

**VILLAGE OF DOWNERS GROVE**  
**Report for the Village**  
**10/11/2022**

|  |   |
|--|---|
| <b>SUBJECT:</b>  | <b>SUBMITTED BY:</b>                                  |
| 7251 and 7261 Lemont Road Planned Unit Development Amendment | Stan Popovich, AICP<br>Community Development Director |

**SYNOPSIS**

An ordinance and resolution have been prepared to amend Planned Unit Development #18 with a Special Use to allow the construction of a drive-through restaurant and retail building and a Plat of Subdivision with an exception to create a new lot without street frontage at 7251 and 7261 Lemont Road in the Downers Park Plaza shopping center.

**STRATEGIC PLAN ALIGNMENT**

The goals for 2021-2023 include *Strong and Diverse Local Economy*.

**FISCAL IMPACT**

N/A

**RECOMMENDATION**

**UPDATE & RECOMMENDATION**

This item was discussed at the October 4, 2022 Village Council meeting. Based on Council discussion, the petitioner has made the following updates to their proposal:

1. An additional set of windows were added to the south facade.
2. An additional set of windows were added to the north facade.
3. A pedestrian connection has been added which will connect this development with the existing sidewalk system for the rest of the center. The sidewalk will run south from the proposed development site to the sidewalk in front of 7339 Lemont Road.

Staff recommends approval on the October 11, 2022 Active Agenda.

**BACKGROUND**

Property Information & Zoning Request

The petitioner is proposing to construct a future drive-through restaurant and retail building at 7251 and 7261 Lemont Road. The building will be located on a new 0.66 acre lot within the 32.94 acre Downers Park Plaza shopping center located at the northeast corner of Lemont Road and 75<sup>th</sup> Street. The property is zoned B-2/PUD #18, General Retail Business/Planned Unit Development #18. The petitioner is requesting:

- A PUD Amendment with a Special Use to permit the construction of a drive-through restaurant/retail space; and
- A Plat of Subdivision to create an outlot with an exception to create a lot without street frontage.

The petitioner is proposing to build a new 5,230 square foot restaurant/retail with a drive-through lane and 37 parking spaces. The proposed development will involve a decrease of 42 parking spaces for the overall shopping center. Even with the decreased parking, the shopping center will continue to provide more than the required amount of parking. The drive-through facility will be located on the north and east sides of the building and will provide the required minimum stacking spaces as required by the Municipal Code. The petitioner is proposing landscaping in conformance with the Village requirements. The proposed landscaping includes a mix of canopy trees and landscape materials such as shrubs and ornamental grasses. Parking lot and site lighting is provided within the proposed development and is compliant with the Village requirements.

A Plat of Subdivision is proposed to create a new outlot for the restaurant/retail building. The new lot is located on the west side of the shopping center along Lemont Road, directly east of the existing Burger King Restaurant and the 3 Corners Grill and Tap.

#### Comprehensive Plan

The Comprehensive Plan's Future Land Use Map designates this property as Corridor Commercial. Corridor Commercial uses include a blend of neighborhood oriented commercial retail that provide services and retail opportunities to the nearby neighborhoods and the surrounding region. The Comprehensive Plan specifically identifies that the 75<sup>th</sup> Street corridor should continue to contain a range of these types of uses. These commercial areas have a "unique character" and should serve the daily needs of local residents while providing goods and services to the larger region.

The proposed development also meets the Comprehensive Plan's recommendations for a Corridor Commercial area. The proposed development implements the recommendations of the Economic Development Plan to enhance the sales tax, proposes a high level of design, utilizes shared parking, proposes no new curb cuts, provides a dumpster enclosure and screening, and provides a pedestrian connection to existing sidewalk infrastructure.

#### Compliance with the Zoning Ordinance

The property is zoned B-2/PUD, General Retail Business District/ Planned Unit Development #18. The proposal includes a request for a Special Use to operate a drive-through, which is an available Special Use in the B-2 district. The existing parking lot area that will be converted into the proposed outlot currently contains 79 parking spaces. The proposed development will have 37 parking spaces, which will result in a reduction of 42 spaces. As noted in Table 2 in the Plan Commission staff report, the shopping center will have 1,119 parking spaces, for an excess of 44 parking spaces. All of the Zoning Ordinance requirements are met.

#### Compliance with the Subdivision Ordinance

The final plat of subdivision is in substantial compliance with the minimum lot dimension requirements as outlined in Section 20.301 of the Village's Subdivision Ordinance. However, Lot 1-B includes an exception to the lot frontage requirement. While Lot 1-B will not front a dedicated street, public access will be granted in perpetuity through a cross access easement and agreement between Lot 1-B (newly created outlot) and Lot 2-A (Main Shopping Center). The petitioner has stated that given the project's location set within an existing shopping center and other surrounding parcels, providing lot frontage along Lemont Road (nearest public right of way) is difficult. As noted, access will be provided through existing cross access easements through the driveways on both Lemont Road and 75th Street.

### Engineering\Public Improvements

There is a slight net decrease in the impervious area and therefore new stormwater detention is not required. The drainage for the site will tie into the existing stormwater system for the shopping center. The petitioner will be required to meet all Village engineering standards and comply with all applicable codes when formally submitting for a permit. There will be no changes to the existing access points off of Lemont Road.

### Traffic and Parking

A traffic impact study for the proposed development was completed by the petitioner. The study examined the existing 75<sup>th</sup> Street and Lemont Road traffic conditions and the future conditions based on the proposed development. The study found that proposed parking supply is sufficient and the development will not have a significant impact on the area roadways.

### Public Comment

Prior to the Plan Commission meeting, one public comment was received by staff. The inquiry was related to who the future tenants would be. Staff informed the resident that the final tenants had not yet been decided. During the Plan Commission meeting two public comments were received. The first comment was regarding the lack of pedestrian signage and crosswalks at Lemont Road and Dunham Road. Staff noted that Lemont Road was under the jurisdiction of DuPage County Department of Transportation (DuDOT). Staff committed to speaking with the Village Traffic Engineer to express the concerns related to pedestrian signage and lack of crosswalks be communicated to DuDOT. The second public comment included clarification for clustering the restaurants in this area. The petitioner shared that the location of the proposed outlot was chosen because that existing area of parking is rarely used.

## **ATTACHMENTS**

Ordinance

Aerial Map

Staff Report with attachments dated September 12, 2022

Draft Minutes of the Plan Commission Hearing dated September 12, 2022



October 6, 2022

Ms. Flora P. Leon, AICP  
Senior Planner  
Village of Downers Grove  
801 Burlington Avenue  
Downers Grove, IL 60515

Re: Response Letter to Village Council Meeting Comments  
Proposed Restaurant/Retail Project  
7251 & 7261 Lemont Rd.  
Downers Park Plaza, Proposed Lot 1-B

Dear Ms. Leon:

Enclosed are revised drawings, per discussions and comments at the Village Council meeting on October 4<sup>th</sup>, 2022, which provide additional storefront along the left (north) and right (south) elevations and proposes an additional pedestrian connection to Lot 2 as part of the proposed development of Lot 1-B.

We have provided for additional storefront at both the above referenced building elevations to the extent feasible. Any additional storefront along both elevations will begin to be placed in undesirable locations which will interfere with interior design, specifically on the north elevation where additional windows would begin to be located within the kitchen/prep area and the south elevation where additional storefront would begin to be located towards stockrooms or storage areas, along with possibly limiting merchandise placement along these walls depending on the final end user's floor planning.

The addition of storefront along the rear (east) elevation of this building is not practical as this area is "back of house" and a significant portion of this wall will have utility services (electrical, gas, telephone,

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**COMMERICAL GENERAL CONTRACTOR • PROJECT/CONSTRUCTION  
MANAGEMENT**

109 New Camellia Blvd., Suite 100 • Covington, Louisiana 70433 • 985-792-4389 •  
Fax 985-792-4392



data, etc.) located here once constructed. As with the limitations on the north and south elevations, storefront additions are not practical in this area.

An additional pedestrian crossing has been provided to the existing sidewalk at the retail building located on Lot 2. This routing was carefully considered to allow for a final connection at the fully controlled (4-way stop) intersection and will allow for a full connection from Lemont Rd to Lot 2 as part of construction on this project.

In closing, we believe these revisions satisfactorily address comments presented at the Council Meeting and look forward to discussing further as needed.

Sincerely,

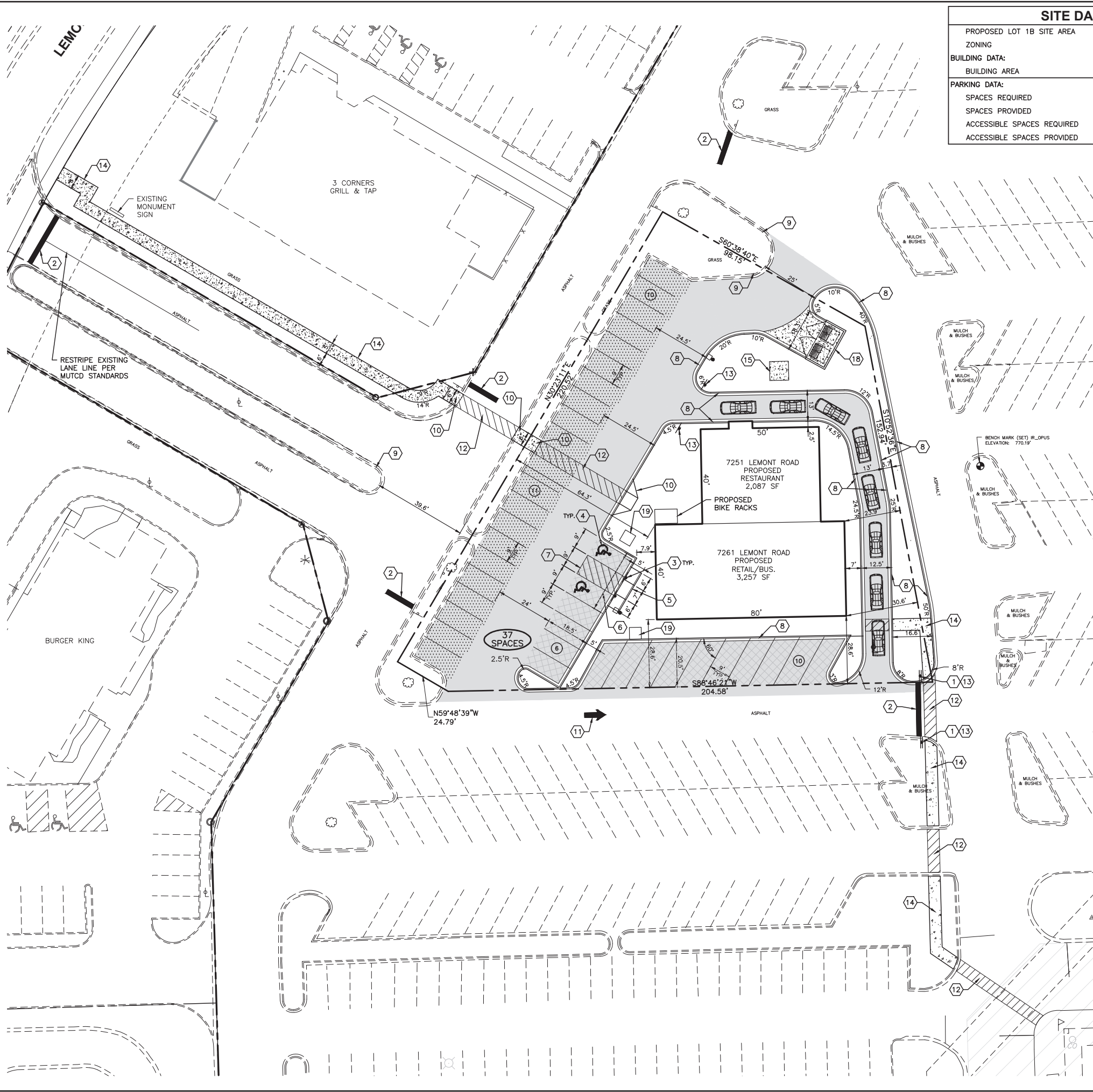
A handwritten signature in blue ink that reads "Jason Reibert". The signature is fluid and cursive.

Jason Reibert

Vice President

CC: Bob Whelan, PMAT DPP LLC (w/ enclosures)  
Kevin Kush, PMAT DPP LLC (w/ enclosures)  
Steve Zito, Zito-Russell Architects (w/ enclosures)  
Tim Reber, Woolpert (w/ enclosures)

Layout Tab Name: C200 SITE PLAN, Images: Map.png; william\_dougherty1.jpg; Xrefs: 10015411-TBLK.dwg; 10015411-X-BY OTHERS.dwg; 10015411-P.dwg; 10015411-X.dwg  
 User Saved By: douglas, 8/22/2022, 11:00:46 AM  
 G:\DE\clients\PM\10015411 Retail - Downers Grove, IL\4.0 Disciplines\Civil\Cadd\Cad\Cad\10015411-C200-SIT.dwg Plotted By: Hadley, Dennis Plotted: October 6, 2022, 10:02:14 AM



| SITE DATA                  |                     |
|----------------------------|---------------------|
| PROPOSED LOT 1B SITE AREA  | 0.666 ACRES         |
| ZONING                     | PLANNED DEVELOPMENT |
| <b>BUILDING DATA:</b>      |                     |
| BUILDING AREA              | 5,344 SQ. FT.       |
| <b>PARKING DATA:</b>       |                     |
| SPACES REQUIRED            | 37                  |
| SPACES PROVIDED            | 37                  |
| ACCESSIBLE SPACES REQUIRED | 2                   |
| ACCESSIBLE SPACES PROVIDED | 2                   |

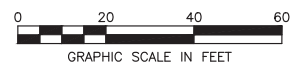
- SITE KEY NOTES**
- 1 "STOP" SIGN, R1-1
  - 2 24" WIDE STOP BAR, TRAFFIC WHITE PAINT
  - 3 BOLLARD WITH ACCESSIBLE PARKING SIGN
  - 4 ACCESSIBLE PARKING SYMBOL
  - 5 ACCESSIBLE RAMP WITH DETECTABLE WARNING
  - 6 ACCESSIBLE PARKING SPACES & THEIR ACCESS AISLES SHALL BE 2% MAX. SLOPE IN ALL DIRECTIONS
  - 7 PAINT 4" WIDE STRIPES @ 2'-0" O.C. @ 45° ANGLE, TRAFFIC YELLOW PAINT
  - 8 CURB AND GUTTER
  - 9 BEGIN/END PROPOSED CURB AND GUTTER. SAWCUT EXISTING CURB TO PROVIDE CLEAN CONSTRUCTION JOINT.
  - 10 ACCESSIBLE RAMP
  - 11 DIRECTIONAL ARROW, TRAFFIC WHITE PAINT
  - 12 CROSSWALK, PAINT 12"-4" WIDE STRIPES AT 2' O.C. CENTERED ON ENTRY, TRAFFIC WHITE PAINT
  - 13 "DO NOT ENTER" SIGN
  - 14 CONCRETE WALK
  - 15 TRANSFORMER PAD
  - 16 BOLLARD
  - 17 MONUMENT SIGN (SEE ARCHITECTURAL PLANS)
  - 18 DUMPSTER ENCLOSURE (SEE ARCHITECTURAL PLANS)
  - 19 5'x5' TREE GRATE

- SITE LEGEND**
- INDICATES HEAVY DUTY PAVEMENT-SEE DETAILS FOR PAVEMENT COMPOSITION
  - INDICATES LIGHT DUTY PAVEMENT-SEE DETAILS FOR PAVEMENT COMPOSITION
  - INDICATES MILL AND OVERLAY
  - INDICATES NEW CONCRETE PAVEMENT/SIDEWALK-SEE DETAILS FOR PAVEMENT COMPOSITION
  - INDICATES PAVEMENT & CURB RESTORATION AREA FROM SANITARY SEWER CONSTRUCTION (MATCH EXISTING PAVEMENT COMPOSITION)
  - LIGHT POLES
  - EXISTING CURB AND GUTTER
  - POSITIVE SLOPED CURB
  - NEGATIVE SLOPED CURB
  - INDICATES ROW PARKING COUNT
  - INDICATES PARKING TOTAL FOR SURROUNDING AREA
  - PROPERTY BOUNDARY

- SITE NOTES**
1. ALL DIMENSIONS, RADII AND COORDINATES ARE TO BACK OF CURB WHERE APPLICABLE.
  2. ALL PAVEMENT MARKING SHALL BE YELLOW IN COLOR UNLESS INDICATED OTHERWISE.
  3. ALL CURB & GUTTER SHALL BE B6.12, "POSITIVE", UNLESS NOTED OTHERWISE (SEE DETAILS).
  4. ADA DETECTABLE WARNINGS/TRUNCATED DOMES TO BE PROVIDED AT SIDEWALKS ON EITHER SIDE OF EACH DRIVEWAY CROSSING.
  5. SEE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS.
  6. WHERE NEW PAVEMENT IS TO BE PLACED OVER CURBED ISLANDS THAT HAVE BEEN REMOVED, CONTRACTOR TO PROVIDE AGGREGATE BASE & BINDER COURSE MATCHING THE EXISTING PAVEMENT SECTIONS PRIOR TO PLACEMENT OF SURFACE COURSE.
  7. CONTRACTOR TO PERFORM PAVEMENT RESTORATION FOR ALL BUILDING FOOTINGS AND UTILITY INSTALLATIONS. CONTRACTOR TO PROVIDE 8" AGGREGATE BASE, 3" BINDER COURSE, AND 1.5" SURFACE COURSE OR MATCH THE EXISTING PAVEMENT SECTION, WHICHEVER IS GREATER.
  8. AREAS OF PAVEMENT RESTORATION SHALL BE PROOF ROLLED TO DETERMINE IF FULL DEPTH RESTORATION IS REQUIRED OR IF ONLY THE BITUMINOUS MATERIAL IS TO BE REPLACED.

**DUPAGE COUNTY BENCHMARK:**  
 BENCHMARK STATION "WOOD" IS LOCATED ALONG 75TH STREET IN A MEDIAN WEST OF THE SOUTHBOUND ON- AND OFF-RAMPS FOR INTERSTATE 355. STATION IS 18.0 FT WEST OF THE CENTERLINE OF THE SOUTHBOUND OFF-RAMP, 7.5 FT NORTH OF THE SOUTH BACK OF CURB OF THE MEDIAN, AND 15.0 FT WEST OF A TRAFFIC SIGNAL BASE AT THE EAST END OF THE MEDIAN. MONUMENT IS A 3.5 INCH ALUMINUM DISK 1.0 FT ABOVE STREET SURFACE.  
 ELEVATION = 764.80'

**BENCHMARK:**  
 THE BASIS OF ELEVATIONS HEREON IS NAVD 88 PER OBSERVATIONS OF SELECTED STATIONS IN THE NATIONAL GEODETIC SURVEY CONTINUOUSLY OPERATING REFERENCE STATION (NGS CORS) NETWORK.  
 IRON ROD SET - SEE DRAWING FOR LOCATION.  
 ELEVATION = 770.19'



|                        |  |  |             |          |
|------------------------|--|--|-------------|----------|
| REVISION               | No.  | DATE   | PROJECT No: | 10015411 |
|                        |  |  | DATE        | 08/24/22 |
| DESIGN                 | DES.   | TR   | DR.         | DH       |
|                        | DR.  | DH   | CKD.        | TR       |
|                        | 1815 South Meyers Road<br>Suite 950<br>Oakbrook Terrace, IL 60181<br>630.424.9080<br>FAX: 630.495.3731 |  |             |          |
|                        |  |  |             |          |
| SITE IMPROVEMENT PLANS |  | 7251 & 7261 LEMONT ROAD                      |             |          |
| RETAIL - DOWNERS GROVE |  | DOWNERS GROVE, DUPAGE COUNTY, ILLINOIS 60516 |             |          |
| SHEET NO.              |  | SITE PLAN                                    |             |          |
| C200                   |  |  |             |          |



FRONT ELEVATION



LEFT ELEVATION



RIGHT ELEVATION



REAR ELEVATION

**OUTPARCEL BUILDING, DOWNERS PARK PLAZA**  
**DOWNERS GROVE, ILLINOIS**

**Stephen L. Zito, AIA**  
 Architect

VILLAGE OF DOWNERS GROVE  
COUNCIL ACTION SUMMARY

INITIATED: Village Attorney DATE: October 11, 2022  
(Name)

RECOMMENDATION FROM: Plan Commission FILE REF: 22-PLC-0026  
(Board or Department)

**NATURE OF ACTION:**

**STEPS NEEDED TO IMPLEMENT ACTION:**

- Ordinance
- Resolution
- Motion
- Other

Motion to adopt "AN ORDINANCE APPROVING AN AMENDMENT TO PLANNED UNIT DEVELOPMENT #18 TO PERMIT CONSTRUCTION OF A RESTAURANT WITH A DRIVE-THROUGH AND RETAIL BUILDING AT 7251 & 7261 LEMONT ROAD", as presented.



**SUMMARY OF ITEM:**

Adoption of this ordinance shall approve an amendment Planned Unit Development #18 to permit construction of a restaurant with a drive-through and retail building at 7251 & 7261 Lemont Road.

**RECORD OF ACTION TAKEN:**

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**ORDINANCE NO. \_\_\_\_\_****AN ORDINANCE APPROVING AN  
AMENDMENT TO PLANNED UNIT DEVELOPMENT #18  
TO PERMIT CONSTRUCTION OF A RESTAURANT  
WITH A DRIVE-THROUGH AND RETAIL BUILDING  
AT 7251 & 7261 LEMONT ROAD**

WHEREAS, the Village Council has previously adopted Ordinance No. 2090, on August 1, 1977, designating the property described therein as Planned Unit Development #18 and subsequent amendments thereto; and,

WHEREAS, the Village Council has previously adopted Ordinance No. 5146 on August 10, 2010, approving an amendment to Planned Unit Development #18 to approve the master sign plan; and,

WHEREAS, the Village Council has previously adopted Ordinance No. 5813 on March 10, 2020, approving off-premise electronic message board signs at 7221-7451 Lemont Road; and

WHEREAS, the Village Council has previously adopted Ordinance No. 5892 on December 14, 2021, approving an amendment to Planned Unit Development #18 to permit the construction of a restaurant with a drive-through at 7361 Lemont Road and approving an amendment to the master sign plan; and

WHEREAS, the Owners have filed a written petition with the Village conforming to the requirements of the Zoning Ordinance and requesting an amendment to Planned Unit Development #18 to permit the construction of a restaurant with a drive-through and a retail building at 7251 & 7261 Lemont Road; and,

WHEREAS, such request was referred to the Plan Commission of the Village of Downers Grove, and the Plan Commission has given the required public notice, conducted a public hearing for the petition on September 12, 2022, and has made its findings and recommendations, all in accordance with the statutes of the State of Illinois and the ordinances of the Village of Downers Grove; and,

WHEREAS, the Plan Commission has recommended approval of the requested petition, subject to certain conditions; and,

WHEREAS, the Village Council has considered the record before the Plan Commission, as well as the recommendations of Plan Commission.

NOW, THEREFORE, BE IT ORDAINED by the Council of the Village of Downers Grove, DuPage County, Illinois, as follows:

**SECTION 1.** That the provisions of the preamble are incorporated into and made a part of this ordinance as if fully set forth herein.

**SECTION 2.** That a Planned Unit Development Amendment is hereby authorized to permit construction of a restaurant with a drive through and a retail building at 7251 and 7261 Lemont Road.

SECTION 3. That approval set forth in Section 2 of this ordinance is subject to the findings and recommendations of the Downers Grove Plan Commission regarding File 22-PLC-026 as set forth in the minutes of their September 12, 2022 meeting.

SECTION 4. The approval set forth in Section 2 of this ordinance is subject to the following conditions:

1. The Planned Unit Development, Special Use, and a Plat of Subdivision with an exception to create a new outlot without street frontage shall substantially conform to the staff report dated September 12, 2022; and drawings prepared by Woolpert Engineering submitted on 8/24/22, and by Zito Russell Architects updated on 8/3/22, except as such plans may be modified to conform to the Village codes and ordinances.
2. A perpetual cross access and parking easement shall be provided between Lots 2-A and Lot 1-B and shown on the Plat of Subdivision.
3. The pedestrian connection shall be secured with the approval of the property owner at 7231 Lemont Road or 7301 Lemont Road.
4. A pedestrian easement shall be provided on Lot 7 (7231 Lemont Road) or Lot 6N (7301 Lemont Road) for the benefit of public access to Lot 1-B.
5. The pedestrian connection on Lot 1-B must be clearly differentiated through the use of elevation changes, a different paving material or other equally effective methods.
6. The photometric plan shall conform to the Village Zoning Ordinance.
7. All signage shall be permitted separately and conform to the Village's Sign Ordinance.
8. A final plat of subdivision will be required prior to permit issuance.

SECTION 5. The above conditions are hereby made part of the terms under which the Planned Unit Development Amendment is granted. Violation of any or all of such conditions shall be deemed a violation of the Village of Downers Grove Zoning Ordinance, the penalty for which may include, but is not limited to, a fine and/or revocation of the Planned Unit Development Amendment granted herein.

SECTION 6. That all ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

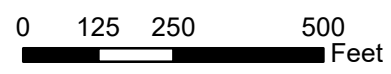
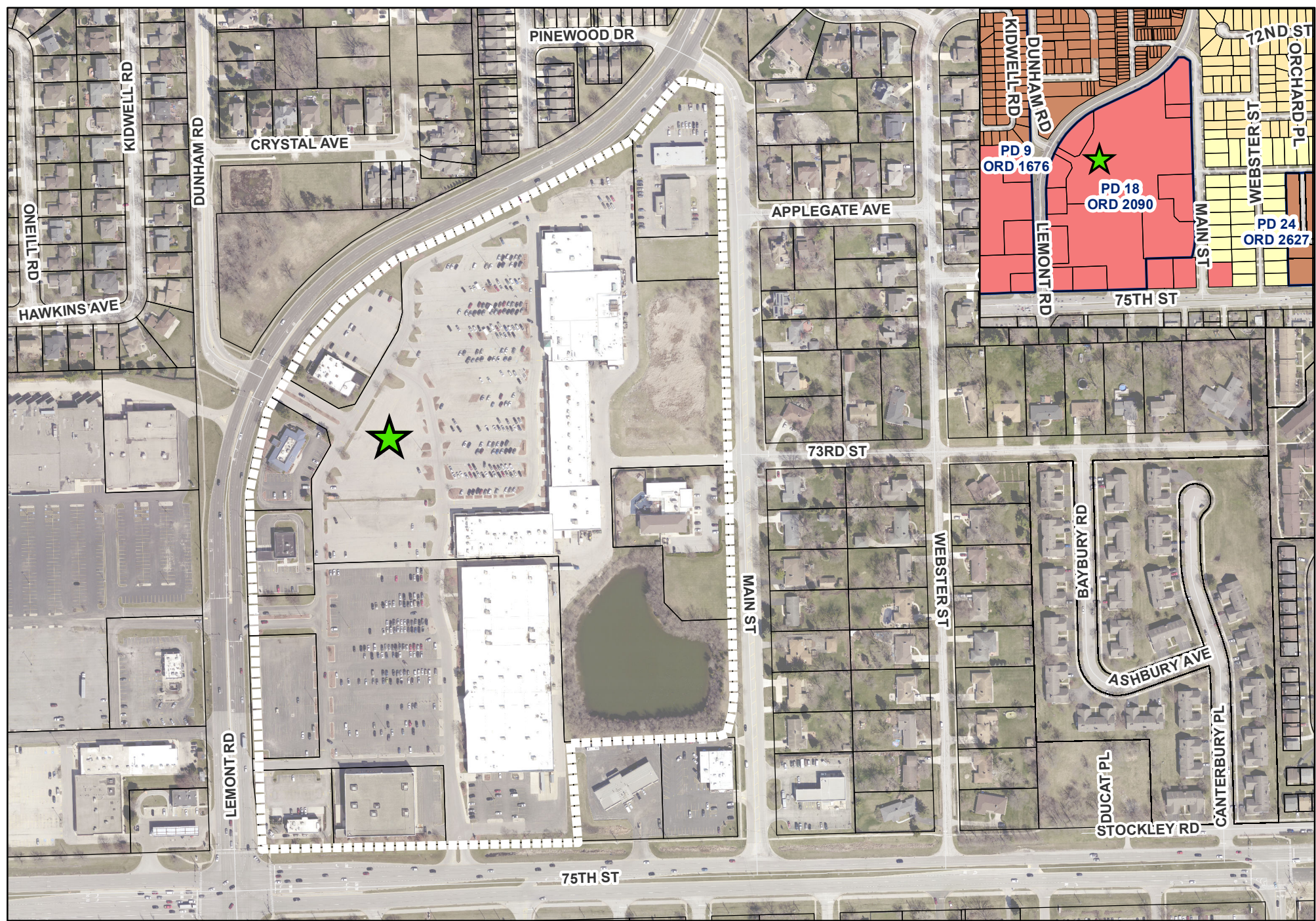
SECTION 7. That this ordinance shall be in full force and effect from and after its passage and publication in pamphlet form as provided by law.

\_\_\_\_\_  
Mayor



Passed:

Published:

Attest: \_\_\_\_\_  
Village Clerk



7221 Lemont Road - Location Map

-  Subject Property
-  Project Location



**VILLAGE OF DOWNERS GROVE  
REPORT FOR THE PLAN COMMISSION  
SEPTEMBER 12, 2022 AGENDA**

| <b>SUBJECT:</b>                          | <b>TYPE:</b>   | <b>SUBMITTED BY:</b>                  |
|--|--|---------------------------------------|
| 22-PLC-0026<br>7251 and 7261 Lemont Road | PUD Amendment, Special Use, and<br>Plat of Subdivision with an Exception | Flora P. Leon, AICP<br>Senior Planner |

**REQUEST**

The petitioner is requesting approval for an amendment to Planned Unit Development #18 to allow the construction of a future restaurant and retail building, a Special Use to allow a drive-through and a Plat of Subdivision with an exception to create a new lot without street frontage at 7251 and 7261 Lemont Road in the Downers Park Plaza shopping center.

**NOTICE**

The application has been filed in conformance with applicable procedural and public notice requirements.

**GENERAL INFORMATION**

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**OWNER/ PETITIONER:** PMAT DPP, LLC  
109 Northpark Blvd, Suite 300  
Covington, LA 70433

**PROPERTY INFORMATION**

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**EXISTING ZONING:** B-2, General Retail Business/ P.D. #18, Planned Unit Development #18  
**EXISTING LAND USE:** Retail Businesses  
**PROPERTY SIZE:** 1,434,656 square feet (32.94 acres)  
**PINS:** 09-29-110-002 to -008, -013 to -016

**SURROUNDING ZONING AND LAND USES**

|               | <b>ZONING</b>  | <b>FUTURE LAND USE</b>  |
|---------------|--|---|
| <b>NORTH:</b> | R-5A, Residential Attached House 5A  | Single Family Attached, Single Family Detached, Park Open Space |
| <b>SOUTH:</b> | Woodridge, OSB, Office and Service Business District<br>Darien, B-3, General Business District | General Office<br>Commercial                                    |
| <b>EAST:</b>  | R-3, Residential Detached House 3<br>R-1, Residential Detached House 1                         | Single Family Detached  |
| <b>WEST:</b>  | B-2, General Retail Business   | Commercial Corridor   |

## **ANALYSIS**

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### **SUBMITTALS**

This report is based on the following documents, which are on file with the Department of Community Development:

1. Project Narrative
2. Approval Criteria
3. Plat of Survey
4. Site Plan
5. Engineering Plans
6. Landscape Plans
7. Elevations
8. Plat of Subdivision
9. Traffic Report

### **PROJECT DESCRIPTION**

The petitioner is proposing to construct a future restaurant and retail building at 7251 and 7261 Lemont Road. The restaurant/retail space will be located on a new 0.66 acre lot within the 32.94 acre Downers Park Plaza shopping center located at the northeast corner of Lemont Road and 75<sup>th</sup> Street. The property is zoned B-2/PUD #18, General Retail Business/Planned Unit Development #18. The petitioner is requesting:

- A PUD Amendment to permit the construction of a restaurant/retail space;
- A Special Use for the construction of a drive-through; and
- A Plat of Subdivision to create an outlot with an exception to create a lot without street frontage.

The petitioner is proposing to build a new 5,230 square foot restaurant/retail building at the northeast corner of the intersection of Dunham Road and Lemont Road, along the east side of Lemont Road. The new building is approximately 28,994 square feet and will include a restaurant with a drive-through lane and 37 parking spaces. The proposed development will involve a decrease of 42 parking spaces for the overall shopping center. Even with the decreased parking, the shopping center will continue to provide more than the required amount of parking.

The drive-through facility will be located on the north and east sides of the building and will provide the required minimum stacking spaces as required by the Village Code. The petitioner is proposing landscaping in conformance with the Village requirements. The proposed landscaping includes a mix of canopy trees and landscape materials such as shrubs and ornamental grasses. Parking lot and site lighting is provided within the proposed development and is compliant with the Village requirements.

The primary building materials used for the exterior are brick and exterior insulation finish system (EIFS). The facades are broken up with decorative columns, windows, and horizontal accent bands. Variation to the roofline is provided by the vertical elements near the entrance of the building. The proposed signage for the future restaurant and retail space will be in compliance with the sign ordinance. Further discussed below, the petitioner is requesting an exception to the lot frontage requirement for new subdivisions.

A Plat of Subdivision is proposed to create a new outlot for the restaurant/retail building. The new lot is located on the west side of the shopping center along Lemont Road, directly east of the existing Burger King Restaurant and the 3 Corners Grill and Tap.

**COMPLIANCE WITH THE COMPREHENSIVE PLAN**

The current Comprehensive Plan’s Future Land Use Map designates this property as Corridor Commercial. Corridor Commercial uses include a blend of neighborhood oriented commercial retail that provide services and retail opportunities to the nearby neighborhoods and the surrounding region. The current Comprehensive Plan specifically identifies that the 75<sup>th</sup> Street corridor should continue to contain a range of these types of uses. These commercial areas have a “unique character” and should serve the daily needs of local residents while providing goods and services to the larger region.

The proposed development also meets the Comprehensive Plan’s recommendations for a Corridor Commercial area:

- Implements the recommendations of the Economic Development Plan to Enhance the Sales Tax
- Proposes a high level of design
- Utilizes shared parking
- Proposes no new curb cuts
- Provides a dumpster enclosure and screening
- Provides a pedestrian connection to existing sidewalk infrastructure

**COMPLIANCE WITH ZONING ORDINANCE**

The property is zoned B-2/PUD, General Retail Business District/ Planned Unit Development #18. The proposal includes a request for a Special Use to operate a drive-through, which is an available Special Use in the B-2 district.

The bulk requirements of the proposed building are summarized in the following table:

**Table 1 – Zoning Requirements, Proposed Outlot**

| <b>7251 and 7261 Lemont Road</b>          | <b>Required</b> | <b>Proposed</b> |
|---|-----------------|-----------------|
| West Setback to building (Street Yard)    | 25 ft.          | 64.3 ft.        |
| North Setback to building (Interior Yard) | 0 ft.           | 53 ft.          |
| East Setback (Rear Yard)                  | 0 ft.           | 23.9 ft.        |
| South Setback (Interior Yard)             | 0 ft.           | 28.6 ft.        |
| East Setback to parking (Rear Yard)       | 0 ft.           | 30 ft.          |
| South Setback to parking (Interior Yard)  | 0 ft.           | 0 ft.           |
| Landscaped Open Space (minimum)           | 10%             | 14%             |
| Floor Area Ratio (maximum)                | 0.75            | 0.18            |
| Building Height (maximum)                 | 35 ft.          | 16.75 ft.       |
| Parking Spaces (minimum)                  | 34              | 37              |
| Stacking Spaces (minimum)                 | 8               | 8               |

**Table 2 - Zoning Requirements, Shopping Center**

| <b>7251 and 7261 Lemont Road</b> | <b>Required</b> | <b>Proposed</b> |
|----------------------------------|-----------------|-----------------|
| Parking Spaces (minimum)         | 1,075           | 1,119           |
| Open Space (minimum)             | 10%             | 26%             |
| Floor Area Ratio (minimum)       | 0.75            | 0.18            |

The existing parking lot area that will be converted into the proposed outlot currently contains 79 parking

spaces. The proposed development will have 37 parking spaces, which will result in a reduction of 42 spaces. As noted in Table 2, the overall shopping center requires 1,075 parking spaces, including the parking required for the proposed use. The shopping center will have 1,119 parking spaces, for an excess of 44 spaces.

### **COMPLIANCE WITH SUBDIVISION ORDINANCE**

The final plat of subdivision is in substantial compliance with the minimum lot dimension requirements as outlined in Section 20.301 of the Village’s Subdivision Ordinance. However, Lot 1-B includes an exception to the lot frontage requirement. While Lot 1-B will not front a dedicated street, public access will be granted in perpetuity through a cross access easement and agreement between Lot 1-B (newly created outlot) and Lot 2-A (Main Shopping Center). The petitioner has stated that given the project’s location set within an existing shopping center and other surrounding parcels, providing lot frontage along Lemont Rd (nearest public right of way) is difficult. As noted, access will be provided through existing cross access easements through the driveways on both Lemont Road and 75th Street.

**Table 3 – Subdivision Requirements**

| <b>Downers Grove Park Plaza</b> | <b>Lot Width (100 ft. minimum)</b> | <b>Lot Depth (140 ft. minimum)</b> | <b>Lot Area (10, 500 square foot minimum)</b> |
|---------------------------------|------------------------------------|------------------------------------|---|
| Lot 2-A                         | 62.15 ft. (existing)               | 1,130 ft.                          | 886,217 sq. ft.                               |
| Lot 1-B                         | 220.5 feet                         | 157 ft.                            | 28,994 sq. ft.                                |

The petitioner is providing the required five-foot wide public utility and drainage easements along the interior yard lot lines and the ten-foot wide public utility and drainage easements along the rear lot lines for Lot 1-B (proposed restaurant/retail site).

### **ENGINEERING/PUBLIC IMPROVEMENTS**

There is a slight net decrease in the impervious area and therefore new stormwater detention is not required. The drainage for the site will tie into the existing stormwater system for the shopping center. The petitioner will be required to meet all Village engineering standards and comply with all applicable codes when formally submitting for a permit.

There will be no changes to the existing access points off of Lemont Road. The middle entrance drive along Lemont Road will include an extended curbed island to help redirect traffic directly west of the proposed lot. The existing drive aisles are directly adjacent to the proposed lot on west, east, and south side. Three drive aisles within the existing parking lot will have access to the site along the north side, the south westernmost entrance will have two-way access and the south easternmost drive aisle will be a drive-through entrance only.

### **TRAFFIC**

A traffic impact study for the proposed development was completed by the petitioner. The study examined the existing 75<sup>th</sup> Street and Lemont Road traffic conditions and the future conditions based on the proposed development. The study found that based on the projected parking, the proposed parking supply is sufficient to accommodate the parking demand of the proposed drive-through restaurant and retail space. The results of the capacity analysis indicate that the traffic generated by the proposed restaurant/retail space will not have a significant impact on the area roadways and that the volume of traffic estimated to be generated will be reduced due to pass-by trips and internal capture.

The access system serving Downers Park Plaza shopping center will ensure an adequate and flexible access system is provided to accommodate the traffic that will be generated by the proposed restaurant, and the

site plan provides for efficient circulation and adequate stacking. As recommended by the traffic study, the petitioner will provide appropriate wayfinding signs, stripping will be provided to direct customers to and from the entrance of the drive-through lane, existing movements from the drive-through will be under stop sign control and the westbound lanes at the signalized access drives serving Downers Park Plaza shopping center will be restriped.

### **PUBLIC SAFETY REQUIREMENTS**

The Fire Prevention Division reviewed the proposed development and determined that sufficient access to and around the site is provided for emergency vehicles. The loop around the building provides sufficient access around the property as needed. The building will be required to include a fire alarm and sprinkler system that meet the Village's code requirements.

### **NEIGHBORHOOD COMMENT**

Notice was provided to all property owners 250 feet or less from the property in addition to posting public hearing notice signs and publishing the legal notice in *The Bugle*. One public comment was received by staff. The inquiry was general in nature and the resident was satisfied once informed of the proposal.

### **STANDARDS OF APPROVAL**

The petitioner is requesting approval of an amendment to Planned Unit Development #18 to allow the construction of a future restaurant and retail building, a Special Use to allow a drive-through, and a Plat of Subdivision with an exception to create a new outlot without street frontage at 7251 and 7261 Lemont Road in the Downers Park Plaza shopping center. The petitioner has submitted a narrative that attempts to address all of the standards of approval. The Plan Commission should consider the petitioner's documentation, the staff report, and the discussion at the Plan Commission meeting in determining whether the standards for approval have been met.

#### ***Planned Unit Development***

##### ***Section 28.12.040.C.6 Review and Approval Criteria***

The decision to amend the zoning map to approve a PUD development plan and to establish a PUD overlay district are matters of legislative discretion that are not controlled by any single standard. In making recommendations and decisions regarding approval of planned unit developments, review and decision-making bodies must consider at least the following factors:

- 1. The zoning map amendment review and approval criteria of Sec. 28.12.030.I.*
- 2. Whether the proposed PUD development plan and map amendment would be consistent with the comprehensive plan and any other adopted plans for the subject area.*
- 3. Whether PUD development plan complies with the PUD overlay district provisions of Sec. 28.4.030.*
- 4. Whether the proposed development will result in public benefits that are greater than or at least equal to those that would have resulted from development under conventional zoning regulations.*
- 5. Whether appropriate terms and conditions have been imposed on the approval to protect the interests of surrounding property owners and residents, existing and future residents of the PUD and the general public.*

#### ***Special Use***

##### ***Section 28.12.050.H Approval Criteria – Special Uses***

No special use may be recommended for approval or approved unless the respective review or decision-making body determines that the proposed special use is constituent with and in substantial compliance with all Village Council policies and plans and that the petitioner has presented evidence to support each of the following conclusions:



1. *That the proposed use is expressly authorized as a Special Use in the district in which it is to be located;*
2. *That the proposed use at the proposed location is necessary or desirable to provide a service or a facility that is in the interest of public convenience and will contribute to the general welfare of the neighborhood or community.*
3. *That the proposed use will not, in the particular case, be detrimental to the health, safety or general welfare of persons residing or working in the vicinity or be injurious to property values or improvements in the vicinity.*

### ***Section 20.602(c) Exceptions***

An exception shall be recommended by the Plan Commission only if it finds that there are practical difficulties or particular hardships in the way of carrying out the strict letter of the provisions of this subdivision ordinance. In its consideration of the standards of practical difficulties or particular hardships, the Commission may consider, but is not limited to, the following:

1. *The extent to which the proposed exception impacts on the value or reasonable use of surrounding properties.*
2. *Whether the exception is consistent with the trend of development in the area and the surrounding uses.*
3. *The characteristics of the property which support or mitigate against the granting of the exception.*
4. *Whether the exception is in conformance with the general plan and spirit of this Chapter.*
5. *Whether the exception will alter, or be consistent with, the essential character of the locality.*

## **DRAFT MOTION**

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Staff will provide a recommendation at the September 12, 2022 meeting. Should the Plan Commission find that the request meets the standards of approval based on the Zoning and Subdivision Ordinances, staff has prepared a draft motion that the Plan Commission may make for the recommended approval of 22-PLC-0026:

Based on the petitioner's submittal, the staff report, and the testimony presented, I find that the petitioner has met the standards of approval for a Planned Unit Development, Special Use, Final Plat of Subdivision, and an Exception to the Subdivision Standards as required by the Village of Downers Grove Zoning and Subdivisions Ordinances and is in the public interest and therefore, I move that the Plan Commission recommend to the Village Council approval of 22-PLC-0026, subject to the following conditions:

1. The Planned Unit Development, Special Use, and a Plat of Subdivision with an exception to create a new outlot without street frontage shall substantially conform to the staff report; and drawings prepared by Woolpert Engineering submitted on 8/24/222, and by Zito Russell Architects updated on 8/3/22, except as such plans may be modified to conform to the Village codes and ordinances.
2. A perpetual cross access and parking easement is provided between Lots 2-A and Lot 1-B and is shown on the Plat of Subdivision.
3. The pedestrian connection shall be secured with the approval of the property owner at 7231 Lemont Road.
4. A pedestrian easement shall be provided on Lot 7 (7321 Lemont Road) for the benefit of public access to Lot 1-B.
5. The pedestrian connection on Lot 1-B must be clearly differentiated through the use of elevation changes, a different paving material or other equally effective methods.

22-PLC-0026; 7251 and 7261 Lemont Road – Downers Grove Plaza  
September 12, 2022

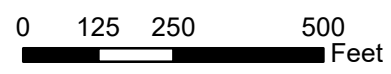
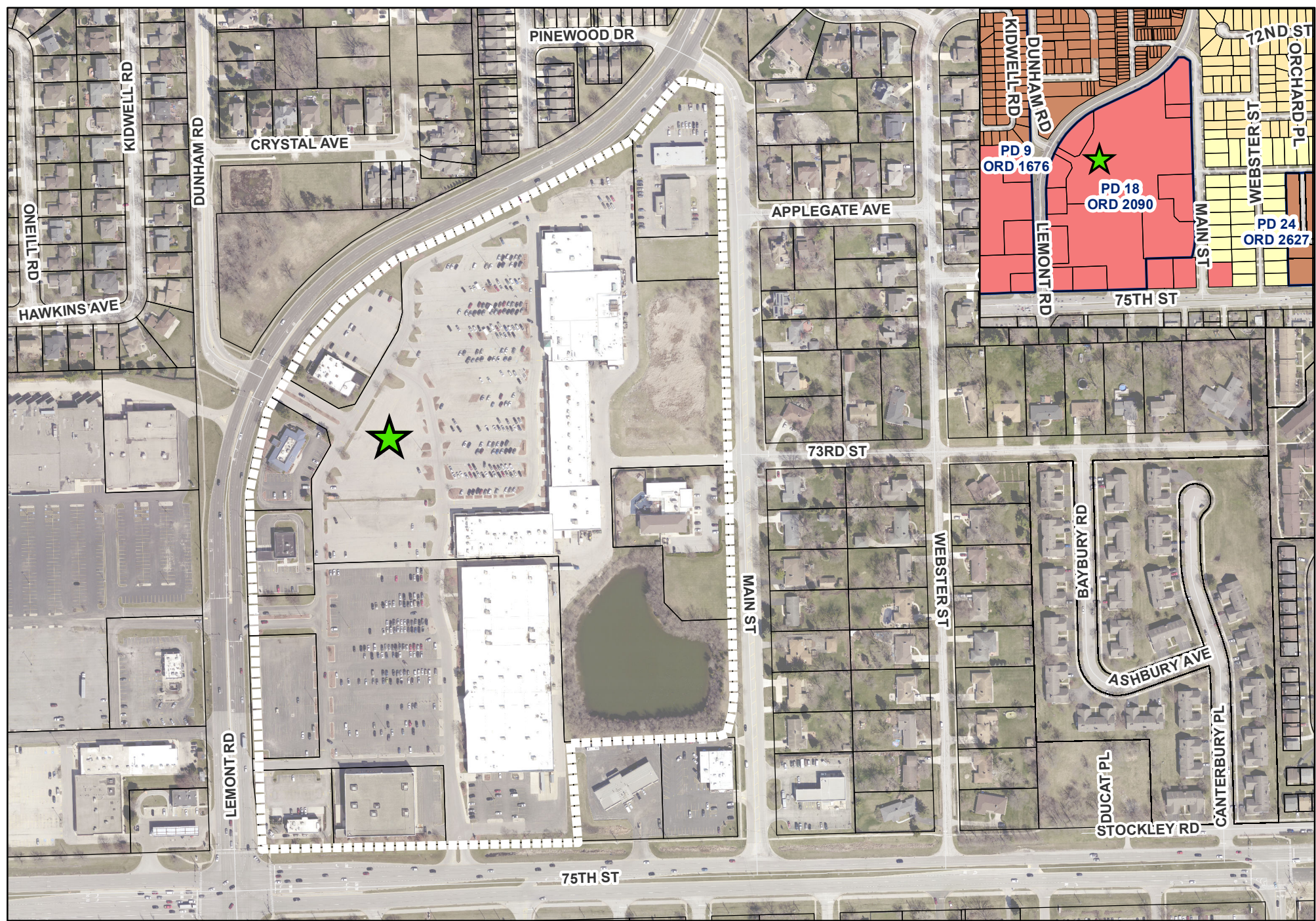
Page 7

6. The photometric plan shall conform to the Village Zoning Ordinance.
7. All signage shall be permitted separately and conform to the Village's Sign Ordinance.
8. A final plat of subdivision will be required prior to permit issuance.



Staff Report Approved By:

A handwritten signature in black ink, appearing to read "Stanley J. Popovich". The signature is fluid and cursive, with the first name being the most prominent.

Stanley J. Popovich, AICP  
Director of Community Development



7221 Lemont Road - Location Map

-  Subject Property
-  Project Location



August 2, 2022 (REV  
August 22, 2022)

Mr. Stan Popovich  
Village of Downers Grove  
801 Burlington Avenue  
Downers Grove, IL 60515

Re: Project Summary/Narrative  
Proposed Restaurant/Retail Project  
7251 & 7261 Lemont Rd.  
Downers Park Plaza, Proposed Lot 1-B

Dear Stan:

As per our recent meetings and conversations, please see the enclosed Planning Commission application for the above referenced project on behalf of PMAT DPP LLC (Owner) which includes a Special Use approval request (drive through), PUD Amendment, Resubdivision plat, and Waiver Request. A check for the required application fees was delivered to your office on Wednesday, 8/1/22, through UPS Tracking # 1ZF6R2340297361068.

The 5,230 SF restaurant/retail Shell Building is proposed to be located within the existing Downers Park Plaza Shopping Center, an existing PUD with B-2 zoning, located at the corner of Lemont Rd and 75<sup>th</sup> St. This project will have internal connectivity through the existing shopping center and utilize all existing driveway entrances currently in place. The proposed lot (Lot 1-B) for this project is being carved out of Lot 2 and is currently being used as a parking lot for the development. This portion of the parking lot is very seldomly used given its location to the main shopping center and Lot 2 will still have an excess of 158 parking spaces following the development of the proposed project on Lot 1-B.



The design team has spent a considerable amount of time ensuring the project meets or exceeds PUD or subdivision requirements for this development. The proposed Lot 1-B to be created for this project meets or exceeds Village requirements for minimum lot area, coverage, etc. for the resubdivision. A waiver is

being requested for the frontage requirement due to this lot not having frontage along a public ROW, which is being addressed through the Easement, Covenants, and Restrictions (ECR) document. This ECR, which is currently in place at the shopping center, governs cross access, cross parking, maintenance, monument signage rights, and other development and operating conditions at Downers Park Plaza. A copy of the revised ECR document, which accounts for the creation of the new Lot 1-B for this project, is included with this application for Village review. This document will be recorded concurrently with the resubdivision plat following receiving all necessary Village approvals and will run in perpetuity through title on the property. This ensures access to this parcel (and others) will permanently remain in place through the cross access easements established in the agreement.

The enclosed traffic study, prepared by KLOA, was completed as part of project design. The study noted that the project provides efficient circulation and adequate drive through stacking. Additionally, the study found the volume of traffic estimated to be generated by the proposed project will be reduced due to pass-by trips and internal capture and that the traffic that will be generated by the will not have a significant impact on the area roadways. This demonstrates that the project will not have a negative impact on overall traffic in the area or internal site circulation at Downers Park Plaza.

The project has a drive-thru design included for the proposed restaurant user. This is classified as an allowable Special Use within the B-2 zoning district. As noted above, the design team spent a significant amount of time during site planning to ensure adequate drive through stacking and efficient internal site circulation through the final placement of the building and parking lot geometry. With the change in market trends and overall community safety standards due to Covid-19, the drive through will provide a significant benefit to the community.

The application packet also included black/white and colored exterior elevations for the project. These elevations share some common design elements with the main building with some small modern aesthetic while complying with Village requirements. We believe these elevations provide a clean and



modern store aesthetically and fit in well with nearby projects. The elevations also include a description of each of the proposed finish material. Samples of these materials can be provided upon request.

Given this project is located within an existing, developed shopping center with roadway frontage, utilities are readily available for tie-in with sufficient capacity available to serve the project. Additionally, as the impervious area of the project is unchanged (effectively slightly decreased), the existing detention pond constructed for the shopping center will properly handle the storm water from this project as it does today. This will ensure the proposed project does not adversely impact drainage at the shopping center or in the surrounding areas.

Landscaping and site lighting photometric plans are included for review. The landscaping plans provide plantings like those within the existing shopping center and provide sufficient screening of the drive through when viewed from Lemont Rd. Site lighting plans were developed to ensure quality lighting standards are met as required by the end-users, while also meeting Village requirements to safely illuminate the project at nighttime hours.

We appreciate you and your staff's time to date discussing this project ahead of this submittal and are excited at the opportunity to bring this quality restaurant to the Downers Grove community. We are available to answer any questions or comments regarding this application and look forward to presenting this project to the Planning and Zoning Commission on September 12, 2022. Please advise of any additional information that may be required and once you have confirmation of the application's placement on the meeting agenda.

Sincerely,



Jason Reibert

Vice President

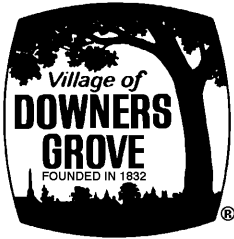


CC: Bob Whelan, PMAT DPP LLC (w/ enclosures)

Kevin Kush, PMAT DPP LLC (w/ enclosures)

Steve Zito, Zito-Russell Architects (w/ enclosures)

Tim Reber, Woolpert (w/ enclosures)



Review and Approval Criteria  
**PLANNED UNIT DEVELOPMENT**

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Plan Commission Number & Title: \_\_\_\_\_

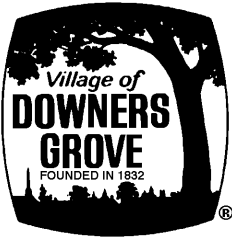
**A DETAILED RESPONSE TO ALL OF THE STANDARDS SHALL BE PROVIDED, SPECIFYING HOW EACH STANDARD IS OR IS NOT MET.**

***Section 28.12.040.C.6 Review and Approval Criteria (Planned Unit Development)***

*The decision to amend the zoning map to approve a PUD development plan and to establish a PUD overlay district are matters of legislative discretion that are not controlled by any single standard. In making recommendations and decisions regarding approval of planned unit developments, review and decision-making bodies must consider at least the following factors:*

- 1. The zoning map amendment review and approval criteria of Sec. 12.030.I.***  
See the analysis of zoning map amendment review and approval criteria in separate document.
- 2. Whether the proposed PUD development plan and map amendment would be consistent with the Comprehensive Plan and any other adopted plans for the subject area.***
- 3. Whether PUD development plan complies with the PUD overlay district provisions of Sec. 4.030.***
- 4. Whether the proposed development will result in public benefits that are greater than or at least equal to those that would have resulted from development under conventional zoning regulations.***
- 5. Whether appropriate terms and conditions have been imposed on the approval to protect the interests of surrounding property owners and residents, existing and future residents of the PUD and the general public.***





## Review and Approval Criteria SPECIAL USES

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Plan Commission Number & Title: \_\_\_\_\_

**A DETAILED RESPONSE TO ALL OF THE STANDARDS SHALL BE PROVIDED, SPECIFYING HOW EACH STANDARD IS OR IS NOT MET.**

***Section 28.12.050.H Approval Criteria (Special Uses)***

No special use may be recommended for approval or approved unless the respective review or decision-making body determines that the proposed special use is constituent with and in substantial compliance with all Village Council policies and plans and that the applicant has presented evidence to support each of the following conclusions:

- 1. That the proposed use is expressly authorized as a Special Use in the district in which it is to be located.***
  
- 2. That the proposed use at the proposed location is necessary or desirable to provide a service or a facility that is in the interest of public convenience and will contribute to the general welfare of the neighborhood or community.***
  
- 3. That the proposed use will not, in the particular case, be detrimental to the health, safety or general welfare of persons residing or working in the vicinity or be injurious to property values or improvements in the vicinity.***

Applicant: PMAT DPP LLC

Project: Downers Park Plaza – Lot 1-B Resubdivision

1.The extent to which the proposed exception impacts on the value or reasonable use of surrounding properties.

**RESPONSE: The exception will not have any impact on value or reasonable use of the surrounding properties. To the general public, access and circulation would remain the same regardless of if this property had the required public frontage as permanent cross access is being provided through the recorded Easements, Covenants, and Restrictions (ECR) document and cross-access servitudes.**

2.Whether the exception is consistent with the trend of development in the area and the surrounding uses.

**RESPONSE: The exception is consistent with the surrounding uses as permanent, public access will be granted to the proposed parcel as is with all other parcels in the area. Access for this parcel is being provided through the recorded referenced ECR document, while others are through recorded public right of way. Both ensure public access will not be impeded or restricted.**

3.The characteristics of the property which support or mitigate against the granting of the exception.

**RESPONSE: Given the property's location set within an existing shopping center and other surrounding parcels, providing lot frontage along Lemont Rd (nearest public right of way) is not feasible. As noted, access will be provided through existing cross access easements through the multiple driveways on both Lemont Rd and 75th St.**

4.Whether the exception is in conformance with the general plan and spirit of this Chapter.

**RESPONSE: The exception is in conformance with the general plan and spirit of the Chapter which is to provide permanent, unrestricted access to all parcels being created. This is being accomplished through the referenced ECR document which has been recorded as part of the original development of Downers Park Plaza and will be revised and recorded as part of this resubdivision and will pass through title in the event of any property sales.**

5. Whether the exception will alter, or be consistent with, the essential character of the locality.

**RESPONSE: This exception will not alter the essential character of the locality at this project in any manner. As mentioned in an earlier response, the general public will continue to access and**

circulate the property as they are now. This will not change or impact the character of the general area.

## ZONING ANALYSIS

PROPOSED RETAIL & RESTAURANT, 7251 & 7261 LEMONT ROAD (PART OF EXISTING PUD #18)

| PIN: CURRENTLY UNASSIGNED (EXISTING LOT 2 TO BE SUBDIVIDED) |                         | ZONING DISTRICT: PUD/B-2 GENERAL RETAIL BUSINESS |             |              |
|---|-------------------------|--|-------------|--------------|
| EXIST. USE: RETAIL (COMMERCIAL)                             |                         | PROPOSED USE: RETAIL & RESTAURANT (COMMERCIAL)   |             |              |
| REQUIREMENT   | REQUIRED                | PROPOSED   | MEETS REQ.? | DIFFERENCE   |
| LOT FRONTAGE  | -                       | 0 (INTERIOR LOT)                                 | N/A         | N/A          |
| LOT AREA  | -                       | 0.66 ACRES (28,994 S.F.)                         | N/A         | N/A          |
| LOT WIDTH   | -                       | 220.5'   | N/A         | N/A          |
| STREET YARD   | 25'                     | 64'  | YES         | +39'         |
| REAR YARD   | -                       | VARIES   | N/A         | -            |
| SIDE YARD   | -                       | VARIES   | N/A         | -            |
| HEIGHT  | 35' MAX.                | 16'-9"   | YES         | -20'-3"      |
| OPEN SPACE  | 10% MIN. (2,899 S.F.)   | 14% (4,126 S.F.)                                 | YES         | +1,227 S.F.  |
| FAR   | 0.75 MAX. (21,745 S.F.) | 0.18 (5,230 S.F.)                                | YES         | -16,515 S.F. |
| PARKING (RESTAURANT)  | 21 (+8 STACKING)        | 23 (+8 STACKING)                                 | YES         | +2           |
| PARKING (RETAIL)  | 13                      | 14   | YES         | +1           |

**REMARKS:**

RESTAURANT REQUIRED PARKING CALCULATED AT 10 SPACES PER 1,000 S.F. BUILDING AREA, PLUS 8 STACKING SPACES W/ MIN. 3 SPACES BETWEEN ORDERING POINT AND PICKUP POINT.

RETAIL REQUIRED PARKING CALCULATED AT 4 SPACES PER 1,000 S.F. BUILDING AREA.

## ZONING ANALYSIS

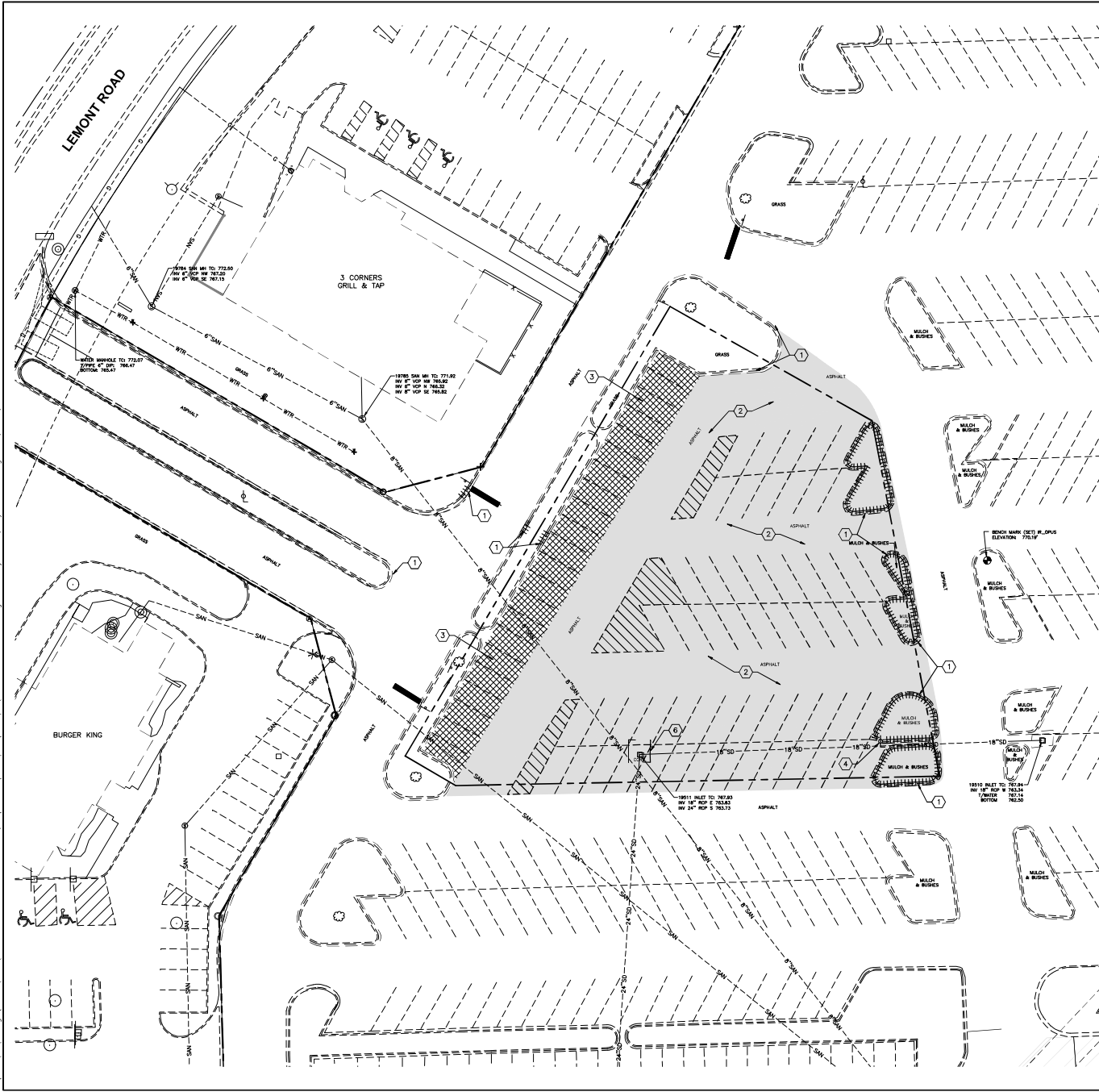
EXISTING (PUD #18) DOWNERS PARK PLAZA SHOPPING CENTER AT  
7451 LEMONT ROAD (LOT 2), 7349 LEMONT ROAD (LOT 5) & 1150 75TH STREET (LOT 8)

| PINS: 0929110002 (LOT 8), 0929110003 (LOT 5) & 0929110007 (LOT 2) |                               | ZONING DISTRICT: PUD/B-2 GENERAL RETAIL BUSINESS |             |               |
|---|-------------------------------|--|-------------|---------------|
| EXIST. USE: RETAIL (COMMERCIAL)                                   |                               | PROPOSED USE: RETAIL (COMMERCIAL)                |             |               |
| REQUIREMENT   | REQUIRED                      | EXISTING   | MEETS REQ.? | DIFFERENCE    |
| LOT AREA (COMBINED)   | -                             | 32.935 ACRES (1,434,656 S.F.)                    | N/A         | N/A           |
| OPEN SPACE (COMBINED)   | 10% MIN. (143,465 S.F.)       | 26% (382,327 S.F.)                               | YES         | +238,862 S.F. |
| FAR (COMBINED)  | 0.75 MAX. (1,075,992 S.F.)    | 0.18 (268,821 S.F.)                              | YES         | -807,171 S.F. |
| PARKING (COMBINED)  | 4.0/1,000 S.F. (1,075 SPACES) | 1,192 SPACES @ 4.43/1,000 S.F.                   | YES         | +117 SPACES   |

**REMARKS:**

REQUIRED PARKING CALCULATED AT 4 SPACES PER 1,000 S.F. BUILDING AREA (COMMERCIAL - SHOPPING CENTER, MULTI-TENANT).





EXISTING LEGEND

- ⊙ STORM MANHOLE
- CURB INLET
- ⊠ CATCH BASIN
- ⚡ FIRE HYD.
- ⊕ WATER VALVE
- ⊕ WATER MANHOLE
- ⊕ SPRINKLER CONTROL VALVE
- ⊕ GAS METER
- ⊕ ELEC. TRANSFORMER
- ⊕ ELECTRIC MANHOLE
- ⊕ TELEPHONE MANHOLE
- ⊕ CLEANOUT
- ⊕ UTILITY POLE
- ⊕ LIGHT POLE
- GUY WIRE
- ⊕ TELEPHONE PEDESTAL
- ⊕ TRAFFIC SIGNAL PULL BOX
- ⊕ SANITARY MANHOLE
- SSM
- UE --- UNDERGROUND ELECTRIC
- G --- UNDERGROUND GAS
- SD --- STORM
- SAN --- SANITARY
- WTR --- WATER
- EX --- EXISTING CURB (AND GUTTER)
- TC TOP OF CASTING

DEMOLITION LEGEND

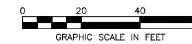
- 1 SAWCUT AND REMOVE EXISTING CURB AND GUTTER
- 2 SAWCUT AND REMOVE EXISTING ASPHALT PAVEMENT FULL DEPTH
- 3 2" MILL AND OVERLAY
- 4 REMOVE EXISTING LIGHTPOLE
- 5 PAVEMENT & CURB RESTORATION AREA FOR PROPOSED SANITARY SEWER CONSTRUCTION
- 6 DELETE EXISTING CONCRETE

DEMOLITION NOTES

- EXISTING UNDERGROUND UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS ACCORDING TO AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE PRESENCE AND LOCATION OF THE EXISTING UTILITIES AND REPAIRING ANY DAMAGE DONE TO THE UTILITIES DURING PROBING OR CONSTRUCTION.
- CALL J.U.L.I.E. (1-800-892-0123) FOR EXACT LOCATION OF UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES FOR THE RELOCATION OF UTILITIES ON SITE OR CROSSING THE SITE TO SERVICE ADJACENT PROPERTIES. DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED AND USED BY OWNER OR OTHERS, DURING OCCUPIED HOURS, EXCEPT WHEN PERMITTED BY OTHERS.
- DEMOLISH AND COMPLETELY REMOVE FROM SITE. EXISTING UNDERGROUND UTILITIES INDICATED TO BE REMOVED, COORDINATE WITH UTILITY COMPANIES FOR SHUT-OFF OF SERVICES, IF LINES ARE ACTIVE.
- EXISTING PAVEMENT AND CONCRETE PAVEMENTS ARE TO BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER.
- MATERIAL CREATED AS A RESULT OF BUILDING DEMOLITION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ALL MUD, DIRT, GRAVEL, AND ANY OTHER MATERIALS TRACKED ONTO ANY PUBLIC OR PRIVATE STREETS OR SIDEWALKS. THE CONTRACTOR MUST USE WATER OR OTHER METHODS TO KEEP AIRBORNE DUST TO A REQUIRED MINIMUM.
- PAVEMENT DAMAGED DUE TO THE REMOVAL OF EXISTING CURBS SHALL BE SAWCUT, REMOVED AND REPLACED IN KIND.
- A FULL DEPTH SAWCUT SHALL BE PROVIDED IN ALL AREAS WHERE PROPOSED PAVEMENT OR CURB AND GUTTER MEETS EXISTING PAVEMENT.
- CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF BENCHMARKS PRIOR TO THE START OF CONSTRUCTION.

BENCHMARK:

THE BASIS OF ELEVATIONS HEREON IS NAVD 88 PER OBSERVATIONS OF SELECTED STATIONS IN THE NATIONAL GEODETIC SURVEY CONTINUOUSLY OPERATING REFERENCE STATION (NGS CORS) NETWORK.  
 IRON ROD SET - SEE DRAWING FOR LOCATION.  
 ELEVATION = 770.14'



| NO. | DATE | REVISION |
|-----|------|----------|
|     |      |          |
|     |      |          |
|     |      |          |
|     |      |          |

PROJECT NO: 10015411  
 DATE: 08/24/22  
 DES. BY: DR. JH  
 DR. JH  
 CKD. JH  
 1816 South Meyers Road  
 Suite 950  
 Oakbrook Terrace, IL 60181  
 630.424.9880  
 FAX: 630.495.3711



**SITE IMPROVEMENT PLANS**  
**RETAIL - DOWNERS GROVE**  
 7251 & 7281 LEMONT ROAD  
 DOWNERS GROVE, DUPAGE COUNTY, ILLINOIS 60516

**EXISTING CONDITIONS - DEMO PLAN**  
 SHEET NO. **C100**

Layout File Name: C100 EXISTING CONDITIONS - DEMO PLAN, impsp.dwg; User: william.dougherty; Job: Xrefs; 10015411-TB-K.dwg; 10015411-X-BY OTHERS.dwg; 10015411-P.dwg; 10015411-X.dwg  
 Last Saved By: Daulton, B; 2/27/2022 10:56:48 AM  
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Layout, Tab Name: C200 SITE PLAN, Images: MapInfo, s:\m\10015411-X-BY OTHERS.dwg, 10015411-P.dwg, 10015411-X.dwg  
Last Saved By: Daulton, 8/22/2022 11:30:23 AM  
X:\s\10015411-X-BY OTHERS.dwg, 10015411-X.dwg, 10015411-P.dwg, 10015411-X.dwg, 10015411-X.dwg



| SITE DATA                  |                     |
|----------------------------|---------------------|
| PROPOSED LOT 1B SITE AREA  | 0.866 ACRES         |
| ZONING                     | PLANNED DEVELOPMENT |
| BUILDING DATA:             |                     |
| BUILDING AREA              | 5,344 SQ. FT.       |
| PARKING DATA:              |                     |
| SPACES REQUIRED            | 37                  |
| SPACES PROVIDED            | 37                  |
| ACCESSIBLE SPACES REQUIRED | 2                   |
| ACCESSIBLE SPACES PROVIDED | 2                   |

- ### SITE KEY NOTES
1. "STOP" SIGN, R1-1
  2. 24" WIDE STOP BAR, TRAFFIC WHITE PAINT
  3. BOLLARD WITH ACCESSIBLE PARKING SIGN
  4. ACCESSIBLE PARKING SYMBOL
  5. ACCESSIBLE RAMP WITH DETECTABLE WARNING
  6. ACCESSIBLE PARKING SPACES & THEIR ACCESS AISLES SHALL BE 2% MAX. SLOPE IN ALL DIRECTIONS
  7. PAINT 4" WIDE STRIPES @ 2'-0" O.C. @ 45° ANGLE, TRAFFIC YELLOW PAINT
  8. CURB AND GUTTER
  9. BEGN/END PROPOSED CURB AND GUTTER, SAWCUT EXISTING CURB TO PROVIDE CLEAN CONSTRUCTION JUNT.
  10. ACCESSIBLE RAMP
  11. DIRECTIONAL ARROW, TRAFFIC WHITE PAINT
  12. CROSSWALK, PAINT 12-4" WIDE STRIPES AT 2' O.C. CENTERED ON ENTRY, TRAFFIC WHITE PAINT
  13. "DO NOT ENTER" SIGN
  14. CONCRETE WALK
  15. TRANSFORMER PAD
  16. BOLLARD
  17. MONUMENT SIGN (SEE ARCHITECTURAL PLANS)
  18. DUMPSTER ENCLOSURE (SEE ARCHITECTURAL PLANS)
  19. 5'x5' TREE GRATE

- ### SITE LEGEND
- INDICATES HEAVY DUTY PAVEMENT—SEE DETAILS FOR PAVEMENT COMPOSITION
  - INDICATES LIGHT DUTY PAVEMENT—SEE DETAILS FOR PAVEMENT COMPOSITION
  - INDICATES MILL AND OVERLAY
  - INDICATES NEW CONCRETE PAVEMENT/SIDEWALK—SEE DETAILS FOR PAVEMENT COMPOSITION
  - INDICATES PAVEMENT & CURB RESTORATION AREA FROM SANITARY SEWER CONSTRUCTION (MATCH EXISTING PAVEMENT COMPOSITION)
  - LIGHT POLES
  - EXISTING CURB AND GUTTER
  - POSITIVE SLOPED CURB
  - NEGATIVE SLOPED CURB
  - INDICATES ROW PARKING COUNT
  - INDICATES PARKING TOTAL FOR SURROUNDING AREA
  - PROPERTY BOUNDARY

- ### SITE NOTES
1. ALL DIMENSIONS, RADI AND COORDINATES ARE TO BACK OF CURB WHERE APPLICABLE.
  2. ALL PAVEMENT MARKING SHALL BE YELLOW IN COLOR UNLESS INDICATED OTHERWISE.
  3. ALL CURB & GUTTER SHALL BE 66.12, "POSITIVE", UNLESS NOTED OTHERWISE (SEE DETAILS).
  4. ADA DETECTABLE WARNING/FRUNGATED DOMES TO BE PROVIDED AT SIDEWALKS ON EITHER SIDE OF EACH DRIVEWAY CROSSING.
  5. SEE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS.
  6. WHERE NEW PAVEMENT IS TO BE PLACED OVER CURBED ISLANDS THAT HAVE BEEN REMOVED, CONTRACTOR TO PROVIDE AGGREGATE BASE & BINDER COURSE MATCHING THE EXISTING PAVEMENT SECTIONS PRIOR TO PLACEMENT OF SURFACE COURSE.
  7. CONTRACTOR TO PERFORM PAVEMENT RESTORATION FOR ALL BUILDING FOOTINGS AND UTILITY INSTALLATIONS. CONTRACTOR TO PROVIDE 2" AGGREGATE BASE, 3" BINDER COURSE, AND 1.5" SURFACE COURSE OR MATCH THE EXISTING PAVEMENT SECTION, WHICHEVER IS GREATER.
  8. AREAS OF PAVEMENT RESTORATION SHALL BE PROFF ROLLED TO DETERMINE IF FULL DEPTH RESTORATION IS REQUIRED OR IF ONLY THE BITUMINOUS MATERIAL IS TO BE REPLACED.

