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

| SUBJECT: | SUBMITTED BY: |
|--|--------------------------------|
| 7251 and 7261 Lemont Road Planned Unit Development | Stan Popovich, AICP |
| Amendment | 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 75th 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 75th 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 requirement 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 75th 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

Resolution Aerial Map Staff Report with attachments dated September 12, 2022 Draft Minutes of the Plan Commission Hearing dated September 12, 2022 Final Plat of Subdivision



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 4th, 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,



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 (4way 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,

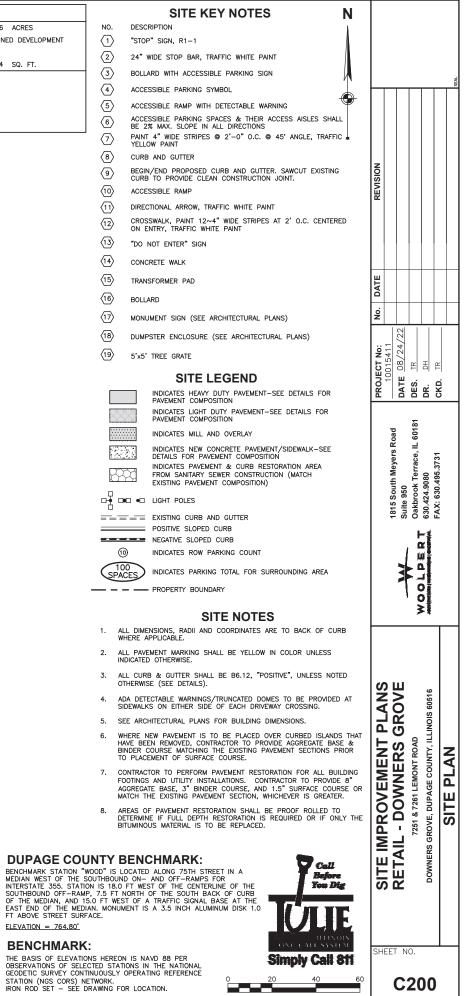
Joan Reibert

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)

SITE DATA 12 MO PROPOSED LOT 1B SITE AREA 0.666 ACRES ZONING PLANNED DEVELOPMENT BUILDING DATA: BUILDING AREA 5.344 SQ. FT. RKING DATA: <u>II</u> SPACES REQUIRED 37 \bigcirc CRAS SPACES PROVIDED 37 ACCESSIBLE SPACES REQUIRED 2 2 ACCESSIBLE SPACES PROVIDED ~14> 3 CORNERS GRILL & TAP MONUMENT SIGN 0 -S60:38'40"E MULCH -{2} 9 -(8) MULCH & BUSHE 8 - RESTRIPE EXISTING LANE LINE PER MUTCD STANDARDS -(13) -{2} MULCH 14'R 8 (10)-BENCH MARK (SET) IR_OPUS FLEVATION: 770.19 (12) 7251 LEMONT ROAD PROPOSED RESTAURANT 2,087 SF (8) BUSHE PROPOSED BIKE RACKS ?.(4) 7261 LEMONT ROAD PROPOSED RETAIL/BUS. 3,257 SF 2 & BUSHE -(8) -6) -(19) 37 SPACES BURGER KING 6 MULCH 2.5'R -(10 \bigcirc 1/13 S88 46'21" -(12) 2 _N59*48'39"W 24.79' (11) (1)(13) -(14 MULCI \bigcirc (\mathbb{Z}) _ _ _ . (14)-___ (12)-ELEVATION = 764.80'**BENCHMARK:** ĺπ-ELEVATION = 770.19'





GRAPHIC SCALE IN FEET



OUTPARCEL BUILDING, DOWNERS PARK PLAZA DOWNERS GROVE, ILLINOIS

10-6-22

Architect

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VILLAGE OF DOWNERS GROVE

COUNCIL ACTION SUMMARY

| INITI | ATED: | Village Attorney (Name) | DATE: | 0 | ctober 11, 2 | 2022 | |
|-------------|------------|----------------------------|----------------------------|--------|--------------|---------|--------|
| RECO | OMMENDA | TION FROM:(B | loard or Departme | | LE REF: | 22-PLC | -0026 |
| <u>NATU</u> | JRE OF AC | <u>TION</u> : | STEPS NEED | DED TO |) IMPLEN | AENT AC | CTION: |
| | Ordinance | | Motion to Add FINAL PLA | - | | | |
| X | Resolution | | EXCEPTION ROAD", as pre | FOR | | | |
| | Motion | | Env | ſ | | | |
| | Other | | | 5~ | | | |

SUMMARY OF ITEM:

Adoption of the attached resolution shall approve a final plat of subdivision with an exception for 7251 and 7261 Lemont Road.

RECORD OF ACTION TAKEN:

1\mw\cas.22\FP-7251-7261-Lemont-22-PLC-0026

Plat of Subdivision 22-PLC-0026

RESOLUTION

A RESOLUTION APPROVING A FINAL PLAT OF SUBDIVISION WITH AN EXCEPTION FOR 7251 AND 7261 LEMONT ROAD

WHEREAS, application has been made pursuant to the provisions of Chapter 20 of the Downers Grove Municipal Code for the approval of a Final Plat of Subdivision to create an outlot with exception for the Downers Park Resubdivision, located at the northeast corner of Lemont Road and 75th Street, commonly known as 7251 and 7261 Lemont Road, Downers Grove, Illinois, legally described as follows:

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

Commonly known as: 7251 and 7261 Lemont Road, Downers Grove, IL PINs: 09-29-110-002 to -008, -013 to -016

WHEREAS, exceptions have been requested pursuant to Section 20.602 of the Downers Grove Municipal Code to permit the following:

1. An Exception from Chapter 20, *Subdivision Ordinance*, Section 20.303(g); *Lot Frontage*, to eliminate the required front lot frontage on dedicated streets.

WHEREAS, notice had been given and a public hearing before the Plan Commission on September 12, 2022 for this final plat application pursuant to the requirements of the Downers Grove Municipal Code; and,

WHEREAS, Village staff has reviewed and recommends approval of the petition for Final Plat of Subdivision for the Downers Park Resubdivision, located at 7251 and 7261 Lemont Road, Downers Grove, Illinois, as requested, subject to certain conditions; and,

NOW, THEREFORE, BE IT RESOLVED by the Village Council of the Village of Downers Grove that the Final Plat of Subdivision for the Downers Park Resubdibvision, located at 7251 and 7261 Lemont Road, Downers Grove, Illinois, is hereby approved 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.

BE IT FURTHER RESOLVED, that the Mayor and Village Clerk are authorized to sign the final plat.

BE IT FURTHER RESOLVED, that this resolution shall be in full force and effect from and after its adoption in the manner provided by law.

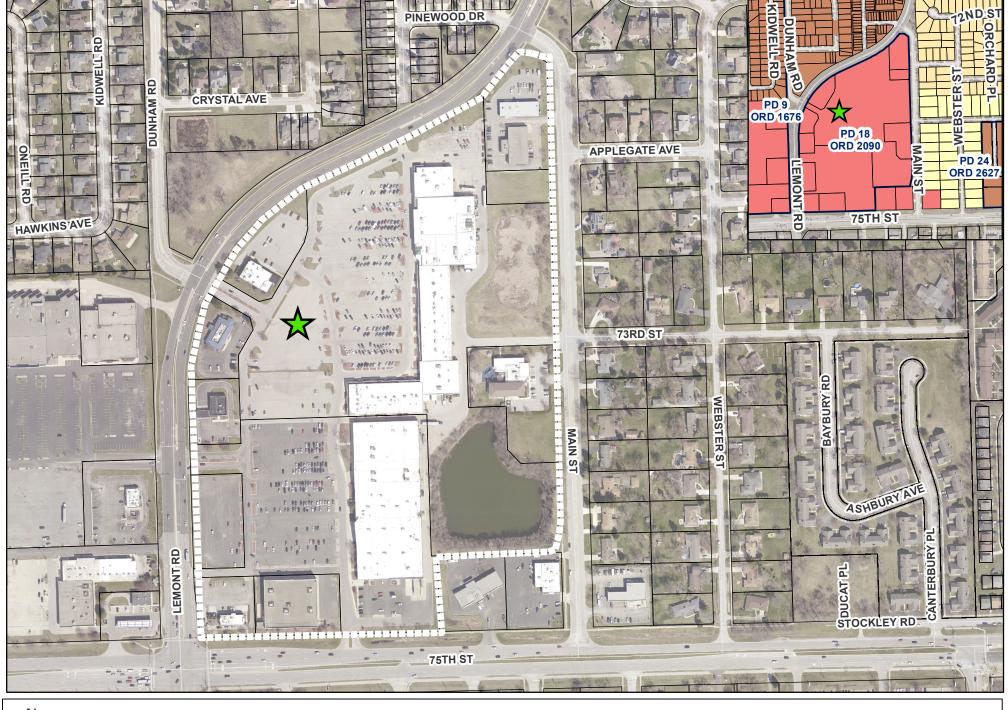
Passed:

Mayor

Attest:

Village Clerk

1\mw\res.22\FP-7251-7261-Lemont-w-excep-22-PLC-0026





7221 Lemont Road - Location Map

Subject Property



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

| SUBJECT: | Түре: | SUBMITTED BY: |
|---------------------------|---------------------------------------|---------------------|
| 22-PLC-0026 | PUD Amendment, Special Use, and | Flora P. Leon, AICP |
| 7251 and 7261 Lemont Road | Plat of Subdivision with an Exception | 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

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

PROPERTY INFORMATION

| 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

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

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ANALYSIS

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 75th 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.

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

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 75th 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:

| 7251 and 7261 Lemont Road | Required | Proposed |
|---|----------|-----------|
| 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 1 – Zoning Requirements, Proposed Outlot

| 7251 and 7261 Lemont Road | Required | Proposed |
|----------------------------|----------|----------|
| 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

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

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.

| Downers Grove Park Plaza | Lot Width (100 ft. minimum) | Lot Depth (140 ft. minimum) | Lot Area (10, 500 square foot minimum) |
|-----------------------------|--------------------------------|--------------------------------|---|
| 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. |

Table 3 – Subdivision Requirements

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 75th 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

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

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. 28.12.030.1.
- 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:

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- 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

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.

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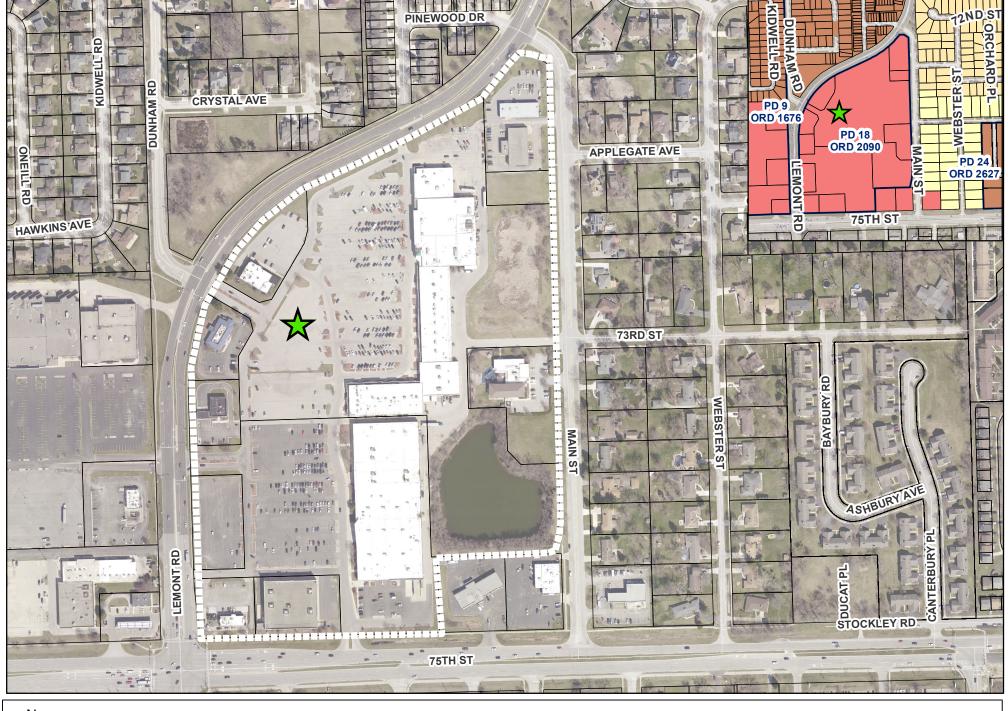
22-PLC-0026; 7251 and 7261 Lemont Road - Downers Grove Plaza September 12, 2022

- 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:

Ault

Stanley J. Popovich, AICP Director of Community Development





7221 Lemont Road - Location Map

Subject Property



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 75th 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 meet as required by the end-users, while also meeting Village requirements to safely illuminates 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 answers 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,

100 Kelo

Jason Reibert Vice President



TURNING IDEAS INTO REALITY

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

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

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 decisionmaking 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 & F | 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 U | SE: | | 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).

SITE IMPROVEMENT PLANS RETAIL - DOWNERS GROVE

7251 & 7261 LEMONT ROAD DOWNERS GROVE, DUPAGE COUNTY, ILLINOIS 60516 AUGUST 24, 2022

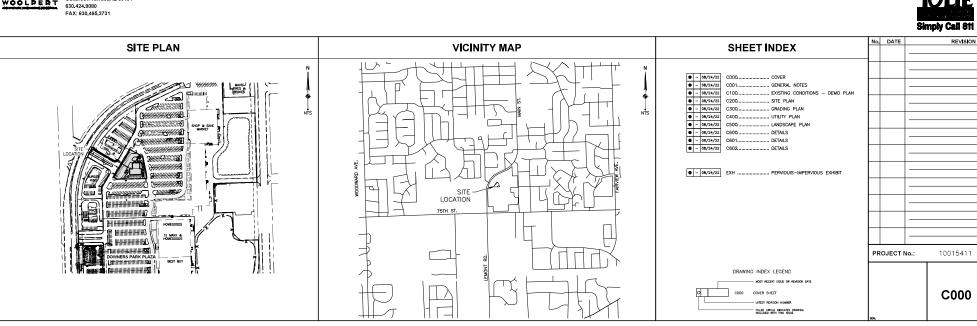
PMAT DPP LLC

109 NEW CAMELLIA BOULEVARD, SUITE 100, COVINGTON, LA 70433 985.792.4389

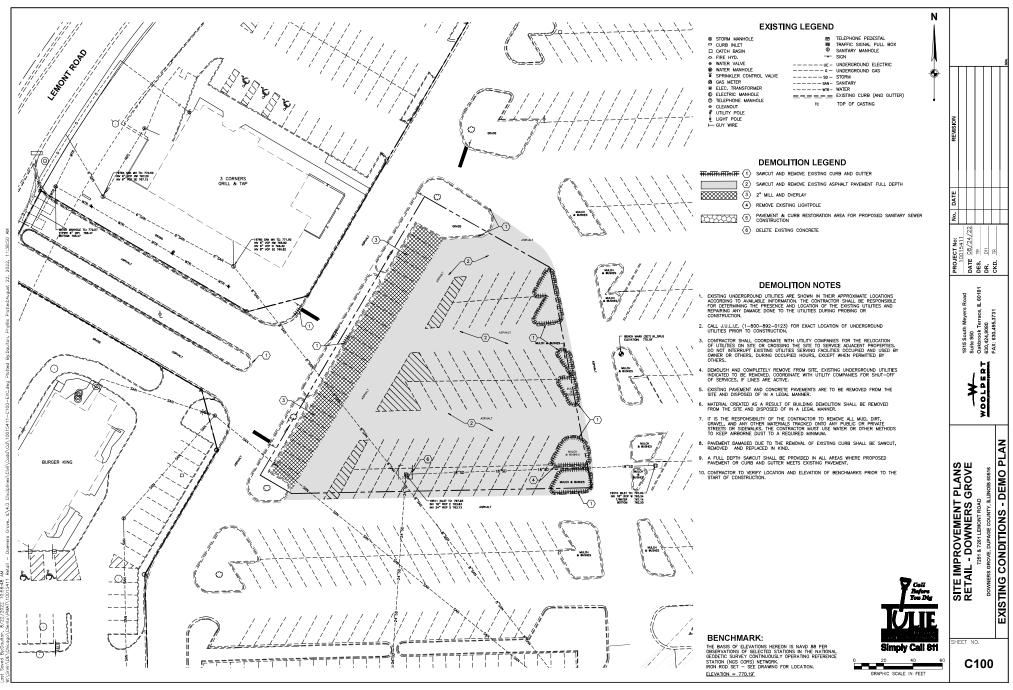
CONTACT: JASON REIBERT EMAIL: JREIBERT@GSRES.COM

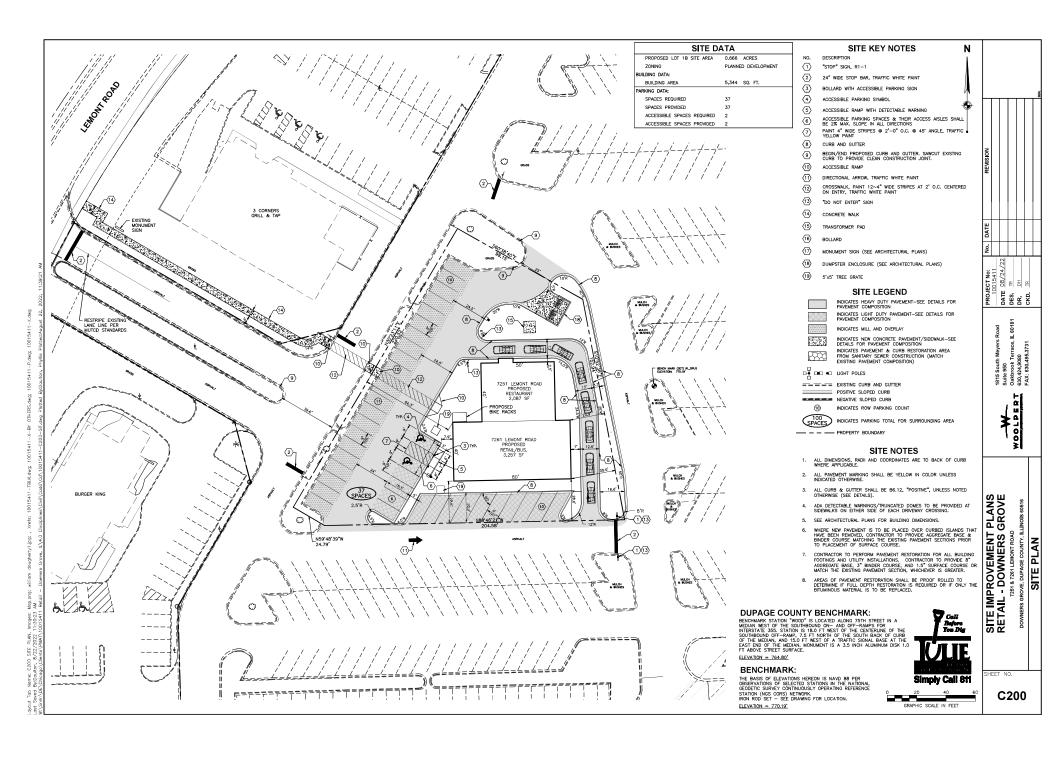
> 1815 South Meyers Road Suite 950 Oakbrook Terrace, IL 60181

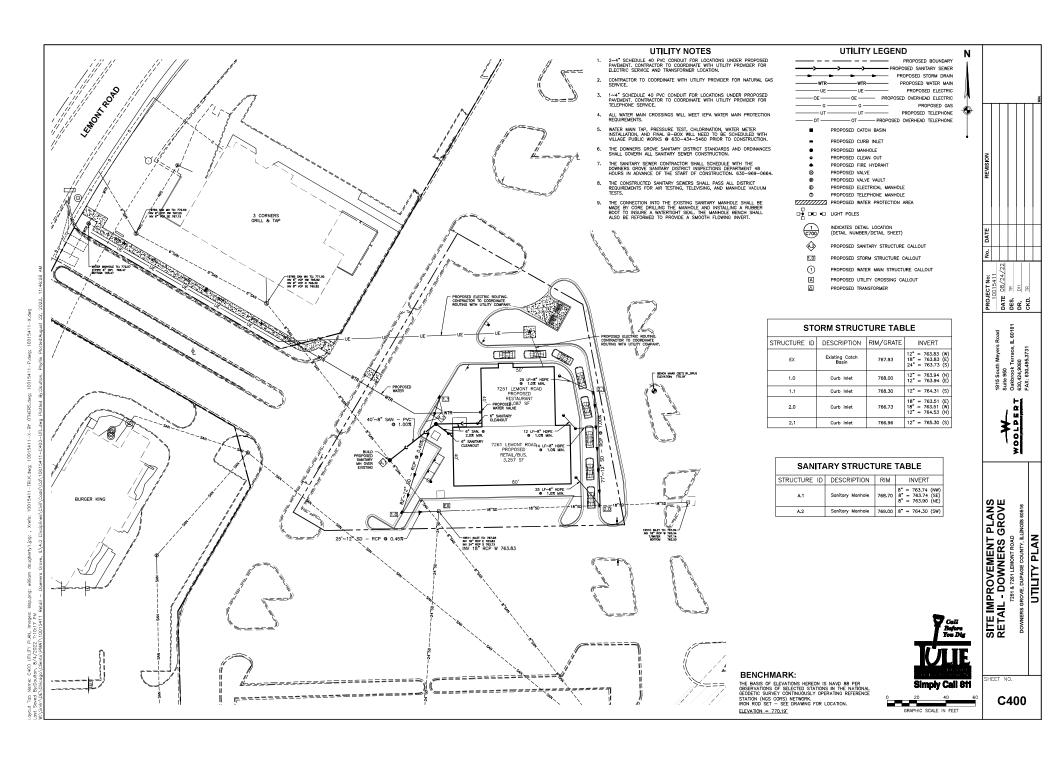
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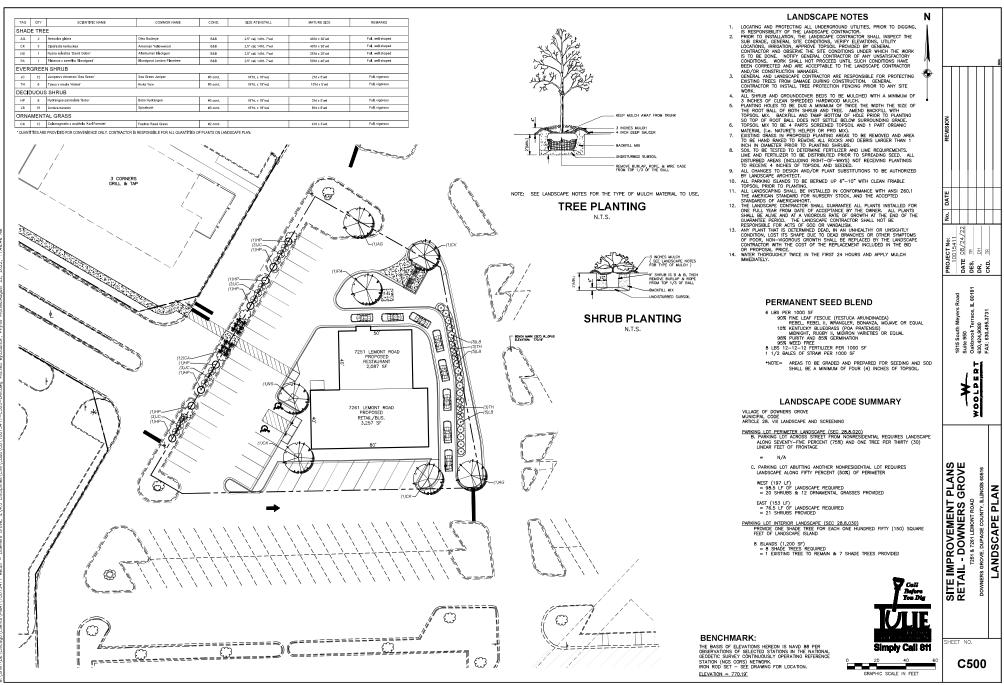


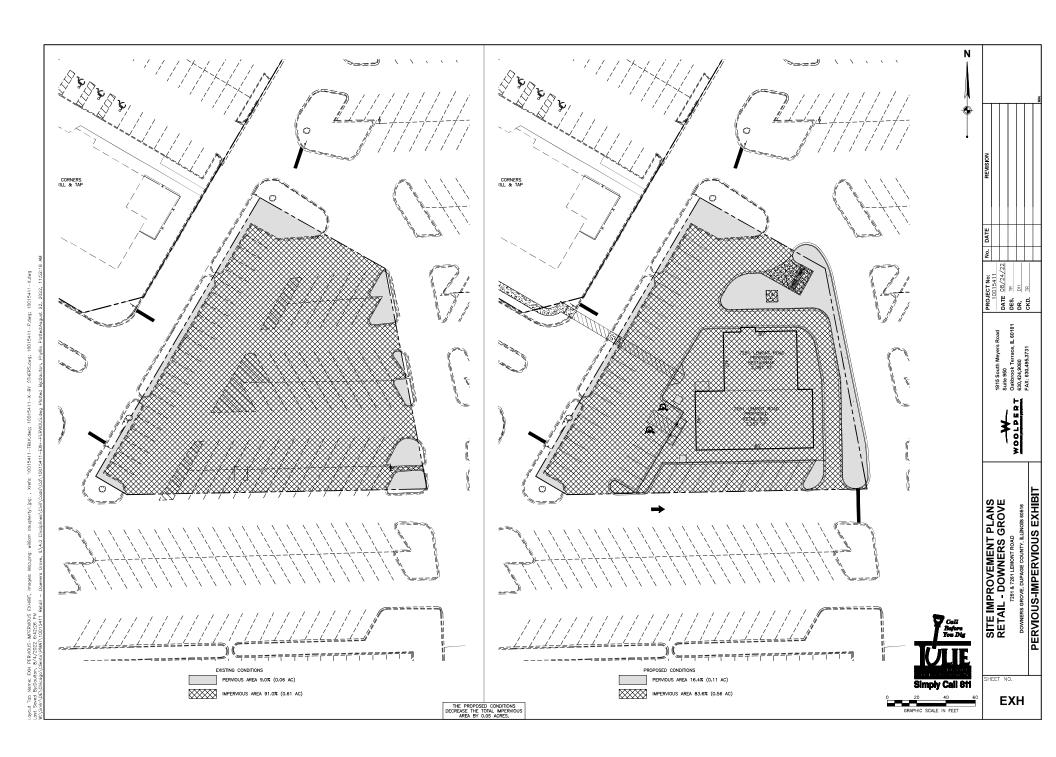


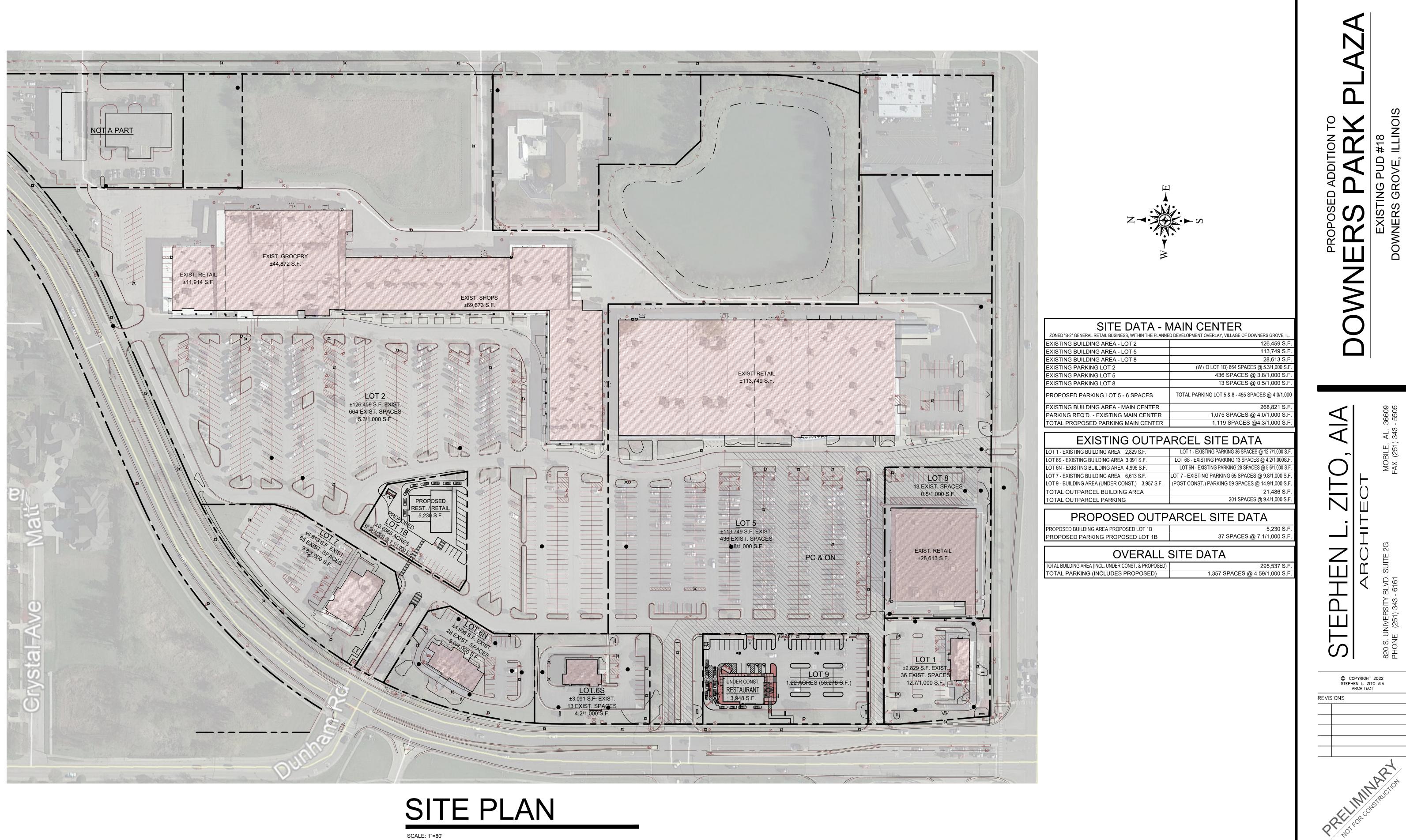














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MOBILE, AL. 36609 FAX (251) 343 - 5505

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3763 AUGUST 3, 2022

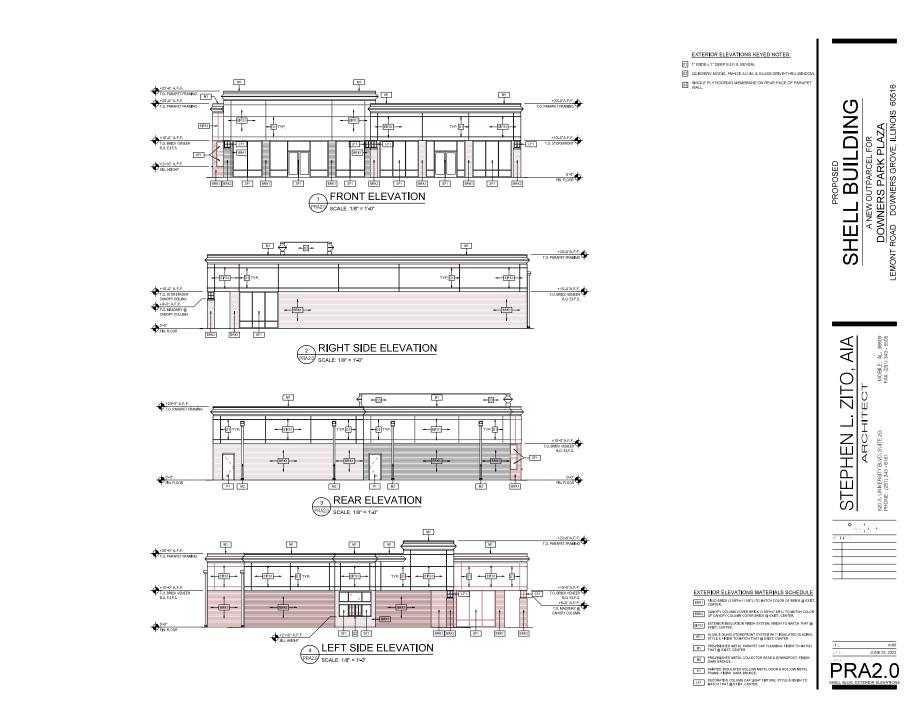


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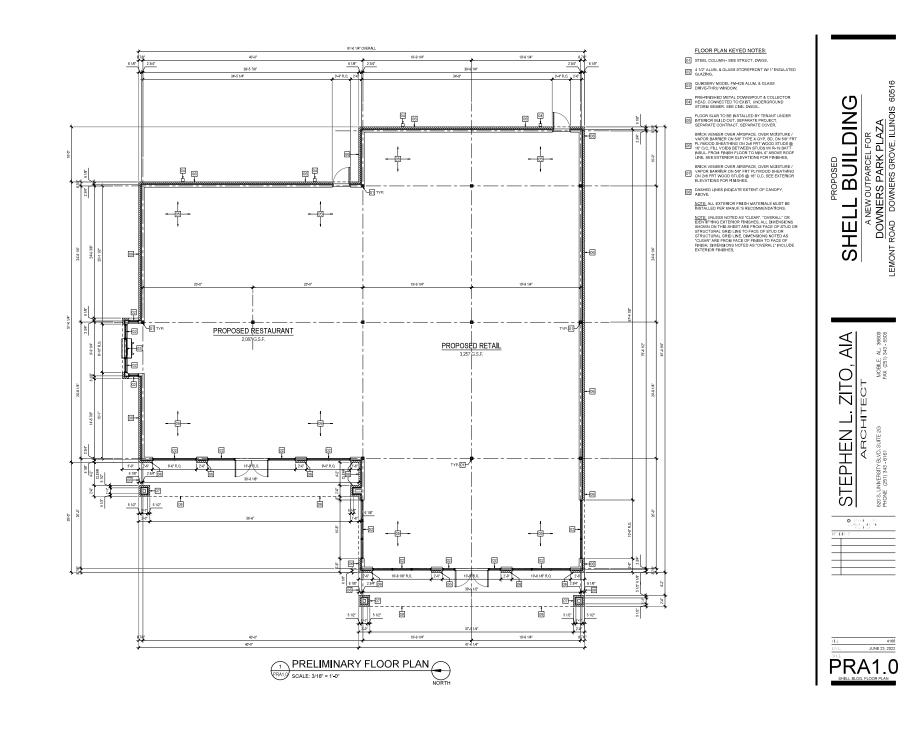
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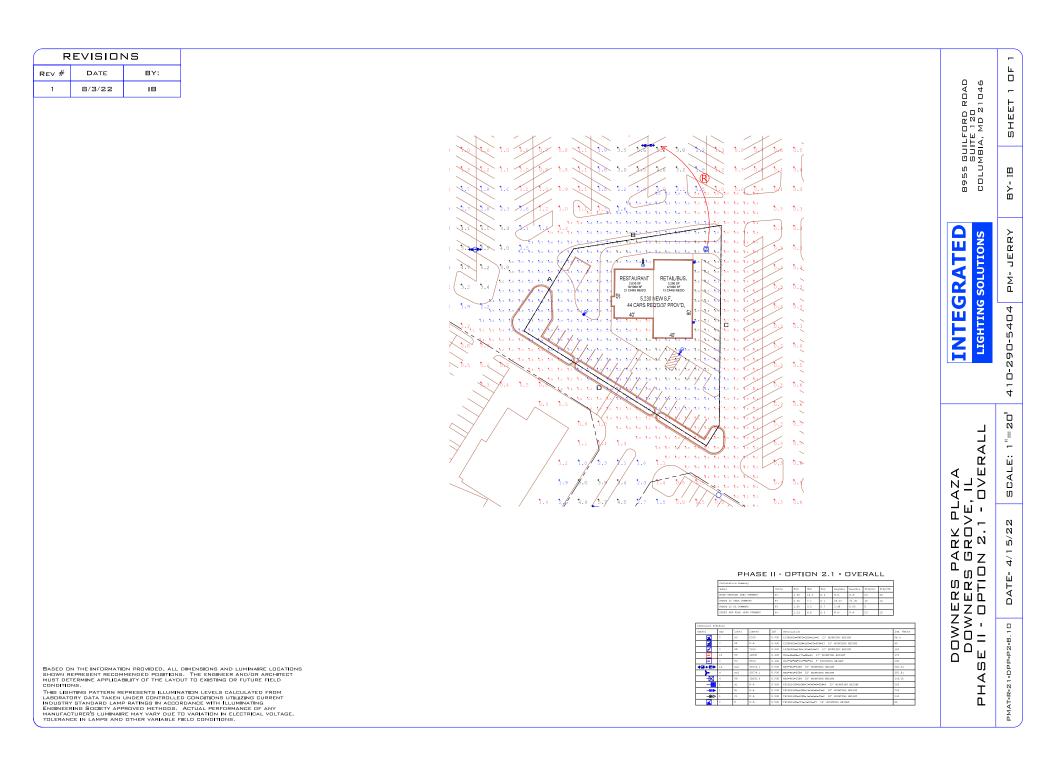


