

Project Number: 24-15420

960kW

other cause beyond a Party's control. A force majeure event does not include an act of gross negligence or intentional wrongdoing.

Governmental authority – Any federal, State, local or other governmental regulatory or administrative agency, court, commission, department, board, other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that this term does not include the interconnection customer, EDC or any affiliate of either.

IEEE Standard 1547 – The Institute of Electrical and Electronics Engineers, Inc. (IEEE), 3 Park Avenue, New York NY 10016-5997, Standard 1547 (2003), "Standard for Interconnecting Distributed Resources with Electric Power Systems."

IEEE Standard 1547.1 – The IEEE Standard 1547.1 (2005), "Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems."

Illinois standard distributed energy resources Interconnection Rules – The most current version of the procedures for interconnecting distributed energy resources facilities adopted by the Illinois Commerce Commission. See 83 Ill. Adm. Code 466

Interconnection agreement or Agreement – The agreement between the interconnection customer and the EDC. The interconnection agreement governs the connection of the DER facility to the EDC's electric distribution system and the ongoing operation of the DER facility after it is connected to the EDC's electric distribution system.

Interconnection customer – The entity entering into this Agreement for the purpose of interconnecting a DER facility to the EDC's electric distribution system.

Interconnection equipment – A group of components or an integrated system connecting an electric generator with a local electric power system or an electric distribution system that includes all interface equipment, including switchgear, protective devices, inverters or other interface devices. Interconnection equipment may be installed as part of an integrated equipment package that includes a generator or other electric source.

Interconnection facilities – Facilities and equipment required by the EDC to accommodate the interconnection of a DER facility. Collectively, interconnection facilities include all facilities, and equipment between the DER facility and the point of interconnection, including modification, additions, or upgrades that are necessary to physically and electrically interconnect the DER facility to the electric distribution system. Interconnection facilities are sole use facilities and do not include distribution upgrades.

Interconnection request – An interconnection customer's request, on the required form, for the interconnection of a new DER facility, or to increase the capacity or change the operating

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characteristics of an existing DER facility that is interconnected with the EDC's electric distribution system.

Interconnection study – Any of the following studies, as determined to be appropriate by the EDC: the interconnection feasibility study, the interconnection system impact study, and the interconnection facilities study.

Load customer – An EDC customer whose primary business classification is not the production of electricity.

Parallel operation or Parallel – The state of operation that occurs when a DER facility is connected electrically to the electric distribution system.

Point of interconnection – The point where the DER facility is electrically connected to the electric distribution system. Point of interconnection has the same meaning as the term "point of common coupling" defined in 3.1.13 of IEEE Standard 1547.

Witness test – For lab-certified equipment, verification (either by an on-site observation or review of documents) by the EDC that the interconnection installation evaluation required by IEEE Standard 1547 Section 5.3 and the commissioning test required by IEEE Standard 1547 Section 5.4 have been adequately performed. For interconnection equipment that has not been lab-certified, the witness test shall also include verification by the EDC of the on-site design tests required by IEEE Standard 1547 Section 5.1 and verification by the EDC of production tests required by IEEE Standard 1547 Section 5.2. All tests verified by the EDC are to be performed in accordance with the test procedures specified by IEEE Standard 1547.1.

Attachment 2

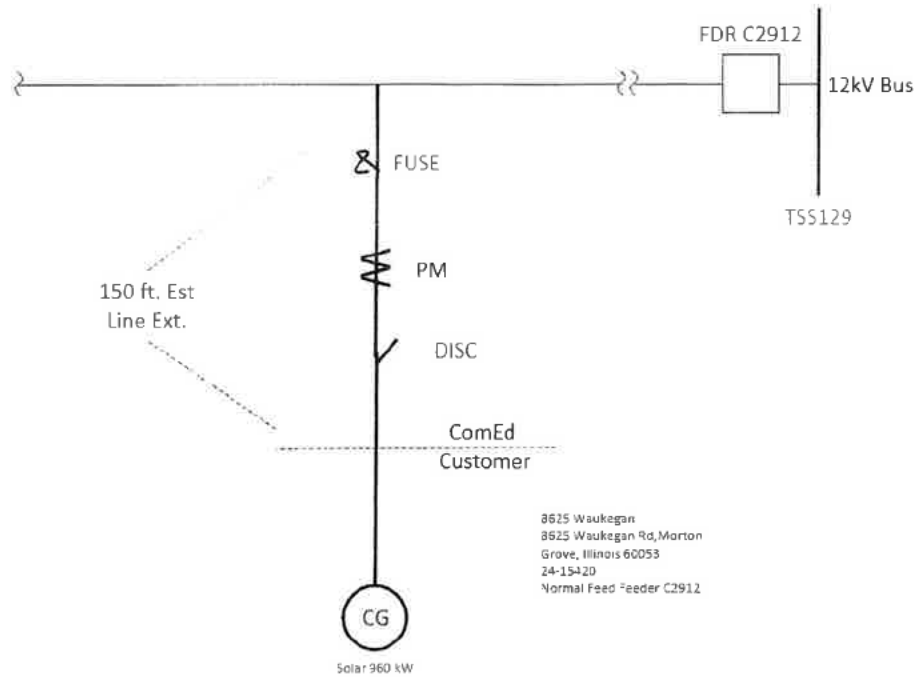
Construction Schedule, Proposed Equipment & Settings

This attachment is to be completed by the interconnection customer and shall include the following:

1. The construction schedule for the DER facility.

The proposed construction schedule for the DER facility is identified in Attachment 3, Schedule for Customer Work.

2. A one-line diagram indicating the DER facility, interconnection equipment, interconnection facilities, metering equipment, and distribution upgrades.
3. Component specifications for equipment identified in the one-line diagram.
4. Component settings.
5. Proposed sequence of operations.
6. A three line diagram showing current potential circuits for protective relays.
7. Relay tripping and control schematic diagram.



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Attachment 3

Description, Costs and Time Required to Build and Install the EDC's Interconnection Facilities

This attachment is to be completed by the EDC and shall include the following:

1. Facilities Address/ Location: 8625 Waukegan Rd, Morton Grove, Illinois 60053
2. Capacity: 960 kW
3. Required interconnection facilities, including any required metering*.
 - 1) Install approx. 150ft of 3-ph OVHD line extension
 - 2) Install normally closed fuse
 - 3) Install OVHD primary meter
 - 4) Install normally closed OVHD disconnect
4. An estimate of itemized costs charged by the EDC for interconnection, including overheads, is provided below*.

Cost Summary	
Labor	\$157,000
Materials	\$25,000
Indirects	\$38,000
AIA	\$20,000
Tax Gross Up	\$30,000
Estimated Grand Total*	\$270,000

**The scope of work and cost provided are intended to be an initial estimate based on information provided by the interconnection customer about its distributed generation system, and ComEd's engineering and design standards. The scope of work may be revised as location-specific conditions are identified during detailed design.*

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5. An estimate for the time required to build and install the EDC's interconnection facilities based on results from prior studies and an estimate of the date upon which the facilities will be completed.

Schedule for EDC Work:

Project Authorization:	Day 1 – The latter of execution of this agreement and receipt by the EDC of the security deposit set forth in Attachment 3.
Deed, plat of Survey and Demarcation Approval *	Day 0 - 90
Project Design	Day 20-254
Material Procurement:	Day 196-318
Construction – Feeder Tie-In:	Day 319-333
Constructions – Substations Modifications:	Day 334-341
Acceptance Testing:	Day 342-344

**Deed and plat of survey need to be provided within 1 month of Project Authorization to start a site walkdown. The demarcation drawing will be issued by the EDC after the site walkdown and needs to be approved by the customer.*

Schedule for Customer Work per Attachment 2, Step 1:

Schedule for Customer Work		
Milestone	Description	Schedule (on/before)
2.1	Submittal of remainder of 100% deposit date	10/11/2024
2.1A	Submittal of deed, plat of survey and demarcation approval	11/11/24
2.2	Begin construction date	07/11/25
2.3	Generator step-up transformers receive back feed power date	10/11/2025
2.4	Generating Test Date	12/11/25
2.5	Desired In-Service Date	02/11/26

**Construction date means customer has issued a notice to proceed to any contractor performing substantial work at the site AND physical activity has occurred at the site, such as grading, earthwork, equipment installation, or other civil works, signaling construction has begun.*

EDC/ComEd requires a schedule amendment to be reviewed for any change in milestone >90 calendar days

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6. Contingency Projects – Any contingencies noted: N/A

Other projects in the interconnection queue, upon which the scope, costs and schedule in Attachment 3 are contingent. This project may be required to include additional scope and costs to complete the EDC's interconnection facilities if a contingency project(s) withdraws from the interconnection queue.

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Attachment 4

Operating Requirements for Distributed Energy Resources Facilities Operating in Parallel

The EDC shall list specific operating practices that apply to this DER interconnection and the conditions under which each listed specific operating practice applies.

See Articles 1.7 Parallel Operation Obligations 1.9, Reactive Power, 1.10, Standards of Operation and as identified in the prior studies.

Any additional operational practices listed below:

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Attachment 5

Monitoring and Control Requirements

This attachment is to be completed by the EDC and shall include the following:

1. The EDC's monitoring and control requirements must be specified, along with a reference to the EDC's written requirements documents from which these requirements are derived.
2. An internet link to the requirements documents.
3. The If applicable, a copy of any agreement between the interconnection customer and the EDC enabling the EDC to monitor and control the distributed energy resources facility in order to preserve distribution system reliability.

<https://www.comed.com/MyAccount/MyService/Pages/DistributionLess10k.aspx>

<http://standards.ieee.org>

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Attachment 6

Metering Requirements

This attachment is to be completed by the EDC and shall include the following:

1. The metering requirements for the energy resources facility.

The specific metering requirements and equipment will be specified as part of the Detailed Engineering.

2. Identification of the appropriate tariffs that establish these requirements.
3. An internet link to these tariffs.

<https://www.comed.com/MyAccount/MyService/Pages/DistributionLess10k.aspx>

<https://www.comed.com/MyAccount/MyBillUsage/Pages/CurrentRatesTariffs.aspx>

Attachment 7

As Built Documents

This attachment is to be completed by the interconnection customer and shall include the following:

When it returns the certificate of completion to the EDC, the interconnection customer shall provide the EDC with documents detailing the as-built status of the following:

1. A one-line diagram indicating the distributed energy resources facility, interconnection equipment, interconnection facilities, and metering equipment.
2. Component specifications for equipment identified in the one-line diagram.
3. Component settings.
4. Proposed sequence of operations.
5. A three-line diagram showing current potential circuits for protective relays.
6. Relay tripping and control schematic diagram.

Attachment 8 Other Provisions

The Parties agree to the following terms and conditions in connection with the distributed generation facility.

- 1.1 Nothing in this Agreement shall constitute an express or implied representation or warranty on the part of EDC with respect to the current or future availability of transmission service or create any obligation on the part of EDC to accept deliveries of energy unless the interconnection customer or a third party taking delivery of such energy has arranged for transmission service with PJM Interconnection LLC, or its successor in interest, the organization that operates the EDC's transmission system ("PJM") in accordance with the PJM tariff and applicable laws and regulations. EDC may charge for service over its electric distribution system to deliver energy or power from the distributed generation facility to or from the facilities controlled or operated by PJM that are used to provide transmission service pursuant to the PJM tariff.
- 1.2 This Agreement does not constitute an agreement to interconnect the interconnection customer to a PJM point of interconnection.
- 1.3 The interconnection customer shall not be allowed to construct any facilities or install any equipment which will be owned or operated by the EDC, without the prior written consent of the EDC, which consent may be conditioned on the Parties negotiating and agreeing upon provisions to govern such construction or installation.
- 1.4 **Tax Status.** Based on information provided by the interconnection customer, EDC will make the determination as to whether all costs and other amounts payable, and property to be transferred, by interconnection customer to EDC under this Agreement (collectively, the "Paid Amounts") satisfy the tax law provisions for non-taxable status, as referenced in this Section 1.4. For any amounts that EDC determines do not qualify for non-taxable status, the interconnection customer shall comply with this Section 1.4, including without limitation paying the applicable income tax gross-up as set forth herein.
 - 1.4.1 **Tax Status**
 - A. To qualify for non-taxable treatment with respect to the Paid Amounts, the interconnection customer must meet all qualifications and requirements as set forth in the tax laws ("Non-Taxable Treatment"). The determination of whether the Paid Amounts qualify for Non-Taxable Treatment shall be made by EDC, based on the information furnished by interconnection customer to determine tax treatment under the relevant tax law provisions.
 - B. To the extent EDC reasonably determines that all or a portion of the Paid Amounts qualify for Non-Taxable Treatment, both Parties intend to treat such

amounts as non-taxable contributions from interconnection customer to EDC for federal and state income tax purposes. With respect to any such Paid Amounts, interconnection customer agrees to maintain Non-Taxable Treatment for such amounts, and interconnection customer shall remain subject to the terms of this Section 1.4, in any subsequent or interim agreement related to this Agreement. To the extent EDC determines that all or a portion of the Paid Amounts are taxable, interconnection customer agrees to pay the income tax gross-up amount referenced in this Section 1.4.

1.4.2 Tax Indemnity

For any amounts the Parties treat as non-taxable pursuant to Section 1.4.1, interconnection customer shall indemnify and hold harmless EDC for any costs or taxes, penalties, and interest that EDC incurs in the event that the IRS and/or a state taxing authority determines that the Paid Amounts are taxable income to EDC. In such an event, interconnection customer shall pay to EDC, on demand, the amount of any income taxes that the IRS or a state taxing authority assesses EDC in connection with the Paid Amounts, plus any applicable interest and/or penalties assessed EDC. In the event that EDC in its sole discretion chooses to contest such assessment and prevails in reducing or eliminating the tax, interest and/or penalties assessed against it, EDC shall refund to interconnection customer the excess of the amount paid to EDC pursuant to this Section 1.4 over the amount of the tax, interest and penalties for which EDC is finally determined to be liable. Interconnection customer's tax indemnification obligation under this section shall survive any termination of this Agreement or of any subsequent or interim agreement related to this Agreement.

1.4.3 Income Tax Gross-Up

- A. In the event that interconnection customer does not establish to EDC's satisfaction within 15 days of the execution of this Agreement (the "Specified Date") that the Paid Amounts are or will be non-taxable, interconnection customer shall increase the amount of the Security Deposit to include any amounts described under this Section 1.4 regarding income tax gross-up.
- B. The required increase in the Security Deposit shall equal the amount necessary to permit EDC to pay all applicable income taxes ("Current Taxes") on the amounts to be paid by interconnection customer under this Agreement after taking into account the present value of future tax deductions for depreciation that would be available as a result of the anticipated payments or property transfers (the "Present Value Depreciation Amount"), with respect to such amounts. For this purpose, Current Taxes shall be computed based on the composite federal and state income

tax rates applicable to EDC at the time the Security Deposit is increased, determined using the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting EDC's anticipated tax depreciation deductions associated with such payments or property transfers by its current weighted average cost of capital. EDC may draw on the Security Deposit on a quarterly basis based on the Paid Amounts received by EDC.

- C. Interconnection customer must provide the increase in the Security Deposit, in a form and with terms as acceptable to EDC, within 15 days of the Specified Date unless EDC notifies interconnection customer otherwise. The requirement for the increase in the Security Deposit under this Paragraph shall be treated as a milestone for purposes of Attachment 3 of this Agreement.
 - D. Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect any entity's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.
 - E. In the event, and to the extent, (i) EDC subsequently determines that amounts for which interconnection customer has paid EDC are non-taxable, and (ii) EDC successfully obtains a refund of federal and/or state income tax originally paid with respect to such amounts, EDC shall timely return such amounts to the interconnection customer. For purposes hereof, EDC may make such a determination in light of subsequent IRS guidance, or other relevant authority. In the event of a successful refund claim by EDC, EDC shall return the remaining Security Deposit attributable to this Section 1.4, but no more than it obtains from the relevant taxing authority, less any reasonable fees incurred to secure such tax refund, to interconnection customer.
- 1.5 If any of EDC's facilities, in addition to those described in Section 2.3, are or will be located on interconnection customer's property, EDC shall have access to such facilities at all times and when practical, the EDC shall provide notice to the interconnection customer prior to using its right of access. Upon EDC's completion of final, detailed engineering, if EDC identifies any facilities which will be located on interconnection customer's property and requests written property rights in order to have such access, the interconnection customer shall provide such rights.
- 1.6 Interconnection customer shall also be responsible for paying in full to EDC all approved FERC and ICC rates and charges applicable to interconnection customer's connection to and usage of the electric distribution system, if any.

- 1.7 Interconnection customer shall not disclose any information labeled “CEII” or “Critical Energy Infrastructure Information” or other information labeled “Confidential” obtained pursuant to or in connection with this Agreement to any third party without the express written consent of the EDC, provided that interconnection customer may produce such information in response to a subpoena, discovery request or other compulsory process issued by a judicial body or governmental agency upon reasonable notice to the interconnection customer.
- 1.8 Each of the Parties shall provide the other party access to areas under its control as reasonably necessary to permit the other Party to perform its obligations under this Agreement, including operation and maintenance obligations. A Party that obtains such access shall comply with all safety rules applicable to the area to which access is obtained. Each Party agrees to inform the other Party’s representatives of safety rules applicable to an area.
- 1.9 Article 5.1.2 of the Interconnection Agreement shall be modified as followed;

The parties agree Article 5 Section 1.2 is stricken in its entirety and replaced with, “Within 120 calendar days after completing the construction and installation of the EDC's interconnection facilities and distribution upgrades described in Attachments 2 and 3 to this Agreement, the EDC shall provide the interconnection customer with a final accounting report of any difference between (1) the actual cost incurred to complete the construction and installation of the EDC's interconnection facilities and distribution upgrades; and (2) the interconnection customer's previous deposit and aggregate payments to the EDC for the interconnection facilities and distribution upgrades. If the interconnection customer's cost responsibility exceeds its previous deposit and aggregate payments, the EDC shall invoice the interconnection customer for the amount due and the interconnection customer shall make payment to the EDC within 30 calendar days. If the interconnection customer's previous deposit and aggregate payments exceed its cost responsibility under this Agreement, the EDC shall refund to the interconnection customer an amount equal to the difference within 30 calendar days after the final accounting report. Upon request from the interconnection customer, if the difference between the budget estimate and the actual cost exceeds 20%, the EDC will provide a written explanation for the difference.”

Certificate Of Completion

Envelope Id: 9D5F0601FB424B3DB2B9E60827F2DE8F
 Subject: Complete with Docusign: 24-15420 8625 Waukegan Rd- App D Blank.pdf
 Source Envelope:
 Document Pages: 33 Signatures: 1
 Certificate Pages: 1 Initials: 0
 AutoNav: Enabled
 EnvelopeId Stamping: Enabled
 Time Zone: (UTC-05:00) Eastern Time (US & Canada)

Status: Completed

Envelope Originator:
 Alex Gross
 522 Cookman Ave
 Ste. 3
 Asbury Park, NJ 07712
 agross@solarlandscape.com
 IP Address: 173.54.193.75

Record Tracking

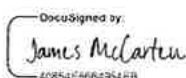
Status: Original Holder: Alex Gross
 9/19/2024 11:50:44 AM agross@solarlandscape.com

Location: DocuSign

Signer Events

James McCarten
 jmccarten@solarlandscape.com
 Director of Interconnection
 Solar Landscape LLC
 Security Level: Email, Account Authentication
 (None)

Signature



Signature Adoption: Pre-selected Style
 Using IP Address: 173.54.193.75

Timestamp

Sent: 9/19/2024 1:54:39 PM
 Viewed: 9/19/2024 1:55:12 PM
 Signed: 9/19/2024 1:55:52 PM

Electronic Record and Signature Disclosure:
 Not Offered via DocuSign

In Person Signer Events

Signature

Timestamp

Editor Delivery Events

Status

Timestamp

Agent Delivery Events

Status

Timestamp

Intermediary Delivery Events

Status

Timestamp

Certified Delivery Events

Status

Timestamp

Carbon Copy Events

Status

Timestamp

Witness Events

Signature

Timestamp

Notary Events

Signature

Timestamp

Envelope Summary Events

Status

Timestamps

Envelope Sent Hashed/Encrypted
 Certified Delivered Security Checked
 Signing Complete Security Checked
 Completed Security Checked

9/19/2024 1:54:40 PM
 9/19/2024 1:55:12 PM
 9/19/2024 1:55:52 PM
 9/19/2024 1:55:52 PM

Payment Events

Status

Timestamps

James H. Weil
Senior Manager, Pre-Construction
Solar Landscape LLC
601 Bangs Avenue, Suite 301
Asbury Park, NJ 07712

October 4th, 2025

Village of Morton Grove Appearance Commission
6101 Capulina Avenue
Morton Grove, IL 60053

Technical Memorandum

Introduction

Solar Landscape proposes to construct, operate, and maintain a rooftop solar system that will participate in the Illinois Shines Community Solar program. The project is located at 8625 Waukegan Rd, Morton Grove, IL. Project is sited adjacent a major road to the west, residential dwellings to the south, forest and field to the east, and a commercial shopping center to the north.

Purpose

The purpose of this technical memorandum is to summarize potential glinting and glare effects of the project. Based on the results of these effects, potential health, safety, and visual mitigation measures associated with these glinting and glare effects may be proposed. For the purposes of this technical memorandum, glint is defined as a bright, momentary flash of light; glare is defined as a more continuous and sustained presence of light that may appear to “sparkle” from public viewing locations.

The source of potential glint and glare for the project is the proposed photovoltaic (PV) panels. However, PV panel surfaces are designed specifically not to reflect light, thus reducing the potential for glint and glare.

Glint and Glare Analysis

The analysis focused on potential glare effects on observation points. These observation points consist of each building on the north end of the Trafalgar Woods townhouse community and the internal streets. Waukegan road is also included as an observation point.

Assumptions

- The proposed solar project will operate 365 days per year, during daylight hours.
- “Green” glare is glare with low potential to cause an afterimage (flash blindness) when observed prior to a typical blink response time.
- “Yellow” glare is glare with potential to cause an afterimage (flash blindness) when observed prior to a typical blink response time.
- “Red” glare is glare with potential to cause retinal burn (permanent eye damage) when observed prior to a typical blink response time.
- Panels are designed to absorb sunlight and will be treated with anti-reflective coatings that will absorb and transmit light rather than reflect it

Software

Analysis for the project was conducted using the GlareGauge model (also known as Solar Glare Hazard Analysis Tool [SGHAT]) developed by Forge Solar and the U.S. Department of Energy’s Sandia National Laboratories to evaluate potential glare. GlareGauge employs an interactive Google map where the user can quickly locate a site, draw an outline of the proposed solar energy system, and specify observer locations and, if needed, aircraft approach paths. Latitude, longitude, and elevation are automatically recorded through the Google interface, providing necessary information for sun position and vector calculations. Additional information regarding the orientation and tilt of the solar energy panels, reflectance, environment, and ocular factors are entered by the user.

Results

The project has been found to create no potential for glare at any of the observation points.

FORGESOLAR GLARE ANALYSIS

Project: **8625 Waukegan Rd, Morton Grove, IL 60053**

Proposed Community Solar Array

Site configuration: **BTM Revision**

Client: Solar Landscape

Created 03 Oct, 2025

Updated 03 Oct, 2025

Time-step 1 minute

Timezone offset UTC-6

Minimum sun altitude 0.0 deg

DNI peaks at 1,000.0 W/m²

Category 500 kW to 1 MW

(1,000 kW / 8 acre limit)

Site ID 161008.25741

Ocular transmission coefficient 0.5

Pupil diameter 0.002 m

Eye focal length 0.017 m

Sun subtended angle 9.3 mrad

PV analysis methodology V2

Summary of Results No glare predicted

PV Array	Tilt °	Orient °	Annual Green Glare		Annual Yellow Glare		Energy kWh
			min	hr	min	hr	
Flat Roof 1A	5.0	180.0	0	0.0	0	0.0	-
Flat Roof 1B	5.0	180.0	0	0.0	0	0.0	-
Flat Roof 2	5.0	180.0	0	0.0	0	0.0	-
Pitched Roof 1A	3.0	270.0	0	0.0	0	0.0	-
Pitched Roof 1B	3.0	90.0	0	0.0	0	0.0	-
Pitched Roof 2	3.0	0.0	0	0.0	0	0.0	-
Pitched Roof 3A	3.0	0.0	0	0.0	0	0.0	-
Pitched Roof 3B	3.0	180.0	0	0.0	0	0.0	-
Pitched Roof 3B2	0.0	180.0	0	0.0	0	0.0	-
Pitched Roof 4	3.0	0.0	0	0.0	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

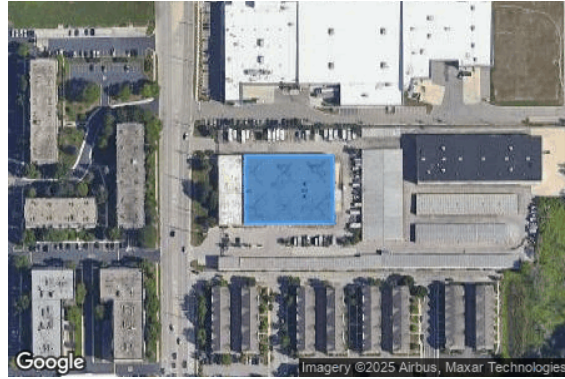
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
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OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Component Data

PV Arrays

Name: Flat Roof 1A
Axis tracking: Fixed (no rotation)
Tilt: 5.0°
Orientation: 180.0°
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.038453	-87.798527	635.46	22.80	658.26
2	42.038455	-87.797781	632.30	22.80	655.10
3	42.038031	-87.797774	632.78	22.80	655.58
4	42.038027	-87.798524	632.47	22.80	655.27

Name: Flat Roof 1B
Axis tracking: Fixed (no rotation)
Tilt: 5.0°
Orientation: 180.0°
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.038448	-87.798744	635.37	18.80	654.17
2	42.038448	-87.798553	635.46	18.80	654.26
3	42.038029	-87.798553	632.60	18.80	651.40
4	42.038027	-87.798740	633.96	18.80	652.76

Name: Flat Roof 2

Axis tracking: Fixed (no rotation)

Tilt: 5.0°

Orientation: 180.0°

Rated power: -

Panel material: Light textured glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.038569	-87.797039	630.91	32.80	663.71
2	42.038571	-87.795992	626.67	32.80	659.47
3	42.038299	-87.795992	626.80	32.80	659.60
4	42.038293	-87.797037	632.09	32.80	664.89

Name: Pitched Roof 1A

Axis tracking: Fixed (no rotation)

Tilt: 3.0°

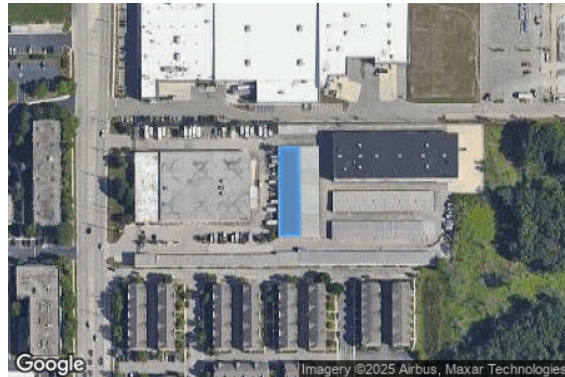
Orientation: 270.0°

Rated power: -

Panel material: Light textured glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.038487	-87.797358	632.19	12.00	644.19
2	42.037934	-87.797349	633.80	12.00	645.80
3	42.037932	-87.797511	633.03	10.00	643.03
4	42.038486	-87.797515	632.28	10.00	642.28

Name: Pitched Roof 1B

Axis tracking: Fixed (no rotation)

Tilt: 3.0°

Orientation: 90.0°

Rated power: -

Panel material: Light textured glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.038488	-87.797186	632.99	10.00	642.99
2	42.037934	-87.797181	631.20	10.00	641.20
3	42.037934	-87.797331	633.77	12.00	645.77
4	42.038487	-87.797336	632.19	12.00	644.19

Name: Pitched Roof 2

Axis tracking: Fixed (no rotation)

Tilt: 3.0°

Orientation: 0.0°

Rated power: -

Panel material: Light textured glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.038207	-87.797056	632.15	10.00	642.15
2	42.038211	-87.796200	628.66	10.00	638.66
3	42.038086	-87.796193	628.84	11.50	640.34
4	42.038083	-87.797059	632.35	11.50	643.85

Name: Pitched Roof 3A
Axis tracking: Fixed (no rotation)
Tilt: 3.0°
Orientation: 0.0°
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.038016	-87.797063	632.35	10.00	642.35
2	42.038018	-87.796254	629.48	10.00	639.48
3	42.037964	-87.796253	628.66	10.00	638.66
4	42.037961	-87.797063	631.76	10.00	641.76

Name: Pitched Roof 3B
Axis tracking: Fixed (no rotation)
Tilt: 3.0°
Orientation: 180.0°
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.037960	-87.797064	631.76	10.00	641.76
2	42.037963	-87.796254	628.66	10.00	638.66
3	42.037909	-87.796252	627.66	10.00	637.66
4	42.037907	-87.797063	630.48	10.00	640.48

Name: Pitched Roof 3B2

Axis tracking: Fixed (no rotation)

Tilt: 0.0°

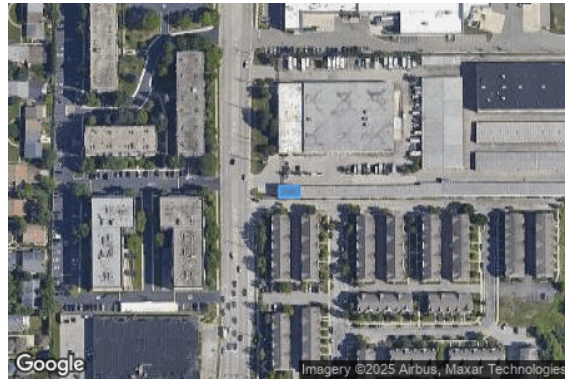
Orientation: 180.0°

Rated power: -

Panel material: Light textured glass with AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.037805	-87.798754	632.45	21.00	653.45
2	42.037807	-87.798586	633.76	21.00	654.76
3	42.037741	-87.798583	634.95	22.50	657.45
4	42.037740	-87.798754	633.09	22.50	655.59

Name: Pitched Roof 4

Axis tracking: Fixed (no rotation)

Tilt: 3.0°

Orientation: 0.0°

Rated power: -

Panel material: Light textured glass without AR coating

Reflectivity: Vary with sun

Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.037750	-87.796180	626.84	13.00	639.84
2	42.037737	-87.798558	635.05	13.00	648.05
3	42.037801	-87.798559	634.34	10.50	644.84
4	42.037807	-87.797543	632.10	10.50	642.60
5	42.037822	-87.797543	632.14	10.50	642.64
6	42.037828	-87.796180	627.49	10.50	637.99

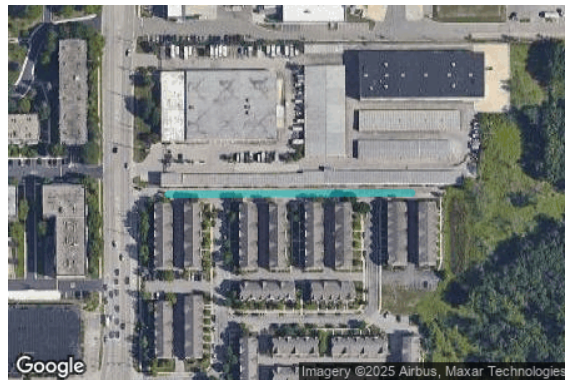
Route Receptors

Name: Grove Street
Path type: Two-way
Azimuthal view angle: 45.0°
Downward view angle: 10.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.037678	-87.798249	631.79	0.00	631.79
2	42.036704	-87.798238	630.77	0.00	630.77

Name: Meadow Lane
Path type: Two-way
Azimuthal view angle: 45.0°
Downward view angle: 0.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.037679	-87.798709	634.33	0.00	634.33
2	42.037688	-87.796617	629.30	0.00	629.30

Name: Prairie Street
Path type: Two-way
Azimuthal view angle: 45.0°
Downward view angle: 10.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.037687	-87.796959	629.90	0.00	629.90
2	42.036965	-87.796945	627.45	0.00	627.45

Name: Waukegan Drive
Path type: Two-way
Azimuthal view angle: 45.0°
Downward view angle: 10.0°



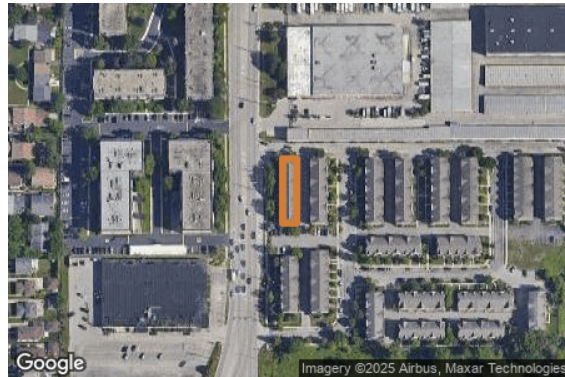
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.039242	-87.799116	634.72	0.00	634.72
2	42.036398	-87.799121	631.06	0.00	631.06

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
OP 1	1	42.037630	-87.798612	635.33	5.00
OP 2	2	42.037628	-87.797883	632.63	4.00
OP 3	3	42.037626	-87.797317	631.99	5.00
OP 4	4	42.037632	-87.796595	629.46	5.00
OP 5	5	42.037598	-87.798822	633.52	12.00
OP 6	6	42.037597	-87.798657	634.87	14.00
OP 7	7	42.037596	-87.798571	634.88	12.00
OP 8	8	42.037598	-87.798403	632.28	12.00
OP 9	9	42.037598	-87.798101	631.96	11.00
OP 10	10	42.037598	-87.797934	632.46	12.00
OP 11	11	42.037597	-87.797835	632.73	12.00
OP 12	12	42.037596	-87.797681	632.81	12.00
OP 13	13	42.037598	-87.797532	632.85	12.00
OP 14	14	42.037593	-87.797372	632.27	12.00
OP 15	15	42.037587	-87.797275	631.79	12.00
OP 16	16	42.037590	-87.797117	630.72	12.00
OP 17	17	42.037608	-87.796819	629.80	11.00
OP 18	18	42.037595	-87.796648	629.41	12.00
OP 19	19	42.037596	-87.796559	629.11	12.00
OP 20	20	42.037602	-87.796391	626.24	12.00

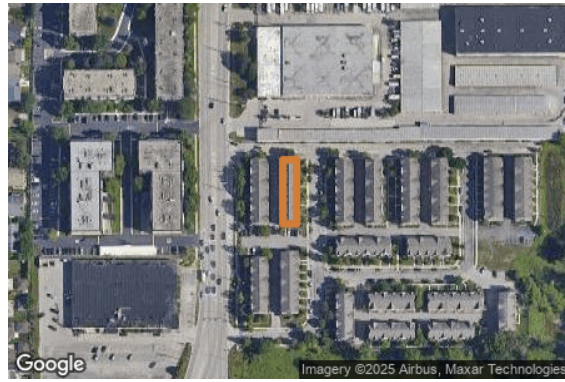
Obstruction Components

Name: Building 1
Top height: 35.0 ft



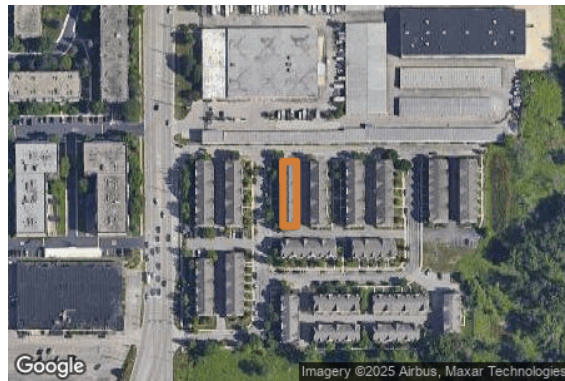
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037617	-87.798800	633.44
2	42.037210	-87.798800	633.41
3	42.037209	-87.798679	631.95
4	42.037617	-87.798678	634.91
5	42.037618	-87.798800	633.44

Name: Building 2
Top height: 35.0 ft



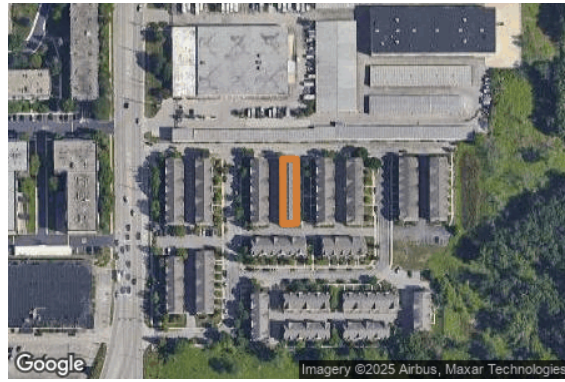
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037616	-87.798547	635.06
2	42.037211	-87.798546	630.63
3	42.037210	-87.798427	630.50
4	42.037618	-87.798427	632.76
5	42.037617	-87.798548	635.06

Name: Building 3
Top height: 35.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037617	-87.798073	632.22
2	42.037208	-87.798070	631.11
3	42.037209	-87.797951	632.62
4	42.037620	-87.797953	632.49
5	42.037619	-87.798074	632.22

Name: Building 4
Top height: 35.0 ft



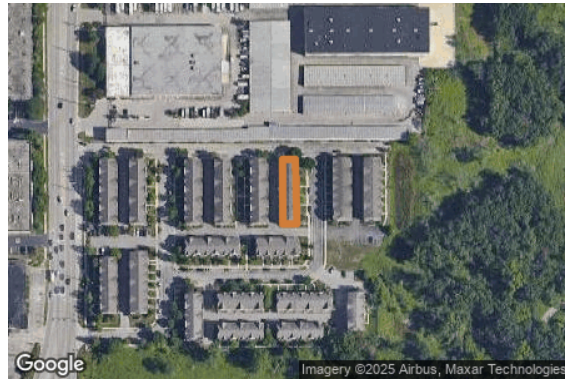
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037619	-87.797814	632.71
2	42.037208	-87.797812	633.14
3	42.037211	-87.797696	633.35
4	42.037619	-87.797699	632.54
5	42.037619	-87.797814	632.71

Name: Building 5
Top height: 35.0 ft



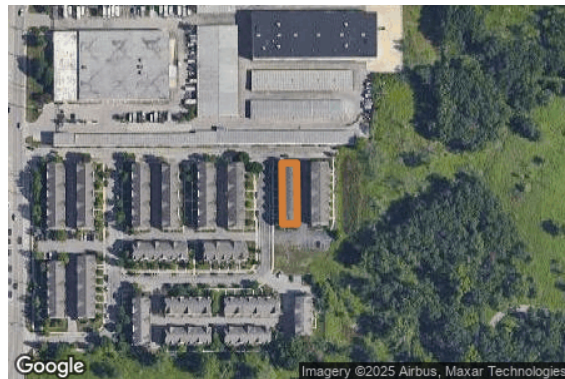
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037619	-87.797507	632.58
2	42.037209	-87.797499	631.69
3	42.037212	-87.797383	631.12
4	42.037620	-87.797388	632.30
5	42.037621	-87.797507	632.58

Name: Building 6
Top height: 35.0 ft



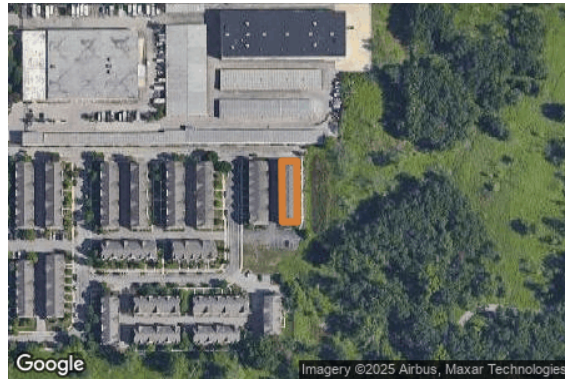
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037621	-87.797251	631.78
2	42.037211	-87.797248	630.77
3	42.037212	-87.797127	629.76
4	42.037622	-87.797141	631.25
5	42.037622	-87.797251	631.78

Name: Building 7
Top height: 35.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037626	-87.796800	629.73
2	42.037240	-87.796795	629.05
3	42.037241	-87.796668	628.12
4	42.037627	-87.796674	629.54
5	42.037626	-87.796800	629.73

Name: Building 8
Top height: 35.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037626	-87.796539	629.28
2	42.037243	-87.796533	627.31
3	42.037242	-87.796406	625.48
4	42.037628	-87.796409	627.52
5	42.037628	-87.796539	629.28

Name: Building FR 1A
Top height: 22.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.038463	-87.797768	632.29
2	42.038022	-87.797764	632.71
3	42.038016	-87.798535	632.51
4	42.038461	-87.798541	635.47
5	42.038463	-87.797768	632.29

Name: Building FR 1B

Top height: 18.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.038457	-87.798547	635.47
2	42.038459	-87.798757	635.27
3	42.038018	-87.798756	634.02
4	42.038017	-87.798542	632.51

Name: Building FR 2

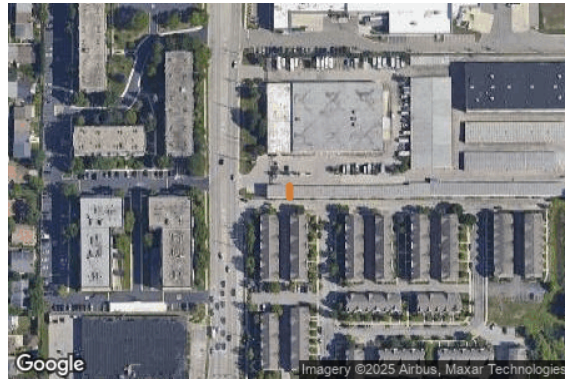
Top height: 32.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.038574	-87.797049	631.00
2	42.038578	-87.795979	626.65
3	42.038292	-87.795979	626.70
4	42.038286	-87.797047	632.08
5	42.038574	-87.797049	631.00

Name: Obstruction 20

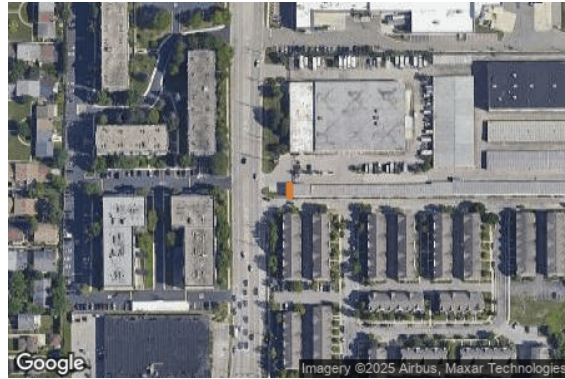
Top height: 21.5 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037809	-87.798572	634.07
2	42.037736	-87.798570	635.00

Name: SBU2

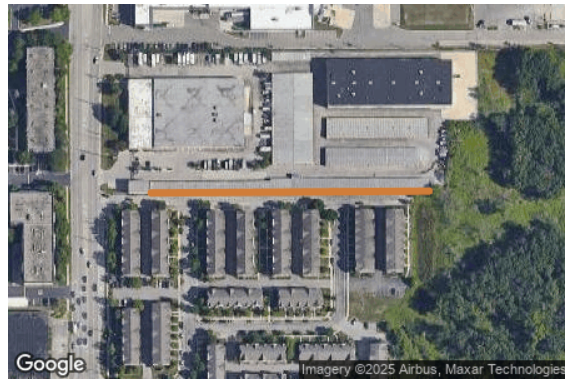
Top height: 22.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037737	-87.798761	632.94
2	42.037809	-87.798761	632.40

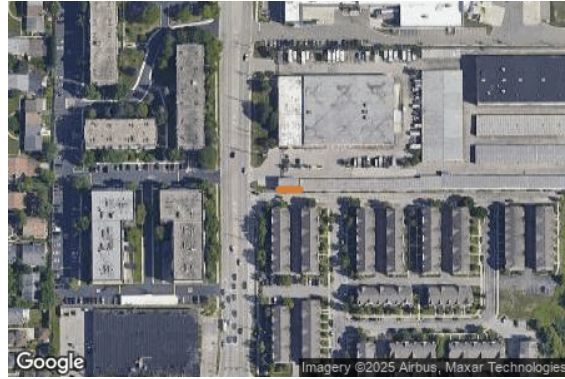
Name: South Building Lower Level

Top height: 13.0 ft



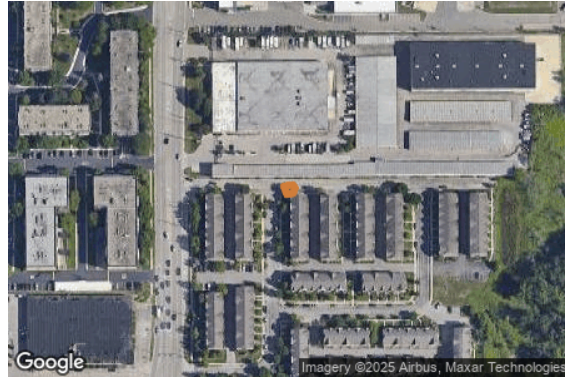
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037734	-87.798570	635.13
2	42.037746	-87.796181	626.84

Name: South Building Upper Level
Top height: 22.0 ft



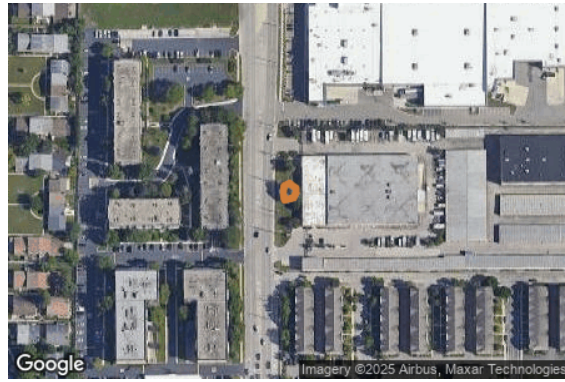
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037736	-87.798753	633.09
2	42.037737	-87.798576	634.95

Name: Tree1
Top height: 32.8 ft



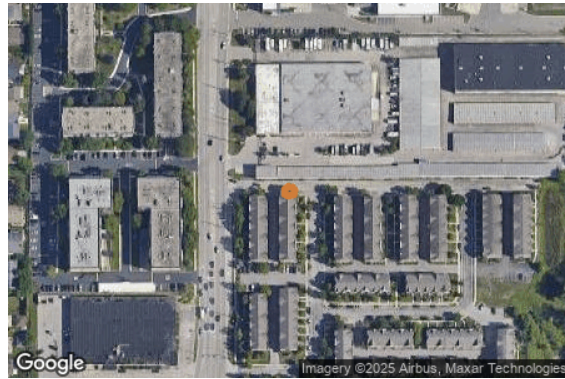
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037679	-87.798102	632.31
2	42.037672	-87.798146	632.03
3	42.037621	-87.798121	631.97
4	42.037628	-87.798067	632.27
5	42.037661	-87.798049	632.49
6	42.037681	-87.798071	632.46

Name: Tree 2
 Top height: 40.0 ft



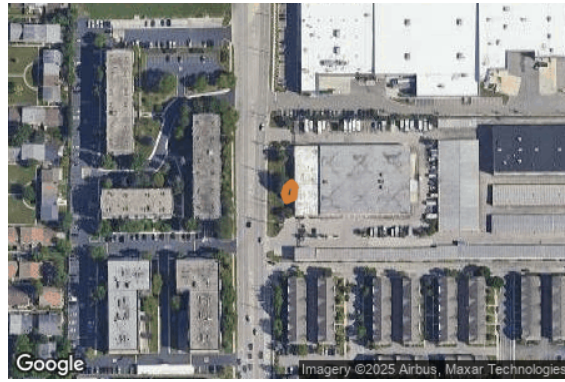
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.038288	-87.798872	634.93
2	42.038271	-87.798919	634.85
3	42.038231	-87.798929	634.60
4	42.038181	-87.798916	634.52
5	42.038196	-87.798838	634.49
6	42.038229	-87.798817	634.66
7	42.038257	-87.798819	634.83
8	42.038271	-87.798848	634.77
9	42.038288	-87.798872	634.93

Name: Tree2
 Top height: 32.8 ft



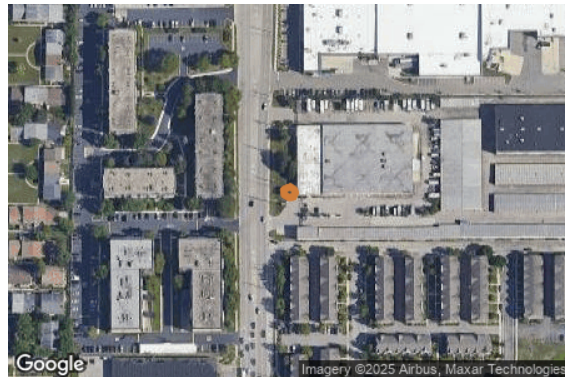
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037682	-87.798485	634.43
2	42.037661	-87.798519	635.09
3	42.037632	-87.798521	634.93
4	42.037620	-87.798491	634.07
5	42.037627	-87.798442	632.96
6	42.037654	-87.798432	632.95
7	42.037675	-87.798449	633.53
8	42.037682	-87.798485	634.43

Name: Tree 3
Top height: 40.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.038226	-87.798790	634.89
2	42.038203	-87.798765	634.91
3	42.038133	-87.798777	634.94
4	42.038113	-87.798836	634.87
5	42.038154	-87.798854	634.43
6	42.038197	-87.798838	634.49
7	42.038226	-87.798795	634.89

Name: Tree 4
Top height: 25.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.038068	-87.798823	635.21
2	42.038050	-87.798877	635.19
3	42.038015	-87.798873	634.94
4	42.037998	-87.798831	634.40
5	42.038003	-87.798794	634.00
6	42.038030	-87.798777	634.41
7	42.038050	-87.798788	634.85
8	42.038068	-87.798823	635.21

Glare Analysis Results

Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
Flat Roof 1A	5.0	180.0	0	0.0	0	0.0	-
Flat Roof 1B	5.0	180.0	0	0.0	0	0.0	-
Flat Roof 2	5.0	180.0	0	0.0	0	0.0	-
Pitched Roof 1A	3.0	270.0	0	0.0	0	0.0	-
Pitched Roof 1B	3.0	90.0	0	0.0	0	0.0	-
Pitched Roof 2	3.0	0.0	0	0.0	0	0.0	-
Pitched Roof 3A	3.0	0.0	0	0.0	0	0.0	-
Pitched Roof 3B	3.0	180.0	0	0.0	0	0.0	-
Pitched Roof 3B2	0.0	180.0	0	0.0	0	0.0	-
Pitched Roof 4	3.0	0.0	0	0.0	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 20	0	0.0	0	0.0

PV: Flat Roof 1A no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Flat Roof 1A and Route: Grove Street

No glare found

Flat Roof 1A and Route: Meadow Lane

No glare found

Flat Roof 1A and Route: Prairie Street

No glare found

Flat Roof 1A and Route: Waukegan Drive

No glare found

Flat Roof 1A and OP 1

No glare found

Flat Roof 1A and OP 2

No glare found

Flat Roof 1A and OP 3

No glare found

Flat Roof 1A and OP 4

No glare found

Flat Roof 1A and OP 5

No glare found

Flat Roof 1A and OP 6

No glare found

Flat Roof 1A and OP 7

No glare found

Flat Roof 1A and OP 8

No glare found

Flat Roof 1A and OP 9

No glare found

Flat Roof 1A and OP 10

No glare found

Flat Roof 1A and OP 11

No glare found

Flat Roof 1A and OP 12

No glare found

Flat Roof 1A and OP 13

No glare found

Flat Roof 1A and OP 14

No glare found

Flat Roof 1A and OP 15

No glare found

Flat Roof 1A and OP 16

No glare found

Flat Roof 1A and OP 17

No glare found

Flat Roof 1A and OP 18

No glare found

Flat Roof 1A and OP 19

No glare found

Flat Roof 1A and OP 20

No glare found

PV: Flat Roof 1B no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Flat Roof 1B and Route: Grove Street

No glare found

Flat Roof 1B and Route: Meadow Lane

No glare found

Flat Roof 1B and Route: Prairie Street

No glare found

Flat Roof 1B and Route: Waukegan Drive

No glare found

Flat Roof 1B and OP 1

No glare found

Flat Roof 1B and OP 2

No glare found

Flat Roof 1B and OP 3

No glare found

Flat Roof 1B and OP 4

No glare found

Flat Roof 1B and OP 5

No glare found

Flat Roof 1B and OP 6

No glare found

Flat Roof 1B and OP 7

No glare found

Flat Roof 1B and OP 8

No glare found

Flat Roof 1B and OP 9

No glare found

Flat Roof 1B and OP 10

No glare found

Flat Roof 1B and OP 11

No glare found

Flat Roof 1B and OP 12

No glare found

Flat Roof 1B and OP 13

No glare found

Flat Roof 1B and OP 14

No glare found

Flat Roof 1B and OP 15

No glare found

Flat Roof 1B and OP 16

No glare found

Flat Roof 1B and OP 17

No glare found

Flat Roof 1B and OP 18

No glare found

Flat Roof 1B and OP 19

No glare found

Flat Roof 1B and OP 20

No glare found

PV: Flat Roof 2 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Flat Roof 2 and Route: Grove Street

No glare found

Flat Roof 2 and Route: Meadow Lane

No glare found

Flat Roof 2 and Route: Prairie Street

No glare found

Flat Roof 2 and Route: Waukegan Drive

No glare found

Flat Roof 2 and OP 1

No glare found

Flat Roof 2 and OP 2

No glare found

Flat Roof 2 and OP 3

No glare found

Flat Roof 2 and OP 4

No glare found

Flat Roof 2 and OP 5

No glare found

Flat Roof 2 and OP 6

No glare found

Flat Roof 2 and OP 7

No glare found

Flat Roof 2 and OP 8

No glare found

Flat Roof 2 and OP 9

No glare found

Flat Roof 2 and OP 10

No glare found

Flat Roof 2 and OP 11

No glare found

Flat Roof 2 and OP 12

No glare found

Flat Roof 2 and OP 13

No glare found

Flat Roof 2 and OP 14

No glare found

Flat Roof 2 and OP 15

No glare found

Flat Roof 2 and OP 16

No glare found

Flat Roof 2 and OP 17

No glare found

Flat Roof 2 and OP 18

No glare found

Flat Roof 2 and OP 19

No glare found

Flat Roof 2 and OP 20

No glare found

PV: Pitched Roof 1A no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Pitched Roof 1A and Route: Grove Street

No glare found

Pitched Roof 1A and Route: Meadow Lane

No glare found

Pitched Roof 1A and Route: Prairie Street

No glare found

Pitched Roof 1A and Route: Waukegan Drive

No glare found

Pitched Roof 1A and OP 1

No glare found

Pitched Roof 1A and OP 2

No glare found

Pitched Roof 1A and OP 3

No glare found

Pitched Roof 1A and OP 4

No glare found

Pitched Roof 1A and OP 5

No glare found

Pitched Roof 1A and OP 6

No glare found

Pitched Roof 1A and OP 7

No glare found

Pitched Roof 1A and OP 8

No glare found

Pitched Roof 1A and OP 9

No glare found

Pitched Roof 1A and OP 10

No glare found

Pitched Roof 1A and OP 11

No glare found

Pitched Roof 1A and OP 12

No glare found

Pitched Roof 1A and OP 13

No glare found

Pitched Roof 1A and OP 14

No glare found

Pitched Roof 1A and OP 15

No glare found

Pitched Roof 1A and OP 16

No glare found

Pitched Roof 1A and OP 17

No glare found

Pitched Roof 1A and OP 18

No glare found

Pitched Roof 1A and OP 19

No glare found

Pitched Roof 1A and OP 20

No glare found

PV: Pitched Roof 1B no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Pitched Roof 1B and Route: Grove Street

No glare found

Pitched Roof 1B and Route: Meadow Lane

No glare found

Pitched Roof 1B and Route: Prairie Street

No glare found

Pitched Roof 1B and Route: Waukegan Drive

No glare found

Pitched Roof 1B and OP 1

No glare found

Pitched Roof 1B and OP 2

No glare found

Pitched Roof 1B and OP 3

No glare found

Pitched Roof 1B and OP 4

No glare found

Pitched Roof 1B and OP 5

No glare found

Pitched Roof 1B and OP 6

No glare found

Pitched Roof 1B and OP 7

No glare found

Pitched Roof 1B and OP 8

No glare found

Pitched Roof 1B and OP 9

No glare found

Pitched Roof 1B and OP 10

No glare found

Pitched Roof 1B and OP 11

No glare found

Pitched Roof 1B and OP 12

No glare found

Pitched Roof 1B and OP 13

No glare found

Pitched Roof 1B and OP 14

No glare found

Pitched Roof 1B and OP 15

No glare found

Pitched Roof 1B and OP 16

No glare found

Pitched Roof 1B and OP 17

No glare found

Pitched Roof 1B and OP 18

No glare found

Pitched Roof 1B and OP 19

No glare found

Pitched Roof 1B and OP 20

No glare found

PV: Pitched Roof 2 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Pitched Roof 2 and Route: Grove Street

No glare found

Pitched Roof 2 and Route: Meadow Lane

No glare found

Pitched Roof 2 and Route: Prairie Street

No glare found

Pitched Roof 2 and Route: Waukegan Drive

No glare found

Pitched Roof 2 and OP 1

No glare found

Pitched Roof 2 and OP 2

No glare found

Pitched Roof 2 and OP 3

No glare found

Pitched Roof 2 and OP 4

No glare found

Pitched Roof 2 and OP 5

No glare found

Pitched Roof 2 and OP 6

No glare found

Pitched Roof 2 and OP 7

No glare found

Pitched Roof 2 and OP 8

No glare found

Pitched Roof 2 and OP 9

No glare found

Pitched Roof 2 and OP 10

No glare found

Pitched Roof 2 and OP 11

No glare found

Pitched Roof 2 and OP 12

No glare found

Pitched Roof 2 and OP 13

No glare found

Pitched Roof 2 and OP 14

No glare found

Pitched Roof 2 and OP 15

No glare found

Pitched Roof 2 and OP 16

No glare found

Pitched Roof 2 and OP 17

No glare found

Pitched Roof 2 and OP 18

No glare found

Pitched Roof 2 and OP 19

No glare found

Pitched Roof 2 and OP 20

No glare found

PV: Pitched Roof 3A no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Pitched Roof 3A and Route: Grove Street

No glare found

Pitched Roof 3A and Route: Meadow Lane

No glare found

Pitched Roof 3A and Route: Prairie Street

No glare found

Pitched Roof 3A and Route: Waukegan Drive

No glare found

Pitched Roof 3A and OP 1

No glare found

Pitched Roof 3A and OP 2

No glare found

Pitched Roof 3A and OP 3

No glare found

Pitched Roof 3A and OP 4

No glare found

Pitched Roof 3A and OP 5

No glare found

Pitched Roof 3A and OP 6

No glare found

Pitched Roof 3A and OP 7

No glare found

Pitched Roof 3A and OP 8

No glare found

Pitched Roof 3A and OP 9

No glare found

Pitched Roof 3A and OP 10

No glare found

Pitched Roof 3A and OP 11

No glare found

Pitched Roof 3A and OP 12

No glare found

Pitched Roof 3A and OP 13

No glare found

Pitched Roof 3A and OP 14

No glare found

Pitched Roof 3A and OP 15

No glare found

Pitched Roof 3A and OP 16

No glare found

Pitched Roof 3A and OP 17

No glare found

Pitched Roof 3A and OP 18

No glare found

Pitched Roof 3A and OP 19

No glare found

Pitched Roof 3A and OP 20

No glare found

PV: Pitched Roof 3B no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Pitched Roof 3B and Route: Grove Street

No glare found

Pitched Roof 3B and Route: Meadow Lane

No glare found

Pitched Roof 3B and Route: Prairie Street

No glare found

Pitched Roof 3B and Route: Waukegan Drive

No glare found

Pitched Roof 3B and OP 1

No glare found

Pitched Roof 3B and OP 2

No glare found

Pitched Roof 3B and OP 3

No glare found

Pitched Roof 3B and OP 4

No glare found

Pitched Roof 3B and OP 5

No glare found

Pitched Roof 3B and OP 6

No glare found

Pitched Roof 3B and OP 7

No glare found

Pitched Roof 3B and OP 8

No glare found

Pitched Roof 3B and OP 9

No glare found

Pitched Roof 3B and OP 10

No glare found

Pitched Roof 3B and OP 11

No glare found

Pitched Roof 3B and OP 12

No glare found

Pitched Roof 3B and OP 13

No glare found

Pitched Roof 3B and OP 14

No glare found

Pitched Roof 3B and OP 15

No glare found

Pitched Roof 3B and OP 16

No glare found

Pitched Roof 3B and OP 17

No glare found

Pitched Roof 3B and OP 18

No glare found

Pitched Roof 3B and OP 19

No glare found

Pitched Roof 3B and OP 20

No glare found

PV: Pitched Roof 3B2 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Pitched Roof 3B2 and Route: Grove Street

No glare found

Pitched Roof 3B2 and Route: Meadow Lane

No glare found

Pitched Roof 3B2 and Route: Prairie Street

No glare found

Pitched Roof 3B2 and Route: Waukegan Drive

No glare found

Pitched Roof 3B2 and OP 1

No glare found

Pitched Roof 3B2 and OP 2

No glare found

Pitched Roof 3B2 and OP 3

No glare found

Pitched Roof 3B2 and OP 4

No glare found

Pitched Roof 3B2 and OP 5

No glare found

Pitched Roof 3B2 and OP 6

No glare found

Pitched Roof 3B2 and OP 7

No glare found

Pitched Roof 3B2 and OP 8

No glare found

Pitched Roof 3B2 and OP 9

No glare found

Pitched Roof 3B2 and OP 10

No glare found

Pitched Roof 3B2 and OP 11

No glare found

Pitched Roof 3B2 and OP 12

No glare found

Pitched Roof 3B2 and OP 13

No glare found

Pitched Roof 3B2 and OP 14

No glare found

Pitched Roof 3B2 and OP 15

No glare found

Pitched Roof 3B2 and OP 16

No glare found

Pitched Roof 3B2 and OP 17

No glare found

Pitched Roof 3B2 and OP 18

No glare found

Pitched Roof 3B2 and OP 19

No glare found

Pitched Roof 3B2 and OP 20

No glare found

PV: Pitched Roof 4 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Pitched Roof 4 and Route: Grove Street

No glare found

Pitched Roof 4 and Route: Meadow Lane

No glare found

Pitched Roof 4 and Route: Prairie Street

No glare found

Pitched Roof 4 and Route: Waukegan Drive

No glare found

Pitched Roof 4 and OP 1

No glare found

Pitched Roof 4 and OP 2

No glare found

Pitched Roof 4 and OP 3

No glare found

Pitched Roof 4 and OP 4

No glare found

Pitched Roof 4 and OP 5

No glare found

Pitched Roof 4 and OP 6

No glare found

Pitched Roof 4 and OP 7

No glare found

Pitched Roof 4 and OP 8

No glare found

Pitched Roof 4 and OP 9

No glare found

Pitched Roof 4 and OP 10

No glare found

Pitched Roof 4 and OP 11

No glare found

Pitched Roof 4 and OP 12

No glare found

Pitched Roof 4 and OP 13

No glare found

Pitched Roof 4 and OP 14

No glare found

Pitched Roof 4 and OP 15

No glare found

Pitched Roof 4 and OP 16

No glare found

Pitched Roof 4 and OP 17

No glare found

Pitched Roof 4 and OP 18

No glare found

Pitched Roof 4 and OP 19

No glare found

Pitched Roof 4 and OP 20

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.

