0
Spring (Mar-May)		0
Summer (June-Aug)	2	100
Fall (Sep-Nov)		0
Severity	Number	%
Fatality		0
Injury		0
Injury and Property Damage	1	50
Property Damage		0
Non-Reportable	1	50

Pavement	Number	%
Dry	2	100
Snow/Ice		0
Wet		0
Accident Type	Number	%
Rear End	1	50
Right Angle		0
Overtaking	1	50
Overtaken		0
Sideswipe		0
Right Turn		0
Left Turn		0
Head On		0
Backing		0
Animal		0
Bicyclist		0
Fixed Object		0
Contributing Factors	Number	%
Animal's Action		0
Backing Unsafely		0
Brakes Defective		0
Driver Inattention		0
Driver Inexperience		0
Failure to Keep Right		0
Failure to Yield ROW		0
Fell Asleep		0
Following Too Closely		0
Glare		0
Passing or Lane Usage Improperly		0
Pavement Slippery		0
Reaction to Uninvolved Vehicle	1	50
Tire Failure/Inadequate		0
Traffic Control Devices Disregarded		0
Turning Improper		0
Unsafe Lane Change		0
Unsafe Speed	1	50
View Obstructed/Limited		0
Unknown/Not Entered		0

Accident Rate Calculations

Total Volume	7050	Vehicles per Day
	7.72	Million Entering Vehicles (MEV)
	0.26	Collision Rate per MEV
	0.07	NYSOT Average Collision Rate (Urban 3-Leg Unsignalized Intersection, > 5 lanes)

STONEFIELD

Table B14

3-Year Motor Vehicle Collision Summary Table by Location

Intersection/Location Name:

Time Period:

Total Accidents:

Intersection of Edwards Avenue & LIE East Exit Ramp

2/1/2017 - 1/31-2020

33

Day of Week	Number	%
Sunday	4	12
Monday	6	18
Tuesday	5	16
Wednesday	7	21
Thursday	1	3
Friday	6	18
Saturday	4	12
Time of Day	Number	%
6 am-10 am	10	30
10 am-4 pm	14	43
4 pm-7 pm	7	21
7 pm-12 am	1	3
12 am-6 am	1	3
Weather	Number	%
Clear	24	73
Cloudy	4	12
Fog/Smog/Smoke	1	3
Rain	4	12
Sleet/Hail/Freezing Rain		0
Snow		0
Light Conditions	Number	%
Dark, Road Lighted	1	3
Dark, Road Unlighted	1	3
Dawn		0
Daylight	31	94
Dusk		0
Time of Year	Number	%
Winter (Dec-Feb)	3	10
Spring (Mar-May)	10	30
Summer (June-Aug)	9	27
Fall (Sep-Nov)	11	33
Severity	Number	%
Fatality		0
Injury	1	3
Injury and Property Damage	4	12
Property Damage	15	46
Non-Reportable	13	39

Pavement	Number	%
Dry	27	82
Snow/Ice		0
Wet	6	18
Accident Type	Number	%
Rear End	10	30
Right Angle	12	37
Overtaking	5	15
Overtaken		0
Sideswipe		0
Right Turn		0
Left Turn	3	9
Head On		0
Backing		0
Animal		0
Bicyclist		0
Fixed Object	3	9
Contributing Factors	Number	%
Animal's Action		0
Backing Unsafely		0
Brakes Defective		0
Driver Inattention	10	30
Driver Inexperience	1	3
Failure to Keep Right		0
Failure to Yield ROW	11	34
Fell Asleep		0
Following Too Closely	1	3
Glare		0
Passing or Lane Usage Improperly		0
Pavement Slippery	1	3
Reaction to Uninvolved Vehicle	1	3
Tire Failure/Inadequate		0
Traffic Control Devices Disregarded	1	3
Turning Improper	3	9
Unsafe Lane Change		0
Unsafe Speed	1	3
View Obstructed/Limited	2	6
Unknown/Not Entered	1	3

Accident Rate Calculations

Total Volume	18658	Vehicles per Day
	20.43	Million Entering Vehicles (MEV)
	1.62	Collision Rate per MEV
	0.07	NYSOT Average Collision Rate (Urban 3-Leg Unsignalized Intersection, > 5 lanes)

RAW MOTOR VEHICLE COLLISION DATA

**DECEMBER 16, 2020 VIDEO TELECONFERENCE
MEETING MINUTES**

December 17, 2020

New York State Department of Transportation
Traffic Engineering & Safety (Permits)
NYS Office Building
250 Veterans Memorial Highway
Hauppauge, New York 11788-5518
Attn: Mohammad Islam

Planning Department
Town of Riverhead
200 Howell Avenue
Riverhead, NY 11901
Attn: Jefferson Murphree

RE: HK Ventures, LLC – NYS Route 25 Access Plan Video Tele-conference
4285 Middle Country Road (NYS Route 25)
Hamlet of Calverton, Town of Riverhead
Suffolk County, New York 11961
NYSDOT Case # 84382
SE&D Job No. NYC-200069

Dear Mr. Islam & Mr. Murphree:

Please see below the meeting minutes from the December 16, 2020 video tele-conference with the New York State Department of Transportation (NYSDOT), the Town of Riverhead Planning Department, and the applicant regarding the above referenced application:

Attendees:

- NYSDOT
 - Mohammad Islam
 - Alexander Mirsakov
- Town of Riverhead Planning Department
 - Jefferson Murphree
 - Greg Bergman
 - Ray DiBiase (LKMA)
- HK Ventures (applicant)
 - Scott Johns
- Key Civil Engineering
 - Jaclyn Peranteau
- Stonefield Engineering & Design
 - Andrew Villari
 - Amanda LaRosa
 - Victoria Epstein

Meeting Minutes:

- I. Stonefield provided background information regarding the proposed development program and introduced conversation regarding access plan options along NYS Route 25. Stonefield noted

- SEQR Positive Declaration received from the Town and stated that the Traffic Impact Study is being updated to address comments received from and on behalf of the Town.
2. NYSDOT confirmed that a Traffic Signal Warrant Analysis (TSWA) was conducted in 2015 at the intersection of NYS Route 25 and Fresh Pond Avenue for which a signal was denied based on accident and delay analyses at the subject location.
 3. After discussion of some potential access configurations, the NYSDOT stated that the ideal resolution would be the construction of a signalized intersection with left-turn lanes at the intersection of NYS Route 25 and Fresh Pond Avenue and an unsignalized driveway with right-in/right-out access configuration along NYS Route 25 at the HK Ventures property. It was understood that this assumes the neighboring property owner is agreeable to such improvements.
 4. NYSDOT stated that a signal located at the HK Ventures driveway may be considered if cross-access is not feasible.
 5. NYSDOT may consider a Two-Way Left-Turn Lane (TWLTL) along HK Ventures frontage that turns into an exclusive westbound left-turn at the intersection with Fresh Pond Avenue.
 6. NYSDOT noted that shoulders cannot be removed due to presence of a bicycle lane along NYS Route 25.
 7. NYSDOT noted preference to the addition of a left-turn lane unless there is major need for a signal – based on 2015 TSWA this is not likely, however, given the new development plans along the corridor a signal may be warranted for the future.
 8. Stonefield acknowledged that a TSWA at the HK Ventures driveway along NYS Route 25 may result in the conclusion that the signal will not be warranted on volumes, but other warrants may be applicable.
 - a. NYSDOT confirmed they do not wish to wait the typical 5-year study period to determine if the location will meet the crash warrant.
 9. Stonefield presented conceptual roundabout design at the intersection of NYS Route 25 and Fresh Pond Avenue.
 - a. The roundabout design would result in approximately 20,000 SF of taking from five (5) separate properties by NYSDOT.
 10. NYSDOT stated preference to a traffic signal over a roundabout at the subject intersection based on corridor characteristics and intersection geometry.
 - a. Ray DiBiase of LKMA on behalf of the Town requested that an assessment of a roundabout at the subject intersection as well as the associated advantages and disadvantages of a roundabout be provided.
 - b. NYSDOT was open to assessment but informed that the roundabout will likely not be considered as an alternative.
 11. Town of Riverhead Planning Department inquired as to what point NYSDOT typically becomes involved in change-of-use programs and that discussion of potential signal installation may be considered.
 - a. NYSDOT responded that NYSDOT involvement is dependent on phasing, and whether multiple developments are proposed – NYSDOT will ask developers to look at joint impact and will assess if alternate access plans are warranted.
 12. Stonefield inquired as to whether there are any additional planned projects within the site vicinity on the horizon which would impact the subject corridor.
 - a. NYSDOT was not aware of additional developments, besides already known development and improvement plans at Edwards Avenue under NYSDOT Project Pin 081001, which would impact the subject corridor.
 - b. HK Ventures is currently the only application that has been submitted to the Town which is anticipated to impact traffic along the subject corridor. Other property owners have inquired about what types of developments are permitted on their properties.

13. DOT inquired as to whether a TSWA is anticipated in connection with the HK Ventures permit application.
 - a. Stonefield confirmed that an updated analysis is anticipated to be submitted dependent on agreement between the applicant and the neighboring property owner.
 - b. NYSDOT does not wish to conduct an independent analysis if analysis is anticipated to be conducted under the permit application.
14. NYSDOT to provide the 2015 TSWA for Fresh Pond Avenue and any other documents which may assist in updated analyses to be conducted under the HK Ventures permit application.

Best regards,



Andrew J. Villari, PE
Stonefield Engineering & Design

**CALVERTON INDUSTRIES, LLC. LETTER OF DENIAL
OF CROSS-ACCESS**

Calverton Industries LLC

Mailing Address: PO Box 9

Speonk, NY 11972

Phone (631) 325-1492

Fax (631) 325-1580

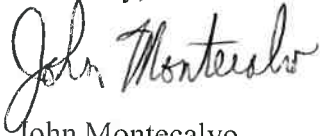
March 9, 2021

**HK Ventures, LLC
100 Crossways Park West
Woodbury, NY 11797
Attn: David Zere**

Good afternoon David,

As per our prior conversation, we at Calverton Industries, feel that allowing access thru our property to yours, would be detrimental to our future plans. Unfortunately we cannot accommodate your request.

Sincerely,



John Montecalvo
Managing Member

Calverton Industries, LLC

TRAFFIC SIGNAL WARRANT ANALYSIS

STONEFIELD

TRAFFIC SIGNAL WARRANT ANALYSIS

NYS ROUTE 25 & SITE DRIVEWAY
HAMLET OF CALVERTON, TOWN OF RIVERHEAD
SUFFOLK COUNTY, NEW YORK

PREPARED FOR:

HK VENTURES, LLC

PREPARED BY:

STONEFIELD ENGINEERING & DESIGN, LLC
APRIL 19, 2021
NYC-200069



ANDREW J. VILLARI, PE
PROJECT MANAGER
NY P.E. LICENSE #100729



MATTHEW J. SECKLER, PE, PP, PTOE
PRINCIPAL
NY P.E. LICENSE #092725

TECHNICAL APPENDIX

TRAFFIC SIGNAL WARRANT ANALYSIS

Table 1A – Traffic Signal Warrant Analysis Summary – 2025 Build

HCS+: MUTCD SIGNAL WARRANT OUTPUTS

NYSDOT TRAFFIC DATA

NYSDOT Traffic Count Hourly Report

Growth Rates provided by NYSDOT Office of Technical Services Traffic Monitoring Section

SITE-GENERATED TRAFFIC VOLUMES

Table 2A – Projected Site-Generated Daily Traffic Volumes

TRAFFIC SIGNAL WARRANT ANALYSIS

Stonefield Engineering & Design, LLC (“Stonefield”) prepared a Traffic Signal Warrant Analysis to assist in determining whether a traffic signal should be installed at the proposed intersection of NYS Route 25 and the HK Ventures Site Driveway in the Hamlet of Calverton, Town of Riverhead, Suffolk County, New York. This report serves to supplement Stonefield’s Traffic Impact Study, dated April 19, 2021, and analyzes the full build-out of the proposed industrial park. Site access would be provided via one (1) full-movement driveway along NYS Route 25.

The Manual on Uniform Traffic Control Devices (MUTCD), published by the Federal Highway Administration (FHWA), states that “The investigation of the need for a traffic control signal shall include an analysis of factors related to the existing operation...at the study location...and the applicable factors contained in the traffic signal warrants.” Specifically, these Warrants are as follows:

- Warrant 1, Eight-Hour Vehicular Volume
- Warrant 2, Four-Hour Vehicular Volume
- Warrant 3, Peak Hour
- Warrant 4, Pedestrian Volume
- Warrant 5, School Crossing
- Warrant 6, Coordinated Signal System
- Warrant 7, Crash Experience
- Warrant 8, Roadway Network
- Warrant 9, Intersection Near a Grade Crossing

Further, the MUTCD states that “a traffic control signal should not be installed unless one or more of the factors described in [Chapter 4C] are met.” As part of the study, New York State Department of Transportation (NYSDOT) 24-hour count data along NYS Route 25 was utilized for the Traffic Signal Warrant Analysis and is appended to this report.

Future traffic volumes were projected based on industry standards and guidance contained within the MUTCD. Specifically, an annual background traffic growth rate of 1.0% was applied to the NYSDOT traffic volumes along NYS Route 25 for eleven (11) years in accordance with data provided by the NYSDOT Office of Technical Services’ Traffic Monitoring Section. For the proposed HK Ventures site driveway, daily traffic volumes were projected utilizing data provided by the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition and subsequently distributed based on ITE’s Hourly Distribution of Entering and Exiting Vehicle Trips. A summary of the volume data is appended at the end of this report.

The succeeding sections of this study describe Stonefield's evaluation of the MUTCD Warrants, and documents provided in the Technical Appendix provide a summary of the overall analysis for the 2025 Build Condition.

TRAFFIC SIGNAL WARRANTS

WARRANT 1 – EIGHT-HOUR VEHICULAR VOLUME

2025 BUILD: MET

This Warrant is intended for application at “locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal” or “where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay.” Warrant 1 is satisfied when one of the following conditions exists for any eight (8) hours of an average day on roadways:

- A. The vehicles per hour given in both of the 100 percent columns of Condition A in Table 4C-I exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection; or
- B. The vehicles per hour given in both of the 100 percent columns of Condition B in Table 4C-I exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection.

As indicated on the appended Table 1A, volume thresholds for Condition B are met for nine (9) hours; therefore, this Warrant is satisfied for the 2025 Build Condition.

WARRANT 2 – FOUR-HOUR VEHICULAR VOLUME

2025 BUILD: MET

This Warrant is intended for application “where the volume of intersecting traffic is the principal reason to consider installing a traffic control signal.” This Warrant is satisfied if traffic volumes exceed the applicable curve in Figure 4C-I within the MUTCD for any four (4) hours of an average day. As indicated on the appended Table 1A, this threshold is exceeded for nine (9) hours in the Build Condition; therefore, this Warrant is satisfied for the 2025 Build Condition.

WARRANT 3 – PEAK HOUR

2025 BUILD: MET

This Warrant is intended for application “only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time.” The proposed development qualifies as a “high-occupancy vehicle facility.” Warrant 3 is satisfied when one of the following conditions exists for an average day on roadways:

- A. If all three (3) of the following conditions exist for the same one (1) hour of an average day:
 - 1. The total stopped time delay experienced by traffic on one minor-street approach controlled by a stop sign equals or exceeds four (4) vehicle-hours for a one-lane approach;
 - 2. The volume on the same minor-street approach equals or exceeds 100 vehicles per hour for one moving lane of traffic; and

3. The total entering traffic volume at the intersection exceeds 800 vehicles per hour for intersections with four (4) approaches; or,
- B. Traffic volumes exceed the applicable curve in Figure 4C-3 within the MUTCD for any one (1) hour of an average day.

Calculations pertaining to total stopped time delay have not been performed; however, as indicated on the appended Table 1A, the threshold specified in Condition B is exceeded during seven (7) one (1)-hour periods in the 2025 Build Condition; therefore, this Warrant is satisfied.

WARRANT 4 – PEDESTRIAN VOLUME

2025 BUILD: NOT MET

This Warrant is intended for application “where the traffic volume on a major street is so heavy that pedestrians experience excessive delay in crossing the major street.” Warrant 4 is satisfied when one of the following conditions exists for an average day on roadways:

- A. Traffic and pedestrian volumes exceed the applicable curve in Figure 4C-5 within the MUTCD for any four (4) hours of an average day; or
- B. Traffic and pedestrian volumes exceed the applicable curve in Figure 4C-7 within the MUTCD for any one (1) hour of an average day.

Pedestrian volumes at the subject intersection are not sufficient to warrant signalization during the 2025 Build Condition. Therefore, this Warrant is not satisfied.

WARRANT 5 – SCHOOL CROSSING

N/A

This Warrant is intended for application “where the fact that schoolchildren cross the major street is the principal reason to consider installing a traffic control signal.” Therefore, this Warrant is not applicable.

WARRANT 6 – COORDINATED SIGNAL SYSTEM

N/A

This Warrant is intended for application if progressive movement in a coordinated signal system would necessitate installing a traffic signal in order to maintain proper platooning of vehicles. The principal reason for installing a traffic signal is not to maintain proper platooning of vehicles; therefore, this Warrant is not applicable.

WARRANT 7 – CRASH EXPERIENCE

NOT MET

This Warrant is intended for application “where the severity and frequency of crashes are the principal reasons to consider installing a traffic control signal.” Warrant 7 is satisfied when all of the following criteria are met:

- A. Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency; and
- B. Five or more reported crashes, of types susceptible to correction by a traffic control signal, have occurred within a 12-month period, each crash involving personal injury or property damage apparently exceeding the applicable requirements for a reportable crash; and
- C. For each of any 8 hours of an average day, the vehicles per hour (vph) given in both the 80 percent columns of Condition A in Table 4C-I, or the vph in both of the 80 percent columns of Condition B in Table 4C-I exists on the major-street and the higher-volume minor-street approach, respectively, to the intersection, or the volume of pedestrian traffic is not less than 80 percent of the requirements specified in the Pedestrian Volume warrant. These major-street and minor-street volumes shall be for the same 8 hours. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours.

As the intersection does not yet exist, crash history at the intersection has not been evaluated, therefore, this Warrant is not applicable.

WARRANT 8 – ROADWAY NETWORK

N/A

This Warrant is intended “to encourage concentration and organization of traffic flow on a roadway network.” This Warrant is satisfied if the common intersection of two or more major routes meets one or both of the following criteria:

- A. The intersection has a total existing, or immediately projected, entering volume of at least 1,000 vehicles per hour during the peak hour of a typical weekday and has 5-year projected traffic volumes, based on an engineering study, that meet one or more of Warrants 1, 2, and 3 during an average weekday; or
- B. The intersection has a total existing or immediately projected entering volume of at least 1,000 vehicles per hour for each of any 5 hours of a non-normal business day (Saturday or Sunday).

The volumes at the subject intersection do not exceed the thresholds required to satisfy this Warrant, therefore this Warrant is not applicable.

WARRANT 9 – INTERSECTION NEAR A GRADE CROSSING

N/A

This Warrant is intended for application at locations proximate to grade crossings. As this intersection is not near an at-grade railroad crossing, this Warrant is not applicable.

CONCLUSIONS

This report was prepared to assist in determining whether a traffic signal should be installed at the intersection of NYS Route 25 and the HK Ventures Site Driveway in the Hamlet of Calverton, Town of Riverhead, Suffolk County, New York. Based on the analysis documented herein, MUCTD Warrant 1B (Eight-Hour Vehicular Volume), MUCTD Warrant 2 (Four-Hour Vehicular Volume), and MUTCD Warrant 3 (Peak-Hour Vehicular Volume) are met in the 2025 Build Condition. Based on the analyses contained within this report, a signal is warranted at the intersection of NYS Route 25 and the HK Ventures site driveway as a result of the proposed development. Therefore, Access Condition B as analyzed in the Traffic Impact Study, dated April 19, 2021 is recommended to be implemented.

TECHNICAL APPENDIX

WARRANT SUMMARY TABLE

STONEFIELD

stonefieldeng.com

584 Broadway, Suite 310, New York, NY 10012

718.606.8305 t. 201.340.4472 f.

Table 1A - Traffic Signal Warrant Analysis Summary

Traffic Signal Warrant Analysis - Average Weekday Volumes

Middle Country Road (NYS Route 25) and Site Driveway

Hamlet of Calverton, Town of Riverhead, Suffolk County, New York

	2025 Traffic Volumes		Project Traffic Volumes	FHWA MUTCD Traffic Signal Warrants									
	Middle Country Road	Middle Country Road	Site-Generated Traffic	X = Hourly Requirement Satisfied									
	Vehicles Per Hour	Vehicles Per Hour	Vehicles Per Hour	N/A = Warrant is Not Applicable									
	Major Street (One Way EB)	Major Street (One Way WB)	Minor Street (One Way NB)	1A (70%)	1B (70%)	2 (70%)	3B (70%)	4	5	6	7	8	9
12-1 AM	38	57	0					N/A	N/A	N/A	N/A	N/A	N/A
1-2 AM	22	29	2										
2-3 AM	22	19	2										
3-4 AM	23	18	0										
4-5 AM	77	20	0										
5-6 AM	226	91	5										
6-7 AM	483	180	16										
7-8 AM	703	340	36										
8-9 AM	821	375	57										
9-10 AM	765	406	92		X	X							
10-11 AM	747	459	108		X	X	X						
11-12 N	672	553	114		X	X	X						
12-1 PM	669	655	145	X	X	X	X						
1-2 PM	687	625	89		X	X							
2-3 PM	630	656	127		X	X	X						
3-4 PM	636	753	175	X	X	X	X						
4-5 PM	624	857	137		X	X	X						
5-6 PM	565	835	208	X	X	X	X						
6-7 PM	462	616	36										
7-8 PM	334	518	2										
8-9 PM	235	467	0										
9-10 PM	180	377	13										
10-11 PM	137	234	0										
11-12 AM	67	146	0										
Warrant Met?				NO	YES	YES	YES	N/A	N/A	N/A	N/A	N/A	N/A

HCS+: MUTCD SIGNAL WARRANT OUTPUTS

Analyst: AJL	Intersection: NYS Route 25 & Site Driveway
Agency: SED	Jurisdiction: NYSDOT
Date: 4/19/2021	Units: U.S. Customary
Project ID: NYC-200069	Analysis Year: 2024
EW Street: Middle Country Road	NS Street: Site Driveway

General Information

Major St. Speed (mph): 50	Population: Not less than 10000
Nearest Signal (ft): 4800	Coordinated Signal System: N
Crashes per Yr: 0	

School Crossing

Students in Highest Hour: 0
 Adequate Gaps in Period: 0
 Minutes in Period: 0

Roadway Network

Two Major Routes: 0
 Weekend Count: 0
 5-yr Growth Factor: 0

Geometry and Traffic

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	1	1	0	1	0	1	0	0	0
LaneUsage		TR	R	L	T		L		R			

Results

Warrant 1: Eight-Hour Vehicular Volume	[X]
1 A. Minimum Vehicular Volumes	[]
1 B. Interruption of Continuous Traffic	[X]
1 80% Vehicular --and-- Interruption Volumes	[]
Warrant 2: Four-Hour Vehicular Volume	
2 A. Four-Hour Vehicular Volumes	[X]
Warrant 3: Peak Hour	[X]
3 A. Peak-Hour Conditions	[]
3 B. Peak-Hour Vehicular Volume Hours Met	[X]
Warrant 4: Pedestrian Volume	[]
4 A. Pedestrian Volumes	[]
4 B. Gaps Same Period	[]
Warrant 5: School Crossing	[]
5 A. Student Volumes	[]
5 B. Gaps Same Period	[]
Warrant 6: Coordinated Signal System	
6 Degree of Platooning	[]
Warrant 7: Crash Experience	[]
7 A. Adequate trials of alternatives	[]

7 80% Volumes for Warrants 1A, 1B --or-- 4 [X]

8 A. Weekday Volume []

8 B. Weekend Volume []

Traffic	Volumes (vph)											
	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
	0	703	0	0	340	0	18	0	18	0	0	0
	0	821	0	0	375	0	28	0	29	0	0	0
	0	765	0	0	406	0	46	0	46	0	0	0
	0	747	0	0	459	0	54	0	54	0	0	0
	0	672	0	0	553	0	57	0	57	0	0	0
	0	669	0	0	655	0	72	0	73	0	0	0
	0	687	0	0	625	0	44	0	45	0	0	0
	0	630	0	0	656	0	63	0	64	0	0	0
	0	636	0	0	753	0	87	0	88	0	0	0
	0	624	0	0	857	0	68	0	69	0	0	0
	0	565	0	0	835	0	104	0	104	0	0	0
	0	462	0	0	616	0	18	0	18	0	0	0

[illegible]

	0.0	0.0		0.0	0.0		0.0	0.0	
	0.0	0.0		0.0	0.0		0.0	0.0	
	0.0	0.0		0.0	0.0		0.0	0.0	
	0.0	0.0		0.0	0.0		0.0	0.0	
	0.0	0.0		0.0	0.0		0.0	0.0	
	0.0	0.0		0.0	0.0		0.0	0.0	

Warrants Volume

Information

Analyst	AJL	Intersection	NYS Route 25 & Site Driveway
Agency/Co	SED	Jurisdiction	NYSDOT
Date Performed	4/19/2021	Units	U.S. Customary
Project ID	NYC-200069	Time Period Analyzed	
East/West Street	Middle Country Road	North/South Street	Site Driveway
File Name	2021-04 Warrants	Major Street	East-West

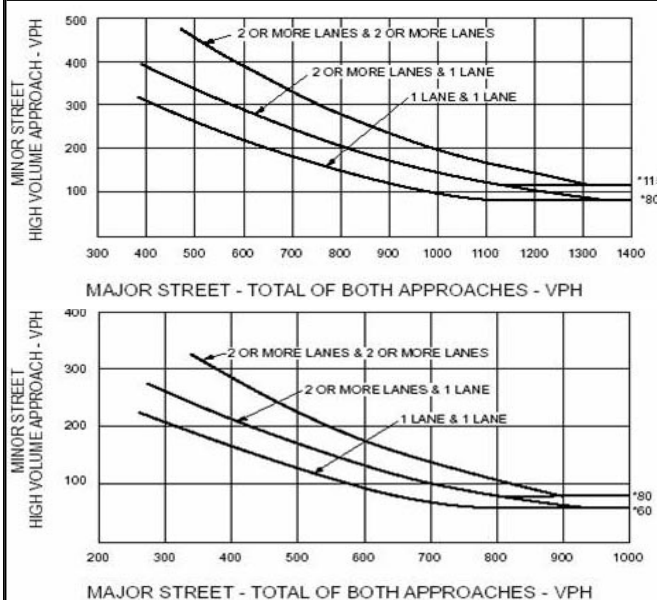
Project Description NYC-200069

Warrant 1

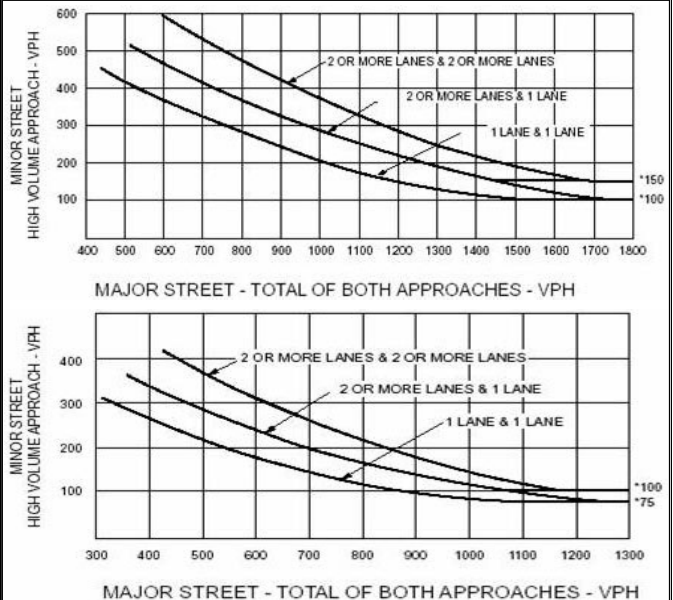
Condition A - Minimum Vehicular Volume							
Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)			Vehicles per hour on higher-volume minor-street approach (one direction only)		
Major Street	Minor Street	100% ^a	80% ^a	70% ^c	100% ^a	80% ^a	70% ^c
1.....	1.....	500	400	350	150	120	105
2 or more...	1.....	600	480	420	150	120	105
2 or more...	2 or more...	600	480	420	200	160	140
1.....	2 or more...	500	400	350	200	160	140

Condition B - Interruption of Continuous Traffic							
Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)			Vehicles per hour on higher-volume minor-street approach (one direction only)		
Major Street	Minor Street	100% ^a	80% ^a	70% ^c	100% ^a	80% ^a	70% ^c
1.....	1.....	750	600	525	75	60	53
2 or more...	1.....	900	720	630	75	60	53
2 or more...	2 or more...	900	720	630	100	80	70
1.....	2 or more...	750	600	525	100	80	70

Warrant 2



Warrant 3



Volume Summary

Major Street Lanes 2+			Minor Street Lanes 2+			Speed		Population		10000+	
Hours	Major Volume	Minor Volume	Total Volume	1A (70%)	1A (56%)	1B (70%)	1B (56%)	2 (70%)	3A (70%)	3B (70%)	
07-08	1043	36	1079	No	No	No	No	No	No	No	
08-09	1196	57	1253	No	No	No	Yes	No	No	No	
09-10	1171	92	1263	No	No	Yes	Yes	Yes	No	No	
10-11	1206	108	1314	No	No	Yes	Yes	Yes	No	Yes	
11-12	1225	114	1339	No	Yes	Yes	Yes	Yes	No	Yes	
12-13	1324	145	1469	Yes	Yes	Yes	Yes	Yes	No	Yes	
13-14	1312	89	1401	No	No	Yes	Yes	Yes	No	No	
14-15	1286	127	1413	No	Yes	Yes	Yes	Yes	No	Yes	
15-16	1389	175	1564	Yes	Yes	Yes	Yes	Yes	No	Yes	
16-17	1481	137	1618	No	Yes	Yes	Yes	Yes	No	Yes	
17-18	1400	208	1608	Yes	Yes	Yes	Yes	Yes	No	Yes	
18-19	1078	36	1114	No	No	No	No	No	No	No	
Totals	15111	1324	16435	3	6	9	10	9	0	7	

NYSDOT TRAFFIC DATA

STATION: 070042

New York State Department of Transportation

Traffic Count Hourly Report

Page 1 of 2

ROUTE #: **NY 25** ROAD NAME: FROM: **RT 25A** TO: **EDWARDS AVE** COUNTY: **Suffolk**
 DIRECTION: Eastbound FACTOR GROUP: 30 REC. SERIAL #: 8003 FUNC. CLASS: 14 TOWN:
 STATE DIR CODE: 6 WK OF YR: 32 PLACEMENT: 0.31mi W of Fresh Pond Ave NHS: no LION#:
 DATE OF COUNT: 08/07/2014 @ REF MARKER: JURIS: City BIN:
 NOTES LANE 1: ADDL DATA: CC Stn: RR CROSSING:
 COUNT TYPE: AXLE PAIRS BATCH ID: DOT-R10R10 WW32A VIMS SAMPLE:
 COUNT TAKEN BY: ORG CODE: VEC INITIALS: OO PROCESSED BY: ORG CODE: DOT INITIALS: JLB

DATE	DAY	12 TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 5	5 TO 6	6 TO 7	7 TO 8	8 TO 9	9 TO 10	10 TO 11	11 TO 12	12 TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 5	5 TO 6	6 TO 7	7 TO 8	8 TO 9	9 TO 10	10 TO 11	11 TO 12	DAILY TOTAL	DAILY HIGH COUNT	DAILY HIGH HOUR
		AM												PM														
1	F																											
2	S																											
3	S																											
4	M																											
5	T																											
6	W																											
7	T						240	467	659	760	659	649	761	778	644	562	601	563	533	461	313	239	175	121	73			
8	F	36	14	22	28	89	204	466	669	690	699	676	636	739	690	584	659	634	581	470	377	249	175	231	93	9711	739	12
9	S	58	37	17	22	48	117	235	413	494	601	678	704	687	659	620	537	550	491	375	311	248	195	166	117	8380	704	11
10	S	76	43	34	23	35	69	142	272	352	561	680	729	786	748	725	540	436	362	309	289	223	161	123	64	7782	786	12
11	M	28	20	15	30	73	206	432	655	759	698	644	624	640	612	562	549	589	528	385	280	211	157	101	60	8858	759	8
12	T	31	20	22	24	73	216	438	672	734	659	600	597	623	652	573	574	585	519	402	268	202	178	118	55	8835	734	8
13	W	37	20	14	19	58	153	380	577	825	785	665	571	586	636	622	575	565	489	408	353	209	152	150	63	8912	825	8
14	T	36	25	22	17	64	228	480	645	756	716	879	513	446	610	578	622	565	519	462	318	221	165	139	56	9082	879	10
15	F																											
16	S																											
17	S																											
18	M																											
19	T																											
20	W																											
21	T																											
22	F																											
23	S																											
24	S																											
25	M																											
26	T																											
27	W																											
28	T																											
29	F																											
30	S																											
31	S																											

AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6AM to Fri Noon)																							ADT	
34	20	20	21	69	203	433	630	736	686	670	602	600	616	565	570	559	506	414	299	211	161	123	60	8808
<u>DAYS Counted</u>	<u>HOURS Counted</u>		<u>WEEKDAYS Counted</u>	<u>WEEKDAY Hours</u>	<u>AVERAGE WEEKDAY</u>		Axle Adj. <u>Factor</u>	Seasonal/Weekday <u>Adjustment Factor</u>	<u>ESTIMATED</u>															
					High Hour	% of day																		
8	187		5	121	736	8%	0.976	1.090	AADT 8081															

ROUTE # **NY 25** ROAD NAME: FROM: **RT 25A** TO: **EDWARDS AVE** COUNTY: **Suffolk**
 STATION: **070042** STATE DIR CODE: 6 PLACEMENT: **0.31mi W of Fresh Pond Ave** DATE OF COUNT: **08/07/2014**

STATION: 070042

New York State Department of Transportation

Traffic Count Hourly Report

Page 2 of 2

ROUTE #: NY 25 ROAD NAME: FROM: RT 25A TO: EDWARDS AVE COUNTY: Suffolk
 DIRECTION: Westbound FACTOR GROUP: 30 REC. SERIAL #: 8003 FUNC. CLASS: 14 TOWN:
 STATE DIR CODE: 7 WK OF YR: 32 PLACEMENT: 0.31mi W of Fresh Pond Ave NHS: no LION#:
 DATE OF COUNT: 08/07/2014 @ REF MARKER: JURIS: City BIN:
 NOTES LANE 1: ADDL DATA: CC Stn: RR CROSSING:
 COUNT TYPE: AXLE PAIRS BATCH ID: DOT-R10R10 WW32A VIMS SAMPLE:
 COUNT TAKEN BY: ORG CODE: VEC INITIALS: OO PROCESSED BY: ORG CODE: DOT INITIALS: JLB

DATE	DAY	12 TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 5	5 TO 6	6 TO 7	7 TO 8	8 TO 9	9 TO 10	10 TO 11	11 TO 12	12 TO 1	1 TO 2	2 TO 3	3 TO 4	4 TO 5	5 TO 6	6 TO 7	7 TO 8	8 TO 9	9 TO 10	10 TO 11	11 TO 12	DAILY TOTAL	DAILY HIGH	DAILY HIGH
		AM												PM														
1	F																											
2	S																											
3	S																											
4	M																											
5	T																											
6	W																											
7	T						84	178	321	338	361	401	495	564	530	580	732	800	806	596	504	478	381	219	160			
8	F	50	29	21	14	19	75	148	307	351	391	414	500	528	630	628	712	827	777	636	532	497	420	271	185	8962	827	16
9	S	89	51	24	22	16	33	74	215	263	346	392	472	526	578	573	603	608	595	564	448	448	403	340	210	7893	608	16
10	S	115	50	25	22	16	24	59	128	219	289	379	468	526	609	563	609	619	623	535	519	492	311	178	128	7506	623	17
11	M	35	22	15	13	11	74	152	296	353	367	330	438	457	606	602	663	815	862	613	482	405	302	205	130	8248	862	17
12	T	50	28	16	17	22	89	154	323	335	359	394	476	532	594	671	710	822	821	561	450	380	319	217	126	8466	822	16
13	W	52	24	14	15	14	93	175	348	410	411	445	391	494	466	577	655	754	725	554	435	431	336	192	119	8130	754	16
14	T	55	27	16	20	17	78	182	274	280	351	542	750	956	675	578	701	746	618	507	502	452	393	240	135	9095	956	12
15	F																											
16	S																											
17	S																											
18	M																											
19	T																											
20	W																											
21	T																											
22	F																											
23	S																											
24	S																											
25	M																											
26	T																											
27	W																											
28	T																											
29	F																											
30	S																											
31	S																											

AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6AM to Fri Noon)																							ADT	
51	26	17	16	18	82	161	305	336	364	411	496	587	560	588	675	768	748	552	464	419	338	210	131	8323
<u>DAYS Counted</u>	<u>HOURS Counted</u>	<u>WEEKDAYS Counted</u>	<u>WEEKDAY Hours</u>	<u>AVERAGE WEEKDAY</u>		<u>Axle Adj. Factor</u>	<u>Seasonal/Weekday Adjustment Factor</u>	<u>ESTIMATED</u>																
				High Hour	% of day																			
8	187	5	121	768	9%	0.976	1.090	AADT																
								7636																

ROUTE # NY 25 ROAD NAME: FROM: RT 25A TO: EDWARDS AVE COUNTY: Suffolk
 STATION: 070042 STATE DIR CODE: 7 PLACEMENT: 0.31mi W of Fresh Pond Ave DATE OF COUNT: 08/07/2014

From: dot.sm.mo.traffic.data.viewer <MO-TrafficDataViewer@dot.ny.gov>
Sent: Monday, January 11, 2021 10:17 AM
To: Villari, Andrew
Subject: RE: Inquiry from Highway Data Services Bureau page @DOT.NY.GOV

CAUTION: External Email

Good morning Andrew,

Below are the available growth rates for the locations you requested:

1. Middle Country Rd – Station 070042: FC 14, +1.00%
Fresh Pond Ave – Station 071486: FC 16, -1.44%
2. Calverton CDP: we do not have growth rates available for CDPs
3. Town of Riverhead: +0.52%
4. Suffolk County – For FC 14 roads, +0.31% . For FC 16 roads, +0.34%

Please ask if you have further questions.

Traffic Data Viewer

NYSDOT Office of Technical Services Traffic Monitoring Section

50 Wolf Road, POD 4-2, Albany, NY 12232
518-457-1965 | MO-TrafficDataViewer@dot.ny.gov



ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

SITE-GENERATED TRAFFIC VOLUMES

STONEFIELD

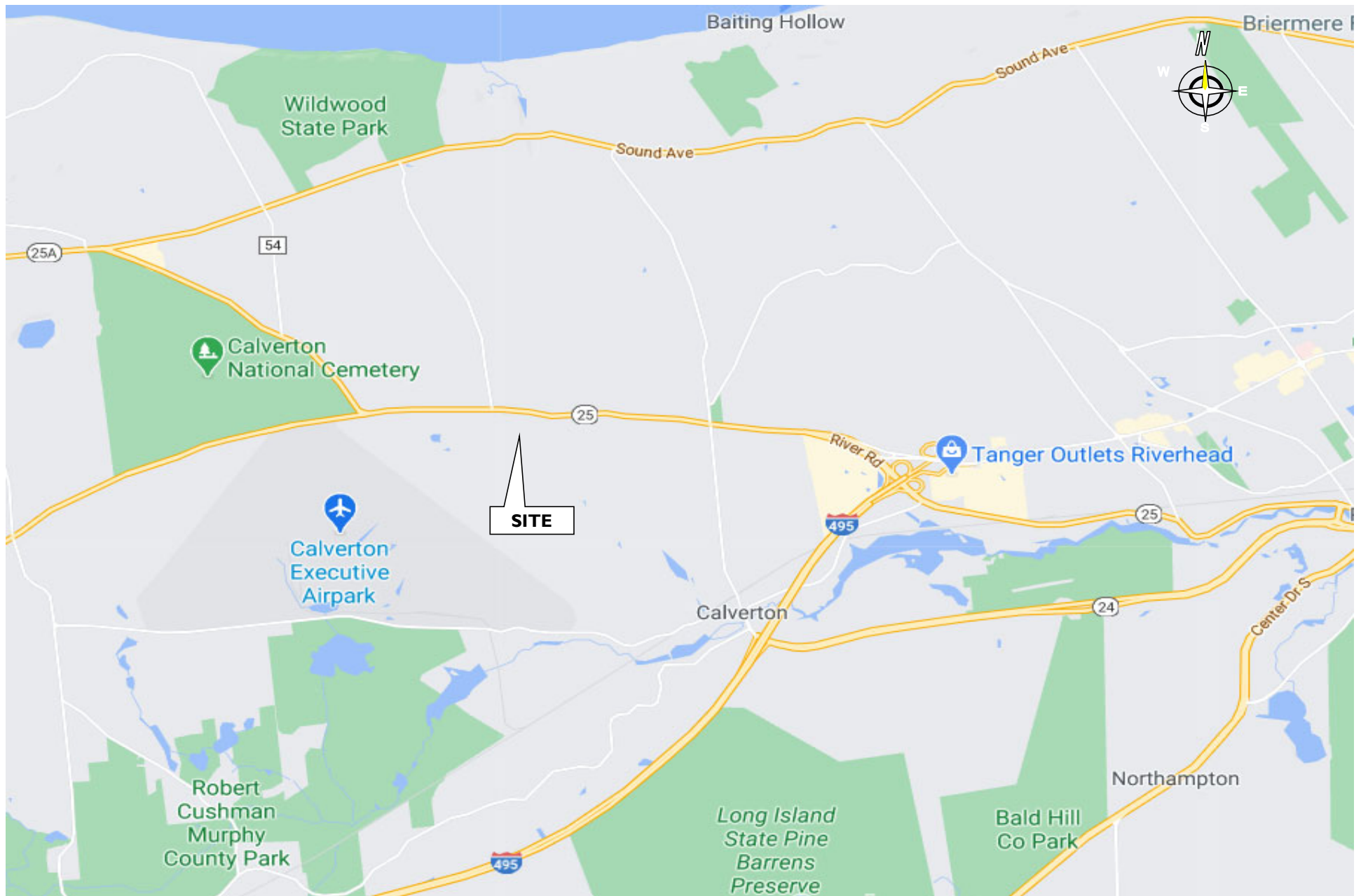
Table 2A - Projected Site-Generated Daily Traffic Volumes
Middle Country Road and Site Driveway
Hamlet of Calverton, Town of Riverhead, Suffolk County, New York

	Phase I	Phase II
Enter	715	649
Exit	716	648
TOTAL	1431	1297

	Distribution of Exiting Vehicle Trips ¹	Project Site-Generated Daily Traffic Volumes		TOTAL Vehicles Per Hour Major Street (One Way NB)
		Phase I Vehicles Per Hour Major Street (One Way NB)	Phase II Vehicles Per Hour Major Street (One Way NB)	
	% OUT	716	648	1364
12-1 AM	0	0	0	0
1-2 AM	0.1	1	1	2
2-3 AM	0.1	1	1	2
3-4 AM	0	0	0	0
4-5 AM	0	0	0	0
5-6 AM	0.4	2	3	5
6-7 AM	1.2	8	8	16
7-8 AM	2.7	19	17	36
8-9 AM	4.2	30	27	57
9-10 AM	6.8	48	44	92
10-11 AM	7.9	57	51	108
11-12 N	8.4	60	54	114
12-1 PM	10.6	76	69	145
1-2 PM	6.5	47	42	89
2-3 PM	9.3	67	60	127
3-4 PM	12.8	92	83	175
4-5 PM	10.1	72	65	137
5-6 PM	15.2	109	99	208
6-7 PM	2.6	19	17	36
7-8 PM	0.1	1	1	2
8-9 PM	0	0	0	0
9-10 PM	1	7	6	13
10-11 PM	0	0	0	0
11-12 AM	0	0	0	0

¹ Institute of Transportation Engineers Trip Generation Manual, 10th Edition - LU 110 Hourly Variation of Total Traffic

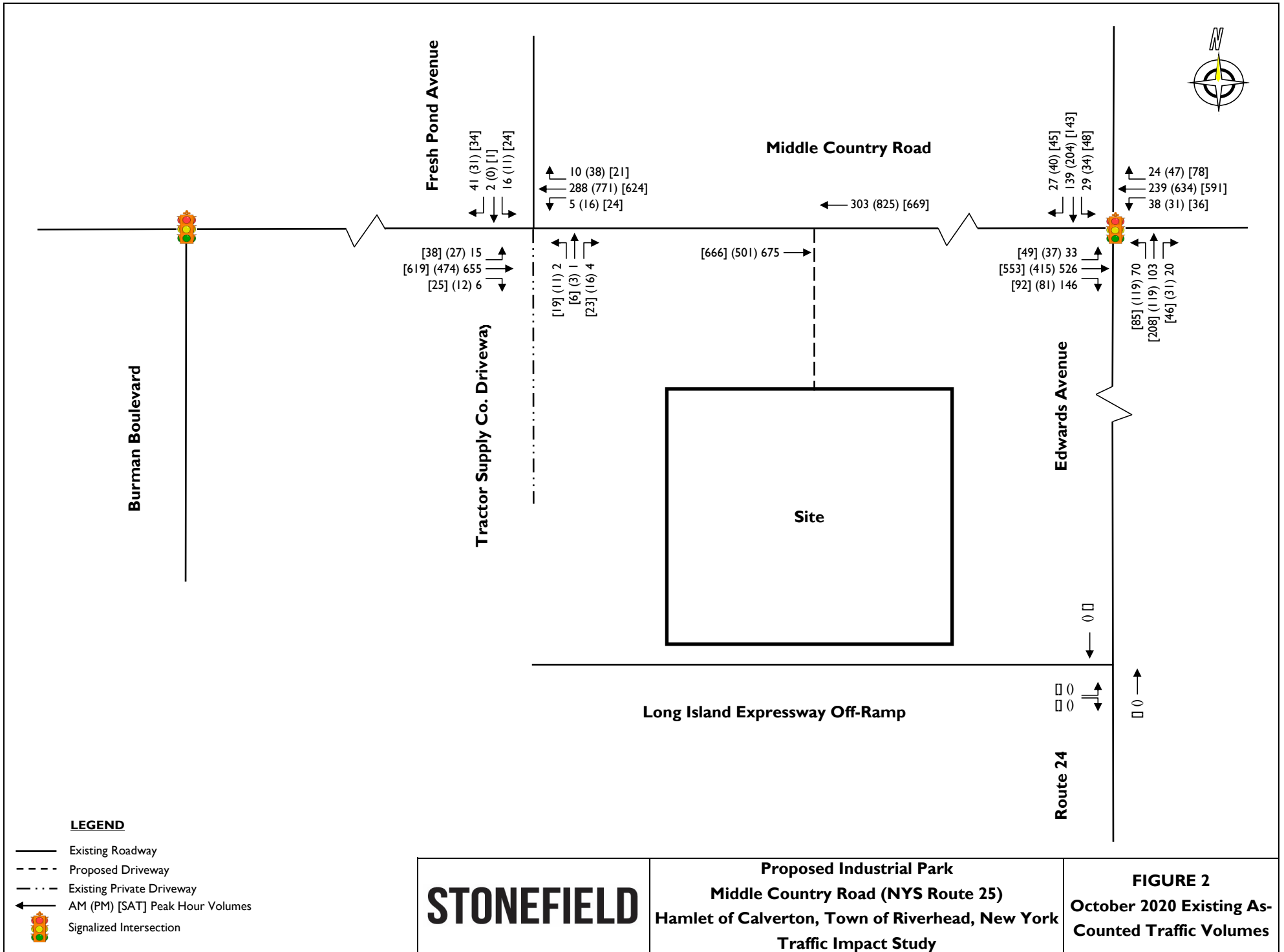
FIGURES

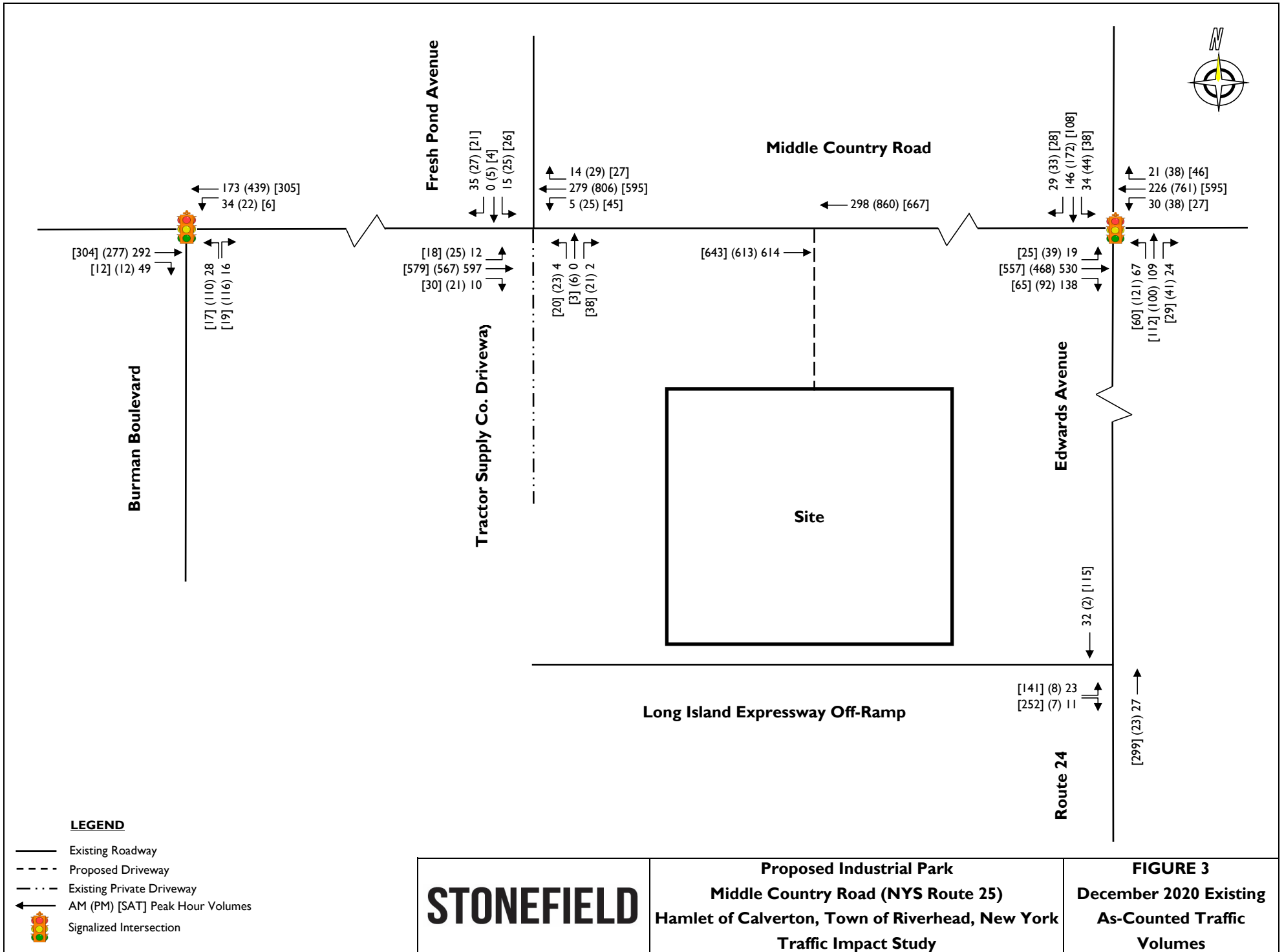


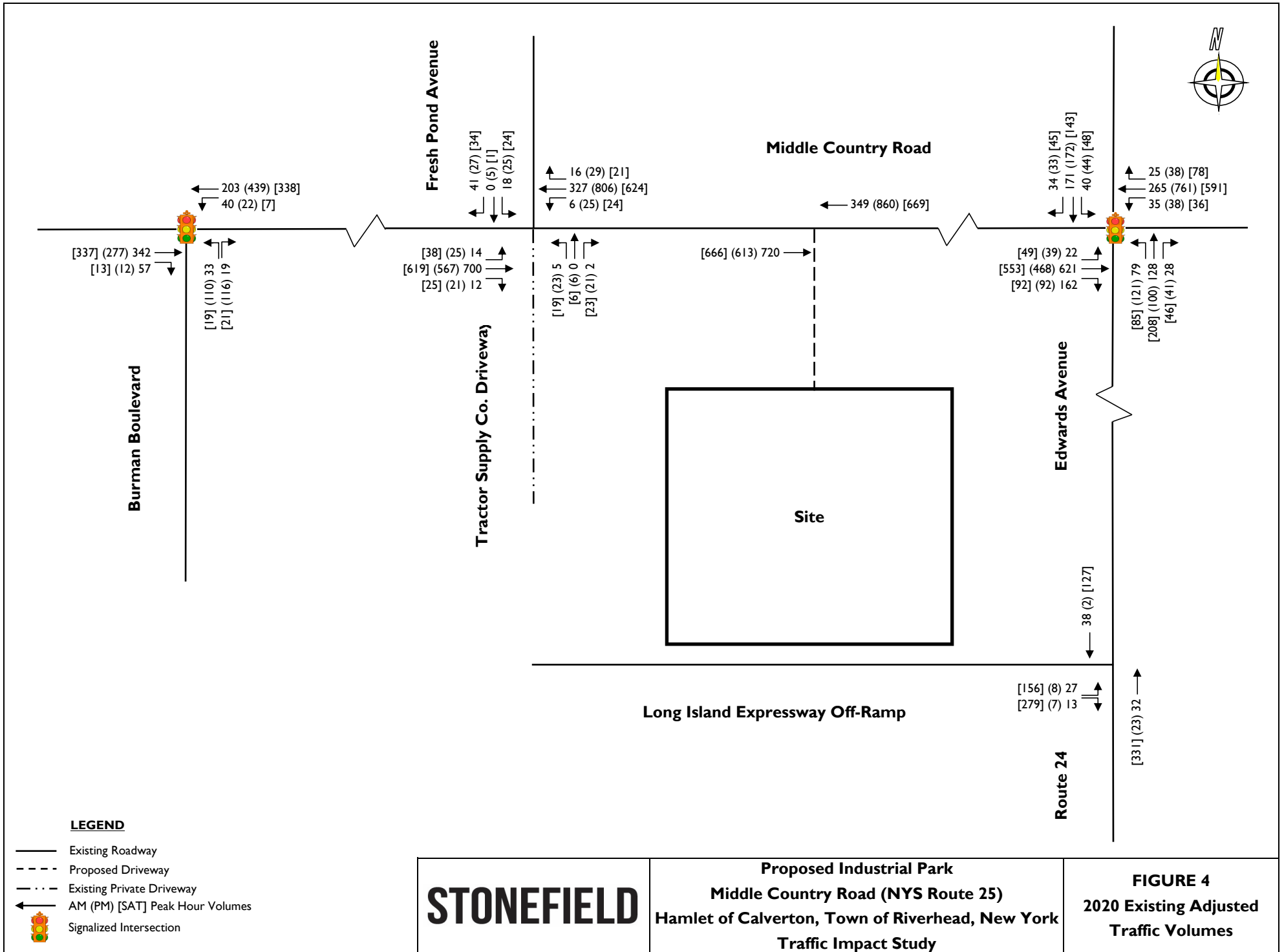
STONEFIELD

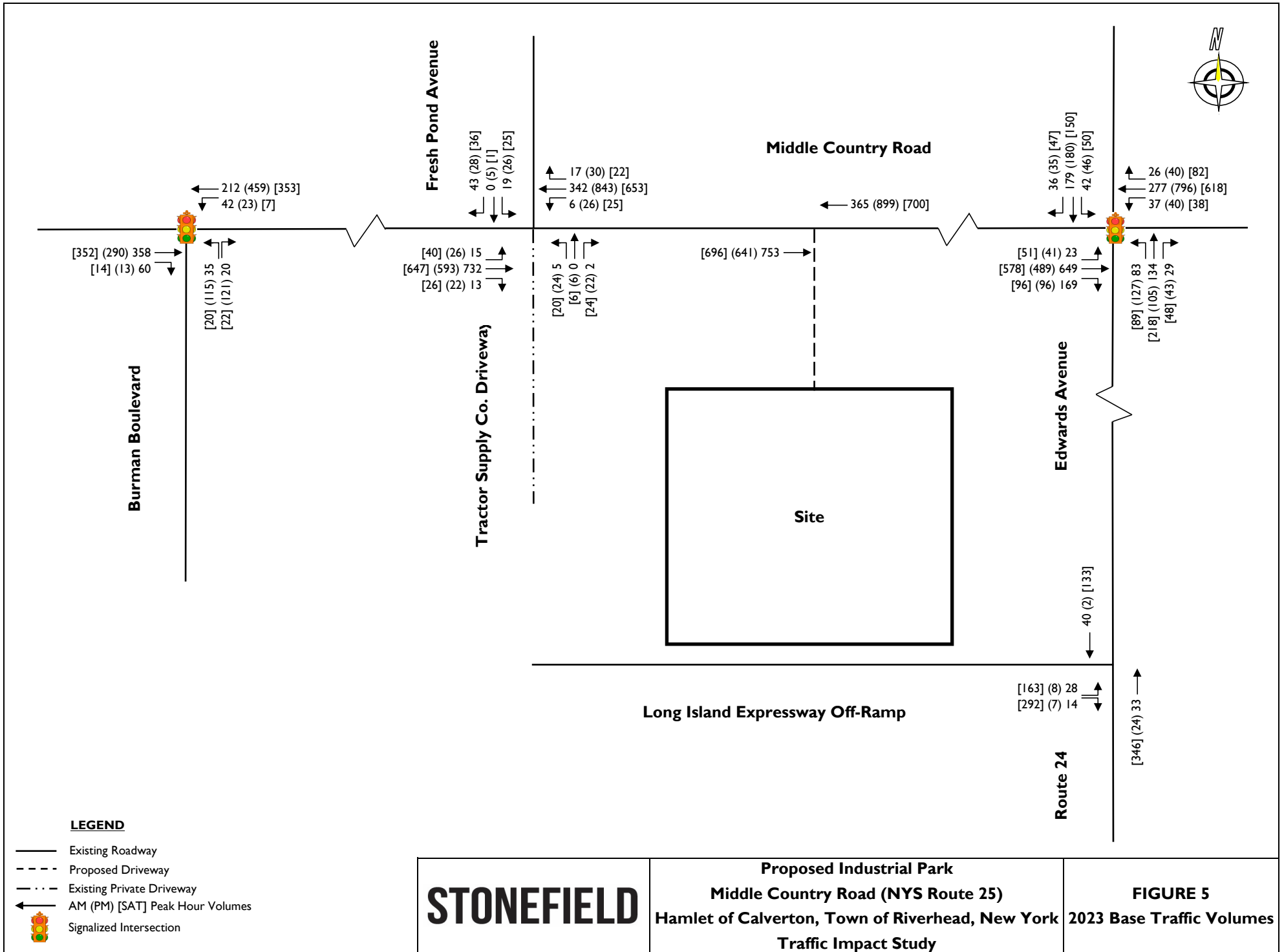
Proposed Industrial Park
Middle Country Road (NYS Route 25)
Hamlet of Calverton, Town of Riverhead, New York
Traffic Impact Study