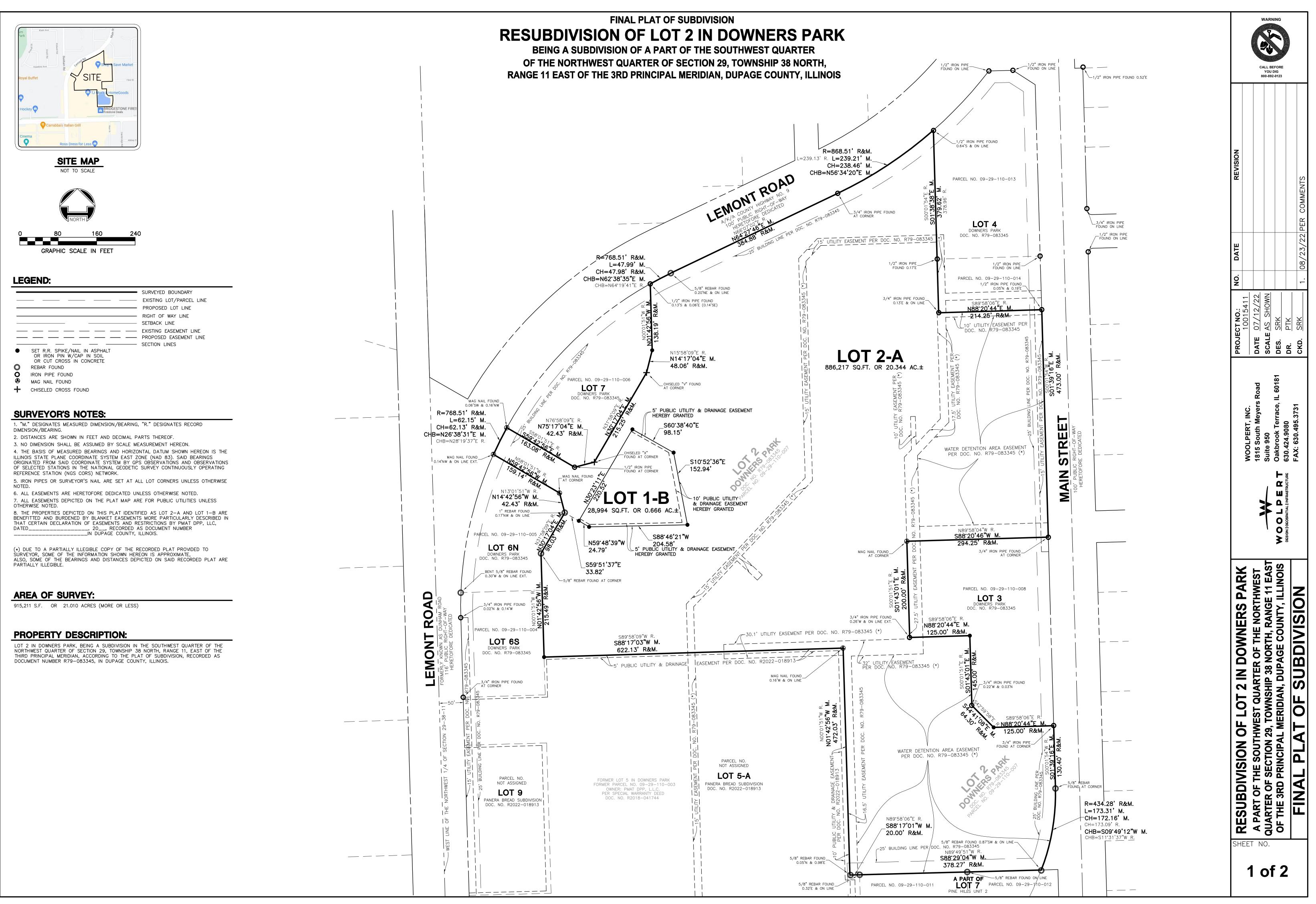














| SCHOOL DISTRICT BOUNDARY STATEMENT | VILLAGE COI |
|--|--|
| STATE OF ILLINOIS)) SS | STATE OF ILLINOIS |
| COUNTY OF DUPAGE) THE UNDERSIGNED DO HEREBY CERTIFY THAT, AS OWNERS OF THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE, AND KNOWN AS 7451 LEMONT ROAD, DOWNERS GROVE, IL 60515, TO THE | COUNTY OF DUPAGE I,CERTIFY THAT THERE / |
| BEST OF THEIR KNOWLEDGE, SAID PROPERTY IS LOCATED WITHIN THE BOUNDARIES OF THE HIGH SCHOOL DISTRICT 99, AND ELEMENTARY SCHOOL DISTRICT 58 IN DUPAGE COUNTY, ILLINOIS. | ASSESSMENTS OR ANY AGAINST THE TRACT O DATED THIS D/ |
| DATED AT, A.D., 20 | |
| BY: | |
| BY: | PLAN COMM |
| OWNER'S CERTIFICATE | STATE OF ILLINOIS COUNTY OF DUPAGE |
| STATE OF)) SS COUNTY OF) | APPROVED BY THE PL/ THIS DAY OF _ |
| I,, HEREBY CERTIFIES 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. | |
| DATED THIS DAY OF A.D., 20 | |
| OWNER: | |
| NOTARY'S CERTIFICATE | STATE OF ILLINOIS |
| STATE OF)) SS | COUNTY OF DUPAGE |
| COUNTY OF) I HEREBY CERTIFY THAT THE PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING | BY THE COUNCIL OF T |
| CERTIFICATE ARE KNOWN TO ME AS SUCH OWNERS. GIVEN UNDER MY HAND AND SEAL THIS DAY OF, A.D., 20 | VILLAGE CLE |
| | |
| | |
| MY COMMISSION EXPIRES: | PUBLIC UTILIT |
| SANITARY DISTRICT CERTIFICATE | EASEMENTS ARE HEREB AND TO THOSE PUBLIC DOWNERS GROVE, INCLU |
|) SS COUNTY OF DUPAGE) | ILLINOIS, NORTHERN ILL THROUGH ALL OF THE THE PLAT FOR THE PE |
| I, GOLLECTOR OF THE DOWNERS GROVE SANITARY DISTRICT, 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. | REPAIR, INSPECT, MAIN COMMUNITY ANTENNA T SEWERS, TOGETHER WIT APPLIANCES AND OTHER |
| DATED THIS DAY OF A.D., 20 | VILLAGE UNDER AND TH ACROSS THE PROPERTY THE RIGHT IS ALSO GR |
| COLLECTOR | PLANTS ON THE EASEM UTILITIES. NO PERMAN USED FOR PAVEMENT, OR LATER INTERFERE V |
| DUPAGE COUNTY CLERK'S CERTIFICATE | FOR SEWERS AND OTH ORDINANCES OF THE V |
| STATE OF ILLINOIS)) SS | EASEMENTS ARE HEREB DUPAGE AND OTHER GO HEREBY, OVER THE EN MUNICIPAL AND OTHER |
| COUNTY OF DUPAGE) | SERVICE AND MAINTENA |
| THERE ARE NO DELINQUENT GENERAL TAXES, NO UNPAID FORFEITED TAXES, AND NO REDEEMABLE TAX SALES AGAINST ANY OF THE LAND INCLUDED IN THIS PLAT. I, FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THIS PLAT. | |
| GIVEN UNDER MY HAND AND SEAL OF THE COUNTY CLERK OF DUPAGE COUTY, ILLINOIS, | |
| THIS DAY OF, A.D., 20 | AN EASEMENT AND COMM |
| COUNTY CLERK | ILLINOIS THEIR RESPECTIVE LICE |
| DUPAGE COUNTY RECORDER'S CERTIFICATE | OPERATE, REPAIR, MAIN FROM TIME TO TIME, P PEDESTALS, EQUIPMENT UNDERGROUND TRANSM |
| STATE OF ILLINOIS)) SS | SIGNALS IN, OVER, UN WITHIN THE DASHED "EASEMENT", "UTILITY |
| COUNTY OF DUPAGE) THIS PLAT WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF DUPAGE COUNTY, ILLINOIS, ON | THE PROPERTY DESIGN "COMMON ELEMENTS", A AND THE PROPERTY D |
| THE DAY OF, A.D., 20 AT O'CLOCK M, AS DOCUMENT NUMBER | PRIVATE, TOGETHER WI THE SURFACE OF EACH ON ADJACENT LOTS, A BUSHES, ROOTS AND S |
| | AS MAY BE REASONA ENTER UPON THE SUB PLACED OVER GRANTEE |
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| PMAT DPP LLC | TO THE SEPARATELY (THOUGH SUCH BE OTH |
| ADDRESS: 109 NORTHPARK BLVD, NO 300 | ELEMENTS", "OPEN SP THE TERM "COMMON |

UPON WRITTEN REQUEST.

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

OR'S CERTIFICATE

DLLECTOR OF THE VILLAGE OF DOWNERS GROVE, DO HEREBY ELINQUENT OR UNPAID CURRENT OR FORFEITED SPECIAL INSTALLMENTS THEREOF THAT HAVE NOT BEEN APPORTIONED NCLUDED IN THIS PLAT.

_____, A.D., 20_____

COLLECTOR

N'S CERTIFICATE

SSION OF THE VILLAGE OF DOWNERS GROVE, ____, A.D., 20____

CHAIRMAN

'S CERTIFICATE

__, A.D., 20 ____ OF DOWNERS GROVE.

____ ____ MAYOR

ND DRAINAGE EASEMENT PROVISIONS

ED FOR AND GRANTED TO THE VILLAGE OF DOWNERS GROVE, ILLINOIS OMPANIES OPERATING UNDER FRANCHISE FROM THE VILLAGE OF NOT LIMITED TO ILLINOIS BELL TELEPHONE COMPANY DBA AT&T COMPANY AND THEIR SUCCESSORS AND ASSIGNS, UNDER AND RKED "PUBLIC UTILITY AND DRAINAGE EASEMENT" OR (P.U.D.E.) ON RIGHT, PRIVILEGE AND AUTHORITY TO CONSTRUCT, RECONSTRUCT, OPERATE VARIOUS UTILITY TRANSMISSIONS AND DISTRIBUTION SYSTEMS, SYSTEMS, POTABLE WATER AND INCLUDING STORM AND/OR SANITARY D ALL NECESSARY MANHOLES, CATCH BASINS, CONNECTIONS, JRES AND APPURTENANCES AS MAY BE DEEMED NECESSARY BY SAID AID INDICATED EASEMENTS. TOGETHER WITH RIGHT OF ACCESS ESSARY MEN AND EQUIPMENT TO DO ANY OF THE ABOVE WORK CUT DOWN, TRIM OR REMOVE ANY TREES, SHRUBS OR OTHER INTERFERE WITH THE OPERATIONS OF THE SEWERS OR OTHER INGS SHALL BE PLACED ON SAID EASEMENTS, BUT SAME MAY BE SHRUBS, LANDSCAPING AND OTHER PURPOSES THAT DO NOT THEN FORESAID USES OR RIGHTS. WHERE AN EASEMENT IS USED BOTH S, THE OTHER UTILITY INSTALLATION SHALL BE SUBJECT TO THE DOWNERS GROVE.

ED AND GRANTED TO THE VILLAGE OF DOWNERS GROVE, COUNTY OF TAL AUTHORITIES HAVING JURISDICTION OF THE LAND SUBDIVIDED MENT AREA FOR INGRESS. EGRESS AND THE PERFORMANCE OF ENTAL SERVICES, INCLUDING WATER, STORM AND SANITARY SEWER

ASEMENT PROVISIONS

/ING THE SUBDIVISION AND OTHER PROPERTY WITH ELECTRIC SERVICE IS HEREBY RESERVED FOR AND GRANTED TO: COMMONWEALTH EDISON COMPANY AND

LEPHONE COMPANY DBA AT&T ILLINOIS, GRANTEES, JCCESSORS AND ASSIGNS JOINTLY AND SEVERALLY, TO CONSTRUCT,

DIFY, RECONSTRUCT, REPLACE, SUPPLEMENT, RELOCATE AND REMOVE, ANCHORS, WIRES, CABLES, CONDUITS, MANHOLES, TRANSFORMERS, OR OTHER FACILITIES USED IN CONNECTION WITH OVERHEAD AND ND DISTRIBUTION OF ELECTRICITY, COMMUNICATIONS, SOUNDS AND OSS, ALONG AND UPON THE SURFACE OF THE PROPERTY SHOWN ED LINES (OR SIMILAR DESIGNATION) ON THE PLAT AND MARKED "PUBLIC UTILITY EASEMENT", "P.U.E" (OR SIMILAR DESIGNATION), THE DECLARATION OF CONDOMINIUM AND/OR ON THIS PLAT AS PROPERTY DESIGNATED ON THE PLAT AS "COMMON AREA OR AREAS", ON THE PLAT FOR STREETS AND ALLEYS, WHETHER PUBLIC OR GHTS TO INSTALL REQUIRED SERVICE CONNECTIONS OVER OR UNDER COMMON AREA OR AREAS TO SERVE IMPROVEMENTS THEREON, OR ON AREA OR AREAS. THE RIGHT TO CUT. TRIM OR REMOVE TREES. ND TO CLEAR OBSTRUCTIONS FROM THE SURFACE AND SUBSURFACE IRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ROPERTY FOR ALL SUCH PURPOSES. OBSTRUCTIONS SHALL NOT BE TIES OR IN, UPON OR OVER THE PROPERTY WITHIN THE DASHED OR SNATION) MARKED "EASEMENT", "UTILITY EASEMENT", "PUBLIC UTILITY DESIGNATION) WITHOUT THE PRIOR WRITTEN CONSENT OF GRANTEES. UCH FACILITIÉS, THE GRADE OF THE SUBDIVIDED PROPERTY SHALL IER SO AS TO INTERFERE WITH THE PROPER OPERATION AND

SHALL HAVE THE MEANING SET FORTH FOR SUCH TERM IN THE CHAPTER 765 ILCS 605/2(C), AS AMENDED FROM TIME TO TIME. REAS" IS DEFINED AS A LOT, PARCEL OR AREA OF REAL PROPERTY, MENT OF WHICH IS RESERVED IN WHOLE OR AS AN APPURTENANCE TS, PARCELS OR AREAS WITHIN THE PLANNED DEVELOPMENT, EVEN SIGNATED ON THE PLAT BY TERMS SUCH AS "OUTLOTS", "COMMON 'EN AREA", "COMMON GROUND", "PARKING" AND "COMMON AREA". AREAS", AND "COMMON ELEMENTS" INCLUDE REAL PROPERTY WAYS AND WALKWAYS, BUT EXCLUDES REAL PROPERTY PHYSICALLY RVICE BUSINESS DISTRICT OR STRUCTURES SUCH AS A POOL, EQUIPMENT.

RELOCATION OF FACILITIES WILL BE DONE BY GRANTEES AT COST OF THE GRANTOR/LOT OWNER,

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. SHALL BE CONSTRUCTED WHOLLY UNDERGROUND, EXCEPT FOR TRANSFORMERS, TRANSFORMER PADS, LIGHT POLES, REGULATORS, VALVES, MARKERS AND SIMILAR STRUCTURES APPROVED BY THE VILLAGE ENGINEER OF THE VILLAGE OF DOWNERS GROVE PRIOR TO RECORDING OF THIS PLAT OF SUBDIVISION (b) AN EASEMENT FOR SERVING THE SUBDIVISION, AND OTHER PROPERTY WITH STORM DRAINAGE,

SANITARY SEWER, STREET LIGHTING, POTABLE WATER SERVICE, AND OTHER PUBLIC UTILITY SERVICES, IS HEREBY RESERVED FOR AND GRANTED TO THE VILLAGE OF DOWNERS GROVE AND DOWNERS GROVE SANITARY DISTRICT, THEIR RESPECTIVE SUCCESSORS AND ASSIGNS, JOINTLY AND SEPARATELY, TO INSTALL, OPERATE AND MAINTAIN, AND REMOVE, FROM TIME TO TIME, FACILITIES AND EQUIPMENT USED IN CONNECTION WITH THE PUBLIC WATER SUPPLY, TRANSMISSION LINES, SANITARY SEWERS, STORM DRAINAGE SYSTEMS, STREET LIGHTING SYSTEM, OR OTHER PUBLIC UTILITY SERVICE, AND THEIR APPURTENANCES, EITHER ON, OVER, ACROSS, BELOW OR THROUGH THE GROUND SHOWN WITHIN THE DOTTED LINES ON THE PLAT MARKED "PUBLIC UTILITY AND/OR DRAINAGE EASEMENT," OR SIMILAR LANGUAGE DESIGNATING A STORMWATER OR SEWER EASEMENT, AND THE PROPERTY DESIGNED ON THE PLAT FOR STREETS AND ALLEYS, TOGETHER WITH THE RIGHT TO CUT, TRIM OR REMOVE TREES, BUSHES AND ROOTS AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN. AND THE RIGHT TO ENTER UPON THE SUBDIVIDED PROPERTY FOR ALL SUCH PURPOSES, OBSTRUCTIONS SHALL NOT BE PLACED OVER GRANTEES FACILITIES OR IN, UPON OR OVER, THE PROPERTY WITHIN THE STORMWATER OR SEWER EASEMENT WITHOUT THE PRIOR WRITTEN CONSENT OF GRANTEES. AFTER INSTALLATION OF ANY SUCH FACILITIES, THE GRADE OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED IN A MANNER SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF.

WHEREAS, SAID LOTS WILL BE CONVEYED TO PURCHASERS SUBJECT TO THIS DECLARATION TO THE END THAT THE RESTRICTIONS IMPOSED SHALL INURE TO THE BENEFIT OF EACH AND ALL OF THE PURCHASERS OF SUCH LOTS WHETHER THEY SHALL HAVE BECOME SUCH BEFORE OR AFTER THE DATE THEREOF, AND THEIR RESPECTIVE HEIRS AND ASSIGNS, AND

WHEREAS, THE AFORESAID PROPERTY DESCRIBED ON THE ATTACHED PLAT IS LOCATED ENTIRELY WITHIN THE CORPORATE LIMITS OF THE VILLAGE OF DOWNERS GROVE, ILLINOIS, AND WHEREAS, ALL OF THE PROVISIONS, RESTRICTIONS, CONDITIONS, COVENANTS, AGREEMENTS, AND CHARGES HEREIN CONTAINED SHALL RUN WITH AND BIND ALL OF SAID LOTS AND LAND AND SHALL INURE TO THE BENEFIT OF, AND BE ENFORCEABLE BY THE VILLAGE OF DOWNERS GROVE, ILLINOIS, AND THE OWNERS OR OWNER OF ANY OF THE LOTS OF LAND COMPRISED WITHIN SAID PLAT, AND THEIR RESPECTIVE HEIRS, EXECUTORS, ADMINISTRATORS, SUCCESSORS, GRANTEES AND ASSIGNS.

NOW. THEREFORE, ALL PERSONS, FIRMS OR CORPORATIONS NOW OWNING THE AFORESAID PROPERTY DO COVENANT AND AGREE THAT THEY OR ANY PERSON, FIRM OR CORPORATION HEREAFTER ACQUIRING ANY PROPERTY OR LOTS SHOWN UPON THE ATTACHED PLAT OF SUBDIVISION ARE HEREBY SUBJECTED TO THE FOLLOWING RESTRICTIONS RUNNING WITH SAID PROPERTY TO WHOMSOEVER OWNED, TO WIT: OWNER HEREBY GRANTS TO THE VILLAGE OF DOWNERS GROVE A STORMWATER MANAGEMENT EASEMENT FOR THE USE AND BENEFIT OF THE VILLAGE, OVER THE STORMWATER FACILITIES WITHIN THE PROPERTY AND A RIGHT OF ACCESS TO PRIVATELY-OWNED LAND FOR THE REASONABLE EXERCISE OF THE RIGHTS GRANTED TO THE VILLAGE.

EACH OWNER OR PURCHASER SHALL BE RESPONSIBLE TO INSPECT AND MAINTAIN THE STORMWATER FACILITIES ON THEIR LOT. NO BUILDINGS OR STRUCTURES OF ANY KIND SHALL BE PLACED ON SAID EASEMENT NOR SHALL ANY OTHER CHANGE BE MADE ON THE PROPERTY THAT MIGHT MATERIALLY AFFECT THE PROPERTY MANAGEMENT, OPERATION OR CONTINUED MAINTENANCE OF ANY STORMWATER FACILITY; IMPEDE STORMWATER DRAINAGE IN OR ON THE PROPERTY: NEGATIVELY IMPACT THE WATER QUALITY OF THE STORMWATER FACILITIES; OR MATERIALLY REDUCE THE STORMWATER DETENTION OR RETENTION CAPACITY THEREOF AS PROVIDED IN THE APPROVED PLANS. IN THE EVENT THE VILLAGE DETERMINES, IN ITS SOLE AND ABSOLUTE DISCRETION, THAT THE PROHIBITIONS

OF THE PRECEDING PARAGRAPH HAVE BEEN VIOLATED OR THAT PROPER MAINTENANCE OF THE STORMWATER FACILITIES IS NOT BEING PERFORMED OR THAT PROPER OPERATION OF THE STORMWATER FACILITIES IS NOT OCCURRING, ON THE PROPERTY AT ANY TIME, THE VILLAGE OR ITS CONTRACTORS OR AGENTS, AFTER TEN (10) DAYS PRIOR WRITTEN NOTICE TO THE OWNER, MAY, BUT SHALL NOT BE OBLIGATED TO, ENTER UPON ANY OR ALL OF THE PROPERTY FOR THE PURPOSES OF (A) CORRECTING ANY VIOLATION AND (B) PERFORMING MAINTENANCE WORK ON AND TO THE STORMWATER FACILITIES. IN THE EVENT THAT THE VILLAGE SHALL PERFORM, OR CAUSE TO BE PERFORMED, ANY WORK PURSUANT TO THE STORMWATER MANAGEMENT EASEMENT, THE VILLAGE SHALL HAVE THE RIGHT TO CHARGE THE

OWNER AN AMOUNT SUFFICIENT TO DEFRAY THE ENTIRE COST OF SUCH WORK, INCLUDING ADMINISTRATIVE COSTS. EITHER BEFORE OR AFTER SUCH COST IS INCURRED, IF THE AMOUNT SO CHARGED IS NOT PAID BY THE OWNER WITHIN THIRTY (30) DAYS FOLLOWING A DEMAND IN WRITING BY THE VILLAGE FOR SUCH PAYMENT, SUCH CHARGE, TOGETHER WITH INTEREST AND COSTS OF COLLECTION, SHALL BECOME A LIEN UPON THE PROPERTY AND THE VILLAGE SHALL HAVE THE RIGHT TO COLLECT SUCH CHARGE WITH INTEREST AND COSTS, AND TO ENFORCE SUCH LIEN AS IN FORECLOSURE PROCEEDINGS AS PERMITTED BY IAW

IN WITNESS WHEREOF, THE OWNERS HAVE SET THEIR HANDS UPON THE ATTACHED PLAT THE DAY AND DATE FIRST WRITTEN THEREON.

DATED THIS _____ DAY OF _____, A.D., 20_____

OWNER

OWNER

NOTARY PUBLIC

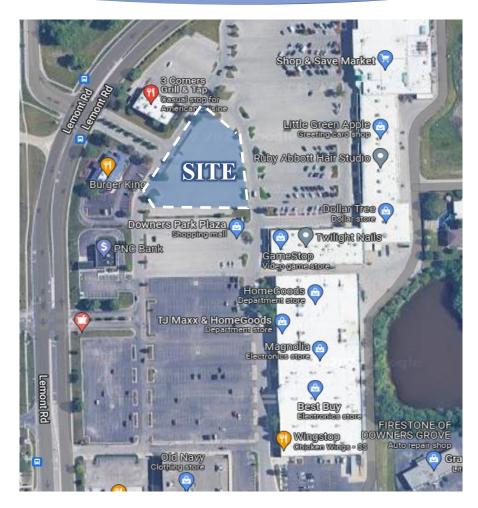
MY COMMISSION EXPIRES: _____

WARNING

| | | YC | BEFORE DU DIG 892-0123 |
|--|---|--|---|
| | THIS PLAT HAS BEEN SUBMITTED FOR RECORDING BY AND RETURN TO: NAME: ADDRESS: | Z | |
| PARCEL NUMBER (PIN): | | REVISION | |
| 09-29-110-007 | | R | NTS |
| SURVEYOR'S NOTES: 1. "M." DESIGNATES MEASURED DIMENSION/BEARING, "R." 2. DISTANCES ARE SHOWN IN FEET AND DECIMAL PARTS 3. NO DIMENSION SHALL BE ASSUMED BY SCALE MEASUR 4. THE BASIS OF MEASURED BEARINGS AND HORIZONTAL STATE PLANE COORDINATE SYSTEM EAST ZONE (NAD 83) COORDINATE SYSTEM BY GPS OBSERVATIONS AND OBSERV NATIONAL GEODETIC SURVEY CONTINUOUSLY OPERATING R 5. IRON PIPES OR SURVEYOR'S NAIL ARE SET AT ALL LO | THEREOF. EMENT HEREON. DATUM SHOWN HEREON IS THE ILLINOIS SAID BEARINGS ORIGINATED FROM SAID VATIONS OF SELECTED STATIONS IN THE REFERENCE STATION (NGS CORS) NETWORK. | | /22 PER COMMENTS |
| ALL EASEMENTS ARE HERETOFORE DEDICATED UNLESS ALL EASEMENTS DEPICTED ON THE PLAT MAP ARE FOR NOTED. | OTHERWISE NOTED. | DATE | 8/23 |
| 8. THE PROPERTIES DEPICTED ON THIS PLAT IDENTIFIED A AND BURDENED BY BLANKET EASEMENTS MORE PARTICUL DECLARATION OF EASEMENTS AND RESTRICTIONS BY PMA 20, RECORDED AS DOCUMENT NUMBER | ARLY DESCRIBED IN THAT CERTAIN T DPP. LLC. DATED | <u>o</u> | 1.0 |
| AREA OF SURVEY: | | T NO.: 0015411 7/12/22 S SHOWN | |
| 915,211 S.F. OR 21.010 ACRES (MORE OR LESS) | | 07/ 07/ | N N N N N N N N N N N N N N N N N N N |
| DRAINAGE CERTIFICATE | | ROJE ATE | |
| STATE OF ILLINOIS)) SS COUNTY OF DUPAGE) | | | |
| THE OWNER OF THE LAND DEPICTED HEREON OR HIS DUL STATE, THAT TO THE BEST OF OUR KNOWLEDGE AND BEI MADE FOR COLLECTION AND DIVERSION OF SUCH SURFAC WHICH THE SUBDIVIDER HAS A RIGHT TO USE, AND THAT FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINE LIKELIHOOD OF DAMAGE TO THE ADJOINING PROPERTY BE SUBDIVISION. FURTHER, AS ENGINEER, I HEREBY CERTIFY OF THIS SUBDIVISION OR ANY PART THEREOF IS NOT LOC AREA AS IDENTIFIED BY THE FEDERAL EMERGENCY MANA DATED THIS DAY OF, A.D., 20 ILLINOIS REGISTERED PROFESSIONAL ENGINEER STATE REGISTRATION NUMBER | LIEF, REASONABLE PROVISION HAS BEEN E WATERS AND PUBLIC AREAS, OR DRAINS SUCH SURFACE WATERS WILL BE PLANNED ERING PRACTICES SO AS TO REDUCE THE CAUSE OF THE CONSTRUCTION OF THE THAT THE PROPERTY WHICH IS THE SUBJECT CATED WITHIN A SPECIAL FLOOD HAZARD | WOOLPERT, INC. 1815 South Meyers Road | Cakbrook Terrace, IL 60181 630.424.9080 FAX: 630.495.3731 |
| REGISTRATION EXPIRATION DATE | | | |
| PROPERTY OWNER'S SIGNATURES | | | |
| BY: BY: _ OWNER OR ATTORNEY | OWNER OR ATTORNEY | | |
| PRINTED NAME | PRINTED NAME | | X O O DESIGN GEOS |
| | | | > " |
| SURVEYOR'S CERTIFICATE: | | RK EST | NOIS |
|) SS COUNTY OF DUPAGE) | | PARK HWEST | |
| I, STEPHEN R. KREGER, ILLINOIS PROFESSIONAL LAND SU CERTIFY, THAT AT THE REQUEST OF THE OWNER THEREO FOLLOWING DESCRIBED PROPERTY; | | | <u> </u> <u></u> <u></u> <u></u> |
| LOT 2 IN DOWNERS PARK, BEING A SUBDIVISION IN THE QUARTER OF SECTION 29, TOWNSHIP 38 NORTH, RANGE MERIDIAN, ACCORDING TO THE PLAT OF SUBDIVISION, REC R79-083345, IN DUPAGE COUNTY, ILLINOIS. ALL DIMENSIONS ARE IN FEET OR DECIMALS THEREOF; | 11, EAST OF THE THIRD PRINCIPAL | | COUNTY, |
| 1/2" DIAMETER BY 24" LONG IRON PIPES WILL BE SET AT POINTS OF CURVATURE AND POINTS OF TANGENCY IN CO APPLICABLE ORDINANCES EXCEPT AS NOTED. | MPLIANCE WITH ILLINOIS STATUTES AND | IN DOV | DUPAGE CC |
| SURVEY AND SUBDIVISION WHICH WAS PREPARED IN ACC ORDINANCES OF THE VILLAGE OF DOWNERS GROVE, ILLING BELIEF, AND THAT THE MONUMENTATION SHOWN ON THE WILL BE PLACED IN THE GROUND AS INDICATED HEREON CONSTRUCTION OF THE IMPROVEMENTS OR WITHIN 12 MOI WHICHEVER SHALL OCCUR FIRST. | ORDANCE WITH PROVISIONS OF APPLICABLE DIS, TO THE BEST OF MY KNOWLEDGE AND FACE OF THIS PLAT HAS BEEN FOUND OR I, AFTER THE COMPLETION OF THE | | ERIDIAN, DI |
| I FURTHER CERTIFY THAT THE PROPERTY DESCRIBED AND WITHIN THE CORPORATE LIMITS OF THE VILLAGE OF DOWN ADOPTED A COMPREHENSIVE PLAN AND IS EXERCISING THE DIVISION 12 OF ARTICLE 11 OF THE ILLINOIS MUNICIPAL C | IERS GROVE, ILLINOIS, WHICH HAS HE SPECIAL POWERS AUTHORIZED BY | | |
| THIS PROFESSIONAL SERVICE CONFORMS TO THE CURREN BOUNDARY SURVEY. | | | |
| I, FURTHER CERTIFY THAT ACCORDING TO THE FLOOD INS 17043C0169J, PUBLISHED BY THE FEDERAL EMERGENCY M DATE OF AUGUST 1, 2019, WHICH IS THE MOST CURRENT ON FEMA'S WEBSITE, THIS SITE IS LOCATED IN ZONE "X TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, B KNOWLEDGE AND BELIEF. THE SURVEYOR UTILIZED THE A THIS DETERMINATION; FURTHERMORE, THE SURVEYOR DOE INFORMATION HAS NOT BEEN PUBLISHED BY THE FEDERA SOME OTHER SOURCE GIVEN UNDER MY HAND AND SEAL THIS DAY OF | MANAGEMENT AGENCY WITH AN EFFECTIVE FLOOD INSURANCE RATE MAP AVAILABLE " (NO SHADING) – AREAS DETERMINED OR IN ZONE " D " (NO SHADING) – BUT POSSIBLE, TO THE BEST OF MY ABOVE REFERENCED FLOODPLAIN MAP FOR TS NOT CERTIFY THAT REVISED FLOODPLAIN L EMERGENCY MANAGEMENT AGENCY OR | | FINAL SECT |
| WOOLPERT, INC. | ONAL LAND | N 4 2 | 30 |
| STEPHEN R. KREGER ILLINOIS PROFESSIONAL LAND SURVEYOR #35-002985 LICENSE EXPIRES 11/30/22 | | SHEET NO | |
| WOOLPERT, INC. ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184–001393 | ★ .035~002985.★ | 2 0 | of 2 |

Traffic and Parking Impact Study Proposed Outlot Parcel

Downers Grove, Illinois



Prepared For:

PMAT DPP LLC



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 75th 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.

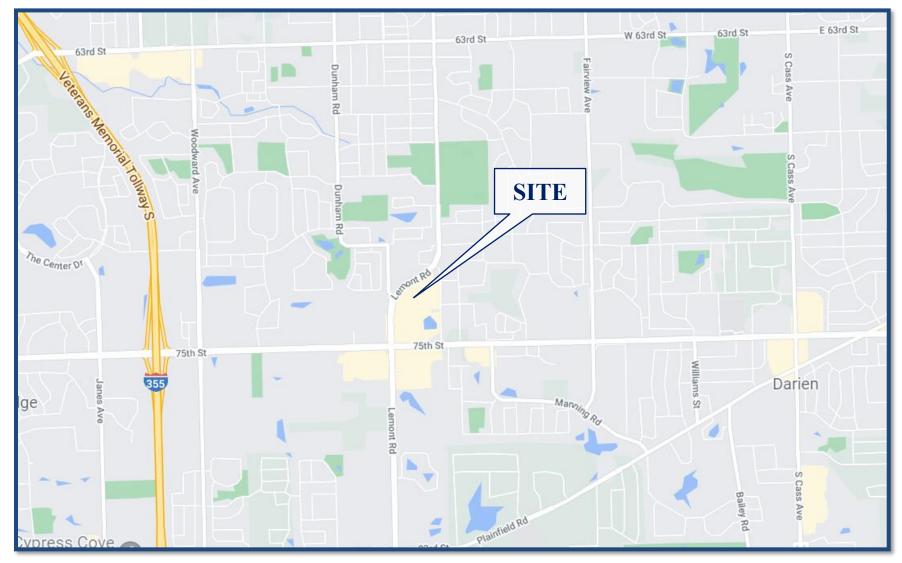
Figure 1 shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site. The sections of this report present the following:

- 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.

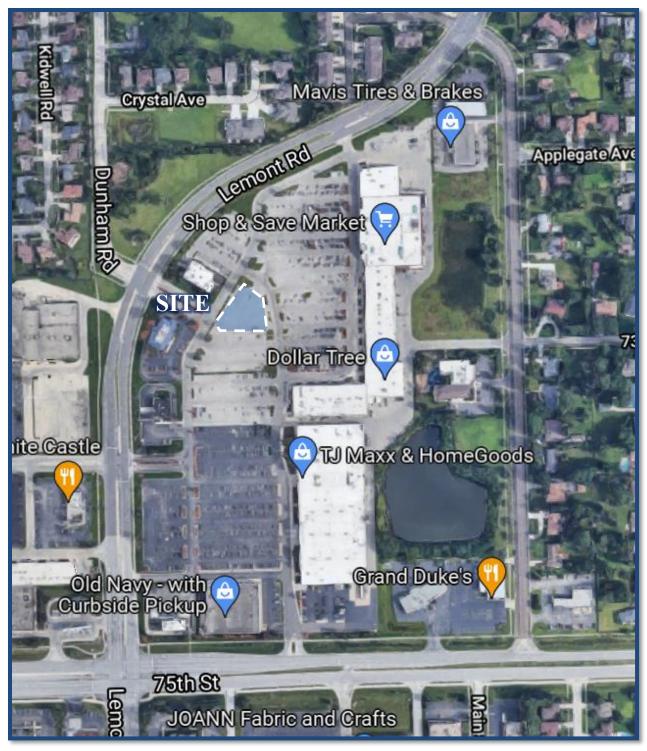




Site Location

Proposed Outlot Parcel Downers Grove, Illinois Figure 1





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.