"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.

Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.

The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.

Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.

Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.

The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.

The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)

The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.

The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.

The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.

Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.

Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.

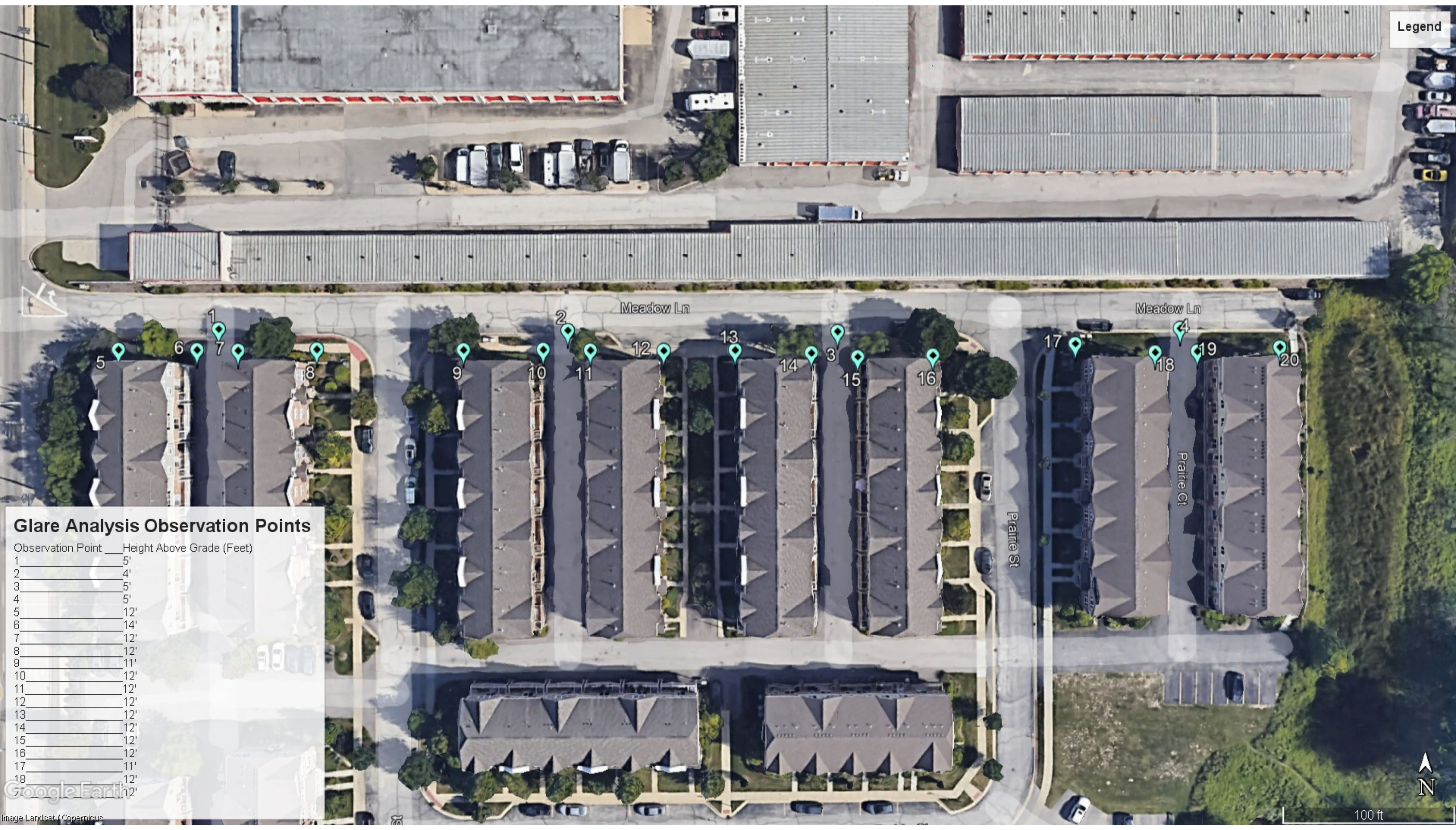
Refer to the Help page at www.forgesolar.com/help/ for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

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Legend



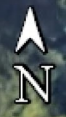
Glare Analysis Observation Points

Observation Point Height Above Grade (Feet)

1	5'
2	4'
3	5'
4	5'
5	12'
6	14'
7	12'
8	12'
9	11'
10	12'
11	12'
12	12'
13	12'
14	12'
15	12'
16	12'
17	12'
18	12'
19	11'
20	12'

Google Earth

Image Landsat / Copernicus



100 ft

OE/AAA Pre-screening Results

Fri Jun 27 2025 10:08:50 GMT-0400 (Eastern Daylight Time)

Structure: Building

Latitude	Longitude	Height	Site Elevation	AMSL
42.038436	-87.798744	15	634	649
42.038544	-87.795999	17	630	647
42.037751	-87.796186	30	628	658
42.037738	-87.798729	41	634	675

Based on the information you provided, you are not required to file notice with the FAA.



Illinois Power Agency
105 West Madison Street, Suite 1401
Chicago, Illinois 60602
August 24, 2023

To Whom It May Concern,

Go Green Skokie is a community of individuals who live, work, or have children who currently attend school in Skokie. Our mission is to promote environmental sustainability and justice in our Village. Community solar is in line with our mission and we are excited that local projects will be coming to our community.

This is a letter in support of the Illinois Adjustable Block Community Solar Program and Solar Landscape's five proposed Community-Driven Community Solar projects to be located in Niles Township. We have met with members of the Community Engagement team from Solar Landscape and are committed to continuing to collaborate with Solar Landscape in an effort to support the benefits the project will bring to our community.

On Monday August 14th, Lauren Grodnicki of Go Green Skokie joined an in person meeting with Kevin Dunshee, the Chief Commercial Office of Solar Landscape and gave a comprehensive overview of Illinois Community Solar and the work Solar Landscape is doing in and around Skokie and the greater Niles Township community. Kevin made us aware that the five proposed CDCS projects will, when completed, will power approximately 1,000 homes. Kevin stayed and answered questions and attendees offered feedback regarding the benefits the project will bring to our community through a QR code he provided. Lauren also joined a participatory community workshop hosted via Zoom by Solar Landscape on August 15th.

On August 23rd, Jennifer Schneider met with the entire Go Green Skokie team during our monthly meeting. We have provided input regarding the project development process through these meetings, additional calls, and a stakeholder benefits survey. Solar Landscape has actively engaged with us to solicit our participation in this process, and we look forward to continuing to provide consultation as the project is constructed and energized. We value our role as stakeholders in a local community solar project that will provide lower costs, cleaner air, job training, and other benefits in and around our community. As such, we are committed to having at least four or more members of our organization provide on-going collaboration with Solar Landscape as the project development process continues.

We look forward to weighing in project-related decisions that arise and provide input on the dissemination of the local scholarship program and any other programs we determine are most appropriate and impactful for our community. Go Green Skokie will ensure that four or more of our team members will participate with the ongoing collaborative input related to this project as it is built, energized, operated, and maintained.

We will continue to collaborate with Solar Landscape on the development of this community solar projects in Niles Township which will provide opportunities for our members to subscribe to the project, receive meaningful electricity bill savings, help us meet some of the goals in Skokie's Environmental Sustainability Plan, and continue to participate in the state's goal of 100% clean energy.

Sincerely,





Illinois Power Agency
105 West Madison Street, Suite 1401
Chicago, Illinois 60602

August 24th, 2023

To Whom it May Concern,

This is a letter in support of the Illinois Adjustable Block Community Solar Program and Solar Landscape's Community-Driven Community Solar (CDCS) project application(s) that will benefit Niles Township:

<u>Project Application ID</u>	<u>Project Address</u>
<u>SLDIL 114754</u>	<u>6460 Lincoln Ave. Lincolnwood</u>
<u>SLDIL 114750</u>	<u>8050 McCormick Blvd. Skokie</u>
<u>SLDIL 114767</u>	<u>8625 Waukegan Rd. Morton Grove</u>
<u>SLDIL 114742</u>	<u>6400-6430 Howard St. Niles</u>
<u>SLDIL 114798</u>	<u>6350 Howard St. Niles</u>

The Garfield Park Community Council (GPCC) is a community-building organization made up of dedicated residents and allies working together to develop leaders and create opportunities and programs that build a vital Garfield Park and greater Chicago-metro area community. Since 2012, GPCC developed and implemented more than 60 local projects with at least 50 partner organizations throughout Cook County and facilitated more than \$50 million in community investment, an outgrowth of the original comprehensive approach to improving the quality of life for neighborhood residents. GPCC has become a leader in community development initiatives and engages various public and private institutions, including private developers, law enforcement, city officials, and funders, to ensure that community residents are involved in new projects and policies.

Since November of 2022, we have been engaged in the community solar project planning process with Solar Landscape. GPCC's Executive Director attended Solar Landscape's Community Solar Forum hosted in Garfield Park at the Legler Regional Library to understand the proposed projects and be informed about the locations, sizes, environmental benefits, and projected number of subscribers for all projects listed above as well as others in the area we serve (Cook County). We gave input on our priorities for the Community Solar projects through a community stakeholder survey and made recommendations via in person and phone conversations. We are aware through our collaboration that members of the greater GPCC community may be served by the proposed projects we collaborated on last year and look forward to continuing to do so.

Since that time:

- On July 21st, 2023, Jennifer Schneider from Solar Landscape's community engagement team met with our Sustainable Housing Associate, Aretha Berdell, via a zoom call. Jennifer made us aware of Solar Landscape's project applications for this year's round of CDCS and shared ways for us to provide input through a stakeholder benefits survey and provided follow-up resources. During the meeting, Aretha shared that she is now a Solar for All grassroots educator and is interested in also educating residents on and sharing Illinois Shines subscription opportunities. Additionally, Aretha shared that GPCC has been looking for solar panel training material grants to sponsor educational programming opportunities for local Boys and Girls Club, of which Solar Landscape has committed to sponsoring.
- Jennifer reached out again on July 24th to schedule an in-person meeting for Ms. Berdell with Solar Landscape's Chief Commercial Officer, Kevin Dunshee.
- On July 27th, Jennifer shared with Ms. Berdell an update on Solar Landscape's awarded projects from last year that GPCC supported and provided input on the same day they were announced by the Illinois Power Agency.

- On August 1st, Mr. Dunshee met with Ms. Berdell at our office, located at 300 N Central Park Ave, Chicago. Mr. Dunshee reviewed both Illinois community solar programs in greater detail and explained the locations, sizes, environmental benefits, and projected number of subscribers of Solar Landscape's proposed CDCS projects. Ms. Berdell discussed at length the GPCC's plans to build the Garfield Park Community Orchard and shared the blueprints and artist depictions with Mr. Dunshee. She shared with Solar Landscape GPCC's vision and recommendation that any funds available from the project may be best utilized in the construction of the garden. Mr. Dunshee and Ms. Berdell agreed to meet again to discuss CDCS project benefits further.
- On August 16th, Mr. Dunshee met Ms. Berdell at the Garfield Park Conservatory at 1:30pm. They spoke at length about the solar initiatives as well as the community garden. Mr. Dunshee committed to being at the GPCC's Nature Day event on September 22nd with his team members, and to provide a solar demonstration for the students present.
- On August 18th, Mr. Dunshee met via Zoom call with our team as well as one of our major sponsors, Wells Fargo, to review the GPCC project kick-off event and committed to a donation to offset food costs for the day.

Lowering the utility costs for residents in the communities we serve while reducing carbon emissions through Community Solar is something we strongly support. In addition to supporting this Solar Landscape project application, we will continue to consult with Solar Landscape to meaningfully engage our community around these projects while providing support and guidance in the following ways:

- GPCC will work with Solar Landscape to provide educational opportunities and information about Community Solar for low-to-moderate income households that the organization serves.
- GPCC will promote any annual scholarship programs from the project, including Solar Landscape's Community Sustainability Challenge scholarship for high school students to its community members.
- Solar Landscape has committed to providing a \$200 donation to GPCC for any resident that subscribes to one of their community solar projects using our unique promo-code.
- Solar Landscape will provide marketing and public relations support to facilitate our involvement in educating our community about Community Solar.

We are pleased that our team has been involved in providing input to shape the community solar programs being designed in collaboration with Solar Landscape. We are excited to support the work of community solar developers like Solar Landscape to help bring clean energy, jobs training, and lower utility costs to our community. We will continue to collaborate with Solar Landscape through Ms. Berdell, myself, and other members of our organization and continue to offer our consultation on ways to provide benefits to the communities we serve during the building and operation of the solar projects.

We fully support Solar Landscape's community solar projects that will bring environmental justice, solar access for all, and lower energy costs to Niles Township.

Sincerely,



Mike Thomas
CEO
Garfield Park Community Council



Seven
Generations
Ahead

-Great Law of the Iroquois

In every deliberation we must consider the impact on the seventh generation.

Illinois Power Agency
105 West Madison Street, Suite 1401
Chicago, Illinois 60602

August 23rd, 2023

To Whom it May Concern,

Seven Generations Ahead (SGA) works with local government, community, and private sector leaders to help communities make the changes they need to build a healthy and sustainable future. Through community-wide sustainability planning and implementation, project design and implementation, educational conferences and forums, community network development, consulting, and programs, SGA is a catalyst for local community solutions to global environmental issues.

This is a letter in support of the Illinois Adjustable Block Program and Solar Landscape's Illinois Community-Driven Community Solar (CDCS) project application(s). Since the fall of 2022, we have been engaged with the Community Engagement Team from Solar Landscape through meetings and regular correspondence. We are committed to continuing to collaborate with Solar Landscape in an effort to support local community solar projects and the benefits the projects will bring to the communities we serve. We informed Solar Landscape about how SGA networks in Niles Township could be served by and benefit from the proposed projects, and how they are in line with SGA's goals.

Solar Landscape has actively engaged with us to solicit our participation in this process, and we look forward to continuing to provide consultation as the projects are constructed and energized. For example, Solar Landscape gave us a presentation on the community solar program and informed us about the Niles Township project location(s), size(s), environmental benefits, and projected number of subscribers for the following application(s):

Project Application ID

SLDIL 114754
SLDIL 114750
SLDIL 114767
SLDIL 114742
SLDIL 114798

Project Address

6460 Lincoln Ave, Lincolnwood
8050 McCormick Blvd, Skokie
8625 Waukegan Rd, Morton Grove
6400-6430 Howard St, Niles
6350 Howard St, Niles

We also gave Solar Landscape input on our priorities for the projects and Solar Landscape agreed to make a charitable donation to SGA for every subscriber that uses our invite code.

We value our role as stakeholders in CDCS community solar projects that will provide lower costs, cleaner air, job training, and other benefits in and around our community. As such, we are committed to SGA leadership including myself and SGA Solar Consultant Mark providing ongoing collaboration with Solar Landscape as the project development process continues.

Lowering the utility costs for our community while reducing carbon emissions is something we strongly support. In addition to supporting Solar Landscape's Niles Township project application(s), we will continue to consult with Solar Landscape to meaningfully engage the Niles Township community around these projects while providing support and guidance in the following ways:

- SGA will work with Solar Landscape to provide educational opportunities and information about Community Solar for Niles Township community members and leaders.
- SGA will work with Solar Landscape to provide information on Community Solar to staff and volunteers who are eligible to subscribe.
- SGA will promote the Niles Township project(s)' annual scholarship program funding to its community members.
- SGA will promote local community solar projects on social media and our website.
- Solar Landscape will provide support for SGA's initiatives and events.
- Solar Landscape will provide marketing and public relations support to facilitate our involvement with educating our community about Community Solar.

I am pleased to have been involved in providing input to shape the community solar programs being designed in collaboration with Solar Landscape. We are excited to continue to work with Solar Landscape to help bring clean energy, additional benefits, and lower utility costs to our community, and look forward to continuing to weigh in on ways to provide meaningful benefits to the community during the building and operation of the solar projects.

We fully support Solar Landscape's community solar projects that will bring environmental justice, solar access for all, and lower energy costs to Niles Township residents and the communities we serve.

Sincerely,



Gary Cuneen, Founder and Executive Director, Seven Generations Ahead

Illinois Power Agency
105 West Madison Street, Suite 1401
Chicago, Illinois 60602



August 23, 2023

To Whom it May Concern,

This is a letter in support of the Illinois Adjustable Block Community Solar Program and Solar Landscape's Illinois Community-Driven Community Solar (CDCS) project application(s) for Niles Township:

<u>Project Application ID</u>	<u>Project Address</u>
SLDIL 114754	6460 Lincoln Ave, Lincolnwood
SLDIL 114750	8050 McCormick Blvd, Skokie
SLDIL 114767	8625 Waukegan Rd, Morton Grove
SLDIL 114742	6400-6430 Howard St, Niles
SLDIL 114798	6350 Howard St, Niles

A 501 (c) (6) organization founded in 1979, the Hispanic American Construction Industry Association (HACIA) works to ensure the equitable participation of its members in the construction industry, while also promoting the growth, quality of work, professionalism and integrity of these individuals and businesses. We have fought for diversity in the construction world for over 40 years and continue to clear paths of opportunity for Minority- and Woman-owned Business Enterprises across the Midwest. From advocating for public policy, providing the tools necessary to seize and succeed at new business opportunities and providing training and education that assist Hispanics in growing their own construction-related businesses, HACIA believes in pushing its community beyond what have become traditional roles for Hispanics in the construction industry and we realize the importance of our participation in the growing renewable energy industry. HACIA works with individuals from across the state.

We have been partnering with solar developer Solar Landscape since 2022. At that time, we held a solar installation training for our cohorts in collaboration with Solar Landscape and the SAFER Foundation. Since that time, we have had collaborative discussions with the firm's Chief Commercial Officer, Kevin Dunshee. As a result of our conversations, we have included additional training courses focusing on commercial solar installation for interested cohorts enrolled in our pre-apprenticeship programs. The details are provided below. Solar Landscape has shared with us their proposed project applications for the Illinois Shines CDCS program, and we have collaborated to provide input on project development and organization, as well as the ways HACIA cohorts will benefit from employment as these projects enter the construction phase.

Please note:

- On May 25th, 2023, Solar Landscape team of Kevin Dunshee and Raphaela Hsu-Flanders had a planning call with Hector Tello and Dennis Esquivel regarding the next training event.
- Additional planning calls were held on June 1st, June 7th, June 21st, and June 27th as well as July 18th, 2023.
- From July 31st through August 4th, 2023, the Solar Landscape team trained 20 HACIA trainees on commercial solar installation. The training was held at 2810 W Addison St, Chicago, a location rented by Solar Landscape. Cohorts were provided a \$300 stipend upon completion of the training and Solar Landscape will be providing interested cohorts with introductions to career opportunities through local companies that are hiring Equity Eligible Persons (EEPS) for their workforce.
- HACIA works with individuals from throughout Illinois. The cohorts for these two trainings were from the following areas: Pingree Grove, Chicago, Bellwood, Gainwood, Pingree Grove, Midlothian, Lincoln, Ciserro, Edgewater, Chicago-Pilsen, Chicago South Side, Burrwood, Wheaton, Garfield Park

650 W. Lake Street, Suite 415
Chicago, IL 60661
haciaworks.org | (312) 575-0389

- Mr. Dunshee was a speaker at our HACIA graduation on Thursday, August 3rd where he spoke about the opportunities available to our cohorts through the Illinois community solar programs and the federal government's Inflation Reduction Act.
- On August 16, 2023, Mr. Dunshee met with Mr. Tello and Mr. Esquivel at our HACIA headquarters in Chicago to review the training video that was created and to begin planning for additional training.
- On August 23, 2023, Mr. Dunshee met with HACIA Executive Director Jaqueline Gomez and Director of Programs Alma Tello to review the training and begin planning for additional and more advanced training for HACIA cohorts.
- Mr. Dunshee explained how Solar Landscape's nationally recognized Solar Training and Educational Partnership (STEP-UP) for solar workforce development can collaborate with us on how to best train and employ HACIA cohorts.
- Solar Landscape has provided us informed us about their project locations, sizes, economic benefits, social benefits, environmental benefits, and projected number of subscribers.

Thanks to Illinois' initiatives in our groundbreaking community solar program, more and more solar projects are being built throughout the state. Solar panels are warrantied for 25 years and have a useful life of at least ten years longer. Even if all solar construction stopped, solar installations would have to be operated and maintained for decades, ensuring job opportunities for properly trained solar professionals. With this in mind, we are continuing out partnering with Solar Landscape in the following ways:

- Providing training in solar panel operations and maintenance to our more advanced, NABCEP certified green energy graduates.
- Solar Landscape will write the curriculum and deliver the training with their certified team of O&M professionals.
- Cohorts will learn how a solar project production is measured in real-time through the use of advanced computer software systems.
- Cohorts will learn about commissioning a solar energy system and the preventive maintenance that goes into project construction.
- Cohorts will get exposure to the additional software that is used to monitor and diagnose problem areas in a solar system.
- Cohorts will be taken on a tour at a jobsite of an operational solar array to demonstrate how a technician trouble shoots a system.
- Cohorts will be taken on a tour of a solar system being constructed to determine best practices on the roof, including safety and installation.
- HACIA will work with Solar Landscape to provide educational opportunities and information about Community Solar for communities that the organization serves.
- HACIA will work with Solar Landscape to provide Community Solar information to staff and volunteers who are eligible to subscribe.
- HACIA will promote local community solar projects on social media and feature HACIA cohorts that have helped in the project construction.
- Solar Landscape has agreed to provide marketing, public relations, and other support to HACIA to assist with our training expenses and to facilitate our involvement in educating our community about Community Solar.

Our organization is pleased to have built this relationship with Solar Landscape as we work to train HACIA cohorts and help them find a path to employment.

Lowering utility costs for our community while reducing carbon emissions is something we strongly support. In addition to supporting Solar Landscape's Niles Township project applications, we will continue to consult with Solar Landscape and meaningfully engage with them surrounding career opportunities projects will provide to our cohorts.

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Chicago, IL 60661
haciaworks.org | (312) 575-0389

We have a large and active board, and we are committed to having in on-going collaborative discussions and analysis to ensure these solar projects bring the desired benefits to our community. We are excited to work with Solar Landscape to help bring clean energy, jobs training, and lower utility costs to our community, and look forward to continuing to weigh in on ways to provide benefits to the community during the building and operation of the solar projects.

We fully support Solar Landscape's community solar projects that will bring environmental justice, solar access for all, and lower energy costs to Niles Township and in all the other communities we serve.

Sincerely,



Jaqueline Gomez
CEO
HACIA



Chicago Muslims Green Team

EIN: 85-2049059

Website: <https://chicagomuslimsgreenteam.org/>
Email: contact@chicagomuslimsgreenteam.org

Illinois Power Agency
105 West Madison Street, Suite 1401
Chicago, Illinois 60602

August 22, 2023

To Whom it May Concern,

This is a letter in support of the Illinois Shines Adjustable Block Program and Solar Landscape's Illinois Community-Driven Community Solar (CDCS) project application(s):

SLDIL 114754	6460 Lincoln Ave, Lincolnwood
SLDIL 114750	8050 McCormick Blvd, Skokie
SLDIL 114767	8625 Waukegan Rd, Morton Grove
SLDIL 114742	6400-6430 Howard St, Niles - Howard Industrial Center
SLDIL 114798	6350 Howard St, Niles - Howard Industrial Center

Chicago Muslim Green Team (CMGT) connects Chicago Muslims and the greater community to issues of environmental justice and spreads awareness about an Eco-friendly lifestyle based on Islamic teachings. CMGT inspires Chicago Muslims to lead in building an environmentally friendly city that restores balance and connection between nature and people. We plan to engage the Solar Landscape Community Solar Projects through our Building Bridges, Green Ramadan, Green Mosque, and Capacity Building programs to educate our community about the environmental, social, cultural, and economic benefits of community solar. With over 60 Muslim community centers we have a great opportunity to engage large portions of the community around these projects. Additionally, we provide information about and opportunities to train our local community on skills that will help them find jobs in the clean energy transition that Illinois is making.

We have been engaged in collaborative discussions with Solar Landscape's Chief Commercial Officer Kevin Dunshee and the Director of Partnerships, Jennifer Schneider. During in-person meetings and zoom calls, Solar Landscape has shared with us their proposed project application for all projects in Niles Township and we have collaborated through these meetings to provide input on project development and organization as well as the most meaningful ways our community can benefit from the program.

During our project development process CMGT and Solar Landscape have worked together on the following:

- CMGT created a website to promote the Solar Landscape's Community Solar workshops for education and community input. The website will be the community solar landing page for Solar Landscape's Community Stakeholder Survey as well as community solar education. The website: <https://bit.ly/2023SOLAR> was shared to the CMGT's social media and "WhatsApp" groups.
- The webpage will be updated regularly with our plans to do more educational programs and outreach as the project is built, energized, operated, and maintained.
- On July 20, 2023, Caroline Williams and Layalee Beirat had a Zoom call with Jennifer Schneider from Solar Landscape to find out more about our organization and our community-based initiatives. Jennifer updated us on Illinois Community solar and shared a stakeholder survey with us to complete which has been sent to our entire Board of Directors.
- On August 4, 2023, Kevin Dunshee, Solar Landscape's Chief Commercial Officer met with Caroline Williams and Layalee Beirat at the South Shore Cultural Center on South Shore Road at 6 pm to provide a refresher presentation on Illinois Community Solar program and discuss the benefits they provide.
- Solar Landscape has informed us about the Niles Township project(s) location, size, economic benefits, social benefits, environmental benefits, and projected number of subscribers.
- On August 16, 2023, at 4:40 pm, Mr. Dunshee met with an additional **five** of our stakeholders at the Masjid Al Farooq Mosque located at 8950 S. Stoney Island Ave. in Chicago.

- CMGT gave Solar Landscape, via Kevin, our input on our priorities for the projects, which included tree planting as it relates to our Tree Ambassador Program, sponsoring our Green Mosque initiative, and continuing to educate, inform and benefit our community. This includes education programs for students which they will provide through the Green Ambassador Program for high school students interested in STEM fields of study.
- Solar Landscape will help us form and train a Solar Ambassador Team (similar to our Tree Ambassador Team) to help direct community members on where to get more information and education on the benefits of CDCS and how to enroll in a project.
- Solar Landscape agreed to make a charitable donation to CMGT of at least \$200 for every project subscriber that uses our promo code.
- Solar Landscape agreed to provide us required analysis as we work on our Green Mosque program.

Lowering the utility costs for our community while reducing carbon emissions is something we strongly support. In addition to supporting Solar Landscape's Niles Township project application(s), we will continue to consult with Solar Landscape and meaningfully engage with them and our community surrounding these projects while providing support and guidance in the following ways:

- CMGT is aware that Solar Landscape has developed a solar workforce development program with HACIA. We will work with Solar Landscape to bring this training to Niles Township as well. We will host and enlist people to Solar Landscape's workforce training opportunities for our members and the local Niles Township community.
- CMGT will work with Solar Landscape to promote the projects' annual scholarship program funding to its community members.
- CMGT will work with Solar Landscape to provide educational opportunities and information about Community Solar for the Niles Township community.
- CMGT will work with Solar Landscape to provide Community Solar information to staff and volunteers who are eligible to subscribe.
- CMGT will promote this community solar project on social media.
- Solar Landscape will provide support in the form of tabling and sponsorships for CMGT initiatives and events.
- Solar Landscape will provide marketing and public relations support to facilitate our involvement educating our community about Community Solar.

Our organization is pleased to have been involved in providing input that has helped shape Solar Landscape's community solar project in Niles Township. We appreciate that Solar Landscape has met with us in person several times and listened to and included our recommendations. We have a large and active board, and we are committed to providing at least four members per project to work in on-going collaborative discussions and analysis to ensure these projects bring the desired benefits to our community and the Niles Township community. We are excited to work with Solar Landscape to help bring clean energy, jobs training, and lower utility costs to our community, and look forward to continuing to weigh in on ways to provide benefits to the community during the building and operation of the solar projects.

We fully support Solar Landscape's community solar projects that will bring environmental justice, solar access for all, and lower energy costs to Niles Township residents and the communities we serve.

Sincerely,



Caroline K. Williams
CEO



Village of Morton Grove

Department of Community & Economic Development

To: Chairperson Kintner and Members of the Plan Commission

From: Brandon Nolin, AICP, Community Development Administrator
Anne Ryder Kirchner, Planner/Zoning Administrator

Date: January 13, 2026

Re: Plan Commission Case PC 25-14
Request for a Special Use Permit for a parking variation for an existing shopping center in a C-1 General Commercial District in accordance with Section 12-7-3:K at the property commonly known as 9428 Waukegan Road in Morton Grove, Illinois (PIN 10-18-100-027-0000). The applicant is Naser Hosseini of Cultura Persian Subs.

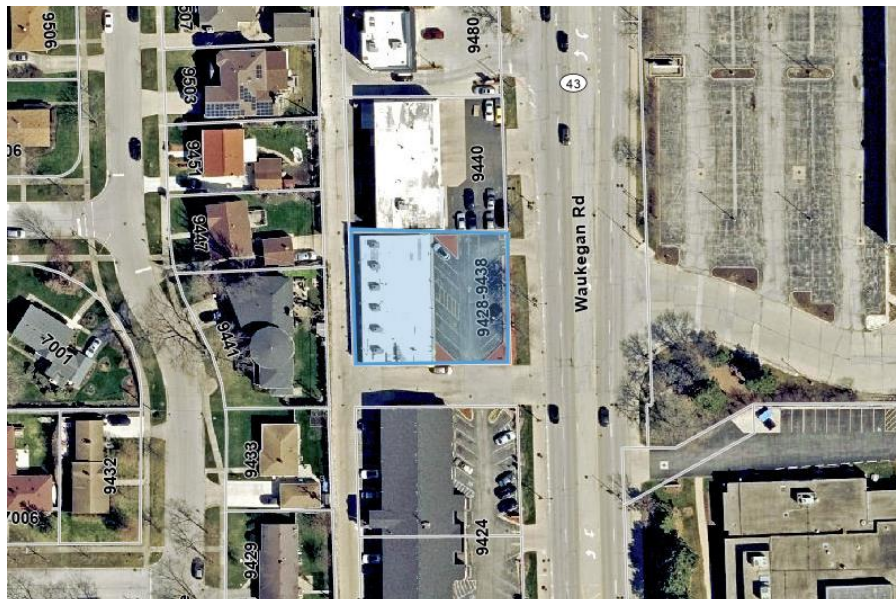
STAFF REPORT

Public Notice

The Village of Morton Grove provided public notice for the January 20, 2026, Zoning Board of Appeals public hearing for PC 25-14 in accordance with the Unified Development Code. The *Morton Grove Champion* published a public notice on January 1, 2026. The Village mailed letters on December 31, 2025, notifying surrounding property owners, and placed a public notice sign on the subject property on December 31, 2025.

Property Background

The subject property at 9428 Waukegan Road, is a 0.28-acre (12,234 square feet) site located on the west side of Waukegan Road between Emerson Street and Golf Road. The property is within a C-1 General Commercial District and is improved with a commercial structure. To the north and south are properties also zoned in a C-1 General Commercial District and improved for commercial use. To the west, properties are zoned R-2 and improved with single-family homes, and to the east, across Dempster Street, are Golf Middle School and Fareva.



Subject Property Location Map

Application Overview

The applicant, Cultura Persian Subs, is an existing restaurant tenant at the subject property which is an inline retail center with six (6) tenant spaces. Cultura Subs is located at 9428-9430 Waukegan Road and is seeking to expand into 9432 Waukegan Road. Expanding the restaurant use into a space previously occupied by a non-restaurant space with a lower parking requirement will require approval of a parking variation to allow a reduction in the shared off-street parking requirement for the multi-tenant property at 9428-9438 Waukegan Road.

The subject property has **14 on-site parking spaces** that are shared between the mix of uses. One unit, 709 square feet in size, is currently vacant. The combined parking requirement for all uses on the site, including the proposed restaurant and without applying the shared parking calculation provided by Section 12-7-3:H, is 22.4 spaces, which is rounded down to **22 spaces**. Applying the shared parking calculation, the minimum off-street parking requirement is reduced to **21 spaces**. The base parking calculations and shared parking calculations are depicted in the tables below.

BASE PARKING REQUIREMENT - 9428-38 Waukegan					
Unit	Tenant	Use	SF	Fractional Req. Spaces	Required Parking
9428	Cultura Subs	Restaurant	1,418	9.45	9
9430					
9432	Cultura Subs Expansion	Restaurant	709	4.73	5
9434	US Medical Equipments, Inc	Retail	1,418	5.67	6
9436					
9438	Undressed Alterations Tailor	Service	709	2.36	2
Existing on-site parking: 14 spaces (not incl. illegal alley parking spaces)					22

SHARED PARKING REQUIREMENT - 9428-38 Waukegan						
Land Use	Weekdays			Weekends		
	2:00 a.m. - 7:00 a.m.	7:00 a.m. - 6:00 p.m.	6:00 p.m. - 2:00 a.m.	2:00 a.m. - 7:00 a.m.	7:00 a.m. - 6:00 p.m.	6:00 p.m. - 2:00 a.m.
Office	0.05	1	0.05	0	0.1	0
Services & Retail	0	0.9	0.8	0	1	0.6
Restaurant (Not 24 hr)	0.1	0.7	1	0.2	0.7	1
Office	0.0	0.0	0.0	0.0	0.0	0.0
Services & Retail	0.0	8.1	7.2	0.0	9.0	5.4
Restaurant (Not 24 hr)	1.4	9.8	14.0	2.8	9.8	14.0
FRACTIONAL TOTAL	1.4	17.9	21.2	2.8	18.8	19.4
FULL TOTAL	1	12	21	2	7	9

Based on the proposed mix of uses, the property will have nine (9) fewer spaces than required by Code for the base parking requirement and seven (7) fewer spaces than required by Code for the shared parking requirement.

Section 12-7-3:K of the Unified Development Code controls requests for parking variations and reads as follows:

12-7-3:K. Parking Variations: Peak Demand: Variations with regards to a reduction in off street parking are obtainable, based on the actual peak demand of a use or combination of uses as demonstrated by an independent traffic study completed by a traffic engineer selected from a list of engineers maintained by the Village or as approved by the Village engineer. In addition to the standards identified in chapter 16 of this title, relative to variations and special uses in general, the amount of available, properly zoned on street parking, and the proximity to municipally owned lots will be taken into consideration regarding a parking variation. Parking variations may be granted, based on the percentages below, by the zoning board of appeals, based on the gross square footage of building size. Any requests for a higher percentage than listed below will be considered a special use and require plan commission recommendation and board of trustees approval.

Based on the shared parking requirement of 21 spaces and an on-site parking capacity of 14 spaces, the requested reduction of 50% requires a Special Use Permit and must be reviewed by the Plan Commission. For a property of this size, requests for a parking variation less than 35% could be approved as a variation by the Zoning Board of Appeals.

Parking Study

As required by Section 12-7-3:K, the applicant obtained an independent parking study to support the request for variation. The study, prepared by Kimley-Horn and Associates, Inc., and dated November 17, 2025, is included in the hearing packet. The study assesses parking demand based on (1) Village Code requirements and (2) observed parking demand at the subject property. The study makes the following observations:

- Based on the Village shared parking standards, the off-street parking requirement is highest during the 6:00 PM – 2:00 AM time period on weekdays, when 21 spaces are required. With the shared parking reduction, the existing supply of 14 parking spaces does not meet the shared parking requirement with a deficit of 7 spaces.
- Site security footage was reviewed to document existing parking demand. Based on the parking observations, peak parking demand in the parking lot was 10 out of 14 spaces on Thursdays between 2:45-3:15PM. Of the 10 spaces occupied, 6 spaces were associated with the Cultura Sub/Steaks restaurant.
- Based on the existing square footage of 1,418 SF for Cultura Subs/Steaks and the maximum observed parking demand of 6 spaces, the maximum parking demand rate equates to 4.23 spaces per 1,000 SF. The proposed expansion would result in an increase in parking demand of three (3) spaces.

The submitted study concludes that peak parking demand observed in the parking lot was 10 out of the available 14 spaces, and there are approximately four (4) spaces available for the proposed dining room expansion. As such, the parking study found that an additional parking demand of three (3) spaces generated by the proposed restaurant expansion could be accommodated at the subject property. Staff note that per Village code, a typical permitted retail use would require 2.9 spaces for the same 709-square-foot space compared to 4.7 spaces for a restaurant use.

Alley Parking

Staff site visits and the parking study both revealed that two unidentified vehicles are currently parking in the alleyway west of the building. The alley is not a legal parking area due to insufficient width, and adjacency to rear exit stairs and utilities. Staff informed the applicant of this issue and confirmed that such spaces cannot be counted toward on-site parking capacity. Per the parking study and in discussion with Staff, the applicant has indicated they will inform employees not to park in the alleyway area. Per the parking study, it is not anticipated that the demand in the parking lot will increase as a result of these vehicles relocating from the alleyway.



Rear Alley at Subject Property where parking has been Observed

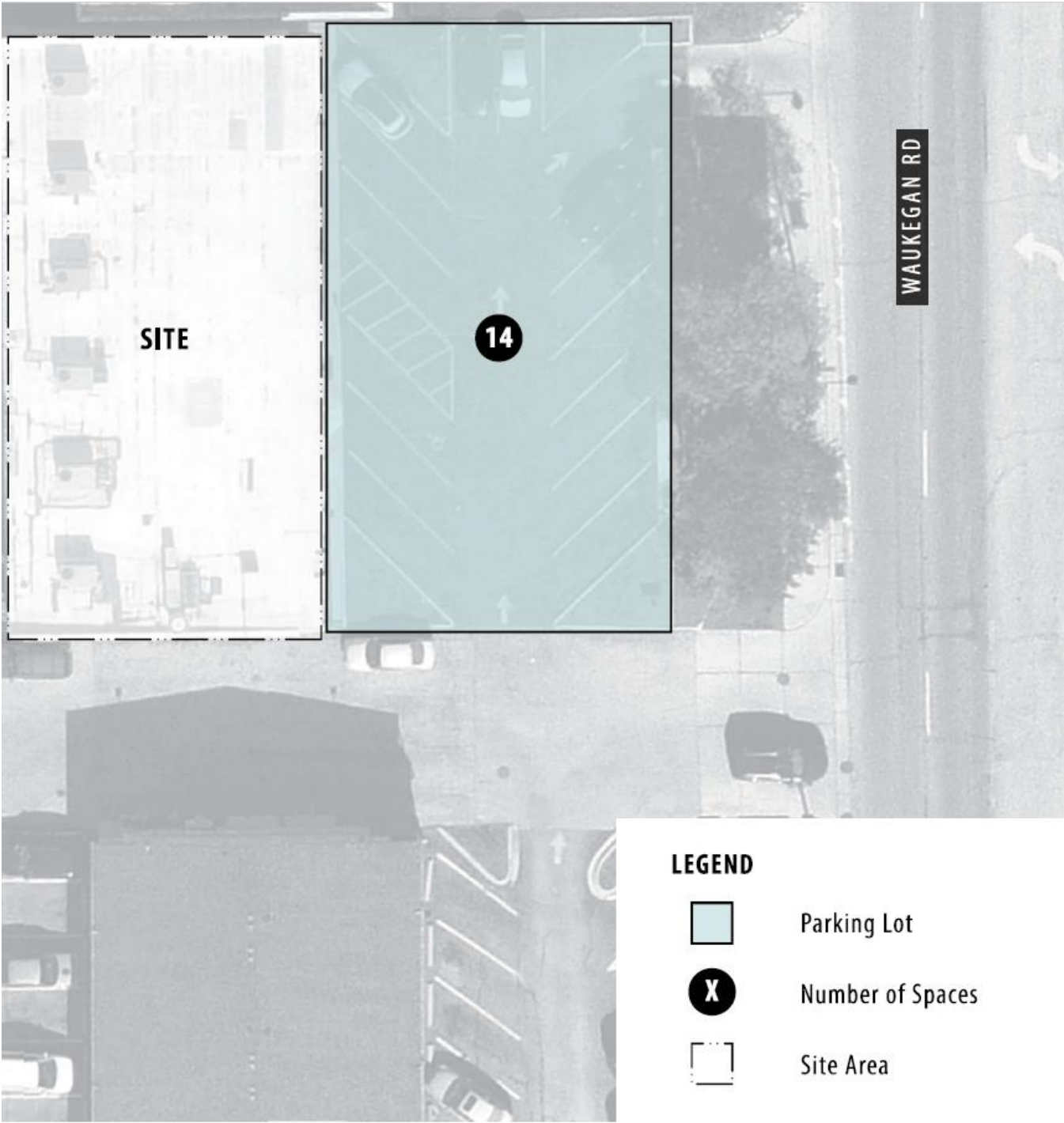


EXHIBIT 1
EXISTING PARKING LOCATIONS

Discussion

Given peak parking demand of 10 spaces currently, the study's findings support the Staff recommendation of using the lower shared parking requirement of **21 spaces**. With on-site parking capacity of 14 spaces, the Plan Commission's approval is needed for a **variation of 7 spaces or 50%** to allow for the existing restaurant to expand into the adjacent vacant in-line retail space.

The Village's shared parking calculation establishes peak demand for restaurant uses to be between the hours of 6:00 p.m. and 2:00 a.m. Other users generally close at 5 p.m. which means parking is more available in the evening hours at the subject property. However, staff notes that Cultura Persian Subs peak hours generally occur in the mid-afternoon when the neighboring businesses are open. Furthermore, while the parking study cites peak observed parking use of 10 out of 14 on-site spaces, parking demand could increase if the restaurant does better business.

Commission Review

Traffic Safety Commission

In reviewing the case with the Village Engineer, review by the Traffic Safety Commission (TSC) was not requested as no changes are proposed for parking configuration, access, or snow storage.

Department Review

The proposed project was reviewed by several department representatives with departments providing comment.

- **Building Department:** No comments at this time.
- **Fire Department:** No comments at this time.
- **Public Works Department/Engineering:** No comments at this time.

Standards for Review

The Standards for Special Uses are established in Section 12-16-4:C.5 of the Unified Development Code:

Standards for Special Uses: The following standards for evaluating special uses shall be applied in a reasonable manner, taking into consideration the restrictions and/or limitations which exist for the site being considered for development:

1. **Preservation of Health, Safety, Morals, And Welfare:** The establishment, maintenance and operation of the special use will not be detrimental to or endanger the public health, safety, morals or general welfare.
2. **Adjacent Properties:** The special use should not be injurious to the use and enjoyment of other property in the immediate vicinity for the uses permitted in the zoning district.
3. **Orderly Development:** The establishment of the special use will not impede normal and orderly development or impede the utilization of surrounding property for uses permitted in the zoning district.
4. **Adequate Facilities:** Adequate utilities, access roads, drainage and other necessary facilities are in existence or are being provided.
5. **Traffic Control:** Adequate measures have been or will be taken to provide ingress and egress designed to minimize traffic congestion on the public streets. The proposed use of the subject site should not draw substantial amounts of traffic on local residential streets.
6. **Adequate Buffering:** Adequate fencing and/or screening shall be provided to ensure the right of enjoyment of surrounding properties to provide for the public safety or to screen parking areas and other visually incompatible uses.
7. **Conformance to Other Regulations:** The special use shall, in all other respects, conform to applicable provisions of this title or amendments thereto. Variation from provisions of this title as provided for in subsection 12-16-3A, "Variations", of this chapter, may be considered by the plan commission and the Village board of trustees as a part of the special use permit.

Recommendation

Should the Plan Commission recommend approval of this application, staff suggests the following motion and conditions:

Motion to recommend approval of Case PC 25-14, a request for approval of a Special Use Permit for a parking variation for an existing shopping center in a C-1 General Commercial District in accordance with Section 12-7-3:K at the property commonly known as 9428 Waukegan Road in Morton Grove, Illinois (PIN 10-18-100-027-0000), subject to the following conditions:

- 1) The applicant's business shall operate in accordance with the plans submitted by the applicant in the application dated 10/25/2025; and*
- 2) Employees and all other users shall be prohibited from parking along the alley on the subject property.*
- 3) Should impacts of the parking variation be determined by the Village Administrator to be inconsistent with the representations and assertions contained in the application and provided by the applicant's testimony, such inconsistencies may serve as the basis for further review by the Plan Commission and a requirement for additional measures to reduce parking demand.*

Attachments

- **Attachment A** – Final Plans and Supporting Documents for PC 25-14

Attachment A

Final Plans and Supporting Documents for PC 25-14

1. *Variation Application, submitted by Naser Hosseini, dated October 25, 2025*
2. *Application Cover Letter, submitted by Naser Hosseini, received October 29, 2025*
3. *Property Owner Authorization Letter, submitted by Khaleel Musa, received October 29, 2025*
4. *Plat of Survey of 9432-38 Waukegan Road, prepared by ALTA/ACSM Land Title Survey, dated June 5, 2009*
5. *Parking Study – 9430 Waukegan Road, prepared by Kimley-Horn Assoc., dated November 17, 2025*



VARIATION APPLICATION

Village of Morton Grove
Department of Community Development
6101 Capulina Avenue, Morton Grove, Illinois 60053
commdev@mortongroveil.org | 847-663-3063

Case Number: _____ Date Application Filed: 10/25/25

APPLICANT INFORMATION

Applicant Name: Naser Hosseini
Applicant Address: 9432 Waukegan Rd
Applicant City / State / Zip Code: Morton Grove
Applicant Phone: _____
Applicant Email: _____
Applicant Relationship to Property Owner: tenant
Applicant Signature: [Signature]

PROPERTY OWNER INFORMATION (IF DIFFERENT FROM APPLICANT)

Owner Name: 9432-38 Waukegan LLC
Owner Address: 9211 Waukegan Rd
Owner City / State / Zip Code: Morton Grove, IL 60053
Owner Phone: _____
Owner Email: _____
Owner Signature: [Signature]

PROPERTY INFORMATION

Common Address of Property: 9432 Waukegan Rd
Property Identification Number (PIN): _____
Property Square Footage: 4,5000
Property Zoning District: _____
Property Current Use: _____

APPLICATION INFORMATION

Applicant is requesting a variation from the following section(s) of the Morton Grove Unified Development Code:
Restaurant Expansion
Purpose of requested variation (attach as needed): _____

RESPONSES TO STANDARDS FOR VARIATION

Provide responses to the four (4) Standards for a Variation as listed in Section 12-16-3-A-2 of the Village of Morton Grove Unified Development Code. The applicant must present this information for the official record of the Zoning Board of Appeals. The Variation Standards are as follows:

- a. **Not Self-Imposed:** The alleged difficulty or hardship is caused by this title and has not been created by any persons presently having an interest in the subject property.

The need for this variation is not self-imposed but results from the existing building layout and the growing customer demand. The current space limits the ability to seat guests comfortably and safely. The hardship arises from the structure's original design and zoning restrictions, not from any

- b. **Nonmonetary Considerations:** The circumstances or conditions are such that the strict application of the provisions of this title would deprive the applicant of a reasonable use of their land. Mere loss in value shall not justify a variation.

without the variation, the business cannot provide enough seating or meet customer demand. The request ensures reasonable use of the property for dining purposes, not for financial gain.

- c. **Not Detrimental to Public Welfare:** The granting of any variation is in harmony with the general purposes and intent of this title and will not be detrimental to the public welfare or to other property or improvements in the neighborhood.

The dining expansion will not harm public welfare. It will improve guest comfort and safety without creating noise, parking, or traffic issues.

- d. **Not Detrimental to Neighborhood:** The proposed variation will not impair an adequate supply of light and air to adjacent property, substantially increase congestion in the streets, increase the potential damage of fire, endanger the public safety, or alter the character of the neighborhood.

The variation will not block light or air, affect safety, or change the neighborhood's character. It maintains the same design and use as nearby properties.