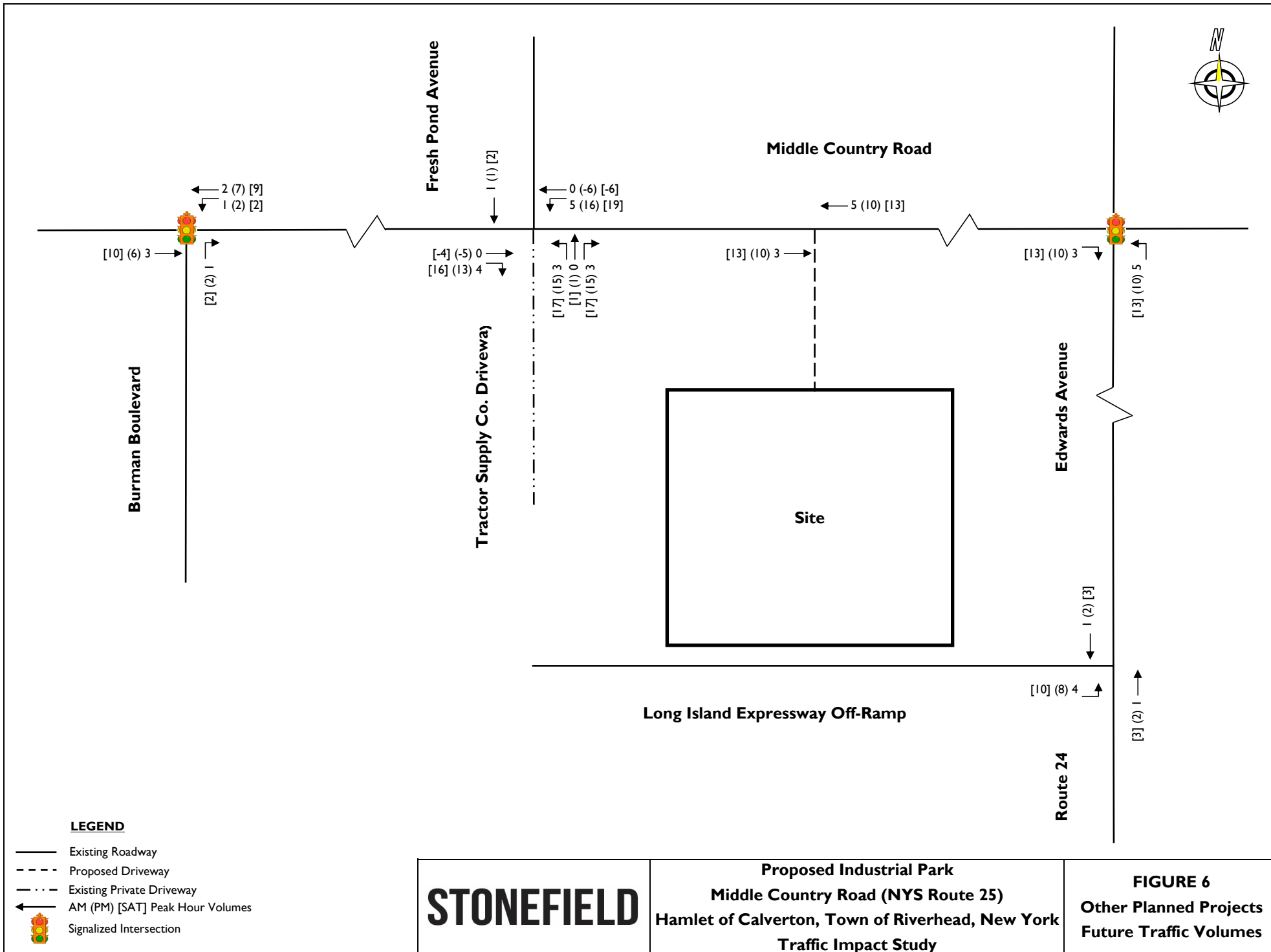
FIGURE I
Site Location Map

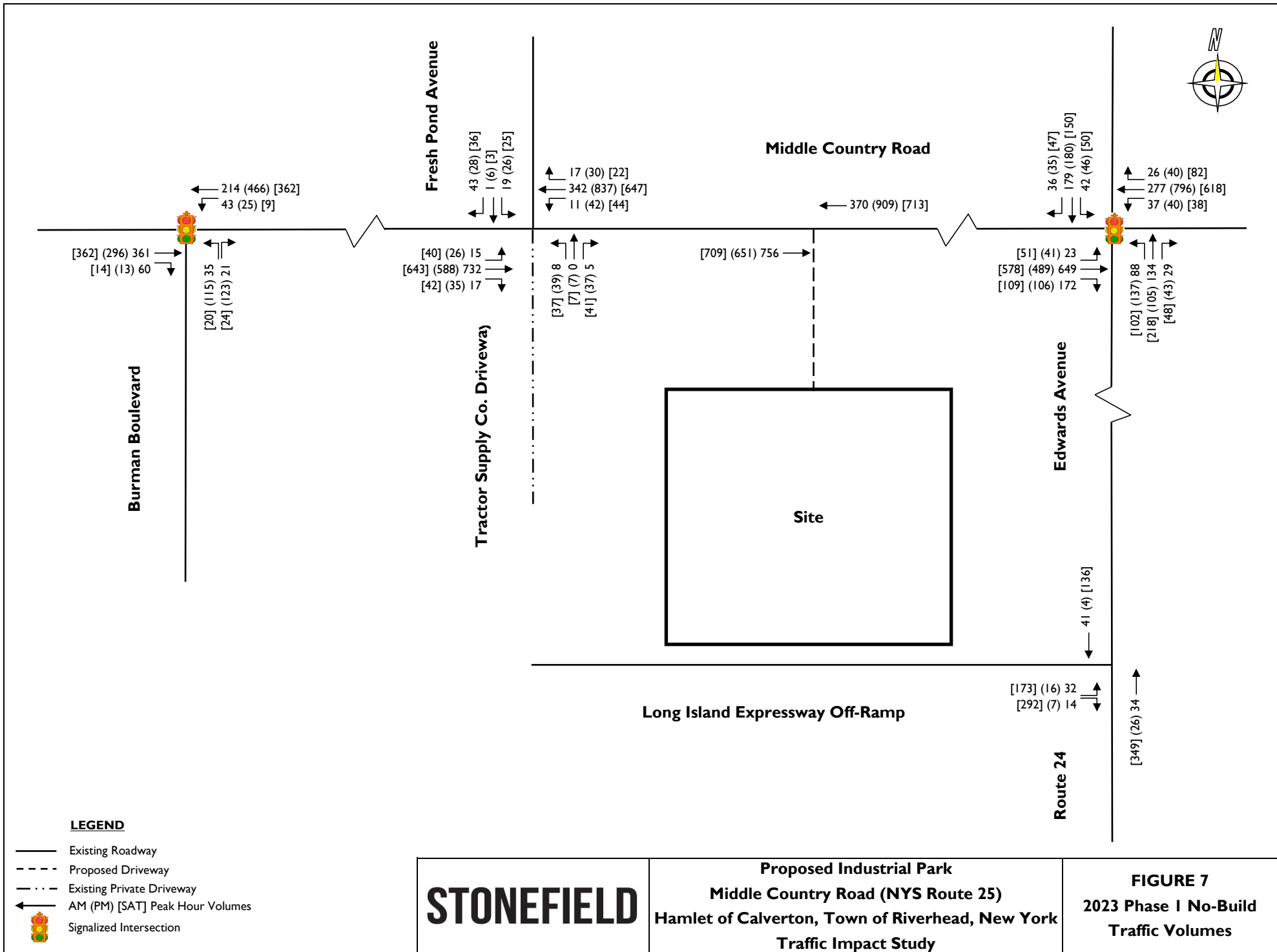


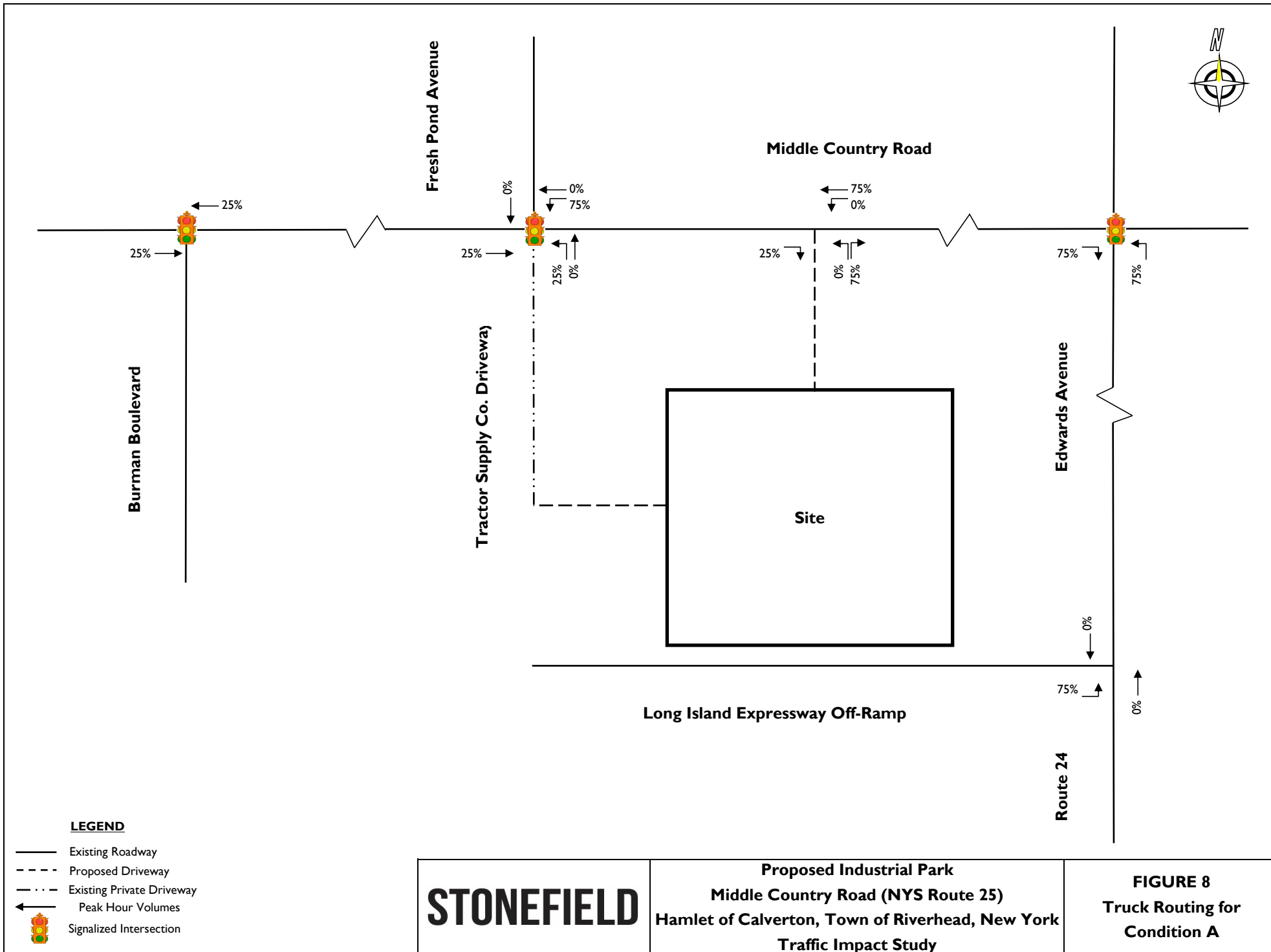


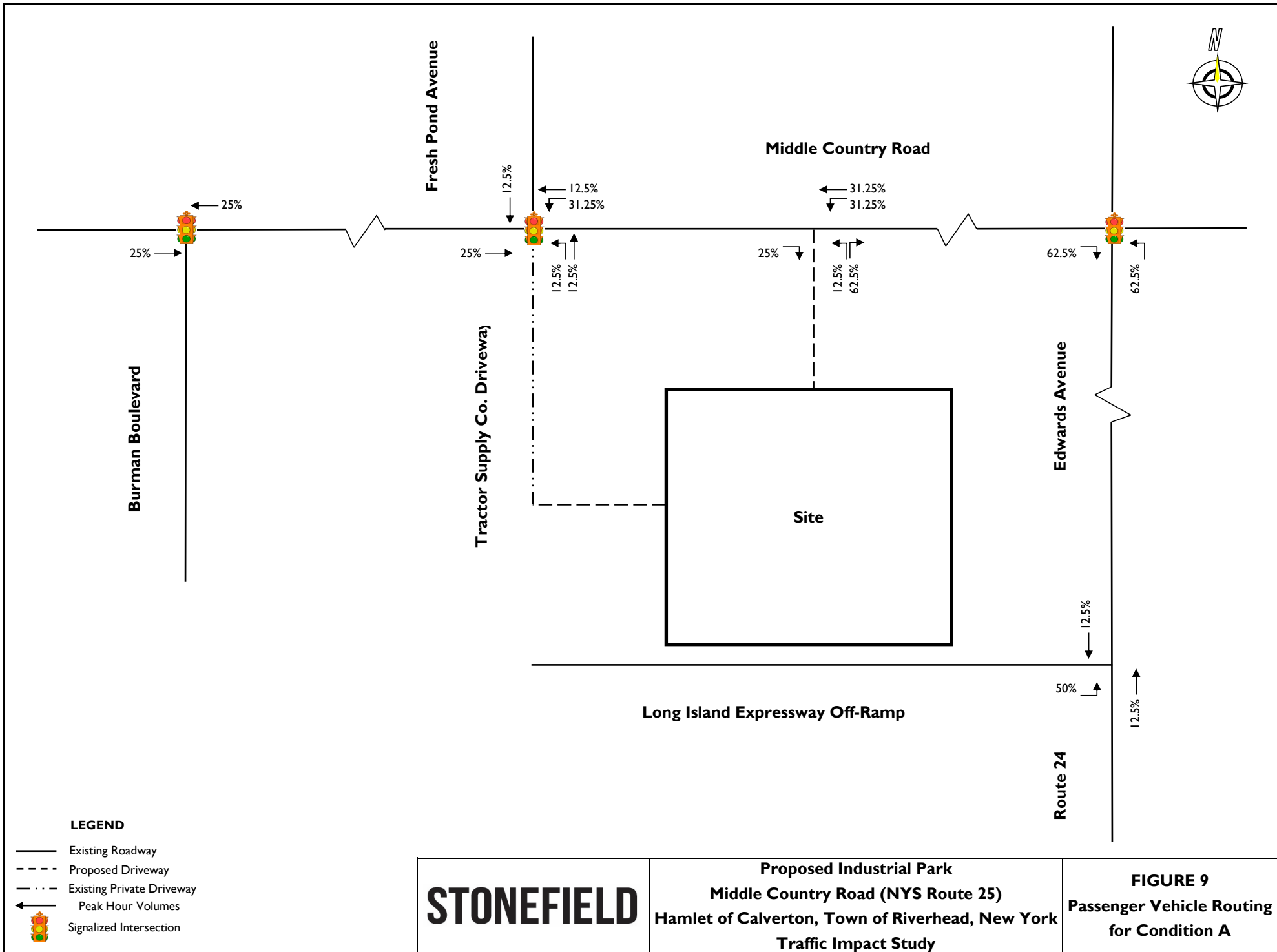


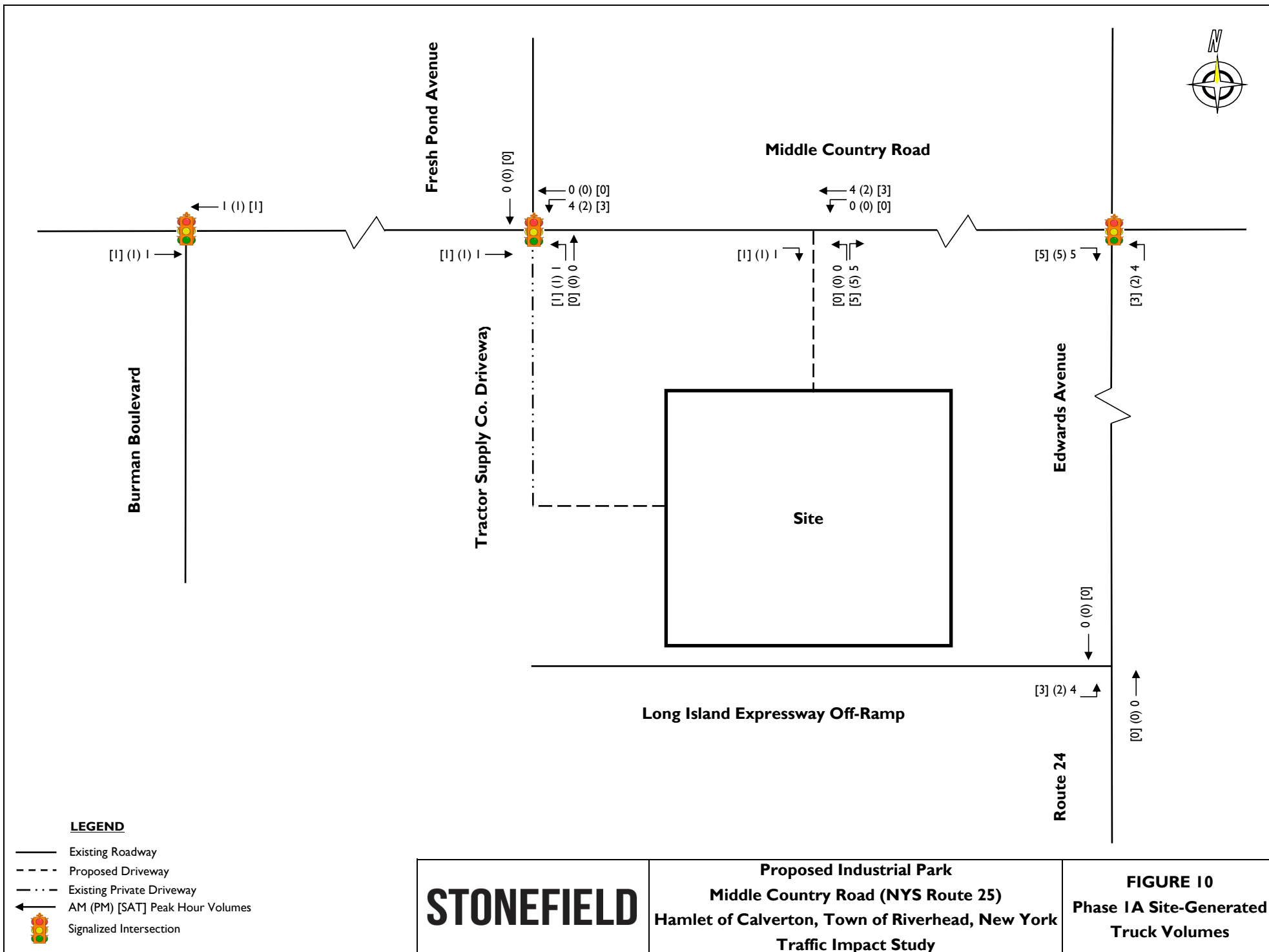


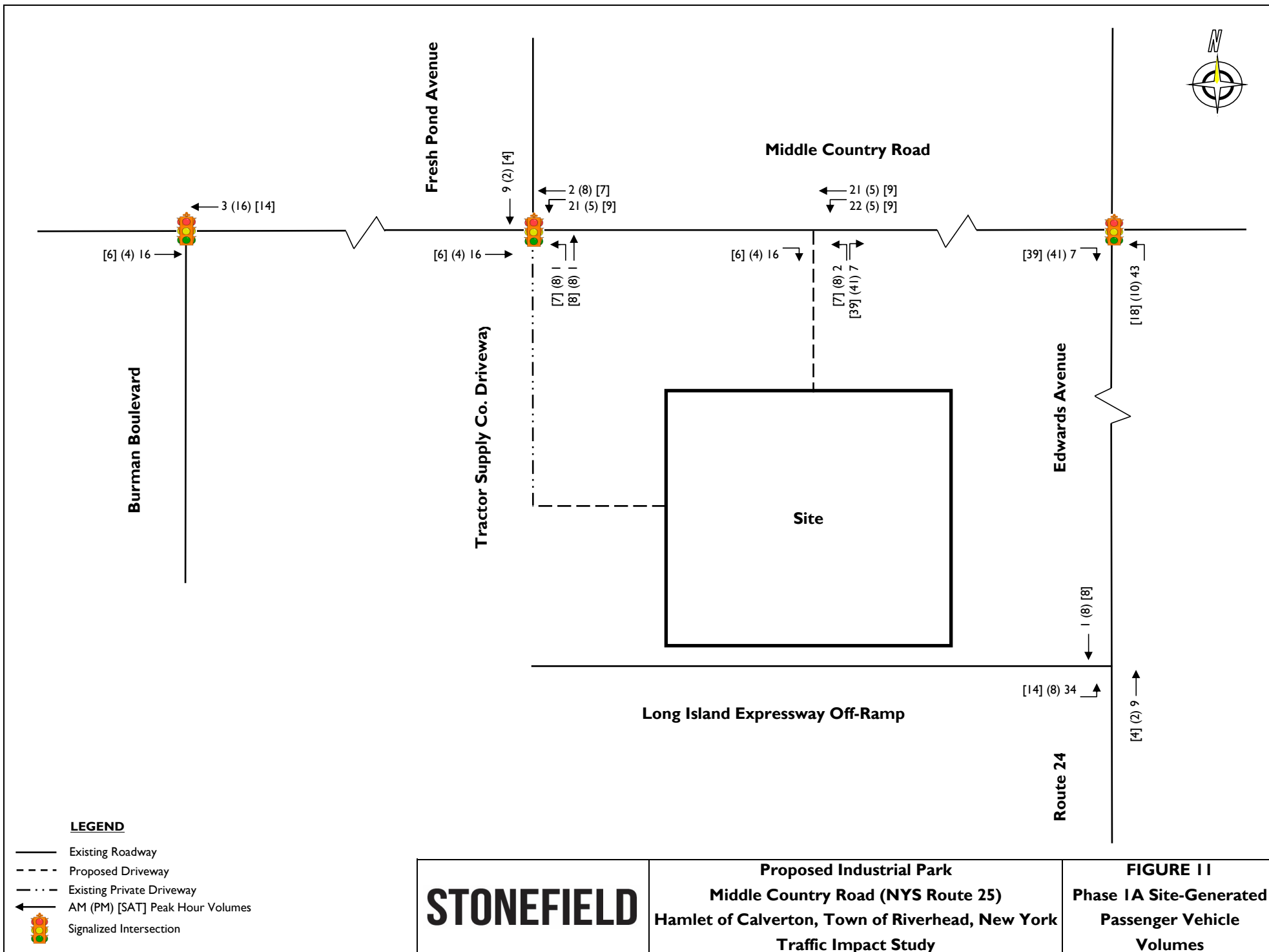


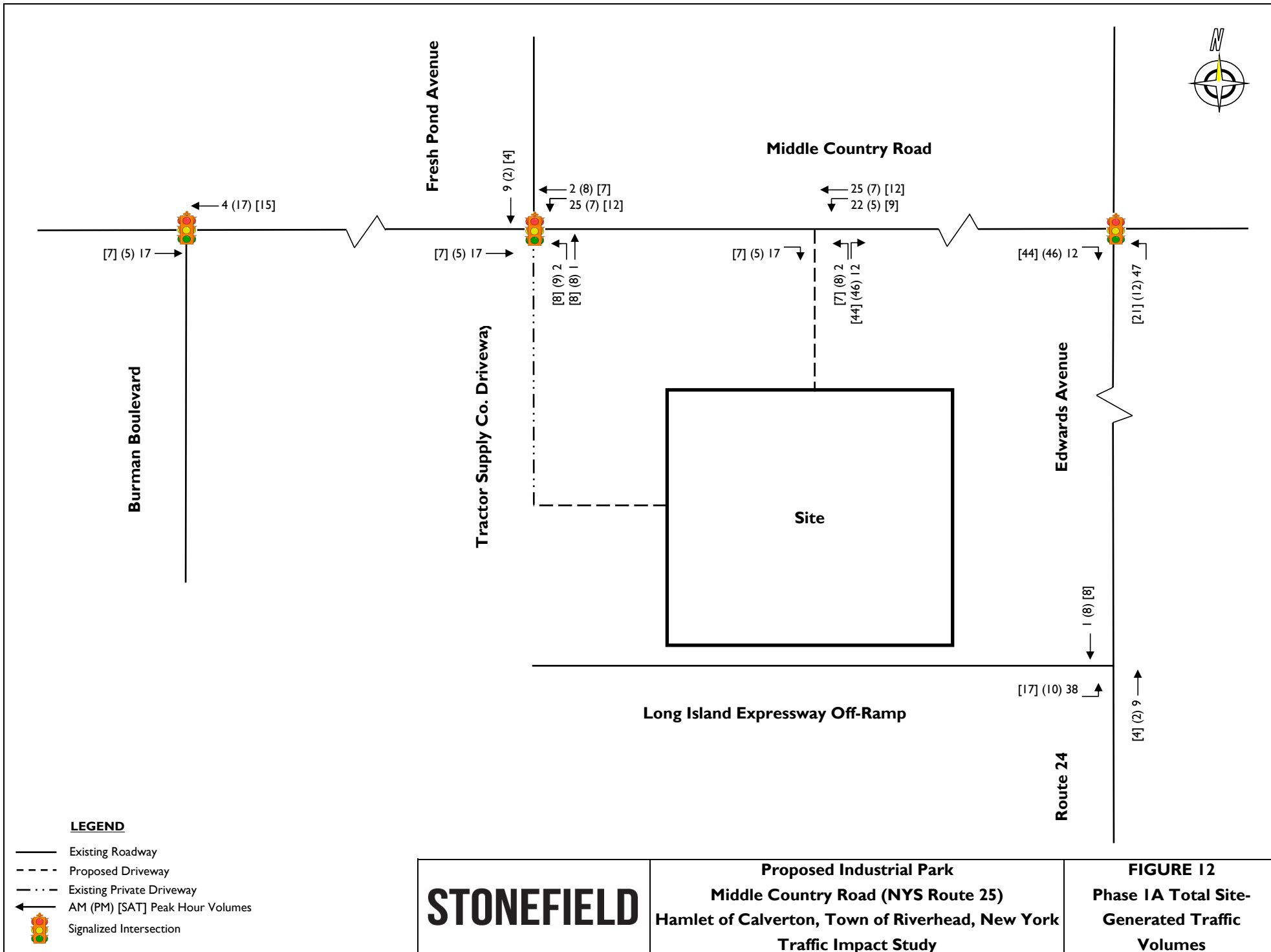


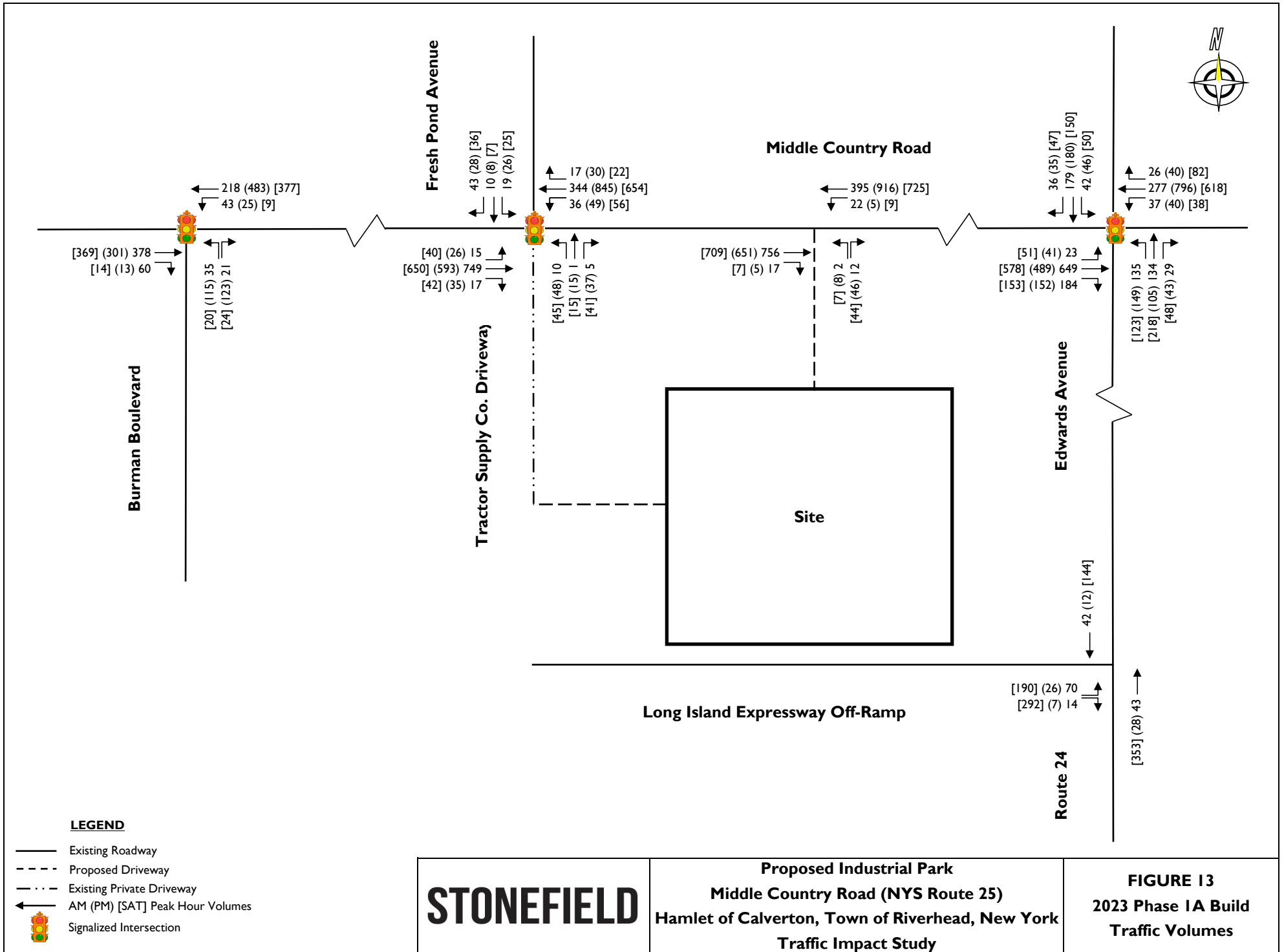


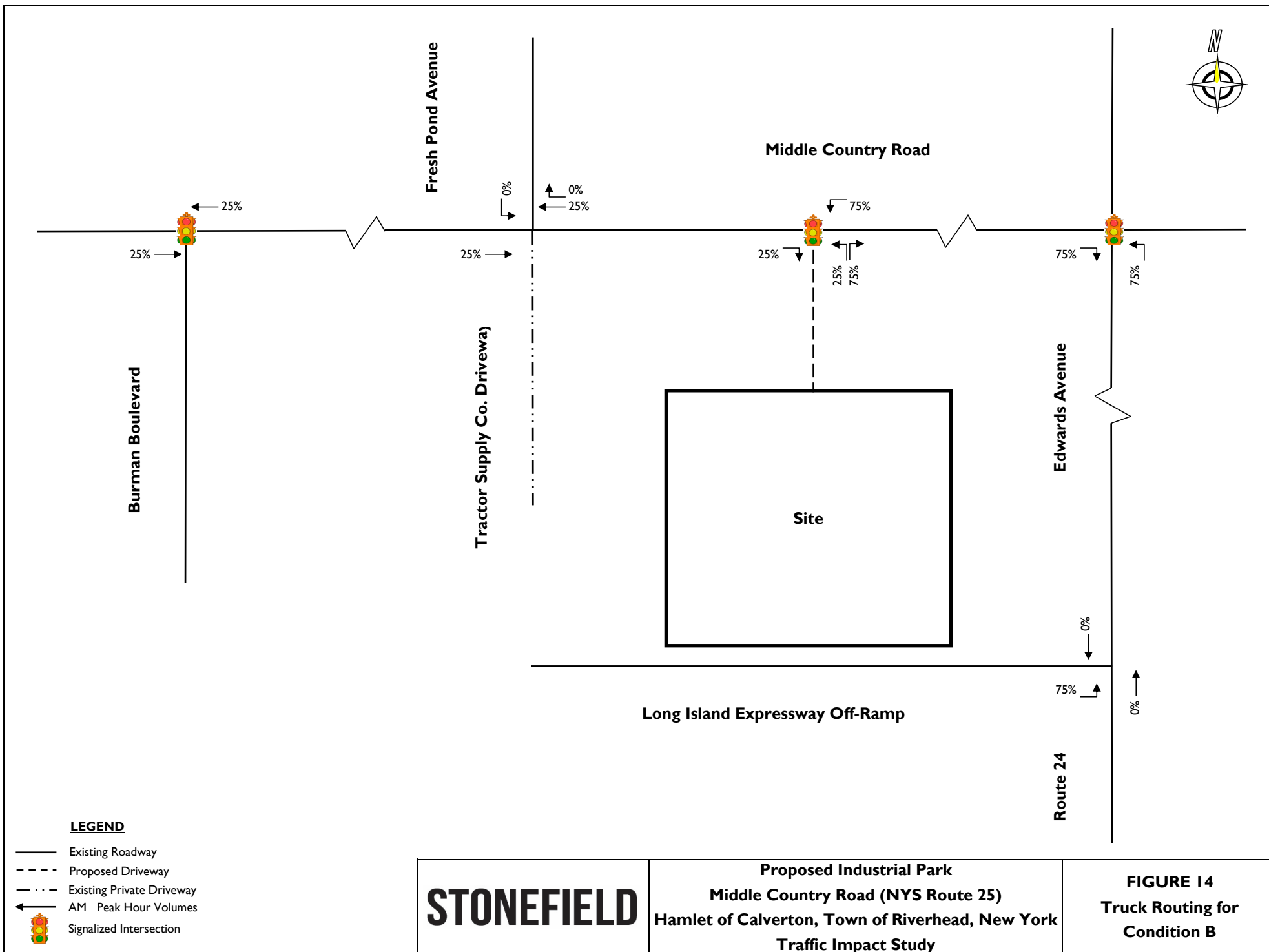


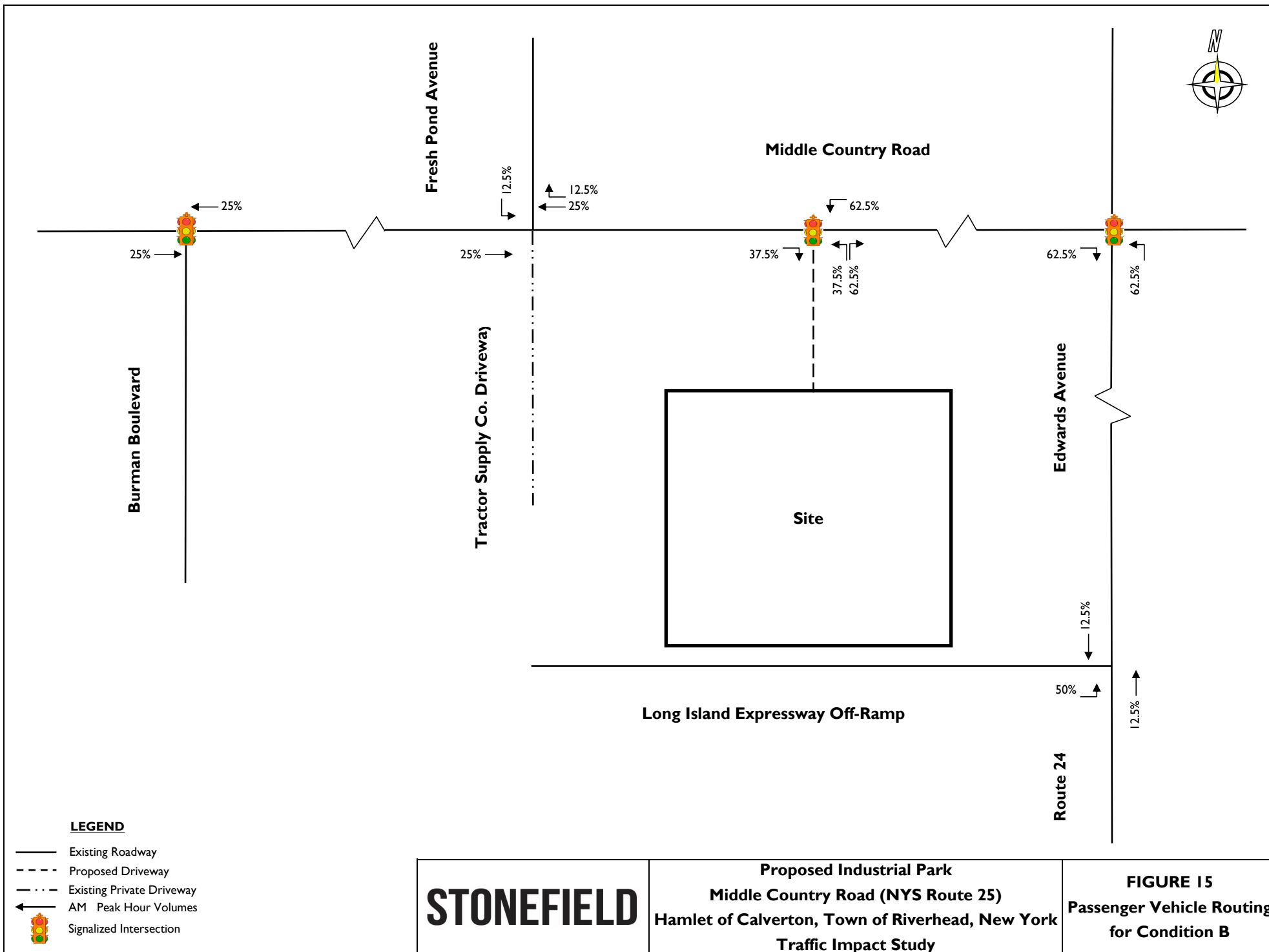


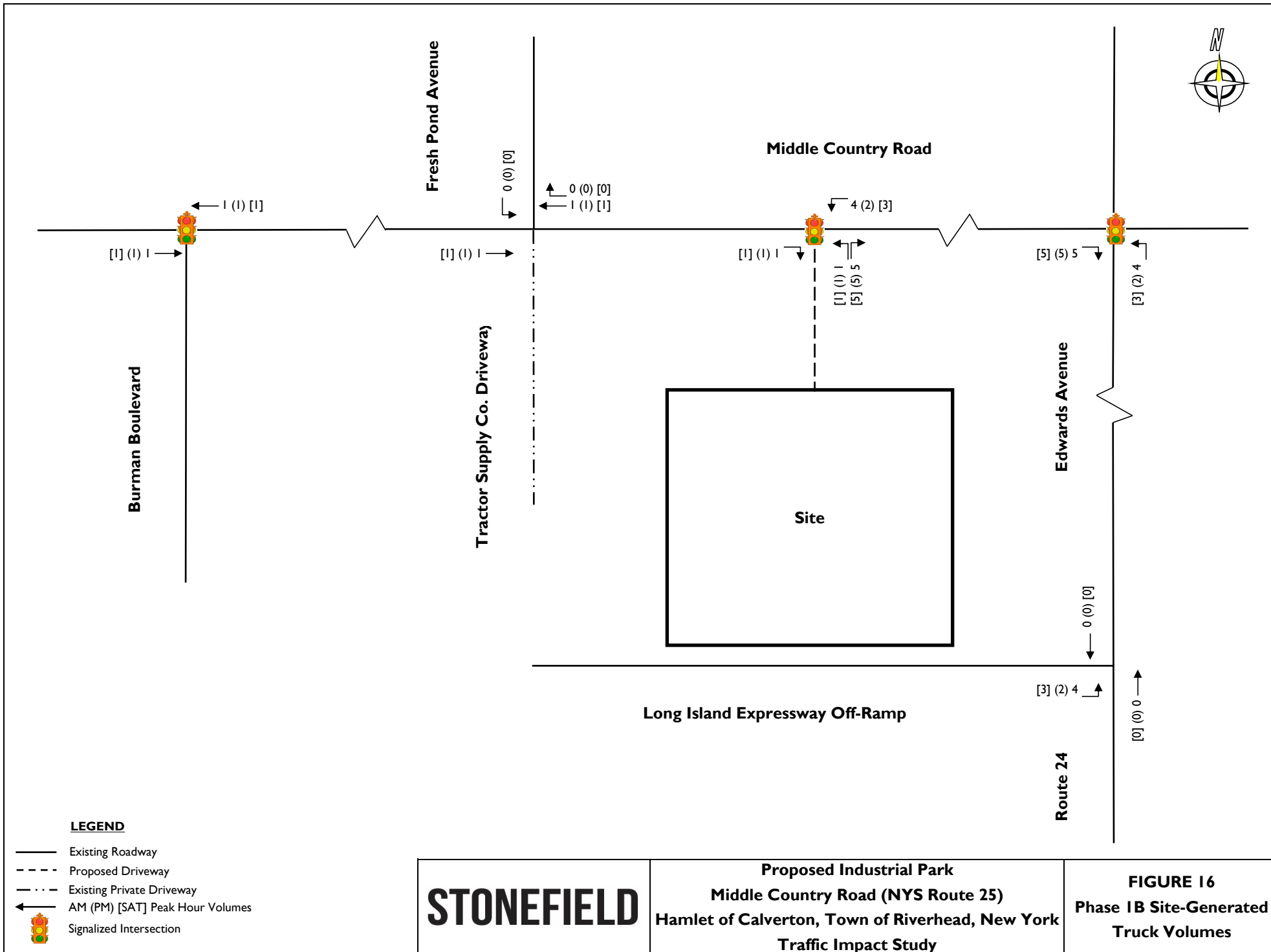


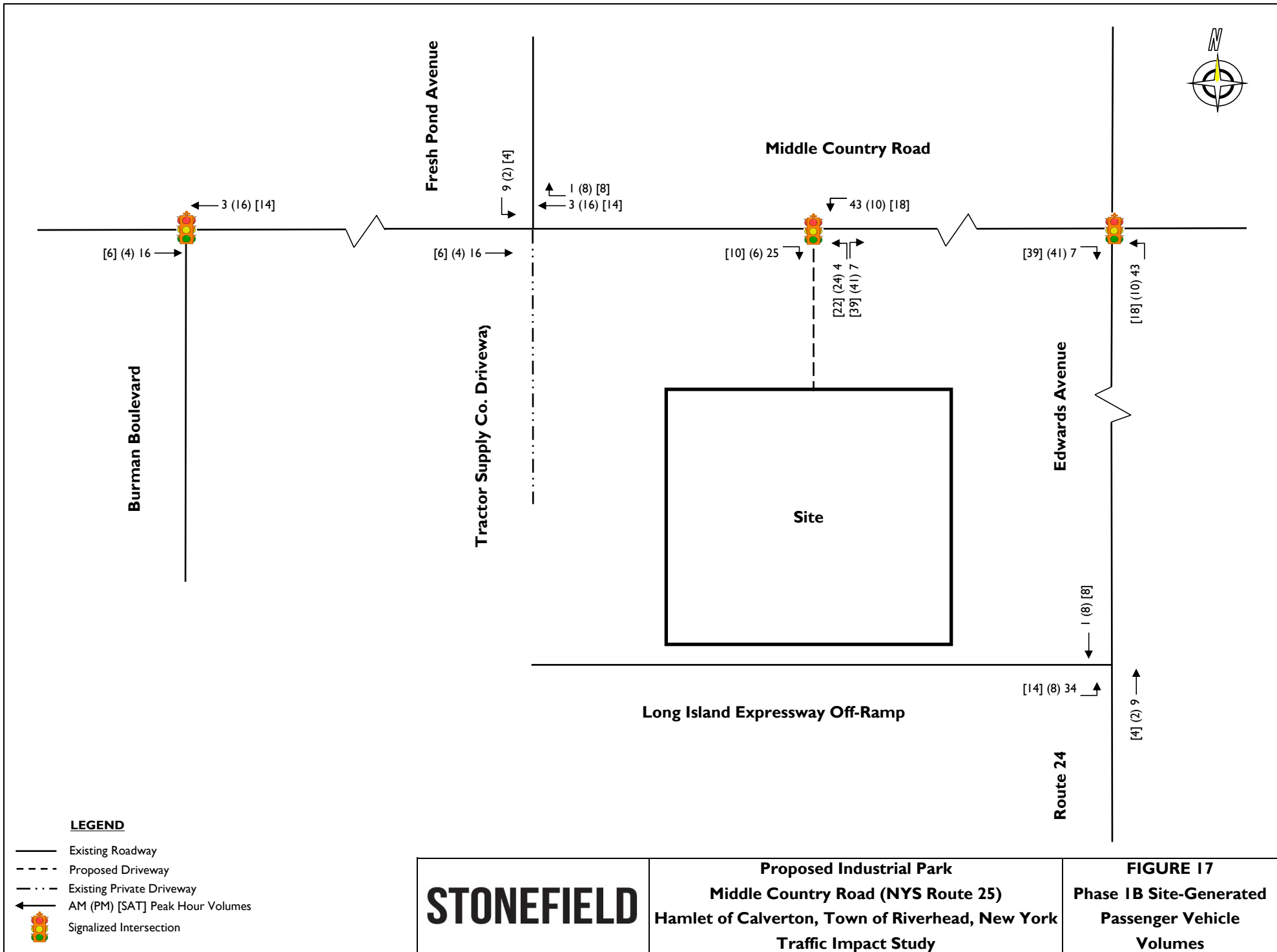


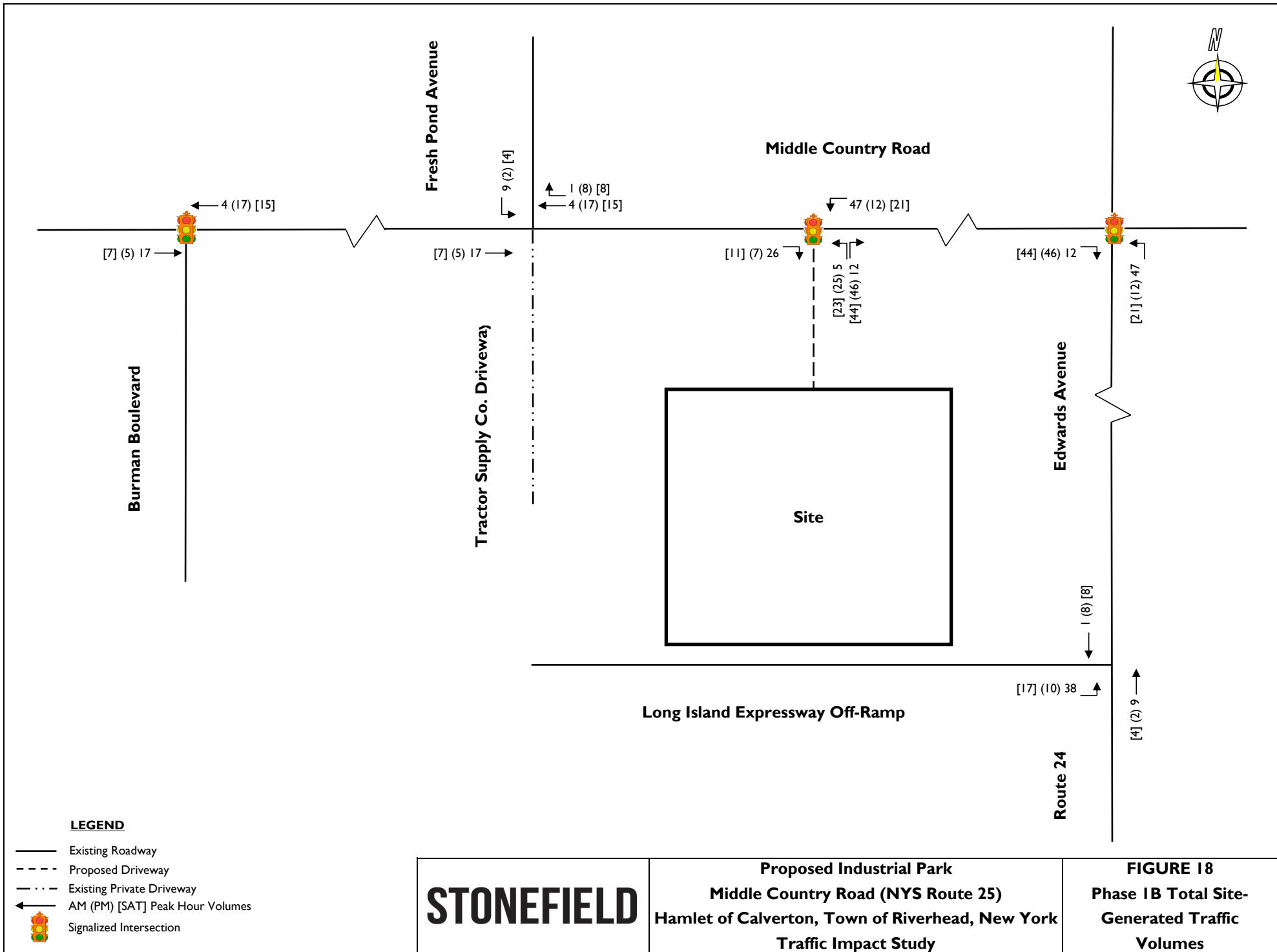


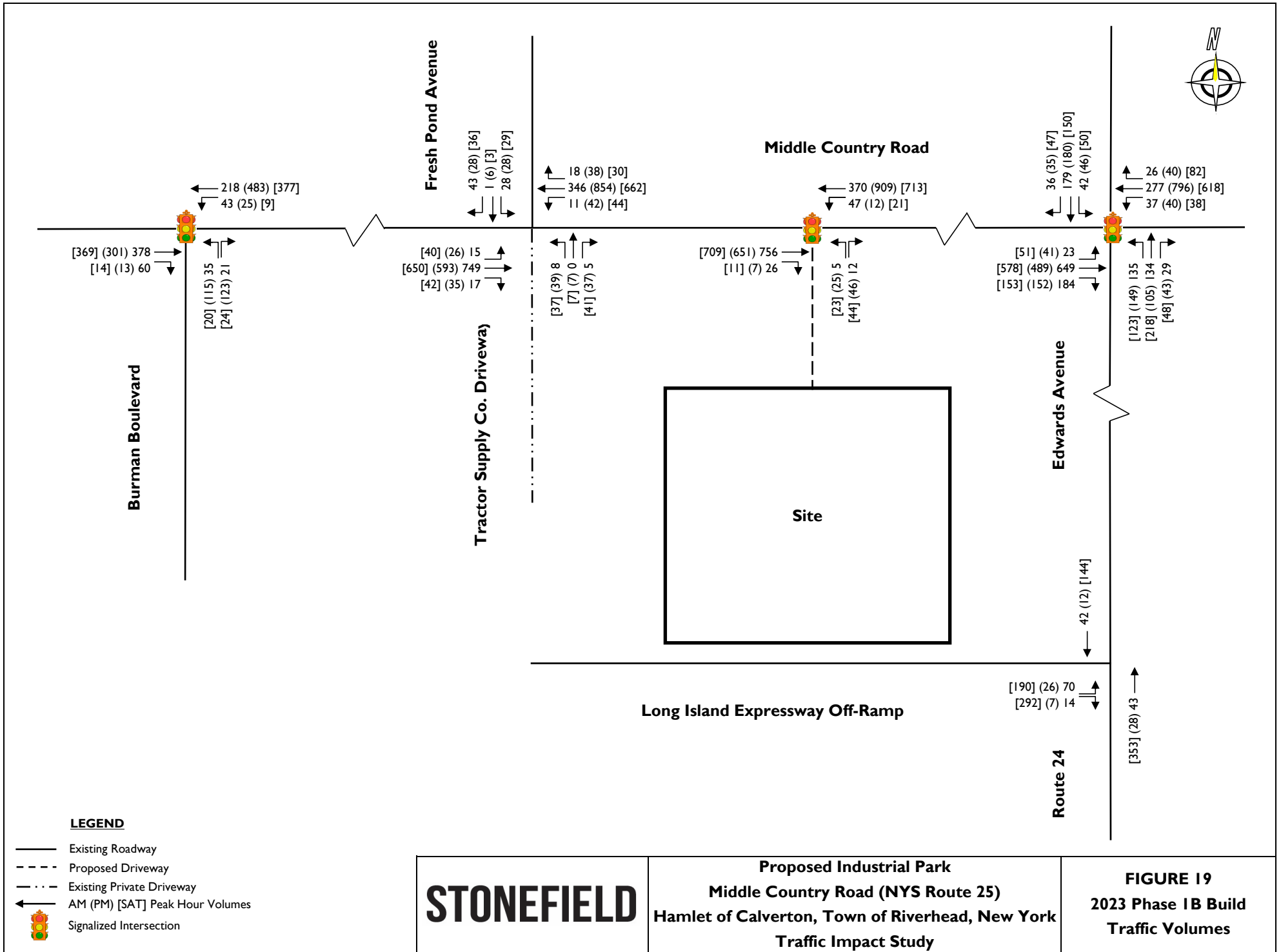


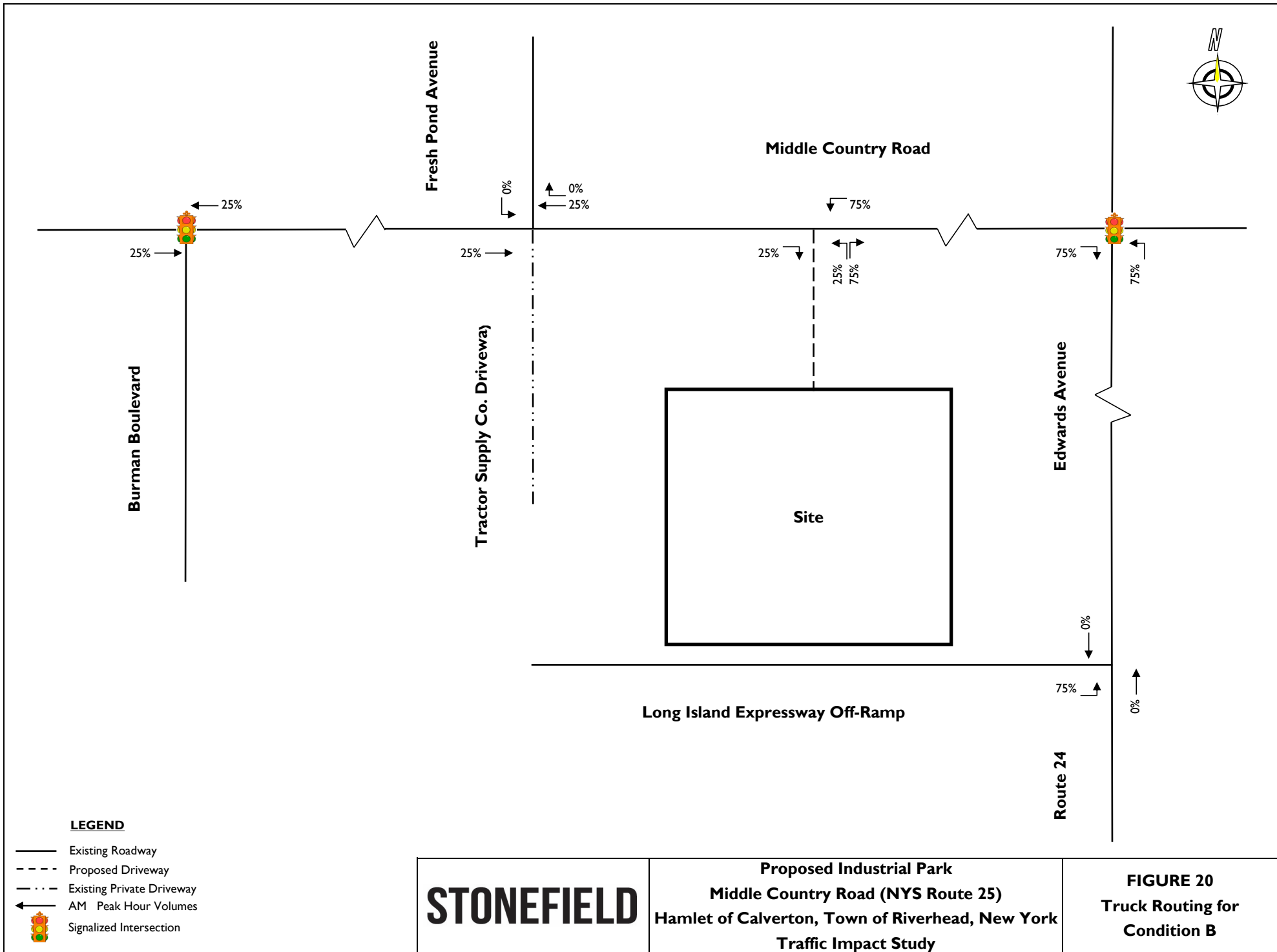


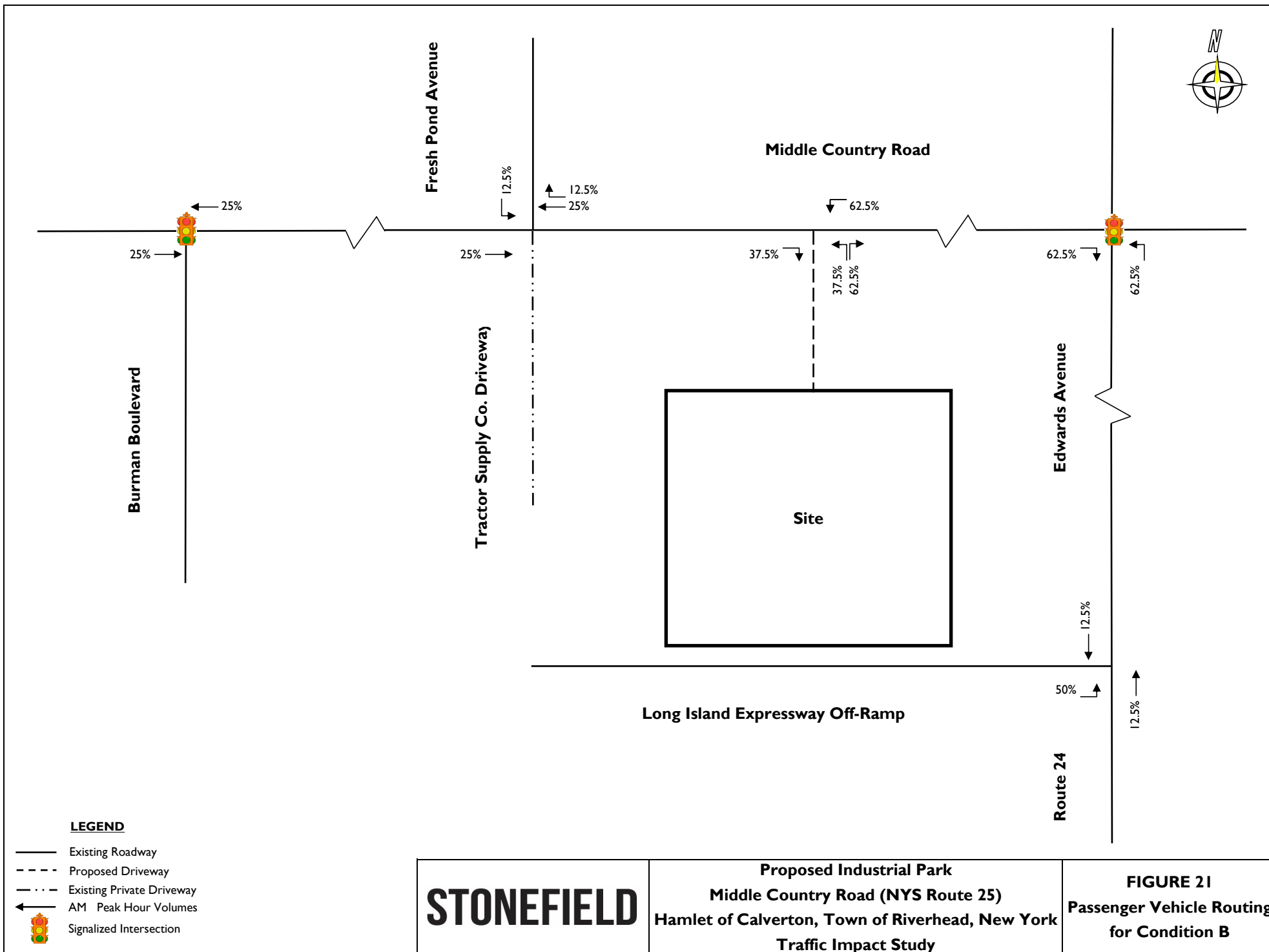


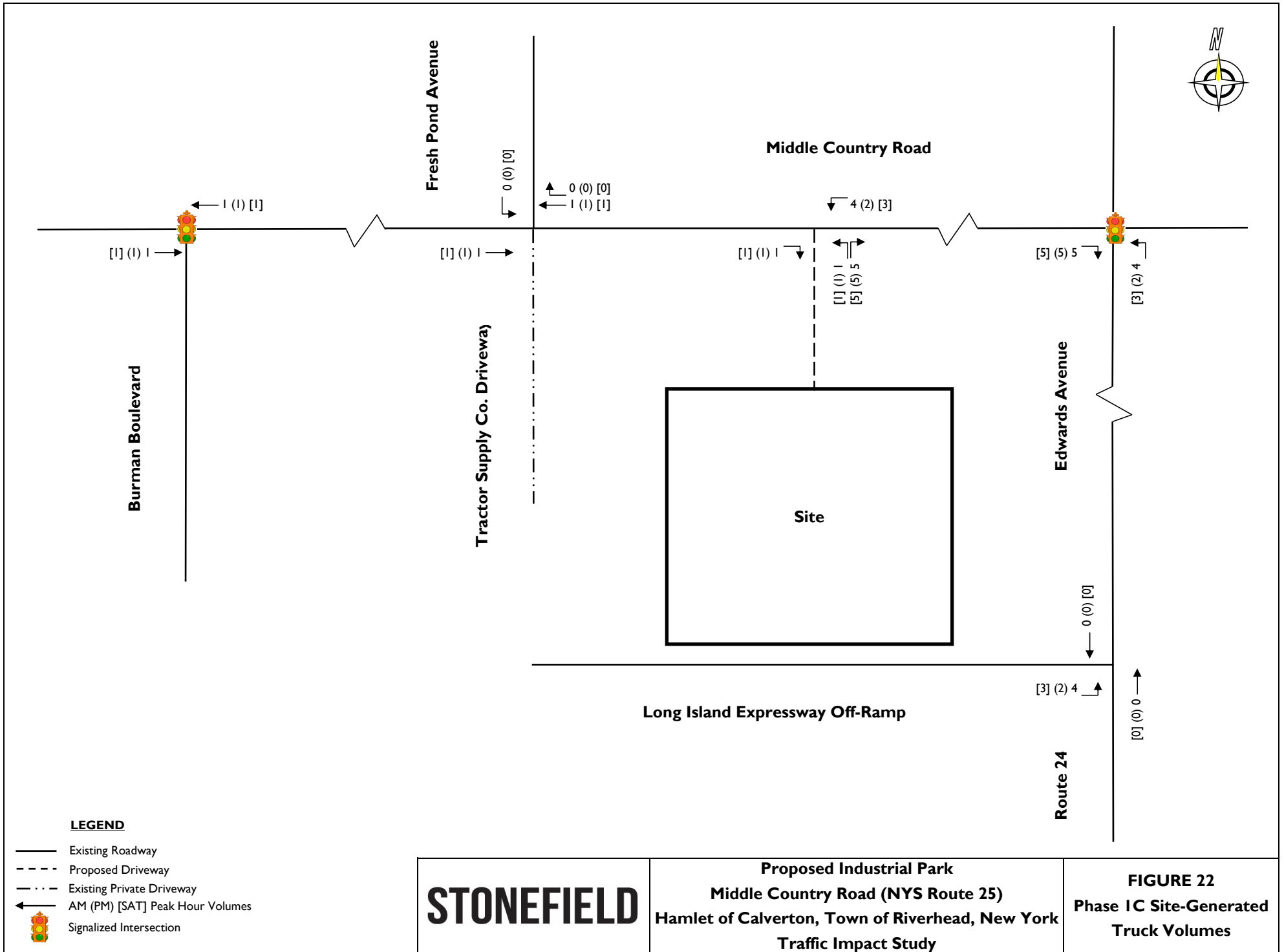


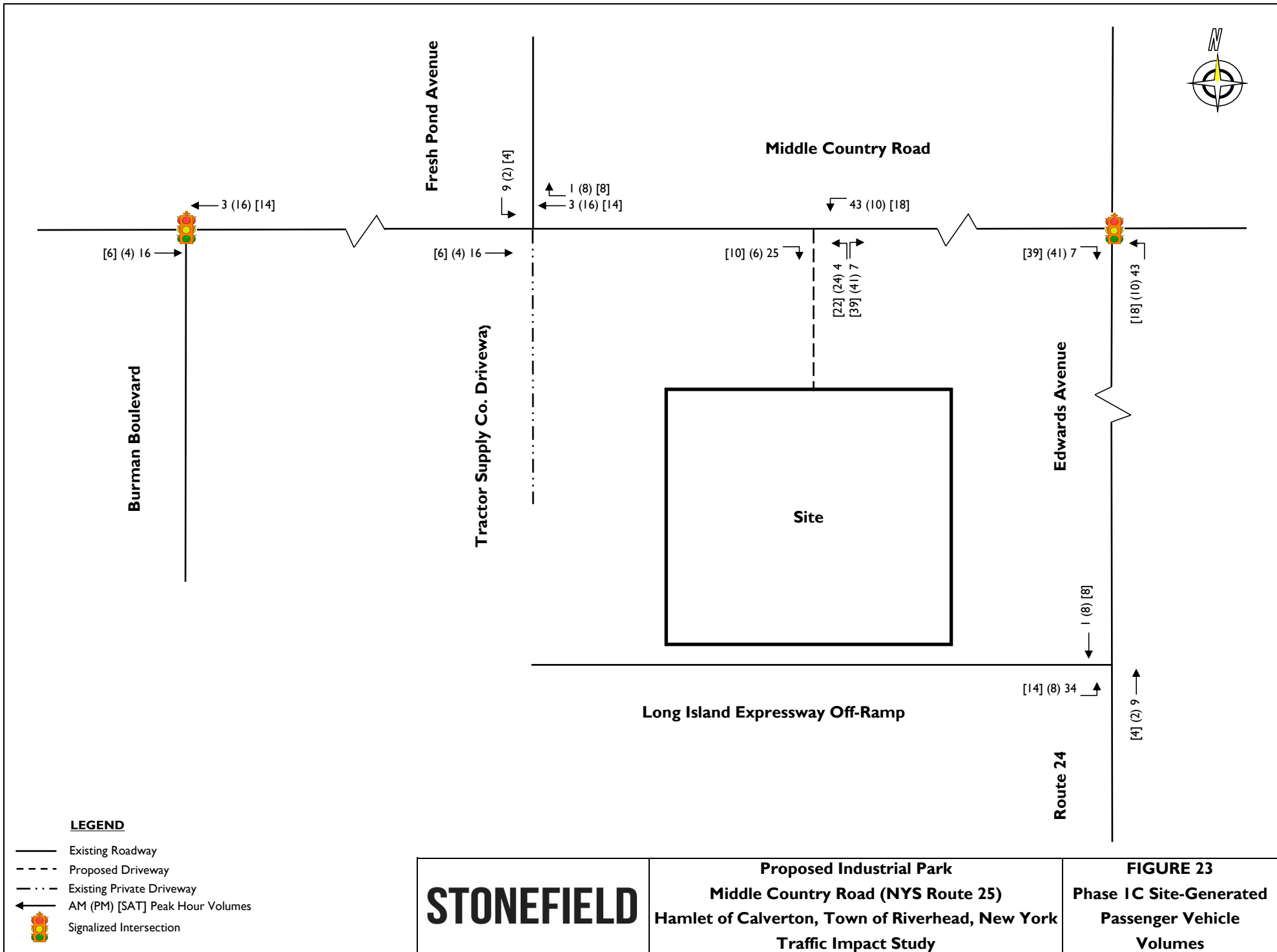


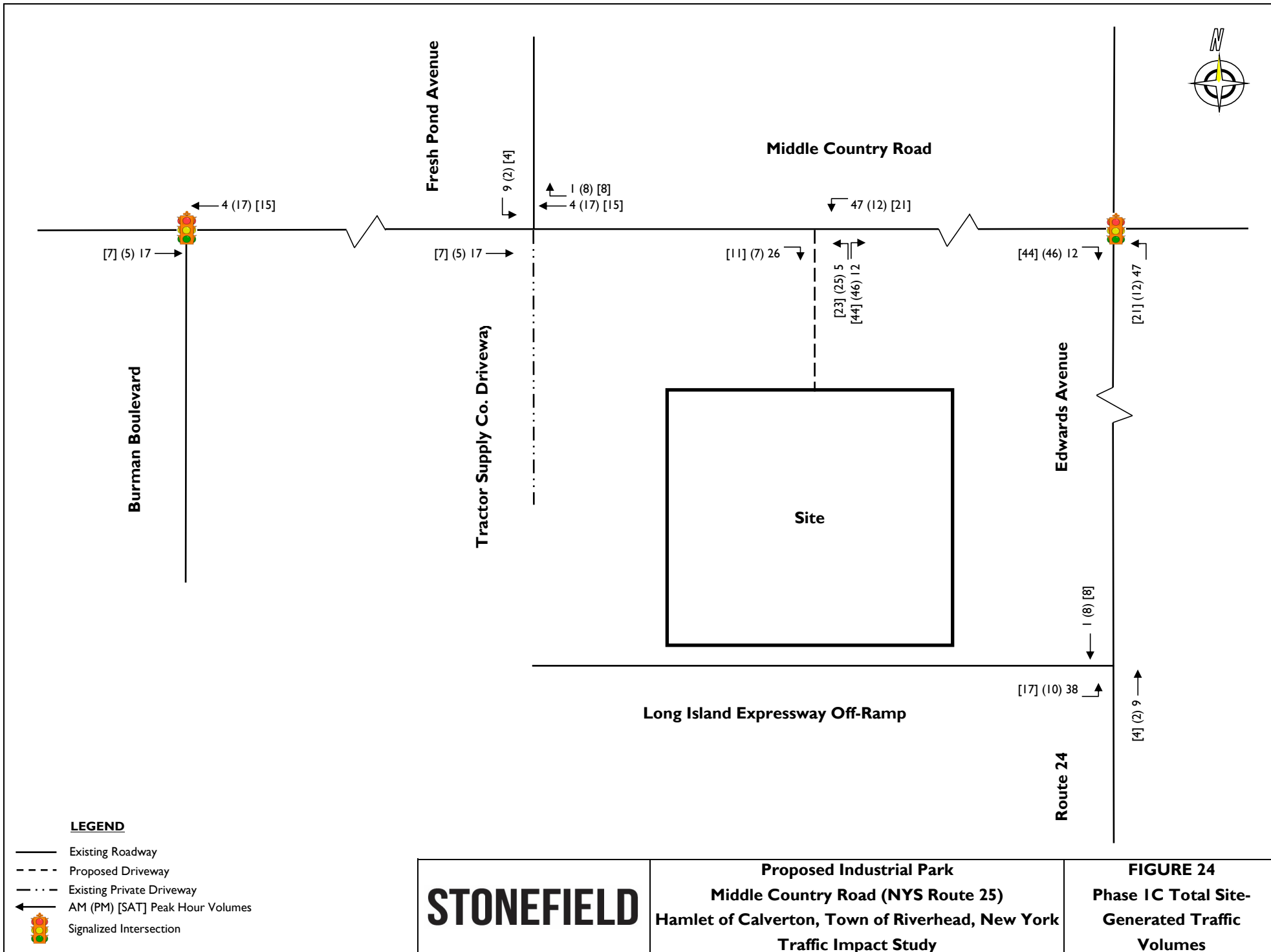


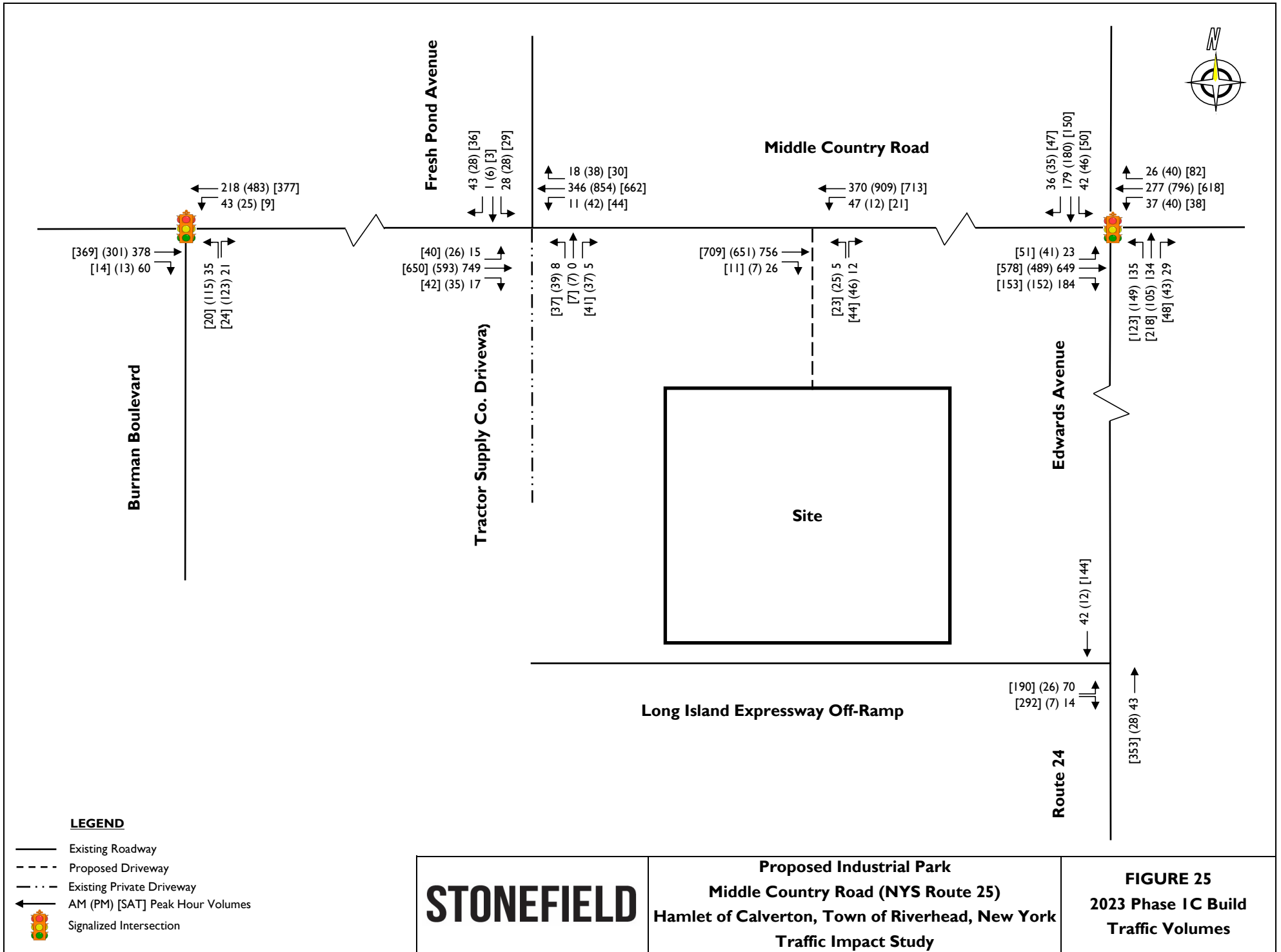


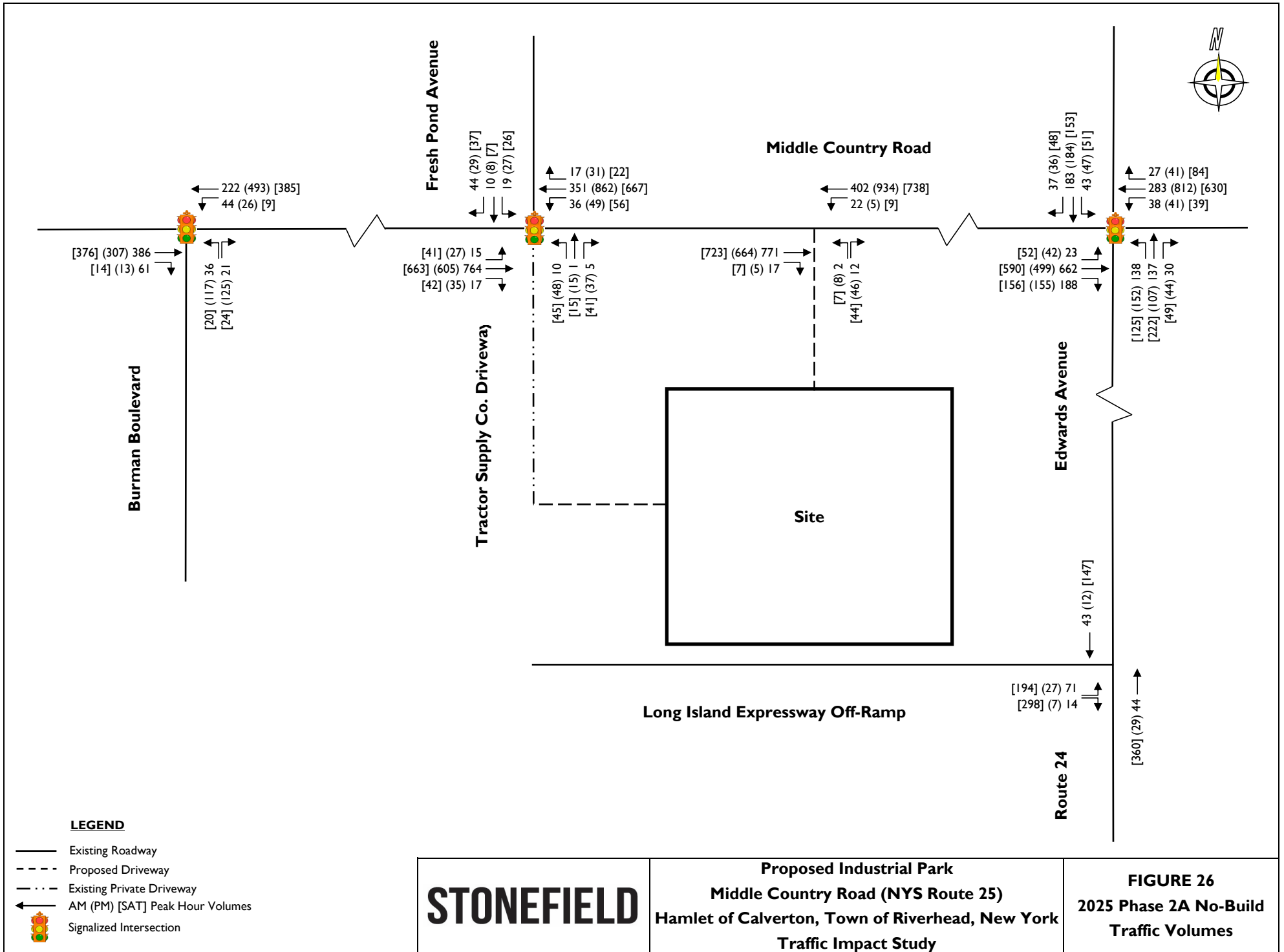


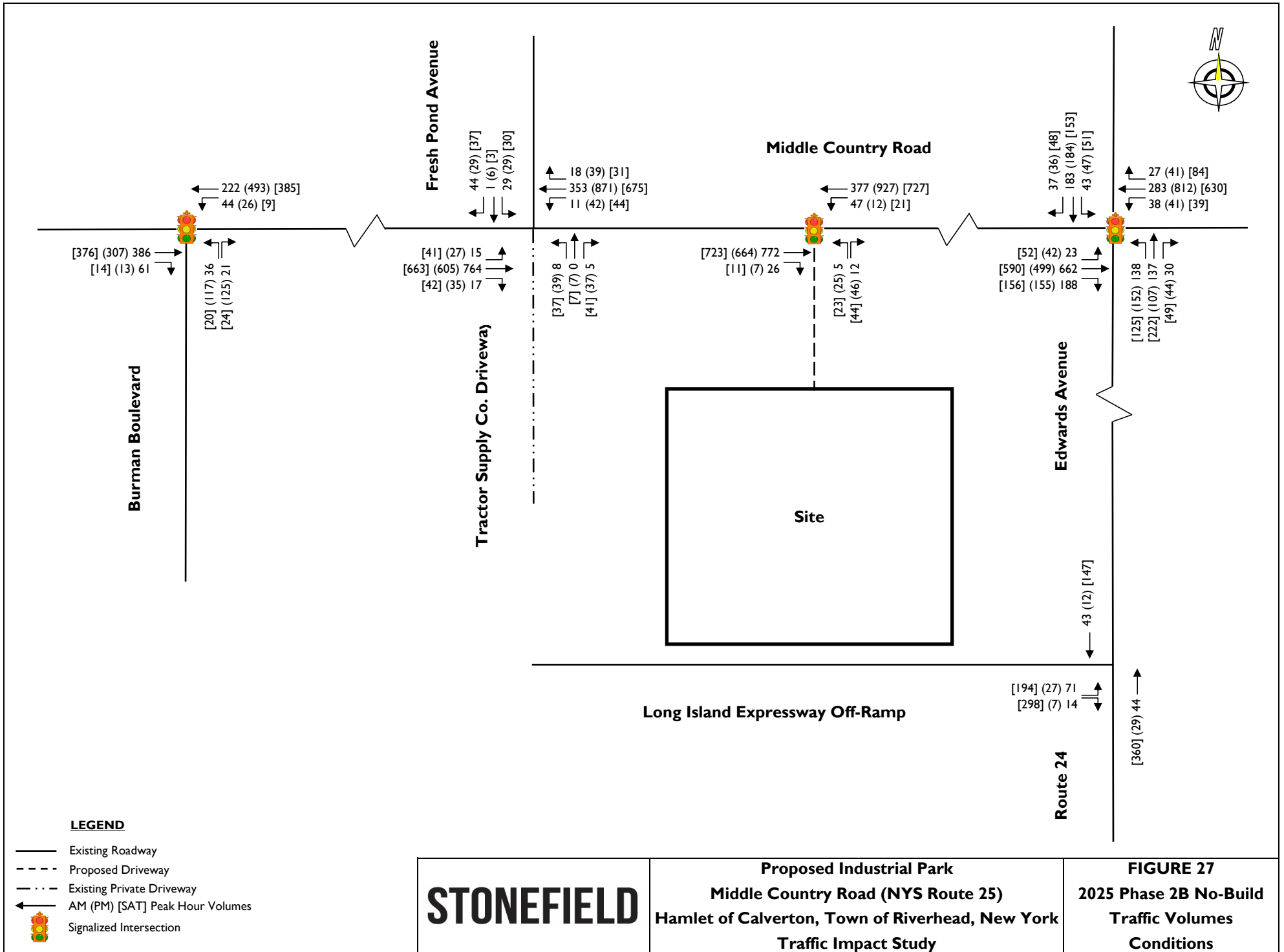


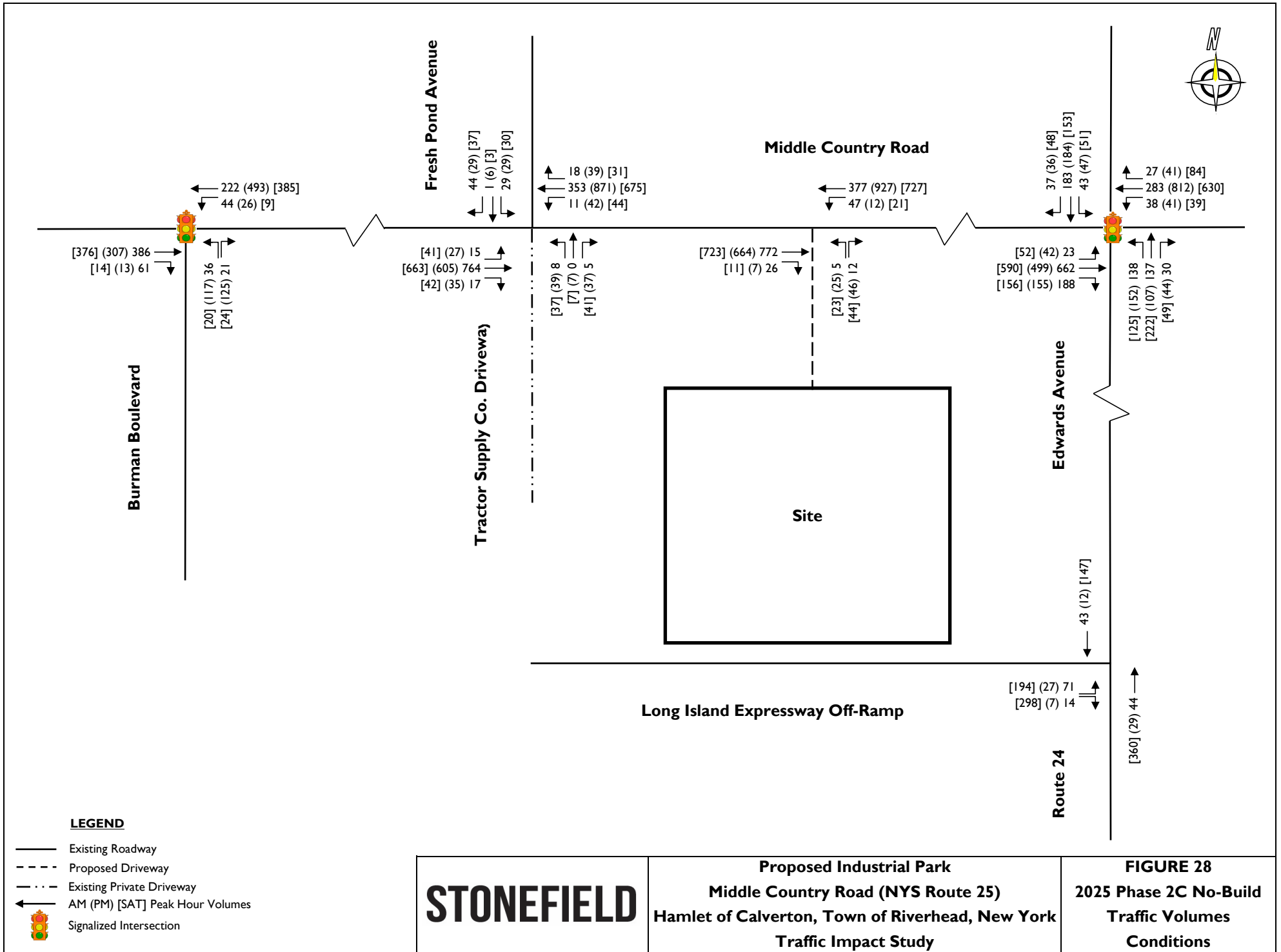


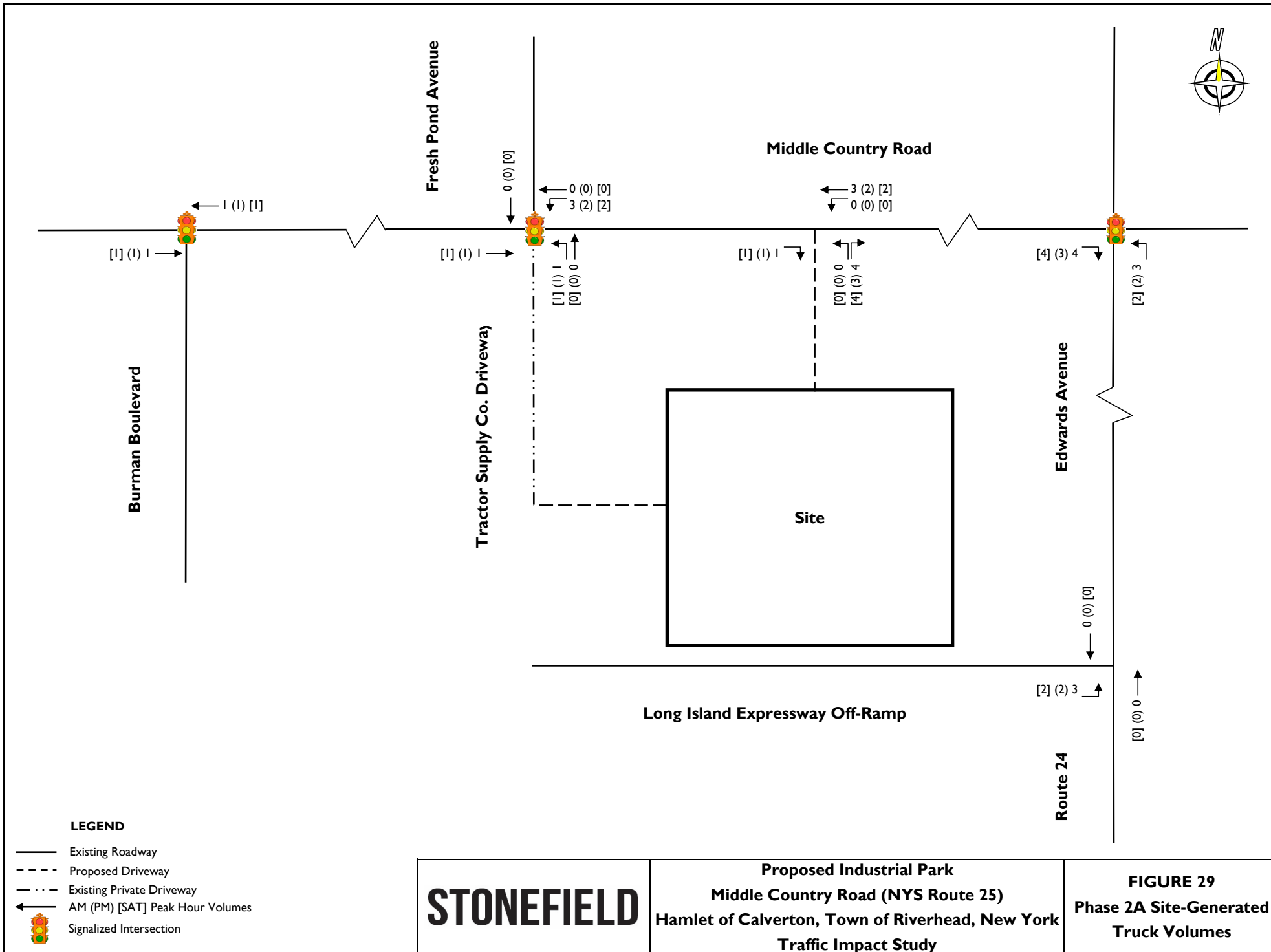


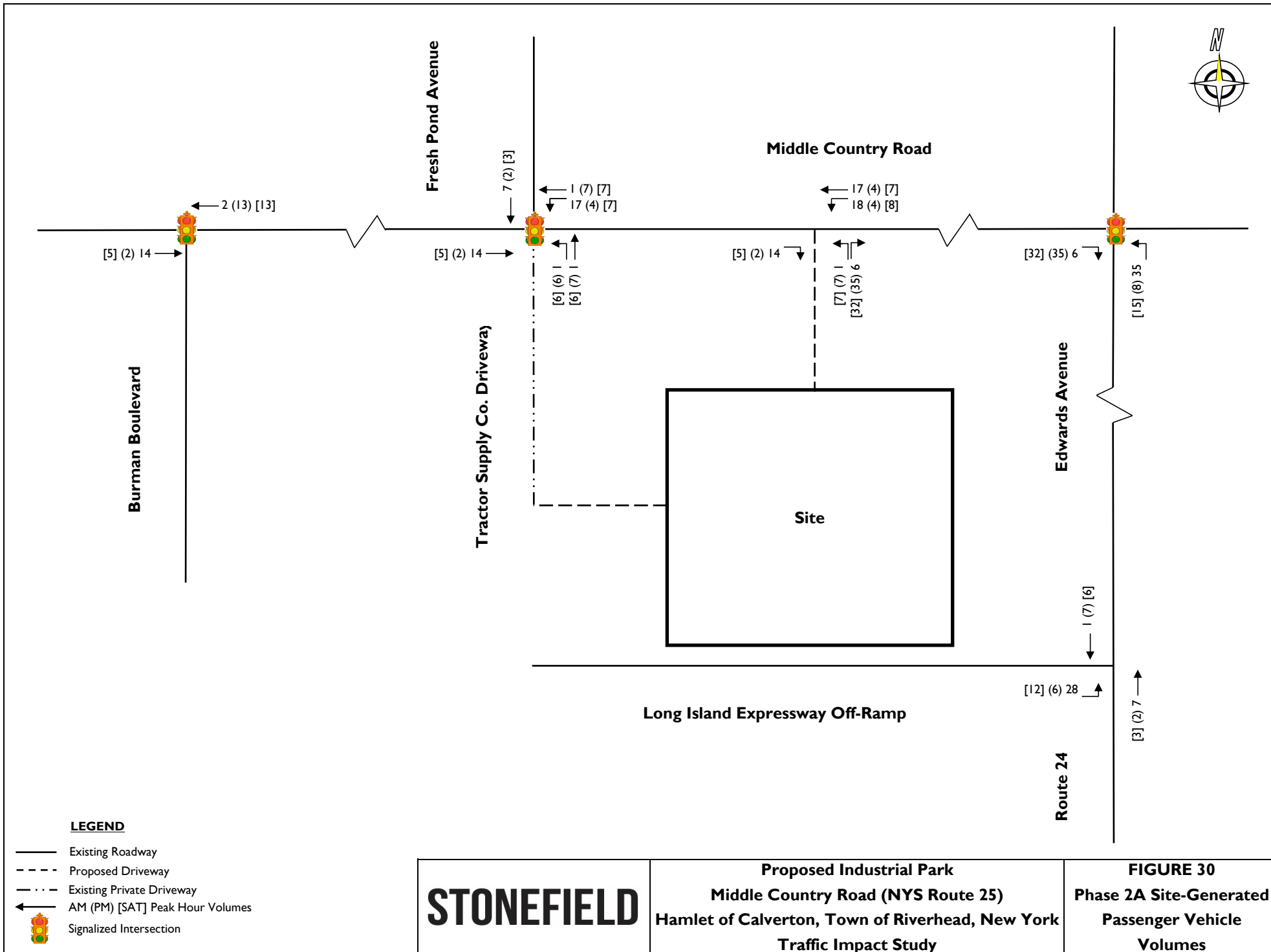


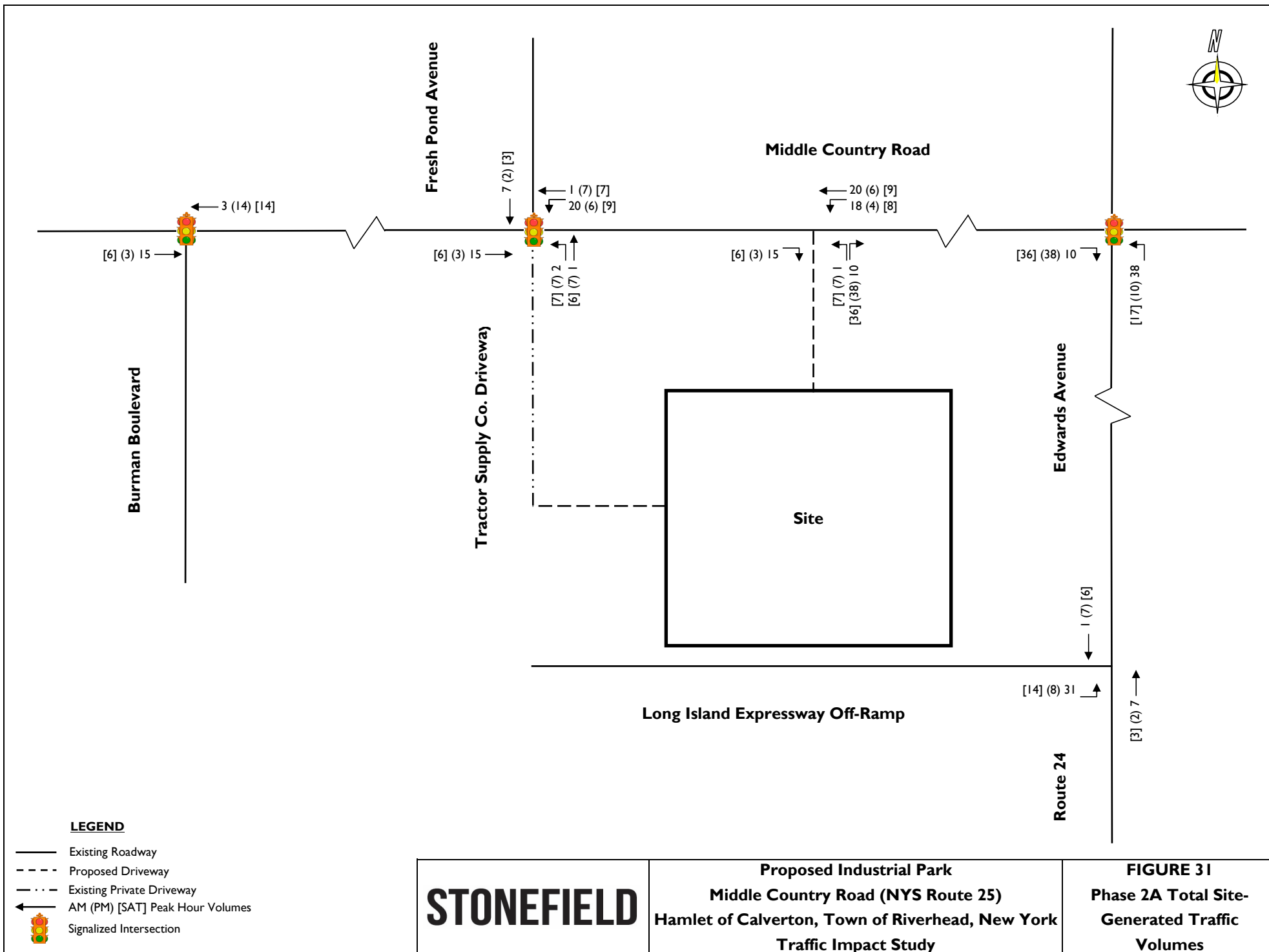


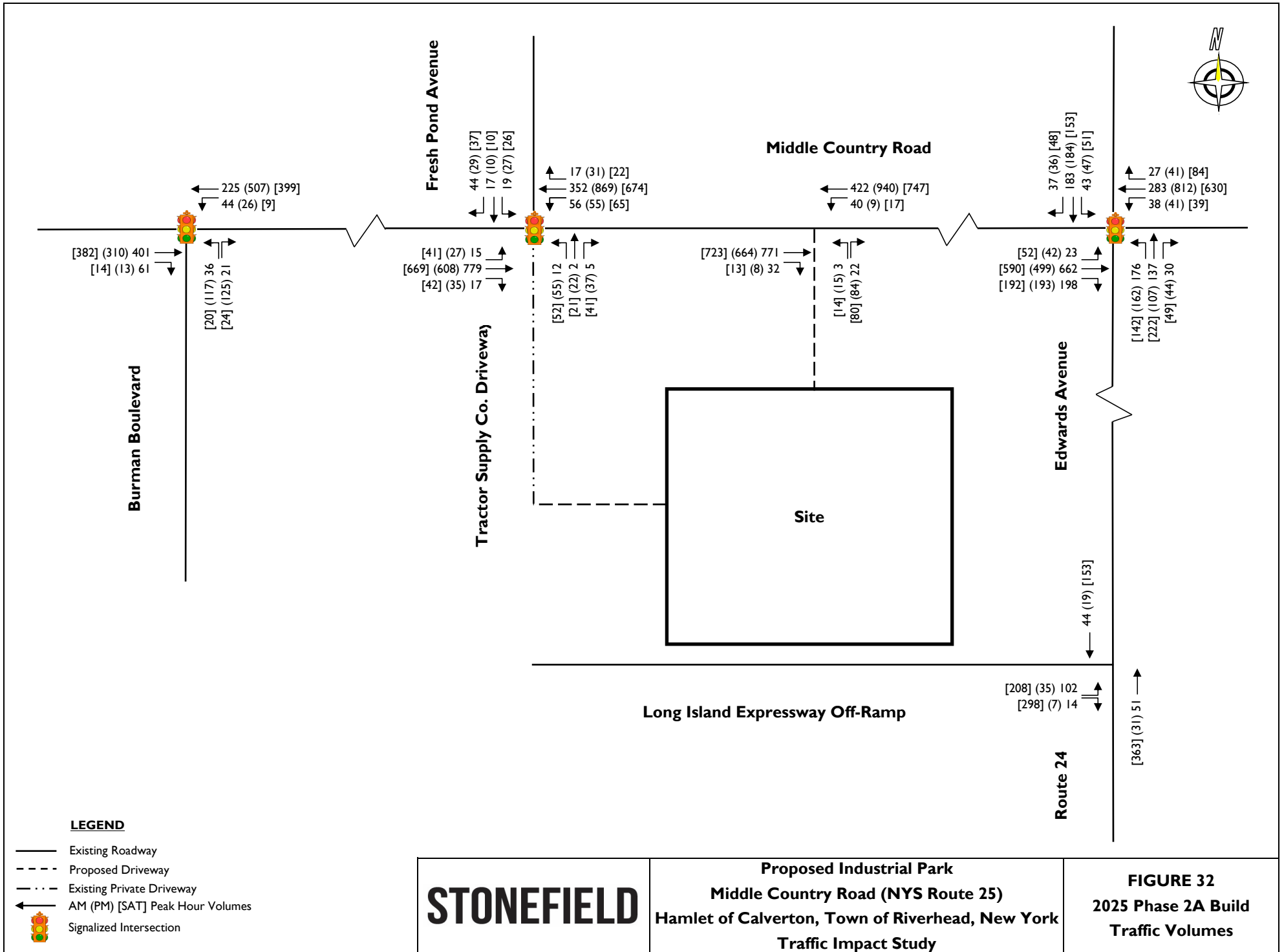


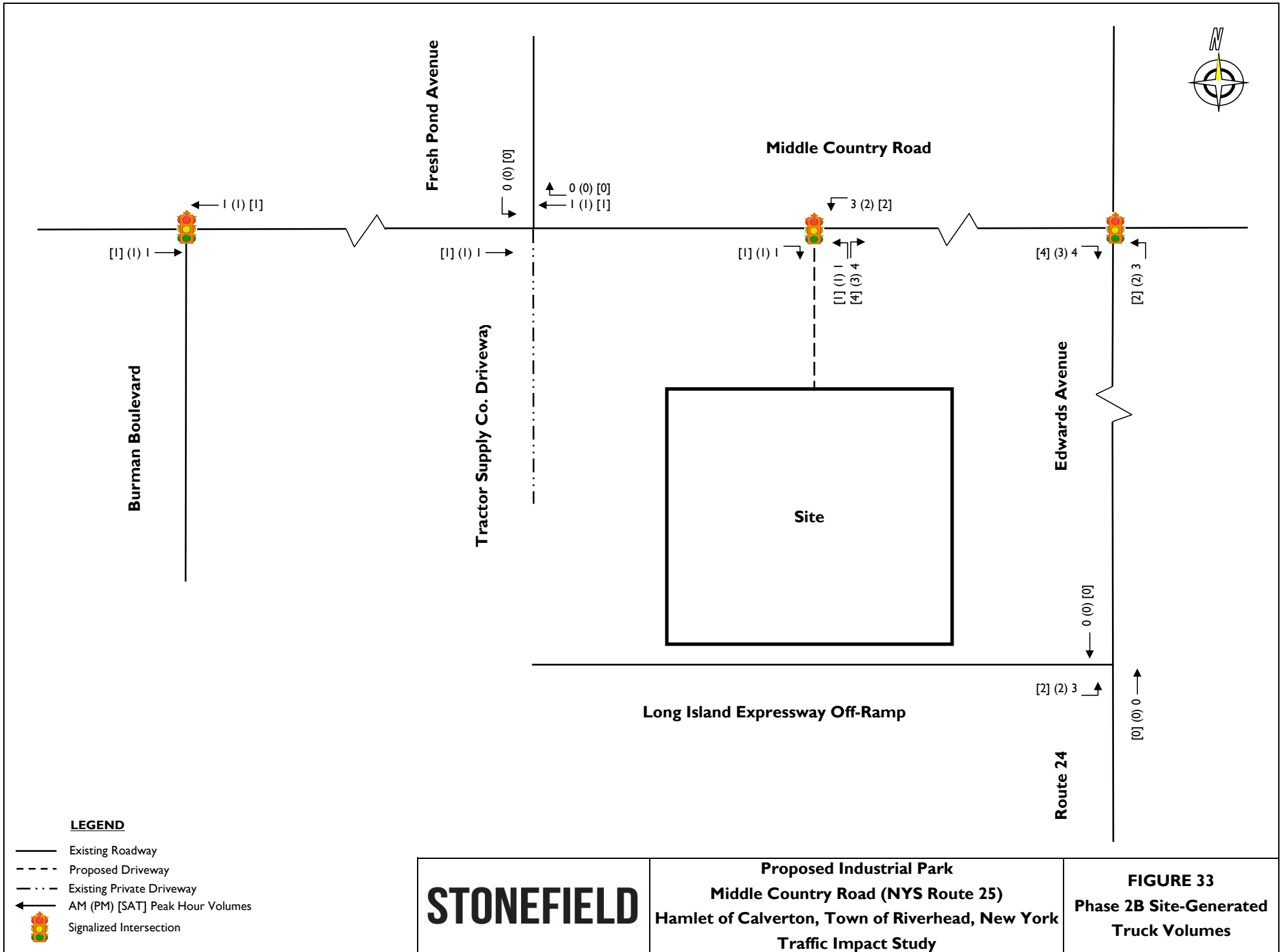


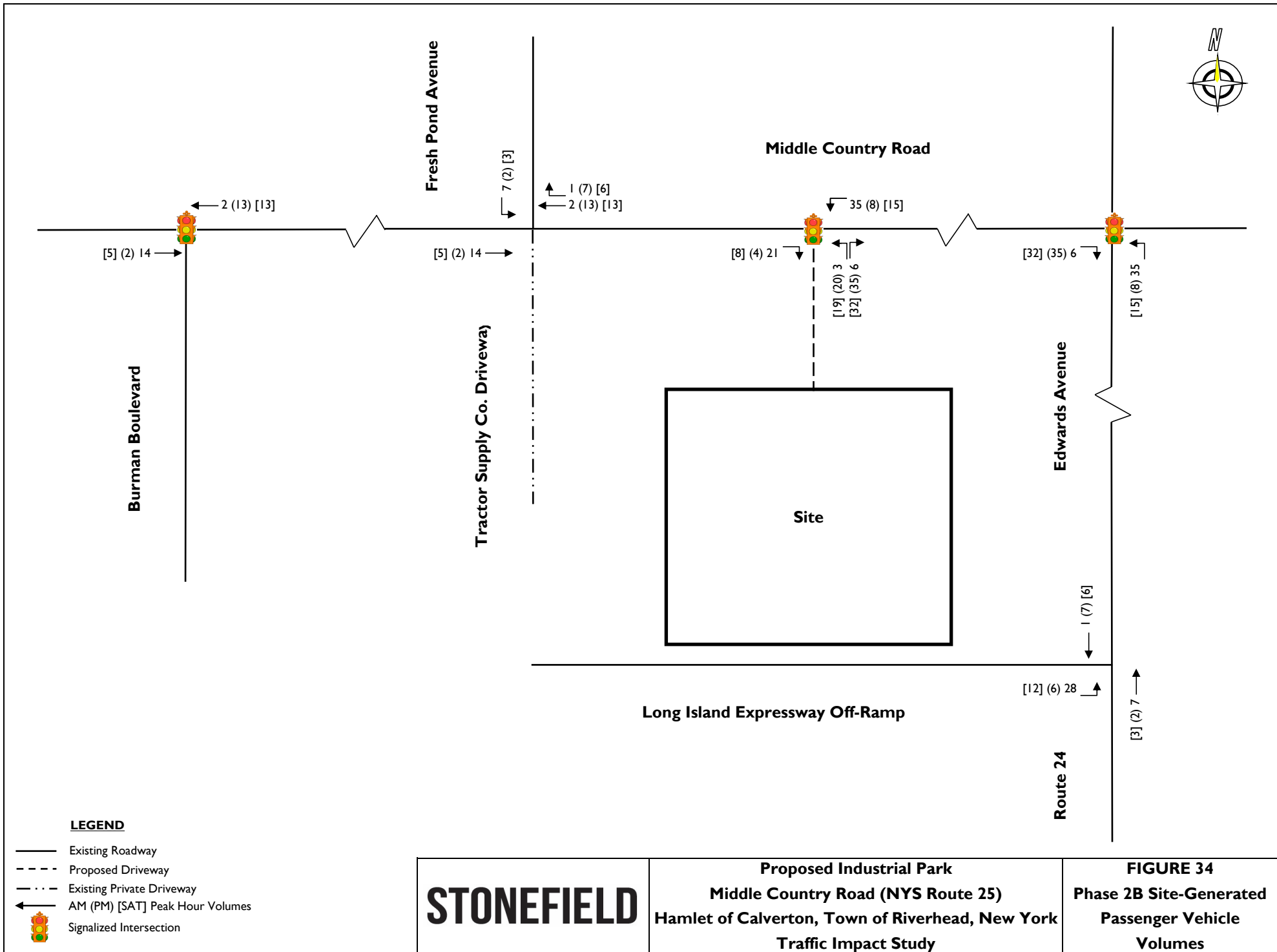


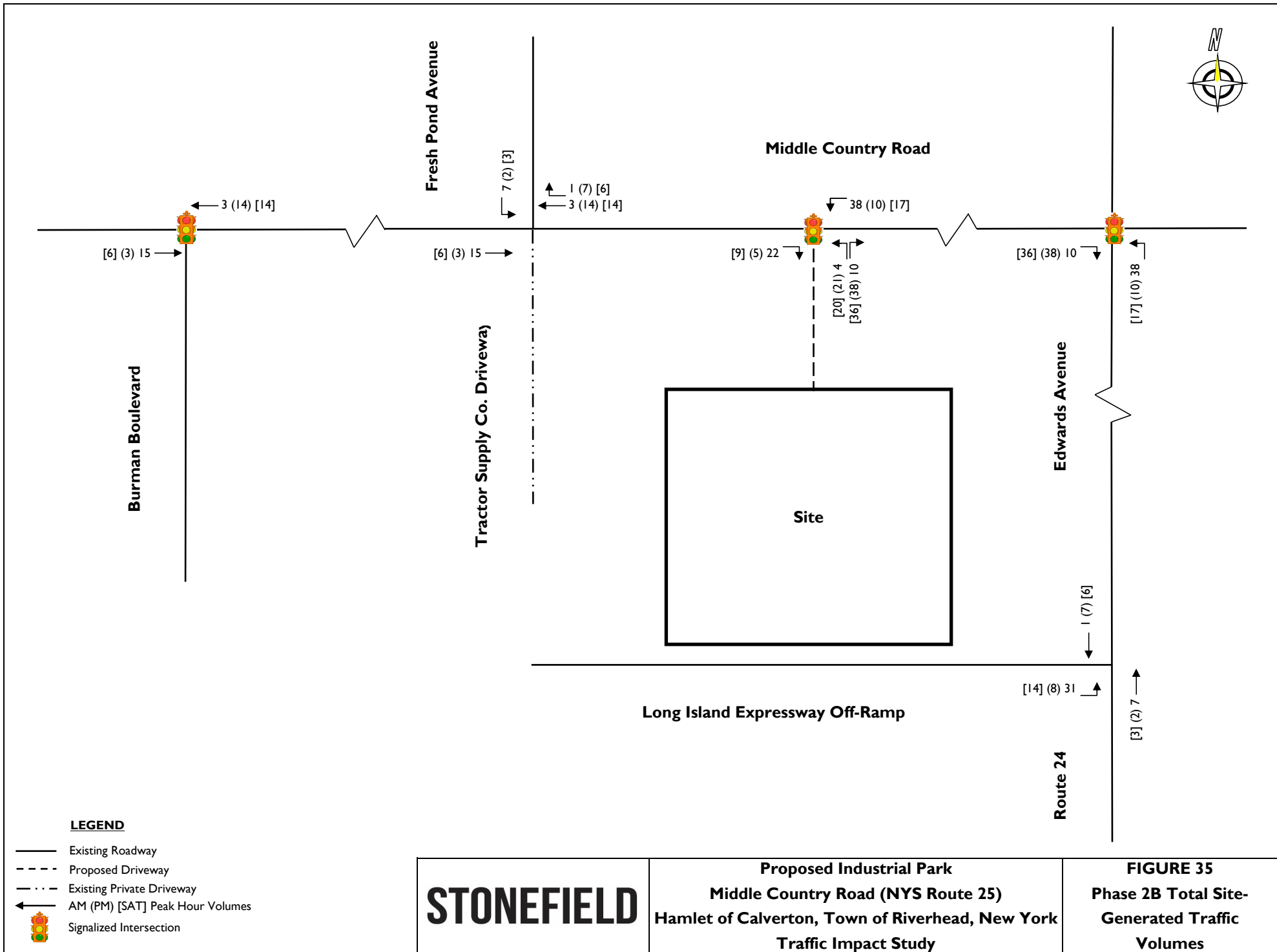


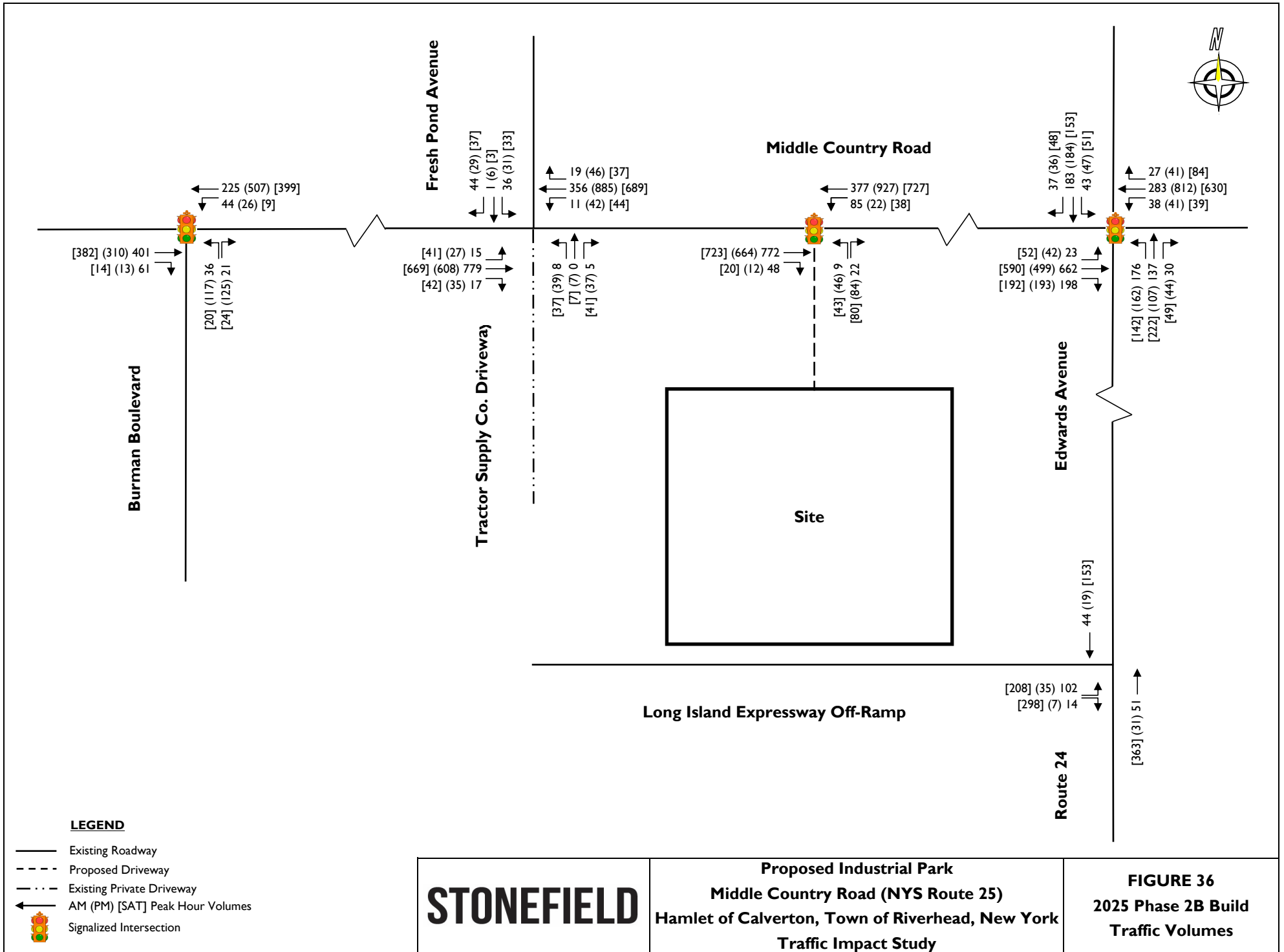


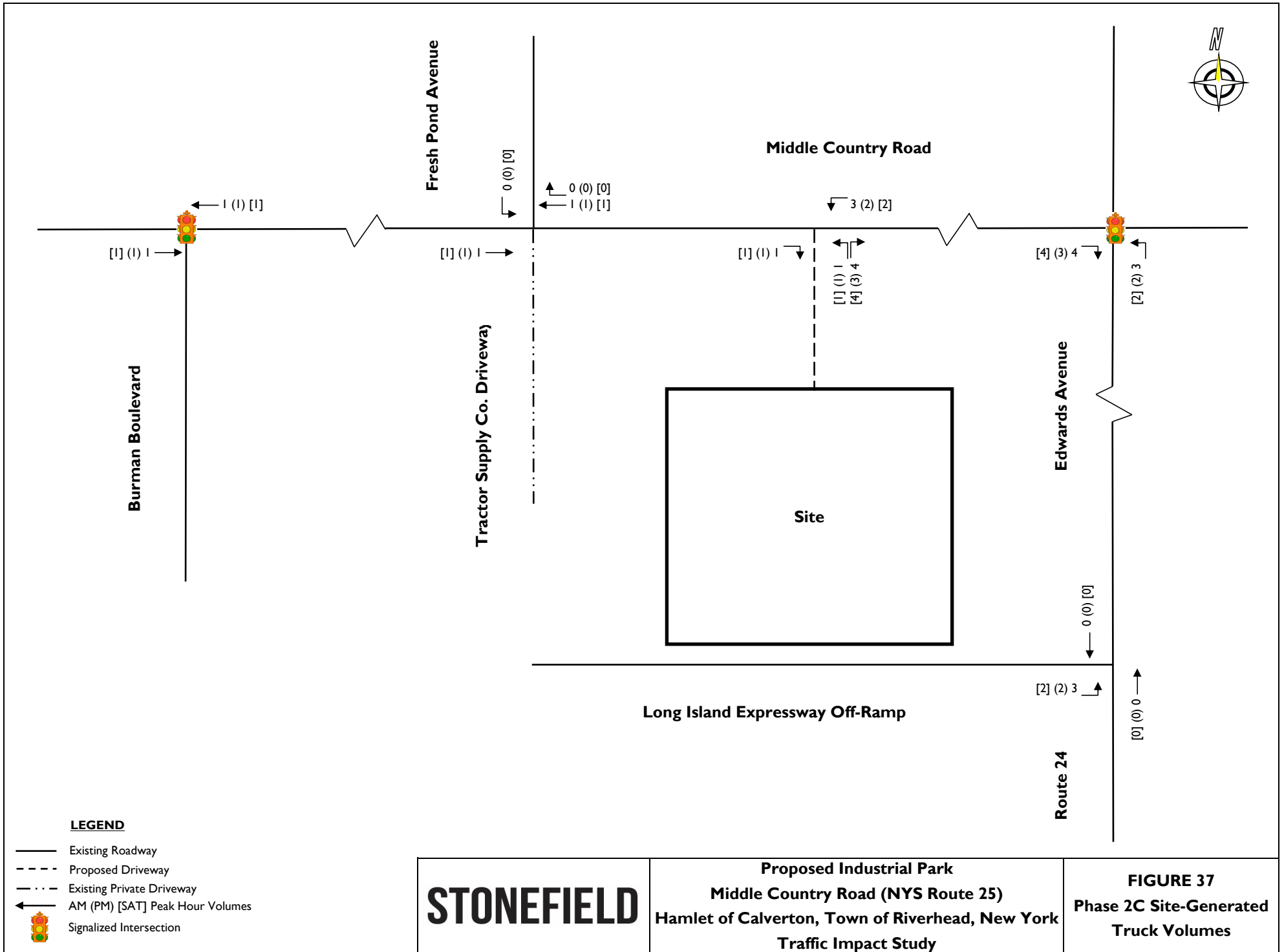


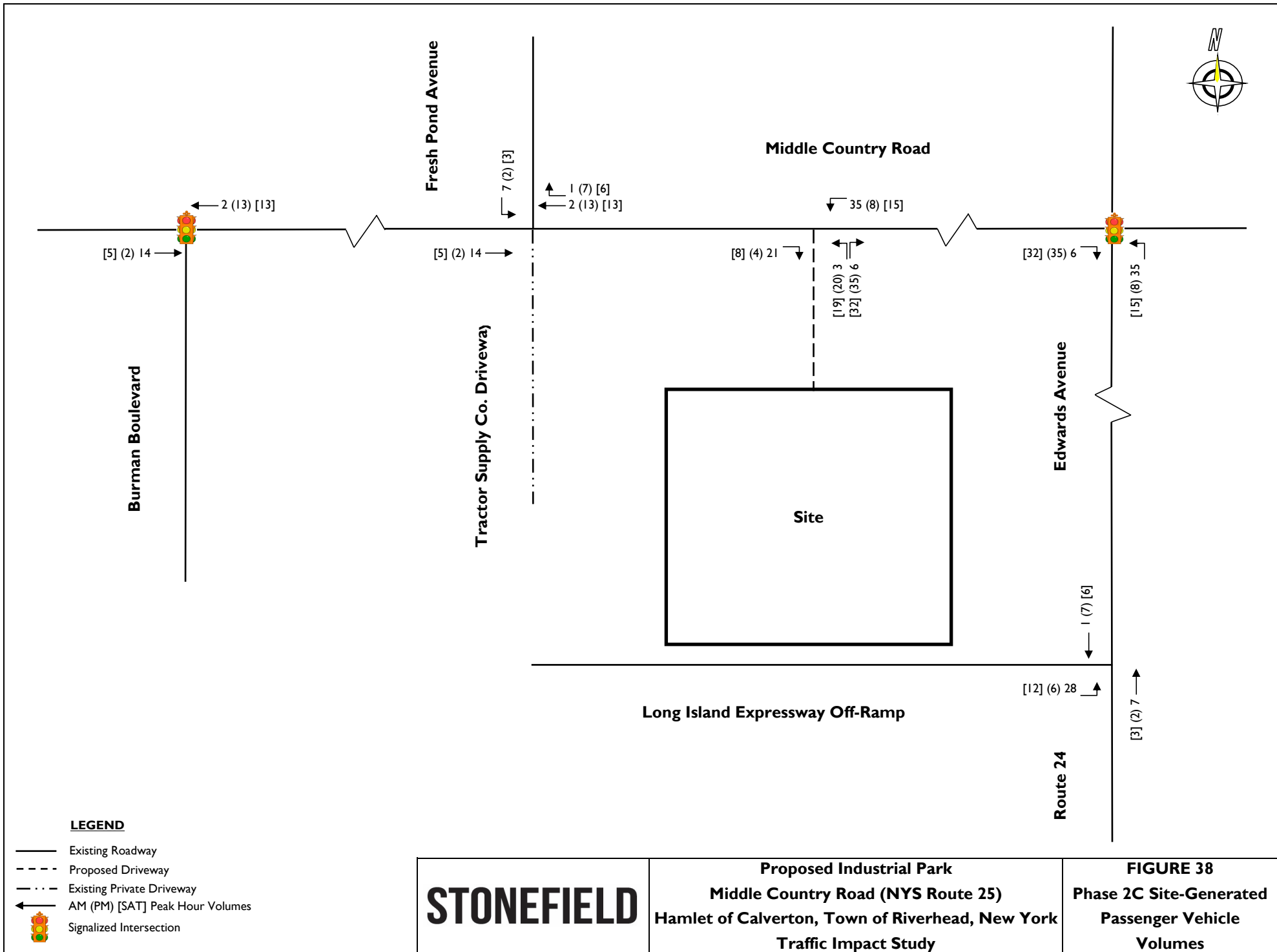


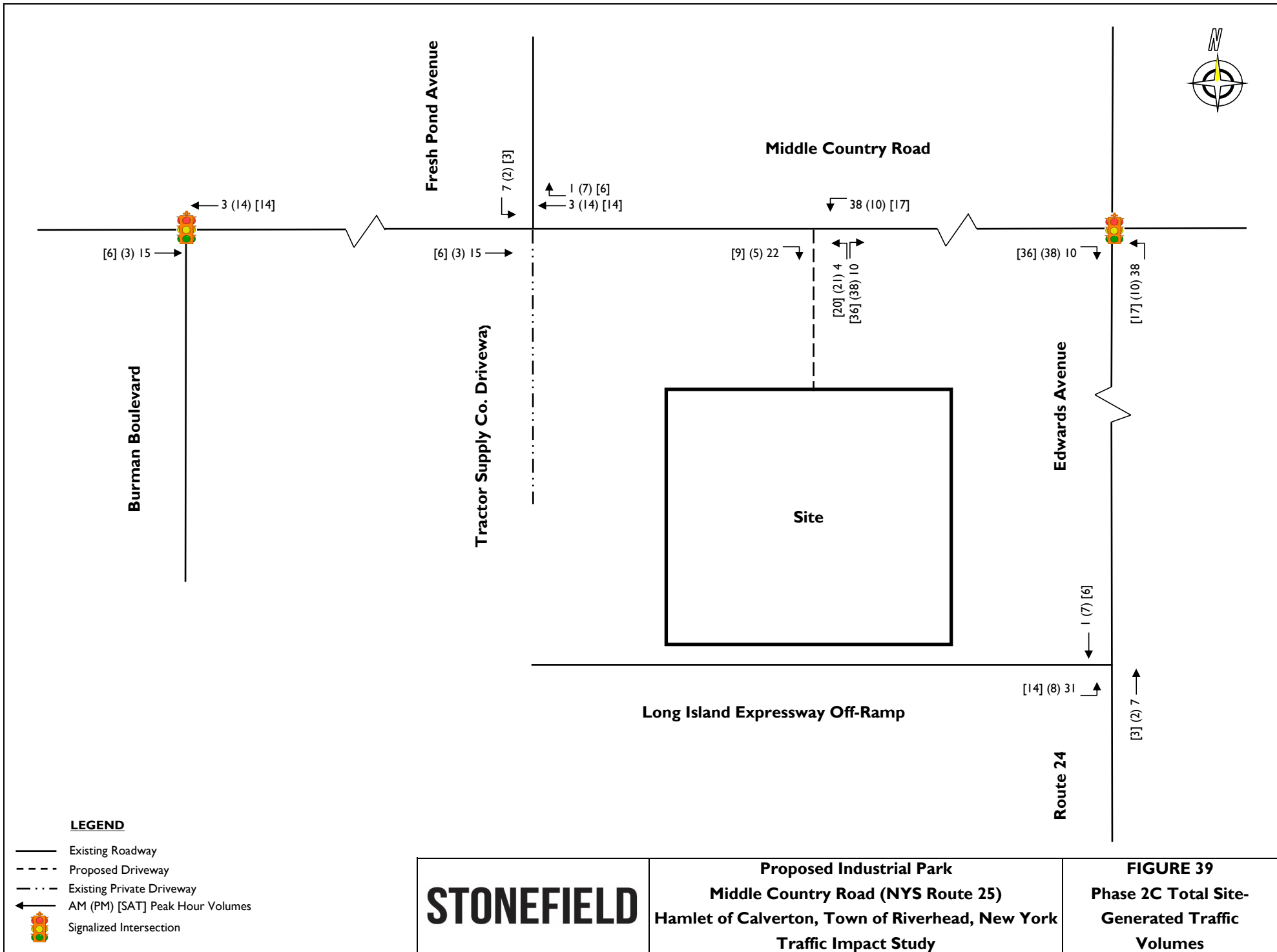


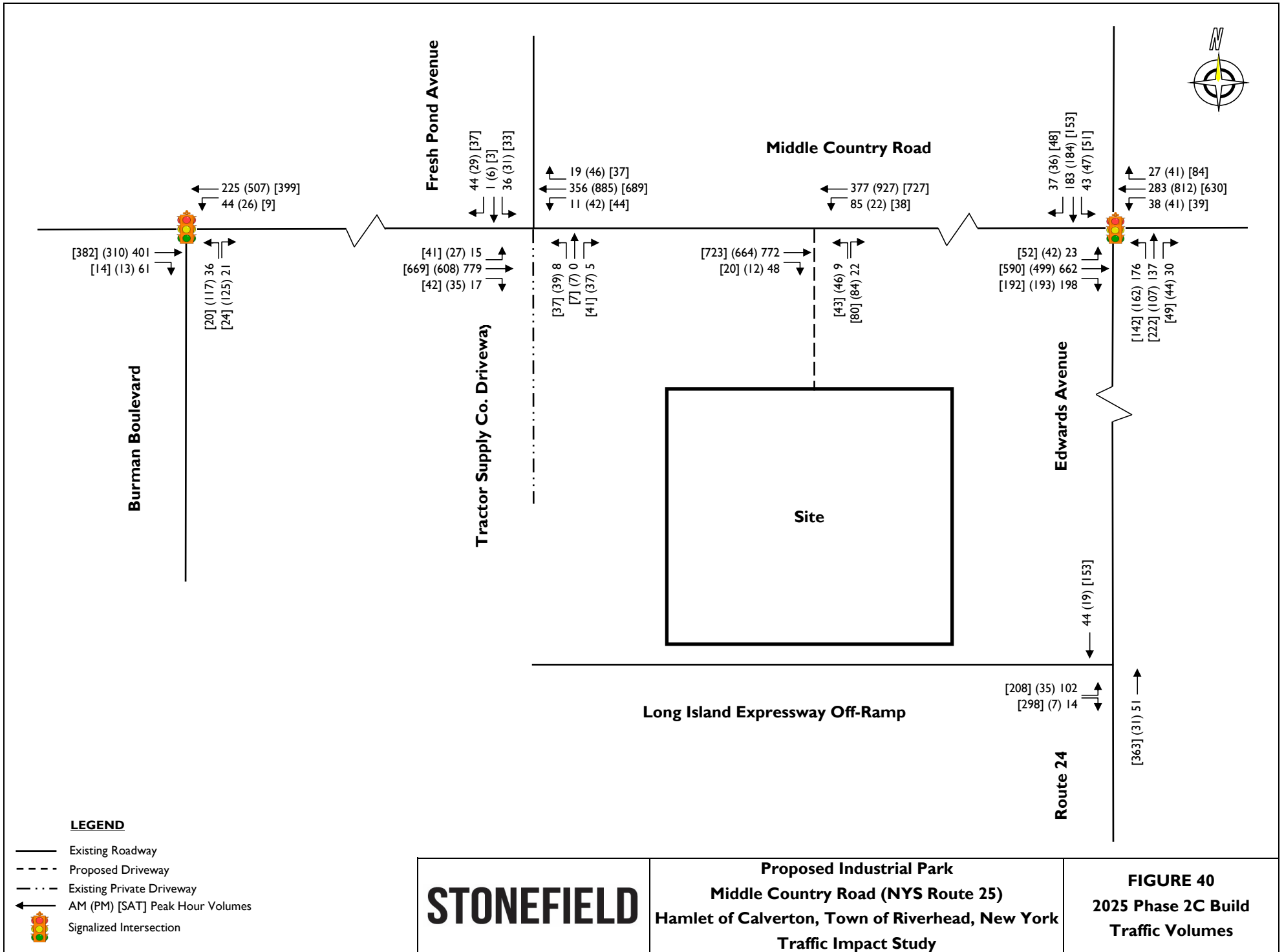


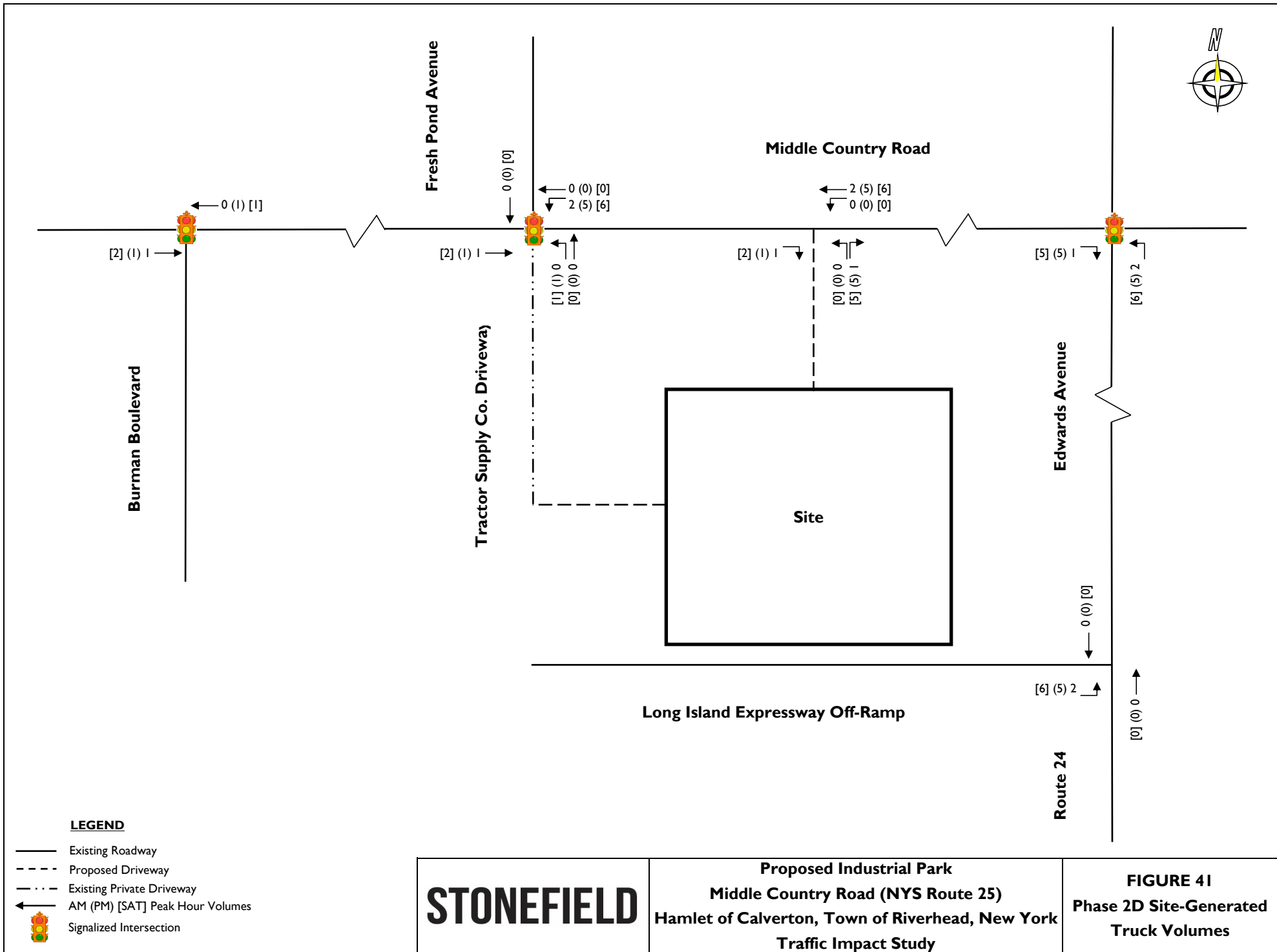


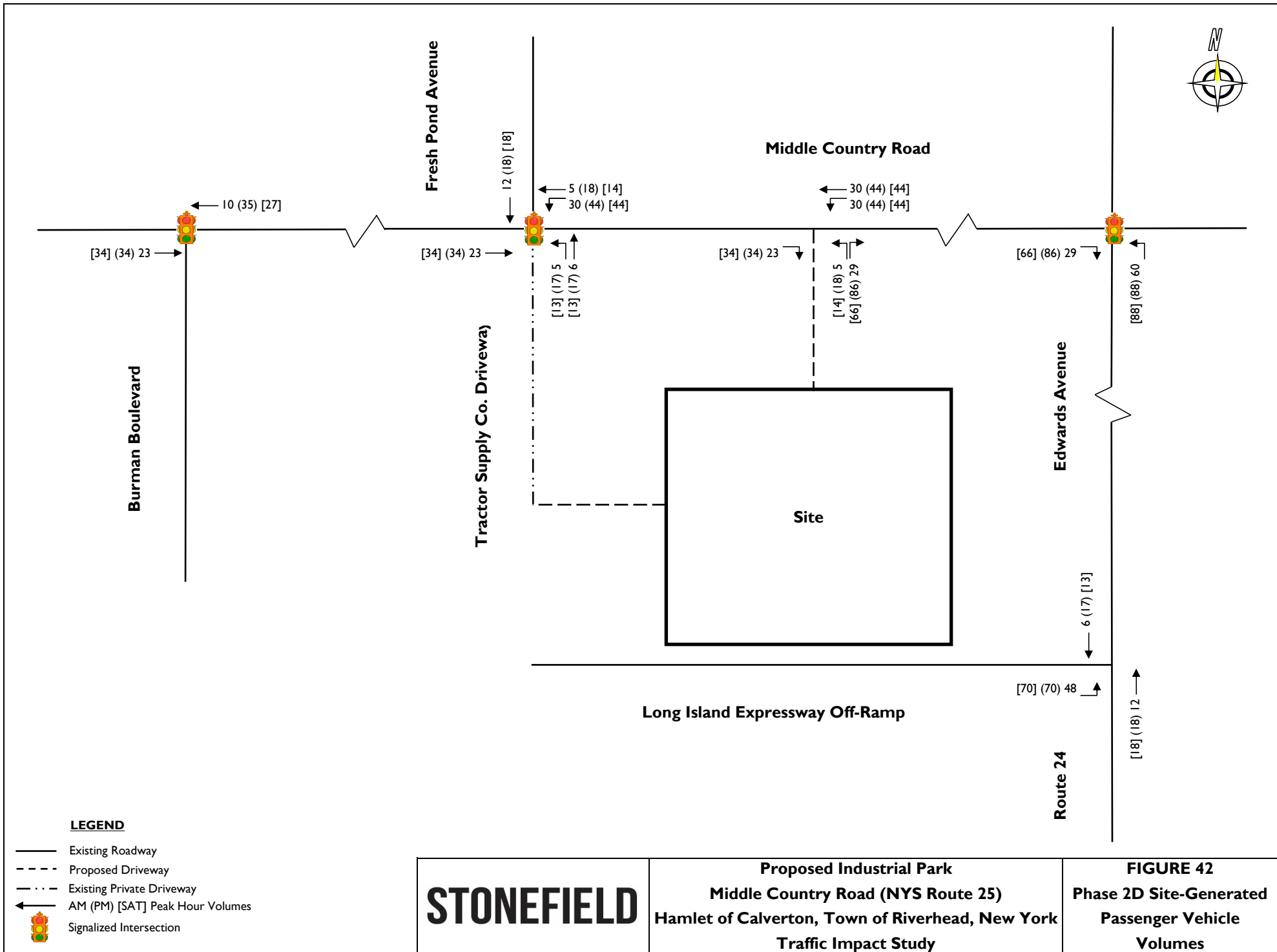


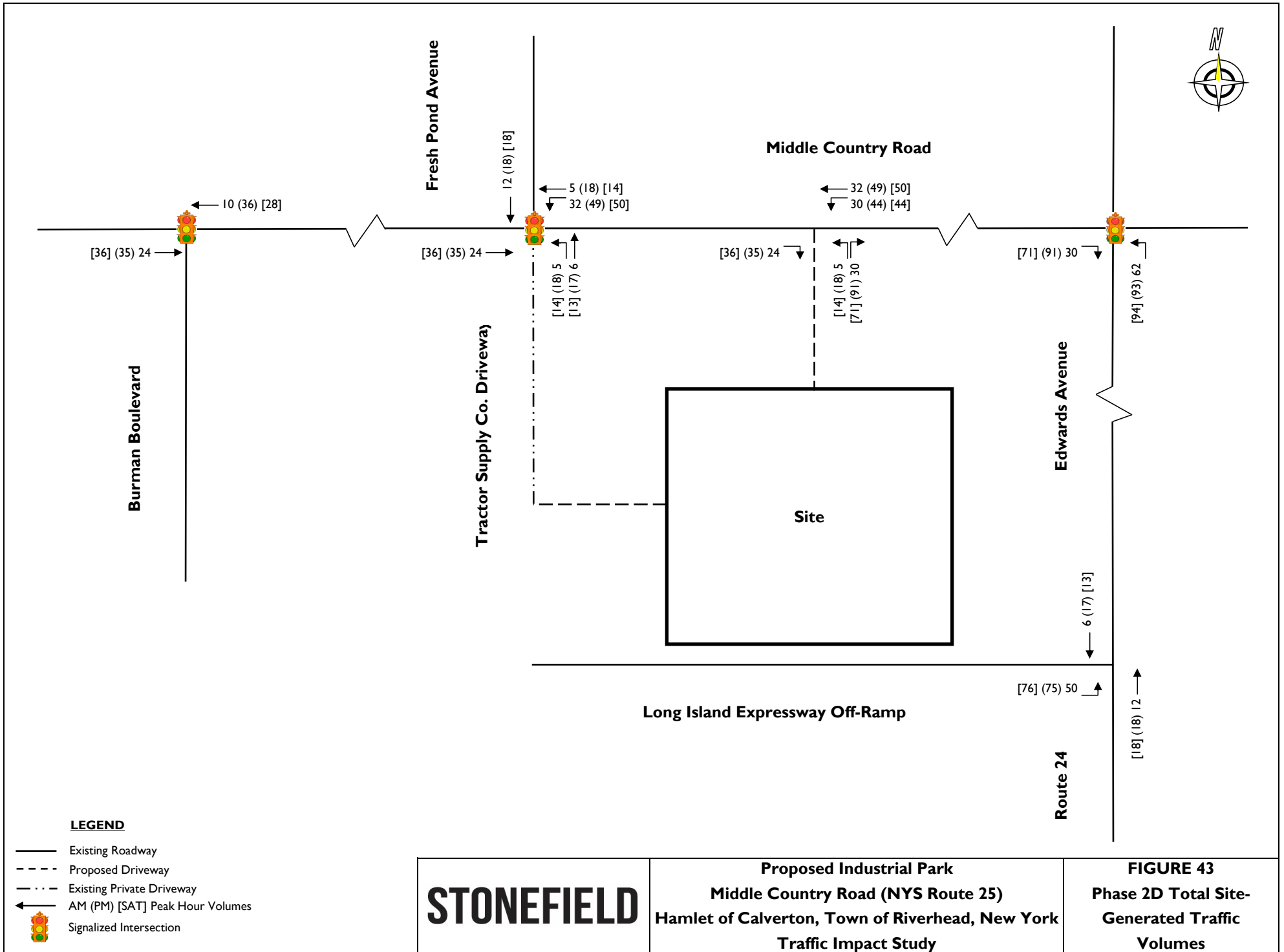


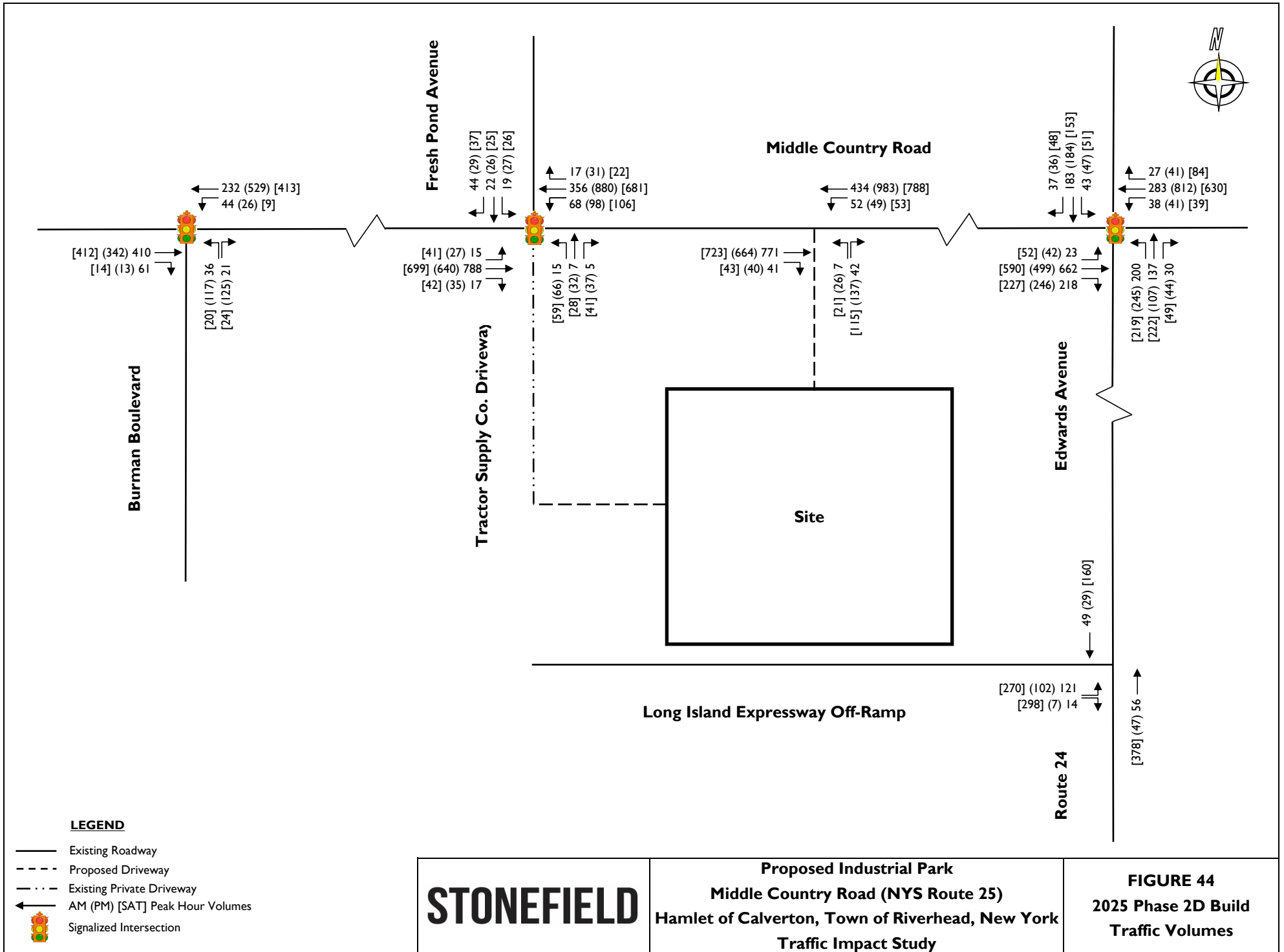


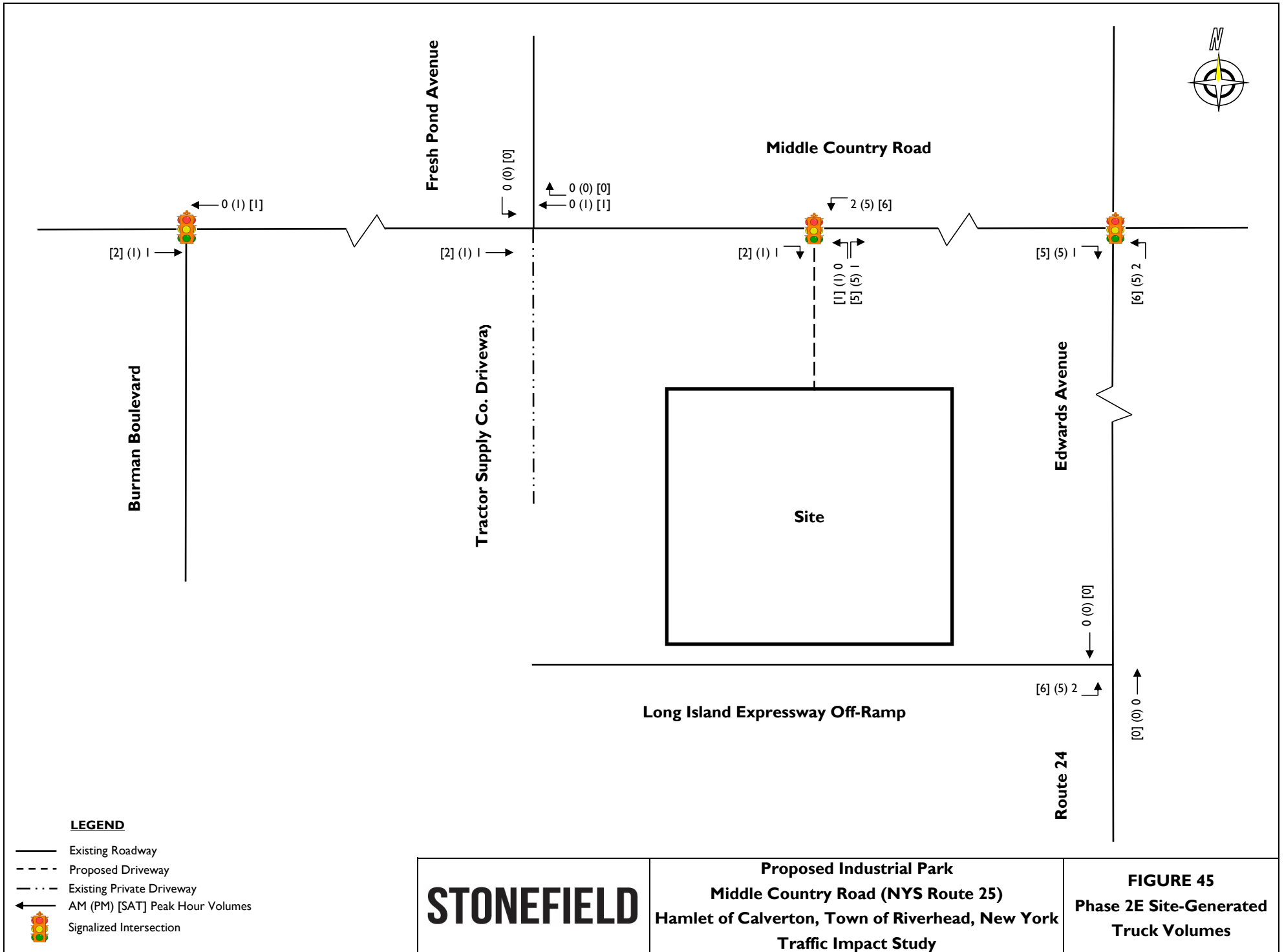


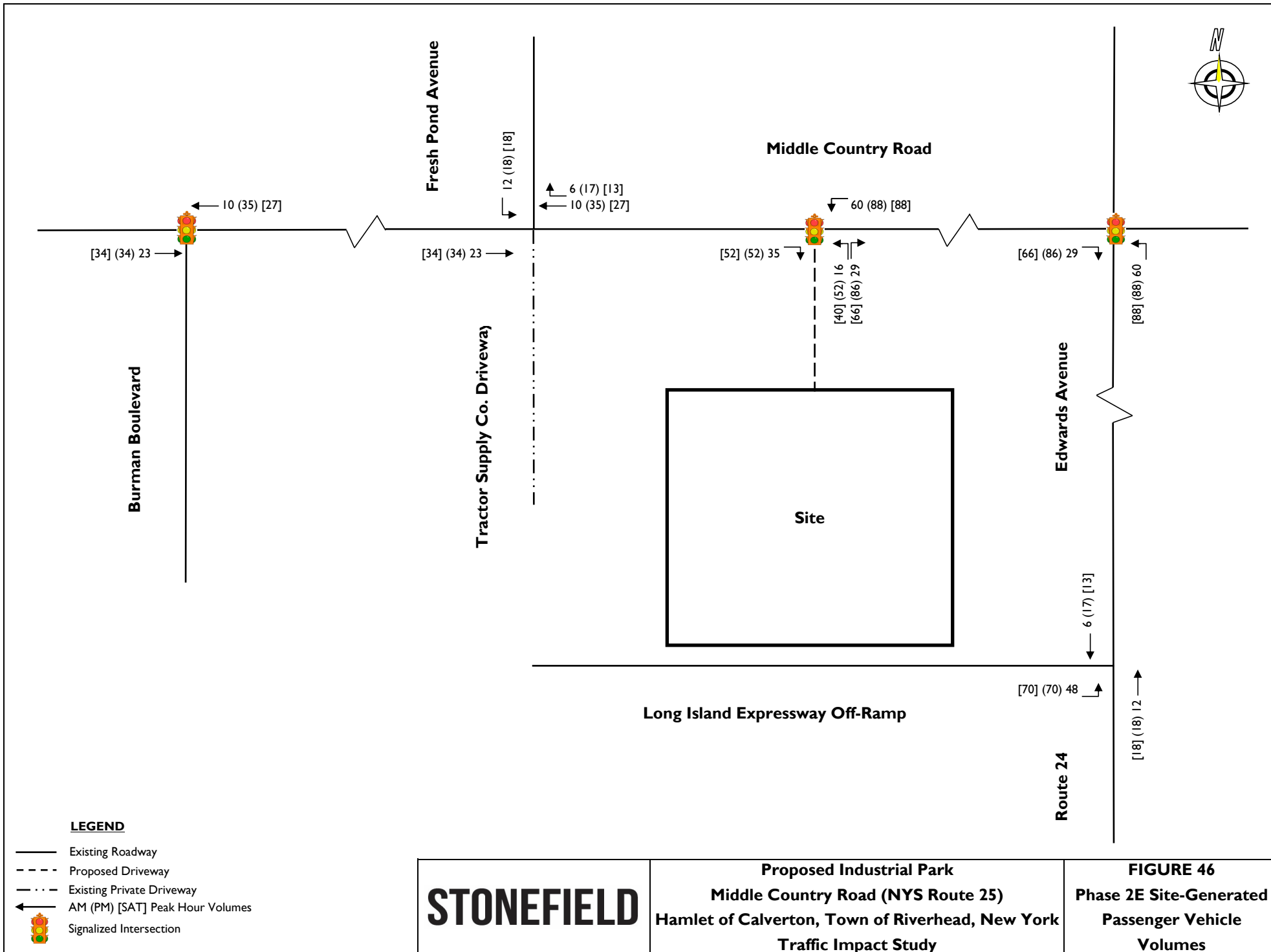


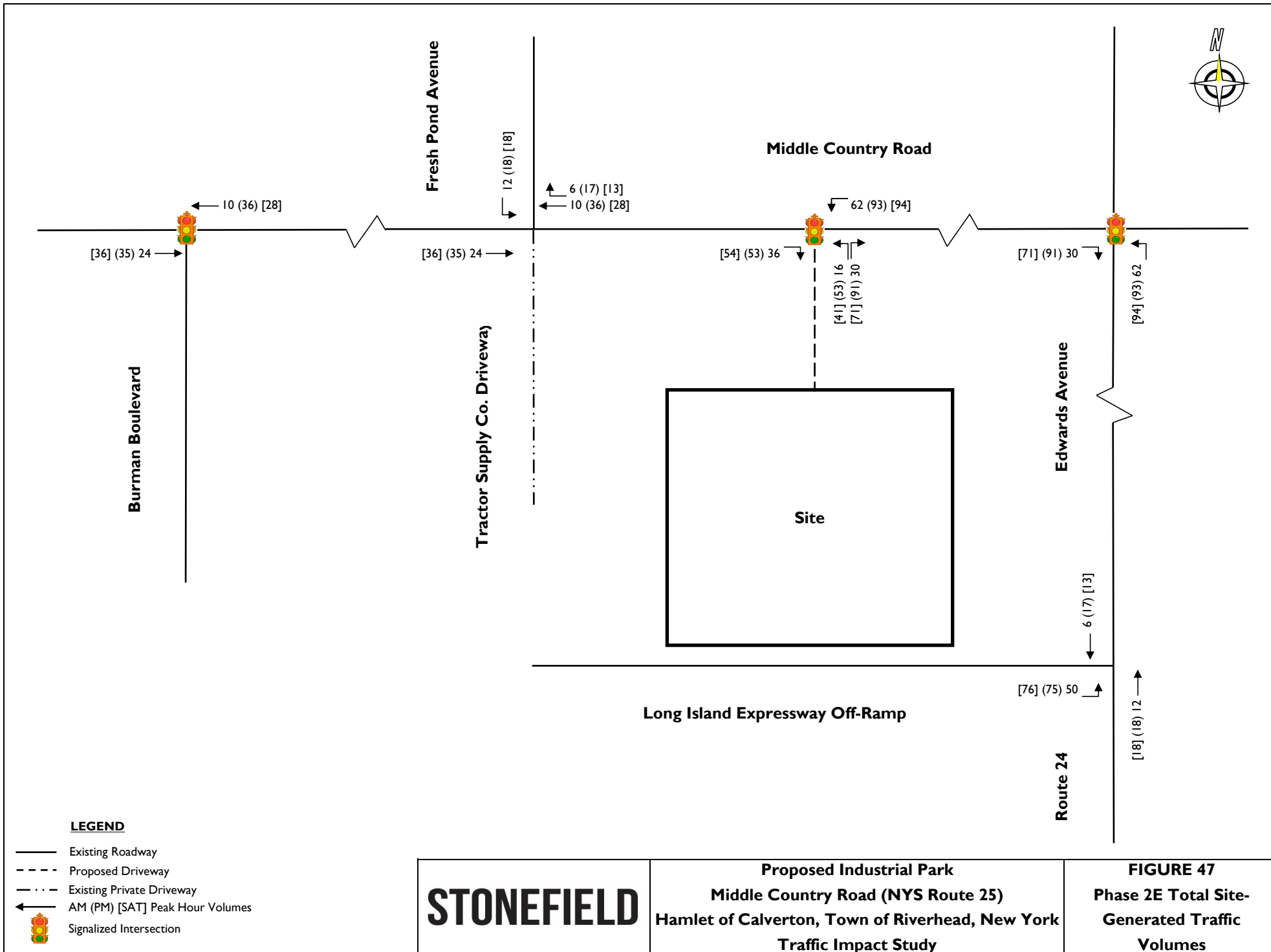


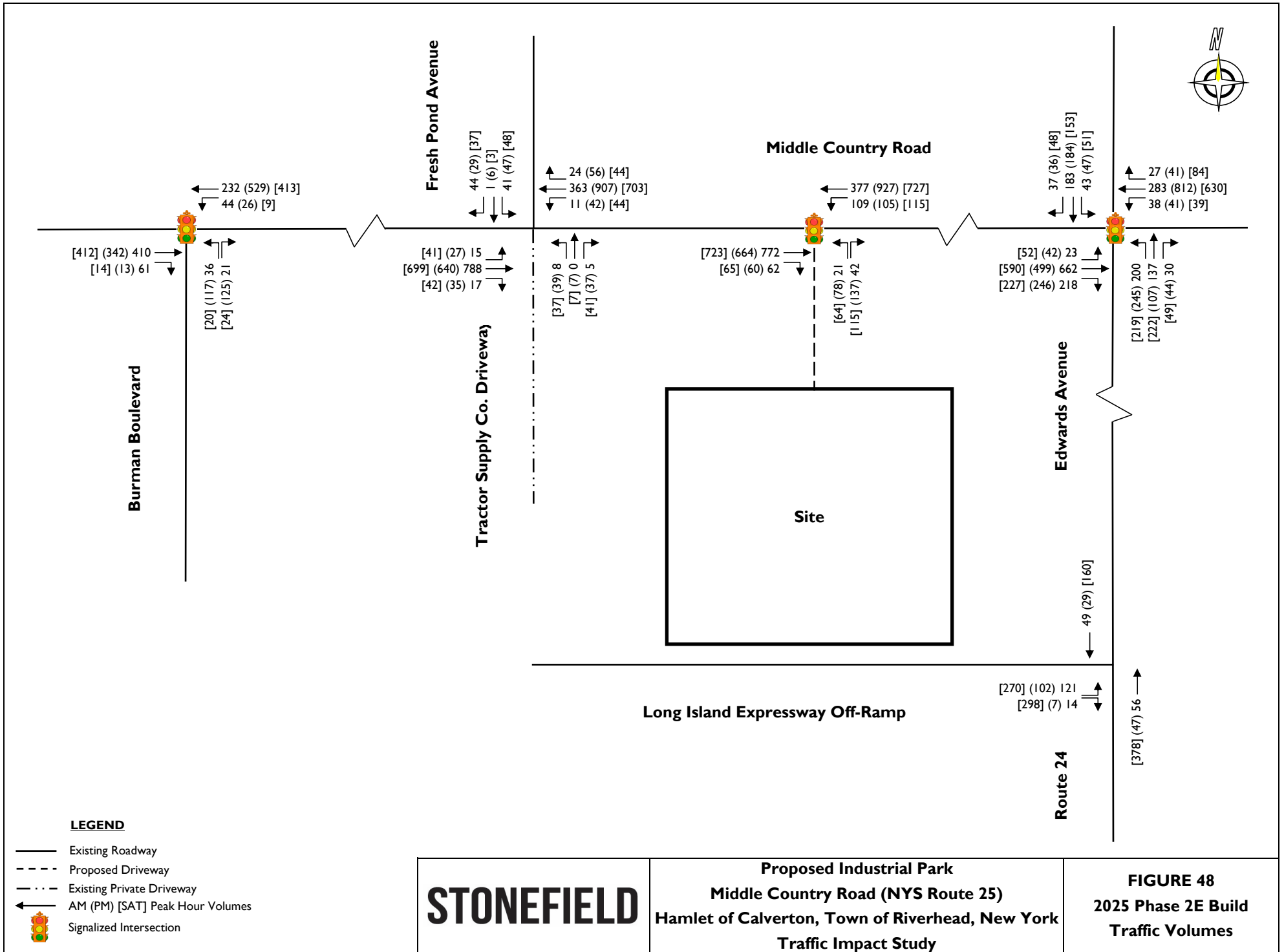


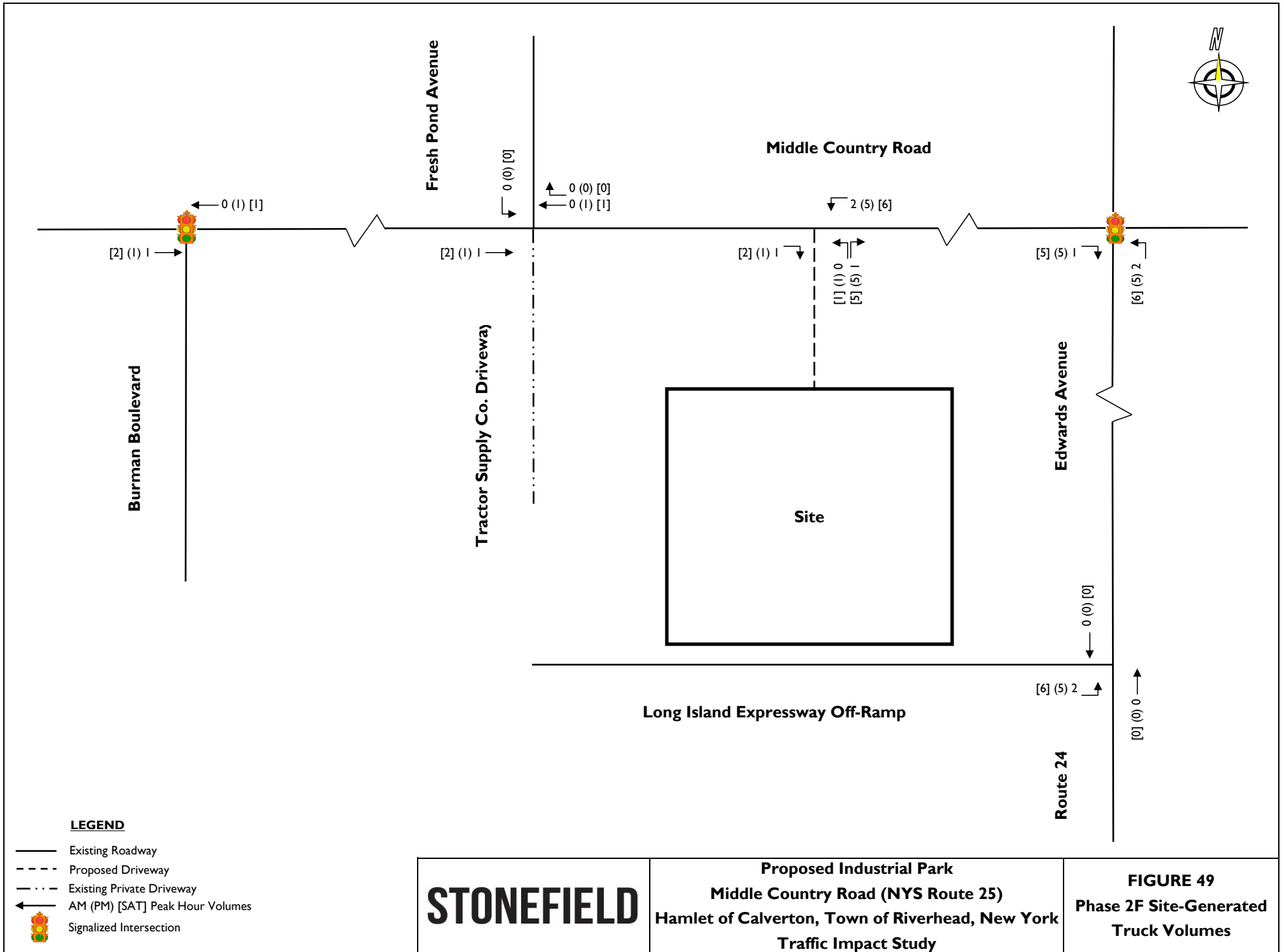


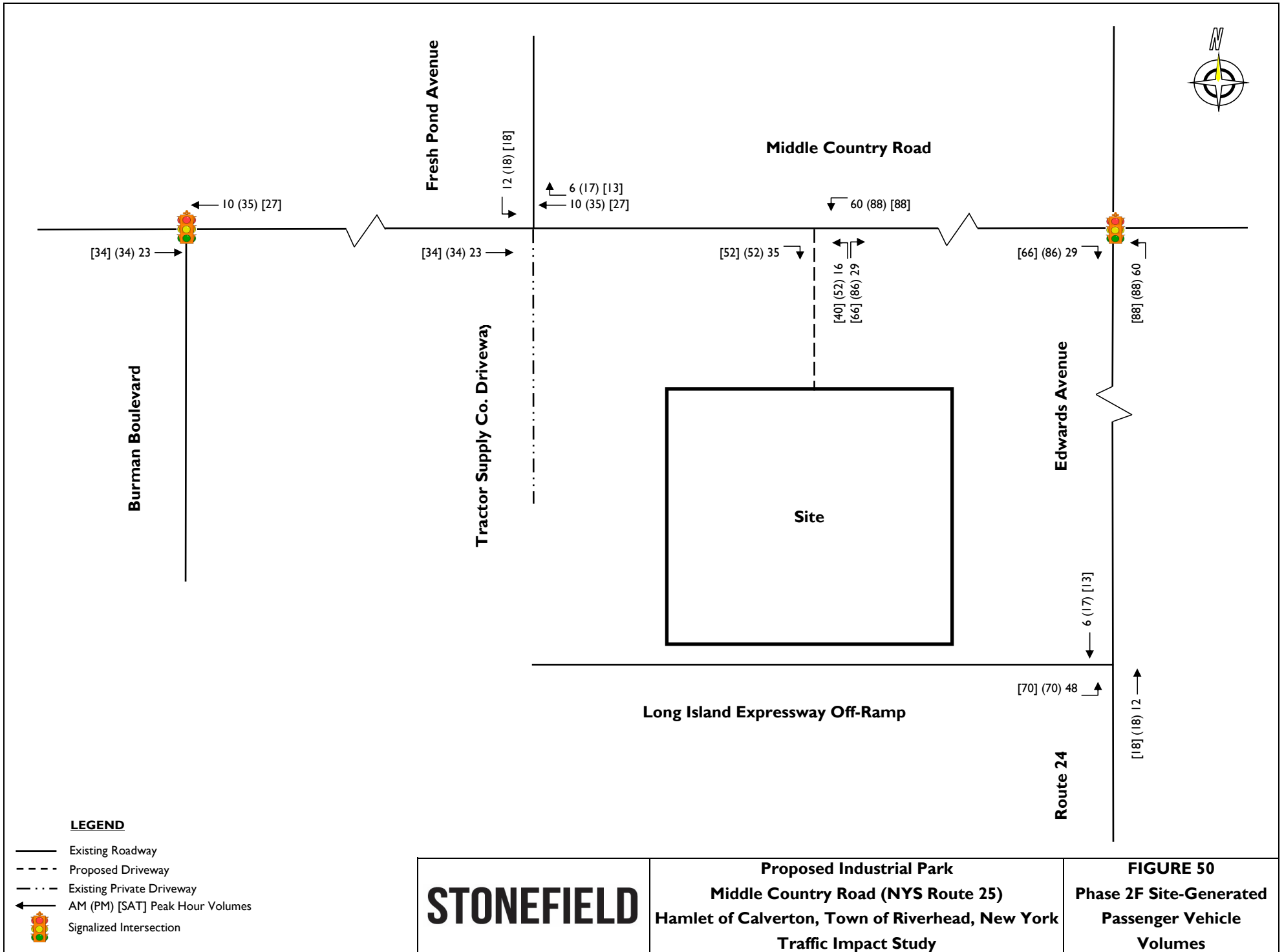


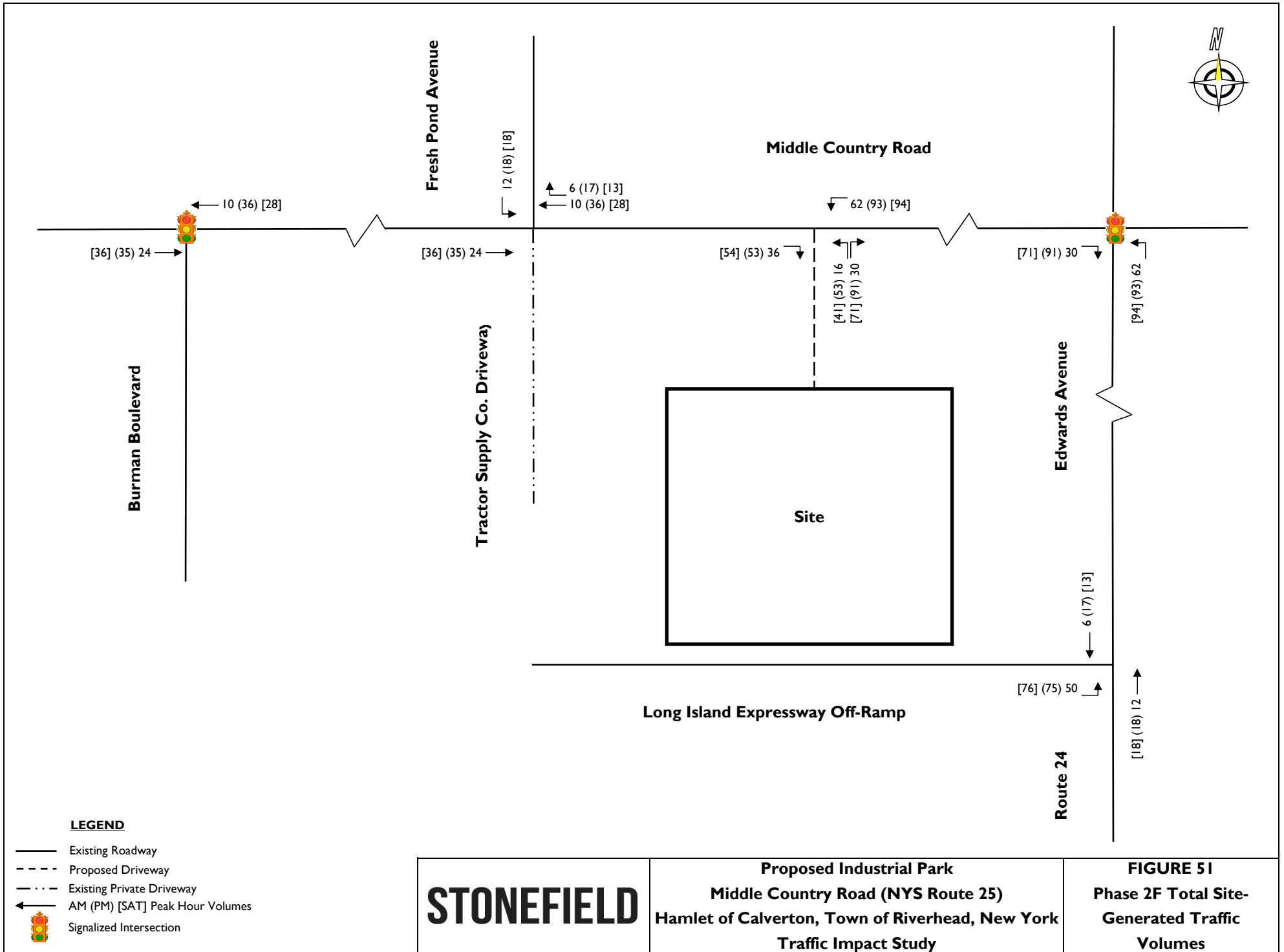


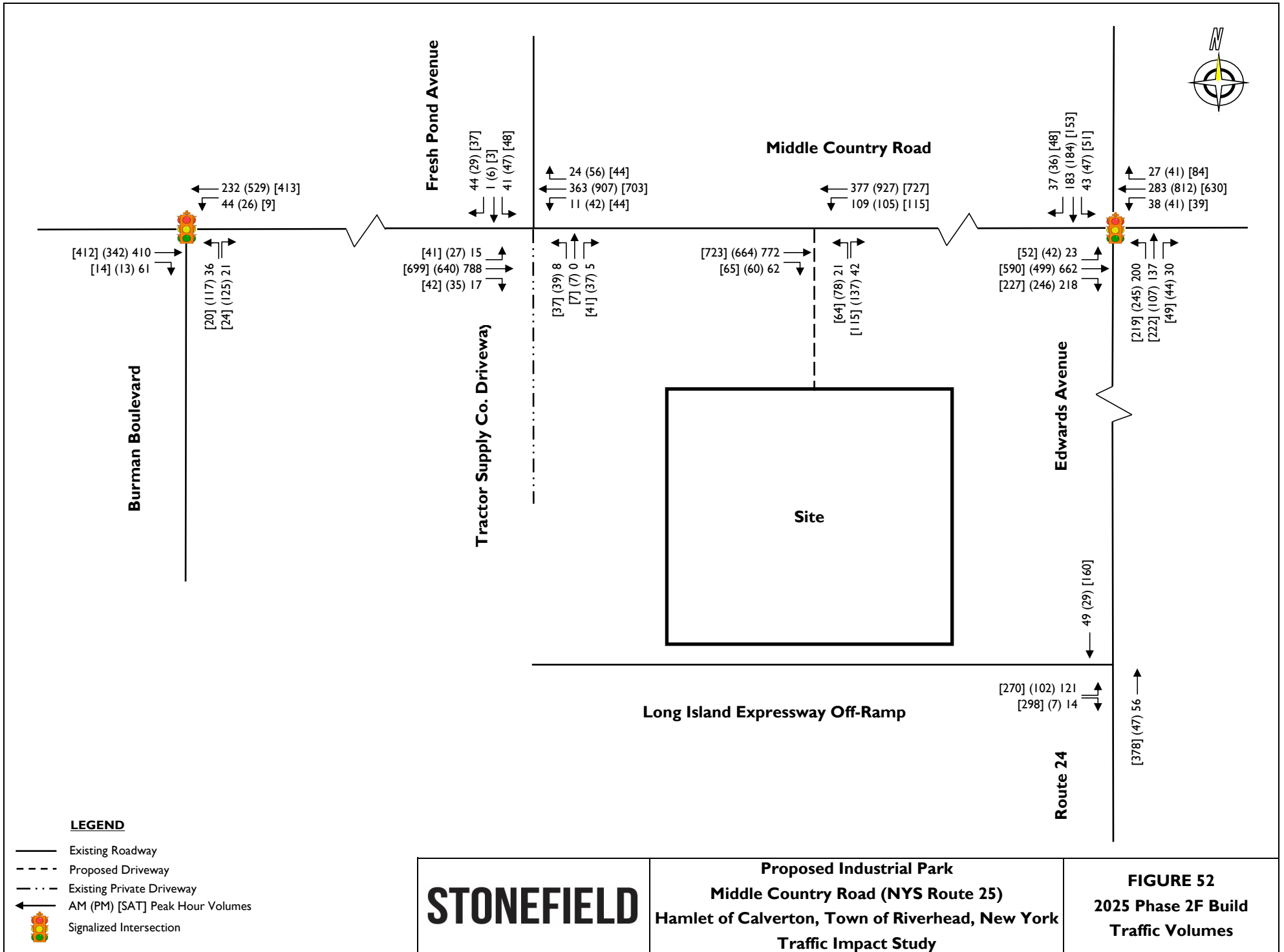


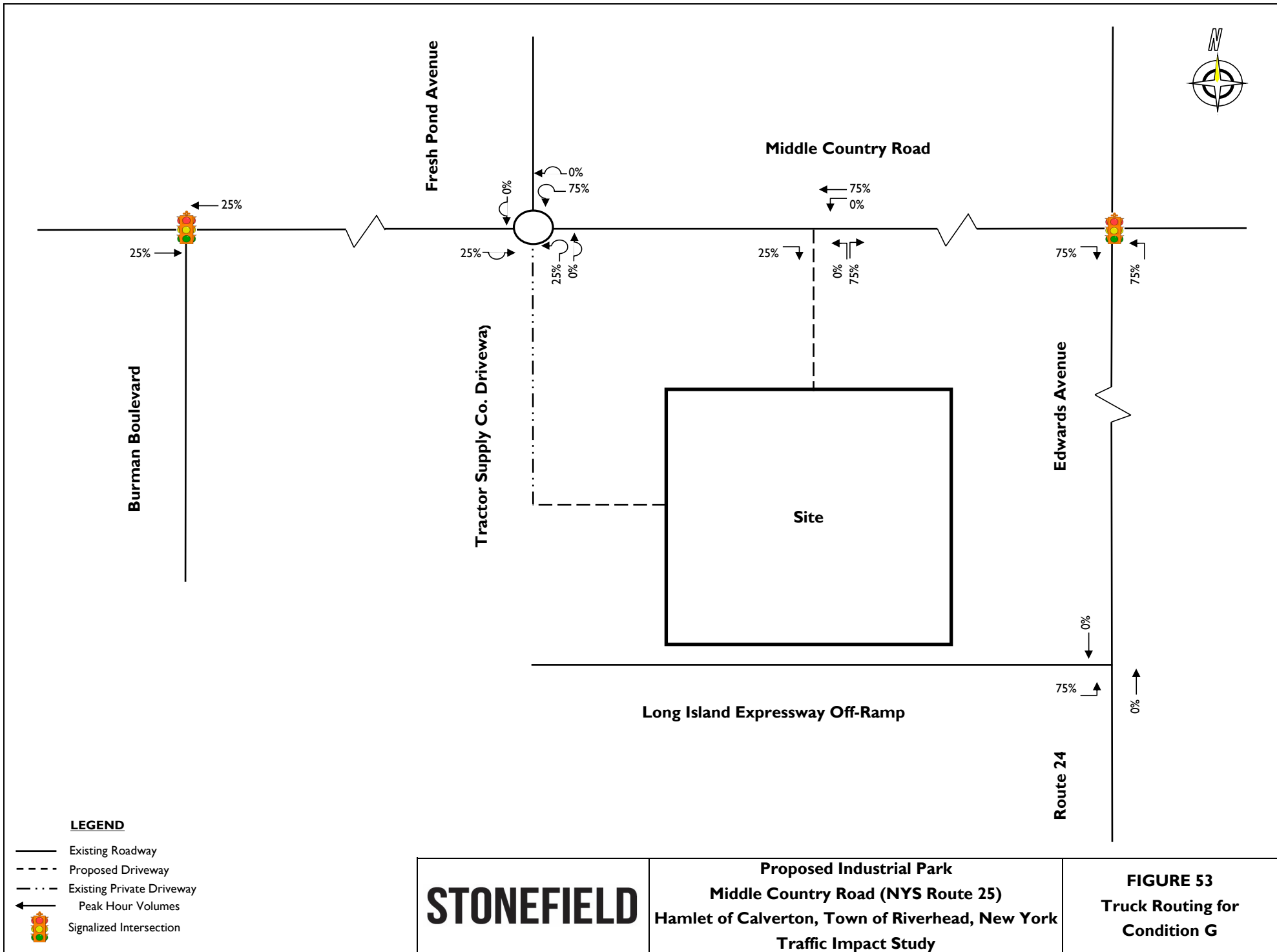


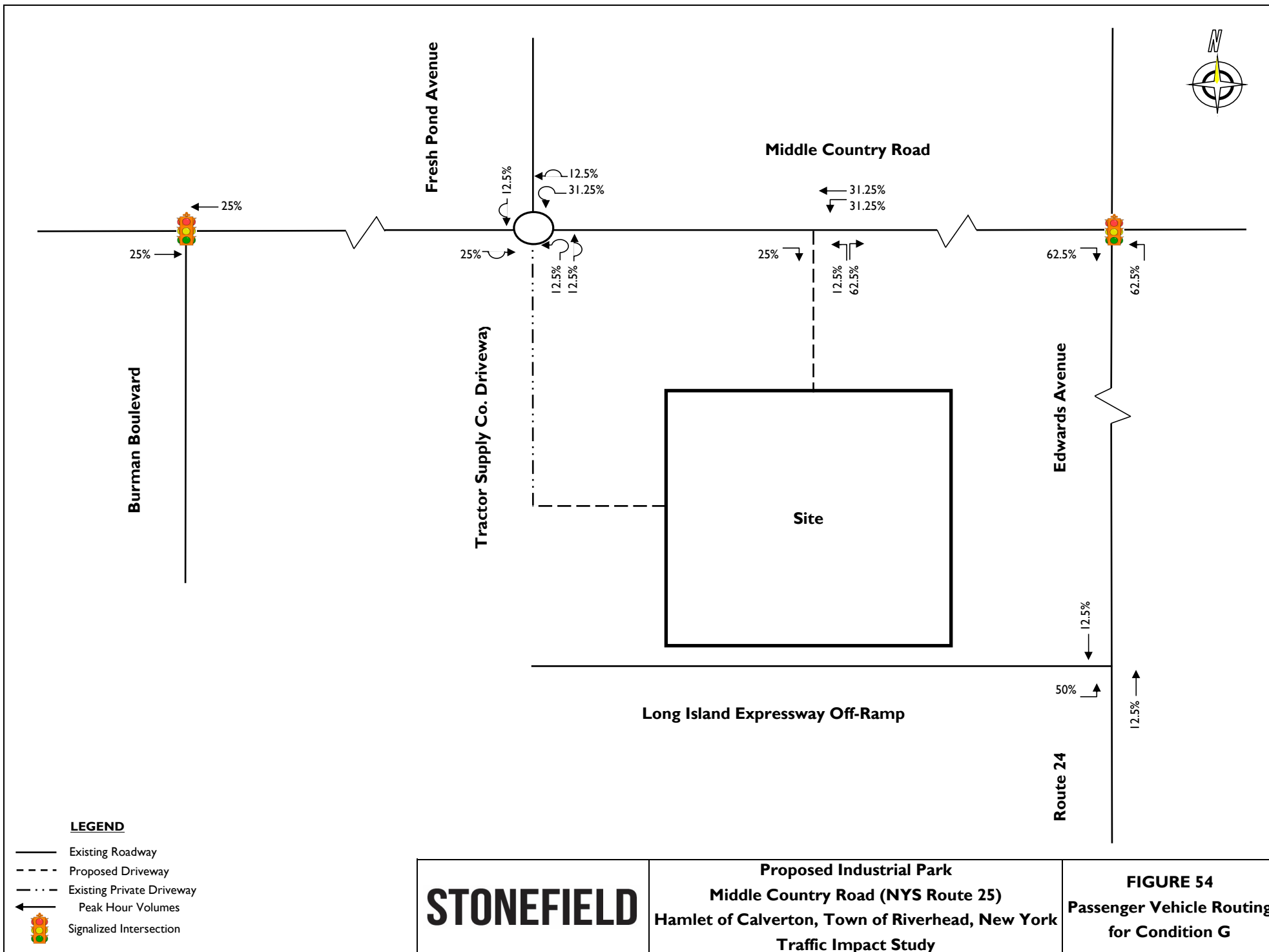


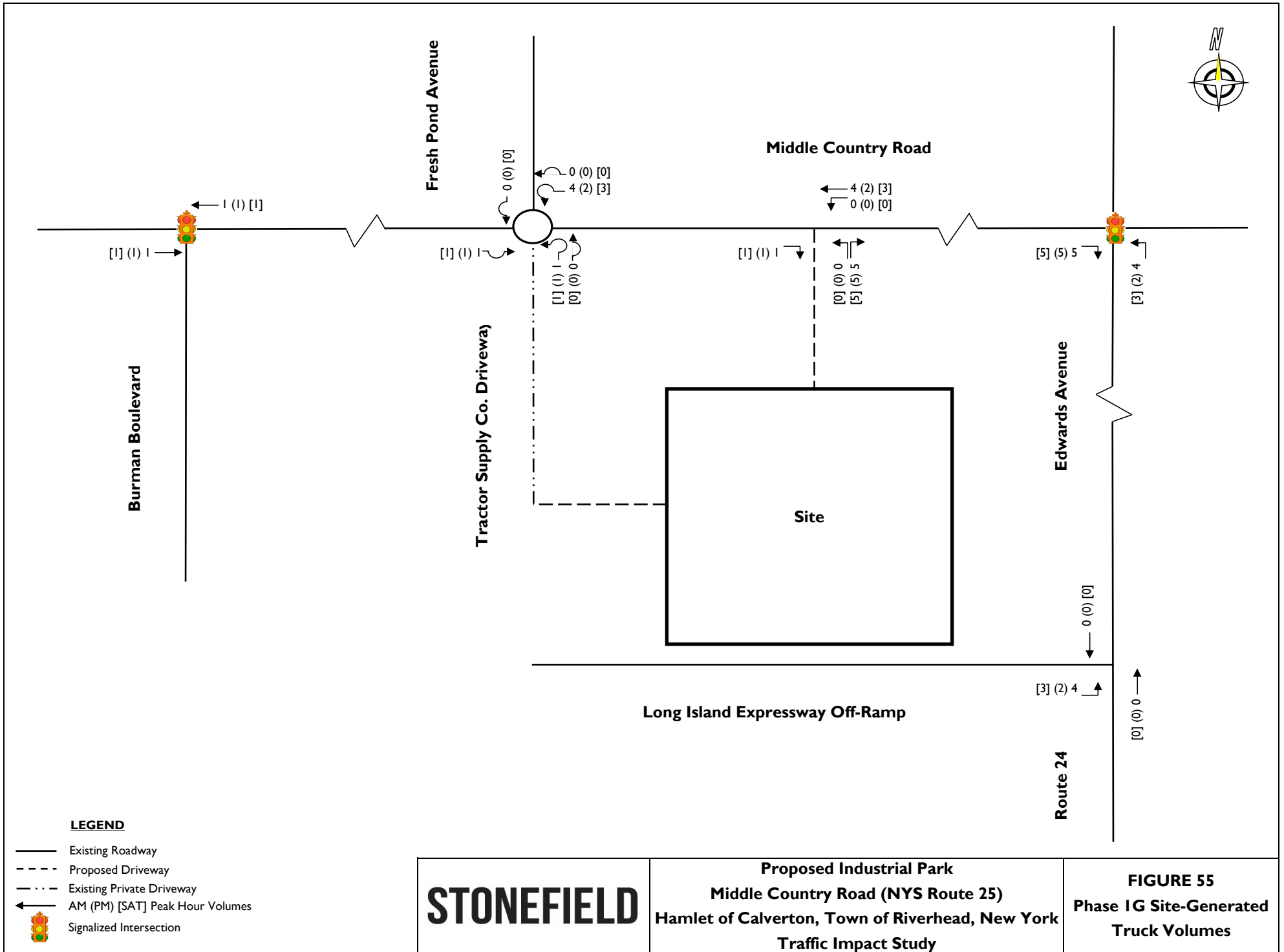


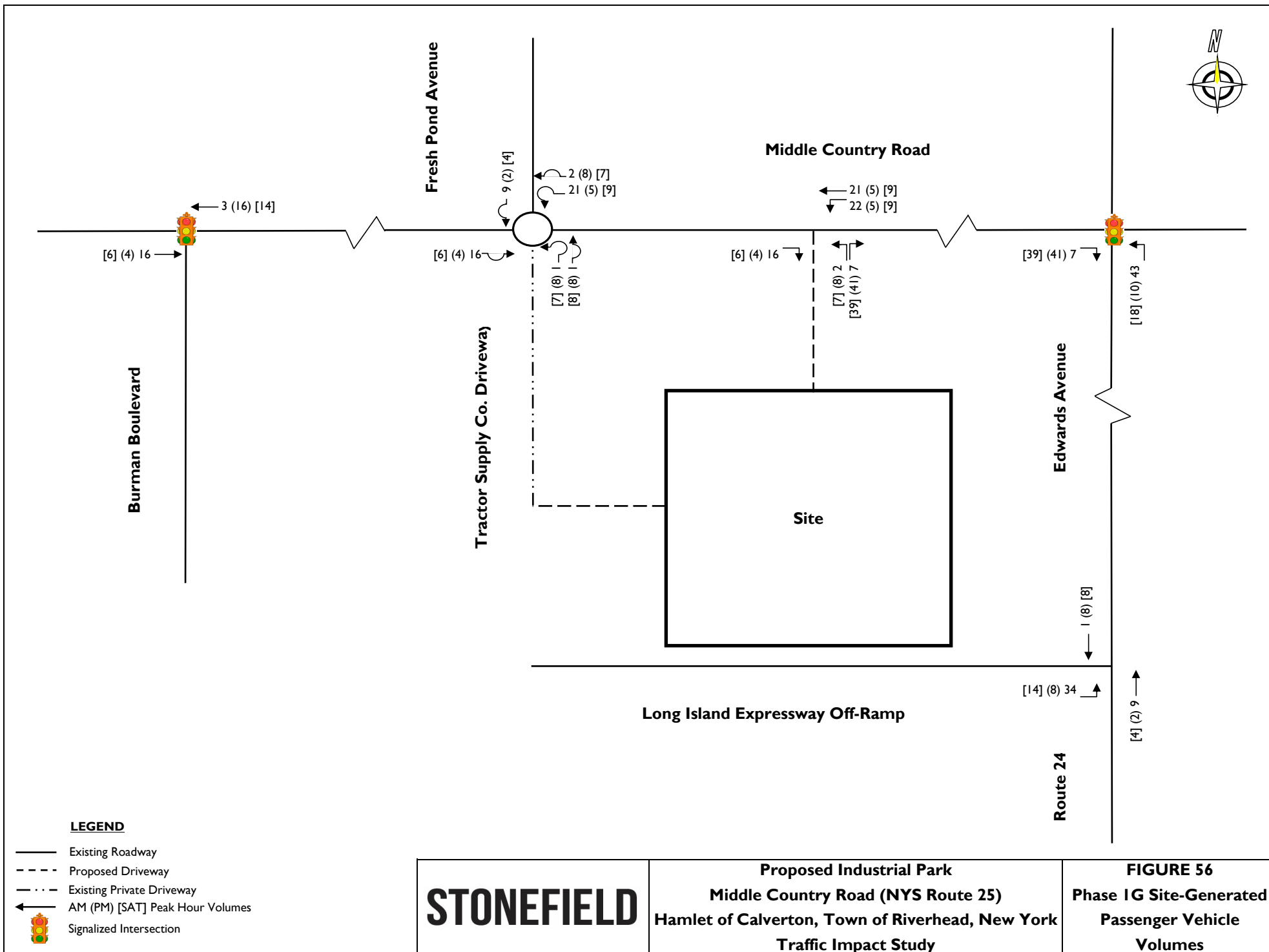


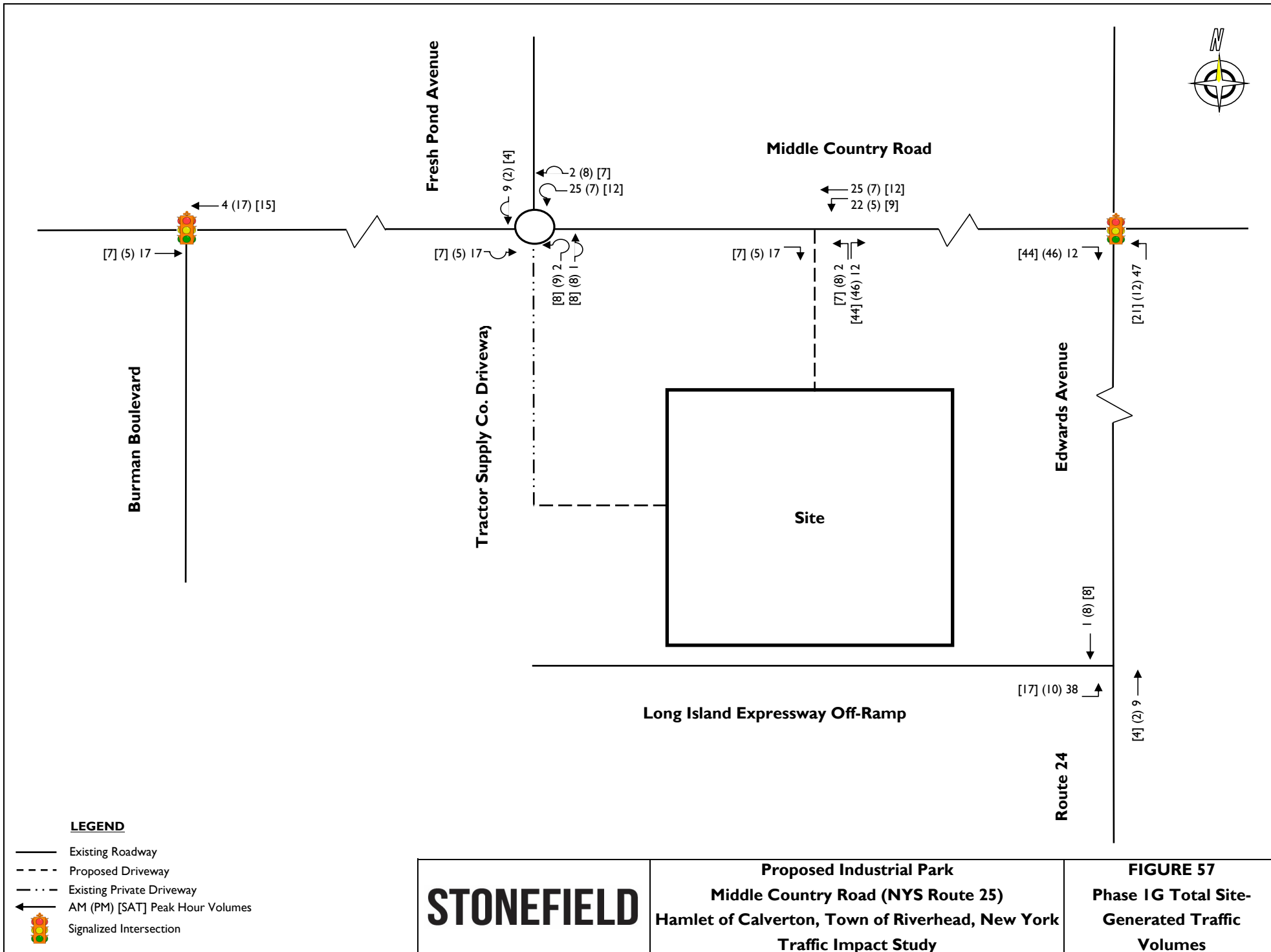


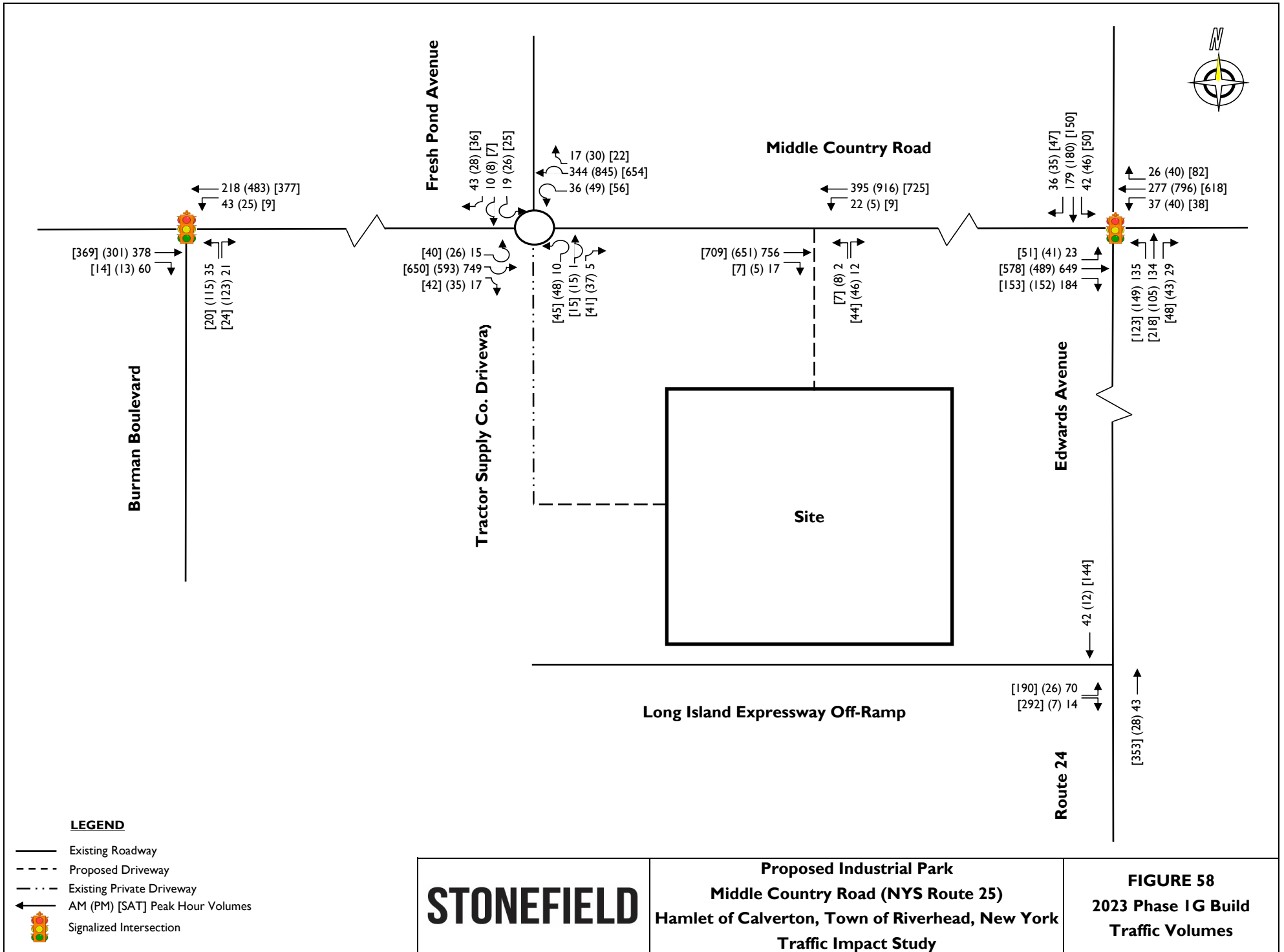


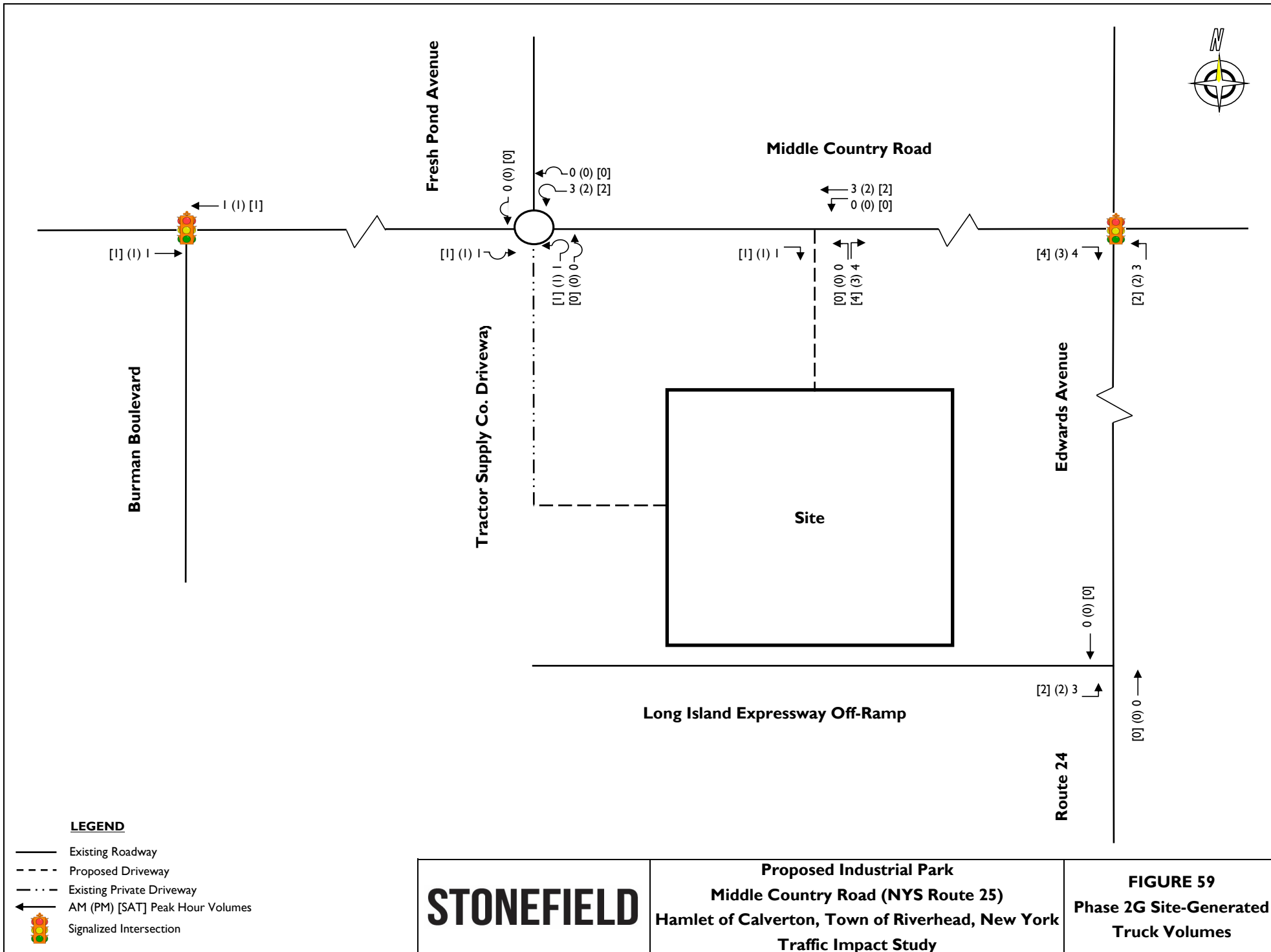


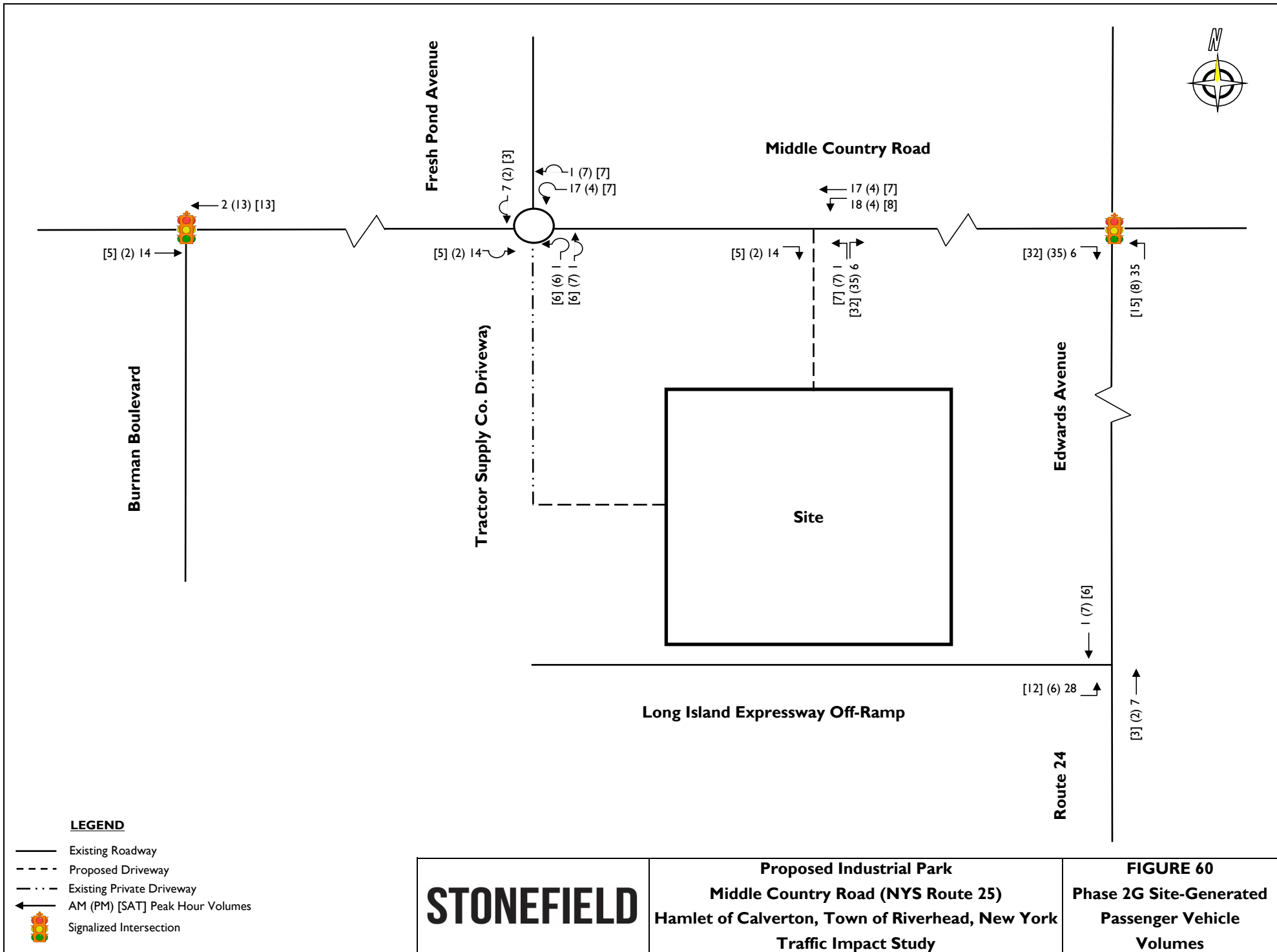


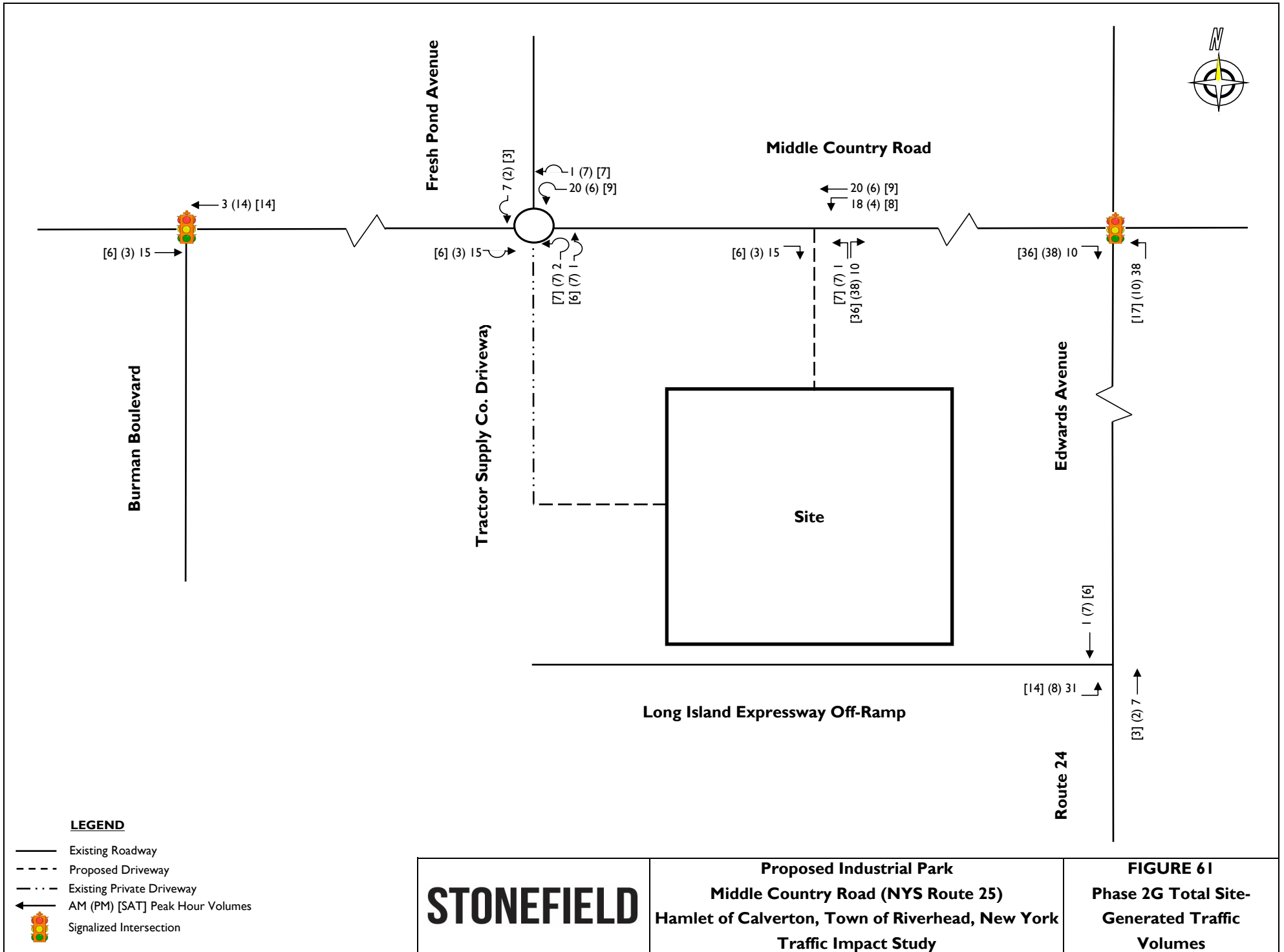


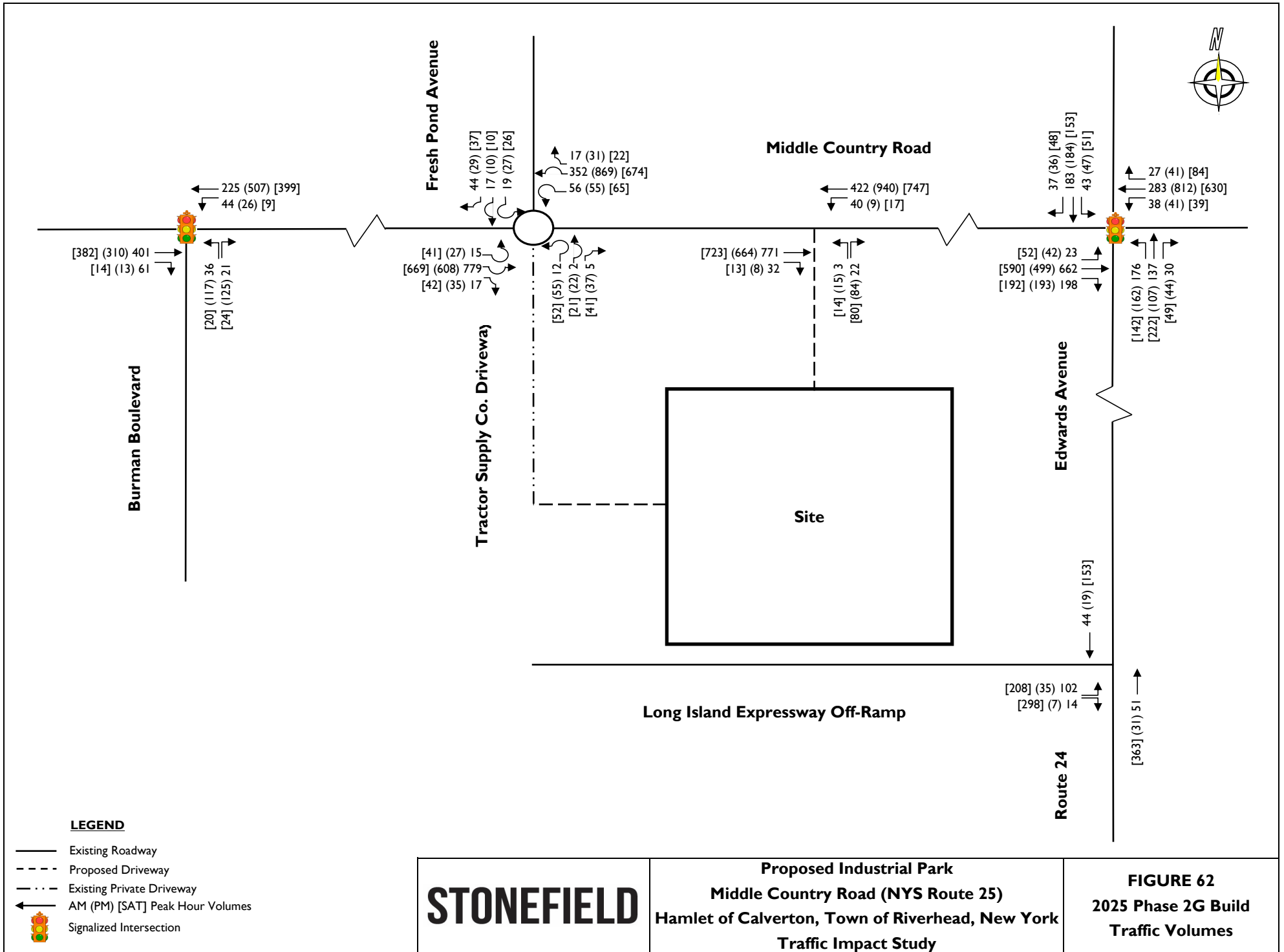












HIGHWAY CAPACITY ANALYSIS DETAIL SHEETS

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2020 Existing Condition
Weekday AM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	342	57	40	203	33	19
Future Volume (veh/h)	342	57	40	203	33	19
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1722	1678	1767	1278	1248
Adj Flow Rate, veh/h	384	64	45	228	37	21
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	7	12	15	9	42	44
Cap, veh/h	1360	1105	675	1337	89	77
Arrive On Green	0.76	0.76	0.76	0.76	0.07	0.07
Sat Flow, veh/h	1796	1459	845	1767	1217	1058
Grp Volume(v), veh/h	384	64	45	228	37	21
Grp Sat Flow(s),veh/h/ln	1796	1459	845	1767	1217	1058
Q Serve(g_s), s	5.2	0.9	1.4	2.9	2.3	1.5
Cycle Q Clear(g_c), s	5.2	0.9	6.6	2.9	2.3	1.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1360	1105	675	1337	89	77
V/C Ratio(X)	0.28	0.06	0.07	0.17	0.42	0.27
Avail Cap(c_a), veh/h	1360	1105	675	1337	537	467
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.0	2.4	4.0	2.7	35.1	34.8
Incr Delay (d2), s/veh	0.5	0.1	0.2	0.3	3.1	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	0.2	0.3	0.9	1.3	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.5	2.5	4.2	3.0	38.3	36.7
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	448			273	58	
Approach Delay, s/veh	3.4			3.2	37.7	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		12.3		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		7.2		4.3		8.6
Green Ext Time (p_c), s		2.4		0.1		1.5
Intersection Summary						
HCM 6th Ctrl Delay			5.8			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2020 Existing Condition
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	621	162	35	265	25	79	128	28	40	171	34
Future Volume (veh/h)	22	621	162	35	265	25	79	128	28	40	171	34
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	1796	1796	1796	1693	1693	1693	1678	1678	1678	1826	1826	1826
Adj Flow Rate, veh/h	25	714	186	40	305	29	91	147	32	46	197	39
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	7	7	7	14	14	14	15	15	15	5	5	5
Cap, veh/h	61	803	205	103	700	63	147	192	37	96	296	54
Arrive On Green	0.60	0.60	0.60	0.60	0.60	0.60	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	22	1349	345	87	1176	106	357	809	157	178	1247	229
Grp Volume(v), veh/h	925	0	0	374	0	0	270	0	0	282	0	0
Grp Sat Flow(s),veh/h/ln	1717	0	0	1368	0	0	1323	0	0	1653	0	0
Q Serve(g_s), s	12.8	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	36.6	0.0	0.0	9.1	0.0	0.0	15.3	0.0	0.0	12.0	0.0	0.0
Prop In Lane	0.03		0.20	0.11		0.08	0.34		0.12	0.16		0.14
Lane Grp Cap(c), veh/h	1069	0	0	865	0	0	377	0	0	447	0	0
V/C Ratio(X)	0.87	0.00	0.00	0.43	0.00	0.00	0.72	0.00	0.00	0.63	0.00	0.00
Avail Cap(c_a), veh/h	1589	0	0	1286	0	0	578	0	0	690	0	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.7	0.0	0.0	8.2	0.0	0.0	28.2	0.0	0.0	27.0	0.0	0.0
Incr Delay (d2), s/veh	3.5	0.0	0.0	0.3	0.0	0.0	2.6	0.0	0.0	1.5	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(95%),veh/ln	16.3	0.0	0.0	4.4	0.0	0.0	8.2	0.0	0.0	8.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.2	0.0	0.0	8.6	0.0	0.0	30.7	0.0	0.0	28.4	0.0	0.0
LnGrp LOS	B	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h	925		374				270				282	
Approach Delay, s/veh	17.2		8.6				30.7				28.4	
Approach LOS	B		A				C				C	
Timer - Assigned Phs	2		4				6				8	
Phs Duration (G+Y+Rc), s	53.2		24.5				53.2				24.5	
Change Period (Y+Rc), s	7.0		6.0				7.0				6.0	
Max Green Setting (Gmax), s	70.0		30.0				70.0				30.0	
Max Q Clear Time (g_c+I1), s	38.6		17.3				11.1				14.0	
Green Ext Time (p_c), s	7.7		1.2				2.6				1.3	
Intersection Summary												
HCM 6th Ctrl Delay	19.2											
HCM 6th LOS	B											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2020 Existing Condition
Weekday AM Peak Hour

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↔	↔			↕	
Traffic Vol, veh/h	14	700	12	6	327	16	5	0	2	18	0	41
Future Vol, veh/h	14	700	12	6	327	16	5	0	2	18	0	41
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	-	-	-	-	-	-	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, %	0	6	10	20	14	14	0	0	50	0	0	0
Mvmt Flow	15	745	13	6	348	17	5	0	2	19	0	44

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	365	0	0	758	0	0	1173	1159	752	1152	1157	357
Stage 1	-	-	-	-	-	-	782	782	-	369	369	-
Stage 2	-	-	-	-	-	-	391	377	-	783	788	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.5	6.7	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4	3.75	3.5	4	3.3
Pot Cap-1 Maneuver	1205	-	-	778	-	-	171	197	342	176	198	692
Stage 1	-	-	-	-	-	-	390	408	-	655	624	-
Stage 2	-	-	-	-	-	-	637	619	-	390	405	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1205	-	-	778	-	-	156	191	342	171	192	692
Mov Cap-2 Maneuver	-	-	-	-	-	-	156	191	-	171	192	-
Stage 1	-	-	-	-	-	-	381	399	-	641	618	-
Stage 2	-	-	-	-	-	-	591	613	-	379	396	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	25.1	17.1
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	156	342	1205	-	-	778	-	-	359
HCM Lane V/C Ratio	0.034	0.006	0.012	-	-	0.008	-	-	0.175
HCM Control Delay (s)	28.9	15.6	8	0	-	9.7	0	-	17.1
HCM Lane LOS	D	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	0	-	-	0	-	-	0.6

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2020 Existing Condition
Weekday AM Peak Hour

Intersection

Int Delay, s/veh 3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	38	0	0	32	27	13
Future Vol, veh/h	38	0	0	32	27	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	0	0	9	14	4
Mvmt Flow	41	0	0	35	29	14

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	-	59
Stage 1	-	-	41
Stage 2	-	-	18
Critical Hdwy	-	-	7.08
Critical Hdwy Stg 1	-	-	6.08
Critical Hdwy Stg 2	-	-	6.08
Follow-up Hdwy	-	-	3.64
Pot Cap-1 Maneuver	-	0	907
Stage 1	-	0	942
Stage 2	-	0	968
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	907
Mov Cap-2 Maneuver	-	-	907
Stage 1	-	-	942
Stage 2	-	-	968

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	907	1045	-	-
HCM Lane V/C Ratio	0.032	0.014	-	-
HCM Control Delay (s)	9.1	8.5	-	-
HCM Lane LOS	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2020 Existing Condition
Weekday PM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	277	12	22	439	110	116
Future Volume (veh/h)	277	12	22	439	110	116
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1159	1559	1870	1885	1900
Adj Flow Rate, veh/h	301	13	24	477	120	126
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	50	23	2	1	0
Cap, veh/h	1372	715	688	1361	195	175
Arrive On Green	0.73	0.73	0.73	0.73	0.11	0.11
Sat Flow, veh/h	1885	982	888	1870	1795	1610
Grp Volume(v), veh/h	301	13	24	477	120	126
Grp Sat Flow(s),veh/h/ln	1885	982	888	1870	1795	1610
Q Serve(g_s), s	4.3	0.3	0.7	7.7	5.3	6.2
Cycle Q Clear(g_c), s	4.3	0.3	5.0	7.7	5.3	6.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1372	715	688	1361	195	175
V/C Ratio(X)	0.22	0.02	0.03	0.35	0.62	0.72
Avail Cap(c_a), veh/h	1372	715	688	1361	762	684
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.6	3.1	4.4	4.1	35.1	35.5
Incr Delay (d2), s/veh	0.4	0.0	0.1	0.7	3.1	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	0.1	0.2	3.3	4.4	4.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.0	3.1	4.5	4.8	38.2	41.0
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	314			501	246	
Approach Delay, s/veh	4.0			4.8	39.7	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		15.4		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		6.3		8.2		9.7
Green Ext Time (p_c), s		1.7		0.7		3.0
Intersection Summary						
HCM 6th Ctrl Delay			12.6			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2020 Existing Condition
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	468	92	38	761	38	121	100	41	44	172	33
Future Volume (veh/h)	39	468	92	38	761	38	121	100	41	44	172	33
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	1870	1870	1870	1870	1870	1841	1841	1841	1737	1737	1737
Adj Flow Rate, veh/h	41	488	96	40	793	40	126	104	43	46	179	34
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	4	4	4	11	11	11
Cap, veh/h	91	802	152	80	959	47	206	145	51	105	290	50
Arrive On Green	0.57	0.57	0.57	0.57	0.57	0.57	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	62	1396	265	46	1670	82	547	605	215	186	1211	211
Grp Volume(v), veh/h	625	0	0	873	0	0	273	0	0	259	0	0
Grp Sat Flow(s),veh/h/ln	1723	0	0	1798	0	0	1367	0	0	1609	0	0
Q Serve(g_s), s	0.0	0.0	0.0	10.1	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	15.5	0.0	0.0	27.4	0.0	0.0	13.4	0.0	0.0	9.9	0.0	0.0
Prop In Lane	0.07		0.15	0.05		0.05	0.46		0.16	0.18		0.13
Lane Grp Cap(c), veh/h	1044	0	0	1087	0	0	402	0	0	445	0	0
V/C Ratio(X)	0.60	0.00	0.00	0.80	0.00	0.00	0.68	0.00	0.00	0.58	0.00	0.00
Avail Cap(c_a), veh/h	1746	0	0	1843	0	0	673	0	0	744	0	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.6	0.0	0.0	12.0	0.0	0.0	25.1	0.0	0.0	23.9	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.4	0.0	0.0	2.0	0.0	0.0	1.2	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(95%),veh/ln	7.8	0.0	0.0	12.4	0.0	0.0	7.3	0.0	0.0	6.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.2	0.0	0.0	13.4	0.0	0.0	27.1	0.0	0.0	25.1	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	C	A	A
Approach Vol, veh/h		625			873			273			259	
Approach Delay, s/veh		10.2			13.4			27.1			25.1	
Approach LOS		B			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		47.0		22.6		47.0		22.6				
Change Period (Y+Rc), s		7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s		70.0		30.0		70.0		30.0				
Max Q Clear Time (g_c+I1), s		17.5		15.4		29.4		11.9				
Green Ext Time (p_c), s		4.6		1.3		7.2		1.2				
Intersection Summary												
HCM 6th Ctrl Delay				15.8								
HCM 6th LOS				B								

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2020 Existing Condition
Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↔	↔			↕	
Traffic Vol, veh/h	25	567	21	25	806	29	23	6	21	25	5	27
Future Vol, veh/h	25	567	21	25	806	29	23	6	21	25	5	27
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	-	-	-	-	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	2	0	4	2	3	0	0	0	4	0	0
