

  
**OLGUIN LAW**  
LLC

July 31, 2023

John Adler  
Community Development Director  
Village of Wilmette  
1200 Wilmette Avenue  
Wilmette, IL 60091

Re: Proposed McDonald's Restaurant  
200 Skokie Road, Wilmette, Illinois ("Property")

Mr. Adler:

On behalf of the Applicant, McDonald's USA, LLC, we are pleased to submit the following documents pertaining to the Application for Public Hearing (Variation and Special Use) regarding the proposed McDonald's restaurant at 200 Skokie Road, Wilmette:

1. Application for Public Hearing;
2. Responses to Special Use Standards;
3. Responses to Variations Standards;
4. Property Owner Authorization Letter;
5. Traffic Impact Study Dated July 20, 2023, prepared by KLOA;
6. Proof of Ownership in the form of a Special Warrant Deed dated March 15, 2021;
7. ALTA Survey prepared by Compass Surveying, Ltd.;
8. Site Plan prepared by Watermark Engineering Resources, Ltd. dated July 3, 2023;
9. Exterior Elevations prepared by Lingle Design Group, Inc.;
10. Floor Plans prepared by Lingle Design Group, Inc.;
11. Olguin Law LLC check in the amount of \$394.00 for the required application fee.

Should you have any questions or need any additional information, please do not hesitate to call.

Sincerely,



James E. Olguin

**VILLAGE OF WILMETTE  
ZONING BOARD OF APPEALS  
Application for Public Hearing**

Date Stamp

**PETITIONER INFORMATION**

Petitioner's Name: McDonald's USA, LLC c/o Olguin Law LLC

Property Address: 200 Skokie Boulevard, Wilmette, Illinois

Petitioner's Mailing Address (if different): 16101 108th Ave., 1st Floor, Orland Park, Illinois 60467

Petitioner's Daytime Phone: 630-403-8003

Petitioner's Email: jim@olguinlawllc.com

  
\_\_\_\_\_  
Petitioner's Signature

7/24/2023  
\_\_\_\_\_  
Date

Is the petitioner the legal owner of the property?     YES     NO

If not, please provide the owner's name, address and phone number and submit his/her signature below or in a letter of authorization.

**PROPERTY OWNER INFORMATION if different from petitioner**

Property Owner's Name: Steiner Family Holdings No. 4, L.L.C.

Property Owner's Address: 6521 Vanderbilt Street

Property Owner's Daytime Phone: \_\_\_\_\_

Property Owner's Email: david.steiner1960@gmail.com

Signed letter of authorization is attached.  
\_\_\_\_\_  
Property Owner's Signature

\_\_\_\_\_  
Date

**PROPERTY DESCRIPTION**

Legal Description of the property (if different than what is on the Plat of Survey):  
\_\_\_\_\_  
  
\_\_\_\_\_  
Legal Description noted on the Plat of Survey

Present Use: Vacant (former Baker's Square restaurant)

**DESCRIPTION OF REQUEST**

Application for:     Variation     Special Use

Briefly describe the request:

Petitioner requests approval of a special use permit  
and variation to permit a drive-through McDonald's  
restaurant on a site less than one acre (0.94 acres)

**CHECKLIST OF COMPLETE SUBMITTALS**

Please check off those attachments being submitted with this application. *Please note: applications are scheduled in order of filing date, with complete applications being scheduled first.*

**Required Submittals**

- Filing Fee (see the current fee schedule)
- Evidence of Ownership
- Owner Authorization Letter (if applicable)
- Plans
  - Site Plan, showing lot dimensions, existing and proposed structures, existing and proposed setbacks, distances to structures on adjoining lots, and a north arrow.
  - Floor plans to accurate scale with all dimensions indicated.
  - Elevations drawn to accurate scale with all dimensions indicated.
- Plat of Survey including the legal description
- Floor Area Worksheets (if applicable)
- Letter to the Zoning Board of Appeals, addressing the Standards of Review
- Tree Survey (if applicable)
- Traffic Study (if applicable)

Receipt

**All correspondence should be forwarded to:  
 Community Development Department  
 Village of Wilmette  
 1200 Wilmette Avenue  
 Wilmette, IL 60091**

John Adler  
Community Development Director  
Village of Wilmette  
1200 Wilmette Avenue  
Wilmette, IL 60091

Re: Proposed McDonald's Restaurant  
200 Skokie Road, Wilmette, Illinois ("Property")

Mr. Adler:

Please accept this letter as written authorization of Steiner Family Holdings No. 4, L.L.C., owner of the above-referenced Property, to allow McDonald's USA, LLC, through its zoning attorney James E. Olguin, to file such zoning and permit applications as may be needed to secure the development approvals for a McDonald's restaurant and associated drive-through.