Naser Hosseini

20 Ridge Road
Highland Park, IL 60035

Village of Morton Grove

Department of Community and Economic Development
6101 Capulina Avenue
Morton Grove, IL 60053

Subject: Request for Restaurant Expansion – Cultura Subs Taste of Persia

Dear Members of the Village of Morton Grove,

My name is **Naser Hosseini**, and I am the owner of **Cultura Subs Taste of Persia**, located at **9428 Waukegan Road, Morton Grove, IL 60053**. I am writing to formally express my intent to expand the restaurant's existing space to better serve our customers and the growing Morton Grove community.

Since acquiring the business earlier this year, we have seen steady growth in customer demand, particularly for dine-in service. Our current seating capacity is limited, and expanding the dining area will allow us to provide a more comfortable and enjoyable experience for guests while maintaining safe spacing and efficient service.

The expansion will also bring several community benefits. It will create new local job opportunities, contribute to the vitality of the Waukegan Road corridor, and support the Village's ongoing efforts to attract and retain thriving small businesses. We plan to enhance the restaurant's design and layout to align with Morton Grove's aesthetic and commercial development goals.

I am committed to working closely with the Village to ensure that all necessary permits, design guidelines, and building requirements are met. I truly believe this project will have a positive economic and social impact on the area, and I appreciate your consideration and continued support of local business owners.

Thank you for your time and attention to this request. Please let me know if you require any additional information or documents regarding this proposal.

Sincerely,

Naser Hosseini

Owner,
20 Ridge Road
Highland Park, IL 60035

Village of Morton Grove

Department of Community and Economic Development
6101 Capulina Avenue
Morton Grove, IL 60053

Subject: Landlord Approval for Restaurant Expansion – 9432 Waukegan Road

Dear Members of the Village of Morton Grove,

I am writing as the property owner of **9432 Waukegan Road, Morton Grove, IL 60053**, to confirm that I fully approve and support **Mr. Naser Hosseini's** request to expand his restaurant operations within the premises.

Mr. Hosseini has been a responsible and dedicated tenant who has made significant improvements to the space and maintained it in excellent condition. His proposed expansion will enhance the customer experience, increase local dining options, and contribute positively to the commercial corridor on Waukegan Road.

As the landlord, I have no objections to the proposed modifications or layout adjustments necessary for the expansion, provided that all required building codes, permits, and village guidelines are met. I believe this project will not only benefit his business but also strengthen the Morton Grove business community as a whole.

Please feel free to contact me directly should you require any additional information or documentation regarding this approval.

Sincerely,

Khaleel Musa

Landlord / Property Owner

PROFESSIONALS ASSOCIATED SURVEY, INC.
PROFESSIONAL DESIGN FIRM NO. 184-003023

7100 N. TRIPP AVE., LINCOLNWOOD, ILLINOIS 60712
TEL. (847) 675-3000 FAX (847) 675-2167
e-mail: prosurvey@bcglobal.net

ALTA/ACSM LAND TITLE SURVEY

VICINITY MAP



SURVEY SITE

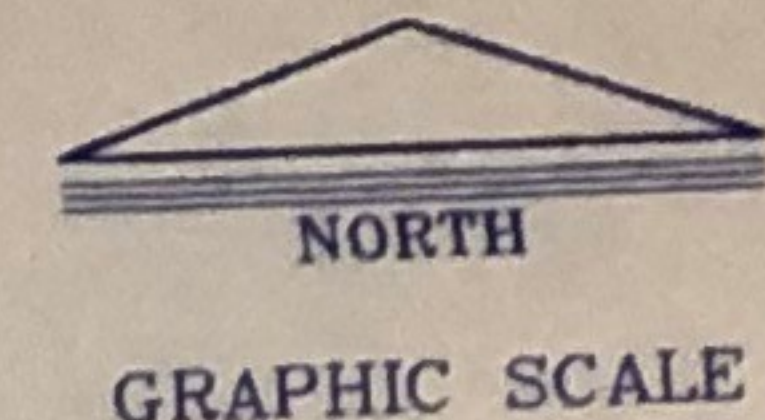
A TRACT OF LAND BEING PART OF THE NORTHWEST 1/4 OF SECTION 18, TOWNSHIP 41 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, SAID TRACT BEING DESCRIBED AS FOLLOWS: COMMENCING AT A POINT ON THE WEST LINE OF WAUKEGAN ROAD AS DEDICATED BY INSTRUMENT RECORDED FEBRUARY 11, 1930 AS DOCUMENT 10592815 (EXCEPT THE EAST 4.0 FEET THEREOF) SAID POINT BEING 135.19 FEET NORTH OF THE SOUTH LINE OF THE SAID NORTH 818 FEET OF THE NORTHWEST 1/4 OF SECTION 18, (AS MEASURED ALONG SAID WEST LINE OF WAUKEGAN ROAD); THENCE WEST ALONG A LINE DRAWN PERPENDICULAR TO THE WEST LINE OF WAUKEGAN ROAD, A DISTANCE OF 121.0 FEET; THENCE SOUTH ALONG A LINE PARALLEL TO THE WEST LINE OF WAUKEGAN ROAD TO A POINT 33.0 FEET NORTH OF THE SOUTH LINE OF SAID NORTH 818 FEET OF THE NORTHWEST 1/4 OF SECTION 18; THENCE EAST ALONG A LINE DRAWN PERPENDICULAR TO THE WEST LINE OF WAUKEGAN ROAD, A DISTANCE OF 121.0 FEET; THENCE NORTH ALONG THE WEST LINE OF WAUKEGAN ROAD, A DISTANCE OF 102.19 FEET TO THE POINT OF BEGINNING, ALL IN COOK COUNTY, ILLINOIS.

LAND TOTAL AREA: 12,234.64 SQ.FT. = 0.2808 ACRE.

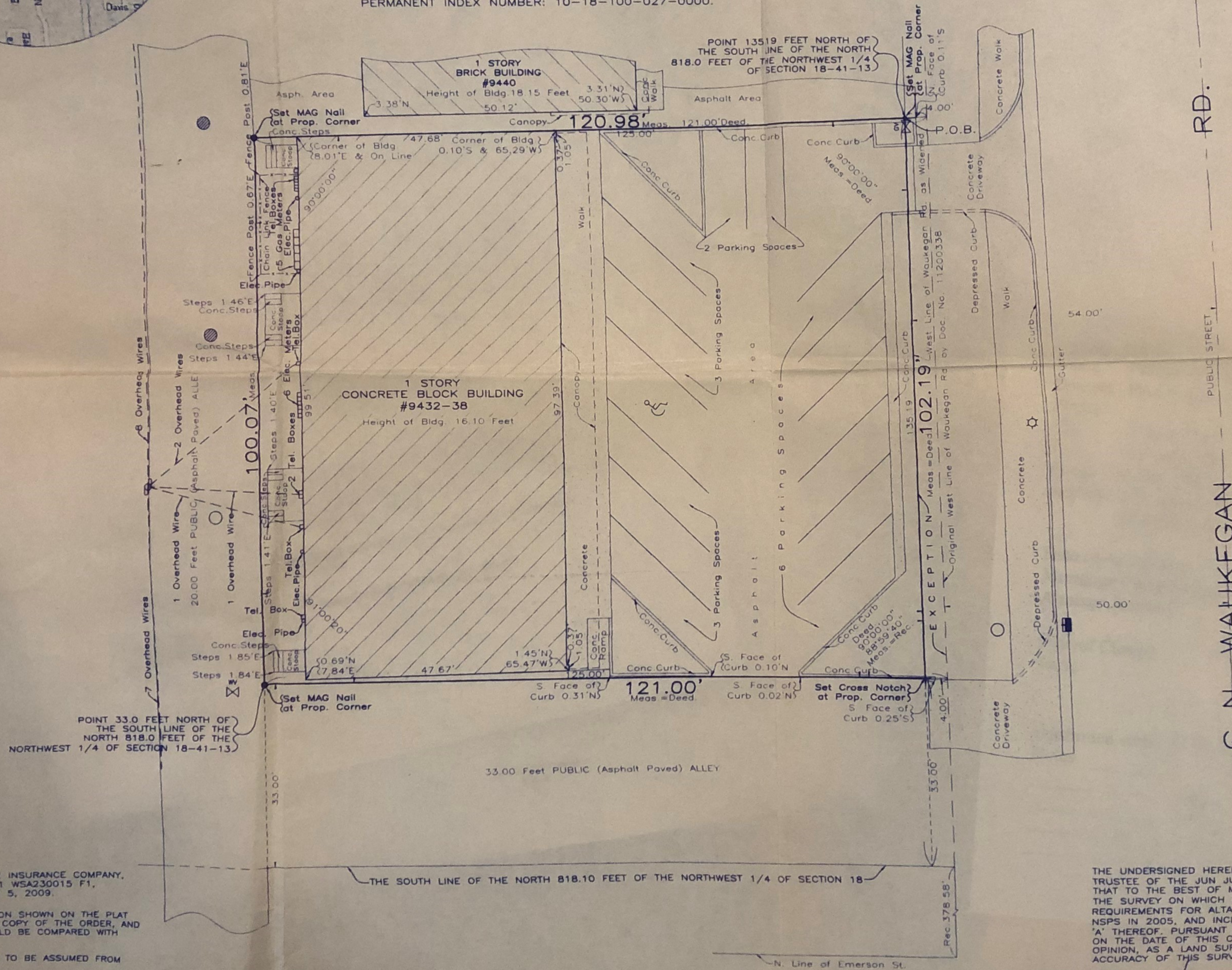
EXTERIOR FOOT PRINT AREA OF BUILDING: 4,707.89 SQ.FT.

COMMONLY KNOWN AS: 9432-38 NORTH WAUKEGAN ROAD, KORTON GROVE, ILLINOIS.

PERMANENT INDEX NUMBER: 10-18-100-027-0000.



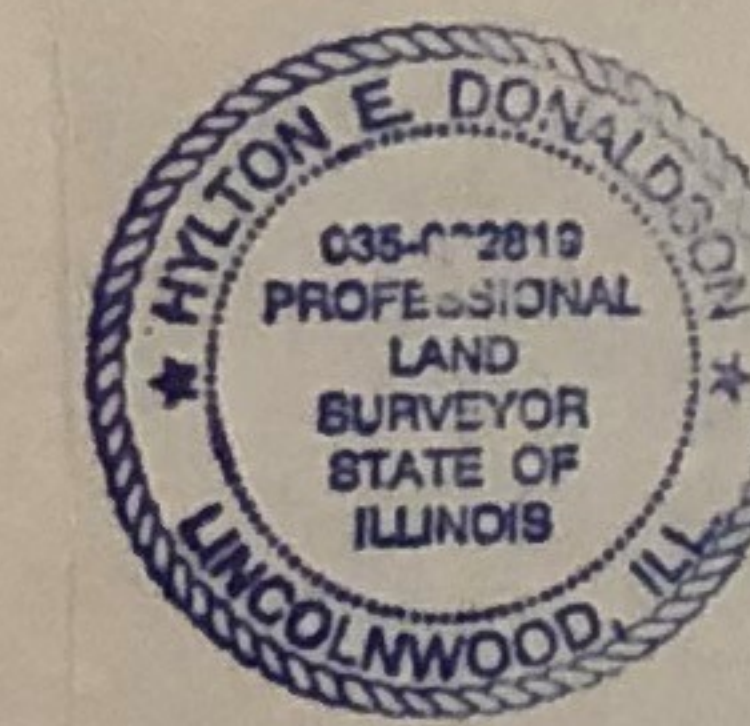
(IN FEET)
1 Inch = 15 Ft.



RD.
E-N. WAUKEGAN
PUBLIC STREET

- LEGEND:
- - MANHOLE
 - - CATCH BASIN
 - - INLET
 - ⊙ - LIGHT POLE
 - ⊗ - GAS VALVE
 - ⊕ - WATER VALVE
 - ⊙ - UTILITY POLE
 - ♿ - HANDICAPPED PARKING

NOTE:
REGULAR PARKING SPACES.....14
HANDICAPPED PARKING SPACE.....1
TOTAL PARKING SPACES.....15



THE UNDERSIGNED HEREBY CERTIFIES TO CHICAGO TITLE INSURANCE AND JUN JUNG a/k/a JUNGU JUNG TRUSTEE OF THE JUN JUNG a/k/a JUNGU JUNG DECLARATION OF TRUST DATED SEPTEMBER 17, 2005 THAT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF, THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE "MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS" JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS IN 2005, AND INCLUDES ITEMS 1, 2, 3, 4, 7(a), 7(b)(1), 7(c), 8, 9, 10, 11(a) AND 14 OF TABLE "A" THEREOF, PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA AND NSPS AND IN EFFECT ON THE DATE OF THIS CERTIFICATION, UNDERSIGNED FURTHER CERTIFIES THAT IN MY PROFESSIONAL OPINION, AS A LAND SURVEYOR REGISTERED IN THE STATE OF ILLINOIS, THE RELATIVE POSITIONAL ACCURACY OF THIS SURVEY DOES NOT EXCEED THE ALLOWABLE LIMITS SPECIFIED THEREIN.

DATE: 6/5/2009
SIGNED: *Milton E. Donaldson*
ILLINOIS PROFESSIONAL LAND SURVEYOR NUMBER 35-2819
MY LICENSE EXPIRES NOVEMBER 30, 2010.
Drawn by: J. K.

BASIS: CHICAGO TITLE INSURANCE COMPANY,
ORDER NUMBER 1401 WSA230015 F1,
EFFECTIVE DATE: MAY 5, 2009.

THE LEGAL DESCRIPTION SHOWN ON THE PLAT
HEREON DRAWN IS A COPY OF THE ORDER, AND
FOR ACCURACY SHOULD BE COMPARED WITH
THE TITLE OR DEED.

DIMENSIONS ARE NOT TO BE ASSUMED FROM
SCALING.

ORDER NO.: 09-81443
SCALE: 1 INCH = 15 FEET
DATE OF FIELD WORK: June 2, 2009
ORDERED BY: Dean Kalamationos
Attorney at Law

FLOOD CERTIFICATE:
ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT
AGENCY (FEMA) FLOOD INSURANCE RATE MAP OF
Village of Morton Grove, ILLINOIS DATED August 19, 2008
COMMUNITY PANEL NUMBER 17012B 0241 J, THIS PROPERTY IS IN A
MINIMUM FLOOD AREA AND IS DESIGNATED AS ZONE "X"
NO SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE.

MEMORANDUM

To: Mr. Naser Hosseini – Cultura Persian Subs, LLC

From: Justin Opitz, AICP
Nina Zlataric, EIT

Date: November 17, 2025

RE: Parking Study – 9430 Waukegan Road
Morton Grove, Illinois

Introduction

On behalf of Cultura Persian Subs, LLC, Kimley-Horn and Associates, Inc. (Kimley-Horn) has prepared a parking study for the property at 9428-9438 Waukegan Road in Morton Grove, Illinois. This memorandum outlines parking counts conducted on November 6th and November 8th, 2025, and reviews future parking demand relative to existing supply, and summarizes a potential tenant occupancy scenario for the proposed expansion of the Cultura Subs/Steaks dining room at 9428-30 Waukegan Road into currently vacant space at 9432 Waukegan Road.

Site Conditions

The property at 9428-9438 Waukegan Road is made up of one building with a combined gross floor area of approximately 4,254 square feet (SF). The building provides 14 off-street parking spaces located to the east of the building along the Waukegan Road frontage. In addition to this, 6 on-street public parking spaces along Waukegan Road south of Emerson Street are located within walking distance (500 feet) to the proposed dining room expansion. No change is planned to the existing site access. A photo inventory of the site area and parking lots is included as **Attachment** at the end of this memorandum.

Parking Study

A parking study was conducted to analyze the utilization of the existing parking by current tenants of the subject property and quantify the number of available parking spaces that could be utilized by customers of the proposed dining room expansion in the future. The existing on-site parking locations are depicted in **Exhibit 1**.

Municipal Parking Requirements

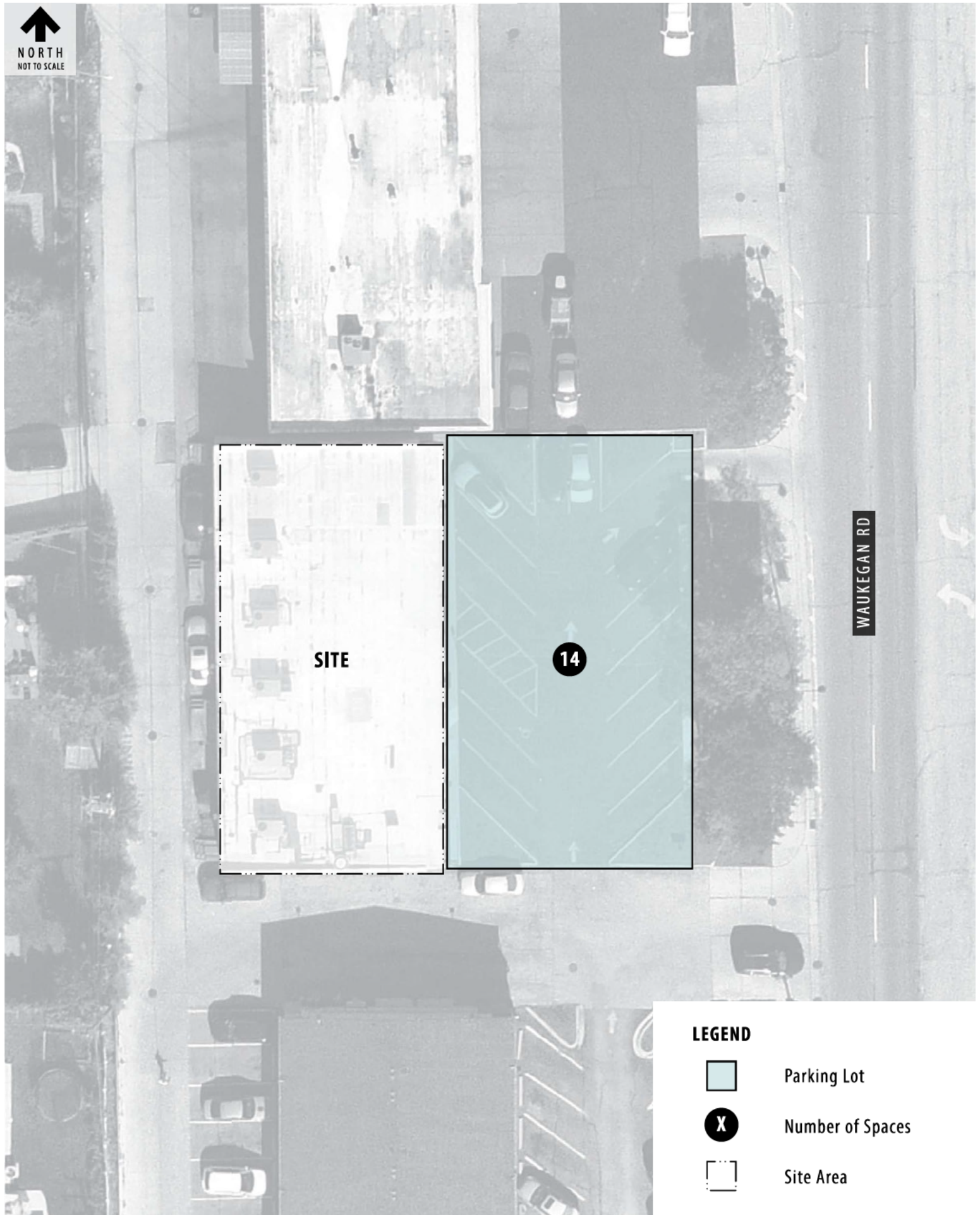
The Village of Morton Grove requires a designated amount of off-street parking depending on the land use and floor area. **Table 1** outlines Village requirements for the existing tenants and the proposed dining room expansion. For each of these uses, the Village code defines parking requirements based on SF of gross floor area.

Table 1. Off-Street Parking Requirements

Business Name (Address – Waukegan Road)	Code Categorization / Land Use	Size	Required Space by Use	Required Spaces
Cultura Subs (9428)	Restaurant	1,418 SF	1 space per 150 SF of gross floor area	9
Cultura Steaks (9430)	Restaurant			
Vacant (Proposed Dining Room Expansion) (9432)	Restaurant	709 SF	1 space per 150 SF of gross floor area	5
US Medical Equipment's, Inc. (9434-36)	Medical Supply	1,418	1 space per 250 SF of gross floor area	6
Undressed Alterations Tailor (9438)	Commercial Services	709 SF	1 space per 300 SF of gross floor area	2
Total Required Off-Street Parking Spaces				22

Subtotal OCCUPIED 17

Subtotal VACANT 5



SITE

14

WAUKEGAN RD

LEGEND



Parking Lot



Number of Spaces



Site Area

Based on Village code, 22 off-street parking spaces are required for the existing businesses and the proposed dining room expansion. As restaurant space, the dining room expansion would require 5 spaces. The existing supply of 14 on-site spaces at 9428-9438 Waukegan Road does not meet the collective 22-space requirement with a deficit of 8 spaces.

The Village code permits required off-street parking to be shared between two or more land uses jointly providing off-street parking when their respective hours of peak operation do not overlap. Such a case is worth examining for all uses within the multi-tenant commercial building, which has a few businesses with different peak operational times. **Table 2** summarizes the shared parking requirements per Village code.

Based on the Village shared parking standards, the off-street parking requirement is highest during the 6:00 PM – 2:00 AM time period on weekdays, when 21 spaces are required. With the shared parking reduction, the existing supply of 14 parking spaces does not meet the shared parking requirement with a deficit of 7 spaces.

Table 2: Shared Parking Standards

Land Use Classification	Size (SF)	Required Spaces ¹	Weekdays ²			Weekends ²		
			2 AM – 7 AM	7 AM – 6 PM	6 PM – 2 AM	2 AM – 7 AM	7 AM – 6 PM	6 PM – 2 AM
Cultura Subs/Steaks ³ (9428-9430)	1,418 SF	9	10% 1	70% 6	100% 9	20% 2	70% 6	100% 9
Vacant (Proposed Dining Room Expansion) ³ (9432)	709 SF	5	10% 1	70% 4	100% 5	20% 1	70% 4	100% 5
US Medical Equipment's, Inc. ⁴ (9434-36)	1,418 SF	6	0% 0	90% 5	80% 5	0% 0	100% 6	60% 4
Undressed Alterations Tailor ⁴ (9438)	709 SF	2	0% 0	90% 2	80% 2	0% 0	100% 2	60% 1
Total	4,254 SF	22	2	17	21	3	18	19
Subtotal OCCUPIED	3,545 SF	17	1	13	16	2	14	14
Subtotal VACANT	709 SF	5	1	4	5	1	4	5

¹ Required Spaces are based on "Required Spaces By Use" table from Village of Morton Grove Code 12-7-3.

² Shared parking calculations are based on required spaces multiplied by percentages in the top-right corners of each cell, referenced from Village of Morton Grove Code 12-7-3.

³ Classified as Restaurant (Not 24 hr)

⁴ Classified as Retail Sales and Services

Parking Counts

Kimley-Horn reviewed security video footage provided by the Client to conduct parking counts on Thursday, November 6th and Saturday, November 8th, 2025. Counts were collected at the on-site parking area every fifteen minutes from 8:00AM to 10:00PM on Thursday and from 10:00AM to 10:00PM on Saturday to capture parking demand during the primary hours of operation of the businesses. **Tables 3-4** summarize the collected data for each fifteen-minute interval in the east on-site parking lot with 14 spaces.

Table 3: Parking Counts – Thursday, November 6th, 2025 (Occupied Spaces)

Interval	_:00	_:15	_:30	_:45	Max. by 15-min bin
Location (Parking Spaces)	Parking Lot (14)	Parking Lot (14)	Parking Lot (14)	Parking Lot (14)	Total
8:00 AM	3	3	3	3	3
9:00 AM	3	3	3	4	4
10:00 AM	4	5	5	5	5
11:00 AM	5	7	6	8	8
12:00 PM	7	7	7	6	7
1:00 PM	7	7	7	6	7
2:00 PM	7	6	8	10	10
3:00 PM	10	10	8	8	10
4:00 PM	8	8	8	4	8
5:00 PM	5	5	7	7	7
6:00 PM	6	4	3	3	6
7:00 PM	3	5	5	6	6
8:00 PM	5	7	6	6	7
9:00 PM	6	5	4	4	6
Max. by Location	10	10	8	10	

Table Legend

- Parking Lot Occupancy = 0-60%
- Parking Lot Occupancy = 60-85%
- Parking Lot Occupancy = >85%

Table 4: Parking Counts – Saturday, November 8th, 2025 (Occupied Spaces)

Interval	_:00	_:15	_:30	_:45	Max. by 15-min bin
Location (Parking Spaces)	Parking Lot (14)	Parking Lot (14)	Parking Lot (14)	Parking Lot (14)	Total
10:00 AM	2	2	3	3	3
11:00 AM	4	4	4	3	4
12:00 PM	3	5	5	5	5
1:00 PM	5	4	4	5	5
2:00 PM	5	8	8	6	8
3:00 PM	3	4	5	4	5
4:00 PM	4	4	3	2	4
5:00 PM	3	3	3	3	3
6:00 PM	2	2	3	3	3
7:00 PM	3	3	3	3	3
8:00 PM	2	2	2	3	3
9:00 PM	3	4	4	4	4
Max. by Location	5	8	8	6	

Table Legend

- Parking Lot Occupancy = 0-60%
- Parking Lot Occupancy = 60-85%
- Parking Lot Occupancy = >85%

Based on the parking counts, peak parking demand occurred around 2:45-3:15PM on Thursday and around 2:15-2:30PM on Saturday. The maximum parking demand in a fifteen-minute interval across the two days was 10 parking spaces between 2:45-3:15PM on Thursday, which results in a maximum capacity of 71 percent and leaves 4 available spaces for patrons. Based on a review of the security footage during this time period, it is estimated that 6 spaces occupied were associated with the Cultura Subs/Steaks restaurant, while the remaining 4 spaces were associated with the US Medical Equipment, Inc. and Undressed Alterations Tailor tenants. Based on the existing square footage of 1,418 SF for Cultura Subs/Steaks and the maximum parking demand of 6 spaces, the maximum parking demand rate equates to 4.23 spaces per 1,000 SF.

Parking Demand Review

Based on the parking data in Tables 3-4, peak parking demand in the parking lot was 10 out of 14 spaces on Thursday between 2:45-3:15PM. Of the 10 spaces occupied, 6 spaces were associated with the Cultura Sub/Steaks restaurant. With the proposed dining room expansion Cultura Subs/Steaks would expand to 2,127 SF. Using the maximum parking demand rate of 4.23 spaces per 1,000 SF, parking demand for the restaurant with the dining room expansion can be estimated at 9 spaces, or 3 additional spaces above the existing 6 space demand. In the parking lot that provides 14 spaces, the maximum parking demand with the proposed dining room expansion is estimated to be 13 spaces. It should be noted that this maximum demand scenario is expected to occur for a short period of time (30 minutes) during mid-afternoon on a weekday.

The review of security footage revealed that two unidentified vehicles were parked in the alleyway west of the building throughout the count period, despite it being illegal to park in this area. The client has indicated they will inform tenants of this parking restriction. It is not anticipated that the demand in the parking lot will increase as a result of these vehicles relocating from the alleyway.

Traffic Evaluation

Kimley-Horn obtained traffic volumes along Waukegan Road from IDOT's Traffic Count Database System (TCDS) using the most recent year (2023) for average annual daily traffic (AADT), which is approximately 24,300 vehicles per day in the site vicinity. It is unlikely that additional traffic generated by the expanded dining room would have a noticeable negative impact on surrounding roadway operations.

Access to the site is provided via two access driveways, one entrance-only driveway that connects to a shared-driveway with the property to the south and Waukegan Road, and one exit-only driveway along Waukegan Road. The parking lot circulation provides one-way northbound operations. No changes to the site access configurations are recommended to facilitate dining room expansion traffic.

Conclusion

The 9428-9438 Waukegan Road building provides 14 off-street parking spaces in the parking lot located along the Waukegan Road frontage. Based on the collected parking count data, peak parking demand in the parking lot was 10 out of the available 14 spaces, leaving 4 spaces available for the proposed dining room expansion. Expanding the Cultura Subs/Steaks dining room is expected to generate an additional parking demand of 3 spaces, resulting in a maximum peak parking demand of 13 spaces.

Based on existing parking demand data, and a review of the parking demand associated with the proposed dining room expansion to Cultura Subs/Steaks, the 9428-9438 Waukegan Road building has an estimated peak parking demand of 13 spaces, which is accommodated by the 14 spaces on site during the maximum peak demand scenario.

ATTACHEMENTS

Parking Lot Photo Inventory

PARKING LOT PHOTO INVENTORY



Looking north at Parking Lot



Looking south at Parking Lot



Looking north at alley

To: Chairperson Kintner and Members of the Plan Commission

From: Brandon Nolin, AICP, Community Development Administrator
Anne Ryder Kirchner, Planner/Zoning Administrator

Date: January 13, 2026

Re: Plan Commission Case PC 26-01

Request for approval of an amendment to a Special Use Permit (Ord. 10-26) to eliminate the automotive maintenance and repair use and expand the retail sales area within an automobile minimart station in a M-2 General Manufacturing District in accordance with Section 12-4-4:E of the Village of Morton Grove Unified Development Code (Title 12), for the property commonly known as 6000 Oakton Street in Morton Grove, Illinois (10-20-302-037-0000). The applicant is Proyekt Studio, LLC on behalf of St. Marys Petroleum Inc.

STAFF REPORT

Public Notice

The Village provided Public Notice for the January 20, 2026, Plan Commission public hearing for PC 26-01 in accordance with the Unified Development Code. The Morton Grove Champion published a public notice on January 1, 2026. The Village notified surrounding property owners via mail and placed a public notice sign on the subject property on December 31, 2025.

Application Summary

Proyekt Studio, LLC on behalf of St. Marys Petroleum Inc. ("applicant"), submitted a complete Special Use Permit application to the Department of Community and Economic Development requesting an amendment to Ordinance 10-26 for the renovation of an existing automobile minimart station at 6000 Oakton Street. The proposed project consists of the elimination of the automotive maintenance and repair use and expansion of the retail sales area, including exterior façade changes.

Subject Property

The subject property consists one (1) lot at 6000 Oakton Street in Morton Grove, Illinois. The parcel is zoned M-2 General Manufacturing and is 24,895 sq. ft. (0.57 acres) in total area including portions of adjacent rights-of-way for Austin Avenue and Oakton Street. The adjoining property to the west is a restaurant, and the adjoining property to the north and east across Austin Avenue are industrial buildings. All surrounding properties in the M-2 General Manufacturing zoning district. The subject property is located north across Oakton Street from the Village of Skokie.

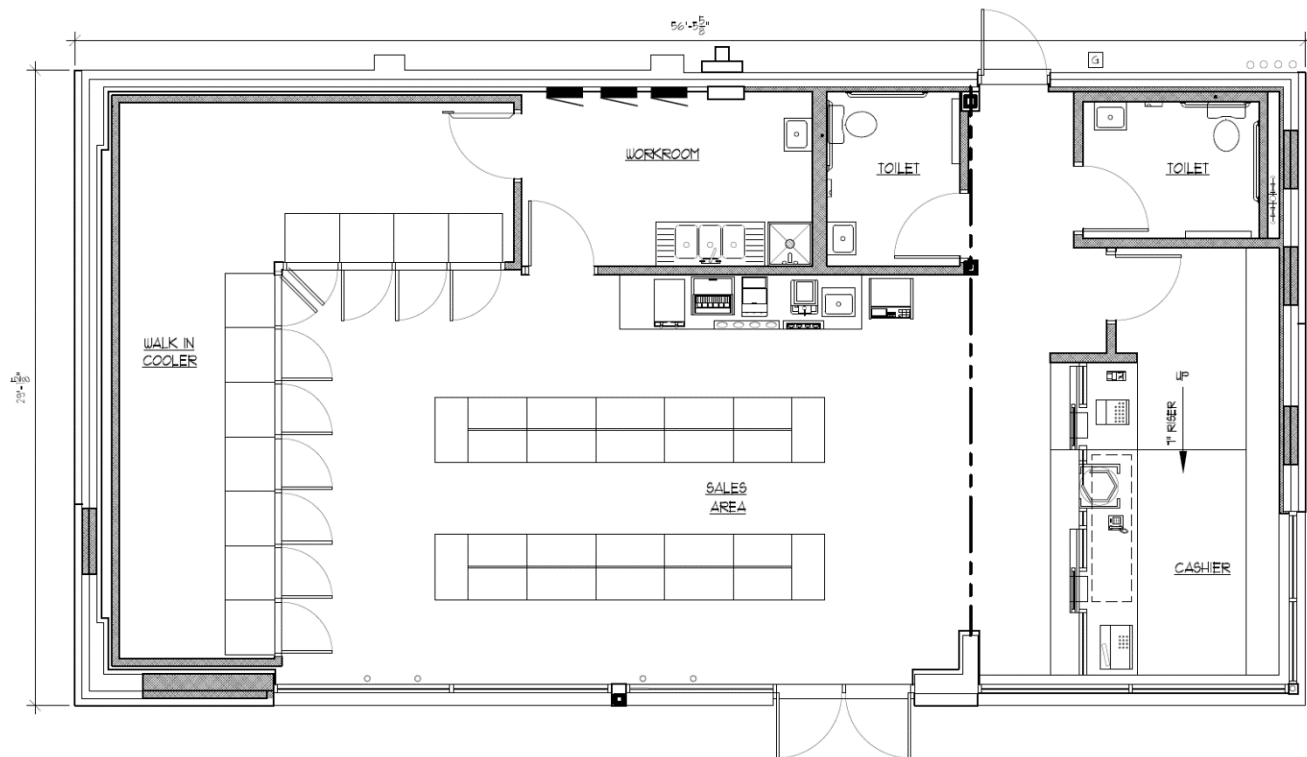


Subject Property Location Map

Project Overview

The applicant is proposing to renovate the existing automobile minimart and service station at 6000 Oakton Street to eliminate the automotive maintenance and repair use and expand the retail sales area. The business was established under Special Use Permit (Ordinance 10-26) and changes to the use mix require an amendment to that special use permit.

The retail area would expand into a portion of the building currently occupied by two automotive repair service bays. As part of the renovation, the service bays would be eliminated and replaced by a new façade with interior remodeling to add a walk-in cooler, a work room, two restrooms, and expanded sales area. The total retail space proposed is approximately 1,645 sq. ft. The main entrance would be relocated to a more central location along the primary (south) façade, and the existing cashier area should be expanded. In response to Appearance Commission discussion, the applicant is also proposing to establish a new landscape bed along the Austin Avenue frontage and expand the existing landscape bed along the west lot line. There are no proposed changes to signage which was recently approved under case AC 24-03.



Proposed Floor Plan

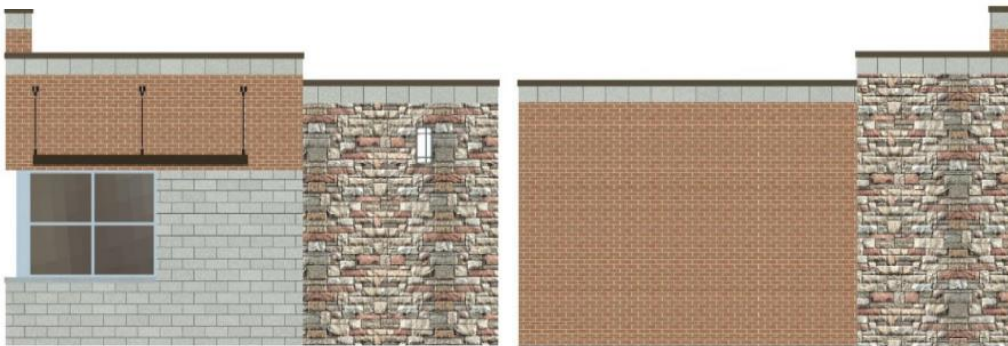
Building Design

Based on the submitted elevations, the exterior finishes of the proposed building will predominantly consist of light brown brick veneer with a gray stone parapet and stone still. A coursed ashler stone veneer in light brown and orange tones is proposed to break up the façade. The east window would have an aluminum louvered sun shade. As clarified by the applicant during discussion with the Appearance Commission, the east windows are proposed to have an opaque glazing to conceal shelving and the cashier location from view. The windows on the south façade and the door would be completely transparent.



SOUTH ELEVATION

SCALE: NTS



EAST ELEVATION

SCALE: NTS

WEST ELEVATION

SCALE: NTS

Proposed Building Elevations

Zoning Analysis

The current automobile mini-mart station was approved by special use permit under Ordinance 10-26. The ordinance references a site plan, façade and landscape plan, and typical floor plan that would be replaced as part of the requested special use permit amendment. A variation of 1.5 ft. was also granted to allow the gas canopy to have a front yard setback of 8.5 ft. As the building footprint is not expanding or otherwise intensifying, the amendment is being sought to allow a change in the mix of uses at the subject property.

The initial approving ordinance also included several conditions that would continue to apply to the currently proposed business unless revised by the amending ordinance. The conditions currently in place are as follows:

- Any outdoor refuse and/or recycling areas shall be provided in a solidly screened enclosure area to be approved by the Building Commissioner.
- The hours of operation for this facility shall be limited to: Monday through Friday 5 a.m. to 11 p.m., Saturday 6 a.m.- 11 p.m. and Sunday 7 a.m.- 8 p.m.
- Landscaping on the subject site shall be maintained so as to maintain sight distance visibility for traffic and driveway intersections on the subject site and adjacent sites.
- The applicant shall install parking blocks in those parking spaces adjacent to public sidewalks in a manner to minimize vehicle overhang onto the public sidewalk.
- The accessible parking spaces on the subject site shall be relocated, if required, to conform to applicable accessibility requirements.

- All employee parking, refuse/ recycling containers, and snow removal equipment shall be located within the solid fenced enclosure at the north end of the property.
- Snow plowing, storage and removal shall be completed in such a manner so as to maintain site accessibility for parking, walking, and vehicular access.

As proposed, all conditions currently in place would be equally applicable to the proposed business. While parking spaces may be relocated from the Austin Avenue frontage, the condition requiring properly located parking blocks can be left in place in the event parking spaces were ever relocated back to the current Austin Avenue location.

Lighting

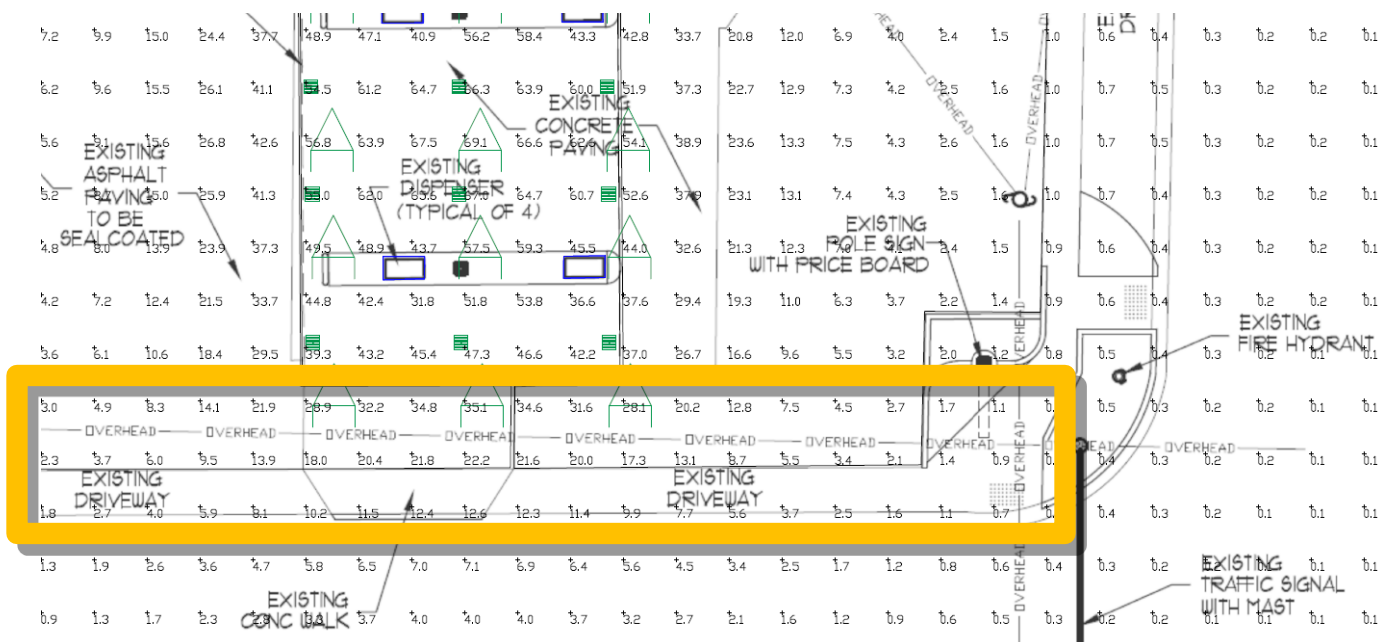
The applicant provided a lighting plan and photometric analysis prepared by Walsh, Long & Co. Proposed lighting consists of twelve (12) LED fixtures mounted to the underside of the gas canopy to illuminate the fuel pumps, and three (3) wall mounted LED fixtures along the north, east, and south facades of the proposed retail building. The applicant confirmed during discussion with the Appearance Commission that lighting would not exceed the 5000K (degrees Kelvin).

West Façade Low Light Levels

Per the photometric plan submitted by the applicant, foot candles range from 0.0 to 0.8 on the west side and northwest corner of the building where no site lighting is provided. Low light levels are desirable at the property line, but low light levels on-site could present a safety concern for employees accessing the rear storage area. In response to Appearance Commission questions, the applicant indicated they would revise the lighting plan to include a light wall pack on the west façade of the building to address concerns with low light levels in that area.

South Property Line Spillover

The Oakton Street frontage is well above 0 foot candles, with light levels ranging from 1.4 to 22.2 foot candles due to the close proximity of the gas canopy to the south property line. Per Section 12-4-3:B.5, lighting of parking and loading areas must be a minimum of one foot-candle on the surface. However, such lighting must be confined to the property boundary and reach as close to zero illumination at the property boundaries as possible. Glare may not be evident from surrounding properties or adjacent public rights of way. In response to Appearance Commission discussion, the applicant has requested their lighting consultant to confirm that shields or baffles could be used to limit light across the property line caused by the canopy lighting. As of the date of this report, no additional information regarding site lighting had been provided to staff. **As a condition of approval, Staff recommends requiring that a revised lighting plan be provided that includes additional lighting on the west side of the building, and additional measures to reduce spillover onto Oakton Street right of way.**



Photometric Analysis with South Property Line Highlighted (ORANGE)

Landscaping

The application initially addressed only façade and building access improvements. Comments made by Staff and Appearance Commission members relayed concerns to the applicant regarding a lack of proposed landscaping as the site is currently deficient regarding perimeter landscaping even though there appears to be sufficient space to accommodate additional landscape beds. In response to Appearance Commission comments, the applicant indicated that the applicant was willing to work with staff to identify opportunities for landscaping, but the ability to add landscaping would be impacted by space needed for semi-truck maneuvering. Specifically, he noted that the gap between the north gas pump island and southernmost space on Austin Avenue is only 26 ft. as currently proposed.

Austin Avenue Perimeter Landscaping

Following the Appearance Commission meeting, the applicant submitted a revised site plan and landscape plan indicating an expanded landscape bed on the west property line and a new 5 ft. landscape bed along the Austin Avenue frontage. The Austin Avenue landscaping was made possible by relocating the existing parking stalls along Austin Avenue to be along the east wall of the retail building.

In establishing the Austin Avenue landscaping, a total of two (2) parking spaces are lost compared to the current site plan. The traffic and parking study completed for the application was based on nine (9) parking spaces and indicated no more than six (6) spaces are used at one time during periods of peak parking demand.

Pole Sign Landscaping

Under case AC 24-03, the applicant was granted a sign variation to replace the face of a non-conforming pole sign. As part of that variation, the applicant was required to modify the parking lot curb to establish a continuous two-foot landscape bed surrounding the sign base. Plantings required for that area are six (6) evergreen shrubs each to be 3 ft. in height.

The revised landscape plan provided by the applicant indicates plantings surrounding the sign base will consist of “Annual Flower Program By Owner.” ***In accordance with the sign variation granted under AC 24-03, Staff recommend requiring that 3 ft. shrubs continue to be required for the landscape bed surrounding the pole sign base.***

Proposed Species

The proposed tree species are native and included on the approved tree planting list within the Village of Morton Grove’s Tree Manual. However, the proposed shrub species (Siberian Peashrub) is considered an invasive species. ***Staff recommend, as a condition of approval, requiring non-invasive species be used for all groundcover and shrubs at the site.***

Proposed Fence

The applicant is proposing to replace the existing chain link sliding gate that provides access to the rear of the property from the east wall of the building with a vinyl fence and gate that is 6 ft. in height. A similar gate and fence would replace the chain link gate on the west side of the retail building. The fence was included in the revised landscaping plan provided after Appearance Commission review and the style or color of the fence were not discussed with the Appearance Commission.

The chain link fence along the west property line (adjacent a commercial property) and north property line (adjacent an industrial property) are proposed to remain. The current fence also features an approximately one-foot vertical section of barbed wire along its entire length.

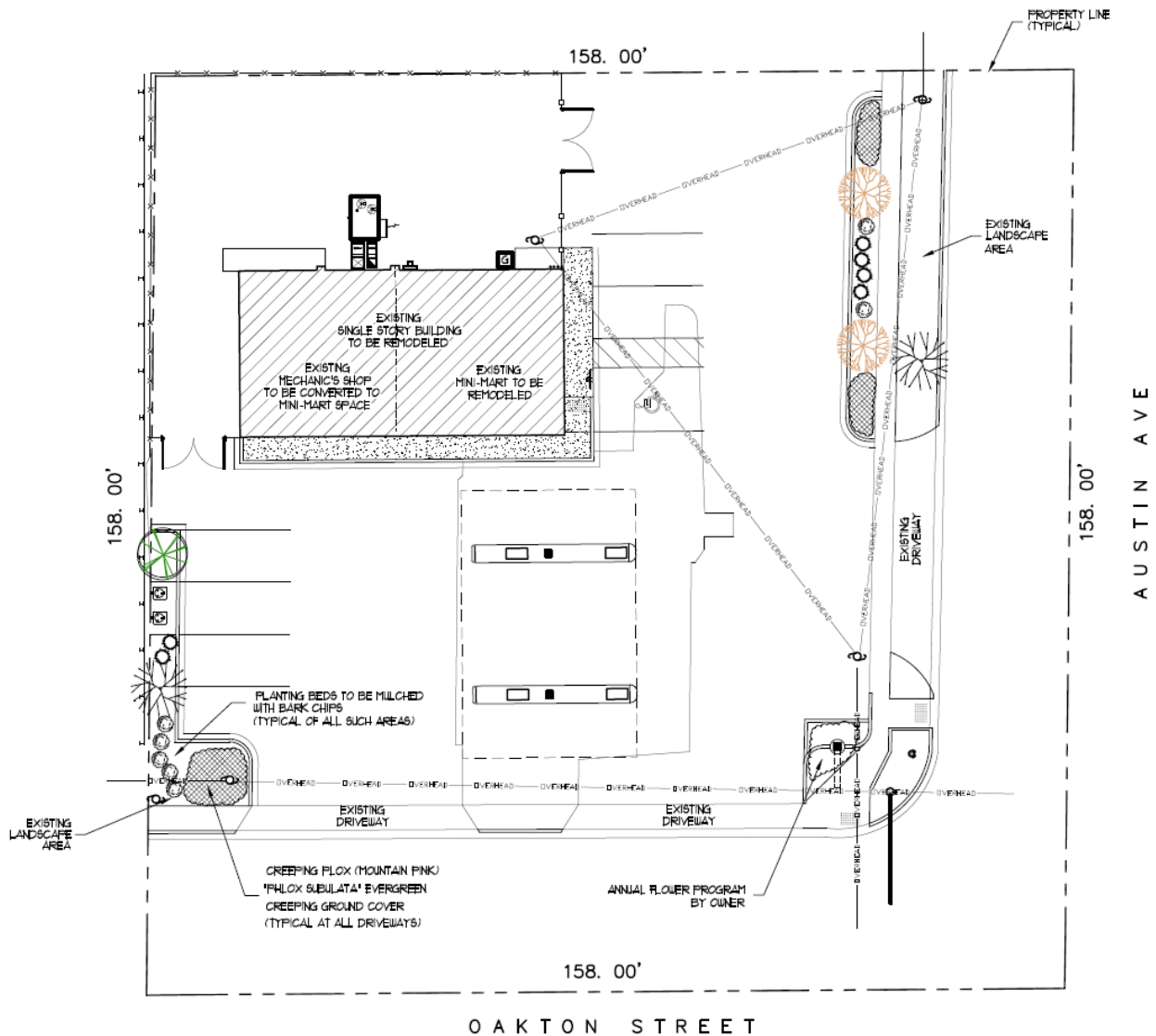
As noted in the conditions currently applicable to the property under Ord. 10-26, “Any outdoor refuse and/or recycling areas shall be provided in a solidly screened enclosure area to be approved by the Building Commissioner.” Furthermore, per Section 12-11-5:A, all storage areas, service yards, loading docks and ramps, electrical equipment enclosures, incinerators and equipment for the disposal of materials, storage tanks, and trash areas, shall be screened from view. In Section 12-11-5:B, in listing types of permitted visual screening, chain link fencing is noted as strictly prohibited. ***As a condition of approval, Staff recommend requiring fencing be installed as proposed and along both property lines, so as to completely enclose the rear yard and side yard, and in a neutral color that complements the light brown and gray of the proposed façade.***

Staff would also like to note that the Village has adopted a fence standard for commercial and mixed-use projects, requiring metal posts and supporting members spaced a maximum of eight feet (8’) on center and set in a minimum eight-inch (8”)

diameter concrete pier, extending a minimum of forty-two (42") deep. A note indicating this will be required to be added to the landscaping plan prior to issue of a building permit.



Existing Fencing at the Subject Property as viewed from the Southwest (6004 Oakton)



Proposed Landscape Plan

Traffic and Parking Impact

A traffic impact study was prepared by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) and is included in the hearing packet for Case PC 26-01. The study concluded that the expansion of the retail component of the existing business and elimination of the automotive repair business at the subject property is not anticipated to increase traffic to the site, or exceed existing parking. KLOA, Inc. noted that the intersection of Oakton Street and Austin Avenue has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed use change and no roadway or traffic control improvements are required. The intersection is projected to operate at the same level of service with the proposed use mix.

The subject property currently has nine (9) parking spaces and eight (8) fueling pump spaces. Seven (7) parking spaces are proposed per the revised site plan and landscaping plan that included additional landscaping. KLOA conducted parking surveys at two other automobile minimarts in the area. At either location, at no time was use of parking observed to be greater than six (6) parking spaces (not including fueling pump spaces). The study concluded that the proposed site plan has sufficient off-street parking to meet the demands of the proposed retail use mix.

The study did not evaluate the Village's code requirements. Per Section 12-7-3:1, an automobile minimart station requires 1.0 space per employee, not to exceed 5 spaces of which 2 spaces shall be for handicapped individuals. The proposed seven (7) parking spaces meets Village requirements for the proposed 1,645-square-foot retail space. For comparison, under Case PC 24-07, the Plan Commission previously approved a 2,495-square-foot automobile minimart station with eight (8) parking spaces (in addition to eight (8) pump spaces).

Commission Review

Appearance Commission

On January 6, 2026, the Appearance Commission reviewed Case PC 26-01. At the conclusion of the discussion, the Appearance Commission voted unanimously (5-0) to recommend approval of the application including conditions regarding the need for a revised lighting plan and landscaping plan prior to applying for the building permit. The Staff Report to the Appearance Commission and related minutes have been included as "**Attachment A**."

Traffic Safety Commission

Given the limited impact of the proposed use mix and changes to parking lot striping, the Traffic Safety Commission Chairperson waived the requirement for review of the proposed special use amendment (see "**Attachment B**").

Departmental Review

The proposed project was reviewed by several department representatives with the Department of Building and Inspection Services being the only department to provide comments (see "**Attachment C**").

- **Building Department:** In review of the proposed project, the Building and Inspection Services issued the following comments:
 - Building Department would expect a full set of plans with construction details if approved.
 - Code Enforcement has concerns regarding exterior storage located in the rear fenced in area as it relates to possible rodent harborage.
- **Fire Department:** No comments at this time.
- **Public Works Department/Engineering:** No comments at this time.

Standards for Review

The Standards for Special Uses are established in Section 12-16-4:C.5 of the Unified Development Code:

Standards For Special Uses: The following standards for evaluating special uses shall be applied in a reasonable manner, taking into consideration the restrictions and/or limitations which exist for the site being considered for development:

1. **Preservation of Health, Safety, Morals, And Welfare:** The establishment, maintenance and operation of the special use will not be detrimental to or endanger the public health, safety, morals or general welfare.
2. **Adjacent Properties:** The special use should not be injurious to the use and enjoyment of other property in the immediate vicinity for the uses permitted in the zoning district.
3. **Orderly Development:** The establishment of the special use will not impede normal and orderly development or

- impede the utilization of surrounding property for uses permitted in the zoning district.
4. Adequate Facilities: Adequate utilities, access roads, drainage and other necessary facilities are in existence or are being provided.
 5. Traffic Control: Adequate measures have been or will be taken to provide ingress and egress designed to minimize traffic congestion on the public streets. The proposed use of the subject site should not draw substantial amounts of traffic on local residential streets.
 6. Adequate Buffering: Adequate fencing and/or screening shall be provided to ensure the right of enjoyment of surrounding properties to provide for the public safety or to screen parking areas and other visually incompatible uses.
 7. Conformance To Other Regulations: The special use shall, in all other respects, conform to applicable provisions of this title or amendments thereto. Variation from provisions of this title as provided for in subsection 12-16-3A, "Variations", of this chapter, may be considered by the plan commission and the Village Board of Trustees as a part of the special use permit.

Recommendation

Should the Plan Commission recommend approval of this application, staff suggests the following motion and conditions:

Motion to recommend approval of Case PC 26-01, a request to amend a Special Use Permit (Ord. 10-26) to eliminate the automotive maintenance and repair use and expand the retail sales area within an automobile minimart station, in a M-2 General Manufacturing District in accordance with Section 12-4-4:E, at the property commonly known as 6000 Oakton Street in Morton Grove, Illinois, subject to the following conditions:

1. *Prior to filing any Building Permit Application, the owner/applicant shall provide revised elevation drawings, subject to review and approval by the Community Development Administrator and Appearance Commission Chairperson, that indicate 100% transparent glazing on all windows, except for those located on the east façade and the primary entrance. A note shall also be provided on the revised elevation drawings indicating that no shelving or stock shall be placed in front of any windows on the south façade to maintain transparency. If such designs are deemed to be inconsistent with the approved plans, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*
2. *Prior to filing any Building Permit Application, the owner/applicant shall provide revised lighting plan and photometric analysis, subject to review and approval by the Community Development Administrator and Appearance Commission Chairperson, that provides adequate site lighting and limits spillover on all property lines including the, but not limited to the Oakton Street right-of-way. If such designs are deemed to be inconsistent with the approved plans, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*
3. *Prior to filing any Sign Permit Application, the owner/applicant shall provide the Village with final details regarding all sign locations and dimensions on the subject property, to ensure compliance with the Appearance Certificate granted under case AC 24-03, as determined by the Community Development Administrator. Illuminated signage and other illuminating features on the property may not exceed 5,000K (degrees Kelvin). If such designs are deemed to be inconsistent with the approved plans, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*
4. *Prior to filing any Building Permit Application, the owner/applicant shall provide revised a site plan and landscaping plan that include only non-invasive shrub and groundcover species and indicate the installation of a 6 ft. fence that completely encloses the side and rear yards of the subject property, subject to review and approval by the Community Development Administrator and Appearance Commission Chairperson. If such designs are deemed to be inconsistent with the approved plans, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*
5. *(Any other conditions recommended by the Plan Commission)*

Attachments

- **Attachment A** – Staff Report for the Appearance Commission for AC 26-03, prepared by Brandon Nolin, AICP, Community Development Administrator, dated December 23, 2025
- **Attachment B** – Plan Review Comment Form for PC 26-01, prepared by Amit Shah, Traffic Safety Commission Chair dated December 15, 2025
- **Attachment C** – Plan Review Comment Forms for PC 26-01, prepared by James English, Director of Building and Inspection Services, dated December 29, 2025
- **Attachment D** – Final Plans and Supporting Documents for PC 26-01

Attachment A

Staff Report for the Appearance Commission for AC 26-03
Prepared by Brandon Nolin, AICP, Community Development Administrator
Dated December 23, 2025

To: Chairperson Pietron and Members of the Appearance Commission

From: Brandon Nolin, AICP, Community Development Administrator
Anne Ryder Kirchner, Planner/Zoning Administrator

Date: December 23, 2025

Re: **Appearance Commission Case AC 26-03**
Request for approval of an amendment to a Special Use Permit (Ord. 10-26) to eliminate the automotive maintenance and repair use and expand the retail sales area within an automobile minimart station in a M-2 General Manufacturing District in accordance with Section 12-4-4:E of the Village of Morton Grove Unified Development Code (Title 12), for the property commonly known as 6000 Oakton Street in Morton Grove, Illinois (10-20-302-037-0000). The applicant is Proyekt Studio, LLC on behalf of St. Marys Petroleum Inc.