Mvmt Flow	26	579	21	26	822	30	23	6	21	26	5	28
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	852	0	0	600	0	0	1548	1546	590	1544	1541	837
Stage 1	-	-	-	-	-	-	642	642	-	889	889	-
Stage 2	-	-	-	-	-	-	906	904	-	655	652	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.1	6.5	6.2	7.14	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Follow-up Hdwy	2.2	-	-	2.236	-	-	3.5	4	3.3	3.536	4	3.3
Pot Cap-1 Maneuver	795	-	-	967	-	-	94	116	511	93	116	370
Stage 1	-	-	-	-	-	-	466	472	-	335	364	-
Stage 2	-	-	-	-	-	-	333	358	-	452	467	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	795	-	-	967	-	-	78	105	511	79	105	370
Mov Cap-2 Maneuver	-	-	-	-	-	-	78	105	-	79	105	-
Stage 1	-	-	-	-	-	-	443	449	-	319	345	-
Stage 2	-	-	-	-	-	-	288	340	-	406	444	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.3			42.7			53.4		
HCM LOS							E			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	78	275	795	-	-	967	-	-	130			
HCM Lane V/C Ratio	0.301	0.1	0.032	-	-	0.026	-	-	0.447			
HCM Control Delay (s)	69.9	19.5	9.7	0	-	8.8	0	-	53.4			
HCM Lane LOS	F	C	A	A	-	A	A	-	F			
HCM 95th %tile Q(veh)	1.1	0.3	0.1	-	-	0.1	-	-	2			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2020 Existing Condition
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	3.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↗	↗
Traffic Vol, veh/h	2	0	0	23	8	7
Future Vol, veh/h	2	0	0	23	8	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	4	8	3
Mvmt Flow	2	0	0	24	8	7
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	14	1
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	12	-
Critical Hdwy	-	-	-	-	6.96	6.96
Critical Hdwy Stg 1	-	-	-	-	5.96	-
Critical Hdwy Stg 2	-	-	-	-	5.96	-
Follow-up Hdwy	-	-	-	-	3.58	3.33
Pot Cap-1 Maneuver	-	0	0	-	986	1079
Stage 1	-	0	0	-	1003	-
Stage 2	-	0	0	-	992	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	986	1079
Mov Cap-2 Maneuver	-	-	-	-	986	-
Stage 1	-	-	-	-	1003	-
Stage 2	-	-	-	-	992	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.6	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBT
Capacity (veh/h)	986		1079		-	-
HCM Lane V/C Ratio	0.008		0.007		-	-
HCM Control Delay (s)	8.7		8.4		-	-
HCM Lane LOS	A		A		-	-
HCM 95th %tile O(veh)	0		0		-	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2020 Existing Condition
Saturday Midday Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	337	13	7	338	19	21
Future Volume (veh/h)	337	13	7	338	19	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1648	1900	1885	1633	1900
Adj Flow Rate, veh/h	351	14	7	352	20	22
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	17	0	1	18	0
Cap, veh/h	1445	1070	828	1445	95	99
Arrive On Green	0.77	0.77	0.77	0.77	0.06	0.06
Sat Flow, veh/h	1885	1397	1033	1885	1555	1610
Grp Volume(v), veh/h	351	14	7	352	20	22
Grp Sat Flow(s),veh/h/ln	1885	1397	1033	1885	1555	1610
Q Serve(g_s), s	4.2	0.2	0.2	4.2	1.0	1.0
Cycle Q Clear(g_c), s	4.2	0.2	4.3	4.2	1.0	1.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1445	1070	828	1445	95	99
V/C Ratio(X)	0.24	0.01	0.01	0.24	0.21	0.22
Avail Cap(c_a), veh/h	1445	1070	828	1445	695	720
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.6	2.2	3.2	2.6	35.0	35.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.4	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	0.0	0.0	1.3	0.7	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.0	2.2	3.3	3.0	36.0	36.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	365			359	42	
Approach Delay, s/veh	3.0			3.0	36.1	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		11.3		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		6.2		3.0		6.3
Green Ext Time (p_c), s		2.0		0.1		2.0
Intersection Summary						
HCM 6th Ctrl Delay			4.8			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2020 Existing Condition
Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	553	92	36	591	78	85	208	46	48	143	45
Future Volume (veh/h)	49	553	92	36	591	78	85	208	46	48	143	45
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	1885	1885	1885	1885	1885	1885	1870	1870	1870	1841	1841	1841
Adj Flow Rate, veh/h	52	582	97	38	622	82	89	219	48	51	151	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	2	2	2	4	4	4
Cap, veh/h	97	812	131	82	869	111	147	280	57	116	277	77
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	76	1442	232	50	1542	198	331	1103	223	217	1092	304
Grp Volume(v), veh/h	731	0	0	742	0	0	356	0	0	249	0	0
Grp Sat Flow(s),veh/h/ln	1751	0	0	1790	0	0	1657	0	0	1613	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	20.6	0.0	0.0	20.7	0.0	0.0	14.3	0.0	0.0	9.2	0.0	0.0
Prop In Lane	0.07		0.13	0.05		0.11	0.25		0.13	0.20		0.19
Lane Grp Cap(c), veh/h	1041	0	0	1062	0	0	484	0	0	470	0	0
V/C Ratio(X)	0.70	0.00	0.00	0.70	0.00	0.00	0.74	0.00	0.00	0.53	0.00	0.00
Avail Cap(c_a), veh/h	1745	0	0	1789	0	0	754	0	0	735	0	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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.2	0.0	0.0	11.3	0.0	0.0	25.0	0.0	0.0	23.1	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.8	0.0	0.0	2.2	0.0	0.0	0.9	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(95%),veh/ln	10.2	0.0	0.0	10.3	0.0	0.0	9.1	0.0	0.0	6.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.1	0.0	0.0	12.1	0.0	0.0	27.2	0.0	0.0	24.0	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	C	A	A
Approach Vol, veh/h	731			742			356			249		
Approach Delay, s/veh	12.1			12.1			27.2			24.0		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	47.0			24.0			47.0			24.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	22.6			16.3			22.7			11.2		
Green Ext Time (p_c), s	5.7			1.7			5.7			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	16.1											
HCM 6th LOS	B											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2020 Existing Condition
Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	619	25	24	624	21	19	6	23	24	1	34
Future Vol, veh/h	38	619	25	24	624	21	19	6	23	24	1	34
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	-	-	-	-	-	-	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, %	5	1	0	0	2	5	0	0	0	8	0	0
Mvmt Flow	40	659	27	26	664	22	20	6	24	26	1	36
Major/Minor	Major1		Major2			Minor1			Minor2			
Conflicting Flow All	686	0	0	686	0	0	1499	1491	673	1495	1493	675
Stage 1	-	-	-	-	-	-	753	753	-	727	727	-
Stage 2	-	-	-	-	-	-	746	738	-	768	766	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.18	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.572	4	3.3
Pot Cap-1 Maneuver	894	-	-	917	-	-	102	125	459	98	124	457
Stage 1	-	-	-	-	-	-	405	420	-	406	432	-
Stage 2	-	-	-	-	-	-	409	427	-	385	415	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	894	-	-	917	-	-	85	111	459	81	110	457
Mov Cap-2 Maneuver	-	-	-	-	-	-	85	111	-	81	110	-
Stage 1	-	-	-	-	-	-	375	389	-	376	412	-
Stage 2	-	-	-	-	-	-	358	407	-	332	385	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	0.5		0.3			35.6			43.2			
HCM LOS						E			E			
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	85 278		894	-	-	917	-	-	155			
HCM Lane V/C Ratio	0.238 0.111		0.045	-	-	0.028	-	-	0.405			
HCM Control Delay (s)	60.1 19.6		9.2	0	-	9	0	-	43.2			
HCM Lane LOS	F C		A	A	-	A	A	-	E			
HCM 95th %tile Q(veh)	0.8 0.4		0.1	-	-	0.1	-	-	1.8			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2020 Existing Condition
Saturday MIDDAY Peak Hour

Intersection						
Int Delay, s/veh	5.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	127	0	0	331	156	279
Future Vol, veh/h	127	0	0	331	156	279
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	2	2
Mvmt Flow	131	0	0	341	161	288
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	302	66
Stage 1	-	-	-	-	131	-
Stage 2	-	-	-	-	171	-
Critical Hdwy	-	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	-	0	0	-	665	984
Stage 1	-	0	0	-	881	-
Stage 2	-	0	0	-	842	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	665	984
Mov Cap-2 Maneuver	-	-	-	-	665	-
Stage 1	-	-	-	-	881	-
Stage 2	-	-	-	-	842	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		10.9	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	WBT	
Capacity (veh/h)	665		984	-	-	
HCM Lane V/C Ratio	0.242		0.292	-	-	
HCM Control Delay (s)	12.1		10.2	-	-	
HCM Lane LOS	B		B	-	-	
HCM 95th %tile Q(veh)	0.9		1.2	-	-	

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2023 Phase 1 No-Build Condition
Weekday AM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	361	60	43	214	35	21
Future Volume (veh/h)	361	60	43	214	35	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1722	1678	1767	1278	1248
Adj Flow Rate, veh/h	406	67	48	240	39	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	7	12	15	9	42	44
Cap, veh/h	1355	1101	655	1333	92	80
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1796	1459	826	1767	1217	1058
Grp Volume(v), veh/h	406	67	48	240	39	24
Grp Sat Flow(s),veh/h/ln	1796	1459	826	1767	1217	1058
Q Serve(g_s), s	5.7	0.9	1.6	3.1	2.4	1.7
Cycle Q Clear(g_c), s	5.7	0.9	7.3	3.1	2.4	1.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1355	1101	655	1333	92	80
V/C Ratio(X)	0.30	0.06	0.07	0.18	0.42	0.30
Avail Cap(c_a), veh/h	1355	1101	655	1333	536	466
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.1	2.5	4.2	2.8	35.1	34.8
Incr Delay (d2), s/veh	0.6	0.1	0.2	0.3	3.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.3	0.4	1.0	1.4	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.7	2.6	4.5	3.1	38.2	36.8
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	473			288	63	
Approach Delay, s/veh	3.5			3.3	37.7	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		12.5		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		7.7		4.4		9.3
Green Ext Time (p_c), s		2.6		0.2		1.6
Intersection Summary						
HCM 6th Ctrl Delay			6.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary 8: Edwards Avenue & Middle Country Road

2023 Phase 1 No-Build Condition
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	649	172	37	277	26	88	134	29	42	179	36
Future Volume (veh/h)	23	649	172	37	277	26	88	134	29	42	179	36
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			
Adj Sat Flow, veh/h/ln	1737	1796	1796	1411	1693	1693	1722	1678	1678	1767	1826	1826
Adj Flow Rate, veh/h	26	746	198	43	318	30	101	154	33	48	206	41
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	7	7	33	14	14	12	15	15	9	5	5
Cap, veh/h	564	832	221	142	926	87	211	331	71	249	366	73
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	959	1368	363	448	1523	144	1043	1339	287	1130	1479	294
Grp Volume(v), veh/h	26	0	944	43	0	348	101	0	187	48	0	247
Grp Sat Flow(s),veh/h/ln	959	0	1731	448	0	1667	1043	0	1626	1130	0	1773
Q Serve(g_s), s	1.2	0.0	42.3	8.2	0.0	9.3	8.4	0.0	8.8	3.4	0.0	11.0
Cycle Q Clear(g_c), s	10.6	0.0	42.3	50.6	0.0	9.3	19.4	0.0	8.8	12.2	0.0	11.0
Prop In Lane	1.00		0.21	1.00		0.09	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	564	0	1053	142	0	1014	211	0	402	249	0	439
V/C Ratio(X)	0.05	0.00	0.90	0.30	0.00	0.34	0.48	0.00	0.46	0.19	0.00	0.56
Avail Cap(c_a), veh/h	726	0	1345	217	0	1295	300	0	541	346	0	590
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.4	0.0	15.2	37.0	0.0	8.7	38.1	0.0	28.8	34.0	0.0	29.6
Incr Delay (d2), s/veh	0.0	0.0	6.9	1.2	0.0	0.2	1.7	0.0	0.8	0.4	0.0	1.1
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(95%),veh/ln	0.4	0.0	20.7	1.6	0.0	4.9	3.9	0.0	6.0	1.6	0.0	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.4	0.0	22.1	38.2	0.0	8.9	39.8	0.0	29.7	34.4	0.0	30.8
LnGrp LOS	B	A	C	D	A	A	D	A	C	C	A	C
Approach Vol, veh/h	970				391				288			
Approach Delay, s/veh	21.8				12.2				33.2			
Approach LOS	C				B				C			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	61.8			28.3			61.8			28.3		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	44.3			21.4			52.6			14.2		
Green Ext Time (p_c), s	7.6			0.9			2.2			1.3		
Intersection Summary												
HCM 6th Ctrl Delay	23.0											
HCM 6th LOS	C											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2023 Phase 1 No-Build Condition
Weekday AM Peak Hour

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	15	732	17	11	342	17	8	0	5	19	1	43
Future Vol, veh/h	15	732	17	11	342	17	8	0	5	19	1	43
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	-	-	-	-	-	-	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, %	0	6	10	20	14	14	0	0	50	0	0	0
Mvmt Flow	16	779	18	12	364	18	9	0	5	20	1	46

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	382	0	0	797	0	0	1241	1226	788	1220	1226	373
Stage 1	-	-	-	-	-	-	820	820	-	397	397	-