**DUPAGE COUNTY BENCHMARK:**  
 BENCHMARK STATION "WOOD" IS LOCATED ALONG 75TH STREET IN A MEDIAN WEST OF THE SOUTHBOUND ON- AND OFF-RAMPS FOR INTERSTATE 355. STATION IS 18.0 FT WEST OF THE CENTERLINE OF THE SOUTHBOUND OFF-RAMP, 7.5 FT NORTH OF THE SOUTH BACK OF CURB OF THE MEDIAN, AND 15.0 FT WEST OF A TRAFFIC SIGNAL BASE AT THE EAST END OF THE MEDIAN. MONUMENT IS A 3.5 INCH ALUMINUM DISK 1.0 FT ABOVE STREET SURFACE.  
 ELEVATION = 764.80'

**BENCHMARK:**  
 THE BASIS OF ELEVATIONS HEREON IS NAVD 88 PER OBSERVATIONS OF SELECTED STATIONS IN THE NATIONAL GEODETIC SURVEY CONTINUOUSLY OPERATING REFERENCE STATION (NGS CORS) NETWORK.  
 IRON ROD SET - SEE DRAWING FOR LOCATION.  
 ELEVATION = 770.12'

**Call Before You Dig**  
**811**  
 Simply Call 811

GRAPHIC SCALE IN FEET

| REVISION |      |
|----------|------|
| No.      | DATE |
|          |      |
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PROJECT No.: 10015411  
 DATE: 08/24/22  
 DES. BY: [Blank]  
 DR. BY: [Blank]  
 CKD. BY: [Blank]

1816 South Meyers Road  
 Suite 950  
 Oakbrook Terrace, IL 60181  
 630.424.9880  
 FAX: 630.495.3721

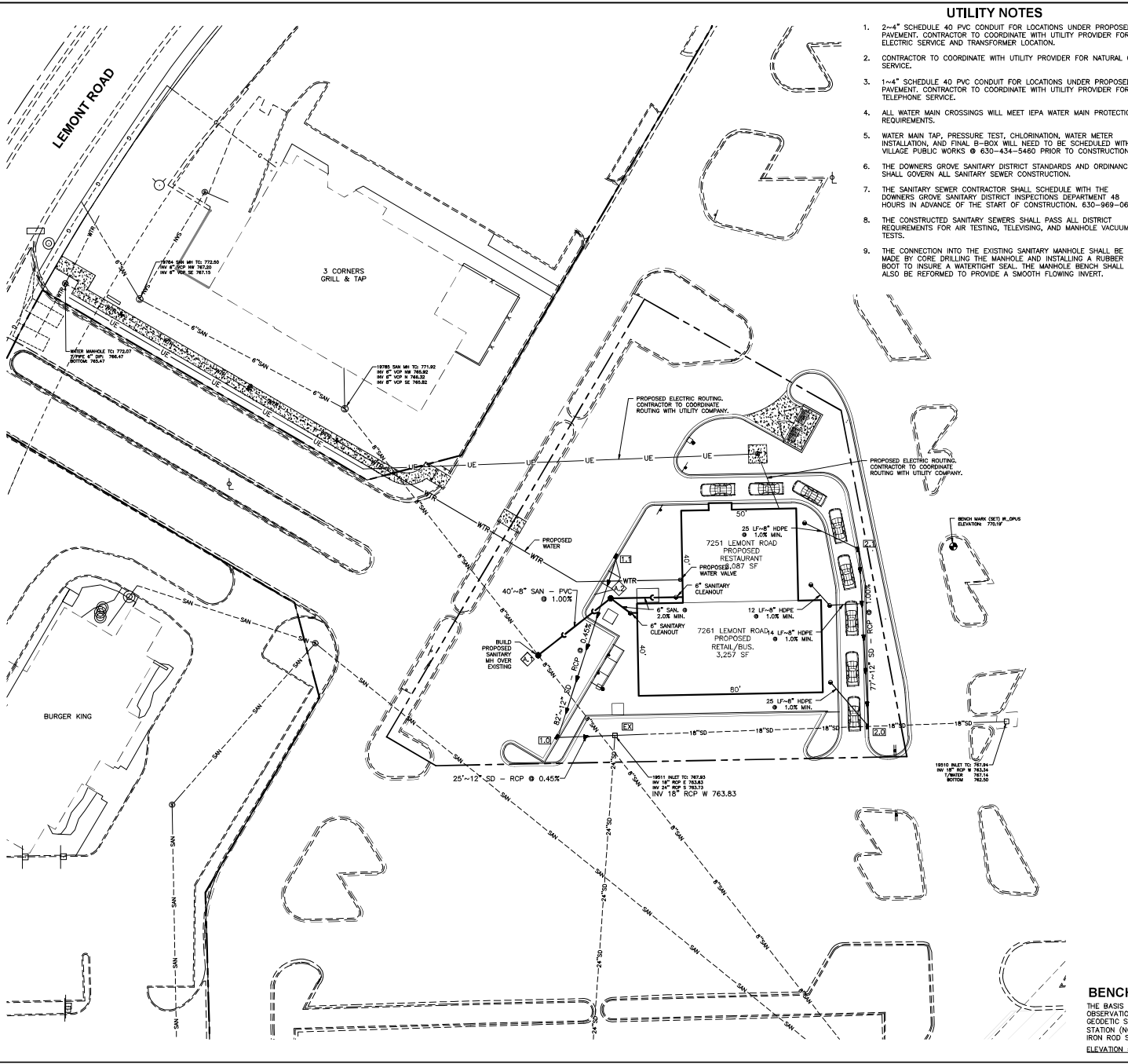
**WOOLBERT**  
 ENGINEERS & ARCHITECTS

**SITE IMPROVEMENT PLANS**  
**RETAIL - DOWNERS GROVE**  
 7251 & 7261 LEMONT ROAD  
 DOWNERS GROVE, DUPAGE COUNTY, ILLINOIS 60516

**SITE PLAN**

SHEET NO. **C200**

Layout: Tab Name: C400 UTILITY PLAN; Image: map.png; William DeGruyter; Lp; Xref: 10015411-TBLK.dwg; 10015411-X-BY OTHERS.dwg; 10015411-P.dwg; 10015411-X.dwg  
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**UTILITY NOTES**

- 2-4" SCHEDULE 40 PVC CONDUIT FOR LOCATIONS UNDER PROPOSED PAVEMENT. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER FOR ELECTRIC SERVICE AND TRANSFORMER LOCATION.
- CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER FOR NATURAL GAS SERVICE.
- 1-4" SCHEDULE 40 PVC CONDUIT FOR LOCATIONS UNDER PROPOSED PAVEMENT. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER FOR TELEPHONE SERVICE.
- ALL WATER MAIN CROSSINGS WILL MEET IEPA WATER MAIN PROTECTION REQUIREMENTS.
- WATER MAIN TAP, PRESSURE TEST, CHLORINATION, WATER METER INSTALLATION, AND FINAL 8-BOX WILL NEED TO BE SCHEDULED WITH VILLAGE PUBLIC WORKS @ 630-434-5460 PRIOR TO CONSTRUCTION.
- THE DOWNERS GROVE SANITARY DISTRICT STANDARDS AND ORDINANCES SHALL GOVERN ALL SANITARY SEWER CONSTRUCTION.
- THE SANITARY SEWER CONTRACTOR SHALL SCHEDULE WITH THE DOWNERS GROVE SANITARY DISTRICT INSPECTIONS DEPARTMENT 48 HOURS IN ADVANCE OF THE START OF CONSTRUCTION. 630-969-0664.
- THE CONSTRUCTED SANITARY SEWERS SHALL PASS ALL DISTRICT REQUIREMENTS FOR AIR TESTING, TELEVISION, AND MANHOLE VACUUM TESTS.
- THE CONNECTION INTO THE EXISTING SANITARY MANHOLE SHALL BE MADE BY CORE DRILLING THE MANHOLE AND INSTALLING A RUBBER BOOT TO INSURE A WATER TIGHT SEAL. THE MANHOLE BENCH SHALL ALSO BE REFORMED TO PROVIDE A SMOOTH FLOWING INVERT.

**UTILITY LEGEND**

**STORM STRUCTURE TABLE**

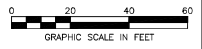
| STRUCTURE ID | DESCRIPTION          | RIM/GRATE | INVERT   |
|--------------|----------------------|-----------|--|
| EX           | Existing Catch Basin | 767.93    | 12" = 763.83 (W)<br>18" = 763.83 (E)<br>24" = 763.73 (S) |
| 1.0          | Curb Inlet           | 768.00    | 12" = 763.94 (N)<br>12" = 763.94 (E)                     |
| 1.1          | Curb Inlet           | 768.30    | 12" = 764.31 (S)   |
| 2.0          | Curb Inlet           | 766.73    | 18" = 763.51 (E)<br>18" = 763.51 (W)<br>12" = 764.53 (N) |
| 2.1          | Curb Inlet           | 766.96    | 12" = 765.30 (S)   |

**SANITARY STRUCTURE TABLE**

| STRUCTURE ID | DESCRIPTION      | RIM    | INVERT   |
|--------------|------------------|--------|--|
| A.1          | Sanitary Manhole | 768.70 | 8" = 763.74 (NW)<br>8" = 763.74 (SE)<br>8" = 763.90 (NE) |
| A.2          | Sanitary Manhole | 769.00 | 8" = 764.30 (SW)   |

**BENCHMARK:**

THE BASIS OF ELEVATIONS HEREON IS NAVD 88 PER OBSERVATIONS OF SELECTED STATIONS IN THE NATIONAL GEODETIC SURVEY CONTINUOUSLY OPERATING REFERENCE STATION (NGS CORS) NETWORK.  
IRON ROD SET - SEE DRAWING FOR LOCATION.  
ELEVATION = 770.19'



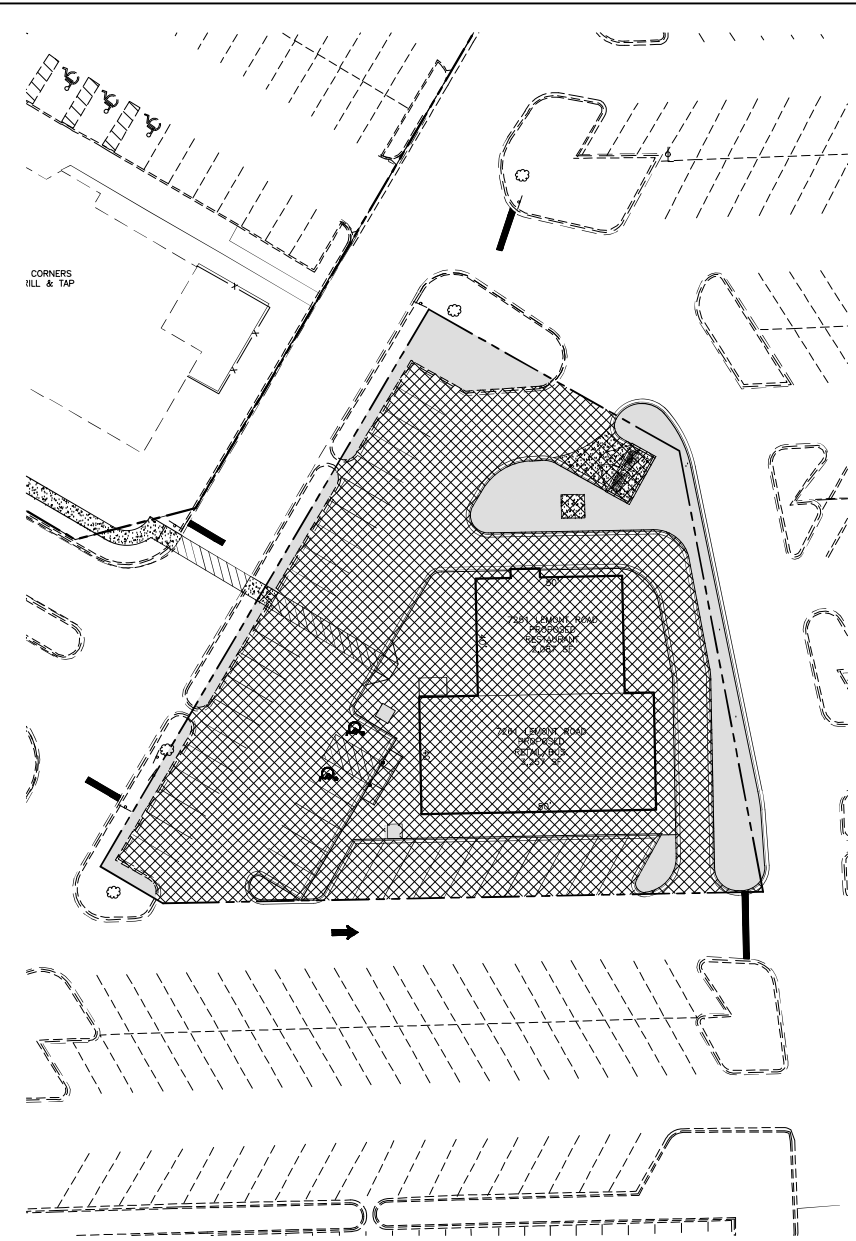
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|---|--------------------------|---------------------------|-----------------------|
| <b>PROJECT No.:</b><br>10015411   | <b>DATE:</b><br>08/24/22 | <b>DES. BY:</b><br>DR. DJ | <b>CKD. BY:</b><br>TF |
| 1816 South Meyers Road<br>Suite 950<br>Oakbrook Terrace, IL 60181<br>DR. DJ 630.424.9880<br>CKD. TF FAX 630.495.3721                      |                          |                           |                       |
|   |                          |                           |                       |
| <b>SITE IMPROVEMENT PLANS</b><br><b>RETAIL - DOWNERS GROVE</b><br>7251 & 7261 LEMONT ROAD<br>DOWNERS GROVE, DUPAGE COUNTY, ILLINOIS 60516 |                          |                           |                       |
| <b>UTILITY PLAN</b>   |                          |                           |                       |
| SHEET NO. <b>C400</b>   |                          |                           |                       |



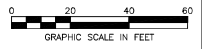




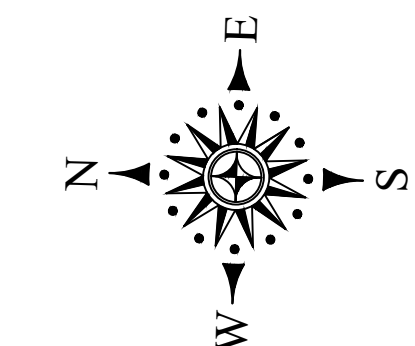
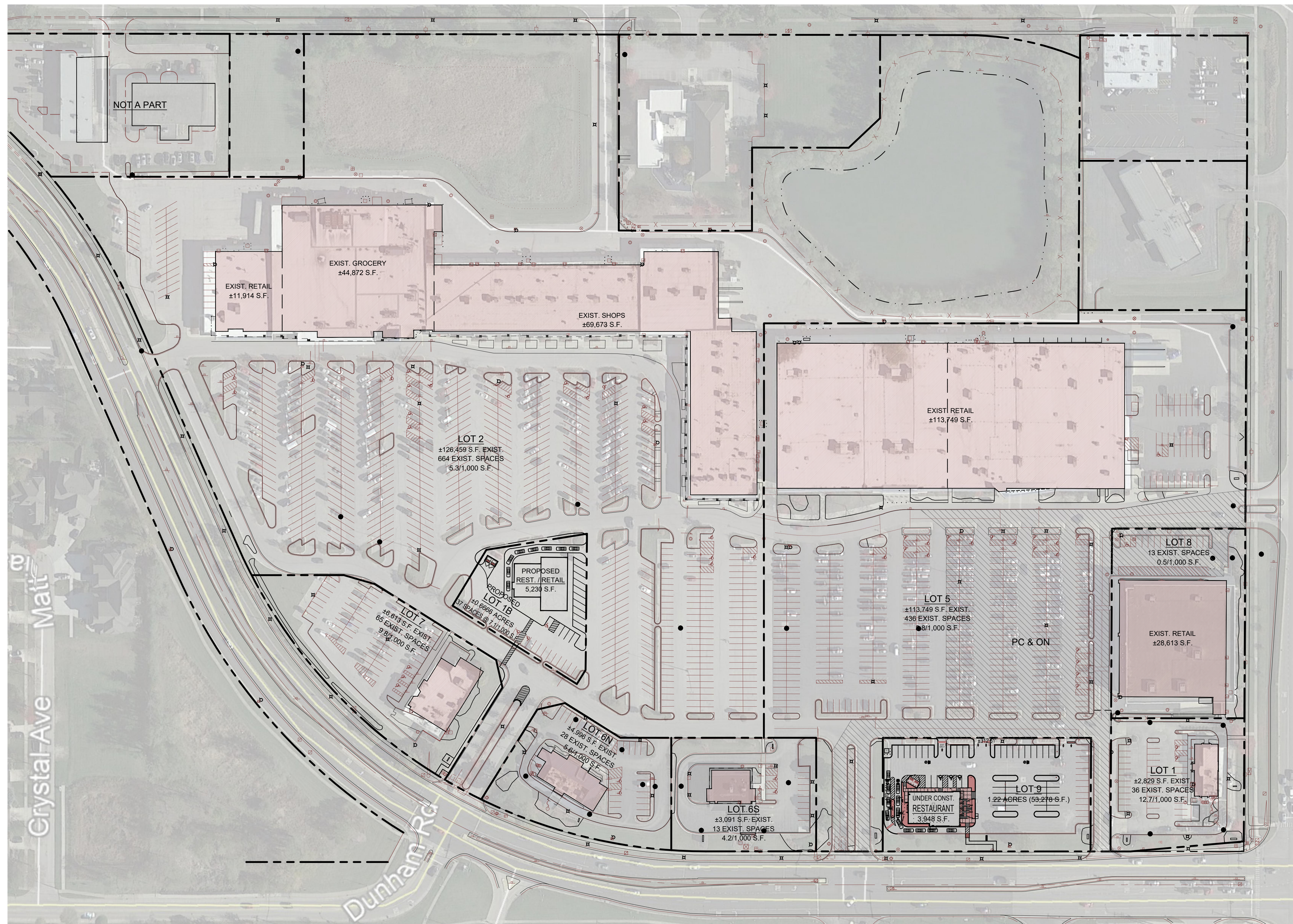
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THE PROPOSED CONDITIONS DECREASE THE TOTAL IMPERVIOUS AREA BY 0.05 ACRES.



|   |          |                                    |           |
|---|----------|------------------------------------|-----------|
| PROJECT No: 10015411  |          | REVISION                           |           |
| DATE: 08/24/22  | DES. BY: | DATE:                              | REVISION: |
| DR. JHU   | CKD. TR: | DATE:                              | REVISION: |
| 1816 South Meyers Road<br>Suite 950<br>Oakbrook Terrace, IL 60181<br>630.424.9880<br>FAX: 630.495.3731                                    |          |                                    |           |
| <b>SITE IMPROVEMENT PLANS</b><br><b>RETAIL - DOWNERS GROVE</b><br>7251 & 7261 LEMONT ROAD<br>DOWNERS GROVE, DUPAGE COUNTY, ILLINOIS 60516 |          | <b>PERVIOUS-IMPERVIOUS EXHIBIT</b> |           |
| SHEET NO. EXH   |          |                                    |           |



**SITE DATA - MAIN CENTER**

ZONED 'B-2' GENERAL RETAIL BUSINESS, WITHIN THE PLANNED DEVELOPMENT OVERLAY, VILLAGE OF DOWNERS GROVE, ILL.

|                                       |   |
|---------------------------------------|---|
| EXISTING BUILDING AREA - LOT 2        | 126,459 S.F.                                      |
| EXISTING BUILDING AREA - LOT 5        | 113,749 S.F.                                      |
| EXISTING BUILDING AREA - LOT 8        | 28,613 S.F.                                       |
| EXISTING PARKING LOT 2                | (W/O LOT 1B) 664 SPACES @ 5.31/1,000 S.F.         |
| EXISTING PARKING LOT 5                | 436 SPACES @ 3.81/1,000 S.F.                      |
| EXISTING PARKING LOT 8                | 13 SPACES @ 0.51/1,000 S.F.                       |
| PROPOSED PARKING LOT 5 - 6 SPACES     | TOTAL PARKING LOT 5 & 8 - 465 SPACES @ 4.01/1,000 |
| EXISTING BUILDING AREA - MAIN CENTER  | 288,821 S.F.                                      |
| PARKING REQ'D. - EXISTING MAIN CENTER | 1,075 SPACES @ 4.01/1,000 S.F.                    |
| TOTAL PROPOSED PARKING MAIN CENTER    | 1,119 SPACES @ 4.31/1,000 S.F.                    |

**EXISTING OUTPARCEL SITE DATA**

|                                      |                              |                           |                              |
|--------------------------------------|------------------------------|---------------------------|------------------------------|
| LOT 1 - EXISTING BUILDING AREA       | 2,829 S.F.                   | LOT 1 - EXISTING PARKING  | 36 SPACES @ 12.71/1,000 S.F. |
| LOT 6S - EXISTING BUILDING AREA      | 3,091 S.F.                   | LOT 6S - EXISTING PARKING | 13 SPACES @ 4.21/1,000 S.F.  |
| LOT 6N - EXISTING BUILDING AREA      | 4,996 S.F.                   | LOT 6N - EXISTING PARKING | 28 SPACES @ 5.61/1,000 S.F.  |
| LOT 7 - EXISTING BUILDING AREA       | 6,613 S.F.                   | LOT 7 - EXISTING PARKING  | 65 SPACES @ 9.81/1,000 S.F.  |
| LOT 9 - BUILDING AREA (UNDER CONST.) | 3,957 S.F.                   | (POST CONST.) PARKING     | 59 SPACES @ 14.91/1,000 S.F. |
| TOTAL OUTPARCEL BUILDING AREA        | 21,486 S.F.                  |                           |                              |
| TOTAL OUTPARCEL PARKING              | 201 SPACES @ 9.41/1,000 S.F. |                           |                              |

**PROPOSED OUTPARCEL SITE DATA**

|  |                             |
|--|-----------------------------|
| PROPOSED BUILDING AREA PROPOSED LOT 1B | 5,230 S.F.                  |
| PROPOSED PARKING PROPOSED LOT 1B       | 37 SPACES @ 7.11/1,000 S.F. |

**OVERALL SITE DATA**

|   |                                |
|---|--------------------------------|
| TOTAL BUILDING AREA (INCL. UNDER CONST. & PROPOSED) | 295,537 S.F.                   |
| TOTAL PARKING (INCLUDES PROPOSED)                   | 1,357 SPACES @ 4.59/1,000 S.F. |

# SITE PLAN

SCALE: 1"=80'

PROPOSED ADDITION TO  
**DOWNERS PARK PLAZA**

EXISTING PUD #18  
DOWNERS GROVE, ILLINOIS

**STEPHEN L. ZITO, AIA**  
ARCHITECT

MOBILE, AL. 36609  
FAX (251) 343 - 5505

820 S. UNIVERSITY BLVD. SUITE 2G  
PHONE (251) 343 - 6161

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STEPHEN L. ZITO AIA  
ARCHITECT

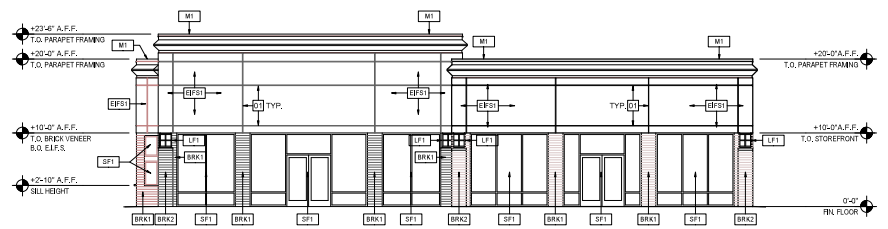
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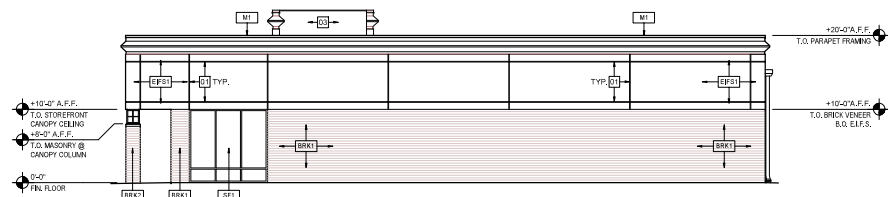
**PRELIMINARY**  
NOT FOR CONSTRUCTION

FILE 3763  
DATE AUGUST 3, 2022  
SHEET

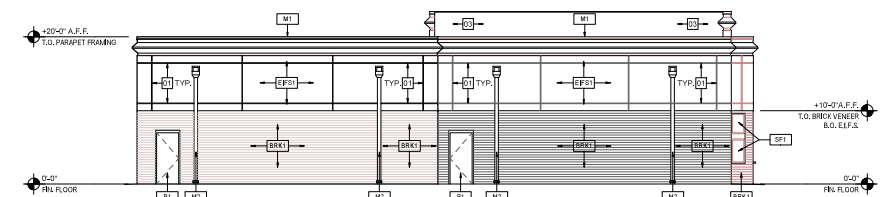
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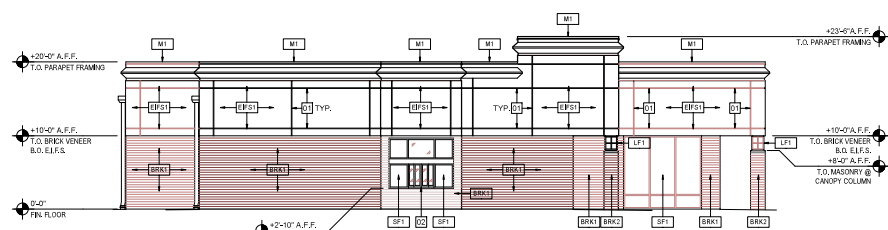
1 FRONT ELEVATION  
SCALE: 1/8" = 1'-0"



2 RIGHT SIDE ELEVATION  
SCALE: 1/8" = 1'-0"



3 REAR ELEVATION  
SCALE: 1/8" = 1'-0"



4 LEFT SIDE ELEVATION  
SCALE: 1/8" = 1'-0"

- EXTERIOR ELEVATIONS KEYED NOTES:**
- [M1] 1" WIDE x 1" DEEP E.I.F.S. REVEAL
  - [M2] QUINSEY MODEL FM-42E ALUM. & GLASS DRIVE-THRU WINDOW
  - [EPF31] SINGLE PLY ROOFING MEMBRANE ON REAR FACE OF PARAPET WALL

- EXTERIOR ELEVATIONS MATERIALS SCHEDULE**
- [BRK1] FIELD BRICK (3 5/8"x11 5/8") TO MATCH COLOR OF BRK2 @ EXIST. CENTER
  - [BRK2] CANOPY COLUMN COVER BRICK (3 5/8"x11 5/8") TO MATCH COLOR OF CANOPY COLUMN COVER BRICK @ EXIST. CENTER
  - [EPF31] EXTERIOR INSULATION FINISH SYSTEM, FINISH TO MATCH THAT @ EXIST. CENTER
  - [SP1] ALUM. & GLASS STOREFRONT SYSTEM W/ 1" INSULATED GLAZING, STYLE & FINISH TO MATCH THAT @ EXIST. CENTER
  - [M1] PRE-FINISHED METAL PARAPET CAP FLASHING, FINISH TO MATCH THAT @ EXIST. CENTER
  - [M2] PAINTED INSULATED HOLLOW METAL DOOR & HOLLOW METAL FRAME, FINISH: DARK BRONZE
  - [P1] PAINTED INSULATED HOLLOW METAL DOOR & HOLLOW METAL FRAME, FINISH: DARK BRONZE
  - [LFT1] DECORATIVE COLUMN CAP LIGHT FIXTURE, STYLE & FINISH TO MATCH THAT @ EXIST. CENTER

PROPOSED  
**SHELL BUILDING**  
A NEW OUTPARCEL FOR  
DOWNERS PARK PLAZA  
LEMONT ROAD DOWNERS GROVE, ILLINOIS 60516

**STEPHEN L. ZITO, AIA**  
ARCHITECT  
MOBILE, AL 36609  
PHONE: (251) 343-5505  
FAX: (251) 343-5505

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
|     |      |             |
|     |      |             |
|     |      |             |

116 4186  
DATE: JUNE 23, 2022

**PRA2.0**  
SHELL BLDG. EXTERIOR ELEVATIONS

DATE: 06/23/2022 SHELL BUILDING - DOWNERS PARK PLAZA PLOT SCALE: 1/8"=1'-0" SHEET: 26/31



FRONT ELEVATION



LEFT ELEVATION



RIGHT ELEVATION



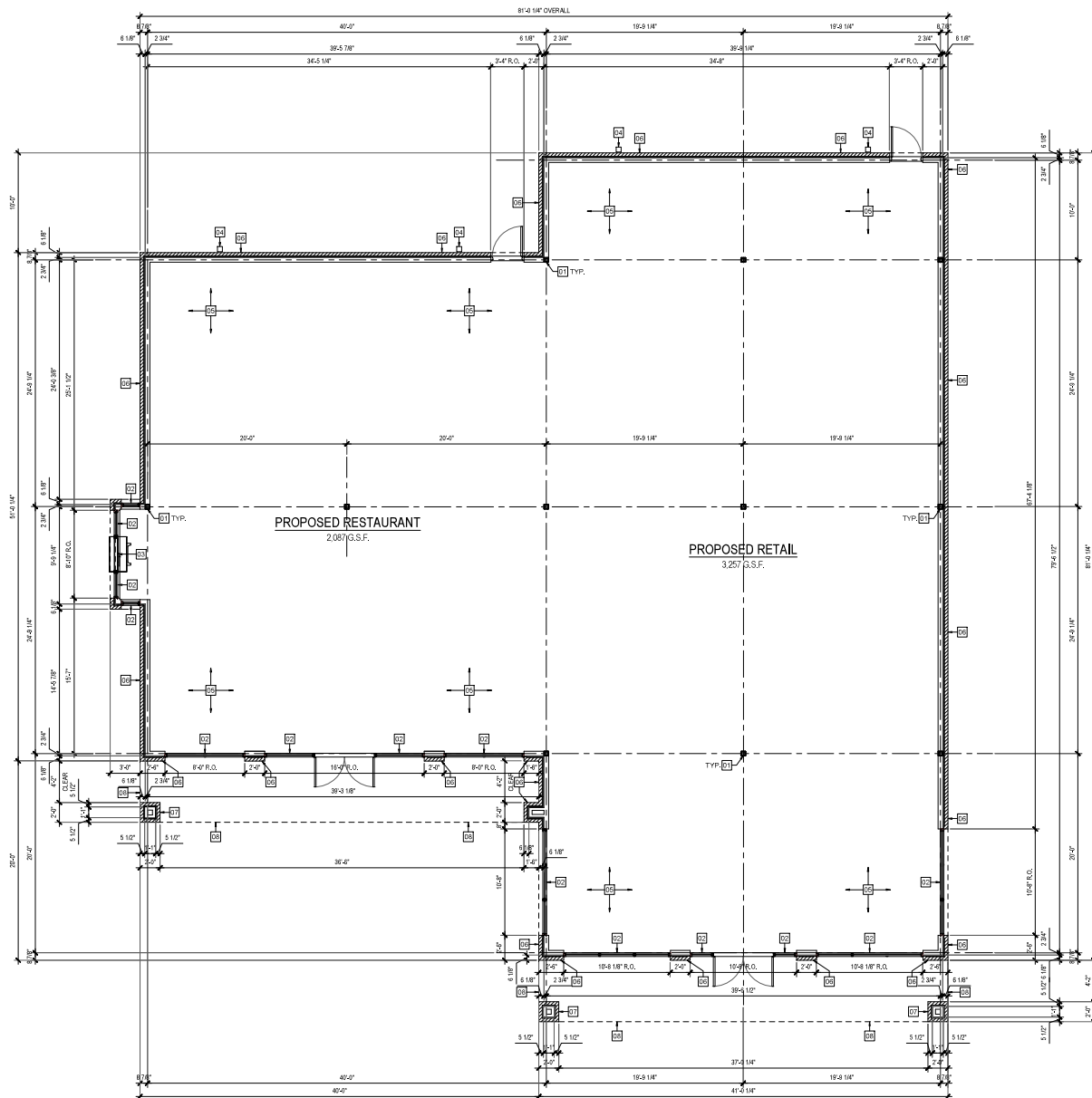
REAR ELEVATION

**OUTPARCEL BUILDING, DOWNERS PARK PLAZA**  
**DOWNERS GROVE, ILLINOIS**

**Stephen L. Zito, AIA**  
 Architect

4166

6/21/22



1 PRELIMINARY FLOOR PLAN  
 SCALE: 3/16" = 1'-0"

- FLOOR PLAN KEYED NOTES:**
- 01 STEEL COLUMN - SEE STRUCT. DWGS.
  - 02 4 1/2" ALUM. & GLASS STOREFRONT W/ 1" INSULATED GLAZING.
  - 03 QUIKSERV MODEL FM-42E ALUM. & GLASS DRIVE-THRU WINDOW.
  - 04 FINISH-FINISHED METAL DOWNSPOUT & COLLECTOR HEAD, CONNECTED TO EXIST. UNDERGROUND STORM SEWER. SEE CIVIL DWGS.
  - 05 FLOOR SLAB TO BE INSTALLED BY TENANT UNDER INTERIOR BUILD-OUT. SEPARATE PROJECT. SEPARATE CONTRACT, SEPARATE COVER.
  - 06 BRICK VENEER OVER AIRSPACE, OVER MOISTURE / VAPOR BARRIER ON 5/8" TYPE X GYP. BD. ON 5/8" FRT PLYWOOD SHEATHING ON 2x8 FRT WOOD STUDS @ 16" O.C. FILL VOIDS BETWEEN STUDS W/ R-19 BATT INSUL. FROM FINISH FLOOR TO MIN. 4" ABOVE ROOF LINE. SEE EXTERIOR ELEVATIONS FOR FINISHES.
  - 07 BRICK VENEER OVER AIRSPACE, OVER MOISTURE / VAPOR BARRIER ON 5/8" FRT PLYWOOD SHEATHING ON 2x8 FRT WOOD STUDS @ 16" O.C. SEE EXTERIOR ELEVATIONS FOR FINISHES.
  - 08 DASHED LINES INDICATE EXTENT OF CANOPY, ABOVE.
- NOTE: ALL EXTERIOR FINISH MATERIALS MUST BE REINSTALLED PER MANUF.'S RECOMMENDATIONS.
- NOTE: UNLESS NOTED AS 'CLEAR', 'OVERALL' OR 'CENTERING' EXTERIOR FINISHES. ALL DIMENSIONS SHOWN ON THIS SHEET ARE FROM FACE OF STUD OR STRUCTURAL GRID LINE TO FACE OF STUD OR STRUCTURAL GRID LINE. DIMENSIONS NOTED AS 'CLEAR' ARE FROM FACE OF FINISH TO FACE OF FINISH. DIMENSIONS NOTED AS 'OVERALL' INCLUDE EXTERIOR FINISHES.

PLOT SCALE: 1/4" = 10'-0" (THIS SHEET ONLY)

DATE: 05/08/2022 SHELL BUILDING - DOWNERS PARK PLAZA

**PROPOSED**  
**SHELL BUILDING**  
 A NEW OUTPARCEL FOR  
 DOWNERS PARK PLAZA  
 LEMONT ROAD DOWNERS GROVE, ILLINOIS 60516

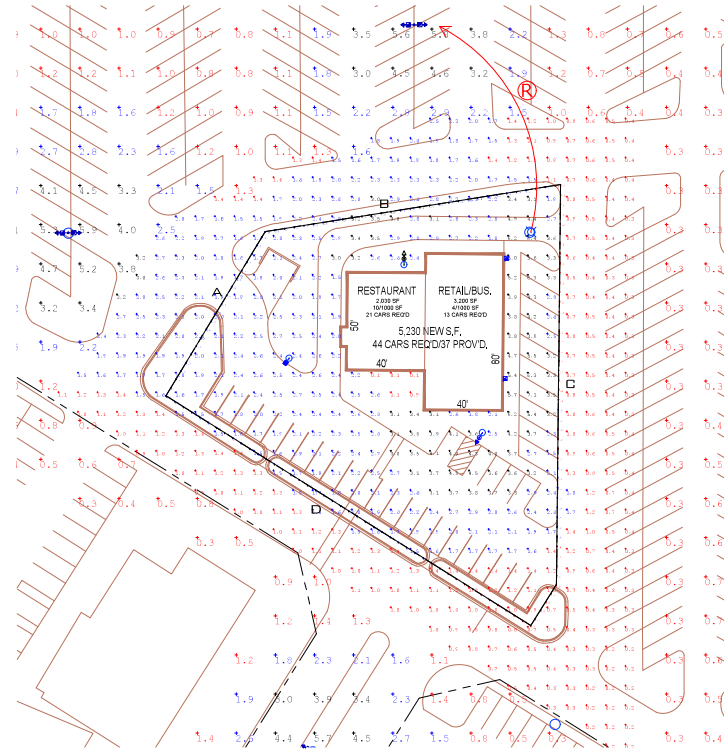
**STEPHEN L. ZITO, AIA**  
 ARCHITECT  
 MOBILE, AL 36609  
 PHONE: (251) 343-5505  
 FAX: (251) 343-5505

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
|     |      |             |
|     |      |             |
|     |      |             |

ILL 4188  
 DATE: JUNE 23, 2022  
**PRA1.0**  
 SHELL BLDG. FLOOR PLAN

REVISIONS

| REV # | DATE   | BY: |
|-------|--------|-----|
| 1     | 8/3/22 | IB  |



PHASE II - OPTION 2.1 - OVERALL

| Footcandle Summary       | Area   | Min | Avg | Max | Min/Fsq | Avg/Fsq | Max/Fsq | Project | Depth |
|--------------------------|--------|-----|-----|-----|---------|---------|---------|---------|-------|
| Overall                  | 10,000 | 0.5 | 1.2 | 5.0 | 0.05    | 0.12    | 0.50    | 100'    | 10'   |
| Overall (Excl. Parking)  | 8,000  | 0.5 | 1.2 | 5.0 | 0.05    | 0.12    | 0.50    | 100'    | 10'   |
| Overall (Excl. Building) | 12,000 | 0.5 | 1.2 | 5.0 | 0.05    | 0.12    | 0.50    | 100'    | 10'   |
| Overall (Excl. Area)     | 10,000 | 0.5 | 1.2 | 5.0 | 0.05    | 0.12    | 0.50    | 100'    | 10'   |

| Footcandle Summary       | Area   | Min | Avg | Max | Min/Fsq | Avg/Fsq | Max/Fsq | Project | Depth |
|--------------------------|--------|-----|-----|-----|---------|---------|---------|---------|-------|
| Overall                  | 10,000 | 0.5 | 1.2 | 5.0 | 0.05    | 0.12    | 0.50    | 100'    | 10'   |
| Overall (Excl. Parking)  | 8,000  | 0.5 | 1.2 | 5.0 | 0.05    | 0.12    | 0.50    | 100'    | 10'   |
| Overall (Excl. Building) | 12,000 | 0.5 | 1.2 | 5.0 | 0.05    | 0.12    | 0.50    | 100'    | 10'   |
| Overall (Excl. Area)     | 10,000 | 0.5 | 1.2 | 5.0 | 0.05    | 0.12    | 0.50    | 100'    | 10'   |

BASED ON THE INFORMATION PROVIDED, ALL DIMENSIONS AND LUMINAIRE LOCATIONS SHOWN REPRESENT RECOMMENDED POSITIONS. THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING OR FUTURE FIELD CONDITIONS.

THIS LIGHTING PATTERN REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS UTILIZING CURRENT INDUSTRY STANDARD LAMP RATINGS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS AND OTHER VARIABLE FIELD CONDITIONS.

DOWNERS PARK PLAZA  
DOWNERS GROVE, IL  
PHASE II - OPTION 2.1 - OVERALL

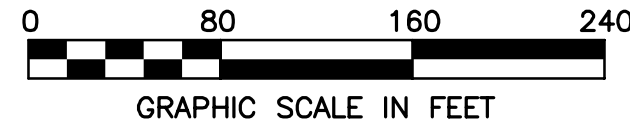
INTEGRATED  
LIGHTING SOLUTIONS

8955 GUILFORD ROAD  
SUITE 120  
COLUMBIA, MD 21046

# FINAL PLAT OF SUBDIVISION RESUBDIVISION OF LOT 2 IN DOWNERS PARK BEING A SUBDIVISION OF A PART OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE 3RD PRINCIPAL MERIDIAN, DUPAGE COUNTY, ILLINOIS



**SITE MAP**  
NOT TO SCALE



**LEGEND:**

- SURVEYED BOUNDARY
  - EXISTING LOT/PARCEL LINE
  - PROPOSED LOT LINE
  - RIGHT OF WAY LINE
  - SETBACK LINE
  - EXISTING EASEMENT LINE
  - PROPOSED EASEMENT LINE
  - SECTION LINES
- SET R.R. SPIKE/NAIL IN ASPHALT OR IRON PIN W/CAP IN SOIL OR CUT CROSS IN CONCRETE
  - REBAR FOUND
  - IRON PIPE FOUND
  - MAG NAIL FOUND
  - CHISELED CROSS FOUND

**SURVEYOR'S NOTES:**

- "M." DESIGNATES MEASURED DIMENSION/BEARING, "R." DESIGNATES RECORD DIMENSION/BEARING.
- DISTANCES ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF.
- NO DIMENSION SHALL BE ASSUMED BY SCALE MEASUREMENT HEREON.
- THE BASIS OF MEASURED BEARINGS AND HORIZONTAL DATUM SHOWN HEREON IS THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE (NAD 83). SAID BEARINGS ORIGINATED FROM SAID COORDINATE SYSTEM BY GPS OBSERVATIONS AND OBSERVATIONS OF SELECTED STATIONS IN THE NATIONAL GEODETIC SURVEY CONTINUOUSLY OPERATING REFERENCE STATION (NGS CORS) NETWORK.
- IRON PIPES OR SURVEYOR'S NAIL ARE SET AT ALL LOT CORNERS UNLESS OTHERWISE NOTED.
- ALL EASEMENTS ARE HERETOFORE DEDICATED UNLESS OTHERWISE NOTED.
- ALL EASEMENTS DEPICTED ON THE PLAT MAP ARE FOR PUBLIC UTILITIES UNLESS OTHERWISE NOTED.
- THE PROPERTIES DEPICTED ON THIS PLAT IDENTIFIED AS LOT 2-A AND LOT 1-B ARE BENEFITTED AND BURDENED BY BLANKET EASEMENTS MORE PARTICULARLY DESCRIBED IN THAT CERTAIN DECLARATION OF EASEMENTS AND RESTRICTIONS BY PMAT DPP, LLC, DATED 02/20/20, RECORDED AS DOCUMENT NUMBER 2022-018913 IN DUPAGE COUNTY, ILLINOIS.

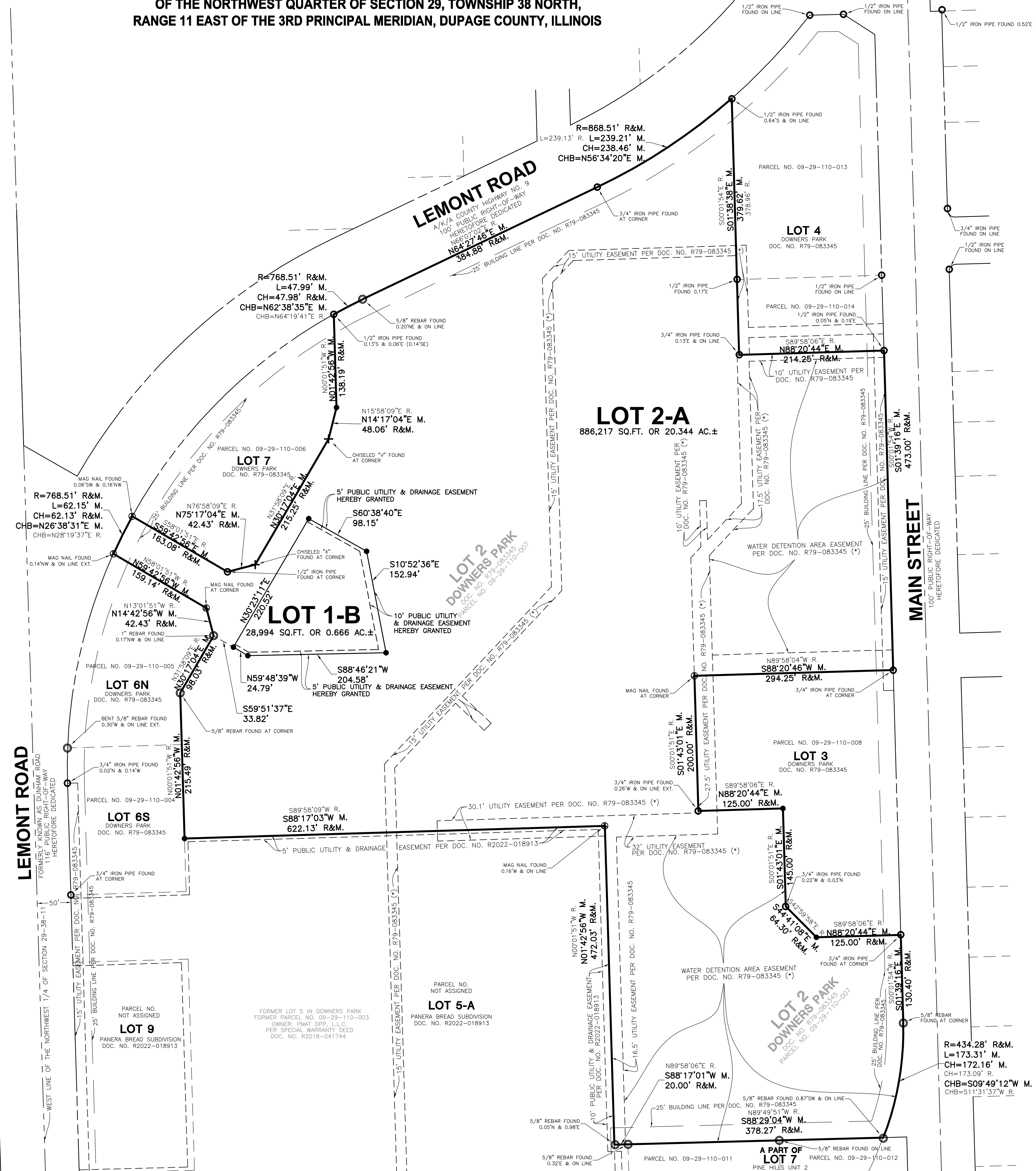
(\*) DUE TO A PARTIALLY ILLEGIBLE COPY OF THE RECORDED PLAT PROVIDED TO SURVEYOR, SOME OF THE INFORMATION SHOWN HEREON IS APPROXIMATE. ALSO, SOME OF THE BEARINGS AND DISTANCES DEPICTED ON SAID RECORDED PLAT ARE PARTIALLY ILLEGIBLE.

**AREA OF SURVEY:**

915,211 S.F. OR 21.010 ACRES (MORE OR LESS)

**PROPERTY DESCRIPTION:**

LOT 2 IN DOWNERS PARK, BEING A SUBDIVISION IN THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 38 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SUBDIVISION, RECORDED AS DOCUMENT NUMBER R79-083345, IN DUPAGE COUNTY, ILLINOIS.



| NO. | DATE     | REVISION     |
|-----|----------|--------------|
| 1.  | 08/23/22 | PER COMMENTS |

|                 |          |
|-----------------|----------|
| PROJECT NO.:    | 10015411 |
| DATE:           | 07/12/22 |
| SCALE AS SHOWN: |          |
| DES. SRK        |          |
| DR. PTK         |          |
| CKD. SRK        |          |

**WOOLPERT, INC.**  
1815 South Meyers Road  
Suite 950  
Oakbrook Terrace, IL 60181  
630.424.9080  
630.495.3731

**WOOLPERT**  
CONSTRUCTION PRODUCTS

**RESUBDIVISION OF LOT 2 IN DOWNERS PARK**  
A PART OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE 3RD PRINCIPAL MERIDIAN, DUPAGE COUNTY, ILLINOIS

**FINAL PLAT OF SUBDIVISION**

G:\Projects\Various\81934 - Downers Park Plaza - Outparcel on 75th - Panera\Drawings\10015411 - Plot Lot 2-R.dwg, Plotted: Aug 23, 2022 - 11:47am



RESUBDIVISION OF LOT 2 IN DOWNERS PARK

BEING A SUBDIVISION OF A PART OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE 3RD PRINCIPAL MERIDIAN, DUPAGE COUNTY, ILLINOIS

THIS PLAT HAS BEEN SUBMITTED FOR RECORDING BY AND RETURN TO: NAME: ADDRESS:

SCHOOL DISTRICT BOUNDARY STATEMENT

STATE OF ILLINOIS } SS COUNTY OF DUPAGE } THE UNDERSIGNED DO HEREBY CERTIFY THAT, AS OWNERS OF THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE...

DATED AT ILLINOIS THIS DAY OF A.D., 20 BY: COLLECTOR

OWNER'S CERTIFICATE

STATE OF COUNTY OF I HEREBY CERTIFY THAT THEY ARE THE OWNERS OF THE ABOVE-DESCRIBED PROPERTY AND HAVE CAUSED THE SAME TO BE SURVEYED AND SUBDIVIDED AS SHOWN ON THE PLAT HEREON DRAWN.

NOTARY'S CERTIFICATE

STATE OF COUNTY OF I HEREBY CERTIFY THAT THE PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING CERTIFICATE ARE KNOWN TO ME AS SUCH OWNERS.

VILLAGE COLLECTOR'S CERTIFICATE

STATE OF ILLINOIS } SS COUNTY OF DUPAGE } I, COLLECTOR OF THE VILLAGE OF DOWNERS GROVE, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT OR UNPAID CURRENT OR FORFEITED SPECIAL ASSESSMENTS OR ANY DEFERRED INSTALLMENTS THEREOF THAT HAVE NOT BEEN APPORTIONED AGAINST THE TRACT OF LAND, INCLUDED IN THIS PLAT.

PLAN COMMISSION'S CERTIFICATE

STATE OF ILLINOIS } SS COUNTY OF DUPAGE } APPROVED BY THE PLAN COMMISSION OF THE VILLAGE OF DOWNERS GROVE, THIS DAY OF A.D., 20 CHAIRMAN

VILLAGE COUNCIL'S CERTIFICATE

STATE OF ILLINOIS } SS COUNTY OF DUPAGE } APPROVED THIS DAY OF A.D., 20 BY THE COUNCIL OF THE VILLAGE OF DOWNERS GROVE. VILLAGE CLERK MAYOR

DECLARATION OF RESTRICTIVE COVENANTS

THE UNDERSIGNED OWNER HEREBY DECLARES THAT THE REAL PROPERTY DESCRIBED IN AND DEPICTED ON THIS PLAT OF SUBDIVISION SHALL BE HELD, TRANSFERRED, SOLD, CONVEYED AND OCCUPIED SUBJECT TO THE FOLLOWING COVENANTS AND RESTRICTIONS: (a) ALL PUBLIC UTILITY STRUCTURES AND FACILITIES, WHETHER LOCATED ON PUBLIC OR PRIVATE PROPERTY...

PUBLIC UTILITIES AND DRAINAGE EASEMENT PROVISIONS

EASEMENTS ARE HEREBY RESERVED FOR AND GRANTED TO THE VILLAGE OF DOWNERS GROVE, ILLINOIS AND TO THOSE PUBLIC UTILITY COMPANIES OPERATING UNDER FRANCHISE FROM THE VILLAGE OF DOWNERS GROVE, INCLUDING, BUT NOT LIMITED TO ILLINOIS BELL TELEPHONE COMPANY DBA AT&T ILLINOIS, NORTHERN ILLINOIS GAS COMPANY AND THEIR SUCCESSORS AND ASSIGNS, UNDER AND THROUGH ALL OF THE AREAS MARKED "PUBLIC UTILITY AND DRAINAGE EASEMENT" OR ("P.U.D.E.") ON THE PLAT FOR THE PERPETUAL RIGHT, PRIVILEGE AND AUTHORITY TO CONSTRUCT, RECONSTRUCT, REPAIR, INSPECT, MAINTAIN AND OPERATE VARIOUS UTILITY TRANSMISSIONS AND DISTRIBUTION SYSTEMS...

EASEMENTS ARE HEREBY RESERVED AND GRANTED TO THE VILLAGE OF DOWNERS GROVE, COUNTY OF DUPAGE AND OTHER GOVERNMENTAL AUTHORITIES HAVING JURISDICTION OF THE LAND SUBDIVIDED HEREBY OVER THE ENTIRE EASEMENT AREA FOR INGRESS, EGRESS AND THE PERFORMANCE OF MUNICIPAL AND OTHER GOVERNMENTAL SERVICES, INCLUDING WATER, STORM AND SANITARY SEWER SERVICE AND MAINTENANCE.

EASEMENT PROVISIONS

AN EASEMENT FOR SERVING THE SUBDIVISION AND OTHER PROPERTY WITH ELECTRIC AND COMMUNICATION SERVICE IS HEREBY RESERVED FOR AND GRANTED TO: COMMONWEALTH EDISON COMPANY AND ILLINOIS BELL TELEPHONE COMPANY DBA AT&T ILLINOIS, GRANTEEES, THEIR RESPECTIVE LICENSEES, SUCCESSORS AND ASSIGNS JOINTLY AND SEVERALLY, TO CONSTRUCT, OPERATE, REPAIR, MAINTAIN, MODIFY, RECONSTRUCT, REPLACE, SUPPLEMENT, RELOCATE AND REMOVE...

DUPAGE COUNTY CLERK'S CERTIFICATE

STATE OF ILLINOIS } SS COUNTY OF DUPAGE } I, COUNTY CLERK OF DUPAGE COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT GENERAL TAXES, NO UNPAID FORFEITED TAXES, AND NO REDEEMABLE TAX SALES AGAINST ANY OF THE LAND INCLUDED IN THIS PLAT.

GIVEN UNDER MY HAND AND SEAL OF THE COUNTY CLERK OF DUPAGE COUNTY, ILLINOIS, THIS DAY OF A.D., 20 COUNTY CLERK

DUPAGE COUNTY RECORDER'S CERTIFICATE

STATE OF ILLINOIS } SS COUNTY OF DUPAGE } THIS PLAT WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF DUPAGE COUNTY, ILLINOIS, ON THE DAY OF A.D., 20 AT O'CLOCK M. AS DOCUMENT NUMBER RECORDER OF DEEDS

PREPARED FOR:

PMAT DPP LLC ADDRESS: 109 NORTH PARK BLVD, NO 300 COVINGTON, LA 70433-5093

PARCEL NUMBER (PIN):

09-29-110-007

SURVEYOR'S NOTES:

- 1. "M." DESIGNATES MEASURED DIMENSION/BEARING, "R." DESIGNATES RECORD DIMENSION/BEARING. 2. DISTANCES ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF. 3. NO DIMENSION SHALL BE ASSUMED BY SCALE MEASUREMENT HEREON. 4. THE BASIS OF MEASURED BEARINGS AND HORIZONTAL DATUM SHOWN HEREON IS THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE (NAD 83)...

AREA OF SURVEY:

915,211 S.F. OR 21,010 ACRES (MORE OR LESS)

DRAINAGE CERTIFICATE

STATE OF ILLINOIS } SS COUNTY OF DUPAGE } I, A REGISTERED PROFESSIONAL ENGINEER IN ILLINOIS AND THE OWNER OF THE LAND DEPICTED HEREON OR HIS DULY AUTHORIZED ATTORNEY, DO HEREBY STATE, THAT TO THE BEST OF OUR KNOWLEDGE AND BELIEF, REASONABLE PROVISION HAS BEEN MADE FOR COLLECTION AND DIVERSION OF SUCH SURFACE WATERS AND PUBLIC AREAS, OR DRAINS WHICH THE SUBDIVIDER HAS A RIGHT TO USE...

DATED THIS DAY OF A.D., 20 ILLINOIS REGISTERED PROFESSIONAL ENGINEER STATE REGISTRATION NUMBER REGISTRATION EXPIRATION DATE PROPERTY OWNER'S SIGNATURES BY: OWNER OR ATTORNEY BY: OWNER OR ATTORNEY PRINTED NAME PRINTED NAME

SURVEYOR'S CERTIFICATE:

STATE OF ILLINOIS } SS COUNTY OF DUPAGE } I, STEPHEN R. KREGER, ILLINOIS PROFESSIONAL LAND SURVEYOR NUMBER 35-002985, DO HEREBY CERTIFY, THAT AT THE REQUEST OF THE OWNER THEREOF, I HAVE SURVEYED AND SUBDIVIDED THE FOLLOWING DESCRIBED PROPERTY:

LOT 2 IN DOWNERS PARK, BEING A SUBDIVISION IN THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 38 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT OF SUBDIVISION, RECORDED AS DOCUMENT NUMBER R79-083345, IN DUPAGE COUNTY, ILLINOIS.

ALL DIMENSIONS ARE IN FEET OR DECIMALS THEREOF; 1/2" DIAMETER BY 24" LONG IRON PIPES WILL BE SET AT ALL SUBDIVISION CORNERS, LOT CORNERS, POINTS OF CURVATURE AND POINTS OF TANGENCY IN COMPLIANCE WITH ILLINOIS STATUTES AND APPLICABLE ORDINANCES EXCEPT AS NOTED.

I FURTHER CERTIFY THAT THE PLAT HEREON DRAWN IS A CORRECT REPRESENTATION OF SAID SURVEY AND SUBDIVISION WHICH WAS PREPARED IN ACCORDANCE WITH PROVISIONS OF APPLICABLE ORDINANCES OF THE VILLAGE OF DOWNERS GROVE, ILLINOIS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THE MONUMENTATION SHOWN ON THE FACE OF THIS PLAT HAS BEEN FOUND OR WILL BE PLACED IN THE GROUND AS INDICATED HEREON, AFTER THE COMPLETION OF THE CONSTRUCTION OF THE IMPROVEMENTS OR WITHIN 12 MONTHS AFTER RECORDEATION OF THIS PLAT, WHICHEVER SHALL OCCUR FIRST.

I FURTHER CERTIFY THAT THE PROPERTY DESCRIBED AND SHOWN ON THE PLAT HEREON DRAWN IS WITHIN THE CORPORATE LIMITS OF THE VILLAGE OF DOWNERS GROVE, ILLINOIS, WHICH HAS ADDED A COMPREHENSIVE PLAN AND IS EXERCISING THE SPECIAL POWERS AUTHORIZED BY DIVISION 12 OF ARTICLE 11 OF THE ILLINOIS MUNICIPAL CODE.

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

I, FURTHER CERTIFY THAT ACCORDING TO THE FLOOD INSURANCE RATE MAP - MAP NUMBER 17043C0169J, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITH AN EFFECTIVE DATE OF AUGUST 1, 2019, WHICH IS THE MOST CURRENT FLOOD INSURANCE RATE MAP AVAILABLE ON FEMA'S WEBSITE, THIS SITE IS LOCATED IN ZONE X-1 (NO SHADING) - AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN OR IN ZONE D-0 (NO SHADING) - AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE, TO THE BEST OF MY KNOWLEDGE AND BELIEF...

GIVEN UNDER MY HAND AND SEAL THIS DAY OF 20 A.D. WOOLPERT, INC.

STEPHEN R. KREGER ILLINOIS PROFESSIONAL LAND SURVEYOR #35-002985 LICENSE EXPIRES 11/30/22



WOOLPERT, INC. ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-001393



Table with columns: NO., DATE, REVISION. No. 1, Date 08/23/22, Revision 1.08/23/22 PER COMMENTS.

Table with columns: PROJECT NO., DATE, SCALE AS SHOWN, DES., DR., CKD. Values: 10015411, 07/12/22, SRK, PTK, SRK.

WOOLPERT, INC. 1815 South Meyers Road Suite 950 Oakbrook Terrace, IL 60181 DR. 630.424.9080 FAX: 630.495.3731



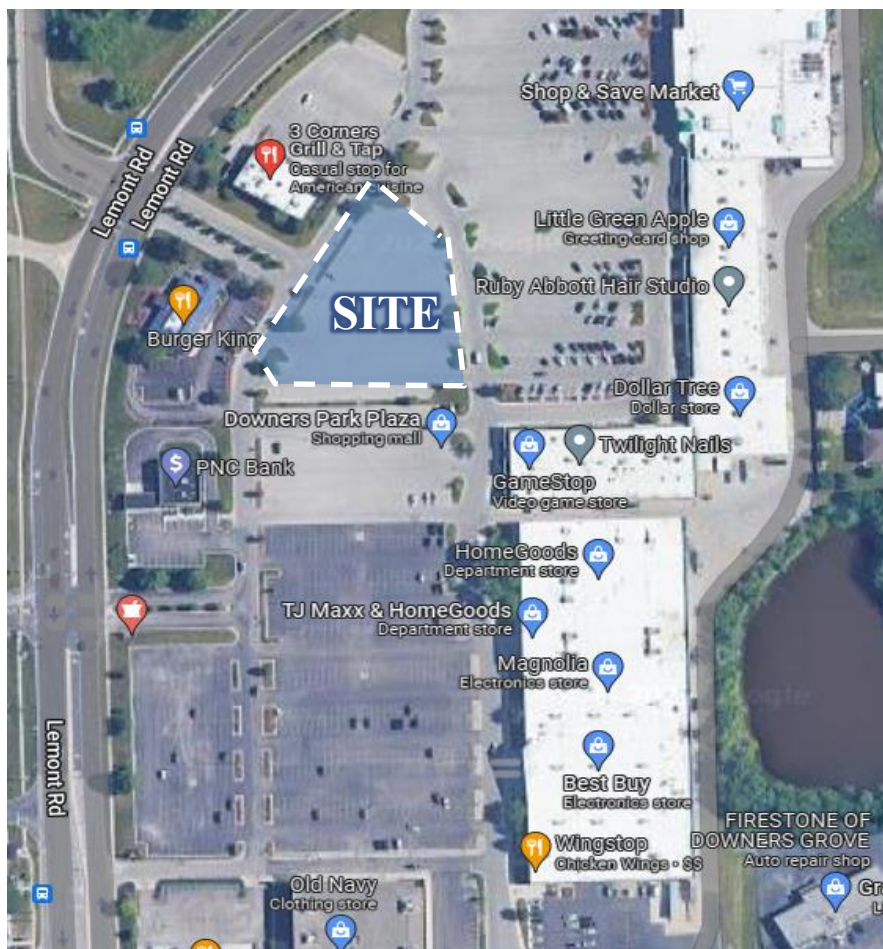
RESUBDIVISION OF LOT 2 IN DOWNERS PARK A PART OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE 3RD PRINCIPAL MERIDIAN, DUPAGE COUNTY, ILLINOIS FINAL PLAT OF SUBDIVISION SHEET NO. 2 of 2

G:\CS\Projects\Various\81934 - Downers Park Plaza - Outparcel on 75th - Parcel\Drawings\10015411 - Plat Lot 2-R1.dwg, Plotted By: Koczmarzyk, Plotted: Aug 23, 2022 - 11:47am

# Traffic and Parking Impact Study

## Proposed Outlot Parcel

Downers Grove, Illinois



Prepared For:

### PMAT DPP LLC



June 23, 2022

# 1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O’Hara, Aboona, Inc. (KLOA, Inc.) for proposed outlot parcel to be located within Downers Park Plaza shopping center located in the northeast quadrant of the intersection of 75<sup>th</sup> Street with Lemont Road in Downers Grove, Illinois. The plans call for a 5,230 square-foot multi-tenant building that will include a 2,087 square-foot, drive-through restaurant and a 3,258 square-foot retail area. The site will occupy an outlot parcel within the shopping center in proximity to the access drive off Lemont Road in alignment with Dunham Road. Access will be provided via the existing access system serving the shopping center.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed outlot parcel will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate the traffic generated by the proposed outlot parcel.

**Figure 1** shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site. The sections of this report present the following:

- Existing roadway conditions
- A description of the proposed outlot parcel
- Directional distribution of the outlot parcel traffic
- Vehicle trip generation for the outlot parcel
- Future traffic conditions including access to the outlot parcel
- Traffic analyses for the weekday morning, weekday evening, and Saturday midday peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system
- Evaluation of the adequacy parking supply

Traffic capacity analyses were conducted for the weekday morning, weekday evening, and Saturday midday peak hours for the following conditions:

1. Base Conditions – Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area adjusted to reflect normal conditions.
2. No-Build Conditions – Analyzes the capacity of the existing roadway system using base peak hour traffic volumes including ambient traffic growth and other developments in the area.
3. Projected Conditions – Analyzes the capacity of the future roadway system using the projected traffic volumes that include the base traffic volumes, ambient traffic growth, other developments in the area, and the traffic estimated to be generated by the full buildout of the proposed outlot parcel.

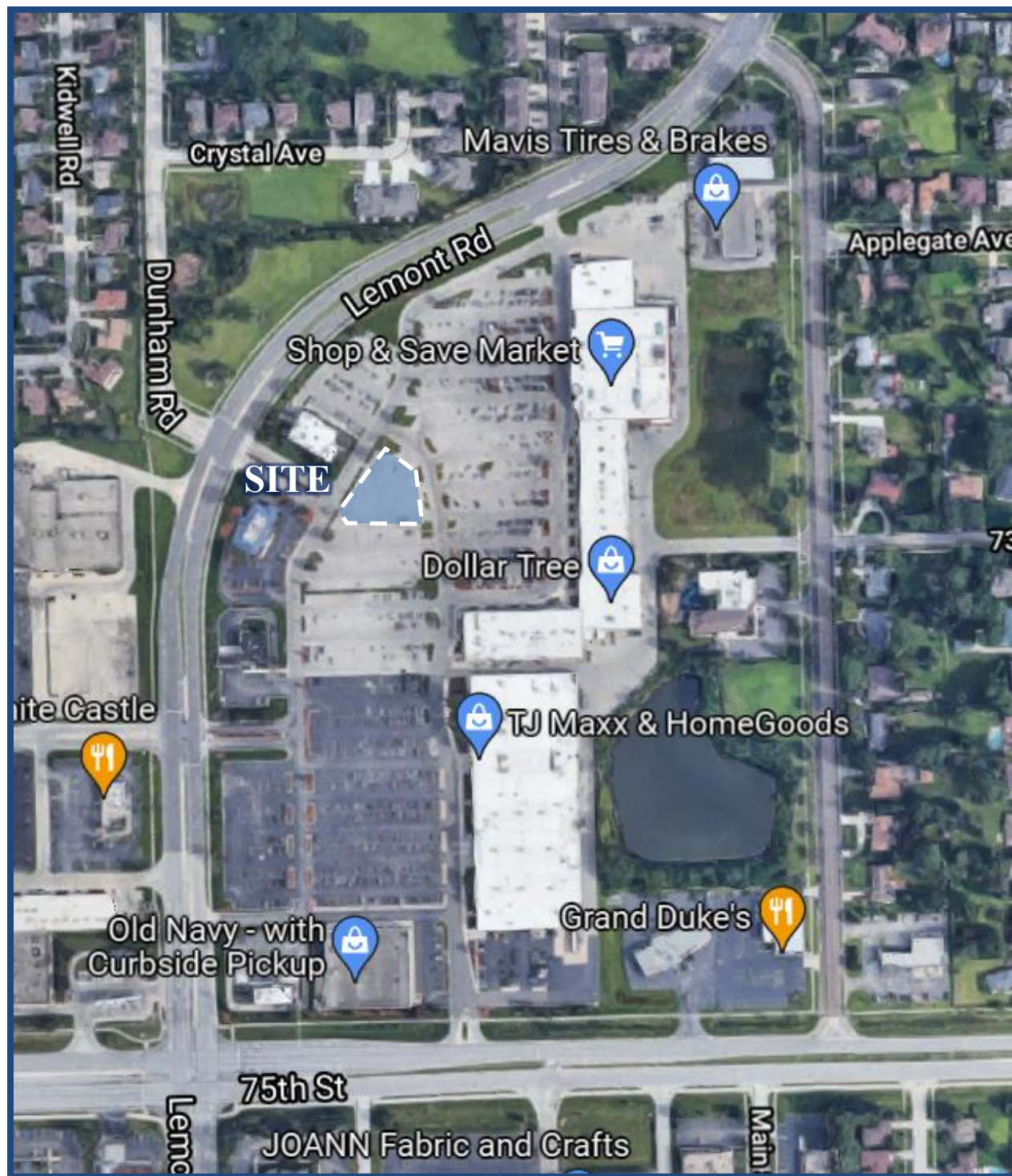


Site Location

Figure 1

*Proposed Outlot Parcel  
Downers Grove, Illinois*





Aerial View of Site

Figure 2

## 2. Existing Conditions

The following provides a detailed description of the physical characteristics of the roadways including geometry and traffic control, adjacent land uses, and peak hour traffic flows along area roadways.

### Site Location

The site, which is currently occupied by a surface parking lot, will occupy an outlot parcel located within Downers Park Plaza shopping center located in the northeast quadrant of the intersection of 75th Street with Lemont Road in Downers Grove, Illinois. Land uses in the vicinity of the site are primarily commercial.

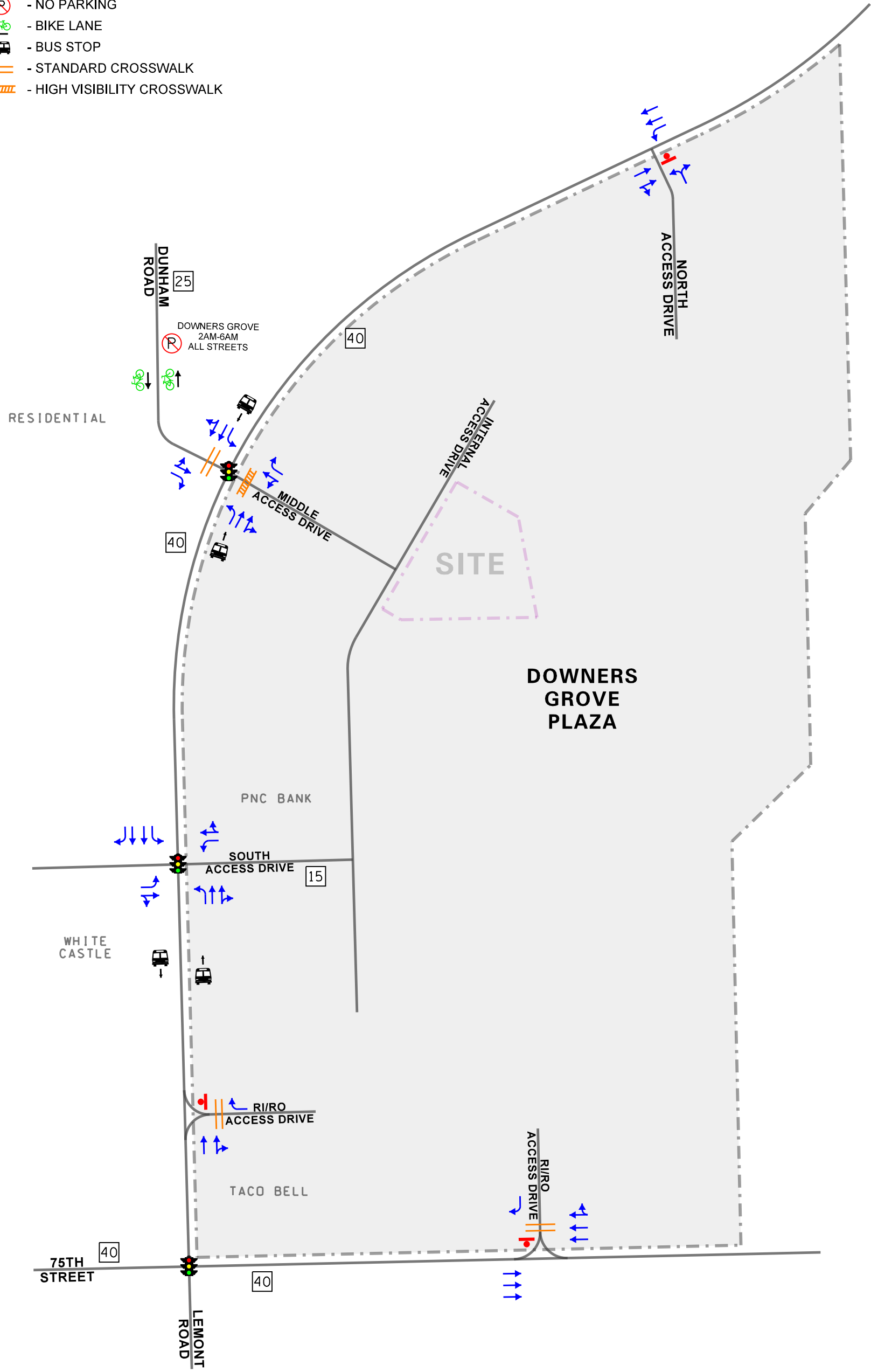
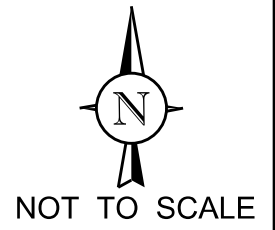
### Existing Roadway System Characteristics

The characteristics of the existing roadways that surround the existing Downers Park Plaza are illustrated in **Figure 3** and described below.