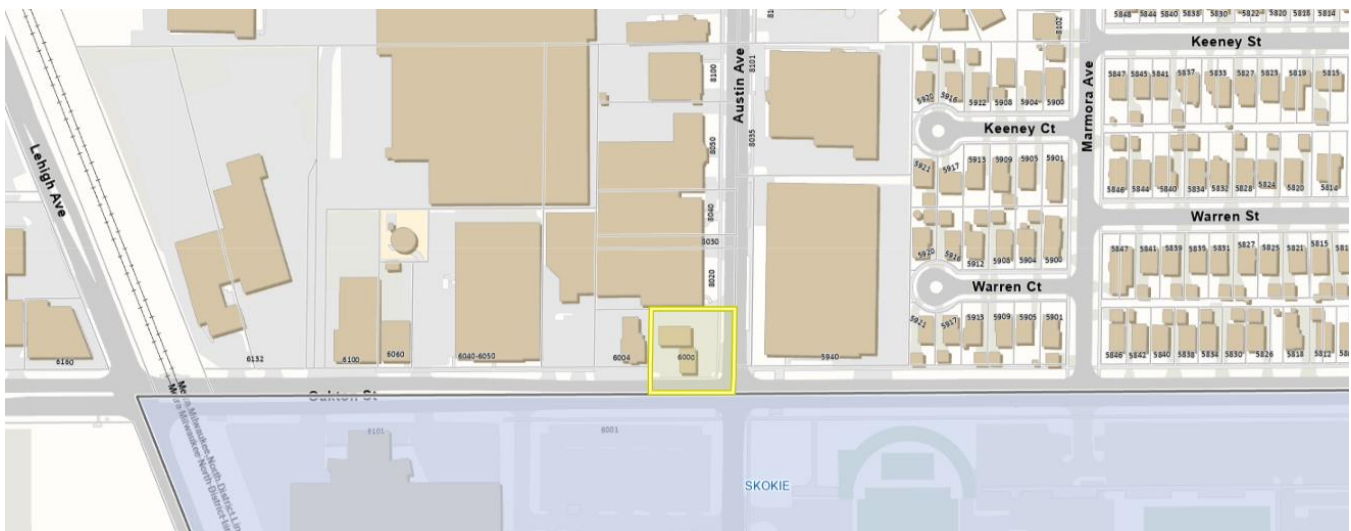
STAFF REPORT

Application Summary

Proyekt Studio, LLC on behalf of St. Marys Petroleum Inc. (“applicant”), submitted a complete Appearance Commission Application to the Department of Community and Economic Development requesting an Appearance Certificate for the renovation of an existing automobile minimart station at 6000 Oakton Street. The proposed project consists of the elimination of the automotive maintenance and repair use and expansion of the retail sales area, including exterior façade changes.

Subject Property

The subject property consists one (1) lot at 6000 Oakton Street in Morton Grove, Illinois. The parcel is zoned M-2 General Manufacturing and is 24,895 sq. ft. (0.57 acres) in total area including portions of adjacent rights-of-way for Austin Avenue and Oakton Street. The adjoining property to the west is a restaurant, and the adjoining property to the north and east across Austin Avenue are industrial buildings. All surrounding properties in the M-2 General Manufacturing zoning district. The subject property is located north across Oakton Street from the Village of Skokie.

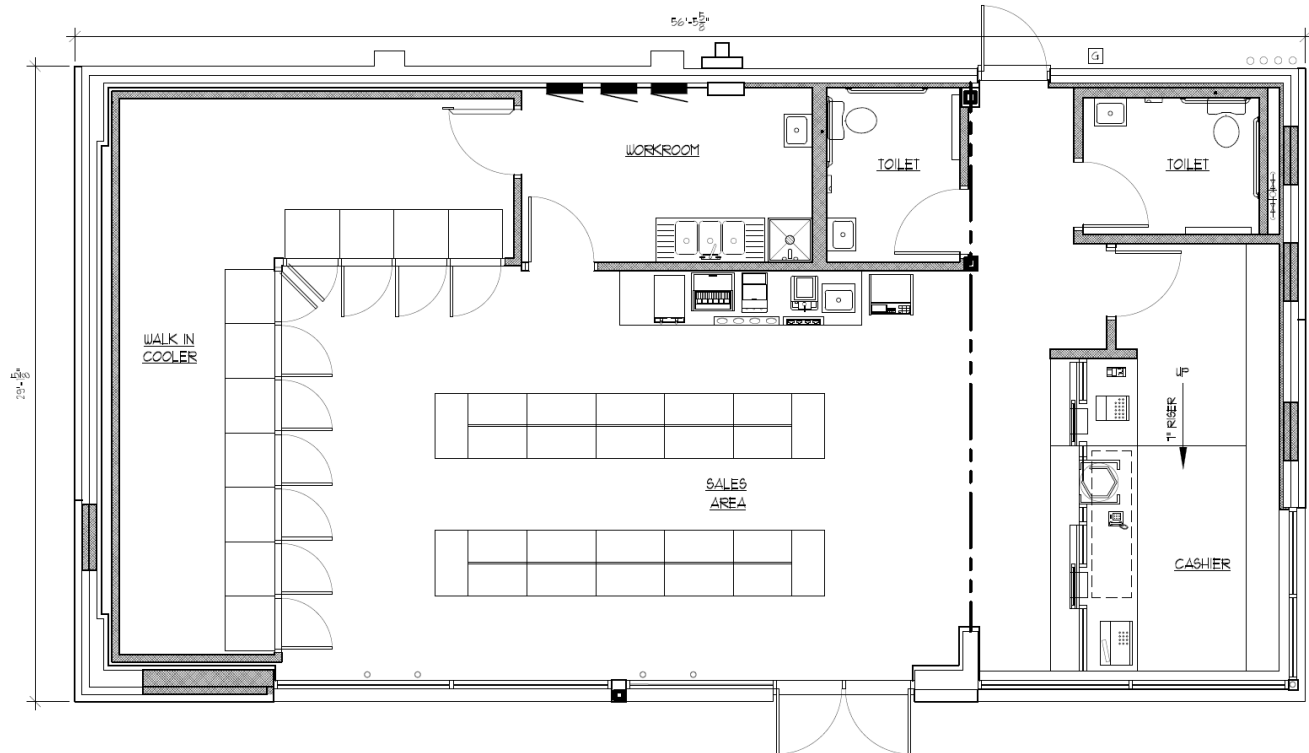


Subject Property Location Map

Project Overview

The applicant is proposing to renovate the existing automobile minimart and service station at 6000 Oakton Street to eliminate the automotive maintenance and repair use and expand the retail sales area. The business was established under Special Use Permit (Ordinance 10-26) and changes to the use mix require an amendment to that special use permit.

The retail area would expand into a portion of the building currently occupied by two automotive repair service bays. As part of the renovation, the service bays would be eliminated and replaced by a new façade with interior remodeling to add a walk-in cooler, a work room, two restrooms, and expanded sales area. The main entrance would be relocated to a more central location along the primary (south) façade, and the existing cashier area should be expanded. There are no proposed changes to signage (which was recently approved under case AC 24-03) or to landscaping.



Proposed Floor Plan

Building Design

Based on the submitted elevations, the exterior finishes of the proposed building will predominantly consist of light brown brick veneer with a gray stone parapet and stone still. A coursed ashler stone veneer in light brown and orange tones is proposed to break up the façade. The east window would have an aluminum louvered sun shade.

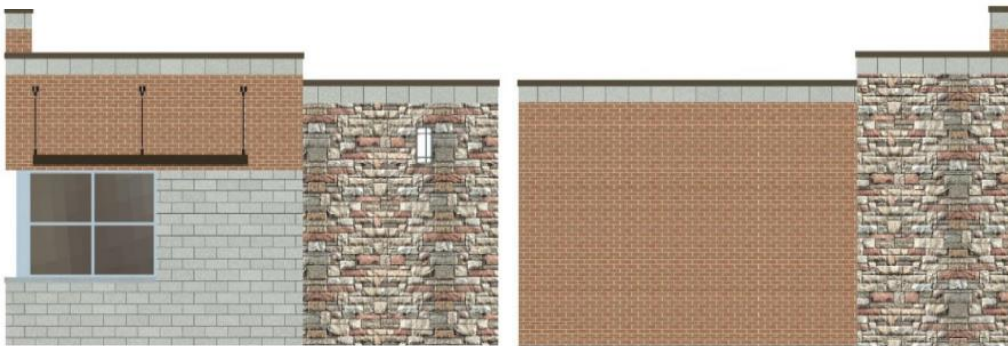
Façade Transparency

A note on the east elevation drawing indicates that all windows would have an opaque glazing. The windows on the east end of the south façade (where the cashier would be located) are proposed to use Level 1 bullet resistant glass, while all other windows would consist of one inch insulated glass. Staff are concerned that use of all opaque glazing will negatively impact the appearance of the Oakton Street corridor, and believe that transparent windows would foster a greater sense of activity by making the structure feel more open to visitors. **As a condition of approval, staff recommend that the primary entrance and all windows, except for those located on the east façade (by the proposed cash register), be 100% transparent and that no shelving or stock should be placed in front of any windows to maintain transparency. The applicant should speak to the proposed glazing and security needs.**



SOUTH ELEVATION

SCALE: NTS



EAST ELEVATION

SCALE: NTS

WEST ELEVATION

SCALE: NTS

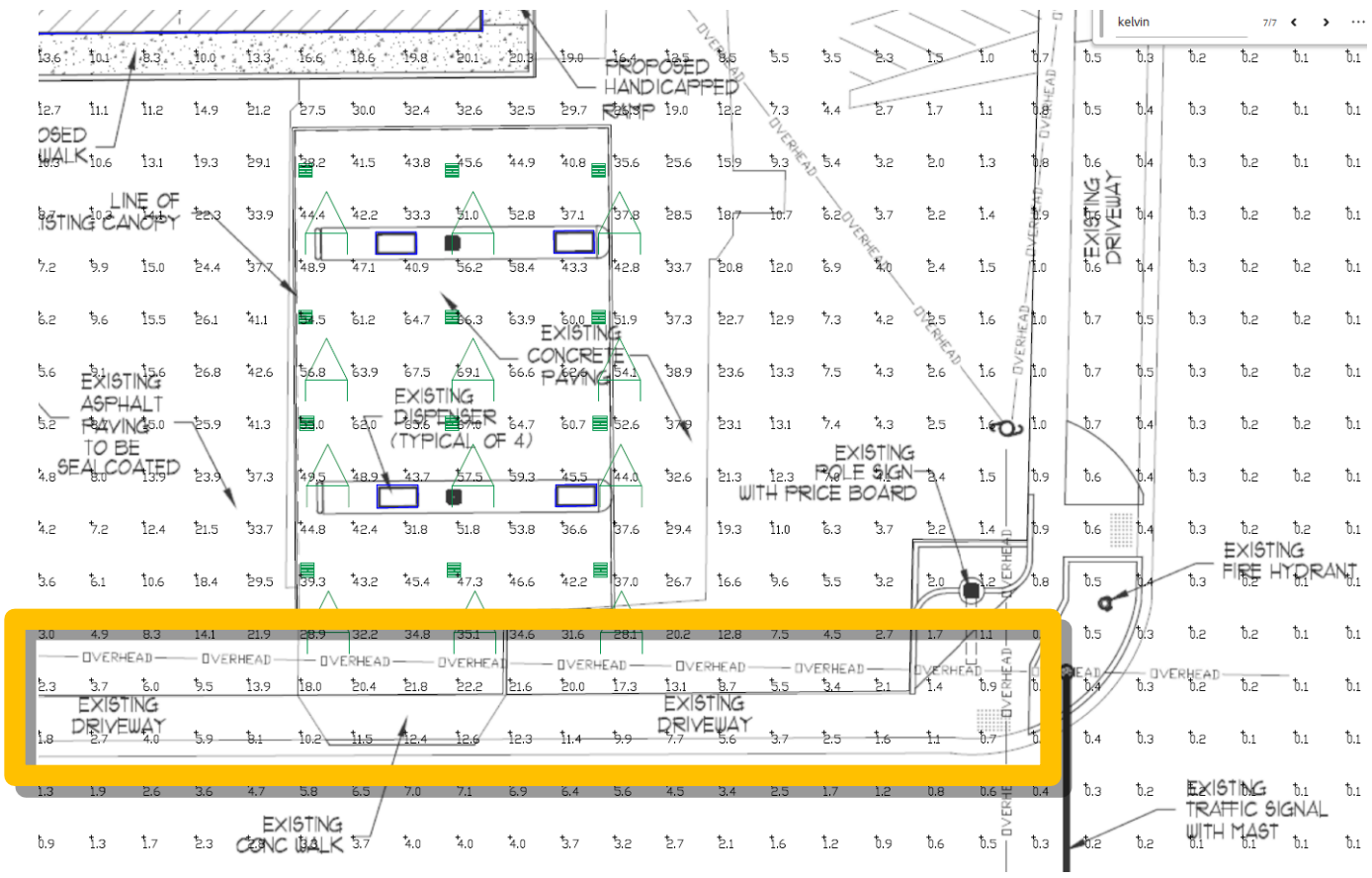
Proposed Building Elevations

Lighting

The applicant provided a photometric analysis prepared by Walsh, Long & Co. Proposed lighting consists of twelve (12) LED fixtures mounted to the underside of the gas canopy to illuminate the fuel pumps, and three (3) wall mounted LED fixtures along the north, east, and south facades of the proposed retail building. No lighting is proposed on the west side of the building. The proposed light fixtures can provide a range of light temperature between 2,700 and 5,000K, but the selected temperature is not specified in the application.

Per Section 12-4-3:B.5, lighting of parking and loading areas must be a minimum of one foot-candle on the surface. However, such lighting must be confined to the property boundary and reach as close to zero illumination at the property boundaries as possible. Glare may not be evident from surrounding properties or adjacent public rights of way. As proposed, light levels along nearly all segments of the subject property's lot lines will exceed 1 foot candle. Foot candles range from 0.0 to 0.8 on the west side and northwest corner of the building where no site lighting is provided. Low light levels are desirable at the property line, but low light levels on-site could present a safety concern for employees accessing the rear loading area.

Per the photometric plan submitted by the applicant, light levels along the north and west property edges adjacent to the canopy and parking area measure between 0.0 and 1.2 foot candles. The lighting on the Austin Avenue frontage range between 0.0 and 0.5 foot candles. The south property line along the Oakton Street frontage is well above 0 foot candles, with light levels ranging from 1.4 to 22.2 foot candles. This is due to the close proximity of the gas canopy to the south property line. ***The applicant is expected to discuss the types of lighting fixtures proposed in the photometric plan including the light temperature to be used on all fixtures. The applicant should also speak to the lighting plan and how it could be modified to achieve adequate site lighting and as close to zero illumination at the south property lines.***



Photometric Analysis with South Property Line Highlighted (ORANGE)

Signage

The Appearance Commission previously approved a sign package for the subject property under case AC 24-03 as part of the rebranding of the gas station from Marathon to Mobil. The current façade includes two wall signs on the primary façade (Oakton Street) for the “service center” and “food shop,” and a small wall sign is located on the secondary façade (Austin Avenue) for the “food shop.” Those signs would be removed as part of the proposed renovation. No additional signs are proposed at this time.

Any future signs, such as wall signs for the remodeled and expanded retail use, would need to adhere to the waivers granted under AC 24-03, or additional waivers would need to be approved by the Appearance Commission. **Staff recommends including explicit reference to AC 24-03 within any conditions of approval for this case.**



Existing Wall Signs at Subject Property (Staff provided)

Appearance Commission Review

In accordance with Unified Development Code Section 12-12-1:C, all site, landscape and building plans are to be reviewed by the Appearance Commission, and an Appearance Certificate by the Commission granted, prior to the issuance of a building permit. Further, per Section 12-16-2:C.2, the Appearance Commission is charged with reviewing the exterior elevations, sketches, and materials and other exhibits as to whether they are appropriate or compatible with the character of the immediate neighborhood and whether the submitted plans comply with the provisions of the regulations and standards set forth in chapter, 12 "Design Standards," of this title.

The Design Standards (Sec. 12-12-1:D) are as follows:

D. Criteria and Evaluation Elements: The following factors and characteristics relating to a unit or development and which affect appearance, will govern the appearance review commission's evaluation of a design submission:

1. Evaluation Standards:
 - a. Property Values: Where a substantial likelihood exists that a building will depreciate property values of adjacent properties or throughout the community, construction of that building should be barred.
 - b. Inappropriateness: A building that is obviously incongruous with its surroundings or unsightly and grotesque can be inappropriate in light of the comprehensive plan goal of preserving the character of the municipality.
 - c. Similarity/Dissimilarity: A builder should avoid excessively similar or excessively dissimilar adjacent buildings.
 - d. Safety: A building whose design or color might, because of the building's location, be distracting to vehicular traffic may be deemed a safety hazard.
2. Design Criteria:
 - a. Standards: Appearance standards as set forth in this chapter.
 - b. Logic Of Design: Generally accepted principles, parameters and criteria of validity in the solution of design problems.
 - c. Architectural Character: The composite or aggregate of the components of structure, form, materials and functions of a building or group of buildings and other architectural and site composing elements.
 - d. Attractiveness: The relationship of compositional qualities of commonly accepted design parameters such as scale, mass, volume, texture, color and line, which are pleasing and interesting to the reasonable observer.
 - e. Compatibility: The characteristics of different uses of activities that permit them to be located near each other in harmony and without conflict. Some elements affecting compatibility include intensity of occupancy as measured by dwelling units per acre; floor area ratio; pedestrian or vehicular traffic generated; parking required; volume of goods handled; and such environmental effects as noise, vibration, glare, air pollution, erosion, or radiation.
 - f. Harmony: A quality which produces an aesthetically pleasing whole as in an arrangement of varied architectural and landscape elements.
 - g. Material Selection: Material selection as it relates to the evaluation standards and ease and feasibility of future maintenance.
 - h. Landscaping: All requirements set forth in chapter 11, "Landscaping and Trees", of this title. (Ord. 07-07, 3-26-2007)

Recommendation

If the Appearance Commission approves the request for an Appearance Certificate for site, landscape, and building plans, for the modification of an existing automobile minimart station under Special Use Permit amendment (PC 26-01) for the property commonly known as 6000 Oakton Street in Morton Grove, Illinois, staff recommends the following conditions of approval:

1. *Prior to filing any Building Permit Application, the owner/applicant shall provide revised elevation drawings, subject to review and approval by the Community Development Administrator and Appearance Commission Chairperson, that indicate 100% transparent glazing on all windows, except for those located on the east façade and the primary entrance. A note shall also be provided on the revised elevation drawings indicating that no shelving or stock shall ever be placed in front of any windows to maintain transparency. If such designs are deemed to be inconsistent with*

the approved plans, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.

- 2. Prior to filing any Building Permit Application, the owner/applicant shall provide revised lighting plan and photometric analysis, subject to review and approval by the Community Development Administrator and Appearance Commission Chairperson, that provides adequate site lighting and limits spillover on all property lines including the, but not limited to the Oakton Street right-of-way. If such designs are deemed to be inconsistent with the approved plans, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*
- 3. Prior to filing any Sign Permit Application, the owner/applicant shall provide the Village with final details regarding all sign locations and dimensions on the subject property, to ensure compliance with the Appearance Certificate granted under case AC 24-03, as determined by the Community Development Administrator. Illuminated signage and other illuminating features on the property may not exceed 5,000K (degrees Kelvin). If such designs are deemed to be inconsistent with the approved plans, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*

Attachment B

Plan Review Comment Form for PC 26-01
Prepared by Amit Shah, Traffic Safety Commission Chair
Dated December 15, 2025

REVIEWING:

BUILDING

FIRE

POLICE

PUBLIC WORKS/ENGINEERING

TSC

VILLAGE OF MORTON GROVE, ILLINOIS
PLAN REVIEW COMMENT FORM

DATE DISTRIBUTED: 12/11/2025

CASE NUMBER: PC 26-01

APPLICATION: Request for approval of an amendment to a Special Use Permit (Ord. 10-26) to eliminate the automotive maintenance and repair use and expand the retail sales area within an automobile minimart station in a M-2 General Manufacturing District in accordance with Section 12-4-4:E of the Village of Morton Grove Unified Development Code (Title 12), for the property commonly known as 6000 Oakton Street in Morton Grove, Illinois (10-20-302-037-0000). The applicant is Proyekt Studio, LLC on behalf of St. Marys Petroleum Inc.

A Planned Unit Development Application has been submitted to the Plan Commission for action. Please return your review to the Department of Community and Economic Development by **Friday, January 2, 2026**.

Thank you,
Brandon Nolin, AICP
Community Development Administrator

COMMENTS OR CONCERNS

TSC has reviewed modifications at this site previously. They have Special Use Permits to operated gas retailer, Mini-Mart and service station. They want to eliminate the service station and expand the Mini-Mart & no expansion to the building. They would certainly have the right to eliminate the service station. They need to obtain the right to expand the Mini-Mart. This is an existing facility. There will be changes to the on-site traffic patterns, but I expect they will be very small changes.

This project will have an insignificant negative impact on the community from a traffic safety perspective. I approve to waive the review of the application by the full commission.

These comments accurately represent existing Village regulations or policies.

Name (please print): AMIT SHAH

Signed: Amit Shah

Date: 12/15/2025

Attachment C

Plan Review Comment Forms for PC 26-01
Prepared by James English, Director of Building and Inspection Services
Dated December 29, 2025

REVIEWING:

BUILDING

FIRE

POLICE

PUBLIC WORKS/ENGINEERING

TSC

VILLAGE OF MORTON GROVE, ILLINOIS
PLAN REVIEW COMMENT FORM

DATE DISTRIBUTED: 12/11/2025

CASE NUMBER: PC 26-01

APPLICATION: Request for approval of an amendment to a Special Use Permit (Ord. 10-26) to eliminate the automotive maintenance and repair use and expand the retail sales area within an automobile minimart station in a M-2 General Manufacturing District in accordance with Section 12-4-4:E of the Village of Morton Grove Unified Development Code (Title 12), for the property commonly known as 6000 Oakton Street in Morton Grove, Illinois (10-20-302-037-0000). The applicant is Proyekt Studio, LLC on behalf of St. Marys Petroleum Inc.

A Planned Unit Development Application has been submitted to the Plan Commission for action. Please return your review to the Department of Community and Economic Development by **Friday, January 2, 2026**.

Thank you,
Brandon Nolin, AICP
Community Development Administrator

COMMENTS OR CONCERNS

- 1) Building Department would expect a full set of plans with construction details if approved.
- 2) Code Enforcement has concerns regarding exterior storage located in the rear fenced in area as it relates to possible rodent harborage.

These comments accurately represent existing Village regulations or policies.

Name (please print): Jim English, Director of Building and Inspectional Services

Signed:

Date: 12/29/2026

Attachment D

Final Plans and Supporting Documents for PC 26-01

1. *Special Use Application, submitted by Proyeckt Studio, LLC, received Nov. 18, 2025*
2. *Written Authorization from Property Owner, dated September 5, 2025*
3. *Legal Description, submitted by Proyeckt Studio, LLC, dated August 14, 2025*
4. *Plat of Survey of 6000 Oakton Street, Morton Grove, Illinois, prepared by Exacta Landscape Surveyors, LLC,*
5. *Existing Site Plan, prepared by Proyeckt Studio, LLC, dated January 12, 2026*
6. *Site Plan, prepared by Proyeckt Studio, LLC, dated January 12, 2026*
7. *Landscaping Plan, prepared by Proyeckt Studio, LLC, dated January 12, 2026*
8. *Truck Access Plan, prepared by Proyeckt Studio, LLC, dated January 12, 2026*
9. *Existing Floor Plan, prepared by Proyeckt Studio, LLC, dated July 25, 2025*
10. *Floor Plan, prepared by Proyeckt Studio, LLC, dated July 25, 2025*
11. *South Elevation, prepared by Proyeckt Studio, LLC, dated July 25, 2025*
12. *East Elevation, prepared by Proyeckt Studio, LLC, dated July 25, 2025*
13. *West Elevation, prepared by Proyeckt Studio, LLC, dated July 25, 2025*
14. *North Elevation, prepared by Proyeckt Studio, LLC, dated July 25, 2025*
15. *South, East, and West Elevations (Color), prepared by Proyeckt Studio, LLC, received Nov. 18, 2025*
16. *Lighting Proposal, prepared by Walsh, Long, & Co., dated September 15, 2025*
17. *Scottsdale Legacy (CRUS) LED Canopy Luminaire Features & Specifications, provided by Proyeckt Studio, LLC, received Nov. 18, 2025*
18. *Mirada Medium Wall Sconce (XVM) Outdoor Wall Sconce Features & Specifications, provided by Proyeckt Studio, LLC, received Nov. 18, 2025*
19. *Traffic Impact Study Proposed Fuel Center Remodel/Expansion, prepared by KLOA, Inc., dated November 13, 2025*



Incredibly Close ✨ Amazingly Open

SPECIAL USE APPLICATION

Village of Morton Grove
Department of Community Development
6101 Capulina Avenue, Morton Grove, Illinois 60053
commdev@mortongrovel.org | 847-663-3063

Case Number: PC 26-01 Date Application Filed: Nov. 18, 2025

APPLICANT INFORMATION

Applicant Name: Gregory Ziomek
Applicant Organization: Projekt Studio LLC
Applicant Address: 2810 RFD
Applicant City / State / Zip Code: Long Grove, IL 60047
Applicant Phone: [REDACTED]
Applicant Email: [REDACTED]
Applicant Relationship to Property Owner: Project Architect
Applicant Signature: Gregory Ziomek

PROPERTY OWNER INFORMATION (IF DIFFERENT FROM APPLICANT)

Owner Name: Oaktin Real Estate Company
Owner Address: 960 Rand Rd, Suite 208
Owner City / State / Zip Code: Des Plaines, IL 60016
Owner Phone: [REDACTED]
Owner Email: [REDACTED]
Owner Signature: Cynthia K. Chandy

PROPERTY INFORMATION

Common Address of Property: 6000 Oakton St.
Property Identification Number (PIN): 10-20-302-037-0000
Property Square Footage: 24,968 sq ft
Legal Description (attach as necessary): see attached page 3
Property Zoning District: M-2, General Manufacturing

APPLICATION INFORMATION

Requested Special Use: to revise an existing special use for a gas station
Purpose of Special Use (attach as necessary): to enlarge a mini-mart / gas station into an area of the building that is currently an auto repair area.

RESPONSES TO STANDARDS FOR SPECIAL USE

Provide responses to the seven (7) Standards for Special Use as listed in Section 12-16-4-C-5 of the Village of Morton Grove Unified Development Code. The applicant must present this information for the official record of the Planning Commission. The Special Use Standards are as follows:

- a. The establishment, maintenance, or operation of the Special Use will not be detrimental to, or endanger the public health, safety, morals, comfort, or general welfare.

Correct - This project will not be detrimental. It will be beneficial to the neighborhood, due to it being a cleaner and more handicapped accessible building.

- b. The Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood.

Correct - It will not negatively impact property in the immediate vicinity. The cleaner / brighter building will be an asset.

- c. The establishment of the Special Use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

This project will be constructed to comply with all applicable requirements of governing entities having jurisdiction, therefore it will not impede the development of adjacent properties.

- d. Adequate utilities, access roads, drainage and/or necessary facilities have been or are being provided.

Correct - the existing utilities, roads and facilities are adequate for this project.

- e. Adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.

Yes - Our project will not alter traffic patterns, we will keep the existing driveways.

- f. The proposed Special Use is not contrary to the objectives of the current Comprehensive Plan for the Village of Morton Grove.

The project is in harmony with the Comprehensive Plan as evident by other such uses along this road.

- g. The Special Use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may, in each instance, be modified pursuant to the recommendations of the Commission.

Yes - The project will conform ^{to} the applicable regulations

OAKTIN REAL ESTATE INC.
6000 OAKTON ST
MORTON GROVE, IL 60053

September 5, 2025

The Village of Morton Grove
Department of Community and Economic Development
6101 Capilina Ave.
Morton Grove, IL. 60053

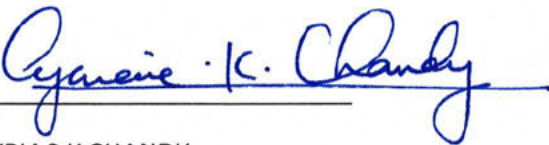
Re: Authorization to File Application
6000 Oakton St
Morton Grove, IL. 60053

Dear Sir:

I am the owner of the above-referenced address. This letter shall serve as my written authorization for my Architect (Gregory Ziomek of Proyeckt Studio LLC) to file a Special Use application and accept conditions of approval regarding the project and property.

Thank you for your time with this matter

Regards,

A handwritten signature in blue ink that reads "Cyriac K. Chandy". The signature is written in a cursive style and is positioned above a horizontal line.

CYRIAC K CHANDY
PRESIDENT



PROYEKT STUDIO, LLC
Architecture / Engineering
2810 RFD, Long Grove IL. 60047

Aug 14, 2025

The Village of Morton Grove
Department of Community and Economic Development
6101 Capilina Ave.
Morton Grove, IL. 60053

Re: Legal Description
6000 Oakton St
Morton Grove, IL. 60053

THE EAST 158 FEET OF THE SOUTH 158 FEET OF THE EAST 4 ACRES OF THE SOUTH 1/2 OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF SECTION 20, TOWNSHIP 41 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

Thank you for your time with this matter

Regards,

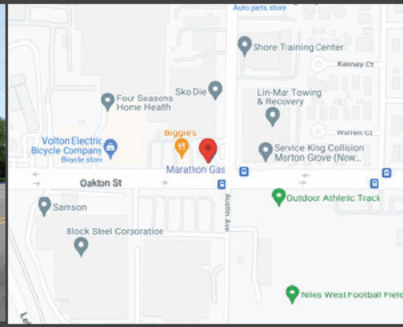
Gregory P. Ziomek



Gregory P Ziomek, A.L.A., N.C.A.R.B., L.E.E.D.-G.A.
IL Arch Lic # 001-01746
GZ:lg
cc: File



www.exactalands.com | office: 773.305.4011



PROPERTY ADDRESS:
6000 OAKTON STREET, MORTON GROVE, ILLINOIS 60053

SURVEY NUMBER: IL2307.3479

DATE SIGNED: 08/07/23 **FIELD WORK DATE:** 7/22/2023

REVISION DATE(S):
(REV.0 8/7/2023)

POINTS OF INTEREST
IMPROVEMENTS WITHIN THE SOUTH 50 FEET OF PROPERTY TAKEN FOR OAKTON STREET.

STATE OF ILLINOIS }
COUNTY OF LASALLE } SS

THIS IS TO CERTIFY THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY. GIVEN UNDER MY HAND AND SEAL THIS DATE HEREON.



ILLINOIS PROFESSIONAL LAND SURVEYOR No. 2971
LICENSE EXPIRES 11/30/2024
EXACTA LAND SURVEYORS, LLC
PROFESSIONAL DESIGN FIRM 184008059-0008



Exacta Land Surveyors, LLC
PLS# 184008059
316 East Jackson Street | Morris, IL 60450



IL2307.3479
BOUNDARY SURVEY
COOK COUNTY

ALTA/NSPS "TABLE A" ITEMS

1. AS SHOWN HEREON
2. AS SHOWN HEREON
4. GROSS LAND AREA IS 24968', MORE OR LESS
- 7a. AS SHOWN HEREON
- 7b. BUILDING SQ. FT. = 15,75'
- 7c. BUILDING HEIGHT = 16.00'
8. AS SHOWN HEREON
14. AS SHOWN HEREON

REVIEW OF TITLE:
CHICAGO TITLE INSURANCE COMPANY
COMMITMENT NO.: 23CSA122128NA
COOK COUNTY, ILLINOIS
SCHEDULE B-II
EFFECTIVE DECEMBER 27, 2018

EXCEPTIONS 1-18, 20, & 23: NO SURVEY OR PLOTTABLE MATTERS; AFFECTS THE SUBJECT PROPERTY
EXCEPTION L 19: EASEMENT REFERENCED IN DOCUMENT NO. 12684945. THIS EXCEPTION IS FOR LAND NOW TAKEN FOR OAKTON AVENUE AND AUSTIN AVENUE.
EXCEPTION M 21: EASEMENTS AS SHOWN HEREON; AFFECTS THE SUBJECT PROPERTY
EXCEPTION N 22: EASEMENTS AS SHOWN HEREON; AFFECTS THE SUBJECT PROPERTY

TO: ST. MARYS PETROLEUM INC.
CHICAGO TITLE INCSURANCE COMPANY

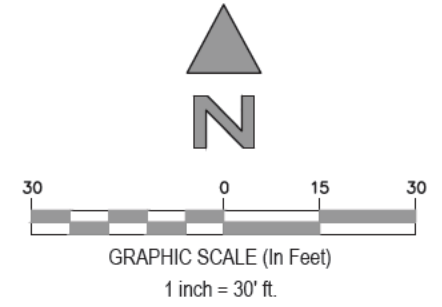
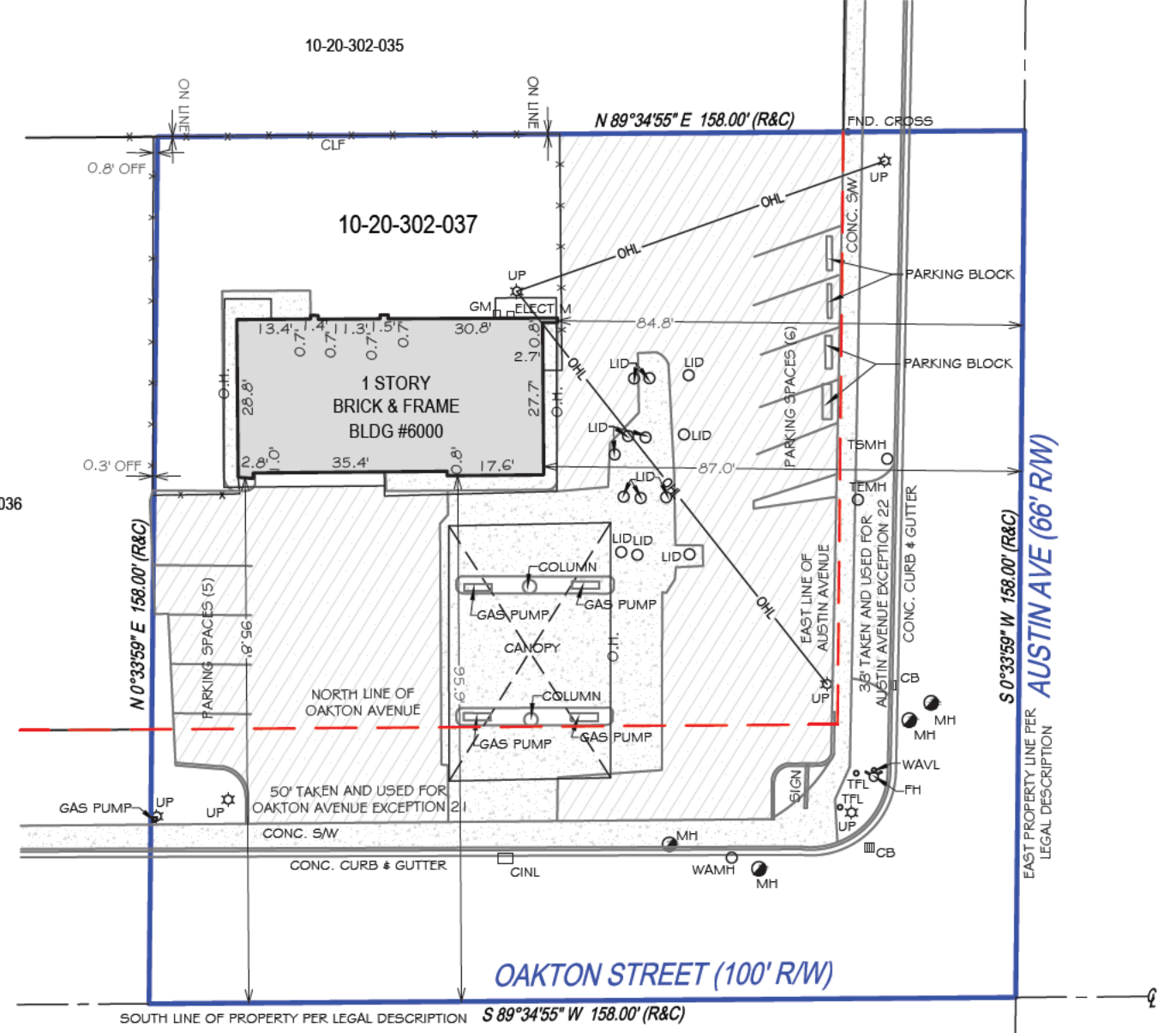
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 4, 7(A, B, AND C), 8, AND 14 OF TABLE A. FIELDWORK WAS COMPLETED ON JULY 22, 2023. DATED THIS 7TH DAY OF AUGUST, 2023.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2971
LICENSE EXPIRES 11/30/2024
EXACTA LAND SURVEYORS
PROFESSIONAL DESIGN FIRM 184008059-0008



CHICAGO TITLE INSURANCE COMPANY COMMITMENT NO.
23CSA122128NA DATED DECEMBER 27, 2018 WAS UTILIZED IN THE PREPARATION OF THIS SURVEY

TOTAL AREA OF PROPERTY SURVEYED 24968 SQ.FT.±



PROPERTY ADDRESS:
6000 OAKTON STREET, MORTON GROVE, ILLINOIS 60053

SURVEY NUMBER: IL2307.3479

CERTIFIED TO:
ST. MARYS PETROLEUM, INC; CHICAGO TITLE INSURANCE COMPANY;

DATE OF SURVEY: 08/07/23

BUYER: ST. MARYS PETROLEUM, INC

LENDER:

TITLE COMPANY:

COMMITMENT DATE: DECEMBER 27, 2018 **CLIENT FILE NO:** 23CSA122128NA

LEGAL DESCRIPTION:
THE EAST 158 FEET OF THE SOUTH 158 FEET OF THE EAST 4 ACRES OF THE SOUTH 1/2 OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF SECTION 20, TOWNSHIP 41 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

FLOOD ZONE INFORMATION:


- GENERAL SURVEYORS NOTES:**
- The Legal Description used to perform this survey was supplied by others. This survey does not determine nor imply ownership of the lands or any fences shown hereon. Unless otherwise noted, an examination of the abstract of title was NOT performed by the signing surveyor to determine which instruments, if any, are affecting this property.
 - The purpose of this survey is to establish the boundary of the lands described by the legal description provided and to depict the visible improvements thereon for a pending financial transaction. Underground footings, utilities, or other service lines, including roof eave overhangs were not located as part of this survey. Unless specifically stated otherwise the purpose and intent of this survey is not for any construction activities or future planning.
 - If there is a septic tank or drain field shown on this survey, the location depicted hereon was either shown to the surveyor by a third party or it was estimated by visual above ground inspection. No excavation was performed to determine its location.
 - This survey is exclusively for a pending financial transaction and only to be used by the parties to whom it is certified.
 - Alterations to this survey map and report by other than the signing surveyor are prohibited.
 - Dimensions are in feet and decimals thereof.
 - Any FEMA flood zone data contained on this survey is for informational purposes only. Research to obtain said data was performed at www.fema.gov and may not reflect the most recent information.
 - Unless otherwise noted "SIR" indicates a set iron rebar, 5/8 inch in diameter and twenty-four inches long.
 - The symbols reflected in the legend and on this survey may have been enlarged or reduced for clarity. The symbols have been plotted at the approximate center of the field location and may not represent the actual shape or size of the feature.
 - Points of Interest (POI's) are select above-ground improvements, which may appear in conflict with boundary, building setback or easement lines, as defined by the parameters of this survey. These POI's may not represent all items of interest to the viewer. There may be additional POI's which are not shown or called-out as POI's, or which are otherwise unknown to the surveyor.
 - Utilities shown on the subject property may or may not indicate the existence of recorded or unrecorded utility easements.
 - The information contained on this survey has been performed exclusively by and is the sole responsibility of Exacta Land Surveyors, LLC. Additional logos or references to third party firms are for informational purposes only.
 - Due to varying construction standards, building dimensions are approximate and are not intended to be used for new construction or planning.
 - Surveyor bearings are used for angular reference and are used to show angular relationships of lines only and are not related or orientated to true or magnetic north. Bearings are shown as surveyor bearings, and when shown as matching those on the subdivision plats on which this survey is based, they are to be deemed no more accurate as the determination of a north orientation made on and for those original subdivision plats. North 00 degrees East is assumed and upon preparation of this plat, the resulting bearing between found points as shown on this survey is the basis of said surveyor bearings as defined and required to be noted by Illinois Administrative Code Title 68, Chapter VII, Sub-Chapter B, Part 1270, Section 1270.56, Paragraph B, Sub-Paragraph 6, Item k.
 - THIS SURVEY IS A PROFESSIONAL SERVICE IN COMPLIANCE WITH THE MINIMUM STANDARDS OF THE STATE OF ILLINOIS. NO IMPROVEMENTS SHOULD BE MADE ON THE BASIS OF THIS PLAT ALONE. PLEASE REFER ALSO TO YOUR DEED, TITLE POLICY AND LOCAL ORDINANCES. COPYRIGHT BY EXACTA ILLINOIS SURVEYORS. THIS DOCUMENT MAY ONLY BE USED BY THE PARTIES TO WHICH IT IS CERTIFIED. PLEASE DIRECT QUESTIONS OR COMMENTS TO EXACTA ILLINOIS SURVEYORS, INC. AT THE PHONE NUMBER SHOWN HEREON.

SURVEYORS LEGEND:

LINETYPES	
	Boundary Line
	Center Line
	Chain Link or Wire Fence
	Easement
	Edge of Water
	Iron Fence
	Overhead Lines
	Structure
	Survey Tie Line
	Vinyl Fence
	Wall or Party Wall
	Wood Fence
SURFACE TYPES	
	Asphalt
	Brick or Tile
	Concrete
	Covered Area
	Water
	Wood
SYMBOLS	
	Benchmark
	Center Line
	Central Angle or Delta
	Common Ownership
	Control Point
	Catch Basin
	Elevation
	Fire Hydrant
	Find or Set Monument
	Guywire or Anchor
	Manhole
	Tree
	Utility or Light Pole
	Well

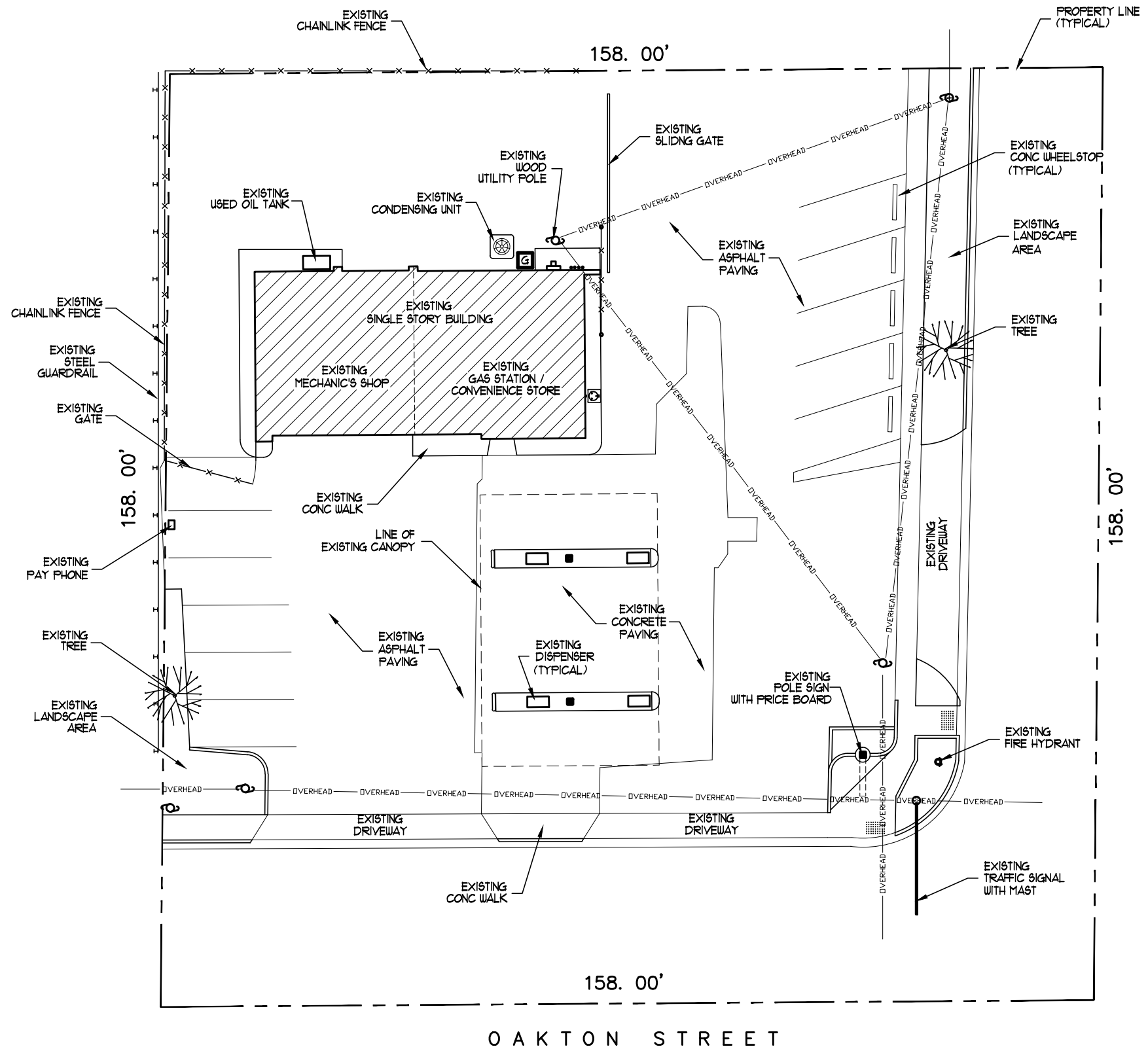
<p>ABBREVIATIONS</p> <p>(C) - Calculated (D) - Deed (F) - Field (M) - Measured (P) - Plat (R) - Record (S) - Survey A/C - Air Conditioning AE - Access Easement ANE - Anchor Easement ASBL - Accessory Setback Line B/W - Bay/Box Window BC - Block Corner BFP - Backflow Preventer BLDG - Building BLK - Block BM - Benchmark BR - Bearing Reference BRL - Building Restriction Line BSMT - Basement C - Curve C/L - Center Line C/P - Covered Porch C/S - Concrete Slab CATV - Cable TV Riser CB - Concrete Block CH - Chord Bearing CHIM - Chimney CLF - Chain Link Fence CME - Canal Maintenance Easement CO - Clean Out CONC - Concrete COR - Corner CS/W - Concrete Sidewalk CUE - Control Utility Easement CVG - Concrete Valley Gutter D/W - Driveway DE - Drainage Easement DF - Drain Field DH - Drill Hole DUE - Drainage & Utility Easement ELEV - Elevation EM - Electric Meter ENCL - Enclosure ENT - Entrance EOP - Edge of Pavement EOW - Edge of Water ESMT - Easement EUB - Electric Utility Box F/DH - Found Drill Hole FCM - Found Concrete Monument FF - Finished Floor</p>	<p>FIP - Found Iron Pipe FIPC - Found Iron Pipe & Cap FIR - Found Iron Rod FIRC - Found Iron Rod & Cap FN - Found Nail FN&D - Found Nail & Disc FRRSPK - Found Rail Road Spike GAR - Garage GM - Gas Meter ID - Identification IE/EE - Ingress/Egress Easement ILL - Illegible INST - Instrument INT - Intersection IRRE - Irrigation Easement L - Length LAE - Limited Access Easement LB# - License No. (Business) LBE - Limited Buffer Easement LE - Landscape Easement LME - Lake/Landscape Maintenance Easement LS# - License No. (Surveyor) MB - Map Book ME - Maintenance Easement MES - Mitered End Section MF - Metal Fence MH - Manhole MHWL - Mean High Water Line NR - Non-Radial NTS - Not to Scale NAVD88 - North American Vertical Datum 1988 NGVD29 - National Geodetic Vertical Datum 1929 OG - On Ground ORB - Official Records Book ORV - Official Record Volume O/A - Overall O/S - Offset OFF - Outside Subject Property OH - Overhang OHL - Overhead Utility Lines OHWL - Ordinary High Water Line ON - Inside Subject Property P/E - Pool Equipment PB - Plat Book PC - Point of Curvature PCC - Point of Compound Curvature PCP - Permanent Control Point PI - Point of Intersection PLS - Professional Land</p>	<p>Surveyor PLT - Planter POB - Point of Beginning POC - Point of Commencement PRC - Point of Reverse Curvature PRM - Permanent Reference Monument PSM - Professional Surveyor & Mapper PT - Point of Tangency PUE - Public Utility Easement R - Radius or Radial R/W - Right of Way RES - Residential RGE - Range ROE - Roof Overhang Easement RP - Radius Point S/W - Sidewalk SBL - Setback Line SCL - Survey Closure Line SCR - Screen SEC - Section SEP - Septic Tank SEW - Sewer SIRC - Set Iron Rod & Cap SMWE - Storm Water Management Easement SN&D - Set Nail and Disc SQFT - Square Feet STL - Survey Tie Line STY - Story SV - Sewer Valve SWE - Sidewalk Easement TBM - Temporary Bench Mark TEL - Telephone Facilities TOB - Top of Bank TUE - Technological Utility Easement TWP - Township TX - Transformer TYP - Typical UE - Utility Easement UG - Underground UP - Utility Pole UR - Utility Riser VF - Vinyl Fence W/C - Witness Corner W/F - Water Filter WF - Wood Fence WM - Water Meter/Valve Box WV - Water valve</p>
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JOB SPECIFIC SURVEYOR NOTES:



Exacta Land Surveyors, LLC
PLS# 184008059
316 East Jackson Street | Morris, IL 60450

**SEE PAGE 1 OF 2 FOR MAP OF PROPERTY
PAGE 2 OF 2 - NOT VALID WITHOUT ALL PAGES**



PROJECT DATA	
ZONING DISTRICT:	M-2 GENERAL MANUFACTURING
FAR:	N / A
PROPERTY PIN NUMBER:	10-20-302-031-0000
LOT AREA:	24,968 SQ FT
OCCUPANCY CLASS:	GROUP "M" - MERCANTILE
CONSTRUCTION TYPE:	5 B
OCCUPANT LOAD:	
FIRE ALARM:	YES
FIRE SPRINKLER:	NO
EXISTING FLOOR AREA :	1,575 SQ FT
MAX ALLOWABLE HEIGHT:	
PROPOSED HEIGHT:	
PARKING REQUIRED:	2 SPACES (1 / EMPLOYEE)
PARKING PROVIDED:	
REGULAR:	6 SPACES
HANDICAPPED:	1 SPACE
TOTAL:	7 SPACES
LOADING SPACES REQUIRED:	0 SPACES
LOADING SPACES PROVIDED:	0 SPACES

EXISTING SITE PLAN
SCALE: 1" = 20'-0"



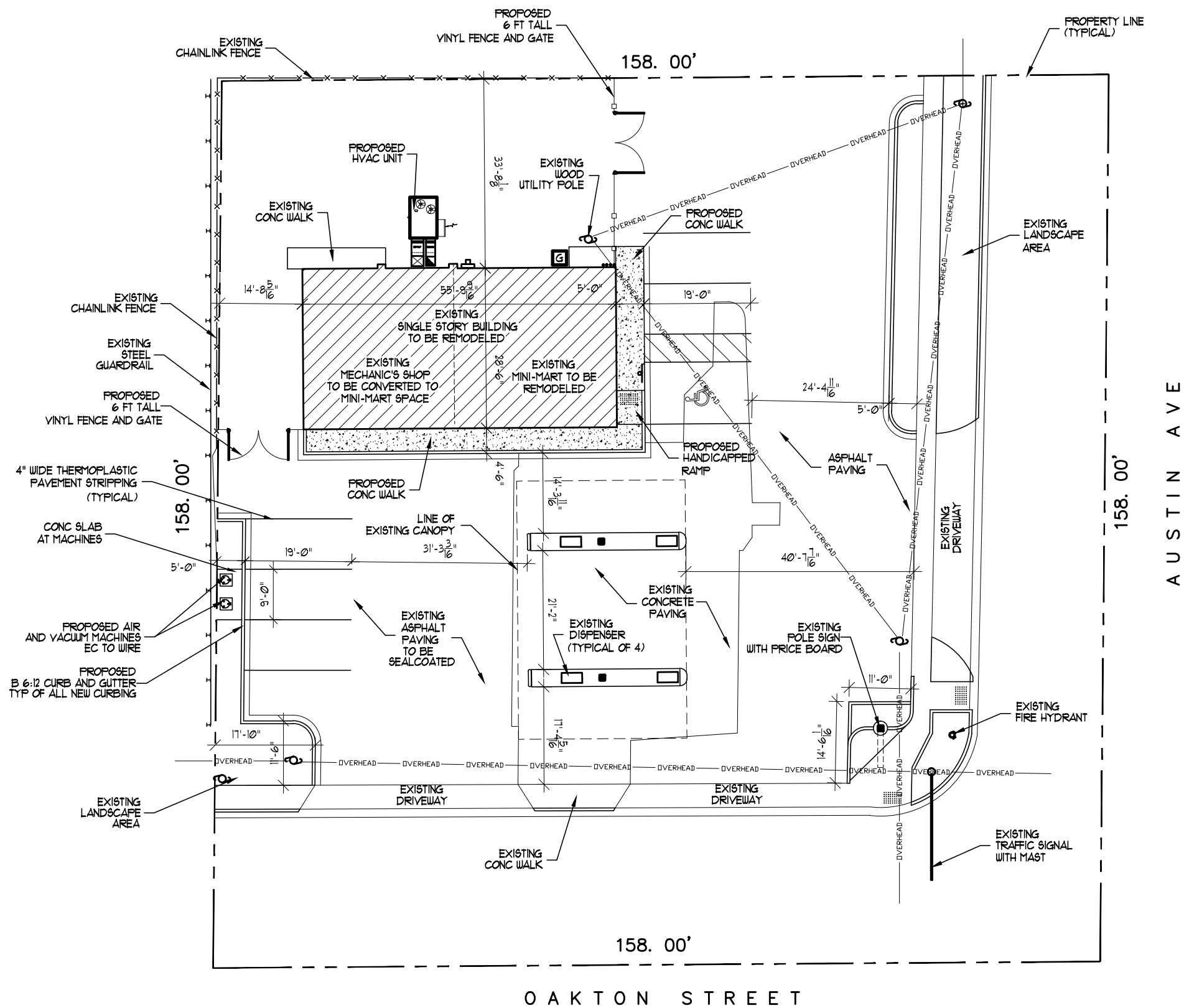
PROYEKT STUDIO, LLC
ARCHITECTURE, ENGINEERING

2810 RFD
Long Grove, IL. 60047
773-796-5992, GZIOMEK@SBCGLOBAL.NET

PROPOSED
MINI-MART REMODEL

6000 OAKTON ST
MORTON GROVE, IL. 60053

REVISIONS			DATE
NO.	DATE	DESCRIPTION	
			1/12/26
			JOB # 2503Z
			SHEET Δ - 1
			OF 10 SHEETS



SITE PLAN
SCALE: 1" = 20'-0"



PROYEKT STUDIO, LLC
ARCHITECTURE, ENGINEERING

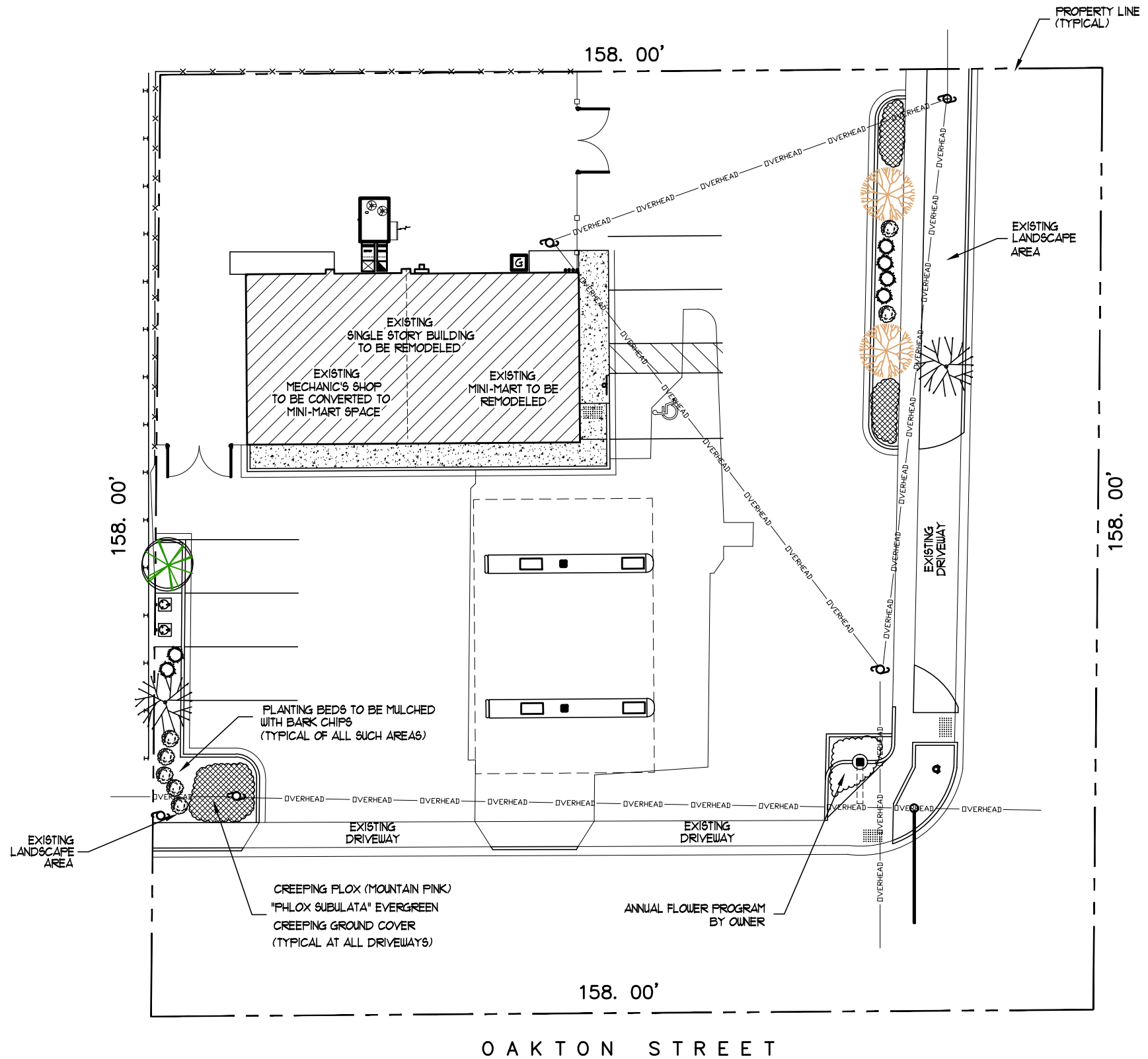
2810 RFD
Long Grove, IL. 60047
773-796-5992, GZIOMEK@SBCGLOBAL.NET

PROPOSED
MINI-MART REMODEL

6000 OAKTON ST
MORTON GROVE, IL. 60053

REVISIONS		
NO.	DATE	DESCRIPTION

DATE 1/12/26
JOB # 2503Z
SHEET Δ-2
OF 10 SHEETS



LANDSCAPE SCHEDULE			
	SYMBOL	QUANTITY	DESCRIPTION
TREES		1	KENTUCKY COFFEE TREE (GYMNOCLADUS DIOICUS) 2 1/2" - 3" CALIFER
		2	SWAMP WHITE OAK (QUERCUS BICOLOR) 2 1/2" - 3" CALIFER
		2	EXISTING TREE TO REMAIN
SHRUBS		6	Compact Pfitzer Juniper Juniperus c. Pfitz. Compacta' PLANTED 30" OC AND 3'-0" HGT
		1	SIBERIAN PEASHRUB (CARAGANA ARBORESCENS) PLANTED 30" OC AND 3'-0" HGT

PARKWAY AREAS DISTURBED BY CONSTRUCTION SHALL BE RE-SODDED FOLLOWING PROJECT COMPLETION. (TYP.)