Stage 2	-	-	-	-	-	-	421	406	-	823	829	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.5	6.7	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4	3.75	3.5	4	3.3
Pot Cap-1 Maneuver	1188	-	-	751	-	-	153	180	325	158	180	678
Stage 1	-	-	-	-	-	-	372	392	-	633	607	-
Stage 2	-	-	-	-	-	-	614	601	-	371	388	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1188	-	-	751	-	-	137	172	325	150	172	678
Mov Cap-2 Maneuver	-	-	-	-	-	-	137	172	-	150	172	-
Stage 1	-	-	-	-	-	-	363	383	-	618	595	-
Stage 2	-	-	-	-	-	-	560	589	-	356	379	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.3			26.6			19.1		
HCM LOS							D			C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	137	325	1188	-	-	751	-	-	322
HCM Lane V/C Ratio	0.062	0.016	0.013	-	-	0.016	-	-	0.208
HCM Control Delay (s)	33	16.3	8.1	0	-	9.9	0	-	19.1
HCM Lane LOS	D	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.2	0.1	0	-	-	0	-	-	0.8

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2023 Phase 1 No-Build Condition
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	3.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘	↘
Traffic Vol, veh/h	41	0	0	34	32	14
Future Vol, veh/h	41	0	0	34	32	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	0	0	9	14	4
Mvmt Flow	45	0	0	37	35	15
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	-	-	64	23
Stage 1	-	-	-	-	45	-
Stage 2	-	-	-	-	19	-
Critical Hdwy	-	-	-	-	7.08	6.98
Critical Hdwy Stg 1	-	-	-	-	6.08	-
Critical Hdwy Stg 2	-	-	-	-	6.08	-
Follow-up Hdwy	-	-	-	-	3.64	3.34
Pot Cap-1 Maneuver	-	0	0	-	901	1042
Stage 1	-	0	0	-	938	-
Stage 2	-	0	0	-	967	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	901	1042
Mov Cap-2 Maneuver	-	-	-	-	901	-
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	967	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		9		
HCM LOS				A		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT		
Capacity (veh/h)	901	1042	-	-		
HCM Lane V/C Ratio	0.039	0.015	-	-		
HCM Control Delay (s)	9.2	8.5	-	-		
HCM Lane LOS	A	A	-	-		
HCM 95th %tile Q(veh)	0.1	0	-	-		

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2023 Phase 1 No-Build Condition
Weekday PM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↙	↑	↙	↗
Traffic Volume (veh/h)	296	13	25	466	115	123
Future Volume (veh/h)	296	13	25	466	115	123
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1159	1559	1870	1885	1900
Adj Flow Rate, veh/h	322	14	27	507	125	134
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	50	23	2	1	0
Cap, veh/h	1364	711	667	1353	204	183
Arrive On Green	0.72	0.72	0.72	0.72	0.11	0.11
Sat Flow, veh/h	1885	982	871	1870	1795	1610
Grp Volume(v), veh/h	322	14	27	507	125	134
Grp Sat Flow(s),veh/h/ln	1885	982	871	1870	1795	1610
Q Serve(g_s), s	4.7	0.3	0.9	8.5	5.5	6.7
Cycle Q Clear(g_c), s	4.7	0.3	5.6	8.5	5.5	6.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1364	711	667	1353	204	183
V/C Ratio(X)	0.24	0.02	0.04	0.37	0.61	0.73
Avail Cap(c_a), veh/h	1364	711	667	1353	758	680
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.8	3.2	4.8	4.3	35.0	35.5
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.8	3.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	0.1	0.2	3.8	4.5	5.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.2	3.3	4.9	5.1	38.0	41.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	336			534	259	
Approach Delay, s/veh	4.2			5.1	39.6	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		15.9		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		6.7		8.7		10.5
Green Ext Time (p_c), s		1.8		0.8		3.2
Intersection Summary						
HCM 6th Ctrl Delay			12.8			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary 8: Edwards Avenue & Middle Country Road

2023 Phase 1 No-Build Condition
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	489	106	40	796	40	137	105	43	46	180	35
Future Volume (veh/h)	41	489	106	40	796	40	137	105	43	46	180	35
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	1826	1870	1870	1737	1870	1870	1811	1841	1841	1870	1737	1737
Adj Flow Rate, veh/h	43	509	110	42	829	42	143	109	45	48	188	36
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	2	2	11	2	2	6	4	4	2	11	11
Cap, veh/h	192	820	177	334	971	49	280	339	140	349	388	74
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	621	1490	322	747	1765	89	1120	1238	511	1233	1417	271
Grp Volume(v), veh/h	43	0	619	42	0	871	143	0	154	48	0	224
Grp Sat Flow(s),veh/h/ln	621	0	1812	747	0	1854	1120	0	1749	1233	0	1688
Q Serve(g_s), s	4.7	0.0	17.2	3.0	0.0	29.4	9.0	0.0	5.2	2.4	0.0	8.2
Cycle Q Clear(g_c), s	34.1	0.0	17.2	20.2	0.0	29.4	17.2	0.0	5.2	7.6	0.0	8.2
Prop In Lane	1.00		0.18	1.00		0.05	1.00		0.29	1.00		0.16
Lane Grp Cap(c), veh/h	192	0	997	334	0	1020	280	0	479	349	0	462
V/C Ratio(X)	0.22	0.00	0.62	0.13	0.00	0.85	0.51	0.00	0.32	0.14	0.00	0.48
Avail Cap(c_a), veh/h	439	0	1719	632	0	1759	428	0	711	512	0	686
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.5	0.0	11.3	18.3	0.0	14.1	29.7	0.0	21.3	24.4	0.0	22.4
Incr Delay (d2), s/veh	0.6	0.0	0.6	0.2	0.0	2.2	1.4	0.0	0.4	0.2	0.0	0.8
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(95%),veh/ln	1.2	0.0	9.1	0.8	0.0	14.6	4.2	0.0	3.5	1.2	0.0	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.1	0.0	12.0	18.4	0.0	16.2	31.1	0.0	21.7	24.5	0.0	23.2
LnGrp LOS	C	A	B	B	A	B	C	A	C	C	A	C
Approach Vol, veh/h	662			913			297			272		
Approach Delay, s/veh	13.1			16.3			26.2			23.5		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	47.6			26.2			47.6			26.2		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	36.1			19.2			31.4			10.2		
Green Ext Time (p_c), s	4.5			1.0			7.3			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	17.6											
HCM 6th LOS	B											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2023 Phase 1 No-Build Condition
Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	26	588	35	42	837	30	39	7	37	26	3	28
Future Vol, veh/h	26	588	35	42	837	30	39	7	37	26	3	28
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	-	-	-	-	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	2	0	4	2	3	0	0	0	4	0	0
Mvmt Flow	27	600	36	43	854	31	40	7	38	27	3	29
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	885	0	0	636	0	0	1644	1643	618	1651	1646	870
Stage 1	-	-	-	-	-	-	672	672	-	956	956	-
Stage 2	-	-	-	-	-	-	972	971	-	695	690	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.1	6.5	6.2	7.14	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Follow-up Hdwy	2.2	-	-	2.236	-	-	3.5	4	3.3	3.536	4	3.3
Pot Cap-1 Maneuver	773	-	-	938	-	-	81	101	493	78	100	354
Stage 1	-	-	-	-	-	-	449	458	-	307	339	-
Stage 2	-	-	-	-	-	-	306	334	-	429	449	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	773	-	-	938	-	-	65	87	493	60	86	354
Mov Cap-2 Maneuver	-	-	-	-	-	-	65	87	-	60	86	-
Stage 1	-	-	-	-	-	-	425	433	-	290	308	-
Stage 2	-	-	-	-	-	-	253	304	-	369	425	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.4			69.1			76.6		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	65	283	773	-	-	938	-	-	104			
HCM Lane V/C Ratio	0.612	0.159	0.034	-	-	0.046	-	-	0.559			
HCM Control Delay (s)	124.4	20.1	9.8	0	-	9	0	-	76.6			
HCM Lane LOS	F	C	A	A	-	A	A	-	F			
HCM 95th %tile Q(veh)	2.6	0.6	0.1	-	-	0.1	-	-	2.6			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2023 Phase 1 No-Build Condition
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	3.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑	↑
Traffic Vol, veh/h	4	0	0	26	16	7
Future Vol, veh/h	4	0	0	26	16	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	4	8	3
Mvmt Flow	4	0	0	27	17	7
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	-	-	18	2
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	14	-
Critical Hdwy	-	-	-	-	6.96	6.96
Critical Hdwy Stg 1	-	-	-	-	5.96	-
Critical Hdwy Stg 2	-	-	-	-	5.96	-
Follow-up Hdwy	-	-	-	-	3.58	3.33
Pot Cap-1 Maneuver	-	0	0	-	980	1078
Stage 1	-	0	0	-	1001	-
Stage 2	-	0	0	-	989	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	980	1078
Mov Cap-2 Maneuver	-	-	-	-	980	-
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	989	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		8.6		
HCM LOS				A		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT		
Capacity (veh/h)	980	1078	-	-		
HCM Lane V/C Ratio	0.017	0.007	-	-		
HCM Control Delay (s)	8.7	8.4	-	-		
HCM Lane LOS	A	A	-	-		
HCM 95th %tile Q(veh)	0.1	0	-	-		

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2023 Phase 1 No-Build Condition
Saturday Midday Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	362	14	9	362	20	24
Future Volume (veh/h)	362	14	9	362	20	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1648	1900	1885	1633	1900
Adj Flow Rate, veh/h	377	15	9	377	21	25
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	17	0	1	18	0
Cap, veh/h	1440	1067	802	1440	100	104
Arrive On Green	0.76	0.76	0.76	0.76	0.06	0.06
Sat Flow, veh/h	1885	1397	1008	1885	1555	1610
Grp Volume(v), veh/h	377	15	9	377	21	25
Grp Sat Flow(s),veh/h/ln	1885	1397	1008	1885	1555	1610
Q Serve(g_s), s	4.6	0.2	0.2	4.6	1.0	1.2
Cycle Q Clear(g_c), s	4.6	0.2	4.9	4.6	1.0	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1440	1067	802	1440	100	104
V/C Ratio(X)	0.26	0.01	0.01	0.26	0.21	0.24
Avail Cap(c_a), veh/h	1440	1067	802	1440	693	717
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.7	2.2	3.5	2.7	34.8	34.9
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.4	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	0.0	0.1	1.5	0.7	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.2	2.2	3.5	3.2	35.9	36.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	392			386	46	
Approach Delay, s/veh	3.1			3.2	36.0	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		11.6		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		6.6		3.2		6.9
Green Ext Time (p_c), s		2.2		0.1		2.2
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2023 Phase 1 No-Build Condition
Saturday Midday Peak Hour

																					
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR									
Lane Configurations																					
Traffic Volume (veh/h)	51	578	109	38	618	82	102	218	48	50	150	47									
Future Volume (veh/h)	51	578	109	38	618	82	102	218	48	50	150	47									
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	1841	1885	1885	1811	1885	1885	1796	1870	1870	1900	1841	1841									
Adj Flow Rate, veh/h	54	608	115	40	651	86	107	229	51	53	158	49									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95									
Percent Heavy Veh, %	4	1	1	6	1	1	7	2	2	0	4	4									
Cap, veh/h	307	881	167	310	933	123	263	359	80	219	327	101									
Arrive On Green	0.57	0.57	0.57	0.57	0.57	0.57	0.24	0.24	0.24	0.24	0.24	0.24									
Sat Flow, veh/h	709	1541	292	707	1631	215	1128	1481	330	1117	1348	418									
Grp Volume(v), veh/h	54	0	723	40	0	737	107	0	280	53	0	207									
Grp Sat Flow(s),veh/h/ln	709	0	1833	707	0	1846	1128	0	1811	1117	0	1765									
Q Serve(g_s), s	4.1	0.0	19.5	3.0	0.0	19.9	6.3	0.0	9.7	3.1	0.0	7.0									
Cycle Q Clear(g_c), s	24.0	0.0	19.5	22.5	0.0	19.9	13.3	0.0	9.7	12.8	0.0	7.0									
Prop In Lane	1.00		0.16	1.00		0.12	1.00		0.18	1.00		0.24									
Lane Grp Cap(c), veh/h	307	0	1048	310	0	1056	263	0	439	219	0	428									
V/C Ratio(X)	0.18	0.00	0.69	0.13	0.00	0.70	0.41	0.00	0.64	0.24	0.00	0.48									
Avail Cap(c_a), veh/h	611	0	1834	613	0	1848	473	0	777	427	0	757									
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00									
Uniform Delay (d), s/veh	19.2	0.0	10.6	18.5	0.0	10.7	28.5	0.0	23.7	29.5	0.0	22.7									
Incr Delay (d2), s/veh	0.3	0.0	0.8	0.2	0.0	0.8	1.0	0.0	1.5	0.6	0.0	0.8									
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(95%),veh/ln	1.1	0.0	9.5	0.8	0.0	9.7	2.9	0.0	7.0	1.4	0.0	4.9									
Unsig. Movement Delay, s/veh																					
LnGrp Delay(d),s/veh	19.5	0.0	11.4	18.7	0.0	11.5	29.5	0.0	25.3	30.1	0.0	23.6									
LnGrp LOS	B	A	B	B	A	B	C	A	C	C	A	C									
Approach Vol, veh/h	777			777			387			260											
Approach Delay, s/veh	12.0			11.9			26.5			24.9											
Approach LOS	B			B			C			C											
Timer - Assigned Phs	2			4			6			8											
Phs Duration (G+Y+Rc), s	47.0			23.0			47.0			23.0											
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0											
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0											
Max Q Clear Time (g_c+I1), s	26.0			15.3			24.5			14.8											
Green Ext Time (p_c), s	5.7			1.6			5.7			1.1											
Intersection Summary																					
HCM 6th Ctrl Delay	16.0																				
HCM 6th LOS	B																				