Should you require any additional information or documentation, you may contact me at the following:

6521 vanderbilt street

Houston TX 77005

David.Steiner1960@gmail.com

Sincerely,

Steiner Family Holdings No. 4 LLC

By:  \_\_\_\_\_  
E7401F064B0A4CB...

Legal Description

LOT 1 AND THE SOUTH 100 FEET (AS MEASURED ALONG THE EAST LINE THEREOF) OF LOT 2 IN MANGEL'S SUBDIVISION OF PART OF LOT 31 IN COUNTY CLERKS DIVISION OF SECTION 32, TOWNSHIP 42 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AS DOCUMENT NUMBER 21067238, IN THE VILLAGE OF WILMETTE, IN COOK COUNTY, ILLINOIS.

05-32-306-033-0000 and 05-32-306-049-0000

**MCDONALD'S USA, LLC**  
**RESPONSE TO STANDARDS FOR SPECIAL USE**

Section 30-5.3.E Approval Standards for Special Uses

**a. The proposed use in the specific location will be consistent with the goals and policies of the Comprehensive Plan.**

Response: The property is currently zoned for commercial use and was previously operated as a restaurant. The proposed special use is consistent with the goals and policies of the Comprehensive Plan, including the redevelopment of underutilized commercial properties to increase the tax base. In addition, the aesthetic improvements will support the Plan's goal of maintaining attractive commercial areas.

**b. The establishment, maintenance, or operation of the proposed use in the specific location will not be detrimental to or endanger the public health, safety and welfare.**

Response: The proposed special use will not be detrimental to or endanger the public health, safety, comfort, or general welfare. McDonald's, as a reputable and experienced company, is committed to adhering to all health and safety requirements. Using its market-leading drive-through knowledge and guidance from one of the preeminent traffic engineering consulting firms in the area, the site has been designed with traffic flow management and safety measures in mind, ensuring that it does not pose any material risk to pedestrians or motorists. Adequate parking is provided on-site for the proposed use and appropriate buffering is proposed.

**c. The proposed use in the specific location will not be injurious to the use or enjoyment of other property in the neighborhood for the purposes permitted in the district.**

Response: The proposed special use is commercial in nature and the property is currently commercially zoned. It will complement the existing commercial uses in the area. The inclusion of appropriate buffers along the residential uses ensures that the proposed McDonald's drive-through will not be injurious to the use or enjoyment of other properties in the neighborhood. These buffers will effectively mitigate any potential concerns, promoting harmonious coexistence between the commercial development and the residential properties nearby. Consequently, the proposed use will not disrupt the neighborhood's character or impede the residents' ability to enjoy their properties in line with the permitted district purposes.

**d. The establishment of the special use in the specific location will not impede the normal and orderly development and improvement of surrounding properties for uses permitted in the zoning district.**

Response: All surrounding properties are already fully developed.

**e. The proposed use in the specific location will not substantially diminish property values in the neighborhood.**

Response: The proposed Special Use is commercial in nature and will be occupying commercially zoned property that was previously used as a restaurant. The significant investment by McDonald's will signify the economic viability of the area, which will have a positive influence on property values. In addition, the aesthetic improvements resulting from a new and well-designed McDonald's building will also be beneficial to property values.

**f. Adequate utilities, road access, drainage, and other necessary facilities already exist or will be provided to serve the proposed use. Updated 3/7/2023 Page 12 Wilmette ZBA Handbook**

Response: The proposed special use will be occupying an existing commercial property that already has adequate utilities, drainage, and road access. The property will be re-developed in compliance with applicable stormwater requirements.