LANDSCAPING PLAN
SCALE: 1" = 20'-0"



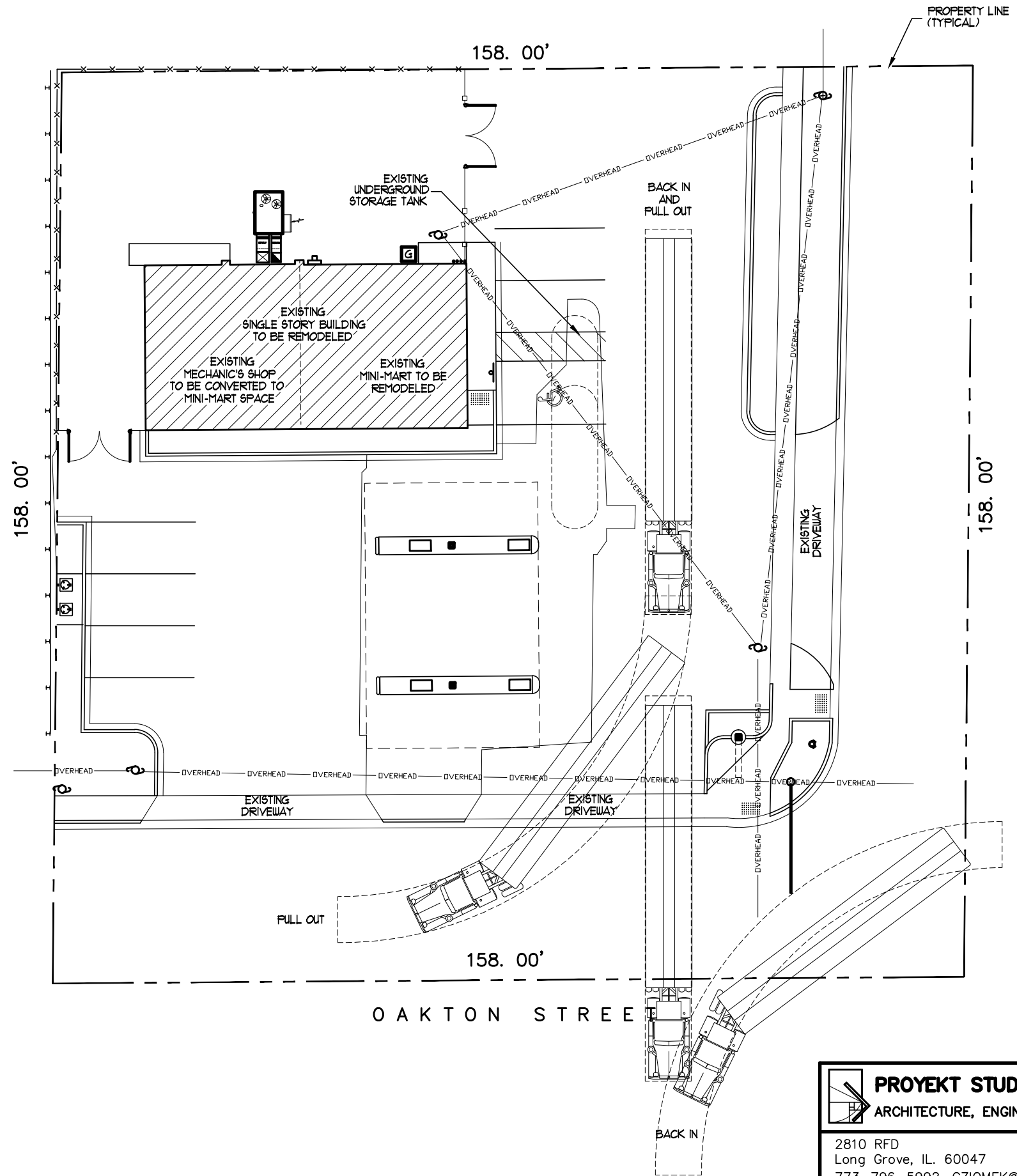
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REVISIONS			DATE
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			1/12/26
			JOB # 2503Z
			SHEET Δ-2.1
			OF 10 SHEETS



TRUCK ACCESS PLAN
SCALE: 1" = 20'-0"



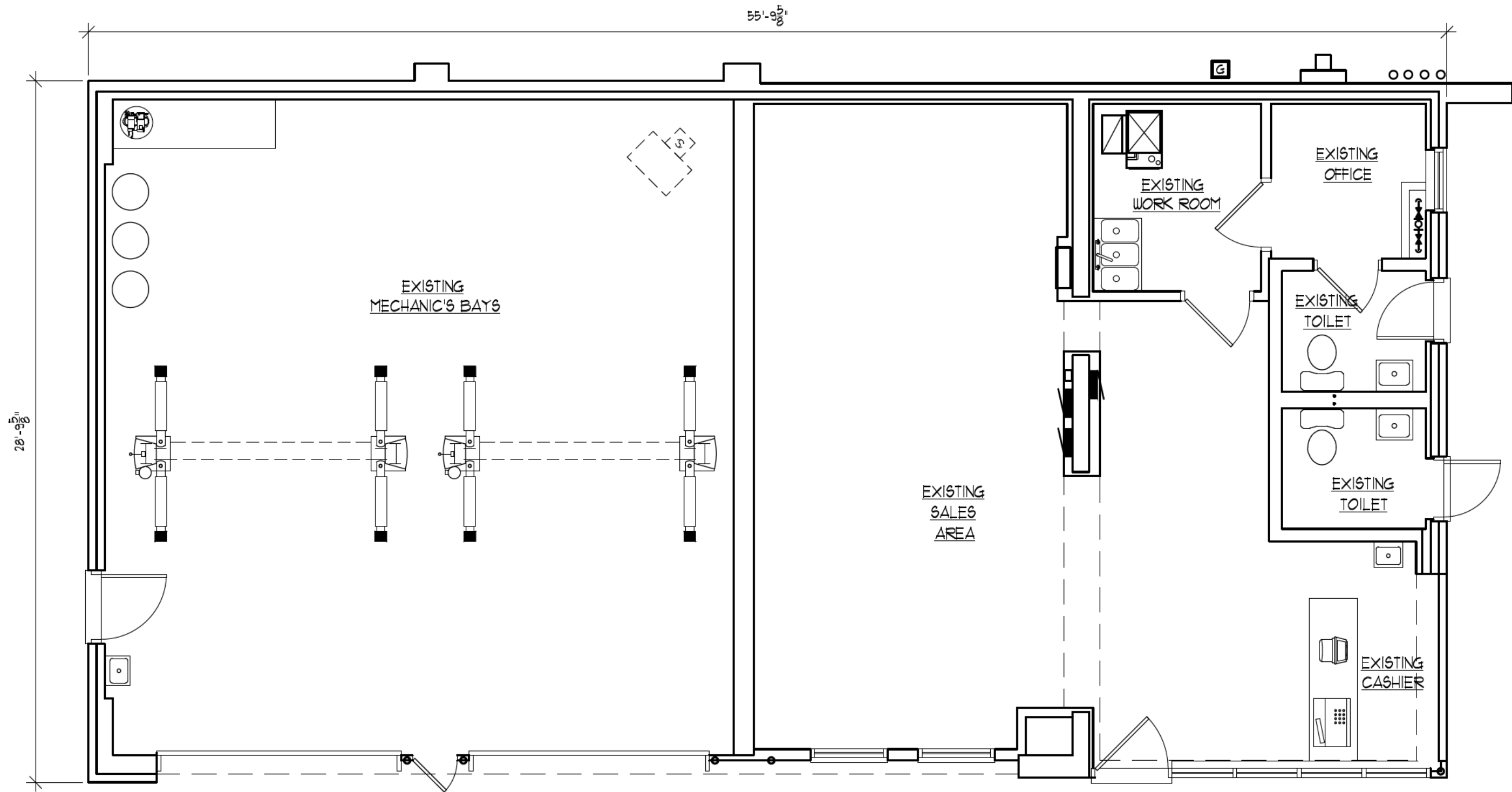
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**PROPOSED
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6000 OAKTON ST
MORTON GROVE, IL. 60053

REVISIONS			DATE
NO.	DATE	DESCRIPTION	
			1/12/26
			JOB # 2503Z
			SHEET Δ-2.2
			OF 10 SHEETS



EXISTING FLOOR PLAN
 SCALE: 1/8" = 1'-0"



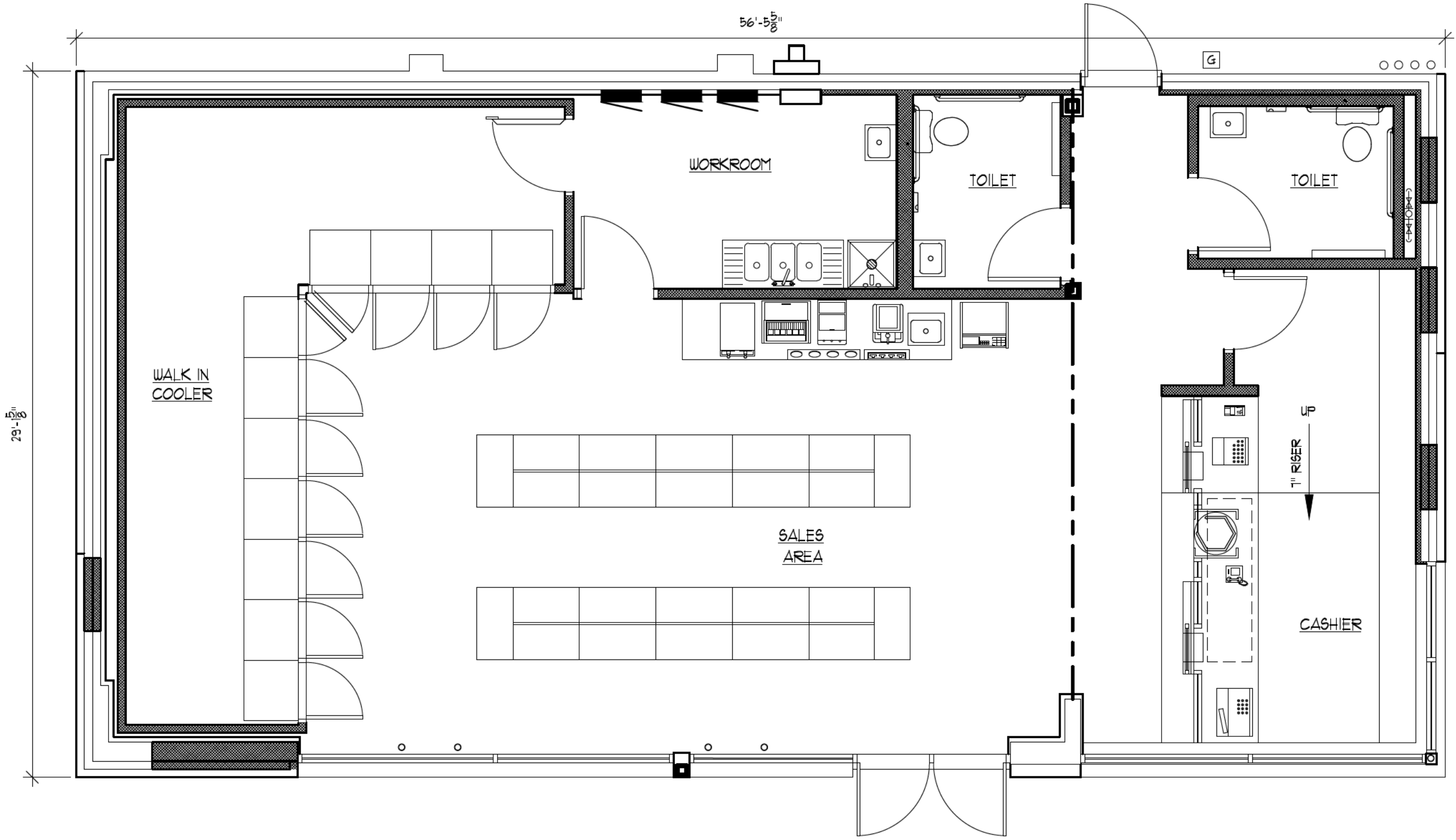
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**PROPOSED
 MINI-MART REMODEL**

6000 OAKTON ST
 MORTON GROVE, IL. 60053

REVISIONS			DATE
NO.	DATE	DESCRIPTION	
			7/25/25
			JOB # 2503Z
			SHEET Δ-3
			OF 8 SHEETS



FLOOR PLAN

SCALE: 1/4" = 1'-0"



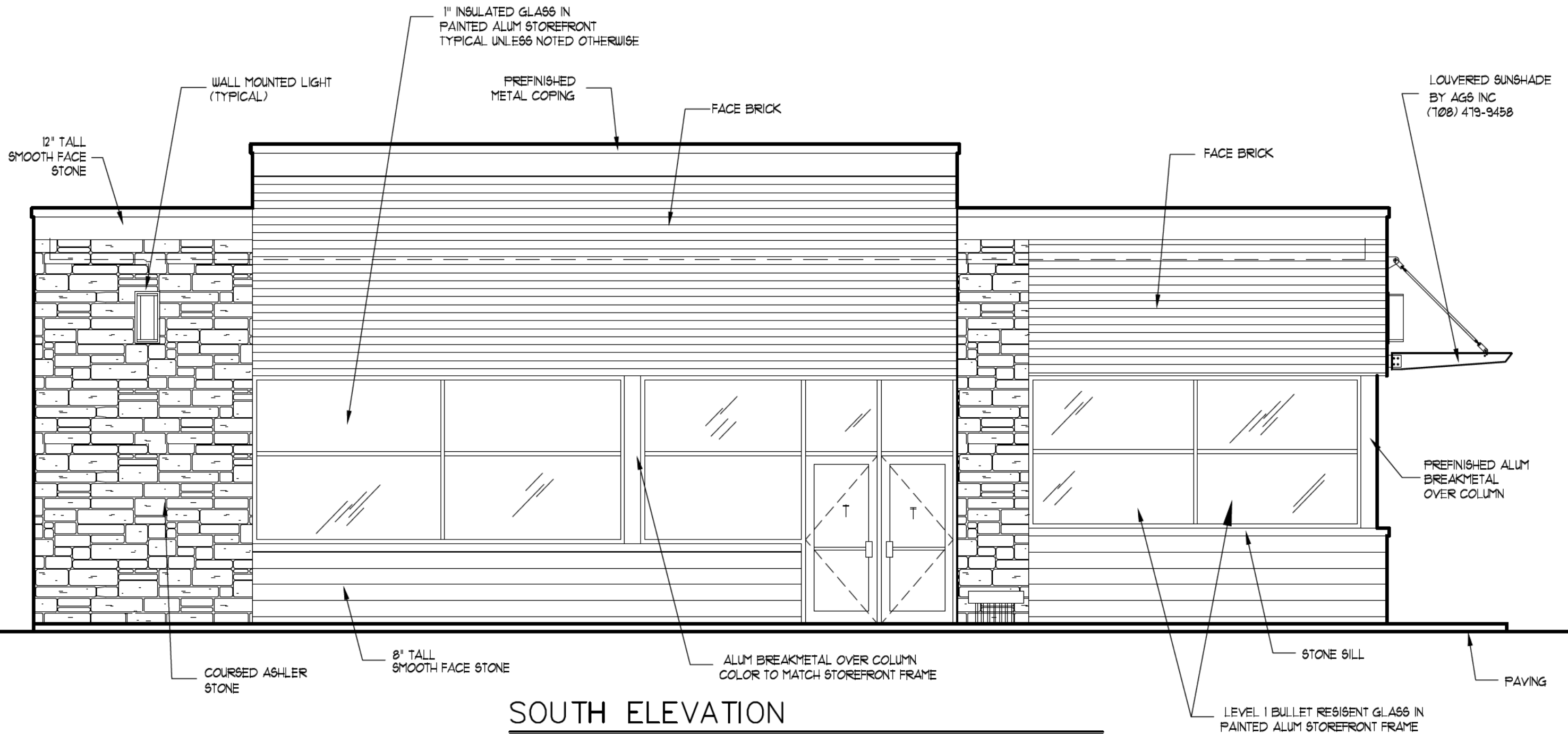
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**PROPOSED
 MINI-MART REMODEL**

6000 OAKTON ST
 MORTON GROVE, IL. 60053

REVISIONS			DATE
NO.	DATE	DESCRIPTION	
			7/25/25
			JOB # 2503Z
			SHEET Δ-4
			OF 8 SHEETS



SOUTH ELEVATION
 SCALE: 1/4" = 1'-0"

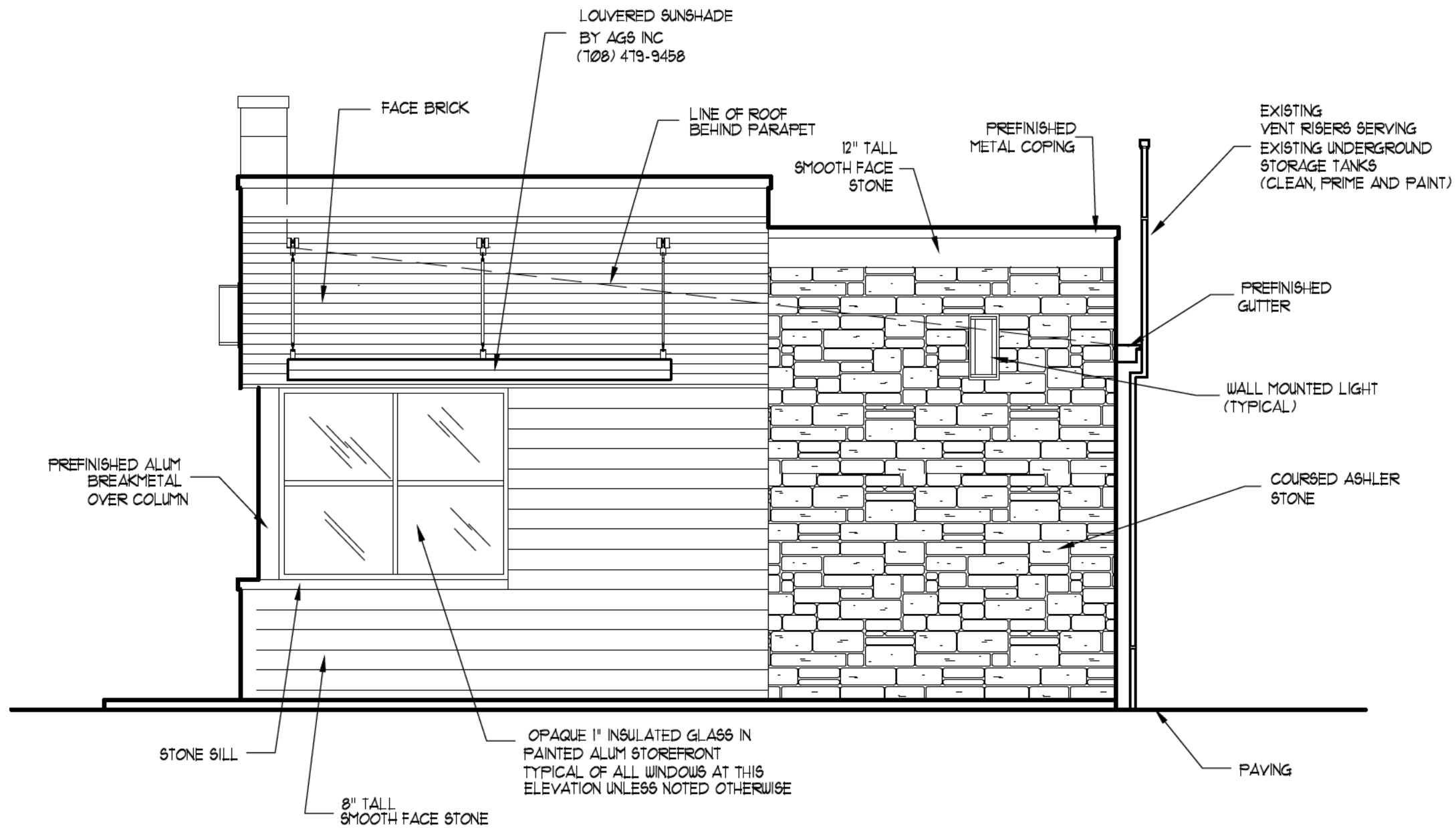
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**PROPOSED
 MINI-MART REMODEL**

6000 OAKTON ST
 MORTON GROVE, IL. 60053

REVISIONS			DATE
NO.	DATE	DESCRIPTION	
			7/25/25
			JOB # 2503Z
			SHEET A-5
			OF 8 SHEETS



EAST ELEVATION

SCALE: 1/4" = 1'-0"

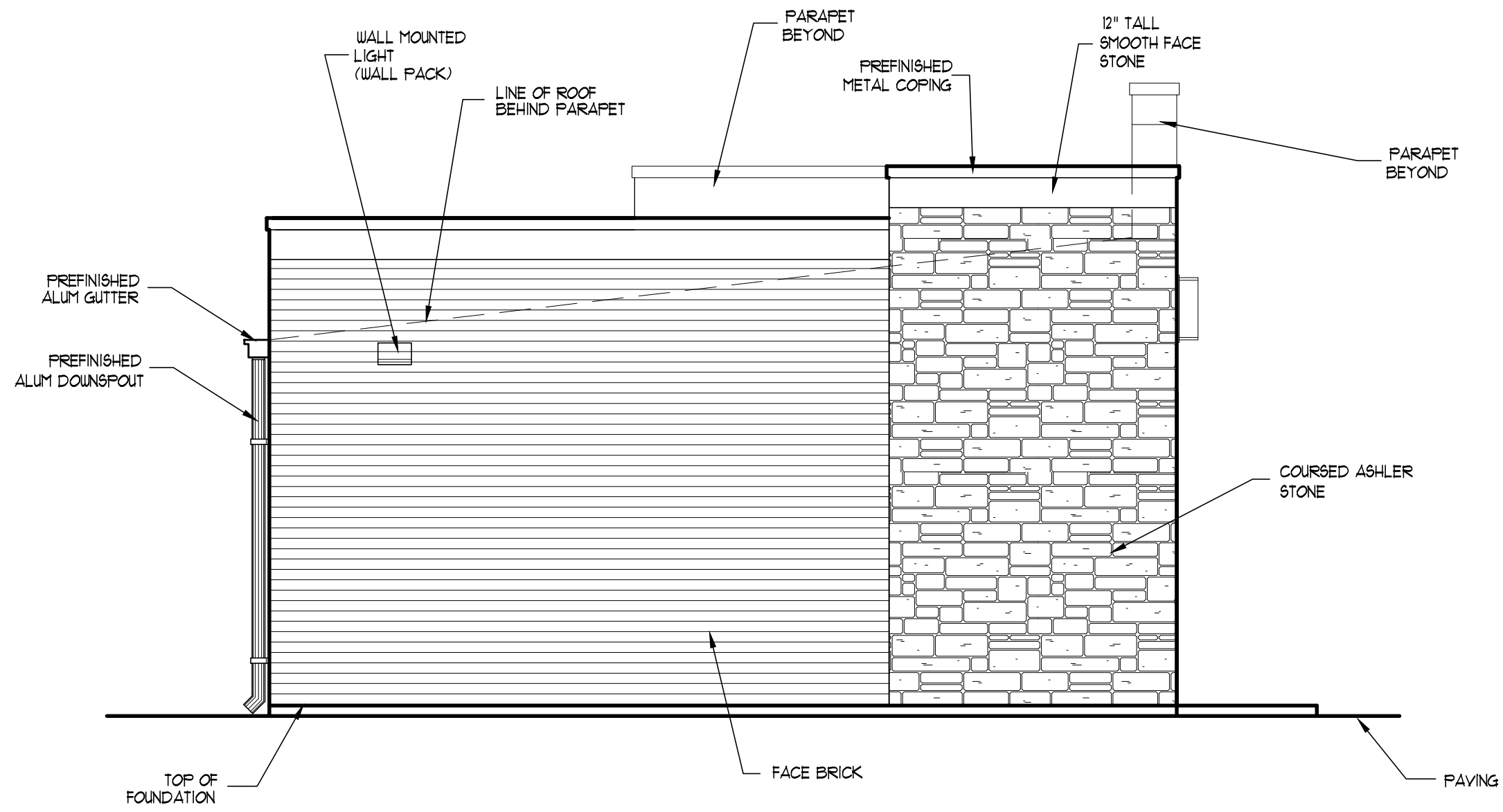
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**PROPOSED
 MINI-MART REMODEL**

6000 OAKTON ST
 MORTON GROVE, IL. 60053

REVISIONS			DATE
NO.	DATE	DESCRIPTION	
			7/25/25
			JOB # 2503Z
			SHEET Δ-6
			OF 8 SHEETS



WEST ELEVATION

SCALE: 1/4" = 1'-0"

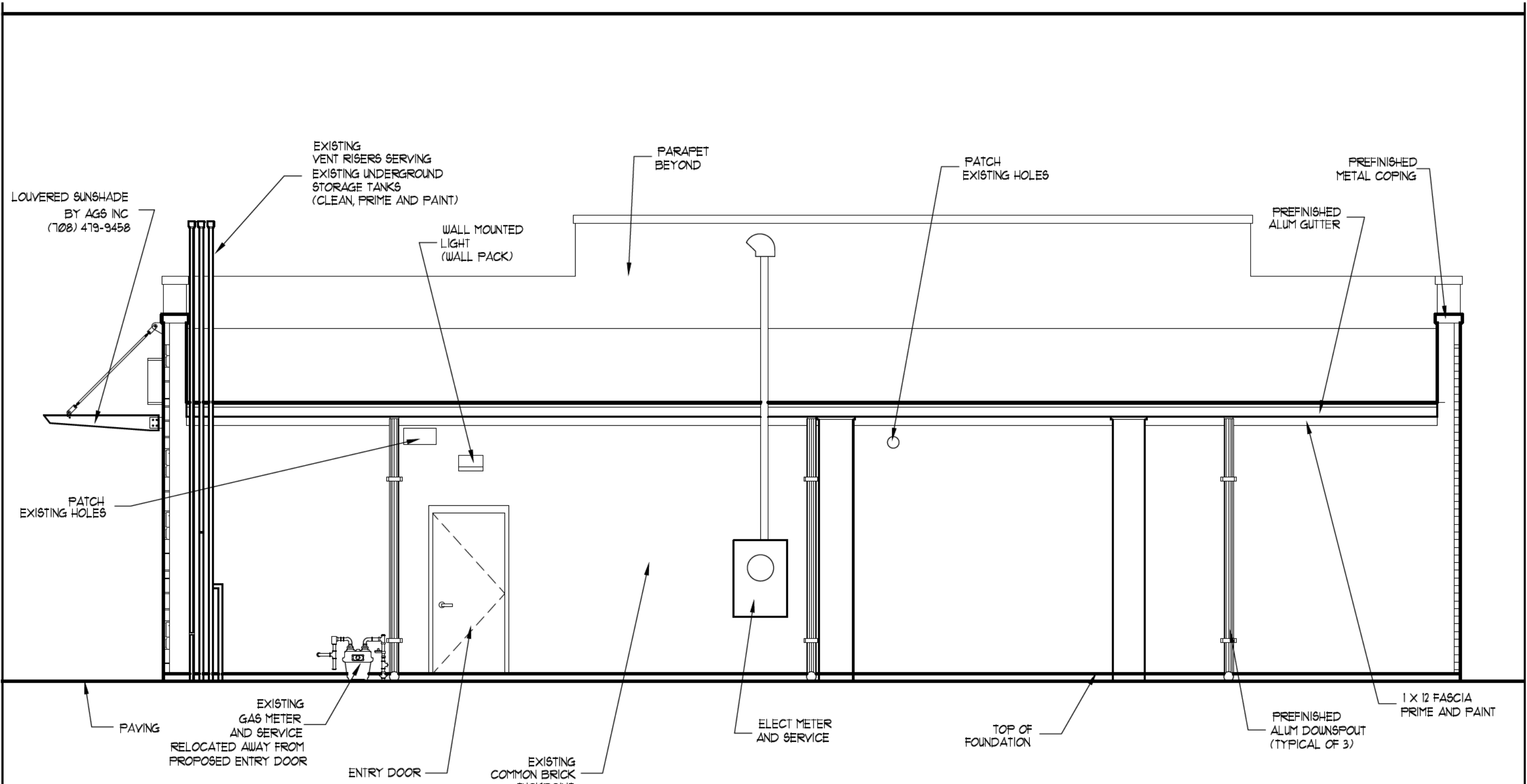
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PROPOSED
 MINI-MART REMODEL

6000 OAKTON ST
 MORTON GROVE, IL. 60053

REVISIONS			DATE
NO.	DATE	DESCRIPTION	
			1/12/26
			JOB # 2503Z
			SHEET $\Delta - 7$
			OF 8 SHEETS



NORTH ELEVATION

SCALE: 1/4" = 1'-0"

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**PROPOSED
MINI-MART REMODEL**

6000 OAKTON ST
MORTON GROVE, IL. 60053

REVISIONS			DATE
NO.	DATE	DESCRIPTION	
			7/25/25
			JOB # 2503Z
			SHEET Δ-8
			OF 8 SHEETS



SOUTH ELEVATION

SCALE: NTS



EAST ELEVATION

SCALE: NTS

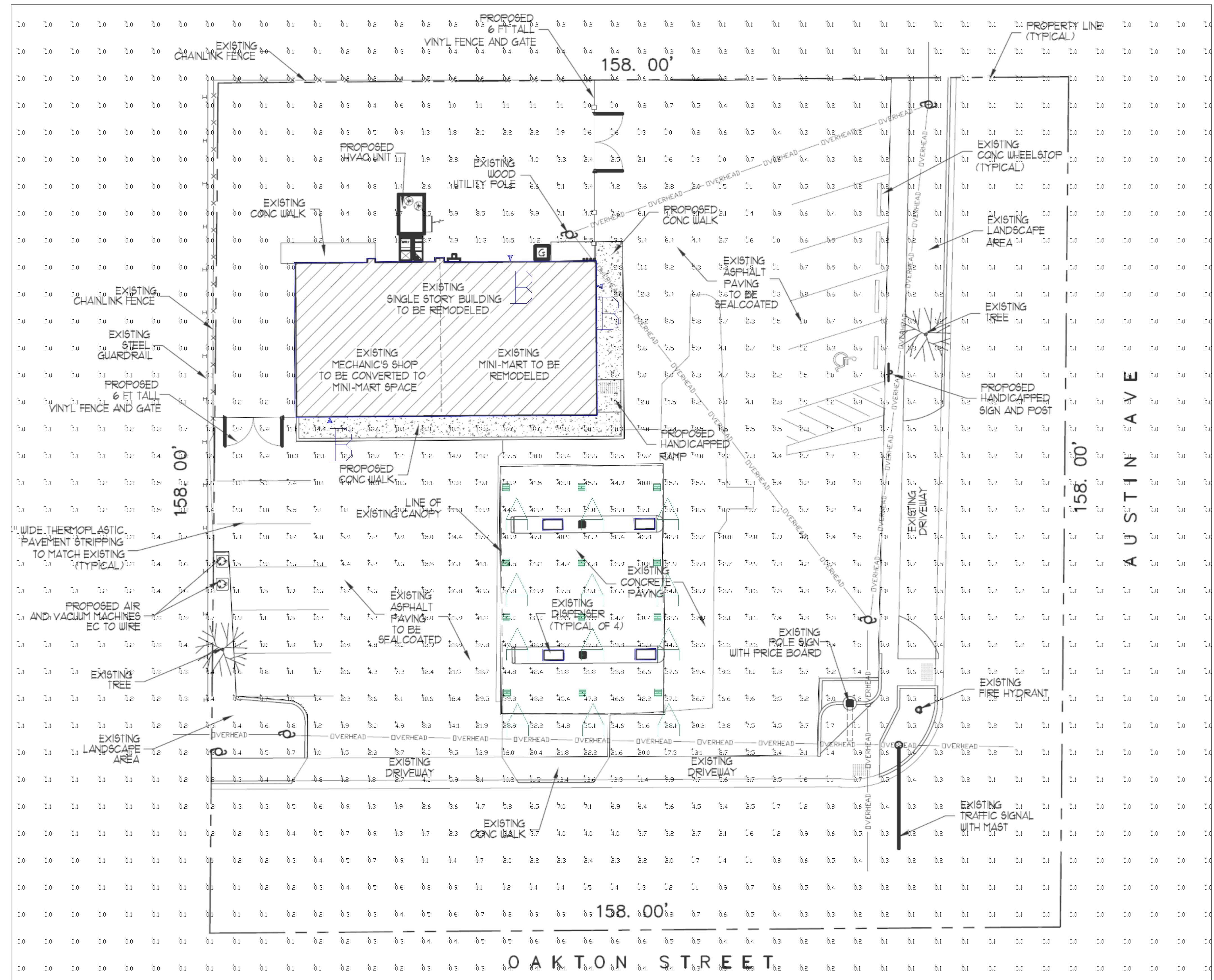
6000 E OAKTON
PROPOSED REMODEL

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Long Grove, IL. 60047



WEST ELEVATION

SCALE: NTS



**PHOTOMETRIC EVALUATION
NOT FOR CONSTRUCTION**

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with the Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted. Fixture nomenclature noted does not include mounting hardware or poles. This drawing is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

The IES no longer uses the Cutoff Classification System for LED fixtures. The IES classifies LED fixtures with the BUG rating which refers to the Backlight-Uplight-Glare system. An Uplight of '00' most closely matches the old Full Cutoff rating.

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Grid Z
ALL_CALC_POINTS_AT_GRADE	Illuminance	Fc	4.53	69.1	0.0	N.A.	0	
CANDOPY	Illuminance	Fc	51.34	69.1	31.8	1.61	2.17	0
INSIDE_CURB	Illuminance	Fc	9.30	54.1	0.1	93.00	541.00	0

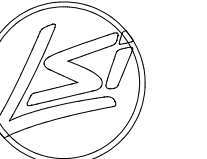
Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	Mounting Height	LLF	Arr. Lum. Lumens	Arr. Watts	BUG Rating
	12	A	Single	CRUS-SC-SS-50	15'	1.000	13980	93	B3-U0-G1
	3	B	Single	XWM-4-LED-08L-50-70CRI	10'	1.000	8579	64	B1-U0-G3

Dimensions of drawings that have been scaled or converted from PDF files or scanned /submitted images are approximate.

For quotes, please contact
WALSH, LONG & CO

Total Project Watts
Total Watts = 1308



LIGHTING PROPOSAL LO-163220

MINI-MART
6000 OAKTON ST
MORTON GROVE, IL

BY:DK DATE:9/15/25 REV: SHEET 1 OF 1

SCALE: 1"=10' ARCH D 0 10



Scottsdale® Legacy (CRUS)

LED Canopy Luminaire



OVERVIEW

Lumen Package (lm)	5,000 - 22,000
Wattage Range (W)	38 - 152
Efficacy Range (LPW)	114 - 156
Weight lbs (kg)	23 (10.4)

QUICK LINKS

[Ordering Guide](#)
[Performance](#)
[Photometrics](#)
[Dimensions](#)

FEATURES & SPECIFICATIONS

Construction

- Features a ultra-slim 11/16" profile die-cast housing, with flat clear or diffused tempered glass lens. Unit is water-resistant, sealed and IP66 rated. Integral designed heat sink does not trap dirt and grime, ensuring cool running performance over the life of the fixture.
- Standard color is white and is finished with LSI's DuraGrip® polyester powder coat process. DuraGrip withstands extreme weather changes without cracking or peeling.
- Luminaire assembly incorporates a pressure stabilizing vent breather to prevent seal fatigue and failure.

Optical System

- Features an array of select, mid-power, high brightness, high efficiency LED; 3000K, 4000K, 5000K color temperature, 80 CRI (nominal).
- Choice of Symmetric or Asymmetric distribution. Asymmetric provides a wider distribution pattern. Optional symmetric with diffused lens also available.
- Forward Throw distribution provides an industry leading unique distribution pattern that illuminates the area under the gas canopy and beyond. The forward through optic directs the light to the forecourt from the gas canopy eliminating the need for supplemental floodlights and extensive perimeter lighting.
- Diffuse lens available as an option to soften brightness of the luminaire.
- Six Lumen Packages: 5,000, 9,000, 10,000, 13,000, 18,000 and 22,000 Lumens.

Electrical

- High performance factory programmable driver features over-voltage, under voltage, short-circuit and over temperature protection with integral 6kV surge protection that meets IEEE C62.41.2 and ANSI C82.77-5 Location Category C Low standards. Additional field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2). Custom lumen and wattage packages available.
- Driver components are fully encased in potting for moisture resistance. Complies with IEC and FCC standards. 0-10 V dimming supplied standard with all drive currents.
- Die-cast aluminum, wet location rated driver/electrical enclosure is elevated above canopy deck to prevent water entry, provide easy "knock-out" connection of primary wiring and acts as the primary heatsink ensuring cool operation of internal components for longer life. Seals to optical housing via one-piece molded silicone gasket.
- Universal voltage power supply, 120-277 VAC, 50/60 HZ and 347-480 VAC, 50/60 HZ input.
- -40°C to 55°C (-40°F to 131°F) ambient operating temperature. (Varies based on lumen package and mounting style see performance data for specifics.)
- Minimum 60,000 to 100,000 hours depending upon the ambient temperature of the installation location (see performance data for specifics.)

Hazardous Location

- Designed for lighter than air fuel applications. Product is suitable for Class 1 Divisions 2 only when properly installed per LSI installation instructions. See lsicorp.com for specific guidance. Not available on SLW.

Installation

- One-person installation.
- Installs in a 12" or 16" deck pan. Deck penetration consists of a 4" hole, simplifying installation and water sealing. Unit is designed to quickly retrofit into existing Scottsdale (4") hole as well as openings for Encore and Encore Top Access and to reconnect wiring for the SC/ECTA without having to relocate the conduit.
- Retro panels are available for existing Encores as well as kits for recessed and 2x2 installations (see separate spec sheets). Support brackets are provided standard, to prevent sagging of deck.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to <https://www.lsicorp.com/resources/terms-conditions-warranty/> for more information.

Listings

- UL and ETL listed to UL 1598, UL 8750 and other U.S. and International safety standards. Suitable for wet locations.
- DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.
- Meets Buy American Act requirements.
- IDA compliant with 3000K or lower color temperature.

Scottsdale® Legacy (CRUS) LED Canopy Luminaire

Type: _____

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ORDERING GUIDE

[Back to Quick Links](#)

TYPICAL ORDER EXAMPLE: CRUS SCFT LED VHO 50 UE WHT DFL							
Prefix	Distribution	Light Source	Driver	Color Temperature	Input Voltage	Finish	Options ⁴
CRUS - LED Canopy Luminaire	SC - Symmetric AC¹ - Asymmetric <hr/> SCFT² - Combination Standard Symmetric and Forward Throw	LED	SLW - 5,000 Lumens VLW - 9,000 Lumens LW - 11,000 Lumens SS - 13,000 Lumens HO - 19,000 Lumens VHO - 22,000 Lumens ² Custom Lumen Packages³ VHO - 22,000 Lumens	30 - 3000K 40 - 4000K 50 - 5000K	UE - Universal Voltage (120 - 277V) HV - High Voltage (347 - 480V)	WHT - White BRZ - Bronze BLK - Black	HL⁵ - Hazardous Location DFL - Diffuse Lens



Need more information?
[Click here for our glossary](#)

Have additional questions?
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ACCESSORY ORDERING INFORMATION (Accessories are field installed)

Order Number	Description
525946	Retrofit Panels - EC / ECTA / SCF to CRUS, for 16" Deck Panel
530281	Retrofit Panels - ECTA / SCF to CRUS, for 12" Deck Panel
357282	Retrofit 2x2 Cover Panel Blank (no holes)

Order Number	Description
354702	Retrofit RIC Cover Panel Blank (no holes)
1320540	Kit - Hole Plugs and Silicone (enough for 25 retrofits)*

*Consists of (25) 7/8" hole plugs, (100) 5/16" hole plugs and (1) tube of RTV

1 AC distribution utilizes a reflector which alters the look from a standard SC distribution.
 2 FT distribution option only available with VHO 22,000 lumen package.
 3 Custom lumen and wattage packages available; consult factory. Values are within industry standard tolerances but not DLC listed.
 4 Not available with SCFT.
 5 Not available on SLW.

Scottsdale® Legacy (CRUS) LED Canopy Luminaire

Type: _____

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PERFORMANCE

[Back to Quick Links](#)

Delivered Lumens											
Lumen Package	Distribution	3000K CCT			4000K CCT			5000K CCT			Wattage
		Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	
VHO	SC	21,301	140	B4-U0-G2	21,835	144	B4-U0-G2	22,697	150	B4-U0-G2	152
	AC	17,355	114	B3-U0-G3	17,799	117	B3-U0-G3	18,502	122	B3-U0-G3	
	SCFT	22,192	146	B3-U0-G3	22,598	149	B3-U0-G3	23,269	153	B3-U0-G3	
HO	SC	17,889	143	B3-U0-G1	18,346	146	B3-U0-G2	19,071	152	B4-U0-G2	125
	AC	14,582	116	B3-U0-G2	14,955	119	B3-U0-G2	15,546	124	B3-U0-G2	
SS	SC	13,113	141	B3-U0-G1	13,449	144	B3-U0-G1	13,980	150	B3-U0-G1	93
	AC	11,468	123	B3-U0-G2	11,761	126	B3-U0-G2	12,226	131	B3-U0-G2	
LW	SC	10,457	144	B3-U0-G1	10,724	148	B3-U0-G1	11,148	154	B3-U0-G1	73
	AC	9,145	126	B2-U0-G2	9,379	129	B2-U0-G2	9,749	134	B2-U0-G2	
VLW	SC	8,783	146	B3-U0-G1	9,008	149	B3-U0-G1	9,364	155	B3-U0-G1	60
	AC	7,681	127	B2-U0-G1	7,878	131	B2-U0-G1	8,189	136	B2-U0-G1	
SLW	SC	5,585	146	B2-U0-G1	5,728	150	B2-U0-G1	5,954	156	B2-U0-G1	38
	AC	4,884	128	B1-U0-G1	5,009	131	B1-U0-G1	5,207	136	B1-U0-G1	

*LEDs are frequently updated therefore values are nominal.

Electrical Data (AMPS)							
Lumen Package	Wattage	120V	208V	240V	277V	347V	480V
VHO	152	1.27	0.73	0.64	0.55	0.44	0.32
HO	124	1.03	0.6	0.52	0.45	0.36	0.26
SS	92	0.77	0.44	0.38	0.33	0.27	0.19
LW	72	0.6	0.35	0.3	0.26	0.21	0.15
VLW	60	0.5	0.29	0.25	0.22	0.17	0.13
SLW	38	0.32	0.18	0.16	0.14	0.11	0.08

*Electrical data at 25C (77F). Actual wattage may differ by +/-10%.

OPERATING TEMPERATURE		
Lumen Package	Mounting	Max
VHO	Metal/Wood Canopy	45 C
HO	Metal/Wood Canopy	45 C
SS	Metal/Wood Canopy	55 C

Recommended Lumen Maintenance ¹ CRUS VHO					
Ambient Temperature °C	Initial ²	25k hr ²	50k hr ²	75k hr ³	100k hr ³
0 C	102%	97%	92%	88%	84%
10 C	102%	97%	92%	88%	84%
20 C	102%	97%	92%	88%	84%
25 C	102%	97%	92%	88%	84%
30 C	102%	97%	92%	88%	84%
40 C	101%	95%	90%	85%	80%
50 C	101%	94%	89%	83%	78%

Recommended Lumen Maintenance ¹ CRUS SS					
Ambient Temperature °C	Initial ²	25k hr ²	50k hr ²	75k hr ³	100k hr ³
0	102%	97%	92%	88%	84%
10	102%	97%	92%	88%	84%
20	102%	97%	92%	88%	84%
25	102%	97%	92%	88%	84%
30	102%	97%	92%	88%	84%
40	102%	97%	92%	88%	84%
50	101%	95%	91%	86%	82%

1 Lumen maintenance values at 25 °C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing.

2 In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED).

3 In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times NA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED).

Scottsdale® Legacy (CRUS) LED Canopy Luminaire

Type : _____

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PHOTOMETRICS

[Back to Quick Links](#)

Luminaire photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%.

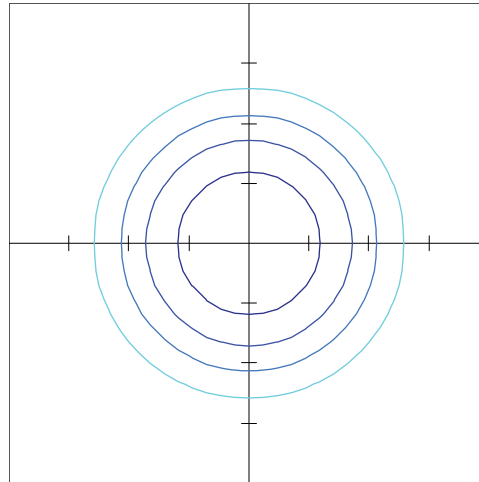
See the individual product page on <https://www.lsicorp.com/> for detailed photometric data.