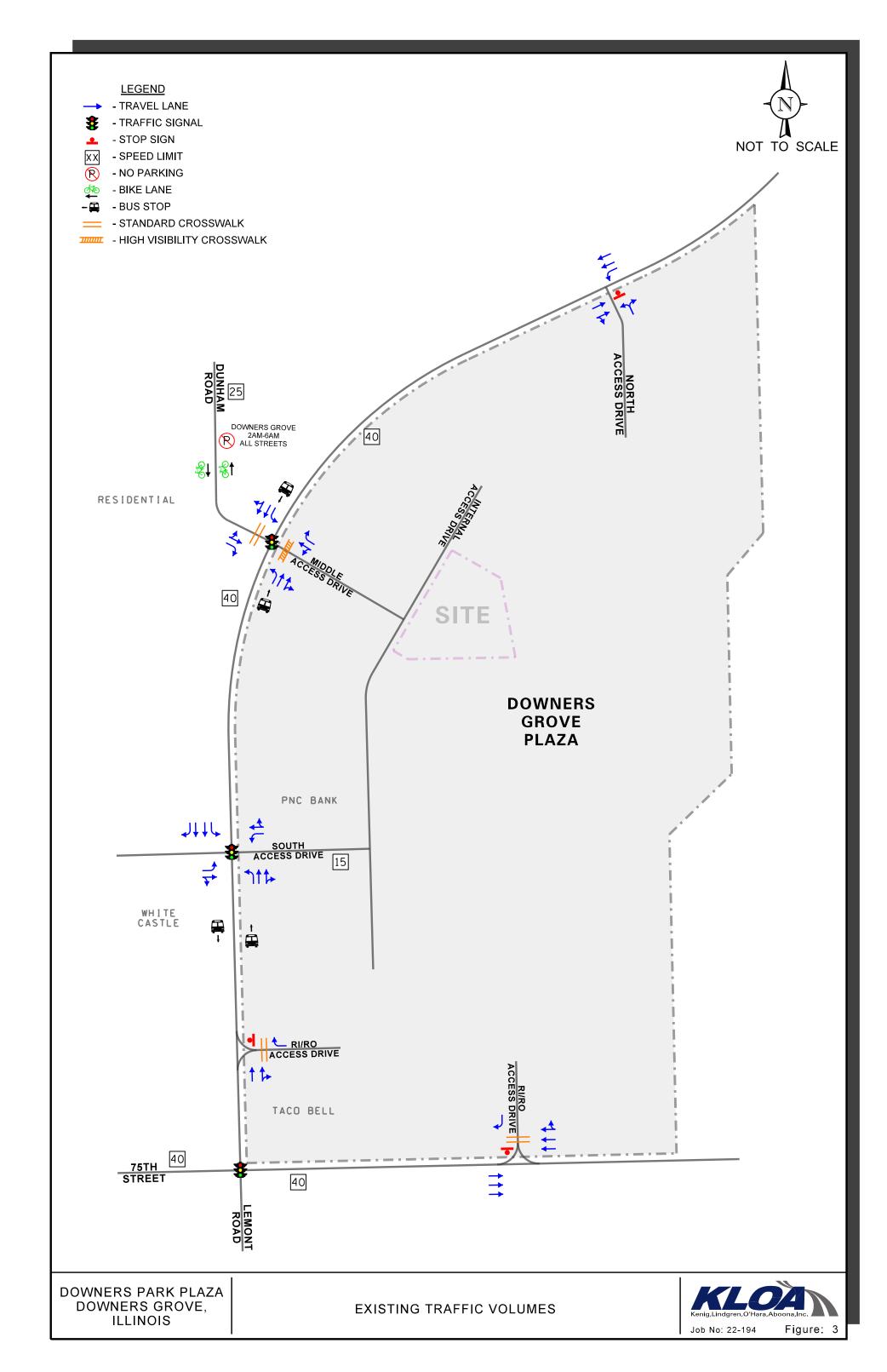
Existing Roadway System Characteristics

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 though 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 though 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.

75th 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, 75th Street provides three through lanes on the eastbound approach. The westbound approach provides two through lanes and a combined through/right-turn lane. 75th 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). 75th Street has a posted speed limit of 40 miles per hour.





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

Proposed Outlot Parcel

Downers Grove. Illinois

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:

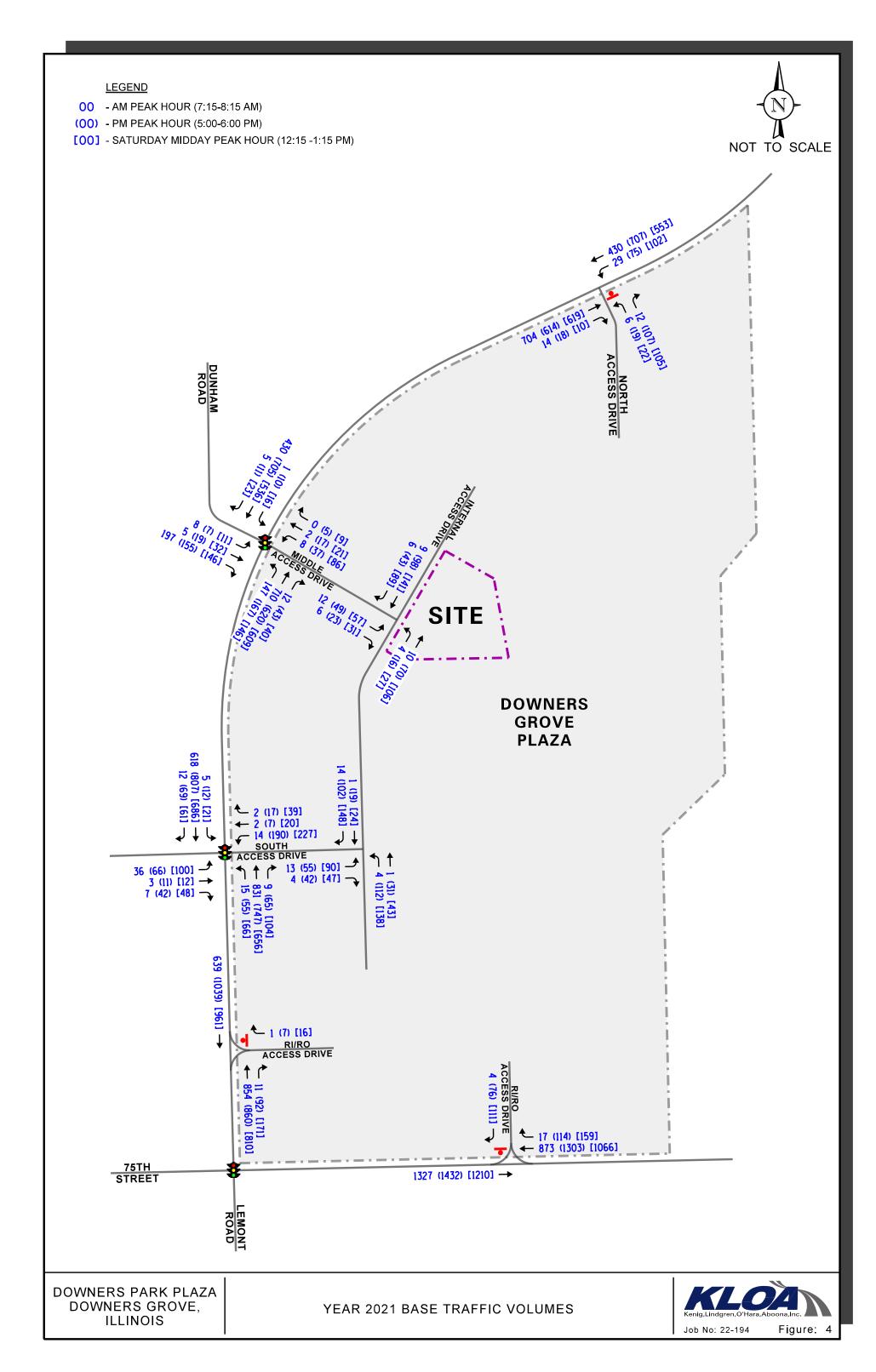
- Lemont Road with the access drives serving Downers Park Plaza
- 75th Street with the right-in/right-out access drive serving Downers Park Plaza
- Two internal intersections off the main access drives off Lemont Road

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.







Crash Data Analysis

KLOA, Inc. obtained crash data¹ for the past five years (2016 to 2020) for the intersections of Lemont Road with the access drives serving Downers Park Plaza, 75th 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 75th 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 at the intersection of the internal access drive with the south access drive, and four crashes were reported at the intersection of the internal access drive with the south access drive at the intersection of the internal access drive with the south access drive at the intersection of the internal access drive with the south access drive 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.

| Year | Type of Crash Frequency | | | | | | | | | | |
|---------|-------------------------|----------|----------|-----------------|-----------|----------|----------|----------|--|--|--|
| rear | Angle | Head On | Object | Rear End | Sideswipe | Turning | Other | Total | | | |
| 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> | | | |
| Total | 2 | 0 | 1 | 3 | 1 | 6 | 0 | 13 | | | |
| Average | <1.0 | 0 | <1.0 | <1.0 | <1.0 | 1.2 | 0 | 2.6 | | | |

Table 1LEMONT ROAD WITH DUNHAM ROAD – CRASH SUMMARY

¹ 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.



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

| Year | | Type of Crash Frequency | | | | | | | | | | | |
|---------|----------|-------------------------|-----------------|----------|-----------|----------|----------|----------|--|--|--|--|--|
| rear | Angle | Head On | Object Rear End | | Sideswipe | Turning | Other | Total | | | | | |
| 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> | | | | | |
| Total | 0 | 1 | 0 | 7 | 0 | 4 | 2 | 14 | | | | | |
| Average | 0 | <1.0 | 0 | 1.4 | 0 | <1.0 | <1.0 | 2.8 | | | | | |



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 75th 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:

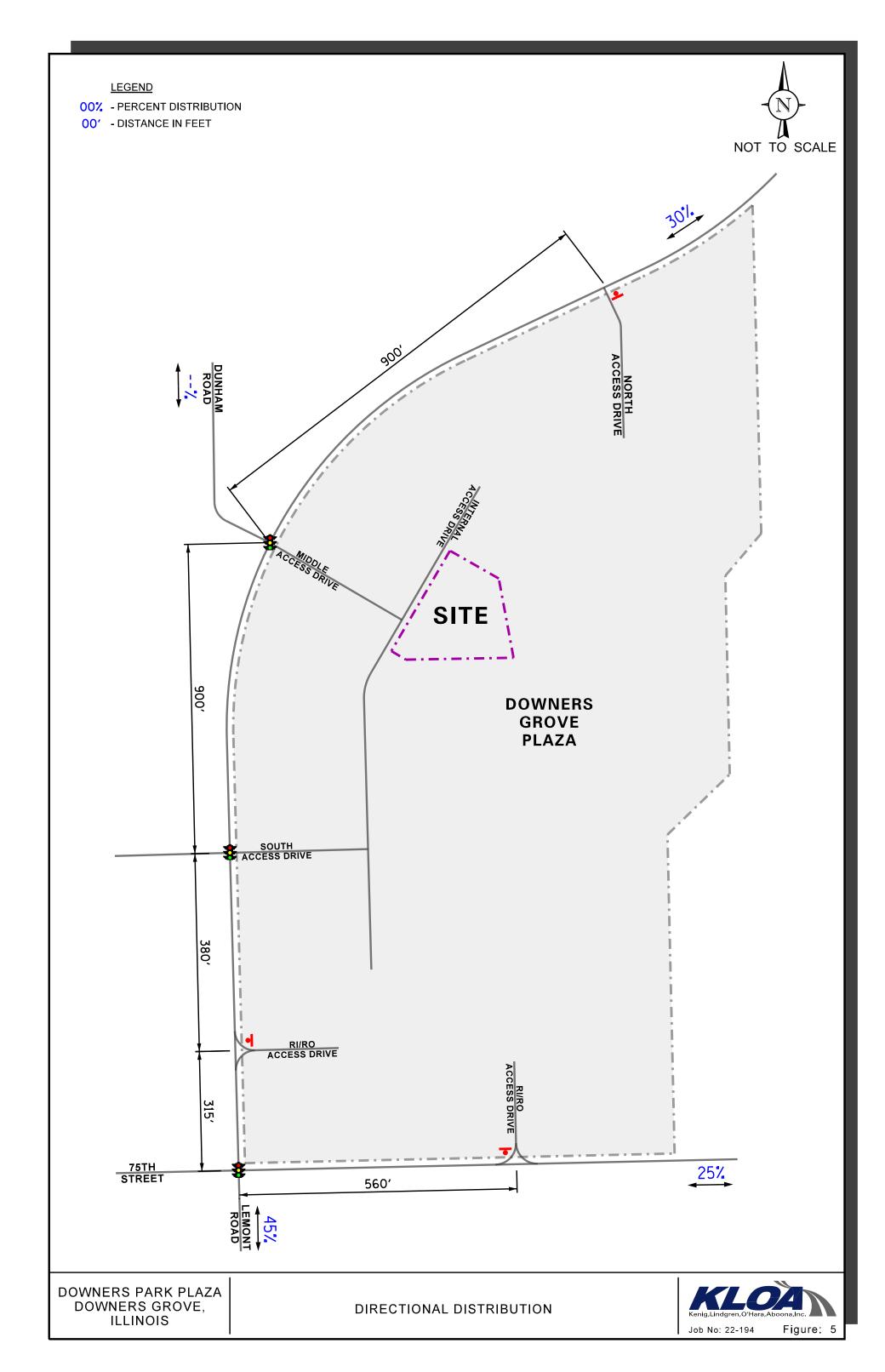
- A proposed two-way drive aisle that connects to an existing one-way eastbound parking aisle along the south side of the site and the existing two-way circulation drive that borders the east side of the site.
- A proposed inbound only access to the drive through lane that is located off of the existing 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.





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*, 11th 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 | Land Type/Size | | Weekday Morning Peak Hour | | | Weekday Evening Peak Hour | | | Saturday Midday Peak Hour | | |
|--------------------|---|-----|---------------------------------|-------|-----|------------------------------|-------|-----|------------------------------|-------|------|
| Code | | 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 |
| 10 | % Interaction Reduction | -5 | -5 | -10 | -4 | -3 | -7 | -6 | -6 | -12 | -99 |
| 50 % 1 | Pass-By Reduction | -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 |
| 10 | % Interaction Reduction | 0 | 0 | 0 | -2 | -2 | -4 | -1 | -1 | -2 | -18 |
| 20 % 1 | Pass-By Reduction | -1 | -1 | -2 | -3 | -3 | -6 | -2 | -2 | -4 | -32 |
| То | tal New Trips | 26 | 22 | 48 | 28 | 27 | 55 | 26 | 32 | 58 | 569 |



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.

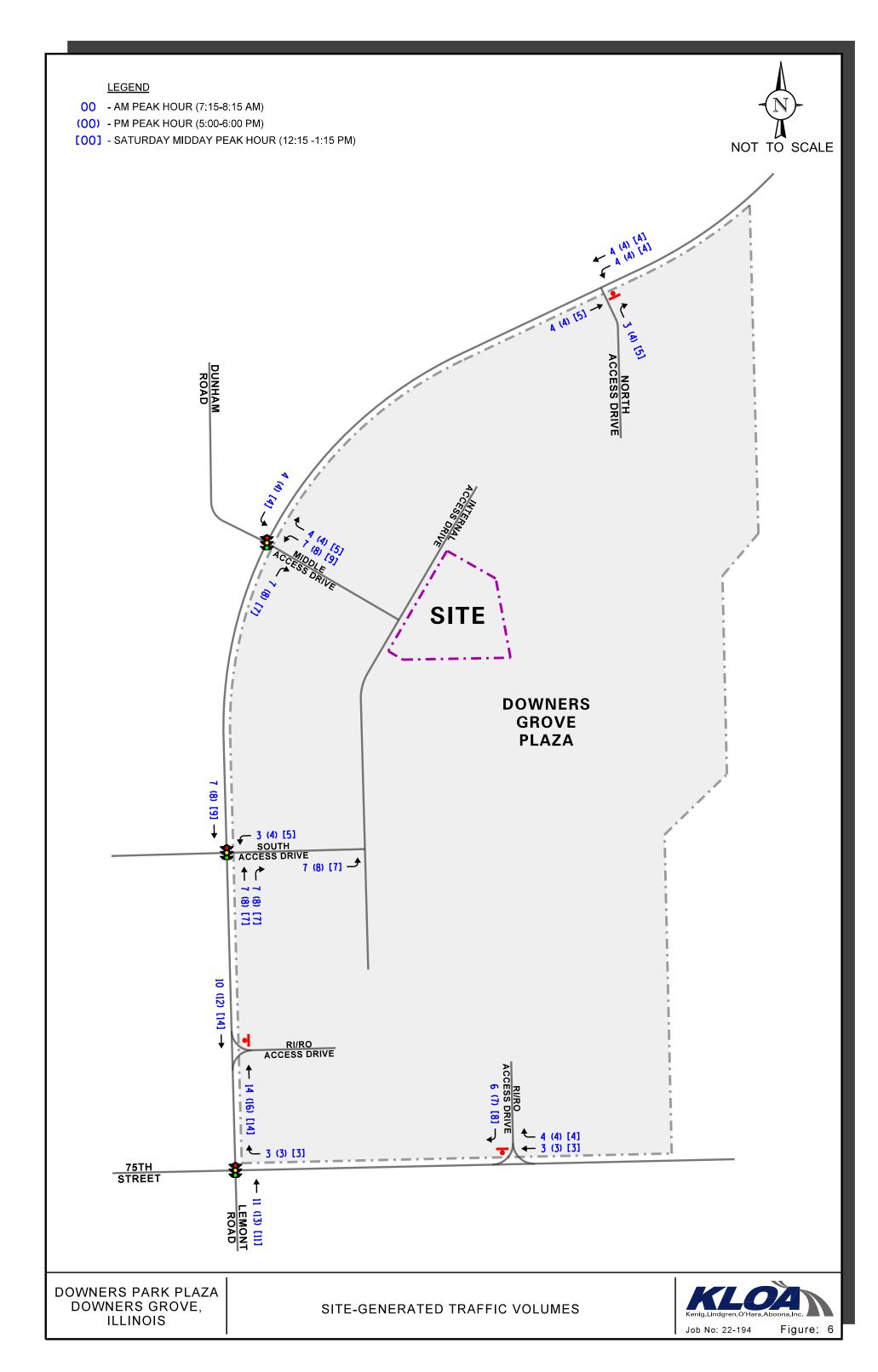
In addition, the traffic to be generated by the currently under construction Panera Bread restaurant located in the Downers Park Plaza shopping center and the full occupancy of Downers Park Plaza was added in the background conditions. It should be noted that Downers Park Plaza contained approximately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

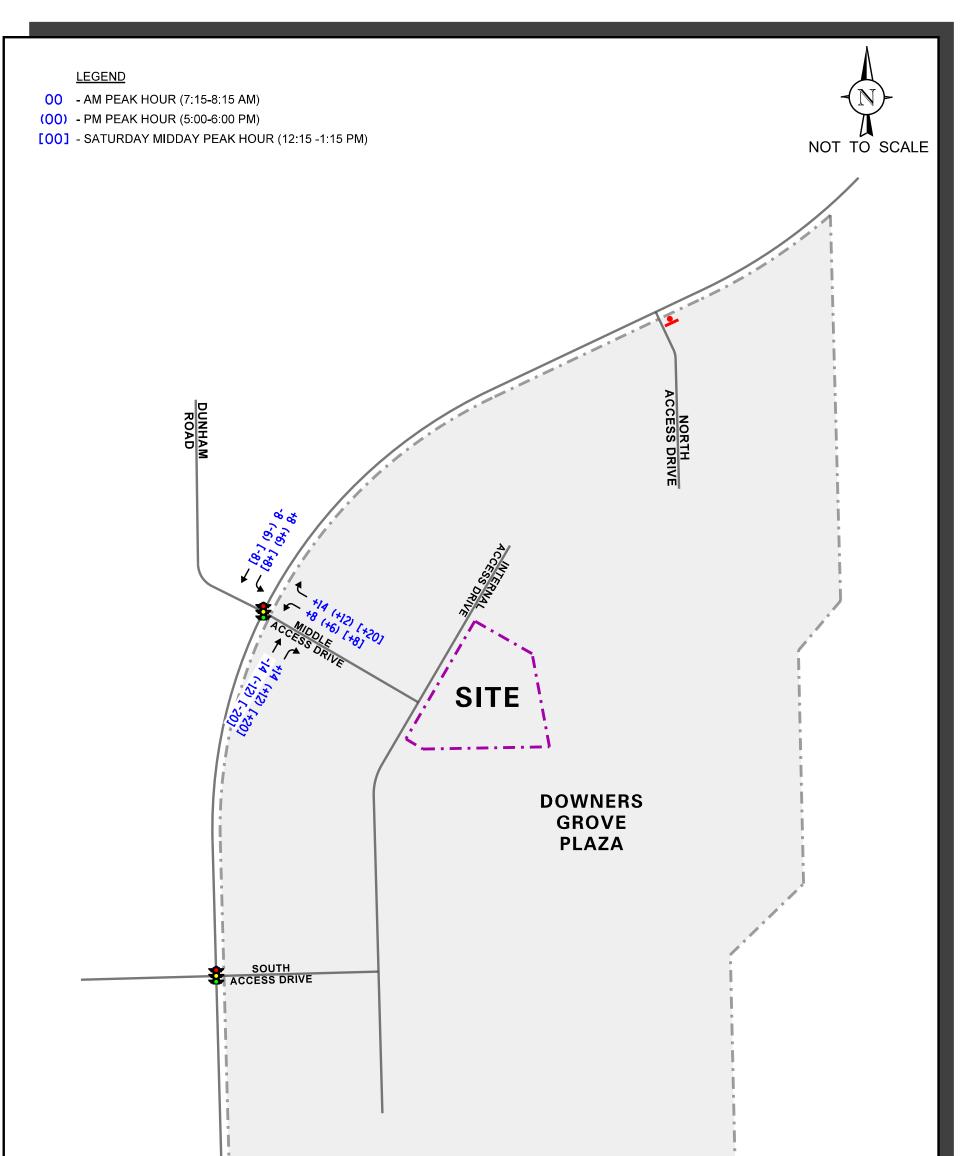
Figure 8 shows the Year 2027 no-build traffic conditions. A copy of the CMAP 2050 projections letter is included in the Appendix.

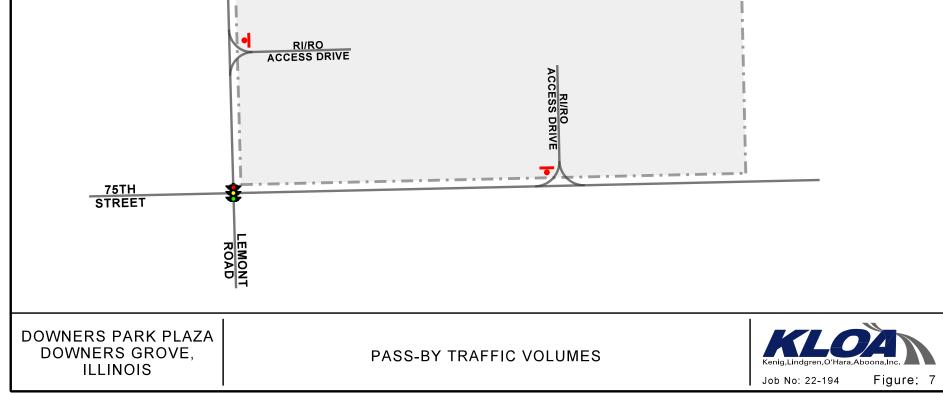
Year 2027 Total Projected Traffic Conditions

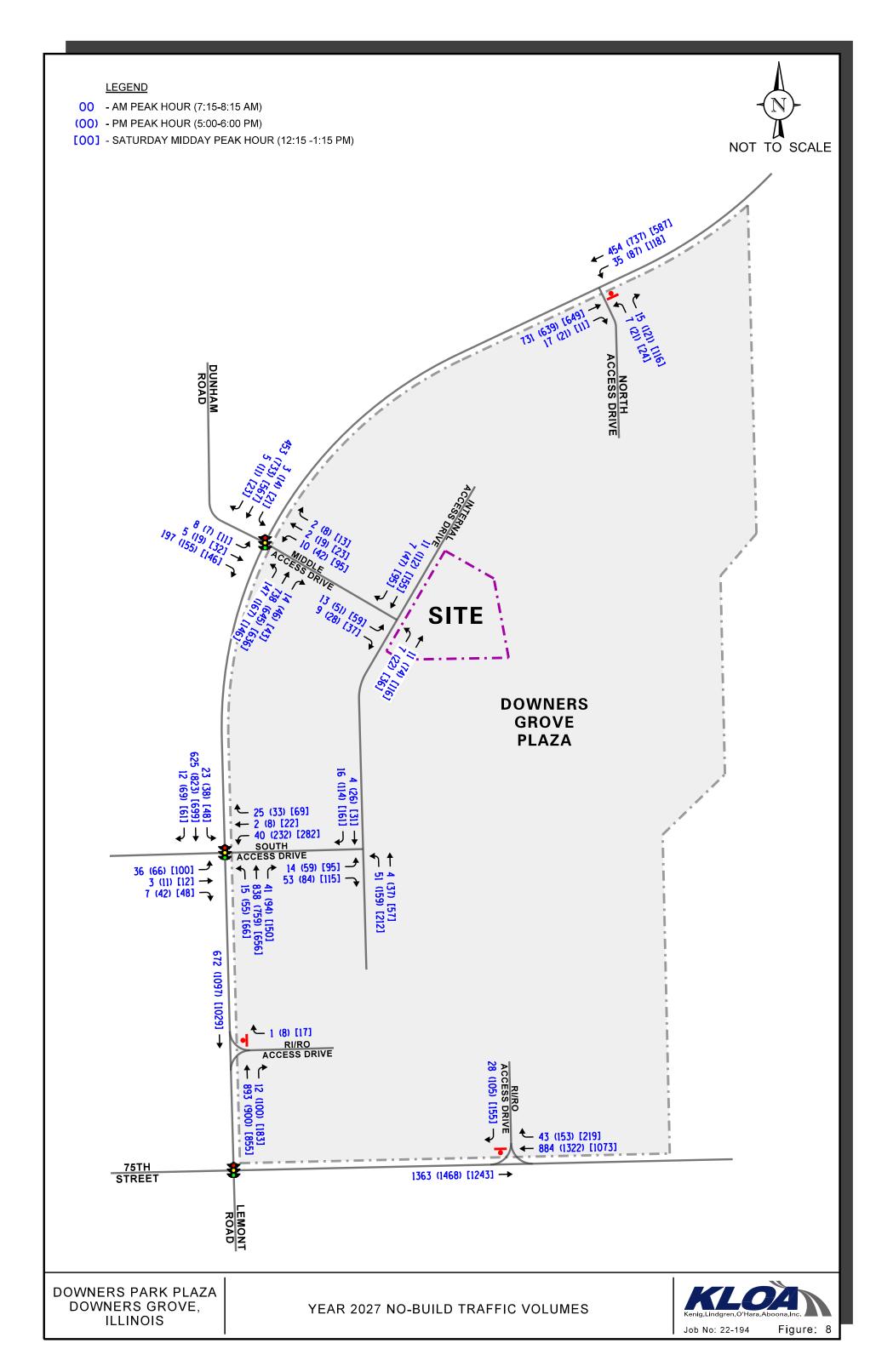
The new and pass-by development-generated traffic (Figures 6 and 7) was added to the no-build traffic volumes (Figure 8) to determine the Year 2027 total projected traffic volumes, which are illustrated in **Figure 9**.

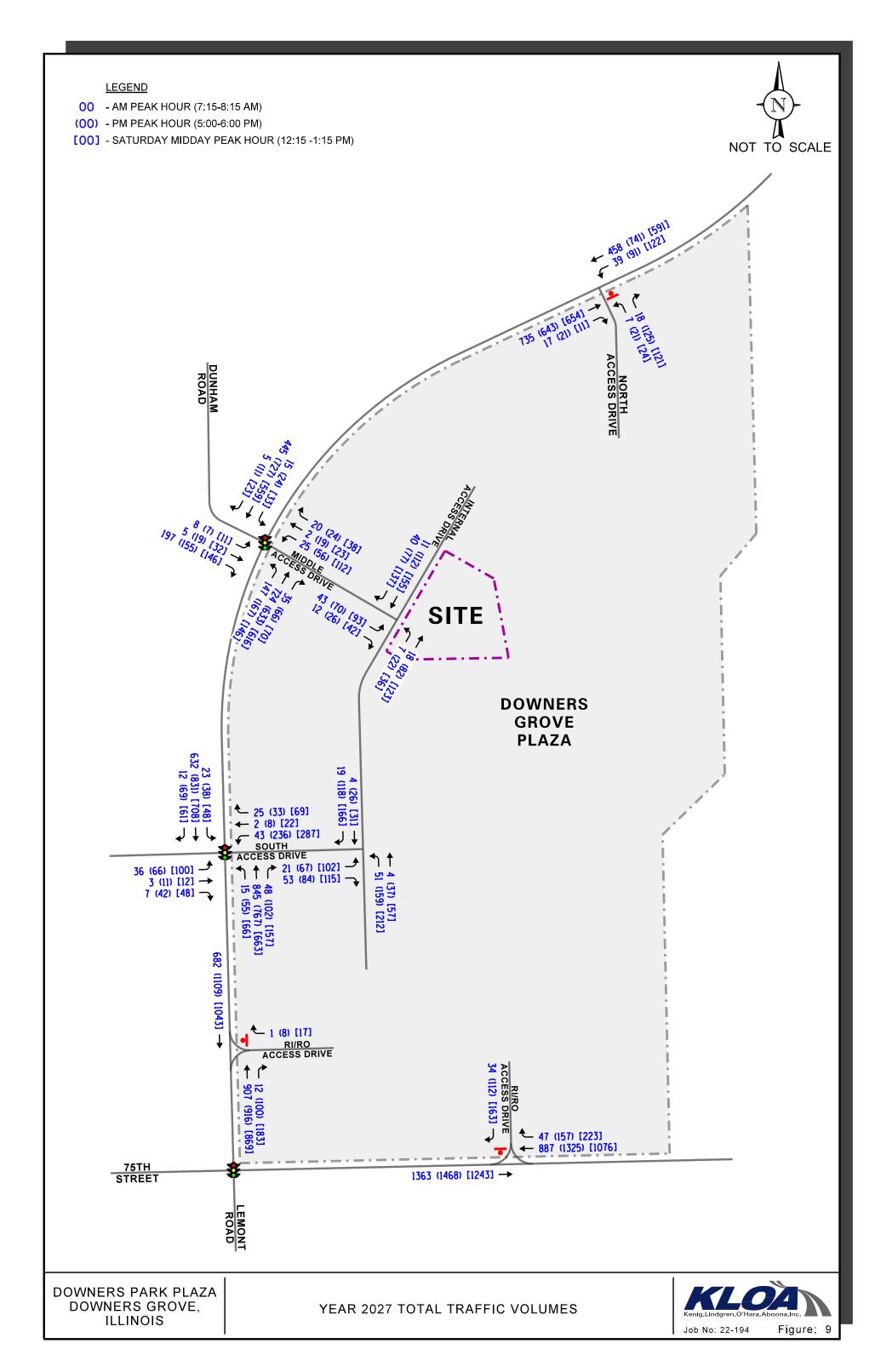












5. Traffic Analysis and Recommendations

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)*, 6th Edition and analyzed using Synchro/SimTraffic 11 software. The analysis for the traffic-signal controlled intersections were accomplished using fields 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 | Easth | ound | Westl | oound | North | oound | South | bound | Overall |
|---|----------------------|------------------|--|----------------|-----------|-------------|----------|-----------------|-----------|-----------|
| | I Cak Hour | L/T | R | L/T | R | L | T/R | L | T/R | Overall |
| | Weekday | С | С | С | A | A | А | A | В | В |
| | Morning | 20.8 | 34.3 | 20.7 | 0.0 | 3.8 | 5.7 | 6.0 | 13.4 | 11.6 |
| 21 ns | Peak Hour | | 33.4 | C – | | A – | | B – | | |
| 20) itio | Weekday | С 24.2 | C 34.4 | C 26.4 | C 22.8 | A 3.8 | A 2.5 | A 4.9 | B 12.3 | В |
| Year 2021 Conditions | Evening Peak Hour | | <u> </u> | 20.4 C – | | 3.8 A – | | 4.9 B- | | 10.4 |
| Ye Co | Saturday | C – | C | C – | C | A – | 2.0 A | A A | B | |
| | Midday | 25.4 | 34.4 | 32.5 | 23.3 | 3.7 | 3.5 | 4.7 | 11.2 | В |
| | Peak Hour | | 32.4 | C – | | A – | | B – | | 11.3 |
| | Weekday | С | С | С | В | А | А | А | В | В |
| uild | Morning | 20.8 | 34.3 | 20.8 | 20.0 | 3.2 | 5.1 | 6.0 | 13.5 | В 11.3 |
| -Bu | Peak Hour | | 33.4 | C – | | A – | | B – | | 11.5 |
| · 2027 No-B Conditions | Weekday | С | С | С | С | А | А | Α | В | В |
| 27 Idi | Evening | 24.2 | 34.4 | 27.0 | 23.0 | 3.5 | 2.0 | 4.9 | 12.5 | 10.2 |
| 20) 01 | Peak Hour | | 33.0 | C – | | A – | | B – | 1 | _ |
| Year 2027 No-Build Conditions | Saturday | C 25.4 | C | C | C | A | A | A | B | В |
| Ye | Midday Book Howy | 25.4 | 34.4 | 33.9 | 23.6 | 3.8 | 3.5 | 5.0 | 11.8 | 11.6 |
| | Peak Hour | C – C – | 32.4 C | C – | 32.8 C | A – | | B – | | |
| su | Weekday Morning | 20.8 | 34.3 | 22.0 | 21.3 | A 3.3 | A 5.2 | A 6.0 | B 13.5 | В |
| otal itio | Peak Hour | | $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | | | A-4.9 | | B – 13.3 | | 11.5 |
| T ₀ | Weekday | C | C | C | С | A | A | A | B | |
| 027 Cc | Evening | 24.2 | 34.4 | 28.1 | 24.2 | 3.5 | 2.1 | 4.8 | 12.4 | B |
| r 2(ted | Peak Hour | C – | 33.0 | C – | 27.2 | A – | 2.3 | B – | 12.4 | 10.5 |
| Year 2027 Total Projected Conditions | Saturday | С | С | D | С | А | А | А | В | В |
| Pro | Midday | 25.4 | 34.3 | 36.8 | 25.3 | 3.8 | 3.5 | 5.1 | 11.8 | Б 12.2 |
| | Peak Hour | | 32.3 | | 34.3 | A – | 3.5 | B – | | 12.2 |
| Letter denot | es Level of Service | ; Delay is measu | red in seconds. | L – Left Turns | | T – Through | | R – Right Turns | S | |



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

| | Deck Hour | Easth | ound | Westl | oound | North | bound | Se | outhbou | nd | Orrenall |
|---|---------------------------------|------------------|-------------------|------------------|-------------------|--------------------|-------------------|-----------|--|----------|-----------|
| | Peak Hour | L | T/R | L | T/R | L | T/R | L | Т | R | Overall |
| 1 IS | Weekday Morning Peak Hour | С 27.8 С – | C 21.2 26.4 | C 26.9 C – | C 25.5 26.6 | A 3.0 A – | A 5.7 5.7 | A 0.6 | A 2.0 A - 1.9 | A 0.0 | A 5.0 |
| Year 2021 Conditions | Weekday Evening Peak Hour | C 28.0 C – | B 16.6 22.9 | D 43.5 D – | B 18.7 40.7 | B 12.1 B - 1 | B 13.4 | A 5.5 | A 8.2 A - 7.6 | A 0.6 | B 14.2 |
| C ₀ | Saturday Midday Peak Hour | C 23.2 C – | B 16.6 | C 32.6 | B 18.0 29.5 | A 7.9 B-1 | B 11.6 | A 3.3 | A 7.4 A - 6.7 | A 0.2 | B 12.8 |
| Build s | Weekday Morning Peak Hour | C 29.0 C – | C 21.2 | C 24.4 | B 15.1 20.7 | A 4.8 A – | A 8.5 | A 1.9 | $\begin{array}{c c} A \\ \hline A \\ \hline 2.7 \\ \hline A - 2.6 \end{array}$ | A 0.0 | A 7.1 |
| Year 2027 No-Build Conditions | Weekday Evening Peak Hour | C 31.8 C – | B 16.6 25.0 | D 54.8 D – | B 16.0 49.0 | B 13.3 B – 1 | B 15.3 15.1 | A 5.8 | A 8.3 A - 7.6 | A 0.6 | В 16.7 |
| Year 2 Co | Saturday Midday Peak Hour | С 22.2 С – | B 16.6 | C 29.7 | B 15.7 26.3 | A 9.7 B-1 | B 15.0 | A 4.6 | A 8.9 A - 8.0 | A 0.2 | B 14.6 |
| Total nditions | Weekday Morning Peak Hour | C 29.0 C – | C 21.2 | C 24.6 | B 15.1 20.9 | A 4.9 A – | A 8.5 | A 2.1 | A 2.8 A - 2.7 | A 0.0 | A 7.2 |
| Year 2027 Total Projected Conditions | Weekday Evening Peak Hour | C 31.8 C – | B 16.6 | E 56.4 D – | B 16.0 | B 13.3 B – 1 | В 15.4 | A 6.1 | A 8.6 A - 7.9 | A 0.7 | В 17.0 |
| Year Project | Saturday Midday Peak Hour | C 21.9 C – | В 16.6 | С 29.7 | B 15.7 26.3 | A 9.8 B – 1 | В 15.3 | A 4.8 | A 9.1 A - 8.1 | A 0.2 | В 14.7 |
| Letter denot | tes Level of Service | | | L – Left Turns | | T – Through | / | R – Right | | | |



CAPACITY ANALYSIS RESULTS UNSIGNALIZED INTERSECTIONS – BASE CONDITIONS

| Intersection | Mor | kday ning Hour | Eve | ekday ening Hour | Saturday Midday Peak Hour | |
|--|-------------|----------------------|-----|------------------------|---------------------------------|-------|
| | LOS | Delay | LOS | Delay | LOS | Delay |
| Lemont Road with North Access E | Drive | | | | | |
| Westbound Approach | В | 12.9 | В | 13.6 | В | 13.5 |
| • Southbound Left Turns | В | 11.2 | А | 9.2 | А | 9.3 |
| Lemont Road with Right-In/Right | -Out Acces | s Drive | | | | |
| • Westbound Right Turns | В | 11.6 | В | 12.0 | В | 12.1 |
| 75 th Street with Right-In/Right-Ou | it Access D | rive | | | | |
| • Southbound Right Turns | В | 13.8 | С | 20.7 | С | 19.0 |
| Middle Access Drive with Internal | Drive | | | | | |
| • ICU Level of Service ¹ | А | 14.0% | А | 25.7% | А | 33.3% |
| South Access Drive with Internal l | Drive | | | | | |
| • ICU Level of Service ¹ | А | 13.5% | А | 28.5% | А | 35.3% |

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.