*Lemont Road* is a north-south minor arterial that generally provides two lanes in each direction separated by a raised median in the vicinity of the site. At its signalized intersection with Dunham Road, Lemont Road provides an exclusive left-turn lane, a through lane and a combined through/right-turn lane on the northbound approach. The southbound approach provides an exclusive left-turn lane, a through lane and a combined through/right-turn lane. At its signalized intersection with the main access drive serving Downers Park Plaza, Lemont Road provides an exclusive left-turn lane, a through lane and a combined through/right-turn lane on the northbound approach. The southbound approach provides an exclusive left-turn lane, a through lane and a combined through/right-turn lane. At its unsignalized intersection with the full movement access serving Downers Park Plaza, the northbound approach provides a through lane and a combined through/right-turn lane. The southbound approach provides an exclusive left-turn lane and two through lanes. At its unsignalized intersection with the right-in/right-out access drive serving Downers Park Plaza, Lemont Road provides a through lane and a combined through/right-turn lane on the northbound approach. Lemont Road is under the jurisdiction of DuPage County Division of Transportation (DuDOT) and carries an Annual Average Daily Traffic (AADT) volume of approximately 13,400 vehicles (IDOT 2016). Lemont Road has a posted speed limit of 40 miles per hour.

*75<sup>th</sup> Street* is an east-west other principal arterial that generally provides two lanes in each direction separated by a raised median in the vicinity of the site. At its unsignalized intersection with the right-in/right-out access drive serving Downers Park Plaza, 75<sup>th</sup> Street provides three through lanes on the eastbound approach. The westbound approach provides two through lanes and a combined through/right-turn lane. 75<sup>th</sup> Street is under the jurisdiction of DuDOT and carries an AADT volume of approximately 32,300 vehicles west of Lemont Road and 31,500 vehicles east of Lemont Road (IDOT 2016). 75<sup>th</sup> Street has a posted speed limit of 40 miles per hour.

- LEGEND**
- TRAVEL LANE
  - TRAFFIC SIGNAL
  - STOP SIGN
  - SPEED LIMIT
  - NO PARKING
  - BIKE LANE
  - BUS STOP
  - STANDARD CROSSWALK
  - HIGH VISIBILITY CROSSWALK



DOWNERS PARK PLAZA  
DOWNERS GROVE,  
ILLINOIS

EXISTING TRAFFIC VOLUMES

Job No: 22-194      Figure: 3

*Dunham Road* is a north-south major collector that generally provides one travel lane and one bike lane in each direction in the vicinity of the site. At its signalized intersection with Lemont Road, Dunham Road provides an exclusive right-turn lane and a combined through/left-turn lane on the southbound approach. The northbound approach provides a combined through/left-turn lane and a combined through/right-turn lane. A standard style crosswalk is provided on the north leg of this intersection and a high-visibility crosswalk is provided on the south leg of this intersection. Dunham Road is under the jurisdiction of the Village of Downers Grove and has a posted speed limit of 25 miles per hour in the northbound approach and 30 miles per hour in the southbound approach.

## Existing Traffic Volumes

In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period vehicle, pedestrian, and bicycle movement traffic counts on Thursday, September 9, 2021, during the weekday morning (7:00 to 9:00 A.M.) and evening (7:00 to 6:00 P.M.) peak periods and on Saturday, September 11, 2021, during the Saturday midday (12:00 to 2:00 P.M.) peak period at the following intersections:

- Lemont Road with the access drives serving Downers Park Plaza
- 75<sup>th</sup> Street with the right-in/right-out access drive serving Downers Park Plaza
- Two internal intersections off the main access drives off Lemont Road

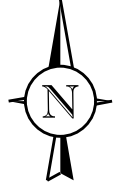
In order to represent normal conditions, counts were adjusted based on a comparison with the hourly counts previously conducted by KLOA, Inc. in the area and were increased by 10 percent during the weekday morning peak hour and were not increased during the weekday evening and Saturday midday peak hours. The results of the traffic counts showed that the weekday morning peak hour of traffic occurs from 7:15 A.M. to 8:15 A.M., the weekday evening peak hour of traffic occurs from 5:00 P.M. to 6:00 P.M., and the Saturday midday peak hour of traffic occurs from 12:15 P.M. to 1:15 P.M.

**Figure 4** illustrates the Year 2021 traffic volumes. Copies of the traffic count summary sheets are included in the Appendix.

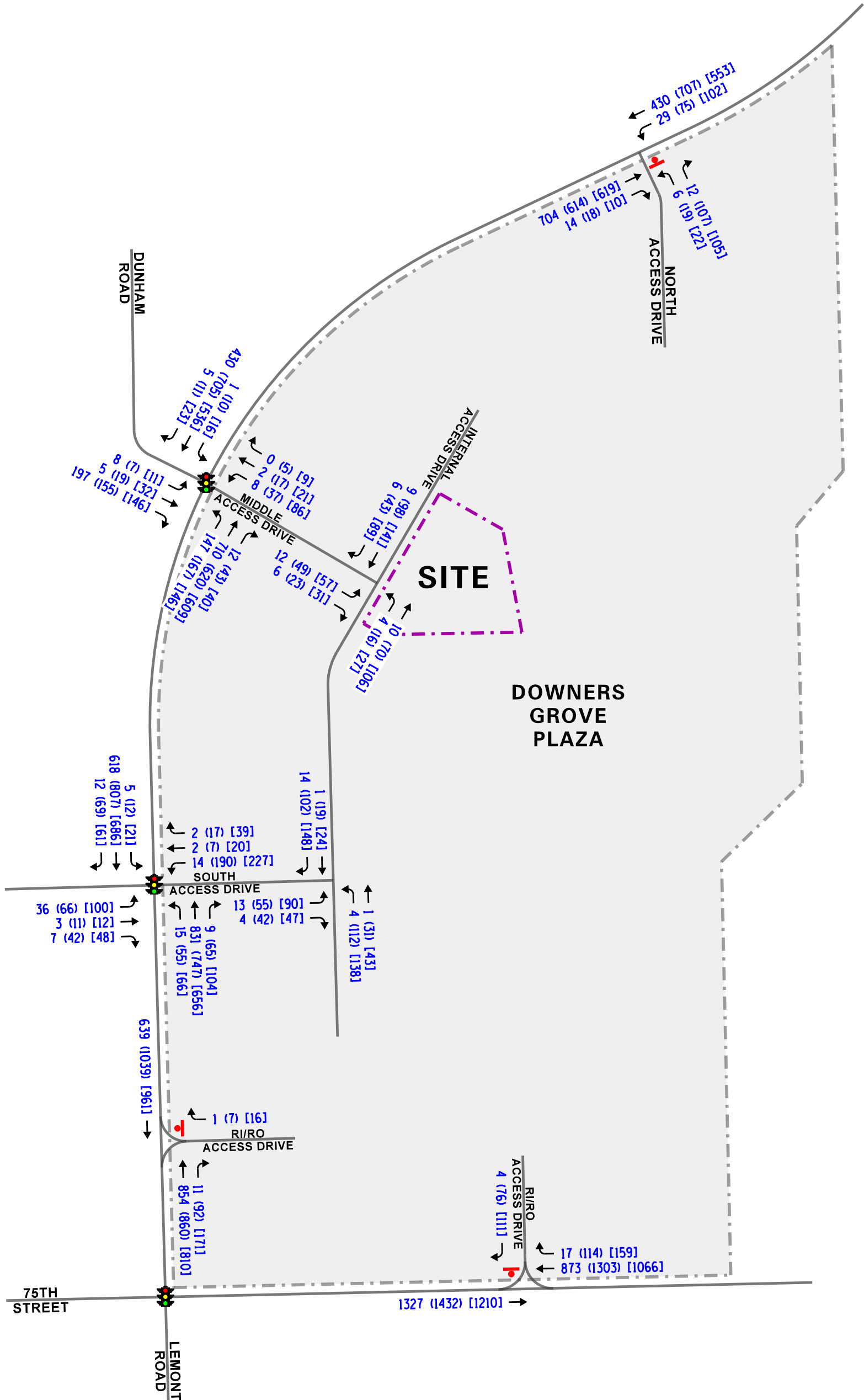


LEGEND

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (5:00-6:00 PM)
- [00] - SATURDAY MIDDAY PEAK HOUR (12:15 -1:15 PM)



NOT TO SCALE



## Crash Data Analysis

KLOA, Inc. obtained crash data<sup>1</sup> for the past five years (2016 to 2020) for the intersections of Lemont Road with the access drives serving Downers Park Plaza, 75<sup>th</sup> Street with the right-in/right-out access drive serving Downers Park Plaza and the two internal intersections off the main access drives off Lemont Road. The crash data for the intersections of Lemont Road with Dunham Road and Lemont Road with the right-in/right-out access drive is summarized in **Tables 1** and **2**, respectively. Only eight crashes were reported at the intersection of 75<sup>th</sup> Street with the right-in/right-out access drive serving Downers Park Plaza, four crashes were reported at the intersection of Lemont Road with the north access drive, four crashes were reported at the intersection of Lemont Road with the south access drive, four crashes were reported at the intersection of the internal access drive with the middle access drive, and four crashes were reported at the intersection of the internal access drive with the south access drive over the five-year period. It should be noted that no fatalities were reported at any studied intersection between 2016 and 2020.

Table 1  
LEMONT ROAD WITH DUNHAM ROAD – CRASH SUMMARY

| Year           | Type of Crash Frequency |          |                |                |                |            |          | Total      |
|----------------|-------------------------|----------|----------------|----------------|----------------|------------|----------|------------|
|                | Angle                   | Head On  | Object         | Rear End       | Sideswipe      | Turning    | Other    |            |
| 2016           | 0                       | 0        | 0              | 0              | 1              | 1          | 0        | 2          |
| 2017           | 0                       | 0        | 0              | 0              | 0              | 2          | 0        | 2          |
| 2018           | 2                       | 0        | 1              | 0              | 0              | 1          | 0        | 4          |
| 2019           | 0                       | 0        | 0              | 1              | 0              | 0          | 0        | 1          |
| 2020           | <u>0</u>                | <u>0</u> | <u>0</u>       | <u>2</u>       | <u>0</u>       | <u>2</u>   | <u>0</u> | <u>4</u>   |
| <b>Total</b>   | <b>2</b>                | <b>0</b> | <b>1</b>       | <b>3</b>       | <b>1</b>       | <b>6</b>   | <b>0</b> | <b>13</b>  |
| <b>Average</b> | <b>&lt;1.0</b>          | <b>0</b> | <b>&lt;1.0</b> | <b>&lt;1.0</b> | <b>&lt;1.0</b> | <b>1.2</b> | <b>0</b> | <b>2.6</b> |

<sup>1</sup> IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s). Additionally, for coding years 2015 to present, the Bureau of Data Collection uses the exact latitude/longitude supplied by the investigating law enforcement agency to locate crashes. Therefore, location data may vary in previous years since data prior to 2015 was physically located by bureau personnel.

Table 2

## LEMONT ROAD WITH RIGHT-IN/RIGHT-OUT ACCESS DRIVE – CRASH SUMMARY

| Year           | Type of Crash Frequency |                |          |            |           |                |                | Total      |
|----------------|-------------------------|----------------|----------|------------|-----------|----------------|----------------|------------|
|                | Angle                   | Head On        | Object   | Rear End   | Sideswipe | Turning        | Other          |            |
| 2016           | 0                       | 0              | 0        | 2          | 0         | 1              | 0              | 3          |
| 2017           | 0                       | 0              | 0        | 1          | 0         | 1              | 1              | 3          |
| 2018           | 0                       | 0              | 0        | 2          | 0         | 1              | 0              | 3          |
| 2019           | 0                       | 0              | 0        | 1          | 0         | 1              | 0              | 2          |
| 2020           | <u>0</u>                | <u>1</u>       | <u>0</u> | <u>1</u>   | <u>0</u>  | <u>0</u>       | <u>1</u>       | <u>3</u>   |
| <b>Total</b>   | <b>0</b>                | <b>1</b>       | <b>0</b> | <b>7</b>   | <b>0</b>  | <b>4</b>       | <b>2</b>       | <b>14</b>  |
| <b>Average</b> | <b>0</b>                | <b>&lt;1.0</b> | <b>0</b> | <b>1.4</b> | <b>0</b>  | <b>&lt;1.0</b> | <b>&lt;1.0</b> | <b>2.8</b> |

### 3. Traffic Characteristics of the Proposed Outlot

To evaluate the impact of the subject development on the area roadway system, it was necessary to quantify the number of vehicle trips the site will generate during the peak hours and then determine the directions from which the proposed traffic will approach and depart the site.

#### Proposed Site and Site Plan

As proposed, the site will be developed with an approximate 5,230 square-foot multi-tenant building that will include a drive-through restaurant. The site will occupy an outlot parcel within Lot 2 of the shopping center in proximity to the access drive off Lemont Road in alignment with Dunham Road within Downers Park Plaza shopping center. Access to the Downers Park Plaza shopping center is currently provided via the following:

- A full movement access drive on Lemont Road located approximately 825 feet north of Dunham Road. This access drive provides one inbound lane and one outbound lane with outbound movements under stop sign control. Southbound left-turn movements are accommodated via an exclusive southbound left-turn lane.
- A full movement access drive on Lemont Road opposite Dunham Road. This access drive provides one inbound lane and two outbound lanes (striped as an exclusive right-turn lane and a combined through/left-turn lane) with outbound movements under stop sign control. Northbound and southbound left-turn movements are accommodated via an exclusive northbound left-turn lane and an exclusive southbound left-turn lane, respectively.
- A full movement access drive on Lemont Road located approximately 620 feet south of Dunham Road. This access drive provides one inbound lane and two outbound lanes (striped as an exclusive left-turn lane and a combined through/right-turn lane) with outbound movements under stop sign control. Northbound and southbound left-turn movements are accommodated by an exclusive northbound left-turn lane and an exclusive southbound left-turn lane, respectively.
- A right-out only access drive on Lemont Road located approximately 1,000 feet south of Dunham Road. This access drive provides one outbound lane with outbound movements under stop sign control. Left turning movements are physically restricted due to the existing median along Lemont Road.
- A right-out only access drive on 75<sup>th</sup> Street located approximately 560 feet east of Lemont Road. This access drive provides one outbound lane with outbound movements under stop sign control. Left-turn movements are physically restricted due to the existing median along Lemont Road.

Based on the proposed outlot parcel plan, the following internal connections will be provided:

- A proposed two-way drive aisle that connects to an existing one-way eastbound parking aisle along the south side of the site and the existing two-way circulation drive that borders the east side of the site.
- A proposed inbound only access to the drive through lane that is located off of the existing one-way eastbound parking aisle along the south side of the site. Out bound movements from the drive through will exit on to the proposed two-way drive aisle as discussed above.

A copy of the site plan is included in the Appendix.

### Directional Distribution of Site Traffic

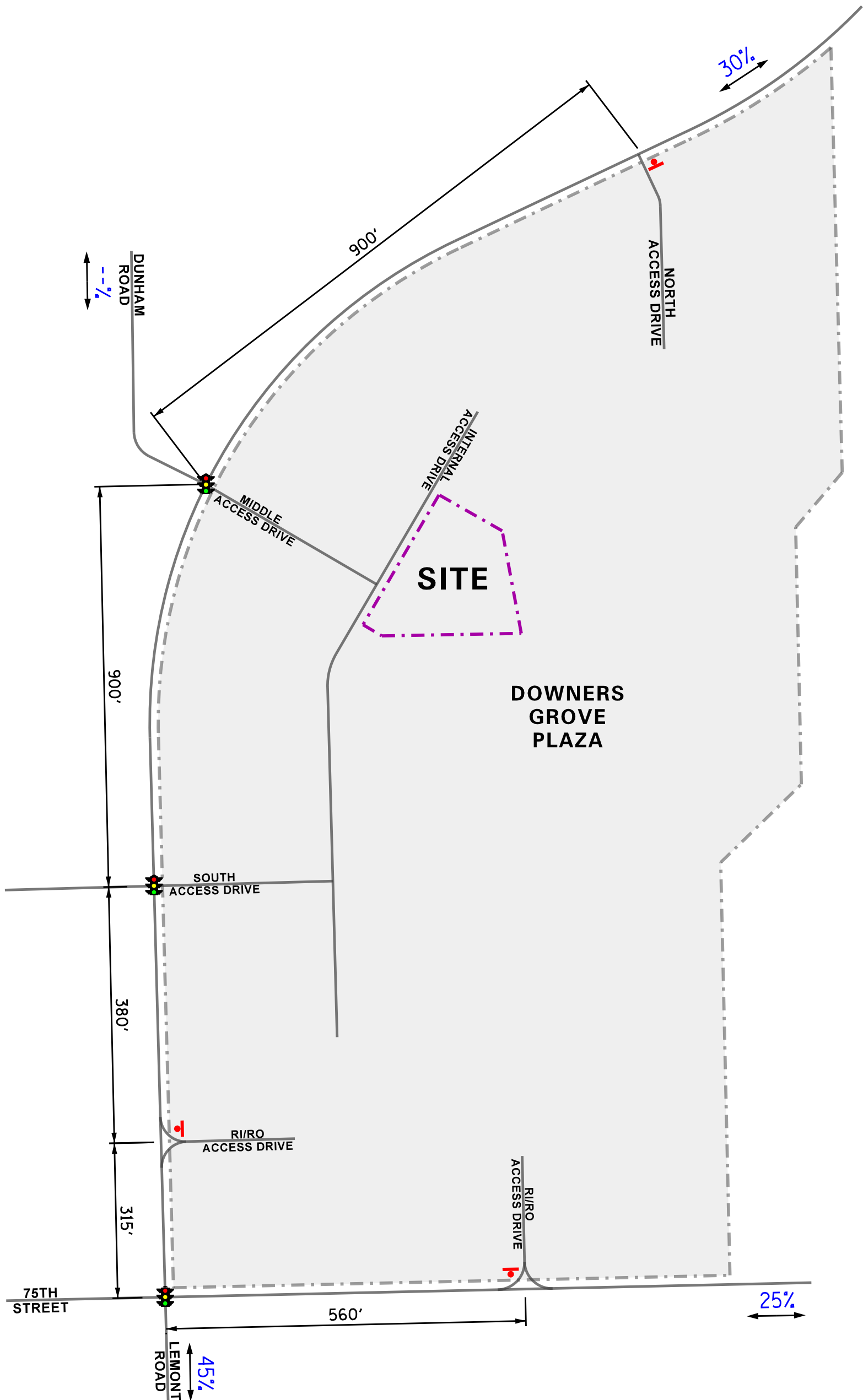
The directional distribution of how traffic will approach and depart the site was estimated based on the general travel patterns through the study area derived from the peak hour traffic volumes. **Figure 5** shows the established directional distribution for the proposed outlot parcel.

LEGEND

- 00% - PERCENT DISTRIBUTION
- 00' - DISTANCE IN FEET



NOT TO SCALE



DOWNERS PARK PLAZA  
DOWNERS GROVE,  
ILLINOIS

DIRECTIONAL DISTRIBUTION



Job No: 22-194

Figure: 5

## Development Traffic Generation

The estimate of vehicle traffic to be generated by the proposed outlot parcel is based upon the proposed land use types and sizes. The vehicle trip generation for the proposed outlot parcel was calculated using data published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11<sup>th</sup> Edition. Land-Use Code 934 (Fast Food Restaurant with Drive Through Window) and Land-Use Code 822 (Strip Retail) was utilized to estimate the trips to be generated by the proposed outlot parcel.

It is important to note that surveys conducted by ITE have shown that approximately 50 percent of trips made to fast-food restaurant uses and 20 percent of trips made to retail uses are diverted from the existing traffic on the roadway system. This is particularly true during the weekday morning and evening peak hours when traffic is diverted from the home-to-work and work-to-home trips. Such diverted trips are referred to as pass-by traffic. As such, a 50 percent pass-by reduction was applied to the trips estimated to be generated by the proposed restaurant and a 20 percent pass-by reduction was applied to the trips estimated to be generated by the retail space within the outlot parcel. It should be noted that internal interaction will occur between the proposed outlot parcel and the existing uses, which will further reduce the estimated trips. As such, a 10 percent interaction reduction was applied to the new trips generated by both uses.

**Table 3** shows the estimated vehicle trip generation for the weekday morning, weekday evening, and Saturday midday peak hours and daily trips. The ITE trip generation summary sheets are included in the Appendix.

Table 3

## ESTIMATED PEAK HOUR VEHICLE TRIP GENERATION

| ITE Land Use Code | Type/Size  | Weekday Morning Peak Hour |           |           | Weekday Evening Peak Hour |           |           | Saturday Midday Peak Hour |           |           | Daily Traffic |
|-------------------|--|---------------------------|-----------|-----------|---------------------------|-----------|-----------|---------------------------|-----------|-----------|---------------|
|                   |  | In                        | Out       | Total     | In                        | Out       | Total     | In                        | Out       | Total     |               |
| 934               | Fast Food Restaurant with Drive-Through (3,258 s.f.) | 48                        | 46        | 94        | 36                        | 33        | 69        | 59                        | 57        | 116       | 982           |
|                   | <i>10 % Interaction Reduction</i>                    | -5                        | -5        | -10       | -4                        | -3        | -7        | -6                        | -6        | -12       | -99           |
|                   | <i>50 % Pass-By Reduction</i>                        | -21                       | -21       | -42       | -16                       | -16       | -32       | -26                       | -26       | -52       | -442          |
| 822               | Retail (2,087 s.f.)                                  | 5                         | 3         | 8         | 17                        | 18        | 35        | 11                        | 10        | 21        | 178           |
|                   | <i>10 % Interaction Reduction</i>                    | 0                         | 0         | 0         | -2                        | -2        | -4        | -1                        | -1        | -2        | -18           |
|                   | <i>20 % Pass-By Reduction</i>                        | -1                        | -1        | -2        | -3                        | -3        | -6        | -2                        | -2        | -4        | -32           |
|                   | <b>Total New Trips</b>                               | <b>26</b>                 | <b>22</b> | <b>48</b> | <b>28</b>                 | <b>27</b> | <b>55</b> | <b>26</b>                 | <b>32</b> | <b>58</b> | <b>569</b>    |



## 4. Projected Traffic Conditions

The total projected traffic volumes take into consideration the base traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed outlot parcel.

### Development Traffic Assignment

The estimated weekday morning, weekday evening, and Saturday midday peak hour traffic volumes that will be generated by the proposed outlot parcel were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5). **Figure 6** illustrates the traffic assignment of the new passenger vehicle trips and **Figure 7** illustrates the traffic assignment of the pass-by passenger vehicle trips.

### Background Traffic Conditions

The base traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on 2050 Average Daily Traffic (ADT) projections provided by the Chicago Metropolitan Agency for Planning (CMAP) in a letter dated September 21, 2021, the existing traffic volumes were increased by an annually compounded growth rate for six years (one-year buildout plus five years) totaling 2.1 percent to represent Year 2027 no-build conditions.

In addition, the traffic to be generated by the currently under construction Panera Bread restaurant located in the Downers Park Plaza shopping center and the full occupancy of Downers Park Plaza was added in the background conditions. It should be noted that Downers Park Plaza contained approximately 33,321 square feet of vacant space at the time the traffic counts were conducted.

**Figure 8** shows the Year 2027 no-build traffic conditions. A copy of the CMAP 2050 projections letter is included in the Appendix.

### Year 2027 Total Projected Traffic Conditions

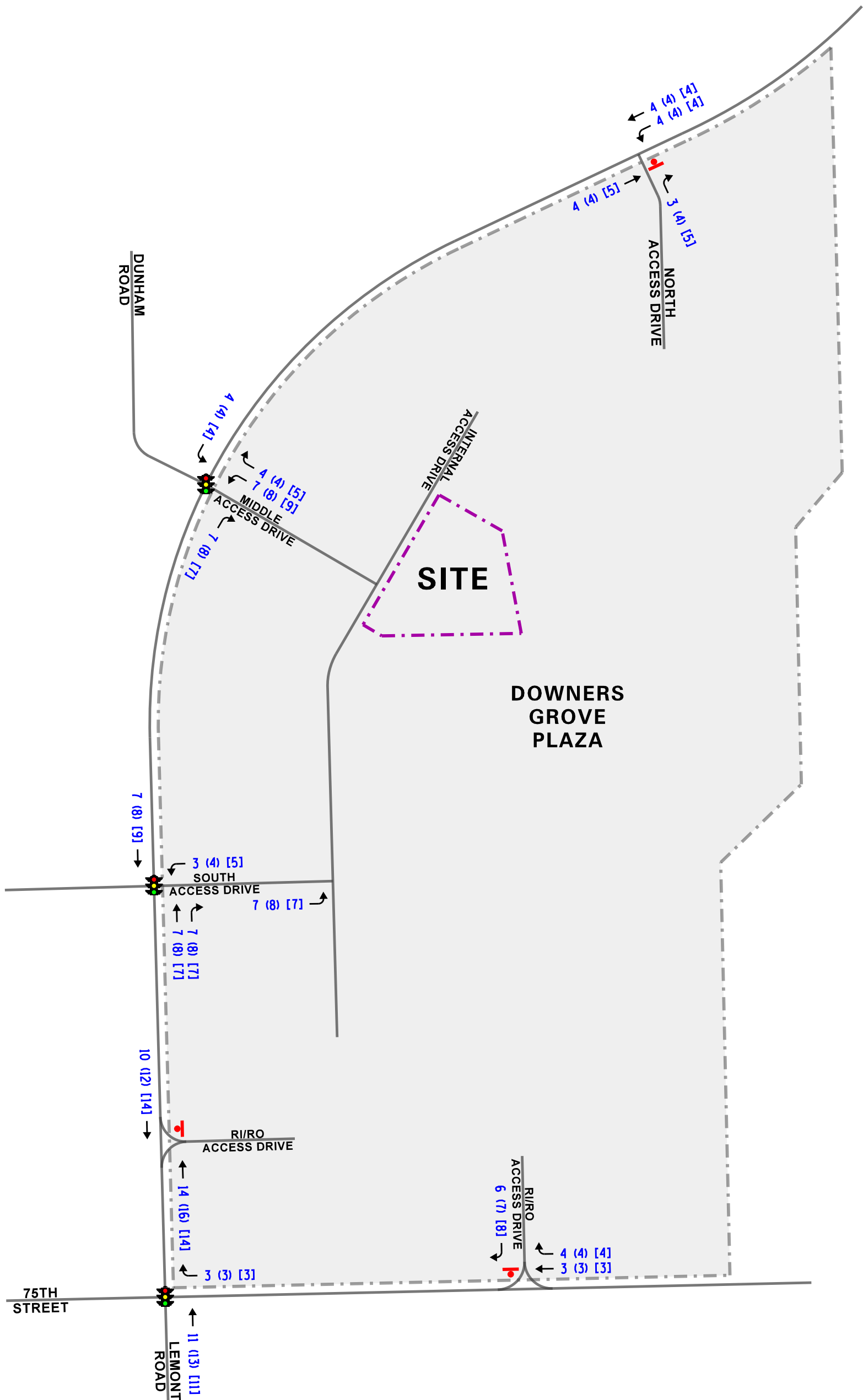
The new and pass-by development-generated traffic (Figures 6 and 7) was added to the no-build traffic volumes (Figure 8) to determine the Year 2027 total projected traffic volumes, which are illustrated in **Figure 9**.

**LEGEND**

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (5:00-6:00 PM)
- [00] - SATURDAY MIDDAY PEAK HOUR (12:15 -1:15 PM)



NOT TO SCALE

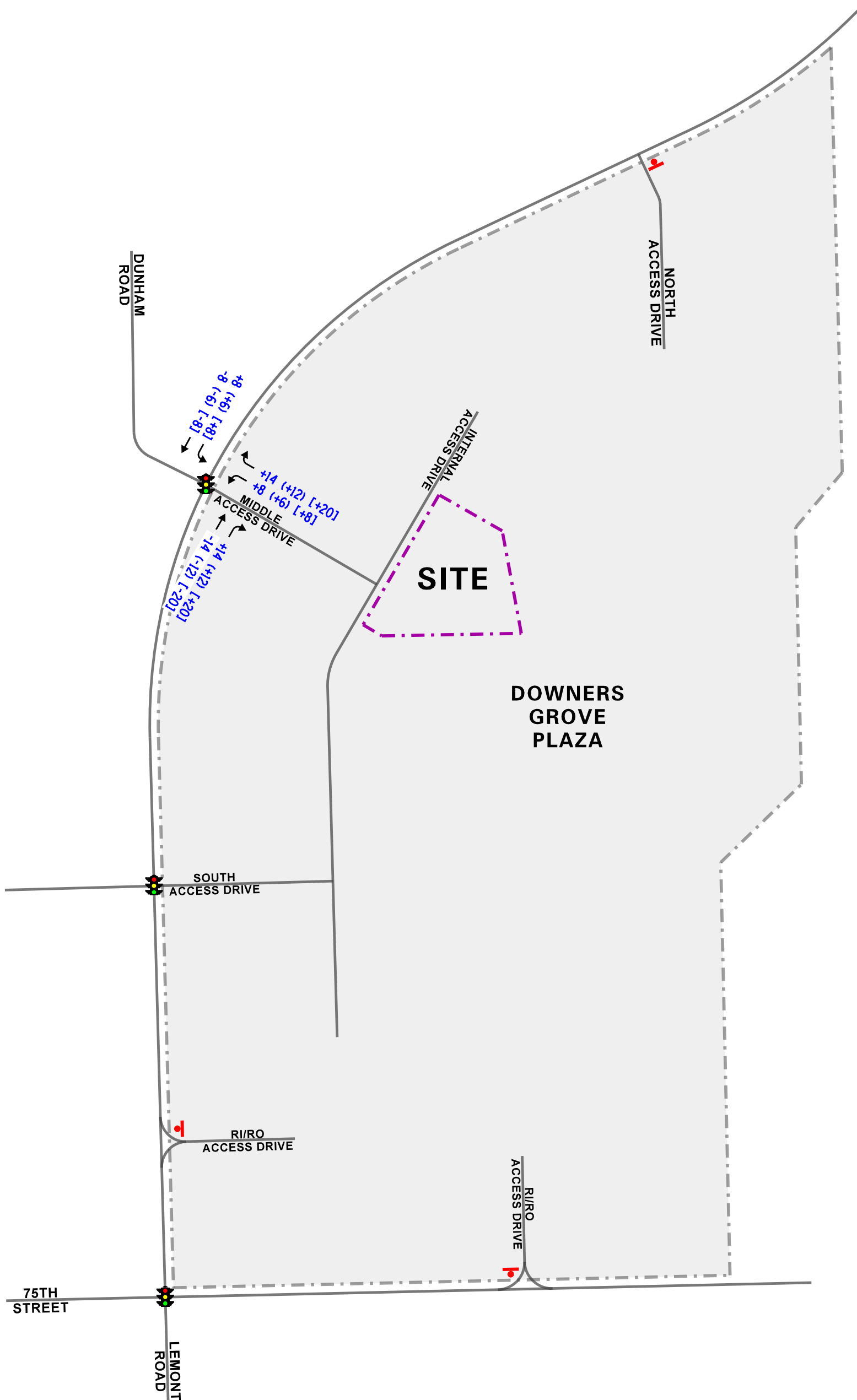


**LEGEND**

- 00** - AM PEAK HOUR (7:15-8:15 AM)
- (00)** - PM PEAK HOUR (5:00-6:00 PM)
- [00]** - SATURDAY MIDDAY PEAK HOUR (12:15 -1:15 PM)

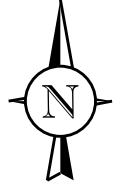


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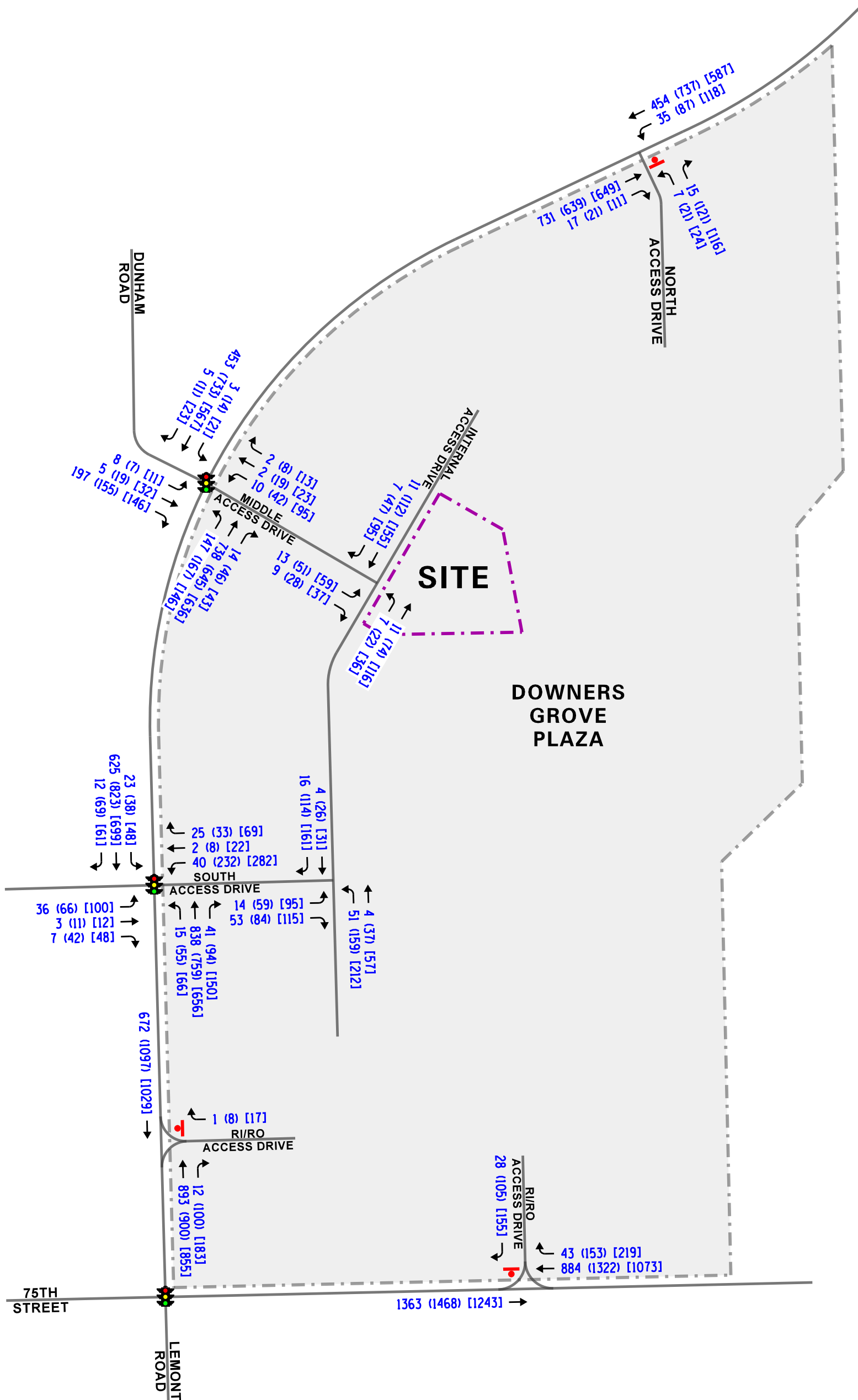


**LEGEND**

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (5:00-6:00 PM)
- [00] - SATURDAY MIDDAY PEAK HOUR (12:15 -1:15 PM)



NOT TO SCALE

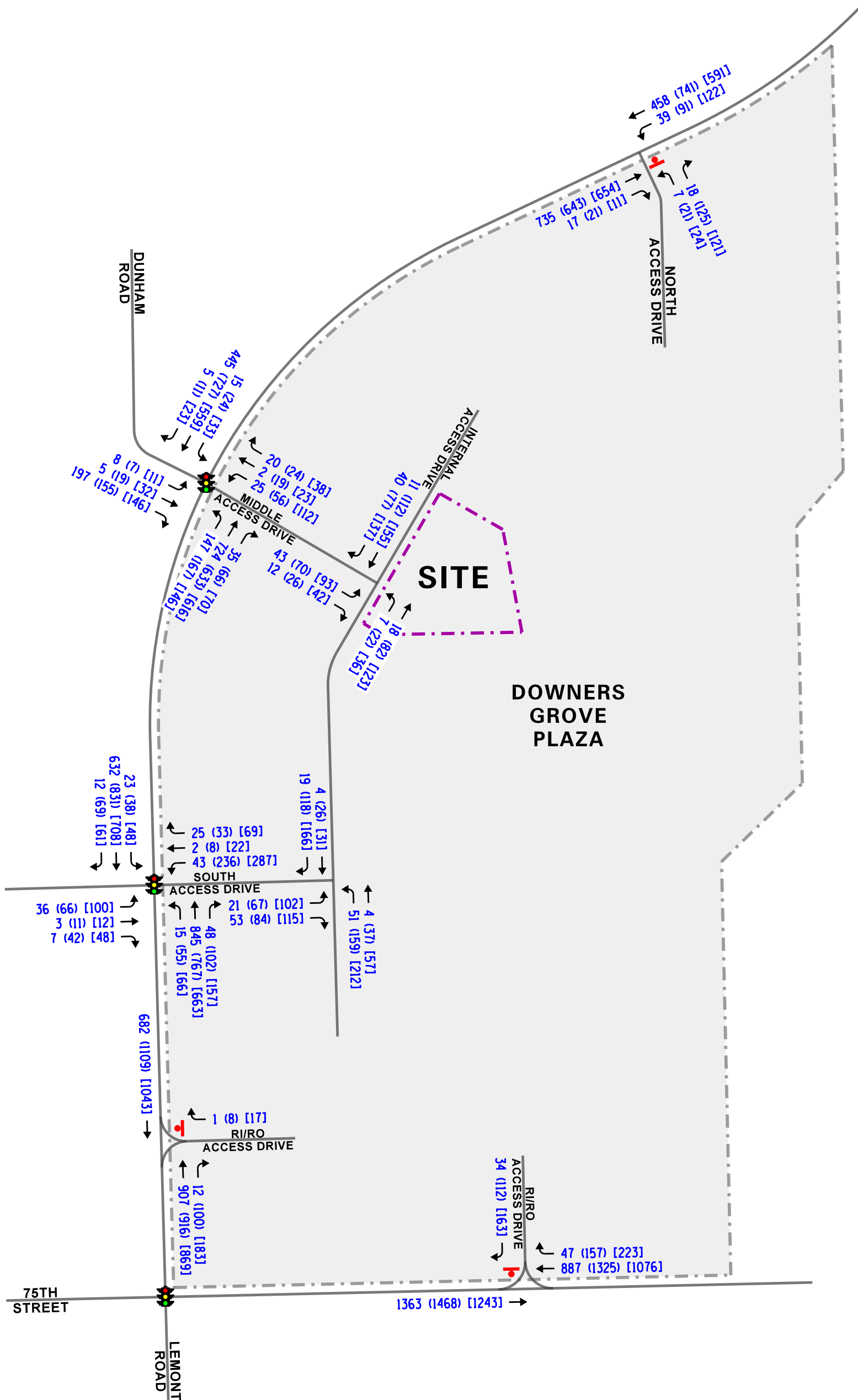


LEGEND

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (5:00-6:00 PM)
- [00] - SATURDAY MIDDAY PEAK HOUR (12:15 -1:15 PM)



NOT TO SCALE



## 5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning, weekday evening and Saturday midday peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access drives are projected to operate and whether any road improvements or modifications are required.

### Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning, weekday evening, and Saturday midday peak hours for the base (Year 2021), Year 2027 no-build, and Year 2027 total projected traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)*, 6<sup>th</sup> Edition and analyzed using Synchro/SimTraffic 11 software. The analysis for the traffic-signal controlled intersections were accomplished using field measures.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the base, no-build and total projected conditions are presented in **Tables 4 through 8**. A discussion of each intersection follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 4  
 CAPACITY ANALYSIS RESULTS  
 LEMONT ROAD WITH DUNHAM ROAD / MIDDLE ACCESS DRIVE – SIGNALIZED

|   | Peak Hour                 | Eastbound |           | Westbound |           | Northbound |          | Southbound |           | Overall   |
|---|---------------------------|-----------|-----------|-----------|-----------|------------|----------|------------|-----------|-----------|
|   |                           | L/T       | R         | L/T       | R         | L          | T/R      | L          | T/R       |           |
| Year 2021<br>Conditions                 | Weekday Morning Peak Hour | C<br>20.8 | C<br>34.3 | C<br>20.7 | A<br>0.0  | A<br>3.8   | A<br>5.7 | A<br>6.0   | B<br>13.4 | B<br>11.6 |
|   |                           | C – 33.4  |           | C – 20.7  |           | A – 5.4    |          | B – 13.4   |           |           |
|   | Weekday Evening Peak Hour | C<br>24.2 | C<br>34.4 | C<br>26.4 | C<br>22.8 | A<br>3.8   | A<br>2.5 | A<br>4.9   | B<br>12.3 | B<br>10.4 |
|   |                           | C – 33.0  |           | C – 26.1  |           | A – 2.8    |          | B – 12.2   |           |           |
| Saturday Midday Peak Hour               | C<br>25.4                 | C<br>34.4 | C<br>32.5 | C<br>23.3 | A<br>3.7  | A<br>3.5   | A<br>4.7 | B<br>11.2  | B<br>11.3 |           |
|   |                           | C – 32.4  |           | C – 31.8  |           | A – 3.5    |          | B – 11.0   |           |           |
| Year 2027 No-Build<br>Conditions        | Weekday Morning Peak Hour | C<br>20.8 | C<br>34.3 | C<br>20.8 | B<br>20.0 | A<br>3.2   | A<br>5.1 | A<br>6.0   | B<br>13.5 | B<br>11.3 |
|   |                           | C – 33.4  |           | C – 20.7  |           | A – 4.8    |          | B – 13.5   |           |           |
|   | Weekday Evening Peak Hour | C<br>24.2 | C<br>34.4 | C<br>27.0 | C<br>23.0 | A<br>3.5   | A<br>2.0 | A<br>4.9   | B<br>12.5 | B<br>10.2 |
|   |                           | C – 33.0  |           | C – 26.5  |           | A – 2.3    |          | B – 12.3   |           |           |
| Saturday Midday Peak Hour               | C<br>25.4                 | C<br>34.4 | C<br>33.9 | C<br>23.6 | A<br>3.8  | A<br>3.5   | A<br>5.0 | B<br>11.8  | B<br>11.6 |           |
|   |                           | C – 32.4  |           | C – 32.8  |           | A – 3.5    |          | B – 11.6   |           |           |
| Year 2027 Total<br>Projected Conditions | Weekday Morning Peak Hour | C<br>20.8 | C<br>34.3 | C<br>22.0 | C<br>21.3 | A<br>3.3   | A<br>5.2 | A<br>6.0   | B<br>13.5 | B<br>11.5 |
|   |                           | C – 33.4  |           | C – 21.7  |           | A – 4.9    |          | B – 13.3   |           |           |
|   | Weekday Evening Peak Hour | C<br>24.2 | C<br>34.4 | C<br>28.1 | C<br>24.2 | A<br>3.5   | A<br>2.1 | A<br>4.8   | B<br>12.4 | B<br>10.5 |
|   |                           | C – 33.0  |           | C – 27.2  |           | A – 2.3    |          | B – 12.4   |           |           |
| Saturday Midday Peak Hour               | C<br>25.4                 | C<br>34.3 | D<br>36.8 | C<br>25.3 | A<br>3.8  | A<br>3.5   | A<br>5.1 | B<br>11.8  | B<br>12.2 |           |
|   |                           | C – 32.3  |           | C – 34.3  |           | A – 3.5    |          | B – 11.5   |           |           |

Letter denotes Level of Service; Delay is measured in seconds. L – Left Turns T – Through R – Right Turns

Table 5  
CAPACITY ANALYSIS RESULTS  
LEMONT ROAD WITH SOUTH ACCESS DRIVE – SIGNALIZED

|   | Peak Hour                 | Eastbound |           | Westbound |           | Northbound |           | Southbound |          |           | Overall   |
|---|---------------------------|-----------|-----------|-----------|-----------|------------|-----------|------------|----------|-----------|-----------|
|   |                           | L         | T/R       | L         | T/R       | L          | T/R       | L          | T        | R         |           |
| Year 2021<br>Conditions                 | Weekday Morning Peak Hour | C<br>27.8 | C<br>21.2 | C<br>26.9 | C<br>25.5 | A<br>3.0   | A<br>5.7  | A<br>0.6   | A<br>2.0 | A<br>0.0  | A<br>5.0  |
|   |                           | C – 26.4  |           | C – 26.6  |           | A – 5.7    |           | A – 1.9    |          |           |           |
|   | Weekday Evening Peak Hour | C<br>28.0 | B<br>16.6 | D<br>43.5 | B<br>18.7 | B<br>12.1  | B<br>13.4 | A<br>5.5   | A<br>8.2 | A<br>0.6  | B<br>14.2 |
|   | C – 22.9                  |           | D – 40.7  |           | B – 13.4  |            | A – 7.6   |            |          |           |           |
| Saturday Midday Peak Hour               | C<br>23.2                 | B<br>16.6 | C<br>32.6 | B<br>18.0 | A<br>7.9  | B<br>11.6  | A<br>3.3  | A<br>7.4   | A<br>0.2 | B<br>12.8 |           |
|   | C – 20.7                  |           | C – 29.5  |           | B – 11.3  |            | A – 6.7   |            |          |           |           |
| Year 2027 No-Build<br>Conditions        | Weekday Morning Peak Hour | C<br>29.0 | C<br>21.2 | C<br>24.4 | B<br>15.1 | A<br>4.8   | A<br>8.5  | A<br>1.9   | A<br>2.7 | A<br>0.0  | A<br>7.1  |
|   |                           | C – 27.3  |           | C – 20.7  |           | A – 8.4    |           | A – 2.6    |          |           |           |
|   | Weekday Evening Peak Hour | C<br>31.8 | B<br>16.6 | D<br>54.8 | B<br>16.0 | B<br>13.3  | B<br>15.3 | A<br>5.8   | A<br>8.3 | A<br>0.6  | B<br>16.7 |
|   | C – 25.0                  |           | D – 49.0  |           | B – 15.1  |            | A – 7.6   |            |          |           |           |
| Saturday Midday Peak Hour               | C<br>22.2                 | B<br>16.6 | C<br>29.7 | B<br>15.7 | A<br>9.7  | B<br>15.0  | A<br>4.6  | A<br>8.9   | A<br>0.2 | B<br>14.6 |           |
|   | C – 20.1                  |           | C – 26.3  |           | B – 14.6  |            | A – 8.0   |            |          |           |           |
| Year 2027 Total<br>Projected Conditions | Weekday Morning Peak Hour | C<br>29.0 | C<br>21.2 | C<br>24.6 | B<br>15.1 | A<br>4.9   | A<br>8.5  | A<br>2.1   | A<br>2.8 | A<br>0.0  | A<br>7.2  |
|   |                           | C – 27.3  |           | C – 20.9  |           | A – 8.5    |           | A – 2.7    |          |           |           |
|   | Weekday Evening Peak Hour | C<br>31.8 | B<br>16.6 | E<br>56.4 | B<br>16.0 | B<br>13.3  | B<br>15.4 | A<br>6.1   | A<br>8.6 | A<br>0.7  | B<br>17.0 |
|   | C – 25.0                  |           | D – 50.4  |           | B – 15.2  |            | A – 7.9   |            |          |           |           |
| Saturday Midday Peak Hour               | C<br>21.9                 | B<br>16.6 | C<br>29.7 | B<br>15.7 | A<br>9.8  | B<br>15.3  | A<br>4.8  | A<br>9.1   | A<br>0.2 | B<br>14.7 |           |
|   | C – 19.9                  |           | C – 26.3  |           | B – 14.9  |            | A – 8.1   |            |          |           |           |

Letter denotes Level of Service; Delay is measured in seconds. L – Left Turns T – Through R – Right Turns



Table 6  
CAPACITY ANALYSIS RESULTS  
UNSIGNALIZED INTERSECTIONS – BASE CONDITIONS

| Intersection  | Weekday Morning Peak Hour |       | Weekday Evening Peak Hour |       | Saturday Midday Peak Hour |       |
|---|---------------------------|-------|---------------------------|-------|---------------------------|-------|
|   | LOS                       | Delay | LOS                       | Delay | LOS                       | Delay |
| <b>Lemont Road with North Access Drive</b>  |                           |       |                           |       |                           |       |
| • Westbound Approach  | B                         | 12.9  | B                         | 13.6  | B                         | 13.5  |
| • Southbound Left Turns   | B                         | 11.2  | A                         | 9.2   | A                         | 9.3   |
| <b>Lemont Road with Right-In/Right-Out Access Drive</b>   |                           |       |                           |       |                           |       |
| • Westbound Right Turns   | B                         | 11.6  | B                         | 12.0  | B                         | 12.1  |
| <b>75<sup>th</sup> Street with Right-In/Right-Out Access Drive</b>  |                           |       |                           |       |                           |       |
| • Southbound Right Turns  | B                         | 13.8  | C                         | 20.7  | C                         | 19.0  |
| <b>Middle Access Drive with Internal Drive</b>  |                           |       |                           |       |                           |       |
| • ICU Level of Service <sup>1</sup>   | A                         | 14.0% | A                         | 25.7% | A                         | 33.3% |
| <b>South Access Drive with Internal Drive</b>   |                           |       |                           |       |                           |       |
| • ICU Level of Service <sup>1</sup>   | A                         | 13.5% | A                         | 28.5% | A                         | 35.3% |
| LOS = Level of Service<br>Delay is measured in seconds.<br>1 - The operation of this intersection is based on a critical volume to saturation flow (v/s) evaluation also known as the Intersection Capacity Utilization (ICU) method. |                           |       |                           |       |                           |       |

Table 7  
CAPACITY ANALYSIS RESULTS  
UNSIGNALIZED INTERSECTIONS – YEAR 2027 NO-BUILD CONDITIONS

| Intersection  | Weekday Morning Peak Hour |       | Weekday Evening Peak Hour |       | Saturday Midday Peak Hour |       |
|---|---------------------------|-------|---------------------------|-------|---------------------------|-------|
|   | LOS                       | Delay | LOS                       | Delay | LOS                       | Delay |
| <b>Lemont Road with North Access Drive</b>  |                           |       |                           |       |                           |       |
| • Westbound Approach  | B                         | 13.2  | B                         | 14.4  | B                         | 14.3  |
| • Southbound Left Turns   | B                         | 11.5  | A                         | 9.4   | A                         | 9.5   |
| <b>Lemont Road with Right-In/Right-Out Access Drive</b>   |                           |       |                           |       |                           |       |
| • Westbound Right Turns   | B                         | 11.8  | B                         | 12.2  | B                         | 12.9  |
| <b>75<sup>th</sup> Street with Right-In/Right-Out Access Drive</b>  |                           |       |                           |       |                           |       |
| • Southbound Right Turns  | B                         | 14.7  | C                         | 24.3  | C                         | 23.3  |
| <b>Middle Access Drive with Internal Drive</b>  |                           |       |                           |       |                           |       |
| • ICU Level of Service <sup>1</sup>   | A                         | 16.8% | A                         | 27.2% | A                         | 35.4% |
| <b>South Access Drive with Internal Drive</b>   |                           |       |                           |       |                           |       |
| • ICU Level of Service <sup>1</sup>   | A                         | 19.7% | A                         | 32.5% | A                         | 41.6% |
| LOS = Level of Service<br>Delay is measured in seconds.<br>1 - The operation of this intersection is based on a critical volume to saturation flow (v/s) evaluation also known as the Intersection Capacity Utilization (ICU) method. |                           |       |                           |       |                           |       |

Table 8  
CAPACITY ANALYSIS RESULTS  
UNSIGNALIZED INTERSECTIONS – YEAR 2027 TOTAL PROJECTED CONDITIONS

| Intersection  | Weekday Morning Peak Hour |       | Weekday Evening Peak Hour |       | Saturday Midday Peak Hour |       |
|---|---------------------------|-------|---------------------------|-------|---------------------------|-------|
|   | LOS                       | Delay | LOS                       | Delay | LOS                       | Delay |
| <b>Lemont Road with North Access Drive</b>  |                           |       |                           |       |                           |       |
| • Westbound Approach  | B                         | 13.1  | B                         | 14.5  | B                         | 14.4  |
| • Southbound Left Turns   | B                         | 11.6  | A                         | 9.4   | A                         | 9.6   |
| <b>Lemont Road with Right-In/Right-Out Access Drive</b>   |                           |       |                           |       |                           |       |
| • Westbound Right Turns   | B                         | 11.9  | B                         | 12.3  | B                         | 13    |
| <b>75<sup>th</sup> Street with Right-In/Right-Out Access Drive</b>  |                           |       |                           |       |                           |       |
| • Southbound Right Turns  | B                         | 13.7  | D                         | 25.2  | C                         | 24.3  |
| <b>Middle Access Drive with Internal Drive</b>  |                           |       |                           |       |                           |       |
| • ICU Level of Service <sup>1</sup>   | A                         | 17.1% | A                         | 30.3% | A                         | 40.1% |
| <b>South Access Drive with Internal Drive</b>   |                           |       |                           |       |                           |       |
| • ICU Level of Service <sup>1</sup>   | A                         | 19.7% | A                         | 33.1% | A                         | 42.3% |
| LOS = Level of Service<br>Delay is measured in seconds.<br>1 - The operation of this intersection is based on a critical volume to saturation flow (v/s) evaluation also known as the Intersection Capacity Utilization (ICU) method. |                           |       |                           |       |                           |       |

## Discussion and Recommendations

The following is an evaluation of the analyzed intersections based on the projected traffic volumes and the capacity analyses performed.

### *Lemont Road with Dunham Road and Middle Access Drive*

The results of the capacity analysis indicate that overall this intersection currently operates at Level of Service (LOS) B during the weekday morning, weekday evening, and Saturday midday peak hours. All approaches currently operate at LOS C or better during the peak hours.

Under Year 2027 no-build conditions, overall this intersection will continue to operate at the same existing levels of service during the weekday morning, weekday evening, and Saturday midday peak hours with increases in delay of less than one second. All approaches will continue to operate at the same existing levels of service during the peak hours with increases in delay of approximately one second with the exception of the westbound right-turn movement, which will operate at LOS B.

Under Year 2027 total projected conditions, overall this intersection will continue to operate at the same levels of service during the weekday morning, weekday evening, and Saturday midday peak hours with increases in delay of less than one second over no-build conditions. All approaches will continue to operate at the same levels of service during the peak hours with increases in delay of approximately one second with the exception of the westbound right-turn movement, which is projected to operate at LOS C during the weekday morning peak hour with an increase in delay of one second and it will continue to operate at LOS C during the Saturday midday peak hour with an increase in delay of less than two seconds over no-build conditions. The shared left-turn/through lane is projected to operate at LOS D with an increase in delay of approximately three seconds during the Saturday midday peak hour over no-build conditions. Based on field observations, the westbound lanes should be restriped. Therefore, this intersection has sufficient reserve capacity to accommodate the traffic estimated to be generated by the proposed outlot parcel and no roadway or traffic control improvements will be required.

### *Lemont Road with South Access Drive*

The results of the capacity analysis indicate that overall this intersection currently operates at LOS A during the weekday morning peak hour and LOS B during the weekday evening and Saturday midday peak hours. All approaches currently operate at an acceptable LOS D or better during the peak hours.

Under Year 2027 no-build conditions, overall this intersection will continue to operate at the same existing levels of service during the weekday morning, weekday evening, and Saturday midday peak hours with increases in delay of approximately two seconds. All approaches will continue to operate at the same existing levels of service during the peak hours with increases in delay of approximately three seconds.

Under Year 2027 total projected conditions, overall this intersection will continue to operate at the same levels of service during the weekday morning, weekday evening, and Saturday midday peak hours with increases in delay of less than one second over no-build conditions. All approaches will continue to operate at the same levels of service during the peak hours with increases in delay of less than one second with the exception of the westbound left-turn movement, which is projected to operate on the threshold of LOS D/E during the weekday evening peak hour with an increase in delay of approximately two seconds. Based on a review of the simulation, the westbound queues extend beyond the south leg of the internal intersection during the weekday evening peak hour. However, it is important to note that the queues will clear with every green phase.

Based on field observations, the westbound lanes should be restriped. Therefore, this intersection has sufficient reserve capacity to accommodate the traffic estimated to be generated by the proposed outlot parcel and no roadway or traffic control improvements will be required.

#### *Lemont Avenue with North Access Drive*

The results of the capacity analysis indicate that the westbound approach currently operate at LOS B during the weekday morning, weekday evening, and Saturday midday peak hours. In addition, the southbound left turning movements currently operates at LOS B or better during the peak hours.

Under Year 2027 no-build conditions, the westbound approach and the southbound left-turn movements will continue to operate at the same existing levels of service with increases in delay of less than one second.

Under Year 2027 total projected conditions, the westbound approach and the southbound left turning movements will continue to operate at the same levels of service during the weekday morning, weekday evening, and Saturday midday peak hours with increases in delay of less than one second over no-build conditions. As such, this intersection has sufficient reserve capacity to accommodate the traffic estimated to be generated by the proposed outlot parcel and no roadway or traffic control improvements will be required.

#### *Lemont Avenue with Right-Out Only Access Drive*

The results of the capacity analysis indicate that the outbound movements are operating at LOS B during the weekday morning, weekday evening, and Saturday midday peak hours.

Under Year 2027 no-build conditions, all movements will operate at the same existing levels of service during all three peak hours with increases in delay of less than one second.

Under Year 2027 total projected conditions, all movements will operate at the same levels of service during the peak hours with increases in delay of less than one second over no-build conditions. As such, this access drive will be adequate in accommodating the traffic estimated to be generated by the proposed outlot parcel and will ensure efficient and flexible access is provided.

### *75<sup>th</sup> Street with Right-Out Only Access Drive*

The results of the capacity analysis indicate that the outbound movements are operating at LOS B during the weekday morning peak hour and LOS C during the weekday evening and Saturday midday peak hours.

Under Year 2027 no-build conditions, all movements will operate at the same existing levels of service during the peak hours with increases in delay of less than one second.

Under Year 2027 total projected conditions, all movements will operate at the same levels of service during all three peak hours with increases in delay of approximately one second over no-build conditions. As such, this access drive will be adequate in accommodating the traffic estimated to be generated by the proposed outlot parcel and will ensure efficient and flexible access is provided.

### *Middle Access Drive with Internal Drive*

Because of the traffic control configuration of this intersection where the eastbound traffic is free flow and the other two approaches are under stop sign control, the intersection could not be analyzed using HCM procedures. This intersection's traffic control is designed to allow eastbound movements to operate under free flow conditions in order to keep eastbound queues from extending onto the middle access drive. Given this traffic control configuration and the limitations of the HCM procedures, the intersection was analyzed using the intersection capacity utilization (ICU) level of service. The ICU indicates how much reserve capacity is available or how much an intersection is over capacity.

Based on the ICU analysis, the intersection currently utilizes approximately 14 percent of the capacity of the intersection during the weekday morning peak hour and approximately 25 to 33 percent of its capacity during the weekday evening and Saturday midday peak hours.

Under Year 2027 no-build conditions, it is projected that the intersection will utilize approximately 17 percent of its capacity during the weekday morning peak hour and 27 to 35 percent of its capacity during the weekday evening and Saturday midday peak hours.

Under Year 2027 total projected conditions, it is projected that the intersection will utilize approximately 17 percent of its capacity during the weekday morning peak hour and 30 to 40 percent of its capacity during the weekday evening and Saturday midday peak hours. As a result, the intersection will continue to operate efficiently and with minimal delay. As such, this intersection has sufficient reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no roadway or traffic control improvements will be required.

### *South Access Drive with Internal Drive*

Because of the traffic control configuration of this intersection where the eastbound traffic is free flow and the other two approaches are under stop sign control, the intersection could not be analyzed using HCM procedures. This intersection's traffic control is designed to allow eastbound movements to operate under free flow conditions in order to keep eastbound queues from extending onto the middle access drive. Given this traffic control configuration and the limitations of the HCM procedures, the intersection was analyzed using the intersection capacity utilization (ICU) level of service. The ICU indicates how much reserve capacity is available or how much an intersection is over capacity.

Based on the ICU analysis, the intersection currently utilizes approximately 14 percent of the capacity of the intersection during the weekday morning peak hour and approximately 29 to 35 percent of its capacity during the weekday evening and Saturday midday peak hours. Under Year 2027 no-build conditions, it is projected that the intersection will utilize approximately 20 percent of its capacity during the weekday morning peak hour and 32 to 42 percent of its capacity during the weekday evening and Saturday midday peak hours.

Under Year 2027 total projected conditions, it is projected that the intersection will utilize approximately 20 percent of its capacity during the weekday morning peak hour and 33 to 42 percent of its capacity during the weekday evening and Saturday midday peak hours. As a result, the intersection will continue to operate efficiently and with minimal delay. As such, this intersection has sufficient reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no roadway or traffic control improvements will be required.

### *On-Site Circulation and Drive-Through Stacking*

The drive-through facility for the proposed outlot parcel will extend along the east and the north sides of the building. As proposed, vehicles will enter the drive-through lane at the southeast corner of the site and exit at the northwest corner of the building. A review of the site plan indicated that approximately eight vehicles will be able to be accommodated within the drive-through lane without blocking the access drives or internal circulation. The stacking of eight vehicles meets the stacking requirement in the Village of Downers Grove municipal code. Additionally, per the municipal code, the proposed location of the ordering board should be at least three vehicles from the pick-up window.

Appropriate wayfinding signs and striping should be provided within the site directing customers to and from the entrance of the drive-through lane. "Do Not Enter" signs should be placed at the exit of the drive-through lane to deter opposing traffic from entering the drive-through lane from the one-way exit direction. Additionally, the exiting movements from the drive-through lane should be under stop sign control.

## Parking Evaluation

The following describes the results of a parking evaluation conducted for the Downers Park Plaza taking into consideration the existing parking demand and parking demand generated by existing, proposed, and vacant uses within the shopping center.

### Existing Parking Demand

Parking inventory and occupancy surveys were conducted in the parking lots serving Downers Park Plaza. The surveys were performed every hour from 8:00 A.M. to 8:00 P.M. on Wednesday, September 1, 2021 and Saturday, September 11, 2021. The surveys were broken out by rows as shown in **Figure 10**. The results of the parking inventory and occupancy surveys are shown in **Tables 9** and **10**.

Downers Park Plaza has a total of 1,405 parking spaces and had a peak parking demand of 448 vehicles on Thursday at 1:00 P.M. and 481 vehicles on Saturday at 12:00 P.M. With a total of 1,405 parking spaces parking spaces available, approximately 32 percent of the parking spaces were occupied during the plaza's peak parking demand on Thursday and approximately 34 percent of the parking spaces were occupied during the plaza's peak parking demand on Saturday.

### Projected Parking Demand

The projected parking demand of Downers Park Plaza was determined as follows:

- The estimated parking demand of the proposed outlot was based on the Village of Downers Grove Municipal Code (ratio of 10 spaces per 1,000 square-foot for the restaurant and 4 spaces per 1000 square-foot for retail) which is higher than the rates provided in the Institute of Transportation Engineers *Parking Generation Manual*, 5<sup>th</sup> Edition. The hourly distribution for proposed outlot was also based on the Village of Downers Municipal Code **Table 11** summarizes the hourly distribution of parking demand for the proposed outlot.
- The estimated parking demand of the proposed Panera Bread restaurant was based on the Village of Downers Grove Municipal Code (ratio of 10 spaces per 1,000 square-foot) which is higher than the rates provided in the Institute of Transportation Engineers *Parking Generation Manual*, 5<sup>th</sup> Edition. The hourly distribution for proposed Panera Bread restaurant was also based on the Village of Downers Municipal Code. **Table 12** summarizes the hourly distribution of parking demand for the Panera Bread restaurant with a drive-through window.
- The estimated parking demand of the vacant space was based on the Village of Downers Grove Municipal Code (ratio of four spaces per 1,000 square-foot), which is higher than the rates provided in the Institute of Transportation Engineers *Parking Generation Manual*, 5<sup>th</sup> Edition. The hourly distribution for vacant space was also based on the Village of Downers Municipal Code. **Table 13** summarizes the hourly distribution of parking demand for the vacant space.





Parking Occupancy Surveys

Figure 10

Table 9  
EXISTING PARKING SURVEYS – THURSDAY, SEPTEMBER 9, 2021

| Time             | Parking Lots |          |           |            |            |            |            |           |          |           |            |            |           |           |           |          | Total       | Percent Occupied |
|------------------|--------------|----------|-----------|------------|------------|------------|------------|-----------|----------|-----------|------------|------------|-----------|-----------|-----------|----------|-------------|------------------|
|                  | 1            | 2        | 3         | 4          | 5          | 6          | 7          | 8         | 9        | 10        | 11         | 12         | 13        | 14        | 15        | 16       |             |                  |
| 8:00 AM          | 1            | 0        | 0         | 6          | 1          | 24         | 42         | 15        | 0        | 11        | 8          | 10         | 0         | 1         | 25        | 3        | 147         | 10%              |
| 9:00 AM          | 4            | 0        | 1         | 12         | 4          | 51         | 47         | 15        | 1        | 22        | 21         | 10         | 0         | 1         | 22        | 5        | 216         | 15%              |
| 10:00 AM         | 5            | 0        | 1         | 21         | 4          | 61         | 61         | 21        | 1        | 44        | 63         | 11         | 1         | 1         | 22        | 7        | 324         | 23%              |
| 11:00 AM         | 12           | 0        | 2         | 26         | 6          | 76         | 78         | 20        | 0        | 55        | 79         | 10         | 2         | 1         | 20        | 5        | 392         | 28%              |
| 12:00 PM         | 31           | 0        | 2         | 28         | 2          | 82         | 80         | 22        | 2        | 47        | 79         | 12         | 2         | 1         | 14        | 5        | 409         | 29%              |
| 1:00 PM          | 24           | 0        | 2         | 31         | 3          | 83         | 75         | 22        | 0        | 61        | 108        | 14         | 3         | 0         | 17        | 5        | 448         | 32%              |
| 2:00 PM          | 22           | 0        | 0         | 24         | 3          | 87         | 61         | 21        | 1        | 50        | 103        | 14         | 4         | 0         | 15        | 4        | 409         | 29%              |
| 3:00 PM          | 18           | 0        | 0         | 21         | 2          | 78         | 49         | 22        | 2        | 49        | 94         | 14         | 2         | 0         | 15        | 5        | 371         | 26%              |
| 4:00 PM          | 29           | 0        | 0         | 22         | 3          | 76         | 51         | 20        | 0        | 45        | 90         | 14         | 5         | 0         | 15        | 3        | 373         | 27%              |
| 5:00 PM          | 44           | 0        | 0         | 20         | 5          | 72         | 53         | 18        | 0        | 32        | 72         | 15         | 4         | 0         | 11        | 3        | 349         | 25%              |
| 6:00 PM          | 55           | 0        | 1         | 14         | 4          | 62         | 38         | 17        | 1        | 37        | 91         | 13         | 4         | 0         | 12        | 4        | 353         | 25%              |
| 7:00 PM          | 45           | 0        | 1         | 8          | 3          | 45         | 29         | 7         | 0        | 38        | 76         | 12         | 4         | 0         | 12        | 3        | 283         | 20%              |
| 8:00 PM          | 52           | 0        | 0         | 7          | 5          | 32         | 27         | 4         | 0        | 33        | 54         | 11         | 2         | 0         | 13        | 3        | 243         | 17%              |
| <b>Inventory</b> | <b>65</b>    | <b>0</b> | <b>13</b> | <b>187</b> | <b>143</b> | <b>201</b> | <b>222</b> | <b>41</b> | <b>0</b> | <b>95</b> | <b>249</b> | <b>101</b> | <b>33</b> | <b>13</b> | <b>42</b> | <b>0</b> | <b>1405</b> |                  |

Table 10  
EXISTING PARKING SURVEYS – SATURDAY, SEPTEMBER 11, 2021

| Time             | Parking Lots |          |           |            |            |            |            |           |          |           |            |            |           |           |           |          | Total       | Percent Occupied |
|------------------|--------------|----------|-----------|------------|------------|------------|------------|-----------|----------|-----------|------------|------------|-----------|-----------|-----------|----------|-------------|------------------|
|                  | 1            | 2        | 3         | 4          | 5          | 6          | 7          | 8         | 9        | 10        | 11         | 12         | 13        | 14        | 15        | 16       |             |                  |
| 8:00 AM          | 0            | 0        | 0         | 7          | 1          | 24         | 34         | 13        | 0        | 8         | 9          | 10         | 0         | 0         | 18        | 3        | 127         | 9%               |
| 9:00 AM          | 0            | 0        | 1         | 7          | 1          | 48         | 47         | 12        | 1        | 10        | 16         | 11         | 0         | 0         | 20        | 3        | 177         | 13%              |
| 10:00 AM         | 2            | 0        | 0         | 12         | 3          | 67         | 61         | 16        | 2        | 38        | 75         | 13         | 1         | 0         | 15        | 5        | 310         | 22%              |
| 11:00 AM         | 10           | 0        | 0         | 12         | 4          | 80         | 76         | 17        | 0        | 42        | 95         | 14         | 1         | 0         | 13        | 4        | 368         | 26%              |
| 12:00 PM         | 29           | 0        | 1         | 23         | 4          | 97         | 103        | 16        | 1        | 51        | 123        | 15         | 1         | 0         | 11        | 6        | 481         | 34%              |
| 1:00 PM          | 28           | 0        | 0         | 24         | 3          | 82         | 91         | 16        | 2        | 47        | 115        | 15         | 4         | 1         | 15        | 4        | 447         | 32%              |
| 2:00 PM          | 38           | 0        | 1         | 30         | 2          | 69         | 79         | 15        | 1        | 52        | 142        | 20         | 5         | 1         | 11        | 5        | 471         | 34%              |
| 3:00 PM          | 37           | 0        | 1         | 26         | 5          | 70         | 68         | 11        | 1        | 52        | 138        | 17         | 4         | 0         | 10        | 5        | 445         | 32%              |
| 4:00 PM          | 35           | 0        | 0         | 27         | 6          | 67         | 54         | 4         | 2        | 41        | 124        | 13         | 3         | 0         | 11        | 5        | 392         | 28%              |
| 5:00 PM          | 39           | 0        | 0         | 26         | 5          | 65         | 47         | 3         | 0        | 35        | 102        | 13         | 4         | 0         | 12        | 4        | 355         | 25%              |
| 6:00 PM          | 42           | 0        | 0         | 15         | 3          | 49         | 40         | 3         | 1        | 31        | 83         | 14         | 4         | 0         | 13        | 3        | 301         | 21%              |
| 7:00 PM          | 45           | 0        | 0         | 15         | 7          | 41         | 36         | 1         | 0        | 30        | 62         | 12         | 4         | 0         | 11        | 3        | 267         | 19%              |
| 8:00 PM          | 50           | 0        | 0         | 10         | 6          | 30         | 34         | 2         | 1        | 29        | 36         | 12         | 2         | 0         | 10        | 2        | 224         | 16%              |
| <b>Inventory</b> | <b>65</b>    | <b>0</b> | <b>13</b> | <b>187</b> | <b>143</b> | <b>201</b> | <b>222</b> | <b>41</b> | <b>0</b> | <b>95</b> | <b>249</b> | <b>101</b> | <b>33</b> | <b>13</b> | <b>42</b> | <b>0</b> | <b>1405</b> |                  |

Table 11  
PROJECTED OUTLOT HOURLY PARKING DEMAND

| Time Period | Weekday | Weekend |
|-------------|---------|---------|
| 8:00 AM     | 24      | 28      |
| 9:00 AM     | 24      | 28      |
| 10:00 AM    | 24      | 28      |
| 11:00 AM    | 24      | 28      |
| 12:00 AM    | 24      | 28      |
| 1:00 PM     | 24      | 28      |
| 2:00 PM     | 24      | 28      |
| 3:00 PM     | 24      | 28      |
| 4:00 PM     | 24      | 28      |
| 5:00 PM     | 24      | 28      |
| 6:00 PM     | 33      | 29      |
| 7:00 PM     | 33      | 29      |
| 8:00 PM     | 33      | 29      |

Table 12  
PROJECTED PANERA BREAD HOURLY PARKING DEMAND

| Time Period | Weekday | Weekend |
|-------------|---------|---------|
| 8:00 AM     | 27      | 27      |
| 9:00 AM     | 27      | 27      |
| 10:00 AM    | 27      | 27      |
| 11:00 AM    | 27      | 27      |
| 12:00 AM    | 27      | 27      |
| 1:00 PM     | 27      | 27      |
| 2:00 PM     | 27      | 27      |
| 3:00 PM     | 27      | 27      |
| 4:00 PM     | 27      | 27      |
| 5:00 PM     | 27      | 27      |
| 6:00 PM     | 39      | 39      |
| 7:00 PM     | 39      | 39      |
| 8:00 PM     | 39      | 39      |

Table 13  
 VACANT RETAIL SPACE HOURLY PARKING DEMAND

| Time Period | Weekday | Weekend |
|-------------|---------|---------|
| 8:00 AM     | 93      | 133     |
| 9:00 AM     | 93      | 133     |
| 10:00 AM    | 93      | 133     |
| 11:00 AM    | 93      | 133     |
| 12:00 AM    | 93      | 133     |
| 1:00 PM     | 93      | 133     |
| 2:00 PM     | 93      | 133     |
| 3:00 PM     | 93      | 133     |
| 4:00 PM     | 93      | 133     |
| 5:00 PM     | 93      | 133     |
| 6:00 PM     | 120     | 80      |
| 7:00 PM     | 120     | 80      |
| 8:00 PM     | 120     | 80      |

## Projected Parking Demand Results

**Tables 14** and **15** show the total projected parking demand of Downers Park Plaza based on the following:

- The existing hourly parking demand.
- The hourly parking demand estimated to be generated by the proposed outlot.
- The hourly parking demand estimated to be generated by the proposed Panera Bread.
- The hourly parking demand estimated to be generated by the full occupancy of Downers Park Plaza.