**g. Adequate measures already exist or will be taken to provide ingress and egress to the proposed use in a manner that minimizes traffic congestion in the public streets.**

Response: The proposed special use incorporates the recommendations of a traffic consulting firm to ensure the minimization of traffic congestion on nearby streets. A copy of the traffic report is submitted as part of the application.

**h. The proposed use in the specific location will be consistent with the community character of the neighborhood of the parcel proposed for the special use.**

Response: The proposed use will fit in with the commercial nature of the neighborhood and will provide a service needed by residents in the community. The intersection of Glenview Road and Skokie Boulevard is a vibrant intersection and lends itself to the proposed use.

**i. Development of the proposed use will not substantially adversely affect a known archaeological, historical, or cultural resource located on or off of the proposed site.**

Response: There are no designated archaeological, historical, or cultural landmarks on the site or in the vicinity.

**j. The applicant has made adequate legal provision to guarantee the provision and development of any buffers, landscaping, public open space and other improvements associated with the proposed use.**

Response: All required buffers are provided as part of the proposed plans.

**k. The proposed use will meet any and all additional use standards specified in Article 12 of the Zoning Ordinance for such a use.**

Response: Except for any approved variation, the proposed special use will adhere to such standards.

**MCDONALD'S USA, LLC**  
**RESPONSE TO STANDARDS FOR VARIATION**

**Section 30-5.4.F Approval Standards for Variations**

**a. The particular physical conditions, shape, or surroundings of the property would impose upon the owner a practical difficulty or particular hardship, as opposed to a mere inconvenience, if the requirements of the Zoning Ordinance were strictly enforced.**

Response: The Applicant is seeking a minor reduction in the required lot area from one (1) acre to 0.943 acres. The property is currently bounded by improved properties and two roadways. Consequently, there is no opportunity to expand the property to meet the one-acre requirement. In addition, the shape of the parcel contributes to its current size. Due to the angle created by Old Glenview Road, an irregular lot was created. Also, Skokie Boulevard has an expansive right-of-way that was dedicated, thereby reducing the area of the property.

**b. The plight of the property owner was not created by the owner and is due to unique circumstances.**

Response: The size of the property was not the result of the current owner's actions. The most recent subdivision occurred in 1970 and there have been several owners since that time. The conditions noted in "Response a." are unique to this property.

**c. The difficulty or hardship is peculiar to the property in question and is not generally shared by other properties classified in the same zoning district and/or used for the same purposes. This includes the need to accommodate desirable existing site landscape or reflect unique conditions created by the age and character of the property.**

Response: The hardship and difficulty of the property is unique in several ways. As noted in "Response a." there is no opportunity to expand the property to meet the one-acre requirement. In addition, the shape of the parcel contributes to its current size. Due to the angle created by Old Glenview Road, an irregular lot was created. Also, Skokie Boulevard has an expansive right-of-way that was dedicated, thereby reducing the area of the property.

**d. The difficulty or hardship resulting from the application of the Zoning Ordinance would prevent the owner from making a reasonable use of the property. However, the fact the property could be utilized more profitably with the variation than without the variation is not considered as grounds for granting the variation.**

Response: The property owner has been marketing the currently vacant restaurant property for some time. In this context, the property owner asserts that strict adherence to the current lot size requirement presents a significant difficulty or hardship that hinders them from making reasonable use of the property. By developing a McDonald's restaurant on the site, several benefits will be brought to the community, including economic development, improved amenities, and the revitalization of a currently vacant commercial property. It is essential to emphasize that the

primary motivation for seeking the variation is not solely driven by financial gain. The objective is to establish a reasonable and justifiable use of the property that aligns with community needs and adheres to responsible development principles.

**e. The proposed variation will not impair an adequate supply of light and air to adjacent property or otherwise injure other property or its use, will not substantially increase the danger of fire or otherwise endanger the public health, safety and welfare, and will not substantially diminish or impair property values within the neighborhood.**

Response: The proposed variation is a minor reduction in the required lot size. Due to the minor nature of the reduction, all other Village Code-required setbacks from adjacent properties will be accommodated. Consequently, the variation will not impair the adequate supply of light and air to adjacent properties nor injure them or their use. All life-safety regulations will also be met. Therefore, no significant increase in the danger of fire or impairment of public health, safety, or welfare will occur. Furthermore, replacing the currently vacant restaurant property with a first-class restaurant operator will diminish or impair property values. The significant investment by McDonald's will signify the area's economic viability, which will positively influence property values. In addition, the aesthetic improvements resulting from a new and well-designed McDonald's building will also be beneficial to property values.