CRUS-SC-SS-50

Luminaire Data	
Type 5 Distribution	
Description	5000 Kelvin, 80 CRI
Delivered Lumens	13,980
Watts	93
Efficacy	150
IES Type	Type VS - Very Short
BUG Rating	B3-U0-G1

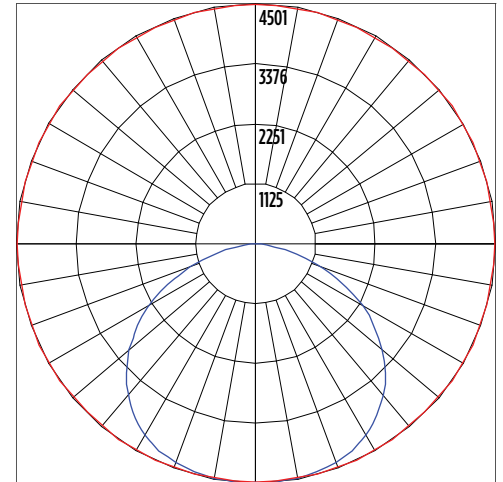
Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30°)	3,479.6	26.7%
Medium (30-60°)	7,109.8	54.5%
High (60-80°)	2,334.8	17.9%
Very High (80-90°)	114.4	0.9%
Uplight (90-180°)	0.0	0.0%
Total Flux	13,038.6	100%

ISO Footcandle



10' Mounting Height / 10' Grid Spacing
 ■ 5 FC ■ 2 FC ■ 1 FC ■ 0.5 FC

Polar Curve



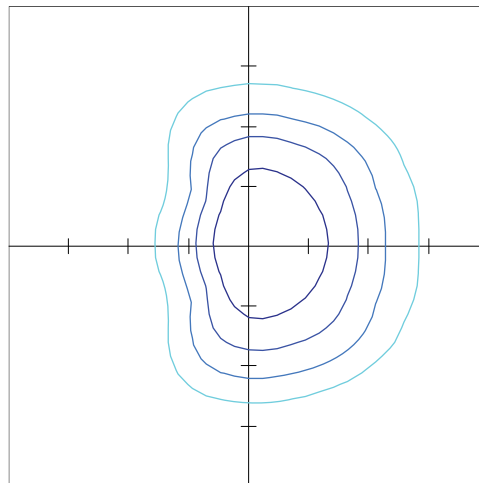
■ Vertical Plane ■ Horizontal Cone

CRUS-AC-SS-50

Luminaire Data	
Type 3 Distribution	
Description	5000 Kelvin, 80 CRI
Delivered Lumens	12,226
Watts	93
Efficacy	131
IES Type	Type III, Very Short
BUG Rating	B3-U0-G2

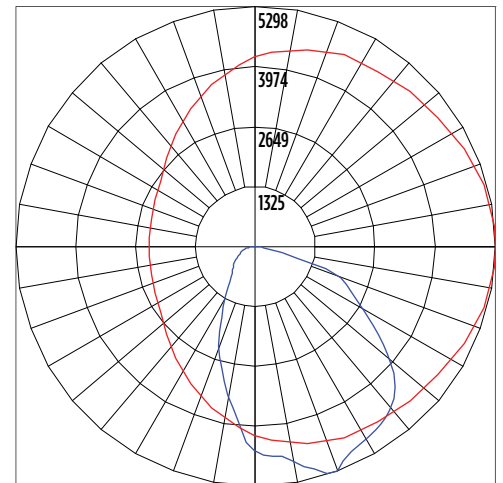
Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30°)	3,240.3	27%
Medium (30-60°)	6,245.5	51%
High (60-80°)	2,594.6	21%
Very High (80-90°)	146.1	1%
Uplight (90-180°)	0	0%
Total Flux	12,227	100%

ISO Footcandle



15' Mounting Height / 15' Grid Spacing
 ■ 5 FC ■ 2 FC ■ 1 FC ■ 0.5 FC

Polar Curve



■ Vertical Plane ■ Horizontal Cone

Scottsdale® Legacy (CRUS) LED Canopy Luminaire

Type : _____

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PHOTOMETRICS

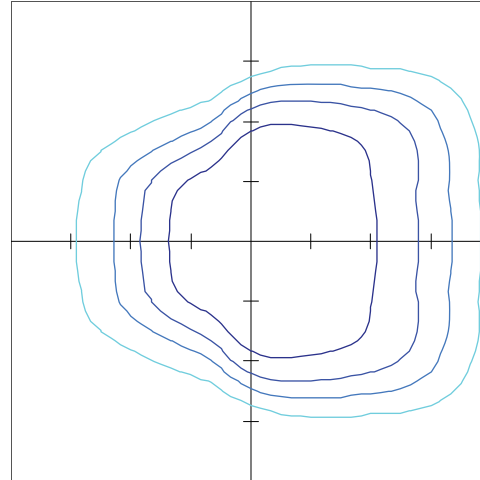
[Back to Quick Links](#)

CRUS-SCFT-SS-50

Luminaire Data	
Type 5 Distribution	
Description	5000 Kelvin, 80 CRI
Delivered Lumens	13,980
Watts	93
Efficacy	150
IES Type	Type VS - Very Short
BUG Rating	B3-U0-G3

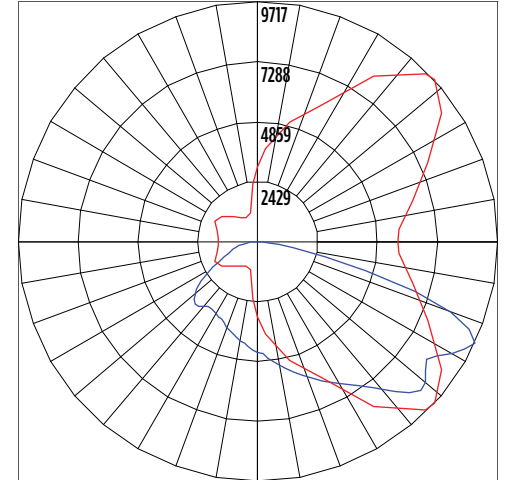
Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30°)	2,397.7	10.30%
Medium (30-60°)	8,658.8	37.20%
High (60-80°)	4,914.2	21.10%
Very High (80-90°)	225.7	1.00%
Uplight (90-180°)	0	0%
Total Flux	23,269.3	100%

ISO Footcandle



10' Mounting Height / 10' Grid Spacing
 5 FC 2 FC 1 FC 0.5 FC

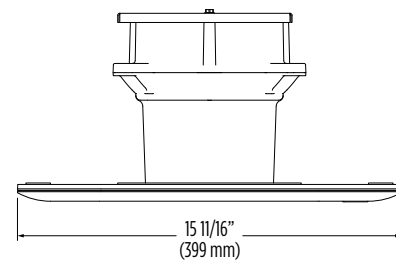
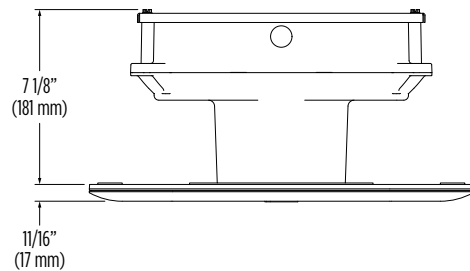
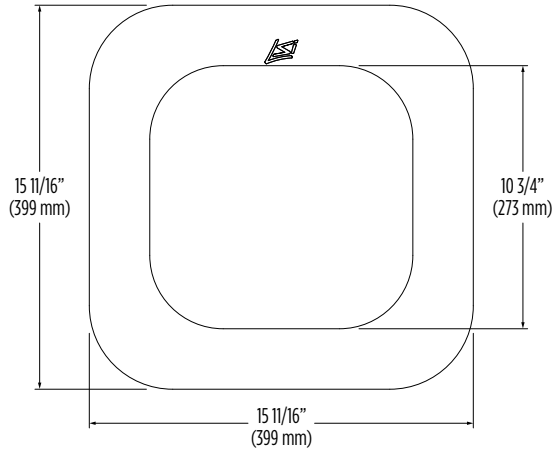
Polar Curve



Vertical Plane Horizontal Cone

PRODUCT DIMENSIONS

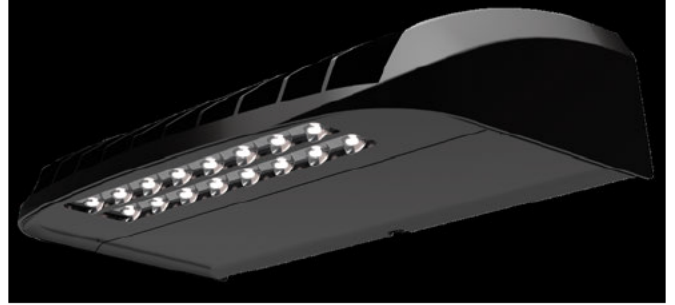
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Mirada Medium Wall Sconce (XWM)

Outdoor Wall Sconce



OVERVIEW

Lumen Package	3,000 - 21,000
Wattage Range	23 - 175
Efficacy Range (LPW)	125 - 158
Weight lbs(kg)	27 (12.2)
Control Options	IMSBT, ALB, ALS, PCI

QUICK LINKS

[Ordering Guide](#)
[Performance](#)
[Photometrics](#)
[Dimensions](#)

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Hinged die-cast aluminum wiring access door located underneath.
- Galvanized-steel universal wall mount bracket comes standard with hinging mechanism to easily access the junction box wire connections without removing the luminaire.
- Optional pole-mounting bracket (XPM) permits mounting to standard poles.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Max shipping weight: 30lbs in carton

Optical System

- State-of-the-Art one piece silicone optic provides industry leading optical control while also acting as an integrated gasket reducing system complexity and improving fixture reliability.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in Types 2, 3, 4, and FT distributions.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93-95%.
- Zero uplight.
- 5000K, 4000K, 3500K, 3000K, and 2700K color temperatures per ANSI C78.377. Also Available in Phosphor Converted Amber with Peak intensity at 610nm.
- 70 or 80CRI Minimum.

Electrical

- High-performance programmable driver features over-voltage, under-voltage, short-circuit and over temperature protection. Custom lumen and wattage packages available.

- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (347-480 Vac).
- L80 Calculated Life: >100k Hours
- Total harmonic distortion (THD): <20%
- 3L to 12L operating temperature: -40°C to +50°C (-40°F to +122°F)
- 15L operating temperature: -40°C to +45°C (-40°F to +113°F).
- 18L operating temperature: -40°C to +40°C (-40°F to +104°F).
- 21L operating temperature: -40°C to +35°C (-40°F to +95°F).
- Power factor (PF): >.90
- Input power stays constant over life.
- Optional 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation
- Components are fully encased in potting material for moisture resistance. Driver and key electronic components can easily be accessed via hinged door.
- Optional integral emergency battery pack provides 90-minutes of constant power to the LED system, ensuring code compliance. A test switch/indicator button is installed on the housing for ease of maintenance. The fixture delivers 1500 lumens during emergency mode.

Controls

- Integral passive infrared Bluetooth™ motion sensor options. Fixtures operate independently and can be commissioned via an iOS or Android configuration app. Updates and modifications to the control strategy are easily implemented via an intuitive app.

- AirLink™ Blue wireless control system with technology partner Silvalir incorporates Luminaire Level Lighting Controls (LLC) and high-end trim.

Installation

- Universal wall mounting plate easily mounts directly to 4" octagonal or square junction box.
- 2 fasteners secure the hinged door underneath the housing and provide quick & easy access to the electrical compartment for installing/servicing.
- Optional terminal block accepts up to 12 ga wire.

Warranty


- LSI luminaires carry a 5-year limited warranty. Refer to <https://www.lsicorp.com/resources/terms-conditions-warranty/> for more information.
- 1 Year warranty on Battery Back-up option.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- DarkSky Approved with 3000K or warmer color temperature selection.
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet Locations.
- IP65 rated luminaire per IEC 60598.
- 3G rated for ANSI C136.31 high vibration applications when pole mounted (using optional XPM) or wall mounted.
- IK10 rated luminaire per IEC 66262 mechanical impact code
- DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Mirada Medium Wall Sconce (XWM) Outdoor Wall Sconce

Type: _____

 Have questions? Call us at (800) 436-7800

ORDERING GUIDE

[Back to Quick Links](#)

TYPICAL ORDER EXAMPLE: XWM 2 LED 03L 30 UE BRZ ALSC				
Family	Distribution	Light Source	Lumen Package	Color Temperature
XWM - Mirada Medium Wall Sconce	2 - Type 2 3 - Type 3 4 - Type 4 FT - Type 4 Forward Throw	LED	3L - 3,000 4L - 4,000 6L - 6,000 8L - 8,000 12L - 12,000 15L - 15,000 18L - 18,000 21L - 21,000 Custom Lumen Packages ¹	50 - 5000K (70CRI) 50K8 - 5000K (80CRI) 40 - 4000K (70CRI) 40K8 - 4000K (80CRI) 35K8 - 3500K (80CRI) DarkSky Approved CCT's 30 - 3000K (70 CRI) 30K8 - 3000K (80 CRI) 27K8 - 2700K (80 CRI) AMB - Phosphor Converted Amber ²
Voltage	Finish	Controls	Options	
UE - Universal Voltage (120-277V) HV - High Voltage (347-480V)	BLK - Black BRZ - Dark Bronze GMG - Gun Metal Gray GPT - Graphite MSV - Metallic Silver PLP - Platinum Plus SVG - Satin Verde Green WHT - White	Blank - None <u>Wireless Controls</u> ALSC - AirLink Synapse Control System ALSCS01 - AirLink Synapse Control System with 8-12' Motion Sensor ALSCS02 - AirLink Synapse Control System with 12-20' Motion Sensor ALBMR1LR - AirLink Blue Wireless Motion & Photo Sensor Controller (8 - 15' mounting height) ³ ALBMR2LR - AirLink Blue Wireless Motion & Photo Sensor Controller (16 - 40' mounting height) ³ <u>Standalone Controls</u> DIM - 0-10v Dimming leads extended to housing exterior IMSBT1L - Integral Bluetooth™ Motion and Photocell Sensor (8-24' MH) ^{3,4} IMSBT2L - Integral Bluetooth™ Motion and Photocell Sensor (25-40' MH) ^{3,4} <u>Button Type Photocells</u> PC1120 - 120V PC1208-277 - 208 -277V PC1347 - 347V	Blank - None BB - Battery Back-up (0°C) ⁵ CWBB - Cold Weather Battery Backup (-20°C) ⁵ XPMA - Pole Mounting Bracket SP1 - 10kV Surge Protection TB - Terminal Block	



Need more information?
Click here for our glossary

Have additional questions?
Call us at (800) 436-7800



FUSING ACCESSORY ORDERING INFORMATION⁶

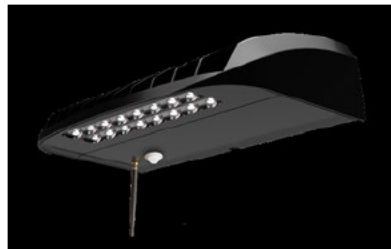
Part Number	Description
FK120 ⁷	FK120 - Single Fusing
FK277 ⁷	FK277 - Single Fusing
FK347 ⁷	FK347 - Single Fusing
DFK208 ⁷	DFK - Double Fusing
DFK240 ⁷	DFK - Double Fusing (240V)
DFK480 ⁷	DFK - Double Fusing (480V)

MOUNTING ACCESSORY ORDERING INFORMATION⁶

Part Number ⁸	Description
809374CLR	XWM Wet Location Surface Conduit/Wiring Box
751632	10' Linear Bird Spike Kit (2' Recommended per Luminaire)

CONTROLS ACCESSORY ORDERING INFORMATION

Part Number	Description
734263	Adjustable Output Module



1 Custom lumen and wattage packages available consult factory. Values are within industry standard tolerances but not DLC listed.
2 Only available in 6L Lumen Package. Consult factory for lead time and availability.
3 IMSBT and ALBMRxLR control options are not available in 3L or 4L lumen packages when high voltage (HV) is specified.
4 IMSBTxL is field configurable via the Leviton app that can be downloaded from your smartphone's app store.

5 Not available in HV.
6 Accessories are shipped separately and field installed.
7 Fusing must be located in a hand hole for pole or in the junction box.
8 "CLR" to be replaced by paint finish selection. See Finish options for paint color selections.

Mirada Medium Wall Sconce (XWM) Outdoor Wall Sconce

Type: _____

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PERFORMANCE

[Back to Quick Links](#)

Delivered Lumens ¹												
Lumen Package	Distribution	CRI	3000K			4000K			5000K			Wattage
			Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	
3L	2	70	3,178	138	B1-U0-G1	3,368	146	B1-U0-G1	9,853	159	B1-U0-G1	23
	3		3,224	140	B1-U0-G1	3,416	148	B1-U0-G1	3,361	145	B1-U0-G1	
	4		3,210	140	B1-U0-G2	3,364	146	B1-U0-G2	3,294	143	B1-U0-G2	
	FT		3,160	137	B1-U0-G1	3,349	145	B1-U0-G1	3,294	143	B1-U0-G1	
4L	2	70	4,230	139	B1-U0-G1	4,483	147	B1-U0-G1	4,410	145	B1-U0-G1	30
	3		4,291	141	B1-U0-G1	4,547	150	B1-U0-G1	4,473	147	B1-U0-G1	
	4		4,234	141	B1-U0-G2	4,437	148	B1-U0-G2	4,344	145	B1-U0-G2	
	FT		4,206	138	B1-U0-G1	4,458	147	B1-U0-G1	4,385	144	B1-U0-G1	
6L	2	70	6,326	134	B2-U0-G1	6,704	142	B2-U0-G2	6,595	140	B2-U0-G2	47
	3		6,417	136	B1-U0-G2	6,800	144	B2-U0-G2	6,689	142	B2-U0-G2	
	4		6,336	135	B1-U0-G3	6,640	141	B1-U0-G3	6,500	138	B1-U0-G3	
	FT		6,290	134	B2-U0-G2	6,666	142	B2-U0-G2	6,557	139	B2-U0-G2	
8L	2	70	8,166	128	B2-U0-G2	8,654	135	B2-U0-G2	8,513	133	B2-U0-G2	64
	3		8,283	129	B2-U0-G2	8,778	137	B2-U0-G2	8,635	134	B2-U0-G2	
	4		8,362	131	B1-U0-G3	8,763	137	B2-U0-G3	8,579	134	B1-U0-G3	
	FT		8,120	126	B2-U0-G2	8,605	134	B2-U0-G2	8,465	132	B2-U0-G2	
12L	2	70	11,492	149	B2-U0-G2	12,033	156	B3-U0-G2	11,927	155	B3-U0-G2	77
	3		11,757	153	B2-U0-G2	12,311	160	B2-U0-G2	12,203	158	B2-U0-G2	
	4		11,486	149	B2-U0-G3	12,058	157	B2-U0-G3	11,716	152	B2-U0-G3	
	FT		11,721	152	B2-U0-G2	12,274	159	B2-U0-G3	12,166	158	B2-U0-G3	
15L	2	70	14,221	145	B3-U0-G2	14,891	152	B3-U0-G2	14,760	151	B3-U0-G2	98
	3		14,549	148	B2-U0-G2	15,235	155	B2-U0-G2	15,101	154	B2-U0-G2	
	4		14,099	144	B2-U0-G3	14,801	151	B2-U0-G3	14,382	147	B2-U0-G3	
	FT		14,505	148	B2-U0-G3	15,189	155	B2-U0-G3	15,055	154	B2-U0-G3	
18L	2	70	16,894	138	B3-U0-G3	17,690	145	B3-U0-G3	17,534	144	B3-U0-G3	122
	3		17,285	142	B3-U0-G3	18,099	148	B3-U0-G3	17,940	147	B3-U0-G3	
	4		16,951	139	B2-U0-G3	17,795	146	B3-U0-G3	17,291	142	B3-U0-G3	
	FT		17,231	141	B3-U0-G3	18,044	148	B3-U0-G3	17,885	147	B3-U0-G3	
21L	2	70	19,961	133	B3-U0-G3	20,902	139	B3-U0-G3	20,718	138	B3-U0-G3	150
	3		20,422	136	B3-U0-G3	21,385	143	B3-U0-G3	21,197	141	B3-U0-G3	
	4		19,768	132	B3-U0-G4	20,753	138	B3-U0-G5	20,165	134	B3-U0-G4	
	FT		20,360	136	B3-U0-G3	21,320	142	B3-U0-G3	21,132	141	B3-U0-G3	

LUMEN SCALING FACTOR		
70CRI - 80CRI	3000K 70CRI - 3500K 80CRI	3000K 70CRI - 2700K 80CRI
0.93	1.00	0.86

Electrical Data (Amps) - 2700K/3000K/3500K/4000K/5000K ²						
Lumen Package	120V	208V	240V	277V	347V	480V
3L	0.19	0.11	0.10	0.08	0.07	0.05
4L	0.25	0.14	0.13	0.11	0.09	0.06
6L	0.39	0.23	0.20	0.17	0.14	0.10
9L	0.53	0.31	0.27	0.23	0.18	0.13
12L	0.64	0.37	0.32	0.28	0.22	0.16
15L	0.82	0.47	0.41	0.35	0.28	0.20
18L	1.02	0.59	0.51	0.44	0.35	0.25
21L	1.25	0.72	0.63	0.54	0.43	0.31

Delivered Lumens (Phosphor Converted Amber)					
Lumen Package	Distribution	Amber			Wattage
		Delivered Lumens	Efficacy	BUG Rating	
6L	2	3,325	76	B1-U0-G1	44
	3	3,385	78	B1-U0-G1	
	4	3,310	75	B1-U0-G1	
	FT	3,343	77	B1-U0-G1	

Recommended Lumen Maintenance - XWM ³					
Ambient Temperature °C	Initial ⁴	25K hrs. ⁴	50K hrs. ⁴	75K hrs. ⁵	100K hrs. ⁵
35	99%	97%	95%	93%	91%
50	100%	98%	95%	93%	90%

- LEDs are frequently updated therefore values are nominal
- Electrical data at 25C (77F). Actual wattage may differ by +/-10%.
- Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing.
- In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).
- In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).

Mirada Medium Wall Sconce (XWM) Outdoor Wall Sconce

Type : _____

 Have questions? Call us at (800) 436-7800

PHOTOMETRICS

[Back to Quick Links](#)

Luminaire photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%.

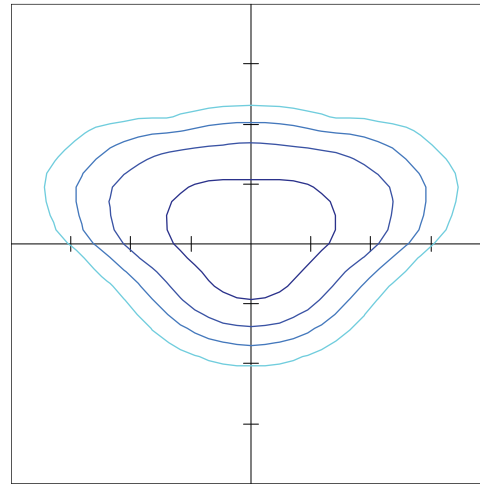
See the individual product page on <https://www.lsicorp.com/> for detailed photometric data.

XWM-2-LED-12L-40

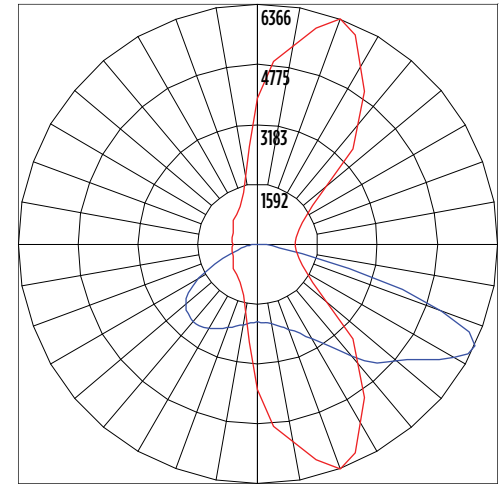
Luminaire Data	
Type 2 Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	12,033
Watts	77
Efficacy	156
IES Type	Type II - Short
BUG Rating	B3-U0-G2

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30°)	1,961	16%
Medium (30-60°)	6,874	57%
High (60-80°)	3,014	25%
Very High (80-90°)	184	2%
Uplight (90-180°)	0	0%
Total Flux	12,033	100%

ISO Footcandle



Polar Curve

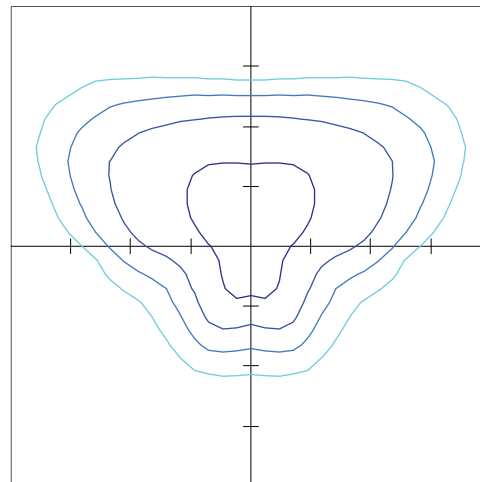


XWM-3-LED-12L-40

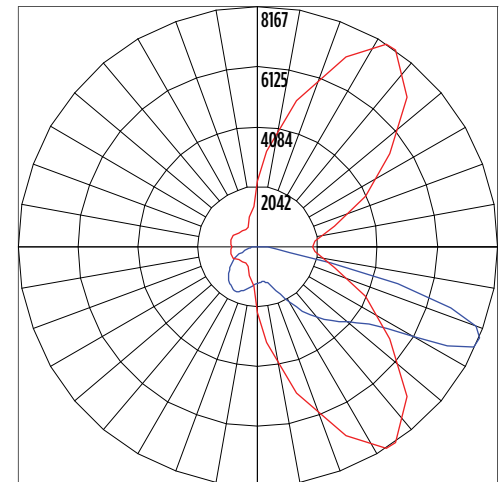
Luminaire Data	
Type 3 Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	12,311
Watts	77
Efficacy	160
IES Type	Type III - Short
BUG Rating	B2-U0-G2

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30°)	1,340	11%
Medium (30-60°)	6,164	50%
High (60-80°)	4,549	37%
Very High (80-90°)	258	2%
Uplight (90-180°)	0	0%
Total Flux	12,311	100%

ISO Footcandle



Polar Curve



Mirada Medium Wall Sconce (XWM) Outdoor Wall Sconce

Type : _____

 Have questions? Call us at (800) 436-7800

PHOTOMETRICS

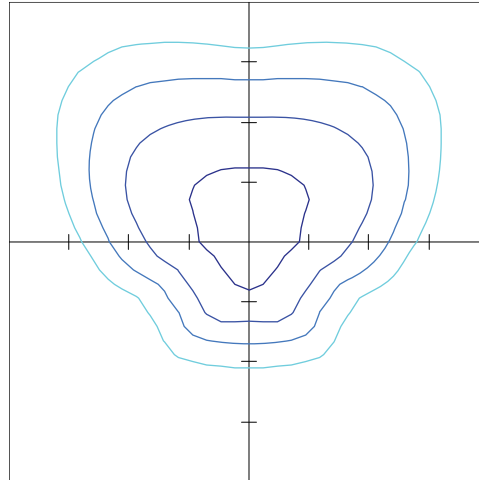
[Back to Quick Links](#)

XWM-FT-LED-12L-40

Luminaire Data	
Type FT Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	12,274
Watts	77
Efficacy	159
IES Type	Type IV - Short
BUG Rating	B2-U0-G3

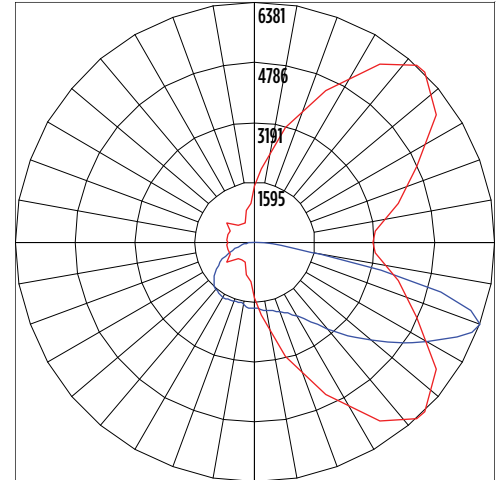
Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30°)	1,578	13%
Medium (30-60°)	5,798	47%
High (60-80°)	4,576	37%
Very High (80-90°)	322	3%
Uplight (90-180°)	0	0%
Total Flux	12,274	100%

ISO Footcandle



15' Mounting Height / 15' Grid Spacing
 5 FC 2 FC 1 FC 0.5 FC

Polar Curve



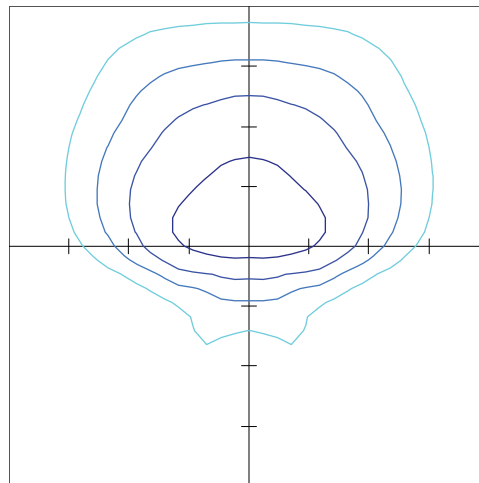
Vertical Plane Horizontal Cone

XWM-4-LED-12L-40

Luminaire Data	
Type 4 Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	12,058
Watts	77
Efficacy	157
IES Type	Type IV - Very Short
BUG Rating	B2-U0-G3

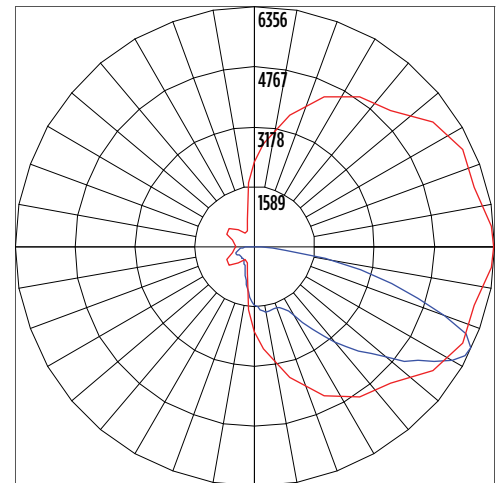
Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30°)	1,345	11%
Medium (30-60°)	5,394	45%
High (60-80°)	4,855	40%
Very High (80-90°)	464	4%
Uplight (90-180°)	0	0%
Total Flux	12,058	100%

ISO Footcandle



15' Mounting Height / 15' Grid Spacing
 5 FC 2 FC 1 FC 0.5 FC

Polar Curve



Vertical Plane Horizontal Cone

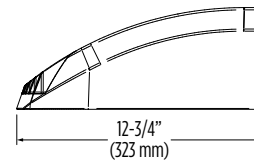
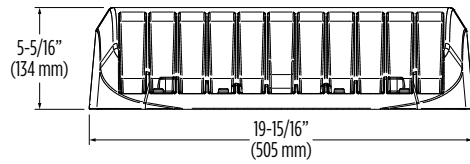
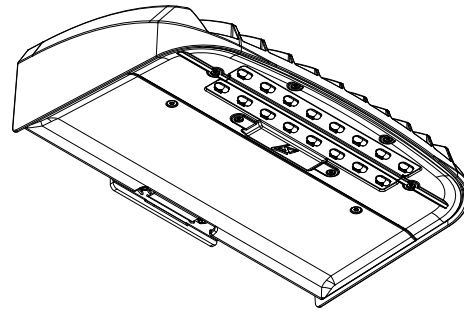
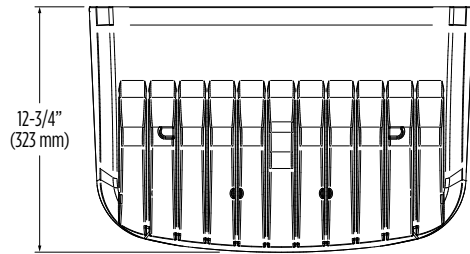
Mirada Medium Wall Sconce (XWM) Outdoor Wall Sconce

Type : _____

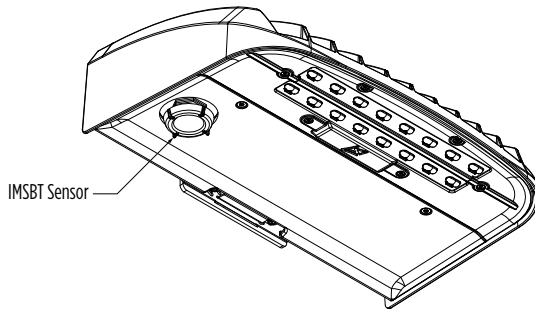
 **Have questions?** Call us at (800) 436-7800

PRODUCT DIMENSIONS

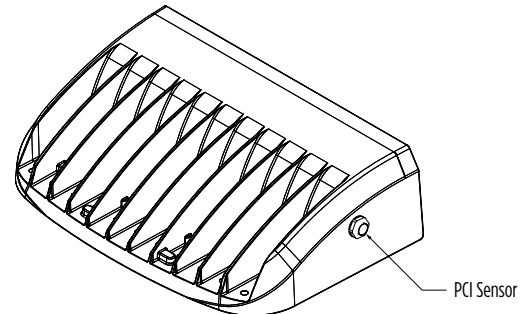
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**Mirada Medium Wall Sconce with
Integral Bluetooth™ Motion and Photocell Sensor**
(XWM IMSBTxL)

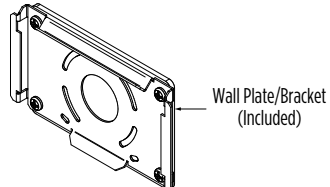
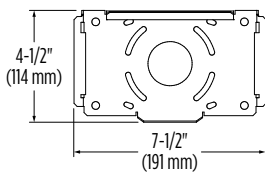


**Mirada Medium Wall Sconce with
Button Type Photocell**
(XWM PCI)

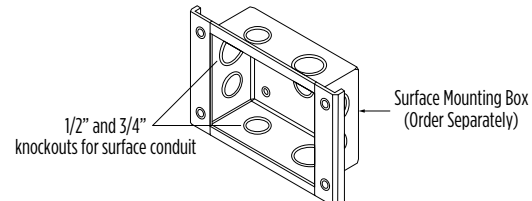


Mounting Options

Mounting Over Junction Box
(Standard/Included)



XWM Wet Location Surface Conduit/Wiring Box
(809374CLR)



Mirada Medium Wall Sconce (XWM) Outdoor Wall Sconce

Type : _____

 **Have questions?** Call us at (800) 436-7800

CONTROLS

[Back to Quick Links](#)

Integral Bluetooth™ Motion and Photocell Sensor (IMSBTxL)

Slim low profile sensor provides multi-level control based on motion and/or daylight. Sensor controls 0-10 VDC LED drivers and is IP66 rated for cold and wet locations (-40°F to 167°F). Two unique PIR lenses are available and used based on fixture mounting height. All control parameters are adjustable via an iOS or Android App capable of storing and transmitting sensor profiles.

[Click here to learn more details about IMSBT](#)



LEVITON App



Apple



Android

AirLink Wireless Lighting Controller (ALSC, ALSCS)

The AirLink integrated controller is a California Title 24 compliant lighting controller that provides real-time light monitoring and control with utility-grade power monitoring. It includes a 24V sensor input and power supply to connect a sensor into the outdoor AirLink wireless lighting system. The wireless integrated controller is compatible with this fixture.

[Click here to learn more details about AirLink](#)

AirLink Blue (ALBMRxLR)

Wireless Bluetooth Mesh Lighting Control System that incorporates Luminaire Level Lighting Controls (LLLC) and high-end trim to provide energy savings code compliance and enhanced safety/security for parking lots and parking garages. Three key components; Bluetooth wireless radio/sensor controller, Time Keeper and an iOS App with technology partner Silvair. Capable of grouping multiple fixtures and sensors as well as scheduling time-based events by zone. Radio/Sensor Controller is factory integrated into Area/Site, Wall Mounted, Parking Garage and Canopy luminaires.

[Click here to learn more details about AirLink Blue](#)



AirLink Blue App



Apple

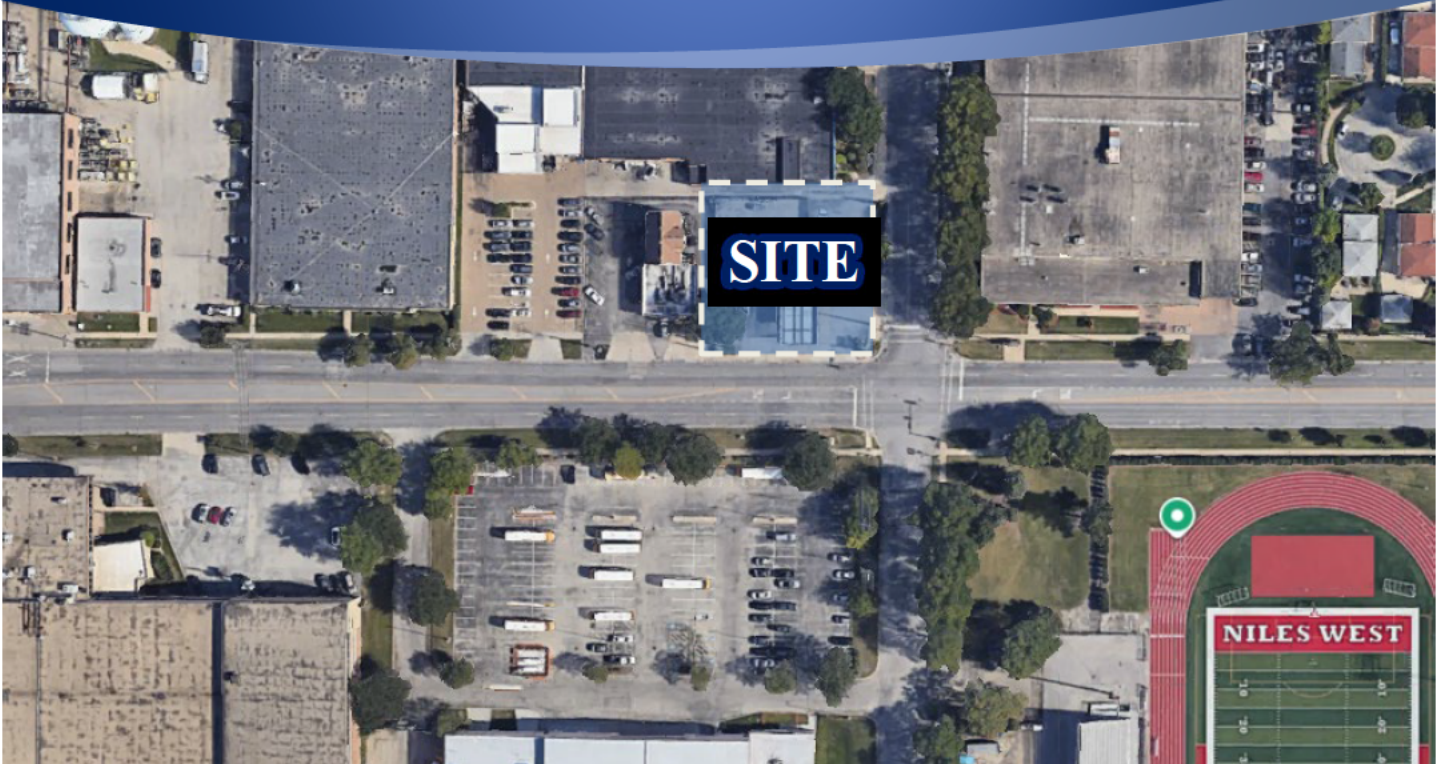
Sensor Sequence of Operations

Standard Programming	On Event	Off Event	On Light Level	Dim Light Level	Daylight Harvesting	Delay To Off	Sensitivity
IMSBTxL	Motion	No Motion	100%	N/A	On; Auto Calibration	20 minutes	High

Operation	Description
On Event	Trigger that activates lights to turn on; either automatic via motion detected or manually activated via push of button.
Off Event	Trigger that activates lights to turn off; either automatic via no motion detected or manually activated via push of button.
On Light Level	The light level that the fixtures will turn on to when ON EVENT occurs.
Dim Light Level	The light level that the fixtures will dim down to when no motion is detected.
Delay to Dim	The amount of time after which no motion is detected that the fixtures will be triggered to dim down. This sequence is optional, and sensor can be programmed to only trigger the fixture to turn off by entering 100% in this field.
Delay to Off	The amount of time after which no motion is detected that the fixtures will be triggered to turn off. If delay to dim is part of the programmed functionality, this is the amount of time after which no motion is detected after the fixture have already dimmed down.
Sensitivity	The sensitivity can be set to high, medium, low, or auto where applicable. High will detect smaller, simple motions. Low will only detect larger more complex motions. Auto temperature calibration adjusts the PIR sensitivity as ambient temperature rises to increase detection of heat movement through the field of view.

Traffic Impact Study Proposed Fuel Center Remodel/Expansion

Morton Grove, Illinois



Prepared For:



November 13, 2025

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 the proposed remodel/expansion of Mini-Mart within the existing fuel center located at 6000 Oakton Street in Morton Grove, Illinois. The plans call for remodeling the existing mini-mart and converting the existing mechanic's shop to be part of the expanded mini-mart. The existing fuel center will continue to have eight fueling positions.

Access to the fuel center will continue to be provided off Oakton Street and Austin Avenue.

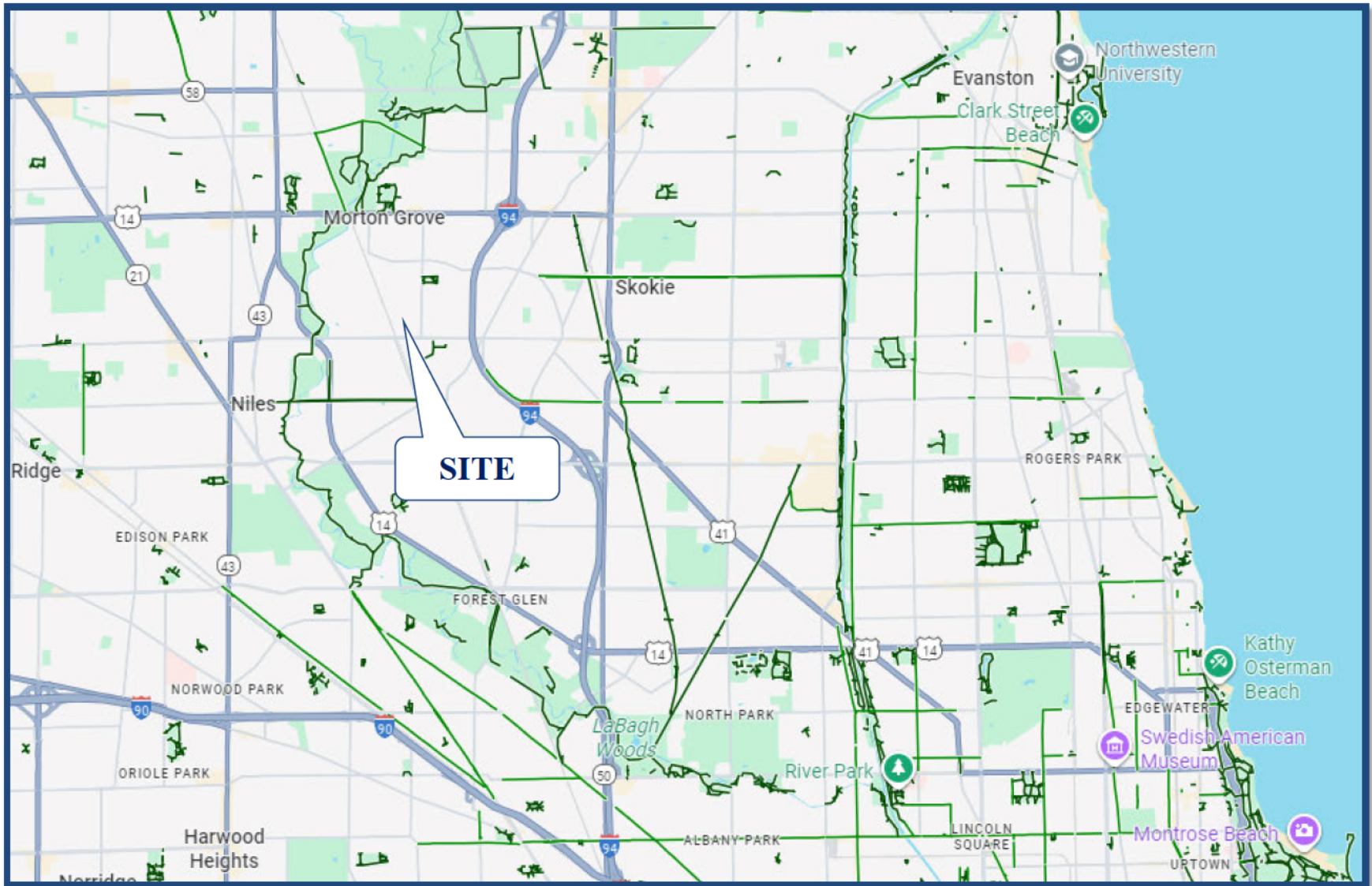
The purpose of this study was to examine background traffic conditions, assess the impact that the proposed fuel center will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate the traffic generated by the proposed expansion.

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 fuel center
- Directional distribution of the fuel center traffic
- Vehicle trip generation for the fuel center
- Future traffic conditions including access to the fuel center
- Traffic analyses for the weekday morning and weekday evening peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system
- Parking evaluation

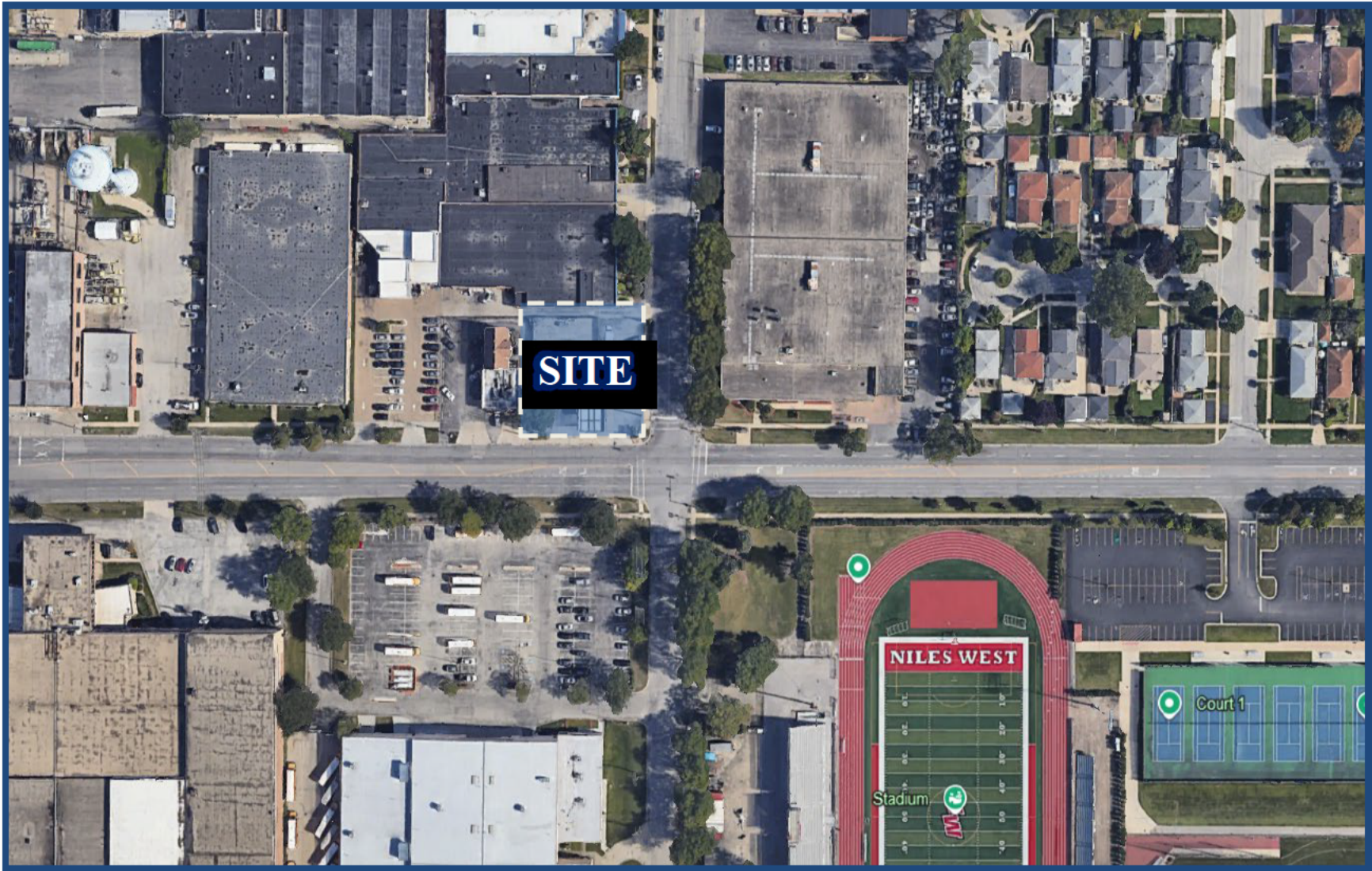
Traffic capacity analyses were conducted for the weekday morning and weekday evening peak hours for the following conditions:

1. Existing Conditions – Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.
2. Year 2031 No-Build Conditions – Analyzes the capacity of the existing roadway system using peak hour traffic volumes adjusted to represent the background growth of the area.
3. Year 2031 Total Projected Conditions – Analyzes the capacity of the future roadway system using the projected traffic volumes that include the existing traffic volumes, ambient traffic growth over a six-year period, and the traffic estimated to be generated by the full buildout of the proposed fuel center.



Site Location

Figure 1



Aerial View of Site

Figure 2

2. Existing Conditions

Existing transportation conditions in the vicinity of the site were documented based on field visits conducted by KLOA, Inc. in order to obtain a database for projecting future conditions. The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices, and existing peak hour traffic volumes.

Site Location

The site, which is currently occupied by a Mobil fuel center, is located at 6000 Oakton Street in Morton Grove, Illinois. Land uses in the vicinity of the site are primarily industrial with commercial uses along Oakton Street, a residential development to the east and Niles West High School and athletic fields in the southeast quadrant of the intersection of Oakton Street with Austin Avenue. Commercial uses include Volton Electric Bicycle Company and Crash Champions Collision Repair.

Existing Roadway System Characteristics

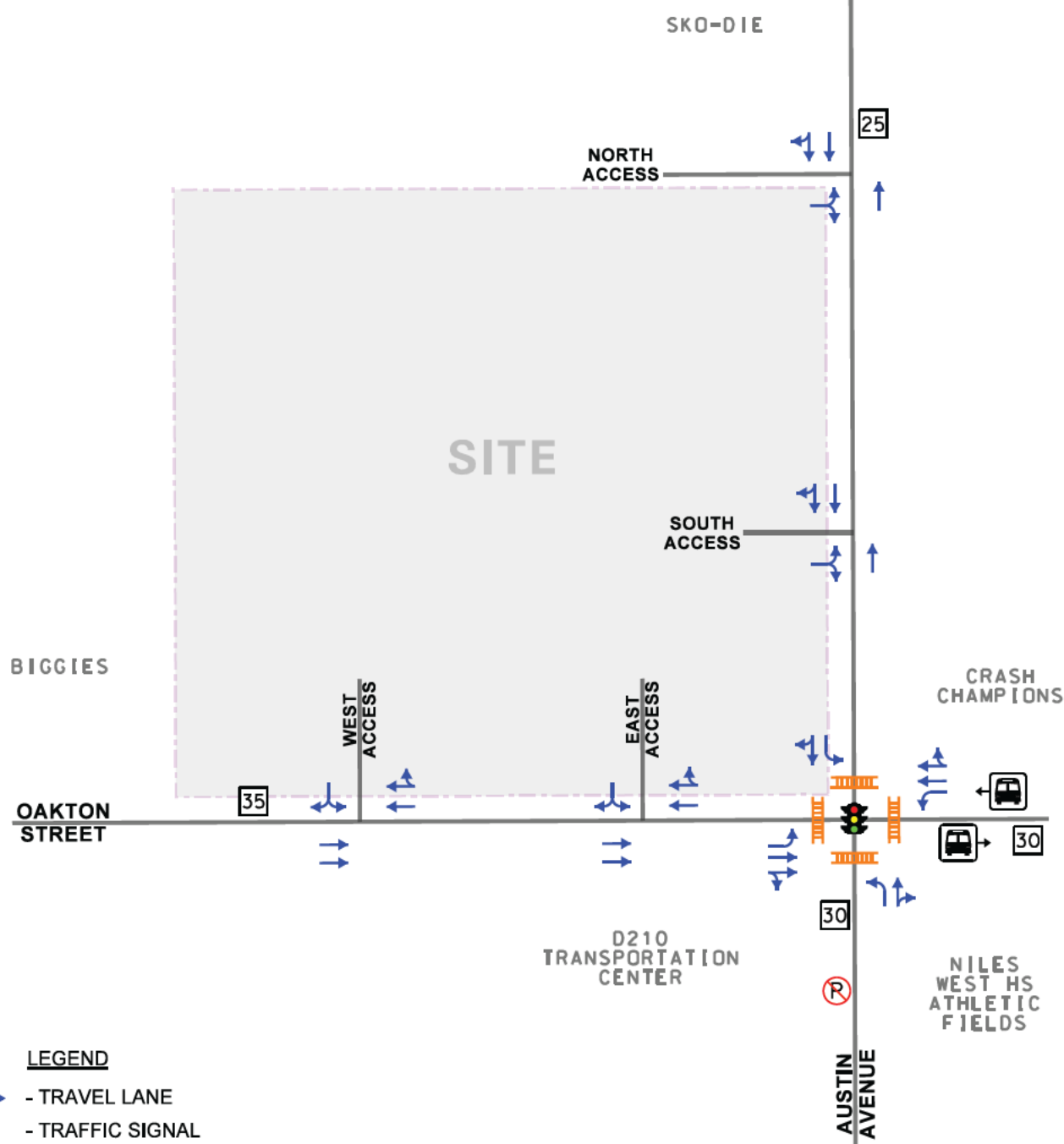
The characteristics of the existing roadways near the fuel center are described below and illustrated in **Figure 3**.

Oakton Street is an east-west minor arterial roadway that in the vicinity of the site provides two travel lanes in each direction. At its signalized intersection with Austin Avenue, Oakton Street provides an exclusive left-turn lane, a through lane, and a shared through/right-turn lane on the eastbound and westbound approaches. High-visibility crosswalks are provided on both approaches. At its unsignalized intersections with the Mobil access drives, Oakton Street provides two through lanes on the eastbound approach and a through lane and a shared through/right-turn lane on the westbound approach. Left-turn movements can be accommodated within the storage and taper of the eastbound left-turn lane serving the intersection with Austin Avenue. Oakton Street is under the jurisdiction of the Illinois Department of Transportation (IDOT), carries an annual average daily traffic (AADT) of 21,400 vehicles (IDOT 2023), and has a posted speed limit of 35 miles per hour.

Austin Avenue is a north-south major collector roadway north of Oakton Street and local roadway south of Oakton Street that provides one travel lane in each direction. At its signalized intersection with Oakton Street, Austin Avenue provides an exclusive left-turn lane and a shared through/right-turn lane on the southbound approaches. High-visibility crosswalks are provided on both approaches. At its unsignalized intersections with the Mobil access drives, Austin Avenue provides a through lane on the northbound approach and a shared through/right-turn lane on the southbound approach. Austin Avenue is under the jurisdiction of the Village of Morton Grove, carries an AADT of 5,000 vehicles north of Oakton Street (IDOT 2022), and has a posted speed limit of 25 miles per hour north of Oakton Street and 30 miles per hour south of Oakton Street.



NOT TO SCALE



LEGEND

- TRAVEL LANE
- TRAFFIC SIGNAL
- SPEED LIMIT SIGN
- NO PARKING
- BUS STOP WITH SHELTER
- HIGH VISIBILITY CROSSWALK

6000 Oakton Street
Morton Grove, Illinois

Existing Roadway Characteristics

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

Job No: 25-304 Figure: 3

Traffic Signal Interconnect

The intersection of Oakton Street with Austin Avenue is part of a five-signal traffic signal interconnect system that spans approximately 5,000 feet from River Drive to Gross Point Road and Central Avenue.

Existing Traffic Volumes

To determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period traffic counts on Tuesday, October 28, 2025, during the weekday morning (7:00 to 9:00 A.M.) and evening (4:00 to 6:00 P.M.) peak periods at the following intersections:

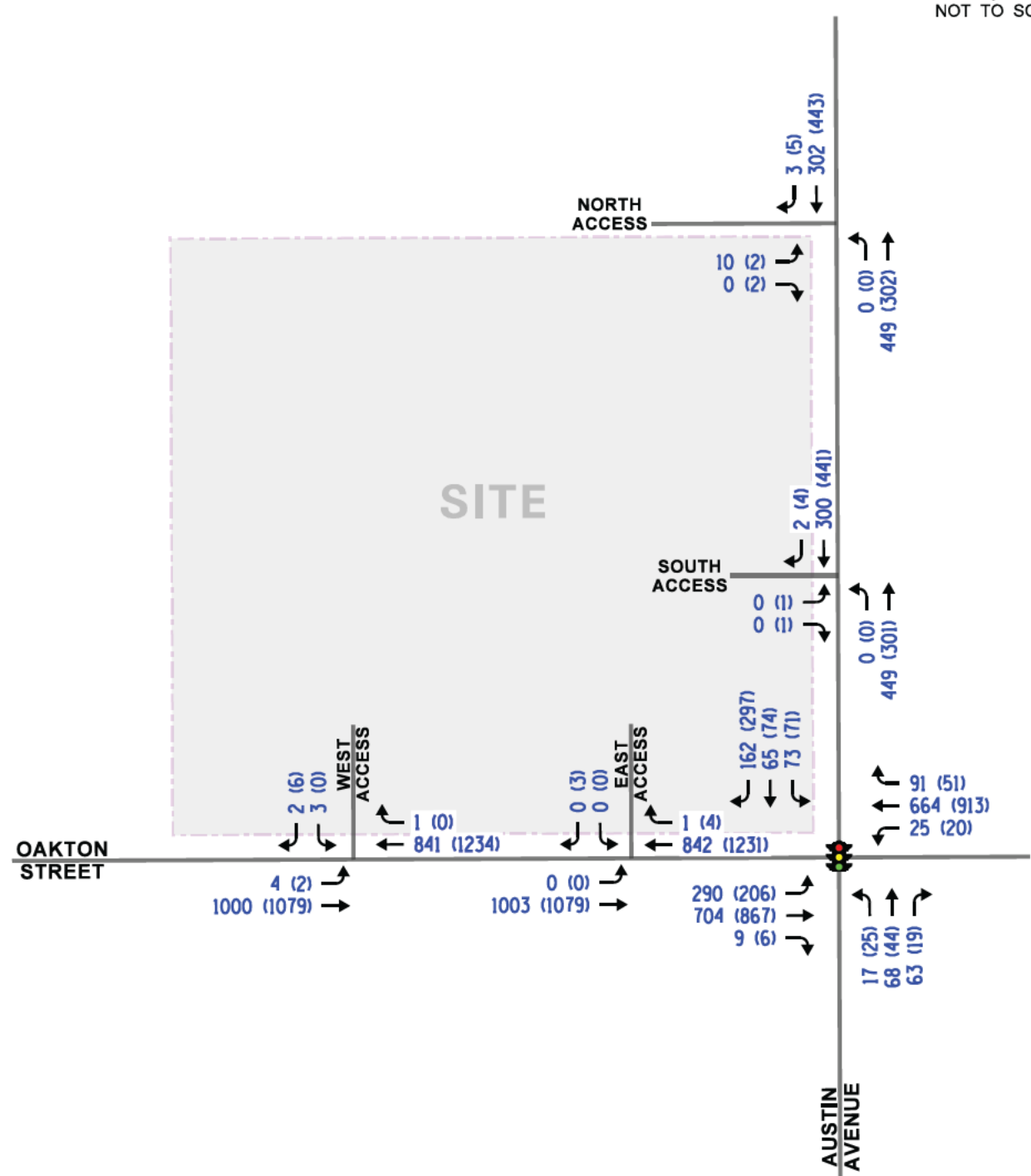
- Oakton Street with Austin Avenue
- Oakton Street with Mobil access drives
- Austin Avenue with Mobil access drives

The results of the traffic counts indicate that the weekday morning peak hour of traffic occurs from 7:30 A.M. to 8:30 A.M. and the weekday evening peak hour of traffic occurs from 4:15 P.M. to 5:15 P.M.