It should be noted that the number of parking spaces will be reduced by 101 parking spaces with the buildout of the currently under construction Panera Bread restaurant and will be reduced by 35 parking spaces with the buildout of the outlot resulting in a net parking supply of 1269 parking spaces.

The following summarizes the results of the projected parking demand:

- *Weekday Peak Parking Demand.* Downers Park Plaza is estimated to have a peak parking demand of approximately 592 vehicles (47 percent) on a Thursday at 1:00 P.M.
- *Weekend Peak Parking Demand.* Downers Park Plaza is estimated to have a peak parking demand of approximately 669 vehicles (53 percent) on a Saturday at 12:00 P.M.

Based on the projected parking demand it can be seen that the proposed parking supply will be sufficient accommodating the future parking demand, including the proposed outlot parcel.

Table 14  
PROJECTED HOURLY PARKING OCCUPANCY - WEEKDAY

| Time             | Existing Surveys | Under Construction<br>Panera Bread | Vacant<br>Space | Proposed<br>Outlot | Total        | Percent<br>Occupied |
|------------------|------------------|------------------------------------|-----------------|--------------------|--------------|---------------------|
| 8:00 AM          | 147              | 27                                 | 93              | 24                 | 291          | 23%                 |
| 9:00 AM          | 216              | 27                                 | 93              | 24                 | 360          | 28%                 |
| 10:00 AM         | 324              | 27                                 | 93              | 24                 | 468          | 37%                 |
| 11:00 AM         | 392              | 27                                 | 93              | 24                 | 536          | 42%                 |
| 12:00 PM         | 409              | 27                                 | 93              | 24                 | 553          | 44%                 |
| 1:00 PM          | 448              | 27                                 | 93              | 24                 | 592          | 47%                 |
| 2:00 PM          | 409              | 27                                 | 93              | 24                 | 553          | 44%                 |
| 3:00 PM          | 371              | 27                                 | 93              | 24                 | 515          | 41%                 |
| 4:00 PM          | 373              | 27                                 | 93              | 24                 | 517          | 41%                 |
| 5:00 PM          | 349              | 27                                 | 93              | 24                 | 493          | 39%                 |
| 6:00 PM          | 353              | 39                                 | 120             | 33                 | 545          | 43%                 |
| 7:00 PM          | 283              | 39                                 | 120             | 33                 | 475          | 37%                 |
| 8:00 PM          | 243              | 39                                 | 120             | 33                 | 435          | 34%                 |
| <b>Inventory</b> |                  |                                    |                 |                    | <b>1,269</b> |                     |



Table 15  
PROJECTED HOURLY PARKING OCCUPANCY - SATURDAY

| Time             | Existing Surveys | Under Construction<br>Panera Bread | Vacant<br>Space | Proposed<br>Outlot | Total        | Percent<br>Occupied |
|------------------|------------------|------------------------------------|-----------------|--------------------|--------------|---------------------|
| 8:00 AM          | 127              | 27                                 | 133             | 28                 | 315          | 25%                 |
| 9:00 AM          | 177              | 27                                 | 133             | 28                 | 365          | 29%                 |
| 10:00 AM         | 310              | 27                                 | 133             | 28                 | 498          | 39%                 |
| 11:00 AM         | 368              | 27                                 | 133             | 28                 | 556          | 44%                 |
| 12:00 PM         | 481              | 27                                 | 133             | 28                 | 669          | 53%                 |
| 1:00 PM          | 447              | 27                                 | 133             | 28                 | 635          | 50%                 |
| 2:00 PM          | 471              | 27                                 | 133             | 28                 | 659          | 52%                 |
| 3:00 PM          | 445              | 27                                 | 133             | 28                 | 633          | 50%                 |
| 4:00 PM          | 392              | 27                                 | 133             | 28                 | 580          | 46%                 |
| 5:00 PM          | 355              | 27                                 | 133             | 28                 | 543          | 43%                 |
| 6:00 PM          | 301              | 39                                 | 80              | 29                 | 449          | 35%                 |
| 7:00 PM          | 267              | 39                                 | 80              | 29                 | 415          | 33%                 |
| 8:00 PM          | 224              | 39                                 | 80              | 29                 | 372          | 29%                 |
| <b>Inventory</b> |                  |                                    |                 |                    | <b>1,269</b> |                     |

## 6. Conclusion

Based on existing conditions and the traffic capacity analyses, the findings and recommendations of this study are outlined below:

- The volume of traffic estimated to be generated by the proposed outlot parcel will be reduced due to pass-by trips and internal capture.
- The results of the capacity analysis indicate that the traffic that will be generated by the proposed outlot parcel will not have a significant impact on the area roadways.
- The access system serving Downers Park Plaza will ensure an adequate and flexible access system is provided to accommodate the traffic that will be generated by the proposed outlot parcel.
- The site plan provides for efficient circulation and adequate stacking of 8 vehicles for the proposed drive through restaurant within the outlot parcel.
- Appropriate wayfinding signs and striping should be provided within the site directing customers to and from the entrance of the drive-through lane.
- “Do Not Enter” signs should be placed at the exit of the drive-through lane to deter opposing traffic from entering the drive-through lane from the one-way exit direction.
- Exiting movements from the drive-through lane should be under stop sign control.
- Based on field observations, the westbound lanes should be restriped at the signalized access drives serving Downers Park Plaza.

# Appendix

Traffic Count Summary Sheets

Site Plan

CMAP 2050 Projections Letter

Level of Service Criteria

Capacity Analysis Summary Sheets

# Traffic Count Summary Sheets







Kenig Lindgren O'Hara Aboona, Inc.  
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018  
(847)518-9990 kpachowicz@kloainc.com

Count Name: Old Sutton Rd with Penny Rd  
Site Code:  
Start Date: 10/13/2021  
Page No: 3

### Turning Movement Peak Hour Data (7:15 AM)

| Start Time           | Penny Rd Eastbound |       |       |       |      | Penny Rd Westbound |        |       |       |       | Old Sutton Rd Northbound |            |        |       |       | Old Sutton Rd Southbound |      |            |        |       |       |       |      |            |            |       |       |       |   |       |       |
|----------------------|--------------------|-------|-------|-------|------|--------------------|--------|-------|-------|-------|--------------------------|------------|--------|-------|-------|--------------------------|------|------------|--------|-------|-------|-------|------|------------|------------|-------|-------|-------|---|-------|-------|
|                      | U-Turn             | Left  | Thru  | Right | Peds | App. Total         | U-Turn | Left  | Thru  | Right | Peds                     | App. Total | U-Turn | Left  | Thru  | Right                    | Peds | App. Total | U-Turn | Left  | Thru  | Right | Peds | App. Total | Int. Total |       |       |       |   |       |       |
| 7:15 AM              | 0                  | 2     | 27    | 9     | 0    | 38                 | 0      | 2     | 10    | 9     | 0                        | 21         | 0      | 4     | 5     | 3                        | 0    | 12         | 0      | 4     | 5     | 0     | 0    | 9          | 0          | 4     | 5     | 0     | 0 | 9     | 80    |
| 7:30 AM              | 0                  | 1     | 20    | 8     | 0    | 29                 | 0      | 3     | 14    | 8     | 0                        | 25         | 0      | 4     | 5     | 4                        | 0    | 13         | 0      | 2     | 9     | 0     | 0    | 11         | 0          | 2     | 9     | 0     | 0 | 11    | 78    |
| 7:45 AM              | 0                  | 0     | 32    | 9     | 0    | 41                 | 0      | 0     | 11    | 10    | 0                        | 21         | 0      | 8     | 3     | 6                        | 0    | 17         | 0      | 6     | 12    | 0     | 0    | 18         | 0          | 6     | 12    | 0     | 0 | 18    | 97    |
| 8:00 AM              | 0                  | 0     | 27    | 12    | 0    | 39                 | 0      | 2     | 11    | 10    | 0                        | 23         | 0      | 2     | 5     | 4                        | 0    | 11         | 0      | 3     | 15    | 0     | 0    | 18         | 0          | 3     | 15    | 0     | 0 | 18    | 91    |
| Total                | 0                  | 3     | 106   | 38    | 0    | 147                | 0      | 7     | 46    | 37    | 0                        | 90         | 0      | 18    | 18    | 17                       | 0    | 53         | 0      | 15    | 41    | 0     | 0    | 56         | 0          | 15    | 41    | 0     | 0 | 56    | 346   |
| Approach %           | 0.0                | 2.0   | 72.1  | 25.9  | -    | -                  | 0.0    | 7.8   | 51.1  | 41.1  | -                        | -          | 0.0    | 34.0  | 34.0  | 32.1                     | -    | -          | 0.0    | 26.8  | 73.2  | 0.0   | -    | -          | 0.0        | 26.8  | 73.2  | 0.0   | - | -     | -     |
| Total %              | 0.0                | 0.9   | 30.6  | 11.0  | -    | 42.5               | 0.0    | 2.0   | 13.3  | 10.7  | -                        | 26.0       | 0.0    | 5.2   | 5.2   | 4.9                      | -    | 15.3       | 0.0    | 4.3   | 11.8  | 0.0   | -    | 16.2       | 0.0        | 4.3   | 11.8  | 0.0   | - | 16.2  | -     |
| PHF                  | 0.000              | 0.375 | 0.828 | 0.792 | -    | 0.896              | 0.000  | 0.583 | 0.821 | 0.925 | -                        | 0.900      | 0.000  | 0.563 | 0.900 | 0.708                    | -    | 0.779      | 0.000  | 0.625 | 0.683 | 0.000 | -    | 0.778      | 0.000      | 0.625 | 0.683 | 0.000 | - | 0.778 | 0.892 |
| % Lights             | 0                  | 0     | 103   | 37    | -    | 140                | 0      | 7     | 28    | 32    | -                        | 67         | 0      | 18    | 18    | 14                       | -    | 50         | 0      | 15    | 37    | 0     | -    | 52         | 0          | 15    | 37    | 0     | - | 52    | 309   |
| % Lights             | -                  | 0.0   | 97.2  | 97.4  | -    | 95.2               | -      | 100.0 | 60.9  | 86.5  | -                        | 74.4       | -      | 100.0 | 100.0 | 82.4                     | -    | 94.3       | -      | 100.0 | 90.2  | -     | -    | 92.9       | -          | 100.0 | 90.2  | -     | - | 92.9  | 89.3  |
| Buses                | 0                  | 3     | 0     | 0     | -    | 3                  | 0      | 0     | 1     | 3     | -                        | 4          | 0      | 0     | 0     | 1                        | -    | 1          | 0      | 0     | 0     | 0     | -    | 0          | 0          | 0     | 0     | 0     | - | 0     | 8     |
| % Buses              | -                  | 100.0 | 0.0   | 0.0   | -    | 2.0                | -      | 0.0   | 2.2   | 8.1   | -                        | 4.4        | -      | 0.0   | 0.0   | 5.9                      | -    | 1.9        | -      | 0.0   | 0.0   | -     | -    | 0.0        | -          | 0.0   | 0.0   | -     | - | 0.0   | 2.3   |
| Single-Unit Trucks   | 0                  | 0     | 0     | 1     | -    | 1                  | 0      | 0     | 0     | 2     | -                        | 2          | 0      | 0     | 0     | 1                        | -    | 1          | 0      | 0     | 4     | 0     | -    | 4          | 0          | 0     | 4     | 0     | - | 4     | 8     |
| % Single-Unit Trucks | -                  | 0.0   | 0.0   | 2.6   | -    | 0.7                | -      | 0.0   | 0.0   | 5.4   | -                        | 2.2        | -      | 0.0   | 0.0   | 5.9                      | -    | 1.9        | -      | 0.0   | 9.8   | -     | -    | 7.1        | -          | 0.0   | 9.8   | -     | - | 7.1   | 2.3   |
| Articulated Trucks   | 0                  | 0     | 3     | 0     | -    | 3                  | 0      | 0     | 17    | 0     | -                        | 17         | 0      | 0     | 0     | 1                        | -    | 1          | 0      | 0     | 0     | 0     | -    | 0          | 0          | 0     | 0     | 0     | - | 0     | 21    |
| % Articulated Trucks | -                  | 0.0   | 2.8   | 0.0   | -    | 2.0                | -      | 0.0   | 37.0  | 0.0   | -                        | 18.9       | -      | 0.0   | 0.0   | 5.9                      | -    | 1.9        | -      | 0.0   | 0.0   | -     | -    | 0.0        | -          | 0.0   | 0.0   | -     | - | 0.0   | 6.1   |
| Bicycles on Road     | 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     |
| % Bicycles on Road   | -                  | 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   |
| Pedestrians          | -                  | -     | -     | -     | 0    | -                  | -      | -     | -     | -     | 0                        | -          | -      | -     | -     | -                        | 0    | -          | -      | -     | -     | -     | 0    | -          | -          | -     | -     | -     | 0 | -     | -     |
| % Pedestrians        | -                  | -     | -     | -     | -    | -                  | -      | -     | -     | -     | -                        | -          | -      | -     | -     | -                        | -    | -          | -      | -     | -     | -     | -    | -          | -          | -     | -     | -     | - | -     | -     |



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Count Name: Old Sutton Rd with Penny Rd  
Site Code:  
Start Date: 10/13/2021  
Page No: 4

### Turning Movement Peak Hour Data (4:00 PM)

| Start Time           | Penny Rd Eastbound |       |       |       |      | Penny Rd Westbound |        |       |       |       | Old Sutton Rd Northbound |            |        |       |       | Old Sutton Rd Southbound |      |            |        |       |       |       |      |            |            |
|----------------------|--------------------|-------|-------|-------|------|--------------------|--------|-------|-------|-------|--------------------------|------------|--------|-------|-------|--------------------------|------|------------|--------|-------|-------|-------|------|------------|------------|
|                      | U-Turn             | Left  | Thru  | Right | Peds | App. Total         | U-Turn | Left  | Thru  | Right | Peds                     | App. Total | U-Turn | Left  | Thru  | Right                    | Peds | App. Total | U-Turn | Left  | Thru  | Right | Peds | App. Total | Int. Total |
| 4:00 PM              | 0                  | 0     | 13    | 6     | 0    | 19                 | 0      | 5     | 17    | 10    | 0                        | 32         | 0      | 15    | 2     | 3                        | 0    | 20         | 0      | 6     | 6     | 1     | 0    | 13         | 84         |
| 4:15 PM              | 0                  | 0     | 11    | 0     | 0    | 11                 | 0      | 2     | 30    | 10    | 0                        | 42         | 0      | 13    | 13    | 3                        | 0    | 29         | 0      | 2     | 5     | 0     | 7    | 89         |            |
| 4:30 PM              | 0                  | 0     | 13    | 4     | 0    | 17                 | 0      | 1     | 16    | 5     | 0                        | 22         | 0      | 9     | 6     | 3                        | 0    | 18         | 0      | 5     | 5     | 0     | 10   | 67         |            |
| 4:45 PM              | 0                  | 0     | 13    | 7     | 0    | 20                 | 0      | 0     | 22    | 6     | 0                        | 28         | 0      | 9     | 12    | 5                        | 0    | 26         | 0      | 5     | 4     | 1     | 0    | 10         | 84         |
| Total                | 0                  | 0     | 50    | 17    | 0    | 67                 | 0      | 8     | 85    | 31    | 0                        | 124        | 0      | 46    | 33    | 14                       | 0    | 93         | 0      | 18    | 20    | 2     | 0    | 40         | 324        |
| Approach %           | 0.0                | 0.0   | 74.6  | 25.4  | -    | -                  | 0.0    | 6.5   | 68.5  | 25.0  | -                        | -          | 0.0    | 49.5  | 35.5  | 15.1                     | -    | -          | 0.0    | 45.0  | 50.0  | 5.0   | -    | -          | -          |
| Total %              | 0.0                | 0.0   | 15.4  | 5.2   | -    | 20.7               | 0.0    | 2.5   | 26.2  | 9.6   | -                        | 38.3       | 0.0    | 14.2  | 10.2  | 4.3                      | -    | 28.7       | 0.0    | 5.6   | 6.2   | 0.6   | -    | 12.3       | -          |
| PHF                  | 0.000              | 0.000 | 0.962 | 0.607 | -    | 0.838              | 0.000  | 0.400 | 0.708 | 0.775 | -                        | 0.738      | 0.000  | 0.767 | 0.635 | 0.700                    | -    | 0.802      | 0.000  | 0.750 | 0.833 | 0.500 | -    | 0.769      | 0.910      |
| % Lights             | 0                  | 0     | 50    | 17    | 0    | 67                 | 0      | 7     | 81    | 30    | 0                        | 118        | 0      | 45    | 32    | 14                       | 0    | 91         | 0      | 18    | 19    | 2     | 0    | 39         | 315        |
| % Buses              | -                  | -     | 100.0 | 100.0 | -    | 100.0              | -      | 87.5  | 95.3  | 96.8  | -                        | 95.2       | -      | 97.8  | 97.0  | 100.0                    | -    | 97.8       | -      | 100.0 | 95.0  | 100.0 | -    | 97.5       | 97.2       |
| % Single-Unit Trucks | 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          |
| % Articulated Trucks | -                  | -     | 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        |
| % Bicycles on Road   | 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          |
| % Pedestrians        | -                  | -     | 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        |



Barrington, IL Weather: Cool and Dry  
 Old Sutton Rd and Access Dr South of PennyRd  
 Tuesday December 14, 2021 Passenger Vehicles Only

12/15/21  
 13:12:11

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 8 dec/oldsutton/accspenny/cars

| Begin Time   | N-Approach |            |          | E-Approach |          |          | S-Approach |            |          | W-Approach |          |          | Int Total  |
|--------------|------------|------------|----------|------------|----------|----------|------------|------------|----------|------------|----------|----------|------------|
|              | RT         | TH         | LT       | RT         | TH       | LT       | RT         | TH         | LT       | RT         | TH       | LT       |            |
| 600          | 0          | 5          | 0        | 0          | 0        | 0        | 1          | 5          | 0        | 0          | 0        | 0        | 11         |
| 615          | 0          | 13         | 0        | 0          | 0        | 0        | 1          | 3          | 0        | 0          | 0        | 0        | 17         |
| 630          | 0          | 10         | 0        | 0          | 0        | 1        | 0          | 3          | 0        | 0          | 0        | 0        | 14         |
| 645          | 0          | 14         | 2        | 0          | 0        | 0        | 0          | 4          | 0        | 0          | 0        | 0        | 20         |
| 700          | 0          | 13         | 2        | 0          | 0        | 0        | 0          | 5          | 0        | 0          | 0        | 0        | 20         |
| 715          | 0          | 13         | 0        | 0          | 0        | 0        | 0          | 12         | 0        | 0          | 0        | 0        | 25         |
| 730          | 0          | 13         | 0        | 0          | 0        | 0        | 0          | 13         | 0        | 0          | 0        | 0        | 26         |
| 745          | 0          | 11         | 0        | 0          | 0        | 0        | 0          | 5          | 0        | 0          | 0        | 0        | 16         |
| 800          | 0          | 18         | 0        | 0          | 0        | 0        | 0          | 4          | 0        | 0          | 0        | 0        | 22         |
| 815          | 0          | 12         | 0        | 0          | 0        | 0        | 0          | 11         | 0        | 0          | 0        | 0        | 23         |
| 830          | 0          | 14         | 0        | 0          | 0        | 0        | 0          | 4          | 0        | 0          | 0        | 0        | 18         |
| 845          | 0          | 9          | 0        | 0          | 0        | 0        | 0          | 11         | 0        | 0          | 0        | 0        | 20         |
| 1500         | 0          | 11         | 1        | 1          | 0        | 0        | 1          | 18         | 0        | 0          | 0        | 0        | 32         |
| 1515         | 0          | 12         | 0        | 0          | 0        | 0        | 0          | 16         | 0        | 0          | 0        | 0        | 28         |
| 1530         | 0          | 10         | 0        | 1          | 0        | 1        | 0          | 17         | 0        | 0          | 0        | 0        | 29         |
| 1545         | 0          | 15         | 0        | 0          | 0        | 0        | 0          | 24         | 0        | 0          | 0        | 0        | 39         |
| 1600         | 0          | 24         | 0        | 1          | 0        | 0        | 0          | 30         | 0        | 0          | 0        | 0        | 55         |
| 1615         | 0          | 20         | 1        | 1          | 0        | 0        | 0          | 32         | 0        | 0          | 0        | 0        | 54         |
| 1630         | 0          | 24         | 0        | 0          | 0        | 0        | 0          | 24         | 0        | 0          | 0        | 0        | 48         |
| 1645         | 0          | 14         | 0        | 0          | 0        | 0        | 0          | 28         | 0        | 0          | 0        | 0        | 42         |
| 1700         | 0          | 24         | 0        | 0          | 0        | 0        | 0          | 30         | 0        | 0          | 0        | 0        | 54         |
| 1715         | 0          | 21         | 0        | 0          | 0        | 0        | 0          | 26         | 0        | 0          | 0        | 0        | 47         |
| 1730         | 0          | 10         | 0        | 0          | 0        | 0        | 0          | 31         | 0        | 0          | 0        | 0        | 41         |
| 1745         | 0          | 15         | 1        | 0          | 0        | 0        | 0          | 21         | 0        | 0          | 0        | 0        | 37         |
| <b>Total</b> | <b>0</b>   | <b>345</b> | <b>7</b> | <b>4</b>   | <b>0</b> | <b>2</b> | <b>3</b>   | <b>377</b> | <b>0</b> | <b>0</b>   | <b>0</b> | <b>0</b> | <b>738</b> |

Barrington, IL                      Weather: Cool and Dry  
 Old Sutton Rd and Access Dr South of PennyRd  
 Tuesday December 14, 2021 Passenger Vehicles Only

12/15/21  
 13:12:11

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - Totals

Intersection # 8 dec/oldsutton/accspenny/cars

| Begin<br>Time | Approach Totals |   |     |   | Exit Totals |    |     |   | Int<br>Total |
|---------------|-----------------|---|-----|---|-------------|----|-----|---|--------------|
|               | N               | E | S   | W | N           | E  | S   | W |              |
| 600           | 5               | 0 | 6   | 0 | 5           | 1  | 5   | 0 | 11           |
| 615           | 13              | 0 | 4   | 0 | 3           | 1  | 13  | 0 | 17           |
| 630           | 10              | 1 | 3   | 0 | 3           | 0  | 11  | 0 | 14           |
| 645           | 16              | 0 | 4   | 0 | 4           | 2  | 14  | 0 | 20           |
| 700           | 15              | 0 | 5   | 0 | 5           | 2  | 13  | 0 | 20           |
| 715           | 13              | 0 | 12  | 0 | 12          | 0  | 13  | 0 | 25           |
| 730           | 13              | 0 | 13  | 0 | 13          | 0  | 13  | 0 | 26           |
| 745           | 11              | 0 | 5   | 0 | 5           | 0  | 11  | 0 | 16           |
| 800           | 18              | 0 | 4   | 0 | 4           | 0  | 18  | 0 | 22           |
| 815           | 12              | 0 | 11  | 0 | 11          | 0  | 12  | 0 | 23           |
| 830           | 14              | 0 | 4   | 0 | 4           | 0  | 14  | 0 | 18           |
| 845           | 9               | 0 | 11  | 0 | 11          | 0  | 9   | 0 | 20           |
| -----         |                 |   |     |   |             |    |     |   |              |
| 1500          | 12              | 1 | 19  | 0 | 19          | 2  | 11  | 0 | 32           |
| 1515          | 12              | 0 | 16  | 0 | 16          | 0  | 12  | 0 | 28           |
| 1530          | 10              | 2 | 17  | 0 | 18          | 0  | 11  | 0 | 29           |
| 1545          | 15              | 0 | 24  | 0 | 24          | 0  | 15  | 0 | 39           |
| 1600          | 24              | 1 | 30  | 0 | 31          | 0  | 24  | 0 | 55           |
| 1615          | 21              | 1 | 32  | 0 | 33          | 1  | 20  | 0 | 54           |
| 1630          | 24              | 0 | 24  | 0 | 24          | 0  | 24  | 0 | 48           |
| 1645          | 14              | 0 | 28  | 0 | 28          | 0  | 14  | 0 | 42           |
| 1700          | 24              | 0 | 30  | 0 | 30          | 0  | 24  | 0 | 54           |
| 1715          | 21              | 0 | 26  | 0 | 26          | 0  | 21  | 0 | 47           |
| 1730          | 10              | 0 | 31  | 0 | 31          | 0  | 10  | 0 | 41           |
| 1745          | 16              | 0 | 21  | 0 | 21          | 1  | 15  | 0 | 37           |
| =====         |                 |   |     |   |             |    |     |   |              |
| Total         | 352             | 6 | 380 | 0 | 381         | 10 | 347 | 0 | 738          |

Barrington, IL                      Weather: Cool and Dry  
 Old Sutton Rd and Access Dr South of PennyRd  
 Tuesday December 14, 2021 Passenger Vehicles Only

12/15/21  
 13:12:11

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: by Movement

Intersection # 8 dec/oldsutton/accspenny/cars

| Begin Time | N-Approach |    |    | E-Approach |    |    | S-Approach |     |    | W-Approach |    |    | Int Total |
|------------|------------|----|----|------------|----|----|------------|-----|----|------------|----|----|-----------|
|            | RT         | TH | LT | RT         | TH | LT | RT         | TH  | LT | RT         | TH | LT |           |
| 600        | 0          | 20 | 0  | 0          | 0  | 0  | 4          | 20  | 0  | 0          | 0  | 0  | 44        |
| 615        | 0          | 52 | 0  | 0          | 0  | 0  | 4          | 12  | 0  | 0          | 0  | 0  | 68        |
| 630        | 0          | 40 | 0  | 0          | 0  | 4  | 0          | 12  | 0  | 0          | 0  | 0  | 56        |
| 645        | 0          | 56 | 8  | 0          | 0  | 0  | 0          | 16  | 0  | 0          | 0  | 0  | 80        |
| 700        | 0          | 52 | 8  | 0          | 0  | 0  | 0          | 20  | 0  | 0          | 0  | 0  | 80        |
| 715        | 0          | 52 | 0  | 0          | 0  | 0  | 0          | 48  | 0  | 0          | 0  | 0  | 100       |
| 730        | 0          | 52 | 0  | 0          | 0  | 0  | 0          | 52  | 0  | 0          | 0  | 0  | 104       |
| 745        | 0          | 44 | 0  | 0          | 0  | 0  | 0          | 20  | 0  | 0          | 0  | 0  | 64        |
| 800        | 0          | 72 | 0  | 0          | 0  | 0  | 0          | 16  | 0  | 0          | 0  | 0  | 88        |
| 815        | 0          | 48 | 0  | 0          | 0  | 0  | 0          | 44  | 0  | 0          | 0  | 0  | 92        |
| 830        | 0          | 56 | 0  | 0          | 0  | 0  | 0          | 16  | 0  | 0          | 0  | 0  | 72        |
| 845        | 0          | 36 | 0  | 0          | 0  | 0  | 0          | 44  | 0  | 0          | 0  | 0  | 80        |
| 1500       | 0          | 44 | 4  | 4          | 0  | 0  | 4          | 72  | 0  | 0          | 0  | 0  | 128       |
| 1515       | 0          | 48 | 0  | 0          | 0  | 0  | 0          | 64  | 0  | 0          | 0  | 0  | 112       |
| 1530       | 0          | 40 | 0  | 4          | 0  | 4  | 0          | 68  | 0  | 0          | 0  | 0  | 116       |
| 1545       | 0          | 60 | 0  | 0          | 0  | 0  | 0          | 96  | 0  | 0          | 0  | 0  | 156       |
| 1600       | 0          | 96 | 0  | 4          | 0  | 0  | 0          | 120 | 0  | 0          | 0  | 0  | 220       |
| 1615       | 0          | 80 | 4  | 4          | 0  | 0  | 0          | 128 | 0  | 0          | 0  | 0  | 216       |
| 1630       | 0          | 96 | 0  | 0          | 0  | 0  | 0          | 96  | 0  | 0          | 0  | 0  | 192       |
| 1645       | 0          | 56 | 0  | 0          | 0  | 0  | 0          | 112 | 0  | 0          | 0  | 0  | 168       |
| 1700       | 0          | 96 | 0  | 0          | 0  | 0  | 0          | 120 | 0  | 0          | 0  | 0  | 216       |
| 1715       | 0          | 84 | 0  | 0          | 0  | 0  | 0          | 104 | 0  | 0          | 0  | 0  | 188       |
| 1730       | 0          | 40 | 0  | 0          | 0  | 0  | 0          | 124 | 0  | 0          | 0  | 0  | 164       |
| 1745       | 0          | 60 | 4  | 0          | 0  | 0  | 0          | 84  | 0  | 0          | 0  | 0  | 148       |

Barrington, IL                      Weather: Cool and Dry  
 Old Sutton Rd and Access Dr South of PennyRd  
 Tuesday December 14, 2021 Passenger Vehicles Only

12/15/21  
 13:12:11

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: Appr/Exit Totals

Intersection # 8 dec/oldsutton/accspenny/cars

| Begin<br>Time | Approach Totals |   |     |   | Exit Totals |   |    |   | Int<br>Total |
|---------------|-----------------|---|-----|---|-------------|---|----|---|--------------|
|               | N               | E | S   | W | N           | E | S  | W |              |
| 600           | 20              | 0 | 24  | 0 | 20          | 4 | 20 | 0 | 44           |
| 615           | 52              | 0 | 16  | 0 | 12          | 4 | 52 | 0 | 68           |
| 630           | 40              | 4 | 12  | 0 | 12          | 0 | 44 | 0 | 56           |
| 645           | 64              | 0 | 16  | 0 | 16          | 8 | 56 | 0 | 80           |
| 700           | 60              | 0 | 20  | 0 | 20          | 8 | 52 | 0 | 80           |
| 715           | 52              | 0 | 48  | 0 | 48          | 0 | 52 | 0 | 100          |
| 730           | 52              | 0 | 52  | 0 | 52          | 0 | 52 | 0 | 104          |
| 745           | 44              | 0 | 20  | 0 | 20          | 0 | 44 | 0 | 64           |
| 800           | 72              | 0 | 16  | 0 | 16          | 0 | 72 | 0 | 88           |
| 815           | 48              | 0 | 44  | 0 | 44          | 0 | 48 | 0 | 92           |
| 830           | 56              | 0 | 16  | 0 | 16          | 0 | 56 | 0 | 72           |
| 845           | 36              | 0 | 44  | 0 | 44          | 0 | 36 | 0 | 80           |
| -----         |                 |   |     |   |             |   |    |   |              |
| 1500          | 48              | 4 | 76  | 0 | 76          | 8 | 44 | 0 | 128          |
| 1515          | 48              | 0 | 64  | 0 | 64          | 0 | 48 | 0 | 112          |
| 1530          | 40              | 8 | 68  | 0 | 72          | 0 | 44 | 0 | 116          |
| 1545          | 60              | 0 | 96  | 0 | 96          | 0 | 60 | 0 | 156          |
| 1600          | 96              | 4 | 120 | 0 | 124         | 0 | 96 | 0 | 220          |
| 1615          | 84              | 4 | 128 | 0 | 132         | 4 | 80 | 0 | 216          |
| 1630          | 96              | 0 | 96  | 0 | 96          | 0 | 96 | 0 | 192          |
| 1645          | 56              | 0 | 112 | 0 | 112         | 0 | 56 | 0 | 168          |
| 1700          | 96              | 0 | 120 | 0 | 120         | 0 | 96 | 0 | 216          |
| 1715          | 84              | 0 | 104 | 0 | 104         | 0 | 84 | 0 | 188          |
| 1730          | 40              | 0 | 124 | 0 | 124         | 0 | 40 | 0 | 164          |
| 1745          | 64              | 0 | 84  | 0 | 84          | 4 | 60 | 0 | 148          |

Barrington, IL                      Weather: Cool and Dry  
 Old Sutton Rd and Access Dr South of PennyRd  
 Tuesday December 14, 2021 Passenger Vehicles Only

12/15/21  
 13:12:11

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes:      by Movement

Intersection # 8 dec/oldsutton/accspenny/cars

| Begin Time | N-Approach |    |    | E-Approach |    |    | S-Approach |     |    | W-Approach |    |    | Int Total |
|------------|------------|----|----|------------|----|----|------------|-----|----|------------|----|----|-----------|
|            | RT         | TH | LT | RT         | TH | LT | RT         | TH  | LT | RT         | TH | LT |           |
| 600        | 0          | 42 | 2  | 0          | 0  | 1  | 2          | 15  | 0  | 0          | 0  | 0  | 62        |
| 615        | 0          | 50 | 4  | 0          | 0  | 1  | 1          | 15  | 0  | 0          | 0  | 0  | 71        |
| 630        | 0          | 50 | 4  | 0          | 0  | 1  | 0          | 24  | 0  | 0          | 0  | 0  | 79        |
| 645        | 0          | 53 | 4  | 0          | 0  | 0  | 0          | 34  | 0  | 0          | 0  | 0  | 91        |
| 700        | 0          | 50 | 2  | 0          | 0  | 0  | 0          | 35  | 0  | 0          | 0  | 0  | 87        |
| 715        | 0          | 55 | 0  | 0          | 0  | 0  | 0          | 34  | 0  | 0          | 0  | 0  | 89        |
| 730        | 0          | 54 | 0  | 0          | 0  | 0  | 0          | 33  | 0  | 0          | 0  | 0  | 87        |
| 745        | 0          | 55 | 0  | 0          | 0  | 0  | 0          | 24  | 0  | 0          | 0  | 0  | 79        |
| 800        | 0          | 53 | 0  | 0          | 0  | 0  | 0          | 30  | 0  | 0          | 0  | 0  | 83        |
| 815        | 0          | 35 | 0  | 0          | 0  | 0  | 0          | 26  | 0  | 0          | 0  | 0  | 61*       |
| 830        | 0          | 23 | 0  | 0          | 0  | 0  | 0          | 15  | 0  | 0          | 0  | 0  | 38*       |
| 845        | 0          | 9  | 0  | 0          | 0  | 0  | 0          | 11  | 0  | 0          | 0  | 0  | 20*       |
| -----      |            |    |    |            |    |    |            |     |    |            |    |    |           |
| 1500       | 0          | 48 | 1  | 2          | 0  | 1  | 1          | 75  | 0  | 0          | 0  | 0  | 128       |
| 1515       | 0          | 61 | 0  | 2          | 0  | 1  | 0          | 87  | 0  | 0          | 0  | 0  | 151       |
| 1530       | 0          | 69 | 1  | 3          | 0  | 1  | 0          | 103 | 0  | 0          | 0  | 0  | 177       |
| 1545       | 0          | 83 | 1  | 2          | 0  | 0  | 0          | 110 | 0  | 0          | 0  | 0  | 196       |
| 1600       | 0          | 82 | 1  | 2          | 0  | 0  | 0          | 114 | 0  | 0          | 0  | 0  | 199       |
| 1615       | 0          | 82 | 1  | 1          | 0  | 0  | 0          | 114 | 0  | 0          | 0  | 0  | 198       |
| 1630       | 0          | 83 | 0  | 0          | 0  | 0  | 0          | 108 | 0  | 0          | 0  | 0  | 191       |
| 1645       | 0          | 69 | 0  | 0          | 0  | 0  | 0          | 115 | 0  | 0          | 0  | 0  | 184       |
| 1700       | 0          | 70 | 1  | 0          | 0  | 0  | 0          | 108 | 0  | 0          | 0  | 0  | 179       |
| 1715       | 0          | 46 | 1  | 0          | 0  | 0  | 0          | 78  | 0  | 0          | 0  | 0  | 125*      |
| 1730       | 0          | 25 | 1  | 0          | 0  | 0  | 0          | 52  | 0  | 0          | 0  | 0  | 78*       |
| 1745       | 0          | 15 | 1  | 0          | 0  | 0  | 0          | 21  | 0  | 0          | 0  | 0  | 37*       |

Barrington, IL                      Weather: Cool and Dry  
 Old Sutton Rd and Access Dr South of PennyRd  
 Tuesday December 14, 2021 Passenger Vehicles Only

12/15/21  
 13:12:11

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes:      Appr/Exit Totals

Intersection # 8 dec/oldsutton/accspenny/cars

| Begin<br>Time | Approach Totals |   |     |   | Exit Totals |   |    |   | Int<br>Total |
|---------------|-----------------|---|-----|---|-------------|---|----|---|--------------|
|               | N               | E | S   | W | N           | E | S  | W |              |
| 600           | 44              | 1 | 17  | 0 | 15          | 4 | 43 | 0 | 62           |
| 615           | 54              | 1 | 16  | 0 | 15          | 5 | 51 | 0 | 71           |
| 630           | 54              | 1 | 24  | 0 | 24          | 4 | 51 | 0 | 79           |
| 645           | 57              | 0 | 34  | 0 | 34          | 4 | 53 | 0 | 91           |
| 700           | 52              | 0 | 35  | 0 | 35          | 2 | 50 | 0 | 87           |
| 715           | 55              | 0 | 34  | 0 | 34          | 0 | 55 | 0 | 89           |
| 730           | 54              | 0 | 33  | 0 | 33          | 0 | 54 | 0 | 87           |
| 745           | 55              | 0 | 24  | 0 | 24          | 0 | 55 | 0 | 79           |
| 800           | 53              | 0 | 30  | 0 | 30          | 0 | 53 | 0 | 83           |
| 815           | 35              | 0 | 26  | 0 | 26          | 0 | 35 | 0 | 61*          |
| 830           | 23              | 0 | 15  | 0 | 15          | 0 | 23 | 0 | 38*          |
| 845           | 9               | 0 | 11  | 0 | 11          | 0 | 9  | 0 | 20*          |
| -----         |                 |   |     |   |             |   |    |   |              |
| 1500          | 49              | 3 | 76  | 0 | 77          | 2 | 49 | 0 | 128          |
| 1515          | 61              | 3 | 87  | 0 | 89          | 0 | 62 | 0 | 151          |
| 1530          | 70              | 4 | 103 | 0 | 106         | 1 | 70 | 0 | 177          |
| 1545          | 84              | 2 | 110 | 0 | 112         | 1 | 83 | 0 | 196          |
| 1600          | 83              | 2 | 114 | 0 | 116         | 1 | 82 | 0 | 199          |
| 1615          | 83              | 1 | 114 | 0 | 115         | 1 | 82 | 0 | 198          |
| 1630          | 83              | 0 | 108 | 0 | 108         | 0 | 83 | 0 | 191          |
| 1645          | 69              | 0 | 115 | 0 | 115         | 0 | 69 | 0 | 184          |
| 1700          | 71              | 0 | 108 | 0 | 108         | 1 | 70 | 0 | 179          |
| 1715          | 47              | 0 | 78  | 0 | 78          | 1 | 46 | 0 | 125*         |
| 1730          | 26              | 0 | 52  | 0 | 52          | 1 | 25 | 0 | 78*          |
| 1745          | 16              | 0 | 21  | 0 | 21          | 1 | 15 | 0 | 37*          |

Barrington, IL                      Weather: Cool and Dry  
 Old Sutton Rd and Access Dr South of PennyRd  
 Tuesday December 14, 2021    Single Unit Trucks Only

12/15/21  
 13:15:23

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 9 dec/oldsutton/accspenny/single

| Begin<br>Time | N-Approach |           |          | E-Approach |          |          | S-Approach |           |          | W-Approach |          |          | Int<br>Total |
|---------------|------------|-----------|----------|------------|----------|----------|------------|-----------|----------|------------|----------|----------|--------------|
|               | RT         | TH        | LT       | RT         | TH       | LT       | RT         | TH        | LT       | RT         | TH       | LT       |              |
| 600           | 0          | 0         | 0        | 0          | 0        | 0        | 0          | 0         | 0        | 0          | 0        | 0        | 0            |
| 615           | 0          | 0         | 0        | 0          | 0        | 0        | 0          | 0         | 0        | 0          | 0        | 0        | 0            |
| 630           | 0          | 0         | 0        | 0          | 0        | 0        | 0          | 0         | 0        | 0          | 0        | 0        | 0            |
| 645           | 0          | 1         | 0        | 0          | 0        | 0        | 0          | 0         | 0        | 0          | 0        | 0        | 1            |
| 700           | 0          | 1         | 0        | 0          | 0        | 0        | 0          | 0         | 0        | 0          | 0        | 0        | 1            |
| 715           | 0          | 1         | 0        | 2          | 0        | 0        | 0          | 1         | 0        | 0          | 0        | 0        | 4            |
| 730           | 0          | 0         | 0        | 0          | 0        | 0        | 0          | 2         | 0        | 0          | 0        | 0        | 2            |
| 745           | 0          | 1         | 0        | 0          | 0        | 0        | 0          | 5         | 0        | 0          | 0        | 0        | 6            |
| 800           | 0          | 1         | 0        | 0          | 0        | 0        | 0          | 0         | 0        | 0          | 0        | 0        | 1            |
| 815           | 0          | 3         | 0        | 0          | 0        | 0        | 0          | 0         | 0        | 0          | 0        | 0        | 3            |
| 830           | 0          | 0         | 0        | 0          | 0        | 0        | 0          | 0         | 0        | 0          | 0        | 0        | 0            |
| 845           | 0          | 0         | 0        | 0          | 0        | 0        | 0          | 1         | 0        | 0          | 0        | 0        | 1            |
| 1500          | 0          | 0         | 0        | 0          | 0        | 0        | 0          | 0         | 0        | 0          | 0        | 0        | 0            |
| 1515          | 0          | 2         | 0        | 0          | 0        | 0        | 0          | 0         | 0        | 0          | 0        | 0        | 2            |
| 1530          | 0          | 1         | 0        | 0          | 0        | 1        | 0          | 2         | 0        | 0          | 0        | 0        | 4            |
| 1545          | 0          | 2         | 0        | 0          | 0        | 0        | 0          | 0         | 0        | 0          | 0        | 0        | 2            |
| 1600          | 0          | 0         | 0        | 0          | 0        | 0        | 0          | 2         | 0        | 0          | 0        | 0        | 2            |
| 1615          | 0          | 0         | 0        | 0          | 0        | 0        | 0          | 0         | 0        | 0          | 0        | 0        | 0            |
| 1630          | 0          | 0         | 0        | 0          | 0        | 0        | 0          | 1         | 0        | 0          | 0        | 0        | 1            |
| 1645          | 0          | 1         | 0        | 0          | 0        | 0        | 0          | 0         | 0        | 0          | 0        | 0        | 1            |
| 1700          | 0          | 0         | 0        | 0          | 0        | 0        | 0          | 3         | 0        | 0          | 0        | 0        | 3            |
| 1715          | 0          | 0         | 0        | 0          | 0        | 0        | 0          | 0         | 0        | 0          | 0        | 0        | 0            |
| 1730          | 0          | 0         | 0        | 0          | 0        | 0        | 0          | 1         | 0        | 0          | 0        | 0        | 1            |
| 1745          | 0          | 1         | 1        | 0          | 0        | 0        | 1          | 0         | 0        | 0          | 0        | 0        | 3            |
| <b>Total</b>  | <b>0</b>   | <b>15</b> | <b>1</b> | <b>2</b>   | <b>0</b> | <b>1</b> | <b>1</b>   | <b>18</b> | <b>0</b> | <b>0</b>   | <b>0</b> | <b>0</b> | <b>38</b>    |

Barrington, IL                      Weather: Cool and Dry  
 Old Sutton Rd and Access Dr South of PennyRd  
 Tuesday December 14, 2021    Single Unit Trucks Only

12/15/21  
 13:15:23

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - Totals

Intersection # 9 dec/oldsutton/accspenny/single

| Begin<br>Time | Approach Totals |   |    |   | Exit Totals |   |    |   | Int<br>Total |
|---------------|-----------------|---|----|---|-------------|---|----|---|--------------|
|               | N               | E | S  | W | N           | E | S  | W |              |
| 600           | 0               | 0 | 0  | 0 | 0           | 0 | 0  | 0 | 0            |
| 615           | 0               | 0 | 0  | 0 | 0           | 0 | 0  | 0 | 0            |
| 630           | 0               | 0 | 0  | 0 | 0           | 0 | 0  | 0 | 0            |
| 645           | 1               | 0 | 0  | 0 | 0           | 0 | 1  | 0 | 1            |
| 700           | 1               | 0 | 0  | 0 | 0           | 0 | 1  | 0 | 1            |
| 715           | 1               | 2 | 1  | 0 | 3           | 0 | 1  | 0 | 4            |
| 730           | 0               | 0 | 2  | 0 | 2           | 0 | 0  | 0 | 2            |
| 745           | 1               | 0 | 5  | 0 | 5           | 0 | 1  | 0 | 6            |
| 800           | 1               | 0 | 0  | 0 | 0           | 0 | 1  | 0 | 1            |
| 815           | 3               | 0 | 0  | 0 | 0           | 0 | 3  | 0 | 3            |
| 830           | 0               | 0 | 0  | 0 | 0           | 0 | 0  | 0 | 0            |
| 845           | 0               | 0 | 1  | 0 | 1           | 0 | 0  | 0 | 1            |
| -----         |                 |   |    |   |             |   |    |   |              |
| 1500          | 0               | 0 | 0  | 0 | 0           | 0 | 0  | 0 | 0            |
| 1515          | 2               | 0 | 0  | 0 | 0           | 0 | 2  | 0 | 2            |
| 1530          | 1               | 1 | 2  | 0 | 2           | 0 | 2  | 0 | 4            |
| 1545          | 2               | 0 | 0  | 0 | 0           | 0 | 2  | 0 | 2            |
| 1600          | 0               | 0 | 2  | 0 | 2           | 0 | 0  | 0 | 2            |
| 1615          | 0               | 0 | 0  | 0 | 0           | 0 | 0  | 0 | 0            |
| 1630          | 0               | 0 | 1  | 0 | 1           | 0 | 0  | 0 | 1            |
| 1645          | 1               | 0 | 0  | 0 | 0           | 0 | 1  | 0 | 1            |
| 1700          | 0               | 0 | 3  | 0 | 3           | 0 | 0  | 0 | 3            |
| 1715          | 0               | 0 | 0  | 0 | 0           | 0 | 0  | 0 | 0            |
| 1730          | 0               | 0 | 1  | 0 | 1           | 0 | 0  | 0 | 1            |
| 1745          | 2               | 0 | 1  | 0 | 0           | 2 | 1  | 0 | 3            |
| =====         |                 |   |    |   |             |   |    |   |              |
| Total         | 16              | 3 | 19 | 0 | 20          | 2 | 16 | 0 | 38           |



Barrington, IL Weather: Cool and Dry  
 Old Sutton Rd and Access Dr South of PennyRd  
 Tuesday December 14, 2021 Single Unit Trucks Only

12/15/21  
 13:15:23

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: by Movement

Intersection # 9 dec/oldsutton/accspenny/single

| Begin Time | N-Approach |    |    | E-Approach |    |    | S-Approach |    |    | W-Approach |    |    | Int Total |
|------------|------------|----|----|------------|----|----|------------|----|----|------------|----|----|-----------|
|            | RT         | TH | LT | RT         | TH | LT | RT         | TH | LT | RT         | TH | LT |           |
| 600        | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0         |
| 615        | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0         |
| 630        | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0         |
| 645        | 0          | 4  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 4         |
| 700        | 0          | 4  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 4         |
| 715        | 0          | 4  | 0  | 8          | 0  | 0  | 0          | 4  | 0  | 0          | 0  | 0  | 16        |
| 730        | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 8  | 0  | 0          | 0  | 0  | 8         |
| 745        | 0          | 4  | 0  | 0          | 0  | 0  | 0          | 20 | 0  | 0          | 0  | 0  | 24        |
| 800        | 0          | 4  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 4         |
| 815        | 0          | 12 | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 12        |
| 830        | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0         |
| 845        | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 4  | 0  | 0          | 0  | 0  | 4         |
| 1500       | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0         |
| 1515       | 0          | 8  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 8         |
| 1530       | 0          | 4  | 0  | 0          | 0  | 4  | 0          | 8  | 0  | 0          | 0  | 0  | 16        |
| 1545       | 0          | 8  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 8         |
| 1600       | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 8  | 0  | 0          | 0  | 0  | 8         |
| 1615       | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0         |
| 1630       | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 4  | 0  | 0          | 0  | 0  | 4         |
| 1645       | 0          | 4  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 4         |
| 1700       | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 12 | 0  | 0          | 0  | 0  | 12        |
| 1715       | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0         |
| 1730       | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 4  | 0  | 0          | 0  | 0  | 4         |
| 1745       | 0          | 4  | 4  | 0          | 0  | 0  | 4          | 0  | 0  | 0          | 0  | 0  | 12        |

Barrington, IL                      Weather: Cool and Dry  
 Old Sutton Rd and Access Dr South of PennyRd  
 Tuesday December 14, 2021    Single Unit Trucks Only

12/15/21  
 13:15:23

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: Appr/Exit Totals

Intersection # 9 dec/oldsutton/accspenny/single

| Begin<br>Time | Approach Totals |   |    |   | Exit Totals |   |    |   | Int<br>Total |
|---------------|-----------------|---|----|---|-------------|---|----|---|--------------|
|               | N               | E | S  | W | N           | E | S  | W |              |
| 600           | 0               | 0 | 0  | 0 | 0           | 0 | 0  | 0 | 0            |
| 615           | 0               | 0 | 0  | 0 | 0           | 0 | 0  | 0 | 0            |
| 630           | 0               | 0 | 0  | 0 | 0           | 0 | 0  | 0 | 0            |
| 645           | 4               | 0 | 0  | 0 | 0           | 0 | 4  | 0 | 4            |
| 700           | 4               | 0 | 0  | 0 | 0           | 0 | 4  | 0 | 4            |
| 715           | 4               | 8 | 4  | 0 | 12          | 0 | 4  | 0 | 16           |
| 730           | 0               | 0 | 8  | 0 | 8           | 0 | 0  | 0 | 8            |
| 745           | 4               | 0 | 20 | 0 | 20          | 0 | 4  | 0 | 24           |
| 800           | 4               | 0 | 0  | 0 | 0           | 0 | 4  | 0 | 4            |
| 815           | 12              | 0 | 0  | 0 | 0           | 0 | 12 | 0 | 12           |
| 830           | 0               | 0 | 0  | 0 | 0           | 0 | 0  | 0 | 0            |
| 845           | 0               | 0 | 4  | 0 | 4           | 0 | 0  | 0 | 4            |
| 1500          | 0               | 0 | 0  | 0 | 0           | 0 | 0  | 0 | 0            |
| 1515          | 8               | 0 | 0  | 0 | 0           | 0 | 8  | 0 | 8            |
| 1530          | 4               | 4 | 8  | 0 | 8           | 0 | 8  | 0 | 16           |
| 1545          | 8               | 0 | 0  | 0 | 0           | 0 | 8  | 0 | 8            |
| 1600          | 0               | 0 | 8  | 0 | 8           | 0 | 0  | 0 | 8            |
| 1615          | 0               | 0 | 0  | 0 | 0           | 0 | 0  | 0 | 0            |
| 1630          | 0               | 0 | 4  | 0 | 4           | 0 | 0  | 0 | 4            |
| 1645          | 4               | 0 | 0  | 0 | 0           | 0 | 4  | 0 | 4            |
| 1700          | 0               | 0 | 12 | 0 | 12          | 0 | 0  | 0 | 12           |
| 1715          | 0               | 0 | 0  | 0 | 0           | 0 | 0  | 0 | 0            |
| 1730          | 0               | 0 | 4  | 0 | 4           | 0 | 0  | 0 | 4            |
| 1745          | 8               | 0 | 4  | 0 | 0           | 8 | 4  | 0 | 12           |

Barrington, IL Weather: Cool and Dry  
 Old Sutton Rd and Access Dr South of PennyRd  
 Tuesday December 14, 2021 Single Unit Trucks Only

12/15/21  
 13:15:23

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: by Movement

Intersection # 9 dec/oldsutton/accspenny/single

| Begin Time | N-Approach |    |    | E-Approach |    |    | S-Approach |    |    | W-Approach |    |    | Int Total |
|------------|------------|----|----|------------|----|----|------------|----|----|------------|----|----|-----------|
|            | RT         | TH | LT | RT         | TH | LT | RT         | TH | LT | RT         | TH | LT |           |
| 600        | 0          | 1  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 1         |
| 615        | 0          | 2  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 0  | 0  | 2         |
| 630        | 0          | 3  | 0  | 2          | 0  | 0  | 0          | 1  | 0  | 0          | 0  | 0  | 6         |
| 645        | 0          | 3  | 0  | 2          | 0  | 0  | 0          | 3  | 0  | 0          | 0  | 0  | 8         |
| 700        | 0          | 3  | 0  | 2          | 0  | 0  | 0          | 8  | 0  | 0          | 0  | 0  | 13        |
| 715        | 0          | 3  | 0  | 2          | 0  | 0  | 0          | 8  | 0  | 0          | 0  | 0  | 13        |
| 730        | 0          | 5  | 0  | 0          | 0  | 0  | 0          | 7  | 0  | 0          | 0  | 0  | 12        |
| 745        | 0          | 5  | 0  | 0          | 0  | 0  | 0          | 5  | 0  | 0          | 0  | 0  | 10        |
| 800        | 0          | 4  | 0  | 0          | 0  | 0  | 0          | 1  | 0  | 0          | 0  | 0  | 5         |
| 815        | 0          | 3  | 0  | 0          | 0  | 0  | 0          | 1  | 0  | 0          | 0  | 0  | 4*        |
| 830        | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 1  | 0  | 0          | 0  | 0  | 1*        |
| 845        | 0          | 0  | 0  | 0          | 0  | 0  | 0          | 1  | 0  | 0          | 0  | 0  | 1*        |
| 1500       | 0          | 5  | 0  | 0          | 0  | 1  | 0          | 2  | 0  | 0          | 0  | 0  | 8         |
| 1515       | 0          | 5  | 0  | 0          | 0  | 1  | 0          | 4  | 0  | 0          | 0  | 0  | 10        |
| 1530       | 0          | 3  | 0  | 0          | 0  | 1  | 0          | 4  | 0  | 0          | 0  | 0  | 8         |
| 1545       | 0          | 2  | 0  | 0          | 0  | 0  | 0          | 3  | 0  | 0          | 0  | 0  | 5         |
| 1600       | 0          | 1  | 0  | 0          | 0  | 0  | 0          | 3  | 0  | 0          | 0  | 0  | 4         |
| 1615       | 0          | 1  | 0  | 0          | 0  | 0  | 0          | 4  | 0  | 0          | 0  | 0  | 5         |
| 1630       | 0          | 1  | 0  | 0          | 0  | 0  | 0          | 4  | 0  | 0          | 0  | 0  | 5         |
| 1645       | 0          | 1  | 0  | 0          | 0  | 0  | 0          | 4  | 0  | 0          | 0  | 0  | 5         |
| 1700       | 0          | 1  | 1  | 0          | 0  | 0  | 1          | 4  | 0  | 0          | 0  | 0  | 7         |
| 1715       | 0          | 1  | 1  | 0          | 0  | 0  | 1          | 1  | 0  | 0          | 0  | 0  | 4*        |
| 1730       | 0          | 1  | 1  | 0          | 0  | 0  | 1          | 1  | 0  | 0          | 0  | 0  | 4*        |
| 1745       | 0          | 1  | 1  | 0          | 0  | 0  | 1          | 0  | 0  | 0          | 0  | 0  | 3*        |

Barrington, IL                      Weather: Cool and Dry  
 Old Sutton Rd and Access Dr South of PennyRd  
 Tuesday December 14, 2021    Single Unit Trucks Only

12/15/21  
 13:15:23

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes:    Appr/Exit Totals

Intersection # 9 dec/oldsutton/accspenny/single

| Begin Time | Approach Totals |   |   |   | Exit Totals |   |   |   | Int Total |
|------------|-----------------|---|---|---|-------------|---|---|---|-----------|
|            | N               | E | S | W | N           | E | S | W |           |
| 600        | 1               | 0 | 0 | 0 | 0           | 0 | 1 | 0 | 1         |
| 615        | 2               | 0 | 0 | 0 | 0           | 0 | 2 | 0 | 2         |
| 630        | 3               | 2 | 1 | 0 | 3           | 0 | 3 | 0 | 6         |
| 645        | 3               | 2 | 3 | 0 | 5           | 0 | 3 | 0 | 8         |
| 700        | 3               | 2 | 8 | 0 | 10          | 0 | 3 | 0 | 13        |
| 715        | 3               | 2 | 8 | 0 | 10          | 0 | 3 | 0 | 13        |
| 730        | 5               | 0 | 7 | 0 | 7           | 0 | 5 | 0 | 12        |
| 745        | 5               | 0 | 5 | 0 | 5           | 0 | 5 | 0 | 10        |
| 800        | 4               | 0 | 1 | 0 | 1           | 0 | 4 | 0 | 5         |
| 815        | 3               | 0 | 1 | 0 | 1           | 0 | 3 | 0 | 4*        |
| 830        | 0               | 0 | 1 | 0 | 1           | 0 | 0 | 0 | 1*        |
| 845        | 0               | 0 | 1 | 0 | 1           | 0 | 0 | 0 | 1*        |
| -----      |                 |   |   |   |             |   |   |   |           |
| 1500       | 5               | 1 | 2 | 0 | 2           | 0 | 6 | 0 | 8         |
| 1515       | 5               | 1 | 4 | 0 | 4           | 0 | 6 | 0 | 10        |
| 1530       | 3               | 1 | 4 | 0 | 4           | 0 | 4 | 0 | 8         |
| 1545       | 2               | 0 | 3 | 0 | 3           | 0 | 2 | 0 | 5         |
| 1600       | 1               | 0 | 3 | 0 | 3           | 0 | 1 | 0 | 4         |
| 1615       | 1               | 0 | 4 | 0 | 4           | 0 | 1 | 0 | 5         |
| 1630       | 1               | 0 | 4 | 0 | 4           | 0 | 1 | 0 | 5         |
| 1645       | 1               | 0 | 4 | 0 | 4           | 0 | 1 | 0 | 5         |
| 1700       | 2               | 0 | 5 | 0 | 4           | 2 | 1 | 0 | 7         |
| 1715       | 2               | 0 | 2 | 0 | 1           | 2 | 1 | 0 | 4*        |
| 1730       | 2               | 0 | 2 | 0 | 1           | 2 | 1 | 0 | 4*        |
| 1745       | 2               | 0 | 1 | 0 | 0           | 2 | 1 | 0 | 3*        |







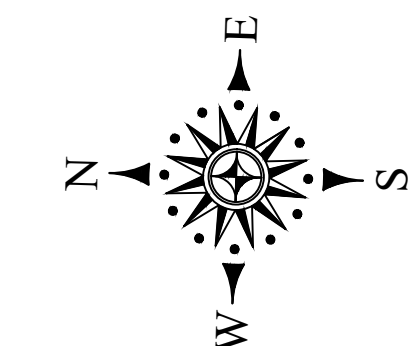
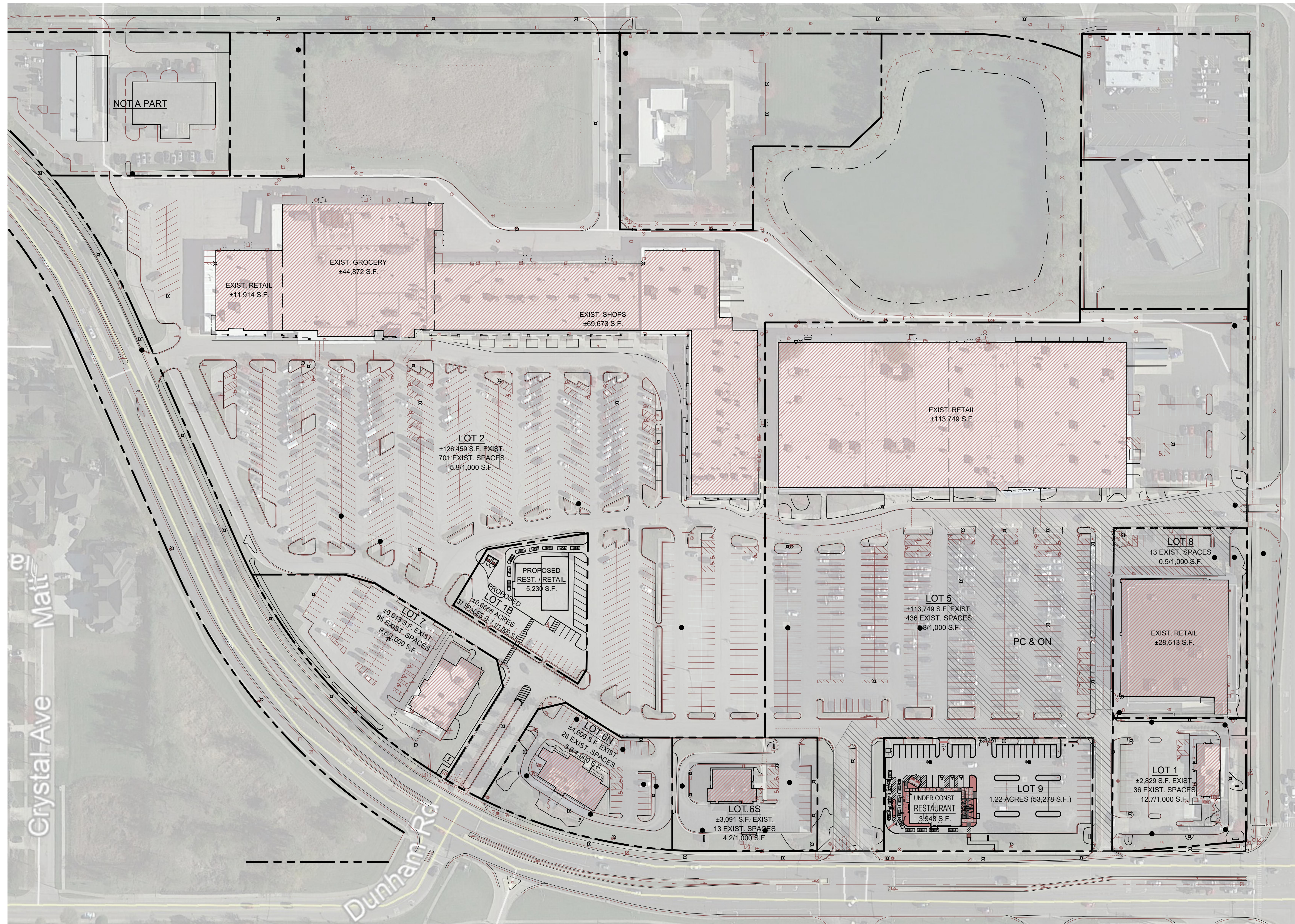








## Site Plan



**SITE DATA - MAIN CENTER**

ZONED 'B-2' GENERAL RETAIL BUSINESS, WITHIN THE PLANNED DEVELOPMENT OVERLAY, VILLAGE OF DOWNERS GROVE, IL.

|                                       |   |
|---------------------------------------|---|
| EXISTING BUILDING AREA - LOT 2        | 126,459 S.F.                                      |
| EXISTING BUILDING AREA - LOT 5        | 113,749 S.F.                                      |
| EXISTING BUILDING AREA - LOT 8        | 28,613 S.F.                                       |
| EXISTING PARKING LOT 2                | 701 SPACES @ 5.91/1,000 S.F.                      |
| EXISTING PARKING LOT 5                | 436 SPACES @ 3.81/1,000 S.F.                      |
| EXISTING PARKING LOT 8                | 13 SPACES @ 0.51/1,000 S.F.                       |
| PROPOSED PARKING LOT 5 - 6 SPACES     | TOTAL PARKING LOT 5 & 8 - 455 SPACES @ 4.01/1,000 |
| EXISTING BUILDING AREA - MAIN CENTER  | 288,821 S.F.                                      |
| PARKING REQ'D. - EXISTING MAIN CENTER | 1,075 SPACES @ 4.01/1,000 S.F.                    |
| TOTAL PROPOSED PARKING MAIN CENTER    | 1,156 SPACES @ 4.31/1,000 S.F.                    |

**EXISTING OUTPARCEL SITE DATA**

|                                      |                              |                           |                              |
|--------------------------------------|------------------------------|---------------------------|------------------------------|
| LOT 1 - EXISTING BUILDING AREA       | 2,829 S.F.                   | LOT 1 - EXISTING PARKING  | 36 SPACES @ 12.71/1,000 S.F. |
| LOT 6S - EXISTING BUILDING AREA      | 3,091 S.F.                   | LOT 6S - EXISTING PARKING | 13 SPACES @ 4.21/1,000 S.F.  |
| LOT 6N - EXISTING BUILDING AREA      | 4,996 S.F.                   | LOT 6N - EXISTING PARKING | 28 SPACES @ 5.61/1,000 S.F.  |
| LOT 7 - EXISTING BUILDING AREA       | 6,613 S.F.                   | LOT 7 - EXISTING PARKING  | 65 SPACES @ 9.81/1,000 S.F.  |
| LOT 9 - BUILDING AREA (UNDER CONST.) | 3,957 S.F.                   | (POST CONST.) PARKING     | 59 SPACES @ 14.91/1,000 S.F. |
| TOTAL OUTPARCEL BUILDING AREA        | 21,486 S.F.                  |                           |                              |
| TOTAL OUTPARCEL PARKING              | 201 SPACES @ 9.41/1,000 S.F. |                           |                              |

**PROPOSED OUTPARCEL SITE DATA**

|  |                             |
|--|-----------------------------|
| PROPOSED BUILDING AREA PROPOSED LOT 1B | 5,230 S.F.                  |
| PROPOSED PARKING PROPOSED LOT 1B       | 37 SPACES @ 7.11/1,000 S.F. |

**OVERALL SITE DATA**

|   |                                |
|---|--------------------------------|
| TOTAL BUILDING AREA (INCL. UNDER CONST. & PROPOSED) | 295,537 S.F.                   |
| TOTAL PARKING (INCLUDES PROPOSED)                   | 1,394 SPACES @ 4.71/1,000 S.F. |

# SITE PLAN

SCALE: 1"=80'

PROPOSED ADDITION TO  
**DOWNERS PARK PLAZA**

EXISTING PUD #18  
DOWNERS GROVE, ILLINOIS

**STEPHEN L. ZITO, AIA**  
ARCHITECT

MOBILE, AL. 36609  
FAX (251) 343 - 5505

820 S. UNIVERSITY BLVD. SUITE 2G  
PHONE (251) 343 - 6161

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STEPHEN L. ZITO AIA  
ARCHITECT

REVISIONS

|  |  |  |
|--|--|--|
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**PRELIMINARY**  
NOT FOR CONSTRUCTION

FILE 3763  
DATE APRIL 6, 2022  
SHEET

**PR14**

# CMAP 2050 Projections Letter



Chicago Metropolitan  
Agency for Planning

433 West Van Buren Street  
Suite 450  
Chicago, IL 60607

312-454-0400  
cmap.illinois.gov

September 21, 2021

Elise Purguette  
Traffic Engineer  
Kenig, Lindgren, O'Hara and Aboona, Inc.  
9575 West Higgins Road  
Suite 400  
Rosemont, IL 60018

**Subject: 75th Street @ Lemont Road**  
IDOT

Dear Ms. Purguette:

In response to a request made on your behalf and dated September 21, 2021, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

| ROAD SEGMENT               | Current ADT | Year 2050 ADT |
|----------------------------|-------------|---------------|
| 75th St west of Lemont Rd  | 32,300      | 36,400        |
| 75th St east of Lemont Rd  | 31,500      | 35,500        |
| Lemont Rd north of 75th St | 13,400      | 15,100        |

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2021 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP  
Senior Planner, Research & Analysis

cc: Rios (IDOT)  
2021\_CY\_TrafficForecast\DownersGrove\du-44-21\du-44-21.docx

## Level of Service Criteria

## LEVEL OF SERVICE CRITERIA

| <b>Signalized Intersections</b>   |  |  |
|-----------------------------------|--|--|
| <b>Level of Service</b>           | <b>Interpretation</b>  | <b>Average Control Delay (seconds per vehicle)</b> |
| A                                 | Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.  | ≤10  |
| B                                 | Good progression, with more vehicles stopping than for Level of Service A.   | >10 - 20   |
| C                                 | Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping. | >20 - 35   |
| D                                 | The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.   | >35 - 55   |
| E                                 | Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.   | >55 - 80   |
| F                                 | The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.  | >80.0  |
| <b>Unsignalized Intersections</b> |  |  |
| <b>Level of Service</b>           | <b>Average Total Delay (SEC/VEH)</b>   |  |
| A                                 | 0 - 10   |  |
| B                                 | > 10 - 15  |  |
| C                                 | > 15 - 25  |  |
| D                                 | > 25 - 35  |  |
| E                                 | > 35 - 50  |  |
| F                                 | > 50   |  |

Source: *Highway Capacity Manual*, 2010.

