**f. The variation, if granted, will not alter the essential character of the neighborhood and will be consistent with the goals, objectives and policies set forth in the Comprehensive Plan.**

Response: The property is currently zoned for commercial use and was previously operated as a restaurant. The commercial character of the property and the neighborhood will thus remain unchanged. The variation requested is merely a bulk standard modification that does not alter the character of the area. The variation is consistent with the comprehensive plan, including the redevelopment of underutilized commercial properties to increase the tax base.

# ALTA/NSPS LAND TITLE AND TOPOGRAPHIC SURVEY

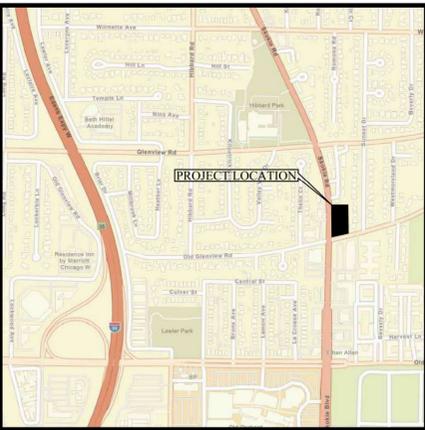
GRAPHIC SCALE



( IN FEET )  
1 inch = 20 ft.

**AREA SUMMARY**  
(TO HEAVY LINES)  
41,091 SQUARE FEET  
OR  
0.943 ACRES  
(BASED ON MEASURED VALUES)

**STRIPED PARKING DATA**  
REGULAR SPACES = 65  
ACCESSIBLE SPACES = 4  
TOTAL SPACES = 69



VICINITY MAP  
NO SCALE

## LEGAL DESCRIPTION

LOT 1 AND THE SOUTH 100 FEET (AS MEASURED ALONG THE EAST LINE THEREOF) OF LOT 2 IN MANGEL'S SUBDIVISION, PART OF LOT 31 IN COUNTY CLERK'S DIVISION OF SECTION 32, TOWNSHIP 42 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AS DOCUMENT NUMBER 21067238, IN THE VILLAGE OF WILMETTE, IN COOK COUNTY, ILLINOIS.

## BEING THE SAME AS

LOT 1 AND THE SOUTH 100 FEET (AS MEASURED ALONG THE EAST LINE THEREOF) OF LOT 2 IN MANGEL'S SUBDIVISION, RECORDED JANUARY 27, 1970 AS DOCUMENT NUMBER 21067238, IN THE SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 42 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF THE NORTH LINE OF SAID SOUTH 100 FEET OF LOT 2 AND THE EAST LINE OF SAID LOT 2; THENCE SOUTH 00 DEGREES 21 MINUTES 28 SECONDS WEST ALONG SAID EAST LINE AND EAST LINE OF SAID LOT 1, A DISTANCE OF 281.85 FEET TO THE SOUTHEAST CORNER OF SAID LOT 1; THENCE SOUTH 78 DEGREE 00 MINUTES 20 SECONDS WEST, 138.60 FEET TO THE SOUTHWEST CORNER OF SAID LOT 1; THENCE NORTH 00 DEGREES 30 MINUTES 00 SECONDS EAST ALONG THE WEST LINE OF SAID LOT 1, A DISTANCE OF 43.78 FEET TO A POINT OF CURVATURE; THENCE NORTHERLY ALONG THE WEST LINES OF SAID LOTS 1 AND 2, BEING A CURVE TANGENT TO THE LAST DESCRIBED COURSE, CONCAVE WESTERLY, HAVING A RADIUS OF 2314.93 FEET, A CHORD BEARING NORTH 02 DEGREES 07 MINUTES 39 SECONDS WEST, A CHORD LENGTH OF 267.24 FEET, AN ARC LENGTH OF 267.33 FEET TO THE NORTH LINE OF SAID SOUTH 100 FEET OF LOT 2; THENCE SOUTH 89 DEGREES 55 MINUTES 35 SECONDS EAST, 146.87 FEET TO THE POINT OF BEGINNING, IN THE VILLAGE OF WILMETTE, COOK COUNTY, ILLINOIS.