Figure 4 illustrates the existing peak hour vehicle traffic volumes. Copies of the traffic count summary sheets are included in the Appendix.



NOT TO SCALE



LEGEND

- 00 - WEEKDAY AM PEAK HOUR (7:30-8:30 AM)
- (00) - WEEKDAY PM PEAK HOUR (4:15-5:15 PM)

6000 Oakton Street
Morton Grove, Illinois

Existing Traffic Volumes



Job No: 25-304 Figure: 4

Crash Data Summary

KLOA, Inc. obtained crash data from IDOT for the most recent past five years available (2020 to 2024) for the intersection of Oakton Street with Austin Avenue. A review of the crash data indicated that no fatalities were reported at the intersection¹. **Table 1** summarizes the crash data for this intersection.

Table 1
OAKTON STREET WITH AUSTIN AVENUE – CRASH SUMMARY

Year	Type of Crash								Severity		
	A	HO	O	RE	S	T	Other	Total	PD	I	F
2020	0	0	0	0	1	0	0	1	1	0	0
2021	0	0	1	1	0	4	1	7	4	3	0
2022	0	0	0	1	0	0	0	1	1	0	0
2023	1	0	0	2	0	0	0	3	3	0	0
2024	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>6</u>	<u>0</u>	<u>8</u>	<u>6</u>	<u>2</u>	<u>0</u>
Total	1	0	2	5	1	10	1	20	15	5	0
Avg	<1.0	--	<1.0	1.0	<1.0	2.0	<1.0	4.0	3.0	1.0	--
A – Angle; HO – Head On; O – Object; RE – Rear End; S – Sideswipe; T – Turning PD – Property Damage; I – Injury; F - Fatal											

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).

3. Traffic Characteristics of the Proposed Fuel Center

To properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed fuel center, including the directional distribution and volumes of traffic that it will generate.

Proposed Site and Development Plan

As indicated earlier, the site is currently occupied by a Mobil fuel center with four fueling positions, a mini-mart, and a mechanic's shop. As proposed, the mini-mart will be remodeled and the mechanic's shop will be converted into an expansion of the mini-mart. Access to the fuel center will continue to be provided via the existing access drives off Oakton Street and Austin Avenue.

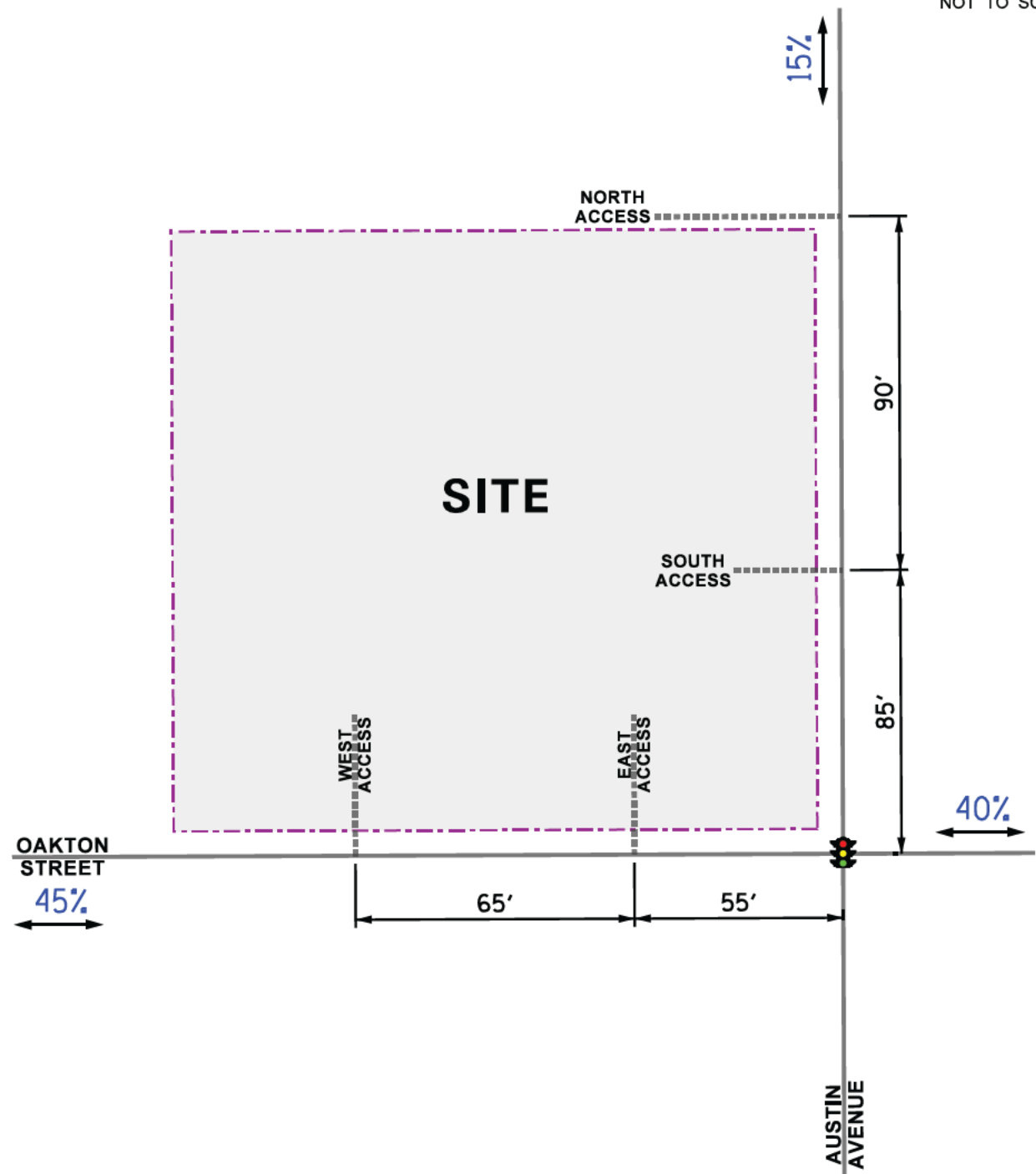
A copy of the site plan depicting the proposed fuel center and access drives is included in the Appendix.

Directional Distribution

The directions from which patrons and employees will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts and the operation of the roadway system. **Figure 5** illustrates the directional distribution of the fuel center-generated traffic.



NOT TO SCALE



LEGEND

00% - PERCENT DISTRIBUTION

00' - DISTANCE IN FEET

6000 Oakton Street
Morton Grove, Illinois

Directional Distribution



Job No: 25-304

Figure: 5

Peak Hour Traffic Volumes

The number of passenger vehicle peak hour trips estimated to be generated by the proposed fuel center was based on the rates contained in *Trip Generation Manual*, 12th Edition, published by the Institute of Transportation Engineers (ITE). Land-Use Code 945 – Convenience Store/Gas Station – GFA (2-4K) was utilized for the proposed expansion which will result in an approximately 1,515 square-foot mini-mart. The amount of traffic volumes that are currently being generated by the existing fuel center were subtracted from the estimated traffic volumes for the proposed fuel center to calculate the additional total trips that will be generated by the proposed fuel center.

It is important to note that surveys conducted by ITE have shown that approximately 60 percent of trips made to fueling centers 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.

Table 2 summarizes the trips projected to be generated by the proposed development.

It should be noted that the existing fuel center with eight fueling positions and mechanic shop generate approximately 26 trips during the weekday morning peak hour and approximately 30 trips during the evening peak hour which is approximately one-fourth of what it is expected to generate based on the ITE rates during the weekday morning and evening peak hours. As such, the estimated trips for the proposed expansion shown in Table 3 are very conservative estimates.

Table 2
PROJECTED SITE-GENERATED TRAFFIC VOLUMES

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
		In	Out	Total	In	Out	Total
945	Convenience Store/Gas Station – GFA (2-4K) – 8 Fueling Positions	55	54	109	63	64	127
	Trips Generated by the Existing Fuel Center (8 Fueling Positions) and Mechanic’s Shop	-11	-15	-26	-15	-15	-30
	Net Total Trips	44	39	83	48	49	97
	<i>-60% Pass-By</i>	-25	-25	-50	-29	-29	-48
	Total New Trips	19	14	33	19	20	39

4. Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed subject fuel center.

Fuel Center Traffic Assignment

The estimated weekday morning and weekday evening peak hour traffic volumes that will be generated by the proposed fuel center 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 trips.

Background (No-Build) Traffic Conditions

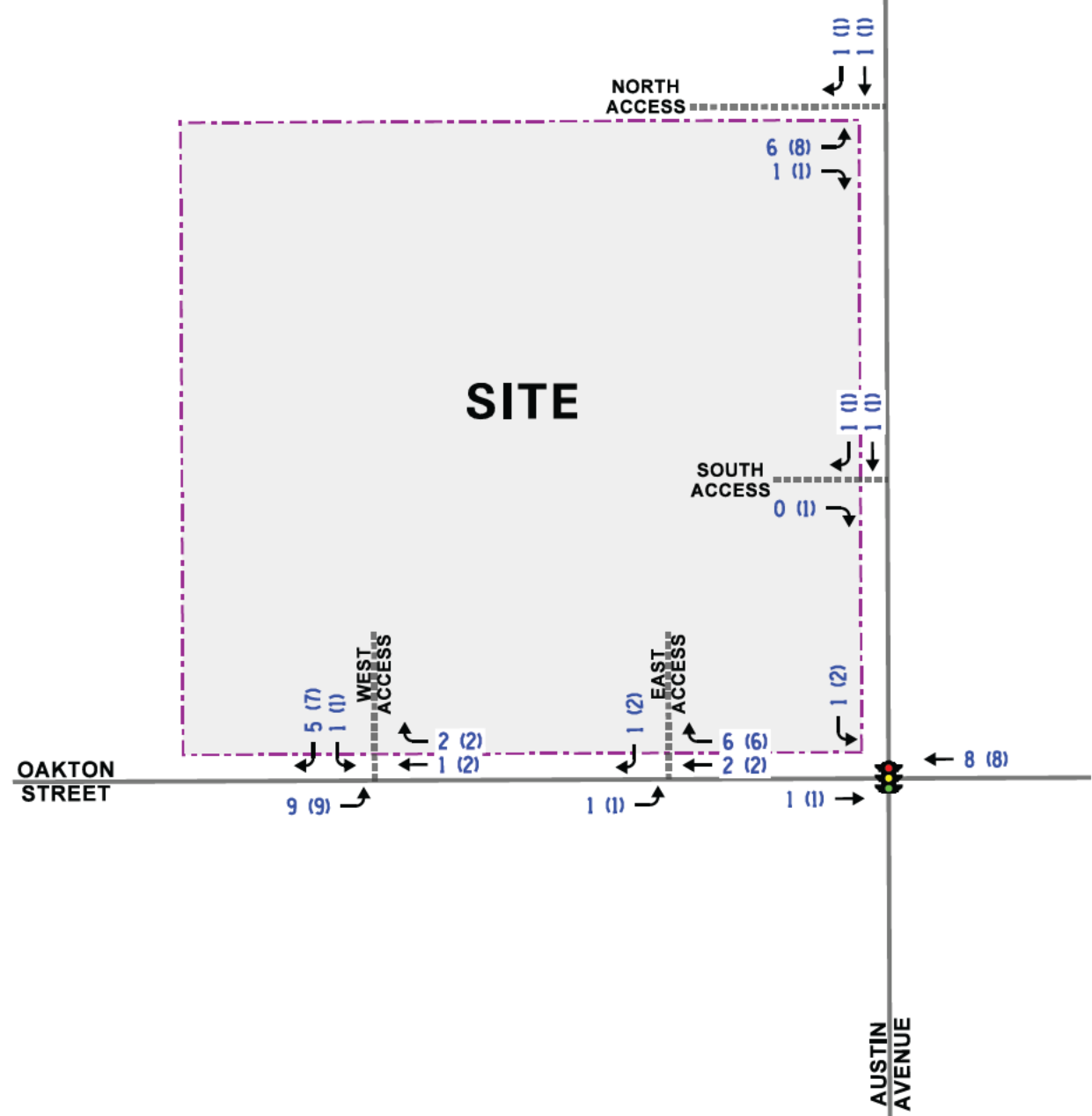
The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on Annual Average Daily Traffic (AADT) projections provided by the Chicago Metropolitan Agency for Planning (CMAP) in a letter, the existing traffic volumes are projected to increase by a total of 2 percent (0.3 percent compounded annually) to represent Year 2031 no-build conditions (one-year buildout plus five years). Year 2031 background traffic volumes are shown in **Figure 8**.

Year 2031 Total Projected Traffic Volumes

The new development-generated traffic (Figures 6 and 7) was added to the Year 2031 no-build traffic volumes to determine the projected Year 2031 total traffic volumes, as shown in **Figure 9**.



NOT TO SCALE



LEGEND

- 00 - WEEKDAY AM PEAK HOUR (7:30-8:30 AM)
- (00) - WEEKDAY PM PEAK HOUR (4:15-5:15 PM)

6000 Oakton Street
Morton Grove, Illinois

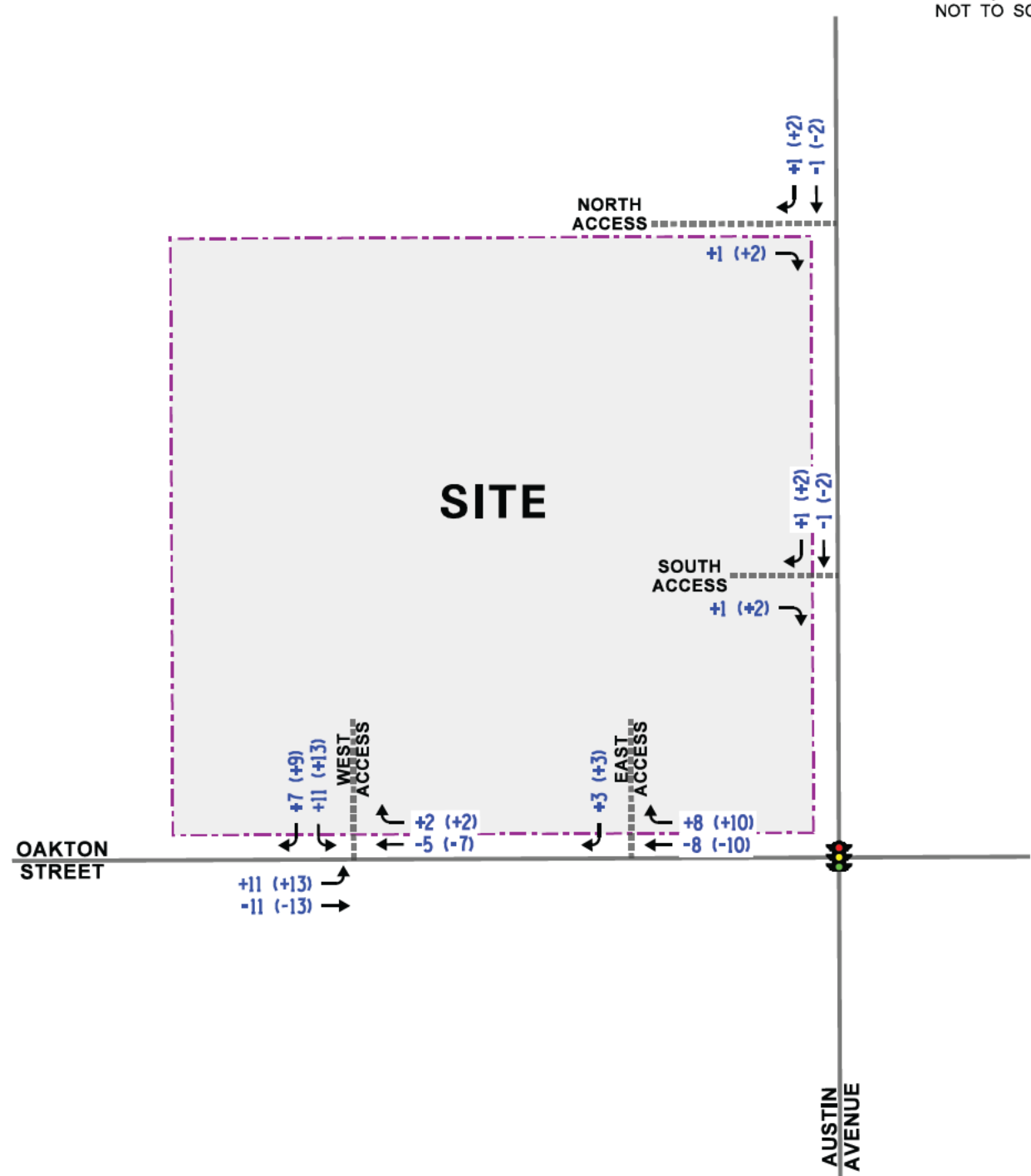
Site-Generated Traffic Volumes



Job No: 25-304 Figure: 6



NOT TO SCALE



LEGEND

- 00 - WEEKDAY AM PEAK HOUR (7:30-8:30 AM)
- (00) - WEEKDAY PM PEAK HOUR (4:15-5:15 PM)

6000 Oakton Street
Morton Grove, Illinois

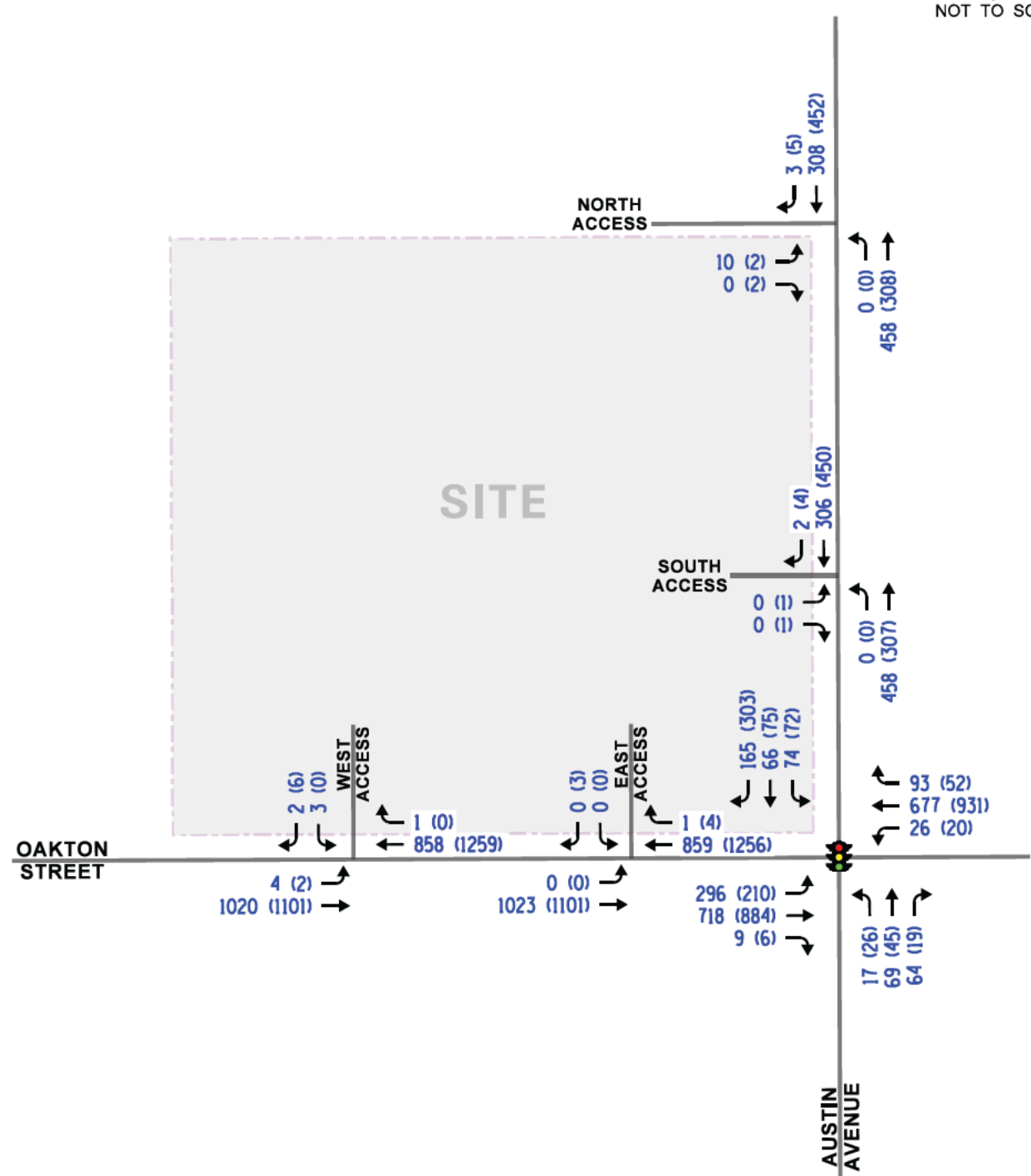
Pass-By Traffic Volumes

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Job No: 25-304 Figure: 7



NOT TO SCALE



LEGEND

- 00 - WEEKDAY AM PEAK HOUR (7:30-8:30 AM)
- (00) - WEEKDAY PM PEAK HOUR (4:15-5:15 PM)

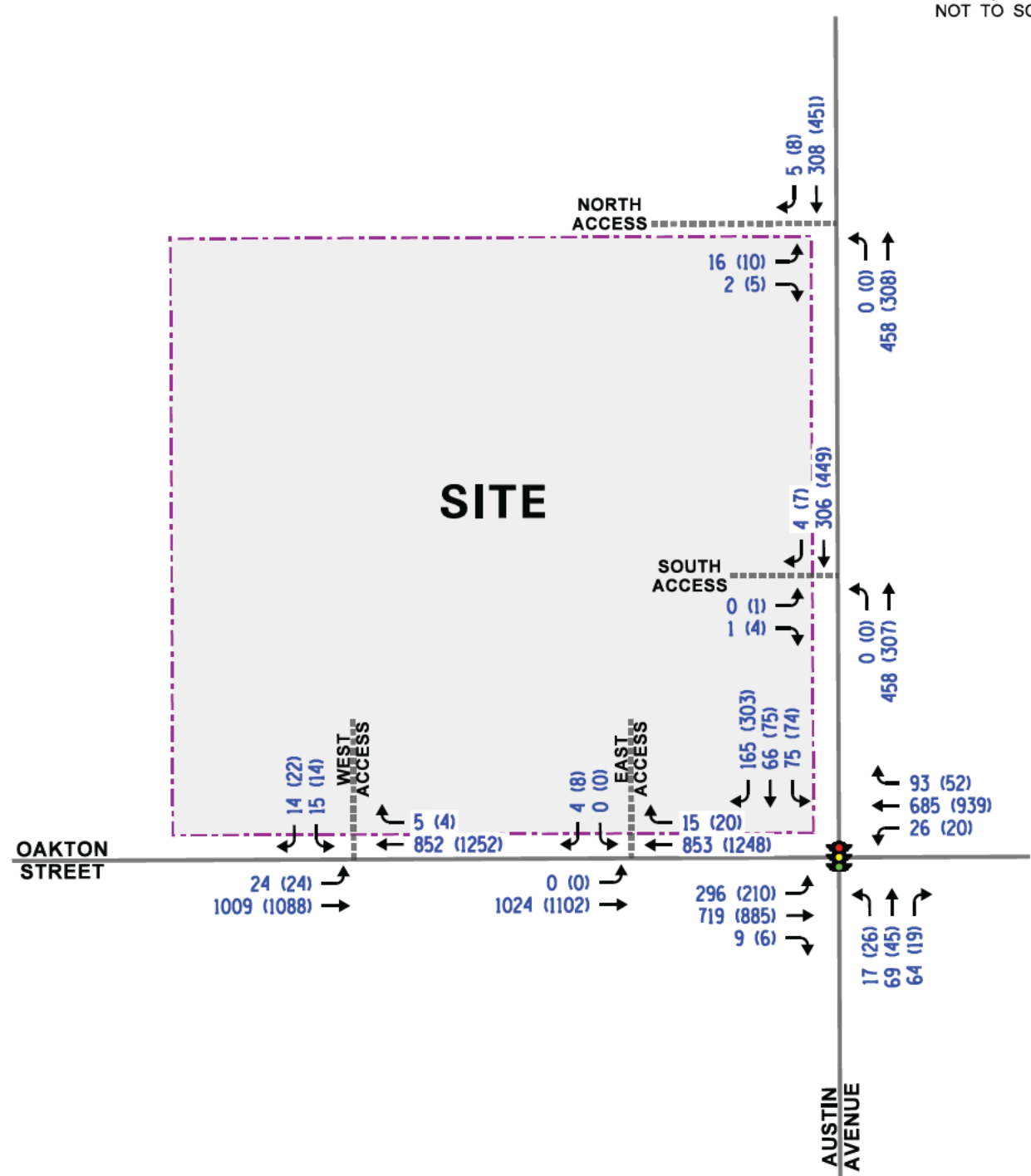
6000 Oakton Street
Morton Grove, Illinois

Year 2031 No-Build Traffic Volumes

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.
Job No: 25-304 Figure: 8



NOT TO SCALE



LEGEND

- 00 - WEEKDAY AM PEAK HOUR (7:30-8:30 AM)
- (00) - WEEKDAY PM PEAK HOUR (4:15-5:15 PM)

6000 Oakton Street
Morton Grove, Illinois

Year 2031 Total Traffic Volumes

Job No: 25-304 Figure: 9

5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning and weekday evening 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 roadway improvements or modifications are required.

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning and evening peak hours for the existing (Year 2025), Year 2031 no-build, and Year 2031 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 12 software. The analysis for the traffic-signal controlled intersection was accomplished using actual cycle lengths and phasings to determine the average overall vehicle delay and levels of services.

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 existing (2025), Year 2031 no-build, and Year 2031 total projected conditions are presented in **Tables 3** through **6**. A discussion of each intersection follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 3

OAKTON STREET WITH AUSTIN AVENUE – SIGNALIZED

	Peak Hour	Eastbound			Westbound		Northbound		Southbound		Overall
		L	T	R	L	T/R	L	T/R	L	T/R	
Existing Conditions	Weekday Morning	B 14.8	B 12.6		A 7.6	B 19.5	C 30.0	D 35.0	C 34.2	D 47.9	C 20.9
		B – 13.3			B – 19.2		C – 34.4		D – 44.6		
	Weekday Evening	B 14.2	B 13.7		A 7.8	C 21.5	D 38.0	C 32.1	C 33.7	E 74.9	C 26.5
		B – 13.8			C – 21.2		C – 33.8		E – 68.3		
No-Build Conditions	Weekday Morning	B 16.2	B 12.8		A 7.7	C 20.2	C 30.0	C 35.2	C 34.2	D 48.1	C 21.4
		B – 13.8			B – 19.8		C – 34.6		D – 44.7		
	Weekday Evening	B 14.9	B 13.9		A 7.8	C 22.1	D 38.8	C 32.1	C 33.7	E 69.8	C 27.2
		B – 14.0			C – 21.8		C – 34.0		E – 69.8		
Projected Conditions	Weekday Morning	B 16.5	B 12.8		A 7.7	C 20.3	C 30.0	C 35.2	C 34.3	D 48.1	C 21.5
		B – 13.9			B – 19.9		C – 34.6		D – 44.7		
	Weekday Evening	B 15.0	B 13.9		A 7.8	C 22.3	D 38.8	C 32.1	C 33.8	E 76.6	C 27.2
		B – 14.1			C – 22.0		C – 34.0		E – 69.6		
Letter denotes Level of Service L – Left Turn R – Right Turn Delay is measured in seconds. T – Through											

Table 4
 CAPACITY ANALYSIS RESULTS
 YEAR 2025 EXISTING CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Oakton Street with south access drive (east)				
• Eastbound Left Turn	--	--	--	--
• Southbound Approach	--	--	B	13.6
Oakton Street with south access drive (west)				
• Eastbound Left Turn	A	9.7	B	11.6
• Southbound Approach	D	25.3	B	13.7
Oakton Street with east access drive (north)				
• Eastbound Approach	C	15.8	B	13.3
• Northbound Left Turn	--	--	--	--
Oakton Street with east access drive (south)				
• Eastbound Approach	--	--	B	13.5
• Northbound Left Turn	--	--	--	--
LOS = Level of Service Delay is measured in seconds.		1 – All-way stop control 2 – Two-way stop control		

Table 5
 CAPACITY ANALYSIS RESULTS
 YEAR 2031 NO-BUILD CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Oakton Street with South Access Drive (East)				
• Eastbound Left Turn	--	--	--	--
• Southbound Approach	--	--	B	13.8
Oakton Street with South Access Drive (West)				
• Eastbound Left Turn	A	9.8	B	11.8
• Southbound Approach	D	26.2	B	13.9
Oakton Street with East Access Drive (North)				
• Eastbound Approach	C	16.1	B	13.4
• Northbound Left Turn	--	--	--	--
Oakton Street with East Access Drive (South)				
• Eastbound Approach	--	--	B	13.6
• Northbound Left Turn	--	--	--	--
LOS = Level of Service Delay is measured in seconds.		1 – All-way stop control 2 – Two-way stop control		

Table 6
 CAPACITY ANALYSIS RESULTS
 YEAR 2031 TOTAL PROJECTED CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Oakton Street with South Access Drive (East)				
• Eastbound Left Turn	--	--	--	--
• Southbound Approach	B	11.6	B	14.0
Oakton Street with South Access Drive (West)				
• Eastbound Left Turn	A	9.9	B	12.0
• Southbound Approach	D	29.2	E	48.7
Oakton Street with East Access Drive (North)				
• Eastbound Approach	C	15.7	B	14.5
• Northbound Left Turn	--	--	--	--
Oakton Street with East Access Drive (South)				
• Eastbound Approach	B	10.0	B	12.3
• Northbound Left Turn	--	--	--	--
LOS = Level of Service Delay is measured in seconds.		1 – All-way stop control 2 – Two-way stop control		

Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements necessary to accommodate the fuel center-generated traffic.

Oakton Street with Austin Avenue

The results of the capacity analyses indicate that this intersection currently operates at LOS C during the weekday morning and weekday evening peak hours. Eastbound and westbound movements operate at LOS C or better, and northbound and southbound movements operate at LOS D or better except the southbound through/right-turn movement during the weekday evening peak hour which operates at LOS E. However, it should be noted that the analyses performed without right-turn on red movements allowed. Assuming right-turn on red movements, the southbound through/right-turn movement and southbound approach are projected to operate at LOS D.

Under no-build and total projected conditions, this intersection and its approaches are projected to continue to operate at existing LOS during the weekday morning and evening peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic to be generated by the proposed expansion and no roadway or traffic control improvements are required.

Oakton Street with South Access Drive (East)

The results of the capacity analyses indicate that southbound approach currently operates at LOS B during the weekday evening peak hour. No eastbound left-turn movements were observed during the peak hours and no movements on the southbound approach were observed during the weekday morning peak hour. Under no-build conditions, the southbound approach is projected to continue to operate at existing LOS during the peak hours.

Under total projected conditions, the southbound approach is projected to operate at LOS B during the weekday morning and weekday evening peak hours. No eastbound left-turn movements are expected due to the proximity of the access drive to Austin Avenue. As such, this intersection has sufficient reserve capacity to accommodate the traffic to be generated by the proposed expansion and no roadway or traffic control improvements are required.

Oakton Street with South Access Drive (West)

The results of the capacity analyses indicate that the eastbound left-turn movement operates at LOS A during the weekday morning peak hour and LOS B during the weekday evening peak hour and the southbound approach currently operates at LOS D during the weekday morning peak hour and LOS B during the weekday evening peak hour. Under no-build conditions, the eastbound left-turn movement and southbound approach are projected to continue to operate at existing LOS.

Under total projected conditions, the eastbound left-turn movement is projected to continue to operate at existing LOS and the southbound approach is projected to operate at LOS D during the

weekday morning peak and LOS E during the weekday evening peak hour. However, the high delay on the southbound approach is to be expected of outbound movements onto a minor arterial roadway like Oakton Street. Further, the 95th percentile queue on the southbound approach is projected to be only one to two vehicles.

As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed expansion and no roadway or traffic control improvements are required.

Austin Avenue with East Access Drive (North)

The results of the capacity analyses indicate that eastbound approach currently operates at LOS C during the weekday morning peak hour and LOS B during the weekday evening peak hour. No northbound left-turn movements were observed during the peak hours. Under no-build and total projected conditions, the eastbound approach is projected to continue to operate at existing LOS. As such, this intersection has sufficient reserve capacity to accommodate the traffic to be generated by the proposed development and no roadway or traffic control improvements are required.

Austin Avenue with East Access Drive (South)

The results of the capacity analyses indicate that the eastbound approach currently operates at LOS B during the weekday evening peak hour. No northbound left-turn movements were observed during the peak hours and no movements on the eastbound approach were observed during the weekday morning peak hour. Under no-build conditions, the eastbound approach is projected to continue to operate at existing LOS during the weekday evening peak hour.

Under total projected conditions, the eastbound approach is projected to operate at LOS B during the weekday morning and weekday evening peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic to be generated by the proposed expansion and no roadway or traffic control improvements are required.

Parking Evaluation

The proposed expansion of the min-mart will retain the existing nine parking spaces, which includes one ADA space. In order to determine the projected parking demand of the proposed fuel center, the parking demand was estimated based on the Village of Morton Grove Municipal Code. The parking demand for the proposed fuel center is as follows:

Parking Requirements of Proposed Fuel Center per Village Code

- Permitted and Special Uses in the Commercial Zoning Districts
 - One parking space per 250 square feet of gross floor area

Based on the above and the requirements of the Village of Morton Grove, this translates into 6 parking spaces. As such, the proposed nine parking spaces along with the proposed eight fueling pumps will be adequate to meet the parking requirements of the Village.

Parking Occupancy Surveys

Parking occupancy surveys were conducted on Thursday, August 8, 2024 at two existing fuel centers. The first is located at 3600 N. Ashland Avenue in Chicago (Shell fuel center) which has eight pumps and the second is located at 6777 Lincoln Avenue in Lincolnwood, Illinois (Mobil fuel center) which has 12 fueling pumps. The parking surveys were performed every 15 minutes from 7:00 A.M. to 7:00 P.M. The results of the parking surveys are summarized in **Table 7** and **Table 8**, which show the number of occupied parking spaces and number of vehicles utilizing the pumps. As can be seen from Table 8, the maximum parking demand at the Shell fuel center was six parking spaces occurring once at 10:30 A.M. Table 9 shows that the maximum parking demand at the Mobil fuel center was also six parking spaces occurring once at 12:00 noon.

Therefore, based on the results of the parking surveys, the existing nine parking spaces will be adequate to accommodate the parking demand of the proposed fuel center.

Table 7

3600 N. ASHLAND AVENUE, CHICAGO PARKING SURVEY

Time	Parking Spaces	Pumps	Total
7:00 AM	2	3	5
7:15 AM	1	1	2
7:30 AM	1	3	4
7:45 AM	2	4	6
8:00 AM	2	2	4
8:15 AM	2	4	6
8:30 AM	1	2	3
8:45 AM	1	2	3
9:00 AM	2	3	5
9:15 AM	1	4	5
9:30 AM	1	4	5
9:45 AM	1	2	3
10:00 AM	3	3	6
10:15 AM	4	1	5
10:30 AM	6	5	11
10:45 AM	3	1	4
11:00 AM	3	1	4
11:15 AM	2	5	7
11:30 AM	2	2	4
11:45 AM	3	3	6
12:00 PM	3	4	7
12:15 PM	2	4	6
12:30 PM	4	4	8
12:45 PM	2	5	7

Table 7, continued
 3600 N. ASHLAND AVENUE, CHICAGO PARKING SURVEY

Time	Parking Spaces	Pumps	Total
1:00 PM	2	4	6
1:15 PM	3	3	6
1:30 PM	3	3	6
1:45 PM	3	2	5
2:00 PM	2	3	5
2:15 PM	3	3	6
2:30 PM	2	1	3
2:45 PM	3	4	7
3:00 PM	2	4	6
3:15 PM	2	5	7
3:30 PM	2	2	4
3:45 PM	2	4	6
4:00 PM	3	2	5
4:15 PM	2	3	5
4:30 PM	1	1	2
4:45 PM	2	5	7
5:00 PM	2	2	4
5:15 PM	2	1	3
5:30 PM	3	5	8
5:45 PM	2	3	5
6:00 PM	4	4	8
6:15 PM	2	2	4
6:30 PM	3	3	6
6:45 PM	2	1	3
7:00 PM	2	2	4

Table 8

6777 LINCOLNWOOD AVENUE, LINCOLNWOOD PARKING SURVEY

Time	Parking Spaces	Pumps	Total
7:00 AM	1	1	2
7:15 AM	1	1	2
7:30 AM	1	4	5
7:45 AM	1	2	3
8:00 AM	1	2	3
8:15 AM	2	5	7
8:30 AM	2	3	5
8:45 AM	1	3	4
9:00 AM	2	4	6
9:15 AM	3	2	5
9:30 AM	1	3	4
9:45 AM	2	5	7
10:00 AM	2	0	2
10:15 AM	3	0	3
10:30 AM	4	0	4
10:45 AM	5	3	8
11:00 AM	3	4	7
11:15 AM	5	4	9
11:30 AM	5	3	8
11:45 AM	4	8	12
12:00 PM	6	5	11
12:15 PM	2	5	7
12:30 PM	2	4	6
12:45 PM	2	5	7

Table 8, continued

6777 LINCOLNWOOD AVENUE, LINCOLNWOOD PARKING SURVEY

Time	Parking Spaces	Pumps	Total
1:00 PM	3	5	8
1:15 PM	2	7	9
1:30 PM	1	2	3
1:45 PM	2	4	6
2:00 PM	2	3	5
2:15 PM	3	4	7
2:30 PM	2	4	6
2:45 PM	5	7	12
3:00 PM	3	4	7
3:15 PM	2	4	6
3:30 PM	3	0	3
3:45 PM	2	8	10
4:00 PM	5	3	8
4:15 PM	4	2	6
4:30 PM	3	0	3
4:45 PM	2	2	4
5:00 PM	1	1	2
5:15 PM	1	2	3
5:30 PM	2	3	5
5:45 PM	1	1	2
6:00 PM	0	2	2
6:15 PM	0	2	2
6:30 PM	0	3	3
6:45 PM	0	4	4
7:00 PM	2	0	2

6. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- The traffic projected to be generated by the proposed expansion will be reduced due to the volume of pass-by traffic that will be diverted from the existing traffic on the adjacent roadways.
- The area roadway system has sufficient reserve capacity to accommodate the additional traffic to be generated by the proposed fuel center and no roadway improvements or traffic control modifications are required.
- The outbound movements from both access drives should be under stop sign control.
- The proposed access system will be adequate in accommodating the traffic projected to be generated by the proposed fuel center with limited impact on the external roadway system.
- The existing nine parking spaces along with the eight fueling pumps will be adequate to meet the parking requirements based on the results of the parking surveys.

Appendix

Traffic Count Summary Sheets

Site Plan

ITE Trip Generation Sheets

CMAP 2050 Projections Letter

Level of Service Criteria

Capacity Analysis Summary Sheets

Traffic Count Summary Sheets



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Count Name:
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Site Code:
Start Date: 10/28/2025
Page No: 1

Turning Movement Data

Start Time	Oakton St Eastbound						Oakton St Westbound						Austin Ave Northbound						Austin Ave Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	34	105	0	0	139	0	2	124	6	0	132	0	3	16	16	0	35	0	4	7	32	0	43	349
7:15 AM	0	40	111	0	0	151	0	4	189	12	0	205	0	2	7	7	0	16	0	18	11	26	0	55	427
7:30 AM	0	70	144	0	0	214	0	8	169	20	1	197	0	1	15	9	0	25	0	23	8	33	0	64	500
7:45 AM	0	86	127	0	0	213	0	5	171	26	0	202	0	1	12	37	0	50	0	20	18	36	0	74	539
Hourly Total	0	230	487	0	0	717	0	19	653	64	1	736	0	7	50	69	0	126	0	65	44	127	0	236	1815
8:00 AM	0	67	117	1	0	185	0	8	140	29	0	177	0	4	16	12	0	32	0	19	16	42	0	77	471
8:15 AM	0	67	98	0	0	165	0	4	123	16	0	143	0	9	23	5	0	37	0	11	23	51	0	85	430
8:30 AM	0	71	101	0	0	172	0	9	127	12	0	148	0	10	17	5	0	32	0	6	20	32	3	58	410
8:45 AM	0	53	120	0	0	173	0	4	119	11	0	134	0	18	23	11	0	52	0	11	11	42	0	64	423
Hourly Total	0	258	436	1	0	695	0	25	509	68	0	602	0	41	79	33	0	153	0	47	70	167	3	284	1734
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	48	188	0	0	236	0	5	165	16	0	186	0	6	24	0	0	30	0	15	23	77	1	115	567
4:15 PM	0	50	193	0	0	243	0	8	231	13	0	252	0	7	12	6	0	25	0	17	22	62	1	101	621
4:30 PM	0	51	189	0	0	240	0	3	222	16	0	241	0	7	6	5	0	18	0	19	18	66	0	103	602
4:45 PM	0	58	212	0	0	270	0	3	221	8	0	232	0	6	9	4	0	19	0	15	16	62	2	93	614
Hourly Total	0	207	782	0	0	989	0	19	839	53	0	911	0	26	51	15	0	92	0	66	79	267	4	412	2404
5:00 PM	0	44	200	0	0	244	0	6	220	13	0	239	0	4	17	4	0	25	0	20	18	95	0	133	641
5:15 PM	0	48	231	0	0	279	0	4	234	11	0	249	0	4	4	3	0	11	0	16	7	53	0	76	615
5:30 PM	0	50	232	0	0	282	0	0	192	8	0	200	0	1	9	5	0	15	0	13	12	61	0	86	583
5:45 PM	0	45	224	0	0	269	0	6	177	13	0	196	0	4	3	7	0	14	0	13	12	48	0	73	552
Hourly Total	0	187	887	0	0	1074	0	16	823	45	0	884	0	13	33	19	0	65	0	62	49	257	0	368	2391
Grand Total	0	882	2592	1	0	3475	0	79	2824	230	1	3133	0	87	213	136	0	436	0	240	242	818	7	1300	8344
Approach %	0.0	25.4	74.6	0.0	-	-	0.0	2.5	90.1	7.3	-	-	0.0	20.0	48.9	31.2	-	-	0.0	18.5	18.6	62.9	-	-	-
Total %	0.0	10.6	31.1	0.0	-	41.6	0.0	0.9	33.8	2.8	-	37.5	0.0	1.0	2.6	1.6	-	5.2	0.0	2.9	2.9	9.8	-	15.6	-
Lights	0	847	2509	0	-	3356	0	54	2763	223	-	3040	0	71	176	120	-	367	0	232	180	759	-	1171	7934
% Lights	-	96.0	96.8	0.0	-	96.6	-	68.4	97.8	97.0	-	97.0	-	81.6	82.6	88.2	-	84.2	-	96.7	74.4	92.8	-	90.1	95.1
Buses	0	6	27	1	-	34	0	16	22	1	-	39	0	4	13	11	-	28	0	1	40	7	-	48	149
% Buses	-	0.7	1.0	100.0	-	1.0	-	20.3	0.8	0.4	-	1.2	-	4.6	6.1	8.1	-	6.4	-	0.4	16.5	0.9	-	3.7	1.8
Single-Unit Trucks	0	19	44	0	-	63	0	8	33	6	-	47	0	12	22	5	-	39	0	5	22	47	-	74	223
% Single-Unit Trucks	-	2.2	1.7	0.0	-	1.8	-	10.1	1.2	2.6	-	1.5	-	13.8	10.3	3.7	-	8.9	-	2.1	9.1	5.7	-	5.7	2.7
Articulated Trucks	0	10	12	0	-	22	0	1	6	0	-	7	0	0	2	0	-	2	0	2	0	5	-	7	38
% Articulated Trucks	-	1.1	0.5	0.0	-	0.6	-	1.3	0.2	0.0	-	0.2	-	0.0	0.9	0.0	-	0.5	-	0.8	0.0	0.6	-	0.5	0.5
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0



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Count Name:
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Site Code:
Start Date: 10/28/2025
Page No: 3

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Oakton St Eastbound						Oakton St Westbound						Austin Ave Northbound						Austin Ave Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30 AM	0	70	144	0	0	214	0	8	169	20	1	197	0	1	15	9	0	25	0	23	8	33	0	64	500
7:45 AM	0	86	127	0	0	213	0	5	171	26	0	202	0	1	12	37	0	50	0	20	18	36	0	74	539
8:00 AM	0	67	117	1	0	185	0	8	140	29	0	177	0	4	16	12	0	32	0	19	16	42	0	77	471
8:15 AM	0	67	98	0	0	165	0	4	123	16	0	143	0	9	23	5	0	37	0	11	23	51	0	85	430
Total	0	290	486	1	0	777	0	25	603	91	1	719	0	15	66	63	0	144	0	73	65	162	0	300	1940
Approach %	0.0	37.3	62.5	0.1	-	-	0.0	3.5	83.9	12.7	-	-	0.0	10.4	45.8	43.8	-	-	0.0	24.3	21.7	54.0	-	-	-
Total %	0.0	14.9	25.1	0.1	-	40.1	0.0	1.3	31.1	4.7	-	37.1	0.0	0.8	3.4	3.2	-	7.4	0.0	3.8	3.4	8.4	-	15.5	-
PHF	0.000	0.843	0.844	0.250	-	0.908	0.000	0.781	0.882	0.784	-	0.890	0.000	0.417	0.717	0.426	-	0.720	0.000	0.793	0.707	0.794	-	0.882	0.900
Lights	0	275	460	0	-	735	0	21	595	87	-	703	0	15	62	62	-	139	0	72	39	144	-	255	1832
% Lights	-	94.8	94.7	0.0	-	94.6	-	84.0	98.7	95.6	-	97.8	-	100.0	93.9	98.4	-	96.5	-	98.6	60.0	88.9	-	85.0	94.4
Buses	0	2	6	1	-	9	0	4	3	0	-	7	0	0	3	1	-	4	0	0	25	5	-	30	50
% Buses	-	0.7	1.2	100.0	-	1.2	-	16.0	0.5	0.0	-	1.0	-	0.0	4.5	1.6	-	2.8	-	0.0	38.5	3.1	-	10.0	2.6
Single-Unit Trucks	0	9	15	0	-	24	0	0	5	4	-	9	0	0	1	0	-	1	0	1	1	12	-	14	48
% Single-Unit Trucks	-	3.1	3.1	0.0	-	3.1	-	0.0	0.8	4.4	-	1.3	-	0.0	1.5	0.0	-	0.7	-	1.4	1.5	7.4	-	4.7	2.5
Articulated Trucks	0	4	5	0	-	9	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	1	-	1	10
% Articulated Trucks	-	1.4	1.0	0.0	-	1.2	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.6	-	0.3	0.5
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Count Name:
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Site Code:
Start Date: 10/28/2025
Page No: 4

Turning Movement Peak Hour Data (4:15 PM)

Start Time	Oakton St Eastbound						Oakton St Westbound						Austin Ave Northbound						Austin Ave Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:15 PM	0	50	193	0	0	243	0	8	231	13	0	252	0	7	12	6	0	25	0	17	22	62	1	101	621
4:30 PM	0	51	189	0	0	240	0	3	222	16	0	241	0	7	6	5	0	18	0	19	18	66	0	103	602
4:45 PM	0	58	212	0	0	270	0	3	221	8	0	232	0	6	9	4	0	19	0	15	16	62	2	93	614
5:00 PM	0	44	200	0	0	244	0	6	220	13	0	239	0	4	17	4	0	25	0	20	18	95	0	133	641
Total	0	203	794	0	0	997	0	20	894	50	0	964	0	24	44	19	0	87	0	71	74	285	3	430	2478
Approach %	0.0	20.4	79.6	0.0	-	-	0.0	2.1	92.7	5.2	-	-	0.0	27.6	50.6	21.8	-	-	0.0	16.5	17.2	66.3	-	-	-
Total %	0.0	8.2	32.0	0.0	-	40.2	0.0	0.8	36.1	2.0	-	38.9	0.0	1.0	1.8	0.8	-	3.5	0.0	2.9	3.0	11.5	-	17.4	-
PHF	0.000	0.875	0.936	0.000	-	0.923	0.000	0.625	0.968	0.781	-	0.956	0.000	0.857	0.647	0.792	-	0.870	0.000	0.888	0.841	0.750	-	0.808	0.966
Lights	0	197	779	0	-	976	0	14	878	50	-	942	0	23	40	18	-	81	0	68	56	264	-	388	2387
% Lights	-	97.0	98.1	-	-	97.9	-	70.0	98.2	100.0	-	97.7	-	95.8	90.9	94.7	-	93.1	-	95.8	75.7	92.6	-	90.2	96.3
Buses	0	1	6	0	-	7	0	5	7	0	-	12	0	0	2	1	-	3	0	0	7	2	-	9	31
% Buses	-	0.5	0.8	-	-	0.7	-	25.0	0.8	0.0	-	1.2	-	0.0	4.5	5.3	-	3.4	-	0.0	9.5	0.7	-	2.1	1.3
Single-Unit Trucks	0	4	7	0	-	11	0	1	8	0	-	9	0	1	0	0	-	1	0	2	11	17	-	30	51
% Single-Unit Trucks	-	2.0	0.9	-	-	1.1	-	5.0	0.9	0.0	-	0.9	-	4.2	0.0	0.0	-	1.1	-	2.8	14.9	6.0	-	7.0	2.1
Articulated Trucks	0	1	2	0	-	3	0	0	1	0	-	1	0	0	2	0	-	2	0	1	0	2	-	3	9
% Articulated Trucks	-	0.5	0.3	-	-	0.3	-	0.0	0.1	0.0	-	0.1	-	0.0	4.5	0.0	-	2.3	-	1.4	0.0	0.7	-	0.7	0.4
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Study Name Austin Ave and East Access Drive TMC
Start Date Tuesday, October 28, 2025 7:00 AM
End Date Tuesday, October 28, 2025 6:00 PM
Site Code

Report Summary

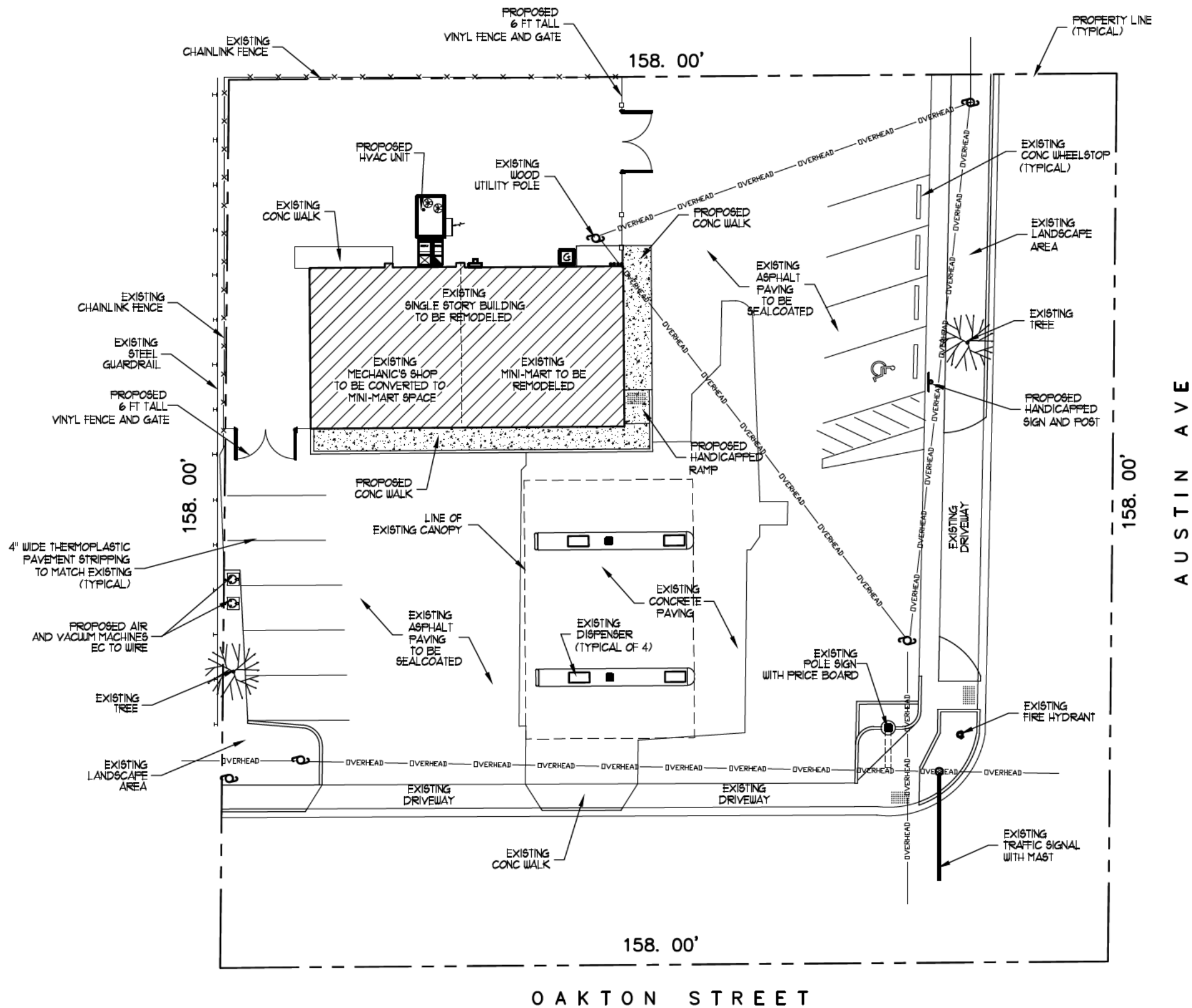
Time Period	Class.	Eastbound				Northbound				Southbound				Northeastbound				Total		Crosswalk									
		U	L	R	HR	I	O	U	HL	L	T	I	O	U	T	BR	R	I	O	U	HL	BL	HR	I	O	Total	Direction	Total	
Peak 1	Lights	0	9	0	0	9	3	0	0	0	425	425	255	0	255	1	3	259	434	0	0	0	0	0	1	693	W	1	1
Specified Period	%	0%	90%	0%	0%	90%	100%	0%	0%	0%	95%	95%	85%	0%	85%	50%	100%	85%	95%	0%	0%	0%	0%	0%	50%	91%		100%	
7:30 AM - 8:30 AM	Buses	0	0	0	0	0	0	0	0	0	5	5	33	0	33	0	0	33	5	0	0	0	0	0	0	38	S	0	0
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	11%	0%	11%	0%	0%	11%	1%	0%	0%	0%	0%	0%	0%	5%		0%	
7:30 AM - 8:30 AM	Single-Unit Truc	0	1	0	0	1	0	0	0	0	16	16	11	0	11	1	0	12	17	0	0	0	0	0	1	29	N	1	1
	%	0%	10%	0%	0%	10%	0%	0%	0%	4%	4%	4%	0%	4%	50%	0%	4%	4%	0%	0%	0%	0%	0%	50%	4%		100%		
	articulated Truc	0	0	0	0	0	0	0	0	3	3	1	0	1	0	0	1	3	0	0	0	0	0	0	4	SW	0	0	
	%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	1%		0%		
	cycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		2	2
	%	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%	
	Total	0	10	0	0	10	3	0	0	0	449	449	300	0	300	2	3	305	459	0	0	0	0	0	2	764			
	PHF	0	0.42	0	0	0.42	0.38	0	0	0	0.91	0.91	0.94	0	0.94	0.5	0.38	0.94	0.93	0	0	0	0	0	0.5	0.94			
	Approach %					1%	0%					59%	39%					40%	60%					0%	0%				
Peak 2	Lights	0	2	2	0	4	5	0	0	0	291	291	406	0	403	4	5	412	294	0	0	1	1	2	4	709	W	3	3
Specified Period	%	0%	100%	100%	0%	100%	100%	0%	0%	0%	97%	97%	91%	0%	91%	100%	100%	91%	97%	0%	0%	100%	100%	100%	100%	93%		100%	
4:15 PM - 5:15 PM	Buses	0	0	0	0	0	0	0	0	0	3	3	8	0	8	0	0	8	3	0	0	0	0	0	0	11	S	2	2
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	2%	0%	2%	0%	0%	2%	1%	0%	0%	0%	0%	0%	1%		100%		
4:15 PM - 5:15 PM	Single-Unit Truc	0	0	0	0	0	0	0	0	4	4	28	0	28	0	0	28	4	0	0	0	0	0	0	0	32	N	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	6%	0%	6%	0%	0%	6%	1%	0%	0%	0%	0%	0%	0%	4%		0%		
	articulated Truc	0	0	0	0	0	0	0	0	3	3	4	0	4	0	0	4	3	0	0	0	0	0	0	0	7	SW	2	2
	%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	1%		100%		
	cycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		7	7
	%	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%	
	Total	0	2	2	0	4	5	0	0	0	301	301	446	0	443	4	5	452	304	0	0	1	1	2	4	759			
	PHF	0	0.5	0.25	0	0.33	0.62	0	0	0	0.98	0.98	0.84	0	0.84	0.5	0.62	0.84	0.97	0	0	0.25	0.25	0.5	0.5	0.89			
	Approach %					1%	1%					40%	59%					60%	40%					0%	1%				