Capacity Analysis Summary Sheets  
Year 2021 Weekday Morning Peak Hour Conditions

Lanes, Volumes, Timings

1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |   |  |  |   |  |  |  |  |  |  |  |  |
| Traffic Volume (vph)    | 8   | 5   | 197   | 8   | 2   | 0   | 147   | 710   | 12  | 1   | 430   | 5   |
| Future Volume (vph)     | 8   | 5   | 197   | 8   | 2   | 0   | 147   | 710   | 12  | 1   | 430   | 5   |
| Ideal Flow (vphpl)      | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Lane Width (ft)         | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  |
| Grade (%)               |   | 0%  |   |   | 0%  |   |   | 0%  |   |   | 0%  |   |
| Storage Length (ft)     | 0   |   | 105   | 0   |   | 85  | 175   |   | 0   | 135   |   | 0   |
| Storage Lanes           | 0   |   | 1   | 0   |   | 1   | 1   |   | 0   | 1   |   | 0   |
| Taper Length (ft)       | 60  |   |   | 25  |   |   | 165   |   |   | 120   |   |   |
| Lane Util. Factor       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  | 1.00  | 0.95  | 0.95  |
| Ped Bike Factor         |   |   | 0.850   |   |   |   |   | 0.998   |   |   | 0.998   |   |
| Flt Protected           |   | 0.971   |   |   | 0.961   |   | 0.950   |   |   | 0.950   |   |   |
| Satd. Flow (prot)       | 0   | 1845  | 1615  | 0   | 1674  | 1900  | 1752  | 3461  | 0   | 1805  | 3425  | 0   |
| Flt Permitted           |   | 0.881   |   |   | 0.846   |   | 0.463   |   |   | 0.302   |   |   |
| Satd. Flow (perm)       | 0   | 1674  | 1615  | 0   | 1473  | 1900  | 854   | 3461  | 0   | 574   | 3425  | 0   |
| Right Turn on Red       |   |   | No  |   |   | No  |   |   | No  |   |   | No  |
| Satd. Flow (RTOR)       |   |   |   |   |   |   |   |   |   |   |   |   |
| Link Speed (mph)        |   | 30  |   |   | 30  |   |   | 40  |   |   | 40  |   |
| Link Distance (ft)      |   | 667   |   |   | 331   |   |   | 633   |   |   | 695   |   |
| Travel Time (s)         |   | 15.2  |   |   | 7.5   |   |   | 10.8  |   |   | 11.8  |   |
| Confl. Peds. (#/hr)     |   |   |   |   |   |   |   |   |   |   |   |   |
| Confl. Bikes (#/hr)     |   |   |   |   |   |   |   |   |   |   |   |   |
| Peak Hour Factor        | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  |
| Growth Factor           | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  |
| Heavy Vehicles (%)      | 0%  | 0%  | 0%  | 0%  | 50%   | 0%  | 3%  | 4%  | 10%   | 0%  | 5%  | 20%   |
| Bus Blockages (#/hr)    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
| Parking (#/hr)          |   |   |   |   |   |   |   |   |   |   |   |   |
| Mid-Block Traffic (%)   |   | 0%  |   |   | 0%  |   |   | 0%  |   |   | 0%  |   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 0   | 15  | 221   | 0   | 11  | 0   | 165   | 811   | 0   | 1   | 489   | 0   |
| Turn Type               | Perm  | NA  | Perm  | Perm  | NA  | Perm  | pm+pt   | NA  |   | pm+pt   | NA  |   |
| Protected Phases        |   | 4   |   |   | 8   |   |   | 5   | 2   |   | 1   | 6   |
| Permitted Phases        | 4   |   | 4   | 8   |   | 8   | 2   |   |   | 6   |   |   |
| Detector Phase          | 4   | 4   | 4   | 8   | 8   | 8   | 5   | 2   |   | 1   | 6   |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 3.0   | 15.0  |   | 3.0   | 15.0  |   |
| Minimum Split (s)       | 24.0  | 24.0  | 24.0  | 24.0  | 24.0  | 24.0  | 9.5   | 25.0  |   | 9.5   | 24.0  |   |
| Total Split (s)         | 28.0  | 28.0  | 28.0  | 28.0  | 28.0  | 28.0  | 14.0  | 37.0  |   | 10.0  | 33.0  |   |
| Total Split (%)         | 37.3%   | 37.3%   | 37.3%   | 37.3%   | 37.3%   | 37.3%   | 18.7%   | 49.3%   |   | 13.3%   | 44.0%   |   |
| Yellow Time (s)         | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 3.5   | 4.0   |   | 3.5   | 4.0   |   |
| All-Red Time (s)        | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 0.0   | 2.0   |   | 0.0   | 2.0   |   |
| Lost Time Adjust (s)    |   | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0   |   | 0.0   | 0.0   |   |
| Total Lost Time (s)     |   | 6.0   | 6.0   |   | 6.0   | 6.0   | 3.5   | 6.0   |   | 3.5   | 6.0   |   |
| Lead/Lag                |   |   |   |   |   |   |   | Lag   | Lead  |   | Lag   | Lead  |
| Lead-Lag Optimize?      |   |   |   |   |   |   |   | Yes   | Yes   |   | Yes   | Yes   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Min   |   | None  | C-Min   |   |
| Act Effct Green (s)     |   | 16.3  | 16.3  |   | 16.3  |   | 49.2  | 44.9  |   | 44.3  | 36.3  |   |
| Actuated g/C Ratio      |   | 0.22  | 0.22  |   | 0.22  |   | 0.66  | 0.60  |   | 0.59  | 0.48  |   |

Lanes, Volumes, Timings

1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

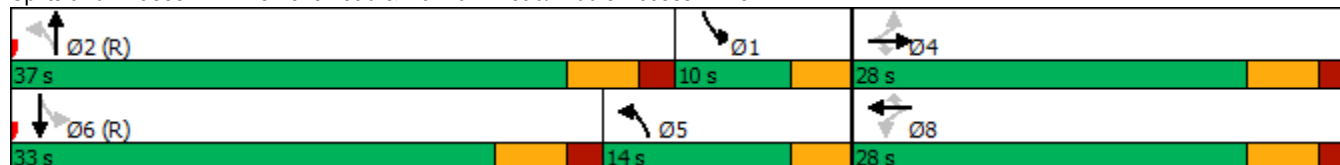


| Lane Group              | EBL | EBT  | EBR  | WBL | WBT  | WBR | NBL  | NBT  | NBR | SBL  | SBT  | SBR |
|-------------------------|-----|------|------|-----|------|-----|------|------|-----|------|------|-----|
| v/c Ratio               |     | 0.04 | 0.63 |     | 0.03 |     | 0.26 | 0.39 |     | 0.00 | 0.29 |     |
| Control Delay           |     | 20.8 | 34.3 |     | 20.7 |     | 3.8  | 5.7  |     | 6.0  | 13.4 |     |
| Queue Delay             |     | 0.0  | 0.0  |     | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  |     |
| Total Delay             |     | 20.8 | 34.3 |     | 20.7 |     | 3.8  | 5.7  |     | 6.0  | 13.4 |     |
| LOS                     |     | C    | C    |     | C    |     | A    | A    |     | A    | B    |     |
| Approach Delay          |     | 33.4 |      |     | 20.7 |     |      | 5.4  |     |      | 13.4 |     |
| Approach LOS            |     | C    |      |     | C    |     |      | A    |     |      | B    |     |
| Queue Length 50th (ft)  |     | 6    | 94   |     | 4    |     | 10   | 33   |     | 0    | 67   |     |
| Queue Length 95th (ft)  |     | 18   | 145  |     | 15   |     | 8    | 44   |     | 2    | 122  |     |
| Internal Link Dist (ft) |     | 587  |      |     | 251  |     |      | 553  |     |      | 615  |     |
| Turn Bay Length (ft)    |     |      | 105  |     |      |     | 175  |      |     | 135  |      |     |
| Base Capacity (vph)     |     | 491  | 473  |     | 432  |     | 727  | 2073 |     | 453  | 1659 |     |
| Starvation Cap Reductn  |     | 0    | 0    |     | 0    |     | 0    | 0    |     | 0    | 0    |     |
| Spillback Cap Reductn   |     | 0    | 0    |     | 0    |     | 0    | 0    |     | 0    | 0    |     |
| Storage Cap Reductn     |     | 0    | 0    |     | 0    |     | 0    | 0    |     | 0    | 0    |     |
| Reduced v/c Ratio       |     | 0.03 | 0.47 |     | 0.03 |     | 0.23 | 0.39 |     | 0.00 | 0.29 |     |

Intersection Summary

|                                    |   |
|------------------------------------|---|
| Area Type:                         | Other   |
| Cycle Length:                      | 75  |
| Actuated Cycle Length:             | 75  |
| Offset:                            | 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle:                     | 60  |
| Control Type:                      | Actuated-Coordinated  |
| Maximum v/c Ratio:                 | 0.63  |
| Intersection Signal Delay:         | 11.6  |
| Intersection LOS:                  | B   |
| Intersection Capacity Utilization: | 46.4%   |
| ICU Level of Service:              | A   |
| Analysis Period (min):             | 15  |

Splits and Phases: 1: Lemont Road & Dunham Road/Middle Access Drive



Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022

| Lane Group                | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR   |
|---------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| Lane Configurations       |       |       |      |       |       |      |       |       |      |       |       |       |
| Traffic Volume (vph)      | 36    | 3     | 7    | 14    | 2     | 2    | 15    | 831   | 9    | 5     | 618   | 12    |
| Future Volume (vph)       | 36    | 3     | 7    | 14    | 2     | 2    | 15    | 831   | 9    | 5     | 618   | 12    |
| Ideal Flow (vphpl)        | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900  |
| Lane Width (ft)           | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12    |
| Grade (%)                 |       | 0%    |      |       | 0%    |      |       | 0%    |      |       | 0%    |       |
| Storage Length (ft)       | 85    |       | 0    | 85    |       | 0    | 200   |       | 0    | 70    |       | 160   |
| Storage Lanes             | 1     |       | 0    | 1     |       | 0    | 1     |       | 0    | 1     |       | 1     |
| Taper Length (ft)         | 75    |       |      | 75    |       |      | 130   |       |      | 175   |       |       |
| Lane Util. Factor         | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 0.95  | 0.95 | 1.00  | 0.95  | 1.00  |
| Ped Bike Factor           |       |       |      |       |       |      |       |       |      |       |       |       |
| Fr <sub>t</sub>           |       | 0.891 |      |       | 0.925 |      |       | 0.998 |      |       |       | 0.850 |
| Fl <sub>t</sub> Protected | 0.950 |       |      | 0.950 |       |      | 0.950 |       |      | 0.950 |       |       |
| Satd. Flow (prot)         | 1656  | 1608  | 0    | 1805  | 1758  | 0    | 1805  | 3466  | 0    | 1805  | 3505  | 1380  |
| Fl <sub>t</sub> Permitted | 0.833 |       |      |       |       |      | 0.395 |       |      | 0.291 |       |       |
| Satd. Flow (perm)         | 1452  | 1608  | 0    | 1900  | 1758  | 0    | 750   | 3466  | 0    | 553   | 3505  | 1380  |
| Right Turn on Red         |       |       | Yes  |       |       | Yes  |       |       | Yes  |       |       | Yes   |
| Satd. Flow (RTOR)         |       | 8     |      |       | 2     |      |       | 2     |      |       |       | 145   |
| Link Speed (mph)          |       | 30    |      |       | 30    |      |       | 40    |      |       |       | 40    |
| Link Distance (ft)        |       | 302   |      |       | 294   |      |       | 366   |      |       |       | 633   |
| Travel Time (s)           |       | 6.9   |      |       | 6.7   |      |       | 6.2   |      |       |       | 10.8  |
| Confl. Peds. (#/hr)       |       |       |      |       |       |      |       |       |      |       |       |       |
| Confl. Bikes (#/hr)       |       |       |      |       |       |      |       |       |      |       |       |       |
| Peak Hour Factor          | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93  |
| Growth Factor             | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100%  |
| Heavy Vehicles (%)        | 9%    | 14%   | 2%   | 0%    | 0%    | 0%   | 0%    | 4%    | 0%   | 0%    | 3%    | 17%   |
| Bus Blockages (#/hr)      | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0     |
| Parking (#/hr)            |       |       |      |       |       |      |       |       |      |       |       |       |
| Mid-Block Traffic (%)     |       | 0%    |      |       | 0%    |      |       | 0%    |      |       |       | 0%    |
| Shared Lane Traffic (%)   |       |       |      |       |       |      |       |       |      |       |       |       |
| Lane Group Flow (vph)     | 39    | 11    | 0    | 15    | 4     | 0    | 16    | 904   | 0    | 5     | 665   | 13    |
| Turn Type                 | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    | Perm  |
| Protected Phases          | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     |       |
| Permitted Phases          | 4     |       |      | 8     |       |      | 2     |       |      | 6     |       | 6     |
| Detector Phase            | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     | 6     |
| Switch Phase              |       |       |      |       |       |      |       |       |      |       |       |       |
| Minimum Initial (s)       | 3.0   | 8.0   |      | 3.0   | 8.0   |      | 3.0   | 15.0  |      | 3.0   | 15.0  | 15.0  |
| Minimum Split (s)         | 9.5   | 23.0  |      | 9.5   | 23.0  |      | 9.5   | 25.0  |      | 9.5   | 24.0  | 24.0  |
| Total Split (s)           | 10.0  | 23.0  |      | 10.0  | 23.0  |      | 10.0  | 32.0  |      | 10.0  | 32.0  | 32.0  |
| Total Split (%)           | 13.3% | 30.7% |      | 13.3% | 30.7% |      | 13.3% | 42.7% |      | 13.3% | 42.7% | 42.7% |
| Yellow Time (s)           | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   | 4.0   |
| All-Red Time (s)          | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   | 2.0   |
| Lost Time Adjust (s)      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)       | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   | 6.0   |
| Lead/Lag                  | Lag   | Lead  |      | Lag   | Lead  |      | Lag   | Lead  |      | Lag   | Lead  | Lead  |
| Lead-Lag Optimize?        | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   | Yes   |
| Recall Mode               | None  | None  |      | None  | None  |      | None  | C-Min |      | None  | C-Min | C-Min |
| Act Effct Green (s)       | 9.8   | 8.0   |      | 8.0   | 8.0   |      | 63.7  | 59.3  |      | 62.8  | 59.3  | 59.3  |
| Actuated g/C Ratio        | 0.13  | 0.11  |      | 0.11  | 0.11  |      | 0.85  | 0.79  |      | 0.84  | 0.79  | 0.79  |

Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

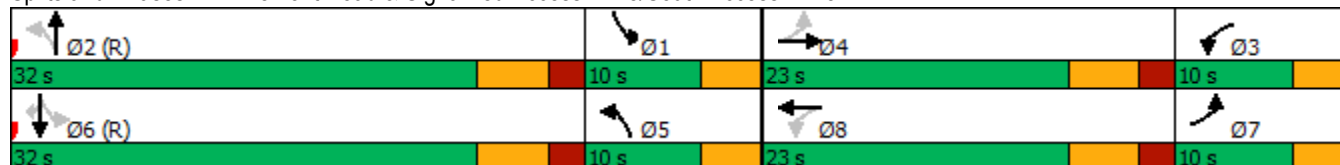
06/21/2022

| Lane Group              | EBL  | EBT  | EBR | WBL  | WBT  | WBR | NBL  | NBT  | NBR | SBL  | SBT  | SBR  |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|------|
| v/c Ratio               | 0.19 | 0.06 |     | 0.08 | 0.02 |     | 0.02 | 0.33 |     | 0.01 | 0.24 | 0.01 |
| Control Delay           | 27.8 | 21.2 |     | 26.9 | 25.5 |     | 3.0  | 5.7  |     | 0.6  | 2.0  | 0.0  |
| Queue Delay             | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  |
| Total Delay             | 27.8 | 21.2 |     | 26.9 | 25.5 |     | 3.0  | 5.7  |     | 0.6  | 2.0  | 0.0  |
| LOS                     | C    | C    |     | C    | C    |     | A    | A    |     | A    | A    | A    |
| Approach Delay          |      | 26.4 |     |      | 26.6 |     |      | 5.7  |     |      | 1.9  |      |
| Approach LOS            |      | C    |     |      | C    |     |      | A    |     |      | A    |      |
| Queue Length 50th (ft)  | 16   | 1    |     | 7    | 1    |     | 1    | 62   |     | 0    | 6    | 0    |
| Queue Length 95th (ft)  | 36   | 16   |     | 19   | 9    |     | 8    | 195  |     | m1   | 60   | m0   |
| Internal Link Dist (ft) |      | 222  |     |      | 214  |     |      | 286  |     |      | 553  |      |
| Turn Bay Length (ft)    | 85   |      |     | 85   |      |     | 200  |      |     | 70   |      | 160  |
| Base Capacity (vph)     | 219  | 370  |     | 210  | 400  |     | 738  | 2743 |     | 575  | 2773 | 1122 |
| Starvation Cap Reductn  | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.18 | 0.03 |     | 0.07 | 0.01 |     | 0.02 | 0.33 |     | 0.01 | 0.24 | 0.01 |

Intersection Summary

Area Type: Other  
 Cycle Length: 75  
 Actuated Cycle Length: 75  
 Offset: 2 (3%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.33  
 Intersection Signal Delay: 5.0 Intersection LOS: A  
 Intersection Capacity Utilization 41.9% ICU Level of Service A  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Lemont Road & Signalized Access Drive/South Access Drive



## HCM 6th TWSC

### 3: Lemont Road & North Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.5  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      | ↔    |      | ↕    |      | ↔    | ↕    |
| Traffic Vol, veh/h       | 6    | 12   | 704  | 14   | 29   | 430  |
| Future Vol, veh/h        | 6    | 12   | 704  | 14   | 29   | 430  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 100  | -    |
| Veh in Median Storage, # | 1    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 97   | 97   | 97   | 97   | 97   | 97   |
| Heavy Vehicles, %        | 3    | 14   | 7    | 4    | 50   | 0    |
| Mvmt Flow                | 6    | 12   | 726  | 14   | 30   | 443  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |     |
|----------------------|--------|--------|--------|---|-----|
| Conflicting Flow All | 1015   | 370    | 0      | 0 | 740 |
| Stage 1              | 733    | -      | -      | - | -   |
| Stage 2              | 282    | -      | -      | - | -   |
| Critical Hdwy        | 6.86   | 7.18   | -      | - | 5.1 |
| Critical Hdwy Stg 1  | 5.86   | -      | -      | - | -   |
| Critical Hdwy Stg 2  | 5.86   | -      | -      | - | -   |
| Follow-up Hdwy       | 3.53   | 3.44   | -      | - | 2.7 |
| Pot Cap-1 Maneuver   | 233    | 594    | -      | - | 609 |
| Stage 1              | 434    | -      | -      | - | -   |
| Stage 2              | 738    | -      | -      | - | -   |
| Platoon blocked, %   |        |        | -      | - | -   |
| Mov Cap-1 Maneuver   | 222    | 594    | -      | - | 609 |
| Mov Cap-2 Maneuver   | 337    | -      | -      | - | -   |
| Stage 1              | 434    | -      | -      | - | -   |
| Stage 2              | 702    | -      | -      | - | -   |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 12.9 | 0  | 0.7 |
| HCM LOS              | B    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 474   | 609   |
| HCM Lane V/C Ratio    | -   | -        | 0.039 | 0.049 |
| HCM Control Delay (s) | -   | -        | 12.9  | 11.2  |
| HCM Lane LOS          | -   | -        | B     | B     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   | 0.2   |

HCM 6th TWSC  
4: Lemont Road & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      | ↗    |      | ↕↗   |      |      | ↕↖↗  |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 854  | 11   | 0    | 639  | 0    |
| Future Vol, veh/h        | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 854  | 11   | 0    | 639  | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | 0    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 3    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 4    | 9    | 0    | 3    | 0    |
| Mvmt Flow                | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 928  | 12   | 0    | 695  | 0    |

| Major/Minor          | Minor1 | Major1 | Major2      |
|----------------------|--------|--------|-------------|
| Conflicting Flow All | -      | - 470  | - 0 0       |
| Stage 1              | -      | -      | -           |
| Stage 2              | -      | -      | -           |
| Critical Hdwy        | -      | - 6.9  | -           |
| Critical Hdwy Stg 1  | -      | -      | -           |
| Critical Hdwy Stg 2  | -      | -      | -           |
| Follow-up Hdwy       | -      | - 3.3  | -           |
| Pot Cap-1 Maneuver   | 0      | 0 545  | 0 - - 0 - 0 |
| Stage 1              | 0      | 0 -    | 0 - - 0 - 0 |
| Stage 2              | 0      | 0 -    | 0 - - 0 - 0 |
| Platoon blocked, %   |        |        | - - -       |
| Mov Cap-1 Maneuver   | -      | 0 545  | - - - - -   |
| Mov Cap-2 Maneuver   | -      | 0 -    | - - - - -   |
| Stage 1              | -      | 0 -    | - - - - -   |
| Stage 2              | -      | 0 -    | - - - - -   |

| Approach             | WB   | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 11.6 | 0  | 0  |
| HCM LOS              | B    |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h)      | -   | - 545    | -   |
| HCM Lane V/C Ratio    | -   | - 0.002  | -   |
| HCM Control Delay (s) | -   | - 11.6   | -   |
| HCM Lane LOS          | -   | - B      | -   |
| HCM 95th %tile Q(veh) | -   | - 0      | -   |

## HCM 6th TWSC

### 5: 75th Street & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |        |        |        |       |      |      |
|--------------------------|--------|--------|--------|-------|------|------|
| Int Delay, s/veh         | 0      |        |        |       |      |      |
| Movement                 | EBL    | EBT    | WBT    | WBR   | SBL  | SBR  |
| Lane Configurations      |        | ↑↑↑    | ↑↑↑    |       |      | ↑    |
| Traffic Vol, veh/h       | 0      | 1327   | 873    | 17    | 0    | 4    |
| Future Vol, veh/h        | 0      | 1327   | 873    | 17    | 0    | 4    |
| Conflicting Peds, #/hr   | 0      | 0      | 0      | 0     | 0    | 0    |
| Sign Control             | Free   | Free   | Free   | Free  | Stop | Stop |
| RT Channelized           | -      | None   | -      | None  | -    | None |
| Storage Length           | -      | -      | -      | -     | -    | 0    |
| Veh in Median Storage, # | -      | 0      | 0      | -     | 0    | -    |
| Grade, %                 | -      | 0      | 0      | -     | 0    | -    |
| Peak Hour Factor         | 94     | 94     | 94     | 94    | 94   | 94   |
| Heavy Vehicles, %        | 0      | 3      | 2      | 12    | 0    | 25   |
| Mvmt Flow                | 0      | 1412   | 929    | 18    | 0    | 4    |
| Major/Minor              | Major1 | Major2 | Minor2 |       |      |      |
| Conflicting Flow All     | -      | 0      | -      | 0     | -    | 474  |
| Stage 1                  | -      | -      | -      | -     | -    | -    |
| Stage 2                  | -      | -      | -      | -     | -    | -    |
| Critical Hdwy            | -      | -      | -      | -     | -    | 7.6  |
| Critical Hdwy Stg 1      | -      | -      | -      | -     | -    | -    |
| Critical Hdwy Stg 2      | -      | -      | -      | -     | -    | -    |
| Follow-up Hdwy           | -      | -      | -      | -     | -    | 4.15 |
| Pot Cap-1 Maneuver       | 0      | -      | -      | -     | 0    | 414  |
| Stage 1                  | 0      | -      | -      | -     | 0    | -    |
| Stage 2                  | 0      | -      | -      | -     | 0    | -    |
| Platoon blocked, %       | -      | -      | -      | -     | -    | -    |
| Mov Cap-1 Maneuver       | -      | -      | -      | -     | -    | 414  |
| Mov Cap-2 Maneuver       | -      | -      | -      | -     | -    | -    |
| Stage 1                  | -      | -      | -      | -     | -    | -    |
| Stage 2                  | -      | -      | -      | -     | -    | -    |
| Approach                 | EB     | WB     | SB     |       |      |      |
| HCM Control Delay, s     | 0      | 0      | 13.8   |       |      |      |
| HCM LOS                  |        |        |        |       |      | B    |
| Minor Lane/Major Mvmt    | EBT    | WBT    | WBR    | SBLn1 |      |      |
| Capacity (veh/h)         | -      | -      | -      | 414   |      |      |
| HCM Lane V/C Ratio       | -      | -      | -      | 0.01  |      |      |
| HCM Control Delay (s)    | -      | -      | -      | 13.8  |      |      |
| HCM Lane LOS             | -      | -      | -      | B     |      |      |
| HCM 95th %tile Q(veh)    | -      | -      | -      | 0     |      |      |



### Intersection Capacity Utilization 6: Internal Drive & Middle Access Drive

06/21/2022



| Movement                   | EBL  | EBR  | NBL   | NBT      | SBT  | SBR  |
|----------------------------|------|------|-------|----------|------|------|
| Lane Configurations        |      |      |       |          |      |      |
| Volume (vph)               | 49   | 23   | 16    | 70       | 98   | 43   |
| Pedestrians                |      |      |       |          |      |      |
| Ped Button                 |      |      |       |          |      |      |
| Pedestrian Timing (s)      |      |      |       |          |      |      |
| Free Right                 |      | No   |       |          |      | No   |
| Ideal Flow                 | 1900 | 1900 | 1900  | 1900     | 1900 | 1900 |
| Lost Time (s)              | 4.0  | 4.0  | 4.0   | 4.0      | 4.0  | 4.0  |
| Minimum Green (s)          | 4.0  | 4.0  | 4.0   | 4.0      | 4.0  | 4.0  |
| Refr Cycle Length (s)      | 120  | 120  | 120   | 120      | 120  | 120  |
| Volume Combined (vph)      | 49   | 23   | 0     | 86       | 141  | 0    |
| Lane Utilization Factor    | 1.00 | 1.00 | 1.00  | 1.00     | 1.00 | 1.00 |
| Turning Factor (vph)       | 0.95 | 0.85 | 0.95  | 0.99     | 0.95 | 0.85 |
| Saturated Flow (vph)       | 1805 | 1615 | 0     | 1882     | 1813 | 0    |
| Ped Intf Time (s)          | 0.0  | 0.0  | 0.0   | 0.0      | 0.0  | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      |       | 0.00     | 0.00 |      |
| Protected Option Allowed   | No   |      |       | No       | No   |      |
| Reference Time (s)         |      | 1.7  |       |          |      | 0.0  |
| Adj Reference Time (s)     |      | 8.0  |       |          |      | 0.0  |
| Permitted Option           |      |      |       |          |      |      |
| Adj Saturation A (vph)     | 120  |      | 0     | 493      | 1813 |      |
| Reference Time A (s)       | 48.9 |      | 0.0   | 20.9     | 9.3  |      |
| Adj Saturation B (vph)     | NA   |      | NA    | NA       | 1813 |      |
| Reference Time B (s)       | NA   |      | NA    | NA       | 9.3  |      |
| Reference Time (s)         |      |      |       | 20.9     | 9.3  |      |
| Adj Reference Time (s)     |      |      |       | 24.9     | 13.3 |      |
| Split Option               |      |      |       |          |      |      |
| Ref Time Combined (s)      | 3.3  |      | 0.0   | 5.5      | 9.3  |      |
| Ref Time Seperate (s)      | 3.3  |      | 1.1   | 4.4      | 6.5  |      |
| Reference Time (s)         | 3.3  |      | 5.5   | 5.5      | 9.3  |      |
| Adj Reference Time (s)     | 8.0  |      | 9.5   | 9.5      | 13.3 |      |
| Summary                    | EB   |      | NB SB | Combined |      |      |
| Protected Option (s)       | NA   |      | NA    |          |      |      |
| Permitted Option (s)       | Err  |      | 24.9  |          |      |      |
| Split Option (s)           | 8.0  |      | 22.8  |          |      |      |
| Minimum (s)                | 8.0  |      | 22.8  | 30.8     |      |      |
| Right Turns                | EBR  |      |       |          |      |      |
| Adj Reference Time (s)     | 8.0  |      |       |          |      |      |
| Cross Thru Ref Time (s)    | 13.3 |      |       |          |      |      |
| Oncoming Left Ref Time (s) | 0.0  |      |       |          |      |      |
| Combined (s)               | 21.3 |      |       |          |      |      |

#### Intersection Summary

Intersection Capacity Utilization 25.7% ICU Level of Service A  
 Reference Times and Phasing Options do not represent an optimized timing plan.

## Intersection Capacity Utilization

### 7: Internal Drive & South Access Drive

06/21/2022



| Movement   | EBL  | EBR  | NBL   | NBT   | SBT                  | SBR  |
|--|------|------|-------|-------|----------------------|------|
| Lane Configurations  |      |      |       |       |                      |      |
| Volume (vph)   | 55   | 42   | 112   | 31    | 19                   | 102  |
| Pedestrians  |      |      |       |       |                      |      |
| Ped Button   |      |      |       |       |                      |      |
| Pedestrian Timing (s)  |      |      |       |       |                      |      |
| Free Right   |      | No   |       |       |                      | No   |
| Ideal Flow   | 1900 | 1900 | 1900  | 1900  | 1900                 | 1900 |
| Lost Time (s)  | 4.0  | 4.0  | 4.0   | 4.0   | 4.0                  | 4.0  |
| Minimum Green (s)  | 4.0  | 4.0  | 4.0   | 4.0   | 4.0                  | 4.0  |
| Refr Cycle Length (s)  | 120  | 120  | 120   | 120   | 120                  | 120  |
| Volume Combined (vph)  | 55   | 42   | 0     | 143   | 121                  | 0    |
| Lane Utilization Factor  | 1.00 | 1.00 | 1.00  | 1.00  | 1.00                 | 1.00 |
| Turning Factor (vph)   | 0.95 | 0.85 | 0.95  | 0.96  | 0.87                 | 0.85 |
| Saturated Flow (vph)   | 1805 | 1615 | 0     | 1826  | 1660                 | 0    |
| Ped Intf Time (s)  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0                  | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      |       | 0.00  | 0.00                 |      |
| Protected Option Allowed   | No   |      |       | No    | No                   |      |
| Reference Time (s)   |      | 3.1  |       |       |                      | 0.0  |
| Adj Reference Time (s)   |      | 8.0  |       |       |                      | 0.0  |
| Permitted Option   |      |      |       |       |                      |      |
| Adj Saturation A (vph)   | 120  |      | 0     | 144   | 1660                 |      |
| Reference Time A (s)   | 54.8 |      | 0.0   | 118.8 | 8.7                  |      |
| Adj Saturation B (vph)   | NA   |      | NA    | NA    | 1660                 |      |
| Reference Time B (s)   | NA   |      | NA    | NA    | 8.7                  |      |
| Reference Time (s)   |      |      |       | 118.8 | 8.7                  |      |
| Adj Reference Time (s)   |      |      |       | 122.8 | 12.7                 |      |
| Split Option   |      |      |       |       |                      |      |
| Ref Time Combined (s)  | 3.7  |      | 0.0   | 9.4   | 8.7                  |      |
| Ref Time Seperate (s)  | 3.7  |      | 7.4   | 2.0   | 1.4                  |      |
| Reference Time (s)   | 3.7  |      | 9.4   | 9.4   | 8.7                  |      |
| Adj Reference Time (s)   | 8.0  |      | 13.4  | 13.4  | 12.7                 |      |
| Summary  | EB   |      | NB SB |       | Combined             |      |
| Protected Option (s)   | NA   |      | NA    |       |                      |      |
| Permitted Option (s)   | Err  |      | 122.8 |       |                      |      |
| Split Option (s)   | 8.0  |      | 26.1  |       |                      |      |
| Minimum (s)  | 8.0  |      | 26.1  |       | 34.1                 |      |
| Right Turns  | EBR  |      |       |       |                      |      |
| Adj Reference Time (s)   | 8.0  |      |       |       |                      |      |
| Cross Thru Ref Time (s)  | 12.7 |      |       |       |                      |      |
| Oncoming Left Ref Time (s)   | 0.0  |      |       |       |                      |      |
| Combined (s)   | 20.7 |      |       |       |                      |      |
| Intersection Summary   |      |      |       |       |                      |      |
| Intersection Capacity Utilization  |      |      | 28.5% |       | ICU Level of Service | A    |
| Reference Times and Phasing Options do not represent an optimized timing plan. |      |      |       |       |                      |      |

Capacity Analysis Summary Sheets  
Year 2021 Weekday Evening Peak Hour Conditions

### Lanes, Volumes, Timings

#### 1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR  | SBL   | SBT   | SBR  |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations     |       |       |       |       |       |       |       |       |      |       |       |      |
| Traffic Volume (vph)    | 7     | 19    | 155   | 37    | 17    | 5     | 167   | 620   | 43   | 10    | 705   | 11   |
| Future Volume (vph)     | 7     | 19    | 155   | 37    | 17    | 5     | 167   | 620   | 43   | 10    | 705   | 11   |
| Ideal Flow (vphpl)      | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 |
| Lane Width (ft)         | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12   | 12    | 12    | 12   |
| Grade (%)               |       | 0%    |       |       | 0%    |       |       | 0%    |      |       | 0%    |      |
| Storage Length (ft)     | 0     |       | 105   | 0     |       | 85    | 175   |       | 0    | 135   |       | 0    |
| Storage Lanes           | 0     |       | 1     | 0     |       | 1     | 1     |       | 0    | 1     |       | 0    |
| Taper Length (ft)       | 60    |       |       | 25    |       |       | 165   |       |      | 120   |       |      |
| Lane Util. Factor       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95 | 1.00  | 0.95  | 0.95 |
| Ped Bike Factor         |       |       |       |       |       |       |       |       |      |       |       |      |
| Frt                     |       |       | 0.850 |       |       | 0.850 |       | 0.990 |      |       | 0.998 |      |
| Flt Protected           |       | 0.987 |       |       | 0.967 |       | 0.950 |       |      | 0.950 |       |      |
| Satd. Flow (prot)       | 0     | 1875  | 1615  | 0     | 1837  | 1615  | 1805  | 3536  | 0    | 1805  | 3568  | 0    |
| Flt Permitted           |       | 0.926 |       |       | 0.785 |       | 0.336 |       |      | 0.379 |       |      |
| Satd. Flow (perm)       | 0     | 1759  | 1615  | 0     | 1492  | 1615  | 638   | 3536  | 0    | 720   | 3568  | 0    |
| Right Turn on Red       |       |       | No    |       |       | No    |       |       | No   |       |       | No   |
| Satd. Flow (RTOR)       |       |       |       |       |       |       |       |       |      |       |       |      |
| Link Speed (mph)        |       | 30    |       |       | 30    |       |       | 40    |      |       | 40    |      |
| Link Distance (ft)      |       | 667   |       |       | 331   |       |       | 633   |      |       | 695   |      |
| Travel Time (s)         |       | 15.2  |       |       | 7.5   |       |       | 10.8  |      |       | 11.8  |      |
| Confl. Peds. (#/hr)     |       |       |       |       |       |       |       |       |      |       |       |      |
| Confl. Bikes (#/hr)     |       |       |       |       |       |       |       |       |      |       |       |      |
| 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 |
| Growth Factor           | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100% | 100%  | 100%  | 100% |
| Heavy Vehicles (%)      | 0%    | 0%    | 0%    | 0%    | 0%    | 0%    | 0%    | 1%    | 2%   | 0%    | 1%    | 0%   |
| Bus Blockages (#/hr)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0    |
| Parking (#/hr)          |       |       |       |       |       |       |       |       |      |       |       |      |
| Mid-Block Traffic (%)   |       | 0%    |       |       | 0%    |       |       | 0%    |      |       | 0%    |      |
| Shared Lane Traffic (%) |       |       |       |       |       |       |       |       |      |       |       |      |
| Lane Group Flow (vph)   | 0     | 26    | 158   | 0     | 55    | 5     | 170   | 677   | 0    | 10    | 730   | 0    |
| Turn Type               | Perm  | NA    | Perm  | Perm  | NA    | Perm  | pm+pt | NA    |      | pm+pt | NA    |      |
| Protected Phases        |       | 4     |       |       | 8     |       | 5     | 2     |      | 1     | 6     |      |
| Permitted Phases        | 4     |       | 4     | 8     |       | 8     | 2     |       |      | 6     |       |      |
| Detector Phase          | 4     | 4     | 4     | 8     | 8     | 8     | 5     | 2     |      | 1     | 6     |      |
| Switch Phase            |       |       |       |       |       |       |       |       |      |       |       |      |
| Minimum Initial (s)     | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 3.0   | 15.0  |      | 3.0   | 15.0  |      |
| Minimum Split (s)       | 22.5  | 22.5  | 22.5  | 22.5  | 22.5  | 22.5  | 9.5   | 22.5  |      | 9.5   | 22.5  |      |
| Total Split (s)         | 26.0  | 26.0  | 26.0  | 26.0  | 26.0  | 26.0  | 14.0  | 39.0  |      | 10.0  | 35.0  |      |
| Total Split (%)         | 34.7% | 34.7% | 34.7% | 34.7% | 34.7% | 34.7% | 18.7% | 52.0% |      | 13.3% | 46.7% |      |
| Yellow Time (s)         | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 3.5   | 4.0   |      | 3.5   | 4.0   |      |
| All-Red Time (s)        | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 0.0   | 2.0   |      | 0.0   | 2.0   |      |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |      | 0.0   | 0.0   |      |
| Total Lost Time (s)     |       | 6.0   | 6.0   |       | 6.0   | 6.0   | 3.5   | 6.0   |      | 3.5   | 6.0   |      |
| Lead/Lag                |       |       |       |       |       |       | Lag   | Lead  |      | Lag   | Lead  |      |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   |      | Yes   | Yes   |      |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Min |      | None  | C-Min |      |
| Act Effct Green (s)     |       | 13.5  | 13.5  |       | 13.5  | 13.5  | 52.0  | 47.7  |      | 47.4  | 39.5  |      |
| Actuated g/C Ratio      |       | 0.18  | 0.18  |       | 0.18  | 0.18  | 0.69  | 0.64  |      | 0.63  | 0.53  |      |

### Lanes, Volumes, Timings

#### 1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

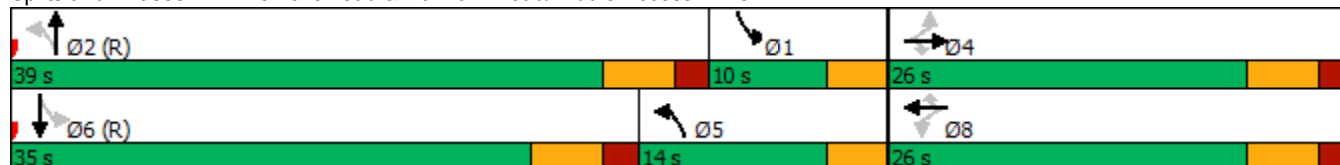


| Lane Group              | EBL | EBT  | EBR  | WBL | WBT  | WBR  | NBL  | NBT  | NBR | SBL  | SBT  | SBR |
|-------------------------|-----|------|------|-----|------|------|------|------|-----|------|------|-----|
| v/c Ratio               |     | 0.08 | 0.55 |     | 0.21 | 0.02 | 0.31 | 0.30 |     | 0.02 | 0.39 |     |
| Control Delay           |     | 24.2 | 34.4 |     | 26.4 | 22.8 | 3.8  | 2.5  |     | 4.9  | 12.3 |     |
| Queue Delay             |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  | 0.0  |     | 0.0  | 0.0  |     |
| Total Delay             |     | 24.2 | 34.4 |     | 26.4 | 22.8 | 3.8  | 2.5  |     | 4.9  | 12.3 |     |
| LOS                     |     | C    | C    |     | C    | C    | A    | A    |     | A    | B    |     |
| Approach Delay          |     | 33.0 |      |     | 26.1 |      |      | 2.8  |     |      | 12.2 |     |
| Approach LOS            |     | C    |      |     | C    |      |      | A    |     |      | B    |     |
| Queue Length 50th (ft)  |     | 10   | 68   |     | 22   | 2    | 12   | 32   |     | 1    | 96   |     |
| Queue Length 95th (ft)  |     | 28   | 115  |     | 48   | 10   | 22   | 18   |     | 6    | 173  |     |
| Internal Link Dist (ft) |     | 587  |      |     | 251  |      |      | 553  |     |      | 615  |     |
| Turn Bay Length (ft)    |     |      | 105  |     |      | 85   | 175  |      |     | 135  |      |     |
| Base Capacity (vph)     |     | 469  | 430  |     | 397  | 430  | 639  | 2249 |     | 558  | 1879 |     |
| Starvation Cap Reductn  |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Spillback Cap Reductn   |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Storage Cap Reductn     |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Reduced v/c Ratio       |     | 0.06 | 0.37 |     | 0.14 | 0.01 | 0.27 | 0.30 |     | 0.02 | 0.39 |     |

#### Intersection Summary

|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 75  |
| Actuated Cycle Length:            | 75  |
| Offset:                           | 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle:                    | 55  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.55  |
| Intersection Signal Delay:        | 10.4  |
| Intersection LOS:                 | B   |
| Intersection Capacity Utilization | 52.0%   |
| ICU Level of Service              | A   |
| Analysis Period (min)             | 15  |

#### Splits and Phases: 1: Lemont Road & Dunham Road/Middle Access Drive



Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022

| Lane Group                | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR   |
|---------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| Lane Configurations       |       |       |      |       |       |      |       |       |      |       |       |       |
| Traffic Volume (vph)      | 66    | 11    | 42   | 190   | 7     | 17   | 55    | 747   | 65   | 21    | 807   | 69    |
| Future Volume (vph)       | 66    | 11    | 42   | 190   | 7     | 17   | 55    | 747   | 65   | 21    | 807   | 69    |
| Ideal Flow (vphpl)        | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900  |
| Lane Width (ft)           | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12    |
| Grade (%)                 |       | 0%    |      |       | 0%    |      |       | 0%    |      |       | 0%    |       |
| Storage Length (ft)       | 85    |       | 0    | 85    |       | 0    | 200   |       | 0    | 70    |       | 160   |
| Storage Lanes             | 1     |       | 0    | 1     |       | 0    | 1     |       | 0    | 1     |       | 1     |
| Taper Length (ft)         | 75    |       |      | 75    |       |      | 130   |       |      | 175   |       |       |
| Lane Util. Factor         | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 0.95  | 0.95 | 1.00  | 0.95  | 1.00  |
| Ped Bike Factor           |       |       |      |       |       |      |       |       |      |       |       |       |
| Fr <sub>t</sub>           |       | 0.881 |      |       | 0.892 |      |       | 0.988 |      |       |       | 0.850 |
| Fl <sub>t</sub> Protected | 0.950 |       |      | 0.950 |       |      | 0.950 |       |      | 0.950 |       |       |
| Satd. Flow (prot)         | 1805  | 1674  | 0    | 1805  | 1695  | 0    | 1805  | 3534  | 0    | 1805  | 3574  | 1615  |
| Fl <sub>t</sub> Permitted | 0.000 |       |      | 0.000 |       |      | 0.236 |       |      | 0.337 |       |       |
| Satd. Flow (perm)         | 0     | 1674  | 0    | 0     | 1695  | 0    | 448   | 3534  | 0    | 640   | 3574  | 1615  |
| Right Turn on Red         |       |       | Yes  |       |       | Yes  |       |       | Yes  |       |       | Yes   |
| Satd. Flow (RTOR)         |       | 43    |      |       | 18    |      |       | 14    |      |       |       | 145   |
| Link Speed (mph)          |       | 30    |      |       | 30    |      |       | 40    |      |       |       | 40    |
| Link Distance (ft)        |       | 302   |      |       | 294   |      |       | 366   |      |       |       | 633   |
| Travel Time (s)           |       | 6.9   |      |       | 6.7   |      |       | 6.2   |      |       |       | 10.8  |
| Confl. Peds. (#/hr)       |       |       |      |       |       |      |       |       |      |       |       |       |
| Confl. Bikes (#/hr)       |       |       |      |       |       |      |       |       |      |       |       |       |
| Peak Hour Factor          | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  |
| Growth Factor             | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100%  |
| Heavy Vehicles (%)        | 0%    | 0%    | 0%   | 0%    | 0%    | 0%   | 0%    | 1%    | 0%   | 0%    | 1%    | 0%    |
| Bus Blockages (#/hr)      | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0     |
| Parking (#/hr)            |       |       |      |       |       |      |       |       |      |       |       |       |
| Mid-Block Traffic (%)     |       | 0%    |      |       | 0%    |      |       | 0%    |      |       |       | 0%    |
| Shared Lane Traffic (%)   |       |       |      |       |       |      |       |       |      |       |       |       |
| Lane Group Flow (vph)     | 68    | 54    | 0    | 196   | 25    | 0    | 57    | 837   | 0    | 22    | 832   | 71    |
| Turn Type                 | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    | Perm  |
| Protected Phases          | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     |       |
| Permitted Phases          | 4     |       |      | 8     |       |      | 2     |       |      | 6     |       | 6     |
| Detector Phase            | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     | 6     |
| Switch Phase              |       |       |      |       |       |      |       |       |      |       |       |       |
| Minimum Initial (s)       | 3.0   | 8.0   |      | 3.0   | 8.0   |      | 3.0   | 15.0  |      | 3.0   | 15.0  | 15.0  |
| Minimum Split (s)         | 9.5   | 14.0  |      | 9.5   | 14.0  |      | 9.0   | 24.0  |      | 9.5   | 24.0  | 24.0  |
| Total Split (s)           | 10.0  | 14.0  |      | 16.0  | 20.0  |      | 9.0   | 35.0  |      | 10.0  | 36.0  | 36.0  |
| Total Split (%)           | 13.3% | 18.7% |      | 21.3% | 26.7% |      | 12.0% | 46.7% |      | 13.3% | 48.0% | 48.0% |
| Yellow Time (s)           | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   | 4.0   |
| All-Red Time (s)          | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   | 2.0   |
| Lost Time Adjust (s)      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)       | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   | 6.0   |
| Lead/Lag                  | Lag   | Lag   |      | Lead  | Lead  |      | Lead  | Lead  |      | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?        | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   | Yes   |
| Recall Mode               | None  | None  |      | None  | None  |      | None  | C-Min |      | None  | C-Min | C-Min |
| Act Effct Green (s)       | 12.7  | 8.0   |      | 11.9  | 8.3   |      | 43.7  | 41.2  |      | 42.3  | 39.8  | 39.8  |
| Actuated g/C Ratio        | 0.17  | 0.11  |      | 0.16  | 0.11  |      | 0.58  | 0.55  |      | 0.56  | 0.53  | 0.53  |

Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022

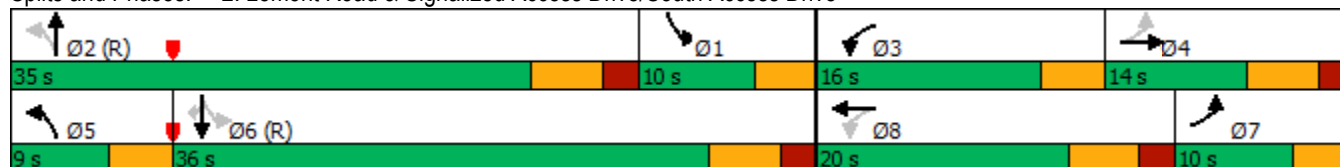


| Lane Group              | EBL  | EBT  | EBR | WBL  | WBT  | WBR | NBL  | NBT  | NBR | SBL  | SBT  | SBR  |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|------|
| v/c Ratio               | 0.22 | 0.25 |     | 0.69 | 0.12 |     | 0.16 | 0.43 |     | 0.05 | 0.44 | 0.08 |
| Control Delay           | 28.0 | 16.6 |     | 43.5 | 18.7 |     | 12.1 | 13.4 |     | 5.5  | 8.2  | 0.6  |
| Queue Delay             | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  |
| Total Delay             | 28.0 | 16.6 |     | 43.5 | 18.7 |     | 12.1 | 13.4 |     | 5.5  | 8.2  | 0.6  |
| LOS                     | C    | B    |     | D    | B    |     | B    | B    |     | A    | A    | A    |
| Approach Delay          |      | 22.9 |     |      | 40.7 |     |      | 13.4 |     |      | 7.6  |      |
| Approach LOS            |      | C    |     |      | D    |     |      | B    |     |      | A    |      |
| Queue Length 50th (ft)  | 21   | 5    |     | 86   | 3    |     | 11   | 117  |     | 3    | 173  | 1    |
| Queue Length 95th (ft)  | 63   | 36   |     | #167 | 24   |     | 36   | 215  |     | m7   | 74   | 3    |
| Internal Link Dist (ft) |      | 222  |     |      | 214  |     |      | 286  |     |      | 553  |      |
| Turn Bay Length (ft)    | 85   |      |     | 85   |      |     | 200  |      |     | 70   |      | 160  |
| Base Capacity (vph)     | 309  | 216  |     | 300  | 331  |     | 361  | 1949 |     | 464  | 1898 | 926  |
| Starvation Cap Reductn  | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.22 | 0.25 |     | 0.65 | 0.08 |     | 0.16 | 0.43 |     | 0.05 | 0.44 | 0.08 |

Intersection Summary

Area Type: Other  
 Cycle Length: 75  
 Actuated Cycle Length: 75  
 Offset: 6 (8%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.69  
 Intersection Signal Delay: 14.2      Intersection LOS: B  
 Intersection Capacity Utilization 56.6%      ICU Level of Service B  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Lemont Road & Signalized Access Drive/South Access Drive



## HCM 6th TWSC

### 3: Lemont Road & North Access Drive

06/21/2022

#### Intersection

Int Delay, s/veh 1.6

| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 19   | 107  | 614  | 18   | 75   | 707  |
| Future Vol, veh/h        | 19   | 107  | 614  | 18   | 75   | 707  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 100  | -    |
| Veh in Median Storage, # | 1    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 96   | 96   | 96   | 96   | 96   | 96   |
| Heavy Vehicles, %        | 1    | 11   | 0    | 2    | 0    | 0    |
| Mvmt Flow                | 20   | 111  | 640  | 19   | 78   | 736  |

| Major/Minor          | Minor1 | Major1 | Major2 | Major2 | Major2 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 1174   | 330    | 0      | 0      | 659    |
| Stage 1              | 650    | -      | -      | -      | -      |
| Stage 2              | 524    | -      | -      | -      | -      |
| Critical Hdwy        | 6.82   | 7.12   | -      | -      | 4.1    |
| Critical Hdwy Stg 1  | 5.82   | -      | -      | -      | -      |
| Critical Hdwy Stg 2  | 5.82   | -      | -      | -      | -      |
| Follow-up Hdwy       | 3.51   | 3.41   | -      | -      | 2.2    |
| Pot Cap-1 Maneuver   | 186    | 640    | -      | -      | 939    |
| Stage 1              | 484    | -      | -      | -      | -      |
| Stage 2              | 561    | -      | -      | -      | -      |
| Platoon blocked, %   |        |        | -      | -      | -      |
| Mov Cap-1 Maneuver   | 171    | 640    | -      | -      | 939    |
| Mov Cap-2 Maneuver   | 305    | -      | -      | -      | -      |
| Stage 1              | 484    | -      | -      | -      | -      |
| Stage 2              | 514    | -      | -      | -      | -      |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 13.6 | 0  | 0.9 |
| HCM LOS              | B    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 549   | 939   |
| HCM Lane V/C Ratio    | -   | -        | 0.239 | 0.083 |
| HCM Control Delay (s) | -   | -        | 13.6  | 9.2   |
| HCM Lane LOS          | -   | -        | B     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0.9   | 0.3   |



### Intersection Capacity Utilization 6: Internal Drive & Middle Access Drive

06/21/2022



| Movement                   | EBL  | EBR  | NBL   | NBT  | SBT      | SBR  |
|----------------------------|------|------|-------|------|----------|------|
| Lane Configurations        |      |      |       |      |          |      |
| Volume (vph)               | 49   | 23   | 16    | 70   | 98       | 43   |
| Pedestrians                |      |      |       |      |          |      |
| Ped Button                 |      |      |       |      |          |      |
| Pedestrian Timing (s)      |      |      |       |      |          |      |
| Free Right                 |      | No   |       |      |          | No   |
| Ideal Flow                 | 1900 | 1900 | 1900  | 1900 | 1900     | 1900 |
| Lost Time (s)              | 4.0  | 4.0  | 4.0   | 4.0  | 4.0      | 4.0  |
| Minimum Green (s)          | 4.0  | 4.0  | 4.0   | 4.0  | 4.0      | 4.0  |
| Refr Cycle Length (s)      | 120  | 120  | 120   | 120  | 120      | 120  |
| Volume Combined (vph)      | 49   | 23   | 0     | 86   | 141      | 0    |
| Lane Utilization Factor    | 1.00 | 1.00 | 1.00  | 1.00 | 1.00     | 1.00 |
| Turning Factor (vph)       | 0.95 | 0.85 | 0.95  | 0.99 | 0.95     | 0.85 |
| Saturated Flow (vph)       | 1805 | 1615 | 0     | 1882 | 1813     | 0    |
| Ped Intf Time (s)          | 0.0  | 0.0  | 0.0   | 0.0  | 0.0      | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      |       | 0.00 | 0.00     |      |
| Protected Option Allowed   | No   |      |       | No   | No       |      |
| Reference Time (s)         |      | 1.7  |       |      |          | 0.0  |
| Adj Reference Time (s)     |      | 8.0  |       |      |          | 0.0  |
| Permitted Option           |      |      |       |      |          |      |
| Adj Saturation A (vph)     | 120  |      | 0     | 493  | 1813     |      |
| Reference Time A (s)       | 48.9 |      | 0.0   | 20.9 | 9.3      |      |
| Adj Saturation B (vph)     | NA   |      | NA    | NA   | 1813     |      |
| Reference Time B (s)       | NA   |      | NA    | NA   | 9.3      |      |
| Reference Time (s)         |      |      |       | 20.9 | 9.3      |      |
| Adj Reference Time (s)     |      |      |       | 24.9 | 13.3     |      |
| Split Option               |      |      |       |      |          |      |
| Ref Time Combined (s)      | 3.3  |      | 0.0   | 5.5  | 9.3      |      |
| Ref Time Seperate (s)      | 3.3  |      | 1.1   | 4.4  | 6.5      |      |
| Reference Time (s)         | 3.3  |      | 5.5   | 5.5  | 9.3      |      |
| Adj Reference Time (s)     | 8.0  |      | 9.5   | 9.5  | 13.3     |      |
| Summary                    |      |      |       |      |          |      |
|                            | EB   |      | NB SB |      | Combined |      |
| Protected Option (s)       | NA   |      | NA    |      |          |      |
| Permitted Option (s)       | Err  |      | 24.9  |      |          |      |
| Split Option (s)           | 8.0  |      | 22.8  |      |          |      |
| Minimum (s)                | 8.0  |      | 22.8  |      | 30.8     |      |
| Right Turns                |      |      |       |      |          |      |
|                            | EBR  |      |       |      |          |      |
| Adj Reference Time (s)     | 8.0  |      |       |      |          |      |
| Cross Thru Ref Time (s)    | 13.3 |      |       |      |          |      |
| Oncoming Left Ref Time (s) | 0.0  |      |       |      |          |      |
| Combined (s)               | 21.3 |      |       |      |          |      |

#### Intersection Summary

Intersection Capacity Utilization 25.7% ICU Level of Service A  
 Reference Times and Phasing Options do not represent an optimized timing plan.

### Intersection Capacity Utilization 7: Internal Drive & South Access Drive

06/21/2022



| Movement                   | EBL  | EBR  | NBL   | NBT   | SBT      | SBR  |
|----------------------------|------|------|-------|-------|----------|------|
| Lane Configurations        |      |      |       |       |          |      |
| Volume (vph)               | 55   | 42   | 112   | 31    | 19       | 102  |
| Pedestrians                |      |      |       |       |          |      |
| Ped Button                 |      |      |       |       |          |      |
| Pedestrian Timing (s)      |      |      |       |       |          |      |
| Free Right                 |      | No   |       |       |          | No   |
| Ideal Flow                 | 1900 | 1900 | 1900  | 1900  | 1900     | 1900 |
| Lost Time (s)              | 4.0  | 4.0  | 4.0   | 4.0   | 4.0      | 4.0  |
| Minimum Green (s)          | 4.0  | 4.0  | 4.0   | 4.0   | 4.0      | 4.0  |
| Refr Cycle Length (s)      | 120  | 120  | 120   | 120   | 120      | 120  |
| Volume Combined (vph)      | 55   | 42   | 0     | 143   | 121      | 0    |
| Lane Utilization Factor    | 1.00 | 1.00 | 1.00  | 1.00  | 1.00     | 1.00 |
| Turning Factor (vph)       | 0.95 | 0.85 | 0.95  | 0.96  | 0.87     | 0.85 |
| Saturated Flow (vph)       | 1805 | 1615 | 0     | 1826  | 1660     | 0    |
| Ped Intf Time (s)          | 0.0  | 0.0  | 0.0   | 0.0   | 0.0      | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      |       | 0.00  | 0.00     |      |
| Protected Option Allowed   | No   |      |       | No    | No       |      |
| Reference Time (s)         |      | 3.1  |       |       |          | 0.0  |
| Adj Reference Time (s)     |      | 8.0  |       |       |          | 0.0  |
| Permitted Option           |      |      |       |       |          |      |
| Adj Saturation A (vph)     | 120  |      | 0     | 144   | 1660     |      |
| Reference Time A (s)       | 54.8 |      | 0.0   | 118.8 | 8.7      |      |
| Adj Saturation B (vph)     | NA   |      | NA    | NA    | 1660     |      |
| Reference Time B (s)       | NA   |      | NA    | NA    | 8.7      |      |
| Reference Time (s)         |      |      |       | 118.8 | 8.7      |      |
| Adj Reference Time (s)     |      |      |       | 122.8 | 12.7     |      |
| Split Option               |      |      |       |       |          |      |
| Ref Time Combined (s)      | 3.7  |      | 0.0   | 9.4   | 8.7      |      |
| Ref Time Seperate (s)      | 3.7  |      | 7.4   | 2.0   | 1.4      |      |
| Reference Time (s)         | 3.7  |      | 9.4   | 9.4   | 8.7      |      |
| Adj Reference Time (s)     | 8.0  |      | 13.4  | 13.4  | 12.7     |      |
| Summary                    |      |      |       |       |          |      |
|                            | EB   |      | NB SB |       | Combined |      |
| Protected Option (s)       | NA   |      | NA    |       |          |      |
| Permitted Option (s)       | Err  |      | 122.8 |       |          |      |
| Split Option (s)           | 8.0  |      | 26.1  |       |          |      |
| Minimum (s)                | 8.0  |      | 26.1  |       | 34.1     |      |
| Right Turns                |      |      |       |       |          |      |
|                            | EBR  |      |       |       |          |      |
| Adj Reference Time (s)     | 8.0  |      |       |       |          |      |
| Cross Thru Ref Time (s)    | 12.7 |      |       |       |          |      |
| Oncoming Left Ref Time (s) | 0.0  |      |       |       |          |      |
| Combined (s)               | 20.7 |      |       |       |          |      |

#### Intersection Summary

Intersection Capacity Utilization 28.5% ICU Level of Service A  
 Reference Times and Phasing Options do not represent an optimized timing plan.

HCM 6th TWSC  
4: Lemont Road & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      | ↗    |      | ↕↗   |      |      | ↕↖↗  |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 0    | 0    | 7    | 0    | 860  | 92   | 0    | 1039 | 0    |
| Future Vol, veh/h        | 0    | 0    | 0    | 0    | 0    | 7    | 0    | 860  | 92   | 0    | 1039 | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | 0    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 3    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 96   | 96   | 96   | 96   | 96   | 96   | 96   | 96   | 96   | 96   | 96   | 96   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 1    | 0    |
| Mvmt Flow                | 0    | 0    | 0    | 0    | 0    | 7    | 0    | 896  | 96   | 0    | 1082 | 0    |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | -      | 496    |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | -      | 6.9    |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | -      | 3.3    |
| Pot Cap-1 Maneuver   | 0      | 0      | 525    |
| Stage 1              | 0      | 0      | -      |
| Stage 2              | 0      | 0      | -      |
| Platoon blocked, %   | -      | -      | -      |
| Mov Cap-1 Maneuver   | -      | 0      | 525    |
| Mov Cap-2 Maneuver   | -      | 0      | -      |
| Stage 1              | -      | 0      | -      |
| Stage 2              | -      | 0      | -      |

| Approach             | WB | NB | SB |
|----------------------|----|----|----|
| HCM Control Delay, s | 12 | 0  | 0  |
| HCM LOS              | B  |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT   |
|-----------------------|-----|----------|-------|
| Capacity (veh/h)      | -   | -        | 525   |
| HCM Lane V/C Ratio    | -   | -        | 0.014 |
| HCM Control Delay (s) | -   | -        | 12    |
| HCM Lane LOS          | -   | -        | B     |
| HCM 95th %tile Q(veh) | -   | -        | 0     |

## HCM 6th TWSC

### 5: 75th Street & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |        |        |        |       |      |      |
|--------------------------|--------|--------|--------|-------|------|------|
| Int Delay, s/veh         | 0.5    |        |        |       |      |      |
| Movement                 | EBL    | EBT    | WBT    | WBR   | SBL  | SBR  |
| Lane Configurations      |        | ↑↑↑    | ↑↑↑    |       |      | ↑    |
| Traffic Vol, veh/h       | 0      | 1432   | 1303   | 114   | 0    | 76   |
| Future Vol, veh/h        | 0      | 1432   | 1303   | 114   | 0    | 76   |
| Conflicting Peds, #/hr   | 0      | 0      | 0      | 0     | 0    | 0    |
| Sign Control             | Free   | Free   | Free   | Free  | Stop | Stop |
| RT Channelized           | -      | None   | -      | None  | -    | None |
| Storage Length           | -      | -      | -      | -     | -    | 0    |
| Veh in Median Storage, # | -      | 0      | 0      | -     | 0    | -    |
| Grade, %                 | -      | 0      | 0      | -     | 0    | -    |
| Peak Hour Factor         | 95     | 95     | 95     | 95    | 95   | 95   |
| Heavy Vehicles, %        | 0      | 1      | 2      | 0     | 0    | 0    |
| Mvmt Flow                | 0      | 1507   | 1372   | 120   | 0    | 80   |
| Major/Minor              | Major1 | Major2 | Minor2 |       |      |      |
| Conflicting Flow All     | -      | 0      | -      | 0     | -    | 746  |
| Stage 1                  | -      | -      | -      | -     | -    | -    |
| Stage 2                  | -      | -      | -      | -     | -    | -    |
| Critical Hdwy            | -      | -      | -      | -     | -    | 7.1  |
| Critical Hdwy Stg 1      | -      | -      | -      | -     | -    | -    |
| Critical Hdwy Stg 2      | -      | -      | -      | -     | -    | -    |
| Follow-up Hdwy           | -      | -      | -      | -     | -    | 3.9  |
| Pot Cap-1 Maneuver       | 0      | -      | -      | -     | 0    | 309  |
| Stage 1                  | 0      | -      | -      | -     | 0    | -    |
| Stage 2                  | 0      | -      | -      | -     | 0    | -    |
| Platoon blocked, %       | -      | -      | -      | -     | -    | -    |
| Mov Cap-1 Maneuver       | -      | -      | -      | -     | -    | 309  |
| Mov Cap-2 Maneuver       | -      | -      | -      | -     | -    | -    |
| Stage 1                  | -      | -      | -      | -     | -    | -    |
| Stage 2                  | -      | -      | -      | -     | -    | -    |
| Approach                 | EB     | WB     | SB     |       |      |      |
| HCM Control Delay, s     | 0      | 0      | 20.7   |       |      |      |
| HCM LOS                  |        |        |        |       |      | C    |
| Minor Lane/Major Mvmt    | EBT    | WBT    | WBR    | SBLn1 |      |      |
| Capacity (veh/h)         | -      | -      | -      | 309   |      |      |
| HCM Lane V/C Ratio       | -      | -      | -      | 0.259 |      |      |
| HCM Control Delay (s)    | -      | -      | -      | 20.7  |      |      |
| HCM Lane LOS             | -      | -      | -      | C     |      |      |
| HCM 95th %tile Q(veh)    | -      | -      | -      | 1     |      |      |

Capacity Analysis Summary Sheets  
Year 2021 Saturday Midday Peak Hour Conditions

Lanes, Volumes, Timings

1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR  | SBL   | SBT   | SBR  |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations     |       |       |       |       |       |       |       |       |      |       |       |      |
| Traffic Volume (vph)    | 11    | 32    | 146   | 86    | 21    | 9     | 146   | 609   | 40   | 16    | 536   | 23   |
| Future Volume (vph)     | 11    | 32    | 146   | 86    | 21    | 9     | 146   | 609   | 40   | 16    | 536   | 23   |
| Ideal Flow (vphpl)      | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 |
| Lane Width (ft)         | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12   | 12    | 12    | 12   |
| Grade (%)               |       | 0%    |       |       | 0%    |       |       | 0%    |      |       | 0%    |      |
| Storage Length (ft)     | 0     |       | 105   | 0     |       | 85    | 175   |       | 0    | 135   |       | 0    |
| Storage Lanes           | 0     |       | 1     | 0     |       | 1     | 1     |       | 0    | 1     |       | 0    |
| Taper Length (ft)       | 60    |       |       | 25    |       |       | 165   |       |      | 120   |       |      |
| Lane Util. Factor       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95 | 1.00  | 0.95  | 0.95 |
| Ped Bike Factor         |       |       | 0.850 |       |       | 0.850 |       | 0.991 |      |       | 0.994 |      |
| Flt Protected           |       | 0.988 |       |       | 0.961 |       | 0.950 |       |      | 0.950 |       |      |
| Satd. Flow (prot)       | 0     | 1836  | 1599  | 0     | 1826  | 1615  | 1787  | 3507  | 0    | 1805  | 3535  | 0    |
| Flt Permitted           |       | 0.911 |       |       | 0.738 |       | 0.415 |       |      | 0.380 |       |      |
| Satd. Flow (perm)       | 0     | 1693  | 1599  | 0     | 1402  | 1615  | 781   | 3507  | 0    | 722   | 3535  | 0    |
| Right Turn on Red       |       |       | No    |       |       | No    |       |       | No   |       |       | No   |
| Satd. Flow (RTOR)       |       |       |       |       |       |       |       |       |      |       |       |      |
| Link Speed (mph)        |       | 30    |       |       | 30    |       |       | 40    |      |       | 40    |      |
| Link Distance (ft)      |       | 667   |       |       | 331   |       |       | 633   |      |       | 695   |      |
| Travel Time (s)         |       | 15.2  |       |       | 7.5   |       |       | 10.8  |      |       | 11.8  |      |
| Confl. Peds. (#/hr)     |       |       |       |       |       |       |       |       |      |       |       |      |
| Confl. Bikes (#/hr)     |       |       |       |       |       |       |       |       |      |       |       |      |
| 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 |
| Growth Factor           | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100% | 100%  | 100%  | 100% |
| Heavy Vehicles (%)      | 9%    | 0%    | 1%    | 0%    | 0%    | 0%    | 1%    | 2%    | 2%   | 0%    | 1%    | 13%  |
| Bus Blockages (#/hr)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0    |
| Parking (#/hr)          |       |       |       |       |       |       |       |       |      |       |       |      |
| Mid-Block Traffic (%)   |       | 0%    |       |       | 0%    |       |       | 0%    |      |       | 0%    |      |
| Shared Lane Traffic (%) |       |       |       |       |       |       |       |       |      |       |       |      |
| Lane Group Flow (vph)   | 0     | 44    | 152   | 0     | 112   | 9     | 152   | 676   | 0    | 17    | 582   | 0    |
| Turn Type               | Perm  | NA    | Perm  | Perm  | NA    | Perm  | pm+pt | NA    |      | pm+pt | NA    |      |
| Protected Phases        |       | 4     |       |       | 8     |       | 5     | 2     |      | 1     | 6     |      |
| Permitted Phases        | 4     |       | 4     | 8     |       | 8     | 2     |       |      | 6     |       |      |
| Detector Phase          | 4     | 4     | 4     | 8     | 8     | 8     | 5     | 2     |      | 1     | 6     |      |
| Switch Phase            |       |       |       |       |       |       |       |       |      |       |       |      |
| Minimum Initial (s)     | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 3.0   | 15.0  |      | 3.0   | 15.0  |      |
| Minimum Split (s)       | 22.5  | 22.5  | 22.5  | 22.5  | 22.5  | 22.5  | 9.5   | 22.5  |      | 9.5   | 22.5  |      |
| Total Split (s)         | 27.0  | 27.0  | 27.0  | 27.0  | 27.0  | 27.0  | 13.0  | 38.0  |      | 10.0  | 35.0  |      |
| Total Split (%)         | 36.0% | 36.0% | 36.0% | 36.0% | 36.0% | 36.0% | 17.3% | 50.7% |      | 13.3% | 46.7% |      |
| Yellow Time (s)         | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 3.5   | 4.0   |      | 3.5   | 4.0   |      |
| All-Red Time (s)        | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 0.0   | 2.0   |      | 0.0   | 2.0   |      |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |      | 0.0   | 0.0   |      |
| Total Lost Time (s)     |       | 6.0   | 6.0   |       | 6.0   | 6.0   | 3.5   | 6.0   |      | 3.5   | 6.0   |      |
| Lead/Lag                |       |       |       |       |       |       | Lag   | Lead  |      | Lag   | Lead  |      |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   |      | Yes   | Yes   |      |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Min |      | None  | C-Min |      |
| Act Effct Green (s)     |       | 13.3  | 13.3  |       | 13.3  | 13.3  | 52.1  | 47.9  |      | 48.1  | 40.1  |      |
| Actuated g/C Ratio      |       | 0.18  | 0.18  |       | 0.18  | 0.18  | 0.69  | 0.64  |      | 0.64  | 0.53  |      |

Lanes, Volumes, Timings

1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

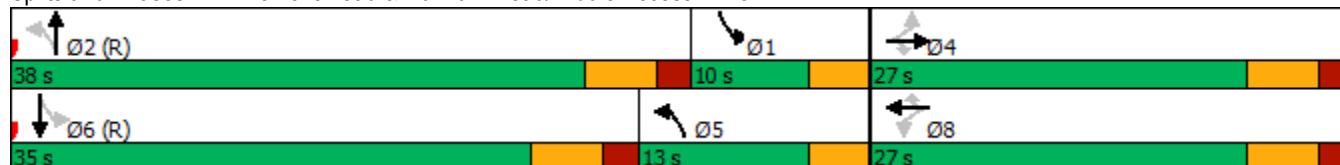


| Lane Group              | EBL | EBT  | EBR  | WBL | WBT  | WBR  | NBL  | NBT  | NBR | SBL  | SBT  | SBR |
|-------------------------|-----|------|------|-----|------|------|------|------|-----|------|------|-----|
| v/c Ratio               |     | 0.15 | 0.54 |     | 0.45 | 0.03 | 0.24 | 0.30 |     | 0.03 | 0.31 |     |
| Control Delay           |     | 25.4 | 34.4 |     | 32.5 | 23.3 | 3.7  | 3.5  |     | 4.7  | 11.2 |     |
| Queue Delay             |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  | 0.0  |     | 0.0  | 0.0  |     |
| Total Delay             |     | 25.4 | 34.4 |     | 32.5 | 23.3 | 3.7  | 3.5  |     | 4.7  | 11.2 |     |
| LOS                     |     | C    | C    |     | C    | C    | A    | A    |     | A    | B    |     |
| Approach Delay          |     | 32.4 |      |     | 31.8 |      |      | 3.5  |     |      | 11.0 |     |
| Approach LOS            |     | C    |      |     | C    |      |      | A    |     |      | B    |     |
| Queue Length 50th (ft)  |     | 17   | 65   |     | 47   | 4    | 15   | 41   |     | 2    | 72   |     |
| Queue Length 95th (ft)  |     | 41   | 112  |     | 87   | 14   | 22   | 41   |     | 9    | 131  |     |
| Internal Link Dist (ft) |     | 587  |      |     | 251  |      |      | 553  |     |      | 615  |     |
| Turn Bay Length (ft)    |     |      | 105  |     |      | 85   | 175  |      |     | 135  |      |     |
| Base Capacity (vph)     |     | 474  | 447  |     | 392  | 452  | 704  | 2238 |     | 566  | 1888 |     |
| Starvation Cap Reductn  |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Spillback Cap Reductn   |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Storage Cap Reductn     |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Reduced v/c Ratio       |     | 0.09 | 0.34 |     | 0.29 | 0.02 | 0.22 | 0.30 |     | 0.03 | 0.31 |     |

Intersection Summary

|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 75  |
| Actuated Cycle Length:            | 75  |
| Offset:                           | 11 (15%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle:                    | 55  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.54  |
| Intersection Signal Delay:        | 11.3  |
| Intersection LOS:                 | B   |
| Intersection Capacity Utilization | 49.5%   |
| ICU Level of Service              | A   |
| Analysis Period (min)             | 15  |

Splits and Phases: 1: Lemont Road & Dunham Road/Middle Access Drive



Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022

| Lane Group                | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR   |
|---------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| Lane Configurations       |       |       |      |       |       |      |       |       |      |       |       |       |
| Traffic Volume (vph)      | 100   | 12    | 48   | 227   | 20    | 39   | 66    | 656   | 104  | 21    | 686   | 61    |
| Future Volume (vph)       | 100   | 12    | 48   | 227   | 20    | 39   | 66    | 656   | 104  | 21    | 686   | 61    |
| Ideal Flow (vphpl)        | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900  |
| Lane Width (ft)           | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12    |
| Grade (%)                 |       | 0%    |      |       | 0%    |      |       | 0%    |      |       | 0%    |       |
| Storage Length (ft)       | 85    |       | 0    | 85    |       | 0    | 200   |       | 0    | 70    |       | 160   |
| Storage Lanes             | 1     |       | 0    | 1     |       | 0    | 1     |       | 0    | 1     |       | 1     |
| Taper Length (ft)         | 75    |       |      | 75    |       |      | 130   |       |      | 175   |       |       |
| Lane Util. Factor         | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 0.95  | 0.95 | 1.00  | 0.95  | 1.00  |
| Ped Bike Factor           |       |       |      |       |       |      |       |       |      |       |       |       |
| Fr <sub>t</sub>           |       | 0.881 |      |       | 0.901 |      |       | 0.980 |      |       |       | 0.850 |
| Fl <sub>t</sub> Protected | 0.950 |       |      | 0.950 |       |      | 0.950 |       |      | 0.950 |       |       |
| Satd. Flow (prot)         | 1770  | 1648  | 0    | 1805  | 1712  | 0    | 1805  | 3478  | 0    | 1805  | 3574  | 1615  |
| Fl <sub>t</sub> Permitted | 0.833 |       |      | 0.716 |       |      | 0.336 |       |      | 0.303 |       |       |
| Satd. Flow (perm)         | 1552  | 1648  | 0    | 1360  | 1712  | 0    | 638   | 3478  | 0    | 576   | 3574  | 1615  |
| Right Turn on Red         |       |       | Yes  |       |       | Yes  |       |       | Yes  |       |       | Yes   |
| Satd. Flow (RTOR)         |       | 50    |      |       | 41    |      |       | 26    |      |       |       | 233   |
| Link Speed (mph)          |       | 30    |      |       | 30    |      |       | 40    |      |       |       | 40    |
| Link Distance (ft)        |       | 302   |      |       | 294   |      |       | 366   |      |       |       | 633   |
| Travel Time (s)           |       | 6.9   |      |       | 6.7   |      |       | 6.2   |      |       |       | 10.8  |
| Confl. Peds. (#/hr)       |       |       |      |       |       |      |       |       |      |       |       |       |
| Confl. Bikes (#/hr)       |       |       |      |       |       |      |       |       |      |       |       |       |
| 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  |
| Growth Factor             | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100%  |
| Heavy Vehicles (%)        | 2%    | 0%    | 2%   | 0%    | 0%    | 0%   | 0%    | 2%    | 0%   | 0%    | 1%    | 0%    |
| Bus Blockages (#/hr)      | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0     |
| Parking (#/hr)            |       |       |      |       |       |      |       |       |      |       |       |       |
| Mid-Block Traffic (%)     |       | 0%    |      |       | 0%    |      |       | 0%    |      |       |       | 0%    |
| Shared Lane Traffic (%)   |       |       |      |       |       |      |       |       |      |       |       |       |
| Lane Group Flow (vph)     | 104   | 63    | 0    | 236   | 62    | 0    | 69    | 791   | 0    | 22    | 715   | 64    |
| Turn Type                 | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    | Perm  |
| Protected Phases          | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     |       |
| Permitted Phases          | 4     |       |      | 8     |       |      | 2     |       |      | 6     |       | 6     |
| Detector Phase            | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     | 6     |
| Switch Phase              |       |       |      |       |       |      |       |       |      |       |       |       |
| Minimum Initial (s)       | 3.0   | 8.0   |      | 3.0   | 8.0   |      | 3.0   | 15.0  |      | 3.0   | 15.0  | 15.0  |
| Minimum Split (s)         | 9.5   | 14.0  |      | 9.5   | 14.0  |      | 9.0   | 24.0  |      | 9.5   | 24.0  | 24.0  |
| Total Split (s)           | 10.6  | 14.0  |      | 18.4  | 21.8  |      | 9.0   | 33.0  |      | 9.6   | 33.6  | 33.6  |
| Total Split (%)           | 14.1% | 18.7% |      | 24.5% | 29.1% |      | 12.0% | 44.0% |      | 12.8% | 44.8% | 44.8% |
| Yellow Time (s)           | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   | 4.0   |
| All-Red Time (s)          | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   | 2.0   |
| Lost Time Adjust (s)      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)       | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   | 6.0   |
| Lead/Lag                  | Lag   | Lead  |      | Lag   | Lead  |      | Lag   | Lead  |      | Lag   | Lead  | Lead  |
| Lead-Lag Optimize?        | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   | Yes   |
| Recall Mode               | None  | None  |      | None  | None  |      | None  | C-Min |      | None  | C-Min | C-Min |
| Act Effct Green (s)       | 15.1  | 8.0   |      | 17.1  | 8.6   |      | 48.8  | 43.0  |      | 47.9  | 39.7  | 39.7  |
| Actuated g/C Ratio        | 0.20  | 0.11  |      | 0.23  | 0.11  |      | 0.65  | 0.57  |      | 0.64  | 0.53  | 0.53  |



Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022

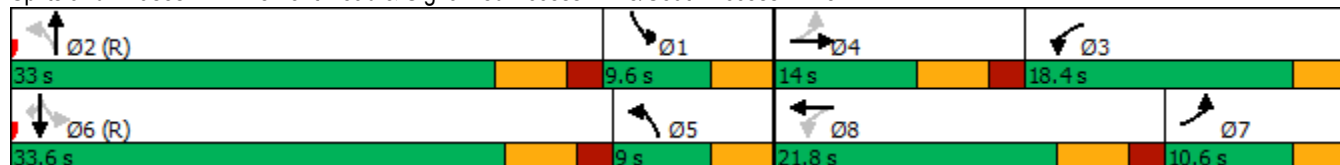


| Lane Group              | EBL  | EBT  | EBR | WBL  | WBT  | WBR | NBL  | NBT  | NBR | SBL  | SBT  | SBR  |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|------|
| v/c Ratio               | 0.31 | 0.29 |     | 0.64 | 0.27 |     | 0.14 | 0.39 |     | 0.05 | 0.38 | 0.07 |
| Control Delay           | 23.2 | 16.6 |     | 32.6 | 18.0 |     | 7.9  | 11.6 |     | 3.3  | 7.4  | 0.2  |
| Queue Delay             | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  |
| Total Delay             | 23.2 | 16.6 |     | 32.6 | 18.0 |     | 7.9  | 11.6 |     | 3.3  | 7.4  | 0.2  |
| LOS                     | C    | B    |     | C    | B    |     | A    | B    |     | A    | A    | A    |
| Approach Delay          |      | 20.7 |     |      | 29.5 |     |      | 11.3 |     |      | 6.7  |      |
| Approach LOS            |      | C    |     |      | C    |     |      | B    |     |      | A    |      |
| Queue Length 50th (ft)  | 37   | 6    |     | 90   | 9    |     | 11   | 88   |     | 3    | 83   | 0    |
| Queue Length 95th (ft)  | 67   | 39   |     | 141  | 42   |     | 30   | 192  |     | m4   | 105  | 0    |
| Internal Link Dist (ft) |      | 222  |     |      | 214  |     |      | 286  |     |      | 553  |      |
| Turn Bay Length (ft)    | 85   |      |     | 85   |      |     | 200  |      |     | 70   |      | 160  |
| Base Capacity (vph)     | 342  | 220  |     | 483  | 393  |     | 500  | 2006 |     | 470  | 1889 | 963  |
| Starvation Cap Reductn  | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.30 | 0.29 |     | 0.49 | 0.16 |     | 0.14 | 0.39 |     | 0.05 | 0.38 | 0.07 |

Intersection Summary

Area Type: Other  
 Cycle Length: 75  
 Actuated Cycle Length: 75  
 Offset: 5 (7%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.64  
 Intersection Signal Delay: 12.8  
 Intersection LOS: B  
 Intersection Capacity Utilization 57.4%  
 ICU Level of Service B  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Lemont Road & Signalized Access Drive/South Access Drive



### HCM 6th TWSC 3: Lemont Road & North Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.9  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      | Y    |      | ↑↑   |      | Y    | ↑↑   |
| Traffic Vol, veh/h       | 22   | 105  | 619  | 10   | 102  | 553  |
| Future Vol, veh/h        | 22   | 105  | 619  | 10   | 102  | 553  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 100  | -    |
| Veh in Median Storage, # | 1    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 96   | 96   | 96   | 96   | 96   | 96   |
| Heavy Vehicles, %        | 2    | 0    | 0    | 2    | 0    | 0    |
| Mvmt Flow                | 23   | 109  | 645  | 10   | 106  | 576  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |     |   |
|----------------------|--------|--------|--------|---|-----|---|
| Conflicting Flow All | 1150   | 328    | 0      | 0 | 655 | 0 |
| Stage 1              | 650    | -      | -      | - | -   | - |
| Stage 2              | 500    | -      | -      | - | -   | - |
| Critical Hdwy        | 6.84   | 6.9    | -      | - | 4.1 | - |
| Critical Hdwy Stg 1  | 5.84   | -      | -      | - | -   | - |
| Critical Hdwy Stg 2  | 5.84   | -      | -      | - | -   | - |
| Follow-up Hdwy       | 3.52   | 3.3    | -      | - | 2.2 | - |
| Pot Cap-1 Maneuver   | 192    | 674    | -      | - | 942 | - |
| Stage 1              | 481    | -      | -      | - | -   | - |
| Stage 2              | 575    | -      | -      | - | -   | - |
| Platoon blocked, %   |        |        | -      | - | -   | - |
| Mov Cap-1 Maneuver   | 170    | 674    | -      | - | 942 | - |
| Mov Cap-2 Maneuver   | 303    | -      | -      | - | -   | - |
| Stage 1              | 481    | -      | -      | - | -   | - |
| Stage 2              | 510    | -      | -      | - | -   | - |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 13.5 | 0  | 1.4 |
| HCM LOS              | B    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 556   | 942   |
| HCM Lane V/C Ratio    | -   | -        | 0.238 | 0.113 |
| HCM Control Delay (s) | -   | -        | 13.5  | 9.3   |
| HCM Lane LOS          | -   | -        | B     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0.9   | 0.4   |

HCM 6th TWSC  
4: Lemont Road & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.1  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      | ↗    |      | ↕↗   |      |      | ↕↖↗  |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 0    | 0    | 16   | 0    | 810  | 104  | 0    | 961  | 0    |
| Future Vol, veh/h        | 0    | 0    | 0    | 0    | 0    | 16   | 0    | 810  | 104  | 0    | 961  | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | 0    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 3    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 1    | 0    |
| Mvmt Flow                | 0    | 0    | 0    | 0    | 0    | 17   | 0    | 880  | 113  | 0    | 1045 | 0    |

| Major/Minor          | Minor1 | Major1 | Major2      |
|----------------------|--------|--------|-------------|
| Conflicting Flow All | -      | - 497  | - 0 0       |
| Stage 1              | -      | -      | -           |
| Stage 2              | -      | -      | -           |
| Critical Hdwy        | -      | - 6.9  | -           |
| Critical Hdwy Stg 1  | -      | -      | -           |
| Critical Hdwy Stg 2  | -      | -      | -           |
| Follow-up Hdwy       | -      | - 3.3  | -           |
| Pot Cap-1 Maneuver   | 0      | 0 524  | 0 - - 0 - 0 |
| Stage 1              | 0      | 0 -    | 0 - - 0 - 0 |
| Stage 2              | 0      | 0 -    | 0 - - 0 - 0 |
| Platoon blocked, %   |        |        | - - -       |
| Mov Cap-1 Maneuver   | -      | 0 524  | - - - - -   |
| Mov Cap-2 Maneuver   | -      | 0 -    | - - - - -   |
| Stage 1              | -      | 0 -    | - - - - -   |
| Stage 2              | -      | 0 -    | - - - - -   |

| Approach             | WB   | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 12.1 | 0  | 0  |
| HCM LOS              | B    |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h)      | -   | - 524    | -   |
| HCM Lane V/C Ratio    | -   | - 0.033  | -   |
| HCM Control Delay (s) | -   | - 12.1   | -   |
| HCM Lane LOS          | -   | - B      | -   |
| HCM 95th %tile Q(veh) | -   | - 0.1    | -   |

HCM 6th TWSC  
5: 75th Street & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.8  |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      | ↑↑↑  | ↑↑↑  |      |      | ↑    |
| Traffic Vol, veh/h       | 0    | 1210 | 1066 | 159  | 0    | 111  |
| Future Vol, veh/h        | 0    | 1210 | 1066 | 159  | 0    | 111  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 98   | 98   | 98   | 98   | 98   | 98   |
| Heavy Vehicles, %        | 0    | 1    | 1    | 0    | 0    | 0    |
| Mvmt Flow                | 0    | 1235 | 1088 | 162  | 0    | 113  |

| Major/Minor          | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | 0      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | -      | -      |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | -      | -      |
| Pot Cap-1 Maneuver   | 0      | -      | -      |
| Stage 1              | 0      | -      | -      |
| Stage 2              | 0      | -      | -      |
| Platoon blocked, %   | -      | -      | -      |
| Mov Cap-1 Maneuver   | -      | -      | -      |
| Mov Cap-2 Maneuver   | -      | -      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |

| Approach             | EB | WB | SB |
|----------------------|----|----|----|
| HCM Control Delay, s | 0  | 0  | 19 |
| HCM LOS              |    |    | C  |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|-----------------------|-----|-----|-----|-------|
| Capacity (veh/h)      | -   | -   | -   | 370   |
| HCM Lane V/C Ratio    | -   | -   | -   | 0.306 |
| HCM Control Delay (s) | -   | -   | -   | 19    |
| HCM Lane LOS          | -   | -   | -   | C     |
| HCM 95th %tile Q(veh) | -   | -   | -   | 1.3   |

## Intersection Capacity Utilization 6: Internal Drive & Middle Access Drive

06/21/2022



| Movement   | EBL   | EBR  | NBL                  | NBT      | SBT  | SBR  |
|--|-------|------|----------------------|----------|------|------|
| Lane Configurations  |       |      |                      |          |      |      |
| Volume (vph)   | 57    | 31   | 27                   | 106      | 141  | 89   |
| Pedestrians  |       |      |                      |          |      |      |
| Ped Button   |       |      |                      |          |      |      |
| Pedestrian Timing (s)  |       |      |                      |          |      |      |
| Free Right   |       | No   |                      |          |      | No   |
| Ideal Flow   | 1900  | 1900 | 1900                 | 1900     | 1900 | 1900 |
| Lost Time (s)  | 4.0   | 4.0  | 4.0                  | 4.0      | 4.0  | 4.0  |
| Minimum Green (s)  | 4.0   | 4.0  | 4.0                  | 4.0      | 4.0  | 4.0  |
| Refr Cycle Length (s)  | 120   | 120  | 120                  | 120      | 120  | 120  |
| Volume Combined (vph)  | 57    | 31   | 0                    | 133      | 230  | 0    |
| Lane Utilization Factor  | 1.00  | 1.00 | 1.00                 | 1.00     | 1.00 | 1.00 |
| Turning Factor (vph)   | 0.95  | 0.85 | 0.95                 | 0.99     | 0.94 | 0.85 |
| Saturated Flow (vph)   | 1805  | 1615 | 0                    | 1881     | 1790 | 0    |
| Ped Intf Time (s)  | 0.0   | 0.0  | 0.0                  | 0.0      | 0.0  | 0.0  |
| Pedestrian Frequency (%)   | 0.00  |      |                      | 0.00     | 0.00 |      |
| Protected Option Allowed   | No    |      |                      | No       | No   |      |
| Reference Time (s)   |       | 2.3  |                      |          |      | 0.0  |
| Adj Reference Time (s)   |       | 8.0  |                      |          |      | 0.0  |
| Permitted Option   |       |      |                      |          |      |      |
| Adj Saturation A (vph)   | 120   |      | 0                    | 460      | 1790 |      |
| Reference Time A (s)   | 56.8  |      | 0.0                  | 34.7     | 15.4 |      |
| Adj Saturation B (vph)   | NA    |      | NA                   | NA       | 1790 |      |
| Reference Time B (s)   | NA    |      | NA                   | NA       | 15.4 |      |
| Reference Time (s)   |       |      |                      | 34.7     | 15.4 |      |
| Adj Reference Time (s)   |       |      |                      | 38.7     | 19.4 |      |
| Split Option   |       |      |                      |          |      |      |
| Ref Time Combined (s)  | 3.8   |      | 0.0                  | 8.5      | 15.4 |      |
| Ref Time Seperate (s)  | 3.8   |      | 1.8                  | 6.7      | 9.5  |      |
| Reference Time (s)   | 3.8   |      | 8.5                  | 8.5      | 15.4 |      |
| Adj Reference Time (s)   | 8.0   |      | 12.5                 | 12.5     | 19.4 |      |
| Summary  | EB    |      | NB SB                | Combined |      |      |
| Protected Option (s)   | NA    |      | NA                   |          |      |      |
| Permitted Option (s)   | Err   |      | 38.7                 |          |      |      |
| Split Option (s)   | 8.0   |      | 31.9                 |          |      |      |
| Minimum (s)  | 8.0   |      | 31.9                 | 39.9     |      |      |
| Right Turns  | EBR   |      |                      |          |      |      |
| Adj Reference Time (s)   | 8.0   |      |                      |          |      |      |
| Cross Thru Ref Time (s)  | 19.4  |      |                      |          |      |      |
| Oncoming Left Ref Time (s)   | 0.0   |      |                      |          |      |      |
| Combined (s)   | 27.4  |      |                      |          |      |      |
| Intersection Summary   |       |      |                      |          |      |      |
| Intersection Capacity Utilization  | 33.3% |      | ICU Level of Service |          | A    |      |
| Reference Times and Phasing Options do not represent an optimized timing plan. |       |      |                      |          |      |      |

## Intersection Capacity Utilization

### 7: Internal Drive & South Access Drive

06/21/2022

























| Movement   | EBL  | EBR  | NBL   | NBT                  | SBT      | SBR  |
|--|------|------|-------|----------------------|----------|------|
| Lane Configurations  |      |      |       |                      |          |      |
| Volume (vph)   | 90   | 47   | 138   | 43                   | 24       | 148  |
| Pedestrians  |      |      |       |                      |          |      |
| Ped Button   |      |      |       |                      |          |      |
| Pedestrian Timing (s)  |      |      |       |                      |          |      |
| Free Right   |      | No   |       |                      |          | No   |
| Ideal Flow   | 1900 | 1900 | 1900  | 1900                 | 1900     | 1900 |
| Lost Time (s)  | 4.0  | 4.0  | 4.0   | 4.0                  | 4.0      | 4.0  |
| Minimum Green (s)  | 4.0  | 4.0  | 4.0   | 4.0                  | 4.0      | 4.0  |
| Refr Cycle Length (s)  | 120  | 120  | 120   | 120                  | 120      | 120  |
| Volume Combined (vph)  | 90   | 47   | 0     | 181                  | 172      | 0    |
| Lane Utilization Factor  | 1.00 | 1.00 | 1.00  | 1.00                 | 1.00     | 1.00 |
| Turning Factor (vph)   | 0.95 | 0.85 | 0.95  | 0.96                 | 0.87     | 0.85 |
| Saturated Flow (vph)   | 1805 | 1615 | 0     | 1828                 | 1655     | 0    |
| Ped Intf Time (s)  | 0.0  | 0.0  | 0.0   | 0.0                  | 0.0      | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      |       | 0.00                 | 0.00     |      |
| Protected Option Allowed   | No   |      |       | No                   | No       |      |
| Reference Time (s)   |      | 3.5  |       |                      |          | 0.0  |
| Adj Reference Time (s)   |      | 8.0  |       |                      |          | 0.0  |
| Permitted Option   |      |      |       |                      |          |      |
| Adj Saturation A (vph)   | 120  |      | 0     | 148                  | 1655     |      |
| Reference Time A (s)   | 89.8 |      | 0.0   | 147.1                | 12.5     |      |
| Adj Saturation B (vph)   | NA   |      | NA    | NA                   | 1655     |      |
| Reference Time B (s)   | NA   |      | NA    | NA                   | 12.5     |      |
| Reference Time (s)   |      |      |       | 147.1                | 12.5     |      |
| Adj Reference Time (s)   |      |      |       | 151.1                | 16.5     |      |
| Split Option   |      |      |       |                      |          |      |
| Ref Time Combined (s)  | 6.0  |      | 0.0   | 11.9                 | 12.5     |      |
| Ref Time Seperate (s)  | 6.0  |      | 9.2   | 2.7                  | 1.7      |      |
| Reference Time (s)   | 6.0  |      | 11.9  | 11.9                 | 12.5     |      |
| Adj Reference Time (s)   | 10.0 |      | 15.9  | 15.9                 | 16.5     |      |
| Summary  | EB   |      | NB SB |                      | Combined |      |
| Protected Option (s)   | NA   |      | NA    |                      |          |      |
| Permitted Option (s)   | Err  |      | 151.1 |                      |          |      |
| Split Option (s)   | 10.0 |      | 32.4  |                      |          |      |
| Minimum (s)  | 10.0 |      | 32.4  |                      | 42.3     |      |
| Right Turns  | EBR  |      |       |                      |          |      |
| Adj Reference Time (s)   | 8.0  |      |       |                      |          |      |
| Cross Thru Ref Time (s)  | 16.5 |      |       |                      |          |      |
| Oncoming Left Ref Time (s)   | 0.0  |      |       |                      |          |      |
| Combined (s)   | 24.5 |      |       |                      |          |      |
| Intersection Summary   |      |      |       |                      |          |      |
| Intersection Capacity Utilization  |      |      | 35.3% | ICU Level of Service |          | A    |
| Reference Times and Phasing Options do not represent an optimized timing plan. |      |      |       |                      |          |      |

Capacity Analysis Summary Sheets  
Year 2027 No-Build Weekday Morning Peak Hour  
Conditions

### Lanes, Volumes, Timings

#### 1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |   |  |  |   |  |  |  |  |  |  |  |  |
| Traffic Volume (vph)    | 8   | 5   | 197   | 10  | 2   | 2   | 147   | 738   | 14  | 3   | 453   | 5   |
| Future Volume (vph)     | 8   | 5   | 197   | 10  | 2   | 2   | 147   | 738   | 14  | 3   | 453   | 5   |
| Ideal Flow (vphpl)      | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Lane Width (ft)         | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  |
| Grade (%)               |   | 0%  |   |   | 0%  |   |   | 0%  |   |   | 0%  |   |
| Storage Length (ft)     | 0   |   | 105   | 0   |   | 85  | 175   |   | 0   | 135   |   | 0   |
| Storage Lanes           | 0   |   | 1   | 0   |   | 1   | 1   |   | 0   | 1   |   | 0   |
| Taper Length (ft)       | 60  |   |   | 25  |   |   | 165   |   |   | 120   |   |   |
| Lane Util. Factor       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  | 1.00  | 0.95  | 0.95  |
| Ped Bike Factor         |   |   | 0.850   |   |   | 0.850   |   | 0.997   |   |   | 0.998   |   |
| Flt Protected           |   | 0.971   |   |   | 0.959   |   | 0.950   |   |   | 0.950   |   |   |
| Satd. Flow (prot)       | 0   | 1845  | 1615  | 0   | 1692  | 1615  | 1752  | 3457  | 0   | 1805  | 3426  | 0   |
| Flt Permitted           |   | 0.880   |   |   | 0.835   |   | 0.446   |   |   | 0.286   |   |   |
| Satd. Flow (perm)       | 0   | 1672  | 1615  | 0   | 1473  | 1615  | 823   | 3457  | 0   | 543   | 3426  | 0   |
| Right Turn on Red       |   |   | No  |   |   | No  |   |   | No  |   |   | No  |
| Satd. Flow (RTOR)       |   |   |   |   |   |   |   |   |   |   |   |   |
| Link Speed (mph)        |   | 30  |   |   | 30  |   |   | 40  |   |   | 40  |   |
| Link Distance (ft)      |   | 667   |   |   | 331   |   |   | 633   |   |   | 695   |   |
| Travel Time (s)         |   | 15.2  |   |   | 7.5   |   |   | 10.8  |   |   | 11.8  |   |
| Confl. Peds. (#/hr)     |   |   |   |   |   |   |   |   |   |   |   |   |
| Confl. Bikes (#/hr)     |   |   |   |   |   |   |   |   |   |   |   |   |
| Peak Hour Factor        | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  |
| Growth Factor           | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  |
| Heavy Vehicles (%)      | 0%  | 0%  | 0%  | 0%  | 50%   | 0%  | 3%  | 4%  | 10%   | 0%  | 5%  | 20%   |
| Bus Blockages (#/hr)    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
| Parking (#/hr)          |   |   |   |   |   |   |   |   |   |   |   |   |
| Mid-Block Traffic (%)   |   | 0%  |   |   | 0%  |   |   | 0%  |   |   | 0%  |   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 0   | 15  | 221   | 0   | 13  | 2   | 165   | 845   | 0   | 3   | 515   | 0   |
| Turn Type               | Perm  | NA  | Perm  | Perm  | NA  | Perm  | pm+pt   | NA  |   | pm+pt   | NA  |   |
| Protected Phases        |   | 4   |   |   | 8   |   | 5   | 2   |   | 1   | 6   |   |
| Permitted Phases        | 4   |   | 4   | 8   |   | 8   | 2   |   |   | 6   |   |   |
| Detector Phase          | 4   | 4   | 4   | 8   | 8   | 8   | 5   | 2   |   | 1   | 6   |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 3.0   | 15.0  |   | 3.0   | 15.0  |   |
| Minimum Split (s)       | 24.0  | 24.0  | 24.0  | 24.0  | 24.0  | 24.0  | 9.5   | 25.0  |   | 9.5   | 24.0  |   |
| Total Split (s)         | 28.0  | 28.0  | 28.0  | 28.0  | 28.0  | 28.0  | 14.0  | 37.0  |   | 10.0  | 33.0  |   |
| Total Split (%)         | 37.3%   | 37.3%   | 37.3%   | 37.3%   | 37.3%   | 37.3%   | 18.7%   | 49.3%   |   | 13.3%   | 44.0%   |   |
| Yellow Time (s)         | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 3.5   | 4.0   |   | 3.5   | 4.0   |   |
| All-Red Time (s)        | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 0.0   | 2.0   |   | 0.0   | 2.0   |   |
| Lost Time Adjust (s)    |   | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0   |   | 0.0   | 0.0   |   |
| Total Lost Time (s)     |   | 6.0   | 6.0   |   | 6.0   | 6.0   | 3.5   | 6.0   |   | 3.5   | 6.0   |   |
| Lead/Lag                |   |   |   |   |   |   | Lag   | Lead  |   | Lag   | Lead  |   |
| Lead-Lag Optimize?      |   |   |   |   |   |   | Yes   | Yes   |   | Yes   | Yes   |   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Min   |   | None  | C-Min   |   |
| Act Effct Green (s)     |   | 16.3  | 16.3  |   | 16.3  | 16.3  | 49.2  | 44.9  |   | 44.3  | 36.3  |   |
| Actuated g/C Ratio      |   | 0.22  | 0.22  |   | 0.22  | 0.22  | 0.66  | 0.60  |   | 0.59  | 0.48  |   |



Lanes, Volumes, Timings

1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

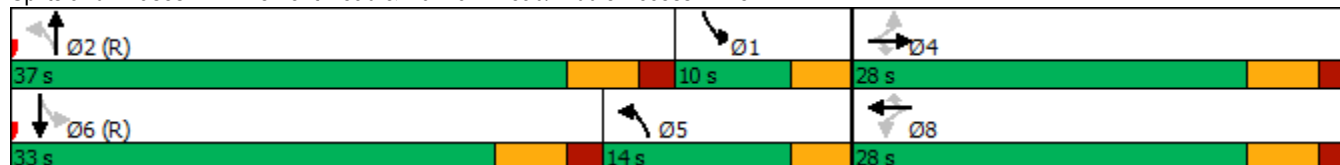


| Lane Group              | EBL | EBT  | EBR  | WBL | WBT  | WBR  | NBL  | NBT  | NBR | SBL  | SBT  | SBR |
|-------------------------|-----|------|------|-----|------|------|------|------|-----|------|------|-----|
| v/c Ratio               |     | 0.04 | 0.63 |     | 0.04 | 0.01 | 0.26 | 0.41 |     | 0.01 | 0.31 |     |
| Control Delay           |     | 20.8 | 34.3 |     | 20.8 | 20.0 | 3.2  | 5.1  |     | 6.0  | 13.5 |     |
| Queue Delay             |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  | 0.0  |     | 0.0  | 0.0  |     |
| Total Delay             |     | 20.8 | 34.3 |     | 20.8 | 20.0 | 3.2  | 5.1  |     | 6.0  | 13.5 |     |
| LOS                     |     | C    | C    |     | C    | B    | A    | A    |     | A    | B    |     |
| Approach Delay          |     | 33.4 |      |     | 20.7 |      |      | 4.8  |     |      | 13.5 |     |
| Approach LOS            |     | C    |      |     | C    |      |      | A    |     |      | B    |     |
| Queue Length 50th (ft)  |     | 6    | 94   |     | 5    | 1    | 10   | 89   |     | 0    | 69   |     |
| Queue Length 95th (ft)  |     | 18   | 145  |     | 16   | 5    | 11   | 51   |     | 4    | 129  |     |
| Internal Link Dist (ft) |     | 587  |      |     | 251  |      |      | 553  |     |      | 615  |     |
| Turn Bay Length (ft)    |     |      | 105  |     |      | 85   | 175  |      |     | 135  |      |     |
| Base Capacity (vph)     |     | 490  | 473  |     | 432  | 473  | 709  | 2071 |     | 437  | 1659 |     |
| Starvation Cap Reductn  |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Spillback Cap Reductn   |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Storage Cap Reductn     |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Reduced v/c Ratio       |     | 0.03 | 0.47 |     | 0.03 | 0.00 | 0.23 | 0.41 |     | 0.01 | 0.31 |     |

Intersection Summary

|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 75  |
| Actuated Cycle Length:            | 75  |
| Offset:                           | 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle:                    | 60  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.63  |
| Intersection Signal Delay:        | 11.3  |
| Intersection LOS:                 | B   |
| Intersection Capacity Utilization | 49.2%   |
| ICU Level of Service              | A   |
| Analysis Period (min)             | 15  |

Splits and Phases: 1: Lemont Road & Dunham Road/Middle Access Drive



Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022



| Lane Group                | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR   |
|---------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| Lane Configurations       |       |       |      |       |       |      |       |       |      |       |       |       |
| Traffic Volume (vph)      | 36    | 3     | 7    | 40    | 2     | 25   | 15    | 838   | 41   | 23    | 625   | 12    |
| Future Volume (vph)       | 36    | 3     | 7    | 40    | 2     | 25   | 15    | 838   | 41   | 23    | 625   | 12    |
| Ideal Flow (vphpl)        | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900  |
| Lane Width (ft)           | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12    |
| Grade (%)                 |       | 0%    |      |       | 0%    |      |       | 0%    |      |       | 0%    |       |
| Storage Length (ft)       | 85    |       | 0    | 85    |       | 0    | 200   |       | 0    | 70    |       | 160   |
| Storage Lanes             | 1     |       | 0    | 1     |       | 0    | 1     |       | 0    | 1     |       | 1     |
| Taper Length (ft)         | 75    |       |      | 75    |       |      | 130   |       |      | 175   |       |       |
| Lane Util. Factor         | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 0.95  | 0.95 | 1.00  | 0.95  | 1.00  |
| Ped Bike Factor           |       |       |      |       |       |      |       |       |      |       |       |       |
| Fr <sub>t</sub>           |       | 0.891 |      |       | 0.860 |      |       | 0.993 |      |       |       | 0.850 |
| Fl <sub>t</sub> Protected | 0.950 |       |      | 0.950 |       |      | 0.950 |       |      | 0.950 |       |       |
| Satd. Flow (prot)         | 1656  | 1608  | 0    | 1805  | 1634  | 0    | 1805  | 3453  | 0    | 1805  | 3505  | 1380  |
| Fl <sub>t</sub> Permitted |       |       |      |       |       |      | 0.387 |       |      | 0.265 |       |       |
| Satd. Flow (perm)         | 1743  | 1608  | 0    | 1900  | 1634  | 0    | 735   | 3453  | 0    | 504   | 3505  | 1380  |
| Right Turn on Red         |       |       | Yes  |       |       | Yes  |       |       | Yes  |       |       | Yes   |
| Satd. Flow (RTOR)         |       | 8     |      |       | 27    |      |       | 7     |      |       |       | 145   |
| Link Speed (mph)          |       | 30    |      |       | 30    |      |       | 40    |      |       |       | 40    |
| Link Distance (ft)        |       | 302   |      |       | 294   |      |       | 366   |      |       |       | 633   |
| Travel Time (s)           |       | 6.9   |      |       | 6.7   |      |       | 6.2   |      |       |       | 10.8  |
| Confl. Peds. (#/hr)       |       |       |      |       |       |      |       |       |      |       |       |       |
| Confl. Bikes (#/hr)       |       |       |      |       |       |      |       |       |      |       |       |       |
| Peak Hour Factor          | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93  |
| Growth Factor             | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100%  |
| Heavy Vehicles (%)        | 9%    | 14%   | 2%   | 0%    | 0%    | 0%   | 0%    | 4%    | 0%   | 0%    | 3%    | 17%   |
| Bus Blockages (#/hr)      | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0     |
| Parking (#/hr)            |       |       |      |       |       |      |       |       |      |       |       |       |
| Mid-Block Traffic (%)     |       | 0%    |      |       | 0%    |      |       | 0%    |      |       |       | 0%    |
| Shared Lane Traffic (%)   |       |       |      |       |       |      |       |       |      |       |       |       |
| Lane Group Flow (vph)     | 39    | 11    | 0    | 43    | 29    | 0    | 16    | 945   | 0    | 25    | 672   | 13    |
| Turn Type                 | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    | Perm  |
| Protected Phases          | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     |       |
| Permitted Phases          | 4     |       |      | 8     |       |      | 2     |       |      | 6     |       | 6     |
| Detector Phase            | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     | 6     |
| Switch Phase              |       |       |      |       |       |      |       |       |      |       |       |       |
| Minimum Initial (s)       | 3.0   | 8.0   |      | 3.0   | 8.0   |      | 3.0   | 15.0  |      | 3.0   | 15.0  | 15.0  |
| Minimum Split (s)         | 9.5   | 23.0  |      | 9.5   | 23.0  |      | 9.5   | 25.0  |      | 9.5   | 24.0  | 24.0  |
| Total Split (s)           | 10.0  | 23.0  |      | 10.0  | 23.0  |      | 10.0  | 32.0  |      | 10.0  | 32.0  | 32.0  |
| Total Split (%)           | 13.3% | 30.7% |      | 13.3% | 30.7% |      | 13.3% | 42.7% |      | 13.3% | 42.7% | 42.7% |
| Yellow Time (s)           | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   | 4.0   |
| All-Red Time (s)          | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   | 2.0   |
| Lost Time Adjust (s)      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)       | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   | 6.0   |
| Lead/Lag                  | Lag   | Lead  |      | Lag   | Lead  |      | Lag   | Lead  |      | Lag   | Lead  | Lead  |
| Lead-Lag Optimize?        | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   | Yes   |
| Recall Mode               | None  | None  |      | None  | None  |      | None  | C-Min |      | None  | C-Min | C-Min |
| Act Effct Green (s)       | 8.7   | 8.0   |      | 11.8  | 8.1   |      | 59.6  | 55.7  |      | 59.8  | 57.5  | 57.5  |
| Actuated g/C Ratio        | 0.12  | 0.11  |      | 0.16  | 0.11  |      | 0.79  | 0.74  |      | 0.80  | 0.77  | 0.77  |

Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022

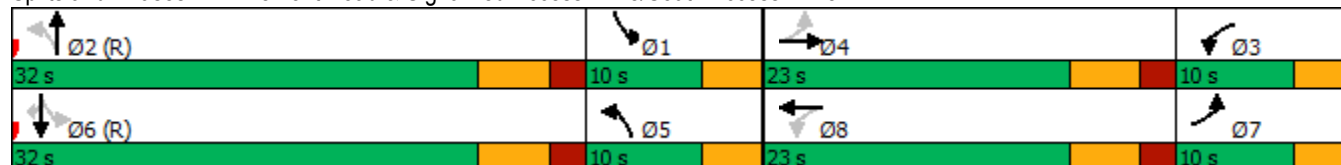


| Lane Group              | EBL  | EBT  | EBR | WBL  | WBT  | WBR | NBL  | NBT  | NBR | SBL  | SBT  | SBR  |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|------|
| v/c Ratio               | 0.20 | 0.06 |     | 0.15 | 0.14 |     | 0.02 | 0.37 |     | 0.05 | 0.25 | 0.01 |
| Control Delay           | 29.0 | 21.2 |     | 24.4 | 15.1 |     | 4.8  | 8.5  |     | 1.9  | 2.7  | 0.0  |
| Queue Delay             | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  |
| Total Delay             | 29.0 | 21.2 |     | 24.4 | 15.1 |     | 4.8  | 8.5  |     | 1.9  | 2.7  | 0.0  |
| LOS                     | C    | C    |     | C    | B    |     | A    | A    |     | A    | A    | A    |
| Approach Delay          |      | 27.3 |     |      | 20.7 |     |      | 8.4  |     |      | 2.6  |      |
| Approach LOS            |      | C    |     |      | C    |     |      | A    |     |      | A    |      |
| Queue Length 50th (ft)  | 17   | 1    |     | 19   | 1    |     | 1    | 50   |     | 0    | 8    | 0    |
| Queue Length 95th (ft)  | 35   | 16   |     | 38   | 23   |     | 9    | 211  |     | m3   | 64   | m0   |
| Internal Link Dist (ft) |      | 222  |     |      | 214  |     |      | 286  |     |      | 553  |      |
| Turn Bay Length (ft)    | 85   |      |     | 85   |      |     | 200  |      |     | 70   |      | 160  |
| Base Capacity (vph)     | 203  | 370  |     | 295  | 391  |     | 686  | 2566 |     | 518  | 2687 | 1092 |
| Starvation Cap Reductn  | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.19 | 0.03 |     | 0.15 | 0.07 |     | 0.02 | 0.37 |     | 0.05 | 0.25 | 0.01 |

Intersection Summary

Area Type: Other  
 Cycle Length: 75  
 Actuated Cycle Length: 75  
 Offset: 2 (3%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.37  
 Intersection Signal Delay: 7.1 Intersection LOS: A  
 Intersection Capacity Utilization 43.4% ICU Level of Service A  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Lemont Road & Signalized Access Drive/South Access Drive



## HCM 6th TWSC

### 3: Lemont Road & North Access Drive

06/21/2022

#### Intersection

Int Delay, s/veh 0.5

| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations      | ↔    |      | ↑↓   |      | ↔    | ↑↑   |
| Traffic Vol, veh/h       | 7    | 15   | 731  | 17   | 35   | 454  |
| Future Vol, veh/h        | 7    | 15   | 731  | 17   | 35   | 454  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 100  | -    |
| Veh in Median Storage, # | 1    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 97   | 97   | 97   | 97   | 97   | 97   |
| Heavy Vehicles, %        | 3    | 14   | 7    | 4    | 50   | 0    |
| Mvmt Flow                | 7    | 15   | 754  | 18   | 36   | 468  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |     |
|----------------------|--------|--------|--------|---|-----|
| Conflicting Flow All | 1069   | 386    | 0      | 0 | 772 |
| Stage 1              | 763    | -      | -      | - | -   |
| Stage 2              | 306    | -      | -      | - | -   |
| Critical Hdwy        | 6.86   | 7.18   | -      | - | 5.1 |
| Critical Hdwy Stg 1  | 5.86   | -      | -      | - | -   |
| Critical Hdwy Stg 2  | 5.86   | -      | -      | - | -   |
| Follow-up Hdwy       | 3.53   | 3.44   | -      | - | 2.7 |
| Pot Cap-1 Maneuver   | 215    | 579    | -      | - | 588 |
| Stage 1              | 418    | -      | -      | - | -   |
| Stage 2              | 717    | -      | -      | - | -   |
| Platoon blocked, %   |        |        | -      | - | -   |
| Mov Cap-1 Maneuver   | 202    | 579    | -      | - | 588 |
| Mov Cap-2 Maneuver   | 320    | -      | -      | - | -   |
| Stage 1              | 418    | -      | -      | - | -   |
| Stage 2              | 673    | -      | -      | - | -   |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 13.2 | 0  | 0.8 |
| HCM LOS              | B    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 460   | 588   |
| HCM Lane V/C Ratio    | -   | -        | 0.049 | 0.061 |
| HCM Control Delay (s) | -   | -        | 13.2  | 11.5  |
| HCM Lane LOS          | -   | -        | B     | B     |
| HCM 95th %tile Q(veh) | -   | -        | 0.2   | 0.2   |

HCM 6th TWSC  
4: Lemont Road & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      | ↗    |      | ↕↗   |      |      | ↕↖↗  |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 893  | 12   | 0    | 672  | 0    |
| Future Vol, veh/h        | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 893  | 12   | 0    | 672  | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | 0    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 3    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 4    | 9    | 0    | 3    | 0    |
| Mvmt Flow                | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 971  | 13   | 0    | 730  | 0    |

| Major/Minor          | Minor1 | Major1 | Major2      |
|----------------------|--------|--------|-------------|
| Conflicting Flow All | -      | - 492  | - 0 0       |
| Stage 1              | -      | -      | -           |
| Stage 2              | -      | -      | -           |
| Critical Hdwy        | -      | - 6.9  | -           |
| Critical Hdwy Stg 1  | -      | -      | -           |
| Critical Hdwy Stg 2  | -      | -      | -           |
| Follow-up Hdwy       | -      | - 3.3  | -           |
| Pot Cap-1 Maneuver   | 0      | 0 528  | 0 - - 0 - 0 |
| Stage 1              | 0      | 0 -    | 0 - - 0 - 0 |
| Stage 2              | 0      | 0 -    | 0 - - 0 - 0 |
| Platoon blocked, %   |        |        | - - -       |
| Mov Cap-1 Maneuver   | -      | 0 528  | - - - - -   |
| Mov Cap-2 Maneuver   | -      | 0 -    | - - - - -   |
| Stage 1              | -      | 0 -    | - - - - -   |
| Stage 2              | -      | 0 -    | - - - - -   |

| Approach             | WB   | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 11.8 | 0  | 0  |
| HCM LOS              | B    |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h)      | -   | - 528    | -   |
| HCM Lane V/C Ratio    | -   | - 0.002  | -   |
| HCM Control Delay (s) | -   | - 11.8   | -   |
| HCM Lane LOS          | -   | - B      | -   |
| HCM 95th %tile Q(veh) | -   | - 0      | -   |

## HCM 6th TWSC

### 5: 75th Street & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |        |        |        |       |      |      |
|--------------------------|--------|--------|--------|-------|------|------|
| Int Delay, s/veh         | 0.2    |        |        |       |      |      |
| Movement                 | EBL    | EBT    | WBT    | WBR   | SBL  | SBR  |
| Lane Configurations      |        | ↑↑↑    | ↑↑↑    |       |      | ↑    |
| Traffic Vol, veh/h       | 0      | 1363   | 884    | 43    | 0    | 28   |
| Future Vol, veh/h        | 0      | 1363   | 884    | 43    | 0    | 28   |
| Conflicting Peds, #/hr   | 0      | 0      | 0      | 0     | 0    | 0    |
| Sign Control             | Free   | Free   | Free   | Free  | Stop | Stop |
| RT Channelized           | -      | None   | -      | None  | -    | None |
| Storage Length           | -      | -      | -      | -     | -    | 0    |
| Veh in Median Storage, # | -      | 0      | 0      | -     | 0    | -    |
| Grade, %                 | -      | 0      | 0      | -     | 0    | -    |
| Peak Hour Factor         | 94     | 94     | 94     | 94    | 94   | 94   |
| Heavy Vehicles, %        | 0      | 3      | 2      | 12    | 0    | 25   |
| Mvmt Flow                | 0      | 1450   | 940    | 46    | 0    | 30   |
| Major/Minor              | Major1 | Major2 | Minor2 |       |      |      |
| Conflicting Flow All     | -      | 0      | -      | 0     | -    | 493  |
| Stage 1                  | -      | -      | -      | -     | -    | -    |
| Stage 2                  | -      | -      | -      | -     | -    | -    |
| Critical Hdwy            | -      | -      | -      | -     | -    | 7.6  |
| Critical Hdwy Stg 1      | -      | -      | -      | -     | -    | -    |
| Critical Hdwy Stg 2      | -      | -      | -      | -     | -    | -    |
| Follow-up Hdwy           | -      | -      | -      | -     | -    | 4.15 |
| Pot Cap-1 Maneuver       | 0      | -      | -      | -     | 0    | 402  |
| Stage 1                  | 0      | -      | -      | -     | 0    | -    |
| Stage 2                  | 0      | -      | -      | -     | 0    | -    |
| Platoon blocked, %       | -      | -      | -      | -     | -    | -    |
| Mov Cap-1 Maneuver       | -      | -      | -      | -     | -    | 402  |
| Mov Cap-2 Maneuver       | -      | -      | -      | -     | -    | -    |
| Stage 1                  | -      | -      | -      | -     | -    | -    |
| Stage 2                  | -      | -      | -      | -     | -    | -    |
| Approach                 | EB     | WB     | SB     |       |      |      |
| HCM Control Delay, s     | 0      | 0      | 14.7   |       |      |      |
| HCM LOS                  |        |        |        |       |      | B    |
| Minor Lane/Major Mvmt    | EBT    | WBT    | WBR    | SBLn1 |      |      |
| Capacity (veh/h)         | -      | -      | -      | 402   |      |      |
| HCM Lane V/C Ratio       | -      | -      | -      | 0.074 |      |      |
| HCM Control Delay (s)    | -      | -      | -      | 14.7  |      |      |
| HCM Lane LOS             | -      | -      | -      | B     |      |      |
| HCM 95th %tile Q(veh)    | -      | -      | -      | 0.2   |      |      |

## Intersection Capacity Utilization 6: Internal Drive & Middle Access Drive

06/21/2022



| Movement   | EBL  | EBR  | NBL   | NBT  | SBT                  | SBR  |
|--|------|------|-------|------|----------------------|------|
| Lane Configurations  |      |      |       |      |                      |      |
| Volume (vph)   | 13   | 9    | 7     | 11   | 11                   | 7    |
| Pedestrians  |      |      |       |      |                      |      |
| Ped Button   |      |      |       |      |                      |      |
| Pedestrian Timing (s)  |      |      |       |      |                      |      |
| Free Right   |      | No   |       |      |                      | No   |
| Ideal Flow   | 1900 | 1900 | 1900  | 1900 | 1900                 | 1900 |
| Lost Time (s)  | 4.0  | 4.0  | 4.0   | 4.0  | 4.0                  | 4.0  |
| Minimum Green (s)  | 4.0  | 4.0  | 4.0   | 4.0  | 4.0                  | 4.0  |
| Refr Cycle Length (s)  | 120  | 120  | 120   | 120  | 120                  | 120  |
| Volume Combined (vph)  | 13   | 9    | 0     | 18   | 18                   | 0    |
| Lane Utilization Factor  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00                 | 1.00 |
| Turning Factor (vph)   | 0.95 | 0.85 | 0.95  | 0.98 | 0.94                 | 0.85 |
| Saturated Flow (vph)   | 1805 | 1615 | 0     | 1863 | 1789                 | 0    |
| Ped Intf Time (s)  | 0.0  | 0.0  | 0.0   | 0.0  | 0.0                  | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      |       | 0.00 | 0.00                 |      |
| Protected Option Allowed   | No   |      |       | No   | No                   |      |
| Reference Time (s)   |      | 0.7  |       |      |                      | 0.0  |
| Adj Reference Time (s)   |      | 8.0  |       |      |                      | 0.0  |
| Permitted Option   |      |      |       |      |                      |      |
| Adj Saturation A (vph)   | 120  |      | 0     | 265  | 1789                 |      |
| Reference Time A (s)   | 13.0 |      | 0.0   | 8.2  | 1.2                  |      |
| Adj Saturation B (vph)   | NA   |      | 0     | 0    | 1789                 |      |
| Reference Time B (s)   | NA   |      | 8.5   | 9.2  | 1.2                  |      |
| Reference Time (s)   |      |      |       | 8.2  | 1.2                  |      |
| Adj Reference Time (s)   |      |      |       | 12.2 | 8.0                  |      |
| Split Option   |      |      |       |      |                      |      |
| Ref Time Combined (s)  | 0.9  |      | 0.0   | 1.2  | 1.2                  |      |
| Ref Time Seperate (s)  | 0.9  |      | 0.5   | 0.7  | 0.7                  |      |
| Reference Time (s)   | 0.9  |      | 1.2   | 1.2  | 1.2                  |      |
| Adj Reference Time (s)   | 8.0  |      | 8.0   | 8.0  | 8.0                  |      |
| Summary  | EB   |      | NB SB |      | Combined             |      |
| Protected Option (s)   | NA   |      | NA    |      |                      |      |
| Permitted Option (s)   | Err  |      | 12.2  |      |                      |      |
| Split Option (s)   | 8.0  |      | 16.0  |      |                      |      |
| Minimum (s)  | 8.0  |      | 12.2  |      | 20.2                 |      |
| Right Turns  | EBR  |      |       |      |                      |      |
| Adj Reference Time (s)   | 8.0  |      |       |      |                      |      |
| Cross Thru Ref Time (s)  | 8.0  |      |       |      |                      |      |
| Oncoming Left Ref Time (s)   | 0.0  |      |       |      |                      |      |
| Combined (s)   | 16.0 |      |       |      |                      |      |
| Intersection Summary   |      |      |       |      |                      |      |
| Intersection Capacity Utilization  |      |      | 16.8% |      | ICU Level of Service | A    |
| Reference Times and Phasing Options do not represent an optimized timing plan. |      |      |       |      |                      |      |

### Intersection Capacity Utilization 7: Internal Drive & South Access Drive

06/21/2022



| Movement                   | EBL  | EBR  | NBL   | NBT  | SBT      | SBR  |
|----------------------------|------|------|-------|------|----------|------|
| Lane Configurations        |      |      |       |      |          |      |
| Volume (vph)               | 14   | 53   | 51    | 4    | 4        | 16   |
| Pedestrians                |      |      |       |      |          |      |
| Ped Button                 |      |      |       |      |          |      |
| Pedestrian Timing (s)      |      |      |       |      |          |      |
| Free Right                 |      | No   |       |      |          | No   |
| Ideal Flow                 | 1900 | 1900 | 1900  | 1900 | 1900     | 1900 |
| Lost Time (s)              | 4.0  | 4.0  | 4.0   | 4.0  | 4.0      | 4.0  |
| Minimum Green (s)          | 4.0  | 4.0  | 4.0   | 4.0  | 4.0      | 4.0  |
| Refr Cycle Length (s)      | 120  | 120  | 120   | 120  | 120      | 120  |
| Volume Combined (vph)      | 14   | 53   | 0     | 55   | 20       | 0    |
| Lane Utilization Factor    | 1.00 | 1.00 | 1.00  | 1.00 | 1.00     | 1.00 |
| Turning Factor (vph)       | 0.95 | 0.85 | 0.95  | 0.95 | 0.88     | 0.85 |
| Saturated Flow (vph)       | 1805 | 1615 | 0     | 1812 | 1672     | 0    |
| Ped Intf Time (s)          | 0.0  | 0.0  | 0.0   | 0.0  | 0.0      | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      |       | 0.00 | 0.00     |      |
| Protected Option Allowed   | No   |      |       | No   | No       |      |
| Reference Time (s)         |      | 3.9  |       |      |          | 0.0  |
| Adj Reference Time (s)     |      | 8.0  |       |      |          | 0.0  |
| Permitted Option           |      |      |       |      |          |      |
| Adj Saturation A (vph)     | 120  |      | 0     | 127  | 1672     |      |
| Reference Time A (s)       | 14.0 |      | 0.0   | 52.0 | 1.4      |      |
| Adj Saturation B (vph)     | NA   |      | 0     | 0    | 1672     |      |
| Reference Time B (s)       | NA   |      | 11.4  | 11.6 | 1.4      |      |
| Reference Time (s)         |      |      |       | 11.6 | 1.4      |      |
| Adj Reference Time (s)     |      |      |       | 15.6 | 8.0      |      |
| Split Option               |      |      |       |      |          |      |
| Ref Time Combined (s)      | 0.9  |      | 0.0   | 3.6  | 1.4      |      |
| Ref Time Seperate (s)      | 0.9  |      | 3.4   | 0.3  | 0.3      |      |
| Reference Time (s)         | 0.9  |      | 3.6   | 3.6  | 1.4      |      |
| Adj Reference Time (s)     | 8.0  |      | 8.0   | 8.0  | 8.0      |      |
| Summary                    |      |      |       |      |          |      |
|                            | EB   |      | NB SB |      | Combined |      |
| Protected Option (s)       | NA   |      | NA    |      |          |      |
| Permitted Option (s)       | Err  |      | 15.6  |      |          |      |
| Split Option (s)           | 8.0  |      | 16.0  |      |          |      |
| Minimum (s)                | 8.0  |      | 15.6  |      | 23.6     |      |
| Right Turns                |      |      |       |      |          |      |
|                            | EBR  |      |       |      |          |      |
| Adj Reference Time (s)     | 8.0  |      |       |      |          |      |
| Cross Thru Ref Time (s)    | 8.0  |      |       |      |          |      |
| Oncoming Left Ref Time (s) | 0.0  |      |       |      |          |      |
| Combined (s)               | 16.0 |      |       |      |          |      |

#### Intersection Summary

Intersection Capacity Utilization 19.7% ICU Level of Service A  
 Reference Times and Phasing Options do not represent an optimized timing plan.



Capacity Analysis Summary Sheets  
Year 2027 No-Build Weekday Evening Peak Hour  
Conditions

Lanes, Volumes, Timings

1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR  | SBL   | SBT   | SBR  |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations     |       |       |       |       |       |       |       |       |      |       |       |      |
| Traffic Volume (vph)    | 7     | 19    | 155   | 42    | 19    | 8     | 167   | 645   | 46   | 14    | 733   | 11   |
| Future Volume (vph)     | 7     | 19    | 155   | 42    | 19    | 8     | 167   | 645   | 46   | 14    | 733   | 11   |
| Ideal Flow (vphpl)      | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 |
| Lane Width (ft)         | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12   | 12    | 12    | 12   |
| Grade (%)               |       | 0%    |       |       | 0%    |       |       | 0%    |      |       | 0%    |      |
| Storage Length (ft)     | 0     |       | 105   | 0     |       | 85    | 175   |       | 0    | 135   |       | 0    |
| Storage Lanes           | 0     |       | 1     | 0     |       | 1     | 1     |       | 0    | 1     |       | 0    |
| Taper Length (ft)       | 60    |       |       | 25    |       |       | 165   |       |      | 120   |       |      |
| Lane Util. Factor       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95 | 1.00  | 0.95  | 0.95 |
| Ped Bike Factor         |       |       |       |       |       |       |       |       |      |       |       |      |
| Frt                     |       |       | 0.850 |       |       | 0.850 |       | 0.990 |      |       | 0.998 |      |
| Flt Protected           |       | 0.987 |       |       | 0.966 |       | 0.950 |       |      | 0.950 |       |      |
| Satd. Flow (prot)       | 0     | 1875  | 1615  | 0     | 1835  | 1615  | 1805  | 3536  | 0    | 1805  | 3568  | 0    |
| Flt Permitted           |       | 0.925 |       |       | 0.778 |       | 0.322 |       |      | 0.365 |       |      |
| Satd. Flow (perm)       | 0     | 1758  | 1615  | 0     | 1478  | 1615  | 612   | 3536  | 0    | 694   | 3568  | 0    |
| Right Turn on Red       |       |       | No    |       |       | No    |       |       | No   |       |       | No   |
| Satd. Flow (RTOR)       |       |       |       |       |       |       |       |       |      |       |       |      |
| Link Speed (mph)        |       | 30    |       |       | 30    |       |       | 40    |      |       | 40    |      |
| Link Distance (ft)      |       | 667   |       |       | 331   |       |       | 633   |      |       | 695   |      |
| Travel Time (s)         |       | 15.2  |       |       | 7.5   |       |       | 10.8  |      |       | 11.8  |      |
| Confl. Peds. (#/hr)     |       |       |       |       |       |       |       |       |      |       |       |      |
| Confl. Bikes (#/hr)     |       |       |       |       |       |       |       |       |      |       |       |      |
| 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 |
| Growth Factor           | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100% | 100%  | 100%  | 100% |
| Heavy Vehicles (%)      | 0%    | 0%    | 0%    | 0%    | 0%    | 0%    | 0%    | 1%    | 2%   | 0%    | 1%    | 0%   |
| Bus Blockages (#/hr)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0    |
| Parking (#/hr)          |       |       |       |       |       |       |       |       |      |       |       |      |
| Mid-Block Traffic (%)   |       | 0%    |       |       | 0%    |       |       | 0%    |      |       | 0%    |      |
| Shared Lane Traffic (%) |       |       |       |       |       |       |       |       |      |       |       |      |
| Lane Group Flow (vph)   | 0     | 26    | 158   | 0     | 62    | 8     | 170   | 705   | 0    | 14    | 759   | 0    |
| Turn Type               | Perm  | NA    | Perm  | Perm  | NA    | Perm  | pm+pt | NA    |      | pm+pt | NA    |      |
| Protected Phases        |       | 4     |       |       | 8     |       | 5     | 2     |      | 1     | 6     |      |
| Permitted Phases        | 4     |       | 4     | 8     |       | 8     | 2     |       |      | 6     |       |      |
| Detector Phase          | 4     | 4     | 4     | 8     | 8     | 8     | 5     | 2     |      | 1     | 6     |      |
| Switch Phase            |       |       |       |       |       |       |       |       |      |       |       |      |
| Minimum Initial (s)     | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 3.0   | 15.0  |      | 3.0   | 15.0  |      |
| Minimum Split (s)       | 22.5  | 22.5  | 22.5  | 22.5  | 22.5  | 22.5  | 9.5   | 22.5  |      | 9.5   | 22.5  |      |
| Total Split (s)         | 26.0  | 26.0  | 26.0  | 26.0  | 26.0  | 26.0  | 14.0  | 39.0  |      | 10.0  | 35.0  |      |
| Total Split (%)         | 34.7% | 34.7% | 34.7% | 34.7% | 34.7% | 34.7% | 18.7% | 52.0% |      | 13.3% | 46.7% |      |
| Yellow Time (s)         | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 3.5   | 4.0   |      | 3.5   | 4.0   |      |
| All-Red Time (s)        | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 0.0   | 2.0   |      | 0.0   | 2.0   |      |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |      | 0.0   | 0.0   |      |
| Total Lost Time (s)     |       | 6.0   | 6.0   |       | 6.0   | 6.0   | 3.5   | 6.0   |      | 3.5   | 6.0   |      |
| Lead/Lag                |       |       |       |       |       |       | Lag   | Lead  |      | Lag   | Lead  |      |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   |      | Yes   | Yes   |      |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Min |      | None  | C-Min |      |
| Act Effct Green (s)     |       | 13.5  | 13.5  |       | 13.5  | 13.5  | 52.0  | 47.7  |      | 47.4  | 39.5  |      |
| Actuated g/C Ratio      |       | 0.18  | 0.18  |       | 0.18  | 0.18  | 0.69  | 0.64  |      | 0.63  | 0.53  |      |

Lanes, Volumes, Timings

1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

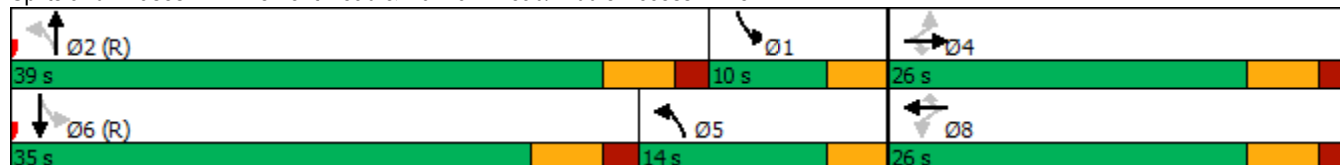


| Lane Group              | EBL | EBT  | EBR  | WBL | WBT  | WBR  | NBL  | NBT  | NBR | SBL  | SBT  | SBR |
|-------------------------|-----|------|------|-----|------|------|------|------|-----|------|------|-----|
| v/c Ratio               |     | 0.08 | 0.55 |     | 0.23 | 0.03 | 0.32 | 0.31 |     | 0.03 | 0.40 |     |
| Control Delay           |     | 24.2 | 34.4 |     | 27.0 | 23.0 | 3.5  | 2.0  |     | 4.9  | 12.5 |     |
| Queue Delay             |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  | 0.0  |     | 0.0  | 0.0  |     |
| Total Delay             |     | 24.2 | 34.4 |     | 27.0 | 23.0 | 3.5  | 2.0  |     | 4.9  | 12.5 |     |
| LOS                     |     | C    | C    |     | C    | C    | A    | A    |     | A    | B    |     |
| Approach Delay          |     | 33.0 |      |     | 26.5 |      |      | 2.3  |     |      | 12.3 |     |
| Approach LOS            |     | C    |      |     | C    |      |      | A    |     |      | B    |     |
| Queue Length 50th (ft)  |     | 10   | 68   |     | 25   | 3    | 2    | 4    |     | 2    | 101  |     |
| Queue Length 95th (ft)  |     | 28   | 115  |     | 53   | 13   | 21   | 21   |     | 8    | 182  |     |
| Internal Link Dist (ft) |     | 587  |      |     | 251  |      |      | 553  |     |      | 615  |     |
| Turn Bay Length (ft)    |     |      | 105  |     |      | 85   | 175  |      |     | 135  |      |     |
| Base Capacity (vph)     |     | 468  | 430  |     | 394  | 430  | 624  | 2248 |     | 543  | 1879 |     |
| Starvation Cap Reductn  |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Spillback Cap Reductn   |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Storage Cap Reductn     |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Reduced v/c Ratio       |     | 0.06 | 0.37 |     | 0.16 | 0.02 | 0.27 | 0.31 |     | 0.03 | 0.40 |     |

Intersection Summary

|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 75  |
| Actuated Cycle Length:            | 75  |
| Offset:                           | 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle:                    | 55  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.55  |
| Intersection Signal Delay:        | 10.2  |
| Intersection LOS:                 | B   |
| Intersection Capacity Utilization | 53.2%   |
| ICU Level of Service              | A   |
| Analysis Period (min)             | 15  |

Splits and Phases: 1: Lemont Road & Dunham Road/Middle Access Drive



Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022

| Lane Group                | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR   |
|---------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| Lane Configurations       |       |       |      |       |       |      |       |       |      |       |       |       |
| Traffic Volume (vph)      | 66    | 11    | 42   | 232   | 8     | 33   | 55    | 759   | 94   | 38    | 823   | 69    |
| Future Volume (vph)       | 66    | 11    | 42   | 232   | 8     | 33   | 55    | 759   | 94   | 38    | 823   | 69    |
| Ideal Flow (vphpl)        | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900  |
| Lane Width (ft)           | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12    |
| Grade (%)                 |       | 0%    |      |       | 0%    |      |       | 0%    |      |       | 0%    |       |
| Storage Length (ft)       | 85    |       | 0    | 85    |       | 0    | 200   |       | 0    | 70    |       | 160   |
| Storage Lanes             | 1     |       | 0    | 1     |       | 0    | 1     |       | 0    | 1     |       | 1     |
| Taper Length (ft)         | 75    |       |      | 75    |       |      | 130   |       |      | 175   |       |       |
| Lane Util. Factor         | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 0.95  | 0.95 | 1.00  | 0.95  | 1.00  |
| Ped Bike Factor           |       |       |      |       |       |      |       |       |      |       |       |       |
| Fr <sub>t</sub>           |       | 0.881 |      |       | 0.879 |      |       | 0.983 |      |       |       | 0.850 |
| Fl <sub>t</sub> Protected | 0.950 |       |      | 0.950 |       |      | 0.950 |       |      | 0.950 |       |       |
| Satd. Flow (prot)         | 1805  | 1674  | 0    | 1805  | 1670  | 0    | 1805  | 3517  | 0    | 1805  | 3574  | 1615  |
| Fl <sub>t</sub> Permitted | 0.000 |       |      | 0.000 |       |      | 0.224 |       |      | 0.314 |       |       |
| Satd. Flow (perm)         | 0     | 1674  | 0    | 0     | 1670  | 0    | 426   | 3517  | 0    | 597   | 3574  | 1615  |
| Right Turn on Red         |       |       | Yes  |       |       | Yes  |       |       | Yes  |       |       | Yes   |
| Satd. Flow (RTOR)         |       | 43    |      |       | 34    |      |       | 21    |      |       |       | 145   |
| Link Speed (mph)          |       | 30    |      |       | 30    |      |       | 40    |      |       |       | 40    |
| Link Distance (ft)        |       | 302   |      |       | 294   |      |       | 366   |      |       |       | 633   |
| Travel Time (s)           |       | 6.9   |      |       | 6.7   |      |       | 6.2   |      |       |       | 10.8  |
| Confl. Peds. (#/hr)       |       |       |      |       |       |      |       |       |      |       |       |       |
| Confl. Bikes (#/hr)       |       |       |      |       |       |      |       |       |      |       |       |       |
| Peak Hour Factor          | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  |
| Growth Factor             | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100%  |
| Heavy Vehicles (%)        | 0%    | 0%    | 0%   | 0%    | 0%    | 0%   | 0%    | 1%    | 0%   | 0%    | 1%    | 0%    |
| Bus Blockages (#/hr)      | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0     |
| Parking (#/hr)            |       |       |      |       |       |      |       |       |      |       |       |       |
| Mid-Block Traffic (%)     |       | 0%    |      |       | 0%    |      |       | 0%    |      |       |       | 0%    |
| Shared Lane Traffic (%)   |       |       |      |       |       |      |       |       |      |       |       |       |
| Lane Group Flow (vph)     | 68    | 54    | 0    | 239   | 42    | 0    | 57    | 879   | 0    | 39    | 848   | 71    |
| Turn Type                 | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    | Perm  |
| Protected Phases          | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     |       |
| Permitted Phases          | 4     |       |      | 8     |       |      | 2     |       |      | 6     |       | 6     |
| Detector Phase            | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     | 6     |
| Switch Phase              |       |       |      |       |       |      |       |       |      |       |       |       |
| Minimum Initial (s)       | 3.0   | 8.0   |      | 3.0   | 8.0   |      | 3.0   | 15.0  |      | 3.0   | 15.0  | 15.0  |
| Minimum Split (s)         | 9.5   | 14.0  |      | 9.5   | 14.0  |      | 9.0   | 24.0  |      | 9.5   | 24.0  | 24.0  |
| Total Split (s)           | 10.0  | 14.0  |      | 16.0  | 20.0  |      | 9.0   | 35.0  |      | 10.0  | 36.0  | 36.0  |
| Total Split (%)           | 13.3% | 18.7% |      | 21.3% | 26.7% |      | 12.0% | 46.7% |      | 13.3% | 48.0% | 48.0% |
| Yellow Time (s)           | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   | 4.0   |
| All-Red Time (s)          | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   | 2.0   |
| Lost Time Adjust (s)      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)       | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   | 6.0   |
| Lead/Lag                  | Lag   | Lag   |      | Lead  | Lead  |      | Lead  | Lead  |      | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?        | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   | Yes   |
| Recall Mode               | None  | None  |      | None  | None  |      | None  | C-Min |      | None  | C-Min | C-Min |
| Act Effct Green (s)       | 9.7   | 8.0   |      | 12.1  | 8.7   |      | 41.5  | 39.0  |      | 42.3  | 39.6  | 39.6  |
| Actuated g/C Ratio        | 0.13  | 0.11  |      | 0.16  | 0.12  |      | 0.55  | 0.52  |      | 0.56  | 0.53  | 0.53  |

### Lanes, Volumes, Timings

## 2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022

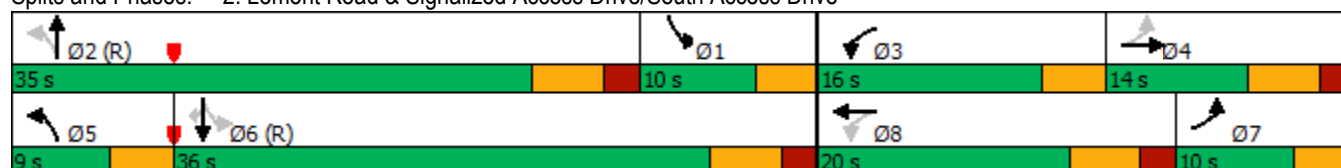


| Lane Group              | EBL  | EBT  | EBR | WBL  | WBT  | WBR | NBL  | NBT  | NBR | SBL  | SBT  | SBR  |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|------|
| v/c Ratio               | 0.29 | 0.25 |     | 0.82 | 0.19 |     | 0.17 | 0.48 |     | 0.09 | 0.45 | 0.08 |
| Control Delay           | 31.8 | 16.6 |     | 54.8 | 16.0 |     | 13.3 | 15.3 |     | 5.8  | 8.3  | 0.6  |
| Queue Delay             | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  |
| Total Delay             | 31.8 | 16.6 |     | 54.8 | 16.0 |     | 13.3 | 15.3 |     | 5.8  | 8.3  | 0.6  |
| LOS                     | C    | B    |     | D    | B    |     | B    | B    |     | A    | A    | A    |
| Approach Delay          |      | 25.0 |     |      | 49.0 |     |      | 15.1 |     |      | 7.6  |      |
| Approach LOS            |      | C    |     |      | D    |     |      | B    |     |      | A    |      |
| Queue Length 50th (ft)  | 28   | 5    |     | 108  | 3    |     | 15   | 166  |     | 5    | 177  | 1    |
| Queue Length 95th (ft)  | 64   | 36   |     | #221 | 30   |     | 36   | 227  |     | m11  | 74   | 3    |
| Internal Link Dist (ft) |      | 222  |     |      | 214  |     |      | 286  |     |      | 553  |      |
| Turn Bay Length (ft)    | 85   |      |     | 85   |      |     | 200  |      |     | 70   |      | 160  |
| Base Capacity (vph)     | 238  | 216  |     | 300  | 339  |     | 338  | 1838 |     | 443  | 1886 | 921  |
| Starvation Cap Reductn  | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.29 | 0.25 |     | 0.80 | 0.12 |     | 0.17 | 0.48 |     | 0.09 | 0.45 | 0.08 |

### Intersection Summary

Area Type: Other  
 Cycle Length: 75  
 Actuated Cycle Length: 75  
 Offset: 6 (8%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.82  
 Intersection Signal Delay: 16.7 Intersection LOS: B  
 Intersection Capacity Utilization 60.2% ICU Level of Service B  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

### Splits and Phases: 2: Lemont Road & Signalized Access Drive/South Access Drive



### HCM 6th TWSC 3: Lemont Road & North Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.8  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 21   | 121  | 639  | 21   | 87   | 737  |
| Future Vol, veh/h        | 21   | 121  | 639  | 21   | 87   | 737  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 100  | -    |
| Veh in Median Storage, # | 1    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 96   | 96   | 96   | 96   | 96   | 96   |
| Heavy Vehicles, %        | 1    | 11   | 0    | 2    | 0    | 0    |
| Mvmt Flow                | 22   | 126  | 666  | 22   | 91   | 768  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |     |   |
|----------------------|--------|--------|--------|---|-----|---|
| Conflicting Flow All | 1243   | 344    | 0      | 0 | 688 | 0 |
| Stage 1              | 677    | -      | -      | - | -   | - |
| Stage 2              | 566    | -      | -      | - | -   | - |
| Critical Hdwy        | 6.82   | 7.12   | -      | - | 4.1 | - |
| Critical Hdwy Stg 1  | 5.82   | -      | -      | - | -   | - |
| Critical Hdwy Stg 2  | 5.82   | -      | -      | - | -   | - |
| Follow-up Hdwy       | 3.51   | 3.41   | -      | - | 2.2 | - |
| Pot Cap-1 Maneuver   | 168    | 626    | -      | - | 916 | - |
| Stage 1              | 469    | -      | -      | - | -   | - |
| Stage 2              | 534    | -      | -      | - | -   | - |
| Platoon blocked, %   |        |        | -      | - |     |   |
| Mov Cap-1 Maneuver   | 151    | 626    | -      | - | 916 | - |
| Mov Cap-2 Maneuver   | 286    | -      | -      | - | -   | - |
| Stage 1              | 469    | -      | -      | - | -   | - |
| Stage 2              | 481    | -      | -      | - | -   | - |

| Approach             | WB   | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 14.4 | 0  | 1  |
| HCM LOS              | B    |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 532   | 916   |
| HCM Lane V/C Ratio    | -   | -        | 0.278 | 0.099 |
| HCM Control Delay (s) | -   | -        | 14.4  | 9.4   |
| HCM Lane LOS          | -   | -        | B     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 1.1   | 0.3   |

HCM 6th TWSC  
4: Lemont Road & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      | ↗    |      | ↕↔   |      |      | ↕↕↕  |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 0    | 0    | 8    | 0    | 900  | 100  | 0    | 1097 | 0    |
| Future Vol, veh/h        | 0    | 0    | 0    | 0    | 0    | 8    | 0    | 900  | 100  | 0    | 1097 | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | 0    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 3    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 96   | 96   | 96   | 96   | 96   | 96   | 96   | 96   | 96   | 96   | 96   | 96   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 1    | 0    |
| Mvmt Flow                | 0    | 0    | 0    | 0    | 0    | 8    | 0    | 938  | 104  | 0    | 1143 | 0    |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | -      | 521    |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | -      | 6.9    |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | -      | 3.3    |
| Pot Cap-1 Maneuver   | 0      | 0      | 505    |
| Stage 1              | 0      | 0      | -      |
| Stage 2              | 0      | 0      | -      |
| Platoon blocked, %   |        |        |        |
| Mov Cap-1 Maneuver   | -      | 0      | 505    |
| Mov Cap-2 Maneuver   | -      | 0      | -      |
| Stage 1              | -      | 0      | -      |
| Stage 2              | -      | 0      | -      |

| Approach             | WB   | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 12.2 | 0  | 0  |
| HCM LOS              | B    |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT   |
|-----------------------|-----|----------|-------|
| Capacity (veh/h)      | -   | -        | 505   |
| HCM Lane V/C Ratio    | -   | -        | 0.017 |
| HCM Control Delay (s) | -   | -        | 12.2  |
| HCM Lane LOS          | -   | -        | B     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   |

## HCM 6th TWSC

### 5: 75th Street & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |        |        |        |       |      |      |
|--------------------------|--------|--------|--------|-------|------|------|
| Int Delay, s/veh         | 0.8    |        |        |       |      |      |
| Movement                 | EBL    | EBT    | WBT    | WBR   | SBL  | SBR  |
| Lane Configurations      |        | ↑↑↑    | ↑↑↑    |       |      | ↑    |
| Traffic Vol, veh/h       | 0      | 1468   | 1322   | 153   | 0    | 105  |
| Future Vol, veh/h        | 0      | 1468   | 1322   | 153   | 0    | 105  |
| Conflicting Peds, #/hr   | 0      | 0      | 0      | 0     | 0    | 0    |
| Sign Control             | Free   | Free   | Free   | Free  | Stop | Stop |
| RT Channelized           | -      | None   | -      | None  | -    | None |
| Storage Length           | -      | -      | -      | -     | -    | 0    |
| Veh in Median Storage, # | -      | 0      | 0      | -     | 0    | -    |
| Grade, %                 | -      | 0      | 0      | -     | 0    | -    |
| Peak Hour Factor         | 95     | 95     | 95     | 95    | 95   | 95   |
| Heavy Vehicles, %        | 0      | 1      | 2      | 0     | 0    | 0    |
| Mvmt Flow                | 0      | 1545   | 1392   | 161   | 0    | 111  |
| Major/Minor              | Major1 | Major2 | Minor2 |       |      |      |
| Conflicting Flow All     | -      | 0      | -      | 0     | -    | 777  |
| Stage 1                  | -      | -      | -      | -     | -    | -    |
| Stage 2                  | -      | -      | -      | -     | -    | -    |
| Critical Hdwy            | -      | -      | -      | -     | -    | 7.1  |
| Critical Hdwy Stg 1      | -      | -      | -      | -     | -    | -    |
| Critical Hdwy Stg 2      | -      | -      | -      | -     | -    | -    |
| Follow-up Hdwy           | -      | -      | -      | -     | -    | 3.9  |
| Pot Cap-1 Maneuver       | 0      | -      | -      | -     | 0    | 295  |
| Stage 1                  | 0      | -      | -      | -     | 0    | -    |
| Stage 2                  | 0      | -      | -      | -     | 0    | -    |
| Platoon blocked, %       | -      | -      | -      | -     | -    | -    |
| Mov Cap-1 Maneuver       | -      | -      | -      | -     | -    | 295  |
| Mov Cap-2 Maneuver       | -      | -      | -      | -     | -    | -    |
| Stage 1                  | -      | -      | -      | -     | -    | -    |
| Stage 2                  | -      | -      | -      | -     | -    | -    |
| Approach                 | EB     | WB     | SB     |       |      |      |
| HCM Control Delay, s     | 0      | 0      | 24.3   |       |      |      |
| HCM LOS                  |        |        |        |       |      | C    |
| Minor Lane/Major Mvmt    | EBT    | WBT    | WBR    | SBLn1 |      |      |
| Capacity (veh/h)         | -      | -      | -      | 295   |      |      |
| HCM Lane V/C Ratio       | -      | -      | -      | 0.375 |      |      |
| HCM Control Delay (s)    | -      | -      | -      | 24.3  |      |      |
| HCM Lane LOS             | -      | -      | -      | C     |      |      |
| HCM 95th %tile Q(veh)    | -      | -      | -      | 1.7   |      |      |



### Intersection Capacity Utilization 6: Internal Drive & Middle Access Drive

06/21/2022



| Movement                   | EBL  | EBR  | NBL   | NBT  | SBT      | SBR  |
|----------------------------|------|------|-------|------|----------|------|
| Lane Configurations        |      |      |       |      |          |      |
| Volume (vph)               | 51   | 28   | 22    | 74   | 112      | 47   |
| Pedestrians                |      |      |       |      |          |      |
| Ped Button                 |      |      |       |      |          |      |
| Pedestrian Timing (s)      |      |      |       |      |          |      |
| Free Right                 |      | No   |       |      |          | No   |
| Ideal Flow                 | 1900 | 1900 | 1900  | 1900 | 1900     | 1900 |
| Lost Time (s)              | 4.0  | 4.0  | 4.0   | 4.0  | 4.0      | 4.0  |
| Minimum Green (s)          | 4.0  | 4.0  | 4.0   | 4.0  | 4.0      | 4.0  |
| Refr Cycle Length (s)      | 120  | 120  | 120   | 120  | 120      | 120  |
| Volume Combined (vph)      | 51   | 28   | 0     | 96   | 159      | 0    |
| Lane Utilization Factor    | 1.00 | 1.00 | 1.00  | 1.00 | 1.00     | 1.00 |
| Turning Factor (vph)       | 0.95 | 0.85 | 0.95  | 0.99 | 0.96     | 0.85 |
| Saturated Flow (vph)       | 1805 | 1615 | 0     | 1878 | 1816     | 0    |
| Ped Intf Time (s)          | 0.0  | 0.0  | 0.0   | 0.0  | 0.0      | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      |       | 0.00 | 0.00     |      |
| Protected Option Allowed   | No   |      |       | No   | No       |      |
| Reference Time (s)         |      | 2.1  |       |      |          | 0.0  |
| Adj Reference Time (s)     |      | 8.0  |       |      |          | 0.0  |
| Permitted Option           |      |      |       |      |          |      |
| Adj Saturation A (vph)     | 120  |      | 0     | 417  | 1816     |      |
| Reference Time A (s)       | 50.9 |      | 0.0   | 27.6 | 10.5     |      |
| Adj Saturation B (vph)     | NA   |      | NA    | NA   | 1816     |      |
| Reference Time B (s)       | NA   |      | NA    | NA   | 10.5     |      |
| Reference Time (s)         |      |      |       | 27.6 | 10.5     |      |
| Adj Reference Time (s)     |      |      |       | 31.6 | 14.5     |      |
| Split Option               |      |      |       |      |          |      |
| Ref Time Combined (s)      | 3.4  |      | 0.0   | 6.1  | 10.5     |      |
| Ref Time Seperate (s)      | 3.4  |      | 1.5   | 4.7  | 7.4      |      |
| Reference Time (s)         | 3.4  |      | 6.1   | 6.1  | 10.5     |      |
| Adj Reference Time (s)     | 8.0  |      | 10.1  | 10.1 | 14.5     |      |
| Summary                    |      |      |       |      |          |      |
|                            | EB   |      | NB SB |      | Combined |      |
| Protected Option (s)       | NA   |      | NA    |      |          |      |
| Permitted Option (s)       | Err  |      | 31.6  |      |          |      |
| Split Option (s)           | 8.0  |      | 24.6  |      |          |      |
| Minimum (s)                | 8.0  |      | 24.6  |      | 32.6     |      |
| Right Turns                |      |      |       |      |          |      |
|                            | EBR  |      |       |      |          |      |
| Adj Reference Time (s)     | 8.0  |      |       |      |          |      |
| Cross Thru Ref Time (s)    | 14.5 |      |       |      |          |      |
| Oncoming Left Ref Time (s) | 0.0  |      |       |      |          |      |
| Combined (s)               | 22.5 |      |       |      |          |      |

#### Intersection Summary

Intersection Capacity Utilization 27.2% ICU Level of Service A  
 Reference Times and Phasing Options do not represent an optimized timing plan.