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

| Intersection | Moi | Weekday Morning Peak Hour | | kday ning Hour | Saturday Midday Peak Hour | |
|--|-------------|---------------------------------|-----|----------------------|---------------------------------|-------|
| | LOS | Delay | LOS | Delay | LOS | Delay |
| Lemont Road with North Access I | Drive | | | | | |
| • Westbound Approach | В | 13.2 | В | 14.4 | В | 14.3 |
| • Southbound Left Turns | В | 11.5 | А | 9.4 | А | 9.5 |
| Lemont Road with Right-In/Right | t-Out Acces | s Drive | | | | |
| • Westbound Right Turns | В | 11.8 | В | 12.2 | В | 12.9 |
| 75 th Street with Right-In/Right-Ou | ut Access D | rive | | | | |
| • Southbound Right Turns | В | 14.7 | С | 24.3 | С | 23.3 |
| Middle Access Drive with Interna | l Drive | | | | | |
| • ICU Level of Service ¹ | А | 16.8% | А | 27.2% | А | 35.4% |
| South Access Drive with Internal | Drive | | | | | |
| • ICU Level of Service ¹ | А | 19.7% | А | 32.5% | А | 41.6% |

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.



CAPACITY ANALYSIS RESULTS UNSIGNALIZED INTERSECTIONS - YEAR 2027 TOTAL PROJECTED CONDITIONS

| Intersection | Mor | kday rning Hour | Eve | kday ning Hour | Saturday Midday Peak Hour | |
|--|-----------|-----------------------|----------------|----------------------|---------------------------------|------------|
| | LOS | Delay | LOS | Delay | LOS | Delay |
| Lemont Road with North Access D | rive | | | | | |
| Westbound Approach | В | 13.1 | В | 14.5 | В | 14.4 |
| • Southbound Left Turns | В | 11.6 | А | 9.4 | А | 9.6 |
| Lemont Road with Right-In/Right- | Out Acces | s Drive | | | | |
| • Westbound Right Turns | В | 11.9 | В | 12.3 | В | 13 |
| 75 th Street with Right-In/Right-Out | Access D | rive | | | | |
| • Southbound Right Turns | В | 13.7 | D | 25.2 | С | 24.3 |
| Middle Access Drive with Internal | Drive | | | | | |
| • ICU Level of Service ¹ | А | 17.1% | А | 30.3% | А | 40.1% |
| South Access Drive with Internal D | rive | | | | | |
| • ICU Level of Service ¹ | А | 19.7% | А | 33.1% | А | 42.3% |
| LOS = Level of Service Delay is measured in seconds. 1 - The operation of this intersection is base Intersection Capacity Utilization (ICU) metho | | al volume to s | saturation flo | ow (v/s) evalu | ation also kn | own as the |



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 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.



75th 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 nobuild 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 intersections 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 morning 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 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*, 5th 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*, 5th 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*, 5th 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 9EXISTING PARKING SURVEYS – THURSDAY, SEPTEMBER 9, 2021

| | Parking Lots | | | | | | | | | | | | | | Percent | | | |
|-----------|--------------|---|----|-----|-----|-----|-----|----|---|----|-----|-----|----|----|---------|----|-------|----------|
| Time | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | Total | Occupied |
| 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% |
| Inventory | 65 | 0 | 13 | 187 | 143 | 201 | 222 | 41 | 0 | 95 | 249 | 101 | 33 | 13 | 42 | 0 | 1405 | |



| EXISTING PARKING SURVEYS – SATURDAY, SEPTEMBER 11, 2021 Parking Lots Parcont | | | | | | | | | | | | | | | | | | |
|--|----|---|----|-----|-----|-----|----------|-------|------|-----|-----|-----|----|----|----|----|-------|----------|
| Time e | | | | 1 | 1 | | Pa Pa | arkin | g Lo | ots | | | 1 | | 1 | | Tatal | Percent |
| Time | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | Total | Occupied |
| 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% |
| Inventory | 65 | 0 | 13 | 187 | 143 | 201 | 222 | 41 | 0 | 95 | 249 | 101 | 33 | 13 | 42 | 0 | 1405 | |

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



| 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 |



| 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 12PROJECTED PANERA BREAD 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 |

Table 13VACANT RETAIL SPACE HOURLY PARKING DEMAND



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.



| PROJECTED HOURLY PARKING OCCUPANCY - WEEKDAY | | | | | | | | | | | | |
|--|------------------|------------------------------------|-----------------|--------------------|-------|---------------------|--|--|--|--|--|--|
| Time | Existing Surveys | Under Construction Panera Bread | Vacant Space | Proposed Outlot | Total | Percent 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% | | | | | | |
| Inventory | | | | | 1,269 | | | | | | | |

| Table 14 |
|--|
| PROJECTED HOURLY PARKING OCCUPANCY - WEEKDAY |



| Time | Existing Surveys | Under Construction Panera Bread | Vacant Space | Proposed Outlot | Total | Percent 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% |
| Inventory | | | | | 1,269 | |

Table 15 PROJECTED HOURLY PARKING OCCUPANCY - SATURDAY



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

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Count Name: Old Sutton Rd with Penny Rd Site Code: Start Date: 10/13/2021 Page No: 1

| | | | Int. Total | 71 | 80 | 78 | 97 | 326 | 91 | 54 | 44 | 43 | 232 | | 84 | 89 | 67 | 84 | 324 | 92 | 86 | 75 | 74 | 327 | 1209 | | | 1145 | 94.7 | 13 | 1.1 | 21 | 1.7 | 29 | 2.4 | - |
|----------------------|---------------|------------|---------------|---------|---------|---------|---------|--------------|---------|---------|---------|---------|--------------|---------------|---------|---------|---------|---------|--------------|---------|---------|---------|---------|--------------|-------------|------------|---------|--------|----------|-------|---------|--------------------|-------------------------|--------------------|-------------------------|------------------|
| | | | App. Total | 6 | 6 | 11 | 18 | 47 | 18 | 9 | 8 | 5 | 37 | | 13 | 7 | 10 | 10 | 40 | 14 | 10 | 9 | 4 | 34 | 158 | | 13.1 | 152 | 96.2 | 0 | 0.0 | 9 | 3.8 | 0 | 0.0 | 0 |
| | | | Peds | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | - | | | | | |
| | on Rd | punc | Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | | ۲ | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | в | 1.9 | 0.2 | в | 100.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| | Old Sutton Rd | Southbound | Thru | 3 | 5 | 6 | 12 | 29 | 15 | 5 | 3 | 3 | 26 | | 9 | 5 | 5 | 4 | 20 | 8 | 9 | - | 4 | 19 | 94 | 59.5 | 7.8 | 89 | 94.7 | 0 | 0.0 | 5 | 5.3 | 0 | 0.0 | 0 |
| | | | Left | 6 | 4 | 2 | 6 | 18 | 3 | ÷ | 4 | 2 | 10 | | 9 | 2 | 5 | 5 | 18 | 6 | 4 | 5 | 0 | 15 | 61 | 38.6 | 5.0 | 60 | 98.4 | 0 | 0.0 | - | 1.6 | 0 | 0.0 | 0 |
| | | | U-Turn | 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 |
| | | | App. Total | 8 | 12 | 13 | 17 | 50 | 11 | 12 | 4 | 4 | 31 | | 20 | 29 | 18 | 26 | 93 | 31 | 25 | 24 | 22 | 102 | 276 | , | 22.8 | 267 | 96.7 | ю | 1.1 | 5 | 1.8 | - | 0.4 | 0 |
| | | | Peds | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | - | | | | | |
| | on Rd | puno | Right | 4 | 3 | 4 | 6 | 17 | 4 | с | 1 | 0 | 8 | | 3 | ю | 3 | 5 | 14 | 1 | 2 | 0 | - | 4 | 43 | 15.6 | 3.6 | 38 | 88.4 | 2 | 4.7 | 2 | 4.7 | - | 2.3 | 0 |
| | Old Sutton Rd | Northbound | Thru | 4 | 5 | 5 | 3 | 17 | 5 | 9 | 3 | 4 | 18 | • | 2 | 13 | 6 | 12 | 33 | 10 | 8 | 14 | 7 | 39 | 107 | 38.8 | 8.9 | 105 | 98.1 | - | 0.9 | - | 0.9 | 0 | 0.0 | 0 |
| ata | | | Left | 0 | 4 | 4 | 8 | 16 | 2 | е | 0 | 0 | 5 | | 15 | 13 | 6 | 6 | 46 | 20 | 15 | 10 | 14 | 59 | 126 | 45.7 | 10.4 | 124 | 98.4 | 0 | 0.0 | 2 | 1.6 | 0 | 0.0 | 0 |
| ient D | | | U-Tum | 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 |
| urning Movement Data | | | App. Total | 9 | 21 | 25 | 21 | 76 | 23 | 13 | 15 | 14 | 65 | | 32 | 42 | 22 | 28 | 124 | 35 | 32 | 21 | 33 | 121 | 386 | , | 31.9 | 347 | 89.9 | 9 | 1.6 | 8 | 2.1 | 25 | 6.5 | 0 |
| ing N |) | | Peds | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | ı | | | | - | | | | | |
| Turn | | ound | Right | 4 | 6 | 8 | 10 | 31 | 10 | 9 | 6 | 3 | 25 | | 10 | 10 | 5 | 9 | 31 | 8 | 8 | 9 | 14 | 36 | 123 | 31.9 | 10.2 | 112 | 91.1 | 5 | 4.1 | 5 | 4.1 | - | 0.8 | 0 |
| | Penny Rd | Westbound | Thru | 5 | 10 | 14 | 11 | 40 | 11 | 9 | 7 | 10 | 34 | | 17 | 30 | 16 | 22 | 85 | 26 | 20 | 13 | 17 | 76 | 235 | 60.9 | 19.4 | 209 | 88.9 | - | 0.4 | e | 1.3 | 22 | 9.4 | 0 |
| | | | Left | 0 | 2 | 3 | 0 | 5 | 2 | ÷ | 2 | 1 | 6 | | 5 | 2 | 1 | 0 | 8 | 1 | 4 | 2 | 2 | 6 | 28 | 7.3 | 2.3 | 26 | 92.9 | 0 | 0.0 | 0 | 0.0 | 2 | 7.1 | 0 |
| | | | U-Turn | 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 |
| | | | App. Total | 45 | 38 | 29 | 41 | 153 | 39 | 23 | 17 | 20 | 99 | - | 19 | 11 | 17 | 20 | 67 | 12 | 19 | 24 | 15 | 70 | 389 | ' | 32.2 | 379 | 97.4 | 4 | 1.0 | 2 | 0.5 | 3 | 0.8 | 1 |
| | | | Peds | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | , | | | - | | | | | |
| | y Rd | puno | Right | 10 | 6 | 8 | 6 | 36 | 12 | 4 | 4 | 9 | 26 | | 9 | 0 | 4 | 7 | 17 | 4 | 5 | 7 | 5 | 21 | 100 | 25.7 | 8.3 | 66 | 0.06 | 0 | 0.0 | - | 1.0 | 0 | 0.0 | 0 |
| | Penny Rd | Eastbound | Thru | 33 | 27 | 20 | 32 | 112 | 27 | 19 | 13 | 13 | 72 | | 13 | 11 | 13 | 13 | 50 | 8 | 13 | 17 | 10 | 48 | 282 | 72.5 | 23.3 | 276 | 97.9 | - | 0.4 | - | 0.4 | 3 | 1.1 | - |
| | | | Left | 2 | 2 | ٢ | 0 | 5 | 0 | 0 | 0 | ٢ | + | | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | - | 7 | 1.8 | 0.6 | 4 | 57.1 | e | 42.9 | 0 | 0.0 | 0 | 0.0 | 0 |
| | | | U-Tum | 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 |
| | | | Start Time | 7:00 AM | 7:15 AM | 7:30 AM | 7:45 AM | Hourly Total | 8:00 AM | 8:15 AM | 8:30 AM | 8:45 AM | Hourly Total | *** BREAK *** | 4:00 PM | 4:15 PM | 4:30 PM | 4:45 PM | Hourly Total | 5:00 PM | 5:15 PM | 5:30 PM | 5:45 PM | Hourly Total | Grand Total | Approach % | Total % | Lights | % Lights | Buses | % Buses | Single-Unit Trucks | % Single-Unit Trucks | Articulated Trucks | % Articulated Trucks | Bicycles on Road |

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

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

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

| | | Int. Total | 84 | 89 | 67 | 84 | 324 | - | - | 0.910 | 315 | 97.2 | 0 | 0.0 | 9 | 1.9 | 3 | 0.9 | 0 | 0.0 | | |
|---|-----------------------------|---------------|---------|---------|---------|---------|-------|------------|---------|-------|--------|----------|-------|---------|--------------------|-------------------------|--------------------|-------------------------|------------------|-----------------------|-------------|---------------|
| | | App. Total | 13 | 7 | 10 | 10 | 40 | | 12.3 | 0.769 | 39 | 97.5 | 0 | 0.0 | - | 2.5 | 0 | 0.0 | 0 | 0.0 | | |
| | | Peds | 0 | 0 | 0 | 0 | 0 | | | | | | | | , | | | | | | 0 | |
| | Old Sutton Rd Southbound | Right | ٢ | 0 | 0 | ٢ | 2 | 5.0 | 0.6 | 0.500 | 2 | 100.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |
| | Old Su South | Thru | 9 | 5 | 5 | 4 | 20 | 50.0 | 6.2 | 0.833 | 19 | 95.0 | 0 | 0.0 | - | 5.0 | 0 | 0.0 | 0 | 0.0 | | |
| | | Left | 9 | 2 | 5 | 5 | 18 | 45.0 | 5.6 | 0.750 | 18 | 100.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |
| - | | U-Tum | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.000 | 0 | | 0 | | 0 | | 0 | | 0 | | | |
| | | App. Total | 20 | 29 | 18 | 26 | 93 | | 28.7 | 0.802 | 91 | 97.8 | 0 | 0.0 | 2 | 2.2 | 0 | 0.0 | 0 | 0.0 | | • |
| | | Peds | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | 0 | ı |
| PM) | Old Sutton Rd Northbound | Right | 3 | 3 | 3 | 5 | 14 | 15.1 | 4.3 | 0.700 | 14 | 100.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |
| (4:00 | Old Su North | Thru | 2 | 13 | 9 | 12 | 33 | 35.5 | 10.2 | 0.635 | 32 | 97.0 | 0 | 0.0 | - | 3.0 | 0 | 0.0 | 0 | 0.0 | | |
| Data | | Left | 15 | 13 | 6 | 6 | 46 | 49.5 | 14.2 | 0.767 | 45 | 97.8 | 0 | 0.0 | - | 2.2 | 0 | 0.0 | 0 | 0.0 | | |
| Hour | | U-Tum | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.000 | 0 | | 0 | | 0 | | 0 | | 0 | | | |
| Turning Movement Peak Hour Data (4:00 PM) | | App. Total | 32 | 42 | 22 | 28 | 124 | | 38.3 | 0.738 | 118 | 95.2 | 0 | 0.0 | в | 2.4 | 3 | 2.4 | 0 | 0.0 | | |
| nent F | | Peds | 0 | 0 | 0 | 0 | 0 | | | | | | | | , | | | | | | 0 | ī |
| loven | Penny Rd Westbound | Right | 10 | 10 | 5 | 9 | 31 | 25.0 | 9.6 | 0.775 | 30 | 96.8 | 0 | 0.0 | - | 3.2 | 0 | 0.0 | 0 | 0.0 | | |
| ning N | Penn Westh | Thru | 17 | 30 | 16 | 22 | 85 | 68.5 | 26.2 | 0.708 | 81 | 95.3 | 0 | 0.0 | 2 | 2.4 | 2 | 2.4 | 0 | 0.0 | | |
| Turn | | Left | 5 | 2 | ٢ | 0 | 8 | 6.5 | 2.5 | 0.400 | 7 | 87.5 | 0 | 0.0 | 0 | 0.0 | ٢ | 12.5 | 0 | 0.0 | | |
| | | U-Turn | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.000 | 0 | | 0 | | 0 | | 0 | | 0 | | | |
| | | App. Total | 19 | 11 | 17 | 20 | 67 | | 20.7 | 0.838 | 67 | 100.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |
| | | Peds | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | 0 | |
| | y Rd ound | Right | 9 | 0 | 4 | 7 | 17 | 25.4 | 5.2 | 0.607 | 17 | 100.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |
| | Penny Rd Eastbound | Thru | 13 | 11 | 13 | 13 | 50 | 74.6 | 15.4 | 0.962 | 50 | 100.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | | |
| | | Left | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.000 | 0 | | 0 | | 0 | | 0 | | 0 | | | • |
| | | U-Tum | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.000 | 0 | | 0 | | 0 | | 0 | | 0 | | | I |
| | | Start Time | 4:00 PM | 4:15 PM | 4:30 PM | 4:45 PM | Total | Approach % | Total % | PHF | Lights | % Lights | Buses | % Buses | Single-Unit Trucks | % Single-Unit Trucks | Articulated Trucks | % Articulated Trucks | Bicycles on Road | % Bicycles on Road | Pedestrians | % Pedestrians |

12/15/21 13:12:11

Barrington, ILWeather: Cool and DryOld Sutton Rd and Access Dr South of PennyRdTuesday December 14, 2021 Passenger Vehicles Only

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

| Begin Time | N- | Appro TH | ach LT | E-i RT | Approa TH | ach LT | S- RT | Appro: TH | ach LT | W-2 RT | Approa TH | ach LT | Int Total |
|----------------|-------|-----------------|--------------------|------------|--------------|-------------------|-------------|--------------------|-----------|-----------|--------------|-----------|-----------------------|
| 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 |
| ===== Total | 0 | 345 | = = == 7 | ===== 4 | 0 | = === 2 | ==== | ==== 377 | 0 | 0 | 0 | 0 | == = == 738 |

Intersection # 8 dec/oldsutton/accspenny/cars

| Barrington, IL | Weather: Cool and Dry | 12/15/21 |
|--------------------------|----------------------------|----------|
| Old Sutton Rd and Access | s Dr South of PennyRd | 13:12:11 |
| Tuesday December 14, 202 | 21 Passenger Vehicles Only | |

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

| | Intersec | tion # | 8 dec/ | oldsutto | on/accspenn | y/cars | | | |
|--------------|---------------|-------------|--------------|----------|--|--------------|--------------|-------|-------------|
| Begin | | Approa | ch Total | s | | Exit | Totals | | Int |
| Time | N | E | S | W | N | Е | S | W | Total |
| ===== 600 | ======== 5 | ====== 0 | ======= 6 | 0 | ====================================== | ======= 1 | ======= 5 | 0 | ===== 11 |
| 615 | 13 | ů 0 | 4 | Ö | 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 | 12/15/21 |
|--------------------------|---------------------------|----------|
| Old Sutton Rd and Access | Dr South of PennyRd | 13:12:11 |
| Tuesday December 14, 202 | 1 Passenger Vehicles Only | |

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

| | Inter | sectio | on # | 8 de | c/old | sutto | n/accs | penny | /cars | | | | |
|--------------|---------|--------|-----------|-------|--------|-----------|-------------|--------|-----------|-------|--------|-----------|-------------|
| Begin | N-2 | Approa | ach | E-2 | Approa | ach | s- | Appro | ach | W-2 | Approa | ach | Int |
| Time | RT | TH | LT | RT | ТН | LT | RT | ТН | LT | RT | ТН | LT | Total |
| ===== 600 | | 20 | ==== 0 | | 0 | ==== 0 | ====== 4 | 20 | ==== 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 | | 0 | 0 | | 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 | 12/15/21 |
|--------------------------|----------------------------|----------|
| Old Sutton Rd and Access | s Dr South of PennyRd | 13:12:11 |
| Tuesday December 14, 202 | 21 Passenger Vehicles Only | |

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

| | Intersect | ion # | 8 dec/o | ldsutto | n/accspenny | /cars | | | |
|--------------|-----------|---------|----------|---------|-------------|--------|---------|--------|-------------|
| Begin | | Approac | h Totals | | | Exit 1 | rotals | | Int |
| Time | N | E | S | W | N | E | S | W | Total |
| ===== 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 | 12/15/21 |
|--------------------------|----------------------------|----------|
| Old Sutton Rd and Access | s Dr South of PennyRd | 13:12:11 |
| Tuesday December 14, 202 | 21 Passenger Vehicles Only | |

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

| Intersection # | 8 | dec/oldsutton/ | accspenny/ | cars |
|----------------|---|----------------|------------|------|
|----------------|---|----------------|------------|------|

| | ===== | | | | | | | ===== | | | | ==== | |
|--------------|-------|-------------|-----------|-------|--------|-----------|------------|----------------------|-----------|-------|-------------|-----------|-------------|
| Begin | N-2 | Approa | ach | E-2 | Approa | ach | s- | Appro | ach | W-2 | Approa | ach | Int |
| Time | RT | ТН | LT | RT | ТН | LT | RT | ТН | LT | RT | ТН | LT | Total |
| ===== 600 | | ===== 42 | ==== 2 | | 0 | ==== 1 | ===== 2 | == = == 15 | ==== 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 | | 2 | 0 | | 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 | 12/15/21 |
|-------------------------|----------------------------|----------|
| Old Sutton Rd and Acces | s Dr South of PennyRd | 13:12:11 |
| Tuesday December 14, 20 | 21 Passenger Vehicles Only | |

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

| in | A | pproac | h Totals | : | | Exit 1 | otals | | Int |
|----|----|--------|----------|---|-----|--------|-------|---|--------|
| me | N | E | S | W | N | Е | S | W | Total |
| 00 | 44 | 1 | 17 | 0 | 15 | 4 | 43 | 0 | 62 |
| 15 | 54 | 1 | 16 | 0 | 15 | 5 | 51 | 0 | 71 |
| 0 | 54 | 1 | 24 | 0 | 24 | 4 | 51 | 0 | 79 |
| 45 | 57 | 0 | 34 | 0 | 34 | 4 | 53 | 0 | 91 |
| 00 | 52 | 0 | 35 | 0 | 35 | 2 | 50 | 0 | 87 |
| 15 | 55 | 0 | 34 | 0 | 34 | 0 | 55 | 0 | 89 |
| 30 | 54 | 0 | 33 | 0 | 33 | 0 | 54 | 0 | 87 |
| 45 | 55 | 0 | 24 | 0 | 24 | 0 | 55 | 0 | 79 |
| 00 | 53 | 0 | 30 | 0 | 30 | 0 | 53 | 0 | 83 |
| 15 | 35 | 0 | 26 | 0 | 26 | 0 | 35 | 0 | 61* |
| 30 | 23 | 0 | 15 | 0 | 15 | 0 | 23 | 0 | 38* |
| 15 | 9 | 0 | 11 | 0 | 11 | 0 | 9 | 0 | 20* |
| 00 | 49 | 3 | 76 | 0 | 77 | 2 | 49 | 0 | 128 |
| 15 | 61 | 3 | 87 | 0 | 89 | 0 | 62 | 0 | 151 |
| 30 | 70 | 4 | 103 | 0 | 106 | 1 | 70 | 0 | 177 |
| 5 | 84 | 2 | 110 | 0 | 112 | 1 | 83 | 0 | 196 |
| 0 | 83 | 2 | 114 | 0 | 116 | 1 | 82 | 0 | 199 |
| L5 | 83 | 1 | 114 | 0 | 115 | 1 | 82 | 0 | 198 |
| 30 | 83 | 0 | 108 | 0 | 108 | 0 | 83 | 0 | 191 |
| 45 | 69 | 0 | 115 | 0 | 115 | 0 | 69 | 0 | 184 |
| 00 | 71 | 0 | 108 | 0 | 108 | 1 | 70 | 0 | 179 |
| 15 | 47 | 0 | 78 | 0 | 78 | 1 | 46 | 0 | 125* |
| 0 | 26 | 0 | 52 | 0 | 52 | 1 | 25 | 0 | 78* |
| 5 | 16 | 0 | 21 | 0 | 21 | 1 | 15 | 0 | 37* |

12/15/21 13:15:23

Barrington, ILWeather: Cool and DryOld Sutton Rd and Access Dr South of PennyRdTuesday December 14, 2021Single Unit Trucks Only

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

| | | | | | ===== | ====== | | | -==== | .e | | | |
|----------------|-----------|--------------|-----------|-----------|--------------|-----------|-------------|--------------|-----------|-----------|--------------|-----------|--------------------|
| Begin Time | N-2 RT | Approa TH | ach LT | E-2 RT | Approa TH | ach LT | S-2 RT | Approa TH | ach LT | W-2 RT | Approa TH | ach LT | Int Total |
| 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 |
| ===== Total | 0 | 15 | 1 | 2 | 0 | ==== 1 | ====== 1 | 18 | 0 | 0 | 0 | 0 | === <u>=</u> 38 |

Intersection # 9 dec/oldsutton/accspenny/single

| Barrington, IL We | eather: Cool and Dry | 12/15/21 |
|-----------------------------|-------------------------|----------|
| Old Sutton Rd and Access Dr | r South of PennyRd | 13:15:23 |
| Tuesday December 14, 2021 | Single Unit Trucks Only | |

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

| Begin | ======== | | ======= h Totals | | on/accspenny | ====================================== | | | Int |
|--------------|----------|-----|---------------------|---|--------------|--|-------|---|-------|
| Time | N | E E | S | W | N | E E | S | W | Total |
| ===== 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 We | eather: Cool and Dry | 12/15/21 |
|-----------------------------|-------------------------|----------|
| Old Sutton Rd and Access Dr | r South of PennyRd | 13:15:23 |
| Tuesday December 14, 2021 | Single Unit Trucks Only | |

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

| Intersection | # | 9 | dec/oldsutton/accspenny/single |
|--------------|---|---|--------------------------------|
|--------------|---|---|--------------------------------|

| | ===== | ===== | ===== | ====== | ===== | ===== | ====== | ===== | ===== | ====== | ===== | ==== | |
|-------|--------|--------|---------------|--------|--------|---------------|--------|--------|-------|--------|--------|------|-------|
| Begin | N-2 | Approa | ach | E-2 | Approa | ach | S-2 | Approa | ach | W-2 | Approa | ach | Int |
| Time | RT | TH | \mathbf{LT} | RT | TH | \mathbf{LT} | RT | TH | LT | RT | TH | LT | Total |
| ===== | ====== | ===== | | ====== | ===== | ==== | ====== | ===== | ==== | ====== | ===== | ==== | ===== |
| 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 | Ō | 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 We | eather: Cool and Dry | 12/15/21 |
|-----------------------------|-------------------------|----------|
| Old Sutton Rd and Access Dr | r South of PennyRd | 13:15:23 |
| Tuesday December 14, 2021 | Single Unit Trucks Only | |

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

| | Intersec | tion # | 9 dec/ | oldsutt | on/accspenr | y/sing | le | | _ |
|-------|----------|--------|----------|---------|-------------|--------|---------|---|----------|
| Begin | | Approa | ch Total | s | | Exit | Totals | | - Int |
| Time | N | E | S | W | N | E | S | W | Total |
| ===== | | | | | | | | | = ===== |
| 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 We | eather: Cool and Dry | 12/15/21 |
|-----------------------------|-------------------------|----------|
| Old Sutton Rd and Access Dr | : South of PennyRd | 13:15:23 |
| Tuesday December 14, 2021 | Single Unit Trucks Only | |

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

| Intersection | # | 9 | dec/oldsutton/ | 'accspenny/single | ! |
|--------------|---|---|----------------|-------------------|---|
| | | | | | |

| | ===== | | | | | | | | | | | | |
|--------------|-------------|------------|-----------|-------|--------|-----------|-------|-------|-------|-------|------------|-----------|-------------|
| Begin | N-2 | Approa | ach | E-2 | Approa | ach | S-2 | Appro | ach | W-2 | Approa | ach | Int |
| Time | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | Total |
| ===== 600 | ====== 0 | ===== 1 | ==== 0 | | 0 | ==== 0 | | 0 | 0 | | ===== 0 | ==== 0 | ====== 1 |
| 615 | 0 | 2 | Ő | 0 | ŏ | 0 | 0 | Ö | 0 | 0 | 0 0 | 0 | 2 |
| 630 | 0 | 3 | ŏ | 2 | ŏ | 0 0 | 0 | 1 | Ő | 0 | Ő | 0 0 | 6 |
| 645 | 0 | 3 | ŏ | 2 | Ő | Ő | 0 | 3 | Ő | Ő | 0 0 | Õ | 8 |
| 700 | 0 | 3 | ŏ | 2 | Ő | õ | Õ | 8 | õ | õ | Ő | Õ | 13 |
| 715 | Ő | 3 | Ö | 2 | 0 | ō | 0 | 8 | Ő | Ő | 0 | Õ | 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 | | | 0 | 0 | | 0 | 2 | | 0 | 0 | 0 | |
| 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 We | eather: Cool and Dry | 12/15/21 |
|-----------------------------|-------------------------|----------|
| Old Sutton Rd and Access Dr | : South of PennyRd | 13:15:23 |
| Tuesday December 14, 2021 | Single Unit Trucks Only | |

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

| Intersection $#$ | 9 | dec/oldsutton/accspenny/single |
|------------------|---|--------------------------------|
|------------------|---|--------------------------------|

| | | | | | | | ======= | | = |
|--------------|---------|---------|----------|--------|---------|----------|---------|-------|--------------|
| Begin | | Approa | ch Total | s | | Exit | Totals | | Int |
| Time | N | E | S | W | N | E | S | W | Total |
| ===== 600 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | = ===== 1 |
| 615 | 2 | 0 0 | 0 | 0 | ů 0 | 0 | 2 | Ő | 2 |
| 630 | - 3 | 2 | 1 | 0 | 3 | 0 | 3 | Õ | 6 |
| 645 | 3 | 2 | -3 | 0 | 5 | 0 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* |
| ===== | ======= | ======= | | ====== | ======= | ======== | ======= | | = ===== |

12/15/21 13:17:17

Barrington, ILWeather: Cool and DryOld Sutton Rd and Access Dr South of PennyRdTuesday December 14, 2021Multi Unit Trucks Only

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

| | ====== | ===== | ===== | ======= | ===== | ===== | | ===== | ====== | ====== | | | |
|---------------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|-----------|--------------|-----------|--------------|
| Begin Time | N-2 RT | Appros TH | ach LT | E-2 RT | Appros TH | ach LT | S-2 RT | Appros TH | ach LT | W-2 RT | Approa TH | ach LT | Int Total |
| ===== 600 | | ===== 0 | ==== 0 | | 0 | ==== 0 | | ===== 0 | ==== 0 | | ===== 0 | ==== 0 | ===== 0 |
| 615 | 0 0 | ŏ | ŏ | Õ | Ő | Ő | õ | Ő | õ | Õ | Ő | ŏ | 0 |
| 630 | 0 0 | Ö | Ő | 0 | Õ | 0 | 0 | Ő | Ő | 0 | 0 | Ő | 0 |
| 645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 830 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1515 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1530 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1545 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ===== | ===== | ===== | | ===== | ===== | | ====== | | | | ===== | | ===== |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Intersection # 10 dec/oldsutton/accspenny/multi

| Barrington, IL We | eather: Cool and Dry | 12/15/21 |
|-----------------------------|------------------------|----------|
| Old Sutton Rd and Access Da | r South of PennyRd | 13:17:17 |
| Tuesday December 14, 2021 | Multi Unit Trucks Only | |

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

| | Intersec | tion # 1 | L0 dec/ | oldsutt | on/accspenr | ny/mult: | L ======= | | = |
|----------------|----------|---------------|----------|-------------|-------------|----------|--------------|-------------|--------------|
| Begin | | Approad | ch Total | s | | Exit | Totals | | Int |
| Time | N | E | S | W | N | E | S | W | Total |
| ===== 600 | 0 | ·======= 0 | 0 | ====== 0 | | 0 | | ====== 0 | ====== 0 |
| 615 | 0 0 | 0 | 0 | 0 | 0 | Ő | 0 | 0 | 0 |
| 630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 830 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1515 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1530 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1545 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ===== Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | = ===== 0 |

| Barrington, IL | Weather: Cool and Dry | 12/15/21 |
|---------------------------|------------------------|----------|
| Old Sutton Rd and Access | Dr South of PennyRd | 13:17:17 |
| Tuesday December 14, 2021 | Multi Unit Trucks Only | |