Study Name Oakton St and Access Drive West TMC
Start Date Tuesday, October 28, 2025 7:00 AM
End Date Tuesday, October 28, 2025 6:00 PM
Site Code

Report Summary

Time Period	Class.	Eastbound				Westbound				Southeastbound				Southwestbound				Total		Crosswalk										
		U	HL	BL	T	I	O	U	T	BR	HR	I	O	U	L	BL	HR	I	O	U	HL	BR	R	I	O	Total	Pedestrian	Total		
Peak 1	Lights	0	4	0	950	954	814	0	812	1	1	814	951	0	2	1	2	5	5	0	0	0	0	0	3	1773	W	0	0	
Specified Period	%	0%	100%	0%	95%	95%	96%	0%	96%	100%	100%	96%	95%	0%	100%	100%	100%	100%	100%	0%	0%	0%	0%	0%	100%	96%	0%	0%		
7:30 AM - 8:30 AM	Buses	0	0	0	11	11	12	0	12	0	0	12	11	0	0	0	0	0	0	0	0	0	0	0	0	23	E	0	0	
One Hour Peak	%	0%	0%	0%	1%	1%	1%	0%	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%			
7:30 AM - 8:30 AM	Single-Unit Truc	0	0	0	28	28	14	0	14	0	0	14	28	0	0	0	0	0	0	0	0	0	0	0	0	42	NW	0	0	
	%	0%	0%	0%	3%	3%	2%	0%	2%	0%	0%	2%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%			
	articulated Truc	0	0	0	6	6	4	0	4	0	0	4	6	0	0	0	0	0	0	0	0	0	0	0	0	10	NE	0	0	
	%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%			
	cycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
	Total	0	4	0	995	999	844	0	842	1	1	844	996	0	2	1	2	5	5	0	0	0	0	0	3	1848				
	PHF	0	0.33	0	0.89	0.9	0.97	0	0.97	0.25	0.25	0.96	0.89	0	0.25	0.25	0.5	0.42	0.31	0	0	0	0	0	0.25	0.94				
	Approach %					54%	46%					46%	54%					0%	0%					0%	0%					
Peak 2	Lights	0	2	0	1051	1053	1199	0	1190	0	4	1194	1051	0	0	0	6	6	2	0	0	3	0	3	4	2256	W	0	0	
Specified Period	%	0%	100%	0%	97%	97%	97%	0%	97%	0%	100%	97%	97%	0%	0%	0%	100%	100%	100%	0%	0%	100%	0%	100%	100%	97%	0%	0%		
4:15 PM - 5:15 PM	Buses	0	0	0	9	9	9	0	9	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	18	E	2	2
One Hour Peak	%	0%	0%	0%	1%	1%	1%	0%	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	100%			
4:15 PM - 5:15 PM	Single-Unit Truc	0	0	0	16	16	28	0	28	0	0	28	16	0	0	0	0	0	0	0	0	0	0	0	0	44	NW	2	2	
	%	0%	0%	0%	1%	1%	2%	0%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	100%			
	articulated Truc	0	0	0	3	3	4	0	4	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	7	NE	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%			
	cycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4		
	%	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%			
	Total	0	2	0	1079	1081	1240	0	1231	0	4	1235	1079	0	0	0	6	6	2	0	0	3	0	3	4	2325				
	PHF	0	0.5	0	0.94	0.94	0.93	0	0.94	0	0.5	0.94	0.94	0	0	0	0.5	0.5	0.5	0	0	0.75	0	0.75	0.5	0.96				
	Approach %					46%	53%					53%	46%					0%	0%					0%	0%					

Site Plan



PROPOSED SITE PLAN

SCALE: 1" = 20'-0"



PROYEKT STUDIO, LLC
ARCHITECTURE, ENGINEERING

2810 RFD
Long Grove, IL. 60047
773-796-5992, GZIOMEK@SBCGLOBAL.NET

**PROPOSED
MINI-MART REMODEL**

6000 OAKTON ST
MORTON GROVE, IL. 60053

REVISIONS		
NO.	DATE	DESCRIPTION

DATE **8/7/25**
JOB # **2503Z**
SHEET **A-2**
OF **8** SHEETS

ITE Trip Generation Sheets

Convenience Store/Gas Station - GFA (2-4k) (945)

Vehicle Trip Ends vs: Vehicle Fueling Positions

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 71

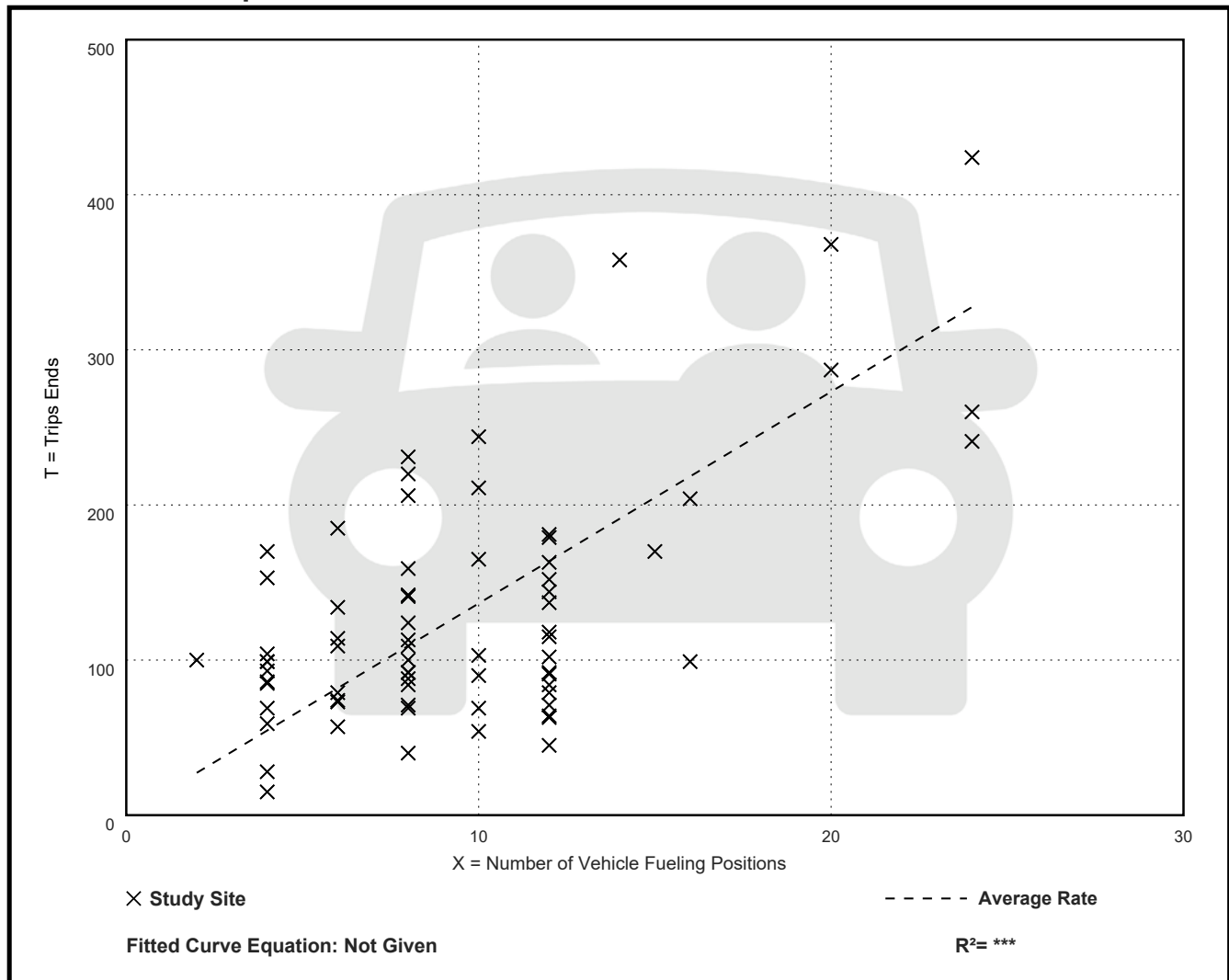
Avg. Num. of Vehicle Fueling Positions: 10

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
13.65	3.75 - 50.00	7.16

Data Plot and Equation



Convenience Store/Gas Station - GFA (2-4k) (945)

Vehicle Trip Ends vs: Vehicle Fueling Positions

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 79

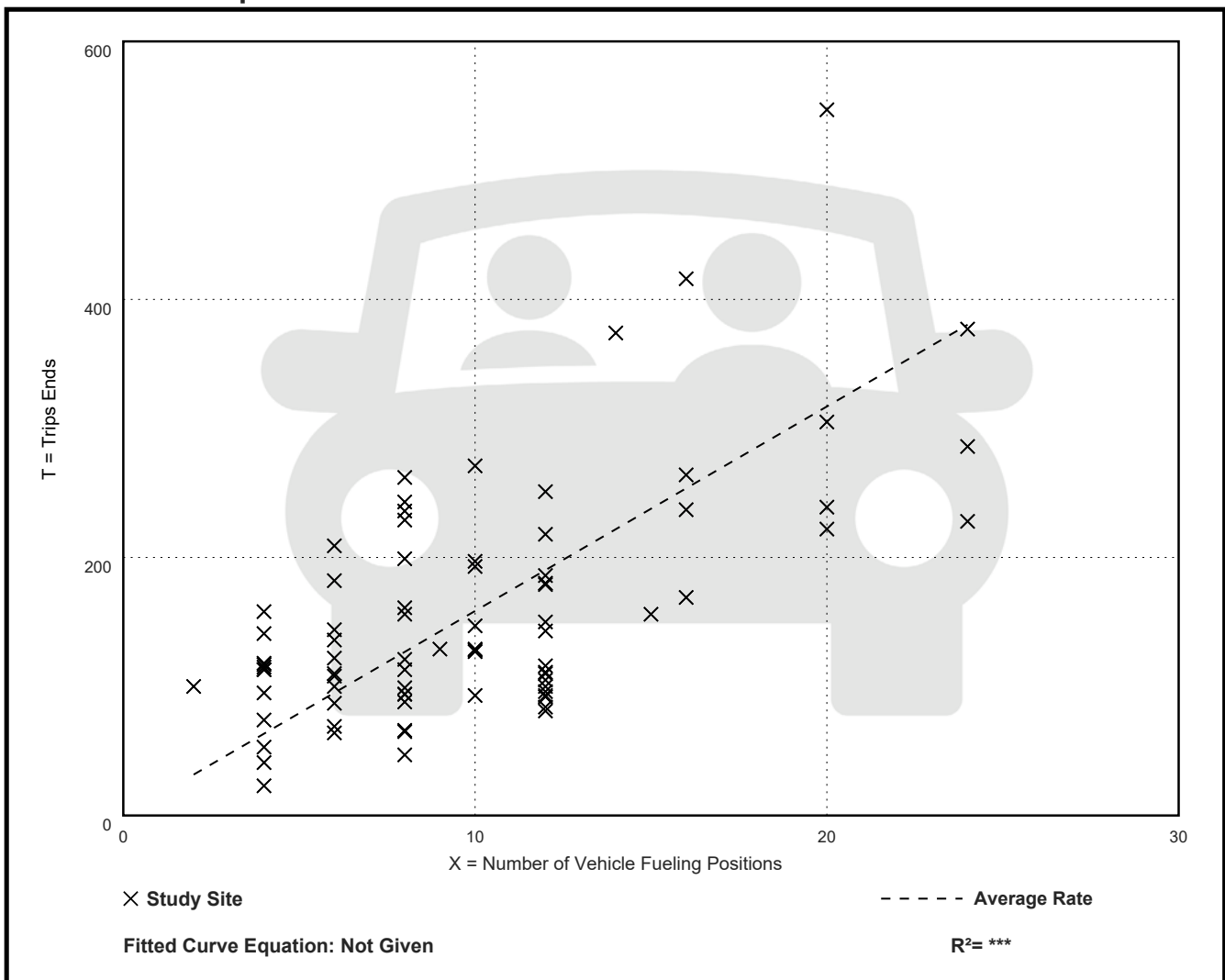
Avg. Num. of Vehicle Fueling Positions: 10

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
15.85	5.75 - 50.00	7.54

Data Plot and Equation



CMAP 2050 Projections Letter



November 10, 2025

Dylan Freeman
Consultant
Kenig, Lindgren, O’Hara and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

**Subject: Oakton Street and Austin Avenue
IDOT**

Dear Mr. Freeman:

In response to a request made on your behalf and dated November 7, 2025, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
Oakton St, at Austin Ave	21,400 (2023)	23,300
Austin Ave north of Oakton St	5,000 (2022)	5,450

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2025 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 or email me at jrodriguez@cmap.illinois.gov

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

cc: Rios (IDOT)
\\2025_trafficForecasts\MortonGrove\ck-117-25\ck-117-25.docx

TRAFFIC FORECAST RECORD

Record Number: ck-117-25

Type of Report: Projection

Year Sought: 2050

Analyst: JAR

Organization Requestion Forecast: KLOA

Contact: Dylan Freeman

Email or Phone: dfreeman@kloainc.com

Sponsor: IDOT

Date request was received: 11/7/2025

Date that response was emailed: 11/10/2025

Facility Location: Oakton Street and Austin Avenue

Municipality: Morton Grove

Level of Service Criteria

LEVEL OF SERVICE CRITERIA

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

Source: *Highway Capacity Manual*, 7th Edition.

Capacity Analysis Summary Sheets
Existing Weekday Morning Peak Hour

Lanes and Geometrics

3: Austin Avenue & Oakton Street

11/12/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	704	9	25	664	91	17	68	63	73	65	162
Future Volume (vph)	290	704	9	25	664	91	17	68	63	73	65	162
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	140		0	225		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	70			155			25			100		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.982			0.928			0.893	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	3466	0	1805	3497	0	1805	1745	0	1787	1596	0
Flt Permitted	0.249			0.352			0.417			0.637		
Satd. Flow (perm)	451	3466	0	669	3497	0	792	1745	0	1198	1596	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35		35			25			25		25
Link Distance (ft)		278		837			675			449		449
Travel Time (s)		5.4		16.3			18.4			12.2		12.2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	5%	4%	0%	0%	1%	4%	0%	2%	0%	1%	2%	8%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	322	792	0	28	839	0	19	146	0	81	252	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8				4
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4		4
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		8.0	8.0		8.0		8.0
Minimum Split (s)	9.5	24.0		9.5	24.0		24.0	24.0		24.0		24.0
Total Split (s)	20.0	52.0		13.0	45.0		35.0	35.0		35.0		35.0
Total Split (%)	20.0%	52.0%		13.0%	45.0%		35.0%	35.0%		35.0%		35.0%
Yellow Time (s)	3.5	4.5		3.5	4.5		4.5	4.5		4.5		4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		1.5	1.5		1.5		1.5
Lost Time Adjust (s)	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		6.0	6.0		6.0		6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None		None
Act Effct Green (s)	68.7	60.3		58.2	49.7		21.8	21.8		21.8		21.8
Actuated g/C Ratio	0.69	0.60		0.58	0.50		0.22	0.22		0.22		0.22
v/c Ratio	0.68	0.38		0.06	0.48		0.11	0.38		0.31		0.73
Control Delay (s/veh)	14.8	12.6		7.6	19.5		30.0	35.0		34.2		47.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0		0.0
Total Delay (s/veh)	14.8	12.6		7.6	19.5		30.0	35.0		34.2		47.9
LOS	B	B		A	B		C	D		C		D
Approach Delay (s/veh)		13.3			19.2			34.4				44.6
Approach LOS		B			B			C				D
Queue Length 50th (ft)	73	144		5	180		10	81		44		152
Queue Length 95th (ft)	143	228		17	288		27	127		80		219

Lanes and Geometrics

3: Austin Avenue & Oakton Street

11/12/2025

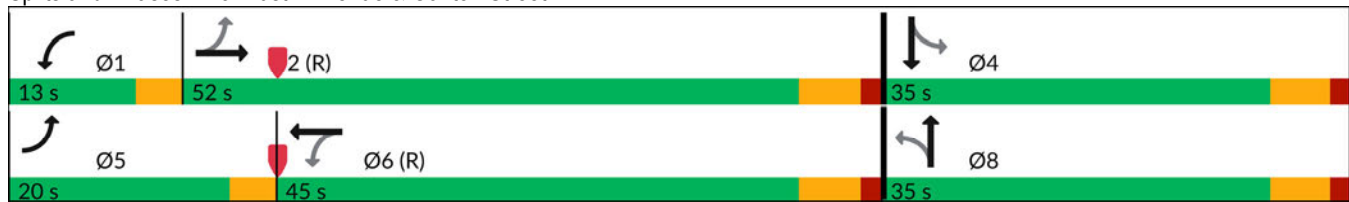


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		198			757			595				369
Turn Bay Length (ft)	90			100			140			225		
Base Capacity (vph)	519	2088		520	1736		229	506		347	462	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.62	0.38		0.05	0.48		0.08	0.29		0.23	0.55	

Intersection Summary

Area Type:	Other
Cycle Length:	100
Actuated Cycle Length:	100
Offset:	47 (47%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle:	60
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.73
Intersection Signal Delay (s/veh):	20.9
Intersection LOS:	C
Intersection Capacity Utilization	75.7%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 3: Austin Avenue & Oakton Street



Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	0	1003	842	1	0	0
Future Vol, veh/h	0	1003	842	1	0	0
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	0	0	0
Mvmt Flow	0	1067	896	1	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	1430 448
Stage 1	-	-	-	-	896 -
Stage 2	-	-	-	-	534 -
Critical Hdwy	-	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	-	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	0	-	-	-	128 563
Stage 1	0	-	-	-	364 -
Stage 2	0	-	-	-	558 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	128 563
Mov Cap-2 Maneuver	-	-	-	-	128 -
Stage 1	-	-	-	-	364 -
Stage 2	-	-	-	-	558 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	4	1000	841	1	3	2
Future Vol, veh/h	4	1000	841	1	3	2
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	0	0	0
Mvmt Flow	4	1064	895	1	3	2

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	896	0	-	0	1436 448
Stage 1	-	-	-	-	895 -
Stage 2	-	-	-	-	540 -
Critical Hdwy	4.1	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	766	-	-	-	127 564
Stage 1	-	-	-	-	364 -
Stage 2	-	-	-	-	554 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	766	-	-	-	126 564
Mov Cap-2 Maneuver	-	-	-	-	126 -
Stage 1	-	-	-	-	361 -
Stage 2	-	-	-	-	554 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.04	0	25.32
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	766	-	-	-	182
HCM Lane V/C Ratio	0.006	-	-	-	0.029
HCM Ctrl Dly (s/v)	9.7	-	-	-	25.3
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	TT			↑	↑	
Traffic Vol, veh/h	0	0	0	449	300	2
Future Vol, veh/h	0	0	0	449	300	2
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	4	4	50
Mvmt Flow	0	0	0	478	319	2

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	798	320	-	0	-	0
Stage 1	320	-	-	-	-	-
Stage 2	478	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	358	725	0	-	-	-
Stage 1	740	-	0	-	-	-
Stage 2	628	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	358	725	-	-	-	-
Mov Cap-2 Maneuver	358	-	-	-	-	-
Stage 1	740	-	-	-	-	-
Stage 2	628	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	0	0	449	302	3
Future Vol, veh/h	10	0	0	449	302	3
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	10	0	0	2	0	4
Mvmt Flow	11	0	0	478	321	3

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	801	323	-	0	-	0
Stage 1	323	-	-	-	-	-
Stage 2	478	-	-	-	-	-
Critical Hdwy	6.5	6.2	-	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.3	-	-	-	-
Pot Cap-1 Maneuver	343	723	0	-	-	-
Stage 1	716	-	0	-	-	-
Stage 2	608	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	343	723	-	-	-	-
Mov Cap-2 Maneuver	343	-	-	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	608	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	15.83	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	343	-	-
HCM Lane V/C Ratio	-	0.031	-	-
HCM Ctrl Dly (s/v)	-	15.8	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Capacity Analysis Summary Sheets
Existing Weekday Evening Peak Hour

Lanes and Geometrics

3: Austin Avenue & Oakton Street

11/12/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	206	867	6	20	913	51	25	44	19	71	74	297
Future Volume (vph)	206	867	6	20	913	51	25	44	19	71	74	297
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	140		0	225		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	70			155			25			100		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999			0.992			0.954				0.880
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3571	0	1719	3548	0	1736	1752	0	1736	1540	0
Flt Permitted	0.188			0.304			0.239			0.715		
Satd. Flow (perm)	347	3571	0	550	3548	0	437	1752	0	1306	1540	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			25				25
Link Distance (ft)		278			837			675				449
Travel Time (s)		5.4			16.3			18.4				12.2
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
Heavy Vehicles (%)	3%	1%	0%	5%	1%	0%	4%	5%	0%	4%	15%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	212	900	0	21	994	0	26	65	0	73	382	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8				4
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4		4
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		8.0	8.0		8.0		8.0
Minimum Split (s)	9.5	24.0		9.5	24.0		24.0	24.0		24.0		24.0
Total Split (s)	23.0	62.0		13.0	52.0		35.0	35.0		35.0		35.0
Total Split (%)	20.9%	56.4%		11.8%	47.3%		31.8%	31.8%		31.8%		31.8%
Yellow Time (s)	3.5	4.5		3.5	4.5		4.5	4.5		4.5		4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		1.5	1.5		1.5		1.5
Lost Time Adjust (s)	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		6.0	6.0		6.0		6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None		None
Act Effct Green (s)	71.8	65.3		63.1	54.6		28.7	28.7		28.7		28.7
Actuated g/C Ratio	0.65	0.59		0.57	0.50		0.26	0.26		0.26		0.26
v/c Ratio	0.58	0.42		0.06	0.56		0.23	0.14		0.21		0.95
Control Delay (s/veh)	14.2	13.7		7.8	21.5		38.0	32.1		33.7		74.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0		0.0
Total Delay (s/veh)	14.2	13.7		7.8	21.5		38.0	32.1		33.7		74.9
LOS	B	B		A	C		D	C		C		E
Approach Delay (s/veh)		13.8			21.2			33.8				68.3
Approach LOS		B			C			C				E
Queue Length 50th (ft)	56	155		5	251		15	37		42		297
Queue Length 95th (ft)	89	252		14	345		43	74		83		#505

Lanes and Geometrics

3: Austin Avenue & Oakton Street

11/12/2025

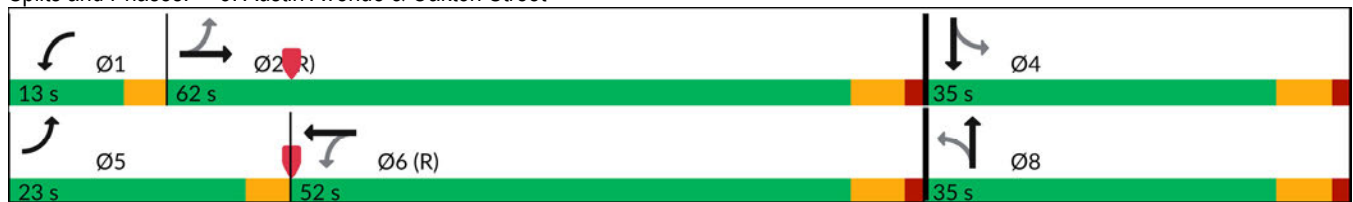


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		198			757			595			369	
Turn Bay Length (ft)	90			100			140			225		
Base Capacity (vph)	475	2118		433	1761		115	461		344	406	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.45	0.42		0.05	0.56		0.23	0.14		0.21	0.94	

Intersection Summary

Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 64.9 (59%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.95
 Intersection Signal Delay (s/veh): 26.5 Intersection LOS: C
 Intersection Capacity Utilization 73.8% ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 3: Austin Avenue & Oakton Street



Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	0	1079	1231	4	0	3
Future Vol, veh/h	0	1079	1231	4	0	3
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	96	96	96	96	96	96
Heavy Vehicles, %	0	2	3	0	0	0
Mvmt Flow	0	1124	1282	4	0	3

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	1846 643
Stage 1	-	-	-	-	1284 -
Stage 2	-	-	-	-	562 -
Critical Hdwy	-	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	-	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	0	-	-	-	68 421
Stage 1	0	-	-	-	227 -
Stage 2	0	-	-	-	540 -
Platoon blocked, %	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	68 421
Mov Cap-2 Maneuver	-	-	-	-	68 -
Stage 1	-	-	-	-	227 -
Stage 2	-	-	-	-	540 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	13.62
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	421
HCM Lane V/C Ratio	-	-	-	0.007
HCM Ctrl Dly (s/v)	-	-	-	13.6
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	2	1079	1234	0	0	6
Future Vol, veh/h	2	1079	1234	0	0	6
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	96	96	96	96	96	96
Heavy Vehicles, %	0	2	3	0	0	0
Mvmt Flow	2	1124	1285	0	0	6

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1285	0	-	0	1852 643
Stage 1	-	-	-	-	1285 -
Stage 2	-	-	-	-	566 -
Critical Hdwy	4.1	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	546	-	-	-	67 421
Stage 1	-	-	-	-	227 -
Stage 2	-	-	-	-	537 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	546	-	-	-	67 421
Mov Cap-2 Maneuver	-	-	-	-	67 -
Stage 1	-	-	-	-	226 -
Stage 2	-	-	-	-	537 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.02	0	13.68
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	546	-	-	-	421
HCM Lane V/C Ratio	0.004	-	-	-	0.015
HCM Ctrl Dly (s/v)	11.6	-	-	-	13.7
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			↑	↑	
Traffic Vol, veh/h	1	1	0	301	441	4
Future Vol, veh/h	1	1	0	301	441	4
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	2	7	0
Mvmt Flow	1	1	0	338	496	4

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	836	498	-	0	-	0
Stage 1	498	-	-	-	-	-
Stage 2	338	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	340	577	0	-	-	-
Stage 1	615	-	0	-	-	-
Stage 2	727	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	340	577	-	-	-	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	615	-	-	-	-	-
Stage 2	727	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.46	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	428	-	-
HCM Lane V/C Ratio	-	0.005	-	-
HCM Ctrl Dly (s/v)	-	13.5	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			↑		↑
Traffic Vol, veh/h	2	2	0	302	443	5
Future Vol, veh/h	2	2	0	302	443	5
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	2	7	0
Mvmt Flow	2	2	0	328	482	5

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	813	484	-	0	-	0
Stage 1	484	-	-	-	-	-
Stage 2	328	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	351	587	0	-	-	-
Stage 1	624	-	0	-	-	-
Stage 2	734	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	351	587	-	-	-	-
Mov Cap-2 Maneuver	351	-	-	-	-	-
Stage 1	624	-	-	-	-	-
Stage 2	734	-	-	-	-	-

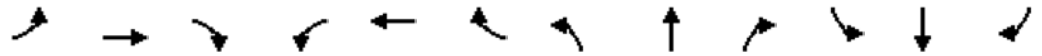
Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.28	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	439	-	-
HCM Lane V/C Ratio	-	0.01	-	-
HCM Ctrl Dly (s/v)	-	13.3	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Capacity Analysis Summary Sheets
Year 2031 No-Build Weekday Morning Peak Hour

Lanes and Geometrics
3: Austin Avenue & Oakton Street

11/12/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	296	718	9	26	677	93	17	69	64	74	66	165
Future Volume (vph)	296	718	9	26	677	93	17	69	64	74	66	165
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	140		0	225		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	70			155			25			100		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.982			0.928				0.893
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	3466	0	1805	3497	0	1805	1745	0	1787	1596	0
Flt Permitted	0.240			0.347			0.411			0.639		
Satd. Flow (perm)	434	3466	0	659	3497	0	781	1745	0	1202	1596	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			25				25
Link Distance (ft)		278			837			675				449
Travel Time (s)		5.4			16.3			18.4				12.2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	5%	4%	0%	0%	1%	4%	0%	2%	0%	1%	2%	8%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	329	808	0	29	855	0	19	148	0	82	256	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8				4
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4		4
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		8.0	8.0		8.0		8.0
Minimum Split (s)	9.5	24.0		9.5	24.0		24.0	24.0		24.0		24.0
Total Split (s)	20.0	52.0		13.0	45.0		35.0	35.0		35.0		35.0
Total Split (%)	20.0%	52.0%		13.0%	45.0%		35.0%	35.0%		35.0%		35.0%
Yellow Time (s)	3.5	4.5		3.5	4.5		4.5	4.5		4.5		4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		1.5	1.5		1.5		1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.2		0.0		0.0
Total Lost Time (s)	3.5	6.0		3.5	6.0		6.0	6.2		6.0		6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None		None
Act Effct Green (s)	68.5	60.0		57.6	49.0		22.0	21.8		22.0		22.0
Actuated g/C Ratio	0.69	0.60		0.58	0.49		0.22	0.22		0.22		0.22
v/c Ratio	0.70	0.39		0.06	0.50		0.11	0.39		0.31		0.73
Control Delay (s/veh)	16.2	12.8		7.7	20.2		30.0	35.2		34.1		48.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0		0.0
Total Delay (s/veh)	16.2	12.8		7.7	20.2		30.0	35.2		34.1		48.1
LOS	B	B		A	C		C	D		C		D
Approach Delay (s/veh)		13.8			19.8			34.6				44.7
Approach LOS		B			B			C				D
Queue Length 50th (ft)	75	149		5	188		10	82		44		155
Queue Length 95th (ft)	157	234		17	295		27	129		80		223

Lanes and Geometrics

3: Austin Avenue & Oakton Street

11/12/2025

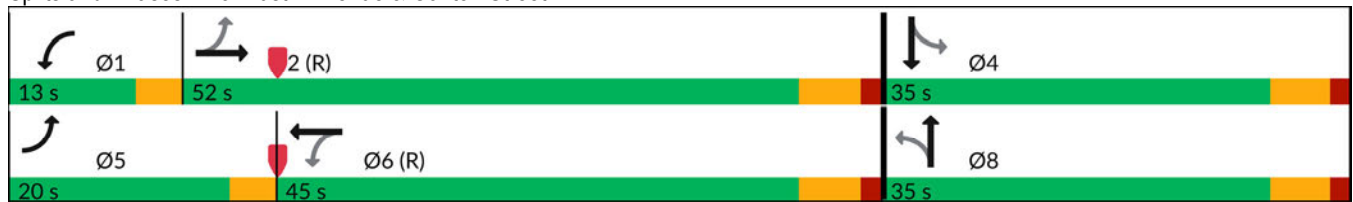


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		198			757			595				369
Turn Bay Length (ft)	90			100			140			225		
Base Capacity (vph)	511	2081		510	1712		226	502		348	462	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.64	0.39		0.06	0.50		0.08	0.29		0.24	0.55	

Intersection Summary

Area Type:	Other
Cycle Length:	100
Actuated Cycle Length:	100
Offset:	47 (47%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle:	60
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.73
Intersection Signal Delay (s/veh):	21.4
Intersection LOS:	C
Intersection Capacity Utilization	76.7%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 3: Austin Avenue & Oakton Street



Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	0	1023	859	1	0	0
Future Vol, veh/h	0	1023	859	1	0	0
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	0	0	0
Mvmt Flow	0	1088	914	1	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	1459 457
Stage 1	-	-	-	-	914 -
Stage 2	-	-	-	-	544 -
Critical Hdwy	-	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	-	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	0	-	-	-	122 556
Stage 1	0	-	-	-	356 -
Stage 2	0	-	-	-	551 -
Platoon blocked, %	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	122 556
Mov Cap-2 Maneuver	-	-	-	-	122 -
Stage 1	-	-	-	-	356 -
Stage 2	-	-	-	-	551 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	4	1020	858	1	3	2
Future Vol, veh/h	4	1020	858	1	3	2
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	0	0	0
Mvmt Flow	4	1085	913	1	3	2

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	914	0	-	0	1464 457
Stage 1	-	-	-	-	913 -
Stage 2	-	-	-	-	551 -
Critical Hdwy	4.1	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	754	-	-	-	121 556
Stage 1	-	-	-	-	356 -
Stage 2	-	-	-	-	547 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	754	-	-	-	120 556
Mov Cap-2 Maneuver	-	-	-	-	120 -
Stage 1	-	-	-	-	353 -
Stage 2	-	-	-	-	547 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.04	0	26.18
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	754	-	-	-	175
HCM Lane V/C Ratio	0.006	-	-	-	0.03
HCM Ctrl Dly (s/v)	9.8	-	-	-	26.2
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	TT			↑	↑	
Traffic Vol, veh/h	0	0	0	458	306	2
Future Vol, veh/h	0	0	0	458	306	2
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	4	4	50
Mvmt Flow	0	0	0	487	326	2

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	814	327	-	0	-	0
Stage 1	327	-	-	-	-	-
Stage 2	487	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	350	719	0	-	-	-
Stage 1	736	-	0	-	-	-
Stage 2	622	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	350	719	-	-	-	-
Mov Cap-2 Maneuver	350	-	-	-	-	-
Stage 1	736	-	-	-	-	-
Stage 2	622	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	TT			↑	↑	
Traffic Vol, veh/h	10	0	0	458	308	3
Future Vol, veh/h	10	0	0	458	308	3
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	10	0	0	2	0	4
Mvmt Flow	11	0	0	487	328	3

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	816	329	-	0	-	0
Stage 1	329	-	-	-	-	-
Stage 2	487	-	-	-	-	-
Critical Hdwy	6.5	6.2	-	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.3	-	-	-	-
Pot Cap-1 Maneuver	336	717	0	-	-	-
Stage 1	711	-	0	-	-	-
Stage 2	601	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	336	717	-	-	-	-
Mov Cap-2 Maneuver	336	-	-	-	-	-
Stage 1	711	-	-	-	-	-
Stage 2	601	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	16.08	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	336	-	-
HCM Lane V/C Ratio	-	0.032	-	-
HCM Ctrl Dly (s/v)	-	16.1	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Capacity Analysis Summary Sheets
Year 2031 No-Build Weekday Evening Peak Hour

Lanes and Geometrics
 3: Austin Avenue & Oakton Street

11/12/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	884	6	20	931	52	26	45	19	72	75	303
Future Volume (vph)	210	884	6	20	931	52	26	45	19	72	75	303
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	140		0	225		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	70			155			25			100		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999			0.992			0.955				0.880
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3571	0	1719	3548	0	1736	1753	0	1736	1540	0
Flt Permitted	0.179			0.298			0.232			0.714		
Satd. Flow (perm)	330	3571	0	539	3548	0	424	1753	0	1304	1540	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35		35			25			25		25
Link Distance (ft)		278		837			675			449		449
Travel Time (s)		5.4		16.3			18.4			12.2		12.2
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
Heavy Vehicles (%)	3%	1%	0%	5%	1%	0%	4%	5%	0%	4%	15%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	216	917	0	21	1014	0	27	66	0	74	389	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8				4
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4		4
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		8.0	8.0		8.0		8.0
Minimum Split (s)	9.5	24.0		9.5	24.0		24.0	24.0		24.0		24.0
Total Split (s)	23.0	62.0		13.0	52.0		35.0	35.0		35.0		35.0
Total Split (%)	20.9%	56.4%		11.8%	47.3%		31.8%	31.8%		31.8%		31.8%
Yellow Time (s)	3.5	4.5		3.5	4.5		4.5	4.5		4.5		4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		1.5	1.5		1.5		1.5
Lost Time Adjust (s)	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		6.0	6.0		6.0		6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None		None
Act Effct Green (s)	71.5	65.0		62.6	54.1		29.0	29.0		29.0		29.0
Actuated g/C Ratio	0.65	0.59		0.57	0.49		0.26	0.26		0.26		0.26
v/c Ratio	0.60	0.43		0.06	0.58		0.24	0.14		0.22		0.96
Control Delay (s/veh)	14.9	13.9		7.8	22.1		38.8	32.1		33.7		76.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0		0.0
Total Delay (s/veh)	14.9	13.9		7.8	22.1		38.8	32.1		33.7		76.6
LOS	B	B		A	C		D	C		C		E
Approach Delay (s/veh)		14.0			21.8			34.0				69.8
Approach LOS		B			C			C				E
Queue Length 50th (ft)	57	159		5	258		16	37		42		304
Queue Length 95th (ft)	90	258		14	360		44	75		84		#520

Lanes and Geometrics

3: Austin Avenue & Oakton Street

11/12/2025

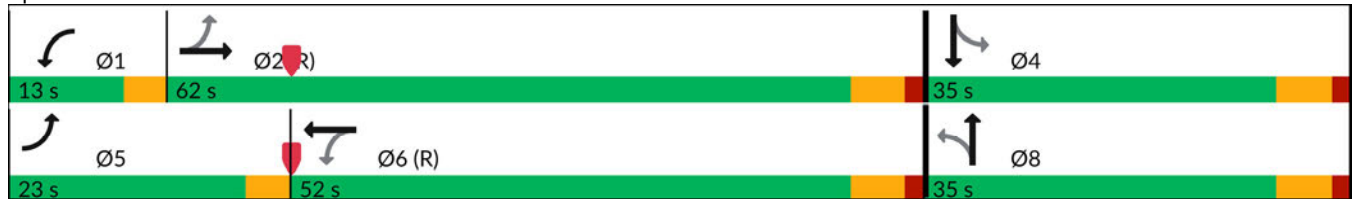


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		198			757			595				369
Turn Bay Length (ft)	90			100			140			225		
Base Capacity (vph)	466	2111		425	1744		111	462		343	406	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.46	0.43		0.05	0.58		0.24	0.14		0.22	0.96	

Intersection Summary

Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 64.9 (59%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.96
 Intersection Signal Delay (s/veh): 27.2 Intersection LOS: C
 Intersection Capacity Utilization 75.0% ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 3: Austin Avenue & Oakton Street



Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	0	1101	1256	4	0	3
Future Vol, veh/h	0	1101	1256	4	0	3
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	96	96	96	96	96	96
Heavy Vehicles, %	0	2	3	0	0	0
Mvmt Flow	0	1147	1308	4	0	3

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	1884 656
Stage 1	-	-	-	-	1310 -
Stage 2	-	-	-	-	573 -
Critical Hdwy	-	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	-	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	0	-	-	-	64 413
Stage 1	0	-	-	-	220 -
Stage 2	0	-	-	-	533 -
Platoon blocked, %	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	64 413
Mov Cap-2 Maneuver	-	-	-	-	64 -
Stage 1	-	-	-	-	220 -
Stage 2	-	-	-	-	533 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	13.79
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	413
HCM Lane V/C Ratio	-	-	-	0.008
HCM Ctrl Dly (s/v)	-	-	-	13.8
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	2	1101	1259	0	0	6
Future Vol, veh/h	2	1101	1259	0	0	6
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	96	96	96	96	96	96
Heavy Vehicles, %	0	2	3	0	0	0
Mvmt Flow	2	1147	1311	0	0	6

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1311	0	-	0	1889 656
Stage 1	-	-	-	-	1311 -
Stage 2	-	-	-	-	578 -
Critical Hdwy	4.1	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	534	-	-	-	63 413
Stage 1	-	-	-	-	220 -
Stage 2	-	-	-	-	530 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	534	-	-	-	63 413
Mov Cap-2 Maneuver	-	-	-	-	63 -
Stage 1	-	-	-	-	219 -
Stage 2	-	-	-	-	530 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.02	0	13.85
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	534	-	-	-	413
HCM Lane V/C Ratio	0.004	-	-	-	0.015
HCM Ctrl Dly (s/v)	11.8	-	-	-	13.9
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	TT			↑	↑	
Traffic Vol, veh/h	1	1	0	307	450	4
Future Vol, veh/h	1	1	0	307	450	4
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	2	7	0
Mvmt Flow	1	1	0	345	506	4

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	853	508	-	0	-	0
Stage 1	508	-	-	-	-	-
Stage 2	345	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	332	569	0	-	-	-
Stage 1	608	-	0	-	-	-
Stage 2	722	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	332	569	-	-	-	-
Mov Cap-2 Maneuver	332	-	-	-	-	-
Stage 1	608	-	-	-	-	-
Stage 2	722	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.63	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	420	-	-
HCM Lane V/C Ratio	-	0.005	-	-
HCM Ctrl Dly (s/v)	-	13.6	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	TT			↑	↑	
Traffic Vol, veh/h	2	2	0	308	452	5
Future Vol, veh/h	2	2	0	308	452	5
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	2	7	0
Mvmt Flow	2	2	0	335	491	5

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	829	494	-	0	-	0
Stage 1	494	-	-	-	-	-
Stage 2	335	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	343	579	0	-	-	-
Stage 1	617	-	0	-	-	-
Stage 2	729	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	343	579	-	-	-	-
Mov Cap-2 Maneuver	343	-	-	-	-	-
Stage 1	617	-	-	-	-	-
Stage 2	729	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.44	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	431	-	-
HCM Lane V/C Ratio	-	0.01	-	-
HCM Ctrl Dly (s/v)	-	13.4	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Capacity Analysis Summary Sheets
Year 2031 Total Projected Weekday Morning Peak Hour

Lanes and Geometrics
3: Austin Avenue & Oakton Street

11/12/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	296	719	9	26	685	93	17	69	64	75	66	165
Future Volume (vph)	296	719	9	26	685	93	17	69	64	75	66	165
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	140		0	225		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	70			155			25			100		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.982			0.928				0.893
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	3466	0	1805	3498	0	1805	1745	0	1787	1596	0
Flt Permitted	0.236			0.346			0.411			0.639		
Satd. Flow (perm)	427	3466	0	657	3498	0	781	1745	0	1202	1596	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			25				25
Link Distance (ft)		278			837			675				449
Travel Time (s)		5.4			16.3			18.4				12.2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	5%	4%	0%	0%	1%	4%	0%	2%	0%	1%	2%	8%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	329	809	0	29	864	0	19	148	0	83	256	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8				4
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4		4
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		8.0	8.0		8.0		8.0
Minimum Split (s)	9.5	24.0		9.5	24.0		24.0	24.0		24.0		24.0
Total Split (s)	20.0	52.0		13.0	45.0		35.0	35.0		35.0		35.0
Total Split (%)	20.0%	52.0%		13.0%	45.0%		35.0%	35.0%		35.0%		35.0%
Yellow Time (s)	3.5	4.5		3.5	4.5		4.5	4.5		4.5		4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		1.5	1.5		1.5		1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.2		0.0		0.0
Total Lost Time (s)	3.5	6.0		3.5	6.0		6.0	6.2		6.0		6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None		None
Act Effct Green (s)	68.5	60.0		57.5	48.9		22.0	21.8		22.0		22.0
Actuated g/C Ratio	0.69	0.60		0.58	0.49		0.22	0.22		0.22		0.22
v/c Ratio	0.70	0.39		0.06	0.51		0.11	0.39		0.31		0.73
Control Delay (s/veh)	16.5	12.8		7.7	20.3		30.0	35.2		34.2		48.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0		0.0
Total Delay (s/veh)	16.5	12.8		7.7	20.3		30.0	35.2		34.2		48.1
LOS	B	B		A	C		C	D		C		D
Approach Delay (s/veh)		13.9			19.9			34.6				44.7
Approach LOS		B			B			C				D
Queue Length 50th (ft)	75	149		5	191		10	82		45		155
Queue Length 95th (ft)	159	235		17	299		27	129		82		223

Lanes and Geometrics

3: Austin Avenue & Oakton Street

11/12/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		198			757			595				369
Turn Bay Length (ft)	90			100			140			225		
Base Capacity (vph)	509	2081		509	1709		226	502		348	462	
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	0.65	0.39		0.06	0.51		0.08	0.29		0.24	0.55	

Intersection Summary

Area Type:	Other
Cycle Length:	100
Actuated Cycle Length:	100
Offset:	47 (47%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle:	60
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.73
Intersection Signal Delay (s/veh):	21.5
Intersection LOS:	C
Intersection Capacity Utilization	76.9%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 3: Austin Avenue & Oakton Street



Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	0	1024	853	15	0	4
Future Vol, veh/h	0	1024	853	15	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	0	0	0
Mvmt Flow	0	1089	907	16	0	4

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	1460 462
Stage 1	-	-	-	-	915 -
Stage 2	-	-	-	-	545 -
Critical Hdwy	-	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	-	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	0	-	-	-	122 552
Stage 1	0	-	-	-	355 -
Stage 2	0	-	-	-	551 -
Platoon blocked, %	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	122 552
Mov Cap-2 Maneuver	-	-	-	-	122 -
Stage 1	-	-	-	-	355 -
Stage 2	-	-	-	-	551 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	11.57
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	552
HCM Lane V/C Ratio	-	-	-	0.008
HCM Ctrl Dly (s/v)	-	-	-	11.6
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	24	1009	852	5	15	14
Future Vol, veh/h	24	1009	852	5	15	14
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	0	0	0
Mvmt Flow	26	1073	906	5	16	15

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	912	0	-	0	1497 456
Stage 1	-	-	-	-	909 -
Stage 2	-	-	-	-	588 -
Critical Hdwy	4.1	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	756	-	-	-	116 557
Stage 1	-	-	-	-	358 -
Stage 2	-	-	-	-	524 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	756	-	-	-	110 557
Mov Cap-2 Maneuver	-	-	-	-	110 -
Stage 1	-	-	-	-	341 -
Stage 2	-	-	-	-	524 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.23	0	29.17
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	756	-	-	-	180
HCM Lane V/C Ratio	0.034	-	-	-	0.172
HCM Ctrl Dly (s/v)	9.9	-	-	-	29.2
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			↑		↑
Traffic Vol, veh/h	0	1	0	458	306	4
Future Vol, veh/h	0	1	0	458	306	4
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	4	4	50
Mvmt Flow	0	1	0	487	326	4

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	815	328	-	0	-	0
Stage 1	328	-	-	-	-	-
Stage 2	487	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	350	718	0	-	-	-
Stage 1	735	-	0	-	-	-
Stage 2	622	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	350	718	-	-	-	-
Mov Cap-2 Maneuver	350	-	-	-	-	-
Stage 1	735	-	-	-	-	-
Stage 2	622	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.02	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 718	-	-
HCM Lane V/C Ratio	- 0.001	-	-
HCM Ctrl Dly (s/v)	- 10	-	-
HCM Lane LOS	- B	-	-
HCM 95th %tile Q(veh)	- 0	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	TT			↑	↑	
Traffic Vol, veh/h	16	2	0	458	308	5
Future Vol, veh/h	16	2	0	458	308	5
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	10	0	0	2	0	4
Mvmt Flow	17	2	0	487	328	5

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	818	330	-	0	-	0
Stage 1	330	-	-	-	-	-
Stage 2	487	-	-	-	-	-
Critical Hdwy	6.5	6.2	-	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.3	-	-	-	-
Pot Cap-1 Maneuver	335	716	0	-	-	-
Stage 1	711	-	0	-	-	-
Stage 2	601	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	335	716	-	-	-	-
Mov Cap-2 Maneuver	335	-	-	-	-	-
Stage 1	711	-	-	-	-	-
Stage 2	601	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	15.68	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	356	-	-
HCM Lane V/C Ratio	-	0.054	-	-
HCM Ctrl Dly (s/v)	-	15.7	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

Capacity Analysis Summary Sheets
Year 2031 Total Projected Weekday Evening Peak Hour

Lanes and Geometrics
3: Austin Avenue & Oakton Street

11/12/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	885	6	20	939	52	26	45	19	74	75	303
Future Volume (vph)	210	885	6	20	939	52	26	45	19	74	75	303
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		0	100		0	140		0	225		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	70			155			25			100		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999			0.992			0.955				0.880
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3571	0	1719	3548	0	1736	1753	0	1736	1540	0
Flt Permitted	0.176			0.297			0.232			0.714		
Satd. Flow (perm)	325	3571	0	537	3548	0	424	1753	0	1304	1540	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			25				25
Link Distance (ft)		278			837			675				449
Travel Time (s)		5.4			16.3			18.4				12.2
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
Heavy Vehicles (%)	3%	1%	0%	5%	1%	0%	4%	5%	0%	4%	15%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	216	918	0	21	1022	0	27	66	0	76	389	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8				4
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4		4
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		8.0	8.0		8.0		8.0
Minimum Split (s)	9.5	24.0		9.5	24.0		24.0	24.0		24.0		24.0
Total Split (s)	23.0	62.0		13.0	52.0		35.0	35.0		35.0		35.0
Total Split (%)	20.9%	56.4%		11.8%	47.3%		31.8%	31.8%		31.8%		31.8%
Yellow Time (s)	3.5	4.5		3.5	4.5		4.5	4.5		4.5		4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		1.5	1.5		1.5		1.5
Lost Time Adjust (s)	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		6.0	6.0		6.0		6.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Min		None	C-Min		None	None		None		None
Act Effct Green (s)	71.5	65.0		62.5	54.0		29.0	29.0		29.0		29.0
Actuated g/C Ratio	0.65	0.59		0.57	0.49		0.26	0.26		0.26		0.26
v/c Ratio	0.60	0.43		0.06	0.59		0.24	0.14		0.22		0.96
Control Delay (s/veh)	15.0	13.9		7.8	22.3		38.8	32.1		33.8		76.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0		0.0
Total Delay (s/veh)	15.0	13.9		7.8	22.3		38.8	32.1		33.8		76.6
LOS	B	B		A	C		D	C		C		E
Approach Delay (s/veh)		14.1			22.0			34.0				69.6
Approach LOS		B			C			C				E
Queue Length 50th (ft)	57	159		5	261		16	37		43		304
Queue Length 95th (ft)	90	258		14	365		44	75		86		#520

Lanes and Geometrics

3: Austin Avenue & Oakton Street

11/12/2025

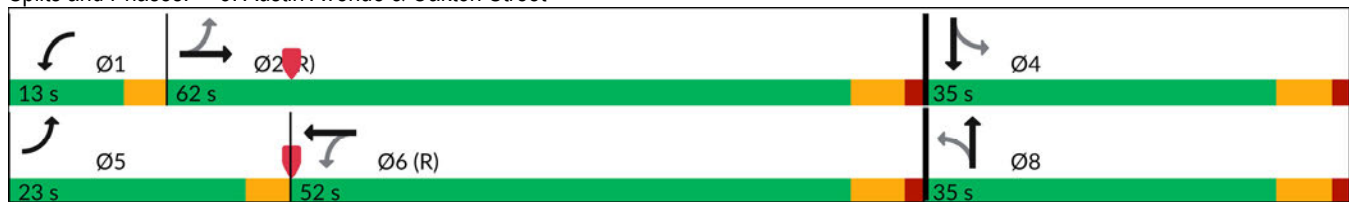


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		198			757			595			369	
Turn Bay Length (ft)	90			100			140			225		
Base Capacity (vph)	464	2111		424	1742		111	462		343	406	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.47	0.43		0.05	0.59		0.24	0.14		0.22	0.96	

Intersection Summary

Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 64.9 (59%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.96
 Intersection Signal Delay (s/veh): 27.2 Intersection LOS: C
 Intersection Capacity Utilization 75.2% ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 3: Austin Avenue & Oakton Street



Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	0	1102	1248	20	0	8
Future Vol, veh/h	0	1102	1248	20	0	8
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	96	96	96	96	96	96
Heavy Vehicles, %	0	2	3	0	0	0
Mvmt Flow	0	1148	1300	21	0	8

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	1884 660
Stage 1	-	-	-	-	1310 -
Stage 2	-	-	-	-	574 -
Critical Hdwy	-	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	-	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	0	-	-	-	64 410
Stage 1	0	-	-	-	220 -
Stage 2	0	-	-	-	532 -
Platoon blocked, %	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	64 410
Mov Cap-2 Maneuver	-	-	-	-	64 -
Stage 1	-	-	-	-	220 -
Stage 2	-	-	-	-	532 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	13.96
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	410
HCM Lane V/C Ratio	-	-	-	0.02
HCM Ctrl Dly (s/v)	-	-	-	14
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		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	24	1088	1252	4	14	22
Future Vol, veh/h	24	1088	1252	4	14	22
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	96	96	96	96	96	96
Heavy Vehicles, %	0	2	3	0	0	0
Mvmt Flow	25	1133	1304	4	15	23

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1308	0	-	0	1923 654
Stage 1	-	-	-	-	1306 -
Stage 2	-	-	-	-	617 -
Critical Hdwy	4.1	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	536	-	-	-	60 414
Stage 1	-	-	-	-	221 -
Stage 2	-	-	-	-	506 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	536	-	-	-	56 414
Mov Cap-2 Maneuver	-	-	-	-	56 -
Stage 1	-	-	-	-	206 -
Stage 2	-	-	-	-	506 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.26	0	48.67
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	536	-	-	-	119
HCM Lane V/C Ratio	0.047	-	-	-	0.316
HCM Ctrl Dly (s/v)	12	-	-	-	48.7
HCM Lane LOS	B	-	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	1.2

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	4	0	307	449	7
Future Vol, veh/h	1	4	0	307	449	7
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	2	7	0
Mvmt Flow	1	4	0	345	504	8

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	853	508	-	0	-	0
Stage 1	508	-	-	-	-	-
Stage 2	345	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	332	569	0	-	-	-
Stage 1	608	-	0	-	-	-
Stage 2	722	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	332	569	-	-	-	-
Mov Cap-2 Maneuver	332	-	-	-	-	-
Stage 1	608	-	-	-	-	-
Stage 2	722	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	12.32	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 498	-	-
HCM Lane V/C Ratio	- 0.011	-	-
HCM Ctrl Dly (s/v)	- 12.3	-	-
HCM Lane LOS	- B	-	-
HCM 95th %tile Q(veh)	- 0	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	5	0	308	451	8
Future Vol, veh/h	10	5	0	308	451	8
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	2	7	0
Mvmt Flow	11	5	0	335	490	9

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	829	495	-	0	-	0
Stage 1	495	-	-	-	-	-
Stage 2	335	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	343	579	0	-	-	-
Stage 1	617	-	0	-	-	-
Stage 2	729	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	343	579	-	-	-	-
Mov Cap-2 Maneuver	343	-	-	-	-	-
Stage 1	617	-	-	-	-	-
Stage 2	729	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	14.46	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	397	-	-
HCM Lane V/C Ratio	-	0.041	-	-
HCM Ctrl Dly (s/v)	-	14.5	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-