## SCHEDULE B EXCEPTIONS

5 6 FOOT PUBLIC UTILITY EASEMENT AS SHOWN ON PLAT OF SUBDIVISION RECORDED AS DOCUMENT NUMBER 21067238.

SCHEDULE B EXCEPTIONS 1, 2, 3, 4, 6, 7, 8 AND 9 ARE NOT SURVEY RELATED AND THEREFORE NOT SHOWN.

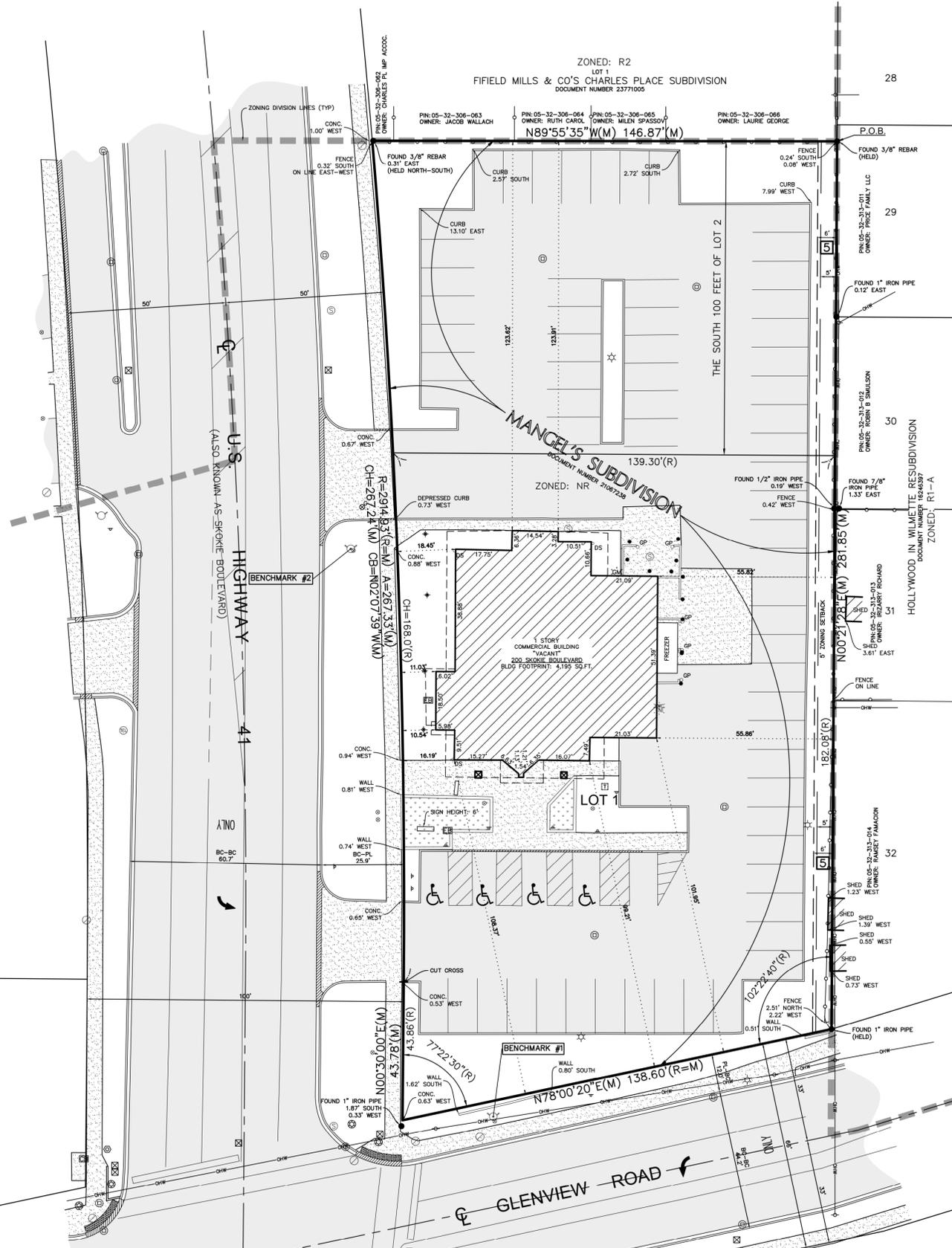
## NOTES

5 6 FOOT PUBLIC UTILITY EASEMENT PER PLAT OF SUBDIVISION RECORDED AS DOCUMENT NUMBER 21067238, SHOWN HEREON.