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

| Intersection # 10 | dec/oldsutton/accspenny/multi |
|-------------------|-------------------------------|
|-------------------|-------------------------------|

| | ===== | ===== | ===== | ====== | ===== | ===== | | | | ====== | | ==== | |
|-----------------------|-------|--------|-----------|--------|--------|-----------|-------|--------|-----------|--------|--------|-----------|------------|
| Begin | N-2 | Approa | ach | E-2 | Approa | ach | S-2 | Approa | ach | W-2 | Approa | ach | Int |
| Time | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | Total |
| == = == 600 | | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 830 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1515 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1530 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1545 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ===== | ===== | ===== | ==== | ===== | ===== | ==== | ===== | ===== | ==== | ===== | ===== | ==== | ===== |

| Barrington, IL We | eather: Cool and Dry | 12/15/21 |
|-----------------------------|------------------------|----------|
| Old Sutton Rd and Access Dr | r South of PennyRd | 13:17:17 |
| Tuesday December 14, 2021 | Multi Unit Trucks Only | |

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

| | Intersec | tion # 10 | 0 dec/o | ldsutt | on/accspenn | y/multi | | | |
|-------|----------|-----------|----------|--------|-------------|---------|--------|---|-------|
| Begin | | Approac | h Totals | | | Exit 1 | rotals | | Int |
| Time | N | E | S | W | N | Е | S | W | Total |
| ===== | | | | | | | | | ===== |
| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 830 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1515 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1530 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1545 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1730 | 0 | 0 0 | Ō | 0 | 0 | 0 | Ō | 0 | 0 |
| 1745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ===== | ======== | | | | | | | | ===== |

| Barrington, IL W | Weather: Cool and Dry | 12/15/21 |
|----------------------------|------------------------|----------|
| Old Sutton Rd and Access I | r South of PennyRd | 13:17:17 |
| Tuesday December 14, 2021 | Multi Unit Trucks Only | |

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

| Intersection | # | 10 | dec/oldsutton/accspenny/multi |
|--------------|---|----|-------------------------------|
|--------------|---|----|-------------------------------|

| Begin | N-2 | Appro | ach | E-2 | Approa | ach | S-2 | Approa | ach | W-2 | Approa | ach | Int |
|--------------------|------------|-------|---------------|-------|--------|-----------|-------|--------|-----------|-------|--------|-------|------------|
| Time | RT | TH | \mathbf{LT} | RT | TH | LT | RT | TH | LT | RT | TH | LT | Total |
| <u>====</u> 600 | ===== 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 | 0 |
| 645 | 0 | Ő | Ő | 0 | Ő | 0 | Ő | ŏ | Õ | Ő | 0 0 | Ő | ů 0 |
| 700 | 0 | Ő | õ | Õ | 0 | Ő | Ő | Ő | 0 0 | õ | 0 0 | õ | 0 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0* |
| 830 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0* |
| 845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0* |
| 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1515 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1530 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1545 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0* |
| 1730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0* |
| 1745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0* |
| ===== | ===== | ===== | ==== | ===== | ===== | ==== | ===== | ===== | ==== | ===== | ===== | ==== | ===== |

| Barrington, IL W | Neather: Cool and Dry | 12/15/21 |
|----------------------------|------------------------|----------|
| Old Sutton Rd and Access D | or South of PennyRd | 13:17:17 |
| Tuesday December 14, 2021 | Multi Unit Trucks Only | |

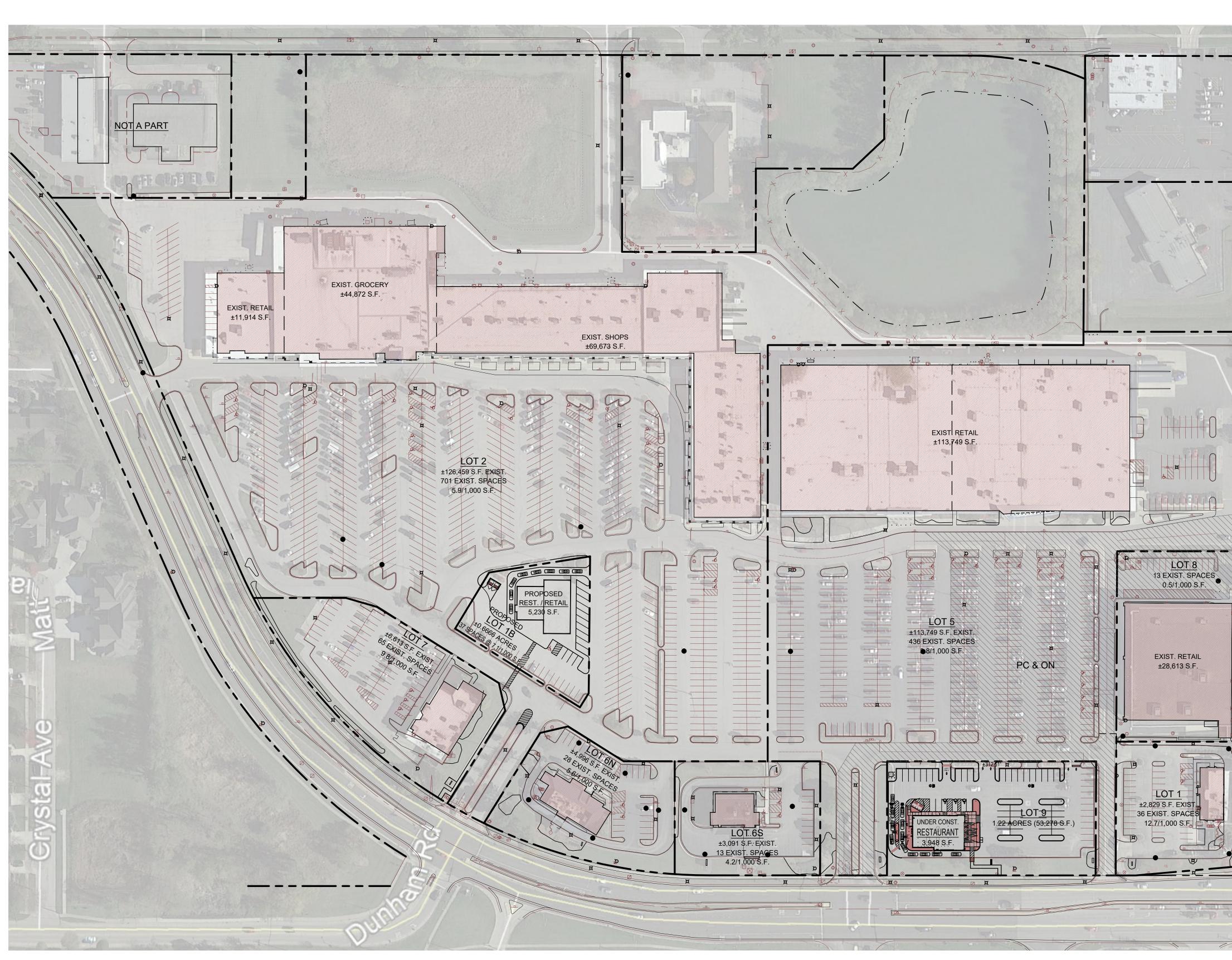
TURNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: Appr/Exit Totals

| Intersection # 10 | dec/oldsutton/ | /accspenny/multi |
|-------------------|----------------|------------------|
|-------------------|----------------|------------------|

| | ======= | ====== | ======= | ======= | | ======= | ====== | ====== | = |
|--------------------|---------|--------|---------|---------|----------------|---------|--------|---------|-----------|
| Begin | | Approa | ch Tota | ls | | Exit | Totals | 5 | Int |
| Time | N | E | S | W | N | E | S | W | Total |
| <u>====</u> 600 | 0 | | | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0* |
| 830 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0* |
| 845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0* |
| 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1515 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1530 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1545 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0* |
| 1730 | 0 | 0 | 0 | 0 | 0 | 0 | Ő | 0 | 0* |
| 1745 | 0 | 0 | Ő | Õ | 0 | Ő | Ő | 0 0 | 0* |
| ===== | ======= | | ======= | | - ======= | | | .====== | = ===== |

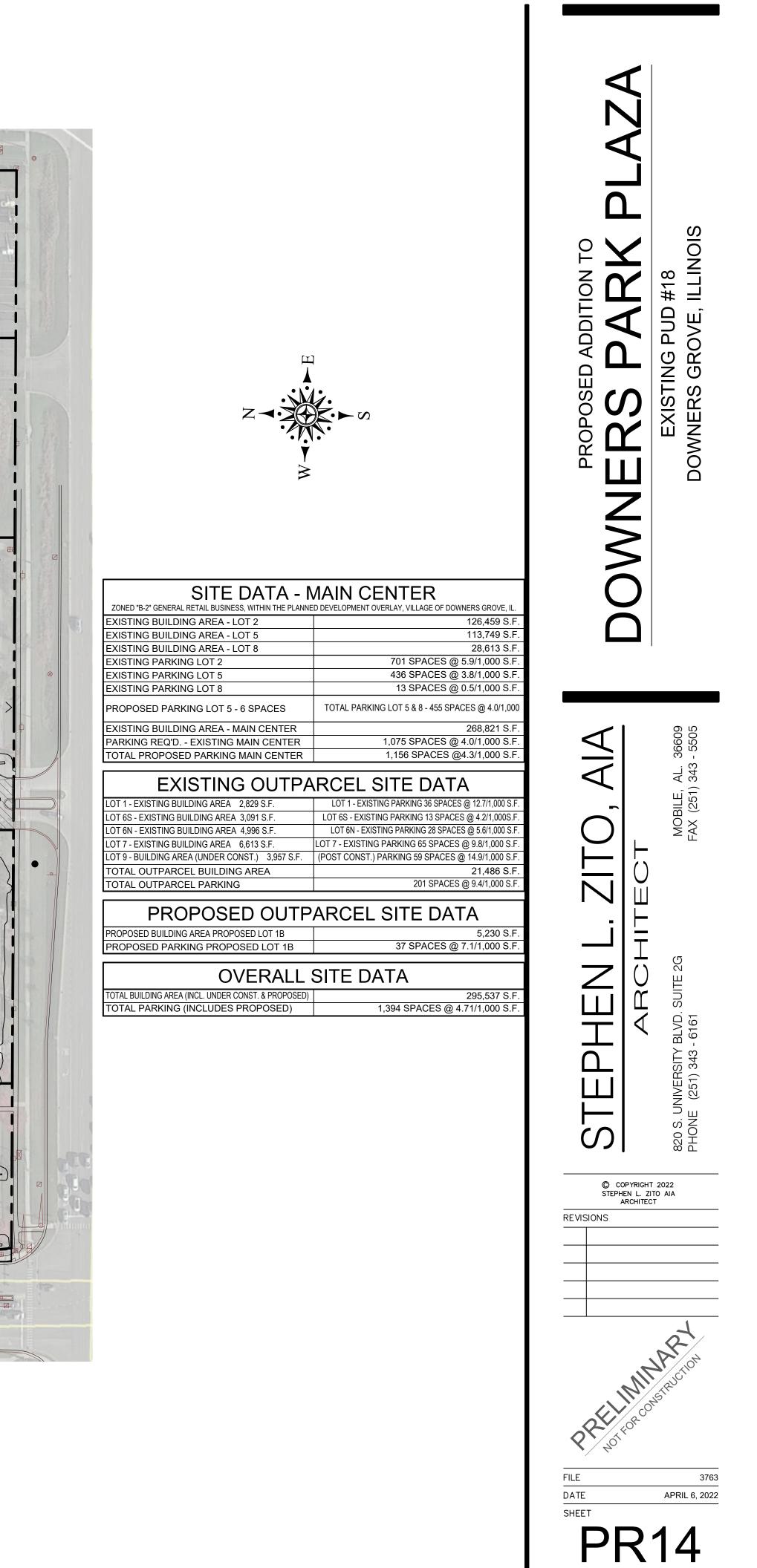
RES 2022-9609

Site Plan





SITE PLAN



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,

I Ray

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

| LEVEL OF SI | ERVICE CRITERIA | |
|----------------|--|--------------------------|
| | Signalized Intersections | |
| Level of | | Average Control Delay |
| Service | Interpretation | (seconds per vehicle) |
| A | Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping. | ≤10 |
| В | Good progression, with more vehicles stopping than for Level of Service A. | >10 - 20 |
| С | 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 |
| | Unsignalized Intersections | |
| | Level of Service Average Total De | lay (SEC/VEH) |
| | A 0 - | - 10 |
| | B > 10 · | - 15 |
| | C > 15 - | - 25 |
| | D > 25 - | - 35 |
| | E > 35 · | - 50 |
| | F > 5 | 0 |
| Source: Highwa | ay Capacity Manual, 2010. | |

<u>Capacity Analysis Summary Sheets</u> Year 2021 Weekday Morning Peak Hour Conditions

| Lanes, | Volumes, | Timings |
|--------|----------|---------|
| , | | 0 |

1: Lemont Road & Dunham Road/Middle Access Drive

| 06/21/2022 |
|------------|
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|-------------------------|-------|--------------|-------|---|--------------|-------|----------|-------|------|----------|-------------|------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ب | 1 | | ب | 1 | <u>م</u> | A⊅ | | <u>ک</u> | ∱ î≽ | |
| 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 | | | | | | | | | | | | |
| Frt | | | 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 | | , in the second s | 0.846 | | 0.463 | •.•. | • | 0.302 | 0.20 | |
| Satd. Flow (perm) | 0 | 1674 | 1615 | 0 | 1473 | 1900 | 854 | 3461 | 0 | 574 | 3425 | 0 |
| Right Turn on Red | • | | No | , in the second s | | No | | •.•. | No | •••• | 0.20 | 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 | |

22-194 Outlot Parcel- Downers Grove sa/bsm

Lanes, Volumes, Timings 1: Lemont Road & Dunham Road/Middle Access Drive

| | . الحر | + | * | 4 | + | • | • | 1 | 1 | * | ţ | ~ |
|--|---------------|--------|----------|--------------|------------|------------|------|------|-----|------|------|-----|
| 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 | | С | С | | С | | А | А | | А | В | |
| Approach Delay | | 33.4 | | | 20.7 | | | 5.4 | | | 13.4 | |
| Approach LOS | | С | | | С | | | А | | | В | |
| 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:NB | TL and | d 6:SBTL | , Start of (| Green | | | | | | | |
| Natural Cycle: 60 | | | | | | | | | | | | |
| Control Type: Actuated-Co | ordinated | | | | | | | | | | | |
| Maximum v/c Ratio: 0.63 | | | | | | | | | | | | |
| Intersection Signal Delay: | | | | | tersectior | | | | | | | |
| Intersection Capacity Utiliz Analysis Period (min) 15 | ation 46.4% | | | IC | CU Level o | of Service | A | | | | | |
| | | | | | | | | | | | | |

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

| Ø2 (R) | | Ø1 | - 104 | |
|--------|---|------------|-------------|--|
| 37 s | | 10 s | 28 s | |
| Ø6 (R) | | Ø 5 | ₩ Ø8 | |
| 33 s | 1 | 14 s | 28 s | |

| Lanes, Volumes, | Timings |
|-----------------|---------|
|-----------------|---------|

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

| 06/21/2022 |
|------------|

| | ۶ | - | \mathbf{F} | 4 | ← | * | 1 | 1 | 1 | 1 | ŧ | ~ |
|-------------------------|-------|-------|--------------|--------|----------|------|----------|-------|------|-------|---------|-------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | 2 | 4Î | | ۲ ۲ | el el | | <u>م</u> | A⊅ | | ľ | <u></u> | 1 |
| 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 | | | | | | | | | | | | |
| Frt | | 0.891 | | | 0.925 | | | 0.998 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1656 | 1608 | 0 | 1805 | 1758 | 0 | 1805 | 3466 | 0 | 1805 | 3505 | 1380 |
| Flt 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 |

22-194 Outlot Parcel- Downers Grove sa/bsm

| Lanes, Volumes, Timings |
|---|
| 2: Lemont Road & Signalized Access Drive/South Access Drive |

| 2: Lemont Road & Signalized Access Drive/South Access Drive 06/21/ | | | | | | | | | | | 21/2022 | |
|--|-------------|----------|---------|------------|------------|------------|------|------|-----|------|---------|------|
| | ٨ | + | * | 1 | + | * | • | 1 | 1 | * | ţ | ~ |
| 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 | С | С | | С | С | | А | А | | А | А | A |
| Approach Delay | | 26.4 | | | 26.6 | | | 5.7 | | | 1.9 | |
| Approach LOS | | С | | | С | | | А | | | А | |
| 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 | | | | | | | | | | | | |
| | Other | | | | | | | | | | | |
| Cycle Length: 75 | | | | | | | | | | | | |
| Actuated Cycle Length: 75 | | | | | | | | | | | | |
| Offset: 2 (3%), Referenced t | to phase 2: | NBTL and | 6:SBTL, | Start of (| Green | | | | | | | |
| Natural Cycle: 70 | | | | | | | | | | | | |
| Control Type: Actuated-Coo | ordinated | | | | | | | | | | | |
| Maximum v/c Ratio: 0.33 | | | | | | | | | | | | |
| Intersection Signal Delay: 5. | | | | | tersectior | | | | | | | |
| Intersection Capacity Utiliza | tion 41.9% | | | IC | U Level o | 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

| Ø2 (R) | Ø1 | <u>→</u> _{Ø4} | √ Ø3 |
|--------|------|------------------------|-------------|
| 32 s | 10 s | 23 s | 10 s |
| Ø6 (R) | ▲ ø5 | ₩ Ø8 | ▶ Ø7 |
| 32 s | 10 s | 23 s | 10 s |

| Intersection | | | | | | |
|------------------------|-------|------|------|------|-----------|----------|
| Int Delay, s/veh | 0.5 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ۰¥ | | | | <u>ار</u> | ^ |
| 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 | Ν | lajor1 | N | lajor2 | |
|----------------------|--------|------|--------|---|--------|---|
| Conflicting Flow All | 1015 | 370 | 0 | 0 | 740 | 0 |
| 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 | r 222 | 594 | - | - | 609 | - |
| Mov Cap-2 Maneuve | r 337 | - | - | - | - | - |
| Stage 1 | 434 | - | - | - | - | - |
| Stage 2 | 702 | - | - | - | - | - |
| | | | | | | |

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

| 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 | - | - E | В | - |
| HCM 95th %tile Q(veh) | - | - 0.1 | 0.2 | - |

| Intersection | | | | | | | | | | | | | |
|------------------------|------|------|------|------|------|------|------|---------------|------|------|----------|------|--|
| Int Delay, s/veh | 0 | | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | |
| Lane Configurations | | | | | | 1 | | _ ≜ î≽ | | | ^ | | |
| 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 | | N | lajor1 | | Ma | ajor2 | | | |
|-----------------------|-----|----------|-----|-----|--------|---|----|-------|---|---|--|
| Conflicting Flow All | | - | - | 470 | - | 0 | 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 | | В | | | | | | | | | |
| | | | | | | | | | | | |
| 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 | - | | | | | | | | |
| | | | | | | | | | | | |

0

_

HCM 95th %tile Q(veh)

| Intersection | | | | | | |
|------------------------|------|----------|-------------|------|------|------|
| Int Delay, s/veh | 0 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ^ | ↑ ↑₽ | | | 1 |
| 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 N | /lajor1 | N | /lajor2 | Ν | linor2 | |
|-----------------------|---------|-----|---------|-------|--------|------|
| 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 | | | | | В | |
| | | | | | | |
| | | ГРТ | | | | |
| Minor Lane/Major Mvmt | L | EBT | WBT | WBR S | | |
| 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

| | | 100030 | | | | |
|-------------------------------------|------|--------------------|-------|------|--------|------------|
| | ۶ | $\mathbf{\hat{z}}$ | • | Ť | ŧ | ~ |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | 5 | 1 | | र्भ | 4Î | |
| 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 |
| | 49 | 23 | 0 | 86 | 141 | 0 |
| Volume Combined (vph) | | | | | | |
| 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 | | | | 21.0 | 10.0 | |
| 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 | Со | mbined | |
| 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 | |
| . , | | | 22.0 | | 00.0 | |
| 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 | | | 05 50 | | | <u> </u> |
| Intersection Canacity I Itilization | nn | | 25 7% | | | of Service |

ICU Level of Service

А

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

Intersection Capacity Utilization 7: Internal Drive & South Access Drive

| | ≯ | \mathbf{i} | • | t | ţ | ~ |
|-----------------------------------|------|--------------|--------|-------|-------------------|------------|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | 5 | 1 | | र्भ | ţ, | |
| 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 | 0.95 | 1826 | 1660 | 0.05 |
| Ped Intf Time (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Pedestrian Frequency (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.0 |
| | | | | | | |
| Protected Option Allowed | No | 0.4 | | No | No | 0.0 |
| Reference Time (s) | | 3.1 | | | | 0.0 |
| Adj Reference Time (s) | | 8.0 | | | | 0.0 |
| Permitted Option | 400 | | 0 | | 4000 | |
| 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 | Co | mbined | |
| 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 | |
| | | | 20.1 | | J 4 .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 | | | 00 50/ | | | <u> </u> |
| Intersection Capacity Utilization | n | | 28.5% | IC | U Level of | of Service |

Reference Times and Phasing Options do not represent an optimized timing plan.

<u>Capacity Analysis Summary Sheets</u> Year 2021 Weekday Evening Peak Hour Conditions

Lanes, Volumes, Timings 1: Lemont Road & Dunham Road/Middle Access Drive

| | ٦ | - | \mathbf{F} | 4 | - | • | • | 1 | 1 | 1 | Ļ | ~ |
|-------------------------|-------|-------|--------------|-------|-------|-------|----------|-------|------|-------|--------|------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | र्भ | 1 | | र्स | 1 | <u>۲</u> | A⊅ | | ň | A ₽ | |
| 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 | |
| | | - | | | 2 | - | | - | | | | |

22-194 Outlot Parcel- Downers Grove sa/bsm

Lanes, Volumes, Timings 1: Lemont Road & Dunham Road/Middle Access Drive

| Burnhammitteu | a/ Wilda | 10 / 1000 | | 10 | | | | | | |
|--------------------|---|--|---|--|---|--|---|---|--|--|
| > → | \mathbf{r} | 4 | ← | • | 1 | Ť | 1 | 1 | ţ | ~ |
| EBL EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| 0.08 | 0.55 | | 0.21 | 0.02 | 0.31 | 0.30 | | 0.02 | 0.39 | |
| 24.2 | 34.4 | | 26.4 | 22.8 | 3.8 | 2.5 | | 4.9 | 12.3 | |
| 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| 24.2 | 34.4 | | 26.4 | 22.8 | 3.8 | 2.5 | | 4.9 | 12.3 | |
| | С | | С | С | А | А | | А | В | |
| | | | 26.1 | | | 2.8 | | | 12.2 | |
| С | | | С | | | А | | | В | |
| 10 | | | 22 | 2 | | - | | 1 | | |
| 28 | 115 | | 48 | 10 | 22 | 18 | | 6 | 173 | |
| 587 | | | 251 | | | 553 | | | 615 | |
| | | | | | | | | | | |
| 469 | 430 | | 397 | 430 | 639 | 2249 | | 558 | 1879 | |
| 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| • | • | | 0 | 0 | | 0 | | 0 | 0 | |
| | - | | | | | - | | - | - | |
| 0.06 | 0.37 | | 0.14 | 0.01 | 0.27 | 0.30 | | 0.02 | 0.39 | |
| | | | | | | | | | | |
| Other | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| to phase 2:NBTL an | d 6:SBTL | ., Start of G | ireen | | | | | | | |
| | | | | | | | | | | |
| ordinated | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| ation 52.0% | | ICL | J Level o | of Service | A | | | | | |
| | | | | | | | | | | |
| | EBL EBT 0.08 24.2 0.0 24.2 C 33.0 C 33.0 C 10 28 587 469 0 0 0 0.06 0 Other 0 | EBL EBT EBR 0.08 0.55 24.2 34.4 0.0 0.0 24.2 34.4 0.0 0.0 24.2 34.4 C C 33.0 C 10 68 28 115 587 105 469 430 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.06 0.37 Other to phase 2:NBTL and 6:SBTL ordinated 0.4 | EBL EBT EBR WBL 0.08 0.55 24.2 34.4 0.0 0.0 0.0 24.2 34.4 0.0 0.0 0.0 0.0 0.0 24.2 34.4 0.0 0.0 0.0 24.2 34.4 0.0 0.0 0.0 24.2 34.4 0.0 0.0 0.0 33.0 C C 0.0 0.0 10 68 28 115 587 105 469 430 0.0 | EBL EBT EBR WBL WBT 0.08 0.55 0.21 24.2 34.4 26.4 0.0 0.0 0.0 0.0 26.1 C C C C 10 33.0 26.1 C C 10 10 68 22 28 115 48 587 251 105 105 105 105 10 0 <td< td=""><td>EBL EBT EBR WBL WBT WBR 0.08 0.55 0.21 0.02 24.2 34.4 26.4 22.8 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 C C C C 33.0 26.1 22 2 33.0 26.1 22 2 10 68 22 2 28 115 48 10 587 251 105 85 469 430 397 430 0 0 0 0 0 0 0 0 0 0 0 0 0 0.37 0.14 0.01</td><td>EBL EBT EBR WBL WBT WBR NBL 0.08 0.55 0.21 0.02 0.31 24.2 34.4 26.4 22.8 3.8 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 C C C A 3.3 3.8 C C C C A 3.3 10 68 22 2 12 28 115 48 10 22 587 251 105 85 175 469 430 397 430 639 0 0 0 0 0 0 0.06 0.37 0.14 0.01 0.27</td><td>EBL EBT EBR WBL WBT WBR NBL NBT 0.08 0.55 0.21 0.02 0.31 0.30 24.2 34.4 26.4 22.8 3.8 2.5 0.0 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 0.0 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 C C C A A 33.0 26.1 2.8 2.8 2.8 C C C A A 10 68 22 2 12 32 28 115 48 10 22 18 587 251 553 553 553 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td><td>EBL EBT EBR WBL WBT WBR NBL NBT NBR 0.08 0.55 0.21 0.02 0.31 0.30 24.2 34.4 26.4 22.8 3.8 2.5 0.00 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 0.0 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 C C C A A 33.0 26.1 2.8 2.8 1.5 10 68 22 2 12 32 28 115 48 10 22 18 587 251 553 553 553 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.06 0.3</td><td>EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL 0.08 0.55 0.21 0.02 0.31 0.30 0.02 24.2 34.4 26.4 22.8 3.8 2.5 4.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 4.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 4.9 C C C A A A 33.0 26.1 2.8 1 1 6 587 251 553 1 1 1 6 587 251 553 135 1 <</td><td>EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT 0.08 0.55 0.21 0.02 0.31 0.30 0.02 0.39 24.2 34.4 26.4 22.8 3.8 2.5 4.9 12.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 4.9 12.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 4.9 12.3 C C C C A A B 33.0 26.1 2.8 1.8 12.2 1 96 12.3 12.2 1 96 173 553 615 135 135 145 48 10 22 18 6 173 553 615 135 135 1469 430 397 430 639 <t< td=""></t<></td></td<> | EBL EBT EBR WBL WBT WBR 0.08 0.55 0.21 0.02 24.2 34.4 26.4 22.8 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 C C C C 33.0 26.1 22 2 33.0 26.1 22 2 10 68 22 2 28 115 48 10 587 251 105 85 469 430 397 430 0 0 0 0 0 0 0 0 0 0 0 0 0 0.37 0.14 0.01 | EBL EBT EBR WBL WBT WBR NBL 0.08 0.55 0.21 0.02 0.31 24.2 34.4 26.4 22.8 3.8 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 C C C A 3.3 3.8 C C C C A 3.3 10 68 22 2 12 28 115 48 10 22 587 251 105 85 175 469 430 397 430 639 0 0 0 0 0 0 0.06 0.37 0.14 0.01 0.27 | EBL EBT EBR WBL WBT WBR NBL NBT 0.08 0.55 0.21 0.02 0.31 0.30 24.2 34.4 26.4 22.8 3.8 2.5 0.0 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 0.0 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 C C C A A 33.0 26.1 2.8 2.8 2.8 C C C A A 10 68 22 2 12 32 28 115 48 10 22 18 587 251 553 553 553 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | EBL EBT EBR WBL WBT WBR NBL NBT NBR 0.08 0.55 0.21 0.02 0.31 0.30 24.2 34.4 26.4 22.8 3.8 2.5 0.00 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 0.0 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 C C C A A 33.0 26.1 2.8 2.8 1.5 10 68 22 2 12 32 28 115 48 10 22 18 587 251 553 553 553 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.06 0.3 | EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL 0.08 0.55 0.21 0.02 0.31 0.30 0.02 24.2 34.4 26.4 22.8 3.8 2.5 4.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 4.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 4.9 C C C A A A 33.0 26.1 2.8 1 1 6 587 251 553 1 1 1 6 587 251 553 135 1 < | EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT 0.08 0.55 0.21 0.02 0.31 0.30 0.02 0.39 24.2 34.4 26.4 22.8 3.8 2.5 4.9 12.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 4.9 12.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 24.2 34.4 26.4 22.8 3.8 2.5 4.9 12.3 C C C C A A B 33.0 26.1 2.8 1.8 12.2 1 96 12.3 12.2 1 96 173 553 615 135 135 145 48 10 22 18 6 173 553 615 135 135 1469 430 397 430 639 <t< td=""></t<> |

| Splits and Phases: | 1: Lemont Road & Dunham Road/Middle A | ccess I | Drive | | |
|--------------------|---------------------------------------|---------|-------|------------------------|--|
| Ø2 (R) | | | Ø1 | ↓ 04 | |
| 39 s | | | 10 s | 26 s | |
| Ø6 (R) | | 1 |)5 | 4 Ø 8 | |
| 35 s | | 14 s | | 26 s | |

| Lanes, Volumes, Timings |
|---|
| |
| 2: Lomant Dood 9 Signalized Access Drive/ |

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

| | ∕ | - | ~ | ~ | + | • | • | t | * | 1 | Ţ | ~ |
|-------------------------|----------|----------|------|----------|---------------|------|---------|----------|-------------|----------|----------|-------|
| | EBL | EBT | EBR | ▼ WBL | WBT | WBR | NBL | NBT | N BR | SBL | ▼ SBT | SBR |
| Lane Group | | | EDK | | | WDK | | | INDK | | | |
| Lane Configurations | ` | • | 40 | 100 | ₽ 7 | 17 | <u></u> | † | CE. | 1 | * | 7 |
| Traffic Volume (vph) | 66 | 11 | 42 | 190 | | 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 (%) | 05 | 0% | 0 | 05 | 0% | 0 | 000 | 0% | 0 | 70 | 0% | 400 |
| 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 | | | 0.892 | | | 0.988 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1674 | 0 | 1805 | 1695 | 0 | 1805 | 3534 | 0 | 1805 | 3574 | 1615 |
| Flt 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 |
| | 0.17 | 0.11 | | 0.10 | v | | 0.00 | 0.00 | | 0.00 | 0.00 | |

22-194 Outlot Parcel- Downers Grove sa/bsm

| Lanes, Volumes, | Fimings |
|------------------------------|--|
| 2 [.] Lemont Road & | Signalized Access Drive/South Access Drive |

| | ۶ | - | \mathbf{r} | • | ← | * | 1 | 1 | 1 | 1 | Ŧ | ~ |
|------------------------------|-------------|----------------------|--------------|------------|------------|------------|------|------|-----|------|------|-----|
| ane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBF |
| //c Ratio | 0.22 | 0.25 | | 0.69 | 0.12 | | 0.16 | 0.43 | | 0.05 | 0.44 | 0.0 |
| Control Delay | 28.0 | 16.6 | | 43.5 | 18.7 | | 12.1 | 13.4 | | 5.5 | 8.2 | 0. |
| Queue Delay | 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. |
| LOS | С | В | | D | В | | В | В | | А | А | |
| Approach Delay | | 22.9 | | | 40.7 | | | 13.4 | | | 7.6 | |
| Approach LOS | | С | | | D | | | В | | | А | |
| Queue Length 50th (ft) | 21 | 5 | | 86 | 3 | | 11 | 117 | | 3 | 173 | |
| Queue Length 95th (ft) | 63 | 36 | | #167 | 24 | | 36 | 215 | | m7 | 74 | |
| nternal Link Dist (ft) | | 222 | | | 214 | | | 286 | | | 553 | |
| Furn Bay Length (ft) | 85 | | | 85 | | | 200 | | | 70 | | 16 |
| Base Capacity (vph) | 309 | 216 | | 300 | 331 | | 361 | 1949 | | 464 | 1898 | 92 |
| 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 | 0.22 | 0.25 | | 0.65 | 0.08 | | 0.16 | 0.43 | | 0.05 | 0.44 | 0.0 |
| ntersection Summary | | | | | | | | | | | | |
| 51 | Other | | | | | | | | | | | |
| Cycle Length: 75 | | | | | | | | | | | | |
| Actuated Cycle Length: 75 | | | | | _ | | | | | | | |
| Offset: 6 (8%), Referenced t | o phase 2: | VBTL and | I 6:SBTL, | Start of (| Green | | | | | | | |
| Natural Cycle: 60 | | | | | | | | | | | | |
| Control Type: Actuated-Coo | rdinated | | | | | | | | | | | |
| Maximum v/c Ratio: 0.69 | | | | | | | | | | | | |
| ntersection Signal Delay: 14 | | | | | tersectior | | _ | | | | | |
| ntersection Capacity Utiliza | tion 56.6% | | | IC | U Level o | of Service | В | | | | | |
| Analysis Period (min) 15 | | | | | | | | | | | | |
| 95th percentile volume e | | | eue may | be longer | | | | | | | | |
| Queue shown is maximu | m atter two | cycles. s meterec | | | | | | | | | | |

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

| <1 ø2 (R) ■ | Ø1 | √ Ø3 | <u>→</u> _{Ø4} |
|-----------------|------|-------------|--------------------------|
| 35 s | 10 s | 16 s | 14 s |
| ▲ ø5 🖕 🗣 ø6 (R) | | ₹_Ø8 | <u>∕</u> ≉ _{∅7} |
| 9 s 36 s | | 20 s | 10 s |

| Intersection | | | | | | |
|------------------------|--------|------|------|------|----------|----------|
| Int Delay, s/veh | 1.6 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ۰¥ | | | | <u>ک</u> | ^ |
| 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 | e, # 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 | М | lajor1 | Ν | lajor2 | |
|----------------------|--------|------|--------|---|--------|---|
| Conflicting Flow All | 1174 | 330 | 0 | 0 | 659 | 0 |
| 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 Maneuve | r 171 | 640 | - | - | 939 | - |
| Mov Cap-2 Maneuve | r 305 | - | - | - | - | - |
| Stage 1 | 484 | - | - | - | - | - |
| Stage 2 | 514 | - | - | - | - | - |
| | | | | | | |
| | | | | | | |

| Minor Lane/Major Mvmt | NBT | NBRV | /BLn1 | 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 | - | - | В | А | - |
| HCM 95th %tile Q(veh) | - | - | 0.9 | 0.3 | - |

Intersection Capacity Utilization 6: Internal Drive & Middle Access Drive

| | | 100030 | | | | | |
|-----------------------------------|----------|--------------|-------|----------|-----------|------------|---|
| | ≯ | \mathbf{i} | - | † | Ţ | - | |
| | | • | ' | • | • | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR | |
| Lane Configurations | <u> </u> | 1 | | र्च | 4 | | |
| 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 | Coi | nbined | | |
| 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 | | | | | | |
| . , | 21.0 | | | | | | |
| Intersection Summary | | | | | | | |
| Intersection Capacity Utilization | n | | 25.7% | IC | U Level o | of Service | ; |

Reference Times and Phasing Options do not represent an optimized timing plan.