### Intersection Capacity Utilization 7: Internal Drive & South Access Drive

06/21/2022



| Movement                   | EBL  | EBR  | NBL   | NBT   | SBT      | SBR  |
|----------------------------|------|------|-------|-------|----------|------|
| Lane Configurations        |      |      |       |       |          |      |
| Volume (vph)               | 59   | 84   | 159   | 37    | 26       | 114  |
| Pedestrians                |      |      |       |       |          |      |
| Ped Button                 |      |      |       |       |          |      |
| Pedestrian Timing (s)      |      |      |       |       |          |      |
| Free Right                 |      | No   |       |       |          | No   |
| Ideal Flow                 | 1900 | 1900 | 1900  | 1900  | 1900     | 1900 |
| Lost Time (s)              | 4.0  | 4.0  | 4.0   | 4.0   | 4.0      | 4.0  |
| Minimum Green (s)          | 4.0  | 4.0  | 4.0   | 4.0   | 4.0      | 4.0  |
| Refr Cycle Length (s)      | 120  | 120  | 120   | 120   | 120      | 120  |
| Volume Combined (vph)      | 59   | 84   | 0     | 196   | 140      | 0    |
| Lane Utilization Factor    | 1.00 | 1.00 | 1.00  | 1.00  | 1.00     | 1.00 |
| Turning Factor (vph)       | 0.95 | 0.85 | 0.95  | 0.96  | 0.88     | 0.85 |
| Saturated Flow (vph)       | 1805 | 1615 | 0     | 1823  | 1668     | 0    |
| Ped Intf Time (s)          | 0.0  | 0.0  | 0.0   | 0.0   | 0.0      | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      |       | 0.00  | 0.00     |      |
| Protected Option Allowed   | No   |      |       | No    | No       |      |
| Reference Time (s)         |      | 6.2  |       |       |          | 0.0  |
| Adj Reference Time (s)     |      | 10.2 |       |       |          | 0.0  |
| Permitted Option           |      |      |       |       |          |      |
| Adj Saturation A (vph)     | 120  |      | 0     | 141   | 1668     |      |
| Reference Time A (s)       | 58.8 |      | 0.0   | 167.4 | 10.1     |      |
| Adj Saturation B (vph)     | NA   |      | NA    | NA    | 1668     |      |
| Reference Time B (s)       | NA   |      | NA    | NA    | 10.1     |      |
| Reference Time (s)         |      |      |       | 167.4 | 10.1     |      |
| Adj Reference Time (s)     |      |      |       | 171.4 | 14.1     |      |
| Split Option               |      |      |       |       |          |      |
| Ref Time Combined (s)      | 3.9  |      | 0.0   | 12.9  | 10.1     |      |
| Ref Time Seperate (s)      | 3.9  |      | 10.6  | 2.3   | 1.9      |      |
| Reference Time (s)         | 3.9  |      | 12.9  | 12.9  | 10.1     |      |
| Adj Reference Time (s)     | 8.0  |      | 16.9  | 16.9  | 14.1     |      |
| Summary                    |      |      |       |       |          |      |
|                            | EB   |      | NB SB |       | Combined |      |
| Protected Option (s)       | NA   |      | NA    |       |          |      |
| Permitted Option (s)       | Err  |      | 171.4 |       |          |      |
| Split Option (s)           | 8.0  |      | 31.0  |       |          |      |
| Minimum (s)                | 8.0  |      | 31.0  |       | 39.0     |      |
| Right Turns                |      |      |       |       |          |      |
|                            | EBR  |      |       |       |          |      |
| Adj Reference Time (s)     | 10.2 |      |       |       |          |      |
| Cross Thru Ref Time (s)    | 14.1 |      |       |       |          |      |
| Oncoming Left Ref Time (s) | 0.0  |      |       |       |          |      |
| Combined (s)               | 24.3 |      |       |       |          |      |

#### Intersection Summary























Intersection Capacity Utilization 32.5% ICU Level of Service A  
 Reference Times and Phasing Options do not represent an optimized timing plan.

Capacity Analysis Summary Sheets  
Year 2027 No-Build Saturday Midday Peak Hour  
Conditions

Lanes, Volumes, Timings

1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

|                         |  |  |  |  |  |  |   |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |   |  |  |   |  |  |  |  |  |  |  |  |
| Traffic Volume (vph)    | 11  | 32  | 146   | 95  | 23  | 13  | 146   | 636   | 43  | 21  | 567   | 23  |
| Future Volume (vph)     | 11  | 32  | 146   | 95  | 23  | 13  | 146   | 636   | 43  | 21  | 567   | 23  |
| Ideal Flow (vphpl)      | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  |
| Lane Width (ft)         | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  | 12  |
| Grade (%)               |   | 0%  |   |   | 0%  |   |   | 0%  |   |   | 0%  |   |
| Storage Length (ft)     | 0   |   | 105   | 0   |   | 85  | 175   |   | 0   | 135   |   | 0   |
| Storage Lanes           | 0   |   | 1   | 0   |   | 1   | 1   |   | 0   | 1   |   | 0   |
| Taper Length (ft)       | 60  |   |   | 25  |   |   | 165   |   |   | 120   |   |   |
| Lane Util. Factor       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95  | 1.00  | 0.95  | 0.95  |
| Ped Bike Factor         |   |   |   |   |   |   |   |   |   |   |   |   |
| Frt                     |   |   | 0.850   |   |   | 0.850   |   | 0.990   |   |   |   | 0.994   |
| Flt Protected           |   | 0.988   |   |   | 0.961   |   | 0.950   |   |   | 0.950   |   |   |
| Satd. Flow (prot)       | 0   | 1836  | 1599  | 0   | 1826  | 1615  | 1787  | 3504  | 0   | 1805  | 3536  | 0   |
| Flt Permitted           |   | 0.908   |   |   | 0.738   |   | 0.397   |   |   | 0.361   |   |   |
| Satd. Flow (perm)       | 0   | 1687  | 1599  | 0   | 1402  | 1615  | 747   | 3504  | 0   | 686   | 3536  | 0   |
| Right Turn on Red       |   |   | No  |   |   | No  |   |   | No  |   |   | No  |
| Satd. Flow (RTOR)       |   |   |   |   |   |   |   |   |   |   |   |   |
| Link Speed (mph)        |   | 30  |   |   | 30  |   |   | 40  |   |   |   | 40  |
| Link Distance (ft)      |   | 667   |   |   | 331   |   |   | 633   |   |   |   | 695   |
| Travel Time (s)         |   | 15.2  |   |   | 7.5   |   |   | 10.8  |   |   |   | 11.8  |
| Confl. Peds. (#/hr)     |   |   |   |   |   |   |   |   |   |   |   |   |
| Confl. Bikes (#/hr)     |   |   |   |   |   |   |   |   |   |   |   |   |
| 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  |
| Growth Factor           | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  |
| Heavy Vehicles (%)      | 9%  | 0%  | 1%  | 0%  | 0%  | 0%  | 1%  | 2%  | 2%  | 0%  | 1%  | 13%   |
| Bus Blockages (#/hr)    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
| Parking (#/hr)          |   |   |   |   |   |   |   |   |   |   |   |   |
| Mid-Block Traffic (%)   |   | 0%  |   |   | 0%  |   |   | 0%  |   |   |   | 0%  |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 0   | 44  | 152   | 0   | 123   | 14  | 152   | 708   | 0   | 22  | 615   | 0   |
| Turn Type               | Perm  | NA  | Perm  | Perm  | NA  | Perm  | pm+pt   | NA  |   | pm+pt   | NA  |   |
| Protected Phases        |   | 4   |   |   | 8   |   | 5   | 2   |   | 1   | 6   |   |
| Permitted Phases        | 4   |   | 4   | 8   |   | 8   | 2   |   |   | 6   |   |   |
| Detector Phase          | 4   | 4   | 4   | 8   | 8   | 8   | 5   | 2   |   | 1   | 6   |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 3.0   | 15.0  |   | 3.0   | 15.0  |   |
| Minimum Split (s)       | 22.5  | 22.5  | 22.5  | 22.5  | 22.5  | 22.5  | 9.5   | 22.5  |   | 9.5   | 22.5  |   |
| Total Split (s)         | 27.0  | 27.0  | 27.0  | 27.0  | 27.0  | 27.0  | 13.0  | 38.0  |   | 10.0  | 35.0  |   |
| Total Split (%)         | 36.0%   | 36.0%   | 36.0%   | 36.0%   | 36.0%   | 36.0%   | 17.3%   | 50.7%   |   | 13.3%   | 46.7%   |   |
| Yellow Time (s)         | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 3.5   | 4.0   |   | 3.5   | 4.0   |   |
| All-Red Time (s)        | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 0.0   | 2.0   |   | 0.0   | 2.0   |   |
| Lost Time Adjust (s)    |   | 0.0   | 0.0   |   | 0.0   | 0.0   | 0.0   | 0.0   |   | 0.0   | 0.0   |   |
| Total Lost Time (s)     |   | 6.0   | 6.0   |   | 6.0   | 6.0   | 3.5   | 6.0   |   | 3.5   | 6.0   |   |
| Lead/Lag                |   |   |   |   |   |   | Lag   | Lead  |   | Lag   | Lead  |   |
| Lead-Lag Optimize?      |   |   |   |   |   |   | Yes   | Yes   |   | Yes   | Yes   |   |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Min   |   | None  | C-Min   |   |
| Act Effct Green (s)     |   | 13.3  | 13.3  |   | 13.3  | 13.3  | 52.0  | 46.1  |   | 47.5  | 39.5  |   |
| Actuated g/C Ratio      |   | 0.18  | 0.18  |   | 0.18  | 0.18  | 0.69  | 0.61  |   | 0.63  | 0.53  |   |

### Lanes, Volumes, Timings

#### 1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

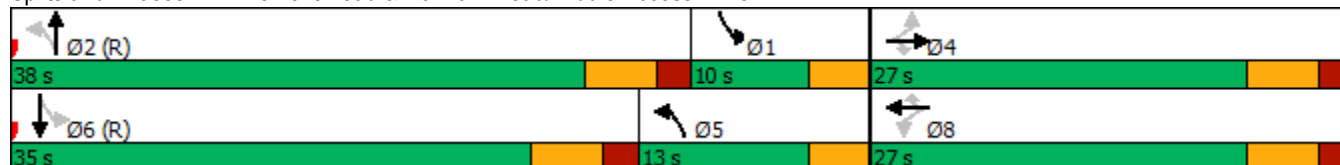


| Lane Group              | EBL | EBT  | EBR  | WBL | WBT  | WBR  | NBL  | NBT  | NBR | SBL  | SBT  | SBR |
|-------------------------|-----|------|------|-----|------|------|------|------|-----|------|------|-----|
| v/c Ratio               |     | 0.15 | 0.54 |     | 0.50 | 0.05 | 0.25 | 0.33 |     | 0.04 | 0.33 |     |
| Control Delay           |     | 25.4 | 34.4 |     | 33.9 | 23.6 | 3.8  | 3.5  |     | 5.0  | 11.8 |     |
| Queue Delay             |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  | 0.0  |     | 0.0  | 0.0  |     |
| Total Delay             |     | 25.4 | 34.4 |     | 33.9 | 23.6 | 3.8  | 3.5  |     | 5.0  | 11.8 |     |
| LOS                     |     | C    | C    |     | C    | C    | A    | A    |     | A    | B    |     |
| Approach Delay          |     | 32.4 |      |     | 32.8 |      |      | 3.5  |     |      | 11.6 |     |
| Approach LOS            |     | C    |      |     | C    |      |      | A    |     |      | B    |     |
| Queue Length 50th (ft)  |     | 17   | 65   |     | 52   | 5    | 11   | 28   |     | 2    | 77   |     |
| Queue Length 95th (ft)  |     | 41   | 112  |     | 94   | 19   | 25   | 48   |     | 11   | 139  |     |
| Internal Link Dist (ft) |     | 587  |      |     | 251  |      |      | 553  |     |      | 615  |     |
| Turn Bay Length (ft)    |     |      | 105  |     |      | 85   | 175  |      |     | 135  |      |     |
| Base Capacity (vph)     |     | 472  | 447  |     | 392  | 452  | 677  | 2151 |     | 540  | 1860 |     |
| Starvation Cap Reductn  |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Spillback Cap Reductn   |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Storage Cap Reductn     |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Reduced v/c Ratio       |     | 0.09 | 0.34 |     | 0.31 | 0.03 | 0.22 | 0.33 |     | 0.04 | 0.33 |     |

#### Intersection Summary

|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 75  |
| Actuated Cycle Length:            | 75  |
| Offset:                           | 11 (15%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle:                    | 55  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.54  |
| Intersection Signal Delay:        | 11.6  |
| Intersection LOS:                 | B   |
| Intersection Capacity Utilization | 51.0%   |
| ICU Level of Service              | A   |
| Analysis Period (min)             | 15  |

#### Splits and Phases: 1: Lemont Road & Dunham Road/Middle Access Drive



Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022



| Lane Group                | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR   |
|---------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| Lane Configurations       |       |       |      |       |       |      |       |       |      |       |       |       |
| Traffic Volume (vph)      | 100   | 12    | 48   | 282   | 22    | 69   | 66    | 656   | 150  | 48    | 699   | 61    |
| Future Volume (vph)       | 100   | 12    | 48   | 282   | 22    | 69   | 66    | 656   | 150  | 48    | 699   | 61    |
| Ideal Flow (vphpl)        | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900  |
| Lane Width (ft)           | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12    |
| Grade (%)                 |       | 0%    |      |       | 0%    |      |       | 0%    |      |       | 0%    |       |
| Storage Length (ft)       | 85    |       | 0    | 85    |       | 0    | 200   |       | 0    | 70    |       | 160   |
| Storage Lanes             | 1     |       | 0    | 1     |       | 0    | 1     |       | 0    | 1     |       | 1     |
| Taper Length (ft)         | 75    |       |      | 75    |       |      | 130   |       |      | 175   |       |       |
| Lane Util. Factor         | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 0.95  | 0.95 | 1.00  | 0.95  | 1.00  |
| Ped Bike Factor           |       |       |      |       |       |      |       |       |      |       |       |       |
| Fr <sub>t</sub>           |       | 0.881 |      |       | 0.886 |      |       | 0.972 |      |       |       | 0.850 |
| Fl <sub>t</sub> Protected | 0.950 |       |      | 0.950 |       |      | 0.950 |       |      | 0.950 |       |       |
| Satd. Flow (prot)         | 1770  | 1648  | 0    | 1805  | 1683  | 0    | 1805  | 3453  | 0    | 1805  | 3574  | 1615  |
| Fl <sub>t</sub> Permitted | 0.833 |       |      | 0.716 |       |      | 0.314 |       |      | 0.260 |       |       |
| Satd. Flow (perm)         | 1552  | 1648  | 0    | 1360  | 1683  | 0    | 597   | 3453  | 0    | 494   | 3574  | 1615  |
| Right Turn on Red         |       |       | Yes  |       |       | Yes  |       |       | Yes  |       |       | Yes   |
| Satd. Flow (RTOR)         |       | 50    |      |       | 72    |      |       | 41    |      |       |       | 233   |
| Link Speed (mph)          |       | 30    |      |       | 30    |      |       | 40    |      |       |       | 40    |
| Link Distance (ft)        |       | 302   |      |       | 294   |      |       | 366   |      |       |       | 633   |
| Travel Time (s)           |       | 6.9   |      |       | 6.7   |      |       | 6.2   |      |       |       | 10.8  |
| Confl. Peds. (#/hr)       |       |       |      |       |       |      |       |       |      |       |       |       |
| Confl. Bikes (#/hr)       |       |       |      |       |       |      |       |       |      |       |       |       |
| 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  |
| Growth Factor             | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100%  |
| Heavy Vehicles (%)        | 2%    | 0%    | 2%   | 0%    | 0%    | 0%   | 0%    | 2%    | 0%   | 0%    | 1%    | 0%    |
| Bus Blockages (#/hr)      | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0     |
| Parking (#/hr)            |       |       |      |       |       |      |       |       |      |       |       |       |
| Mid-Block Traffic (%)     |       | 0%    |      |       | 0%    |      |       | 0%    |      |       |       | 0%    |
| Shared Lane Traffic (%)   |       |       |      |       |       |      |       |       |      |       |       |       |
| Lane Group Flow (vph)     | 104   | 63    | 0    | 294   | 95    | 0    | 69    | 839   | 0    | 50    | 728   | 64    |
| Turn Type                 | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    | Perm  |
| Protected Phases          | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     |       |
| Permitted Phases          | 4     |       |      | 8     |       |      | 2     |       |      | 6     |       | 6     |
| Detector Phase            | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     | 6     |
| Switch Phase              |       |       |      |       |       |      |       |       |      |       |       |       |
| Minimum Initial (s)       | 3.0   | 8.0   |      | 3.0   | 8.0   |      | 3.0   | 15.0  |      | 3.0   | 15.0  | 15.0  |
| Minimum Split (s)         | 9.5   | 14.0  |      | 9.5   | 14.0  |      | 9.0   | 24.0  |      | 9.5   | 24.0  | 24.0  |
| Total Split (s)           | 10.6  | 14.0  |      | 18.4  | 21.8  |      | 9.0   | 33.0  |      | 9.6   | 33.6  | 33.6  |
| Total Split (%)           | 14.1% | 18.7% |      | 24.5% | 29.1% |      | 12.0% | 44.0% |      | 12.8% | 44.8% | 44.8% |
| Yellow Time (s)           | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   | 4.0   |
| All-Red Time (s)          | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   | 2.0   |
| Lost Time Adjust (s)      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)       | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   | 6.0   |
| Lead/Lag                  | Lag   | Lead  |      | Lag   | Lead  |      | Lag   | Lead  |      | Lag   | Lead  | Lead  |
| Lead-Lag Optimize?        | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   | Yes   |
| Recall Mode               | None  | None  |      | None  | None  |      | None  | C-Min |      | None  | C-Min | C-Min |
| Act Effect Green (s)      | 15.4  | 8.0   |      | 20.8  | 8.9   |      | 44.6  | 37.7  |      | 44.6  | 36.3  | 36.3  |
| Actuated g/C Ratio        | 0.21  | 0.11  |      | 0.28  | 0.12  |      | 0.59  | 0.50  |      | 0.59  | 0.48  | 0.48  |

Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022

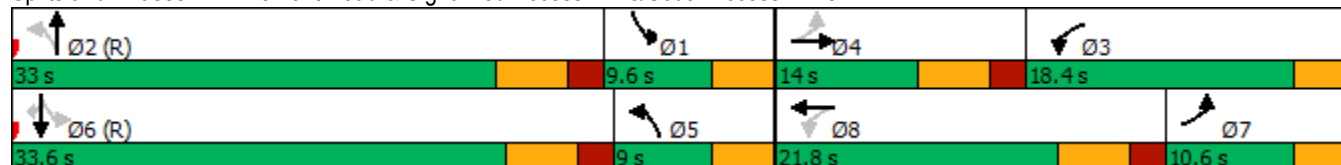


| Lane Group              | EBL  | EBT  | EBR | WBL  | WBT  | WBR | NBL  | NBT  | NBR | SBL  | SBT  | SBR  |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|------|
| v/c Ratio               | 0.30 | 0.29 |     | 0.64 | 0.36 |     | 0.16 | 0.48 |     | 0.13 | 0.42 | 0.07 |
| Control Delay           | 22.2 | 16.6 |     | 29.7 | 15.7 |     | 9.7  | 15.0 |     | 4.6  | 8.9  | 0.2  |
| Queue Delay             | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  |
| Total Delay             | 22.2 | 16.6 |     | 29.7 | 15.7 |     | 9.7  | 15.0 |     | 4.6  | 8.9  | 0.2  |
| LOS                     | C    | B    |     | C    | B    |     | A    | B    |     | A    | A    | A    |
| Approach Delay          |      | 20.1 |     |      | 26.3 |     |      | 14.6 |     |      | 8.0  |      |
| Approach LOS            |      | C    |     |      | C    |     |      | B    |     |      | A    |      |
| Queue Length 50th (ft)  | 34   | 6    |     | 110  | 10   |     | 13   | 141  |     | 8    | 87   | 0    |
| Queue Length 95th (ft)  | 64   | 39   |     | 168  | 49   |     | 32   | 213  |     | 10   | 113  | 1    |
| Internal Link Dist (ft) |      | 222  |     |      | 214  |     |      | 286  |     |      | 553  |      |
| Turn Bay Length (ft)    | 85   |      |     | 85   |      |     | 200  |      |     | 70   |      | 160  |
| Base Capacity (vph)     | 349  | 220  |     | 523  | 411  |     | 443  | 1756 |     | 402  | 1727 | 901  |
| Starvation Cap Reductn  | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.30 | 0.29 |     | 0.56 | 0.23 |     | 0.16 | 0.48 |     | 0.12 | 0.42 | 0.07 |

Intersection Summary

|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 75  |
| Actuated Cycle Length:            | 75  |
| Offset:                           | 5 (7%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle:                    | 60  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.64  |
| Intersection Signal Delay:        | 14.6  |
| Intersection LOS:                 | B   |
| Intersection Capacity Utilization | 61.9%   |
| ICU Level of Service              | B   |
| Analysis Period (min)             | 15  |

Splits and Phases: 2: Lemont Road & Signalized Access Drive/South Access Drive



## HCM 6th TWSC

### 3: Lemont Road & North Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.1  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      | Y    |      | ↑↑   |      | Y    | ↑↑   |
| Traffic Vol, veh/h       | 24   | 116  | 649  | 11   | 118  | 587  |
| Future Vol, veh/h        | 24   | 116  | 649  | 11   | 118  | 587  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 100  | -    |
| Veh in Median Storage, # | 1    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 96   | 96   | 96   | 96   | 96   | 96   |
| Heavy Vehicles, %        | 2    | 0    | 0    | 2    | 0    | 0    |
| Mvmt Flow                | 25   | 121  | 676  | 11   | 123  | 611  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |     |   |
|----------------------|--------|--------|--------|---|-----|---|
| Conflicting Flow All | 1234   | 344    | 0      | 0 | 687 | 0 |
| Stage 1              | 682    | -      | -      | - | -   | - |
| Stage 2              | 552    | -      | -      | - | -   | - |
| Critical Hdwy        | 6.84   | 6.9    | -      | - | 4.1 | - |
| Critical Hdwy Stg 1  | 5.84   | -      | -      | - | -   | - |
| Critical Hdwy Stg 2  | 5.84   | -      | -      | - | -   | - |
| Follow-up Hdwy       | 3.52   | 3.3    | -      | - | 2.2 | - |
| Pot Cap-1 Maneuver   | 169    | 658    | -      | - | 916 | - |
| Stage 1              | 464    | -      | -      | - | -   | - |
| Stage 2              | 541    | -      | -      | - | -   | - |
| Platoon blocked, %   |        |        | -      | - | -   | - |
| Mov Cap-1 Maneuver   | 146    | 658    | -      | - | 916 | - |
| Mov Cap-2 Maneuver   | 280    | -      | -      | - | -   | - |
| Stage 1              | 464    | -      | -      | - | -   | - |
| Stage 2              | 469    | -      | -      | - | -   | - |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 14.3 | 0  | 1.6 |
| HCM LOS              | B    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 534   | 916   |
| HCM Lane V/C Ratio    | -   | -        | 0.273 | 0.134 |
| HCM Control Delay (s) | -   | -        | 14.3  | 9.5   |
| HCM Lane LOS          | -   | -        | B     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 1.1   | 0.5   |



HCM 6th TWSC  
4: Lemont Road & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.1  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      | ↗    |      | ↕↗   |      |      | ↕↖↗  |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 0    | 0    | 17   | 0    | 855  | 183  | 0    | 1029 | 0    |
| Future Vol, veh/h        | 0    | 0    | 0    | 0    | 0    | 17   | 0    | 855  | 183  | 0    | 1029 | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | 0    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 3    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 1    | 0    |
| Mvmt Flow                | 0    | 0    | 0    | 0    | 0    | 18   | 0    | 929  | 199  | 0    | 1118 | 0    |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | -      | 564    |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | -      | 6.9    |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | -      | 3.3    |
| Pot Cap-1 Maneuver   | 0      | 0      | 474    |
| Stage 1              | 0      | 0      | -      |
| Stage 2              | 0      | 0      | -      |
| Platoon blocked, %   | -      | -      | -      |
| Mov Cap-1 Maneuver   | -      | 0      | 474    |
| Mov Cap-2 Maneuver   | -      | 0      | -      |
| Stage 1              | -      | 0      | -      |
| Stage 2              | -      | 0      | -      |

| Approach             | WB   | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 12.9 | 0  | 0  |
| HCM LOS              | B    |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT   |
|-----------------------|-----|----------|-------|
| Capacity (veh/h)      | -   | -        | 474   |
| HCM Lane V/C Ratio    | -   | -        | 0.039 |
| HCM Control Delay (s) | -   | -        | 12.9  |
| HCM Lane LOS          | -   | -        | B     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   |

## HCM 6th TWSC

### 5: 75th Street & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |        |        |        |       |      |      |
|--------------------------|--------|--------|--------|-------|------|------|
| Int Delay, s/veh         | 1.3    |        |        |       |      |      |
| Movement                 | EBL    | EBT    | WBT    | WBR   | SBL  | SBR  |
| Lane Configurations      |        | ↑↑↑    | ↑↑↑    |       |      | ↑    |
| Traffic Vol, veh/h       | 0      | 1243   | 1073   | 219   | 0    | 155  |
| Future Vol, veh/h        | 0      | 1243   | 1073   | 219   | 0    | 155  |
| Conflicting Peds, #/hr   | 0      | 0      | 0      | 0     | 0    | 0    |
| Sign Control             | Free   | Free   | Free   | Free  | Stop | Stop |
| RT Channelized           | -      | None   | -      | None  | -    | None |
| Storage Length           | -      | -      | -      | -     | -    | 0    |
| Veh in Median Storage, # | -      | 0      | 0      | -     | 0    | -    |
| Grade, %                 | -      | 0      | 0      | -     | 0    | -    |
| Peak Hour Factor         | 98     | 98     | 98     | 98    | 98   | 98   |
| Heavy Vehicles, %        | 0      | 1      | 1      | 0     | 0    | 0    |
| Mvmt Flow                | 0      | 1268   | 1095   | 223   | 0    | 158  |
| Major/Minor              | Major1 | Major2 | Minor2 |       |      |      |
| Conflicting Flow All     | -      | 0      | -      | 0     | -    | 659  |
| Stage 1                  | -      | -      | -      | -     | -    | -    |
| Stage 2                  | -      | -      | -      | -     | -    | -    |
| Critical Hdwy            | -      | -      | -      | -     | -    | 7.1  |
| Critical Hdwy Stg 1      | -      | -      | -      | -     | -    | -    |
| Critical Hdwy Stg 2      | -      | -      | -      | -     | -    | -    |
| Follow-up Hdwy           | -      | -      | -      | -     | -    | 3.9  |
| Pot Cap-1 Maneuver       | 0      | -      | -      | -     | 0    | 352  |
| Stage 1                  | 0      | -      | -      | -     | 0    | -    |
| Stage 2                  | 0      | -      | -      | -     | 0    | -    |
| Platoon blocked, %       | -      | -      | -      | -     | -    | -    |
| Mov Cap-1 Maneuver       | -      | -      | -      | -     | -    | 352  |
| Mov Cap-2 Maneuver       | -      | -      | -      | -     | -    | -    |
| Stage 1                  | -      | -      | -      | -     | -    | -    |
| Stage 2                  | -      | -      | -      | -     | -    | -    |
| Approach                 | EB     | WB     | SB     |       |      |      |
| HCM Control Delay, s     | 0      | 0      | 23.3   |       |      |      |
| HCM LOS                  |        |        |        | C     |      |      |
| Minor Lane/Major Mvmt    | EBT    | WBT    | WBR    | SBLn1 |      |      |
| Capacity (veh/h)         | -      | -      | -      | 352   |      |      |
| HCM Lane V/C Ratio       | -      | -      | -      | 0.449 |      |      |
| HCM Control Delay (s)    | -      | -      | -      | 23.3  |      |      |
| HCM Lane LOS             | -      | -      | -      | C     |      |      |
| HCM 95th %tile Q(veh)    | -      | -      | -      | 2.2   |      |      |

### Intersection Capacity Utilization 6: Internal Drive & Middle Access Drive

06/21/2022



| Movement                   | EBL  | EBR  | NBL   | NBT  | SBT      | SBR  |
|----------------------------|------|------|-------|------|----------|------|
| Lane Configurations        |      |      |       |      |          |      |
| Volume (vph)               | 59   | 37   | 36    | 116  | 155      | 95   |
| Pedestrians                |      |      |       |      |          |      |
| Ped Button                 |      |      |       |      |          |      |
| Pedestrian Timing (s)      |      |      |       |      |          |      |
| Free Right                 |      | No   |       |      |          | No   |
| Ideal Flow                 | 1900 | 1900 | 1900  | 1900 | 1900     | 1900 |
| Lost Time (s)              | 4.0  | 4.0  | 4.0   | 4.0  | 4.0      | 4.0  |
| Minimum Green (s)          | 4.0  | 4.0  | 4.0   | 4.0  | 4.0      | 4.0  |
| Refr Cycle Length (s)      | 120  | 120  | 120   | 120  | 120      | 120  |
| Volume Combined (vph)      | 59   | 37   | 0     | 152  | 250      | 0    |
| Lane Utilization Factor    | 1.00 | 1.00 | 1.00  | 1.00 | 1.00     | 1.00 |
| Turning Factor (vph)       | 0.95 | 0.85 | 0.95  | 0.99 | 0.94     | 0.85 |
| Saturated Flow (vph)       | 1805 | 1615 | 0     | 1878 | 1792     | 0    |
| Ped Intf Time (s)          | 0.0  | 0.0  | 0.0   | 0.0  | 0.0      | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      |       | 0.00 | 0.00     |      |
| Protected Option Allowed   | No   |      |       | No   | No       |      |
| Reference Time (s)         |      | 2.7  |       |      |          | 0.0  |
| Adj Reference Time (s)     |      | 8.0  |       |      |          | 0.0  |
| Permitted Option           |      |      |       |      |          |      |
| Adj Saturation A (vph)     | 120  |      | 0     | 406  | 1792     |      |
| Reference Time A (s)       | 58.8 |      | 0.0   | 45.0 | 16.7     |      |
| Adj Saturation B (vph)     | NA   |      | NA    | NA   | 1792     |      |
| Reference Time B (s)       | NA   |      | NA    | NA   | 16.7     |      |
| Reference Time (s)         |      |      |       | 45.0 | 16.7     |      |
| Adj Reference Time (s)     |      |      |       | 49.0 | 20.7     |      |
| Split Option               |      |      |       |      |          |      |
| Ref Time Combined (s)      | 3.9  |      | 0.0   | 9.7  | 16.7     |      |
| Ref Time Seperate (s)      | 3.9  |      | 2.4   | 7.3  | 10.4     |      |
| Reference Time (s)         | 3.9  |      | 9.7   | 9.7  | 16.7     |      |
| Adj Reference Time (s)     | 8.0  |      | 13.7  | 13.7 | 20.7     |      |
| Summary                    |      |      |       |      |          |      |
|                            | EB   |      | NB SB |      | Combined |      |
| Protected Option (s)       | NA   |      | NA    |      |          |      |
| Permitted Option (s)       | Err  |      | 49.0  |      |          |      |
| Split Option (s)           | 8.0  |      | 34.5  |      |          |      |
| Minimum (s)                | 8.0  |      | 34.5  |      | 42.5     |      |
| Right Turns                |      |      |       |      |          |      |
|                            | EBR  |      |       |      |          |      |
| Adj Reference Time (s)     | 8.0  |      |       |      |          |      |
| Cross Thru Ref Time (s)    | 20.7 |      |       |      |          |      |
| Oncoming Left Ref Time (s) | 0.0  |      |       |      |          |      |
| Combined (s)               | 28.7 |      |       |      |          |      |

#### Intersection Summary

Intersection Capacity Utilization 35.4% ICU Level of Service A  
 Reference Times and Phasing Options do not represent an optimized timing plan.

## Intersection Capacity Utilization 7: Internal Drive & South Access Drive

06/21/2022



| Movement   | EBL  | EBR  | NBL   | NBT   | SBT                  | SBR  |
|--|------|------|-------|-------|----------------------|------|
| Lane Configurations  |      |      |       |       |                      |      |
| Volume (vph)   | 95   | 115  | 212   | 57    | 31                   | 161  |
| Pedestrians  |      |      |       |       |                      |      |
| Ped Button   |      |      |       |       |                      |      |
| Pedestrian Timing (s)  |      |      |       |       |                      |      |
| Free Right   |      | No   |       |       |                      | No   |
| Ideal Flow   | 1900 | 1900 | 1900  | 1900  | 1900                 | 1900 |
| Lost Time (s)  | 4.0  | 4.0  | 4.0   | 4.0   | 4.0                  | 4.0  |
| Minimum Green (s)  | 4.0  | 4.0  | 4.0   | 4.0   | 4.0                  | 4.0  |
| Refr Cycle Length (s)  | 120  | 120  | 120   | 120   | 120                  | 120  |
| Volume Combined (vph)  | 95   | 115  | 0     | 269   | 192                  | 0    |
| Lane Utilization Factor  | 1.00 | 1.00 | 1.00  | 1.00  | 1.00                 | 1.00 |
| Turning Factor (vph)   | 0.95 | 0.85 | 0.95  | 0.96  | 0.87                 | 0.85 |
| Saturated Flow (vph)   | 1805 | 1615 | 0     | 1825  | 1661                 | 0    |
| Ped Intf Time (s)  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0                  | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      |       | 0.00  | 0.00                 |      |
| Protected Option Allowed   | No   |      |       | No    | No                   |      |
| Reference Time (s)   |      | 8.5  |       |       |                      | 0.0  |
| Adj Reference Time (s)   |      | 12.5 |       |       |                      | 0.0  |
| Permitted Option   |      |      |       |       |                      |      |
| Adj Saturation A (vph)   | 120  |      | 0     | 144   | 1661                 |      |
| Reference Time A (s)   | 94.7 |      | 0.0   | 224.5 | 13.9                 |      |
| Adj Saturation B (vph)   | NA   |      | NA    | NA    | 1661                 |      |
| Reference Time B (s)   | NA   |      | NA    | NA    | 13.9                 |      |
| Reference Time (s)   |      |      |       | 224.5 | 13.9                 |      |
| Adj Reference Time (s)   |      |      |       | 228.5 | 17.9                 |      |
| Split Option   |      |      |       |       |                      |      |
| Ref Time Combined (s)  | 6.3  |      | 0.0   | 17.7  | 13.9                 |      |
| Ref Time Seperate (s)  | 6.3  |      | 14.1  | 3.6   | 2.2                  |      |
| Reference Time (s)   | 6.3  |      | 17.7  | 17.7  | 13.9                 |      |
| Adj Reference Time (s)   | 10.3 |      | 21.7  | 21.7  | 17.9                 |      |
| Summary  | EB   |      | NB SB |       | Combined             |      |
| Protected Option (s)   | NA   |      | NA    |       |                      |      |
| Permitted Option (s)   | Err  |      | 228.5 |       |                      |      |
| Split Option (s)   | 10.3 |      | 39.6  |       |                      |      |
| Minimum (s)  | 10.3 |      | 39.6  |       | 49.9                 |      |
| Right Turns  | EBR  |      |       |       |                      |      |
| Adj Reference Time (s)   | 12.5 |      |       |       |                      |      |
| Cross Thru Ref Time (s)  | 17.9 |      |       |       |                      |      |
| Oncoming Left Ref Time (s)   | 0.0  |      |       |       |                      |      |
| Combined (s)   | 30.4 |      |       |       |                      |      |
| Intersection Summary   |      |      |       |       |                      |      |
| Intersection Capacity Utilization  |      |      | 41.6% |       | ICU Level of Service | A    |
| Reference Times and Phasing Options do not represent an optimized timing plan. |      |      |       |       |                      |      |

Capacity Analysis Summary Sheets  
Year 2027 Projected Weekday Morning Peak Hour  
Conditions

Lanes, Volumes, Timings

1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR  | SBL   | SBT   | SBR  |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations     |       |       |       |       |       |       |       |       |      |       |       |      |
| Traffic Volume (vph)    | 8     | 5     | 197   | 25    | 2     | 20    | 147   | 724   | 35   | 15    | 445   | 5    |
| Future Volume (vph)     | 8     | 5     | 197   | 25    | 2     | 20    | 147   | 724   | 35   | 15    | 445   | 5    |
| Ideal Flow (vphpl)      | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 |
| Lane Width (ft)         | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12   | 12    | 12    | 12   |
| Grade (%)               |       | 0%    |       |       | 0%    |       |       | 0%    |      |       | 0%    |      |
| Storage Length (ft)     | 0     |       | 105   | 0     |       | 85    | 175   |       | 0    | 135   |       | 0    |
| Storage Lanes           | 0     |       | 1     | 0     |       | 1     | 1     |       | 0    | 1     |       | 0    |
| Taper Length (ft)       | 60    |       |       | 25    |       |       | 165   |       |      | 120   |       |      |
| Lane Util. Factor       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95 | 1.00  | 0.95  | 0.95 |
| Ped Bike Factor         |       |       | 0.850 |       |       | 0.850 |       | 0.993 |      |       | 0.998 |      |
| Flt Protected           |       | 0.971 |       |       | 0.955 |       | 0.950 |       |      | 0.950 |       |      |
| Satd. Flow (prot)       | 0     | 1845  | 1615  | 0     | 1756  | 1615  | 1752  | 3438  | 0    | 1805  | 3425  | 0    |
| Flt Permitted           |       | 0.874 |       |       | 0.776 |       | 0.452 |       |      | 0.283 |       |      |
| Satd. Flow (perm)       | 0     | 1661  | 1615  | 0     | 1427  | 1615  | 834   | 3438  | 0    | 538   | 3425  | 0    |
| Right Turn on Red       |       |       | No    |       |       | No    |       |       | No   |       |       | No   |
| Satd. Flow (RTOR)       |       |       |       |       |       |       |       |       |      |       |       |      |
| Link Speed (mph)        |       | 30    |       |       | 30    |       |       | 40    |      |       | 40    |      |
| Link Distance (ft)      |       | 667   |       |       | 331   |       |       | 633   |      |       | 695   |      |
| Travel Time (s)         |       | 15.2  |       |       | 7.5   |       |       | 10.8  |      |       | 11.8  |      |
| Confl. Peds. (#/hr)     |       |       |       |       |       |       |       |       |      |       |       |      |
| Confl. Bikes (#/hr)     |       |       |       |       |       |       |       |       |      |       |       |      |
| Peak Hour Factor        | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89  | 0.89 | 0.89  | 0.89  | 0.89 |
| Growth Factor           | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100% | 100%  | 100%  | 100% |
| Heavy Vehicles (%)      | 0%    | 0%    | 0%    | 0%    | 50%   | 0%    | 3%    | 4%    | 10%  | 0%    | 5%    | 20%  |
| Bus Blockages (#/hr)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0    |
| Parking (#/hr)          |       |       |       |       |       |       |       |       |      |       |       |      |
| Mid-Block Traffic (%)   |       | 0%    |       |       | 0%    |       |       | 0%    |      |       | 0%    |      |
| Shared Lane Traffic (%) |       |       |       |       |       |       |       |       |      |       |       |      |
| Lane Group Flow (vph)   | 0     | 15    | 221   | 0     | 30    | 22    | 165   | 852   | 0    | 17    | 506   | 0    |
| Turn Type               | Perm  | NA    | Perm  | Perm  | NA    | Perm  | pm+pt | NA    |      | pm+pt | NA    |      |
| Protected Phases        |       | 4     |       |       | 8     |       | 5     | 2     |      | 1     | 6     |      |
| Permitted Phases        | 4     |       | 4     | 8     |       | 8     | 2     |       |      | 6     |       |      |
| Detector Phase          | 4     | 4     | 4     | 8     | 8     | 8     | 5     | 2     |      | 1     | 6     |      |
| Switch Phase            |       |       |       |       |       |       |       |       |      |       |       |      |
| Minimum Initial (s)     | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 3.0   | 15.0  |      | 3.0   | 15.0  |      |
| Minimum Split (s)       | 24.0  | 24.0  | 24.0  | 24.0  | 24.0  | 24.0  | 9.5   | 25.0  |      | 9.5   | 24.0  |      |
| Total Split (s)         | 28.0  | 28.0  | 28.0  | 28.0  | 28.0  | 28.0  | 14.0  | 37.0  |      | 10.0  | 33.0  |      |
| Total Split (%)         | 37.3% | 37.3% | 37.3% | 37.3% | 37.3% | 37.3% | 18.7% | 49.3% |      | 13.3% | 44.0% |      |
| Yellow Time (s)         | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 3.5   | 4.0   |      | 3.5   | 4.0   |      |
| All-Red Time (s)        | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 0.0   | 2.0   |      | 0.0   | 2.0   |      |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |      | 0.0   | 0.0   |      |
| Total Lost Time (s)     |       | 6.0   | 6.0   |       | 6.0   | 6.0   | 3.5   | 6.0   |      | 3.5   | 6.0   |      |
| Lead/Lag                |       |       |       |       |       |       | Lag   | Lead  |      | Lag   | Lead  |      |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   |      | Yes   | Yes   |      |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Min |      | None  | C-Min |      |
| Act Effct Green (s)     |       | 16.3  | 16.3  |       | 16.3  | 16.3  | 49.2  | 44.9  |      | 44.3  | 36.3  |      |
| Actuated g/C Ratio      |       | 0.22  | 0.22  |       | 0.22  | 0.22  | 0.66  | 0.60  |      | 0.59  | 0.48  |      |

Lanes, Volumes, Timings

1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

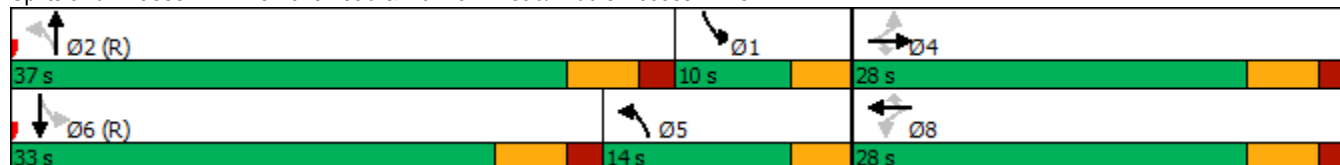


| Lane Group              | EBL | EBT  | EBR  | WBL | WBT  | WBR  | NBL  | NBT  | NBR | SBL  | SBT  | SBR |
|-------------------------|-----|------|------|-----|------|------|------|------|-----|------|------|-----|
| v/c Ratio               |     | 0.04 | 0.63 |     | 0.10 | 0.06 | 0.26 | 0.41 |     | 0.04 | 0.31 |     |
| Control Delay           |     | 20.8 | 34.3 |     | 22.0 | 21.3 | 3.3  | 5.2  |     | 6.0  | 13.5 |     |
| Queue Delay             |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  | 0.0  |     | 0.0  | 0.0  |     |
| Total Delay             |     | 20.8 | 34.3 |     | 22.0 | 21.3 | 3.3  | 5.2  |     | 6.0  | 13.5 |     |
| LOS                     |     | C    | C    |     | C    | C    | A    | A    |     | A    | B    |     |
| Approach Delay          |     | 33.4 |      |     | 21.7 |      |      | 4.9  |     |      | 13.3 |     |
| Approach LOS            |     | C    |      |     | C    |      |      | A    |     |      | B    |     |
| Queue Length 50th (ft)  |     | 6    | 94   |     | 11   | 8    | 10   | 77   |     | 1    | 67   |     |
| Queue Length 95th (ft)  |     | 18   | 145  |     | 28   | 23   | 11   | 51   |     | 10   | 127  |     |
| Internal Link Dist (ft) |     | 587  |      |     | 251  |      |      | 553  |     |      | 615  |     |
| Turn Bay Length (ft)    |     |      | 105  |     |      | 85   | 175  |      |     | 135  |      |     |
| Base Capacity (vph)     |     | 487  | 473  |     | 418  | 473  | 715  | 2058 |     | 434  | 1656 |     |
| Starvation Cap Reductn  |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Spillback Cap Reductn   |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Storage Cap Reductn     |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Reduced v/c Ratio       |     | 0.03 | 0.47 |     | 0.07 | 0.05 | 0.23 | 0.41 |     | 0.04 | 0.31 |     |

Intersection Summary

|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 75  |
| Actuated Cycle Length:            | 75  |
| Offset:                           | 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle:                    | 60  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.63  |
| Intersection Signal Delay:        | 11.5  |
| Intersection LOS:                 | B   |
| Intersection Capacity Utilization | 49.5%   |
| ICU Level of Service              | A   |
| Analysis Period (min)             | 15  |

Splits and Phases: 1: Lemont Road & Dunham Road/Middle Access Drive



Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022



| Lane Group                | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR   |
|---------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| Lane Configurations       |       |       |      |       |       |      |       |       |      |       |       |       |
| Traffic Volume (vph)      | 36    | 3     | 7    | 43    | 2     | 25   | 15    | 845   | 48   | 23    | 632   | 12    |
| Future Volume (vph)       | 36    | 3     | 7    | 43    | 2     | 25   | 15    | 845   | 48   | 23    | 632   | 12    |
| Ideal Flow (vphpl)        | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900  |
| Lane Width (ft)           | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12    |
| Grade (%)                 |       | 0%    |      |       | 0%    |      |       | 0%    |      |       | 0%    |       |
| Storage Length (ft)       | 85    |       | 0    | 85    |       | 0    | 200   |       | 0    | 70    |       | 160   |
| Storage Lanes             | 1     |       | 0    | 1     |       | 0    | 1     |       | 0    | 1     |       | 1     |
| Taper Length (ft)         | 75    |       |      | 75    |       |      | 130   |       |      | 175   |       |       |
| Lane Util. Factor         | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 0.95  | 0.95 | 1.00  | 0.95  | 1.00  |
| Ped Bike Factor           |       |       |      |       |       |      |       |       |      |       |       |       |
| Fr <sub>t</sub>           |       | 0.891 |      |       | 0.860 |      |       | 0.992 |      |       |       | 0.850 |
| Fl <sub>t</sub> Protected | 0.950 |       |      | 0.950 |       |      | 0.950 |       |      | 0.950 |       |       |
| Satd. Flow (prot)         | 1656  | 1608  | 0    | 1805  | 1634  | 0    | 1805  | 3451  | 0    | 1805  | 3505  | 1380  |
| Fl <sub>t</sub> Permitted |       |       |      |       |       |      | 0.383 |       |      | 0.259 |       |       |
| Satd. Flow (perm)         | 1743  | 1608  | 0    | 1900  | 1634  | 0    | 728   | 3451  | 0    | 492   | 3505  | 1380  |
| Right Turn on Red         |       |       | Yes  |       |       | Yes  |       |       | Yes  |       |       | Yes   |
| Satd. Flow (RTOR)         |       | 8     |      |       | 27    |      |       | 8     |      |       |       | 145   |
| Link Speed (mph)          |       | 30    |      |       | 30    |      |       | 40    |      |       |       | 40    |
| Link Distance (ft)        |       | 302   |      |       | 294   |      |       | 366   |      |       |       | 633   |
| Travel Time (s)           |       | 6.9   |      |       | 6.7   |      |       | 6.2   |      |       |       | 10.8  |
| Confl. Peds. (#/hr)       |       |       |      |       |       |      |       |       |      |       |       |       |
| Confl. Bikes (#/hr)       |       |       |      |       |       |      |       |       |      |       |       |       |
| Peak Hour Factor          | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93  |
| Growth Factor             | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100%  |
| Heavy Vehicles (%)        | 9%    | 14%   | 2%   | 0%    | 0%    | 0%   | 0%    | 4%    | 0%   | 0%    | 3%    | 17%   |
| Bus Blockages (#/hr)      | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0     |
| Parking (#/hr)            |       |       |      |       |       |      |       |       |      |       |       |       |
| Mid-Block Traffic (%)     |       | 0%    |      |       | 0%    |      |       | 0%    |      |       |       | 0%    |
| Shared Lane Traffic (%)   |       |       |      |       |       |      |       |       |      |       |       |       |
| Lane Group Flow (vph)     | 39    | 11    | 0    | 46    | 29    | 0    | 16    | 961   | 0    | 25    | 680   | 13    |
| Turn Type                 | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    | Perm  |
| Protected Phases          | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     |       |
| Permitted Phases          | 4     |       |      | 8     |       |      | 2     |       |      | 6     |       | 6     |
| Detector Phase            | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     | 6     |
| Switch Phase              |       |       |      |       |       |      |       |       |      |       |       |       |
| Minimum Initial (s)       | 3.0   | 8.0   |      | 3.0   | 8.0   |      | 3.0   | 15.0  |      | 3.0   | 15.0  | 15.0  |
| Minimum Split (s)         | 9.5   | 23.0  |      | 9.5   | 23.0  |      | 9.5   | 25.0  |      | 9.5   | 24.0  | 24.0  |
| Total Split (s)           | 10.0  | 23.0  |      | 10.0  | 23.0  |      | 10.0  | 32.0  |      | 10.0  | 32.0  | 32.0  |
| Total Split (%)           | 13.3% | 30.7% |      | 13.3% | 30.7% |      | 13.3% | 42.7% |      | 13.3% | 42.7% | 42.7% |
| Yellow Time (s)           | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   | 4.0   |
| All-Red Time (s)          | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   | 2.0   |
| Lost Time Adjust (s)      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)       | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   | 6.0   |
| Lead/Lag                  | Lag   | Lead  |      | Lag   | Lead  |      | Lag   | Lead  |      | Lag   | Lead  | Lead  |
| Lead-Lag Optimize?        | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   | Yes   |
| Recall Mode               | None  | None  |      | None  | None  |      | None  | C-Min |      | None  | C-Min | C-Min |
| Act Effect Green (s)      | 8.7   | 8.0   |      | 11.8  | 8.1   |      | 59.6  | 55.7  |      | 59.8  | 57.5  | 57.5  |
| Actuated g/C Ratio        | 0.12  | 0.11  |      | 0.16  | 0.11  |      | 0.79  | 0.74  |      | 0.80  | 0.77  | 0.77  |



Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022

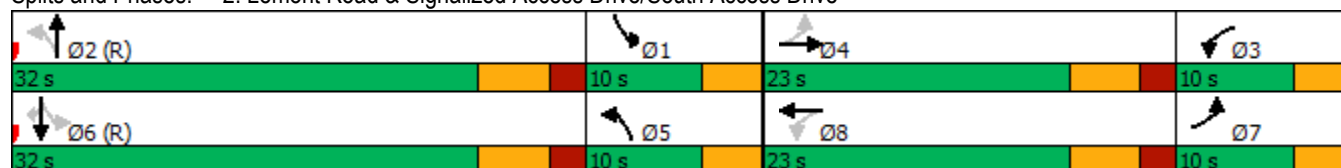


| Lane Group              | EBL  | EBT  | EBR | WBL  | WBT  | WBR | NBL  | NBT  | NBR | SBL  | SBT  | SBR  |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|------|
| v/c Ratio               | 0.20 | 0.06 |     | 0.16 | 0.14 |     | 0.02 | 0.37 |     | 0.05 | 0.25 | 0.01 |
| Control Delay           | 29.0 | 21.2 |     | 24.6 | 15.1 |     | 4.9  | 8.5  |     | 2.1  | 2.8  | 0.0  |
| Queue Delay             | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  |
| Total Delay             | 29.0 | 21.2 |     | 24.6 | 15.1 |     | 4.9  | 8.5  |     | 2.1  | 2.8  | 0.0  |
| LOS                     | C    | C    |     | C    | B    |     | A    | A    |     | A    | A    | A    |
| Approach Delay          |      | 27.3 |     |      | 20.9 |     |      | 8.5  |     |      | 2.7  |      |
| Approach LOS            |      | C    |     |      | C    |     |      | A    |     |      | A    |      |
| Queue Length 50th (ft)  | 17   | 1    |     | 20   | 1    |     | 1    | 52   |     | 0    | 8    | 0    |
| Queue Length 95th (ft)  | 35   | 16   |     | 40   | 23   |     | 9    | 215  |     | m4   | 70   | m0   |
| Internal Link Dist (ft) |      | 222  |     |      | 214  |     |      | 286  |     |      | 553  |      |
| Turn Bay Length (ft)    | 85   |      |     | 85   |      |     | 200  |      |     | 70   |      | 160  |
| Base Capacity (vph)     | 203  | 370  |     | 295  | 391  |     | 681  | 2564 |     | 509  | 2686 | 1091 |
| Starvation Cap Reductn  | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.19 | 0.03 |     | 0.16 | 0.07 |     | 0.02 | 0.37 |     | 0.05 | 0.25 | 0.01 |

Intersection Summary

Area Type: Other  
 Cycle Length: 75  
 Actuated Cycle Length: 75  
 Offset: 2 (3%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.37  
 Intersection Signal Delay: 7.2 Intersection LOS: A  
 Intersection Capacity Utilization 43.9% ICU Level of Service A  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Lemont Road & Signalized Access Drive/South Access Drive



## HCM 6th TWSC

### 3: Lemont Road & North Access Drive

06/21/2022

| Intersection             |        |          |        |       |      |      |
|--------------------------|--------|----------|--------|-------|------|------|
| Int Delay, s/veh         | 0.6    |          |        |       |      |      |
| Movement                 | WBL    | WBR      | NBT    | NBR   | SBL  | SBT  |
| Lane Configurations      | ↔      |          | ↑↓     |       | ↔    | ↑↑   |
| Traffic Vol, veh/h       | 7      | 18       | 735    | 17    | 39   | 458  |
| Future Vol, veh/h        | 7      | 18       | 735    | 17    | 39   | 458  |
| Conflicting Peds, #/hr   | 0      | 0        | 0      | 0     | 0    | 0    |
| Sign Control             | Stop   | Stop     | Free   | Free  | Free | Free |
| RT Channelized           | -      | None     | -      | None  | -    | None |
| Storage Length           | 0      | -        | -      | -     | 100  | -    |
| Veh in Median Storage, # | 1      | -        | 0      | -     | -    | 0    |
| Grade, %                 | 0      | -        | 0      | -     | -    | 0    |
| Peak Hour Factor         | 97     | 97       | 97     | 97    | 97   | 97   |
| Heavy Vehicles, %        | 3      | 14       | 7      | 4     | 50   | 0    |
| Mvmt Flow                | 7      | 19       | 758    | 18    | 40   | 472  |
| Major/Minor              | Minor1 | Major1   | Major2 |       |      |      |
| Conflicting Flow All     | 1083   | 388      | 0      | 0     | 776  | 0    |
| Stage 1                  | 767    | -        | -      | -     | -    | -    |
| Stage 2                  | 316    | -        | -      | -     | -    | -    |
| Critical Hdwy            | 6.86   | 7.18     | -      | -     | 5.1  | -    |
| Critical Hdwy Stg 1      | 5.86   | -        | -      | -     | -    | -    |
| Critical Hdwy Stg 2      | 5.86   | -        | -      | -     | -    | -    |
| Follow-up Hdwy           | 3.53   | 3.44     | -      | -     | 2.7  | -    |
| Pot Cap-1 Maneuver       | 210    | 578      | -      | -     | 586  | -    |
| Stage 1                  | 416    | -        | -      | -     | -    | -    |
| Stage 2                  | 709    | -        | -      | -     | -    | -    |
| Platoon blocked, %       |        |          | -      | -     | -    | -    |
| Mov Cap-1 Maneuver       | 196    | 578      | -      | -     | 586  | -    |
| Mov Cap-2 Maneuver       | 315    | -        | -      | -     | -    | -    |
| Stage 1                  | 416    | -        | -      | -     | -    | -    |
| Stage 2                  | 661    | -        | -      | -     | -    | -    |
| Approach                 | WB     | NB       | SB     |       |      |      |
| HCM Control Delay, s     | 13.1   | 0        | 0.9    |       |      |      |
| HCM LOS                  | B      |          |        |       |      |      |
| Minor Lane/Major Mvmt    | NBT    | NBRWBLn1 | SBL    | SBT   |      |      |
| Capacity (veh/h)         | -      | -        | 468    | 586   |      |      |
| HCM Lane V/C Ratio       | -      | -        | 0.055  | 0.069 |      |      |
| HCM Control Delay (s)    | -      | -        | 13.1   | 11.6  |      |      |
| HCM Lane LOS             | -      | -        | B      | B     |      |      |
| HCM 95th %tile Q(veh)    | -      | -        | 0.2    | 0.2   |      |      |

HCM 6th TWSC  
4: Lemont Road & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      | ↗    |      | ↕↗   |      |      | ↕↖↗  |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 907  | 12   | 0    | 682  | 0    |
| Future Vol, veh/h        | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 907  | 12   | 0    | 682  | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | 0    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 3    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 4    | 9    | 0    | 3    | 0    |
| Mvmt Flow                | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 986  | 13   | 0    | 741  | 0    |

| Major/Minor          | Minor1 | Major1 | Major2      |
|----------------------|--------|--------|-------------|
| Conflicting Flow All | -      | - 500  | - 0 0       |
| Stage 1              | -      | -      | -           |
| Stage 2              | -      | -      | -           |
| Critical Hdwy        | -      | - 6.9  | -           |
| Critical Hdwy Stg 1  | -      | -      | -           |
| Critical Hdwy Stg 2  | -      | -      | -           |
| Follow-up Hdwy       | -      | - 3.3  | -           |
| Pot Cap-1 Maneuver   | 0      | 0 522  | 0 - - 0 - 0 |
| Stage 1              | 0      | 0 -    | 0 - - 0 - 0 |
| Stage 2              | 0      | 0 -    | 0 - - 0 - 0 |
| Platoon blocked, %   |        |        | - - -       |
| Mov Cap-1 Maneuver   | -      | 0 522  | - - - - -   |
| Mov Cap-2 Maneuver   | -      | 0 -    | - - - - -   |
| Stage 1              | -      | 0 -    | - - - - -   |
| Stage 2              | -      | 0 -    | - - - - -   |

| Approach             | WB   | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 11.9 | 0  | 0  |
| HCM LOS              | B    |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h)      | -   | - 522    | -   |
| HCM Lane V/C Ratio    | -   | - 0.002  | -   |
| HCM Control Delay (s) | -   | - 11.9   | -   |
| HCM Lane LOS          | -   | - B      | -   |
| HCM 95th %tile Q(veh) | -   | - 0      | -   |

## HCM 6th TWSC

### 5: 75th Street & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |        |        |        |       |      |      |
|--------------------------|--------|--------|--------|-------|------|------|
| Int Delay, s/veh         | 0.2    |        |        |       |      |      |
| Movement                 | EBL    | EBT    | WBT    | WBR   | SBL  | SBR  |
| Lane Configurations      |        | ↑↑↑    | ↑↑↑    |       |      | ↑    |
| Traffic Vol, veh/h       | 0      | 1363   | 887    | 20    | 0    | 34   |
| Future Vol, veh/h        | 0      | 1363   | 887    | 20    | 0    | 34   |
| Conflicting Peds, #/hr   | 0      | 0      | 0      | 0     | 0    | 0    |
| Sign Control             | Free   | Free   | Free   | Free  | Stop | Stop |
| RT Channelized           | -      | None   | -      | None  | -    | None |
| Storage Length           | -      | -      | -      | -     | -    | 0    |
| Veh in Median Storage, # | -      | 0      | 0      | -     | 0    | -    |
| Grade, %                 | -      | 0      | 0      | -     | 0    | -    |
| Peak Hour Factor         | 94     | 94     | 94     | 94    | 94   | 94   |
| Heavy Vehicles, %        | 0      | 3      | 2      | 12    | 0    | 25   |
| Mvmt Flow                | 0      | 1450   | 944    | 21    | 0    | 36   |
| Major/Minor              | Major1 | Major2 | Minor2 |       |      |      |
| Conflicting Flow All     | -      | 0      | -      | 0     | -    | 483  |
| Stage 1                  | -      | -      | -      | -     | -    | -    |
| Stage 2                  | -      | -      | -      | -     | -    | -    |
| Critical Hdwy            | -      | -      | -      | -     | -    | 7.6  |
| Critical Hdwy Stg 1      | -      | -      | -      | -     | -    | -    |
| Critical Hdwy Stg 2      | -      | -      | -      | -     | -    | -    |
| Follow-up Hdwy           | -      | -      | -      | -     | -    | 4.15 |
| Pot Cap-1 Maneuver       | 0      | -      | -      | -     | 0    | 408  |
| Stage 1                  | 0      | -      | -      | -     | 0    | -    |
| Stage 2                  | 0      | -      | -      | -     | 0    | -    |
| Platoon blocked, %       | -      | -      | -      | -     | -    | -    |
| Mov Cap-1 Maneuver       | -      | -      | -      | -     | -    | 408  |
| Mov Cap-2 Maneuver       | -      | -      | -      | -     | -    | -    |
| Stage 1                  | -      | -      | -      | -     | -    | -    |
| Stage 2                  | -      | -      | -      | -     | -    | -    |
| Approach                 | EB     | WB     | SB     |       |      |      |
| HCM Control Delay, s     | 0      | 0      | 14.7   |       |      |      |
| HCM LOS                  |        |        |        | B     |      |      |
| Minor Lane/Major Mvmt    | EBT    | WBT    | WBR    | SBLn1 |      |      |
| Capacity (veh/h)         | -      | -      | -      | 408   |      |      |
| HCM Lane V/C Ratio       | -      | -      | -      | 0.089 |      |      |
| HCM Control Delay (s)    | -      | -      | -      | 14.7  |      |      |
| HCM Lane LOS             | -      | -      | -      | B     |      |      |
| HCM 95th %tile Q(veh)    | -      | -      | -      | 0.3   |      |      |

### Intersection Capacity Utilization 6: Internal Drive & Middle Access Drive

06/21/2022



| Movement                   | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
|----------------------------|------|------|------|------|------|------|
| Lane Configurations        |      |      |      |      |      |      |
| Volume (vph)               | 43   | 12   | 7    | 18   | 11   | 40   |
| Pedestrians                |      |      |      |      |      |      |
| Ped Button                 |      |      |      |      |      |      |
| Pedestrian Timing (s)      |      |      |      |      |      |      |
| Free Right                 |      | No   |      |      |      | No   |
| Ideal Flow                 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lost Time (s)              | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  |
| Minimum Green (s)          | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  |
| Refr Cycle Length (s)      | 120  | 120  | 120  | 120  | 120  | 120  |
| Volume Combined (vph)      | 43   | 12   | 0    | 25   | 51   | 0    |
| Lane Utilization Factor    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Factor (vph)       | 0.95 | 0.85 | 0.95 | 0.99 | 0.88 | 0.85 |
| Saturated Flow (vph)       | 1805 | 1615 | 0    | 1873 | 1676 | 0    |
| Ped Intf Time (s)          | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      |      | 0.00 | 0.00 |      |
| Protected Option Allowed   | No   |      |      | No   | No   |      |
| Reference Time (s)         |      | 0.9  |      |      |      | 0.0  |
| Adj Reference Time (s)     |      | 8.0  |      |      |      | 0.0  |
| Permitted Option           |      |      |      |      |      |      |
| Adj Saturation A (vph)     | 120  |      | 0    | 352  | 1676 |      |
| Reference Time A (s)       | 42.9 |      | 0.0  | 8.5  | 3.7  |      |
| Adj Saturation B (vph)     | NA   |      | 0    | 0    | 1676 |      |
| Reference Time B (s)       | NA   |      | 8.5  | 9.6  | 3.7  |      |
| Reference Time (s)         |      |      |      | 8.5  | 3.7  |      |
| Adj Reference Time (s)     |      |      |      | 12.5 | 8.0  |      |
| Split Option               |      |      |      |      |      |      |
| Ref Time Combined (s)      | 2.9  |      | 0.0  | 1.6  | 3.7  |      |
| Ref Time Seperate (s)      | 2.9  |      | 0.5  | 1.1  | 0.8  |      |
| Reference Time (s)         | 2.9  |      | 1.6  | 1.6  | 3.7  |      |
| Adj Reference Time (s)     | 8.0  |      | 8.0  | 8.0  | 8.0  |      |
| Summary                    |      |      |      |      |      |      |
| Protected Option (s)       | NA   |      | NA   |      |      |      |
| Permitted Option (s)       | Err  |      | 12.5 |      |      |      |
| Split Option (s)           | 8.0  |      | 16.0 |      |      |      |
| Minimum (s)                | 8.0  |      | 12.5 |      | 20.5 |      |
| Right Turns                |      |      |      |      |      |      |
| Adj Reference Time (s)     | 8.0  |      |      |      |      |      |
| Cross Thru Ref Time (s)    | 8.0  |      |      |      |      |      |
| Oncoming Left Ref Time (s) | 0.0  |      |      |      |      |      |
| Combined (s)               | 16.0 |      |      |      |      |      |

#### Intersection Summary

Intersection Capacity Utilization 17.1% ICU Level of Service A  
 Reference Times and Phasing Options do not represent an optimized timing plan.

# Intersection Capacity Utilization

## 7: Internal Drive & South Access Drive

06/21/2022



| Movement                   | EBL  | EBR  | NBL   | NBT      | SBT  | SBR  |
|----------------------------|------|------|-------|----------|------|------|
| Lane Configurations        |      |      |       |          |      |      |
| Volume (vph)               | 21   | 53   | 51    | 4        | 4    | 19   |
| Pedestrians                |      |      |       |          |      |      |
| Ped Button                 |      |      |       |          |      |      |
| Pedestrian Timing (s)      |      |      |       |          |      |      |
| Free Right                 | No   |      |       |          | No   |      |
| Ideal Flow                 | 1900 | 1900 | 1900  | 1900     | 1900 | 1900 |
| Lost Time (s)              | 4.0  | 4.0  | 4.0   | 4.0      | 4.0  | 4.0  |
| Minimum Green (s)          | 4.0  | 4.0  | 4.0   | 4.0      | 4.0  | 4.0  |
| Refr Cycle Length (s)      | 120  | 120  | 120   | 120      | 120  | 120  |
| Volume Combined (vph)      | 21   | 53   | 0     | 55       | 23   | 0    |
| Lane Utilization Factor    | 1.00 | 1.00 | 1.00  | 1.00     | 1.00 | 1.00 |
| Turning Factor (vph)       | 0.95 | 0.85 | 0.95  | 0.95     | 0.88 | 0.85 |
| Saturated Flow (vph)       | 1805 | 1615 | 0     | 1812     | 1665 | 0    |
| Ped Intf Time (s)          | 0.0  | 0.0  | 0.0   | 0.0      | 0.0  | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      | 0.00  |          | 0.00 |      |
| Protected Option Allowed   | No   |      | No    |          | No   |      |
| Reference Time (s)         | 3.9  |      |       |          | 0.0  |      |
| Adj Reference Time (s)     | 8.0  |      |       |          | 0.0  |      |
| Permitted Option           |      |      |       |          |      |      |
| Adj Saturation A (vph)     | 120  |      | 0     | 127      | 1665 |      |
| Reference Time A (s)       | 20.9 |      | 0.0   | 52.0     | 1.7  |      |
| Adj Saturation B (vph)     | NA   |      | 0     | 0        | 1665 |      |
| Reference Time B (s)       | NA   |      | 11.4  | 11.6     | 1.7  |      |
| Reference Time (s)         |      |      |       | 11.6     | 1.7  |      |
| Adj Reference Time (s)     |      |      |       | 15.6     | 8.0  |      |
| Split Option               |      |      |       |          |      |      |
| Ref Time Combined (s)      | 1.4  |      | 0.0   | 3.6      | 1.7  |      |
| Ref Time Seperate (s)      | 1.4  |      | 3.4   | 0.3      | 0.3  |      |
| Reference Time (s)         | 1.4  |      | 3.6   | 3.6      | 1.7  |      |
| Adj Reference Time (s)     | 8.0  |      | 8.0   | 8.0      | 8.0  |      |
| Summary                    | EB   |      | NB SB | Combined |      |      |
| Protected Option (s)       | NA   |      | NA    |          |      |      |
| Permitted Option (s)       | Err  |      | 15.6  |          |      |      |
| Split Option (s)           | 8.0  |      | 16.0  |          |      |      |
| Minimum (s)                | 8.0  |      | 15.6  | 23.6     |      |      |
| Right Turns                | EBR  |      |       |          |      |      |
| Adj Reference Time (s)     | 8.0  |      |       |          |      |      |
| Cross Thru Ref Time (s)    | 8.0  |      |       |          |      |      |
| Oncoming Left Ref Time (s) | 0.0  |      |       |          |      |      |
| Combined (s)               | 16.0 |      |       |          |      |      |

### Intersection Summary

Intersection Capacity Utilization 19.7% ICU Level of Service A  
 Reference Times and Phasing Options do not represent an optimized timing plan.