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2023 Phase 1 No-Build Condition
Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	6.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	40	643	42	44	647	22	37	7	41	25	3	36
Future Vol, veh/h	40	643	42	44	647	22	37	7	41	25	3	36
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	-	-	-	-	-	-	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, %	5	1	0	0	2	5	0	0	0	8	0	0
Mvmt Flow	43	684	45	47	688	23	39	7	44	27	3	38
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	711	0	0	729	0	0	1607	1598	707	1612	1609	700
Stage 1	-	-	-	-	-	-	793	793	-	794	794	-
Stage 2	-	-	-	-	-	-	814	805	-	818	815	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.18	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.572	4	3.3
Pot Cap-1 Maneuver	875	-	-	884	-	-	85	107	439	81	106	443
Stage 1	-	-	-	-	-	-	385	403	-	373	403	-
Stage 2	-	-	-	-	-	-	375	398	-	361	394	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	875	-	-	884	-	-	66	89	439	60	89	443
Mov Cap-2 Maneuver	-	-	-	-	-	-	66	89	-	60	89	-
Stage 1	-	-	-	-	-	-	353	370	-	342	368	-
Stage 2	-	-	-	-	-	-	310	363	-	292	361	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.6			64			68.6		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	66	279	875	-	-	884	-	-	120			
HCM Lane V/C Ratio	0.596	0.183	0.049	-	-	0.053	-	-	0.567			
HCM Control Delay (s)	120	20.8	9.3	0	-	9.3	0	-	68.6			
HCM Lane LOS	F	C	A	A	-	A	A	-	F			
HCM 95th %tile Q(veh)	2.5	0.7	0.2	-	-	0.2	-	-	2.8			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2023 Phase 1 No-Build Condition
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	5.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	136	0	0	349	173	292
Future Vol, veh/h	136	0	0	349	173	292
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	2	2
Mvmt Flow	140	0	0	360	178	301
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	320	70
Stage 1	-	-	-	-	140	-
Stage 2	-	-	-	-	180	-
Critical Hdwy	-	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	-	0	0	-	648	978
Stage 1	-	0	0	-	872	-
Stage 2	-	0	0	-	833	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	648	978
Mov Cap-2 Maneuver	-	-	-	-	648	-
Stage 1	-	-	-	-	872	-
Stage 2	-	-	-	-	833	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		11.2	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBT
Capacity (veh/h)	648		978		-	-
HCM Lane V/C Ratio	0.275		0.308		-	-
HCM Control Delay (s)	12.7		10.3		-	-
HCM Lane LOS	B		B		-	-
HCM 95th %tile Q(veh)	1.1		1.3		-	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

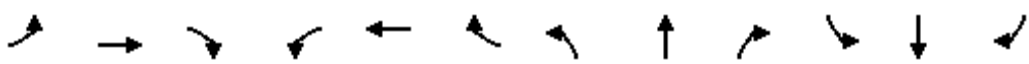
2023 Phase 1 Build Condition A
Weekday AM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	378	60	43	218	35	21
Future Volume (veh/h)	378	60	43	218	35	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1722	1678	1767	1278	1248
Adj Flow Rate, veh/h	425	67	48	245	39	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	7	12	15	9	42	44
Cap, veh/h	1355	1101	641	1333	92	80
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1796	1459	812	1767	1217	1058
Grp Volume(v), veh/h	425	67	48	245	39	24
Grp Sat Flow(s),veh/h/ln	1796	1459	812	1767	1217	1058
Q Serve(g_s), s	6.0	0.9	1.6	3.1	2.4	1.7
Cycle Q Clear(g_c), s	6.0	0.9	7.7	3.1	2.4	1.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1355	1101	641	1333	92	80
V/C Ratio(X)	0.31	0.06	0.07	0.18	0.42	0.30
Avail Cap(c_a), veh/h	1355	1101	641	1333	536	466
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.1	2.5	4.4	2.8	35.1	34.8
Incr Delay (d2), s/veh	0.6	0.1	0.2	0.3	3.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.0	0.3	0.4	1.0	1.4	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.7	2.6	4.6	3.1	38.2	36.8
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	492			293	63	
Approach Delay, s/veh	3.6			3.3	37.7	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		12.5		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		8.0		4.4		9.7
Green Ext Time (p_c), s		2.7		0.2		1.6
Intersection Summary						
HCM 6th Ctrl Delay			6.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

4: Middle Country Road & Fresh Pond Avenue

2023 Phase 1 Build Condition A
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔			↔	
Traffic Volume (veh/h)	15	749	17	36	344	17	10	1	5	19	10	43
Future Volume (veh/h)	15	749	17	36	344	17	10	1	5	19	10	43
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	1811	1811	1811	1648	1693	1693	1752	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	16	797	18	38	366	18	11	1	5	20	11	46
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	6	6	6	17	14	14	10	0	0	0	0	0
Cap, veh/h	53	1320	29	483	1214	60	207	23	115	77	31	81
Arrive On Green	0.76	0.76	0.76	0.76	0.76	0.76	0.08	0.08	0.08	0.08	0.08	0.08
Sat Flow, veh/h	14	1739	39	591	1600	79	1261	275	1377	288	368	974
Grp Volume(v), veh/h	831	0	0	38	0	384	11	0	6	77	0	0
Grp Sat Flow(s),veh/h/ln	1792	0	0	591	0	1678	1261	0	1652	1631	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	6.1	0.0	0.0	0.3	1.6	0.0	0.0
Cycle Q Clear(g_c), s	17.6	0.0	0.0	2.5	0.0	6.1	0.5	0.0	0.3	3.8	0.0	0.0
Prop In Lane	0.02		0.02	1.00		0.05	1.00		0.83	0.26		0.60
Lane Grp Cap(c), veh/h	1403	0	0	483	0	1274	207	0	138	189	0	0
V/C Ratio(X)	0.59	0.00	0.00	0.08	0.00	0.30	0.05	0.00	0.04	0.41	0.00	0.00
Avail Cap(c_a), veh/h	1403	0	0	483	0	1274	566	0	608	642	0	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	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.6	0.0	0.0	2.8	0.0	3.2	36.2	0.0	36.1	37.7	0.0	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	0.3	0.0	0.6	0.1	0.0	0.1	1.4	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(95%),veh/ln	6.7	0.0	0.0	0.2	0.0	2.1	0.4	0.0	0.2	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.5	0.0	0.0	3.1	0.0	3.8	36.3	0.0	36.2	39.1	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	A
Approach Vol, veh/h		831			422			17			77	
Approach Delay, s/veh		6.5			3.8			36.3			39.1	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		72.0		13.6		72.0		13.6				
Change Period (Y+Rc), s		7.0		6.5		7.0		6.5				
Max Green Setting (Gmax), s		65.0		31.5		65.0		31.5				
Max Q Clear Time (g_c+I1), s		19.6		2.5		8.1		5.8				
Green Ext Time (p_c), s		6.5		0.0		2.7		0.3				
Intersection Summary												
HCM 6th Ctrl Delay				7.9								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2023 Phase 1 Build Condition A
Weekday AM Peak Hour

																		
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR						
Lane Configurations																		
Traffic Volume (veh/h)	23	649	184	37	277	26	135	134	29	42	179	36						
Future Volume (veh/h)	23	649	184	37	277	26	135	134	29	42	179	36						
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	1737	1796	1796	1411	1693	1693	1737	1678	1678	1767	1826	1826						
Adj Flow Rate, veh/h	26	746	211	43	318	30	155	154	33	48	206	41						
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87						
Percent Heavy Veh, %	11	7	7	33	14	14	11	15	15	9	5	5						
Cap, veh/h	550	819	232	119	926	87	230	366	78	268	404	80						
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.27	0.27	0.27	0.27	0.27						
Sat Flow, veh/h	959	1347	381	443	1523	144	1052	1339	287	1130	1479	294						
Grp Volume(v), veh/h	26	0	957	43	0	348	155	0	187	48	0	247						
Grp Sat Flow(s),veh/h/ln	959	0	1728	443	0	1667	1052	0	1626	1130	0	1773						
Q Serve(g_s), s	1.5	0.0	53.4	10.4	0.0	11.3	16.0	0.0	10.4	4.0	0.0	12.9						
Cycle Q Clear(g_c), s	12.9	0.0	53.4	63.8	0.0	11.3	28.9	0.0	10.4	14.3	0.0	12.9						
Prop In Lane	1.00		0.22	1.00		0.09	1.00		0.18	1.00		0.17						
Lane Grp Cap(c), veh/h	550	0	1050	119	0	1013	230	0	445	268	0	485						
V/C Ratio(X)	0.05	0.00	0.91	0.36	0.00	0.34	0.67	0.00	0.42	0.18	0.00	0.51						
Avail Cap(c_a), veh/h	579	0	1103	133	0	1064	230	0	445	268	0	485						
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00						
Uniform Delay (d), s/veh	13.8	0.0	18.9	46.9	0.0	10.7	45.8	0.0	32.7	38.6	0.0	33.6						
Incr Delay (d2), s/veh	0.0	0.0	10.9	1.8	0.0	0.2	7.6	0.0	0.6	0.3	0.0	0.9						
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(95%),veh/ln	0.6	0.0	28.2	2.1	0.0	6.6	8.0	0.0	7.2	2.0	0.0	9.3						
Unsig. Movement Delay, s/veh																		
LnGrp Delay(d),s/veh	13.9	0.0	29.8	48.7	0.0	10.9	53.4	0.0	33.3	38.9	0.0	34.5						
LnGrp LOS	B	A	C	D	A	B	D	A	C	D	A	C						
Approach Vol, veh/h	983			391			342			295								
Approach Delay, s/veh	29.4			15.0			42.4			35.2								
Approach LOS	C			B			D			D								
Timer - Assigned Phs	2			4			6			8								
Phs Duration (G+Y+Rc), s	73.7			36.0			73.7			36.0								
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0								
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0								
Max Q Clear Time (g_c+I1), s	55.4			30.9			65.8			16.3								
Green Ext Time (p_c), s	6.0			0.0			0.9			1.2								
Intersection Summary																		
HCM 6th Ctrl Delay	29.7																	
HCM 6th LOS	C																	

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2023 Phase 1 Build Condition A
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	4.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘	↘
Traffic Vol, veh/h	42	0	0	43	70	14
Future Vol, veh/h	42	0	0	43	70	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	0	0	9	12	4
Mvmt Flow	46	0	0	47	76	15
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	-	-	70	23
Stage 1	-	-	-	-	46	-
Stage 2	-	-	-	-	24	-
Critical Hdwy	-	-	-	-	7.04	6.98
Critical Hdwy Stg 1	-	-	-	-	6.04	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	-	-	3.62	3.34
Pot Cap-1 Maneuver	-	0	0	-	898	1042
Stage 1	-	0	0	-	942	-
Stage 2	-	0	0	-	967	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	898	1042
Mov Cap-2 Maneuver	-	-	-	-	898	-
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	967	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		9.3		
HCM LOS				A		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT		
Capacity (veh/h)	898	1042	-	-		
HCM Lane V/C Ratio	0.085	0.015	-	-		
HCM Control Delay (s)	9.4	8.5	-	-		
HCM Lane LOS	A	A	-	-		
HCM 95th %tile Q(veh)	0.3	0	-	-		

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2023 Phase 1 Build Condition A
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	756	17	22	395	2	12
Future Vol, veh/h	756	17	22	395	2	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	6	0	14	0	42
Mvmt Flow	822	18	24	429	2	13
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	-	822	0	1299	822
Stage 1	-	-	-	-	822	-
Stage 2	-	-	-	-	477	-
Critical Hdwy	-	-	4.1	-	6.4	6.62
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.678
Pot Cap-1 Maneuver	-	0	816	-	180	319
Stage 1	-	0	-	-	435	-
Stage 2	-	0	-	-	629	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	816	-	173	319
Mov Cap-2 Maneuver	-	-	-	-	307	-
Stage 1	-	-	-	-	435	-
Stage 2	-	-	-	-	604	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0.5		16.8		
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	307	319	-	816	-	
HCM Lane V/C Ratio	0.007	0.041	-	0.029	-	
HCM Control Delay (s)	16.8	16.8	-	9.5	-	
HCM Lane LOS	C	C	-	A	-	
HCM 95th %tile Q(veh)	0	0.1	-	0.1	-	

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

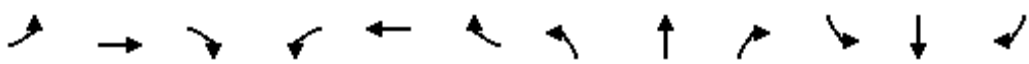
2023 Phase 1 Build Condition A
Weekday PM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Volume (veh/h)	301	13	25	483	115	123
Future Volume (veh/h)	301	13	25	483	115	123
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1159	1559	1870	1885	1900
Adj Flow Rate, veh/h	327	14	27	525	125	134
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	50	23	2	1	0
Cap, veh/h	1364	711	663	1353	204	183
Arrive On Green	0.72	0.72	0.72	0.72	0.11	0.11
Sat Flow, veh/h	1885	982	867	1870	1795	1610
Grp Volume(v), veh/h	327	14	27	525	125	134
Grp Sat Flow(s),veh/h/ln	1885	982	867	1870	1795	1610
Q Serve(g_s), s	4.8	0.3	0.9	8.9	5.5	6.7
Cycle Q Clear(g_c), s	4.8	0.3	5.7	8.9	5.5	6.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1364	711	663	1353	204	183
V/C Ratio(X)	0.24	0.02	0.04	0.39	0.61	0.73
Avail Cap(c_a), veh/h	1364	711	663	1353	758	680
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.8	3.2	4.8	4.4	35.0	35.5
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.8	3.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	0.1	0.2	4.0	4.5	5.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.3	3.3	4.9	5.2	38.0	41.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	341			552	259	
Approach Delay, s/veh	4.2			5.2	39.6	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		15.9		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		6.8		8.7		10.9
Green Ext Time (p_c), s		1.8		0.8		3.4
Intersection Summary						
HCM 6th Ctrl Delay			12.6			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary

4: Middle Country Road & Fresh Pond Avenue

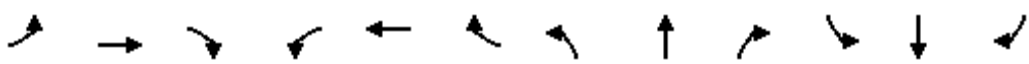
2023 Phase 1 Build Condition A
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔			↔	
Traffic Volume (veh/h)	26	593	35	49	845	30	48	15	37	26	8	28
Future Volume (veh/h)	26	593	35	49	845	30	48	15	37	26	8	28
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	1870	1870	1767	1870	1870	1826	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	27	605	36	50	862	31	49	15	38	27	8	29
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	9	2	2	5	0	0	0	0	0
Cap, veh/h	71	1224	71	611	1330	48	230	45	115	104	38	66
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	35	1652	96	744	1794	65	1338	476	1207	445	395	696
Grp Volume(v), veh/h	668	0	0	50	0	893	49	0	53	64	0	0
Grp Sat Flow(s),veh/h/ln	1783	0	0	744	0	1859	1338	0	1683	1536	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	19.7	0.0	0.0	2.4	0.8	0.0	0.0
Cycle Q Clear(g_c), s	12.0	0.0	0.0	2.1	0.0	19.7	2.2	0.0	2.4	3.2	0.0	0.0
Prop In Lane	0.04		0.05	1.00		0.03	1.00		0.72	0.42		0.45
Lane Grp Cap(c), veh/h	1367	0	0	611	0	1377	230	0	160	208	0	0
V/C Ratio(X)	0.49	0.00	0.00	0.08	0.00	0.65	0.21	0.00	0.33	0.31	0.00	0.00
Avail Cap(c_a), veh/h	1367	0	0	611	0	1377	680	0	726	722	0	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	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.3	0.0	0.0	3.0	0.0	5.3	34.7	0.0	34.8	35.1	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.3	0.0	2.4	0.5	0.0	1.2	0.8	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(95%),veh/ln	4.9	0.0	0.0	0.3	0.0	8.1	1.7	0.0	1.8	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.6	0.0	0.0	3.3	0.0	7.7	35.1	0.0	36.0	35.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	A
Approach Vol, veh/h		668			943			102			64	
Approach Delay, s/veh		5.6			7.5			35.6			35.9	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.0		14.3		68.0		14.3				
Change Period (Y+Rc), s		7.0		6.5		7.0		6.5				
Max Green Setting (Gmax), s		61.0		35.5		61.0		35.5				
Max Q Clear Time (g_c+I1), s		14.0		4.4		21.7		5.2				
Green Ext Time (p_c), s		4.8		0.4		7.7		0.3				
Intersection Summary												
HCM 6th Ctrl Delay				9.4								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2023 Phase 1 Build Condition A
Weekday PM Peak Hour

																					
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR									
Lane Configurations																					
Traffic Volume (veh/h)	41	489	152	40	796	40	149	105	43	46	180	35									
Future Volume (veh/h)	41	489	152	40	796	40	149	105	43	46	180	35									
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												
Adj Sat Flow, veh/h/ln	1826	1870	1870	1737	1870	1870	1796	1841	1841	1870	1737	1737									
Adj Flow Rate, veh/h	43	509	158	42	829	42	155	109	45	48	188	36									
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96									
Percent Heavy Veh, %	5	2	2	11	2	2	7	4	4	2	11	11									
Cap, veh/h	188	754	234	296	972	49	284	349	144	355	399	76									
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.28	0.28	0.28	0.28	0.28	0.28									
Sat Flow, veh/h	621	1369	425	715	1765	89	1111	1238	511	1233	1417	271									
Grp Volume(v), veh/h	43	0	667	42	0	871	155	0	154	48	0	224									
Grp Sat Flow(s),veh/h/ln	621	0	1794	715	0	1854	1111	0	1749	1233	0	1688									
Q Serve(g_s), s	4.9	0.0	20.6	3.5	0.0	30.9	10.4	0.0	5.4	2.5	0.0	8.5									
Cycle Q Clear(g_c), s	35.8	0.0	20.6	24.1	0.0	30.9	19.0	0.0	5.4	7.9	0.0	8.5									
Prop In Lane	1.00		0.24	1.00		0.05	1.00		0.29	1.00		0.16									
Lane Grp Cap(c), veh/h	188	0	988	296	0	1022	284	0	493	355	0	476									
V/C Ratio(X)	0.23	0.00	0.67	0.14	0.00	0.85	0.55	0.00	0.31	0.14	0.00	0.47									
Avail Cap(c_a), veh/h	405	0	1617	547	0	1671	400	0	675	483	0	652									
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00									
Uniform Delay (d), s/veh	29.9	0.0	12.5	21.1	0.0	14.8	31.0	0.0	22.0	25.1	0.0	23.1									
Incr Delay (d2), s/veh	0.6	0.0	0.8	0.2	0.0	2.5	1.6	0.0	0.4	0.2	0.0	0.7									
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(95%),veh/ln	1.3	0.0	10.7	1.0	0.0	15.7	4.9	0.0	3.7	1.2	0.0	5.7									
Unsig. Movement Delay, s/veh																					
LnGrp Delay(d),s/veh	30.5	0.0	13.3	21.3	0.0	17.2	32.6	0.0	22.3	25.2	0.0	23.8									
LnGrp LOS	C	A	B	C	A	B	C	A	C	C	A	C									
Approach Vol, veh/h	710				913				309												
Approach Delay, s/veh	14.3				17.4				27.5												
Approach LOS	B				B				C												
Timer - Assigned Phs	2			4			6			8											
Phs Duration (G+Y+Rc), s	49.8			27.9			49.8			27.9											
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0											
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0											
Max Q Clear Time (g_c+I1), s	37.8			21.0			32.9			10.5											
Green Ext Time (p_c), s	5.0			0.9			7.3			1.2											
Intersection Summary																					
HCM 6th Ctrl Delay	18.7																				
HCM 6th LOS	B																				

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2023 Phase 1 Build Condition A
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘	↗
Traffic Vol, veh/h	12	0	0	28	26	7
Future Vol, veh/h	12	0	0	28	26	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	4	13	3
Mvmt Flow	13	0	0	29	27	7
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	28	7
Stage 1	-	-	-	-	13	-
Stage 2	-	-	-	-	15	-
Critical Hdwy	-	-	-	-	7.06	6.96
Critical Hdwy Stg 1	-	-	-	-	6.06	-
Critical Hdwy Stg 2	-	-	-	-	6.06	-
Follow-up Hdwy	-	-	-	-	3.63	3.33
Pot Cap-1 Maneuver	-	0	0	-	952	1070
Stage 1	-	0	0	-	977	-
Stage 2	-	0	0	-	974	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	952	1070
Mov Cap-2 Maneuver	-	-	-	-	952	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	974	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.8	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	WBT	
Capacity (veh/h)	952		1070	-	-	
HCM Lane V/C Ratio	0.028		0.007	-	-	
HCM Control Delay (s)	8.9		8.4	-	-	
HCM Lane LOS	A		A	-	-	
HCM 95th %tile Q(veh)	0.1		0	-	-	

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2023 Phase 1 Build Condition A
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	651	5	5	916	8	46
Future Vol, veh/h	651	5	5	916	8	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	20	0	2	0	11
Mvmt Flow	708	5	5	996	9	50
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	708	0	1714	708
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	1006	-
Critical Hdwy	-	-	4.1	-	6.4	6.31
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.399
Pot Cap-1 Maneuver	-	0	900	-	100	420
Stage 1	-	0	-	-	492	-
Stage 2	-	0	-	-	357	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	900	-	99	420
Mov Cap-2 Maneuver	-	-	-	-	231	-
Stage 1	-	-	-	-	492	-
Stage 2	-	-	-	-	353	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		15.7		
HCM LOS				C		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	231	420	-	900	-	
HCM Lane V/C Ratio	0.038	0.119	-	0.006	-	
HCM Control Delay (s)	21.2	14.7	-	9	-	
HCM Lane LOS	C	B	-	A	-	
HCM 95th %tile Q(veh)	0.1	0.4	-	0	-	

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2023 Phase 1 Build Condition A
Saturday Midday Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↙	↑	↙	↗
Traffic Volume (veh/h)	369	14	9	377	20	24
Future Volume (veh/h)	369	14	9	377	20	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1648	1900	1885	1633	1900
Adj Flow Rate, veh/h	384	15	9	393	21	25
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	17	0	1	18	0
Cap, veh/h	1440	1067	796	1440	100	104
Arrive On Green	0.76	0.76	0.76	0.76	0.06	0.06
Sat Flow, veh/h	1885	1397	1001	1885	1555	1610
Grp Volume(v), veh/h	384	15	9	393	21	25
Grp Sat Flow(s),veh/h/ln	1885	1397	1001	1885	1555	1610
Q Serve(g_s), s	4.7	0.2	0.2	4.9	1.0	1.2
Cycle Q Clear(g_c), s	4.7	0.2	5.0	4.9	1.0	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1440	1067	796	1440	100	104
V/C Ratio(X)	0.27	0.01	0.01	0.27	0.21	0.24
Avail Cap(c_a), veh/h	1440	1067	796	1440	693	717
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.8	2.2	3.5	2.8	34.8	34.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.5	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	0.0	0.1	1.6	0.7	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.2	2.2	3.5	3.2	35.9	36.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	399			402	46	
Approach Delay, s/veh	3.2			3.2	36.0	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		11.6		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+I1), s	6.7		3.2		7.0	
Green Ext Time (p_c), s	2.2		0.1		2.3	
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

4: Middle Country Road & Fresh Pond Avenue

2023 Phase 1 Build Condition A

Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔			↔	
Traffic Volume (veh/h)	40	650	42	56	654	22	45	15	41	25	7	36
Future Volume (veh/h)	40	650	42	56	654	22	45	15	41	25	7	36
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	1885	1885	1885	1826	1870	1870	1870	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	43	691	45	60	696	23	48	16	44	27	7	38
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	5	2	2	2	0	0	0	0	0
Cap, veh/h	89	1198	76	565	1333	44	235	43	118	96	31	74
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	58	1617	103	704	1800	59	1361	448	1231	372	322	776
Grp Volume(v), veh/h	779	0	0	60	0	719	48	0	60	72	0	0
Grp Sat Flow(s),veh/h/ln	1777	0	0	704	0	1860	1361	0	1678	1471	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	13.5	0.0	0.0	2.8	1.2	0.0	0.0
Cycle Q Clear(g_c), s	15.3	0.0	0.0	3.1	0.0	13.5	2.1	0.0	2.8	4.0	0.0	0.0
Prop In Lane	0.06		0.06	1.00		0.03	1.00		0.73	0.37		0.53
Lane Grp Cap(c), veh/h	1362	0	0	565	0	1377	235	0	160	201	0	0
V/C Ratio(X)	0.57	0.00	0.00	0.11	0.00	0.52	0.20	0.00	0.37	0.36	0.00	0.00
Avail Cap(c_a), veh/h	1362	0	0	565	0	1377	692	0	723	714	0	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	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.8	0.0	0.0	3.2	0.0	4.5	34.7	0.0	34.9	35.4	0.0	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.0	0.4	0.0	1.4	0.4	0.0	1.4	1.1	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(95%),veh/ln	6.3	0.0	0.0	0.4	0.0	5.5	1.6	0.0	2.1	2.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.5	0.0	0.0	3.6	0.0	5.9	35.1	0.0	36.4	36.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	A
Approach Vol, veh/h		779			779			108			72	
Approach Delay, s/veh		6.5			5.8			35.8			36.4	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.0		14.4		68.0		14.4				
Change Period (Y+Rc), s		7.0		6.5		7.0		6.5				
Max Green Setting (Gmax), s		61.0		35.5		61.0		35.5				
Max Q Clear Time (g_c+I1), s		17.3		4.8		15.5		6.0				
Green Ext Time (p_c), s		6.1		0.5		5.7		0.3				
Intersection Summary												
HCM 6th Ctrl Delay				9.2								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2023 Phase 1 Build Condition A

Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	578	153	38	618	82	123	218	48	50	150	47
Future Volume (veh/h)	51	578	153	38	618	82	123	218	48	50	150	47
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			
Adj Sat Flow, veh/h/ln	1841	1885	1885	1811	1885	1885	1781	1870	1870	1900	1841	1841
Adj Flow Rate, veh/h	54	608	161	40	651	86	129	229	51	53	158	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	1	1	6	1	1	8	2	2	0	4	4
Cap, veh/h	290	804	213	261	912	121	280	383	85	238	349	108
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	709	1436	380	677	1631	215	1119	1481	330	1117	1348	418
Grp Volume(v), veh/h	54	0	769	40	0	737	129	0	280	53	0	207
Grp Sat Flow(s),veh/h/ln	709	0	1817	677	0	1846	1119	0	1811	1117	0	1765
Q Serve(g_s), s	4.3	0.0	23.1	3.4	0.0	20.9	7.8	0.0	9.7	3.1	0.0	7.0
Cycle Q Clear(g_c), s	25.2	0.0	23.1	26.5	0.0	20.9	14.9	0.0	9.7	12.8	0.0	7.0
Prop In Lane	1.00		0.21	1.00		0.12	1.00		0.18	1.00		0.24
Lane Grp Cap(c), veh/h	290	0	1016	261	0	1033	280	0	469	238	0	457
V/C Ratio(X)	0.19	0.00	0.76	0.15	0.00	0.71	0.46	0.00	0.60	0.22	0.00	0.45
Avail Cap(c_a), veh/h	588	0	1779	545	0	1808	460	0	760	418	0	741
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	12.0	22.2	0.0	11.5	28.5	0.0	23.2	28.9	0.0	22.3
Incr Delay (d2), s/veh	0.3	0.0	1.2	0.3	0.0	0.9	1.2	0.0	1.2	0.5	0.0	0.7
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(95%),veh/ln	1.2	0.0	11.3	0.9	0.0	10.5	3.6	0.0	6.9	1.4	0.0	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	0.0	13.2	22.4	0.0	12.5	29.7	0.0	24.5	29.3	0.0	23.0
LnGrp LOS	C	A	B	C	A	B	C	A	C	C	A	C
Approach Vol, veh/h	823		777				409			260		
Approach Delay, s/veh	13.7		13.0				26.1			24.3		
Approach LOS	B		B				C			C		
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	47.0		24.5		47.0		24.5					
Change Period (Y+Rc), s	7.0		6.0		7.0		6.0					
Max Green Setting (Gmax), s	70.0		30.0		70.0		30.0					
Max Q Clear Time (g_c+I1), s	27.2		16.9		28.5		14.8					
Green Ext Time (p_c), s	6.3		1.6		5.7		1.1					
Intersection Summary												
HCM 6th Ctrl Delay	16.9											
HCM 6th LOS	B											

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2023 Phase 1 Build Condition A
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	5.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	144	0	0	353	190	292
Future Vol, veh/h	144	0	0	353	190	292
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	3	2
Mvmt Flow	148	0	0	364	196	301
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	330	74
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	182	-
Critical Hdwy	-	-	-	-	6.86	6.94
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	-	-	-	-	3.53	3.32
Pot Cap-1 Maneuver	-	0	0	-	637	973
Stage 1	-	0	0	-	861	-
Stage 2	-	0	0	-	828	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	637	973
Mov Cap-2 Maneuver	-	-	-	-	637	-
Stage 1	-	-	-	-	861	-
Stage 2	-	-	-	-	828	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		11.4	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBT
Capacity (veh/h)	637		973		-	-
HCM Lane V/C Ratio	0.307		0.309		-	-
HCM Control Delay (s)	13.1		10.3		-	-
HCM Lane LOS	B		B		-	-
HCM 95th %tile O(veh)	1.3		1.3		-	-

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2023 Phase 1 Build Condition A
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	709	7	9	725	7	44
Future Vol, veh/h	709	7	9	725	7	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	14	0	2	0	11
Mvmt Flow	771	8	10	788	8	48
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	-	771	0	1579	771
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	808	-
Critical Hdwy	-	-	4.1	-	6.4	6.31
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.399
Pot Cap-1 Maneuver	-	0	853	-	122	386
Stage 1	-	0	-	-	460	-
Stage 2	-	0	-	-	442	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	853	-	119	386
Mov Cap-2 Maneuver	-	-	-	-	258	-
Stage 1	-	-	-	-	460	-
Stage 2	-	-	-	-	433	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0.1		16.1		
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	258	386	-	853	-	
HCM Lane V/C Ratio	0.029	0.124	-	0.011	-	
HCM Control Delay (s)	19.4	15.6	-	9.3	-	
HCM Lane LOS	C	C	-	A	-	
HCM 95th %tile Q(veh)	0.1	0.4	-	0	-	

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2023 Phase 1 Build Condition B
Weekday AM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	378	60	43	218	35	21
Future Volume (veh/h)	378	60	43	218	35	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1722	1678	1767	1278	1248
Adj Flow Rate, veh/h	425	67	48	245	39	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	7	12	15	9	42	44
Cap, veh/h	1355	1101	641	1333	92	80
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1796	1459	812	1767	1217	1058
Grp Volume(v), veh/h	425	67	48	245	39	24
Grp Sat Flow(s),veh/h/ln	1796	1459	812	1767	1217	1058
Q Serve(g_s), s	6.0	0.9	1.6	3.1	2.4	1.7
Cycle Q Clear(g_c), s	6.0	0.9	7.7	3.1	2.4	1.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1355	1101	641	1333	92	80
V/C Ratio(X)	0.31	0.06	0.07	0.18	0.42	0.30
Avail Cap(c_a), veh/h	1355	1101	641	1333	536	466
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.1	2.5	4.4	2.8	35.1	34.8
Incr Delay (d2), s/veh	0.6	0.1	0.2	0.3	3.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.0	0.3	0.4	1.0	1.4	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.7	2.6	4.6	3.1	38.2	36.8
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	492			293	63	
Approach Delay, s/veh	3.6			3.3	37.7	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		12.5		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		8.0		4.4		9.7
Green Ext Time (p_c), s		2.7		0.2		1.6
Intersection Summary						
HCM 6th Ctrl Delay			6.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary 8: Edwards Avenue & Middle Country Road

2023 Phase 1 Build Condition B
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	649	184	37	277	26	135	134	29	42	179	36
Future Volume (veh/h)	23	649	184	37	277	26	135	134	29	42	179	36
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			
Adj Sat Flow, veh/h/ln	1737	1796	1796	1411	1693	1693	1737	1678	1678	1767	1826	1826
Adj Flow Rate, veh/h	26	746	211	43	318	30	155	154	33	48	206	41
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	7	7	33	14	14	11	15	15	9	5	5
Cap, veh/h	550	819	232	119	926	87	230	366	78	268	404	80
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	959	1347	381	443	1523	144	1052	1339	287	1130	1479	294
Grp Volume(v), veh/h	26	0	957	43	0	348	155	0	187	48	0	247
Grp Sat Flow(s),veh/h/ln	959	0	1728	443	0	1667	1052	0	1626	1130	0	1773
Q Serve(g_s), s	1.5	0.0	53.4	10.4	0.0	11.3	16.0	0.0	10.4	4.0	0.0	12.9
Cycle Q Clear(g_c), s	12.9	0.0	53.4	63.8	0.0	11.3	28.9	0.0	10.4	14.3	0.0	12.9
Prop In Lane	1.00		0.22	1.00		0.09	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	550	0	1050	119	0	1013	230	0	445	268	0	485
V/C Ratio(X)	0.05	0.00	0.91	0.36	0.00	0.34	0.67	0.00	0.42	0.18	0.00	0.51
Avail Cap(c_a), veh/h	579	0	1103	133	0	1064	230	0	445	268	0	485
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.8	0.0	18.9	46.9	0.0	10.7	45.8	0.0	32.7	38.6	0.0	33.6
Incr Delay (d2), s/veh	0.0	0.0	10.9	1.8	0.0	0.2	7.6	0.0	0.6	0.3	0.0	0.9
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(95%),veh/ln	0.6	0.0	28.2	2.1	0.0	6.6	8.0	0.0	7.2	2.0	0.0	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	0.0	29.8	48.7	0.0	10.9	53.4	0.0	33.3	38.9	0.0	34.5
LnGrp LOS	B	A	C	D	A	B	D	A	C	D	A	C
Approach Vol, veh/h	983				391				342			
Approach Delay, s/veh	29.4				15.0				42.4			
Approach LOS	C				B				D			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	73.7			36.0			73.7			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	55.4			30.9			65.8			16.3		
Green Ext Time (p_c), s	6.0			0.0			0.9			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	29.7											
HCM 6th LOS	C											

HCM 6th Signalized Intersection Summary
17: Site Driveway & Middle Country Road

2023 Phase 1 Build Condition B
Weekday AM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↰	↱
Traffic Volume (veh/h)	756	26	47	370	5	12
Future Volume (veh/h)	756	26	47	370	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1811	1811	1693	1693	1604	1278
Adj Flow Rate, veh/h	822	28	51	402	5	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	14	14	20	42
Cap, veh/h	1370	47	145	1067	51	36
Arrive On Green	0.79	0.79	0.79	0.79	0.03	0.03
Sat Flow, veh/h	1741	59	116	1357	1527	1083
Grp Volume(v), veh/h	0	850	453	0	5	13
Grp Sat Flow(s),veh/h/ln	0	1800	1473	0	1527	1083
Q Serve(g_s), s	0.0	14.3	0.0	0.0	0.2	0.9
Cycle Q Clear(g_c), s	0.0	14.3	5.8	0.0	0.2	0.9
Prop In Lane		0.03	0.11		1.00	1.00
Lane Grp Cap(c), veh/h	0	1416	1212	0	51	36
V/C Ratio(X)	0.00	0.60	0.37	0.00	0.10	0.36
Avail Cap(c_a), veh/h	0	1416	1212	0	733	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	3.2	2.3	0.0	35.2	35.5
Incr Delay (d2), s/veh	0.0	1.9	0.9	0.0	0.8	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	3.3	1.3	0.0	0.2	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	5.1	3.2	0.0	36.0	41.4
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	850			453	18	
Approach Delay, s/veh	5.1			3.2	39.9	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		66.0		9.0		66.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		59.0		36.0		59.0
Max Q Clear Time (g_c+I1), s		16.3		2.9		7.8
Green Ext Time (p_c), s		6.7		0.0		3.2
Intersection Summary						
HCM 6th Ctrl Delay			4.9			
HCM 6th LOS			A			

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2023 Phase 1 Build Condition B
Weekday AM Peak Hour

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	15	749	17	11	346	18	8	0	5	28	1	43
Future Vol, veh/h	15	749	17	11	346	18	8	0	5	28	1	43
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	-	-	-	-	-	-	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, %	0	6	10	20	14	14	0	0	50	0	0	0
Mvmt Flow	16	797	18	12	368	19	9	0	5	30	1	46
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	387	0	0	815	0	0	1263	1249	806	1243	1249	378
Stage 1	-	-	-	-	-	-	838	838	-	402	402	-
Stage 2	-	-	-	-	-	-	425	411	-	841	847	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.5	6.7	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4	3.75	3.5	4	3.3
Pot Cap-1 Maneuver	1183	-	-	739	-	-	148	175	317	153	175	673
Stage 1	-	-	-	-	-	-	364	384	-	629	604	-
Stage 2	-	-	-	-	-	-	611	598	-	362	381	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1183	-	-	739	-	-	132	167	317	145	167	673
Mov Cap-2 Maneuver	-	-	-	-	-	-	132	167	-	145	167	-
Stage 1	-	-	-	-	-	-	355	374	-	613	591	-
Stage 2	-	-	-	-	-	-	557	585	-	347	371	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.3			27.4			23.2		
HCM LOS							D			C		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	132	317	1183	-	-	739	-	-	274			
HCM Lane V/C Ratio	0.064	0.017	0.013	-	-	0.016	-	-	0.28			
HCM Control Delay (s)	34.1	16.6	8.1	0	-	9.9	0	-	23.2			
HCM Lane LOS	D	C	A	A	-	A	A	-	C			
HCM 95th %tile Q(veh)	0.2	0.1	0	-	-	0	-	-	1.1			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2023 Phase 1 Build Condition B
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	4.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘	↘
Traffic Vol, veh/h	42	0	0	43	70	14
Future Vol, veh/h	42	0	0	43	70	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	0	0	9	12	4
Mvmt Flow	46	0	0	47	76	15

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	70	23
Stage 1	-	-	-	46	-
Stage 2	-	-	-	24	-
Critical Hdwy	-	-	-	7.04	6.98
Critical Hdwy Stg 1	-	-	-	6.04	-
Critical Hdwy Stg 2	-	-	-	6.04	-
Follow-up Hdwy	-	-	-	3.62	3.34
Pot Cap-1 Maneuver	-	0	0	898	1042
Stage 1	-	0	0	942	-
Stage 2	-	0	0	967	-
Platoon blocked, %	-			-	
Mov Cap-1 Maneuver	-	-	-	898	1042
Mov Cap-2 Maneuver	-	-	-	898	-
Stage 1	-	-	-	942	-
Stage 2	-	-	-	967	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	898	1042	-	-
HCM Lane V/C Ratio	0.085	0.015	-	-
HCM Control Delay (s)	9.4	8.5	-	-
HCM Lane LOS	A	A	-	-
HCM 95th %tile Q(veh)	0.3	0	-	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2023 Phase 1 Build Condition B
Weekday PM Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	301	13	25	483	115	123
Future Volume (veh/h)	301	13	25	483	115	123
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1159	1559	1870	1885	1900
Adj Flow Rate, veh/h	327	14	27	525	125	134
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	50	23	2	1	0
Cap, veh/h	1364	711	663	1353	204	183
Arrive On Green	0.72	0.72	0.72	0.72	0.11	0.11
Sat Flow, veh/h	1885	982	867	1870	1795	1610
Grp Volume(v), veh/h	327	14	27	525	125	134
Grp Sat Flow(s),veh/h/ln	1885	982	867	1870	1795	1610
Q Serve(g_s), s	4.8	0.3	0.9	8.9	5.5	6.7
Cycle Q Clear(g_c), s	4.8	0.3	5.7	8.9	5.5	6.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1364	711	663	1353	204	183
V/C Ratio(X)	0.24	0.02	0.04	0.39	0.61	0.73
Avail Cap(c_a), veh/h	1364	711	663	1353	758	680
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.8	3.2	4.8	4.4	35.0	35.5
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.8	3.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	0.1	0.2	4.0	4.5	5.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.3	3.3	4.9	5.2	38.0	41.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	341			552	259	
Approach Delay, s/veh	4.2			5.2	39.6	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		15.9		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		6.8		8.7		10.9
Green Ext Time (p_c), s		1.8		0.8		3.4
Intersection Summary						
HCM 6th Ctrl Delay			12.6			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary 8: Edwards Avenue & Middle Country Road

2023 Phase 1 Build Condition B
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	489	152	40	796	40	149	105	43	46	180	35
Future Volume (veh/h)	41	489	152	40	796	40	149	105	43	46	180	35
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			
Adj Sat Flow, veh/h/ln	1826	1870	1870	1737	1870	1870	1796	1841	1841	1870	1737	1737
Adj Flow Rate, veh/h	43	509	158	42	829	42	155	109	45	48	188	36
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	2	2	11	2	2	7	4	4	2	11	11
Cap, veh/h	188	754	234	296	972	49	284	349	144	355	399	76
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	621	1369	425	715	1765	89	1111	1238	511	1233	1417	271
Grp Volume(v), veh/h	43	0	667	42	0	871	155	0	154	48	0	224
Grp Sat Flow(s),veh/h/ln	621	0	1794	715	0	1854	1111	0	1749	1233	0	1688
Q Serve(g_s), s	4.9	0.0	20.6	3.5	0.0	30.9	10.4	0.0	5.4	2.5	0.0	8.5
Cycle Q Clear(g_c), s	35.8	0.0	20.6	24.1	0.0	30.9	19.0	0.0	5.4	7.9	0.0	8.5
Prop In Lane	1.00		0.24	1.00		0.05	1.00		0.29	1.00		0.16
Lane Grp Cap(c), veh/h	188	0	988	296	0	1022	284	0	493	355	0	476
V/C Ratio(X)	0.23	0.00	0.67	0.14	0.00	0.85	0.55	0.00	0.31	0.14	0.00	0.47
Avail Cap(c_a), veh/h	405	0	1617	547	0	1671	400	0	675	483	0	652
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.9	0.0	12.5	21.1	0.0	14.8	31.0	0.0	22.0	25.1	0.0	23.1
Incr Delay (d2), s/veh	0.6	0.0	0.8	0.2	0.0	2.5	1.6	0.0	0.4	0.2	0.0	0.7
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(95%),veh/ln	1.3	0.0	10.7	1.0	0.0	15.7	4.9	0.0	3.7	1.2	0.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.5	0.0	13.3	21.3	0.0	17.2	32.6	0.0	22.3	25.2	0.0	23.8
LnGrp LOS	C	A	B	C	A	B	C	A	C	C	A	C
Approach Vol, veh/h	710				913				309			
Approach Delay, s/veh	14.3				17.4				27.5			
Approach LOS	B				B				C			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	49.8			27.9			49.8			27.9		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	37.8			21.0			32.9			10.5		
Green Ext Time (p_c), s	5.0			0.9			7.3			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	18.7											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary
17: Site Driveway & Middle Country Road

2023 Phase 1 Build Condition B
Weekday PM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↰	↱
Traffic Volume (veh/h)	651	7	12	909	25	46
Future Volume (veh/h)	651	7	12	909	25	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1841	1737
Adj Flow Rate, veh/h	708	8	13	988	27	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	4	11
Cap, veh/h	1383	16	52	1385	144	121
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1846	21	9	1849	1753	1472
Grp Volume(v), veh/h	0	716	1001	0	27	50
Grp Sat Flow(s),veh/h/ln	0	1867	1857	0	1753	1472
Q Serve(g_s), s	0.0	12.5	0.0	0.0	1.1	2.6
Cycle Q Clear(g_c), s	0.0	12.5	23.1	0.0	1.1	2.6
Prop In Lane		0.01	0.01		1.00	1.00
Lane Grp Cap(c), veh/h	0	1399	1437	0	144	121
V/C Ratio(X)	0.00	0.51	0.70	0.00	0.19	0.41
Avail Cap(c_a), veh/h	0	1399	1437	0	766	644
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	4.1	5.4	0.0	34.3	34.9
Incr Delay (d2), s/veh	0.0	1.3	2.8	0.0	0.6	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	4.7	8.6	0.0	0.9	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	5.4	8.2	0.0	34.9	37.2
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h	716			1001	77	
Approach Delay, s/veh	5.4			8.2	36.4	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		13.1		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		14.5		4.6		25.1
Green Ext Time (p_c), s		5.0		0.2		8.8
Intersection Summary						
HCM 6th Ctrl Delay			8.3			
HCM 6th LOS			A			

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2023 Phase 1 Build Condition B
Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	7.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	26	593	35	42	854	38	39	7	37	28	6	28
Future Vol, veh/h	26	593	35	42	854	38	39	7	37	28	6	28
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	-	-	-	-	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	2	0	4	2	3	0	0	0	4	0	0
Mvmt Flow	27	605	36	43	871	39	40	7	38	29	6	29
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	910	0	0	641	0	0	1671	1673	623	1677	1672	891
Stage 1	-	-	-	-	-	-	677	677	-	977	977	-
Stage 2	-	-	-	-	-	-	994	996	-	700	695	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.1	6.5	6.2	7.14	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Follow-up Hdwy	2.2	-	-	2.236	-	-	3.5	4	3.3	3.536	4	3.3
Pot Cap-1 Maneuver	757	-	-	934	-	-	77	97	490	75	97	344
Stage 1	-	-	-	-	-	-	446	455	-	299	332	-
Stage 2	-	-	-	-	-	-	298	325	-	427	447	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	757	-	-	934	-	-	59	83	490	58	83	344
Mov Cap-2 Maneuver	-	-	-	-	-	-	59	83	-	58	83	-
Stage 1	-	-	-	-	-	-	421	430	-	282	301	-
Stage 2	-	-	-	-	-	-	243	294	-	366	422	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.4			80.1			94.3		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	59		275	757	-	-	934	-	-	-	97	
HCM Lane V/C Ratio	0.675		0.163	0.035	-	-	0.046	-	-	-	0.652	
HCM Control Delay (s)	147.3		20.6	9.9	0	-	9	0	-	-	94.3	
HCM Lane LOS	F		C	A	A	-	A	A	-	-	F	
HCM 95th %tile Q(veh)	2.8		0.6	0.1	-	-	0.1	-	-	-	3.2	

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2023 Phase 1 Build Condition B
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑	↑
Traffic Vol, veh/h	12	0	0	28	26	7
Future Vol, veh/h	12	0	0	28	26	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	4	13	3
Mvmt Flow	13	0	0	29	27	7
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	-	-	28	7
Stage 1	-	-	-	-	13	-
Stage 2	-	-	-	-	15	-
Critical Hdwy	-	-	-	-	7.06	6.96
Critical Hdwy Stg 1	-	-	-	-	6.06	-
Critical Hdwy Stg 2	-	-	-	-	6.06	-
Follow-up Hdwy	-	-	-	-	3.63	3.33
Pot Cap-1 Maneuver	-	0	0	-	952	1070
Stage 1	-	0	0	-	977	-
Stage 2	-	0	0	-	974	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	952	1070
Mov Cap-2 Maneuver	-	-	-	-	952	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	974	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		8.8		
HCM LOS				A		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT		
Capacity (veh/h)	952	1070	-	-		
HCM Lane V/C Ratio	0.028	0.007	-	-		
HCM Control Delay (s)	8.9	8.4	-	-		
HCM Lane LOS	A	A	-	-		
HCM 95th %tile Q(veh)	0.1	0	-	-		

HCM 6th Signalized Intersection Summary 3: Burman Boulevard & Middle Country Road

2023 Phase 1 Build Condition B
Saturday Midday Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↙	↑	↙	↗
Traffic Volume (veh/h)	369	14	9	377	20	24
Future Volume (veh/h)	369	14	9	377	20	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1648	1900	1885	1633	1900
Adj Flow Rate, veh/h	384	15	9	393	21	25
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	17	0	1	18	0
Cap, veh/h	1440	1067	796	1440	100	104
Arrive On Green	0.76	0.76	0.76	0.76	0.06	0.06
Sat Flow, veh/h	1885	1397	1001	1885	1555	1610
Grp Volume(v), veh/h	384	15	9	393	21	25
Grp Sat Flow(s),veh/h/ln	1885	1397	1001	1885	1555	1610
Q Serve(g_s), s	4.7	0.2	0.2	4.9	1.0	1.2
Cycle Q Clear(g_c), s	4.7	0.2	5.0	4.9	1.0	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1440	1067	796	1440	100	104
V/C Ratio(X)	0.27	0.01	0.01	0.27	0.21	0.24
Avail Cap(c_a), veh/h	1440	1067	796	1440	693	717
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.8	2.2	3.5	2.8	34.8	34.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.5	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	0.0	0.1	1.6	0.7	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.2	2.2	3.5	3.2	35.9	36.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	399			402	46	
Approach Delay, s/veh	3.2			3.2	36.0	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		11.6		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		6.7		3.2		7.0
Green Ext Time (p_c), s		2.2		0.1		2.3
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary 8: Edwards Avenue & Middle Country Road

2023 Phase 1 Build Condition B
Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	578	153	38	618	82	123	218	48	50	150	47
Future Volume (veh/h)	51	578	153	38	618	82	123	218	48	50	150	47
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			
Adj Sat Flow, veh/h/ln	1841	1885	1885	1811	1885	1885	1781	1870	1870	1900	1841	1841
Adj Flow Rate, veh/h	54	608	161	40	651	86	129	229	51	53	158	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	1	1	6	1	1	8	2	2	0	4	4
Cap, veh/h	290	804	213	261	912	121	280	383	85	238	349	108
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	709	1436	380	677	1631	215	1119	1481	330	1117	1348	418
Grp Volume(v), veh/h	54	0	769	40	0	737	129	0	280	53	0	207
Grp Sat Flow(s),veh/h/ln	709	0	1817	677	0	1846	1119	0	1811	1117	0	1765
Q Serve(g_s), s	4.3	0.0	23.1	3.4	0.0	20.9	7.8	0.0	9.7	3.1	0.0	7.0
Cycle Q Clear(g_c), s	25.2	0.0	23.1	26.5	0.0	20.9	14.9	0.0	9.7	12.8	0.0	7.0
Prop In Lane	1.00		0.21	1.00		0.12	1.00		0.18	1.00		0.24
Lane Grp Cap(c), veh/h	290	0	1016	261	0	1033	280	0	469	238	0	457
V/C Ratio(X)	0.19	0.00	0.76	0.15	0.00	0.71	0.46	0.00	0.60	0.22	0.00	0.45
Avail Cap(c_a), veh/h	588	0	1779	545	0	1808	460	0	760	418	0	741
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	12.0	22.2	0.0	11.5	28.5	0.0	23.2	28.9	0.0	22.3
Incr Delay (d2), s/veh	0.3	0.0	1.2	0.3	0.0	0.9	1.2	0.0	1.2	0.5	0.0	0.7
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(95%),veh/ln	1.2	0.0	11.3	0.9	0.0	10.5	3.6	0.0	6.9	1.4	0.0	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	0.0	13.2	22.4	0.0	12.5	29.7	0.0	24.5	29.3	0.0	23.0
LnGrp LOS	C	A	B	C	A	B	C	A	C	C	A	C
Approach Vol, veh/h	823				777				409			
Approach Delay, s/veh	13.7				13.0				26.1			
Approach LOS	B				B				C			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	47.0			24.5			47.0			24.5		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	27.2			16.9			28.5			14.8		
Green Ext Time (p_c), s	6.3			1.6			5.7			1.1		
Intersection Summary												
HCM 6th Ctrl Delay	16.9											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary
17: Site Driveway & Middle Country Road

2023 Phase 1 Build Condition B
Saturday Midday Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	709	11	21	713	23	44
Future Volume (veh/h)	709	11	21	713	23	44
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1885	1870	1870	1841	1737
Adj Flow Rate, veh/h	771	12	23	775	25	48
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	2	4	11
Cap, veh/h	1390	22	64	1356	141	118
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1851	29	24	1806	1753	1472
Grp Volume(v), veh/h	0	783	798	0	25	48
Grp Sat Flow(s),veh/h/ln	0	1880	1830	0	1753	1472
Q Serve(g_s), s	0.0	14.2	0.0	0.0	1.1	2.5
Cycle Q Clear(g_c), s	0.0	14.2	14.8	0.0	1.1	2.5
Prop In Lane		0.02	0.03		1.00	1.00
Lane Grp Cap(c), veh/h	0	1411	1420	0	141	118
V/C Ratio(X)	0.00	0.55	0.56	0.00	0.18	0.41
Avail Cap(c_a), veh/h	0	1411	1420	0	768	645
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	4.3	4.3	0.0	34.3	34.9
Incr Delay (d2), s/veh	0.0	1.6	1.6	0.0	0.6	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	5.3	5.5	0.0	0.8	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	5.8	5.9	0.0	34.9	37.2
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h	783			798	73	
Approach Delay, s/veh	5.8			5.9	36.4	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		12.9		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+l1), s		16.2		4.5		16.8
Green Ext Time (p_c), s		5.7		0.2		6.1
Intersection Summary						
HCM 6th Ctrl Delay			7.2			
HCM 6th LOS			A			

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2023 Phase 1 Build Condition B
Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	7.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	650	42	44	662	30	37	7	41	29	3	36
Future Vol, veh/h	40	650	42	44	662	30	37	7	41	29	3	36
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	-	-	-	-	-	-	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, %	5	1	0	0	2	5	0	0	0	8	0	0
Mvmt Flow	43	691	45	47	704	32	39	7	44	31	3	38
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	736	0	0	736	0	0	1635	1630	714	1639	1636	720
Stage 1	-	-	-	-	-	-	800	800	-	814	814	-
Stage 2	-	-	-	-	-	-	835	830	-	825	822	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.18	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.572	4	3.3
Pot Cap-1 Maneuver	856	-	-	879	-	-	82	103	435	78	102	431
Stage 1	-	-	-	-	-	-	382	400	-	363	394	-
Stage 2	-	-	-	-	-	-	365	388	-	358	391	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	856	-	-	879	-	-	63	86	435	57	85	431
Mov Cap-2 Maneuver	-	-	-	-	-	-	63	86	-	57	85	-
Stage 1	-	-	-	-	-	-	349	366	-	332	358	-
Stage 2	-	-	-	-	-	-	300	353	-	288	357	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.6			68.6			88.8		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	63	273	856	-	-	879	-	-	108			
HCM Lane V/C Ratio	0.625	0.187	0.05	-	-	0.053	-	-	0.67			
HCM Control Delay (s)	130	21.2	9.4	0	-	9.3	0	-	88.8			
HCM Lane LOS	F	C	A	A	-	A	A	-	F			
HCM 95th %tile Q(veh)	2.6	0.7	0.2	-	-	0.2	-	-	3.4			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2023 Phase 1 Build Condition B
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	5.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↑	↑
Traffic Vol, veh/h	144	0	0	353	190	292
Future Vol, veh/h	144	0	0	353	190	292
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	3	2
Mvmt Flow	148	0	0	364	196	301

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	-	330 74
Stage 1	-	-	-	-	148 -
Stage 2	-	-	-	-	182 -
Critical Hdwy	-	-	-	-	6.86 6.94
Critical Hdwy Stg 1	-	-	-	-	5.86 -
Critical Hdwy Stg 2	-	-	-	-	5.86 -
Follow-up Hdwy	-	-	-	-	3.53 3.32
Pot Cap-1 Maneuver	-	0	0	-	637 973
Stage 1	-	0	0	-	861 -
Stage 2	-	0	0	-	828 -
Platoon blocked, %	-			-	
Mov Cap-1 Maneuver	-	-	-	-	637 973
Mov Cap-2 Maneuver	-	-	-	-	637 -
Stage 1	-	-	-	-	861 -
Stage 2	-	-	-	-	828 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	637	973	-	-
HCM Lane V/C Ratio	0.307	0.309	-	-
HCM Control Delay (s)	13.1	10.3	-	-
HCM Lane LOS	B	B	-	-
HCM 95th %tile Q(veh)	1.3	1.3	-	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2023 Phase 1 Build Condition C
Weekday AM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	378	60	43	218	35	21
Future Volume (veh/h)	378	60	43	218	35	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1722	1678	1767	1278	1248
Adj Flow Rate, veh/h	425	67	48	245	39	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	7	12	15	9	42	44
Cap, veh/h	1355	1101	641	1333	92	80
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1796	1459	812	1767	1217	1058
Grp Volume(v), veh/h	425	67	48	245	39	24
Grp Sat Flow(s),veh/h/ln	1796	1459	812	1767	1217	1058
Q Serve(g_s), s	6.0	0.9	1.6	3.1	2.4	1.7
Cycle Q Clear(g_c), s	6.0	0.9	7.7	3.1	2.4	1.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1355	1101	641	1333	92	80
V/C Ratio(X)	0.31	0.06	0.07	0.18	0.42	0.30
Avail Cap(c_a), veh/h	1355	1101	641	1333	536	466
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.1	2.5	4.4	2.8	35.1	34.8
Incr Delay (d2), s/veh	0.6	0.1	0.2	0.3	3.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.0	0.3	0.4	1.0	1.4	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.7	2.6	4.6	3.1	38.2	36.8
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	492			293	63	
Approach Delay, s/veh	3.6			3.3	37.7	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		12.5		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		8.0		4.4		9.7
Green Ext Time (p_c), s		2.7		0.2		1.6
Intersection Summary						
HCM 6th Ctrl Delay			6.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary 8: Edwards Avenue & Middle Country Road

2023 Phase 1 Build Condition C
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	649	184	37	277	26	135	134	29	42	179	36
Future Volume (veh/h)	23	649	184	37	277	26	135	134	29	42	179	36
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			
Adj Sat Flow, veh/h/ln	1737	1796	1796	1411	1693	1693	1737	1678	1678	1767	1826	1826
Adj Flow Rate, veh/h	26	746	211	43	318	30	155	154	33	48	206	41
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	7	7	33	14	14	11	15	15	9	5	5
Cap, veh/h	550	819	232	119	926	87	230	366	78	268	404	80
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	959	1347	381	443	1523	144	1052	1339	287	1130	1479	294
Grp Volume(v), veh/h	26	0	957	43	0	348	155	0	187	48	0	247
Grp Sat Flow(s),veh/h/ln	959	0	1728	443	0	1667	1052	0	1626	1130	0	1773
Q Serve(g_s), s	1.5	0.0	53.4	10.4	0.0	11.3	16.0	0.0	10.4	4.0	0.0	12.9
Cycle Q Clear(g_c), s	12.9	0.0	53.4	63.8	0.0	11.3	28.9	0.0	10.4	14.3	0.0	12.9
Prop In Lane	1.00		0.22	1.00		0.09	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	550	0	1050	119	0	1013	230	0	445	268	0	485
V/C Ratio(X)	0.05	0.00	0.91	0.36	0.00	0.34	0.67	0.00	0.42	0.18	0.00	0.51
Avail Cap(c_a), veh/h	579	0	1103	133	0	1064	230	0	445	268	0	485
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.8	0.0	18.9	46.9	0.0	10.7	45.8	0.0	32.7	38.6	0.0	33.6
Incr Delay (d2), s/veh	0.0	0.0	10.9	1.8	0.0	0.2	7.6	0.0	0.6	0.3	0.0	0.9
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(95%),veh/ln	0.6	0.0	28.2	2.1	0.0	6.6	8.0	0.0	7.2	2.0	0.0	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	0.0	29.8	48.7	0.0	10.9	53.4	0.0	33.3	38.9	0.0	34.5
LnGrp LOS	B	A	C	D	A	B	D	A	C	D	A	C
Approach Vol, veh/h	983				391				342			
Approach Delay, s/veh	29.4				15.0				42.4			
Approach LOS	C				B				D			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	73.7			36.0			73.7			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	55.4			30.9			65.8			16.3		
Green Ext Time (p_c), s	6.0			0.0			0.9			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	29.7											
HCM 6th LOS	C											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2023 Phase 1 Build Condition C
Weekday AM Peak Hour

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕		↕	↕	
Traffic Vol, veh/h	15	749	17	11	346	18	8	0	5	28	1	43
Future Vol, veh/h	15	749	17	11	346	18	8	0	5	28	1	43
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	-	-	-	50	-	-	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, %	0	6	10	20	14	14	0	0	50	0	0	0
Mvmt Flow	16	797	18	12	368	19	9	0	5	30	1	46
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	387	0	0	815	0	0	1263	1249	806	1243	1249	378
Stage 1	-	-	-	-	-	-	838	838	-	402	402	-
Stage 2	-	-	-	-	-	-	425	411	-	841	847	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.5	6.7	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4	3.75	3.5	4	3.3
Pot Cap-1 Maneuver	1183	-	-	739	-	-	148	175	317	153	175	673
Stage 1	-	-	-	-	-	-	364	384	-	629	604	-
Stage 2	-	-	-	-	-	-	611	598	-	362	381	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1183	-	-	739	-	-	133	168	317	146	168	673
Mov Cap-2 Maneuver	-	-	-	-	-	-	133	168	-	146	168	-
Stage 1	-	-	-	-	-	-	355	374	-	613	594	-
Stage 2	-	-	-	-	-	-	559	588	-	347	371	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.3			27.2			23.1		
HCM LOS							D			C		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	133	317	1183	-	-	739	-	-	275			
HCM Lane V/C Ratio	0.064	0.017	0.013	-	-	0.016	-	-	0.279			
HCM Control Delay (s)	33.9	16.6	8.1	0	-	9.9	-	-	23.1			
HCM Lane LOS	D	C	A	A	-	A	-	-	C			
HCM 95th %tile Q(veh)	0.2	0.1	0	-	-	0	-	-	1.1			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2023 Phase 1 Build Condition C
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	4.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	42	0	0	43	70	14
Future Vol, veh/h	42	0	0	43	70	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	0	0	9	12	4
Mvmt Flow	46	0	0	47	76	15

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	70	23
Stage 1	-	-	-	46	-
Stage 2	-	-	-	24	-
Critical Hdwy	-	-	-	7.04	6.98
Critical Hdwy Stg 1	-	-	-	6.04	-
Critical Hdwy Stg 2	-	-	-	6.04	-
Follow-up Hdwy	-	-	-	3.62	3.34
Pot Cap-1 Maneuver	-	0	0	898	1042
Stage 1	-	0	0	942	-
Stage 2	-	0	0	967	-
Platoon blocked, %	-				
Mov Cap-1 Maneuver	-	-	-	898	1042
Mov Cap-2 Maneuver	-	-	-	898	-
Stage 1	-	-	-	942	-
Stage 2	-	-	-	967	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	898	1042	-	-
HCM Lane V/C Ratio	0.085	0.015	-	-
HCM Control Delay (s)	9.4	8.5	-	-
HCM Lane LOS	A	A	-	-
HCM 95th %tile Q(veh)	0.3	0	-	-

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2023 Phase 1 Build Condition C
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	756	26	47	370	5	12
Future Vol, veh/h	756	26	47	370	5	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	4	9	14	20	42
Mvmt Flow	822	28	51	402	5	13

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	-	822
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.19
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.281
Pot Cap-1 Maneuver	-	0	778
Stage 1	-	0	-
Stage 2	-	0	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	778
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	17.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	272	319	-	778	-
HCM Lane V/C Ratio	0.02	0.041	-	0.066	-
HCM Control Delay (s)	18.5	16.8	-	10	-
HCM Lane LOS	C	C	-	A	-
HCM 95th %tile Q(veh)	0.1	0.1	-	0.2	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2023 Phase 1 Build Condition C
Weekday PM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Volume (veh/h)	301	13	25	483	115	123
Future Volume (veh/h)	301	13	25	483	115	123
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1159	1559	1870	1885	1900
Adj Flow Rate, veh/h	327	14	27	525	125	134
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	50	23	2	1	0
Cap, veh/h	1364	711	663	1353	204	183
Arrive On Green	0.72	0.72	0.72	0.72	0.11	0.11
Sat Flow, veh/h	1885	982	867	1870	1795	1610
Grp Volume(v), veh/h	327	14	27	525	125	134
Grp Sat Flow(s),veh/h/ln	1885	982	867	1870	1795	1610
Q Serve(g_s), s	4.8	0.3	0.9	8.9	5.5	6.7
Cycle Q Clear(g_c), s	4.8	0.3	5.7	8.9	5.5	6.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1364	711	663	1353	204	183
V/C Ratio(X)	0.24	0.02	0.04	0.39	0.61	0.73
Avail Cap(c_a), veh/h	1364	711	663	1353	758	680
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.8	3.2	4.8	4.4	35.0	35.5
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.8	3.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	0.1	0.2	4.0	4.5	5.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.3	3.3	4.9	5.2	38.0	41.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	341			552	259	
Approach Delay, s/veh	4.2			5.2	39.6	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		15.9		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+I1), s	6.8		8.7		10.9	
Green Ext Time (p_c), s	1.8		0.8		3.4	
Intersection Summary						
HCM 6th Ctrl Delay			12.6			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2023 Phase 1 Build Condition C
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	489	152	40	796	40	149	105	43	46	180	35
Future Volume (veh/h)	41	489	152	40	796	40	149	105	43	46	180	35
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	1826	1870	1870	1737	1870	1870	1796	1841	1841	1870	1737	1737
Adj Flow Rate, veh/h	43	509	158	42	829	42	155	109	45	48	188	36
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	2	2	11	2	2	7	4	4	2	11	11
Cap, veh/h	188	754	234	296	972	49	284	349	144	355	399	76
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	621	1369	425	715	1765	89	1111	1238	511	1233	1417	271
Grp Volume(v), veh/h	43	0	667	42	0	871	155	0	154	48	0	224
Grp Sat Flow(s),veh/h/ln	621	0	1794	715	0	1854	1111	0	1749	1233	0	1688
Q Serve(g_s), s	4.9	0.0	20.6	3.5	0.0	30.9	10.4	0.0	5.4	2.5	0.0	8.5
Cycle Q Clear(g_c), s	35.8	0.0	20.6	24.1	0.0	30.9	19.0	0.0	5.4	7.9	0.0	8.5
Prop In Lane	1.00		0.24	1.00		0.05	1.00		0.29	1.00		0.16
Lane Grp Cap(c), veh/h	188	0	988	296	0	1022	284	0	493	355	0	476
V/C Ratio(X)	0.23	0.00	0.67	0.14	0.00	0.85	0.55	0.00	0.31	0.14	0.00	0.47
Avail Cap(c_a), veh/h	405	0	1617	547	0	1671	400	0	675	483	0	652
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.9	0.0	12.5	21.1	0.0	14.8	31.0	0.0	22.0	25.1	0.0	23.1
Incr Delay (d2), s/veh	0.6	0.0	0.8	0.2	0.0	2.5	1.6	0.0	0.4	0.2	0.0	0.7
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(95%),veh/ln	1.3	0.0	10.7	1.0	0.0	15.7	4.9	0.0	3.7	1.2	0.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.5	0.0	13.3	21.3	0.0	17.2	32.6	0.0	22.3	25.2	0.0	23.8
LnGrp LOS	C	A	B	C	A	B	C	A	C	C	A	C
Approach Vol, veh/h	710			913			309			272		
Approach Delay, s/veh	14.3			17.4			27.5			24.1		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	49.8			27.9			49.8			27.9		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	37.8			21.0			32.9			10.5		
Green Ext Time (p_c), s	5.0			0.9			7.3			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	18.7											
HCM 6th LOS	B											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2023 Phase 1 Build Condition C
Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	7.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	593	35	42	854	38	39	7	37	28	6	28
Future Vol, veh/h	26	593	35	42	854	38	39	7	37	28	6	28
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	-	-	-	50	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	2	0	4	2	3	0	0	0	4	0	0
Mvmt Flow	27	605	36	43	871	39	40	7	38	29	6	29
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	910	0	0	641	0	0	1671	1673	623	1677	1672	891
Stage 1	-	-	-	-	-	-	677	677	-	977	977	-
Stage 2	-	-	-	-	-	-	994	996	-	700	695	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.1	6.5	6.2	7.14	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Follow-up Hdwy	2.2	-	-	2.236	-	-	3.5	4	3.3	3.536	4	3.3
Pot Cap-1 Maneuver	757	-	-	934	-	-	77	97	490	75	97	344
Stage 1	-	-	-	-	-	-	446	455	-	299	332	-
Stage 2	-	-	-	-	-	-	298	325	-	427	447	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	757	-	-	934	-	-	62	87	490	60	87	344
Mov Cap-2 Maneuver	-	-	-	-	-	-	62	87	-	60	87	-
Stage 1	-	-	-	-	-	-	421	430	-	282	317	-
Stage 2	-	-	-	-	-	-	256	310	-	366	422	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.4			74.1			89		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	62 282		757	-	-	934	-	-	100			
HCM Lane V/C Ratio	0.642 0.159		0.035	-	-	0.046	-	-	0.633			
HCM Control Delay (s)	135 20.2		9.9	0	-	9	-	-	89			
HCM Lane LOS	F C		A	A	-	A	-	-	F			
HCM 95th %tile Q(veh)	2.7 0.6		0.1	-	-	0.1	-	-	3.1			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2023 Phase 1 Build Condition C
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘	↗
Traffic Vol, veh/h	12	0	0	28	26	7
Future Vol, veh/h	12	0	0	28	26	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	4	13	3
Mvmt Flow	13	0	0	29	27	7
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	28	7
Stage 1	-	-	-	-	13	-
Stage 2	-	-	-	-	15	-
Critical Hdwy	-	-	-	-	7.06	6.96
Critical Hdwy Stg 1	-	-	-	-	6.06	-
Critical Hdwy Stg 2	-	-	-	-	6.06	-
Follow-up Hdwy	-	-	-	-	3.63	3.33
Pot Cap-1 Maneuver	-	0	0	-	952	1070
Stage 1	-	0	0	-	977	-
Stage 2	-	0	0	-	974	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	952	1070
Mov Cap-2 Maneuver	-	-	-	-	952	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	974	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.8	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	WBT	
Capacity (veh/h)	952		1070	-	-	
HCM Lane V/C Ratio	0.028		0.007	-	-	
HCM Control Delay (s)	8.9		8.4	-	-	
HCM Lane LOS	A		A	-	-	
HCM 95th %tile Q(veh)	0.1		0	-	-	

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2023 Phase 1 Build Condition C
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	651	7	12	909	25	46
Future Vol, veh/h	651	7	12	909	25	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	4	17	2	4	11
Mvmt Flow	708	8	13	988	27	50
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	708	0	1722	708
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	1014	-
Critical Hdwy	-	-	4.27	-	6.44	6.31
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.353	-	3.536	3.399
Pot Cap-1 Maneuver	-	0	825	-	97	420
Stage 1	-	0	-	-	485	-
Stage 2	-	0	-	-	347	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	825	-	94	420
Mov Cap-2 Maneuver	-	-	-	-	222	-
Stage 1	-	-	-	-	485	-
Stage 2	-	-	-	-	335	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.1		17.8	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	WBL	WBT
Capacity (veh/h)	222		420	-	825	-
HCM Lane V/C Ratio	0.122		0.119	-	0.016	-
HCM Control Delay (s)	23.5		14.7	-	9.4	-
HCM Lane LOS	C		B	-	A	-
HCM 95th %tile Q(veh)	0.4		0.4	-	0	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2023 Phase 1 Build Condition C
Saturday Midday Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↙	↑	↙	↗
Traffic Volume (veh/h)	369	14	9	377	20	24
Future Volume (veh/h)	369	14	9	377	20	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1648	1900	1885	1633	1900
Adj Flow Rate, veh/h	384	15	9	393	21	25
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	17	0	1	18	0
Cap, veh/h	1440	1067	796	1440	100	104
Arrive On Green	0.76	0.76	0.76	0.76	0.06	0.06
Sat Flow, veh/h	1885	1397	1001	1885	1555	1610
Grp Volume(v), veh/h	384	15	9	393	21	25
Grp Sat Flow(s),veh/h/ln	1885	1397	1001	1885	1555	1610
Q Serve(g_s), s	4.7	0.2	0.2	4.9	1.0	1.2
Cycle Q Clear(g_c), s	4.7	0.2	5.0	4.9	1.0	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1440	1067	796	1440	100	104
V/C Ratio(X)	0.27	0.01	0.01	0.27	0.21	0.24
Avail Cap(c_a), veh/h	1440	1067	796	1440	693	717
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.8	2.2	3.5	2.8	34.8	34.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.5	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	0.0	0.1	1.6	0.7	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.2	2.2	3.5	3.2	35.9	36.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	399			402	46	
Approach Delay, s/veh	3.2			3.2	36.0	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		11.6		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		6.7		3.2		7.0
Green Ext Time (p_c), s		2.2		0.1		2.3
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2023 Phase 1 Build Condition C

Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	578	153	38	618	82	123	218	48	50	150	47
Future Volume (veh/h)	51	578	153	38	618	82	123	218	48	50	150	47
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	1841	1885	1885	1811	1885	1885	1781	1870	1870	1900	1841	1841
Adj Flow Rate, veh/h	54	608	161	40	651	86	129	229	51	53	158	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	1	1	6	1	1	8	2	2	0	4	4
Cap, veh/h	290	804	213	261	912	121	280	383	85	238	349	108
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	709	1436	380	677	1631	215	1119	1481	330	1117	1348	418
Grp Volume(v), veh/h	54	0	769	40	0	737	129	0	280	53	0	207
Grp Sat Flow(s),veh/h/ln	709	0	1817	677	0	1846	1119	0	1811	1117	0	1765
Q Serve(g_s), s	4.3	0.0	23.1	3.4	0.0	20.9	7.8	0.0	9.7	3.1	0.0	7.0
Cycle Q Clear(g_c), s	25.2	0.0	23.1	26.5	0.0	20.9	14.9	0.0	9.7	12.8	0.0	7.0
Prop In Lane	1.00		0.21	1.00		0.12	1.00		0.18	1.00		0.24
Lane Grp Cap(c), veh/h	290	0	1016	261	0	1033	280	0	469	238	0	457
V/C Ratio(X)	0.19	0.00	0.76	0.15	0.00	0.71	0.46	0.00	0.60	0.22	0.00	0.45
Avail Cap(c_a), veh/h	588	0	1779	545	0	1808	460	0	760	418	0	741
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	12.0	22.2	0.0	11.5	28.5	0.0	23.2	28.9	0.0	22.3
Incr Delay (d2), s/veh	0.3	0.0	1.2	0.3	0.0	0.9	1.2	0.0	1.2	0.5	0.0	0.7
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(95%),veh/ln	1.2	0.0	11.3	0.9	0.0	10.5	3.6	0.0	6.9	1.4	0.0	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	0.0	13.2	22.4	0.0	12.5	29.7	0.0	24.5	29.3	0.0	23.0
LnGrp LOS	C	A	B	C	A	B	C	A	C	C	A	C
Approach Vol, veh/h	823			777			409			260		
Approach Delay, s/veh	13.7			13.0			26.1			24.3		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	47.0			24.5			47.0			24.5		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	27.2			16.9			28.5			14.8		
Green Ext Time (p_c), s	6.3			1.6			5.7			1.1		
Intersection Summary												
HCM 6th Ctrl Delay	16.9											
HCM 6th LOS	B											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2023 Phase 1 Build Condition C
Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	7.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕		↕	↕	
Traffic Vol, veh/h	40	650	42	44	662	30	37	7	41	29	3	36
Future Vol, veh/h	40	650	42	44	662	30	37	7	41	29	3	36
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	-	-	-	50	-	-	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, %	5	1	0	0	2	5	0	0	0	8	0	0
Mvmt Flow	43	691	45	47	704	32	39	7	44	31	3	38
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	736	0	0	736	0	0	1635	1630	714	1639	1636	720
Stage 1	-	-	-	-	-	-	800	800	-	814	814	-
Stage 2	-	-	-	-	-	-	835	830	-	825	822	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.18	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.572	4	3.3
Pot Cap-1 Maneuver	856	-	-	879	-	-	82	103	435	78	102	431
Stage 1	-	-	-	-	-	-	382	400	-	363	394	-
Stage 2	-	-	-	-	-	-	365	388	-	358	391	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	856	-	-	879	-	-	65	89	435	59	88	431
Mov Cap-2 Maneuver	-	-	-	-	-	-	65	89	-	59	88	-
Stage 1	-	-	-	-	-	-	349	366	-	332	373	-
Stage 2	-	-	-	-	-	-	312	367	-	288	357	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.6			65.4			82.7		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	65	278	856	-	-	879	-	-	112			
HCM Lane V/C Ratio	0.606	0.184	0.05	-	-	0.053	-	-	0.646			
HCM Control Delay (s)	123.2	20.8	9.4	0	-	9.3	-	-	82.7			
HCM Lane LOS	F	C	A	A	-	A	-	-	F			
HCM 95th %tile Q(veh)	2.6	0.7	0.2	-	-	0.2	-	-	3.3			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2023 Phase 1 Build Condition C
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	5.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	144	0	0	353	190	292
Future Vol, veh/h	144	0	0	353	190	292
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	3	2
Mvmt Flow	148	0	0	364	196	301
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	330	74
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	182	-
Critical Hdwy	-	-	-	-	6.86	6.94
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	-	-	-	-	3.53	3.32
Pot Cap-1 Maneuver	-	0	0	-	637	973
Stage 1	-	0	0	-	861	-
Stage 2	-	0	0	-	828	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	637	973
Mov Cap-2 Maneuver	-	-	-	-	637	-
Stage 1	-	-	-	-	861	-
Stage 2	-	-	-	-	828	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		11.4	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBT
Capacity (veh/h)	637		973		-	-
HCM Lane V/C Ratio	0.307		0.309		-	-
HCM Control Delay (s)	13.1		10.3		-	-
HCM Lane LOS	B		B		-	-
HCM 95th %tile O(veh)	1.3		1.3		-	-

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2023 Phase 1 Build Condition C
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	709	11	21	713	23	44
Future Vol, veh/h	709	11	21	713	23	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	9	14	2	4	11
Mvmt Flow	771	12	23	775	25	48
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	771	0	1592	771
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	821	-
Critical Hdwy	-	-	4.24	-	6.44	6.31
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.326	-	3.536	3.399
Pot Cap-1 Maneuver	-	0	793	-	117	386
Stage 1	-	0	-	-	453	-
Stage 2	-	0	-	-	429	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	793	-	111	386
Mov Cap-2 Maneuver	-	-	-	-	246	-
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	407	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0.3		17.6		
HCM LOS				C		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	246	386	-	793	-	
HCM Lane V/C Ratio	0.102	0.124	-	0.029	-	
HCM Control Delay (s)	21.3	15.6	-	9.7	-	
HCM Lane LOS	C	C	-	A	-	
HCM 95th %tile Q(veh)	0.3	0.4	-	0.1	-	