Intersection Capacity Utilization 7: Internal Drive & South Access Drive

| | ۶ | * | • | Ť | ţ | ~ |
|--|----------|------|-------|-------|-----------|------------|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | 1 | 1 | | 4 | 4 | |
| 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 | 0.95 | 1826 | 1660 | 0.05 |
| Ped Intf Time (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Pedestrian Frequency (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.0 |
| · · · · · · · · · · · · · · · · · · · | | | | | | |
| Protected Option Allowed | No | 2.4 | | No | No | 0.0 |
| Reference Time (s) | | 3.1 | | | | 0.0 |
| Adj Reference Time (s) | | 8.0 | | | | 0.0 |
| Permitted Option | | | _ | , | 1000 | |
| 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 | Co | mbined | |
| Protected Option (s) | NA | | NA | 0 | monieu | |
| | Err | | 122.8 | | | |
| Permitted Option (s) Split Option (s) | | | 26.1 | | | |
| | 8.0 | | | | 2/1 | |
| 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 | | | 00.5% | | | <u>.</u> |
| Intersection Capacity Utilization | on On | | 28.5% | IC | U Level o | of Service |

Reference Times and Phasing Options do not represent an optimized timing plan.

| Intersection | | | | | | | | | | | | | |
|------------------------|------|------|------|------|------|------|------|---------------|------|------|----------|------|--|
| Int Delay, s/veh | 0 | | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | |
| Lane Configurations | | | | | | 1 | | - † 12 | | | ^ | | |
| 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 | | Μ | lajor1 | | Ma | ajor2 | | | |
|-----------------------|-----|----------|-----|-----|--------|---|----|-------|---|---|--|
| Conflicting Flow All | | - | - | 496 | - | 0 | 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 | 525 | 0 | - | - | 0 | - | 0 | |
| Stage 1 | | 0 | 0 | - | 0 | - | - | 0 | - | 0 | |
| Stage 2 | | 0 | 0 | - | 0 | - | - | 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 | | В | | | | | | | | | |
| | | | | | | | | | | | |
| 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 | - | | | | | | | | |

| Intersection | | | | | | |
|------------------------|--------|------|-------------|------|------|------|
| Int Delay, s/veh | 0.5 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | | <u>↑</u> ↑₽ | | | 1 |
| 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 | e, # - | 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 | ľ | Major2 | N | Ainor2 | | | | | | |
|-----------------------|--------|-----|--------|-------|--------|-----|---|--|--|--|--|
| 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 | | l | | | | |
| HCM Control Delay, s | 0 | | 0 | | 20.7 | | | | | | |
| HCM LOS | | | | | C | | | | | | |
| | | | | | 5 | | | | | | |
| | -1 | EDT | | | - 100 | | | | | | |
| Minor Lane/Major Mvn | nt | EBT | WBT | WBR S | | | | | | | |
| 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 | | | | | | |

<u>Capacity Analysis Summary Sheets</u> Year 2021 Saturday Midday Peak Hour Conditions

Lanes, Volumes, Timings 1: Lemont Road & Dunham Road/Middle Access Drive

| | ۶ | + | * | 4 | ł | * | < | 1 | 1 | * | ţ | ~ |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------------|------|----------|------------|------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ÷ | 1 | | ÷ | 1 | ۲ | ≜ î≽ | | <u>ک</u> | ≜ ⊅ | |
| 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 | | | | | | | | | | | | |
| Frt | | | 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 | 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 | |

22-194 Outlot Parcel- Downers Grove sa/bsm

Lanes, Volumes, Timings 1: Lemont Road & Dunham Road/Middle Access Drive

| | Dunnann | Itout | | | | | | | | | 00/1 | =•== |
|------------------------------|----------------|----------|----------|-------------|------------|------------|------|------|-----|------|------|------|
| | ≯ | + | * | 4 | Ļ | • | • | Ť | * | * | ţ | ~ |
| 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 | | С | С | | С | С | А | А | | А | В | |
| Approach Delay | | 32.4 | | | 31.8 | | | 3.5 | | | 11.0 | |
| Approach LOS | | С | | | С | | | А | | | В | |
| 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%), Referen | ced to phase 2 | 2:NBTL a | and 6:SB | TL, Start o | of Green | | | | | | | |
| Natural Cycle: 55 | | | | | | | | | | | | |
| Control Type: Actuated-Co | oordinated | | | | | | | | | | | |
| Maximum v/c Ratio: 0.54 | | | | | | | | | | | | |
| Intersection Signal Delay: | | | | | tersectior | | | | | | | |
| Intersection Capacity Utiliz | zation 49.5% | | | IC | U Level o | of Service | А | | | | | |
| Analysis Period (min) 15 | | | | | | | | | | | | |
| | | | | | | | | | | | | |

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

| | | Ø1 | 04 |
|------------|------|------|----|
| 38 s | 10 s | 27 s | |
| ● ● Ø6 (R) | ▲ ø5 | + | 28 |
| 35 s | 13 s | 27 s | |

| Lanes, | Volum | es, Timir | igs | | |
|----------|-------|-----------|-----|-----|--|
| <u> </u> | | 100 | | 1 4 | |

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

| (| 06/21/2022 |
|---|------------|
| (| JO/21/2022 |

| | ٦ | - | \mathbf{F} | 4 | + | * | 1 | t | ۲ | 1 | Ŧ | ~ |
|-------------------------|-------|-------|--------------|----------|-------|------|----------|-------|------|-------|---------|-------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ٦ | ¢Î | | <u> </u> | ef 🗧 | | <u>۲</u> | A⊅ | | ۲ | <u></u> | 1 |
| 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 | | | | | | | | | | | | |
| Frt | | 0.881 | | | 0.901 | | | 0.980 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1648 | 0 | 1805 | 1712 | 0 | 1805 | 3478 | 0 | 1805 | 3574 | 1615 |
| Flt 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 |

22-194 Outlot Parcel- Downers Grove sa/bsm

| Lanes, Volumes, Timings |
|---|
| 2: Lemont Road & Signalized Access Drive/South Access Drive |

| 2: Lemont Road & | Signaliz | ed Aco | cess D | rive/So | outh A | ccess l | Drive | | | | 06/2 | 21/2022 |
|-----------------------------------|------------|----------|-----------|------------|------------|------------|-------|------|-----|------|------|---------|
| | ≯ | + | * | 4 | ł | • | • | 1 | 1 | * | ţ | ~ |
| 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 | С | В | | С | В | | А | В | | А | А | A |
| Approach Delay | | 20.7 | | | 29.5 | | | 11.3 | | | 6.7 | |
| Approach LOS | | С | | | С | | | В | | | А | |
| 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 | | | | | | | | | | | | |
| | Other | | | | | | | | | | | |
| Cycle Length: 75 | | | | | | | | | | | | |
| Actuated Cycle Length: 75 | | | | | | | | | | | | |
| Offset: 5 (7%), Referenced t | o phase 2: | NBTL and | d 6:SBTL, | Start of (| Green | | | | | | | |
| Natural Cycle: 60 | | | | | | | | | | | | |
| Control Type: Actuated-Coo | rdinated | | | | | | | | | | | |
| Maximum v/c Ratio: 0.64 | | | | | | | | | | | | |
| Intersection Signal Delay: 12 | | | | | tersectior | | | | | | | |
| Intersection Capacity Utilization | tion 57.4% | | | IC | U Level | of Service | В | | | | | |
| 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

| Ø2 (R) | Ø1 | Ø4 | √ Ø3 | | |
|--------|------------|-------------|-------------|---------|--|
| 33 s | 9.6 s | 14 s | 18.4 s | | |
| Ø6 (R) | Ø 5 | ₩ Ø8 | | ▶ ø7 | |
| 33.6 s | 9 s | 21.8 s | | 10.6 s | |

| Intersection | | | | | | |
|------------------------|-------|------|------|------|-----------|----------|
| Int Delay, s/veh | 1.9 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Y | | | | <u>ار</u> | ^ |
| 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 |

| Minor1 | Ma | ajor1 | N | lajor2 | |
|--------|---|--|--|---|---|
| 1150 | 328 | 0 | 0 | 655 | 0 |
| 650 | - | - | - | - | - |
| 500 | - | - | - | - | - |
| 6.84 | 6.9 | - | - | 4.1 | - |
| 5.84 | - | - | - | - | - |
| 5.84 | - | - | - | - | - |
| 3.52 | 3.3 | - | - | 2.2 | - |
| 192 | 674 | - | - | 942 | - |
| 481 | - | - | - | - | - |
| 575 | - | - | - | - | - |
| | | - | - | | - |
| · 170 | 674 | - | - | 942 | - |
| - 303 | - | - | - | - | - |
| 481 | - | - | - | - | - |
| 510 | - | - | - | - | - |
| | | | | | |
| | 1150 650 500 6.84 5.84 3.52 192 481 575 7 170 303 481 | 1150 328 650 - 500 - 6.84 6.9 5.84 - 5.84 - 3.52 3.3 192 674 481 - 575 - 170 674 303 - 481 - | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ |

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

| Minor Lane/Major Mvmt | NBT | NBRV | VBLn1 | 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 | - | - | В | Α | - |
| HCM 95th %tile Q(veh) | - | - | 0.9 | 0.4 | - |

| Intersection | | | | | | | | | | | | | |
|------------------------|------|------|------|------|------|------|------|---------------|------|------|----------|------|--|
| Int Delay, s/veh | 0.1 | | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | |
| Lane Configurations | | | | | | 1 | | _ ≜ î≽ | | | ^ | | |
| 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 | | N | lajor1 | | Ma | ajor2 | | | |
|-----------------------|-----|----------|-----|-----|--------|---|----|-------|---|---|--|
| Conflicting Flow All | | - | - | 497 | - | 0 | 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 | | В | | | | | | | | | |
| | | | | | | | | | | | |
| 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

_

| Intersection | | | | | | | |
|------------------------|-------|------|------|------|------|------|---|
| Int Delay, s/veh | 0.8 | | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR | 2 |
| Lane Configurations | | *** | 朴朴 | | | 1 | ſ |
| Traffic Vol, veh/h | 0 | 1210 | 1066 | 159 | 0 | 111 | 1 |
| Future Vol, veh/h | 0 | 1210 | 1066 | 159 | 0 | 111 | l |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |) |
| Sign Control | Free | Free | Free | Free | Stop | Stop |) |
| RT Channelized | - | None | - | None | - | None | 9 |
| Storage Length | - | - | - | - | - | 0 |) |
| Veh in Median Storage | , # - | 0 | 0 | - | 0 | - | - |
| Grade, % | - | 0 | 0 | - | 0 | - | - |
| Peak Hour Factor | 98 | 98 | 98 | 98 | 98 | 98 | 3 |
| Heavy Vehicles, % | 0 | 1 | 1 | 0 | 0 | 0 |) |
| Mvmt Flow | 0 | 1235 | 1088 | 162 | 0 | 113 | 3 |

| Major/Minor | Major1 | N | Major2 | Minor2 | | |
|----------------------|--|-----|--------|--------|-------|-----|
| Conflicting Flow All | - | 0 | - | 0 | - | 625 |
| 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 | 370 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | - | - | - | - | - | 370 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| | | | | | | |
| Approach | EB | | WB | | SB | |
| HCM Control Delay, s | 0 | | 0 | | 19 | |
| HCM LOS | | | | | С | |
| | | | | | | |
| Minor Lane/Major Mvn | at | EBT | WBT | WBR S | DIn1 | |
| | ni in i | EDI | VVDI | | | |
| 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

| | ∢ | ~ | • | t | T | 1 |
|----------------------------------|--------------|----------------|-------|--------------|--------------|------------|
| Management | | • | ND: | | • | 000 |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | 5 7 | 7 31 | 27 | 4 106 | 1 41 | 00 |
| Volume (vph) Pedestrians | 57 | 31 | 21 | 106 | 141 | 89 |
| Pedestnans 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 |
| · · · / | | | 1.00 | | | 1.00 |
| Lane Utilization Factor | 1.00 0.95 | 1.00 0.85 | 0.95 | 1.00 0.99 | 1.00 0.94 | 0.85 |
| Turning Factor (vph) | | 1615 | | 0.99 1881 | 0.94 1790 | |
| Saturated Flow (vph) | 1805 | | 0 | | | 0 0.0 |
| 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 | 0.0 | | No | No | 0.0 |
| 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 | Со | mbined | |
| 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 | |
| | | | 01.0 | | 30.0 | |
| 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 Utilizatio | 'n | | 33.3% | IC | U Level o | of Service |
| Peteroneo Timos and Phasing | | do not ra | | | | |

Intersection Capacity Utilization 33.3% ICU Level of Service Reference Times and Phasing Options do not represent an optimized timing plan.

06/21/2022

Intersection Capacity Utilization 7: Internal Drive & South Access Drive

| | ≯ | \mathbf{r} | 1 | 1 | Ļ | 1 | |
|--|------------|--------------|---------------------|-------------|------|---------------------|---|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR | |
| Lane Configurations | ň | 1 | | र्स | eî 🗧 | | |
| 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 | |
| _ost Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Vinimum Green (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Refr Cycle Length (s) | 120 | 120 | 120 | 120 | 120 | 120 | |
| /olume Combined (vph) | 90 | 47 | 0 | 181 | 172 | 0 | |
| ane Utilization Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Furning Factor (vph) | 0.95 | 0.85 | 0.95 | 0.96 | 0.87 | 0.85 | |
| Saturated Flow (vph) | 1805 | 1615 | 0.55 | 1828 | 1655 | 0.00 | |
| Ped Intf Time (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Pedestrian Frequency (%) | 0.00 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| Protected Option Allowed | No | | | No | No | | |
| Reference Time (s) | NU | 3.5 | | NO | INU | 0.0 | |
| Adj Reference Time (s) | | 8.0 | | | | 0.0 | |
| Permitted Option | | 0.0 | | | | 0.0 | |
| Adj Saturation A (vph) | 120 | | 0 | 148 | 1655 | | |
| | 89.8 | | 0.0 | 140 | 12.5 | | |
| Reference Time A (s) | 09.0 NA | | NA | 147.1 NA | 1655 | | |
| Adj Saturation B (vph | NA | | NA | NA | 12.5 | | |
| Reference Time B (s) | INA | | ΝA | 147.1 | 12.5 | | |
| Reference Time (s) | | | | 147.1 | 12.5 | | |
| Adj Reference Time (s) | | | | 101.1 | 10.5 | | |
| Split Option | <u> </u> | | 0.0 | 44.0 | 40 F | | |
| 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 | | Co | mbined | | | |
| 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 | | | 25.20/ | | | 10-11 | |
| Intersection Capacity Utilization Reference Times and Phasing | | do not re | 35.3% epresent a | | | of Service plan. | A |

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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 |
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| | ٦ | - | \mathbf{F} | 4 | + | • | • | 1 | 1 | 1 | Ļ | ~ |
|-------------------------|-------|-------|--------------|-------|-------|-------|-------|-------|------|-------|-------|------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | र्भ | 1 | | र्भ | 1 | 5 | A⊅ | | ۲ | đβ | |
| 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 | | | | | | | | | | | | |
| Frt | | | 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 | |
| | | | | | | | | | | | | |

22-194 Outlot Parcel- Downers Grove sa/bsm

Lanes, Volumes, Timings 1: Lemont Road & Dunham Road/Middle Access Drive

| | Dunnann 1.0 | | | | 100 | | | | | 00/2 | |
|-----------------------------------|-----------------|-----------|---------------|------------|------------|------|------|-----|------|------|-----|
| | ≯ _ | • • | 4 | ł | • | • | Ť | * | * | Ļ | ~ |
| Lane Group | EBL EB | t ebr | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBF |
| v/c Ratio | 0.0 | 4 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 | |
| Total Delay | 20. | 8 34.3 | | 20.8 | 20.0 | 3.2 | 5.1 | | 6.0 | 13.5 | |
| LOS | (| C C | | С | В | А | А | | А | В | |
| Approach Delay | 33. | 4 | | 20.7 | | | 4.8 | | | 13.5 | |
| Approach LOS | (| C | | С | | | А | | | В | |
| Queue Length 50th (ft) | | 6 94 | | 5 | 1 | 10 | 89 | | 0 | 69 | |
| Queue Length 95th (ft) | 1 | 8 145 | | 16 | 5 | 11 | 51 | | 4 | 129 | |
| Internal Link Dist (ft) | 58 | 7 | | 251 | | | 553 | | | 615 | |
| Turn Bay Length (ft) | | 105 | | | 85 | 175 | | | 135 | | |
| Base Capacity (vph) | 49 | 0 473 | | 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 | 0.0 | 3 0.47 | | 0.03 | 0.00 | 0.23 | 0.41 | | 0.01 | 0.31 | |
| Intersection Summary | | | | | | | | | | | |
| | Other | | | | | | | | | | |
| Cycle Length: 75 | | | | | | | | | | | |
| Actuated Cycle Length: 75 | | | | | | | | | | | |
| Offset: 0 (0%), Referenced t | to phase 2:NBTL | and 6:SBT | L, Start of C | Green | | | | | | | |
| Natural Cycle: 60 | | | | | | | | | | | |
| Control Type: Actuated-Coo | rdinated | | | | | | | | | | |
| Maximum v/c Ratio: 0.63 | | | | | | | | | | | |
| Intersection Signal Delay: 17 | | | | | n LOS: B | | | | | | |
| Intersection Capacity Utilization | tion 49.2% | | IC | U Level of | of Service | А | | | | | |
| Analysis Period (min) 15 | | | | | | | | | | | |

Analysis Period (min) 15

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

| ∫ ¶ Ø2 (R) | | Ø1 | | ₽ 04 | |
|------------|----|------|---|-------------|--|
| 37 s | | 10 s | 2 | 28 s | |
| Ø6 (R) | 4 | Ø5 | | | |
| 33 s | 14 | S | 2 | 28 s | |

| Lanes, | Volumes | , Timin | gs | |
|--------|---------|---------|----|--|
| | | | | |

| 2: Lemont Road & S | ignalized Access | Drive/South Acces | s Drive |
|--------------------|------------------|-------------------|---------|
|--------------------|------------------|-------------------|---------|

| uth A | ccess l | Drive | | | | 06/2 | 1/2022 |
|-------|---------|-------|-----|-----|-----|------|--------|
| + | • | ≺ | Ť | * | * | Ŧ | ~ |
| | | NDI | NDT | NDD | CDI | CDT | CDD |

| | | | | | _ | | | | | | | |
|-------------------------|----------|-------|---------------|-------|-------|------|-------|-------------|------|-------|-------------|--------|
| | ٭ | - | \rightarrow | 1 | + | • | 1 | Ť | 1 | • | Ŧ | - |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | <u>۲</u> | 4 | | ሻ | 4 | | ሻ | ≜1 ≱ | | ሻ | - †† | 1 |
| 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 | | | | | | | | | | | | |
| Frt | | 0.891 | | | 0.860 | | | 0.993 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1656 | 1608 | 0 | 1805 | 1634 | 0 | 1805 | 3453 | 0 | 1805 | 3505 | 1380 |
| Flt 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 | | 0.00 | Yes | | | Yes |
| Satd. Flow (RTOR) | | 8 | | | 27 | | | 7 | | | | 145 |
| Link Speed (mph) | | 30 | | | 30 | | | 40 | | | 40 | 1.0 |
| Link Distance (ft) | | 302 | | | 294 | | | 366 | | | 633 | |
| Travel Time (s) | | 6.9 | | | 6.7 | | | 6.2 | | | 10.8 | |
| Confl. Peds. (#/hr) | | 0.0 | | | 0.1 | | | 0.2 | | | 10.0 | |
| 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) | Ŭ | Ű | Ŭ | Ű | Ŭ | Ű | Ŭ | Ŭ | Ŭ | Ŭ | Ŭ | Ű |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | 070 | | | 070 | | | 070 | | | 070 | |
| Lane Group Flow (vph) | 39 | 11 | 0 | 43 | 29 | 0 | 16 | 945 | 0 | 25 | 672 | 13 |
| Turn Type | pm+pt | NA | Ű | pm+pt | NA | Ū | pm+pt | NA | Ū | pm+pt | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | 1 0111 |
| Permitted Phases | 4 | т | | 8 | U | | 2 | 2 | | 6 | U | 6 |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | 6 |
| Switch Phase | , | | | Ŭ | Ŭ | | U | - | | | Ŭ | Ŭ |
| 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 | 0.0 | | 0.16 | 0.1 | | 0.79 | 0.74 | | 0.80 | 0.77 | 0.77 |
| | 0.12 | 0.11 | | 0.10 | 0.11 | | 0.13 | 0.74 | | 0.00 | 0.11 | 0.11 |

22-194 Outlot Parcel- Downers Grove sa/bsm

| Lanes, Volumes, Timings | |
|--|----|
| 2: Lemont Road & Signalized Access Drive/South Access Driv | /e |

| Lane Group EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT v/c Ratio 0.20 0.06 0.15 0.14 0.02 0.37 0.05 0.25 Control Delay 29.0 21.2 24.4 15.1 4.8 8.5 1.9 2.7 Queue Delay 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 LOS C C C B A A A A Approach Delay 27.3 20.7 8.4 2.6 A A A Queue Length 50th (ft) 17 1 19 1 1 50 0 8 | /2022 |
|--|-------|
| v/c Ratio 0.20 0.06 0.15 0.14 0.02 0.37 0.05 0.25 Control Delay 29.0 21.2 24.4 15.1 4.8 8.5 1.9 2.7 Queue Delay 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 LOS C C C B A A A Approach Delay 27.3 20.7 8.4 2.6 A A A A Queue Length 50th (ft) 17 1 19 1 1 50 0 8 | ~ |
| Control Delay 29.0 21.2 24.4 15.1 4.8 8.5 1.9 2.7 Queue Delay 0.0 | SBR |
| Queue Delay 0.0 <th< td=""><td>0.01</td></th<> | 0.01 |
| Total Delay 29.0 21.2 24.4 15.1 4.8 8.5 1.9 2.7 LOS C C C B A A A A Approach Delay 27.3 20.7 8.4 2.6 A Approach LOS C C A A A Queue Length 50th (ft) 17 1 19 1 10 0 8 | 0.0 |
| LOS C C C B 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 50 0 8 | 0.0 |
| Approach Delay 27.3 20.7 8.4 2.6 Approach LOS C C A A Queue Length 50th (ft) 17 1 19 1 50 0 8 | 0.0 |
| Approach LOS C C A A Queue Length 50th (ft) 17 1 19 1 50 0 8 | 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 |
| Spillback Cap Reductn 0 | 0 |
| Storage Cap Reductn 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

| Ø2 (R) | Ø1 | <u>⊸</u> _{Ø4} | √ Ø3 | |
|--------|------|------------------------|-------------|--|
| 32 s | 10 s | 23 s | 10 s | |
| Ø6 (R) | ▲ ø5 | ✓ Ø8 | <u>≯</u> ₀7 | |
| 32 s | 10 s | 23 s | 10 s | |

| Intersection | | | | | | |
|------------------------|--------|------|---------------|------|------|----------|
| Int Delay, s/veh | 0.5 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ۰¥ | | _ ^ †₽ | | ۲. | ^ |
| 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 | e, # 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 | М | ajor1 | Ν | lajor2 | |
|----------------------|--------|------|-------|---|--------|---|
| Conflicting Flow All | 1069 | 386 | 0 | 0 | 772 | 0 |
| 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 | r 202 | 579 | - | - | 588 | - |
| Mov Cap-2 Maneuver | r 320 | - | - | - | - | - |
| Stage 1 | 418 | - | - | - | - | - |
| Stage 2 | 673 | - | - | - | - | - |
| | | | | | | |

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

| Minor Lane/Major Mvmt | NBT | NBRWBLr | 1 SBL | SBT |
|-----------------------|-----|---------|---------|-----|
| Capacity (veh/h) | - | - 46 | 0 588 | - |
| HCM Lane V/C Ratio | - | - 0.04 | 9 0.061 | - |
| HCM Control Delay (s) | - | - 13 | 2 11.5 | - |
| HCM Lane LOS | - | - | B B | - |
| HCM 95th %tile Q(veh) | - | - 0 | 2 0.2 | - |

| Intersection | | | | | | | | | | | | | |
|------------------------|------|------|------|------|------|------|------|---------------|------|------|-------------|------|--|
| Int Delay, s/veh | 0 | | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | |
| Lane Configurations | | | | | | 1 | | _ ≜ î≽ | | | † †† | | |
| 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 | | Μ | lajor1 | | Ма | ajor2 | | | |
|-----------------------|-----|----------|-----|-----|--------|---|----|-------|---|---|--|
| Conflicting Flow All | | - | - | 492 | - | 0 | 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, % | | | | | | - | - | | - | | |
| Nov Cap-1 Maneuver | | - | 0 | 528 | - | - | - | - | - | - | |
| Nov Cap-2 Maneuver | | - | 0 | - | - | - | - | - | - | - | |
| Stage 1 | | - | 0 | - | - | - | - | - | - | - | |
| Stage 2 | | - | 0 | - | - | - | - | - | - | - | |
| | | | | | | | | | | | |
| Approach | | WB | | | NB | | | SB | | | |
| HCM Control Delay, s | | 11.8 | | | 0 | | | 0 | | | |
| HCM LOS | | В | | | | | | | | | |
| | | | | | | | | | | | |
| 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 | - | | | | | | | | |

| Intersection | | | | | | |
|------------------------|-------|----------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ^ | 朴朴 | | | 1 |
| 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 | Ν | /lajor2 | Ν | /linor2 | |
|--------------------------------------|--------|-----|---------|-------|-----------|------|
| 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 | | | | | В | |
| | | | | | | |
| Minor Long/Major Myr | mt. | EBT | WBT | WBR S | | |
| Minor Lane/Major Mvr | п | EDI | VVDI | VDR 3 | | |
| Capacity (veh/h) | | - | - | - | 402 | |
| HCM Lane V/C Ratio | 1 | - | - | - | 0.074 | |
| HCM Control Delay (s HCM Lane LOS |) | - | | | 14.7 D | |
| HCM 25th %tile Q(ver | 2) | - | - | - | В 0.2 | |
| | 1) | - | - | - | 0.2 | |

Synchro 11 Report

06/21/2022

Intersection Capacity Utilization 6: Internal Drive & Middle Access Drive

| | ≯ | ~ | • | ŧ | 1 | 7 |
|-----------------------------------|----------|-----------|-------|------|-----------|------------|
| | - | * |) | I | * | - |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | <u> </u> | 1 | _ | र्भ | ₽ | _ |
| Volume (vph) | 13 | 9 | 7 | 11 | 11 | 7 |
| Pedestrians | | | | | | |
| Ped Button | | | | | | |
| Pedestrian Timing (s) | | | | | | |
| Free Right | 4000 | No | 4000 | 4000 | 4000 | 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 | Co | mbined | |
| Protected Option (s) | NA | | NA | | monica | |
| Permitted Option (s) | Err | | 12.2 | | | |
| Split Option (s) | 8.0 | | 16.0 | | | |
| Minimum (s) | 8.0 | | 12.2 | | 20.2 | |
| | | | 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 | | | | | | |
| | 20 | | 16.8% | | U Level o | of Sonvior |
| Intersection Capacity Utilization | | do not re | | | | |

Intersection Capacity Utilization16.8%ICU Level of ServiceReference Times and Phasing Options do not represent an optimized timing plan.

06/21/2022

Intersection Capacity Utilization 7: Internal Drive & South Access Drive

| | ۶ | \mathbf{r} | 1 | Ť | ţ | ∢ |
|---------------------------------|------|--------------|--------|------|-----------|------------|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | 7 | 1 | | र्स | 4 | |
| 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 | , | | | | 10=- | |
| 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 | Со | mbined | |
| 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 Summery | | | | | | |
| Intersection Summary | | | 10 70/ | | | of Convict |
| Intersection Capacity Utilizati | | 1 | 19.7% | | U Level o | |

06/21/2022

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

| SBR 11 1900 12 0 0 0 |
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| 11 1900 12 0 0 |
| 11 1900 12 0 0 |
| 11 1900 12 0 0 |
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22-194 Outlot Parcel- Downers Grove sa/bsm

Lanes, Volumes, Timings 1: Lemont Road & Dunham Road/Middle Access Drive

| | Barman | Titoat | , initiad | 10 / 1001 | 000 DI | | | | | | | |
|------------------------------|---------------|----------|--------------|------------|-------------|------------|------|------|-----|------|------|-----|
| | ٦ | - | \mathbf{r} | 1 | - | * | 1 | 1 | 1 | 1 | Ŧ | - |
| 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 | | С | С | | С | С | А | А | | А | В | |
| Approach Delay | | 33.0 | | | 26.5 | | | 2.3 | | | 12.3 | |
| Approach LOS | | С | | | С | | | А | | | В | |
| 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 | d to phase 2: | NBTL and | d 6:SBTL | , Start of | Green | | | | | | | |
| Natural Cycle: 55 | | | | | | | | | | | | |
| Control Type: Actuated-Co | oordinated | | | | | | | | | | | |
| Maximum v/c Ratio: 0.55 | | | | | | | | | | | | |
| Intersection Signal Delay: | | | | | itersection | | | | | | | |
| Intersection Capacity Utiliz | zation 53.2% | | | IC | CU Level | of Service | А | | | | | |
| Analysis Period (min) 15 | | | | | | | | | | | | |
| | | | | | | | | | | | | |

| Splits and Phases: | 1: Lemont Road & Dunham Road/Middle A | ccess I | Drive | | |
|--------------------|---------------------------------------|---------|-------|------------------------|--|
| Ø2 (R) | | | Ø1 | ↓ 04 | |
| 39 s | | | 10 s | 26 s | |
| Ø6 (R) | | 1 |)5 | 4 Ø 8 | |
| 35 s | | 14 s | | 26 s | |

| Lanes, | Volumes, | Timing | js | |
|--------|----------|--------|----|--|
| | | | | |

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

| | ٦ | - | \mathbf{F} | 4 | + | * | 1 | t | 1 | 1 | Ŧ | ~ |
|-------------------------|-------|----------|--------------|----------|----------|------|-------------|-------------|------|-------|---------|-------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | 1 | el el | | <u>ک</u> | el el | | <u>ار ا</u> | ∱ î, | | ľ | <u></u> | 1 |
| 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 | | | | | | | | | | | | |
| Frt | | 0.881 | | | 0.879 | | | 0.983 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1674 | 0 | 1805 | 1670 | 0 | 1805 | 3517 | 0 | 1805 | 3574 | 1615 |
| Flt 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 |

22-194 Outlot Parcel- Downers Grove sa/bsm

| Lanes, ` | Vo | lumes, | Timings | | | |
|----------|------|--------|------------|---|-------------|-----|
| 0. I ama | . nt | Dood | Signalized | 1 | Drive/South | 100 |

| | ۶ | - | \mathbf{r} | 4 | ← | * | 1 | Ť | 1 | 1 | Ŧ | ~ |
|---|------------|----------|--------------|------------|------------|------------|------|------|-----|------|------|-----|
| ane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBF |
| //c Ratio | 0.29 | 0.25 | | 0.82 | 0.19 | | 0.17 | 0.48 | | 0.09 | 0.45 | 0.0 |
| Control Delay | 31.8 | 16.6 | | 54.8 | 16.0 | | 13.3 | 15.3 | | 5.8 | 8.3 | 0. |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0. |
| Fotal Delay | 31.8 | 16.6 | | 54.8 | 16.0 | | 13.3 | 15.3 | | 5.8 | 8.3 | 0. |
| LOS | С | В | | D | В | | В | В | | А | А | |
| Approach Delay | | 25.0 | | | 49.0 | | | 15.1 | | | 7.6 | |
| Approach LOS | | С | | | D | | | В | | | А | |
| Queue Length 50th (ft) | 28 | 5 | | 108 | 3 | | 15 | 166 | | 5 | 177 | |
| Queue Length 95th (ft) | 64 | 36 | | #221 | 30 | | 36 | 227 | | m11 | 74 | |
| nternal Link Dist (ft) | | 222 | | | 214 | | | 286 | | | 553 | |
| Furn Bay Length (ft) | 85 | | | 85 | | | 200 | | | 70 | | 16 |
| Base Capacity (vph) | 238 | 216 | | 300 | 339 | | 338 | 1838 | | 443 | 1886 | 92 |
| 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 | 0.29 | 0.25 | | 0.80 | 0.12 | | 0.17 | 0.48 | | 0.09 | 0.45 | 0.0 |
| ntersection Summary | | | | | | | | | | | | |
| 51 | Other | | | | | | | | | | | |
| Cycle Length: 75 | | | | | | | | | | | | |
| Actuated Cycle Length: 75 | | | | | _ | | | | | | | |
| Offset: 6 (8%), Referenced t | o phase 2: | VBTL and | 6:SBTL, | Start of (| Green | | | | | | | |
| Natural Cycle: 60 | | | | | | | | | | | | |
| Control Type: Actuated-Coo | rdinated | | | | | | | | | | | |
| Maximum v/c Ratio: 0.82 | _ | | | | | | | | | | | |
| ntersection Signal Delay: 16 | | | | | tersection | | _ | | | | | |
| ntersection Capacity Utilizat | tion 60.2% | | | IC | U Level o | of Service | В | | | | | |
| Analysis Period (min) 15 | | | | h - 1 | | | | | | | | |
| 95th percentile volume e | | | eue may | be longer | | | | | | | | |
| Queue shown is maximul n Volume for 95th percent | | | | | | | | | | | | |

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

| ≪¶ ø2 (R) 📮 | Ø1 | √ Ø3 | <u></u> |
|-----------------|------|-------------|-----------------|
| 35 s | 10 s | 16 s | 14 s |
| ▲ ø5 🖡 🗣 ø6 (R) | | ₹_Ø8 | ▶ _{Ø7} |
| 9 s 36 s | | 20 s | 10 s |

| Intersection | | | | | | | |
|------------------------|--------|------|-------------|------|------|--------------|---|
| Int Delay, s/veh | 1.8 | | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT | • |
| Lane Configurations | ۰¥ | | ∱ î≽ | | - ሽ | - † † | • |
| Traffic Vol, veh/h | 21 | 121 | 639 | 21 | 87 | 737 | 1 |
| Future Vol, veh/h | 21 | 121 | 639 | 21 | 87 | 737 | , |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | J |
| Sign Control | Stop | Stop | Free | Free | Free | Free | , |
| RT Channelized | - | None | - | None | - | None | , |
| Storage Length | 0 | - | - | - | 100 | - | |
| Veh in Median Storage | e, # 1 | - | 0 | - | - | 0 | j |
| Grade, % | 0 | - | 0 | - | - | 0 |) |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | j |
| Heavy Vehicles, % | 1 | 11 | 0 | 2 | 0 | 0 |) |
| Mvmt Flow | 22 | 126 | 666 | 22 | 91 | 768 | 5 |

| Major/Minor | Minor1 | Ν | lajor1 | N | lajor2 | |
|----------------------|--------|------|--------|---|--------|---|
| 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 | r 151 | 626 | - | - | 916 | - |
| Mov Cap-2 Maneuver | r 286 | - | - | - | - | - |
| Stage 1 | 469 | - | - | - | - | - |
| Stage 2 | 481 | - | - | - | - | - |
| | | | | | | |
| | | | | | | |

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

| Minor Lane/Major Mvmt | NBT | NBRW | /BLn1 | 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 | - | - | В | Α | - |
| HCM 95th %tile Q(veh) | - | - | 1.1 | 0.3 | - |

| Intersection | | | | | | | | | | | | | |
|------------------------|------|------|------|------|------|------|------|---------------|------|------|----------|------|--|
| Int Delay, s/veh | 0 | | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | |
| Lane Configurations | | | | | | 1 | | - † 12 | | | ^ | | |
| 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 | | N | lajor1 | | Ма | ajor2 | | | |
|-----------------------|-----|----------|-----|-----|--------|---|----|-------|---|---|--|
| Conflicting Flow All | | - | - | 521 | - | 0 | 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 | 505 | 0 | - | - | 0 | - | 0 | |
| Stage 1 | | 0 | 0 | - | 0 | - | - | 0 | - | 0 | |
| Stage 2 | | 0 | 0 | - | 0 | - | - | 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 | | В | | | | | | | | | |
| | | | | | | | | | | | |
| 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 | | | | | | | | | |

| Intersection | | | | | | |
|------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.8 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | *** | 朴朴 | | | 1 |
| 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 M | ajor1 | N | /lajor2 | N | 1inor2 | |
|-----------------------|-------|-----|---------|-------|--------|-----|
| 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 | | | | | С | |
| | | | | | | |
| NA' I /NA - ' NA I | | EDT | | | | |
| Minor Lane/Major Mvmt | | EBT | WBT | WBR S | | |
| 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

| | ≯ | \rightarrow | 1 | † | Ŧ | ~ | |
|--|-------------|---------------|-------|----------|-----------|------|-----|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR | |
| Lane Configurations | 1 | 1 | | Ę | et. | | |
| Volume (vph) | 51 | 28 | 22 | 74 | 112 | 47 | |
| Pedestrians | | | | | | | |
| Ped Button | | | | | | | |
| Pedestrian Timing (s) | | | | | | | |
| Free Right | | No | | | | No | |
| deal Flow | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | |
| ₋ost Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Vinimum Green (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Refr Cycle Length (s) | 120 | 120 | 120 | 120 | 120 | 120 | |
| /olume Combined (vph) | 51 | 28 | 0 | 96 | 159 | 0 | |
| ane Utilization Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Furning 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 | Co | mbined | | |
| 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 | | | | | | |
| * | | | | | | | |
| dj Reference Time (s) Cross Thru Ref Time (s) | 8.0 14.5 | | | | | | |
| () | | | | | | | |
| Dncoming Left Ref Time (s) | 0.0 22.5 | | | | | | |
| Combined (s) | 22.3 | | | | | | |
| ntersection Summary | n | | 27.2% | | U Level o | | e A |

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06/21/2022

22-194 Outlot Parcel- Downers Grove

Reference Times and Phasing Options do not represent an optimized timing plan.