SCHEDULE B EXCEPTIONS 1, 2, 3, 4, 6, 7, 8 AND 9 ARE NOT SURVEY RELATED AND THEREFORE NOT SHOWN.

## GENERAL NOTES

- THIS SURVEY IS BASED ON THE LEGAL DESCRIPTION AND EASEMENTS OF RECORD AS IDENTIFIED IN TITLE COMMITMENT NUMBER 22000031454 ISSUED BY STEWART TITLE GUARANTY COMPANY HAVING AN EFFECTIVE DATE OF JULY 29, 2022.
- THIS SITE FALLS WITHIN "OTHER AREAS: ZONE X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS DEFINED BY THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 171000 0253 J, FLOOD INSURANCE RATE MAP NUMBER 17031C0253J, HAVING A REVISED DATE OF AUGUST 19, 2008.
- THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR TOPOGRAPHIC SURVEYS, AND IS BASED ON FIELD WORK PERFORMED ON 09/08/2022.
- IN ADDITION TO THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, THIS SURVEY WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS PROVIDED BY MCDONALD'S AS NOTED ON THE CHECKLIST PROVIDED TO THE CLIENT.
- THE SURVEYOR CONTACTED J.U.L.I.E. (JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS) FOR A DESIGN STAGE REQUEST FOR THIS SITE WHICH WAS ASSIGNED A DIG NUMBER OF A222 302 210. INQUIRIES WERE SENT OUT TO THE VARIOUS UTILITY COMPANIES REQUESTING MAPS AND/OR ATLASSES OF THEIR RESPECTIVE FACILITIES. THE INFORMATION RECEIVED TO DATE IS SHOWN HEREON. ADDITIONALLY, PRIOR TO FIELD WORK ON THIS SITE, THE COUNTY LOCATORS PROVIDED UTILITY LOCATING SERVICES ON SITE AND THE INFORMATION OBTAINED BY THE SURVEYOR FROM THESE MARKS ARE SHOWN HEREON.
- THERE ARE NO GAPS OR GORES BETWEEN PARCELS, LOTS 1 AND 2.
- NO OBSERVED EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.
- NO PROPOSED CHANGES IN STREET RIGHT OF WAY LINES BASED ON INFORMATION RECEIVED FROM THE CONTROLLING JURISDICTION AT THE TIME OF THE SURVEY. NO OBSERVED EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.
- NO OBSERVED EVIDENCE OF SITE BEING USED AS A SOLID WASTE DUMP, SLUMP OR SANITARY LANDFILL.
- NO OBSERVED EVIDENCE OF WETLAND DELINEATION MARKINGS AT THE TIME OF THE SURVEY.



## LINE LEGEND

- SOLID LINE: LIMITS OF LAND PER LEGAL DESCRIPTION
- DASHED LINE: ADJACENT LAND
- DOTTED LINE: PARCEL LINE
- LONG DASHED LINE: EASEMENT LINE
- DASHED LINE WITH CENTER MARK: CENTERLINE
- DASHED LINE WITH SHORT MARK: BUILDING SETBACK LINE
- DASHED LINE WITH T-SHAPE MARK: SECTION LINE
- DASHED LINE WITH WAVE MARK: EXISTING CONTOUR