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 No-Build Condition A

Weekday AM Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	386	61	44	222	36	21
Future Volume (veh/h)	386	61	44	222	36	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1722	1678	1767	1278	1248
Adj Flow Rate, veh/h	434	69	49	249	40	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	7	12	15	9	42	44
Cap, veh/h	1355	1101	633	1332	93	80
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1796	1459	803	1767	1217	1058
Grp Volume(v), veh/h	434	69	49	249	40	24
Grp Sat Flow(s),veh/h/ln	1796	1459	803	1767	1217	1058
Q Serve(g_s), s	6.2	1.0	1.7	3.2	2.5	1.7
Cycle Q Clear(g_c), s	6.2	1.0	7.9	3.2	2.5	1.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1355	1101	633	1332	93	80
V/C Ratio(X)	0.32	0.06	0.08	0.19	0.43	0.30
Avail Cap(c_a), veh/h	1355	1101	633	1332	535	465
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.2	2.5	4.5	2.8	35.1	34.7
Incr Delay (d2), s/veh	0.6	0.1	0.2	0.3	3.2	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	0.3	0.4	1.1	1.5	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.8	2.6	4.7	3.1	38.3	36.8
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	503			298	64	
Approach Delay, s/veh	3.6			3.4	37.7	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		12.6		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+I1), s	8.2		4.5		9.9	
Green Ext Time (p_c), s	2.8		0.2		1.7	
Intersection Summary						
HCM 6th Ctrl Delay			6.1			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 No-Build Condition A

Weekday AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔			↔	
Traffic Volume (veh/h)	15	764	17	36	351	17	10	1	5	19	10	44
Future Volume (veh/h)	15	764	17	36	351	17	10	1	5	19	10	44
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	1811	1811	1811	1752	1693	1693	1693	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	16	813	18	38	373	18	11	1	5	20	11	47
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	6	6	6	10	14	14	14	0	0	0	0	0
Cap, veh/h	53	1321	29	498	1215	59	203	23	115	77	30	82
Arrive On Green	0.76	0.76	0.76	0.76	0.76	0.76	0.08	0.08	0.08	0.08	0.08	0.08
Sat Flow, veh/h	14	1741	38	618	1601	77	1217	275	1377	284	364	982
Grp Volume(v), veh/h	847	0	0	38	0	391	11	0	6	78	0	0
Grp Sat Flow(s),veh/h/ln	1792	0	0	618	0	1679	1217	0	1652	1630	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0	0.3	1.7	0.0	0.0
Cycle Q Clear(g_c), s	18.3	0.0	0.0	2.5	0.0	6.3	0.5	0.0	0.3	3.9	0.0	0.0
Prop In Lane	0.02		0.02	1.00		0.05	1.00		0.83	0.26		0.60
Lane Grp Cap(c), veh/h	1403	0	0	498	0	1274	203	0	138	189	0	0
V/C Ratio(X)	0.60	0.00	0.00	0.08	0.00	0.31	0.05	0.00	0.04	0.41	0.00	0.00
Avail Cap(c_a), veh/h	1403	0	0	498	0	1274	549	0	608	642	0	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	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.7	0.0	0.0	2.8	0.0	3.2	36.2	0.0	36.1	37.7	0.0	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.0	0.3	0.0	0.6	0.1	0.0	0.1	1.4	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(95%),veh/ln	6.9	0.0	0.0	0.2	0.0	2.2	0.4	0.0	0.2	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.6	0.0	0.0	3.1	0.0	3.9	36.3	0.0	36.2	39.1	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	A
Approach Vol, veh/h		847			429			17			78	
Approach Delay, s/veh		6.6			3.8			36.3			39.1	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		72.0		13.7		72.0		13.7				
Change Period (Y+Rc), s		7.0		6.5		7.0		6.5				
Max Green Setting (Gmax), s		65.0		31.5		65.0		31.5				
Max Q Clear Time (g_c+I1), s		20.3		2.5		8.3		5.9				
Green Ext Time (p_c), s		6.7		0.0		2.7		0.3				
Intersection Summary												
HCM 6th Ctrl Delay				8.0								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary 8: Edwards Avenue & Middle Country Road

2025 Phase 2 No-Build Condition A
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	662	188	38	283	27	138	137	30	43	183	37
Future Volume (veh/h)	23	662	188	38	283	27	138	137	30	43	183	37
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			
Adj Sat Flow, veh/h/ln	1737	1796	1796	1411	1693	1693	1737	1678	1678	1767	1826	1826
Adj Flow Rate, veh/h	26	761	216	44	325	31	159	157	34	49	210	43
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	7	7	33	14	14	11	15	15	9	5	5
Cap, veh/h	553	831	236	116	939	90	216	357	77	255	393	80
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	952	1346	382	434	1521	145	1046	1336	289	1126	1471	301
Grp Volume(v), veh/h	26	0	977	44	0	356	159	0	191	49	0	253
Grp Sat Flow(s),veh/h/ln	952	0	1728	434	0	1666	1046	0	1626	1126	0	1772
Q Serve(g_s), s	1.5	0.0	56.0	11.2	0.0	11.7	16.3	0.0	11.0	4.2	0.0	13.7
Cycle Q Clear(g_c), s	13.2	0.0	56.0	67.1	0.0	11.7	30.0	0.0	11.0	15.2	0.0	13.7
Prop In Lane	1.00		0.22	1.00		0.09	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	553	0	1066	116	0	1029	216	0	434	255	0	473
V/C Ratio(X)	0.05	0.00	0.92	0.38	0.00	0.35	0.74	0.00	0.44	0.19	0.00	0.53
Avail Cap(c_a), veh/h	558	0	1076	118	0	1038	216	0	434	255	0	473
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.7	0.0	18.9	48.5	0.0	10.5	48.4	0.0	34.2	40.5	0.0	35.2
Incr Delay (d2), s/veh	0.0	0.0	12.0	2.0	0.0	0.2	12.5	0.0	0.7	0.4	0.0	1.2
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(95%),veh/ln	0.6	0.0	29.5	2.2	0.0	6.7	8.8	0.0	7.6	2.1	0.0	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	0.0	30.9	50.6	0.0	10.7	60.9	0.0	34.9	40.9	0.0	36.4
LnGrp LOS	B	A	C	D	A	B	E	A	C	D	A	D
Approach Vol, veh/h	1003				400				350			
Approach Delay, s/veh	30.5				15.1				46.7			
Approach LOS	C				B				D			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	76.4			36.0			76.4			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	58.0			32.0			69.1			17.2		
Green Ext Time (p_c), s	5.5			0.0			0.2			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	31.2											
HCM 6th LOS	C											

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 No-Build Condition A
Weekday AM Peak Hour

Intersection

Int Delay, s/veh 4.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	43	0	0	44	71	14
Future Vol, veh/h	43	0	0	44	71	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	0	0	9	12	4
Mvmt Flow	47	0	0	48	77	15

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	-	71 24
Stage 1	-	-	-	-	47 -
Stage 2	-	-	-	-	24 -
Critical Hdwy	-	-	-	-	7.04 6.98
Critical Hdwy Stg 1	-	-	-	-	6.04 -
Critical Hdwy Stg 2	-	-	-	-	6.04 -
Follow-up Hdwy	-	-	-	-	3.62 3.34
Pot Cap-1 Maneuver	-	0	0	-	897 1040
Stage 1	-	0	0	-	941 -
Stage 2	-	0	0	-	967 -
Platoon blocked, %	-			-	
Mov Cap-1 Maneuver	-	-	-	-	897 1040
Mov Cap-2 Maneuver	-	-	-	-	897 -
Stage 1	-	-	-	-	941 -
Stage 2	-	-	-	-	967 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	897	1040	-	-
HCM Lane V/C Ratio	0.086	0.015	-	-
HCM Control Delay (s)	9.4	8.5	-	-
HCM Lane LOS	A	A	-	-
HCM 95th %tile Q(veh)	0.3	0	-	-

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 No-Build Condition A
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	771	17	22	402	2	12
Future Vol, veh/h	771	17	22	402	2	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	6	0	14	0	42
Mvmt Flow	838	18	24	437	2	13
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	838	0	1323	838
Stage 1	-	-	-	-	838	-
Stage 2	-	-	-	-	485	-
Critical Hdwy	-	-	4.1	-	6.4	6.62
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.678
Pot Cap-1 Maneuver	-	0	805	-	174	312
Stage 1	-	0	-	-	428	-
Stage 2	-	0	-	-	623	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	805	-	167	312
Mov Cap-2 Maneuver	-	-	-	-	301	-
Stage 1	-	-	-	-	428	-
Stage 2	-	-	-	-	599	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0.5		17		
HCM LOS				C		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	301	312	-	805	-	
HCM Lane V/C Ratio	0.007	0.042	-	0.03	-	
HCM Control Delay (s)	17	17	-	9.6	-	
HCM Lane LOS	C	C	-	A	-	
HCM 95th %tile Q(veh)	0	0.1	-	0.1	-	

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 No-Build Condition A

Weekday PM Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↶	↷	↑	↶	↷
Traffic Volume (veh/h)	307	13	26	493	117	125
Future Volume (veh/h)	307	13	26	493	117	125
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1159	1559	1870	1885	1900
Adj Flow Rate, veh/h	334	14	28	536	127	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	50	23	2	1	0
Cap, veh/h	1362	710	657	1351	207	185
Arrive On Green	0.72	0.72	0.72	0.72	0.12	0.12
Sat Flow, veh/h	1885	982	861	1870	1795	1610
Grp Volume(v), veh/h	334	14	28	536	127	136
Grp Sat Flow(s),veh/h/ln	1885	982	861	1870	1795	1610
Q Serve(g_s), s	5.0	0.3	0.9	9.3	5.6	6.8
Cycle Q Clear(g_c), s	5.0	0.3	5.9	9.3	5.6	6.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1362	710	657	1351	207	185
V/C Ratio(X)	0.25	0.02	0.04	0.40	0.61	0.73
Avail Cap(c_a), veh/h	1362	710	657	1351	757	679
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.9	3.2	4.9	4.5	35.0	35.5
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.9	3.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.1	0.2	4.1	4.6	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.3	3.3	5.0	5.4	38.0	41.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	348			564	263	
Approach Delay, s/veh	4.3			5.3	39.6	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		16.1		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+I1), s	7.0		8.8		11.3	
Green Ext Time (p_c), s	1.9		0.8		3.5	
Intersection Summary						
HCM 6th Ctrl Delay			12.7			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary

4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 No-Build Condition A

Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	605	35	49	862	31	48	15	37	27	8	29
Future Volume (veh/h)	27	605	35	49	862	31	48	15	37	27	8	29
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	1870	1870	1767	1870	1870	1856	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	28	617	36	50	880	32	49	15	38	28	8	30
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	9	2	2	3	0	0	0	0	0
Cap, veh/h	72	1222	70	603	1329	48	233	45	115	105	36	66
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	36	1650	94	736	1793	65	1359	476	1207	447	383	692
Grp Volume(v), veh/h	681	0	0	50	0	912	49	0	53	66	0	0
Grp Sat Flow(s),veh/h/ln	1780	0	0	736	0	1859	1359	0	1683	1522	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	20.5	0.0	0.0	2.4	1.0	0.0	0.0
Cycle Q Clear(g_c), s	12.4	0.0	0.0	2.2	0.0	20.5	2.1	0.0	2.4	3.4	0.0	0.0
Prop In Lane	0.04		0.05	1.00		0.04	1.00		0.72	0.42		0.45
Lane Grp Cap(c), veh/h	1364	0	0	603	0	1377	233	0	160	207	0	0
V/C Ratio(X)	0.50	0.00	0.00	0.08	0.00	0.66	0.21	0.00	0.33	0.32	0.00	0.00
Avail Cap(c_a), veh/h	1364	0	0	603	0	1377	690	0	726	720	0	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	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.4	0.0	0.0	3.0	0.0	5.4	34.7	0.0	34.8	35.1	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.3	0.0	2.5	0.4	0.0	1.2	0.9	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(95%),veh/ln	5.0	0.0	0.0	0.3	0.0	8.4	1.7	0.0	1.8	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.7	0.0	0.0	3.3	0.0	7.9	35.1	0.0	36.0	36.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	A
Approach Vol, veh/h	681			962			102			66		
Approach Delay, s/veh	5.7			7.7			35.6			36.0		
Approach LOS	A			A			D			D		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	68.0			14.3			68.0			14.3		
Change Period (Y+Rc), s	7.0			6.5			7.0			6.5		
Max Green Setting (Gmax), s	61.0			35.5			61.0			35.5		
Max Q Clear Time (g_c+l1), s	14.4			4.4			22.5			5.4		
Green Ext Time (p_c), s	5.0			0.4			8.0			0.3		
Intersection Summary												
HCM 6th Ctrl Delay	9.5											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary 8: Edwards Avenue & Middle Country Road

2025 Phase 2 No-Build Condition A
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	499	155	41	812	41	152	107	44	47	184	36
Future Volume (veh/h)	42	499	155	41	812	41	152	107	44	47	184	36
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			
Adj Sat Flow, veh/h/ln	1826	1870	1870	1737	1870	1870	1796	1841	1841	1870	1737	1737
Adj Flow Rate, veh/h	44	520	161	43	846	43	158	111	46	49	192	38
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	2	2	11	2	2	7	4	4	2	11	11
Cap, veh/h	179	765	237	290	985	50	277	352	146	351	401	79
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	610	1370	424	705	1765	90	1105	1236	512	1230	1408	279
Grp Volume(v), veh/h	44	0	681	43	0	889	158	0	157	49	0	230
Grp Sat Flow(s),veh/h/ln	610	0	1794	705	0	1854	1105	0	1749	1230	0	1687
Q Serve(g_s), s	5.5	0.0	22.4	3.8	0.0	33.7	11.4	0.0	5.8	2.7	0.0	9.4
Cycle Q Clear(g_c), s	39.2	0.0	22.4	26.2	0.0	33.7	20.8	0.0	5.8	8.5	0.0	9.4
Prop In Lane	1.00		0.24	1.00		0.05	1.00		0.29	1.00		0.17
Lane Grp Cap(c), veh/h	179	0	1001	290	0	1035	277	0	498	351	0	481
V/C Ratio(X)	0.25	0.00	0.68	0.15	0.00	0.86	0.57	0.00	0.32	0.14	0.00	0.48
Avail Cap(c_a), veh/h	354	0	1516	492	0	1566	362	0	633	445	0	611
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.2	0.0	13.0	22.4	0.0	15.5	33.1	0.0	23.3	26.6	0.0	24.5
Incr Delay (d2), s/veh	0.7	0.0	0.8	0.2	0.0	3.2	1.8	0.0	0.4	0.2	0.0	0.7
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(95%),veh/ln	1.4	0.0	11.7	1.1	0.0	17.5	5.4	0.0	4.1	1.4	0.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	0.0	13.9	22.6	0.0	18.8	35.0	0.0	23.6	26.8	0.0	25.3
LnGrp LOS	C	A	B	C	A	B	C	A	C	C	A	C
Approach Vol, veh/h	725				932				315			
Approach Delay, s/veh	15.0				19.0				29.3			
Approach LOS	B				B				C			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	53.2			29.6			53.2			29.6		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+l1), s	41.2			22.8			35.7			11.4		
Green Ext Time (p_c), s	5.1			0.8			7.4			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	20.0											
HCM 6th LOS	B											

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 No-Build Condition A
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	12	0	0	29	27	7
Future Vol, veh/h	12	0	0	29	27	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	4	13	3
Mvmt Flow	13	0	0	30	28	7
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	28	7
Stage 1	-	-	-	-	13	-
Stage 2	-	-	-	-	15	-
Critical Hdwy	-	-	-	-	7.06	6.96
Critical Hdwy Stg 1	-	-	-	-	6.06	-
Critical Hdwy Stg 2	-	-	-	-	6.06	-
Follow-up Hdwy	-	-	-	-	3.63	3.33
Pot Cap-1 Maneuver	-	0	0	-	952	1070
Stage 1	-	0	0	-	977	-
Stage 2	-	0	0	-	974	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	952	1070
Mov Cap-2 Maneuver	-	-	-	-	952	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	974	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.8	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	WBT	
Capacity (veh/h)	952		1070	-	-	
HCM Lane V/C Ratio	0.03		0.007	-	-	
HCM Control Delay (s)	8.9		8.4	-	-	
HCM Lane LOS	A		A	-	-	
HCM 95th %tile Q(veh)	0.1		0	-	-	

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 No-Build Condition A
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	664	5	5	934	8	46
Future Vol, veh/h	664	5	5	934	8	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	20	0	2	0	11
Mvmt Flow	722	5	5	1015	9	50
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	-	722	0	1747	722
Stage 1	-	-	-	-	722	-
Stage 2	-	-	-	-	1025	-
Critical Hdwy	-	-	4.1	-	6.4	6.31
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.399
Pot Cap-1 Maneuver	-	0	889	-	96	412
Stage 1	-	0	-	-	485	-
Stage 2	-	0	-	-	349	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	889	-	95	412
Mov Cap-2 Maneuver	-	-	-	-	225	-
Stage 1	-	-	-	-	485	-
Stage 2	-	-	-	-	344	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		15.9		
HCM LOS				C		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	225	412	-	889	-	
HCM Lane V/C Ratio	0.039	0.121	-	0.006	-	
HCM Control Delay (s)	21.6	14.9	-	9.1	-	
HCM Lane LOS	C	B	-	A	-	
HCM 95th %tile Q(veh)	0.1	0.4	-	0	-	

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 No-Build Condition A

Saturday Midday Peak Hour

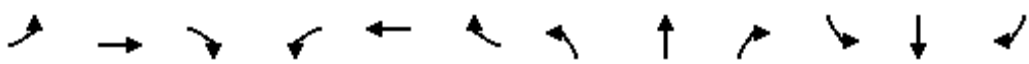
						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	376	14	9	385	20	24
Future Volume (veh/h)	376	14	9	385	20	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1648	1900	1885	1633	1900
Adj Flow Rate, veh/h	392	15	9	401	21	25
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	17	0	1	18	0
Cap, veh/h	1440	1067	789	1440	100	104
Arrive On Green	0.76	0.76	0.76	0.76	0.06	0.06
Sat Flow, veh/h	1885	1397	994	1885	1555	1610
Grp Volume(v), veh/h	392	15	9	401	21	25
Grp Sat Flow(s),veh/h/ln	1885	1397	994	1885	1555	1610
Q Serve(g_s), s	4.9	0.2	0.2	5.0	1.0	1.2
Cycle Q Clear(g_c), s	4.9	0.2	5.1	5.0	1.0	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1440	1067	789	1440	100	104
V/C Ratio(X)	0.27	0.01	0.01	0.28	0.21	0.24
Avail Cap(c_a), veh/h	1440	1067	789	1440	693	717
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.8	2.2	3.5	2.8	34.8	34.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.5	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	0.1	1.6	0.7	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.2	2.2	3.6	3.3	35.9	36.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	407			410	46	
Approach Delay, s/veh	3.2			3.3	36.0	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		11.6		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+I1), s	6.9		3.2		7.1	
Green Ext Time (p_c), s	2.3		0.1		2.3	
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 No-Build Condition A

Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔			↔	
Traffic Volume (veh/h)	41	663	42	56	667	22	45	15	41	26	7	37
Future Volume (veh/h)	41	663	42	56	667	22	45	15	41	26	7	37
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	1885	1885	1885	1826	1870	1870	1841	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	44	705	45	60	710	23	48	16	44	28	7	39
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	5	2	2	4	0	0	0	0	0
Cap, veh/h	89	1197	74	556	1334	43	231	43	118	96	30	73
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	58	1616	101	695	1801	58	1338	448	1231	375	314	768
Grp Volume(v), veh/h	794	0	0	60	0	733	48	0	60	74	0	0
Grp Sat Flow(s),veh/h/ln	1775	0	0	695	0	1860	1338	0	1678	1457	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	13.9	0.0	0.0	2.8	1.4	0.0	0.0
Cycle Q Clear(g_c), s	15.8	0.0	0.0	3.2	0.0	13.9	2.2	0.0	2.8	4.2	0.0	0.0
Prop In Lane	0.06		0.06	1.00		0.03	1.00		0.73	0.38		0.53
Lane Grp Cap(c), veh/h	1360	0	0	556	0	1377	231	0	160	200	0	0
V/C Ratio(X)	0.58	0.00	0.00	0.11	0.00	0.53	0.21	0.00	0.37	0.37	0.00	0.00
Avail Cap(c_a), veh/h	1360	0	0	556	0	1377	680	0	723	712	0	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	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.8	0.0	0.0	3.2	0.0	4.6	34.7	0.0	34.9	35.4	0.0	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	0.4	0.0	1.5	0.4	0.0	1.4	1.1	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(95%),veh/ln	6.6	0.0	0.0	0.4	0.0	5.7	1.6	0.0	2.1	2.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.7	0.0	0.0	3.6	0.0	6.1	35.1	0.0	36.4	36.6	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	A
Approach Vol, veh/h		794			793			108			74	
Approach Delay, s/veh		6.7			5.9			35.8			36.6	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.0		14.4		68.0		14.4				
Change Period (Y+Rc), s		7.0		6.5		7.0		6.5				
Max Green Setting (Gmax), s		61.0		35.5		61.0		35.5				
Max Q Clear Time (g_c+I1), s		17.8		4.8		15.9		6.2				
Green Ext Time (p_c), s		6.3		0.5		5.8		0.3				
Intersection Summary												
HCM 6th Ctrl Delay			9.3									
HCM 6th LOS			A									

HCM 6th Signalized Intersection Summary 8: Edwards Avenue & Middle Country Road

2025 Phase 2 No-Build Condition A
Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	590	156	39	630	84	125	222	49	51	153	48
Future Volume (veh/h)	52	590	156	39	630	84	125	222	49	51	153	48
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			
Adj Sat Flow, veh/h/ln	1841	1885	1885	1811	1885	1885	1781	1870	1870	1900	1841	1841
Adj Flow Rate, veh/h	55	621	164	41	663	88	132	234	52	54	161	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	1	1	6	1	1	8	2	2	0	4	4
Cap, veh/h	276	799	211	245	906	120	282	391	87	240	353	112
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	700	1437	380	667	1630	216	1114	1482	329	1110	1340	424
Grp Volume(v), veh/h	55	0	785	41	0	751	132	0	286	54	0	212
Grp Sat Flow(s),veh/h/ln	700	0	1817	667	0	1846	1114	0	1811	1110	0	1764
Q Serve(g_s), s	4.6	0.0	24.3	3.7	0.0	21.9	8.1	0.0	9.9	3.2	0.0	7.2
Cycle Q Clear(g_c), s	26.5	0.0	24.3	28.0	0.0	21.9	15.3	0.0	9.9	13.2	0.0	7.2
Prop In Lane	1.00		0.21	1.00		0.12	1.00		0.18	1.00		0.24
Lane Grp Cap(c), veh/h	276	0	1009	245	0	1026	282	0	478	240	0	465
V/C Ratio(X)	0.20	0.00	0.78	0.17	0.00	0.73	0.47	0.00	0.60	0.23	0.00	0.46
Avail Cap(c_a), veh/h	568	0	1767	523	0	1795	452	0	755	409	0	735
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.9	0.0	12.5	23.5	0.0	12.0	28.6	0.0	23.2	28.9	0.0	22.2
Incr Delay (d2), s/veh	0.4	0.0	1.3	0.3	0.0	1.0	1.2	0.0	1.2	0.5	0.0	0.7
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(95%),veh/ln	1.3	0.0	11.9	1.0	0.0	11.0	3.7	0.0	7.1	1.5	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	0.0	13.8	23.8	0.0	13.0	29.8	0.0	24.4	29.4	0.0	22.9
LnGrp LOS	C	A	B	C	A	B	C	A	C	C	A	C
Approach Vol, veh/h	840				792				418			
Approach Delay, s/veh	14.4				13.6				26.1			
Approach LOS	B				B				C			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	47.0			25.0			47.0			25.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	28.5			17.3			30.0			15.2		
Green Ext Time (p_c), s	6.5			1.7			5.9			1.1		
Intersection Summary												
HCM 6th Ctrl Delay	17.3											
HCM 6th LOS	B											

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 No-Build Condition A
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	5.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘	↗
Traffic Vol, veh/h	147	0	0	360	194	298
Future Vol, veh/h	147	0	0	360	194	298
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	3	2
Mvmt Flow	152	0	0	371	200	307
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	338	76
Stage 1	-	-	-	-	152	-
Stage 2	-	-	-	-	186	-
Critical Hdwy	-	-	-	-	6.86	6.94
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	-	-	-	-	3.53	3.32
Pot Cap-1 Maneuver	-	0	0	-	629	970
Stage 1	-	0	0	-	857	-
Stage 2	-	0	0	-	824	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	629	970
Mov Cap-2 Maneuver	-	-	-	-	629	-
Stage 1	-	-	-	-	857	-
Stage 2	-	-	-	-	824	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		11.6	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBT
Capacity (veh/h)	629		970		-	-
HCM Lane V/C Ratio	0.318		0.317		-	-
HCM Control Delay (s)	13.4		10.4		-	-
HCM Lane LOS	B		B		-	-
HCM 95th %tile Q(veh)	1.4		1.4		-	-

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 No-Build Condition A
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↰	↱
Traffic Vol, veh/h	723	7	9	738	7	44
Future Vol, veh/h	723	7	9	738	7	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	14	0	2	0	11
Mvmt Flow	786	8	10	802	8	48
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	-	786	0	1608	786
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	822	-
Critical Hdwy	-	-	4.1	-	6.4	6.31
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.399
Pot Cap-1 Maneuver	-	0	842	-	117	378
Stage 1	-	0	-	-	453	-
Stage 2	-	0	-	-	435	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	842	-	115	378
Mov Cap-2 Maneuver	-	-	-	-	253	-
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	426	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0.1		16.4		
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	253	378	-	842	-	
HCM Lane V/C Ratio	0.03	0.127	-	0.012	-	
HCM Control Delay (s)	19.7	15.9	-	9.3	-	
HCM Lane LOS	C	C	-	A	-	
HCM 95th %tile Q(veh)	0.1	0.4	-	0	-	

HCM 6th Signalized Intersection Summary 3: Burman Boulevard & Middle Country Road

2025 Phase 2 No-Build Condition B
Weekday AM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Volume (veh/h)	386	61	44	222	36	21
Future Volume (veh/h)	386	61	44	222	36	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1722	1678	1767	1278	1248
Adj Flow Rate, veh/h	434	69	49	249	40	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	7	12	15	9	42	44
Cap, veh/h	1355	1101	633	1332	93	80
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1796	1459	803	1767	1217	1058
Grp Volume(v), veh/h	434	69	49	249	40	24
Grp Sat Flow(s),veh/h/ln	1796	1459	803	1767	1217	1058
Q Serve(g_s), s	6.2	1.0	1.7	3.2	2.5	1.7
Cycle Q Clear(g_c), s	6.2	1.0	7.9	3.2	2.5	1.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1355	1101	633	1332	93	80
V/C Ratio(X)	0.32	0.06	0.08	0.19	0.43	0.30
Avail Cap(c_a), veh/h	1355	1101	633	1332	535	465
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.2	2.5	4.5	2.8	35.1	34.7
Incr Delay (d2), s/veh	0.6	0.1	0.2	0.3	3.2	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	0.3	0.4	1.1	1.5	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.8	2.6	4.7	3.1	38.3	36.8
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	503			298	64	
Approach Delay, s/veh	3.6			3.4	37.7	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		12.6		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+I1), s	8.2		4.5		9.9	
Green Ext Time (p_c), s	2.8		0.2		1.7	
Intersection Summary						
HCM 6th Ctrl Delay			6.1			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary 8: Edwards Avenue & Middle Country Road

2025 Phase 2 No-Build Condition B
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	662	188	38	283	27	138	137	30	43	183	37
Future Volume (veh/h)	23	662	188	38	283	27	138	137	30	43	183	37
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	1737	1796	1796	1411	1693	1693	1737	1678	1678	1767	1826	1826
Adj Flow Rate, veh/h	26	761	216	44	325	31	159	157	34	49	210	43
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	7	7	33	14	14	11	15	15	9	5	5
Cap, veh/h	553	831	236	116	939	90	216	357	77	255	393	80
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	952	1346	382	434	1521	145	1046	1336	289	1126	1471	301
Grp Volume(v), veh/h	26	0	977	44	0	356	159	0	191	49	0	253
Grp Sat Flow(s),veh/h/ln	952	0	1728	434	0	1666	1046	0	1626	1126	0	1772
Q Serve(g_s), s	1.5	0.0	56.0	11.2	0.0	11.7	16.3	0.0	11.0	4.2	0.0	13.7
Cycle Q Clear(g_c), s	13.2	0.0	56.0	67.1	0.0	11.7	30.0	0.0	11.0	15.2	0.0	13.7
Prop In Lane	1.00		0.22	1.00		0.09	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	553	0	1066	116	0	1029	216	0	434	255	0	473
V/C Ratio(X)	0.05	0.00	0.92	0.38	0.00	0.35	0.74	0.00	0.44	0.19	0.00	0.53
Avail Cap(c_a), veh/h	558	0	1076	118	0	1038	216	0	434	255	0	473
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.7	0.0	18.9	48.5	0.0	10.5	48.4	0.0	34.2	40.5	0.0	35.2
Incr Delay (d2), s/veh	0.0	0.0	12.0	2.0	0.0	0.2	12.5	0.0	0.7	0.4	0.0	1.2
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(95%),veh/ln	0.6	0.0	29.5	2.2	0.0	6.7	8.8	0.0	7.6	2.1	0.0	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	0.0	30.9	50.6	0.0	10.7	60.9	0.0	34.9	40.9	0.0	36.4
LnGrp LOS	B	A	C	D	A	B	E	A	C	D	A	D
Approach Vol, veh/h	1003			400			350			302		
Approach Delay, s/veh	30.5			15.1			46.7			37.1		
Approach LOS	C			B			D			D		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	76.4			36.0			76.4			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	58.0			32.0			69.1			17.2		
Green Ext Time (p_c), s	5.5			0.0			0.2			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	31.2											
HCM 6th LOS	C											

HCM 6th Signalized Intersection Summary
17: Site Driveway & Middle Country Road

2025 Phase 2 No-Build Condition B
Weekday AM Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	772	26	47	377	5	12
Future Volume (veh/h)	772	26	47	377	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1811	1811	1693	1693	1604	1278
Adj Flow Rate, veh/h	839	28	51	410	5	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	14	14	20	42
Cap, veh/h	1371	46	143	1070	51	36
Arrive On Green	0.79	0.79	0.79	0.79	0.03	0.03
Sat Flow, veh/h	1742	58	114	1360	1527	1083
Grp Volume(v), veh/h	0	867	461	0	5	13
Grp Sat Flow(s),veh/h/ln	0	1801	1473	0	1527	1083
Q Serve(g_s), s	0.0	14.9	0.0	0.0	0.2	0.9
Cycle Q Clear(g_c), s	0.0	14.9	6.0	0.0	0.2	0.9
Prop In Lane		0.03	0.11		1.00	1.00
Lane Grp Cap(c), veh/h	0	1416	1212	0	51	36
V/C Ratio(X)	0.00	0.61	0.38	0.00	0.10	0.36
Avail Cap(c_a), veh/h	0	1416	1212	0	733	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	3.3	2.3	0.0	35.2	35.5
Incr Delay (d2), s/veh	0.0	2.0	0.9	0.0	0.8	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	3.4	1.3	0.0	0.2	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	5.3	3.3	0.0	36.0	41.4
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	867			461	18	
Approach Delay, s/veh	5.3			3.3	39.9	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		66.0		9.0		66.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		59.0		36.0		59.0
Max Q Clear Time (g_c+I1), s		16.9		2.9		8.0
Green Ext Time (p_c), s		6.9		0.0		3.2
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 No-Build Condition B
Weekday AM Peak Hour

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	15	764	17	11	353	18	8	0	5	29	1	44
Future Vol, veh/h	15	764	17	11	353	18	8	0	5	29	1	44
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	-	-	-	-	-	-	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, %	0	6	10	20	14	14	0	0	50	0	0	0
Mvmt Flow	16	813	18	12	376	19	9	0	5	31	1	47
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	395	0	0	831	0	0	1288	1273	822	1267	1273	386
Stage 1	-	-	-	-	-	-	854	854	-	410	410	-
Stage 2	-	-	-	-	-	-	434	419	-	857	863	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.5	6.7	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4	3.75	3.5	4	3.3
Pot Cap-1 Maneuver	1175	-	-	729	-	-	142	169	309	147	169	666
Stage 1	-	-	-	-	-	-	356	378	-	623	599	-
Stage 2	-	-	-	-	-	-	604	593	-	355	374	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1175	-	-	729	-	-	127	161	309	140	161	666
Mov Cap-2 Maneuver	-	-	-	-	-	-	127	161	-	140	161	-
Stage 1	-	-	-	-	-	-	347	369	-	607	586	-
Stage 2	-	-	-	-	-	-	549	581	-	340	365	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.3			28.3			24.2		
HCM LOS							D			C		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	127		309	1175	-	-	729	-	-	265		
HCM Lane V/C Ratio	0.067		0.017	0.014	-	-	0.016	-	-	0.297		
HCM Control Delay (s)	35.4		16.9	8.1	0	-	10	0	-	24.2		
HCM Lane LOS	E		C	A	A	-	B	A	-	C		
HCM 95th %tile Q(veh)	0.2		0.1	0	-	-	0	-	-	1.2		

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 No-Build Condition B
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	4.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↱	↱
Traffic Vol, veh/h	43	0	0	44	71	14
Future Vol, veh/h	43	0	0	44	71	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	0	0	9	12	4
Mvmt Flow	47	0	0	48	77	15
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	71	24
Stage 1	-	-	-	-	47	-
Stage 2	-	-	-	-	24	-
Critical Hdwy	-	-	-	-	7.04	6.98
Critical Hdwy Stg 1	-	-	-	-	6.04	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	-	-	3.62	3.34
Pot Cap-1 Maneuver	-	0	0	-	897	1040
Stage 1	-	0	0	-	941	-
Stage 2	-	0	0	-	967	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	897	1040
Mov Cap-2 Maneuver	-	-	-	-	897	-
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	967	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		9.3	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	WBT	
Capacity (veh/h)	897		1040	-	-	
HCM Lane V/C Ratio	0.086		0.015	-	-	
HCM Control Delay (s)	9.4		8.5	-	-	
HCM Lane LOS	A		A	-	-	
HCM 95th %tile Q(veh)	0.3		0	-	-	

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 No-Build Condition B

Weekday PM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Volume (veh/h)	307	13	26	493	117	125
Future Volume (veh/h)	307	13	26	493	117	125
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1159	1559	1870	1885	1900
Adj Flow Rate, veh/h	334	14	28	536	127	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	50	23	2	1	0
Cap, veh/h	1362	710	657	1351	207	185
Arrive On Green	0.72	0.72	0.72	0.72	0.12	0.12
Sat Flow, veh/h	1885	982	861	1870	1795	1610
Grp Volume(v), veh/h	334	14	28	536	127	136
Grp Sat Flow(s),veh/h/ln	1885	982	861	1870	1795	1610
Q Serve(g_s), s	5.0	0.3	0.9	9.3	5.6	6.8
Cycle Q Clear(g_c), s	5.0	0.3	5.9	9.3	5.6	6.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1362	710	657	1351	207	185
V/C Ratio(X)	0.25	0.02	0.04	0.40	0.61	0.73
Avail Cap(c_a), veh/h	1362	710	657	1351	757	679
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.9	3.2	4.9	4.5	35.0	35.5
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.9	3.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.1	0.2	4.1	4.6	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.3	3.3	5.0	5.4	38.0	41.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	348			564	263	
Approach Delay, s/veh	4.3			5.3	39.6	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		16.1		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		7.0		8.8		11.3
Green Ext Time (p_c), s		1.9		0.8		3.5
Intersection Summary						
HCM 6th Ctrl Delay			12.7			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary 8: Edwards Avenue & Middle Country Road

2025 Phase 2 No-Build Condition B
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	499	155	41	812	41	152	107	44	47	184	36
Future Volume (veh/h)	42	499	155	41	812	41	152	107	44	47	184	36
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	1826	1870	1870	1737	1870	1870	1796	1841	1841	1870	1737	1737
Adj Flow Rate, veh/h	44	520	161	43	846	43	158	111	46	49	192	38
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	2	2	11	2	2	7	4	4	2	11	11
Cap, veh/h	179	765	237	290	985	50	277	352	146	351	401	79
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	610	1370	424	705	1765	90	1105	1236	512	1230	1408	279
Grp Volume(v), veh/h	44	0	681	43	0	889	158	0	157	49	0	230
Grp Sat Flow(s),veh/h/ln	610	0	1794	705	0	1854	1105	0	1749	1230	0	1687
Q Serve(g_s), s	5.5	0.0	22.4	3.8	0.0	33.7	11.4	0.0	5.8	2.7	0.0	9.4
Cycle Q Clear(g_c), s	39.2	0.0	22.4	26.2	0.0	33.7	20.8	0.0	5.8	8.5	0.0	9.4
Prop In Lane	1.00		0.24	1.00		0.05	1.00		0.29	1.00		0.17
Lane Grp Cap(c), veh/h	179	0	1001	290	0	1035	277	0	498	351	0	481
V/C Ratio(X)	0.25	0.00	0.68	0.15	0.00	0.86	0.57	0.00	0.32	0.14	0.00	0.48
Avail Cap(c_a), veh/h	354	0	1516	492	0	1566	362	0	633	445	0	611
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.2	0.0	13.0	22.4	0.0	15.5	33.1	0.0	23.3	26.6	0.0	24.5
Incr Delay (d2), s/veh	0.7	0.0	0.8	0.2	0.0	3.2	1.8	0.0	0.4	0.2	0.0	0.7
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(95%),veh/ln	1.4	0.0	11.7	1.1	0.0	17.5	5.4	0.0	4.1	1.4	0.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	0.0	13.9	22.6	0.0	18.8	35.0	0.0	23.6	26.8	0.0	25.3
LnGrp LOS	C	A	B	C	A	B	C	A	C	C	A	C
Approach Vol, veh/h	725			932			315			279		
Approach Delay, s/veh	15.0			19.0			29.3			25.5		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	53.2			29.6			53.2			29.6		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+l1), s	41.2			22.8			35.7			11.4		
Green Ext Time (p_c), s	5.1			0.8			7.4			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	20.0											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary
17: Site Driveway & Middle Country Road

2025 Phase 2 No-Build Condition B
Weekday PM Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	664	7	12	927	25	46
Future Volume (veh/h)	664	7	12	927	25	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1841	1737
Adj Flow Rate, veh/h	722	8	13	1008	27	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	4	11
Cap, veh/h	1384	15	52	1386	144	121
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1846	20	8	1849	1753	1472
Grp Volume(v), veh/h	0	730	1021	0	27	50
Grp Sat Flow(s),veh/h/ln	0	1867	1857	0	1753	1472
Q Serve(g_s), s	0.0	12.9	0.0	0.0	1.1	2.6
Cycle Q Clear(g_c), s	0.0	12.9	24.1	0.0	1.1	2.6
Prop In Lane		0.01	0.01		1.00	1.00
Lane Grp Cap(c), veh/h	0	1399	1437	0	144	121
V/C Ratio(X)	0.00	0.52	0.71	0.00	0.19	0.41
Avail Cap(c_a), veh/h	0	1399	1437	0	766	644
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	4.1	5.5	0.0	34.3	34.9
Incr Delay (d2), s/veh	0.0	1.4	3.0	0.0	0.6	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	4.8	9.0	0.0	0.9	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	5.5	8.5	0.0	34.9	37.2
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h	730			1021	77	
Approach Delay, s/veh	5.5			8.5	36.4	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		13.1		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		14.9		4.6		26.1
Green Ext Time (p_c), s		5.1		0.2		9.1
Intersection Summary						
HCM 6th Ctrl Delay			8.5			
HCM 6th LOS			A			

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 No-Build Condition B
Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	8.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	27	605	35	42	871	39	39	7	37	29	6	29
Future Vol, veh/h	27	605	35	42	871	39	39	7	37	29	6	29
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	-	-	-	-	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	2	0	4	2	3	0	0	0	4	0	0
Mvmt Flow	28	617	36	43	889	40	40	7	38	30	6	30
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	929	0	0	653	0	0	1704	1706	635	1709	1704	909
Stage 1	-	-	-	-	-	-	691	691	-	995	995	-
Stage 2	-	-	-	-	-	-	1013	1015	-	714	709	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.1	6.5	6.2	7.14	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Follow-up Hdwy	2.2	-	-	2.236	-	-	3.5	4	3.3	3.536	4	3.3
Pot Cap-1 Maneuver	744	-	-	924	-	-	73	92	482	71	93	336
Stage 1	-	-	-	-	-	-	438	449	-	292	325	-
Stage 2	-	-	-	-	-	-	291	318	-	419	440	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	744	-	-	924	-	-	55	78	482	54	79	336
Mov Cap-2 Maneuver	-	-	-	-	-	-	55	78	-	54	79	-
Stage 1	-	-	-	-	-	-	412	423	-	275	293	-
Stage 2	-	-	-	-	-	-	235	287	-	357	414	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.4			89.8			108.3		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	55		264	744	-	-	924	-	-	92		
HCM Lane V/C Ratio	0.724		0.17	0.037	-	-	0.046	-	-	0.71		
HCM Control Delay (s)	166.9		21.4	10	0	-	9.1	0	-	108.3		
HCM Lane LOS	F		C	B	A	-	A	A	-	F		
HCM 95th %tile Q(veh)	3		0.6	0.1	-	-	0.1	-	-	3.6		

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 No-Build Condition B
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	12	0	0	29	27	7
Future Vol, veh/h	12	0	0	29	27	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	4	13	3
Mvmt Flow	13	0	0	30	28	7
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	-	-	28	7
Stage 1	-	-	-	-	13	-
Stage 2	-	-	-	-	15	-
Critical Hdwy	-	-	-	-	7.06	6.96
Critical Hdwy Stg 1	-	-	-	-	6.06	-
Critical Hdwy Stg 2	-	-	-	-	6.06	-
Follow-up Hdwy	-	-	-	-	3.63	3.33
Pot Cap-1 Maneuver	-	0	0	-	952	1070
Stage 1	-	0	0	-	977	-
Stage 2	-	0	0	-	974	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	952	1070
Mov Cap-2 Maneuver	-	-	-	-	952	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	974	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		8.8		
HCM LOS				A		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT		
Capacity (veh/h)	952	1070	-	-		
HCM Lane V/C Ratio	0.03	0.007	-	-		
HCM Control Delay (s)	8.9	8.4	-	-		
HCM Lane LOS	A	A	-	-		
HCM 95th %tile Q(veh)	0.1	0	-	-		

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 No-Build Condition B

Saturday Midday Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	376	14	9	385	20	24
Future Volume (veh/h)	376	14	9	385	20	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1648	1900	1885	1633	1900
Adj Flow Rate, veh/h	392	15	9	401	21	25
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	17	0	1	18	0
Cap, veh/h	1440	1067	789	1440	100	104
Arrive On Green	0.76	0.76	0.76	0.76	0.06	0.06
Sat Flow, veh/h	1885	1397	994	1885	1555	1610
Grp Volume(v), veh/h	392	15	9	401	21	25
Grp Sat Flow(s),veh/h/ln	1885	1397	994	1885	1555	1610
Q Serve(g_s), s	4.9	0.2	0.2	5.0	1.0	1.2
Cycle Q Clear(g_c), s	4.9	0.2	5.1	5.0	1.0	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1440	1067	789	1440	100	104
V/C Ratio(X)	0.27	0.01	0.01	0.28	0.21	0.24
Avail Cap(c_a), veh/h	1440	1067	789	1440	693	717
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.8	2.2	3.5	2.8	34.8	34.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.5	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	0.1	1.6	0.7	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.2	2.2	3.6	3.3	35.9	36.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	407			410	46	
Approach Delay, s/veh	3.2			3.3	36.0	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		11.6		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+I1), s	6.9		3.2		7.1	
Green Ext Time (p_c), s	2.3		0.1		2.3	
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary 8: Edwards Avenue & Middle Country Road

2025 Phase 2 No-Build Condition B
Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	590	156	39	630	84	125	222	49	51	153	48
Future Volume (veh/h)	52	590	156	39	630	84	125	222	49	51	153	48
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	1841	1885	1885	1811	1885	1885	1781	1870	1870	1900	1841	1841
Adj Flow Rate, veh/h	55	621	164	41	663	88	132	234	52	54	161	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	1	1	6	1	1	8	2	2	0	4	4
Cap, veh/h	276	799	211	245	906	120	282	391	87	240	353	112
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	700	1437	380	667	1630	216	1114	1482	329	1110	1340	424
Grp Volume(v), veh/h	55	0	785	41	0	751	132	0	286	54	0	212
Grp Sat Flow(s),veh/h/ln	700	0	1817	667	0	1846	1114	0	1811	1110	0	1764
Q Serve(g_s), s	4.6	0.0	24.3	3.7	0.0	21.9	8.1	0.0	9.9	3.2	0.0	7.2
Cycle Q Clear(g_c), s	26.5	0.0	24.3	28.0	0.0	21.9	15.3	0.0	9.9	13.2	0.0	7.2
Prop In Lane	1.00		0.21	1.00		0.12	1.00		0.18	1.00		0.24
Lane Grp Cap(c), veh/h	276	0	1009	245	0	1026	282	0	478	240	0	465
V/C Ratio(X)	0.20	0.00	0.78	0.17	0.00	0.73	0.47	0.00	0.60	0.23	0.00	0.46
Avail Cap(c_a), veh/h	568	0	1767	523	0	1795	452	0	755	409	0	735
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.9	0.0	12.5	23.5	0.0	12.0	28.6	0.0	23.2	28.9	0.0	22.2
Incr Delay (d2), s/veh	0.4	0.0	1.3	0.3	0.0	1.0	1.2	0.0	1.2	0.5	0.0	0.7
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(95%),veh/ln	1.3	0.0	11.9	1.0	0.0	11.0	3.7	0.0	7.1	1.5	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	0.0	13.8	23.8	0.0	13.0	29.8	0.0	24.4	29.4	0.0	22.9
LnGrp LOS	C	A	B	C	A	B	C	A	C	C	A	C
Approach Vol, veh/h	840			792			418			266		
Approach Delay, s/veh	14.4			13.6			26.1			24.2		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	47.0			25.0			47.0			25.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	28.5			17.3			30.0			15.2		
Green Ext Time (p_c), s	6.5			1.7			5.9			1.1		
Intersection Summary												
HCM 6th Ctrl Delay	17.3											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary
17: Site Driveway & Middle Country Road

2025 Phase 2 No-Build Condition B
Saturday Midday Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↱	↱
Traffic Volume (veh/h)	723	11	21	727	23	44
Future Volume (veh/h)	723	11	21	727	23	44
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1885	1870	1870	1841	1737
Adj Flow Rate, veh/h	786	12	23	790	25	48
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	2	4	11
Cap, veh/h	1390	21	64	1356	141	118
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1852	28	23	1806	1753	1472
Grp Volume(v), veh/h	0	798	813	0	25	48
Grp Sat Flow(s),veh/h/ln	0	1880	1829	0	1753	1472
Q Serve(g_s), s	0.0	14.7	0.0	0.0	1.1	2.5
Cycle Q Clear(g_c), s	0.0	14.7	15.3	0.0	1.1	2.5
Prop In Lane		0.02	0.03		1.00	1.00
Lane Grp Cap(c), veh/h	0	1412	1420	0	141	118
V/C Ratio(X)	0.00	0.57	0.57	0.00	0.18	0.41
Avail Cap(c_a), veh/h	0	1412	1420	0	768	645
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	4.3	4.4	0.0	34.3	34.9
Incr Delay (d2), s/veh	0.0	1.6	1.7	0.0	0.6	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	5.5	5.7	0.0	0.8	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	6.0	6.1	0.0	34.9	37.2
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h	798			813	73	
Approach Delay, s/veh	6.0			6.1	36.4	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		12.9		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		16.7		4.5		17.3
Green Ext Time (p_c), s		5.9		0.2		6.3
Intersection Summary						
HCM 6th Ctrl Delay			7.3			
HCM 6th LOS			A			

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 No-Build Condition B
Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	8.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	41	663	42	44	675	31	37	7	41	30	3	37
Future Vol, veh/h	41	663	42	44	675	31	37	7	41	30	3	37
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	-	-	-	-	-	-	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, %	5	1	0	0	2	5	0	0	0	8	0	0
Mvmt Flow	44	705	45	47	718	33	39	7	44	32	3	39
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	751	0	0	750	0	0	1666	1661	728	1670	1667	735
Stage 1	-	-	-	-	-	-	816	816	-	829	829	-
Stage 2	-	-	-	-	-	-	850	845	-	841	838	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.18	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.572	4	3.3
Pot Cap-1 Maneuver	845	-	-	868	-	-	78	98	427	74	97	423
Stage 1	-	-	-	-	-	-	374	393	-	356	388	-
Stage 2	-	-	-	-	-	-	358	382	-	351	384	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	845	-	-	868	-	-	59	81	427	54	80	423
Mov Cap-2 Maneuver	-	-	-	-	-	-	59	81	-	54	80	-
Stage 1	-	-	-	-	-	-	340	358	-	324	352	-
Stage 2	-	-	-	-	-	-	291	346	-	281	349	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.6			75.9			101.1		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	59	263	845	-	-	868	-	-	103			
HCM Lane V/C Ratio	0.667	0.194	0.052	-	-	0.054	-	-	0.723			
HCM Control Delay (s)	145.8	22	9.5	0	-	9.4	0	-	101.1			
HCM Lane LOS	F	C	A	A	-	A	A	-	F			
HCM 95th %tile Q(veh)	2.8	0.7	0.2	-	-	0.2	-	-	3.8			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 No-Build Condition B
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	5.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↱	↱
Traffic Vol, veh/h	147	0	0	360	194	298
Future Vol, veh/h	147	0	0	360	194	298
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	3	2
Mvmt Flow	152	0	0	371	200	307
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	338	76
Stage 1	-	-	-	-	152	-
Stage 2	-	-	-	-	186	-
Critical Hdwy	-	-	-	-	6.86	6.94
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	-	-	-	-	3.53	3.32
Pot Cap-1 Maneuver	-	0	0	-	629	970
Stage 1	-	0	0	-	857	-
Stage 2	-	0	0	-	824	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	629	970
Mov Cap-2 Maneuver	-	-	-	-	629	-
Stage 1	-	-	-	-	857	-
Stage 2	-	-	-	-	824	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		11.6	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBT
Capacity (veh/h)	629		970		-	-
HCM Lane V/C Ratio	0.318		0.317		-	-
HCM Control Delay (s)	13.4		10.4		-	-
HCM Lane LOS	B		B		-	-
HCM 95th %tile Q(veh)	1.4		1.4		-	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 No-Build Condition C
Weekday AM Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	386	61	44	222	36	21
Future Volume (veh/h)	386	61	44	222	36	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1722	1678	1767	1278	1248
Adj Flow Rate, veh/h	434	69	49	249	40	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	7	12	15	9	42	44
Cap, veh/h	1355	1101	633	1332	93	80
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1796	1459	803	1767	1217	1058
Grp Volume(v), veh/h	434	69	49	249	40	24
Grp Sat Flow(s),veh/h/ln	1796	1459	803	1767	1217	1058
Q Serve(g_s), s	6.2	1.0	1.7	3.2	2.5	1.7
Cycle Q Clear(g_c), s	6.2	1.0	7.9	3.2	2.5	1.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1355	1101	633	1332	93	80
V/C Ratio(X)	0.32	0.06	0.08	0.19	0.43	0.30
Avail Cap(c_a), veh/h	1355	1101	633	1332	535	465
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.2	2.5	4.5	2.8	35.1	34.7
Incr Delay (d2), s/veh	0.6	0.1	0.2	0.3	3.2	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	0.3	0.4	1.1	1.5	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.8	2.6	4.7	3.1	38.3	36.8
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	503			298	64	
Approach Delay, s/veh	3.6			3.4	37.7	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		12.6		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+I1), s	8.2		4.5		9.9	
Green Ext Time (p_c), s	2.8		0.2		1.7	
Intersection Summary						
HCM 6th Ctrl Delay			6.1			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 No-Build Condition C

Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	662	188	38	283	27	138	137	30	43	183	37
Future Volume (veh/h)	23	662	188	38	283	27	138	137	30	43	183	37
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	1737	1796	1796	1411	1693	1693	1737	1678	1678	1767	1826	1826
Adj Flow Rate, veh/h	26	761	216	44	325	31	159	157	34	49	210	43
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	7	7	33	14	14	11	15	15	9	5	5
Cap, veh/h	553	831	236	116	939	90	216	357	77	255	393	80
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	952	1346	382	434	1521	145	1046	1336	289	1126	1471	301
Grp Volume(v), veh/h	26	0	977	44	0	356	159	0	191	49	0	253
Grp Sat Flow(s),veh/h/ln	952	0	1728	434	0	1666	1046	0	1626	1126	0	1772
Q Serve(g_s), s	1.5	0.0	56.0	11.2	0.0	11.7	16.3	0.0	11.0	4.2	0.0	13.7
Cycle Q Clear(g_c), s	13.2	0.0	56.0	67.1	0.0	11.7	30.0	0.0	11.0	15.2	0.0	13.7
Prop In Lane	1.00		0.22	1.00		0.09	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	553	0	1066	116	0	1029	216	0	434	255	0	473
V/C Ratio(X)	0.05	0.00	0.92	0.38	0.00	0.35	0.74	0.00	0.44	0.19	0.00	0.53
Avail Cap(c_a), veh/h	558	0	1076	118	0	1038	216	0	434	255	0	473
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.7	0.0	18.9	48.5	0.0	10.5	48.4	0.0	34.2	40.5	0.0	35.2
Incr Delay (d2), s/veh	0.0	0.0	12.0	2.0	0.0	0.2	12.5	0.0	0.7	0.4	0.0	1.2
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(95%),veh/ln	0.6	0.0	29.5	2.2	0.0	6.7	8.8	0.0	7.6	2.1	0.0	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	0.0	30.9	50.6	0.0	10.7	60.9	0.0	34.9	40.9	0.0	36.4
LnGrp LOS	B	A	C	D	A	B	E	A	C	D	A	D
Approach Vol, veh/h	1003			400			350			302		
Approach Delay, s/veh	30.5			15.1			46.7			37.1		
Approach LOS	C			B			D			D		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	76.4			36.0			76.4			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	58.0			32.0			69.1			17.2		
Green Ext Time (p_c), s	5.5			0.0			0.2			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	31.2											
HCM 6th LOS	C											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 No-Build Condition C
Weekday AM Peak Hour

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕		↕	↕	
Traffic Vol, veh/h	15	764	17	11	353	18	8	0	5	29	1	44
Future Vol, veh/h	15	764	17	11	353	18	8	0	5	29	1	44
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	-	-	-	50	-	-	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, %	0	6	10	20	14	14	0	0	50	0	0	0
Mvmt Flow	16	813	18	12	376	19	9	0	5	31	1	47
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	395	0	0	831	0	0	1288	1273	822	1267	1273	386
Stage 1	-	-	-	-	-	-	854	854	-	410	410	-
Stage 2	-	-	-	-	-	-	434	419	-	857	863	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.5	6.7	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4	3.75	3.5	4	3.3
Pot Cap-1 Maneuver	1175	-	-	729	-	-	142	169	309	147	169	666
Stage 1	-	-	-	-	-	-	356	378	-	623	599	-
Stage 2	-	-	-	-	-	-	604	593	-	355	374	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1175	-	-	729	-	-	127	162	309	140	162	666
Mov Cap-2 Maneuver	-	-	-	-	-	-	127	162	-	140	162	-
Stage 1	-	-	-	-	-	-	347	369	-	607	589	-
Stage 2	-	-	-	-	-	-	551	584	-	340	365	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.3			28.3			24.2		
HCM LOS							D			C		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	127	309	1175	-	-	729	-	-	265			
HCM Lane V/C Ratio	0.067	0.017	0.014	-	-	0.016	-	-	0.297			
HCM Control Delay (s)	35.4	16.9	8.1	0	-	10	-	-	24.2			
HCM Lane LOS	E	C	A	A	-	B	-	-	C			
HCM 95th %tile Q(veh)	0.2	0.1	0	-	-	0	-	-	1.2			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 No-Build Condition C
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	4.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	43	0	0	44	71	14
Future Vol, veh/h	43	0	0	44	71	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	0	0	9	12	4
Mvmt Flow	47	0	0	48	77	15

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	-	71 24
Stage 1	-	-	-	-	47 -
Stage 2	-	-	-	-	24 -
Critical Hdwy	-	-	-	-	7.04 6.98
Critical Hdwy Stg 1	-	-	-	-	6.04 -
Critical Hdwy Stg 2	-	-	-	-	6.04 -
Follow-up Hdwy	-	-	-	-	3.62 3.34
Pot Cap-1 Maneuver	-	0	0	-	897 1040
Stage 1	-	0	0	-	941 -
Stage 2	-	0	0	-	967 -
Platoon blocked, %	-			-	
Mov Cap-1 Maneuver	-	-	-	-	897 1040
Mov Cap-2 Maneuver	-	-	-	-	897 -
Stage 1	-	-	-	-	941 -
Stage 2	-	-	-	-	967 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	897	1040	-	-
HCM Lane V/C Ratio	0.086	0.015	-	-
HCM Control Delay (s)	9.4	8.5	-	-
HCM Lane LOS	A	A	-	-
HCM 95th %tile Q(veh)	0.3	0	-	-

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 No-Build Condition C
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	772	26	47	377	5	12
Future Vol, veh/h	772	26	47	377	5	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	4	9	14	20	42
Mvmt Flow	839	28	51	410	5	13
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	-	839	0	1351	839
Stage 1	-	-	-	-	839	-
Stage 2	-	-	-	-	512	-
Critical Hdwy	-	-	4.19	-	6.6	6.62
Critical Hdwy Stg 1	-	-	-	-	5.6	-
Critical Hdwy Stg 2	-	-	-	-	5.6	-
Follow-up Hdwy	-	-	2.281	-	3.68	3.678
Pot Cap-1 Maneuver	-	0	766	-	152	312
Stage 1	-	0	-	-	395	-
Stage 2	-	0	-	-	567	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	766	-	139	312
Mov Cap-2 Maneuver	-	-	-	-	266	-
Stage 1	-	-	-	-	395	-
Stage 2	-	-	-	-	518	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	1.1		17.5		
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	266	312	-	766	-	
HCM Lane V/C Ratio	0.02	0.042	-	0.067	-	
HCM Control Delay (s)	18.8	17	-	10	-	
HCM Lane LOS	C	C	-	B	-	
HCM 95th %tile Q(veh)	0.1	0.1	-	0.2	-	

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 No-Build Condition C

Weekday PM Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	307	13	26	493	117	125
Future Volume (veh/h)	307	13	26	493	117	125
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1159	1559	1870	1885	1900
Adj Flow Rate, veh/h	334	14	28	536	127	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	50	23	2	1	0
Cap, veh/h	1362	710	657	1351	207	185
Arrive On Green	0.72	0.72	0.72	0.72	0.12	0.12
Sat Flow, veh/h	1885	982	861	1870	1795	1610
Grp Volume(v), veh/h	334	14	28	536	127	136
Grp Sat Flow(s),veh/h/ln	1885	982	861	1870	1795	1610
Q Serve(g_s), s	5.0	0.3	0.9	9.3	5.6	6.8
Cycle Q Clear(g_c), s	5.0	0.3	5.9	9.3	5.6	6.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1362	710	657	1351	207	185
V/C Ratio(X)	0.25	0.02	0.04	0.40	0.61	0.73
Avail Cap(c_a), veh/h	1362	710	657	1351	757	679
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.9	3.2	4.9	4.5	35.0	35.5
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.9	3.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.1	0.2	4.1	4.6	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.3	3.3	5.0	5.4	38.0	41.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	348			564	263	
Approach Delay, s/veh	4.3			5.3	39.6	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		16.1		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+I1), s	7.0		8.8		11.3	
Green Ext Time (p_c), s	1.9		0.8		3.5	
Intersection Summary						
HCM 6th Ctrl Delay			12.7			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary 8: Edwards Avenue & Middle Country Road

2025 Phase 2 No-Build Condition C
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	499	155	41	812	41	152	107	44	47	184	36
Future Volume (veh/h)	42	499	155	41	812	41	152	107	44	47	184	36
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	1826	1870	1870	1737	1870	1870	1796	1841	1841	1870	1737	1737
Adj Flow Rate, veh/h	44	520	161	43	846	43	158	111	46	49	192	38
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	2	2	11	2	2	7	4	4	2	11	11
Cap, veh/h	179	765	237	290	985	50	277	352	146	351	401	79
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	610	1370	424	705	1765	90	1105	1236	512	1230	1408	279
Grp Volume(v), veh/h	44	0	681	43	0	889	158	0	157	49	0	230
Grp Sat Flow(s),veh/h/ln	610	0	1794	705	0	1854	1105	0	1749	1230	0	1687
Q Serve(g_s), s	5.5	0.0	22.4	3.8	0.0	33.7	11.4	0.0	5.8	2.7	0.0	9.4
Cycle Q Clear(g_c), s	39.2	0.0	22.4	26.2	0.0	33.7	20.8	0.0	5.8	8.5	0.0	9.4
Prop In Lane	1.00		0.24	1.00		0.05	1.00		0.29	1.00		0.17
Lane Grp Cap(c), veh/h	179	0	1001	290	0	1035	277	0	498	351	0	481
V/C Ratio(X)	0.25	0.00	0.68	0.15	0.00	0.86	0.57	0.00	0.32	0.14	0.00	0.48
Avail Cap(c_a), veh/h	354	0	1516	492	0	1566	362	0	633	445	0	611
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.2	0.0	13.0	22.4	0.0	15.5	33.1	0.0	23.3	26.6	0.0	24.5
Incr Delay (d2), s/veh	0.7	0.0	0.8	0.2	0.0	3.2	1.8	0.0	0.4	0.2	0.0	0.7
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(95%),veh/ln	1.4	0.0	11.7	1.1	0.0	17.5	5.4	0.0	4.1	1.4	0.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	0.0	13.9	22.6	0.0	18.8	35.0	0.0	23.6	26.8	0.0	25.3
LnGrp LOS	C	A	B	C	A	B	C	A	C	C	A	C
Approach Vol, veh/h	725			932			315			279		
Approach Delay, s/veh	15.0			19.0			29.3			25.5		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	53.2			29.6			53.2			29.6		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	41.2			22.8			35.7			11.4		
Green Ext Time (p_c), s	5.1			0.8			7.4			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	20.0											
HCM 6th LOS	B											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 No-Build Condition C
Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	7.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕			↕	
Traffic Vol, veh/h	27	605	35	42	871	39	39	7	37	29	6	29
Future Vol, veh/h	27	605	35	42	871	39	39	7	37	29	6	29
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	-	-	-	50	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	2	0	4	2	3	0	0	0	4	0	0
Mvmt Flow	28	617	36	43	889	40	40	7	38	30	6	30
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	929	0	0	653	0	0	1704	1706	635	1709	1704	909
Stage 1	-	-	-	-	-	-	691	691	-	995	995	-
Stage 2	-	-	-	-	-	-	1013	1015	-	714	709	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.1	6.5	6.2	7.14	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Follow-up Hdwy	2.2	-	-	2.236	-	-	3.5	4	3.3	3.536	4	3.3
Pot Cap-1 Maneuver	744	-	-	924	-	-	73	92	482	71	93	336
Stage 1	-	-	-	-	-	-	438	449	-	292	325	-
Stage 2	-	-	-	-	-	-	291	318	-	419	440	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	744	-	-	924	-	-	58	83	482	56	83	336
Mov Cap-2 Maneuver	-	-	-	-	-	-	58	83	-	56	83	-
Stage 1	-	-	-	-	-	-	412	423	-	275	310	-
Stage 2	-	-	-	-	-	-	248	303	-	357	414	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.4			82.4			101.7		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	58		273	744	-	-	924	-	-	95		
HCM Lane V/C Ratio	0.686		0.164	0.037	-	-	0.046	-	-	0.687		
HCM Control Delay (s)	151.9		20.8	10	0	-	9.1	-	-	101.7		
HCM Lane LOS	F		C	B	A	-	A	-	-	F		
HCM 95th %tile Q(veh)	2.9		0.6	0.1	-	-	0.1	-	-	3.4		

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 No-Build Condition C
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	12	0	0	29	27	7
Future Vol, veh/h	12	0	0	29	27	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	4	13	3
Mvmt Flow	13	0	0	30	28	7
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	-	-	28	7
Stage 1	-	-	-	-	13	-
Stage 2	-	-	-	-	15	-
Critical Hdwy	-	-	-	-	7.06	6.96
Critical Hdwy Stg 1	-	-	-	-	6.06	-
Critical Hdwy Stg 2	-	-	-	-	6.06	-
Follow-up Hdwy	-	-	-	-	3.63	3.33
Pot Cap-1 Maneuver	-	0	0	-	952	1070
Stage 1	-	0	0	-	977	-
Stage 2	-	0	0	-	974	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	952	1070
Mov Cap-2 Maneuver	-	-	-	-	952	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	974	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		8.8		
HCM LOS				A		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT		
Capacity (veh/h)	952	1070	-	-		
HCM Lane V/C Ratio	0.03	0.007	-	-		
HCM Control Delay (s)	8.9	8.4	-	-		
HCM Lane LOS	A	A	-	-		
HCM 95th %tile Q(veh)	0.1	0	-	-		

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 No-Build Condition C
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	664	7	12	927	25	46
Future Vol, veh/h	664	7	12	927	25	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	4	17	2	4	11
Mvmt Flow	722	8	13	1008	27	50
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	722	0	1756	722
Stage 1	-	-	-	-	722	-
Stage 2	-	-	-	-	1034	-
Critical Hdwy	-	-	4.27	-	6.44	6.31
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.353	-	3.536	3.399
Pot Cap-1 Maneuver	-	0	815	-	92	412
Stage 1	-	0	-	-	477	-
Stage 2	-	0	-	-	340	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	815	-	89	412
Mov Cap-2 Maneuver	-	-	-	-	216	-
Stage 1	-	-	-	-	477	-
Stage 2	-	-	-	-	328	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0.1		18.1		
HCM LOS				C		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	216	412	-	815	-	
HCM Lane V/C Ratio	0.126	0.121	-	0.016	-	
HCM Control Delay (s)	24.1	14.9	-	9.5	-	
HCM Lane LOS	C	B	-	A	-	
HCM 95th %tile Q(veh)	0.4	0.4	-	0	-	

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 No-Build Condition C
Saturday Midday Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	376	14	9	385	20	24
Future Volume (veh/h)	376	14	9	385	20	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1648	1900	1885	1633	1900
Adj Flow Rate, veh/h	392	15	9	401	21	25
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	17	0	1	18	0
Cap, veh/h	1440	1067	789	1440	100	104
Arrive On Green	0.76	0.76	0.76	0.76	0.06	0.06
Sat Flow, veh/h	1885	1397	994	1885	1555	1610
Grp Volume(v), veh/h	392	15	9	401	21	25
Grp Sat Flow(s),veh/h/ln	1885	1397	994	1885	1555	1610
Q Serve(g_s), s	4.9	0.2	0.2	5.0	1.0	1.2
Cycle Q Clear(g_c), s	4.9	0.2	5.1	5.0	1.0	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1440	1067	789	1440	100	104
V/C Ratio(X)	0.27	0.01	0.01	0.28	0.21	0.24
Avail Cap(c_a), veh/h	1440	1067	789	1440	693	717
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.8	2.2	3.5	2.8	34.8	34.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.5	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	0.1	1.6	0.7	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.2	2.2	3.6	3.3	35.9	36.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	407			410	46	
Approach Delay, s/veh	3.2			3.3	36.0	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		11.6		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		6.9		3.2		7.1
Green Ext Time (p_c), s		2.3		0.1		2.3
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 No-Build Condition C

Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	590	156	39	630	84	125	222	49	51	153	48
Future Volume (veh/h)	52	590	156	39	630	84	125	222	49	51	153	48
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			
Adj Sat Flow, veh/h/ln	1841	1885	1885	1811	1885	1885	1781	1870	1870	1900	1841	1841
Adj Flow Rate, veh/h	55	621	164	41	663	88	132	234	52	54	161	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	1	1	6	1	1	8	2	2	0	4	4
Cap, veh/h	276	799	211	245	906	120	282	391	87	240	353	112
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	700	1437	380	667	1630	216	1114	1482	329	1110	1340	424
Grp Volume(v), veh/h	55	0	785	41	0	751	132	0	286	54	0	212
Grp Sat Flow(s),veh/h/ln	700	0	1817	667	0	1846	1114	0	1811	1110	0	1764
Q Serve(g_s), s	4.6	0.0	24.3	3.7	0.0	21.9	8.1	0.0	9.9	3.2	0.0	7.2
Cycle Q Clear(g_c), s	26.5	0.0	24.3	28.0	0.0	21.9	15.3	0.0	9.9	13.2	0.0	7.2
Prop In Lane	1.00		0.21	1.00		0.12	1.00		0.18	1.00		0.24
Lane Grp Cap(c), veh/h	276	0	1009	245	0	1026	282	0	478	240	0	465
V/C Ratio(X)	0.20	0.00	0.78	0.17	0.00	0.73	0.47	0.00	0.60	0.23	0.00	0.46
Avail Cap(c_a), veh/h	568	0	1767	523	0	1795	452	0	755	409	0	735
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.9	0.0	12.5	23.5	0.0	12.0	28.6	0.0	23.2	28.9	0.0	22.2
Incr Delay (d2), s/veh	0.4	0.0	1.3	0.3	0.0	1.0	1.2	0.0	1.2	0.5	0.0	0.7
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(95%),veh/ln	1.3	0.0	11.9	1.0	0.0	11.0	3.7	0.0	7.1	1.5	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	0.0	13.8	23.8	0.0	13.0	29.8	0.0	24.4	29.4	0.0	22.9
LnGrp LOS	C	A	B	C	A	B	C	A	C	C	A	C
Approach Vol, veh/h	840				792				418			
Approach Delay, s/veh	14.4				13.6				26.1			
Approach LOS	B				B				C			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	47.0			25.0			47.0			25.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	28.5			17.3			30.0			15.2		
Green Ext Time (p_c), s	6.5			1.7			5.9			1.1		
Intersection Summary												
HCM 6th Ctrl Delay	17.3											
HCM 6th LOS	B											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 No-Build Condition C
Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	8.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕			↕	
Traffic Vol, veh/h	41	663	42	44	675	31	37	7	41	30	3	37
Future Vol, veh/h	41	663	42	44	675	31	37	7	41	30	3	37
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	-	-	-	50	-	-	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, %	5	1	0	0	2	5	0	0	0	8	0	0
Mvmt Flow	44	705	45	47	718	33	39	7	44	32	3	39
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	751	0	0	750	0	0	1666	1661	728	1670	1667	735
Stage 1	-	-	-	-	-	-	816	816	-	829	829	-
Stage 2	-	-	-	-	-	-	850	845	-	841	838	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.18	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.572	4	3.3
Pot Cap-1 Maneuver	845	-	-	868	-	-	78	98	427	74	97	423
Stage 1	-	-	-	-	-	-	374	393	-	356	388	-
Stage 2	-	-	-	-	-	-	358	382	-	351	384	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	845	-	-	868	-	-	61	84	427	55	84	423
Mov Cap-2 Maneuver	-	-	-	-	-	-	61	84	-	55	84	-
Stage 1	-	-	-	-	-	-	340	358	-	324	367	-
Stage 2	-	-	-	-	-	-	304	361	-	281	349	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.6			72.1			97.2		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	61		268	845	-	-	868	-	-	105		
HCM Lane V/C Ratio	0.645		0.191	0.052	-	-	0.054	-	-	0.709		
HCM Control Delay (s)	137.5		21.6	9.5	0	-	9.4	-	-	97.2		
HCM Lane LOS	F		C	A	A	-	A	-	-	F		
HCM 95th %tile Q(veh)	2.7		0.7	0.2	-	-	0.2	-	-	3.7		

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 No-Build Condition C
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	5.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	147	0	0	360	194	298
Future Vol, veh/h	147	0	0	360	194	298
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	3	2
Mvmt Flow	152	0	0	371	200	307
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	-	-	-	338	76
Stage 1	-	-	-	-	152	-
Stage 2	-	-	-	-	186	-
Critical Hdwy	-	-	-	-	6.86	6.94
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	-	-	-	-	3.53	3.32
Pot Cap-1 Maneuver	-	0	0	-	629	970
Stage 1	-	0	0	-	857	-
Stage 2	-	0	0	-	824	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	629	970
Mov Cap-2 Maneuver	-	-	-	-	629	-
Stage 1	-	-	-	-	857	-
Stage 2	-	-	-	-	824	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		11.6		
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT		
Capacity (veh/h)	629	970	-	-		
HCM Lane V/C Ratio	0.318	0.317	-	-		
HCM Control Delay (s)	13.4	10.4	-	-		
HCM Lane LOS	B	B	-	-		
HCM 95th %tile O(veh)	1.4	1.4	-	-		

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 No-Build Condition C
Saturday Midday Peak Hour

Intersection							
Int Delay, s/veh	0.9						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Traffic Vol, veh/h	723	11	21	727	23	44	
Future Vol, veh/h	723	11	21	727	23	44	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	Free	-	None	-	None	
Storage Length	-	-	-	-	0	0	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	92	92	92	92	92	92	
Heavy Vehicles, %	1	9	14	2	4	11	
Mvmt Flow	786	12	23	790	25	48	
Major/Minor	Major1		Major2		Minor1		
Conflicting Flow All	0	-	786	0	1622	786	
Stage 1	-	-	-	-	786	-	
Stage 2	-	-	-	-	836	-	
Critical Hdwy	-	-	4.24	-	6.44	6.31	
Critical Hdwy Stg 1	-	-	-	-	5.44	-	
Critical Hdwy Stg 2	-	-	-	-	5.44	-	
Follow-up Hdwy	-	-	2.326	-	3.536	3.399	
Pot Cap-1 Maneuver	-	0	782	-	112	378	
Stage 1	-	0	-	-	446	-	
Stage 2	-	0	-	-	422	-	
Platoon blocked, %	-			-			
Mov Cap-1 Maneuver	-	-	782	-	106	378	
Mov Cap-2 Maneuver	-	-	-	-	241	-	
Stage 1	-	-	-	-	446	-	
Stage 2	-	-	-	-	400	-	
Approach	EB		WB		NB		
HCM Control Delay, s	0		0.3		17.9		
HCM LOS					C		
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBL	WBT
Capacity (veh/h)	241		378		-	782	-
HCM Lane V/C Ratio	0.104		0.127		-	0.029	-
HCM Control Delay (s)	21.7		15.9		-	9.7	-
HCM Lane LOS	C		C		-	A	-
HCM 95th %tile Q(veh)	0.3		0.4		-	0.1	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition A
Weekday AM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	401	61	44	225	36	21
Future Volume (veh/h)	401	61	44	225	36	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1722	1678	1767	1278	1248
Adj Flow Rate, veh/h	451	69	49	253	40	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	7	12	15	9	42	44
Cap, veh/h	1355	1101	622	1332	93	80
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1796	1459	791	1767	1217	1058
Grp Volume(v), veh/h	451	69	49	253	40	24
Grp Sat Flow(s),veh/h/ln	1796	1459	791	1767	1217	1058
Q Serve(g_s), s	6.6	1.0	1.7	3.3	2.5	1.7
Cycle Q Clear(g_c), s	6.6	1.0	8.3	3.3	2.5	1.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1355	1101	622	1332	93	80
V/C Ratio(X)	0.33	0.06	0.08	0.19	0.43	0.30
Avail Cap(c_a), veh/h	1355	1101	622	1332	535	465
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.2	2.5	4.6	2.8	35.1	34.7
Incr Delay (d2), s/veh	0.7	0.1	0.2	0.3	3.2	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.3	0.4	1.1	1.5	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.9	2.6	4.8	3.1	38.3	36.8
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	520			302	64	
Approach Delay, s/veh	3.7			3.4	37.7	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		12.6		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		8.6		4.5		10.3
Green Ext Time (p_c), s		2.9		0.2		1.7
Intersection Summary						
HCM 6th Ctrl Delay			6.1			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition A
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔			↔	
Traffic Volume (veh/h)	15	779	17	56	352	17	12	2	5	19	17	44
Future Volume (veh/h)	15	779	17	56	352	17	12	2	5	19	17	44
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	1811	1811	1811	1722	1693	1693	1574	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	16	829	18	60	374	18	13	2	5	20	18	47
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	6	6	6	12	14	14	22	0	0	0	0	0
Cap, veh/h	53	1319	28	479	1213	58	193	41	103	74	41	78
Arrive On Green	0.76	0.76	0.76	0.76	0.76	0.76	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	13	1742	37	599	1602	77	1125	481	1203	262	476	912
Grp Volume(v), veh/h	863	0	0	60	0	392	13	0	7	85	0	0
Grp Sat Flow(s),veh/h/ln	1793	0	0	599	0	1679	1125	0	1684	1650	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	6.4	0.0	0.0	0.3	1.9	0.0	0.0
Cycle Q Clear(g_c), s	19.1	0.0	0.0	4.5	0.0	6.4	0.7	0.0	0.3	4.2	0.0	0.0
Prop In Lane	0.02		0.02	1.00		0.05	1.00		0.71	0.24		0.55
Lane Grp Cap(c), veh/h	1400	0	0	479	0	1271	193	0	144	193	0	0
V/C Ratio(X)	0.62	0.00	0.00	0.13	0.00	0.31	0.07	0.00	0.05	0.44	0.00	0.00
Avail Cap(c_a), veh/h	1400	0	0	479	0	1271	509	0	618	647	0	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	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.9	0.0	0.0	3.1	0.0	3.3	36.2	0.0	36.0	37.8	0.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.0	0.5	0.0	0.6	0.1	0.0	0.1	1.6	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(95%),veh/ln	7.4	0.0	0.0	0.4	0.0	2.2	0.5	0.0	0.2	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.9	0.0	0.0	3.6	0.0	3.9	36.4	0.0	36.2	39.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	A
Approach Vol, veh/h		863			452			20			85	
Approach Delay, s/veh		6.9			3.9			36.3			39.4	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		72.0		13.8		72.0		13.8				
Change Period (Y+Rc), s		7.0		6.5		7.0		6.5				
Max Green Setting (Gmax), s		65.0		31.5		65.0		31.5				
Max Q Clear Time (g_c+I1), s		21.1		2.7		8.4		6.2				
Green Ext Time (p_c), s		6.9		0.0		3.0		0.4				
Intersection Summary												
HCM 6th Ctrl Delay				8.3								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition A
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	662	198	38	283	27	176	137	30	43	183	37
Future Volume (veh/h)	23	662	198	38	283	27	176	137	30	43	183	37
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	1737	1796	1796	1411	1693	1693	1752	1678	1678	1767	1826	1826
Adj Flow Rate, veh/h	26	761	228	44	325	31	202	157	34	49	210	43
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	7	7	33	14	14	10	15	15	9	5	5
Cap, veh/h	555	822	246	110	942	90	215	355	77	253	390	80
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	952	1327	398	429	1521	145	1055	1336	289	1126	1471	301
Grp Volume(v), veh/h	26	0	989	44	0	356	202	0	191	49	0	253
Grp Sat Flow(s),veh/h/ln	952	0	1725	429	0	1666	1055	0	1626	1126	0	1772
Q Serve(g_s), s	1.5	0.0	57.8	11.5	0.0	11.7	16.2	0.0	11.1	4.3	0.0	13.8
Cycle Q Clear(g_c), s	13.2	0.0	57.8	69.3	0.0	11.7	30.0	0.0	11.1	15.3	0.0	13.8
Prop In Lane	1.00		0.23	1.00		0.09	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	555	0	1068	110	0	1032	215	0	432	253	0	470
V/C Ratio(X)	0.05	0.00	0.93	0.40	0.00	0.34	0.94	0.00	0.44	0.19	0.00	0.54
Avail Cap(c_a), veh/h	555	0	1068	110	0	1032	215	0	432	253	0	470
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	19.2	50.1	0.0	10.4	50.5	0.0	34.5	40.9	0.0	35.6
Incr Delay (d2), s/veh	0.0	0.0	13.3	2.3	0.0	0.2	44.9	0.0	0.7	0.4	0.0	1.2
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(95%),veh/ln	0.6	0.0	30.7	2.3	0.0	6.7	13.0	0.0	7.7	2.1	0.0	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	32.5	52.4	0.0	10.6	95.4	0.0	35.3	41.3	0.0	36.8
LnGrp LOS	B	A	C	D	A	B	F	A	D	D	A	D
Approach Vol, veh/h	1015			400			393			302		
Approach Delay, s/veh	32.0			15.2			66.2			37.5		
Approach LOS	C			B			E			D		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	77.0			36.0			77.0			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	59.8			32.0			71.3			17.3		
Green Ext Time (p_c), s	5.0			0.0			0.0			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	36.0											
HCM 6th LOS	D											