Intersection Capacity Utilization 7: Internal Drive & South Access Drive

| | outin / | 000000 | DIIVC | | | | |
|-----------------------------------|---------|--------------------|--------|-------|---------|------------|--|
| | ۶ | $\mathbf{\hat{z}}$ | • | Ť | Ļ | ~ | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR | |
| Lane Configurations | ٦ ۲ | 1 | | 4 | el 🗧 | | |
| 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 | | |
| , | EB | | | 0- | mbined | | |
| Summary Diretected Option (c) | | | NB SB | 0 | Demon | | |
| Protected Option (s) | NA | | NA | | | | |
| Permitted Option (s) | Err | | 171.4 | | | | |
| Split Option (s) | 8.0 | | 31.0 | | 20.0 | | |
| 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% | | | of Service | |
| intersection capacity oulization | | | 52.570 | 10 | C LOVEL | | |

Reference Times and Phasing Options do not represent an optimized timing plan.

06/21/2022

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

| | ≯ | + | * | 4 | + | • | • | † | * | * | ţ | ~ |
|--------------------------------------|-------------------|--------------|------------|--------|------------|------------|------------|------------|------|------------|------------|------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | र्स | 1 | | र्स | * | <u>۲</u> | A⊅ | | ۲ | A | |
| 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 | 1.00 | 1.00 | | 1.00 | | 1.00 | | 0.00 | 0.00 | | 0.00 | 0.00 |
| Frt | | | 0.850 | | | 0.850 | | 0.990 | | | 0.994 | |
| Flt Protected | | 0.988 | 0.000 | | 0.961 | 0.000 | 0.950 | 0.000 | | 0.950 | 0.001 | |
| Satd. Flow (prot) | 0 | 1836 | 1599 | 0 | 1826 | 1615 | 1787 | 3504 | 0 | 1805 | 3536 | 0 |
| Flt Permitted | U | 0.908 | 1000 | U | 0.738 | 1010 | 0.397 | 0004 | U | 0.361 | 0000 | Ū |
| Satd. Flow (perm) | 0 | 1687 | 1599 | 0 | 1402 | 1615 | 747 | 3504 | 0 | 686 | 3536 | 0 |
| Right Turn on Red | 0 | 1007 | No | U | 1402 | No | 171 | 0004 | No | 000 | 0000 | No |
| Satd. Flow (RTOR) | | | NU | | | NO | | | NO | | | NO |
| 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) | | 15.2 | | | 7.5 | | | 10.0 | | | 11.0 | |
| 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% | 100 % | 0% | 0% | 0% | 100 % | 2% | 2% | 0% | 1% | 13% |
| Bus Blockages (#/hr) | 9 <i>1</i> 8 0 | 078 | 0 | 078 | 0 /8 | 078 | 0 | 2 /0 | 2 /8 | 078 | 0 | 0 |
| Parking (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | 0 /0 | | | 0 /0 | | | 0 /0 | | | 0 /0 | |
| 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 | 0 | pm+pt | NA | 0 |
| Protected Phases | Feim | 4 | Feim | Feilli | 8 | Feilii | рш+рі 5 | 2 | | μπ+μι 1 | 6 | |
| Permitted Phases | 4 | 4 | 4 | 8 | 0 | 8 | 2 | 2 | | 6 | 0 | |
| Detector Phase | 4 | 4 | 4 | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | 4 | 4 | 4 | 0 | 0 | 0 | 5 | 2 | | 1 | 0 | |
| Minimum Initial (s) | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | 3.0 | 15.0 | | 3.0 | 15.0 | |
| | 22.5 | | 22.5 | 22.5 | 22.5 | 22.5 | 9.5 | 22.5 | | 9.5 | 22.5 | |
| Minimum Split (s) Total Split (s) | 22.5 | 22.5 27.0 | 22.5 | 22.5 | 22.5 | 22.5 | 9.5 | 38.0 | | 9.5 | 35.0 | |
| , | 36.0% | 36.0% | 36.0% | 36.0% | 36.0% | 36.0% | 17.3% | 50.7% | | 13.3% | 46.7% | |
| Total Split (%) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 3.5 | 4.0 | | 3.5 | 40.7% | |
| Yellow Time (s) | | | | | | | | | | 0.0 | | |
| All-Red Time (s) | 2.0 | 2.0 0.0 | 2.0 0.0 | 2.0 | 2.0 0.0 | 2.0 0.0 | 0.0 0.0 | 2.0 0.0 | | 0.0 | 2.0 0.0 | |
| Lost Time Adjust (s) | | | | | | | | | | | | |
| 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? | Nere | Mare | Nere | Ners | Nere | Nera | 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 | |

22-194 Outlot Parcel- Downers Grove sa/bsm

Lanes, Volumes, Timings 1: Lemont Road & Dunham Road/Middle Access Drive

| T. Lemont Road & | Durinani Ko | uu/Iviiuu | | 55 01 | 100 | | | | | 001 | |
|-------------------------------|-------------------|------------|--------------|-----------|------------|------|------|-----|------|------|-----|
| | ≯ → | • • | 4 | + | • | • | Ť | * | 1 | Ļ | ~ |
| Lane Group | EBL EB | Г EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| v/c Ratio | 0.1 | 5 0.54 | | 0.50 | 0.05 | 0.25 | 0.33 | | 0.04 | 0.33 | |
| Control Delay | 25.4 | 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 | | | 33.9 | 23.6 | 3.8 | 3.5 | | 5.0 | 11.8 | |
| LOS | (| | | С | С | А | А | | А | В | |
| Approach Delay | 32.4 | 1 | | 32.8 | | | 3.5 | | | 11.6 | |
| Approach LOS | (|) | | С | | | А | | | В | |
| Queue Length 50th (ft) | 1 | | | 52 | 5 | 11 | 28 | | 2 | 77 | |
| Queue Length 95th (ft) | 4 | 1 112 | | 94 | 19 | 25 | 48 | | 11 | 139 | |
| Internal Link Dist (ft) | 58 | 7 | | 251 | | | 553 | | | 615 | |
| Turn Bay Length (ft) | | 105 | | | 85 | 175 | | | 135 | | |
| Base Capacity (vph) | 472 | 2 447 | | 392 | 452 | 677 | 2151 | | 540 | 1860 | |
| 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 | 0.0 | 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%), Referenc | ed to phase 2:NBT | L and 6:SE | BTL, Start o | f Green | | | | | | | |
| Natural Cycle: 55 | | | | | | | | | | | |
| Control Type: Actuated-Co | ordinated | | | | | | | | | | |
| Maximum v/c Ratio: 0.54 | | | | | | | | | | | |
| Intersection Signal Delay: 1 | | | | | LOS: B | | | | | | |
| Intersection Capacity Utiliza | ation 51.0% | | ICI | J Level o | of Service | A | | | | | |
| Analysis Period (min) 15 | | | | | | | | | | | |

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

| ∮ ¶ ø2 (R) | | Ø1 | 04 |
|------------|------|------|----|
| 38 s | 10 s | 27 s | |
| Ø6 (R) | ▲ ø5 | | Ø8 |
| 35 s | 13 s | 27 s | |

| Lanes, | Volumes, | , Timing | js | |
|--------|----------|----------|----|--|
| - · | | | | |

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

| | ≯ | - | \mathbf{F} | 4 | + | * | • | Ť | 1 | 1 | Ļ | ~ |
|-------------------------|-------|-------|--------------|----------|-------|------|----------|-------|------|-------|---------|-------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ٦ | ¢Î | | <u> </u> | ef 👘 | | <u>۲</u> | A | | ۲ | <u></u> | 1 |
| 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 | | | | | | | | | | | | |
| Frt | | 0.881 | | | 0.886 | | | 0.972 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1648 | 0 | 1805 | 1683 | 0 | 1805 | 3453 | 0 | 1805 | 3574 | 1615 |
| Flt 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 Effct 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 |

22-194 Outlot Parcel- Downers Grove sa/bsm

| Lanes, Volumes, Timings |
|---|
| 2: Lemont Road & Signalized Access Drive/South Access Drive |

| 2: Lemont Road & | Signaliz | ed Aco | cess D | rive/So | outh A | ccess l | Drive | | | | 06/2 | 21/2022 |
|-------------------------------|-------------|----------|-----------|----------|------------|------------|-------|------|-----|------|------|---------|
| | ٠ | + | * | 4 | + | * | • | 1 | 1 | * | ţ | ~ |
| 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 | С | В | | С | В | | А | В | | А | А | A |
| Approach Delay | | 20.1 | | | 26.3 | | | 14.6 | | | 8.0 | |
| Approach LOS | | С | | | С | | | В | | | А | |
| 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 | | | | | | | | | | | | |
| 51 | Other | | | | | | | | | | | |
| Cycle Length: 75 | | | | | | | | | | | | |
| Actuated Cycle Length: 75 | | | | | | | | | | | | |
| Offset: 5 (7%), Referenced t | to phase 2: | NBTL and | d 6:SBTL, | Start of | Green | | | | | | | |
| Natural Cycle: 60 | | | | | | | | | | | | |
| Control Type: Actuated-Coo | ordinated | | | | | | | | | | | |
| Maximum v/c Ratio: 0.64 | | | | | | | | | | | | |
| Intersection Signal Delay: 14 | | | | | tersectior | | | | | | | |
| Intersection Capacity Utiliza | tion 61.9% | | | IC | U Level o | of Service | В | | | | | |
| Analysis Period (min) 15 | | | | | | | | | | | | |

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

| Ø2 (R) | | Ø1 | A ₁₀₄ | √ Ø3 | | |
|--------|---|------------|------------------|-------------|---------|--|
| 33 s | 9 |).6s | 14 s | 18.4 s | | |
| Ø6 (R) | | Ø 5 | ₩ Ø8 | | ▶ Ø7 | |
| 33.6 s | | 9 s | 21.8 s | | 10.6 s | |

| Intersection | | | | | | |
|------------------------|-------|------|---------------|------|-----------|----------|
| Int Delay, s/veh | 2.1 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ۰¥ | | _ ^ †₽ | | <u>ار</u> | ^ |
| 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 | Ma | ajor1 | Ν | lajor2 | |
|----------------------|--------|-----|-------|---|--------|---|
| 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 | r 146 | 658 | - | - | 916 | - |
| Mov Cap-2 Maneuver | r 280 | - | - | - | - | - |
| Stage 1 | 464 | - | - | - | - | - |
| Stage 2 | 469 | - | - | - | - | - |
| | | | | | | |

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

| Minor Lane/Major Mvmt | NBT | NBRWE | 3Ln1 | 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 | - | - | В | Α | - |
| HCM 95th %tile Q(veh) | - | - | 1.1 | 0.5 | - |

| Intersection | | | | | | | | | | | | |
|------------------------|------|------|------|------|------|------|------|---------------|------|------|----------|------|
| Int Delay, s/veh | 0.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | | | | 1 | | - † 14 | | | ^ | |
| 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 | | N | lajor1 | | Ma | ajor2 | | | |
|-----------------------|-----|----------|-----|-----|--------|---|----|-------|---|---|--|
| Conflicting Flow All | | - | - | 564 | - | 0 | 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 | 474 | 0 | - | - | 0 | - | 0 | |
| Stage 1 | | 0 | 0 | - | 0 | - | - | 0 | - | 0 | |
| Stage 2 | | 0 | 0 | - | 0 | - | - | 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 | | В | | | | | | | | | |
| | | | | | | | | | | | |
| 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

_

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| Intersection | | | | | | |
|------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.3 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | *** | 朴朴 | | | 1 |
| 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 N | /lajor1 | Ν | Major2 | М | inor2 | |
|-----------------------|---------|-----|--------|-------|-------|-----|
| 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 | U | | U | | C | |
| | | | | | U | |
| | | | | | | |
| Minor Lane/Major Mvm | t | EBT | WBT | WBR S | | |
| Capacity (veh/h) | | - | - | - | 352 | |
| HCM Lane V/C Ratio | | - | - | - (|).449 | |
| HCM Control Delay (s) | | - | - | - | 23.3 | |
| HCM Lane LOS | | - | - | - | С | |
| HCM 95th %tile Q(veh) | l. | - | - | - | 2.2 | |

Intersection Capacity Utilization 6: Internal Drive & Middle Access Drive

| | ۶ | \mathbf{i} | 1 | 1 | ţ | ~ |
|---------------------------------------|---------|--------------|--------------|------|-----------|----------------------|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | ۲ | 1 | | र्स | ¢Î, | |
| 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 | Co | mbined | |
| Protected Option (s) | NA | | NA | 00 | | |
| Permitted Option (s) | Err | | 49.0 | | | |
| Split Option (s) | 8.0 | | 49.0 34.5 | | | |
| Minimum (s) | 8.0 | | 34.5 | | 42.5 | |
| (| | | 04.0 | | 42.0 | |
| 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 | | | | | | |
| · · · · · · · · · · · · · · · · · · · | | | 25 40/ | | | (O a m d a a |
| Intersection Capacity Utilization | n On | | 35.4% | IC | U Level o | or Service |

Reference Times and Phasing Options do not represent an optimized timing plan.

06/21/2022

Intersection Capacity Utilization 7: Internal Drive & South Access Drive

| | ≯ | \mathbf{i} | • | 1 | ţ | 4 | |
|-----------------------------------|------------|--------------|----------|-------------|-----------|------------|---|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR | |
| Lane Configurations | 5 | 1 | | र्भ | 4Î | | |
| 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 | 0.00 | 1825 | 1661 | 0.00 | |
| Ped Intf Time (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Pedestrian Frequency (%) | 0.00 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| Protected Option Allowed | No | | | No | No | | |
| Reference Time (s) | NU | 8.5 | | NO | INU | 0.0 | |
| Adj Reference Time (s) | | 12.5 | | | | 0.0 | |
| Permitted Option | | 12.5 | | | | 0.0 | |
| • | 120 | | 0 | 144 | 1661 | | |
| Adj Saturation A (vph) | 94.7 | | 0 0.0 | 224.5 | 13.9 | | |
| Reference Time A (s) | 94.7 NA | | NA | 224.5 NA | 1661 | | |
| Adj Saturation B (vph | | | | | | | |
| Reference Time B (s) | NA | | NA | NA 224 5 | 13.9 | | |
| Reference Time (s) | | | | 224.5 | 13.9 | | |
| Adj Reference Time (s) | | | | 228.5 | 17.9 | | |
| Split Option | | | | 47 7 | 10.0 | | |
| 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 | Со | mbined | | |
| 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 | 20 | | 41.6% | | U Level o | of Service | Α |

Intersection Capacity Utilization 41.6% ICU Level of Servi Reference Times and Phasing Options do not represent an optimized timing plan. 06/21/2022

<u>Capacity Analysis Summary Sheets</u> Year 2027 Projected Weekday Morning Peak Hour Conditions

| Lanes, Volumes, | Timings |
|-----------------|---------|
|-----------------|---------|

1: Lemont Road & Dunham Road/Middle Access Drive

|--|

| | ٨ | + | * | 4 | Ļ | * | • | 1 | 1 | ŕ | Ļ | ~ |
|-------------------------|-------|-------|-------|-------|-------|-------|----------|-------|------|-------|-------|------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | र्भ | 1 | | र्स | 1 | <u>۲</u> | A⊅ | | ň | A⊅ | |
| 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 | 1.00 | | | 1.00 | | 1.00 | | 0.00 | 0.00 | | 0.00 | 0.00 |
| Frt | | | 0.850 | | | 0.850 | | 0.993 | | | 0.998 | |
| Flt Protected | | 0.971 | 0.000 | | 0.955 | 0.000 | 0.950 | 0.000 | | 0.950 | 0.000 | |
| Satd. Flow (prot) | 0 | 1845 | 1615 | 0 | 1756 | 1615 | 1752 | 3438 | 0 | 1805 | 3425 | 0 |
| Flt Permitted | U | 0.874 | 1010 | v | 0.776 | 1010 | 0.452 | 0100 | Ū | 0.283 | 0120 | v |
| Satd. Flow (perm) | 0 | 1661 | 1615 | 0 | 1427 | 1615 | 834 | 3438 | 0 | 538 | 3425 | 0 |
| Right Turn on Red | U | 1001 | No | Ū | 1741 | No | 004 | 0400 | No | 000 | 0420 | No |
| Satd. Flow (RTOR) | | | NO | | | 110 | | | NO | | | |
| 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) | | 10.2 | | | 7.0 | | | 10.0 | | | 11.0 | |
| 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 | | | 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 | 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 | |
| | | | | | | | | | | | | |

22-194 Outlot Parcel- Downers Grove sa/bsm

1: Lemont Road & Dunham Road/Middle Access Drive

| | ٨ | + | \mathbf{F} | 4 | + | • | • | Ť | 1 | 1 | ţ | 4 |
|---------------------------|--------------|-----------|--------------|----------|-------|------|------|------|-----|------|------|-----|
| 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 | | С | С | | С | С | А | А | | А | В | |
| Approach Delay | | 33.4 | | | 21.7 | | | 4.9 | | | 13.3 | |
| Approach LOS | | С | | | С | | | А | | | В | |
| 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: 7 | 5 | | | | | | | | | | | |
| Offset: 0 (0%), Reference | d to phase 2 | :NBTL and | d 6:SBTL | Start of | Green | | | | | | | |

Offset: 0 (0%), Referenced Natural Cycle: 60

Control Type: Actuated-Coordinated Maximum v/c Ratio: 0.63

Intersection Signal Delay: 11.5

Intersection Capacity Utilization 49.5% Analysis Period (min) 15 Intersection LOS: B ICU Level of Service A

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

| Ø2 (R) | | Ø1 | | ↓ ₀₄ | |
|--------|----|------|----|------------------------|--|
| 37 s | | 10 s | 28 | 8 s | |
| Ø6 (R) | • | Ø5 | • | ∲ Ø8 | |
| 33 s | 14 | s | 28 | 8 s | |

| Lanes, | Volumes, | , Timings |
|--------|----------|-----------|
| | | |

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

| 06/21/2022 |
|------------|

| | ۶ | - | \mathbf{F} | 4 | ← | * | 1 | 1 | ۲ | 1 | Ŧ | ~ |
|-------------------------|-------|-------|--------------|----------|----------|------|----------|-------|------|-------|---------|-------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ٦ | 4Î | | <u>۲</u> | el el | | <u>۲</u> | A | | ٦ | <u></u> | 1 |
| 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 | | | | | | | | | | | | |
| Frt | | 0.891 | | | 0.860 | | | 0.992 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1656 | 1608 | 0 | 1805 | 1634 | 0 | 1805 | 3451 | 0 | 1805 | 3505 | 1380 |
| Flt 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 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 |

22-194 Outlot Parcel- Downers Grove sa/bsm

| Lanes, Volumes, Timings | |
|---|---------------------------------|
| 2 [.] Lemont Road & Signalized | Access Drive/South Access Drive |

| 2: Lemont Road & | • | ed Aco | cess D | rive/So | outh A | ccess l | Drive | | | | 06/2 | 21/2022 |
|-------------------------------|-------------|----------|-----------|----------|------------|------------|-------|------|-----|------|------|---------|
| | ≯ | + | * | 4 | Ļ | • | < | † | * | * | ţ | ~ |
| 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 | С | С | | С | В | | А | А | | А | А | A |
| Approach Delay | | 27.3 | | | 20.9 | | | 8.5 | | | 2.7 | |
| Approach LOS | | С | | | С | | | А | | | А | |
| 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 | | | | | | | | | | | | |
| 71 | Other | | | | | | | | | | | |
| Cycle Length: 75 | | | | | | | | | | | | |
| Actuated Cycle Length: 75 | | | | | | | | | | | | |
| Offset: 2 (3%), Referenced t | to phase 2: | NBTL and | d 6:SBTL, | Start of | Green | | | | | | | |
| Natural Cycle: 70 | | | | | | | | | | | | |
| Control Type: Actuated-Coo | rdinated | | | | | | | | | | | |
| Maximum v/c Ratio: 0.37 | | | | | | | | | | | | |
| Intersection Signal Delay: 7. | | | | | tersectior | | | | | | | |
| Intersection Capacity Utiliza | tion 43.9% | | | IC | U Level o | 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

| Ø2 (R) | Ø1 | <u>→</u> _{Ø4} | √ Ø3 |
|--------|------|------------------------|-------------|
| 32 s | 10 s | 23 s | 10 s |
| Ø6 (R) | ▲ ø5 | ₩ Ø8 | ▶ Ø7 |
| 32 s | 10 s | 23 s | 10 s |

| Intersection | | | | | | |
|------------------------|------|------|------|------|-----------|----------|
| Int Delay, s/veh | 0.6 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ۰¥ | | | | <u>ار</u> | ^ |
| 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 | Μ | lajor1 | Μ | lajor2 | |
|----------------------|--------|------|--------|---|--------|---|
| 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 Maneuve | r 196 | 578 | - | - | 586 | - |
| Mov Cap-2 Maneuve | r 315 | - | - | - | - | - |
| Stage 1 | 416 | - | - | - | - | - |
| Stage 2 | 661 | - | - | - | - | - |
| | | | | | | |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 13.1 | 0 | 0.9 |
| HCM LOS | В | | |

| 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 | В | - |
| HCM 95th %tile Q(veh) | - | - 0.2 | 0.2 | - |

| Intersection | | | | | | | | | | | | | |
|------------------------|------|------|------|------|------|------|------|---------------|------|------|------------|------|--|
| Int Delay, s/veh | 0 | | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | |
| Lane Configurations | | | | | | 1 | | _ ≜ î≽ | | | ††† | | |
| 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 | |

| | Minor1 | | N | lajor1 | | Ma | ajor2 | | | | |
|-----|-------------|-----|--|---|---|--|--|---|--|---|--|
| | - | - | 500 | - | 0 | 0 | - | - | 0 | | |
| | - | - | - | - | - | - | - | - | - | | |
| | - | - | - | - | - | - | - | - | - | | |
| | - | - | 6.9 | - | - | - | - | - | - | | |
| | - | - | - | - | - | - | - | - | - | | |
| | - | - | - | - | - | - | - | - | - | | |
| | - | - | | - | - | - | - | - | - | | |
| | | | 522 | | - | - | | - | | | |
| | | | - | | - | - | | - | | | |
| | 0 | 0 | - | 0 | - | - | 0 | - | 0 | | |
| | | | | | - | - | | - | | | |
| | - | | 522 | - | - | - | - | - | - | | |
| | - | | - | - | - | - | - | - | - | | |
| | - | | - | - | - | - | - | - | - | | |
| | - | 0 | - | - | - | - | - | - | - | | |
| | | | | | | | | | | | |
| | WB | | | NB | | | SB | | | | |
| | 11.9 | | | 0 | | | 0 | | | | |
| | В | | | | | | | | | | |
| | | | | | | | | | | | |
| NBT | NBRWBLn1 | SBT | | | | | | | | | |
| - | - 522 | - | | | | | | | | | |
| - | - 0.002 | - | | | | | | | | | |
| - | - 11.9 | - | | | | | | | | | |
| - | - B | - | | | | | | | | | |
| - | - 0 | - | | | | | | | | | |
| | - - - | | - - - - - - - - - - - - - - - - - - - 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 11.9 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 < | - 500 - - - - - - - - - - - - - - - - - - - - - - - - - - - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 522 - - - 522 - - - 522 | - - 500 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 3.3 - 0 0 522 0 0 0 - 0 - 0 - 0 - 0 - - - 0 - - - 0 - - - 0 - - - 0 - - - 0 - - - 0 - - - 0 - - - 11.9 0 - - - 522 - - - 522 - <tr td=""> <</tr> | - - 500 - 0 - - - - - - - 6.9 - - - - - - - - - - - - - - - - - - - - - - - - 3.3 - - - 0 522 0 - 0 0 522 0 - 0 0 - 0 - - 0 - 0 - - 0 522 - - - 0 522 - - - 0 522 - - - 0 - - - - 0 - - - - 11.9 0 - - - 522 - - - - | - - 500 - 0 0 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 3.3 - - - 0 0 522 0 - - 0 0 - 0 - - - 0 0 - 0 - - - - 0 522 - - - - - 0 522 - - - - - 0 - - - - - - 11.9 0 - - - - - 522 - - - < | - 500 - 0 0 - - - - - - - - - - 6.9 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 0 0 522 0 - 0 0 0 0 - 0 - 0 - 0 - 0 522 - - - 0 - - 0 - 0 522 - - - - - - - - - - - - - - - - - - | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ |
| | | | | | | | | | | | |

| Intersection | | | | | | |
|------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | *** | 朴朴 | | | 1 |
| 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 | N | /lajor2 | Mir | nor2 | |
|-----------------------|----------|-----|---------|--------|------|------|
| 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 | | | | | В | |
| | | | | | | |
| Minor Lane/Major Mvm | nt. | EBT | WBT | WBR SB | ln1 | |
| | <u>n</u> | EDI | VVDI | | | |
| Capacity (veh/h) | | - | - | | 408 | |
| HCM Lane V/C Ratio | | - | - | - 0. | 14.7 | |
| HCM Control Delay (s) | | - | - | | | |
| HCM Lane LOS | \ | - | - | - | B | |
| HCM 95th %tile Q(veh |) | - | - | - | 0.3 | |

Intersection Capacity Utilization 6: Internal Drive & Middle Access Drive

| | ≯ | \mathbf{r} | 1 | 1 | Ŧ | 1 | |
|--|------|--------------|--------|------|----------|------------|---|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR | |
| Lane Configurations | ٦ | 1 | | ę | eî 🗧 | | |
| Volume (vph) | 43 | 12 | 7 | 18 | 11 | 40 | |
| Pedestrians | | | | | | | |
| Ped Button | | | | | | | |
| Pedestrian Timing (s) | | | | | | | |
| Free Right | | No | | | | No | |
| deal Flow | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | |
| ₋ost Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Vinimum Green (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Refr Cycle Length (s) | 120 | 120 | 120 | 120 | 120 | 120 | |
| /olume Combined (vph) | 43 | 12 | 0 | 25 | 51 | 0 | |
| ane Utilization Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Furning Factor (vph) | 0.95 | 0.85 | 0.95 | 0.99 | 0.88 | 0.85 | |
| Saturated Flow (vph) | 1805 | 1615 | 0.00 | 1873 | 1676 | 0.00 | |
| Ped Intf Time (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Pedestrian Frequency (%) | 0.00 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| Protected Option Allowed | No | | | No | No | | |
| Reference Time (s) | NU | 0.9 | | NU | INU | 0.0 | |
| Adj Reference Time (s) | | 8.0 | | | | 0.0 | |
| i , i | | 0.0 | | | | 0.0 | |
| Permitted Option | 120 | | 0 | 352 | 1676 | | |
| Adj Saturation A (vph) | | | | | | | |
| 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 | | | | 1.0 | <u> </u> | | |
| 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 | EB | | NB SB | Со | mbined | | |
| Protected Option (s) | NA | | NA | | | | |
| Permitted Option (s) | Err | | 12.5 | | | | |
| Split Option (s) | 8.0 | | 16.0 | | | | |
| Vinimum (s) | 8.0 | | 12.5 | | 20.5 | | |
| Right Turns | EBR | | | | | | |
| dj Reference Time (s) | 8.0 | | | | | | |
| Cross Thru Ref Time (s) | 8.0 | | | | | | |
| Discoming Left Ref Time (s) | 0.0 | | | | | | |
| Combined (s) | 16.0 | | | | | | |
| . , | | | | | | | |
| ntersection Summary | | | 47 40/ | | | f Comila | |
| Intersection Capacity Utilization Reference Times and Phasing | | | 17.1% | | | of Service | A |

06/21/2022

Intersection Capacity Utilization 7: Internal Drive & South Access Drive

| | ≯ | \mathbf{i} | 1 | Ť | ţ | ∢ |
|--|------------|--------------|------------|--------------|-------------|------------|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | ۲. | 1 | | र्स | 4 | |
| 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 | 400 | | ^ | 407 | 4005 | |
| 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 11.6 | 1.7 1.7 | |
| Reference Time (s) Adj Reference Time (s) | | | | 15.6 | 8.0 | |
| | | | | 13.0 | 0.0 | |
| Split Option Ref Time Combined (s) | 1.4 | | 0.0 | 3.6 | 1.7 | |
| () | 1.4 1.4 | | 0.0 3.4 | 3.6 0.3 | 0.3 | |
| Ref Time Seperate (s) Reference Time (s) | 1.4 | | 3.4 3.6 | 0.3 3.6 | 0.3 1.7 | |
| Adj Reference Time (s) | 1.4 8.0 | | 3.0 8.0 | 3.0 8.0 | 8.0 | |
| | | | | | | |
| Summary Protected Option (a) | EB | | NB SB | Co | mbined | |
| Protected Option (s) | NA | | NA 15.6 | | | |
| Permitted Option (s) | Err | | 15.6 | | | |
| Split Option (s) | 8.0 | | 16.0 | | 72 C | |
| 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 Utilizati | on | | 19.7% | | U Level o | of Service |
| Poforonoo Timoo and Phasin | | | | | | |

06/21/2022

Reference Times and Phasing Options do not represent an optimized timing plan.

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

06/21/2022

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Lanes, Volumes, Timings

1: Lemont Road & Dunham Road/Middle Access Drive

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| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-------|-------|---------------------|-------|-------|------------|------|-------|-------------|------|
| Lane Configurations | | ÷ | 1 | | ب ا ا | 1 | ٦ | ≜ ⊅ | | 1 | ≜ ↑₽ | |
| 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 | |

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22-194 Outlot Parcel- Downers Grove sa/bsm

06/21/2022

Lanes, Volumes, Timings 1: Lemont Road & Dunham Road/Middle Access Drive

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|-------------------------------|-------------|----------|--------------|------------|-------------|------------|------|------|-----|------|------|-----|
| 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 | | С | С | | С | С | А | А | | А | В | |
| Approach Delay | | 33.0 | | | 27.2 | | | 2.3 | | | 12.4 | |
| Approach LOS | | С | | | С | | | А | | | В | |
| 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 | | | | | | | | | | | | |
| VI | Other | | | | | | | | | | | |
| Cycle Length: 75 | | | | | | | | | | | | |
| Actuated Cycle Length: 75 | | | | | - | | | | | | | |
| Offset: 0 (0%), Referenced t | to phase 2: | NBTL and | d 6:SBTL | , Start of | Green | | | | | | | |
| Natural Cycle: 55 | | | | | | | | | | | | |
| Control Type: Actuated-Coo | rdinated | | | | | | | | | | | |
| Maximum v/c Ratio: 0.55 | ~ – | | | | | | | | | | | |
| Intersection Signal Delay: 10 | | | | | itersectior | | | | | | | |
| Intersection Capacity Utiliza | tion 54.2% | | | IC | CU Level o | of Service | A | | | | | |

Analysis Period (min) 15

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

| | | Ø1 | ↓ _{Ø4} | |
|--------|------|------|------------------------|--|
| 39 s | | 10 s | 26 s | |
| Ø6 (R) | 1 | 25 | ◆ Ø8 | |
| 35 s | 14 s | | 26 s | |

| Lanes, | Volumes, | Timings | |
|--------|----------|---------|--|
| | | | |

| 2: Lemont Road & | Signalized Acce | ess Drive/South Ac | cess Drive |
|------------------|-----------------|--------------------|------------|
| | | | |

| 06/21/2022 |
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|-------------------------|-------|-------|--------------|-------|-------|------|-------|-------------|------|-------|------------|-------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | 5 | 4 | | ٦ | ¢Î, | | ۲ | ≜ †} | | ۲ | † † | 1 |
| 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 (%) | 12 | 0% | 12 | 12 | 0% | 12 | 12 | 0% | 12 | 12 | 0% | 12 |
| Storage Length (ft) | 85 | 070 | 0 | 85 | 0 /0 | 0 | 200 | 070 | 0 | 70 | 0 /0 | 160 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 100 |
| Taper Length (ft) | 75 | | U | 75 | | U | 130 | | 0 | 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 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.35 | 0.55 | 1.00 | 0.35 | 1.00 |
| Frt | | 0.881 | | | 0.879 | | | 0.982 | | | | 0.850 |
| Flt Protected | 0.950 | 0.001 | | 0.950 | 0.079 | | 0.950 | 0.302 | | 0.950 | | 0.000 |
| Satd. Flow (prot) | 1805 | 1674 | 0 | 1805 | 1670 | 0 | 1805 | 3514 | 0 | 1805 | 3574 | 1615 |
| Flt Permitted | 0.000 | 1074 | U | 0.000 | 1070 | 0 | 0.220 | 5514 | 0 | 0.305 | 5574 | 1015 |
| | | 1674 | 0 | 0.000 | 1670 | 0 | 418 | 3514 | 0 | 580 | 3574 | 1615 |
| Satd. Flow (perm) | 0 | 1074 | | U | 1070 | | 410 | 3014 | | 000 | 3074 | |
| Right Turn on Red | | 10 | Yes | | 24 | Yes | | 22 | Yes | | | Yes |
| Satd. Flow (RTOR) | | 43 | | | 34 | | | | | | 40 | 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 |
| | 0.10 | 0.11 | | 0.10 | 0.12 | | 0.00 | 0.02 | | 0.00 | 0.00 | 0.00 |

22-194 Outlot Parcel- Downers Grove sa/bsm

| Lanes, \ | olumes, Timings | |
|---------------------|---|----|
| 2 [.] Lemo | nt Road & Signalized Access Drive/South Access Driv | ve |

| | ۶ | - | \mathbf{r} | ∢ | + | * | • | Ť | 1 | 5 | ţ | ~ |
|--|------------|----------|--------------|------------|------------|------------|------|------|-----|------|------|------|
| _ane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBF |
| /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 | С | В | | E | В | | В | В | | А | А | A |
| Approach Delay | | 25.0 | | | 50.4 | | | 15.2 | | | 7.9 | |
| Approach LOS | | С | | | D | | | В | | | А | |
| Queue Length 50th (ft) | 28 | 5 | | 110 | 3 | | 15 | 171 | | 6 | 181 | (|
| Queue Length 95th (ft) | 64 | 36 | | #226 | 30 | | 36 | 233 | | m12 | 78 | 4 |
| nternal 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 | (|
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | C |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | C |
| Reduced v/c Ratio | 0.29 | 0.25 | | 0.81 | 0.12 | | 0.17 | 0.49 | | 0.09 | 0.45 | 0.08 |
| ntersection Summary | | | | | | | | | | | | |
| 21 | Other | | | | | | | | | | | |
| Cycle Length: 75 | | | | | | | | | | | | |
| Actuated Cycle Length: 75 | | | | | _ | | | | | | | |
| Offset: 6 (8%), Referenced t | o phase 2: | NBTL and | I 6:SBTL, | Start of (| Green | | | | | | | |
| Natural Cycle: 60 | | | | | | | | | | | | |
| Control Type: Actuated-Coo | rdinated | | | | | | | | | | | |
| Vaximum v/c Ratio: 0.84 | - • | | | | | | | | | | | |
| ntersection Signal Delay: 17 | | | | | tersectior | | _ | | | | | |
| ntersection Capacity Utilization | tion 60.9% | | | IC | U Level o | of Service | В | | | | | |
| Analysis Period (min) 15 | | | | | | | | | | | | |
| # 95th percentile volume e | | | eue may | be longer | | | | | | | | |
| Queue shown is maximu m Volume for 95th percent | | | | | | | | | | | | |

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

| <1 ø2 (R) ■ | Ø1 | √ Ø3 | <u>→</u> _{Ø4} |
|-----------------|------|-------------|--------------------------|
| 35 s | 10 s | 16 s | 14 s |
| ▲ ø5 🖕 🗣 ø6 (R) | | ₹_Ø8 | <u>∕</u> ≉ _{∅7} |
| 9 s 36 s | | 20 s | 10 s |

| Intersection | | | | | | |
|------------------------|------|------|------|------|-----------|----------|
| Int Delay, s/veh | 1.8 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ۰¥ | | | | <u>ار</u> | ^ |
| 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 | М | ajor1 | N | lajor2 | |
|----------------------|--------|------|-------|---|--------|---|
| 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 Maneuve | r 147 | 625 | - | - | 912 | - |
| Mov Cap-2 Maneuve | r 282 | - | - | - | - | - |
| Stage 1 | 467 | - | - | - | - | - |
| Stage 2 | 473 | - | - | - | - | - |
| | | | | | | |
| | | | | | ~ ~ ~ | |

| Approach | WB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 14.5 | 0 | 1 |
| HCM LOS | В | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLr | 1 SBL | SBT |
|-----------------------|-----|---------|---------|-----|
| Capacity (veh/h) | - | - 53 | 2 912 | - |
| HCM Lane V/C Ratio | - | - 0.28 | 6 0.104 | - |
| HCM Control Delay (s) | - | - 14 | 5 9.4 | - |
| HCM Lane LOS | - | - | B A | - |
| HCM 95th %tile Q(veh) | - | - 1 | 2 0.3 | - |

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| Intersection | | | | | | | | | | | | | |
|------------------------|------|------|------|------|------|------|------|---------------|------|------|----------|------|--|
| Int Delay, s/veh | 0 | | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | |
| Lane Configurations | | | | | | 1 | | - † 12 | | | ^ | | |
| 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 | | Ν | lajor1 | | Ma | ajor2 | | | | |
|-----------------------|-----|----------|-----|-----|--------|---|----|-------|---|---|--|--|
| Conflicting Flow All | | - | - | 529 | - | 0 | 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 | 499 | 0 | - | - | 0 | - | 0 | | |
| Stage 1 | | 0 | 0 | - | 0 | - | - | 0 | - | 0 | | |
| Stage 2 | | 0 | 0 | - | 0 | - | - | 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 | | В | | | | | | | | | | |
| | | | | | | | | | | | | |
| 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 O(veh) | _ | - 01 | _ | | | | | | | | | |

| 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 | - |

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| Intersection | | | | | | |
|------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.9 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | *** | 朴朴 | | | 1 |
| 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 | N | Major2 | Ν | /linor2 | |
|-----------------------|------------|-----|--------|-------|---------|-----|
| Conflicting Flow All | - | 0 | - | 0 | - | 780 |
| 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 | 294 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | - | - | - | - | - | 294 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| | | | | | | |
| Approach | EB | | WB | | SB | |
| HCM Control Delay, s | 0 | | 0 | | 25.2 | |
| HCM LOS | - | | | | D | |
| | | | | | | |
| Minor Long/Major Mum | . + | EBT | WBT | | 1 חו | |
| Minor Lane/Major Mvm | IL | EDI | VVDI | WBR S | | |
| 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

| | ≯ | | • | t | Ţ | 1 |
|-------------------------------------|----------------|----------------|------------|------------------|-------------|------------|
| Movement | EDI | ▼ EBR | ۱ NBL | NBT | ▼ SBT | SBR |
| Movement | EBL | | INDL | | | SDK |
| Lane Configurations Volume (vph) | آ 70 | 7 26 | 22 | र्द 82 | 1 18 | 77 |
| Pedestrians | 10 | 20 | 22 | 02 | 110 | 11 |
| 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 |
| () | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Minimum Green (s) | | 4.0 120 | 4.0 | 4.0 120 | 4.0 120 | 4.0 |
| Refr Cycle Length (s) | 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 | | | | 02.0 | | |
| Ref Time Combined (s) | 4.7 | | 0.0 | 6.6 | 13.1 | |
| | 4.7 | | 1.5 | 5.2 | 7.9 | |
| Ref Time Seperate (s) | | | 1.5 6.6 | 5.2 6.6 | 13.1 | |
| Reference Time (s) | 4.7 9 7 | | | | | |
| Adj Reference Time (s) | 8.7 | | 10.6 | 10.6 | 17.1 | |
| Summary | EB | | NB SB | Co | mbined | |
| 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 | าท | | 30.3% | | | of Service |
| intersection capacity Utilization | | | 50.570 | 10 | O LEVEL | |

Reference Times and Phasing Options do not represent an optimized timing plan.