## LEGEND

- FOUND 7/8" O.D.I.P. (HELD LOCATION)
- CONCRETE MONUMENT
- CROSS IN CONCRETE
- MANHOLE
- STORM STRUCTURE
- SANITARY MANHOLE
- CLEANOUT
- FLARED END SECTION
- TRANSFORMER PAD
- ELECTRIC MANHOLE
- ELECTRIC BOX
- ELECTRIC PEDESTAL
- ELECTRIC MARKER
- ELECTRIC METER
- UTILITY POLE
- UTILITY POLE W/LIGHT
- UTILITY POLE W/TSF
- QUI POLE
- OVERHEAD TRAFFIC SIGNAL
- TRAFFIC SIGNAL MANHOLE
- LIGHT POLE
- HAND HOLE
- VALVE VAULT
- FIRE HYDRANT
- IRRIGATION CONTROL VALVE
- POST INDICATOR VALVE
- SIAMSE WATER CONNECTION
- WATER MARKER
- WATER METER
- VALVE BOX
- ELE/BOX
- SPRINKLER CONTROL VALVE
- TELEPHONE MANHOLE
- TELEPHONE NETWORK INTERFACE
- TELEPHONE MARKER
- TELEPHONE PEDESTAL
- CABLE TELEVISION PEDESTAL
- CONTROL BOX
- WETLAND FLAG
- GAS METER
- GAS VALVE
- GAS MARKER
- DOWN SPOUT
- BORING HOLE
- MONITORING WELL
- GATE POST
- BOLLARD POLE
- SIGN
- FLAG POLE
- MAILBOX
- SANITARY SEWER
- STORM SEWER
- WATER MAIN
- POLYVINYL CHLORIDE
- GAS MAIN
- ELECTRIC LINE
- OVERHEAD WIRES
- COMMUNICATION LINE
- CONIFEROUS TREE
- DECIDUOUS TREE
- W/ APPROX. DIAMETER
- W/ APPROX. DIAMETER
- MS=MULTI-STEM (DRIP LINE SHOWN IS APPROXIMATE)
- TREE LINE
- ELEVATION
- BITUMINOUS PAVEMENT
- CONCRETE SURFACE
- DEPRESSED CURB
- GRAVEL SURFACE
- LANDSCAPE AREA
- STONE SURFACE
- DETECTABLE TACTILE WARNING SURFACE
- BRICK PAVERS
- WOOD FENCE
- CHAIN LINK FENCE
- METAL FENCE
- SHORE LINE
- METAL GUARDRAIL
- OVERHEAD TRAFFIC ARM

## ABBREVIATIONS

- O.D.I.P. = OUTSIDE DIAMETER IRON PIPE
- TF = TOP OF FOUNDATION
- FF = FINISHED FLOOR
- FE3 = FLARED END SECTION
- VCP = VITRIFIED CLAY PIPE
- DIP = DUCTILE IRON PIPE
- PVC = POLYVINYL CHLORIDE
- RCP = REINFORCED CONCRETE PIPE
- CMP = CORRUGATED METAL PIPE
- R = RECORD BEARING OR DISTANCE
- M = MEASURED BEARING OR DISTANCE
- C = CALCULATED BEARING OR DISTANCE
- D = DEED BEARING OR DISTANCE
- N = NORTH
- S = SOUTH
- E = EAST
- W = WEST
- L = LENGTH
- R = RADIUS
- CH = CHORD
- CB = CHORD BEARING
- B.S.L. = BUILDING SETBACK LINE
- U.E. = UTILITY EASEMENT
- D.E. = DRAINAGE EASEMENT
- P.U.E. = PUBLIC UTILITY EASEMENT
- P.O.C. = POINT OF COMMENCEMENT
- P.I. & D.E. = PUBLIC UTILITY AND DRAINAGE EASEMENT
- BC = BACK OF CURB
- BOB = BACK OF DEPRESSED CURB
- FL = FLOW LINE
- C = CONCRETE
- P = PAVEMENT
- EW = EDGE OF WALK
- TW = TOP OF WALL
- TP = TOP OF PIPE
- IE = INVERT ELEVATION
- PL = PROPERTY LINE
- DS = DOWN SPOUT
- S.F. = SQUARE FEET
- SL = SHORE LINE
- TSF = TRANSFORMER
- P = PAVERS

## ZONING INFORMATION

THE FOLLOWING INFORMATION WAS OBTAINED BY THE SURVEYOR FROM THE VILLAGE OF WILMETTE ONLINE ZONING ORDINANCE:  
THIS SITE IS ZONED: NR, NEIGHBORHOOD RETAIL.