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition A
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	5.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	44	0	0	51	102	14
Future Vol, veh/h	44	0	0	51	102	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	0	0	9	11	4
Mvmt Flow	48	0	0	55	111	15
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	76	24
Stage 1	-	-	-	-	48	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	-	-	-	-	7.02	6.98
Critical Hdwy Stg 1	-	-	-	-	6.02	-
Critical Hdwy Stg 2	-	-	-	-	6.02	-
Follow-up Hdwy	-	-	-	-	3.61	3.34
Pot Cap-1 Maneuver	-	0	0	-	893	1040
Stage 1	-	0	0	-	943	-
Stage 2	-	0	0	-	965	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	893	1040
Mov Cap-2 Maneuver	-	-	-	-	893	-
Stage 1	-	-	-	-	943	-
Stage 2	-	-	-	-	965	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		9.5	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	WBT	
Capacity (veh/h)	893		1040	-	-	
HCM Lane V/C Ratio	0.124		0.015	-	-	
HCM Control Delay (s)	9.6		8.5	-	-	
HCM Lane LOS	A		A	-	-	
HCM 95th %tile O(veh)	0.4		0	-	-	

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition A
Weekday AM Peak Hour

Intersection							
Int Delay, s/veh	0.6						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Traffic Vol, veh/h	771	32	40	422	3	22	
Future Vol, veh/h	771	32	40	422	3	22	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	Free	-	None	-	None	
Storage Length	-	-	-	-	0	0	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	92	92	92	92	92	92	
Heavy Vehicles, %	6	6	0	14	0	41	
Mvmt Flow	838	35	43	459	3	24	
Major/Minor	Major1		Major2		Minor1		
Conflicting Flow All	0	-	838	0	1383	838	
Stage 1	-	-	-	-	838	-	
Stage 2	-	-	-	-	545	-	
Critical Hdwy	-	-	4.1	-	6.4	6.61	
Critical Hdwy Stg 1	-	-	-	-	5.4	-	
Critical Hdwy Stg 2	-	-	-	-	5.4	-	
Follow-up Hdwy	-	-	2.2	-	3.5	3.669	
Pot Cap-1 Maneuver	-	0	805	-	160	313	
Stage 1	-	0	-	-	428	-	
Stage 2	-	0	-	-	585	-	
Platoon blocked, %	-			-			
Mov Cap-1 Maneuver	-	-	805	-	148	313	
Mov Cap-2 Maneuver	-	-	-	-	285	-	
Stage 1	-	-	-	-	428	-	
Stage 2	-	-	-	-	543	-	
Approach	EB		WB		NB		
HCM Control Delay, s	0		0.8		17.5		
HCM LOS	C						
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBL	WBT
Capacity (veh/h)	285		313		-	805	-
HCM Lane V/C Ratio	0.011		0.076		-	0.054	-
HCM Control Delay (s)	17.8		17.5		-	9.7	-
HCM Lane LOS	C		C		-	A	-
HCM 95th %tile Q(veh)	0		0.2		-	0.2	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition A
Weekday PM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Volume (veh/h)	310	13	26	507	117	125
Future Volume (veh/h)	310	13	26	507	117	125
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1159	1559	1870	1885	1900
Adj Flow Rate, veh/h	337	14	28	551	127	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	50	23	2	1	0
Cap, veh/h	1362	710	655	1351	207	185
Arrive On Green	0.72	0.72	0.72	0.72	0.12	0.12
Sat Flow, veh/h	1885	982	859	1870	1795	1610
Grp Volume(v), veh/h	337	14	28	551	127	136
Grp Sat Flow(s),veh/h/ln	1885	982	859	1870	1795	1610
Q Serve(g_s), s	5.0	0.3	0.9	9.6	5.6	6.8
Cycle Q Clear(g_c), s	5.0	0.3	6.0	9.6	5.6	6.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1362	710	655	1351	207	185
V/C Ratio(X)	0.25	0.02	0.04	0.41	0.61	0.73
Avail Cap(c_a), veh/h	1362	710	655	1351	757	679
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.9	3.2	4.9	4.5	35.0	35.5
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.9	3.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.1	0.2	4.3	4.6	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.3	3.3	5.0	5.5	38.0	41.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	351			579	263	
Approach Delay, s/veh	4.3			5.4	39.6	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		16.1		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+I1), s	7.0		8.8		11.6	
Green Ext Time (p_c), s	1.9		0.8		3.6	
Intersection Summary						
HCM 6th Ctrl Delay			12.6			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary

4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition A
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	608	35	55	869	31	55	22	37	27	10	29
Future Volume (veh/h)	27	608	35	55	869	31	55	22	37	27	10	29
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	1870	1870	1722	1870	1870	1826	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	28	620	36	56	887	32	56	22	38	28	10	30
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	12	2	2	5	0	0	0	0	0
Cap, veh/h	72	1222	69	588	1328	48	234	60	103	101	39	62
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	36	1650	94	716	1794	65	1335	625	1080	413	411	651
Grp Volume(v), veh/h	684	0	0	56	0	919	56	0	60	68	0	0
Grp Sat Flow(s),veh/h/ln	1779	0	0	716	0	1859	1335	0	1706	1475	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	20.9	0.0	0.0	2.7	1.0	0.0	0.0
Cycle Q Clear(g_c), s	12.5	0.0	0.0	2.6	0.0	20.9	2.5	0.0	2.7	3.8	0.0	0.0
Prop In Lane	0.04		0.05	1.00		0.03	1.00		0.63	0.41		0.44
Lane Grp Cap(c), veh/h	1363	0	0	588	0	1376	234	0	163	203	0	0
V/C Ratio(X)	0.50	0.00	0.00	0.10	0.00	0.67	0.24	0.00	0.37	0.34	0.00	0.00
Avail Cap(c_a), veh/h	1363	0	0	588	0	1376	681	0	735	716	0	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	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.4	0.0	0.0	3.1	0.0	5.5	34.8	0.0	34.9	35.2	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.3	0.0	2.6	0.5	0.0	1.4	1.0	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(95%),veh/ln	5.1	0.0	0.0	0.3	0.0	8.5	1.9	0.0	2.1	2.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.7	0.0	0.0	3.4	0.0	8.1	35.3	0.0	36.3	36.2	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	A
Approach Vol, veh/h	684			975			116			68		
Approach Delay, s/veh	5.7			7.8			35.8			36.2		
Approach LOS	A			A			D			D		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	68.0			14.4			68.0			14.4		
Change Period (Y+Rc), s	7.0			6.5			7.0			6.5		
Max Green Setting (Gmax), s	61.0			35.5			61.0			35.5		
Max Q Clear Time (g_c+I1), s	14.5			4.7			22.9			5.8		
Green Ext Time (p_c), s	5.0			0.5			8.1			0.3		
Intersection Summary												
HCM 6th Ctrl Delay	9.8											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition A
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	499	193	41	812	41	162	107	44	47	184	36
Future Volume (veh/h)	42	499	193	41	812	41	162	107	44	47	184	36
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			
Adj Sat Flow, veh/h/ln	1826	1870	1870	1737	1870	1870	1781	1841	1841	1870	1737	1737
Adj Flow Rate, veh/h	44	520	201	43	846	43	169	111	46	49	192	38
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	2	2	11	2	2	8	4	4	2	11	11
Cap, veh/h	175	717	277	258	985	50	281	361	150	356	411	81
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	610	1284	497	680	1765	90	1096	1236	512	1230	1408	279
Grp Volume(v), veh/h	44	0	721	43	0	889	169	0	157	49	0	230
Grp Sat Flow(s),veh/h/ln	610	0	1781	680	0	1854	1096	0	1749	1230	0	1687
Q Serve(g_s), s	5.7	0.0	26.1	4.4	0.0	35.3	13.0	0.0	6.1	2.8	0.0	9.7
Cycle Q Clear(g_c), s	41.1	0.0	26.1	30.5	0.0	35.3	22.7	0.0	6.1	8.9	0.0	9.7
Prop In Lane	1.00		0.28	1.00		0.05	1.00		0.29	1.00		0.17
Lane Grp Cap(c), veh/h	175	0	994	258	0	1035	281	0	511	356	0	493
V/C Ratio(X)	0.25	0.00	0.73	0.17	0.00	0.86	0.60	0.00	0.31	0.14	0.00	0.47
Avail Cap(c_a), veh/h	326	0	1435	426	0	1494	339	0	604	422	0	583
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	14.2	25.5	0.0	16.3	34.5	0.0	23.9	27.4	0.0	25.2
Incr Delay (d2), s/veh	0.7	0.0	1.0	0.3	0.0	3.7	2.1	0.0	0.3	0.2	0.0	0.7
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(95%),veh/ln	1.5	0.0	13.4	1.2	0.0	18.6	6.1	0.0	4.3	1.4	0.0	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.5	0.0	15.3	25.8	0.0	19.9	36.6	0.0	24.2	27.5	0.0	25.9
LnGrp LOS	C	A	B	C	A	B	D	A	C	C	A	C
Approach Vol, veh/h	765				932				326			
Approach Delay, s/veh	16.4				20.2				30.6			
Approach LOS	B				C				C			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	55.5			31.4			55.5			31.4		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	43.1			24.7			37.3			11.7		
Green Ext Time (p_c), s	5.4			0.7			7.4			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	21.1											
HCM 6th LOS	C											

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition A
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	4.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	19	0	0	31	35	7
Future Vol, veh/h	19	0	0	31	35	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	4	15	3
Mvmt Flow	20	0	0	32	36	7
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	36	10
Stage 1	-	-	-	-	20	-
Stage 2	-	-	-	-	16	-
Critical Hdwy	-	-	-	-	7.1	6.96
Critical Hdwy Stg 1	-	-	-	-	6.1	-
Critical Hdwy Stg 2	-	-	-	-	6.1	-
Follow-up Hdwy	-	-	-	-	3.65	3.33
Pot Cap-1 Maneuver	-	0	0	-	936	1065
Stage 1	-	0	0	-	963	-
Stage 2	-	0	0	-	968	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	936	1065
Mov Cap-2 Maneuver	-	-	-	-	936	-
Stage 1	-	-	-	-	963	-
Stage 2	-	-	-	-	968	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.9	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	WBT	
Capacity (veh/h)	936		1065	-	-	
HCM Lane V/C Ratio	0.039		0.007	-	-	
HCM Control Delay (s)	9		8.4	-	-	
HCM Lane LOS	A		A	-	-	
HCM 95th %tile O(veh)	0.1		0	-	-	

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition A
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	1.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	664	8	9	940	15	84
Future Vol, veh/h	664	8	9	940	15	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	20	0	2	0	11
Mvmt Flow	722	9	10	1022	16	91
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	722	0	1764	722
Stage 1	-	-	-	-	722	-
Stage 2	-	-	-	-	1042	-
Critical Hdwy	-	-	4.1	-	6.4	6.31
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.399
Pot Cap-1 Maneuver	-	0	889	-	93	412
Stage 1	-	0	-	-	485	-
Stage 2	-	0	-	-	343	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	889	-	91	412
Mov Cap-2 Maneuver	-	-	-	-	220	-
Stage 1	-	-	-	-	485	-
Stage 2	-	-	-	-	334	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.1		17.2	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	WBL	WBT
Capacity (veh/h)	220		412	-	889	-
HCM Lane V/C Ratio	0.074		0.222	-	0.011	-
HCM Control Delay (s)	22.7		16.2	-	9.1	-
HCM Lane LOS	C		C	-	A	-
HCM 95th %tile Q(veh)	0.2		0.8	-	0	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition A
Saturday Midday Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↙	↑	↙	↗
Traffic Volume (veh/h)	382	14	9	399	20	24
Future Volume (veh/h)	382	14	9	399	20	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1648	1900	1885	1633	1900
Adj Flow Rate, veh/h	398	15	9	416	21	25
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	17	0	1	18	0
Cap, veh/h	1440	1067	784	1440	100	104
Arrive On Green	0.76	0.76	0.76	0.76	0.06	0.06
Sat Flow, veh/h	1885	1397	988	1885	1555	1610
Grp Volume(v), veh/h	398	15	9	416	21	25
Grp Sat Flow(s),veh/h/ln	1885	1397	988	1885	1555	1610
Q Serve(g_s), s	5.0	0.2	0.2	5.3	1.0	1.2
Cycle Q Clear(g_c), s	5.0	0.2	5.2	5.3	1.0	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1440	1067	784	1440	100	104
V/C Ratio(X)	0.28	0.01	0.01	0.29	0.21	0.24
Avail Cap(c_a), veh/h	1440	1067	784	1440	693	717
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.8	2.2	3.6	2.8	34.8	34.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.5	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	0.1	1.7	0.7	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.3	2.2	3.6	3.3	35.9	36.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	413			425	46	
Approach Delay, s/veh	3.2			3.3	36.0	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		11.6		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+I1), s	7.0		3.2		7.3	
Green Ext Time (p_c), s	2.3		0.1		2.4	
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition A
Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	669	42	65	674	22	52	21	41	26	10	37
Future Volume (veh/h)	41	669	42	65	674	22	52	21	41	26	10	37
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	1885	1885	1885	1796	1870	1870	1811	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	44	712	45	69	717	23	55	22	44	28	11	39
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	7	2	2	6	0	0	0	0	0
Cap, veh/h	89	1197	74	544	1334	43	224	54	109	92	35	68
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	58	1618	100	680	1802	58	1312	565	1131	342	369	711
Grp Volume(v), veh/h	801	0	0	69	0	740	55	0	66	78	0	0
Grp Sat Flow(s),veh/h/ln	1775	0	0	680	0	1860	1312	0	1696	1423	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	14.2	0.0	0.0	3.0	1.6	0.0	0.0
Cycle Q Clear(g_c), s	16.1	0.0	0.0	4.0	0.0	14.2	2.8	0.0	3.0	4.6	0.0	0.0
Prop In Lane	0.05		0.06	1.00		0.03	1.00		0.67	0.36		0.50
Lane Grp Cap(c), veh/h	1360	0	0	544	0	1377	224	0	163	196	0	0
V/C Ratio(X)	0.59	0.00	0.00	0.13	0.00	0.54	0.25	0.00	0.41	0.40	0.00	0.00
Avail Cap(c_a), veh/h	1360	0	0	544	0	1377	663	0	731	711	0	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	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.9	0.0	0.0	3.3	0.0	4.6	35.0	0.0	35.0	35.6	0.0	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.0	0.5	0.0	1.5	0.6	0.0	1.6	1.3	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(95%),veh/ln	6.8	0.0	0.0	0.4	0.0	5.8	1.9	0.0	2.3	2.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.8	0.0	0.0	3.8	0.0	6.1	35.5	0.0	36.7	36.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	A
Approach Vol, veh/h		801			809			121			78	
Approach Delay, s/veh		6.8			5.9			36.1			36.9	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.0		14.4		68.0		14.4				
Change Period (Y+Rc), s		7.0		6.5		7.0		6.5				
Max Green Setting (Gmax), s		61.0		35.5		61.0		35.5				
Max Q Clear Time (g_c+I1), s		18.1		5.0		16.2		6.6				
Green Ext Time (p_c), s		6.4		0.5		6.0		0.3				
Intersection Summary												
HCM 6th Ctrl Delay				9.7								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition A
Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	590	192	39	630	84	142	222	49	51	153	48
Future Volume (veh/h)	52	590	192	39	630	84	142	222	49	51	153	48
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	1841	1885	1885	1811	1885	1885	1781	1870	1870	1900	1841	1841
Adj Flow Rate, veh/h	55	621	202	41	663	88	149	234	52	54	161	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	1	1	6	1	1	8	2	2	0	4	4
Cap, veh/h	263	745	242	206	891	118	295	409	91	254	369	117
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	700	1362	443	644	1630	216	1114	1482	329	1110	1340	424
Grp Volume(v), veh/h	55	0	823	41	0	751	149	0	286	54	0	212
Grp Sat Flow(s),veh/h/ln	700	0	1805	644	0	1846	1114	0	1811	1110	0	1764
Q Serve(g_s), s	4.8	0.0	27.8	4.1	0.0	22.8	9.3	0.0	9.9	3.2	0.0	7.2
Cycle Q Clear(g_c), s	27.5	0.0	27.8	31.9	0.0	22.8	16.5	0.0	9.9	13.2	0.0	7.2
Prop In Lane	1.00		0.25	1.00		0.12	1.00		0.18	1.00		0.24
Lane Grp Cap(c), veh/h	263	0	987	206	0	1009	295	0	499	254	0	486
V/C Ratio(X)	0.21	0.00	0.83	0.20	0.00	0.74	0.50	0.00	0.57	0.21	0.00	0.44
Avail Cap(c_a), veh/h	551	0	1727	470	0	1766	445	0	742	403	0	723
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.2	0.0	13.8	27.1	0.0	12.7	28.6	0.0	22.8	28.4	0.0	21.8
Incr Delay (d2), s/veh	0.4	0.0	1.9	0.5	0.0	1.1	1.3	0.0	1.0	0.4	0.0	0.6
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(95%),veh/ln	1.3	0.0	13.6	1.1	0.0	11.6	4.3	0.0	7.1	1.5	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.6	0.0	15.8	27.6	0.0	13.8	30.0	0.0	23.8	28.9	0.0	22.4
LnGrp LOS	C	A	B	C	A	B	C	A	C	C	A	C
Approach Vol, veh/h	878			792			435			266		
Approach Delay, s/veh	16.2			14.5			25.9			23.7		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	47.0			26.2			47.0			26.2		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	29.8			18.5			33.9			15.2		
Green Ext Time (p_c), s	7.1			1.6			5.8			1.1		
Intersection Summary												
HCM 6th Ctrl Delay	18.3											
HCM 6th LOS	B											

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition A
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	5.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↖
Traffic Vol, veh/h	153	0	0	363	208	298
Future Vol, veh/h	153	0	0	363	208	298
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	4	2
Mvmt Flow	158	0	0	374	214	307
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	345	79
Stage 1	-	-	-	-	158	-
Stage 2	-	-	-	-	187	-
Critical Hdwy	-	-	-	-	6.88	6.94
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	-	-	3.54	3.32
Pot Cap-1 Maneuver	-	0	0	-	620	965
Stage 1	-	0	0	-	848	-
Stage 2	-	0	0	-	820	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	620	965
Mov Cap-2 Maneuver	-	-	-	-	620	-
Stage 1	-	-	-	-	848	-
Stage 2	-	-	-	-	820	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		11.9	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT		
Capacity (veh/h)	620	965	-	-		
HCM Lane V/C Ratio	0.346	0.318	-	-		
HCM Control Delay (s)	13.8	10.5	-	-		
HCM Lane LOS	B	B	-	-		
HCM 95th %tile O(veh)	1.5	1.4	-	-		

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition A
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	1.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	723	13	17	747	14	80
Future Vol, veh/h	723	13	17	747	14	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	14	0	2	0	11
Mvmt Flow	786	14	18	812	15	87
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	-	786	0	1634	786
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	848	-
Critical Hdwy	-	-	4.1	-	6.4	6.31
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.399
Pot Cap-1 Maneuver	-	0	842	-	112	378
Stage 1	-	0	-	-	453	-
Stage 2	-	0	-	-	423	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	842	-	108	378
Mov Cap-2 Maneuver	-	-	-	-	245	-
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	407	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0.2		17.8		
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	245	378	-	842	-	
HCM Lane V/C Ratio	0.062	0.23	-	0.022	-	
HCM Control Delay (s)	20.7	17.3	-	9.4	-	
HCM Lane LOS	C	C	-	A	-	
HCM 95th %tile Q(veh)	0.2	0.9	-	0.1	-	

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition B
Weekday AM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	401	61	44	225	36	21
Future Volume (veh/h)	401	61	44	225	36	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1722	1678	1767	1278	1248
Adj Flow Rate, veh/h	451	69	49	253	40	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	7	12	15	9	42	44
Cap, veh/h	1355	1101	622	1332	93	80
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1796	1459	791	1767	1217	1058
Grp Volume(v), veh/h	451	69	49	253	40	24
Grp Sat Flow(s),veh/h/ln	1796	1459	791	1767	1217	1058
Q Serve(g_s), s	6.6	1.0	1.7	3.3	2.5	1.7
Cycle Q Clear(g_c), s	6.6	1.0	8.3	3.3	2.5	1.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1355	1101	622	1332	93	80
V/C Ratio(X)	0.33	0.06	0.08	0.19	0.43	0.30
Avail Cap(c_a), veh/h	1355	1101	622	1332	535	465
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.2	2.5	4.6	2.8	35.1	34.7
Incr Delay (d2), s/veh	0.7	0.1	0.2	0.3	3.2	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.3	0.4	1.1	1.5	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.9	2.6	4.8	3.1	38.3	36.8
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	520			302	64	
Approach Delay, s/veh	3.7			3.4	37.7	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		12.6		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		8.6		4.5		10.3
Green Ext Time (p_c), s		2.9		0.2		1.7
Intersection Summary						
HCM 6th Ctrl Delay			6.1			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition B
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	662	198	38	283	27	176	137	30	43	183	37
Future Volume (veh/h)	23	662	198	38	283	27	176	137	30	43	183	37
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	1737	1796	1796	1411	1693	1693	1752	1678	1678	1767	1826	1826
Adj Flow Rate, veh/h	26	761	228	44	325	31	202	157	34	49	210	43
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	7	7	33	14	14	10	15	15	9	5	5
Cap, veh/h	555	822	246	110	942	90	215	355	77	253	390	80
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	952	1327	398	429	1521	145	1055	1336	289	1126	1471	301
Grp Volume(v), veh/h	26	0	989	44	0	356	202	0	191	49	0	253
Grp Sat Flow(s),veh/h/ln	952	0	1725	429	0	1666	1055	0	1626	1126	0	1772
Q Serve(g_s), s	1.5	0.0	57.8	11.5	0.0	11.7	16.2	0.0	11.1	4.3	0.0	13.8
Cycle Q Clear(g_c), s	13.2	0.0	57.8	69.3	0.0	11.7	30.0	0.0	11.1	15.3	0.0	13.8
Prop In Lane	1.00		0.23	1.00		0.09	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	555	0	1068	110	0	1032	215	0	432	253	0	470
V/C Ratio(X)	0.05	0.00	0.93	0.40	0.00	0.34	0.94	0.00	0.44	0.19	0.00	0.54
Avail Cap(c_a), veh/h	555	0	1068	110	0	1032	215	0	432	253	0	470
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	19.2	50.1	0.0	10.4	50.5	0.0	34.5	40.9	0.0	35.6
Incr Delay (d2), s/veh	0.0	0.0	13.3	2.3	0.0	0.2	44.9	0.0	0.7	0.4	0.0	1.2
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(95%),veh/ln	0.6	0.0	30.7	2.3	0.0	6.7	13.0	0.0	7.7	2.1	0.0	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	32.5	52.4	0.0	10.6	95.4	0.0	35.3	41.3	0.0	36.8
LnGrp LOS	B	A	C	D	A	B	F	A	D	D	A	D
Approach Vol, veh/h	1015			400			393			302		
Approach Delay, s/veh	32.0			15.2			66.2			37.5		
Approach LOS	C			B			E			D		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	77.0			36.0			77.0			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	59.8			32.0			71.3			17.3		
Green Ext Time (p_c), s	5.0			0.0			0.0			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	36.0											
HCM 6th LOS	D											

HCM 6th Signalized Intersection Summary
17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition B
Weekday AM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↰	↱
Traffic Volume (veh/h)	772	48	85	377	9	22
Future Volume (veh/h)	772	48	85	377	9	22
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1811	1811	1693	1693	1574	1292
Adj Flow Rate, veh/h	839	52	92	410	10	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	14	14	22	41
Cap, veh/h	1300	81	179	746	81	59
Arrive On Green	0.77	0.77	0.77	0.77	0.05	0.05
Sat Flow, veh/h	1688	105	160	968	1499	1095
Grp Volume(v), veh/h	0	891	502	0	10	24
Grp Sat Flow(s),veh/h/ln	0	1792	1128	0	1499	1095
Q Serve(g_s), s	0.0	17.4	5.8	0.0	0.5	1.6
Cycle Q Clear(g_c), s	0.0	17.4	23.2	0.0	0.5	1.6
Prop In Lane		0.06	0.18		1.00	1.00
Lane Grp Cap(c), veh/h	0	1380	924	0	81	59
V/C Ratio(X)	0.00	0.65	0.54	0.00	0.12	0.41
Avail Cap(c_a), veh/h	0	1380	924	0	704	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	4.0	3.7	0.0	34.5	35.1
Incr Delay (d2), s/veh	0.0	2.3	2.3	0.0	0.7	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	5.2	2.5	0.0	0.3	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	6.4	6.0	0.0	35.2	39.5
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	891			502	34	
Approach Delay, s/veh	6.4			6.0	38.3	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		66.0		10.6		66.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		59.0		36.0		59.0
Max Q Clear Time (g_c+I1), s		19.4		3.6		25.2
Green Ext Time (p_c), s		7.2		0.1		3.9
Intersection Summary						
HCM 6th Ctrl Delay			7.0			
HCM 6th LOS			A			

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition B
Weekday AM Peak Hour

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↱	↰			↕	
Traffic Vol, veh/h	15	779	17	11	356	19	8	0	5	36	1	44
Future Vol, veh/h	15	779	17	11	356	19	8	0	5	36	1	44
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	-	-	-	-	-	-	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, %	0	6	10	20	14	14	0	0	50	0	0	0
Mvmt Flow	16	829	18	12	379	20	9	0	5	38	1	47
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	399	0	0	847	0	0	1307	1293	838	1286	1292	389
Stage 1	-	-	-	-	-	-	870	870	-	413	413	-
Stage 2	-	-	-	-	-	-	437	423	-	873	879	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.5	6.7	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4	3.75	3.5	4	3.3
Pot Cap-1 Maneuver	1171	-	-	718	-	-	138	164	303	143	165	664
Stage 1	-	-	-	-	-	-	349	372	-	620	597	-
Stage 2	-	-	-	-	-	-	602	591	-	348	368	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1171	-	-	718	-	-	123	156	303	135	157	664
Mov Cap-2 Maneuver	-	-	-	-	-	-	123	156	-	135	157	-
Stage 1	-	-	-	-	-	-	340	362	-	604	584	-
Stage 2	-	-	-	-	-	-	546	578	-	333	358	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.3			29			28.3		
HCM LOS							D			D		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	123	303	1171	-	-	718	-	-	239			
HCM Lane V/C Ratio	0.069	0.018	0.014	-	-	0.016	-	-	0.361			
HCM Control Delay (s)	36.4	17.1	8.1	0	-	10.1	0	-	28.3			
HCM Lane LOS	E	C	A	A	-	B	A	-	D			
HCM 95th %tile Q(veh)	0.2	0.1	0	-	-	0.1	-	-	1.6			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition B
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	5.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↱	↱
Traffic Vol, veh/h	44	0	0	51	102	14
Future Vol, veh/h	44	0	0	51	102	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	0	0	9	11	4
Mvmt Flow	48	0	0	55	111	15

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	-	76 24
Stage 1	-	-	-	-	48 -
Stage 2	-	-	-	-	28 -
Critical Hdwy	-	-	-	-	7.02 6.98
Critical Hdwy Stg 1	-	-	-	-	6.02 -
Critical Hdwy Stg 2	-	-	-	-	6.02 -
Follow-up Hdwy	-	-	-	-	3.61 3.34
Pot Cap-1 Maneuver	-	0	0	-	893 1040
Stage 1	-	0	0	-	943 -
Stage 2	-	0	0	-	965 -
Platoon blocked, %	-			-	
Mov Cap-1 Maneuver	-	-	-	-	893 1040
Mov Cap-2 Maneuver	-	-	-	-	893 -
Stage 1	-	-	-	-	943 -
Stage 2	-	-	-	-	965 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	893	1040	-	-
HCM Lane V/C Ratio	0.124	0.015	-	-
HCM Control Delay (s)	9.6	8.5	-	-
HCM Lane LOS	A	A	-	-
HCM 95th %tile Q(veh)	0.4	0	-	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition B
Weekday PM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Volume (veh/h)	310	13	26	507	117	125
Future Volume (veh/h)	310	13	26	507	117	125
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1159	1559	1870	1885	1900
Adj Flow Rate, veh/h	337	14	28	551	127	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	50	23	2	1	0
Cap, veh/h	1362	710	655	1351	207	185
Arrive On Green	0.72	0.72	0.72	0.72	0.12	0.12
Sat Flow, veh/h	1885	982	859	1870	1795	1610
Grp Volume(v), veh/h	337	14	28	551	127	136
Grp Sat Flow(s),veh/h/ln	1885	982	859	1870	1795	1610
Q Serve(g_s), s	5.0	0.3	0.9	9.6	5.6	6.8
Cycle Q Clear(g_c), s	5.0	0.3	6.0	9.6	5.6	6.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1362	710	655	1351	207	185
V/C Ratio(X)	0.25	0.02	0.04	0.41	0.61	0.73
Avail Cap(c_a), veh/h	1362	710	655	1351	757	679
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.9	3.2	4.9	4.5	35.0	35.5
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.9	3.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.1	0.2	4.3	4.6	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.3	3.3	5.0	5.5	38.0	41.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	351			579	263	
Approach Delay, s/veh	4.3			5.4	39.6	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		16.1		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		7.0		8.8		11.6
Green Ext Time (p_c), s		1.9		0.8		3.6
Intersection Summary						
HCM 6th Ctrl Delay			12.6			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition B
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	499	193	41	812	41	162	107	44	47	184	36
Future Volume (veh/h)	42	499	193	41	812	41	162	107	44	47	184	36
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	1826	1870	1870	1737	1870	1870	1781	1841	1841	1870	1737	1737
Adj Flow Rate, veh/h	44	520	201	43	846	43	169	111	46	49	192	38
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	2	2	11	2	2	8	4	4	2	11	11
Cap, veh/h	175	717	277	258	985	50	281	361	150	356	411	81
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	610	1284	497	680	1765	90	1096	1236	512	1230	1408	279
Grp Volume(v), veh/h	44	0	721	43	0	889	169	0	157	49	0	230
Grp Sat Flow(s),veh/h/ln	610	0	1781	680	0	1854	1096	0	1749	1230	0	1687
Q Serve(g_s), s	5.7	0.0	26.1	4.4	0.0	35.3	13.0	0.0	6.1	2.8	0.0	9.7
Cycle Q Clear(g_c), s	41.1	0.0	26.1	30.5	0.0	35.3	22.7	0.0	6.1	8.9	0.0	9.7
Prop In Lane	1.00		0.28	1.00		0.05	1.00		0.29	1.00		0.17
Lane Grp Cap(c), veh/h	175	0	994	258	0	1035	281	0	511	356	0	493
V/C Ratio(X)	0.25	0.00	0.73	0.17	0.00	0.86	0.60	0.00	0.31	0.14	0.00	0.47
Avail Cap(c_a), veh/h	326	0	1435	426	0	1494	339	0	604	422	0	583
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	14.2	25.5	0.0	16.3	34.5	0.0	23.9	27.4	0.0	25.2
Incr Delay (d2), s/veh	0.7	0.0	1.0	0.3	0.0	3.7	2.1	0.0	0.3	0.2	0.0	0.7
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(95%),veh/ln	1.5	0.0	13.4	1.2	0.0	18.6	6.1	0.0	4.3	1.4	0.0	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.5	0.0	15.3	25.8	0.0	19.9	36.6	0.0	24.2	27.5	0.0	25.9
LnGrp LOS	C	A	B	C	A	B	D	A	C	C	A	C
Approach Vol, veh/h	765			932			326			279		
Approach Delay, s/veh	16.4			20.2			30.6			26.2		
Approach LOS	B			C			C			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	55.5			31.4			55.5			31.4		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	43.1			24.7			37.3			11.7		
Green Ext Time (p_c), s	5.4			0.7			7.4			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	21.1											
HCM 6th LOS	C											

HCM 6th Signalized Intersection Summary 17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition B
Weekday PM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↰	↱
Traffic Volume (veh/h)	664	12	22	927	46	84
Future Volume (veh/h)	664	12	22	927	46	84
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1841	1752
Adj Flow Rate, veh/h	722	13	24	1008	50	91
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	4	10
Cap, veh/h	1354	24	60	1344	166	140
Arrive On Green	0.74	0.74	0.74	0.74	0.09	0.09
Sat Flow, veh/h	1831	33	20	1819	1753	1485
Grp Volume(v), veh/h	0	735	1032	0	50	91
Grp Sat Flow(s),veh/h/ln	0	1864	1839	0	1753	1485
Q Serve(g_s), s	0.0	13.8	0.0	0.0	2.2	4.8
Cycle Q Clear(g_c), s	0.0	13.8	26.1	0.0	2.2	4.8
Prop In Lane		0.02	0.02		1.00	1.00
Lane Grp Cap(c), veh/h	0	1378	1405	0	166	140
V/C Ratio(X)	0.00	0.53	0.73	0.00	0.30	0.65
Avail Cap(c_a), veh/h	0	1378	1405	0	756	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	4.6	6.2	0.0	34.3	35.5
Incr Delay (d2), s/veh	0.0	1.5	3.5	0.0	1.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	5.6	10.2	0.0	1.7	3.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	6.0	9.6	0.0	35.3	40.4
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	735			1032	141	
Approach Delay, s/veh	6.0			9.6	38.6	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		14.2		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		15.8		6.8		28.1
Green Ext Time (p_c), s		5.2		0.4		9.2
Intersection Summary						
HCM 6th Ctrl Delay			10.4			
HCM 6th LOS			B			

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition B
Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	9.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	27	608	35	42	885	46	39	7	37	31	6	29
Future Vol, veh/h	27	608	35	42	885	46	39	7	37	31	6	29
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	-	-	-	-	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	2	0	4	2	3	0	0	0	4	0	0
Mvmt Flow	28	620	36	43	903	47	40	7	38	32	6	30
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	950	0	0	656	0	0	1725	1730	638	1730	1725	927
Stage 1	-	-	-	-	-	-	694	694	-	1013	1013	-
Stage 2	-	-	-	-	-	-	1031	1036	-	717	712	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.1	6.5	6.2	7.14	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Follow-up Hdwy	2.2	-	-	2.236	-	-	3.5	4	3.3	3.536	4	3.3
Pot Cap-1 Maneuver	731	-	-	922	-	-	71	89	480	68	90	328
Stage 1	-	-	-	-	-	-	436	447	-	286	319	-
Stage 2	-	-	-	-	-	-	284	311	-	418	439	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	731	-	-	922	-	-	54	75	480	51	76	328
Mov Cap-2 Maneuver	-	-	-	-	-	-	54	75	-	51	76	-
Stage 1	-	-	-	-	-	-	409	420	-	269	287	-
Stage 2	-	-	-	-	-	-	228	280	-	355	412	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.4			92.7			132.1		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	54		258	731	-	-	922	-	-	85		
HCM Lane V/C Ratio	0.737		0.174	0.038	-	-	0.046	-	-	0.792		
HCM Control Delay (s)	172.5		21.9	10.1	0	-	9.1	0	-	132.1		
HCM Lane LOS	F		C	B	A	-	A	A	-	F		
HCM 95th %tile Q(veh)	3.1		0.6	0.1	-	-	0.1	-	-	4		

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition B
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	4.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	19	0	0	31	35	7
Future Vol, veh/h	19	0	0	31	35	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	4	16	3
Mvmt Flow	20	0	0	32	36	7
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	36	10
Stage 1	-	-	-	-	20	-
Stage 2	-	-	-	-	16	-
Critical Hdwy	-	-	-	-	7.12	6.96
Critical Hdwy Stg 1	-	-	-	-	6.12	-
Critical Hdwy Stg 2	-	-	-	-	6.12	-
Follow-up Hdwy	-	-	-	-	3.66	3.33
Pot Cap-1 Maneuver	-	0	0	-	933	1065
Stage 1	-	0	0	-	960	-
Stage 2	-	0	0	-	965	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	933	1065
Mov Cap-2 Maneuver	-	-	-	-	933	-
Stage 1	-	-	-	-	960	-
Stage 2	-	-	-	-	965	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.9	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBT
Capacity (veh/h)	933		1065		-	-
HCM Lane V/C Ratio	0.039		0.007		-	-
HCM Control Delay (s)	9		8.4		-	-
HCM Lane LOS	A		A		-	-
HCM 95th %tile Q(veh)	0.1		0		-	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition B
Saturday Midday Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↙	↑	↙	↗
Traffic Volume (veh/h)	382	14	9	399	20	24
Future Volume (veh/h)	382	14	9	399	20	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1648	1900	1885	1633	1900
Adj Flow Rate, veh/h	398	15	9	416	21	25
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	17	0	1	18	0
Cap, veh/h	1440	1067	784	1440	100	104
Arrive On Green	0.76	0.76	0.76	0.76	0.06	0.06
Sat Flow, veh/h	1885	1397	988	1885	1555	1610
Grp Volume(v), veh/h	398	15	9	416	21	25
Grp Sat Flow(s),veh/h/ln	1885	1397	988	1885	1555	1610
Q Serve(g_s), s	5.0	0.2	0.2	5.3	1.0	1.2
Cycle Q Clear(g_c), s	5.0	0.2	5.2	5.3	1.0	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1440	1067	784	1440	100	104
V/C Ratio(X)	0.28	0.01	0.01	0.29	0.21	0.24
Avail Cap(c_a), veh/h	1440	1067	784	1440	693	717
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.8	2.2	3.6	2.8	34.8	34.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.5	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	0.1	1.7	0.7	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.3	2.2	3.6	3.3	35.9	36.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	413			425	46	
Approach Delay, s/veh	3.2			3.3	36.0	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		11.6		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+I1), s	7.0		3.2		7.3	
Green Ext Time (p_c), s	2.3		0.1		2.4	
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition B
Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	590	192	39	630	84	142	222	49	51	153	48
Future Volume (veh/h)	52	590	192	39	630	84	142	222	49	51	153	48
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	1841	1885	1885	1811	1885	1885	1781	1870	1870	1900	1841	1841
Adj Flow Rate, veh/h	55	621	202	41	663	88	149	234	52	54	161	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	1	1	6	1	1	8	2	2	0	4	4
Cap, veh/h	263	745	242	206	891	118	295	409	91	254	369	117
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	700	1362	443	644	1630	216	1114	1482	329	1110	1340	424
Grp Volume(v), veh/h	55	0	823	41	0	751	149	0	286	54	0	212
Grp Sat Flow(s),veh/h/ln	700	0	1805	644	0	1846	1114	0	1811	1110	0	1764
Q Serve(g_s), s	4.8	0.0	27.8	4.1	0.0	22.8	9.3	0.0	9.9	3.2	0.0	7.2
Cycle Q Clear(g_c), s	27.5	0.0	27.8	31.9	0.0	22.8	16.5	0.0	9.9	13.2	0.0	7.2
Prop In Lane	1.00		0.25	1.00		0.12	1.00		0.18	1.00		0.24
Lane Grp Cap(c), veh/h	263	0	987	206	0	1009	295	0	499	254	0	486
V/C Ratio(X)	0.21	0.00	0.83	0.20	0.00	0.74	0.50	0.00	0.57	0.21	0.00	0.44
Avail Cap(c_a), veh/h	551	0	1727	470	0	1766	445	0	742	403	0	723
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.2	0.0	13.8	27.1	0.0	12.7	28.6	0.0	22.8	28.4	0.0	21.8
Incr Delay (d2), s/veh	0.4	0.0	1.9	0.5	0.0	1.1	1.3	0.0	1.0	0.4	0.0	0.6
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(95%),veh/ln	1.3	0.0	13.6	1.1	0.0	11.6	4.3	0.0	7.1	1.5	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.6	0.0	15.8	27.6	0.0	13.8	30.0	0.0	23.8	28.9	0.0	22.4
LnGrp LOS	C	A	B	C	A	B	C	A	C	C	A	C
Approach Vol, veh/h	878			792			435			266		
Approach Delay, s/veh	16.2			14.5			25.9			23.7		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	47.0			26.2			47.0			26.2		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	29.8			18.5			33.9			15.2		
Green Ext Time (p_c), s	7.1			1.6			5.8			1.1		
Intersection Summary												
HCM 6th Ctrl Delay	18.3											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary
17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition B
Saturday Midday Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	723	20	38	727	43	80
Future Volume (veh/h)	723	20	38	727	43	80
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1885	1870	1870	1841	1737
Adj Flow Rate, veh/h	786	22	41	790	47	87
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	2	4	11
Cap, veh/h	1350	38	84	1281	164	138
Arrive On Green	0.74	0.74	0.74	0.74	0.09	0.09
Sat Flow, veh/h	1825	51	50	1731	1753	1472
Grp Volume(v), veh/h	0	808	831	0	47	87
Grp Sat Flow(s),veh/h/ln	0	1876	1781	0	1753	1472
Q Serve(g_s), s	0.0	16.0	0.0	0.0	2.0	4.6
Cycle Q Clear(g_c), s	0.0	16.0	16.9	0.0	2.0	4.6
Prop In Lane		0.03	0.05		1.00	1.00
Lane Grp Cap(c), veh/h	0	1388	1364	0	164	138
V/C Ratio(X)	0.00	0.58	0.61	0.00	0.29	0.63
Avail Cap(c_a), veh/h	0	1388	1364	0	756	635
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	4.8	4.9	0.0	34.2	35.4
Incr Delay (d2), s/veh	0.0	1.8	2.0	0.0	0.9	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	6.6	7.0	0.0	1.6	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	6.6	7.0	0.0	35.2	40.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	808			831	134	
Approach Delay, s/veh	6.6			7.0	38.3	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		14.1		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+l1), s	18.0		6.6		18.9	
Green Ext Time (p_c), s	6.0		0.4		6.8	
Intersection Summary						
HCM 6th Ctrl Delay			9.2			
HCM 6th LOS			A			

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition B
Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	10.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↵	↵			↕	
Traffic Vol, veh/h	41	669	42	44	689	37	37	7	41	33	3	37
Future Vol, veh/h	41	669	42	44	689	37	37	7	41	33	3	37
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	-	-	-	-	-	-	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, %	5	1	0	0	2	5	0	0	0	8	0	0
Mvmt Flow	44	712	45	47	733	39	39	7	44	35	3	39
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	772	0	0	757	0	0	1691	1689	735	1695	1692	753
Stage 1	-	-	-	-	-	-	823	823	-	847	847	-
Stage 2	-	-	-	-	-	-	868	866	-	848	845	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.18	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.572	4	3.3
Pot Cap-1 Maneuver	830	-	-	863	-	-	75	94	423	71	94	413
Stage 1	-	-	-	-	-	-	371	391	-	348	381	-
Stage 2	-	-	-	-	-	-	350	373	-	348	382	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	830	-	-	863	-	-	57	77	423	51	77	413
Mov Cap-2 Maneuver	-	-	-	-	-	-	57	77	-	51	77	-
Stage 1	-	-	-	-	-	-	337	355	-	316	344	-
Stage 2	-	-	-	-	-	-	284	337	-	277	347	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.5			80.2			129.8		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	57	256	830	-	-	863	-	-	94			
HCM Lane V/C Ratio	0.691	0.199	0.053	-	-	0.054	-	-	0.826			
HCM Control Delay (s)	155	22.5	9.6	0	-	9.4	0	-	129.8			
HCM Lane LOS	F	C	A	A	-	A	A	-	F			
HCM 95th %tile Q(veh)	2.9	0.7	0.2	-	-	0.2	-	-	4.5			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition B
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	5.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	153	0	0	363	208	298
Future Vol, veh/h	153	0	0	363	208	298
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	4	2
Mvmt Flow	158	0	0	374	214	307
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	345	79
Stage 1	-	-	-	-	158	-
Stage 2	-	-	-	-	187	-
Critical Hdwy	-	-	-	-	6.88	6.94
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	-	-	3.54	3.32
Pot Cap-1 Maneuver	-	0	0	-	620	965
Stage 1	-	0	0	-	848	-
Stage 2	-	0	0	-	820	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	620	965
Mov Cap-2 Maneuver	-	-	-	-	620	-
Stage 1	-	-	-	-	848	-
Stage 2	-	-	-	-	820	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		11.9	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBT
Capacity (veh/h)	620		965		-	-
HCM Lane V/C Ratio	0.346		0.318		-	-
HCM Control Delay (s)	13.8		10.5		-	-
HCM Lane LOS	B		B		-	-
HCM 95th %tile Q(veh)	1.5		1.4		-	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition C
Weekday AM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	401	61	44	225	36	21
Future Volume (veh/h)	401	61	44	225	36	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1722	1678	1767	1278	1248
Adj Flow Rate, veh/h	451	69	49	253	40	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	7	12	15	9	42	44
Cap, veh/h	1355	1101	622	1332	93	80
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1796	1459	791	1767	1217	1058
Grp Volume(v), veh/h	451	69	49	253	40	24
Grp Sat Flow(s),veh/h/ln	1796	1459	791	1767	1217	1058
Q Serve(g_s), s	6.6	1.0	1.7	3.3	2.5	1.7
Cycle Q Clear(g_c), s	6.6	1.0	8.3	3.3	2.5	1.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1355	1101	622	1332	93	80
V/C Ratio(X)	0.33	0.06	0.08	0.19	0.43	0.30
Avail Cap(c_a), veh/h	1355	1101	622	1332	535	465
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.2	2.5	4.6	2.8	35.1	34.7
Incr Delay (d2), s/veh	0.7	0.1	0.2	0.3	3.2	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.3	0.4	1.1	1.5	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.9	2.6	4.8	3.1	38.3	36.8
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	520			302	64	
Approach Delay, s/veh	3.7			3.4	37.7	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		12.6		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		8.6		4.5		10.3
Green Ext Time (p_c), s		2.9		0.2		1.7
Intersection Summary						
HCM 6th Ctrl Delay			6.1			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition C
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	662	198	38	283	27	176	137	30	43	183	37
Future Volume (veh/h)	23	662	198	38	283	27	176	137	30	43	183	37
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			
Adj Sat Flow, veh/h/ln	1707	1796	1796	1411	1693	1693	1752	1678	1678	1767	1826	1826
Adj Flow Rate, veh/h	26	761	228	44	325	31	202	157	34	49	210	43
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	13	7	7	33	14	14	10	15	15	9	5	5
Cap, veh/h	547	822	246	110	942	90	215	355	77	253	390	80
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	936	1327	398	429	1521	145	1055	1336	289	1126	1471	301
Grp Volume(v), veh/h	26	0	989	44	0	356	202	0	191	49	0	253
Grp Sat Flow(s),veh/h/ln	936	0	1725	429	0	1666	1055	0	1626	1126	0	1772
Q Serve(g_s), s	1.6	0.0	57.8	11.5	0.0	11.7	16.2	0.0	11.1	4.3	0.0	13.8
Cycle Q Clear(g_c), s	13.2	0.0	57.8	69.3	0.0	11.7	30.0	0.0	11.1	15.3	0.0	13.8
Prop In Lane	1.00		0.23	1.00		0.09	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	547	0	1068	110	0	1032	215	0	432	253	0	470
V/C Ratio(X)	0.05	0.00	0.93	0.40	0.00	0.34	0.94	0.00	0.44	0.19	0.00	0.54
Avail Cap(c_a), veh/h	547	0	1068	110	0	1032	215	0	432	253	0	470
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	19.2	50.1	0.0	10.4	50.5	0.0	34.5	40.9	0.0	35.6
Incr Delay (d2), s/veh	0.0	0.0	13.3	2.3	0.0	0.2	44.9	0.0	0.7	0.4	0.0	1.2
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(95%),veh/ln	0.6	0.0	30.7	2.3	0.0	6.7	13.0	0.0	7.7	2.1	0.0	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	32.5	52.4	0.0	10.6	95.4	0.0	35.3	41.3	0.0	36.8
LnGrp LOS	B	A	C	D	A	B	F	A	D	D	A	D
Approach Vol, veh/h	1015				400				393			
Approach Delay, s/veh	32.0				15.2				66.2			
Approach LOS	C				B				E			
Timer - Assigned Phs	2				4				8			
Phs Duration (G+Y+Rc), s	77.0				36.0				77.0			
Change Period (Y+Rc), s	7.0				6.0				7.0			
Max Green Setting (Gmax), s	70.0				30.0				70.0			
Max Q Clear Time (g_c+I1), s	59.8				32.0				71.3			
Green Ext Time (p_c), s	5.0				0.0				1.2			
Intersection Summary												
HCM 6th Ctrl Delay	36.0											
HCM 6th LOS	D											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition C
Weekday AM Peak Hour

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕		↕	↕	
Traffic Vol, veh/h	15	779	17	11	356	19	8	0	5	36	1	44
Future Vol, veh/h	15	779	17	11	356	19	8	0	5	36	1	44
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	-	-	-	50	-	-	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, %	0	6	10	20	14	14	0	0	50	0	0	0
Mvmt Flow	16	829	18	12	379	20	9	0	5	38	1	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	399	0	0	847	0	0	1307	1293	838	1286	1292	389
Stage 1	-	-	-	-	-	-	870	870	-	413	413	-
Stage 2	-	-	-	-	-	-	437	423	-	873	879	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.5	6.7	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4	3.75	3.5	4	3.3
Pot Cap-1 Maneuver	1171	-	-	718	-	-	138	164	303	143	165	664
Stage 1	-	-	-	-	-	-	349	372	-	620	597	-
Stage 2	-	-	-	-	-	-	602	591	-	348	368	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1171	-	-	718	-	-	124	157	303	136	158	664
Mov Cap-2 Maneuver	-	-	-	-	-	-	124	157	-	136	158	-
Stage 1	-	-	-	-	-	-	340	362	-	604	587	-
Stage 2	-	-	-	-	-	-	549	581	-	333	358	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.3			28.9			28.2		
HCM LOS							D			D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	124	303	1171	-	-	718	-	-	240
HCM Lane V/C Ratio	0.069	0.018	0.014	-	-	0.016	-	-	0.359
HCM Control Delay (s)	36.2	17.1	8.1	0	-	10.1	-	-	28.2
HCM Lane LOS	E	C	A	A	-	B	-	-	D
HCM 95th %tile Q(veh)	0.2	0.1	0	-	-	0.1	-	-	1.6

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition C
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	5.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	44	0	0	51	102	14
Future Vol, veh/h	44	0	0	51	102	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	0	0	9	11	4
Mvmt Flow	48	0	0	55	111	15
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	-	-	76	24
Stage 1	-	-	-	-	48	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	-	-	-	-	7.02	6.98
Critical Hdwy Stg 1	-	-	-	-	6.02	-
Critical Hdwy Stg 2	-	-	-	-	6.02	-
Follow-up Hdwy	-	-	-	-	3.61	3.34
Pot Cap-1 Maneuver	-	0	0	-	893	1040
Stage 1	-	0	0	-	943	-
Stage 2	-	0	0	-	965	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	893	1040
Mov Cap-2 Maneuver	-	-	-	-	893	-
Stage 1	-	-	-	-	943	-
Stage 2	-	-	-	-	965	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		9.5		
HCM LOS				A		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT		
Capacity (veh/h)	893	1040	-	-		
HCM Lane V/C Ratio	0.124	0.015	-	-		
HCM Control Delay (s)	9.6	8.5	-	-		
HCM Lane LOS	A	A	-	-		
HCM 95th %tile Q(veh)	0.4	0	-	-		

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition C
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	1.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	772	48	85	377	9	22
Future Vol, veh/h	772	48	85	377	9	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	4	8	14	22	41
Mvmt Flow	839	52	92	410	10	24
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	-	839	0	1433	839
Stage 1	-	-	-	-	839	-
Stage 2	-	-	-	-	594	-
Critical Hdwy	-	-	4.18	-	6.62	6.61
Critical Hdwy Stg 1	-	-	-	-	5.62	-
Critical Hdwy Stg 2	-	-	-	-	5.62	-
Follow-up Hdwy	-	-	2.272	-	3.698	3.669
Pot Cap-1 Maneuver	-	0	770	-	133	313
Stage 1	-	0	-	-	392	-
Stage 2	-	0	-	-	515	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	770	-	112	313
Mov Cap-2 Maneuver	-	-	-	-	239	-
Stage 1	-	-	-	-	392	-
Stage 2	-	-	-	-	435	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	1.9		18.4		
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	239	313	-	770	-	
HCM Lane V/C Ratio	0.041	0.076	-	0.12	-	
HCM Control Delay (s)	20.7	17.5	-	10.3	-	
HCM Lane LOS	C	C	-	B	-	
HCM 95th %tile Q(veh)	0.1	0.2	-	0.4	-	

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition C
Weekday PM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	310	13	26	507	117	125
Future Volume (veh/h)	310	13	26	507	117	125
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1159	1559	1870	1885	1900
Adj Flow Rate, veh/h	337	14	28	551	127	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	50	23	2	1	0
Cap, veh/h	1362	710	655	1351	207	185
Arrive On Green	0.72	0.72	0.72	0.72	0.12	0.12
Sat Flow, veh/h	1885	982	859	1870	1795	1610
Grp Volume(v), veh/h	337	14	28	551	127	136
Grp Sat Flow(s),veh/h/ln	1885	982	859	1870	1795	1610
Q Serve(g_s), s	5.0	0.3	0.9	9.6	5.6	6.8
Cycle Q Clear(g_c), s	5.0	0.3	6.0	9.6	5.6	6.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1362	710	655	1351	207	185
V/C Ratio(X)	0.25	0.02	0.04	0.41	0.61	0.73
Avail Cap(c_a), veh/h	1362	710	655	1351	757	679
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.9	3.2	4.9	4.5	35.0	35.5
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.9	3.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.1	0.2	4.3	4.6	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.3	3.3	5.0	5.5	38.0	41.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	351			579	263	
Approach Delay, s/veh	4.3			5.4	39.6	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		16.1		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		7.0		8.8		11.6
Green Ext Time (p_c), s		1.9		0.8		3.6
Intersection Summary						
HCM 6th Ctrl Delay			12.6			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition C
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	499	193	41	812	41	162	107	44	47	184	36
Future Volume (veh/h)	42	499	193	41	812	41	162	107	44	47	184	36
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			
Adj Sat Flow, veh/h/ln	1826	1870	1870	1737	1870	1870	1781	1841	1841	1870	1737	1737
Adj Flow Rate, veh/h	44	520	201	43	846	43	169	111	46	49	192	38
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	2	2	11	2	2	8	4	4	2	11	11
Cap, veh/h	175	717	277	258	985	50	281	361	150	356	411	81
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	610	1284	497	680	1765	90	1096	1236	512	1230	1408	279
Grp Volume(v), veh/h	44	0	721	43	0	889	169	0	157	49	0	230
Grp Sat Flow(s),veh/h/ln	610	0	1781	680	0	1854	1096	0	1749	1230	0	1687
Q Serve(g_s), s	5.7	0.0	26.1	4.4	0.0	35.3	13.0	0.0	6.1	2.8	0.0	9.7
Cycle Q Clear(g_c), s	41.1	0.0	26.1	30.5	0.0	35.3	22.7	0.0	6.1	8.9	0.0	9.7
Prop In Lane	1.00		0.28	1.00		0.05	1.00		0.29	1.00		0.17
Lane Grp Cap(c), veh/h	175	0	994	258	0	1035	281	0	511	356	0	493
V/C Ratio(X)	0.25	0.00	0.73	0.17	0.00	0.86	0.60	0.00	0.31	0.14	0.00	0.47
Avail Cap(c_a), veh/h	326	0	1435	426	0	1494	339	0	604	422	0	583
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	14.2	25.5	0.0	16.3	34.5	0.0	23.9	27.4	0.0	25.2
Incr Delay (d2), s/veh	0.7	0.0	1.0	0.3	0.0	3.7	2.1	0.0	0.3	0.2	0.0	0.7
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(95%),veh/ln	1.5	0.0	13.4	1.2	0.0	18.6	6.1	0.0	4.3	1.4	0.0	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.5	0.0	15.3	25.8	0.0	19.9	36.6	0.0	24.2	27.5	0.0	25.9
LnGrp LOS	C	A	B	C	A	B	D	A	C	C	A	C
Approach Vol, veh/h	765				932				326			
Approach Delay, s/veh	16.4				20.2				30.6			
Approach LOS	B				C				C			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	55.5			31.4			55.5			31.4		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+l1), s	43.1			24.7			37.3			11.7		
Green Ext Time (p_c), s	5.4			0.7			7.4			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	21.1											
HCM 6th LOS	C											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition C
Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	8.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕		↕	↕	
Traffic Vol, veh/h	27	608	35	42	885	46	39	7	37	31	6	29
Future Vol, veh/h	27	608	35	42	885	46	39	7	37	31	6	29
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	-	-	-	50	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	2	0	4	2	3	0	0	0	4	0	0
Mvmt Flow	28	620	36	43	903	47	40	7	38	32	6	30
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	950	0	0	656	0	0	1725	1730	638	1730	1725	927
Stage 1	-	-	-	-	-	-	694	694	-	1013	1013	-
Stage 2	-	-	-	-	-	-	1031	1036	-	717	712	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.1	6.5	6.2	7.14	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Follow-up Hdwy	2.2	-	-	2.236	-	-	3.5	4	3.3	3.536	4	3.3
Pot Cap-1 Maneuver	731	-	-	922	-	-	71	89	480	68	90	328
Stage 1	-	-	-	-	-	-	436	447	-	286	319	-
Stage 2	-	-	-	-	-	-	284	311	-	418	439	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	731	-	-	922	-	-	56	80	480	54	81	328
Mov Cap-2 Maneuver	-	-	-	-	-	-	56	80	-	54	81	-
Stage 1	-	-	-	-	-	-	409	420	-	269	304	-
Stage 2	-	-	-	-	-	-	241	296	-	355	412	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.4			87.2			117.5		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	56		267	731	-	-	922	-	-	90		
HCM Lane V/C Ratio	0.711		0.168	0.038	-	-	0.046	-	-	0.748		
HCM Control Delay (s)	161.6		21.2	10.1	0	-	9.1	-	-	117.5		
HCM Lane LOS	F		C	B	A	-	A	-	-	F		
HCM 95th %tile Q(veh)	3		0.6	0.1	-	-	0.1	-	-	3.8		

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition C
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	4.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	19	0	0	31	35	7
Future Vol, veh/h	19	0	0	31	35	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	4	16	3
Mvmt Flow	20	0	0	32	36	7
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	36	10
Stage 1	-	-	-	-	20	-
Stage 2	-	-	-	-	16	-
Critical Hdwy	-	-	-	-	7.12	6.96
Critical Hdwy Stg 1	-	-	-	-	6.12	-
Critical Hdwy Stg 2	-	-	-	-	6.12	-
Follow-up Hdwy	-	-	-	-	3.66	3.33
Pot Cap-1 Maneuver	-	0	0	-	933	1065
Stage 1	-	0	0	-	960	-
Stage 2	-	0	0	-	965	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	933	1065
Mov Cap-2 Maneuver	-	-	-	-	933	-
Stage 1	-	-	-	-	960	-
Stage 2	-	-	-	-	965	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		8.9	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBT
Capacity (veh/h)	933		1065		-	-
HCM Lane V/C Ratio	0.039		0.007		-	-
HCM Control Delay (s)	9		8.4		-	-
HCM Lane LOS	A		A		-	-
HCM 95th %tile Q(veh)	0.1		0		-	-

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition C
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	1.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	664	12	22	927	46	84
Future Vol, veh/h	664	12	22	927	46	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	11	18	2	4	10
Mvmt Flow	722	13	24	1008	50	91
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	722	0	1778	722
Stage 1	-	-	-	-	722	-
Stage 2	-	-	-	-	1056	-
Critical Hdwy	-	-	4.28	-	6.44	6.3
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.362	-	3.536	3.39
Pot Cap-1 Maneuver	-	0	811	-	90	414
Stage 1	-	0	-	-	477	-
Stage 2	-	0	-	-	332	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	811	-	84	414
Mov Cap-2 Maneuver	-	-	-	-	208	-
Stage 1	-	-	-	-	477	-
Stage 2	-	-	-	-	310	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0.2		20.2		
HCM LOS				C		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	208	414	-	811	-	
HCM Lane V/C Ratio	0.24	0.221	-	0.029	-	
HCM Control Delay (s)	27.7	16.1	-	9.6	-	
HCM Lane LOS	D	C	-	A	-	
HCM 95th %tile Q(veh)	0.9	0.8	-	0.1	-	

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition C
Saturday Midday Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↙	↑	↙	↗
Traffic Volume (veh/h)	382	14	9	399	20	24
Future Volume (veh/h)	382	14	9	399	20	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1648	1900	1885	1633	1900
Adj Flow Rate, veh/h	398	15	9	416	21	25
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	17	0	1	18	0
Cap, veh/h	1440	1067	784	1440	100	104
Arrive On Green	0.76	0.76	0.76	0.76	0.06	0.06
Sat Flow, veh/h	1885	1397	988	1885	1555	1610
Grp Volume(v), veh/h	398	15	9	416	21	25
Grp Sat Flow(s),veh/h/ln	1885	1397	988	1885	1555	1610
Q Serve(g_s), s	5.0	0.2	0.2	5.3	1.0	1.2
Cycle Q Clear(g_c), s	5.0	0.2	5.2	5.3	1.0	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1440	1067	784	1440	100	104
V/C Ratio(X)	0.28	0.01	0.01	0.29	0.21	0.24
Avail Cap(c_a), veh/h	1440	1067	784	1440	693	717
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.8	2.2	3.6	2.8	34.8	34.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.5	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	0.1	1.7	0.7	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.3	2.2	3.6	3.3	35.9	36.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	413			425	46	
Approach Delay, s/veh	3.2			3.3	36.0	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		11.6		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+I1), s	7.0		3.2		7.3	
Green Ext Time (p_c), s	2.3		0.1		2.4	
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition C

Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	590	192	39	630	84	142	222	49	51	153	48
Future Volume (veh/h)	52	590	192	39	630	84	142	222	49	51	153	48
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			
Adj Sat Flow, veh/h/ln	1841	1885	1885	1811	1885	1885	1781	1870	1870	1900	1841	1841
Adj Flow Rate, veh/h	55	621	202	41	663	88	149	234	52	54	161	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	1	1	6	1	1	8	2	2	0	4	4
Cap, veh/h	263	745	242	206	891	118	295	409	91	254	369	117
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	700	1362	443	644	1630	216	1114	1482	329	1110	1340	424
Grp Volume(v), veh/h	55	0	823	41	0	751	149	0	286	54	0	212
Grp Sat Flow(s),veh/h/ln	700	0	1805	644	0	1846	1114	0	1811	1110	0	1764
Q Serve(g_s), s	4.8	0.0	27.8	4.1	0.0	22.8	9.3	0.0	9.9	3.2	0.0	7.2
Cycle Q Clear(g_c), s	27.5	0.0	27.8	31.9	0.0	22.8	16.5	0.0	9.9	13.2	0.0	7.2
Prop In Lane	1.00		0.25	1.00		0.12	1.00		0.18	1.00		0.24
Lane Grp Cap(c), veh/h	263	0	987	206	0	1009	295	0	499	254	0	486
V/C Ratio(X)	0.21	0.00	0.83	0.20	0.00	0.74	0.50	0.00	0.57	0.21	0.00	0.44
Avail Cap(c_a), veh/h	551	0	1727	470	0	1766	445	0	742	403	0	723
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.2	0.0	13.8	27.1	0.0	12.7	28.6	0.0	22.8	28.4	0.0	21.8
Incr Delay (d2), s/veh	0.4	0.0	1.9	0.5	0.0	1.1	1.3	0.0	1.0	0.4	0.0	0.6
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(95%),veh/ln	1.3	0.0	13.6	1.1	0.0	11.6	4.3	0.0	7.1	1.5	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.6	0.0	15.8	27.6	0.0	13.8	30.0	0.0	23.8	28.9	0.0	22.4
LnGrp LOS	C	A	B	C	A	B	C	A	C	C	A	C
Approach Vol, veh/h	878				792				435			
Approach Delay, s/veh	16.2				14.5				25.9			
Approach LOS	B				B				C			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	47.0			26.2			47.0			26.2		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	29.8			18.5			33.9			15.2		
Green Ext Time (p_c), s	7.1			1.6			5.8			1.1		
Intersection Summary												
HCM 6th Ctrl Delay	18.3											
HCM 6th LOS	B											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition C
Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	9.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	669	42	44	689	37	37	7	41	33	3	37
Future Vol, veh/h	41	669	42	44	689	37	37	7	41	33	3	37
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	-	-	-	50	-	-	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, %	5	1	0	0	2	5	0	0	0	8	0	0
Mvmt Flow	44	712	45	47	733	39	39	7	44	35	3	39
Major/Minor	Major1		Major2			Minor1			Minor2			
Conflicting Flow All	772	0	0	757	0	0	1691	1689	735	1695	1692	753
Stage 1	-	-	-	-	-	-	823	823	-	847	847	-
Stage 2	-	-	-	-	-	-	868	866	-	848	845	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.18	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.572	4	3.3
Pot Cap-1 Maneuver	830	-	-	863	-	-	75	94	423	71	94	413
Stage 1	-	-	-	-	-	-	371	391	-	348	381	-
Stage 2	-	-	-	-	-	-	350	373	-	348	382	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	830	-	-	863	-	-	59	81	423	53	81	413
Mov Cap-2 Maneuver	-	-	-	-	-	-	59	81	-	53	81	-
Stage 1	-	-	-	-	-	-	337	355	-	316	360	-
Stage 2	-	-	-	-	-	-	297	353	-	277	347	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	0.5		0.5			75.9			121.3			
HCM LOS						F			F			
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	59 262		830	-	-	863	-	-	97			
HCM Lane V/C Ratio	0.667 0.195		0.053	-	-	0.054	-	-	0.801			
HCM Control Delay (s)	145.8 22		9.6	0	-	9.4	-	-	121.3			
HCM Lane LOS	F C		A	A	-	A	-	-	F			
HCM 95th %tile Q(veh)	2.8 0.7		0.2	-	-	0.2	-	-	4.3			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition C
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	5.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↖
Traffic Vol, veh/h	153	0	0	363	208	298
Future Vol, veh/h	153	0	0	363	208	298
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	4	2
Mvmt Flow	158	0	0	374	214	307
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	345	79
Stage 1	-	-	-	-	158	-
Stage 2	-	-	-	-	187	-
Critical Hdwy	-	-	-	-	6.88	6.94
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	-	-	3.54	3.32
Pot Cap-1 Maneuver	-	0	0	-	620	965
Stage 1	-	0	0	-	848	-
Stage 2	-	0	0	-	820	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	620	965
Mov Cap-2 Maneuver	-	-	-	-	620	-
Stage 1	-	-	-	-	848	-
Stage 2	-	-	-	-	820	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		11.9	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBT
Capacity (veh/h)	620		965		-	-
HCM Lane V/C Ratio	0.346		0.318		-	-
HCM Control Delay (s)	13.8		10.5		-	-
HCM Lane LOS	B		B		-	-
HCM 95th %tile O(veh)	1.5		1.4		-	-

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition C
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	1.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	723	20	38	727	43	80
Future Vol, veh/h	723	20	38	727	43	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	10	13	2	4	11
Mvmt Flow	786	22	41	790	47	87
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	-	786	0	1658	786
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	872	-
Critical Hdwy	-	-	4.23	-	6.44	6.31
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.317	-	3.536	3.399
Pot Cap-1 Maneuver	-	0	786	-	106	378
Stage 1	-	0	-	-	446	-
Stage 2	-	0	-	-	406	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	786	-	96	378
Mov Cap-2 Maneuver	-	-	-	-	227	-
Stage 1	-	-	-	-	446	-
Stage 2	-	-	-	-	368	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0.5		20		
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	227	378	-	786	-	
HCM Lane V/C Ratio	0.206	0.23	-	0.053	-	
HCM Control Delay (s)	24.9	17.3	-	9.8	-	
HCM Lane LOS	C	C	-	A	-	
HCM 95th %tile Q(veh)	0.8	0.9	-	0.2	-	

HCM 6th Signalized Intersection Summary 8: Edwards Avenue & Middle Country Road

2025 Phase 2 Mitigation Build Condition A
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	662	198	38	283	27	176	137	30	43	183	37
Future Volume (veh/h)	23	662	198	38	283	27	176	137	30	43	183	37
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			
Adj Sat Flow, veh/h/ln	1737	1796	1796	1411	1693	1693	1752	1678	1678	1767	1826	1826
Adj Flow Rate, veh/h	26	761	228	44	325	31	202	157	34	49	210	43
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	7	7	33	14	14	10	15	15	9	5	5
Cap, veh/h	521	767	230	84	879	84	246	371	80	285	408	84
Arrive On Green	0.58	0.58	0.58	0.58	0.58	0.58	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	952	1327	398	429	1521	145	1055	1336	289	1126	1471	301
Grp Volume(v), veh/h	26	0	989	44	0	356	202	0	191	49	0	253
Grp Sat Flow(s),veh/h/ln	952	0	1725	429	0	1666	1055	0	1626	1126	0	1772
Q Serve(g_s), s	1.4	0.0	51.1	0.9	0.0	10.3	14.2	0.0	8.7	3.4	0.0	10.8
Cycle Q Clear(g_c), s	11.7	0.0	51.1	52.0	0.0	10.3	25.0	0.0	8.7	12.0	0.0	10.8
Prop In Lane	1.00		0.23	1.00		0.09	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	521	0	996	84	0	963	246	0	452	285	0	492
V/C Ratio(X)	0.05	0.00	0.99	0.52	0.00	0.37	0.82	0.00	0.42	0.17	0.00	0.51
Avail Cap(c_a), veh/h	521	0	996	84	0	963	246	0	452	285	0	492
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.3	0.0	18.8	45.0	0.0	10.2	39.2	0.0	26.6	31.5	0.0	27.4
Incr Delay (d2), s/veh	0.0	0.0	26.6	5.7	0.0	0.2	19.4	0.0	0.6	0.3	0.0	0.9
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(95%),veh/ln	0.5	0.0	30.9	1.9	0.0	5.6	9.5	0.0	5.8	1.6	0.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.4	0.0	45.4	50.6	0.0	10.4	58.6	0.0	27.2	31.8	0.0	28.3
LnGrp LOS	B	A	D	D	A	B	E	A	C	C	A	C
Approach Vol, veh/h	1015				400				393			
Approach Delay, s/veh	44.6				14.9				43.3			
Approach LOS	D				B				D			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	59.0			31.0			59.0			31.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	52.0			25.0			52.0			25.0		
Max Q Clear Time (g_c+I1), s	53.1			27.0			54.0			14.0		
Green Ext Time (p_c), s	0.0			0.0			0.0			1.1		
Intersection Summary												
HCM 6th Ctrl Delay	36.5											
HCM 6th LOS	D											

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Mitigation Build Condition B

Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	662	198	38	283	27	176	137	30	43	183	37
Future Volume (veh/h)	23	662	198	38	283	27	176	137	30	43	183	37
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	1737	1796	1796	1411	1693	1693	1752	1678	1678	1767	1826	1826
Adj Flow Rate, veh/h	26	761	228	44	325	31	202	157	34	49	210	43
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	7	7	33	14	14	10	15	15	9	5	5
Cap, veh/h	521	767	230	84	879	84	246	371	80	285	408	84
Arrive On Green	0.58	0.58	0.58	0.58	0.58	0.58	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	952	1327	398	429	1521	145	1055	1336	289	1126	1471	301
Grp Volume(v), veh/h	26	0	989	44	0	356	202	0	191	49	0	253
Grp Sat Flow(s),veh/h/ln	952	0	1725	429	0	1666	1055	0	1626	1126	0	1772
Q Serve(g_s), s	1.4	0.0	51.1	0.9	0.0	10.3	14.2	0.0	8.7	3.4	0.0	10.8
Cycle Q Clear(g_c), s	11.7	0.0	51.1	52.0	0.0	10.3	25.0	0.0	8.7	12.0	0.0	10.8
Prop In Lane	1.00		0.23	1.00		0.09	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	521	0	996	84	0	963	246	0	452	285	0	492
V/C Ratio(X)	0.05	0.00	0.99	0.52	0.00	0.37	0.82	0.00	0.42	0.17	0.00	0.51
Avail Cap(c_a), veh/h	521	0	996	84	0	963	246	0	452	285	0	492
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.3	0.0	18.8	45.0	0.0	10.2	39.2	0.0	26.6	31.5	0.0	27.4
Incr Delay (d2), s/veh	0.0	0.0	26.6	5.7	0.0	0.2	19.4	0.0	0.6	0.3	0.0	0.9
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(95%),veh/ln	0.5	0.0	30.9	1.9	0.0	5.6	9.5	0.0	5.8	1.6	0.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.4	0.0	45.4	50.6	0.0	10.4	58.6	0.0	27.2	31.8	0.0	28.3
LnGrp LOS	B	A	D	D	A	B	E	A	C	C	A	C
Approach Vol, veh/h	1015			400			393			302		
Approach Delay, s/veh	44.6			14.9			43.3			28.9		
Approach LOS	D			B			D			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	59.0			31.0			59.0			31.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	52.0			25.0			52.0			25.0		
Max Q Clear Time (g_c+I1), s	53.1			27.0			54.0			14.0		
Green Ext Time (p_c), s	0.0			0.0			0.0			1.1		
Intersection Summary												
HCM 6th Ctrl Delay	36.5											
HCM 6th LOS	D											

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Mitigation Build Condition C

Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	662	198	38	283	27	176	137	30	43	183	37
Future Volume (veh/h)	23	662	198	38	283	27	176	137	30	43	183	37
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			
Adj Sat Flow, veh/h/ln	1707	1796	1796	1411	1693	1693	1752	1678	1678	1767	1826	1826
Adj Flow Rate, veh/h	26	761	228	44	325	31	202	157	34	49	210	43
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	13	7	7	33	14	14	10	15	15	9	5	5
Cap, veh/h	513	767	230	84	879	84	246	371	80	285	408	84
Arrive On Green	0.58	0.58	0.58	0.58	0.58	0.58	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	936	1327	398	429	1521	145	1055	1336	289	1126	1471	301
Grp Volume(v), veh/h	26	0	989	44	0	356	202	0	191	49	0	253
Grp Sat Flow(s),veh/h/ln	936	0	1725	429	0	1666	1055	0	1626	1126	0	1772
Q Serve(g_s), s	1.4	0.0	51.1	0.9	0.0	10.3	14.2	0.0	8.7	3.4	0.0	10.8
Cycle Q Clear(g_c), s	11.7	0.0	51.1	52.0	0.0	10.3	25.0	0.0	8.7	12.0	0.0	10.8
Prop In Lane	1.00		0.23	1.00		0.09	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	513	0	996	84	0	963	246	0	452	285	0	492
V/C Ratio(X)	0.05	0.00	0.99	0.52	0.00	0.37	0.82	0.00	0.42	0.17	0.00	0.51
Avail Cap(c_a), veh/h	513	0	996	84	0	963	246	0	452	285	0	492
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.3	0.0	18.8	45.0	0.0	10.2	39.2	0.0	26.6	31.5	0.0	27.4
Incr Delay (d2), s/veh	0.0	0.0	26.6	5.7	0.0	0.2	19.4	0.0	0.6	0.3	0.0	0.9
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(95%),veh/ln	0.5	0.0	30.9	1.9	0.0	5.6	9.5	0.0	5.8	1.6	0.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.4	0.0	45.4	50.6	0.0	10.4	58.6	0.0	27.2	31.8	0.0	28.3
LnGrp LOS	B	A	D	D	A	B	E	A	C	C	A	C
Approach Vol, veh/h	1015				400				393			
Approach Delay, s/veh	44.6				14.9				43.3			
Approach LOS	D				B				D			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	59.0			31.0			59.0			31.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	52.0			25.0			52.0			25.0		
Max Q Clear Time (g_c+I1), s	53.1			27.0			54.0			14.0		
Green Ext Time (p_c), s	0.0			0.0			0.0			1.1		
Intersection Summary												
HCM 6th Ctrl Delay	36.5											
HCM 6th LOS	D											