06/21/2022

Intersection Capacity Utilization 7: Internal Drive & South Access Drive

| | outin | 000000 | DIIVC | | | | | |
|-----------------------------------|-------|--------------|-------|-------|-----------|------------|---|--|
| | ٦ | \mathbf{F} | 1 | Ť | ţ | ~ | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR | | |
| Lane Configurations | 7 | 1 | | र्भ | ¢, | | | |
| 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 | Co | mbined | | | |
| 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 | on | | 33.1% | | U Level o | of Service | A | |
| Reference Times and Phasing | | do not re | | | | | | |

Reference Times and Phasing Options do not represent an optimized timing plan.

06/21/2022

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

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|-------------------------|-------|-------|-------|-------|-------|-------|----------|------------|------|-------|------------|------|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | र्स | 1 | | र्स | * | <u>۲</u> | ∱ ⊅ | | ۳ | ∱ ⊅ | |
| 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 | 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 | |

22-194 Outlot Parcel- Downers Grove sa/bsm

06/21/2022

Lanes, Volumes, Timings 1: Lemont Road & Dunham Road/Middle Access Drive

| Barman | 1110010 | ., | 0 / 1001 | | | | | | | | |
|--------------|----------|---|---|---|--|---|---|---|---|---|---|
| ٦ | - | \mathbf{r} | 4 | + | • | 1 | Ť | 1 | 1 | ţ | ~ |
| EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| | 0.15 | 0.54 | | 0.57 | 0.14 | 0.25 | 0.33 | | 0.07 | 0.33 | |
| | 25.4 | 34.3 | | 36.8 | 25.3 | 3.8 | 3.5 | | 5.1 | 11.8 | |
| | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| | 25.4 | 34.3 | | 36.8 | 25.3 | 3.8 | 3.5 | | 5.1 | 11.8 | |
| | | С | | D | С | А | | | А | | |
| | 32.3 | | | 34.3 | | | 3.5 | | | 11.5 | |
| | С | | | С | | | А | | | В | |
| | | | | | | | - | | 3 | | |
| | | 111 | | 106 | 38 | 24 | | | 14 | | |
| | 587 | | | 251 | | | 553 | | | 615 | |
| | | | | | | | | | | | |
| | 470 | 447 | | 389 | 452 | 682 | 2138 | | 535 | 1857 | |
| | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| | • | • | | 0 | 0 | | | | 0 | 0 | |
| | • | • | | | | | | | • | • | |
| | 0.09 | 0.34 | | 0.36 | 0.09 | 0.22 | 0.33 | | 0.06 | 0.33 | |
| | | | | | | | | | | | |
| Other | | | | | | | | | | | |
| | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
| ced to phase | 2:NBTL a | and 6:SB | FL, Start o | of Green | | | | | | | |
| | | | | | | | | | | | |
| oordinated | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| zation 51.7% | | | IC | CU Level of | of Service | А | | | | | |
| | | | | | | | | | | | |
| | EBL | EBL EBT 0.15 25.4 0.0 25.4 C 32.3 C 17 41 587 470 0 0 <td>EBL EBT EBR 0.15 0.54 25.4 34.3 0.0 0.0 25.4 34.3 C C 32.3 C 17 65 41 111 587 105 470 447 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 0.09 0.34 0 0 0 0 0 0 0 0 0 <</td> <td>EBL EBT EBR WBL 0.15 0.54 25.4 34.3 0.0 0.0 25.4 34.3 C C 32.3 C 17 65 41 111 587 105 447 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 6 Ced</td> <td>EBL EBT EBR WBL WBT 0.15 0.54 0.57 25.4 34.3 36.8 0.0 0.0 0.0 25.4 34.3 36.8 C C D 32.3 34.3 36.8 C C D 32.3 34.3 34.3 C C C 17 65 61 41 111 106 587 251 105 105 105 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 6</td> <td>EBL EBT EBR WBL WBT WBR 0.15 0.54 0.57 0.14 25.4 34.3 36.8 25.3 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 C C D C 32.3 34.3 </td> <td>EBL EBT EBR WBL WBT WBR NBL 0.15 0.54 0.57 0.14 0.25 25.4 34.3 36.8 25.3 3.8 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 0.0 25.4 34.3 36.8 25.3 3.8 C C D C A 32.3 34.3 - - - A 32.3 34.3 - - - - - 17 65 61 16 11 - - 11 -<!--</td--><td>EBL EBT EBR WBL WBT WBR NBL NBT 0.15 0.54 0.57 0.14 0.25 0.33 25.4 34.3 36.8 25.3 3.8 3.5 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 C C D C A A 32.3 34.3 35.5 G A 17 65 61 16 11 28 41 111 106 38 24 48 587 251 553 553 553 105 85 175 470 447 389 452 682 2138 0 0 0 0 0<td>EBL EBT EBR WBL WBT WBR NBL NBT NBR 0.15 0.54 0.57 0.14 0.25 0.33 25.4 34.3 36.8 25.3 3.8 3.5 0.0 <td< td=""><td>EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL 0.15 0.54 0.57 0.14 0.25 0.33 0.07 25.4 34.3 36.8 25.3 3.8 3.5 5.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 C C D C A A A 32.3 34.3 3.5 5.1 C A A 17 65 61 16 11 28 3 41 111 106 38 24 48 14 587 251 553 135 135 135 0</td><td>EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT 0.15 0.54 0.57 0.14 0.25 0.33 0.07 0.33 25.4 34.3 36.8 25.3 3.8 3.5 5.1 11.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 11.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 11.8 C C D C A A B 32.3 34.3 35 5.1 11.5 1.5 C C C A B 375 115 1.1 105 85 175 135 141 137 1.05 85</td></td<></td></td></td> | EBL EBT EBR 0.15 0.54 25.4 34.3 0.0 0.0 25.4 34.3 C C 32.3 C 17 65 41 111 587 105 470 447 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 0.09 0.34 0 0 0 0 0 0 0 0 0 < | EBL EBT EBR WBL 0.15 0.54 25.4 34.3 0.0 0.0 25.4 34.3 C C 32.3 C 17 65 41 111 587 105 447 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 6 Ced | EBL EBT EBR WBL WBT 0.15 0.54 0.57 25.4 34.3 36.8 0.0 0.0 0.0 25.4 34.3 36.8 C C D 32.3 34.3 36.8 C C D 32.3 34.3 34.3 C C C 17 65 61 41 111 106 587 251 105 105 105 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 6 | EBL EBT EBR WBL WBT WBR 0.15 0.54 0.57 0.14 25.4 34.3 36.8 25.3 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 C C D C 32.3 34.3 | EBL EBT EBR WBL WBT WBR NBL 0.15 0.54 0.57 0.14 0.25 25.4 34.3 36.8 25.3 3.8 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 0.0 25.4 34.3 36.8 25.3 3.8 C C D C A 32.3 34.3 - - - A 32.3 34.3 - - - - - 17 65 61 16 11 - - 11 - </td <td>EBL EBT EBR WBL WBT WBR NBL NBT 0.15 0.54 0.57 0.14 0.25 0.33 25.4 34.3 36.8 25.3 3.8 3.5 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 C C D C A A 32.3 34.3 35.5 G A 17 65 61 16 11 28 41 111 106 38 24 48 587 251 553 553 553 105 85 175 470 447 389 452 682 2138 0 0 0 0 0<td>EBL EBT EBR WBL WBT WBR NBL NBT NBR 0.15 0.54 0.57 0.14 0.25 0.33 25.4 34.3 36.8 25.3 3.8 3.5 0.0 <td< td=""><td>EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL 0.15 0.54 0.57 0.14 0.25 0.33 0.07 25.4 34.3 36.8 25.3 3.8 3.5 5.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 C C D C A A A 32.3 34.3 3.5 5.1 C A A 17 65 61 16 11 28 3 41 111 106 38 24 48 14 587 251 553 135 135 135 0</td><td>EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT 0.15 0.54 0.57 0.14 0.25 0.33 0.07 0.33 25.4 34.3 36.8 25.3 3.8 3.5 5.1 11.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 11.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 11.8 C C D C A A B 32.3 34.3 35 5.1 11.5 1.5 C C C A B 375 115 1.1 105 85 175 135 141 137 1.05 85</td></td<></td></td> | EBL EBT EBR WBL WBT WBR NBL NBT 0.15 0.54 0.57 0.14 0.25 0.33 25.4 34.3 36.8 25.3 3.8 3.5 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 C C D C A A 32.3 34.3 35.5 G A 17 65 61 16 11 28 41 111 106 38 24 48 587 251 553 553 553 105 85 175 470 447 389 452 682 2138 0 0 0 0 0 <td>EBL EBT EBR WBL WBT WBR NBL NBT NBR 0.15 0.54 0.57 0.14 0.25 0.33 25.4 34.3 36.8 25.3 3.8 3.5 0.0 <td< td=""><td>EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL 0.15 0.54 0.57 0.14 0.25 0.33 0.07 25.4 34.3 36.8 25.3 3.8 3.5 5.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 C C D C A A A 32.3 34.3 3.5 5.1 C A A 17 65 61 16 11 28 3 41 111 106 38 24 48 14 587 251 553 135 135 135 0</td><td>EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT 0.15 0.54 0.57 0.14 0.25 0.33 0.07 0.33 25.4 34.3 36.8 25.3 3.8 3.5 5.1 11.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 11.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 11.8 C C D C A A B 32.3 34.3 35 5.1 11.5 1.5 C C C A B 375 115 1.1 105 85 175 135 141 137 1.05 85</td></td<></td> | EBL EBT EBR WBL WBT WBR NBL NBT NBR 0.15 0.54 0.57 0.14 0.25 0.33 25.4 34.3 36.8 25.3 3.8 3.5 0.0 <td< td=""><td>EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL 0.15 0.54 0.57 0.14 0.25 0.33 0.07 25.4 34.3 36.8 25.3 3.8 3.5 5.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 C C D C A A A 32.3 34.3 3.5 5.1 C A A 17 65 61 16 11 28 3 41 111 106 38 24 48 14 587 251 553 135 135 135 0</td><td>EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT 0.15 0.54 0.57 0.14 0.25 0.33 0.07 0.33 25.4 34.3 36.8 25.3 3.8 3.5 5.1 11.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 11.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 11.8 C C D C A A B 32.3 34.3 35 5.1 11.5 1.5 C C C A B 375 115 1.1 105 85 175 135 141 137 1.05 85</td></td<> | EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL 0.15 0.54 0.57 0.14 0.25 0.33 0.07 25.4 34.3 36.8 25.3 3.8 3.5 5.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 C C D C A A A 32.3 34.3 3.5 5.1 C A A 17 65 61 16 11 28 3 41 111 106 38 24 48 14 587 251 553 135 135 135 0 | EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT 0.15 0.54 0.57 0.14 0.25 0.33 0.07 0.33 25.4 34.3 36.8 25.3 3.8 3.5 5.1 11.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 11.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 25.4 34.3 36.8 25.3 3.8 3.5 5.1 11.8 C C D C A A B 32.3 34.3 35 5.1 11.5 1.5 C C C A B 375 115 1.1 105 85 175 135 141 137 1.05 85 |

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

| Ø2 (R) | | Ø1 | ₩Ø4 | |
|------------|------|------|----------------|--|
| 38 s | | 10 s | 27 s | |
| ● ● Ø6 (R) | 1 | Ø5 | ₩ Ø8 | |
| 35 s | 13 s | | 27 s | |

| Lanes, Volumes, Timings |
|---|
| 2: Lemont Road & Signalized Access Drive/South Access Drive |

| 2: Lemont Road & | • | ed Ac | cess D |)rive/S | outh A | ccess | Drive | | | | 06/2 | 21/2022 |
|-------------------------|-------|-------|--------------|----------|-------------|-------|--------------|-------|------|--------------|---------|---------|
| | ٦ | - | \mathbf{F} | 4 | ╉ | * | 1 | 1 | 1 | 1 | ţ | ~ |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | 1 | ¢Î | | <u>ک</u> | el el | | <u>م</u> | A⊅ | | 1 | <u></u> | 1 |
| 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) | | 0.0 | | | • | | | •.= | | | | |
| 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) | Ű | Ű | Ű | Ű | Ű | Ű | Ŭ | Ŭ | Ű | Ŭ | Ŭ | Ű |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | 0,0 | | | 0,0 | | | 0,0 | | | 0,0 | |
| Lane Group Flow (vph) | 104 | 63 | 0 | 299 | 95 | 0 | 69 | 855 | 0 | 50 | 738 | 64 |
| Turn Type | pm+pt | NA | Ű | pm+pt | NA | Ű | pm+pt | NA | Ű | pm+pt | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | Ű | | 2 | _ | | 6 | Ŭ | 6 |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | 6 |
| Switch Phase | | | | | · · | | • | | | · | Ţ | |
| 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 | None 8.9 | | 44.4 | 37.5 | | 44.4 | 36.1 | 36.1 |
| Actuated g/C Ratio | 0.21 | 0.0 | | 0.28 | 0.9 0.12 | | 44.4 0.59 | 0.50 | | 44.4 0.59 | 0.48 | 0.48 |
| | 0.21 | 0.11 | | 0.20 | 0.12 | | 0.59 | 0.00 | | 0.09 | 0.40 | 0.40 |

22-194 Outlot Parcel- Downers Grove sa/bsm

| Lanes, Volumes, Timings |
|---|
| 2: Lemont Road & Signalized Access Drive/South Access Drive |

| 2: Lemont Road & | Signaliz | ed Aco | cess D | rive/So | outh A | ccess l | Drive | | | | 06/2 | 1/2022 |
|-------------------------------|-------------|----------|-----------|----------|------------|------------|-------|------|-----|------|------|--------|
| | ٨ | + | * | 4 | + | * | • | 1 | 1 | 1 | ţ | ~ |
| 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 | С | В | | С | В | | А | В | | А | А | A |
| Approach Delay | | 19.9 | | | 26.3 | | | 14.9 | | | 8.1 | |
| Approach LOS | | В | | | С | | | В | | | А | |
| 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 | | | | | | | | | | | | |
| // | Other | | | | | | | | | | | |
| Cycle Length: 75 | | | | | | | | | | | | |
| Actuated Cycle Length: 75 | | | | | | | | | | | | |
| Offset: 5 (7%), Referenced | to phase 2: | NBTL and | d 6:SBTL, | Start of | Green | | | | | | | |
| Natural Cycle: 60 | | | | | | | | | | | | |
| Control Type: Actuated-Coo | ordinated | | | | | | | | | | | |
| Maximum v/c Ratio: 0.65 | | | | | | | | | | | | |
| Intersection Signal Delay: 14 | | | | | tersectior | | | | | | | |
| Intersection Capacity Utiliza | ition 62.6% | | | IC | U Level o | of Service | В | | | | | |
| Analysis Period (min) 15 | | | | | | | | | | | | |

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

| Ø2 (R) | | Ø1 | A ₁₀₄ | √ Ø3 | | |
|--------|---|------------|------------------|-------------|---------|--|
| 33 s | 9 |).6s | 14 s | 18.4 s | | |
| Ø6 (R) | | Ø 5 | ₩ Ø8 | | ▶ Ø7 | |
| 33.6 s | | 9 s | 21.8 s | | 10.6 s | |

| Intersection | | | | | | |
|------------------------|-------|------|------|------|-----------|----------|
| Int Delay, s/veh | 2.1 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Y | | | | <u>ار</u> | ^ |
| 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 | M | ajor1 | N | lajor2 | |
|----------------------|--------|-----|-------|---|--------|---|
| Conflicting Flow All | 1249 | 346 | 0 | 0 | 692 | 0 |
| 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 | | 656 | - | - | 912 | - |
| Stage 1 | 461 | - | - | - | - | - |
| Stage 2 | 534 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuve | | 656 | - | - | 912 | - |
| Mov Cap-2 Maneuve | | - | - | - | - | - |
| Stage 1 | 461 | - | - | - | - | - |
| Stage 2 | 460 | - | - | - | - | - |
| | | | | | | |

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

| Minor Lane/Major Mvmt | NBT | NBRWB | Ln1 | SBL | SBT |
|-----------------------|-----|-------|-----|-------|-----|
| Capacity (veh/h) | - | - : | 534 | 912 | - |
| HCM Lane V/C Ratio | - | - 0.1 | 283 | 0.139 | - |
| HCM Control Delay (s) | - | - 1 | 4.4 | 9.6 | - |
| HCM Lane LOS | - | - | В | Α | - |
| HCM 95th %tile Q(veh) | - | - | 1.2 | 0.5 | - |

06/21/2022

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 | | | | | | 1 | | ∱ β | | | *** | | |
| 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 | | N | lajor1 | | Ma | ajor2 | | | |
|-----------------------|-----|----------|-----|-----|--------|---|----|-------|---|---|--|
| Conflicting Flow All | | - | - | 572 | - | 0 | 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 | | В | | | | | | | | | |
| | | | | | | | | | | | |
| 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 | - | | | | | | | | |

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| Intersection | | | | | | |
|------------------------|------|----------|------|------|------|------|
| Int Delay, s/veh | 1.5 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ^ | 朴朴 | | | 1 |
| 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 M | /lajor1 | N | /lajor2 | Mi | nor2 | |
|-----------------------|---------|-----|---------|--------|------|-----|
| Conflicting Flow All | - | 0 | - | 0 | - | 663 |
| 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 | 350 |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | - | - | - | - | - | 350 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| | | | | | | |
| Approach | EB | | WB | | SB | |
| HCM Control Delay, s | 0 | | 0 | | 24.3 | |
| HCM LOS | • | | | | C | |
| | | | | | - | |
| NA' I /NA - ' NA | 1 | EDT | | | | |
| Minor Lane/Major Mvm | 1 | EBT | WBT | WBR SE | | |
| Capacity (veh/h) | | - | - | - | 350 | |
| HCM Lane V/C Ratio | | - | - | | .475 | |
| HCM Control Delay (s) | | - | - | | 24.3 | |
| HCM Lane LOS | | - | - | - | С | |
| HCM 95th %tile Q(veh) | | - | - | - | 2.5 | |

Intersection Capacity Utilization 6: Internal Drive & Middle Access Drive

| | ۶ | \mathbf{i} | 1 | Ť | Ŧ | ~ | |
|---|-------------|--------------|--------------|------|--------|------------|-----|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR | |
| Lane Configurations | ሻ | 7 | | र्स | 4 | | |
| Volume (vph) | 93 | 42 | 36 | 123 | 155 | 137 | |
| Pedestrians | | | | | | | |
| Ped Button | | | | | | | |
| Pedestrian Timing (s) | | | | | | | |
| Free Right | | No | | | | No | |
| deal Flow | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | |
| ost Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Vinimum Green (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Refr Cycle Length (s) | 120 | 120 | 120 | 120 | 120 | 120 | |
| /olume Combined (vph) | 93 | 42 | 0 | 159 | 292 | 0 | |
| ane Utilization Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Furning 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 | | |
| | EB | | | | | | |
| Summary Protected Option (s) | NA | | NB SB NA | | mbined | | |
| Permitted Option (s) | Err | | 49.3 | | | | |
| Split Option (s) | 10.2 | | 49.3 38.0 | | | | |
| Minimum (s) | 10.2 | | 38.0 | | 48.2 | | |
| Right Turns | EBR | | | | | | |
| | <u> </u> | | | | | | |
| Adj Reference Time (s) | 8.0 23.8 | | | | | | |
| Cross Thru Ref Time (s) Dncoming Left Ref Time (s) | 23.8 | | | | | | |
| Combined (s) | 31.8 | | | | | | |
| Intersection Summary | • | | | | | | |
| ntersection Summary | | | 40.1% | | | of Service | e A |
| menseuliun vapaulty uliiiZaliu | ווע | | +U.1/0 | | | | Α |

Intersection Capacity Utilization

ICU Level of Service

А

40.1% Reference Times and Phasing Options do not represent an optimized timing plan. 06/21/2022

Intersection Capacity Utilization 7: Internal Drive & South Access Drive

| | ≯ | $\mathbf{\hat{v}}$ | 1 | 1 | Ļ | ∢ | |
|-----------------------------------|-------|--------------------|-------|-------|-----------|------------|-----|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR | |
| Lane Configurations | ľ | 1 | | ÷٩ | el 🗧 | | |
| 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 | | mbined | | |
| Protected Option (s) | NA | | NA | | nomeu | | |
| Permitted Option (s) | Err | | 228.5 | | | | |
| Split Option (s) | 10.8 | | 39.9 | | | | |
| Minimum (s) | 10.8 | | 39.9 | | 50.7 | | |
| | | | 00.0 | | 00.1 | | |
| 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 | on | | 42.3% | IC | U Level o | of Service | A A |

Reference Times and Phasing Options do not represent an optimized timing plan.

06/21/2022

RES 2022-9609

DRAFT

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, COMMSSIONER 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:

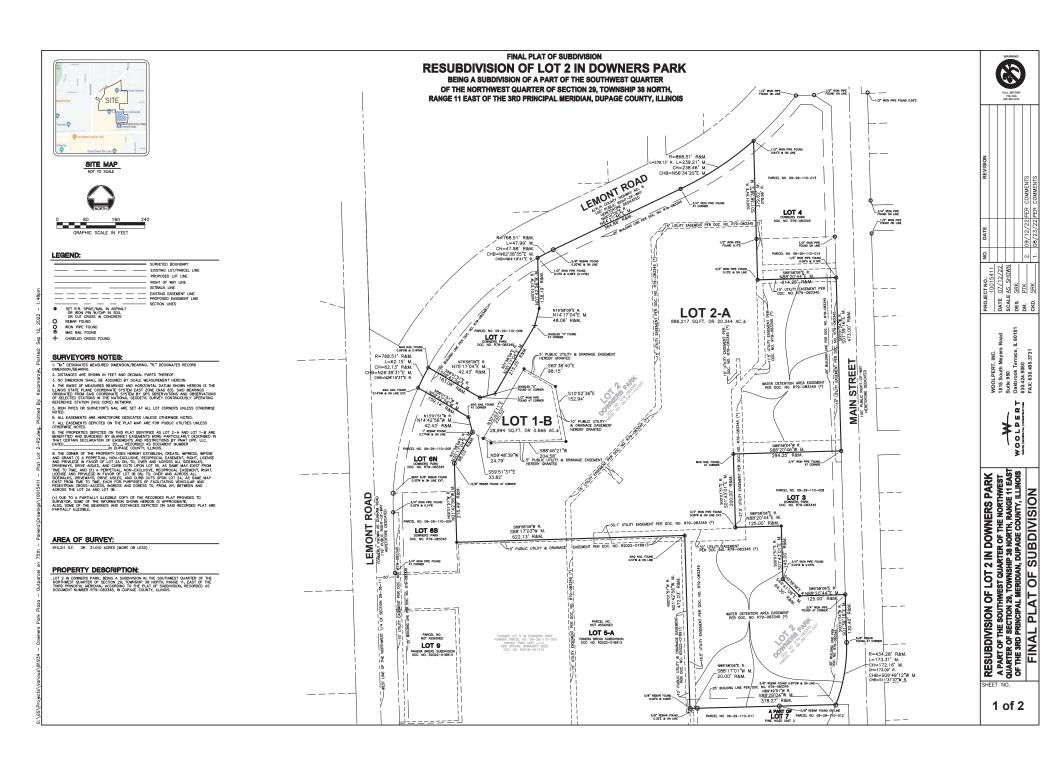
- 1. THE PLANNED UNIT DEVELOPMENT, SPECIAL USE, AND A PLAT OF SUBDIVISION WITH AN EXCEPTION TO CREATE A NEW OUTLOT WITHOUT STREET FRONTAGE SHALL SUBSTANTIALLY CONFORM TO THE STAFF REPORT; AND DRAWINGS PREPARED BY WOOLPERT ENGINEERING SUBMITTED ON 8/24/222, AND BY ZITO RUSSELL ARCHITECTS UPDATED ON 8/3/22, 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 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)



COMMENTS

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DOLPERT, INC. 15 South Meyers F tte 950 kbrook Terrace, IL 2.424.9080 X: 630.495.3731

WOOLI 1815 S Suite 9 Oakbrr 630.42 FAX: €

RESUBDIVISION OF LOT 2 IN DOWNERS PARK A PART OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 28, TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE 3RD PRINCIPAL MERIDIAN, DUPAGE COUNTY, ILLINOIS FINAL PLAT OF SUBDIVISION

Road

E SUBJECT

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

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, AND KNOWN AS 7451 LEMONT ROAD, DOWNERS GROVE, IL 60515, TO THE BEST OF THER KNOWLEDGE, SUD PROPERTY IS LOCATED WITHIN THE BOUNDARES OF THE HIGH SCHOOL DISTRICT 99, AND ELEMENTARY SCHOOL DISTRICT 58 IN DUPAGE COUNTY, ILLINOIS.

DATED AT ______ ILLINOIS THIS ____ DAY OF ______ A.D., 20_____

OWNER'S CERTIFICATE

STATE OF _____ } ss COUNTY OF .

L HEREBY CERTIFIES THAT THEY ARE THE OWNERS OF THE ABOVE-DESCRIBED PROPERTY AND HAVE CUSED THE SAME TO BE SURVEYED AND SUBDIVIDED AS SHOWN ON THE FAIT HEREON DRAWN.

DATED THIS DAY OF A.D., 20 OWNER: ___ OWNER:

NOTARY'S CERTIFICATE

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

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

NOTARY PUBLIC MY COMMISSION EXPIRES: _____

SANITARY DISTRICT CERTIFICATE

STATE OF ILLINOIS) COUNTY OF DUPAGE)

L COLLECTOR OF THE DOWNERS GROVE SANTARY DISTRCT. DO HEREBY CERTIFY THAT THERE ARE NO DELROQUENT OR UNPARD CURRENT OR FORWEITED SPECIAL ASSESSMENTS OR ANY DEFERED AND INSTALLAMENTS THEMEOF THAT HAVE NOT BEEN APPORTIONED AGAINST THE TRACT OF LAND INCLUDED IN THIS PLAT. DATED THIS _____ DAY OF _____ A.D., 20_____

COLLECTOR

DUPAGE COUNTY CLERK'S CERTIFICATE

STATE OF ILLINOIS)) SS COUNTY OF DUPAGE)

I, FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THIS PLAT.

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

COUNTY CLERK

DUPAGE COUNTY RECORDER'S CERTIFICATE

STATE OF ILLINOIS 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 NORTHPARK BLVD, NO 300 COVINGTON, LA 70433-5093

VILLAGE COLLECTOR'S CERTIFICATE STATE OF ILLINOIS } ~~ COUNTY OF DUPAGE

LECTREY THAT THERE ARE NO DELEXCUENT OF THE MILLAG OF DOWNERS GROUD, DO HAREBY CERTEY THAT THERE ARE NO DELEXCUENT OR UNAND CHEENT OR FORFIED SPECAL ASSESSMENTS OF ANY DETERBED INSTALLENTS THEREOF THAT HAVE NOT BEEN APPORTON AGAINST THE TRACT OF LAND, INCLUEDE IN THIS PLAT. DATED THIS _____ DAY OF _____, A.D., 20_____

COLLECTOR

PLAN COMMISSION'S CERTIFICATE

STATE OF ILLINOIS) 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

PUBLIC UTILITIES AND DRAINAGE EASEMENT PROVISIONS

PUBLIC UTILITIES AND DRAINAGE EASEMENT PROVISIONS DEScription elegent reserve for an owner to net which or powses done to have and the second related utility converses ordening utility and or powses done so have those of the second related utility of the second relation of the second relation to the second related utility of the second relation of the second relation to the second relation of the second relation of the second relation of the relations, section and or the second relation of the second relation of the relations, second relation and ordening the second relation of the relations, second relation and ordening the second relation of the relations, second relation and ordening the second relation of the relations, second relation and the second relation of the second relation of the relations of the second relation of the second relation of the second relation of the relations of the relation of the second relation of the second relation of the constraints on the device the relation of the second relation of the constraints on the device the relation of the second relation of the second relation of the relation of the second relation of the constraints on the device the relation of the second relation of the second relation of the relation of the second relation of the second relation of the relation of the second relat

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EASEMENT PROVISIONS

N 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, GRANTEES,

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RELOCATION OF FACILITIES WILL BE DONE BY GRANTEES AT COST OF THE GRANTOR/LOT OWNER, UPON WRITTEN REQUEST.

| | THIS PLAT HAS BEEN SUBAITTED FOR RECORDING BY AND RETURN TO: NAME: ADDRESS: |
|---|--|
| PARCEL NUMBER (PIN): | |
| 09-29-110-007 | |
| SURVEYOR'S NOTES: | |
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| | AT ALL LOT CORNERS UNLESS OTHERWISE NOTED. |
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AREA OF SURVEY: 915.211 S.F. OR 21.010 ACRES (MORE OR LESS)

DRAINAGE CERTIFICATE

DATED THIS _____ DAY OF ____, A.D., 20____.

ILUNOIS REGISTERED PROFESSIONAL ENGINEER

STATE REGISTRATION NUMBER

REGISTRATION EXPIRATION DATE

STATE OF ILLINOIS) SS

COUNTY OF DUPAGE Let onset on the Luke REGISTERD PROFESSION LODGEEN IN LUNCE, TO DIRECTLY THE OWNER OF THE LUKE REGISTER PROVIDENT AND LODGEEN IN LUCE AS THE DIRECTLY THANK DIRECTLY THE DI

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:

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IN WITNESS WHEREOF, THE OWNERS HAVE SET THEIR HANDS UPON THE ATTACHED PLAT THE DAY AND DATE FIRST WRITTEN THEREON.

DATED THIS _____ DAY OF _____, A.D., 20_____ OWNER

| OWNER | | | | |
|--------|--------|------|------|--|
| | | | | |
| NOTARY | PUBLIC | | | |

| MY COMMISSION | EXPIRES: | |
|---------------|----------|--|

PROPERTY OWNER'S SIGNATURES 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, ILLINGS 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 PROFERTY.

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 THRD PRINCIPAL WERDIAN, ACCORDING TO THE PLAT OF SUBDIVISION, RECORDED AS DOCUMENT NUMBER R79-083345, IN DUPAGE COUNTY, ILLINDIS.

ALL DIMENSIONS ARE IN FEET OR DECIMALS THEREOF:

½" 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 CONDANCES EXCEPT AS NOTED.

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WHILE HER SANL GOLD FIRST. I TURHER CERTY THAT THE PROPERTY DESCREED AND SHOWN ON THE PLAT HEREON DRAWN IS WITHIN THE CORPORATE LIMITS OF THE VILLAGE OF DOWNERS GROVE, LLINDS, WHICH HAS ADOPED A COMPREHENSIVE FUN AND IS DERCOSING THE SPECIAL POMERS AUTHORIZED BY DURSION 12 OF HATCLE 11 OF THE LLINDS MANUEPAL CODE. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

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| STEPHEN R. | | | | 1.10 | | | | a st | EPHEN. KREGER |
| ILLINOIS PROF LICENSE EXPI | | | WEYON | #35- | -0029 | 885 | (| EONKE | ROOK TER |
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WOOLPERT, INC. ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-001393