Capacity Analysis Summary Sheets  
Year 2027 Projected Weekday Evening Peak Hour  
Conditions

Lanes, Volumes, Timings

1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR  | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|
| Lane Configurations     |       |       |       |       |       |       |       |       |      |       |       |       |
| Traffic Volume (vph)    | 7     | 19    | 155   | 56    | 19    | 24    | 167   | 633   | 66   | 11    | 727   | 24    |
| Future Volume (vph)     | 7     | 19    | 155   | 56    | 19    | 24    | 167   | 633   | 66   | 11    | 727   | 24    |
| Ideal Flow (vphpl)      | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900 | 1900  | 1900  | 1900  |
| Lane Width (ft)         | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12   | 12    | 12    | 12    |
| Grade (%)               |       | 0%    |       |       | 0%    |       |       | 0%    |      |       | 0%    |       |
| Storage Length (ft)     | 0     |       | 105   | 0     |       | 85    | 175   |       | 0    | 135   |       | 0     |
| Storage Lanes           | 0     |       | 1     | 0     |       | 1     | 1     |       | 0    | 1     |       | 0     |
| Taper Length (ft)       | 60    |       |       | 25    |       |       | 165   |       |      | 120   |       |       |
| Lane Util. Factor       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95 | 1.00  | 0.95  | 0.95  |
| Ped Bike Factor         |       |       |       |       |       |       |       |       |      |       |       |       |
| Frt                     |       |       | 0.850 |       |       | 0.850 |       | 0.986 |      |       |       | 0.995 |
| Flt Protected           |       | 0.987 |       |       | 0.964 |       | 0.950 |       |      | 0.950 |       |       |
| Satd. Flow (prot)       | 0     | 1875  | 1615  | 0     | 1832  | 1615  | 1805  | 3521  | 0    | 1805  | 3557  | 0     |
| Flt Permitted           |       | 0.922 |       |       | 0.763 |       | 0.319 |       |      | 0.361 |       |       |
| Satd. Flow (perm)       | 0     | 1752  | 1615  | 0     | 1450  | 1615  | 606   | 3521  | 0    | 686   | 3557  | 0     |
| Right Turn on Red       |       |       | No    |       |       | No    |       |       | No   |       |       | No    |
| Satd. Flow (RTOR)       |       |       |       |       |       |       |       |       |      |       |       |       |
| Link Speed (mph)        |       | 30    |       |       | 30    |       |       | 40    |      |       | 40    |       |
| Link Distance (ft)      |       | 667   |       |       | 331   |       |       | 633   |      |       | 695   |       |
| Travel Time (s)         |       | 15.2  |       |       | 7.5   |       |       | 10.8  |      |       | 11.8  |       |
| Confl. Peds. (#/hr)     |       |       |       |       |       |       |       |       |      |       |       |       |
| Confl. Bikes (#/hr)     |       |       |       |       |       |       |       |       |      |       |       |       |
| 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  |
| Growth Factor           | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100% | 100%  | 100%  | 100%  |
| Heavy Vehicles (%)      | 0%    | 0%    | 0%    | 0%    | 0%    | 0%    | 0%    | 1%    | 2%   | 0%    | 1%    | 0%    |
| Bus Blockages (#/hr)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     |
| Parking (#/hr)          |       |       |       |       |       |       |       |       |      |       |       |       |
| Mid-Block Traffic (%)   |       | 0%    |       |       | 0%    |       |       | 0%    |      |       | 0%    |       |
| Shared Lane Traffic (%) |       |       |       |       |       |       |       |       |      |       |       |       |
| Lane Group Flow (vph)   | 0     | 26    | 158   | 0     | 76    | 24    | 170   | 713   | 0    | 11    | 766   | 0     |
| Turn Type               | Perm  | NA    | Perm  | Perm  | NA    | Perm  | pm+pt | NA    |      | pm+pt | NA    |       |
| Protected Phases        |       | 4     |       |       | 8     |       | 5     | 2     |      | 1     | 6     |       |
| Permitted Phases        | 4     |       | 4     | 8     |       | 8     | 2     |       |      | 6     |       |       |
| Detector Phase          | 4     | 4     | 4     | 8     | 8     | 8     | 5     | 2     |      | 1     | 6     |       |
| Switch Phase            |       |       |       |       |       |       |       |       |      |       |       |       |
| Minimum Initial (s)     | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 3.0   | 15.0  |      | 3.0   | 15.0  |       |
| Minimum Split (s)       | 22.5  | 22.5  | 22.5  | 22.5  | 22.5  | 22.5  | 9.5   | 22.5  |      | 9.5   | 22.5  |       |
| Total Split (s)         | 26.0  | 26.0  | 26.0  | 26.0  | 26.0  | 26.0  | 14.0  | 39.0  |      | 10.0  | 35.0  |       |
| Total Split (%)         | 34.7% | 34.7% | 34.7% | 34.7% | 34.7% | 34.7% | 18.7% | 52.0% |      | 13.3% | 46.7% |       |
| Yellow Time (s)         | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 3.5   | 4.0   |      | 3.5   | 4.0   |       |
| All-Red Time (s)        | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 0.0   | 2.0   |      | 0.0   | 2.0   |       |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |      | 0.0   | 0.0   |       |
| Total Lost Time (s)     |       | 6.0   | 6.0   |       | 6.0   | 6.0   | 3.5   | 6.0   |      | 3.5   | 6.0   |       |
| Lead/Lag                |       |       |       |       |       |       | Lag   | Lead  |      | Lag   | Lead  |       |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   |      | Yes   | Yes   |       |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Min |      | None  | C-Min |       |
| Act Effct Green (s)     |       | 13.5  | 13.5  |       | 13.5  | 13.5  | 52.0  | 47.7  |      | 47.4  | 39.6  |       |
| Actuated g/C Ratio      |       | 0.18  | 0.18  |       | 0.18  | 0.18  | 0.69  | 0.64  |      | 0.63  | 0.53  |       |



### Lanes, Volumes, Timings

#### 1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

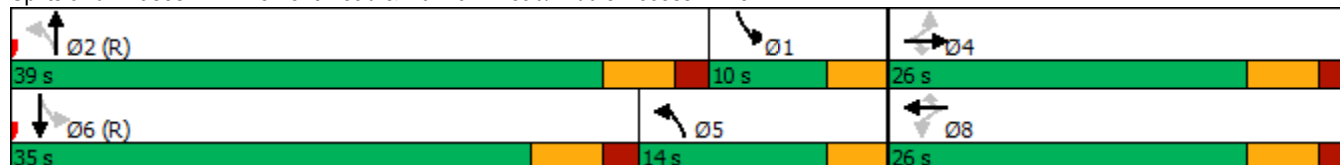


| Lane Group              | EBL | EBT  | EBR  | WBL | WBT  | WBR  | NBL  | NBT  | NBR | SBL  | SBT  | SBR |
|-------------------------|-----|------|------|-----|------|------|------|------|-----|------|------|-----|
| v/c Ratio               |     | 0.08 | 0.55 |     | 0.29 | 0.08 | 0.32 | 0.32 |     | 0.02 | 0.41 |     |
| Control Delay           |     | 24.2 | 34.4 |     | 28.1 | 24.2 | 3.5  | 2.1  |     | 4.8  | 12.5 |     |
| Queue Delay             |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  | 0.0  |     | 0.0  | 0.0  |     |
| Total Delay             |     | 24.2 | 34.4 |     | 28.1 | 24.2 | 3.5  | 2.1  |     | 4.8  | 12.5 |     |
| LOS                     |     | C    | C    |     | C    | C    | A    | A    |     | A    | B    |     |
| Approach Delay          |     | 33.0 |      |     | 27.2 |      |      | 2.3  |     |      | 12.4 |     |
| Approach LOS            |     | C    |      |     | C    |      |      | A    |     |      | B    |     |
| Queue Length 50th (ft)  |     | 10   | 68   |     | 31   | 9    | 2    | 4    |     | 1    | 102  |     |
| Queue Length 95th (ft)  |     | 28   | 115  |     | 62   | 27   | 21   | 21   |     | 7    | 183  |     |
| Internal Link Dist (ft) |     | 587  |      |     | 251  |      |      | 553  |     |      | 615  |     |
| Turn Bay Length (ft)    |     |      | 105  |     |      | 85   | 175  |      |     | 135  |      |     |
| Base Capacity (vph)     |     | 467  | 430  |     | 386  | 430  | 620  | 2240 |     | 539  | 1876 |     |
| Starvation Cap Reductn  |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Spillback Cap Reductn   |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Storage Cap Reductn     |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Reduced v/c Ratio       |     | 0.06 | 0.37 |     | 0.20 | 0.06 | 0.27 | 0.32 |     | 0.02 | 0.41 |     |

#### Intersection Summary

|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 75  |
| Actuated Cycle Length:            | 75  |
| Offset:                           | 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle:                    | 55  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.55  |
| Intersection Signal Delay:        | 10.5  |
| Intersection LOS:                 | B   |
| Intersection Capacity Utilization | 54.2%   |
| ICU Level of Service              | A   |
| Analysis Period (min)             | 15  |

#### Splits and Phases: 1: Lemont Road & Dunham Road/Middle Access Drive



Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022



| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| Lane Configurations     |       |       |      |       |       |      |       |       |      |       |       |       |
| Traffic Volume (vph)    | 66    | 11    | 42   | 236   | 8     | 33   | 55    | 767   | 102  | 38    | 831   | 69    |
| Future Volume (vph)     | 66    | 11    | 42   | 236   | 8     | 33   | 55    | 767   | 102  | 38    | 831   | 69    |
| Ideal Flow (vphpl)      | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900  |
| Lane Width (ft)         | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12    |
| Grade (%)               |       | 0%    |      |       | 0%    |      |       | 0%    |      |       | 0%    |       |
| Storage Length (ft)     | 85    |       | 0    | 85    |       | 0    | 200   |       | 0    | 70    |       | 160   |
| Storage Lanes           | 1     |       | 0    | 1     |       | 0    | 1     |       | 0    | 1     |       | 1     |
| Taper Length (ft)       | 75    |       |      | 75    |       |      | 130   |       |      | 175   |       |       |
| Lane Util. Factor       | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 0.95  | 0.95 | 1.00  | 0.95  | 1.00  |
| Ped Bike Factor         |       |       |      |       |       |      |       |       |      |       |       |       |
| Frt                     |       | 0.881 |      |       | 0.879 |      |       | 0.982 |      |       |       | 0.850 |
| Flt Protected           | 0.950 |       |      | 0.950 |       |      | 0.950 |       |      | 0.950 |       |       |
| Satd. Flow (prot)       | 1805  | 1674  | 0    | 1805  | 1670  | 0    | 1805  | 3514  | 0    | 1805  | 3574  | 1615  |
| Flt Permitted           | 0.000 |       |      | 0.000 |       |      | 0.220 |       |      | 0.305 |       |       |
| Satd. Flow (perm)       | 0     | 1674  | 0    | 0     | 1670  | 0    | 418   | 3514  | 0    | 580   | 3574  | 1615  |
| Right Turn on Red       |       |       | Yes  |       |       | Yes  |       |       | Yes  |       |       | Yes   |
| Satd. Flow (RTOR)       |       | 43    |      |       | 34    |      |       | 22    |      |       |       | 145   |
| Link Speed (mph)        |       | 30    |      |       | 30    |      |       | 40    |      |       |       | 40    |
| Link Distance (ft)      |       | 302   |      |       | 294   |      |       | 366   |      |       |       | 633   |
| Travel Time (s)         |       | 6.9   |      |       | 6.7   |      |       | 6.2   |      |       |       | 10.8  |
| Confl. Peds. (#/hr)     |       |       |      |       |       |      |       |       |      |       |       |       |
| Confl. Bikes (#/hr)     |       |       |      |       |       |      |       |       |      |       |       |       |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  |
| Growth Factor           | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100%  |
| Heavy Vehicles (%)      | 0%    | 0%    | 0%   | 0%    | 0%    | 0%   | 0%    | 1%    | 0%   | 0%    | 1%    | 0%    |
| Bus Blockages (#/hr)    | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0     |
| Parking (#/hr)          |       |       |      |       |       |      |       |       |      |       |       |       |
| Mid-Block Traffic (%)   |       | 0%    |      |       | 0%    |      |       | 0%    |      |       |       | 0%    |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |       |
| Lane Group Flow (vph)   | 68    | 54    | 0    | 243   | 42    | 0    | 57    | 896   | 0    | 39    | 857   | 71    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    | Perm  |
| Protected Phases        | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     |       |
| Permitted Phases        | 4     |       |      | 8     |       |      | 2     |       |      | 6     |       | 6     |
| Detector Phase          | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     | 6     |
| Switch Phase            |       |       |      |       |       |      |       |       |      |       |       |       |
| Minimum Initial (s)     | 3.0   | 8.0   |      | 3.0   | 8.0   |      | 3.0   | 15.0  |      | 3.0   | 15.0  | 15.0  |
| Minimum Split (s)       | 9.5   | 14.0  |      | 9.5   | 14.0  |      | 9.0   | 24.0  |      | 9.5   | 24.0  | 24.0  |
| Total Split (s)         | 10.0  | 14.0  |      | 16.0  | 20.0  |      | 9.0   | 35.0  |      | 10.0  | 36.0  | 36.0  |
| Total Split (%)         | 13.3% | 18.7% |      | 21.3% | 26.7% |      | 12.0% | 46.7% |      | 13.3% | 48.0% | 48.0% |
| Yellow Time (s)         | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   | 4.0   |
| All-Red Time (s)        | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   | 2.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   | 6.0   |
| Lead/Lag                | Lag   | Lag   |      | Lead  | Lead  |      | Lead  | Lead  |      | Lag   | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   | Yes   |
| Recall Mode             | None  | None  |      | None  | None  |      | None  | C-Min |      | None  | C-Min | C-Min |
| Act Effct Green (s)     | 9.7   | 8.0   |      | 12.1  | 8.7   |      | 41.5  | 39.0  |      | 42.3  | 39.6  | 39.6  |
| Actuated g/C Ratio      | 0.13  | 0.11  |      | 0.16  | 0.12  |      | 0.55  | 0.52  |      | 0.56  | 0.53  | 0.53  |

### Lanes, Volumes, Timings

## 2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022

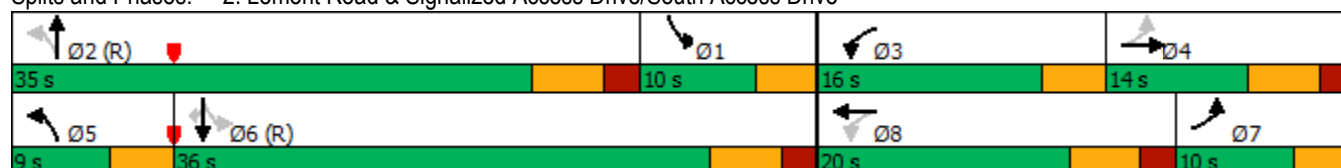


| Lane Group              | EBL  | EBT  | EBR | WBL  | WBT  | WBR | NBL  | NBT  | NBR | SBL  | SBT  | SBR  |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|------|
| v/c Ratio               | 0.29 | 0.25 |     | 0.84 | 0.19 |     | 0.17 | 0.49 |     | 0.09 | 0.45 | 0.08 |
| Control Delay           | 31.8 | 16.6 |     | 56.4 | 16.0 |     | 13.3 | 15.4 |     | 6.1  | 8.6  | 0.7  |
| Queue Delay             | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  |
| Total Delay             | 31.8 | 16.6 |     | 56.4 | 16.0 |     | 13.3 | 15.4 |     | 6.1  | 8.6  | 0.7  |
| LOS                     | C    | B    |     | E    | B    |     | B    | B    |     | A    | A    | A    |
| Approach Delay          |      | 25.0 |     |      | 50.4 |     |      | 15.2 |     |      | 7.9  |      |
| Approach LOS            |      | C    |     |      | D    |     |      | B    |     |      | A    |      |
| Queue Length 50th (ft)  | 28   | 5    |     | 110  | 3    |     | 15   | 171  |     | 6    | 181  | 0    |
| Queue Length 95th (ft)  | 64   | 36   |     | #226 | 30   |     | 36   | 233  |     | m12  | 78   | 4    |
| Internal Link Dist (ft) |      | 222  |     |      | 214  |     |      | 286  |     |      | 553  |      |
| Turn Bay Length (ft)    | 85   |      |     | 85   |      |     | 200  |      |     | 70   |      | 160  |
| Base Capacity (vph)     | 238  | 216  |     | 300  | 339  |     | 334  | 1837 |     | 435  | 1886 | 921  |
| Starvation Cap Reductn  | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.29 | 0.25 |     | 0.81 | 0.12 |     | 0.17 | 0.49 |     | 0.09 | 0.45 | 0.08 |

### Intersection Summary

Area Type: Other  
 Cycle Length: 75  
 Actuated Cycle Length: 75  
 Offset: 6 (8%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.84  
 Intersection Signal Delay: 17.0 Intersection LOS: B  
 Intersection Capacity Utilization 60.9% ICU Level of Service B  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

### Splits and Phases: 2: Lemont Road & Signalized Access Drive/South Access Drive



## HCM 6th TWSC

### 3: Lemont Road & North Access Drive

06/21/2022

| Intersection             |        |          |        |       |      |      |
|--------------------------|--------|----------|--------|-------|------|------|
| Int Delay, s/veh         | 1.8    |          |        |       |      |      |
| Movement                 | WBL    | WBR      | NBT    | NBR   | SBL  | SBT  |
| Lane Configurations      | Y      |          | ↑↑     |       | ↑    | ↑↑   |
| Traffic Vol, veh/h       | 21     | 125      | 643    | 21    | 91   | 741  |
| Future Vol, veh/h        | 21     | 125      | 643    | 21    | 91   | 741  |
| Conflicting Peds, #/hr   | 0      | 0        | 0      | 0     | 0    | 0    |
| Sign Control             | Stop   | Stop     | Free   | Free  | Free | Free |
| RT Channelized           | -      | None     | -      | None  | -    | None |
| Storage Length           | 0      | -        | -      | -     | 100  | -    |
| Veh in Median Storage, # | 1      | -        | 0      | -     | -    | 0    |
| Grade, %                 | 0      | -        | 0      | -     | -    | 0    |
| Peak Hour Factor         | 96     | 96       | 96     | 96    | 96   | 96   |
| Heavy Vehicles, %        | 1      | 11       | 0      | 2     | 0    | 0    |
| Mvmt Flow                | 22     | 130      | 670    | 22    | 95   | 772  |
| Major/Minor              | Minor1 | Major1   | Major2 |       |      |      |
| Conflicting Flow All     | 1257   | 346      | 0      | 0     | 692  | 0    |
| Stage 1                  | 681    | -        | -      | -     | -    | -    |
| Stage 2                  | 576    | -        | -      | -     | -    | -    |
| Critical Hdwy            | 6.82   | 7.12     | -      | -     | 4.1  | -    |
| Critical Hdwy Stg 1      | 5.82   | -        | -      | -     | -    | -    |
| Critical Hdwy Stg 2      | 5.82   | -        | -      | -     | -    | -    |
| Follow-up Hdwy           | 3.51   | 3.41     | -      | -     | 2.2  | -    |
| Pot Cap-1 Maneuver       | 164    | 625      | -      | -     | 912  | -    |
| Stage 1                  | 467    | -        | -      | -     | -    | -    |
| Stage 2                  | 528    | -        | -      | -     | -    | -    |
| Platoon blocked, %       |        |          | -      | -     | -    | -    |
| Mov Cap-1 Maneuver       | 147    | 625      | -      | -     | 912  | -    |
| Mov Cap-2 Maneuver       | 282    | -        | -      | -     | -    | -    |
| Stage 1                  | 467    | -        | -      | -     | -    | -    |
| Stage 2                  | 473    | -        | -      | -     | -    | -    |
| Approach                 | WB     | NB       | SB     |       |      |      |
| HCM Control Delay, s     | 14.5   | 0        | 1      |       |      |      |
| HCM LOS                  | B      |          |        |       |      |      |
| Minor Lane/Major Mvmt    | NBT    | NBRWBLn1 | SBL    | SBT   |      |      |
| Capacity (veh/h)         | -      | -        | 532    | 912   | -    |      |
| HCM Lane V/C Ratio       | -      | -        | 0.286  | 0.104 | -    |      |
| HCM Control Delay (s)    | -      | -        | 14.5   | 9.4   | -    |      |
| HCM Lane LOS             | -      | -        | B      | A     | -    |      |
| HCM 95th %tile Q(veh)    | -      | -        | 1.2    | 0.3   | -    |      |

HCM 6th TWSC  
4: Lemont Road & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      | ↗    |      | ↕↔   |      |      | ↕↕↕  |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 0    | 0    | 8    | 0    | 916  | 100  | 0    | 1109 | 0    |
| Future Vol, veh/h        | 0    | 0    | 0    | 0    | 0    | 8    | 0    | 916  | 100  | 0    | 1109 | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | 0    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 3    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 96   | 96   | 96   | 96   | 96   | 96   | 96   | 96   | 96   | 96   | 96   | 96   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 1    | 0    |
| Mvmt Flow                | 0    | 0    | 0    | 0    | 0    | 8    | 0    | 954  | 104  | 0    | 1155 | 0    |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | -      | 529    |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | -      | 6.9    |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | -      | 3.3    |
| Pot Cap-1 Maneuver   | 0      | 0      | 499    |
| Stage 1              | 0      | 0      | -      |
| Stage 2              | 0      | 0      | -      |
| Platoon blocked, %   |        |        | -      |
| Mov Cap-1 Maneuver   | -      | 0      | 499    |
| Mov Cap-2 Maneuver   | -      | 0      | -      |
| Stage 1              | -      | 0      | -      |
| Stage 2              | -      | 0      | -      |

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

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT   |
|-----------------------|-----|----------|-------|
| Capacity (veh/h)      | -   | -        | 499   |
| HCM Lane V/C Ratio    | -   | -        | 0.017 |
| HCM Control Delay (s) | -   | -        | 12.3  |
| HCM Lane LOS          | -   | -        | B     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   |

HCM 6th TWSC  
5: 75th Street & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.9  |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      | ↑↑↑  | ↑↑↑  |      |      | ↑    |
| Traffic Vol, veh/h       | 0    | 1468 | 1325 | 157  | 0    | 112  |
| Future Vol, veh/h        | 0    | 1468 | 1325 | 157  | 0    | 112  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 0    | 1    | 2    | 0    | 0    | 0    |
| Mvmt Flow                | 0    | 1545 | 1395 | 165  | 0    | 118  |

| Major/Minor          | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | 0      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | -      | -      |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | -      | -      |
| Pot Cap-1 Maneuver   | 0      | -      | -      |
| Stage 1              | 0      | -      | -      |
| Stage 2              | 0      | -      | -      |
| Platoon blocked, %   | -      | -      | -      |
| Mov Cap-1 Maneuver   | -      | -      | -      |
| Mov Cap-2 Maneuver   | -      | -      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |

| Approach             | EB | WB | SB   |
|----------------------|----|----|------|
| HCM Control Delay, s | 0  | 0  | 25.2 |
| HCM LOS              |    |    | D    |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|-----------------------|-----|-----|-----|-------|
| Capacity (veh/h)      | -   | -   | -   | 294   |
| HCM Lane V/C Ratio    | -   | -   | -   | 0.401 |
| HCM Control Delay (s) | -   | -   | -   | 25.2  |
| HCM Lane LOS          | -   | -   | -   | D     |
| HCM 95th %tile Q(veh) | -   | -   | -   | 1.9   |

### Intersection Capacity Utilization 6: Internal Drive & Middle Access Drive

06/21/2022



| Movement                   | EBL  | EBR  | NBL   | NBT  | SBT      | SBR  |
|----------------------------|------|------|-------|------|----------|------|
| Lane Configurations        |      |      |       |      |          |      |
| Volume (vph)               | 70   | 26   | 22    | 82   | 118      | 77   |
| Pedestrians                |      |      |       |      |          |      |
| Ped Button                 |      |      |       |      |          |      |
| Pedestrian Timing (s)      |      |      |       |      |          |      |
| Free Right                 |      | No   |       |      |          | No   |
| Ideal Flow                 | 1900 | 1900 | 1900  | 1900 | 1900     | 1900 |
| Lost Time (s)              | 4.0  | 4.0  | 4.0   | 4.0  | 4.0      | 4.0  |
| Minimum Green (s)          | 4.0  | 4.0  | 4.0   | 4.0  | 4.0      | 4.0  |
| Refr Cycle Length (s)      | 120  | 120  | 120   | 120  | 120      | 120  |
| Volume Combined (vph)      | 70   | 26   | 0     | 104  | 195      | 0    |
| Lane Utilization Factor    | 1.00 | 1.00 | 1.00  | 1.00 | 1.00     | 1.00 |
| Turning Factor (vph)       | 0.95 | 0.85 | 0.95  | 0.99 | 0.94     | 0.85 |
| Saturated Flow (vph)       | 1805 | 1615 | 0     | 1880 | 1787     | 0    |
| Ped Intf Time (s)          | 0.0  | 0.0  | 0.0   | 0.0  | 0.0      | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      |       | 0.00 | 0.00     |      |
| Protected Option Allowed   | No   |      |       | No   | No       |      |
| Reference Time (s)         |      | 1.9  |       |      |          | 0.0  |
| Adj Reference Time (s)     |      | 8.0  |       |      |          | 0.0  |
| Permitted Option           |      |      |       |      |          |      |
| Adj Saturation A (vph)     | 120  |      | 0     | 445  | 1787     |      |
| Reference Time A (s)       | 69.8 |      | 0.0   | 28.0 | 13.1     |      |
| Adj Saturation B (vph)     | NA   |      | NA    | NA   | 1787     |      |
| Reference Time B (s)       | NA   |      | NA    | NA   | 13.1     |      |
| Reference Time (s)         |      |      |       | 28.0 | 13.1     |      |
| Adj Reference Time (s)     |      |      |       | 32.0 | 17.1     |      |
| Split Option               |      |      |       |      |          |      |
| Ref Time Combined (s)      | 4.7  |      | 0.0   | 6.6  | 13.1     |      |
| Ref Time Seperate (s)      | 4.7  |      | 1.5   | 5.2  | 7.9      |      |
| Reference Time (s)         | 4.7  |      | 6.6   | 6.6  | 13.1     |      |
| Adj Reference Time (s)     | 8.7  |      | 10.6  | 10.6 | 17.1     |      |
| Summary                    |      |      |       |      |          |      |
|                            | EB   |      | NB SB |      | Combined |      |
| Protected Option (s)       | NA   |      | NA    |      |          |      |
| Permitted Option (s)       | Err  |      | 32.0  |      |          |      |
| Split Option (s)           | 8.7  |      | 27.7  |      |          |      |
| Minimum (s)                | 8.7  |      | 27.7  |      | 36.4     |      |
| Right Turns                |      |      |       |      |          |      |
|                            | EBR  |      |       |      |          |      |
| Adj Reference Time (s)     | 8.0  |      |       |      |          |      |
| Cross Thru Ref Time (s)    | 17.1 |      |       |      |          |      |
| Oncoming Left Ref Time (s) | 0.0  |      |       |      |          |      |
| Combined (s)               | 25.1 |      |       |      |          |      |

#### Intersection Summary

Intersection Capacity Utilization 30.3% ICU Level of Service A  
 Reference Times and Phasing Options do not represent an optimized timing plan.

### Intersection Capacity Utilization 7: Internal Drive & South Access Drive

06/21/2022



| Movement                   | EBL  | EBR  | NBL   | NBT      | SBT  | SBR  |
|----------------------------|------|------|-------|----------|------|------|
| Lane Configurations        |      |      |       |          |      |      |
| Volume (vph)               | 67   | 84   | 159   | 37       | 26   | 118  |
| Pedestrians                |      |      |       |          |      |      |
| Ped Button                 |      |      |       |          |      |      |
| Pedestrian Timing (s)      |      |      |       |          |      |      |
| Free Right                 |      | No   |       |          |      | No   |
| Ideal Flow                 | 1900 | 1900 | 1900  | 1900     | 1900 | 1900 |
| Lost Time (s)              | 4.0  | 4.0  | 4.0   | 4.0      | 4.0  | 4.0  |
| Minimum Green (s)          | 4.0  | 4.0  | 4.0   | 4.0      | 4.0  | 4.0  |
| Refr Cycle Length (s)      | 120  | 120  | 120   | 120      | 120  | 120  |
| Volume Combined (vph)      | 67   | 84   | 0     | 196      | 144  | 0    |
| Lane Utilization Factor    | 1.00 | 1.00 | 1.00  | 1.00     | 1.00 | 1.00 |
| Turning Factor (vph)       | 0.95 | 0.85 | 0.95  | 0.96     | 0.88 | 0.85 |
| Saturated Flow (vph)       | 1805 | 1615 | 0     | 1823     | 1666 | 0    |
| Ped Intf Time (s)          | 0.0  | 0.0  | 0.0   | 0.0      | 0.0  | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      |       | 0.00     | 0.00 |      |
| Protected Option Allowed   | No   |      |       | No       | No   |      |
| Reference Time (s)         |      | 6.2  |       |          |      | 0.0  |
| Adj Reference Time (s)     |      | 10.2 |       |          |      | 0.0  |
| Permitted Option           |      |      |       |          |      |      |
| Adj Saturation A (vph)     | 120  |      | 0     | 141      | 1666 |      |
| Reference Time A (s)       | 66.8 |      | 0.0   | 167.4    | 10.4 |      |
| Adj Saturation B (vph)     | NA   |      | NA    | NA       | 1666 |      |
| Reference Time B (s)       | NA   |      | NA    | NA       | 10.4 |      |
| Reference Time (s)         |      |      |       | 167.4    | 10.4 |      |
| Adj Reference Time (s)     |      |      |       | 171.4    | 14.4 |      |
| Split Option               |      |      |       |          |      |      |
| Ref Time Combined (s)      | 4.5  |      | 0.0   | 12.9     | 10.4 |      |
| Ref Time Seperate (s)      | 4.5  |      | 10.6  | 2.3      | 1.9  |      |
| Reference Time (s)         | 4.5  |      | 12.9  | 12.9     | 10.4 |      |
| Adj Reference Time (s)     | 8.5  |      | 16.9  | 16.9     | 14.4 |      |
| Summary                    | EB   |      | NB SB | Combined |      |      |
| Protected Option (s)       | NA   |      | NA    |          |      |      |
| Permitted Option (s)       | Err  |      | 171.4 |          |      |      |
| Split Option (s)           | 8.5  |      | 31.3  |          |      |      |
| Minimum (s)                | 8.5  |      | 31.3  | 39.7     |      |      |
| Right Turns                | EBR  |      |       |          |      |      |
| Adj Reference Time (s)     | 10.2 |      |       |          |      |      |
| Cross Thru Ref Time (s)    | 14.4 |      |       |          |      |      |
| Oncoming Left Ref Time (s) | 0.0  |      |       |          |      |      |
| Combined (s)               | 24.6 |      |       |          |      |      |

#### Intersection Summary

Intersection Capacity Utilization 33.1% ICU Level of Service A  
 Reference Times and Phasing Options do not represent an optimized timing plan.



Capacity Analysis Summary Sheets  
Year 2027 Projected Saturday Midday Peak Hour  
Conditions

Lanes, Volumes, Timings

1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR  | SBL   | SBT   | SBR  |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|------|
| Lane Configurations     |       |       |       |       |       |       |       |       |      |       |       |      |
| Traffic Volume (vph)    | 11    | 32    | 146   | 112   | 23    | 38    | 146   | 616   | 70   | 33    | 559   | 23   |
| Future Volume (vph)     | 11    | 32    | 146   | 112   | 23    | 38    | 146   | 616   | 70   | 33    | 559   | 23   |
| Ideal Flow (vphpl)      | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 |
| Lane Width (ft)         | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12    | 12   | 12    | 12    | 12   |
| Grade (%)               |       | 0%    |       |       | 0%    |       |       | 0%    |      |       | 0%    |      |
| Storage Length (ft)     | 0     |       | 105   | 0     |       | 85    | 175   |       | 0    | 135   |       | 0    |
| Storage Lanes           | 0     |       | 1     | 0     |       | 1     | 1     |       | 0    | 1     |       | 0    |
| Taper Length (ft)       | 60    |       |       | 25    |       |       | 165   |       |      | 120   |       |      |
| Lane Util. Factor       | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 0.95  | 0.95 | 1.00  | 0.95  | 0.95 |
| Ped Bike Factor         |       |       |       |       |       |       |       |       |      |       |       |      |
| Frt                     |       |       | 0.850 |       |       | 0.850 |       | 0.985 |      |       | 0.994 |      |
| Flt Protected           |       | 0.988 |       |       | 0.960 |       | 0.950 |       |      | 0.950 |       |      |
| Satd. Flow (prot)       | 0     | 1836  | 1599  | 0     | 1824  | 1615  | 1787  | 3486  | 0    | 1805  | 3536  | 0    |
| Flt Permitted           |       | 0.904 |       |       | 0.732 |       | 0.402 |       |      | 0.357 |       |      |
| Satd. Flow (perm)       | 0     | 1680  | 1599  | 0     | 1391  | 1615  | 756   | 3486  | 0    | 678   | 3536  | 0    |
| Right Turn on Red       |       |       | No    |       |       | No    |       |       | No   |       |       | No   |
| Satd. Flow (RTOR)       |       |       |       |       |       |       |       |       |      |       |       |      |
| Link Speed (mph)        |       | 30    |       |       | 30    |       |       | 40    |      |       | 40    |      |
| Link Distance (ft)      |       | 667   |       |       | 331   |       |       | 633   |      |       | 695   |      |
| Travel Time (s)         |       | 15.2  |       |       | 7.5   |       |       | 10.8  |      |       | 11.8  |      |
| Confl. Peds. (#/hr)     |       |       |       |       |       |       |       |       |      |       |       |      |
| Confl. Bikes (#/hr)     |       |       |       |       |       |       |       |       |      |       |       |      |
| 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 |
| Growth Factor           | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100%  | 100% | 100%  | 100%  | 100% |
| Heavy Vehicles (%)      | 9%    | 0%    | 1%    | 0%    | 0%    | 0%    | 1%    | 2%    | 2%   | 0%    | 1%    | 13%  |
| Bus Blockages (#/hr)    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0    |
| Parking (#/hr)          |       |       |       |       |       |       |       |       |      |       |       |      |
| Mid-Block Traffic (%)   |       | 0%    |       |       | 0%    |       |       | 0%    |      |       | 0%    |      |
| Shared Lane Traffic (%) |       |       |       |       |       |       |       |       |      |       |       |      |
| Lane Group Flow (vph)   | 0     | 44    | 152   | 0     | 141   | 40    | 152   | 715   | 0    | 34    | 606   | 0    |
| Turn Type               | Perm  | NA    | Perm  | Perm  | NA    | Perm  | pm+pt | NA    |      | pm+pt | NA    |      |
| Protected Phases        |       | 4     |       |       | 8     |       | 5     | 2     |      | 1     | 6     |      |
| Permitted Phases        | 4     |       | 4     | 8     |       | 8     | 2     |       |      | 6     |       |      |
| Detector Phase          | 4     | 4     | 4     | 8     | 8     | 8     | 5     | 2     |      | 1     | 6     |      |
| Switch Phase            |       |       |       |       |       |       |       |       |      |       |       |      |
| Minimum Initial (s)     | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 3.0   | 15.0  |      | 3.0   | 15.0  |      |
| Minimum Split (s)       | 22.5  | 22.5  | 22.5  | 22.5  | 22.5  | 22.5  | 9.5   | 22.5  |      | 9.5   | 22.5  |      |
| Total Split (s)         | 27.0  | 27.0  | 27.0  | 27.0  | 27.0  | 27.0  | 13.0  | 38.0  |      | 10.0  | 35.0  |      |
| Total Split (%)         | 36.0% | 36.0% | 36.0% | 36.0% | 36.0% | 36.0% | 17.3% | 50.7% |      | 13.3% | 46.7% |      |
| Yellow Time (s)         | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 3.5   | 4.0   |      | 3.5   | 4.0   |      |
| All-Red Time (s)        | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 2.0   | 0.0   | 2.0   |      | 0.0   | 2.0   |      |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |      | 0.0   | 0.0   |      |
| Total Lost Time (s)     |       | 6.0   | 6.0   |       | 6.0   | 6.0   | 3.5   | 6.0   |      | 3.5   | 6.0   |      |
| Lead/Lag                |       |       |       |       |       |       | Lag   | Lead  |      | Lag   | Lead  |      |
| Lead-Lag Optimize?      |       |       |       |       |       |       | Yes   | Yes   |      | Yes   | Yes   |      |
| Recall Mode             | None  | None  | None  | None  | None  | None  | None  | C-Min |      | None  | C-Min |      |
| Act Effct Green (s)     |       | 13.3  | 13.3  |       | 13.3  | 13.3  | 52.0  | 46.0  |      | 47.5  | 39.4  |      |
| Actuated g/C Ratio      |       | 0.18  | 0.18  |       | 0.18  | 0.18  | 0.69  | 0.61  |      | 0.63  | 0.53  |      |

Lanes, Volumes, Timings

1: Lemont Road & Dunham Road/Middle Access Drive

06/21/2022

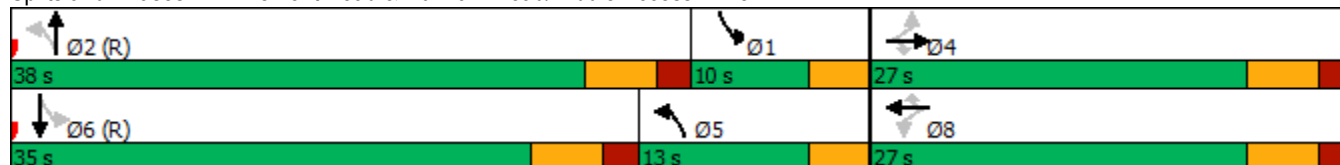


| Lane Group              | EBL | EBT  | EBR  | WBL | WBT  | WBR  | NBL  | NBT  | NBR | SBL  | SBT  | SBR |
|-------------------------|-----|------|------|-----|------|------|------|------|-----|------|------|-----|
| v/c Ratio               |     | 0.15 | 0.54 |     | 0.57 | 0.14 | 0.25 | 0.33 |     | 0.07 | 0.33 |     |
| Control Delay           |     | 25.4 | 34.3 |     | 36.8 | 25.3 | 3.8  | 3.5  |     | 5.1  | 11.8 |     |
| Queue Delay             |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  | 0.0  |     | 0.0  | 0.0  |     |
| Total Delay             |     | 25.4 | 34.3 |     | 36.8 | 25.3 | 3.8  | 3.5  |     | 5.1  | 11.8 |     |
| LOS                     |     | C    | C    |     | D    | C    | A    | A    |     | A    | B    |     |
| Approach Delay          |     | 32.3 |      |     | 34.3 |      |      | 3.5  |     |      | 11.5 |     |
| Approach LOS            |     | C    |      |     | C    |      |      | A    |     |      | B    |     |
| Queue Length 50th (ft)  |     | 17   | 65   |     | 61   | 16   | 11   | 28   |     | 3    | 75   |     |
| Queue Length 95th (ft)  |     | 41   | 111  |     | 106  | 38   | 24   | 48   |     | 14   | 137  |     |
| Internal Link Dist (ft) |     | 587  |      |     | 251  |      |      | 553  |     |      | 615  |     |
| Turn Bay Length (ft)    |     |      | 105  |     |      | 85   | 175  |      |     | 135  |      |     |
| Base Capacity (vph)     |     | 470  | 447  |     | 389  | 452  | 682  | 2138 |     | 535  | 1857 |     |
| Starvation Cap Reductn  |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Spillback Cap Reductn   |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Storage Cap Reductn     |     | 0    | 0    |     | 0    | 0    | 0    | 0    |     | 0    | 0    |     |
| Reduced v/c Ratio       |     | 0.09 | 0.34 |     | 0.36 | 0.09 | 0.22 | 0.33 |     | 0.06 | 0.33 |     |

Intersection Summary

|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 75  |
| Actuated Cycle Length:            | 75  |
| Offset:                           | 11 (15%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle:                    | 55  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.57  |
| Intersection Signal Delay:        | 12.2  |
| Intersection LOS:                 | B   |
| Intersection Capacity Utilization | 51.7%   |
| ICU Level of Service              | A   |
| Analysis Period (min)             | 15  |

Splits and Phases: 1: Lemont Road & Dunham Road/Middle Access Drive



Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022

| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| Lane Configurations     |       |       |      |       |       |      |       |       |      |       |       |       |
| Traffic Volume (vph)    | 100   | 12    | 48   | 287   | 22    | 69   | 66    | 663   | 157  | 48    | 708   | 61    |
| Future Volume (vph)     | 100   | 12    | 48   | 287   | 22    | 69   | 66    | 663   | 157  | 48    | 708   | 61    |
| Ideal Flow (vphpl)      | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900 | 1900  | 1900  | 1900  |
| Lane Width (ft)         | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12   | 12    | 12    | 12    |
| Grade (%)               |       | 0%    |      |       | 0%    |      |       | 0%    |      |       | 0%    |       |
| Storage Length (ft)     | 85    |       | 0    | 85    |       | 0    | 200   |       | 0    | 70    |       | 160   |
| Storage Lanes           | 1     |       | 0    | 1     |       | 0    | 1     |       | 0    | 1     |       | 1     |
| Taper Length (ft)       | 75    |       |      | 75    |       |      | 130   |       |      | 175   |       |       |
| Lane Util. Factor       | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 0.95  | 0.95 | 1.00  | 0.95  | 1.00  |
| Ped Bike Factor         |       |       |      |       |       |      |       |       |      |       |       |       |
| Frt                     |       | 0.881 |      |       | 0.886 |      |       | 0.971 |      |       |       | 0.850 |
| Flt Protected           | 0.950 |       |      | 0.950 |       |      | 0.950 |       |      | 0.950 |       |       |
| Satd. Flow (prot)       | 1770  | 1648  | 0    | 1805  | 1683  | 0    | 1805  | 3450  | 0    | 1805  | 3574  | 1615  |
| Flt Permitted           | 0.833 |       |      | 0.716 |       |      | 0.308 |       |      | 0.251 |       |       |
| Satd. Flow (perm)       | 1552  | 1648  | 0    | 1360  | 1683  | 0    | 585   | 3450  | 0    | 477   | 3574  | 1615  |
| Right Turn on Red       |       |       | Yes  |       |       | Yes  |       |       | Yes  |       |       | Yes   |
| Satd. Flow (RTOR)       |       | 50    |      |       | 72    |      |       | 43    |      |       |       | 233   |
| Link Speed (mph)        |       | 30    |      |       | 30    |      |       | 40    |      |       |       | 40    |
| Link Distance (ft)      |       | 302   |      |       | 294   |      |       | 366   |      |       |       | 633   |
| Travel Time (s)         |       | 6.9   |      |       | 6.7   |      |       | 6.2   |      |       |       | 10.8  |
| Confl. Peds. (#/hr)     |       |       |      |       |       |      |       |       |      |       |       |       |
| Confl. Bikes (#/hr)     |       |       |      |       |       |      |       |       |      |       |       |       |
| 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  |
| Growth Factor           | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100% | 100%  | 100%  | 100%  |
| Heavy Vehicles (%)      | 2%    | 0%    | 2%   | 0%    | 0%    | 0%   | 0%    | 2%    | 0%   | 0%    | 1%    | 0%    |
| Bus Blockages (#/hr)    | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0    | 0     | 0     | 0     |
| Parking (#/hr)          |       |       |      |       |       |      |       |       |      |       |       |       |
| Mid-Block Traffic (%)   |       | 0%    |      |       | 0%    |      |       | 0%    |      |       |       | 0%    |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |       |
| Lane Group Flow (vph)   | 104   | 63    | 0    | 299   | 95    | 0    | 69    | 855   | 0    | 50    | 738   | 64    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    |      | pm+pt | NA    | Perm  |
| Protected Phases        | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     |       |
| Permitted Phases        | 4     |       |      | 8     |       |      | 2     |       |      | 6     |       | 6     |
| Detector Phase          | 7     | 4     |      | 3     | 8     |      | 5     | 2     |      | 1     | 6     | 6     |
| Switch Phase            |       |       |      |       |       |      |       |       |      |       |       |       |
| Minimum Initial (s)     | 3.0   | 8.0   |      | 3.0   | 8.0   |      | 3.0   | 15.0  |      | 3.0   | 15.0  | 15.0  |
| Minimum Split (s)       | 9.5   | 14.0  |      | 9.5   | 14.0  |      | 9.0   | 24.0  |      | 9.5   | 24.0  | 24.0  |
| Total Split (s)         | 10.6  | 14.0  |      | 18.4  | 21.8  |      | 9.0   | 33.0  |      | 9.6   | 33.6  | 33.6  |
| Total Split (%)         | 14.1% | 18.7% |      | 24.5% | 29.1% |      | 12.0% | 44.0% |      | 12.8% | 44.8% | 44.8% |
| Yellow Time (s)         | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   |      | 3.5   | 4.0   | 4.0   |
| All-Red Time (s)        | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   |      | 0.0   | 2.0   | 2.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   |      | 3.5   | 6.0   | 6.0   |
| Lead/Lag                | Lag   | Lead  |      | Lag   | Lead  |      | Lag   | Lead  |      | Lag   | Lead  | Lead  |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   |      | Yes   | Yes   | Yes   |
| Recall Mode             | None  | None  |      | None  | None  |      | None  | C-Min |      | None  | C-Min | C-Min |
| Act Effct Green (s)     | 15.5  | 8.0   |      | 21.0  | 8.9   |      | 44.4  | 37.5  |      | 44.4  | 36.1  | 36.1  |
| Actuated g/C Ratio      | 0.21  | 0.11  |      | 0.28  | 0.12  |      | 0.59  | 0.50  |      | 0.59  | 0.48  | 0.48  |

Lanes, Volumes, Timings

2: Lemont Road & Signalized Access Drive/South Access Drive

06/21/2022

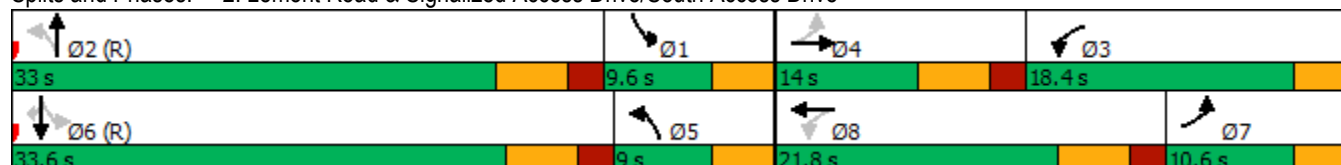


| Lane Group              | EBL  | EBT  | EBR | WBL  | WBT  | WBR | NBL  | NBT  | NBR | SBL  | SBT  | SBR  |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|------|
| v/c Ratio               | 0.30 | 0.29 |     | 0.65 | 0.36 |     | 0.16 | 0.49 |     | 0.13 | 0.43 | 0.07 |
| Control Delay           | 21.9 | 16.6 |     | 29.7 | 15.7 |     | 9.8  | 15.3 |     | 4.8  | 9.1  | 0.2  |
| Queue Delay             | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  |     | 0.0  | 0.0  | 0.0  |
| Total Delay             | 21.9 | 16.6 |     | 29.7 | 15.7 |     | 9.8  | 15.3 |     | 4.8  | 9.1  | 0.2  |
| LOS                     | C    | B    |     | C    | B    |     | A    | B    |     | A    | A    | A    |
| Approach Delay          |      | 19.9 |     |      | 26.3 |     |      | 14.9 |     |      | 8.1  |      |
| Approach LOS            |      | B    |     |      | C    |     |      | B    |     |      | A    |      |
| Queue Length 50th (ft)  | 34   | 6    |     | 111  | 10   |     | 13   | 145  |     | 8    | 92   | 0    |
| Queue Length 95th (ft)  | 64   | 39   |     | 170  | 49   |     | 32   | 220  |     | 11   | 118  | 1    |
| Internal Link Dist (ft) |      | 222  |     |      | 214  |     |      | 286  |     |      | 553  |      |
| Turn Bay Length (ft)    | 85   |      |     | 85   |      |     | 200  |      |     | 70   |      | 160  |
| Base Capacity (vph)     | 353  | 220  |     | 523  | 411  |     | 435  | 1747 |     | 392  | 1719 | 897  |
| Starvation Cap Reductn  | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Spillback Cap Reductn   | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Storage Cap Reductn     | 0    | 0    |     | 0    | 0    |     | 0    | 0    |     | 0    | 0    | 0    |
| Reduced v/c Ratio       | 0.29 | 0.29 |     | 0.57 | 0.23 |     | 0.16 | 0.49 |     | 0.13 | 0.43 | 0.07 |

Intersection Summary

|                                   |   |
|-----------------------------------|---|
| Area Type:                        | Other   |
| Cycle Length:                     | 75  |
| Actuated Cycle Length:            | 75  |
| Offset:                           | 5 (7%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle:                    | 60  |
| Control Type:                     | Actuated-Coordinated  |
| Maximum v/c Ratio:                | 0.65  |
| Intersection Signal Delay:        | 14.7  |
| Intersection LOS:                 | B   |
| Intersection Capacity Utilization | 62.6%   |
| ICU Level of Service              | B   |
| Analysis Period (min)             | 15  |

Splits and Phases: 2: Lemont Road & Signalized Access Drive/South Access Drive



HCM 6th TWSC  
3: Lemont Road & North Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.1  |      |      |      |      |      |
| Movement                 | WBL  | WBR  | NBT  | NBR  | SBL  | SBT  |
| Lane Configurations      | Y    |      | ↑↑   |      | Y    | ↑↑   |
| Traffic Vol, veh/h       | 24   | 121  | 654  | 11   | 122  | 591  |
| Future Vol, veh/h        | 24   | 121  | 654  | 11   | 122  | 591  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | 100  | -    |
| Veh in Median Storage, # | 1    | -    | 0    | -    | -    | 0    |
| Grade, %                 | 0    | -    | 0    | -    | -    | 0    |
| Peak Hour Factor         | 96   | 96   | 96   | 96   | 96   | 96   |
| Heavy Vehicles, %        | 2    | 0    | 0    | 2    | 0    | 0    |
| Mvmt Flow                | 25   | 126  | 681  | 11   | 127  | 616  |

| Major/Minor          | Minor1 | Major1 | Major2 |   |     |
|----------------------|--------|--------|--------|---|-----|
| Conflicting Flow All | 1249   | 346    | 0      | 0 | 692 |
| Stage 1              | 687    | -      | -      | - | -   |
| Stage 2              | 562    | -      | -      | - | -   |
| Critical Hdwy        | 6.84   | 6.9    | -      | - | 4.1 |
| Critical Hdwy Stg 1  | 5.84   | -      | -      | - | -   |
| Critical Hdwy Stg 2  | 5.84   | -      | -      | - | -   |
| Follow-up Hdwy       | 3.52   | 3.3    | -      | - | 2.2 |
| Pot Cap-1 Maneuver   | 165    | 656    | -      | - | 912 |
| Stage 1              | 461    | -      | -      | - | -   |
| Stage 2              | 534    | -      | -      | - | -   |
| Platoon blocked, %   |        |        | -      | - | -   |
| Mov Cap-1 Maneuver   | 142    | 656    | -      | - | 912 |
| Mov Cap-2 Maneuver   | 275    | -      | -      | - | -   |
| Stage 1              | 461    | -      | -      | - | -   |
| Stage 2              | 460    | -      | -      | - | -   |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 14.4 | 0  | 1.6 |
| HCM LOS              | B    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 534   | 912   |
| HCM Lane V/C Ratio    | -   | -        | 0.283 | 0.139 |
| HCM Control Delay (s) | -   | -        | 14.4  | 9.6   |
| HCM Lane LOS          | -   | -        | B     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 1.2   | 0.5   |

HCM 6th TWSC  
4: Lemont Road & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.1  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      | ↗    |      | ↕↗   |      |      | ↕↖↗  |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 0    | 0    | 17   | 0    | 869  | 183  | 0    | 1043 | 0    |
| Future Vol, veh/h        | 0    | 0    | 0    | 0    | 0    | 17   | 0    | 869  | 183  | 0    | 1043 | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | 0    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 3    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 0    | 1    | 0    |
| Mvmt Flow                | 0    | 0    | 0    | 0    | 0    | 18   | 0    | 945  | 199  | 0    | 1134 | 0    |

| Major/Minor          | Minor1 | Major1 | Major2      |
|----------------------|--------|--------|-------------|
| Conflicting Flow All | -      | - 572  | - 0 0       |
| Stage 1              | -      | -      | -           |
| Stage 2              | -      | -      | -           |
| Critical Hdwy        | -      | - 6.9  | -           |
| Critical Hdwy Stg 1  | -      | -      | -           |
| Critical Hdwy Stg 2  | -      | -      | -           |
| Follow-up Hdwy       | -      | - 3.3  | -           |
| Pot Cap-1 Maneuver   | 0      | 0 468  | 0 - - 0 - 0 |
| Stage 1              | 0      | 0 -    | 0 - - 0 - 0 |
| Stage 2              | 0      | 0 -    | 0 - - 0 - 0 |
| Platoon blocked, %   |        |        | - - -       |
| Mov Cap-1 Maneuver   | -      | 0 468  | - - - - -   |
| Mov Cap-2 Maneuver   | -      | 0 -    | - - - - -   |
| Stage 1              | -      | 0 -    | - - - - -   |
| Stage 2              | -      | 0 -    | - - - - -   |

| Approach             | WB | NB | SB |
|----------------------|----|----|----|
| HCM Control Delay, s | 13 | 0  | 0  |
| HCM LOS              | B  |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h)      | -   | - 468    | -   |
| HCM Lane V/C Ratio    | -   | - 0.039  | -   |
| HCM Control Delay (s) | -   | - 13     | -   |
| HCM Lane LOS          | -   | - B      | -   |
| HCM 95th %tile Q(veh) | -   | - 0.1    | -   |

HCM 6th TWSC  
5: 75th Street & Right-In/Right-Out Access Drive

06/21/2022

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.5  |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      | ↑↑↑  | ↑↑↑  |      |      | ↑    |
| Traffic Vol, veh/h       | 0    | 1243 | 1076 | 223  | 0    | 163  |
| Future Vol, veh/h        | 0    | 1243 | 1076 | 223  | 0    | 163  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 98   | 98   | 98   | 98   | 98   | 98   |
| Heavy Vehicles, %        | 0    | 1    | 1    | 0    | 0    | 0    |
| Mvmt Flow                | 0    | 1268 | 1098 | 228  | 0    | 166  |

| Major/Minor          | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | -      | 0      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |
| Critical Hdwy        | -      | -      | -      |
| Critical Hdwy Stg 1  | -      | -      | -      |
| Critical Hdwy Stg 2  | -      | -      | -      |
| Follow-up Hdwy       | -      | -      | -      |
| Pot Cap-1 Maneuver   | 0      | -      | -      |
| Stage 1              | 0      | -      | -      |
| Stage 2              | 0      | -      | -      |
| Platoon blocked, %   | -      | -      | -      |
| Mov Cap-1 Maneuver   | -      | -      | -      |
| Mov Cap-2 Maneuver   | -      | -      | -      |
| Stage 1              | -      | -      | -      |
| Stage 2              | -      | -      | -      |

| Approach             | EB | WB | SB   |
|----------------------|----|----|------|
| HCM Control Delay, s | 0  | 0  | 24.3 |
| HCM LOS              |    |    | C    |

| Minor Lane/Major Mvmt | EBT | WBT | WBR | SBLn1 |
|-----------------------|-----|-----|-----|-------|
| Capacity (veh/h)      | -   | -   | -   | 350   |
| HCM Lane V/C Ratio    | -   | -   | -   | 0.475 |
| HCM Control Delay (s) | -   | -   | -   | 24.3  |
| HCM Lane LOS          | -   | -   | -   | C     |
| HCM 95th %tile Q(veh) | -   | -   | -   | 2.5   |



### Intersection Capacity Utilization 6: Internal Drive & Middle Access Drive

06/21/2022



| Movement                   | EBL  | EBR  | NBL   | NBT  | SBT      | SBR  |
|----------------------------|------|------|-------|------|----------|------|
| Lane Configurations        |      |      |       |      |          |      |
| Volume (vph)               | 93   | 42   | 36    | 123  | 155      | 137  |
| Pedestrians                |      |      |       |      |          |      |
| Ped Button                 |      |      |       |      |          |      |
| Pedestrian Timing (s)      |      |      |       |      |          |      |
| Free Right                 |      | No   |       |      |          | No   |
| Ideal Flow                 | 1900 | 1900 | 1900  | 1900 | 1900     | 1900 |
| Lost Time (s)              | 4.0  | 4.0  | 4.0   | 4.0  | 4.0      | 4.0  |
| Minimum Green (s)          | 4.0  | 4.0  | 4.0   | 4.0  | 4.0      | 4.0  |
| Refr Cycle Length (s)      | 120  | 120  | 120   | 120  | 120      | 120  |
| Volume Combined (vph)      | 93   | 42   | 0     | 159  | 292      | 0    |
| Lane Utilization Factor    | 1.00 | 1.00 | 1.00  | 1.00 | 1.00     | 1.00 |
| Turning Factor (vph)       | 0.95 | 0.85 | 0.95  | 0.99 | 0.93     | 0.85 |
| Saturated Flow (vph)       | 1805 | 1615 | 0     | 1878 | 1766     | 0    |
| Ped Intf Time (s)          | 0.0  | 0.0  | 0.0   | 0.0  | 0.0      | 0.0  |
| Pedestrian Frequency (%)   | 0.00 |      |       | 0.00 | 0.00     |      |
| Protected Option Allowed   | No   |      |       | No   | No       |      |
| Reference Time (s)         |      | 3.1  |       |      |          | 0.0  |
| Adj Reference Time (s)     |      | 8.0  |       |      |          | 0.0  |
| Permitted Option           |      |      |       |      |          |      |
| Adj Saturation A (vph)     | 120  |      | 0     | 421  | 1766     |      |
| Reference Time A (s)       | 92.7 |      | 0.0   | 45.3 | 19.8     |      |
| Adj Saturation B (vph)     | NA   |      | NA    | NA   | NA       |      |
| Reference Time B (s)       | NA   |      | NA    | NA   | NA       |      |
| Reference Time (s)         |      |      |       | 45.3 | 19.8     |      |
| Adj Reference Time (s)     |      |      |       | 49.3 | 23.8     |      |
| Split Option               |      |      |       |      |          |      |
| Ref Time Combined (s)      | 6.2  |      | 0.0   | 10.2 | 19.8     |      |
| Ref Time Seperate (s)      | 6.2  |      | 2.4   | 7.8  | 10.5     |      |
| Reference Time (s)         | 6.2  |      | 10.2  | 10.2 | 19.8     |      |
| Adj Reference Time (s)     | 10.2 |      | 14.2  | 14.2 | 23.8     |      |
| Summary                    |      |      |       |      |          |      |
|                            | EB   |      | NB SB |      | Combined |      |
| Protected Option (s)       | NA   |      | NA    |      |          |      |
| Permitted Option (s)       | Err  |      | 49.3  |      |          |      |
| Split Option (s)           | 10.2 |      | 38.0  |      |          |      |
| Minimum (s)                | 10.2 |      | 38.0  |      | 48.2     |      |
| Right Turns                |      |      |       |      |          |      |
|                            | EBR  |      |       |      |          |      |
| Adj Reference Time (s)     | 8.0  |      |       |      |          |      |
| Cross Thru Ref Time (s)    | 23.8 |      |       |      |          |      |
| Oncoming Left Ref Time (s) | 0.0  |      |       |      |          |      |
| Combined (s)               | 31.8 |      |       |      |          |      |

#### Intersection Summary

Intersection Capacity Utilization 40.1% ICU Level of Service A  
 Reference Times and Phasing Options do not represent an optimized timing plan.

# Intersection Capacity Utilization

## 7: Internal Drive & South Access Drive

06/21/2022



| Movement                   | EBL   | EBR  | NBL   | NBT   | SBT      | SBR  |
|----------------------------|-------|------|-------|-------|----------|------|
| Lane Configurations        |       |      |       |       |          |      |
| Volume (vph)               | 102   | 115  | 212   | 57    | 31       | 166  |
| Pedestrians                |       |      |       |       |          |      |
| Ped Button                 |       |      |       |       |          |      |
| Pedestrian Timing (s)      |       |      |       |       |          |      |
| Free Right                 |       | No   |       |       |          | No   |
| Ideal Flow                 | 1900  | 1900 | 1900  | 1900  | 1900     | 1900 |
| Lost Time (s)              | 4.0   | 4.0  | 4.0   | 4.0   | 4.0      | 4.0  |
| Minimum Green (s)          | 4.0   | 4.0  | 4.0   | 4.0   | 4.0      | 4.0  |
| Refr Cycle Length (s)      | 120   | 120  | 120   | 120   | 120      | 120  |
| Volume Combined (vph)      | 102   | 115  | 0     | 269   | 197      | 0    |
| Lane Utilization Factor    | 1.00  | 1.00 | 1.00  | 1.00  | 1.00     | 1.00 |
| Turning Factor (vph)       | 0.95  | 0.85 | 0.95  | 0.96  | 0.87     | 0.85 |
| Saturated Flow (vph)       | 1805  | 1615 | 0     | 1825  | 1660     | 0    |
| Ped Intf Time (s)          | 0.0   | 0.0  | 0.0   | 0.0   | 0.0      | 0.0  |
| Pedestrian Frequency (%)   | 0.00  |      |       | 0.00  | 0.00     |      |
| Protected Option Allowed   | No    |      |       | No    | No       |      |
| Reference Time (s)         |       | 8.5  |       |       |          | 0.0  |
| Adj Reference Time (s)     |       | 12.5 |       |       |          | 0.0  |
| Permitted Option           |       |      |       |       |          |      |
| Adj Saturation A (vph)     | 120   |      | 0     | 144   | 1660     |      |
| Reference Time A (s)       | 101.7 |      | 0.0   | 224.5 | 14.2     |      |
| Adj Saturation B (vph)     | NA    |      | NA    | NA    | 1660     |      |
| Reference Time B (s)       | NA    |      | NA    | NA    | 14.2     |      |
| Reference Time (s)         |       |      |       | 224.5 | 14.2     |      |
| Adj Reference Time (s)     |       |      |       | 228.5 | 18.2     |      |
| Split Option               |       |      |       |       |          |      |
| Ref Time Combined (s)      | 6.8   |      | 0.0   | 17.7  | 14.2     |      |
| Ref Time Seperate (s)      | 6.8   |      | 14.1  | 3.6   | 2.2      |      |
| Reference Time (s)         | 6.8   |      | 17.7  | 17.7  | 14.2     |      |
| Adj Reference Time (s)     | 10.8  |      | 21.7  | 21.7  | 18.2     |      |
| Summary                    |       |      |       |       |          |      |
|                            | EB    |      | NB SB |       | Combined |      |
| Protected Option (s)       | NA    |      | NA    |       |          |      |
| Permitted Option (s)       | Err   |      | 228.5 |       |          |      |
| Split Option (s)           | 10.8  |      | 39.9  |       |          |      |
| Minimum (s)                | 10.8  |      | 39.9  |       | 50.7     |      |
| Right Turns                |       |      |       |       |          |      |
|                            | EBR   |      |       |       |          |      |
| Adj Reference Time (s)     | 12.5  |      |       |       |          |      |
| Cross Thru Ref Time (s)    | 18.2  |      |       |       |          |      |
| Oncoming Left Ref Time (s) | 0.0   |      |       |       |          |      |
| Combined (s)               | 30.8  |      |       |       |          |      |

### Intersection Summary

Intersection Capacity Utilization 42.3% ICU Level of Service A  
 Reference Times and Phasing Options do not represent an optimized timing plan.

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**VILLAGE OF DOWNERS GROVE  
PLAN COMMISSION MEETING**

**September 12, 2022, 7:00 P.M.**

**22-PLC-0026: A PETITION SEEKING AN AMENDMENT TO PLANNED DEVELOPMENT #18, A SPECIAL USE FOR A RESTAURANT WITH A DRIVE-THROUGH, AND A FINAL PLAT OF SUBDIVISION WITH AN EXCEPTION TO LOT FRONTAGE. THE PROPERTY IS CURRENTLY ZONED B-2/P.D. #18, GENERAL RETAIL BUSINESS/PLANNED UNIT DEVELOPMENT #18. THE PROPERTY IS LOCATED AT THE NORTHEAST CORNER OF LEMONT ROAD AND 75TH STREET, COMMONLY KNOWN AS 7221-7451 LEMONT ROAD, DOWNERS GROVE, IL (PIN: 09-29-110-002 TO -008, -013 TO -016), PMAT, DDP, LLC, OWNERS AND PETITIONER.**

Mr. Jason Reibert, introduced himself as a part of Gulf State Construction Services. He noted that this project was part of an ongoing redevelopment plan at this shopping center. Mr. Reibert shared that the scope of work included a new 5,000SF restaurant and retail building on a new outlot on the west side of the Downers Park Plaza and to the east of Burger King and 3 Corners Grill & Tap. He also shared that the new outlot to the south was previously approved and under construction. Mr. Reibert noted that the proposed lot was located in an area of parking away from retail parking allowing for a redevelopment opportunity. He then noted that no new access points would be proposed. Additionally, he stated that the parking study found that the internal circulation would not be negatively impacted and that there would be sufficient parking available. Mr. Reibert noted that there were existing utilities and drainage on the site. He then shared the elevations and highlighted that similar architecture would complement the existing buildings in the shopping center. Mr. Reibert explained that the proposal included a restaurant with a drive-through window. He also noted that the proposed outlot would meet the subdivision requirements. Mr. Reibert shared that the one item that would require an exception is the street frontage since access to Lemont Street was not possible. He noted that to address a lack of access a cross access agreement would be granted on lot 7. Mr. Reibert concluded his presentation by stating that the criteria for each entitlement request was met.

Chairman Rickard thanked Mr. Reibert, and asked the Commission to present questions.

Commissioner Dmytryszyn asked for more clarification on the internal traffic patterns with the proposal and upcoming Panera building. Mr. Reibert explained that the outlot location was chosen because this area of parking was rarely used. Additionally, the outlot would be directly located adjacent to the main access point off of Lemont Street. As such, this existing access point would help funnel the traffic toward the new outlot.

Chairman Rickard invited for any additional public comment.

Mr. Haran Rashes shared that he lived directly north of Lemont Road. He stated that he was opposed to the petition because of the additional traffic that would be produced and its impact on

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pedestrians. Mr. Rashes shared that he found the traffic study inaccurate and disagreed with the results. He acknowledged that he understood that Lemont Road was under county jurisdiction but noted that he had concerns over the lack of pedestrian signage and crosswalks. Mr. Rashes stated that crossing Lemont Road was not safe.

Mr. Scott Richards, asked why new development was being clustered in the Downers Park Plaza. Chairman Rickard shared that the petitioner could respond that but it sounded like the location was based on the underutilization of the existing parking lot.

Chairman Rickard then invited staff to make their presentation.

Ms. Flora Leon, Senior Planner, summarized the request stating that the petitioner was requesting approval for a planned unit development amendment, special use for a drive-through, and a final plat of subdivision with an exception to lot frontage. Providing a location map she noted the subject site was located east along Lemont Road. The existing zoning district was B-2/P.D. #18 or General Retail Business with an overlay of Planned Unit Development #18. Ms. Leon noted that the required noticing was provided and staff received one phone call asking for information on the future tenants.

Ms. Leon then provided an overall shopping center site plan for reference. She noted that the proposed outlot was located just east of 3 Corners Grill & Tap and Burger King. The proposed future building would include two tenants. She then provided the proposed outlot site plan. Ms. Leon highlighted that as shown on the site plan the outlot did not have frontage along Lemont Street. She noted that the request for the subdivision included a request to deviate from the street frontage requirement. This said, Ms. Leon stated that no change would be occurring to the access of the shopping center along Lemont Street. She then shared that the new outlot would have three entrances and one would be dedicated for the proposed drive-through. Ms. Leon reminded the Plan Commission that the special use request was for this newly proposed drive-through. She went on to share that the trash enclosure would include the required screening and that a pedestrian connection would lead pedestrians onto the existing sidewalk on Lemont Street with permission of the owners at the 3 Corners Grill & Tap. On this note, Ms. Leon explained that staff would also be open to having the petitioner provide a connection out to the sidewalks on Lemont Street via the Burger King lot. If the Plan Commission agreed with this option when making a motion they would simply need to amend the conditions of approval items 3 and 4.

Ms. Leon then shared the elevations of the proposed building and explained that the materials included EIFS and face brick. She then shared that the proposal met the goals of the Comprehensive Plan and that the criteria for a Planned Unit Development, Special Use, and a Subdivision with an Exception were all met. She noted that if the Plan Commission agreed a draft motion could be found on pages 6 and 7 of the staff report.

Commissioner Rector asked for clarification on modifying the conditions of approval. Specifically she asked if the connection had to be designated now. Ms. Leon explained that the conditions of approval, items 3 and 4, could be reworked to allow flexibility for the connection to be established on Lot 7 or 6N.

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Commissioner Rector asked if the Village had any oversight over the crosswalks on Lemont Street. Ms. Leon offered that staff would work with the Public Work Traffic Manger to see if they could reach out to the County to express those concerns.

Commissioner Rector noted that regardless of whether this project happens that concerns needs to be addressed. Mr. Zawila added that that concern was noted on the record and that staff would follow up with Public Works on this matter.

Chairman Rickard noted that if the drive-through ended up on the southern building the stacking would not work and so this design is locked in for the most part. Ms. Leon agreed and stated that the site plan is really the only configuration that worked for the site.

Mr. Reibert explained that while he understood the concern over the crosswalks on Lemont, their scope of work really ends once they are able to make the connection to the sidewalk on Lemont Street. He then explained that the outlot location was chosen because it is centrally located and it is an area seldomly used in the shopping mall. He also noted that this was the only location where they would not negatively impact the existing parking areas of businesses like Shop & Save.

Commissioner Toth, agreed that this area of parking is rarely used and the proposed use would fit in well with the existing mix of users.

Commissioner Dmytryszyn agreed that the area of parking was rarely used and noted that great projects are happening at this shopping center. He mentioned that he did have concerns over the interior traffic patterns and that the data for volume of traffic in the traffic report seemed light.

Commissioner Rector stated she would rather leave the condition of approval for the connection on Lot 7.

Commissioner Roche asked for clarification on which lot was in questions. Mr. Zawila explained lot 7 was 3 Corner Grill & Tap and lot 6N was the Burger King. Commissioner Rector noted that the connection made more sense on lot 7.

Mr. Zawila added that staff offered this evening that either lot 7 or 6N would work for this proposal just in case the petitioner and owner of lot 7 cannot come to an agreement. He noted that this was another option for the conditions. If the condition remains with only making mention of lot 7; then the petitioner would need to come back to plan commission if this connection needs to occur on lot 6N instead. Commissioner Rector agreed that lot 6N should be added in.

**WITH RESPECT TO FILE 22-PLC-0026 AND BASED ON THE PETITIONER'S SUBMITTAL, THE STAFF REPORT, AND THE TESTIMONY PRESENTED, COMMISSIONER RECTOR MADE A MOTION THAT THE PETITIONER HAS MET THE STANDARDS OF APPROVAL FOR AN AMENDMENT TO PLANNED DEVELOPMENT #18, A SPECIAL USE FOR A RESTAURANT WITH A DRIVE-THROUGH, AND A FINAL PLAT OF SUBDIVISION WITH AN EXCEPTION TO LOT**

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**FRONTAGE AS REQUIRED BY THE VILLAGE OF DOWNERS GROVE ZONING ORDINANCE AND IS IN THE PUBLIC INTEREST AND THEREFORE, I MOVE THAT THE PLAN COMMISSION RECOMMEND TO THE VILLAGE COUNCIL APPROVAL OF 22-PLC-0026, SUBJECT TO THE FOLLOWING CONDITIONS:**

- 1. THE PLANNED UNIT DEVELOPMENT, SPECIAL USE, AND A PLAT OF SUBDIVISION WITH AN EXCEPTION TO CREATE A NEW OUTLOT WITHOUT STREET FRONTAGE SHALL SUBSTANTIALLY CONFORM TO THE STAFF REPORT; AND DRAWINGS PREPARED BY WOOLPERT ENGINEERING SUBMITTED ON 8/24/22, AND BY ZITO RUSSELL ARCHITECTS UPDATED ON 8/3/22, EXCEPT AS SUCH PLANS MAY BE MODIFIED TO CONFORM TO THE VILLAGE CODES AND ORDINANCES.**
- 2. A PERPETUAL CROSS ACCESS AND PARKING EASEMENT IS PROVIDED BETWEEN LOTS 2-A AND LOT 1-B AND IS SHOWN ON THE PLAT OF SUBDIVISION.**
- 3. THE PEDESTRIAN CONNECTION SHALL BE SECURED WITH THE APPROVAL OF THE PROPERTY OWNER AT 7231 OR 7301 LEMONT ROAD.**
- 4. A PEDESTRIAN EASEMENT SHALL BE PROVIDED ON LOT 7 (7231 LEMONT ROAD) OR LOT 6N (7301) FOR THE BENEFIT OF PUBLIC ACCESS TO LOT 1-B.**
- 5. THE PEDESTRIAN CONNECTION ON LOT 1-B MUST BE CLEARLY DIFFERENTIATED THROUGH THE USE OF ELEVATION CHANGES, A DIFFERENT PAVING MATERIAL OR OTHER EQUALLY EFFECTIVE METHODS.**
- 6. THE PHOTOMETRIC PLAN SHALL CONFORM TO THE VILLAGE ZONING ORDINANCE.**
- 7. ALL SIGNAGE SHALL BE PERMITTED SEPARATELY AND CONFORM TO THE VILLAGE'S SIGN ORDINANCE.**
- 8. A FINAL PLAT OF SUBDIVISION WILL BE REQUIRED PRIOR TO PERMIT ISSUANCE.**

**SECOND BY COMMISSIONER TOTH. ROLL CALL:**

**AYE: COMMISSIONERS RECTOR, TOTH, DMYTRYSZYN, MAURER, ROCHE, PATEL, AND CHAIRMAN RICKARD**

**MOTION PASSED. VOTE: 7-0**

/s/ Village Staff  
 Recording Secretary  
 (As transcribed by MP-3 audio)