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition D
Weekday AM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Volume (veh/h)	410	61	44	232	36	21
Future Volume (veh/h)	410	61	44	232	36	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1722	1678	1767	1278	1248
Adj Flow Rate, veh/h	461	69	49	261	40	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	7	12	15	9	42	44
Cap, veh/h	1355	1101	615	1332	93	80
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1796	1459	784	1767	1217	1058
Grp Volume(v), veh/h	461	69	49	261	40	24
Grp Sat Flow(s),veh/h/ln	1796	1459	784	1767	1217	1058
Q Serve(g_s), s	6.8	1.0	1.8	3.4	2.5	1.7
Cycle Q Clear(g_c), s	6.8	1.0	8.5	3.4	2.5	1.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1355	1101	615	1332	93	80
V/C Ratio(X)	0.34	0.06	0.08	0.20	0.43	0.30
Avail Cap(c_a), veh/h	1355	1101	615	1332	535	465
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.2	2.5	4.6	2.8	35.1	34.7
Incr Delay (d2), s/veh	0.7	0.1	0.3	0.3	3.2	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	0.3	0.4	1.1	1.5	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.9	2.6	4.9	3.1	38.3	36.8
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	530			310	64	
Approach Delay, s/veh	3.7			3.4	37.7	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		12.6		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+l1), s	8.8		4.5		10.5	
Green Ext Time (p_c), s	3.0		0.2		1.8	
Intersection Summary						
HCM 6th Ctrl Delay			6.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition D
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	788	17	68	356	17	15	7	5	19	22	44
Future Volume (veh/h)	15	788	17	68	356	17	15	7	5	19	22	44
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	1811	1811	1811	1781	1693	1693	1693	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	16	838	18	72	379	18	16	7	5	20	23	47
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	6	6	6	8	14	14	14	0	0	0	0	0
Cap, veh/h	53	1317	28	485	1211	58	200	90	64	73	48	76
Arrive On Green	0.76	0.76	0.76	0.76	0.76	0.76	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	13	1742	37	614	1603	76	1204	1031	736	247	547	868
Grp Volume(v), veh/h	872	0	0	72	0	397	16	0	12	90	0	0
Grp Sat Flow(s),veh/h/ln	1793	0	0	614	0	1679	1204	0	1767	1661	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.5	2.0	0.0	0.0
Cycle Q Clear(g_c), s	19.7	0.0	0.0	5.7	0.0	6.5	0.9	0.0	0.5	4.4	0.0	0.0
Prop In Lane	0.02		0.02	1.00		0.05	1.00		0.42	0.22		0.52
Lane Grp Cap(c), veh/h	1397	0	0	485	0	1269	200	0	155	196	0	0
V/C Ratio(X)	0.62	0.00	0.00	0.15	0.00	0.31	0.08	0.00	0.08	0.46	0.00	0.00
Avail Cap(c_a), veh/h	1397	0	0	485	0	1269	535	0	647	650	0	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	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.0	0.0	0.0	3.3	0.0	3.4	36.2	0.0	36.1	37.8	0.0	0.0
Incr Delay (d2), s/veh	2.1	0.0	0.0	0.6	0.0	0.6	0.2	0.0	0.2	1.7	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(95%),veh/ln	7.7	0.0	0.0	0.5	0.0	2.3	0.6	0.0	0.4	3.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.1	0.0	0.0	3.9	0.0	4.0	36.4	0.0	36.3	39.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	A
Approach Vol, veh/h	872			469			28			90		
Approach Delay, s/veh	7.1			4.0			36.3			39.5		
Approach LOS	A			A			D			D		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	72.0			14.0			72.0			14.0		
Change Period (Y+Rc), s	7.0			6.5			7.0			6.5		
Max Green Setting (Gmax), s	65.0			31.5			65.0			31.5		
Max Q Clear Time (g_c+I1), s	21.7			2.9			8.5			6.4		
Green Ext Time (p_c), s	7.0			0.1			3.1			0.4		
Intersection Summary												
HCM 6th Ctrl Delay	8.6											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition D
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	662	218	38	283	27	200	137	30	43	183	37
Future Volume (veh/h)	23	662	218	38	283	27	200	137	30	43	183	37
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			
Adj Sat Flow, veh/h/ln	1737	1796	1796	1411	1693	1693	1767	1678	1678	1767	1826	1826
Adj Flow Rate, veh/h	26	761	251	44	325	31	230	157	34	49	210	43
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	7	7	33	14	14	9	15	15	9	5	5
Cap, veh/h	555	801	264	95	942	90	216	355	77	253	390	80
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	952	1293	426	420	1521	145	1064	1336	289	1126	1471	301
Grp Volume(v), veh/h	26	0	1012	44	0	356	230	0	191	49	0	253
Grp Sat Flow(s),veh/h/ln	952	0	1719	420	0	1666	1064	0	1626	1126	0	1772
Q Serve(g_s), s	1.5	0.0	61.5	8.5	0.0	11.7	16.2	0.0	11.1	4.3	0.0	13.8
Cycle Q Clear(g_c), s	13.2	0.0	61.5	70.0	0.0	11.7	30.0	0.0	11.1	15.3	0.0	13.8
Prop In Lane	1.00		0.25	1.00		0.09	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	555	0	1065	95	0	1032	216	0	432	253	0	470
V/C Ratio(X)	0.05	0.00	0.95	0.46	0.00	0.34	1.06	0.00	0.44	0.19	0.00	0.54
Avail Cap(c_a), veh/h	555	0	1065	95	0	1032	216	0	432	253	0	470
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	19.9	53.5	0.0	10.4	50.8	0.0	34.5	40.9	0.0	35.6
Incr Delay (d2), s/veh	0.0	0.0	16.9	3.5	0.0	0.2	79.4	0.0	0.7	0.4	0.0	1.2
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(95%),veh/ln	0.6	0.0	33.3	2.3	0.0	6.7	16.7	0.0	7.7	2.1	0.0	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	36.8	56.9	0.0	10.6	130.2	0.0	35.3	41.3	0.0	36.8
LnGrp LOS	B	A	D	E	A	B	F	A	D	D	A	D
Approach Vol, veh/h	1038				400				421			
Approach Delay, s/veh	36.2				15.7				87.1			
Approach LOS	D				B				F			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	77.0			36.0			77.0			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	63.5			32.0			72.0			17.3		
Green Ext Time (p_c), s	3.7			0.0			0.0			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	42.5											
HCM 6th LOS	D											

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition D
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	5.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↗	↗
Traffic Vol, veh/h	49	0	0	56	121	14
Future Vol, veh/h	49	0	0	56	121	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	0	0	9	9	4
Mvmt Flow	53	0	0	61	132	15
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	-	-	84	27
Stage 1	-	-	-	-	53	-
Stage 2	-	-	-	-	31	-
Critical Hdwy	-	-	-	-	6.98	6.98
Critical Hdwy Stg 1	-	-	-	-	5.98	-
Critical Hdwy Stg 2	-	-	-	-	5.98	-
Follow-up Hdwy	-	-	-	-	3.59	3.34
Pot Cap-1 Maneuver	-	0	0	-	888	1036
Stage 1	-	0	0	-	943	-
Stage 2	-	0	0	-	967	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	888	1036
Mov Cap-2 Maneuver	-	-	-	-	888	-
Stage 1	-	-	-	-	943	-
Stage 2	-	-	-	-	967	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		9.7		
HCM LOS				A		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT		
Capacity (veh/h)	888	1036	-	-		
HCM Lane V/C Ratio	0.148	0.015	-	-		
HCM Control Delay (s)	9.8	8.5	-	-		
HCM Lane LOS	A	A	-	-		
HCM 95th %tile Q(veh)	0.5	0	-	-		

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition D
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	771	41	52	434	7	42
Future Vol, veh/h	771	41	52	434	7	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	5	0	13	0	14
Mvmt Flow	838	45	57	472	8	46
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	838	0	1424	838
Stage 1	-	-	-	-	838	-
Stage 2	-	-	-	-	586	-
Critical Hdwy	-	-	4.1	-	6.4	6.34
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.426
Pot Cap-1 Maneuver	-	0	805	-	151	349
Stage 1	-	0	-	-	428	-
Stage 2	-	0	-	-	560	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	805	-	137	349
Mov Cap-2 Maneuver	-	-	-	-	274	-
Stage 1	-	-	-	-	428	-
Stage 2	-	-	-	-	506	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1		17.1	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	WBL	WBT
Capacity (veh/h)	274		349	-	805	-
HCM Lane V/C Ratio	0.028		0.131	-	0.07	-
HCM Control Delay (s)	18.5		16.9	-	9.8	-
HCM Lane LOS	C		C	-	A	-
HCM 95th %tile O(veh)	0.1		0.4	-	0.2	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

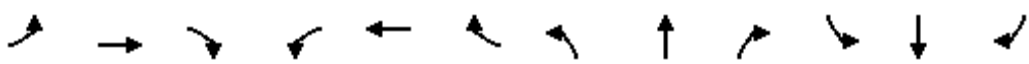
2025 Phase 2 Build Condition D
Weekday PM Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	342	13	26	529	117	125
Future Volume (veh/h)	342	13	26	529	117	125
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1159	1559	1870	1885	1900
Adj Flow Rate, veh/h	372	14	28	575	127	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	50	23	2	1	0
Cap, veh/h	1362	710	631	1351	207	185
Arrive On Green	0.72	0.72	0.72	0.72	0.12	0.12
Sat Flow, veh/h	1885	982	831	1870	1795	1610
Grp Volume(v), veh/h	372	14	28	575	127	136
Grp Sat Flow(s),veh/h/ln	1885	982	831	1870	1795	1610
Q Serve(g_s), s	5.7	0.3	1.0	10.2	5.6	6.8
Cycle Q Clear(g_c), s	5.7	0.3	6.7	10.2	5.6	6.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1362	710	631	1351	207	185
V/C Ratio(X)	0.27	0.02	0.04	0.43	0.61	0.73
Avail Cap(c_a), veh/h	1362	710	631	1351	757	679
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	4.0	3.2	5.1	4.6	35.0	35.5
Incr Delay (d2), s/veh	0.5	0.1	0.1	1.0	3.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	0.1	0.3	4.6	4.6	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.5	3.3	5.3	5.6	38.0	41.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	386			603	263	
Approach Delay, s/veh	4.4			5.6	39.6	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		16.1		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+I1), s	7.7		8.8		12.2	
Green Ext Time (p_c), s	2.1		0.8		3.8	
Intersection Summary						
HCM 6th Ctrl Delay			12.4			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary

4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition D
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔			↔	
Traffic Volume (veh/h)	27	640	35	98	880	31	66	32	37	27	26	29
Future Volume (veh/h)	27	640	35	98	880	31	66	32	37	27	26	29
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	1870	1870	1752	1870	1870	1856	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	28	653	36	100	898	32	67	33	38	28	27	30
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	10	2	2	3	0	0	0	0	0
Cap, veh/h	71	1227	66	575	1328	47	222	78	89	88	59	49
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	34	1658	89	706	1795	64	1336	805	928	313	615	506
Grp Volume(v), veh/h	717	0	0	100	0	930	67	0	71	85	0	0
Grp Sat Flow(s),veh/h/ln	1782	0	0	706	0	1859	1336	0	1733	1435	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	21.5	0.0	0.0	3.2	1.8	0.0	0.0
Cycle Q Clear(g_c), s	13.5	0.0	0.0	5.5	0.0	21.5	3.7	0.0	3.2	5.0	0.0	0.0
Prop In Lane	0.04		0.05	1.00		0.03	1.00		0.54	0.33		0.35
Lane Grp Cap(c), veh/h	1364	0	0	575	0	1375	222	0	167	196	0	0
V/C Ratio(X)	0.53	0.00	0.00	0.17	0.00	0.68	0.30	0.00	0.42	0.43	0.00	0.00
Avail Cap(c_a), veh/h	1364	0	0	575	0	1375	668	0	746	726	0	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	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.6	0.0	0.0	3.5	0.0	5.6	35.3	0.0	35.1	35.8	0.0	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.7	0.0	2.7	0.8	0.0	1.7	1.5	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(95%),veh/ln	5.5	0.0	0.0	0.7	0.0	8.8	2.3	0.0	2.5	2.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.0	0.0	0.0	4.2	0.0	8.3	36.1	0.0	36.8	37.3	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	A
Approach Vol, veh/h		717			1030			138			85	
Approach Delay, s/veh		6.0			7.9			36.4			37.3	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.0		14.5		68.0		14.5				
Change Period (Y+Rc), s		7.0		6.5		7.0		6.5				
Max Green Setting (Gmax), s		61.0		35.5		61.0		35.5				
Max Q Clear Time (g_c+I1), s		15.5		5.7		23.5		7.0				
Green Ext Time (p_c), s		5.4		0.6		8.8		0.4				
Intersection Summary												
HCM 6th Ctrl Delay				10.5								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition D
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	499	246	41	812	41	245	107	44	47	184	36
Future Volume (veh/h)	42	499	246	41	812	41	245	107	44	47	184	36
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	1826	1870	1870	1737	1870	1870	1811	1841	1841	1870	1737	1737
Adj Flow Rate, veh/h	44	520	256	43	846	43	255	111	46	49	192	38
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	2	2	11	2	2	6	4	4	2	11	11
Cap, veh/h	163	657	323	208	980	50	299	383	159	372	437	86
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	610	1183	582	646	1765	90	1114	1236	512	1230	1408	279
Grp Volume(v), veh/h	44	0	776	43	0	889	255	0	157	49	0	230
Grp Sat Flow(s),veh/h/ln	610	0	1766	646	0	1854	1114	0	1749	1230	0	1687
Q Serve(g_s), s	6.4	0.0	33.7	5.5	0.0	39.6	19.5	0.0	6.6	3.0	0.0	10.5
Cycle Q Clear(g_c), s	46.0	0.0	33.7	39.2	0.0	39.6	30.0	0.0	6.6	9.6	0.0	10.5
Prop In Lane	1.00		0.33	1.00		0.05	1.00		0.29	1.00		0.17
Lane Grp Cap(c), veh/h	163	0	981	208	0	1030	299	0	542	372	0	523
V/C Ratio(X)	0.27	0.00	0.79	0.21	0.00	0.86	0.85	0.00	0.29	0.13	0.00	0.44
Avail Cap(c_a), veh/h	266	0	1278	317	0	1342	299	0	542	372	0	523
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.0	0.0	17.1	32.6	0.0	18.4	39.8	0.0	25.3	28.9	0.0	26.6
Incr Delay (d2), s/veh	0.9	0.0	2.6	0.5	0.0	4.8	20.6	0.0	0.3	0.2	0.0	0.6
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(95%),veh/ln	1.7	0.0	17.7	1.5	0.0	21.7	12.2	0.0	4.7	1.6	0.0	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.9	0.0	19.7	33.1	0.0	23.2	60.4	0.0	25.6	29.1	0.0	27.2
LnGrp LOS	D	A	B	C	A	C	E	A	C	C	A	C
Approach Vol, veh/h	820			932			412			279		
Approach Delay, s/veh	20.7			23.6			47.1			27.5		
Approach LOS	C			C			D			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	60.7			36.0			60.7			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	48.0			32.0			41.6			12.5		
Green Ext Time (p_c), s	5.7			0.0			7.2			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	27.1											
HCM 6th LOS	C											

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition D
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	5.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	29	0	0	47	102	7
Future Vol, veh/h	29	0	0	47	102	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	4	8	3
Mvmt Flow	30	0	0	49	106	7

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	55	15
Stage 1	-	-	-	30	-
Stage 2	-	-	-	25	-
Critical Hdwy	-	-	-	6.96	6.96
Critical Hdwy Stg 1	-	-	-	5.96	-
Critical Hdwy Stg 2	-	-	-	5.96	-
Follow-up Hdwy	-	-	-	3.58	3.33
Pot Cap-1 Maneuver	-	0	0	929	1057
Stage 1	-	0	0	971	-
Stage 2	-	0	0	977	-
Platoon blocked, %	-			-	
Mov Cap-1 Maneuver	-	-	-	929	1057
Mov Cap-2 Maneuver	-	-	-	929	-
Stage 1	-	-	-	971	-
Stage 2	-	-	-	977	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	929	1057	-	-
HCM Lane V/C Ratio	0.114	0.007	-	-
HCM Control Delay (s)	9.4	8.4	-	-
HCM Lane LOS	A	A	-	-
HCM 95th %tile Q(veh)	0.4	0	-	-

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition D
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	664	40	49	983	26	137
Future Vol, veh/h	664	40	49	983	26	137
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	5	0	2	0	7
Mvmt Flow	722	43	53	1068	28	149
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	722	0	1896	722
Stage 1	-	-	-	-	722	-
Stage 2	-	-	-	-	1174	-
Critical Hdwy	-	-	4.1	-	6.4	6.27
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.363
Pot Cap-1 Maneuver	-	0	889	-	77	419
Stage 1	-	0	-	-	485	-
Stage 2	-	0	-	-	296	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	889	-	66	419
Mov Cap-2 Maneuver	-	-	-	-	178	-
Stage 1	-	-	-	-	485	-
Stage 2	-	-	-	-	252	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0.4		20		
HCM LOS				C		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	178	419	-	889	-	
HCM Lane V/C Ratio	0.159	0.355	-	0.06	-	
HCM Control Delay (s)	29	18.3	-	9.3	-	
HCM Lane LOS	D	C	-	A	-	
HCM 95th %tile Q(veh)	0.6	1.6	-	0.2	-	

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition D
Saturday Midday Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	412	14	9	413	20	24
Future Volume (veh/h)	412	14	9	413	20	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1648	1900	1885	1633	1900
Adj Flow Rate, veh/h	429	15	9	430	21	25
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	17	0	1	18	0
Cap, veh/h	1440	1067	758	1440	100	104
Arrive On Green	0.76	0.76	0.76	0.76	0.06	0.06
Sat Flow, veh/h	1885	1397	961	1885	1555	1610
Grp Volume(v), veh/h	429	15	9	430	21	25
Grp Sat Flow(s),veh/h/ln	1885	1397	961	1885	1555	1610
Q Serve(g_s), s	5.5	0.2	0.2	5.5	1.0	1.2
Cycle Q Clear(g_c), s	5.5	0.2	5.7	5.5	1.0	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1440	1067	758	1440	100	104
V/C Ratio(X)	0.30	0.01	0.01	0.30	0.21	0.24
Avail Cap(c_a), veh/h	1440	1067	758	1440	693	717
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.8	2.2	3.7	2.8	34.8	34.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.5	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	0.0	0.1	1.7	0.7	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.4	2.2	3.7	3.4	35.9	36.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	444			439	46	
Approach Delay, s/veh	3.3			3.4	36.0	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		11.6		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		7.5		3.2		7.7
Green Ext Time (p_c), s		2.5		0.1		2.5
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition D
Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔			↔	
Traffic Volume (veh/h)	41	699	42	106	681	22	59	28	41	26	25	37
Future Volume (veh/h)	41	699	42	106	681	22	59	28	41	26	25	37
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	1885	1885	1885	1781	1870	1870	1826	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	44	744	45	113	724	23	63	30	44	28	27	39
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	8	2	2	5	0	0	0	0	0
Cap, veh/h	87	1202	71	519	1332	42	212	68	99	83	53	57
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	56	1626	96	654	1803	57	1304	696	1021	276	548	584
Grp Volume(v), veh/h	833	0	0	113	0	747	63	0	74	94	0	0
Grp Sat Flow(s),veh/h/ln	1778	0	0	654	0	1860	1304	0	1716	1408	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	14.5	0.0	0.0	3.4	2.3	0.0	0.0
Cycle Q Clear(g_c), s	17.4	0.0	0.0	8.2	0.0	14.5	3.9	0.0	3.4	5.7	0.0	0.0
Prop In Lane	0.05		0.05	1.00		0.03	1.00		0.59	0.30		0.41
Lane Grp Cap(c), veh/h	1360	0	0	519	0	1375	212	0	167	194	0	0
V/C Ratio(X)	0.61	0.00	0.00	0.22	0.00	0.54	0.30	0.00	0.44	0.48	0.00	0.00
Avail Cap(c_a), veh/h	1360	0	0	519	0	1375	646	0	738	722	0	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	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.1	0.0	0.0	3.9	0.0	4.7	35.4	0.0	35.1	36.1	0.0	0.0
Incr Delay (d2), s/veh	2.1	0.0	0.0	1.0	0.0	1.5	0.8	0.0	1.8	1.9	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(95%),veh/ln	7.4	0.0	0.0	0.9	0.0	6.0	2.2	0.0	2.6	3.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.1	0.0	0.0	4.8	0.0	6.2	36.1	0.0	37.0	38.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	A
Approach Vol, veh/h		833			860			137			94	
Approach Delay, s/veh		7.1			6.1			36.6			38.0	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.0		14.5		68.0		14.5				
Change Period (Y+Rc), s		7.0		6.5		7.0		6.5				
Max Green Setting (Gmax), s		61.0		35.5		61.0		35.5				
Max Q Clear Time (g_c+I1), s		19.4		5.9		16.5		7.7				
Green Ext Time (p_c), s		6.8		0.6		6.7		0.4				
Intersection Summary												
HCM 6th Ctrl Delay				10.3								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition D
Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	590	227	39	630	84	219	222	49	51	153	48
Future Volume (veh/h)	52	590	227	39	630	84	219	222	49	51	153	48
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	1841	1885	1885	1811	1885	1885	1796	1870	1870	1900	1841	1841
Adj Flow Rate, veh/h	55	621	239	41	663	88	231	234	52	54	161	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	1	1	6	1	1	7	2	2	0	4	4
Cap, veh/h	245	714	275	161	897	119	322	465	103	281	420	133
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	700	1296	499	622	1630	216	1123	1482	329	1110	1340	424
Grp Volume(v), veh/h	55	0	860	41	0	751	231	0	286	54	0	212
Grp Sat Flow(s),veh/h/ln	700	0	1795	622	0	1846	1123	0	1811	1110	0	1764
Q Serve(g_s), s	6.2	0.0	39.5	5.8	0.0	29.5	19.3	0.0	12.3	4.0	0.0	9.0
Cycle Q Clear(g_c), s	35.7	0.0	39.5	45.4	0.0	29.5	28.3	0.0	12.3	16.3	0.0	9.0
Prop In Lane	1.00		0.28	1.00		0.12	1.00		0.18	1.00		0.24
Lane Grp Cap(c), veh/h	245	0	988	161	0	1016	322	0	568	281	0	553
V/C Ratio(X)	0.22	0.00	0.87	0.26	0.00	0.74	0.72	0.00	0.50	0.19	0.00	0.38
Avail Cap(c_a), veh/h	372	0	1314	273	0	1351	322	0	568	281	0	553
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.8	0.0	18.6	38.1	0.0	16.3	36.6	0.0	26.8	33.4	0.0	25.6
Incr Delay (d2), s/veh	0.5	0.0	5.1	0.8	0.0	1.5	7.4	0.0	0.7	0.3	0.0	0.4
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(95%),veh/ln	1.8	0.0	21.2	1.6	0.0	16.1	9.6	0.0	8.8	1.9	0.0	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	0.0	23.7	39.0	0.0	17.8	44.1	0.0	27.5	33.7	0.0	26.0
LnGrp LOS	C	A	C	D	A	B	D	A	C	C	A	C
Approach Vol, veh/h	915			792			517			266		
Approach Delay, s/veh	24.1			18.9			34.9			27.6		
Approach LOS	C			B			C			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	59.6			36.0			59.6			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	41.5			30.3			47.4			18.3		
Green Ext Time (p_c), s	7.1			0.0			5.3			1.0		
Intersection Summary												
HCM 6th Ctrl Delay	25.1											
HCM 6th LOS	C											

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition D
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	6.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	160	0	0	378	270	298
Future Vol, veh/h	160	0	0	378	270	298
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	4	2
Mvmt Flow	165	0	0	390	278	307
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	360	83
Stage 1	-	-	-	-	165	-
Stage 2	-	-	-	-	195	-
Critical Hdwy	-	-	-	-	6.88	6.94
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	-	-	3.54	3.32
Pot Cap-1 Maneuver	-	0	0	-	607	960
Stage 1	-	0	0	-	841	-
Stage 2	-	0	0	-	813	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	607	960
Mov Cap-2 Maneuver	-	-	-	-	607	-
Stage 1	-	-	-	-	841	-
Stage 2	-	-	-	-	813	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		13.1	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBT
Capacity (veh/h)	607		960		-	-
HCM Lane V/C Ratio	0.459		0.32		-	-
HCM Control Delay (s)	15.9		10.5		-	-
HCM Lane LOS	C		B		-	-
HCM 95th %tile O(veh)	2.4		1.4		-	-

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition D
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	1.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	723	43	53	788	21	115
Future Vol, veh/h	723	43	53	788	21	115
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	7	0	3	0	9
Mvmt Flow	786	47	58	857	23	125
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	-	786	0	1759	786
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	973	-
Critical Hdwy	-	-	4.1	-	6.4	6.29
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.381
Pot Cap-1 Maneuver	-	0	842	-	94	381
Stage 1	-	0	-	-	453	-
Stage 2	-	0	-	-	370	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	842	-	82	381
Mov Cap-2 Maneuver	-	-	-	-	208	-
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	322	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0.6		19.8		
HCM LOS				C		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	208	381	-	842	-	
HCM Lane V/C Ratio	0.11	0.328	-	0.068	-	
HCM Control Delay (s)	24.4	19	-	9.6	-	
HCM Lane LOS	C	C	-	A	-	
HCM 95th %tile Q(veh)	0.4	1.4	-	0.2	-	

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition E
Weekday AM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	410	61	44	232	36	21
Future Volume (veh/h)	410	61	44	232	36	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1722	1678	1767	1278	1248
Adj Flow Rate, veh/h	461	69	49	261	40	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	7	12	15	9	42	44
Cap, veh/h	1355	1101	615	1332	93	80
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1796	1459	784	1767	1217	1058
Grp Volume(v), veh/h	461	69	49	261	40	24
Grp Sat Flow(s),veh/h/ln	1796	1459	784	1767	1217	1058
Q Serve(g_s), s	6.8	1.0	1.8	3.4	2.5	1.7
Cycle Q Clear(g_c), s	6.8	1.0	8.5	3.4	2.5	1.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1355	1101	615	1332	93	80
V/C Ratio(X)	0.34	0.06	0.08	0.20	0.43	0.30
Avail Cap(c_a), veh/h	1355	1101	615	1332	535	465
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.2	2.5	4.6	2.8	35.1	34.7
Incr Delay (d2), s/veh	0.7	0.1	0.3	0.3	3.2	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	0.3	0.4	1.1	1.5	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.9	2.6	4.9	3.1	38.3	36.8
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	530			310	64	
Approach Delay, s/veh	3.7			3.4	37.7	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		12.6		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+l1), s		8.8		4.5		10.5
Green Ext Time (p_c), s		3.0		0.2		1.8
Intersection Summary						
HCM 6th Ctrl Delay			6.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition E
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	662	218	38	283	27	200	137	30	43	183	37
Future Volume (veh/h)	23	662	218	38	283	27	200	137	30	43	183	37
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			
Adj Sat Flow, veh/h/ln	1737	1796	1796	1411	1693	1693	1767	1678	1678	1767	1826	1826
Adj Flow Rate, veh/h	26	761	251	44	325	31	230	157	34	49	210	43
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	7	7	33	14	14	9	15	15	9	5	5
Cap, veh/h	555	801	264	95	942	90	216	355	77	253	390	80
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	952	1293	426	420	1521	145	1064	1336	289	1126	1471	301
Grp Volume(v), veh/h	26	0	1012	44	0	356	230	0	191	49	0	253
Grp Sat Flow(s),veh/h/ln	952	0	1719	420	0	1666	1064	0	1626	1126	0	1772
Q Serve(g_s), s	1.5	0.0	61.5	8.5	0.0	11.7	16.2	0.0	11.1	4.3	0.0	13.8
Cycle Q Clear(g_c), s	13.2	0.0	61.5	70.0	0.0	11.7	30.0	0.0	11.1	15.3	0.0	13.8
Prop In Lane	1.00		0.25	1.00		0.09	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	555	0	1065	95	0	1032	216	0	432	253	0	470
V/C Ratio(X)	0.05	0.00	0.95	0.46	0.00	0.34	1.06	0.00	0.44	0.19	0.00	0.54
Avail Cap(c_a), veh/h	555	0	1065	95	0	1032	216	0	432	253	0	470
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	19.9	53.5	0.0	10.4	50.8	0.0	34.5	40.9	0.0	35.6
Incr Delay (d2), s/veh	0.0	0.0	16.9	3.5	0.0	0.2	79.4	0.0	0.7	0.4	0.0	1.2
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(95%),veh/ln	0.6	0.0	33.3	2.3	0.0	6.7	16.7	0.0	7.7	2.1	0.0	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	36.8	56.9	0.0	10.6	130.2	0.0	35.3	41.3	0.0	36.8
LnGrp LOS	B	A	D	E	A	B	F	A	D	D	A	D
Approach Vol, veh/h	1038				400				421			
Approach Delay, s/veh	36.2				15.7				87.1			
Approach LOS	D				B				F			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	77.0			36.0			77.0			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	63.5			32.0			72.0			17.3		
Green Ext Time (p_c), s	3.7			0.0			0.0			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	42.5											
HCM 6th LOS	D											

HCM 6th Signalized Intersection Summary

17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition E
Weekday AM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↰	↱
Traffic Volume (veh/h)	772	62	109	377	21	42
Future Volume (veh/h)	772	62	109	377	21	42
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1811	1811	1693	1693	1826	1693
Adj Flow Rate, veh/h	839	67	118	410	23	46
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	6	14	14	5	14
Cap, veh/h	1240	99	184	593	138	114
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1655	132	171	792	1739	1434
Grp Volume(v), veh/h	0	906	528	0	23	46
Grp Sat Flow(s),veh/h/ln	0	1787	962	0	1739	1434
Q Serve(g_s), s	0.0	20.3	14.8	0.0	1.0	2.4
Cycle Q Clear(g_c), s	0.0	20.3	35.1	0.0	1.0	2.4
Prop In Lane		0.07	0.22		1.00	1.00
Lane Grp Cap(c), veh/h	0	1339	777	0	138	114
V/C Ratio(X)	0.00	0.68	0.68	0.00	0.17	0.41
Avail Cap(c_a), veh/h	0	1339	777	0	795	656
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	5.0	7.1	0.0	33.8	34.5
Incr Delay (d2), s/veh	0.0	2.8	4.8	0.0	0.6	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	7.5	4.2	0.0	0.8	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	7.8	11.8	0.0	34.4	36.8
LnGrp LOS	A	A	B	A	C	D
Approach Vol, veh/h	906			528	69	
Approach Delay, s/veh	7.8			11.8	36.0	
Approach LOS	A			B	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		66.0		12.7		66.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		59.0		36.0		59.0
Max Q Clear Time (g_c+I1), s		22.3		4.4		37.1
Green Ext Time (p_c), s		7.4		0.2		4.0
Intersection Summary						
HCM 6th Ctrl Delay			10.5			
HCM 6th LOS			B			

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition E
Weekday AM Peak Hour

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕			↕	
Traffic Vol, veh/h	15	788	17	11	363	24	8	0	5	41	1	44
Future Vol, veh/h	15	788	17	11	363	24	8	0	5	41	1	44
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	-	-	-	-	-	-	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, %	0	6	10	20	14	14	0	0	50	0	0	0
Mvmt Flow	16	838	18	12	386	26	9	0	5	44	1	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	412	0	0	856	0	0	1326	1315	847	1305	1311	399
Stage 1	-	-	-	-	-	-	879	879	-	423	423	-
Stage 2	-	-	-	-	-	-	447	436	-	882	888	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.5	6.7	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4	3.75	3.5	4	3.3
Pot Cap-1 Maneuver	1158	-	-	713	-	-	134	159	299	138	160	655
Stage 1	-	-	-	-	-	-	345	368	-	613	591	-
Stage 2	-	-	-	-	-	-	595	583	-	344	365	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1158	-	-	713	-	-	119	152	299	131	152	655
Mov Cap-2 Maneuver	-	-	-	-	-	-	119	152	-	131	152	-
Stage 1	-	-	-	-	-	-	336	358	-	597	578	-
Stage 2	-	-	-	-	-	-	539	570	-	329	356	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.3			29.8			32.1		
HCM LOS							D			D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	119	299	1158	-	-	713	-	-	222
HCM Lane V/C Ratio	0.072	0.018	0.014	-	-	0.016	-	-	0.412
HCM Control Delay (s)	37.6	17.3	8.2	0	-	10.1	0	-	32.1
HCM Lane LOS	E	C	A	A	-	B	A	-	D
HCM 95th %tile Q(veh)	0.2	0.1	0	-	-	0.1	-	-	1.9

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition E
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	5.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	49	0	0	56	121	14
Future Vol, veh/h	49	0	0	56	121	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	0	0	9	9	4
Mvmt Flow	53	0	0	61	132	15

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	84	27
Stage 1	-	-	-	53	-
Stage 2	-	-	-	31	-
Critical Hdwy	-	-	-	6.98	6.98
Critical Hdwy Stg 1	-	-	-	5.98	-
Critical Hdwy Stg 2	-	-	-	5.98	-
Follow-up Hdwy	-	-	-	3.59	3.34
Pot Cap-1 Maneuver	-	0	0	888	1036
Stage 1	-	0	0	943	-
Stage 2	-	0	0	967	-
Platoon blocked, %	-			-	
Mov Cap-1 Maneuver	-	-	-	888	1036
Mov Cap-2 Maneuver	-	-	-	888	-
Stage 1	-	-	-	943	-
Stage 2	-	-	-	967	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	888	1036	-	-
HCM Lane V/C Ratio	0.148	0.015	-	-
HCM Control Delay (s)	9.8	8.5	-	-
HCM Lane LOS	A	A	-	-
HCM 95th %tile Q(veh)	0.5	0	-	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition E
Weekday PM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Volume (veh/h)	342	13	26	529	117	125
Future Volume (veh/h)	342	13	26	529	117	125
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1159	1559	1870	1885	1900
Adj Flow Rate, veh/h	372	14	28	575	127	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	50	23	2	1	0
Cap, veh/h	1362	710	631	1351	207	185
Arrive On Green	0.72	0.72	0.72	0.72	0.12	0.12
Sat Flow, veh/h	1885	982	831	1870	1795	1610
Grp Volume(v), veh/h	372	14	28	575	127	136
Grp Sat Flow(s),veh/h/ln	1885	982	831	1870	1795	1610
Q Serve(g_s), s	5.7	0.3	1.0	10.2	5.6	6.8
Cycle Q Clear(g_c), s	5.7	0.3	6.7	10.2	5.6	6.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1362	710	631	1351	207	185
V/C Ratio(X)	0.27	0.02	0.04	0.43	0.61	0.73
Avail Cap(c_a), veh/h	1362	710	631	1351	757	679
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	4.0	3.2	5.1	4.6	35.0	35.5
Incr Delay (d2), s/veh	0.5	0.1	0.1	1.0	3.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	0.1	0.3	4.6	4.6	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.5	3.3	5.3	5.6	38.0	41.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	386			603	263	
Approach Delay, s/veh	4.4			5.6	39.6	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		16.1		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+l1), s	7.7		8.8		12.2	
Green Ext Time (p_c), s	2.1		0.8		3.8	
Intersection Summary						
HCM 6th Ctrl Delay			12.4			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition E
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	499	246	41	812	41	245	107	44	47	184	36
Future Volume (veh/h)	42	499	246	41	812	41	245	107	44	47	184	36
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	1826	1870	1870	1737	1870	1870	1811	1841	1841	1870	1737	1737
Adj Flow Rate, veh/h	44	520	256	43	846	43	255	111	46	49	192	38
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	2	2	11	2	2	6	4	4	2	11	11
Cap, veh/h	163	657	323	208	980	50	299	383	159	372	437	86
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	610	1183	582	646	1765	90	1114	1236	512	1230	1408	279
Grp Volume(v), veh/h	44	0	776	43	0	889	255	0	157	49	0	230
Grp Sat Flow(s),veh/h/ln	610	0	1766	646	0	1854	1114	0	1749	1230	0	1687
Q Serve(g_s), s	6.4	0.0	33.7	5.5	0.0	39.6	19.5	0.0	6.6	3.0	0.0	10.5
Cycle Q Clear(g_c), s	46.0	0.0	33.7	39.2	0.0	39.6	30.0	0.0	6.6	9.6	0.0	10.5
Prop In Lane	1.00		0.33	1.00		0.05	1.00		0.29	1.00		0.17
Lane Grp Cap(c), veh/h	163	0	981	208	0	1030	299	0	542	372	0	523
V/C Ratio(X)	0.27	0.00	0.79	0.21	0.00	0.86	0.85	0.00	0.29	0.13	0.00	0.44
Avail Cap(c_a), veh/h	266	0	1278	317	0	1342	299	0	542	372	0	523
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.0	0.0	17.1	32.6	0.0	18.4	39.8	0.0	25.3	28.9	0.0	26.6
Incr Delay (d2), s/veh	0.9	0.0	2.6	0.5	0.0	4.8	20.6	0.0	0.3	0.2	0.0	0.6
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(95%),veh/ln	1.7	0.0	17.7	1.5	0.0	21.7	12.2	0.0	4.7	1.6	0.0	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.9	0.0	19.7	33.1	0.0	23.2	60.4	0.0	25.6	29.1	0.0	27.2
LnGrp LOS	D	A	B	C	A	C	E	A	C	C	A	C
Approach Vol, veh/h	820			932			412			279		
Approach Delay, s/veh	20.7			23.6			47.1			27.5		
Approach LOS	C			C			D			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	60.7			36.0			60.7			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	48.0			32.0			41.6			12.5		
Green Ext Time (p_c), s	5.7			0.0			7.2			1.2		
Intersection Summary												
HCM 6th Ctrl Delay				27.1								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary 17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition E
Weekday PM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↱	↱
Traffic Volume (veh/h)	664	60	105	927	78	137
Future Volume (veh/h)	664	60	105	927	78	137
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1856	1796
Adj Flow Rate, veh/h	722	65	114	1008	85	149
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	3	7
Cap, veh/h	1206	109	128	941	224	193
Arrive On Green	0.71	0.71	0.71	0.71	0.13	0.13
Sat Flow, veh/h	1691	152	113	1319	1767	1522
Grp Volume(v), veh/h	0	787	1122	0	85	149
Grp Sat Flow(s),veh/h/ln	0	1843	1433	0	1767	1522
Q Serve(g_s), s	0.0	18.0	42.0	0.0	3.7	8.0
Cycle Q Clear(g_c), s	0.0	18.0	60.0	0.0	3.7	8.0
Prop In Lane		0.08	0.10		1.00	1.00
Lane Grp Cap(c), veh/h	0	1314	1069	0	224	193
V/C Ratio(X)	0.00	0.60	1.05	0.00	0.38	0.77
Avail Cap(c_a), veh/h	0	1314	1069	0	735	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	6.0	14.8	0.0	33.7	35.6
Incr Delay (d2), s/veh	0.0	2.0	41.6	0.0	1.1	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	8.3	37.4	0.0	2.9	5.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	8.1	56.4	0.0	34.8	42.1
LnGrp LOS	A	A	F	A	C	D
Approach Vol, veh/h	787			1122	234	
Approach Delay, s/veh	8.1			56.4	39.4	
Approach LOS	A			E	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		17.1		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		20.0		10.0		62.0
Green Ext Time (p_c), s		5.8		0.7		0.0
Intersection Summary						
HCM 6th Ctrl Delay			36.8			
HCM 6th LOS			D			

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition E
Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	18.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	640	35	42	907	56	39	7	37	47	6	29
Future Vol, veh/h	27	640	35	42	907	56	39	7	37	47	6	29
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	-	-	-	-	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	2	0	4	2	3	0	0	0	4	0	0
Mvmt Flow	28	653	36	43	926	57	40	7	38	48	6	30
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	983	0	0	689	0	0	1786	1796	671	1791	1786	955
Stage 1	-	-	-	-	-	-	727	727	-	1041	1041	-
Stage 2	-	-	-	-	-	-	1059	1069	-	750	745	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.1	6.5	6.2	7.14	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Follow-up Hdwy	2.2	-	-	2.236	-	-	3.5	4	3.3	3.536	4	3.3
Pot Cap-1 Maneuver	711	-	-	896	-	-	64	81	460	62	82	316
Stage 1	-	-	-	-	-	-	419	432	-	275	310	-
Stage 2	-	-	-	-	-	-	274	300	-	400	424	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	711	-	-	896	-	-	47	68	460	~ 46	69	316
Mov Cap-2 Maneuver	-	-	-	-	-	-	47	68	-	~ 46	69	-
Stage 1	-	-	-	-	-	-	392	404	-	257	277	-
Stage 2	-	-	-	-	-	-	217	268	-	338	397	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.4			116.4			288.7		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	47 240		711	-	-	896	-	-	68			
HCM Lane V/C Ratio	0.847 0.187		0.039	-	-	0.048	-	-	1.23			
HCM Control Delay (s)	221.4 23.4		10.3	0	-	9.2	0	-	288.7			
HCM Lane LOS	F C		B	A	-	A	A	-	F			
HCM 95th %tile Q(veh)	3.4 0.7		0.1	-	-	0.1	-	-	6.7			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition E
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	5.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	29	0	0	47	102	7
Future Vol, veh/h	29	0	0	47	102	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	4	8	3
Mvmt Flow	30	0	0	49	106	7

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	55	15
Stage 1	-	-	-	30	-
Stage 2	-	-	-	25	-
Critical Hdwy	-	-	-	6.96	6.96
Critical Hdwy Stg 1	-	-	-	5.96	-
Critical Hdwy Stg 2	-	-	-	5.96	-
Follow-up Hdwy	-	-	-	3.58	3.33
Pot Cap-1 Maneuver	-	0	0	929	1057
Stage 1	-	0	0	971	-
Stage 2	-	0	0	977	-
Platoon blocked, %	-		-		
Mov Cap-1 Maneuver	-	-	-	929	1057
Mov Cap-2 Maneuver	-	-	-	929	-
Stage 1	-	-	-	971	-
Stage 2	-	-	-	977	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	929	1057	-	-
HCM Lane V/C Ratio	0.114	0.007	-	-
HCM Control Delay (s)	9.4	8.4	-	-
HCM Lane LOS	A	A	-	-
HCM 95th %tile Q(veh)	0.4	0	-	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition E
Saturday Midday Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	412	14	9	413	20	24
Future Volume (veh/h)	412	14	9	413	20	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1648	1900	1885	1633	1900
Adj Flow Rate, veh/h	429	15	9	430	21	25
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	17	0	1	18	0
Cap, veh/h	1440	1067	758	1440	100	104
Arrive On Green	0.76	0.76	0.76	0.76	0.06	0.06
Sat Flow, veh/h	1885	1397	961	1885	1555	1610
Grp Volume(v), veh/h	429	15	9	430	21	25
Grp Sat Flow(s),veh/h/ln	1885	1397	961	1885	1555	1610
Q Serve(g_s), s	5.5	0.2	0.2	5.5	1.0	1.2
Cycle Q Clear(g_c), s	5.5	0.2	5.7	5.5	1.0	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1440	1067	758	1440	100	104
V/C Ratio(X)	0.30	0.01	0.01	0.30	0.21	0.24
Avail Cap(c_a), veh/h	1440	1067	758	1440	693	717
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.8	2.2	3.7	2.8	34.8	34.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.5	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	0.0	0.1	1.7	0.7	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.4	2.2	3.7	3.4	35.9	36.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	444			439	46	
Approach Delay, s/veh	3.3			3.4	36.0	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		11.6		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		7.5		3.2		7.7
Green Ext Time (p_c), s		2.5		0.1		2.5
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition E
Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	590	227	39	630	84	219	222	49	51	153	48
Future Volume (veh/h)	52	590	227	39	630	84	219	222	49	51	153	48
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	1841	1885	1885	1811	1885	1885	1796	1870	1870	1900	1841	1841
Adj Flow Rate, veh/h	55	621	239	41	663	88	231	234	52	54	161	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	1	1	6	1	1	7	2	2	0	4	4
Cap, veh/h	245	714	275	161	897	119	322	465	103	281	420	133
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	700	1296	499	622	1630	216	1123	1482	329	1110	1340	424
Grp Volume(v), veh/h	55	0	860	41	0	751	231	0	286	54	0	212
Grp Sat Flow(s),veh/h/ln	700	0	1795	622	0	1846	1123	0	1811	1110	0	1764
Q Serve(g_s), s	6.2	0.0	39.5	5.8	0.0	29.5	19.3	0.0	12.3	4.0	0.0	9.0
Cycle Q Clear(g_c), s	35.7	0.0	39.5	45.4	0.0	29.5	28.3	0.0	12.3	16.3	0.0	9.0
Prop In Lane	1.00		0.28	1.00		0.12	1.00		0.18	1.00		0.24
Lane Grp Cap(c), veh/h	245	0	988	161	0	1016	322	0	568	281	0	553
V/C Ratio(X)	0.22	0.00	0.87	0.26	0.00	0.74	0.72	0.00	0.50	0.19	0.00	0.38
Avail Cap(c_a), veh/h	372	0	1314	273	0	1351	322	0	568	281	0	553
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.8	0.0	18.6	38.1	0.0	16.3	36.6	0.0	26.8	33.4	0.0	25.6
Incr Delay (d2), s/veh	0.5	0.0	5.1	0.8	0.0	1.5	7.4	0.0	0.7	0.3	0.0	0.4
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(95%),veh/ln	1.8	0.0	21.2	1.6	0.0	16.1	9.6	0.0	8.8	1.9	0.0	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	0.0	23.7	39.0	0.0	17.8	44.1	0.0	27.5	33.7	0.0	26.0
LnGrp LOS	C	A	C	D	A	B	D	A	C	C	A	C
Approach Vol, veh/h	915			792			517			266		
Approach Delay, s/veh	24.1			18.9			34.9			27.6		
Approach LOS	C			B			C			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	59.6			36.0			59.6			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	41.5			30.3			47.4			18.3		
Green Ext Time (p_c), s	7.1			0.0			5.3			1.0		
Intersection Summary												
HCM 6th Ctrl Delay	25.1											
HCM 6th LOS	C											

HCM 6th Signalized Intersection Summary
17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition E
Saturday Midday Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↰	↱
Traffic Volume (veh/h)	723	65	115	727	64	115
Future Volume (veh/h)	723	65	115	727	64	115
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1885	1870	1870	1856	1767
Adj Flow Rate, veh/h	786	71	125	790	70	125
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	2	2	3	9
Cap, veh/h	1236	112	149	839	196	166
Arrive On Green	0.73	0.73	0.73	0.73	0.11	0.11
Sat Flow, veh/h	1704	154	137	1157	1767	1497
Grp Volume(v), veh/h	0	857	915	0	70	125
Grp Sat Flow(s),veh/h/ln	0	1857	1294	0	1767	1497
Q Serve(g_s), s	0.0	19.4	37.1	0.0	3.0	6.7
Cycle Q Clear(g_c), s	0.0	19.4	56.5	0.0	3.0	6.7
Prop In Lane		0.08	0.14		1.00	1.00
Lane Grp Cap(c), veh/h	0	1348	988	0	196	166
V/C Ratio(X)	0.00	0.64	0.93	0.00	0.36	0.75
Avail Cap(c_a), veh/h	0	1348	988	0	748	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	5.8	12.5	0.0	34.0	35.6
Incr Delay (d2), s/veh	0.0	2.3	15.5	0.0	1.1	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	8.5	15.9	0.0	2.4	4.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	8.1	28.0	0.0	35.1	42.3
LnGrp LOS	A	A	C	A	D	D
Approach Vol, veh/h	857			915	195	
Approach Delay, s/veh	8.1			28.0	39.7	
Approach LOS	A			C	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		15.7		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		21.4		8.7		58.5
Green Ext Time (p_c), s		6.7		0.6		0.9
Intersection Summary						
HCM 6th Ctrl Delay			20.5			
HCM 6th LOS			C			

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition E
Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	19.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	699	42	44	703	44	37	7	41	48	3	37
Future Vol, veh/h	41	699	42	44	703	44	37	7	41	48	3	37
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	-	-	-	-	-	-	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, %	5	1	0	0	2	5	0	0	0	8	0	0
Mvmt Flow	44	744	45	47	748	47	39	7	44	51	3	39
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	795	0	0	789	0	0	1742	1744	767	1746	1743	772
Stage 1	-	-	-	-	-	-	855	855	-	866	866	-
Stage 2	-	-	-	-	-	-	887	889	-	880	877	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.18	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.572	4	3.3
Pot Cap-1 Maneuver	813	-	-	840	-	-	69	87	405	65	88	403
Stage 1	-	-	-	-	-	-	356	378	-	340	373	-
Stage 2	-	-	-	-	-	-	341	364	-	334	369	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	813	-	-	840	-	-	51	71	405	~ 46	71	403
Mov Cap-2 Maneuver	-	-	-	-	-	-	51	71	-	~ 46	71	-
Stage 1	-	-	-	-	-	-	321	341	-	307	335	-
Stage 2	-	-	-	-	-	-	274	327	-	263	333	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.5			95.8			282.3		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	51	240	813	-	-	840	-	-	75			
HCM Lane V/C Ratio	0.772	0.213	0.054	-	-	0.056	-	-	1.248			
HCM Control Delay (s)	189	24	9.7	0	-	9.5	0	-	282.3			
HCM Lane LOS	F	C	A	A	-	A	A	-	F			
HCM 95th %tile Q(veh)	3.2	0.8	0.2	-	-	0.2	-	-	7.2			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition E
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	6.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘	↗
Traffic Vol, veh/h	160	0	0	378	270	298
Future Vol, veh/h	160	0	0	378	270	298
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	4	2
Mvmt Flow	165	0	0	390	278	307
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	360	83
Stage 1	-	-	-	-	165	-
Stage 2	-	-	-	-	195	-
Critical Hdwy	-	-	-	-	6.88	6.94
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	-	-	3.54	3.32
Pot Cap-1 Maneuver	-	0	0	-	607	960
Stage 1	-	0	0	-	841	-
Stage 2	-	0	0	-	813	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	607	960
Mov Cap-2 Maneuver	-	-	-	-	607	-
Stage 1	-	-	-	-	841	-
Stage 2	-	-	-	-	813	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		13.1	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBT
Capacity (veh/h)	607		960		-	-
HCM Lane V/C Ratio	0.459		0.32		-	-
HCM Control Delay (s)	15.9		10.5		-	-
HCM Lane LOS	C		B		-	-
HCM 95th %tile O(veh)	2.4		1.4		-	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition F
Weekday AM Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	410	61	44	232	36	21
Future Volume (veh/h)	410	61	44	232	36	21
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1722	1678	1767	1278	1248
Adj Flow Rate, veh/h	461	69	49	261	40	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	7	12	15	9	42	44
Cap, veh/h	1355	1101	615	1332	93	80
Arrive On Green	0.75	0.75	0.75	0.75	0.08	0.08
Sat Flow, veh/h	1796	1459	784	1767	1217	1058
Grp Volume(v), veh/h	461	69	49	261	40	24
Grp Sat Flow(s),veh/h/ln	1796	1459	784	1767	1217	1058
Q Serve(g_s), s	6.8	1.0	1.8	3.4	2.5	1.7
Cycle Q Clear(g_c), s	6.8	1.0	8.5	3.4	2.5	1.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1355	1101	615	1332	93	80
V/C Ratio(X)	0.34	0.06	0.08	0.20	0.43	0.30
Avail Cap(c_a), veh/h	1355	1101	615	1332	535	465
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	3.2	2.5	4.6	2.8	35.1	34.7
Incr Delay (d2), s/veh	0.7	0.1	0.3	0.3	3.2	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	0.3	0.4	1.1	1.5	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.9	2.6	4.9	3.1	38.3	36.8
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	530			310	64	
Approach Delay, s/veh	3.7			3.4	37.7	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		12.6		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+l1), s		8.8		4.5		10.5
Green Ext Time (p_c), s		3.0		0.2		1.8
Intersection Summary						
HCM 6th Ctrl Delay			6.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition F
Weekday AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	662	218	38	283	27	200	137	30	43	183	37
Future Volume (veh/h)	23	662	218	38	283	27	200	137	30	43	183	37
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			
Adj Sat Flow, veh/h/ln	1737	1796	1796	1411	1693	1693	1767	1678	1678	1767	1826	1826
Adj Flow Rate, veh/h	26	761	251	44	325	31	230	157	34	49	210	43
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	11	7	7	33	14	14	9	15	15	9	5	5
Cap, veh/h	555	801	264	95	942	90	216	355	77	253	390	80
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	952	1293	426	420	1521	145	1064	1336	289	1126	1471	301
Grp Volume(v), veh/h	26	0	1012	44	0	356	230	0	191	49	0	253
Grp Sat Flow(s),veh/h/ln	952	0	1719	420	0	1666	1064	0	1626	1126	0	1772
Q Serve(g_s), s	1.5	0.0	61.5	8.5	0.0	11.7	16.2	0.0	11.1	4.3	0.0	13.8
Cycle Q Clear(g_c), s	13.2	0.0	61.5	70.0	0.0	11.7	30.0	0.0	11.1	15.3	0.0	13.8
Prop In Lane	1.00		0.25	1.00		0.09	1.00		0.18	1.00		0.17
Lane Grp Cap(c), veh/h	555	0	1065	95	0	1032	216	0	432	253	0	470
V/C Ratio(X)	0.05	0.00	0.95	0.46	0.00	0.34	1.06	0.00	0.44	0.19	0.00	0.54
Avail Cap(c_a), veh/h	555	0	1065	95	0	1032	216	0	432	253	0	470
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	19.9	53.5	0.0	10.4	50.8	0.0	34.5	40.9	0.0	35.6
Incr Delay (d2), s/veh	0.0	0.0	16.9	3.5	0.0	0.2	79.4	0.0	0.7	0.4	0.0	1.2
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(95%),veh/ln	0.6	0.0	33.3	2.3	0.0	6.7	16.7	0.0	7.7	2.1	0.0	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	36.8	56.9	0.0	10.6	130.2	0.0	35.3	41.3	0.0	36.8
LnGrp LOS	B	A	D	E	A	B	F	A	D	D	A	D
Approach Vol, veh/h	1038				400				421			
Approach Delay, s/veh	36.2				15.7				87.1			
Approach LOS	D				B				F			
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	77.0			36.0			77.0			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+l1), s	63.5			32.0			72.0			17.3		
Green Ext Time (p_c), s	3.7			0.0			0.0			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	42.5											
HCM 6th LOS	D											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition F
Weekday AM Peak Hour

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕		↕	↕	
Traffic Vol, veh/h	15	788	17	11	363	24	8	0	5	41	1	44
Future Vol, veh/h	15	788	17	11	363	24	8	0	5	41	1	44
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	-	-	-	50	-	-	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, %	0	6	10	20	14	14	0	0	50	0	0	0
Mvmt Flow	16	838	18	12	386	26	9	0	5	44	1	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	412	0	0	856	0	0	1326	1315	847	1305	1311	399
Stage 1	-	-	-	-	-	-	879	879	-	423	423	-
Stage 2	-	-	-	-	-	-	447	436	-	882	888	-
Critical Hdwy	4.1	-	-	4.3	-	-	7.1	6.5	6.7	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.38	-	-	3.5	4	3.75	3.5	4	3.3
Pot Cap-1 Maneuver	1158	-	-	713	-	-	134	159	299	138	160	655
Stage 1	-	-	-	-	-	-	345	368	-	613	591	-
Stage 2	-	-	-	-	-	-	595	583	-	344	365	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1158	-	-	713	-	-	120	152	299	131	153	655
Mov Cap-2 Maneuver	-	-	-	-	-	-	120	152	-	131	153	-
Stage 1	-	-	-	-	-	-	336	358	-	597	581	-
Stage 2	-	-	-	-	-	-	542	573	-	329	356	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.3			29.6			32.1		
HCM LOS							D			D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	120	299	1158	-	-	713	-	-	222
HCM Lane V/C Ratio	0.071	0.018	0.014	-	-	0.016	-	-	0.412
HCM Control Delay (s)	37.3	17.3	8.2	0	-	10.1	-	-	32.1
HCM Lane LOS	E	C	A	A	-	B	-	-	D
HCM 95th %tile Q(veh)	0.2	0.1	0	-	-	0.1	-	-	1.9

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition F
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	5.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	49	0	0	56	121	14
Future Vol, veh/h	49	0	0	56	121	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	0	0	9	9	4
Mvmt Flow	53	0	0	61	132	15
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	84	27
Stage 1	-	-	-	-	53	-
Stage 2	-	-	-	-	31	-
Critical Hdwy	-	-	-	-	6.98	6.98
Critical Hdwy Stg 1	-	-	-	-	5.98	-
Critical Hdwy Stg 2	-	-	-	-	5.98	-
Follow-up Hdwy	-	-	-	-	3.59	3.34
Pot Cap-1 Maneuver	-	0	0	-	888	1036
Stage 1	-	0	0	-	943	-
Stage 2	-	0	0	-	967	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	888	1036
Mov Cap-2 Maneuver	-	-	-	-	888	-
Stage 1	-	-	-	-	943	-
Stage 2	-	-	-	-	967	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		9.7	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	WBT	
Capacity (veh/h)	888		1036	-	-	
HCM Lane V/C Ratio	0.148		0.015	-	-	
HCM Control Delay (s)	9.8		8.5	-	-	
HCM Lane LOS	A		A	-	-	
HCM 95th %tile Q(veh)	0.5		0	-	-	

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition F
Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	1.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	772	62	109	377	21	42
Future Vol, veh/h	772	62	109	377	21	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	6	14	5	14
Mvmt Flow	839	67	118	410	23	46
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	839	0	1485	839
Stage 1	-	-	-	-	839	-
Stage 2	-	-	-	-	646	-
Critical Hdwy	-	-	4.16	-	6.45	6.34
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.254	-	3.545	3.426
Pot Cap-1 Maneuver	-	0	779	-	135	348
Stage 1	-	0	-	-	419	-
Stage 2	-	0	-	-	516	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	779	-	109	348
Mov Cap-2 Maneuver	-	-	-	-	240	-
Stage 1	-	-	-	-	419	-
Stage 2	-	-	-	-	415	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.3		18.5	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	WBL	WBT
Capacity (veh/h)	240		348	-	779	-
HCM Lane V/C Ratio	0.095		0.131	-	0.152	-
HCM Control Delay (s)	21.6		16.9	-	10.4	-
HCM Lane LOS	C		C	-	B	-
HCM 95th %tile O(veh)	0.3		0.4	-	0.5	-

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition F
Weekday PM Peak Hour

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	342	13	26	529	117	125
Future Volume (veh/h)	342	13	26	529	117	125
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1159	1559	1870	1885	1900
Adj Flow Rate, veh/h	372	14	28	575	127	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	50	23	2	1	0
Cap, veh/h	1362	710	631	1351	207	185
Arrive On Green	0.72	0.72	0.72	0.72	0.12	0.12
Sat Flow, veh/h	1885	982	831	1870	1795	1610
Grp Volume(v), veh/h	372	14	28	575	127	136
Grp Sat Flow(s),veh/h/ln	1885	982	831	1870	1795	1610
Q Serve(g_s), s	5.7	0.3	1.0	10.2	5.6	6.8
Cycle Q Clear(g_c), s	5.7	0.3	6.7	10.2	5.6	6.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1362	710	631	1351	207	185
V/C Ratio(X)	0.27	0.02	0.04	0.43	0.61	0.73
Avail Cap(c_a), veh/h	1362	710	631	1351	757	679
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	4.0	3.2	5.1	4.6	35.0	35.5
Incr Delay (d2), s/veh	0.5	0.1	0.1	1.0	3.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	0.1	0.3	4.6	4.6	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.5	3.3	5.3	5.6	38.0	41.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	386			603	263	
Approach Delay, s/veh	4.4			5.6	39.6	
Approach LOS	A			A	D	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	67.0		16.1		67.0	
Change Period (Y+Rc), s	7.0		6.5		7.0	
Max Green Setting (Gmax), s	60.0		35.0		60.0	
Max Q Clear Time (g_c+I1), s	7.7		8.8		12.2	
Green Ext Time (p_c), s	2.1		0.8		3.8	
Intersection Summary						
HCM 6th Ctrl Delay			12.4			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary 8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition F
Weekday PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	499	246	41	812	41	245	107	44	47	184	36
Future Volume (veh/h)	42	499	246	41	812	41	245	107	44	47	184	36
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	1826	1870	1870	1737	1870	1870	1811	1841	1841	1870	1737	1737
Adj Flow Rate, veh/h	44	520	256	43	846	43	255	111	46	49	192	38
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	2	2	11	2	2	6	4	4	2	11	11
Cap, veh/h	163	657	323	208	980	50	299	383	159	372	437	86
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	610	1183	582	646	1765	90	1114	1236	512	1230	1408	279
Grp Volume(v), veh/h	44	0	776	43	0	889	255	0	157	49	0	230
Grp Sat Flow(s),veh/h/ln	610	0	1766	646	0	1854	1114	0	1749	1230	0	1687
Q Serve(g_s), s	6.4	0.0	33.7	5.5	0.0	39.6	19.5	0.0	6.6	3.0	0.0	10.5
Cycle Q Clear(g_c), s	46.0	0.0	33.7	39.2	0.0	39.6	30.0	0.0	6.6	9.6	0.0	10.5
Prop In Lane	1.00		0.33	1.00		0.05	1.00		0.29	1.00		0.17
Lane Grp Cap(c), veh/h	163	0	981	208	0	1030	299	0	542	372	0	523
V/C Ratio(X)	0.27	0.00	0.79	0.21	0.00	0.86	0.85	0.00	0.29	0.13	0.00	0.44
Avail Cap(c_a), veh/h	266	0	1278	317	0	1342	299	0	542	372	0	523
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.0	0.0	17.1	32.6	0.0	18.4	39.8	0.0	25.3	28.9	0.0	26.6
Incr Delay (d2), s/veh	0.9	0.0	2.6	0.5	0.0	4.8	20.6	0.0	0.3	0.2	0.0	0.6
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(95%),veh/ln	1.7	0.0	17.7	1.5	0.0	21.7	12.2	0.0	4.7	1.6	0.0	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.9	0.0	19.7	33.1	0.0	23.2	60.4	0.0	25.6	29.1	0.0	27.2
LnGrp LOS	D	A	B	C	A	C	E	A	C	C	A	C
Approach Vol, veh/h	820			932			412			279		
Approach Delay, s/veh	20.7			23.6			47.1			27.5		
Approach LOS	C			C			D			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	60.7			36.0			60.7			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+l1), s	48.0			32.0			41.6			12.5		
Green Ext Time (p_c), s	5.7			0.0			7.2			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	27.1											
HCM 6th LOS	C											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition F
Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	16.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕		↕	↕	
Traffic Vol, veh/h	27	640	35	42	907	56	39	7	37	47	6	29
Future Vol, veh/h	27	640	35	42	907	56	39	7	37	47	6	29
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	-	-	-	50	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	2	0	4	2	3	0	0	0	4	0	0
Mvmt Flow	28	653	36	43	926	57	40	7	38	48	6	30
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	983	0	0	689	0	0	1786	1796	671	1791	1786	955
Stage 1	-	-	-	-	-	-	727	727	-	1041	1041	-
Stage 2	-	-	-	-	-	-	1059	1069	-	750	745	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.1	6.5	6.2	7.14	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.14	5.5	-
Follow-up Hdwy	2.2	-	-	2.236	-	-	3.5	4	3.3	3.536	4	3.3
Pot Cap-1 Maneuver	711	-	-	896	-	-	64	81	460	62	82	316
Stage 1	-	-	-	-	-	-	419	432	-	275	310	-
Stage 2	-	-	-	-	-	-	274	300	-	400	424	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	711	-	-	896	-	-	50	72	460	48	73	316
Mov Cap-2 Maneuver	-	-	-	-	-	-	50	72	-	48	73	-
Stage 1	-	-	-	-	-	-	392	404	-	257	295	-
Stage 2	-	-	-	-	-	-	232	286	-	338	397	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.4			105.1			264.7		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	50		248	711	-	-	896	-	-	71		
HCM Lane V/C Ratio	0.796		0.181	0.039	-	-	0.048	-	-	1.178		
HCM Control Delay (s)	198.1		22.7	10.3	0	-	9.2	-	-	264.7		
HCM Lane LOS	F		C	B	A	-	A	-	-	F		
HCM 95th %tile Q(veh)	3.3		0.6	0.1	-	-	0.1	-	-	6.4		

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition F
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	5.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	29	0	0	47	102	7
Future Vol, veh/h	29	0	0	47	102	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	0	0	4	8	3
Mvmt Flow	30	0	0	49	106	7
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	55	15
Stage 1	-	-	-	-	30	-
Stage 2	-	-	-	-	25	-
Critical Hdwy	-	-	-	-	6.96	6.96
Critical Hdwy Stg 1	-	-	-	-	5.96	-
Critical Hdwy Stg 2	-	-	-	-	5.96	-
Follow-up Hdwy	-	-	-	-	3.58	3.33
Pot Cap-1 Maneuver	-	0	0	-	929	1057
Stage 1	-	0	0	-	971	-
Stage 2	-	0	0	-	977	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	929	1057
Mov Cap-2 Maneuver	-	-	-	-	929	-
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	977	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		9.3	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBT
Capacity (veh/h)	929		1057		-	-
HCM Lane V/C Ratio	0.114		0.007		-	-
HCM Control Delay (s)	9.4		8.4		-	-
HCM Lane LOS	A		A		-	-
HCM 95th %tile O(veh)	0.4		0		-	-

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition F
Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	4.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	664	60	105	927	78	137
Future Vol, veh/h	664	60	105	927	78	137
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	3	7	2	3	7
Mvmt Flow	722	65	114	1008	85	149
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	722	0	1958	722
Stage 1	-	-	-	-	722	-
Stage 2	-	-	-	-	1236	-
Critical Hdwy	-	-	4.17	-	6.43	6.27
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.263	-	3.527	3.363
Pot Cap-1 Maneuver	-	0	858	-	~ 69	419
Stage 1	-	0	-	-	479	-
Stage 2	-	0	-	-	273	-
Platoon blocked, %	-	-				
Mov Cap-1 Maneuver	-	-	858	-	~ 48	419
Mov Cap-2 Maneuver	-	-	-	-	142	-
Stage 1	-	-	-	-	479	-
Stage 2	-	-	-	-	191	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1		34.3	
HCM LOS	D					
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	WBL	WBT
Capacity (veh/h)	142		419	-	858	-
HCM Lane V/C Ratio	0.597		0.355	-	0.133	-
HCM Control Delay (s)	62.3		18.3	-	9.8	-
HCM Lane LOS	F		C	-	A	-
HCM 95th %tile Q(veh)	3.1		1.6	-	0.5	-
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Signalized Intersection Summary

3: Burman Boulevard & Middle Country Road

2025 Phase 2 Build Condition F
Saturday Midday Peak Hour

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	412	14	9	413	20	24
Future Volume (veh/h)	412	14	9	413	20	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1648	1900	1885	1633	1900
Adj Flow Rate, veh/h	429	15	9	430	21	25
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	17	0	1	18	0
Cap, veh/h	1440	1067	758	1440	100	104
Arrive On Green	0.76	0.76	0.76	0.76	0.06	0.06
Sat Flow, veh/h	1885	1397	961	1885	1555	1610
Grp Volume(v), veh/h	429	15	9	430	21	25
Grp Sat Flow(s),veh/h/ln	1885	1397	961	1885	1555	1610
Q Serve(g_s), s	5.5	0.2	0.2	5.5	1.0	1.2
Cycle Q Clear(g_c), s	5.5	0.2	5.7	5.5	1.0	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1440	1067	758	1440	100	104
V/C Ratio(X)	0.30	0.01	0.01	0.30	0.21	0.24
Avail Cap(c_a), veh/h	1440	1067	758	1440	693	717
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	2.8	2.2	3.7	2.8	34.8	34.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.5	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	0.0	0.1	1.7	0.7	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.4	2.2	3.7	3.4	35.9	36.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	444			439	46	
Approach Delay, s/veh	3.3			3.4	36.0	
Approach LOS	A			A	D	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		11.6		67.0
Change Period (Y+Rc), s		7.0		6.5		7.0
Max Green Setting (Gmax), s		60.0		35.0		60.0
Max Q Clear Time (g_c+I1), s		7.5		3.2		7.7
Green Ext Time (p_c), s		2.5		0.1		2.5
Intersection Summary						
HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

8: Edwards Avenue & Middle Country Road

2025 Phase 2 Build Condition F
Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	590	227	39	630	84	219	222	49	51	153	48
Future Volume (veh/h)	52	590	227	39	630	84	219	222	49	51	153	48
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	1841	1885	1885	1811	1885	1885	1796	1870	1870	1900	1841	1841
Adj Flow Rate, veh/h	55	621	239	41	663	88	231	234	52	54	161	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	1	1	6	1	1	7	2	2	0	4	4
Cap, veh/h	245	714	275	161	897	119	322	465	103	281	420	133
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	700	1296	499	622	1630	216	1123	1482	329	1110	1340	424
Grp Volume(v), veh/h	55	0	860	41	0	751	231	0	286	54	0	212
Grp Sat Flow(s),veh/h/ln	700	0	1795	622	0	1846	1123	0	1811	1110	0	1764
Q Serve(g_s), s	6.2	0.0	39.5	5.8	0.0	29.5	19.3	0.0	12.3	4.0	0.0	9.0
Cycle Q Clear(g_c), s	35.7	0.0	39.5	45.4	0.0	29.5	28.3	0.0	12.3	16.3	0.0	9.0
Prop In Lane	1.00		0.28	1.00		0.12	1.00		0.18	1.00		0.24
Lane Grp Cap(c), veh/h	245	0	988	161	0	1016	322	0	568	281	0	553
V/C Ratio(X)	0.22	0.00	0.87	0.26	0.00	0.74	0.72	0.00	0.50	0.19	0.00	0.38
Avail Cap(c_a), veh/h	372	0	1314	273	0	1351	322	0	568	281	0	553
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.8	0.0	18.6	38.1	0.0	16.3	36.6	0.0	26.8	33.4	0.0	25.6
Incr Delay (d2), s/veh	0.5	0.0	5.1	0.8	0.0	1.5	7.4	0.0	0.7	0.3	0.0	0.4
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(95%),veh/ln	1.8	0.0	21.2	1.6	0.0	16.1	9.6	0.0	8.8	1.9	0.0	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	0.0	23.7	39.0	0.0	17.8	44.1	0.0	27.5	33.7	0.0	26.0
LnGrp LOS	C	A	C	D	A	B	D	A	C	C	A	C
Approach Vol, veh/h	915			792			517			266		
Approach Delay, s/veh	24.1			18.9			34.9			27.6		
Approach LOS	C			B			C			C		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	59.6			36.0			59.6			36.0		
Change Period (Y+Rc), s	7.0			6.0			7.0			6.0		
Max Green Setting (Gmax), s	70.0			30.0			70.0			30.0		
Max Q Clear Time (g_c+I1), s	41.5			30.3			47.4			18.3		
Green Ext Time (p_c), s	7.1			0.0			5.3			1.0		
Intersection Summary												
HCM 6th Ctrl Delay	25.1											
HCM 6th LOS	C											

HCM 6th TWSC
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition F
Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	18											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	699	42	44	703	44	37	7	41	48	3	37
Future Vol, veh/h	41	699	42	44	703	44	37	7	41	48	3	37
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	-	-	-	50	-	-	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, %	5	1	0	0	2	5	0	0	0	8	0	0
Mvmt Flow	44	744	45	47	748	47	39	7	44	51	3	39
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	795	0	0	789	0	0	1742	1744	767	1746	1743	772
Stage 1	-	-	-	-	-	-	855	855	-	866	866	-
Stage 2	-	-	-	-	-	-	887	889	-	880	877	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.18	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.18	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.572	4	3.3
Pot Cap-1 Maneuver	813	-	-	840	-	-	69	87	405	65	88	403
Stage 1	-	-	-	-	-	-	356	378	-	340	373	-
Stage 2	-	-	-	-	-	-	341	364	-	334	369	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	813	-	-	840	-	-	53	74	405	~ 48	75	403
Mov Cap-2 Maneuver	-	-	-	-	-	-	53	74	-	~ 48	75	-
Stage 1	-	-	-	-	-	-	321	341	-	307	352	-
Stage 2	-	-	-	-	-	-	288	344	-	263	333	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.5			90.1			260.4		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)	53	245	813	-	-	840	-	-	78			
HCM Lane V/C Ratio	0.743	0.208	0.054	-	-	0.056	-	-	1.2			
HCM Control Delay (s)	176.4	23.5	9.7	0	-	9.5	-	-	260.4			
HCM Lane LOS	F	C	A	A	-	A	-	-	F			
HCM 95th %tile Q(veh)	3.1	0.8	0.2	-	-	0.2	-	-	7			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 6th TWSC
11: LIE East Exit Ramp & Edwards Avenue /Edwards Avenue

2025 Phase 2 Build Condition F
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	6.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↖	↗
Traffic Vol, veh/h	160	0	0	378	270	298
Future Vol, veh/h	160	0	0	378	270	298
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	7	0	0	5	4	2
Mvmt Flow	165	0	0	390	278	307
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	360	83
Stage 1	-	-	-	-	165	-
Stage 2	-	-	-	-	195	-
Critical Hdwy	-	-	-	-	6.88	6.94
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	-	-	3.54	3.32
Pot Cap-1 Maneuver	-	0	0	-	607	960
Stage 1	-	0	0	-	841	-
Stage 2	-	0	0	-	813	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	607	960
Mov Cap-2 Maneuver	-	-	-	-	607	-
Stage 1	-	-	-	-	841	-
Stage 2	-	-	-	-	813	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		13.1	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	WBT
Capacity (veh/h)	607		960		-	-
HCM Lane V/C Ratio	0.459		0.32		-	-
HCM Control Delay (s)	15.9		10.5		-	-
HCM Lane LOS	C		B		-	-
HCM 95th %tile Q(veh)	2.4		1.4		-	-

HCM 6th TWSC
17: Site Driveway & Middle Country Road

2025 Phase 2 Build Condition F
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	3.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	723	65	115	727	64	115
Future Vol, veh/h	723	65	115	727	64	115
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	5	8	2	3	9
Mvmt Flow	786	71	125	790	70	125
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	-	786	0	1826	786
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	1040	-
Critical Hdwy	-	-	4.18	-	6.43	6.29
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.272	-	3.527	3.381
Pot Cap-1 Maneuver	-	0	807	-	84	381
Stage 1	-	0	-	-	447	-
Stage 2	-	0	-	-	339	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	807	-	~ 61	381
Mov Cap-2 Maneuver	-	-	-	-	169	-
Stage 1	-	-	-	-	447	-
Stage 2	-	-	-	-	245	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	1.4		26.7		
HCM LOS	D					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT	
Capacity (veh/h)	169	381	-	807	-	
HCM Lane V/C Ratio	0.412	0.328	-	0.155	-	
HCM Control Delay (s)	40.4	19	-	10.3	-	
HCM Lane LOS	E	C	-	B	-	
HCM 95th %tile Q(veh)	1.8	1.4	-	0.5	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Roundabout
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition G
Weekday AM Peak Hour

Intersection				
Intersection Delay, s/veh	11.7			
Intersection LOS	B			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	863	452	20	85
Demand Flow Rate, veh/h	915	514	26	85
Vehicles Circulating, veh/h	105	34	915	509
Vehicles Exiting, veh/h	489	906	105	39
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	14.9	6.9	9.3	5.4
Approach LOS	B	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	915	514	26	85
Cap Entry Lane, veh/h	1240	1333	543	821
Entry HV Adj Factor	0.943	0.879	0.769	1.000
Flow Entry, veh/h	863	452	20	85
Cap Entry, veh/h	1170	1171	417	821
V/C Ratio	0.738	0.386	0.048	0.104
Control Delay, s/veh	14.9	6.9	9.3	5.4
LOS	B	A	A	A
95th %tile Queue, veh	7	2	0	0

HCM 6th Roundabout
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition G
Weekday PM Peak Hour

Intersection				
Intersection Delay, s/veh	14.0			
Intersection LOS	B			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	684	975	116	68
Demand Flow Rate, veh/h	696	1001	119	69
Vehicles Circulating, veh/h	102	109	689	1027
Vehicles Exiting, veh/h	994	699	109	83
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.4	18.4	7.4	9.5
Approach LOS	A	C	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	696	1001	119	69
Cap Entry Lane, veh/h	1244	1235	683	484
Entry HV Adj Factor	0.982	0.974	0.975	0.986
Flow Entry, veh/h	684	975	116	68
Cap Entry, veh/h	1221	1203	666	477
V/C Ratio	0.560	0.811	0.174	0.143
Control Delay, s/veh	9.4	18.4	7.4	9.5
LOS	A	C	A	A
95th %tile Queue, veh	4	10	1	0

HCM 6th Roundabout
4: Middle Country Road & Fresh Pond Avenue

2025 Phase 2 Build Condition G
Saturday Midday Peak Hour

Intersection				
Intersection Delay, s/veh	11.9			
Intersection LOS	B			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	801	809	121	78
Demand Flow Rate, veh/h	810	829	124	80
Vehicles Circulating, veh/h	115	126	795	863
Vehicles Exiting, veh/h	828	793	130	92
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.8	12.7	8.5	8.2
Approach LOS	B	B	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	810	829	124	80
Cap Entry Lane, veh/h	1227	1213	613	572
Entry HV Adj Factor	0.989	0.975	0.976	0.975
Flow Entry, veh/h	801	809	121	78
Cap Entry, veh/h	1213	1184	599	558
V/C Ratio	0.660	0.683	0.202	0.140
Control Delay, s/veh	11.8	12.7	8.5	8.2
LOS	B	B	A	A
95th %tile Queue, veh	5	6	1	0