- MINIMUM YARDS AND SETBACKS:  
 • FRONT AND CORNER SIDE: NONE  
 • SIDE YARD ADJOINING A STREET: NONE  
 • INTERIOR SIDE: NONE, BUT IF PROVIDED, A MINIMUM OF 9 FEET, THE EAST LINE ABUTS R1-A ZONING AND REQUIRES 5.0 FEET FOR SINGLE FAMILY USE. ALL OTHER USES: 20 FT. SETBACK.  
 \* REAR: 25 FEET

WHEN ABUTTING A RESIDENTIAL DISTRICT, THE SETBACK MUST BE PROVIDED IN ACCORDANCE WITH THE REQUIREMENT OF THE ADJACENT DISTRICT. THE REAR SETBACK FOR THE R-4 DISTRICT IS 20 PERCENT OF THE LOT DEPTH OR 25 FEET, WHICHEVER IS GREATER - 35 FEET MAXIMUM.

MAXIMUM HEIGHT: 2.5 STORIES OR 30 FEET  
 MAXIMUM FLOOR AREA RATIO: 1.0  
 MINIMUM LOT WIDTH: 30 FEET

PARKING: RESTAURANT, FULL SERVICE: 5 PER 1000 SQ. FT. GFA (DEPENDS ON USE, PER TABLE 14-1)

THE SURVEYOR CONTACTED THE VILLAGE OF WILMETTE COMMUNITY DEVELOPMENT DEPARTMENT ON SEPTEMBER 19, 2022 ASKING IF A PLAT OF SUBDIVISION OR REPLAT IS NECESSARY IN ORDER TO CONVEY THIS PROPERTY. LUCAS SILVERTSON RESPONDED ON JUNE 3, 2022 THAT A REPLAT OR SUBDIVISION WAS NOT NECESSARY.

## UTILITY CONTACTS

- DESIGN DIG #A22302210
- CABLE  
COMCAST - MARTHA GERAS  
224-229-5852  
MARTHA\_GERAS@COMCAST.COM
- ELECTRIC  
COMED  
630-576-7094
- GAS  
NICOR GAS  
GASMAPSONICOR.COM
- COMMUNICATIONS  
AT&T  
011629@ATT.COM
- WATER / SANITARY / STORM  
VILLAGE OF WILMETTE - DAN MANIS  
847-853-7602  
MANISD@WILMETTE.IL

## SURVEYOR'S CERTIFICATION

TO: MCDONALD'S CORPORATION, A DELAWARE CORPORATION; MCDONALD'S USA, LLC, A DELAWARE CORPORATION; FRANCHISE REALTY INVESTMENT TRUST - II, A MARYLAND TRUST; AND STEWART TITLE GUARANTY 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, 3, 4, 7(A), 7(B), 7(C), 8, 9, 11, 13, AND 14, OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON 09/09/2022.

COMPASS SURVEYING LTD  
PROFESSIONAL DESIGN FIRM  
LAND SURVEYOR CORPORATION NO. 184-002778  
LICENSE EXPIRES 4/30/2023

DATE OF PLAT OR MAP: 09-16-22

BY: SCOTT C. KREBS  
IL PROFESSIONAL LAND SURVEYOR NO. 3509  
LICENSE EXPIRES 11/30/22



**COMPASS SURVEYING LTD**  
ALTA SURVEYS • TOPOGRAPHY • CONSTRUCTION STAKING  
2631 GINGER WOODS PARKWAY, STE. 100  
AURORA, IL 60502  
PHONE: (630) 820-9100 FAX: (630) 820-7030 EMAIL: ADMIN@CLSURVEYING.COM

PROJECT	McDonald's - Wilmette 12-1278 200 Skokie Blvd.
CLIENT	McDonald's Corporation 110 N. Carpenter Street Chicago IL 60607-2101

DATE: 10-06-22	PC CS	DRAWN BY: RHM	CHECKED BY: SK	BOOK: MCD26, PG: 55
NO.	REVISIONS	DATE	BY	

**UTILITY STATEMENT**  
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM VISIBLE FIELD EVIDENCE AND EXISTING DRAWINGS, MAPS AND RECORDS SUPPLIED TO SURVEYOR. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM AVAILABLE INFORMATION. THE SURVEYOR HAS PHYSICALLY LOCATED VISIBLE STRUCTURES; HOWEVER, HE HAS NOT PHYSICALLY LOCATED THE UNDERGROUND LINES.

**811**  
Know what's below.  
Call before you dig.

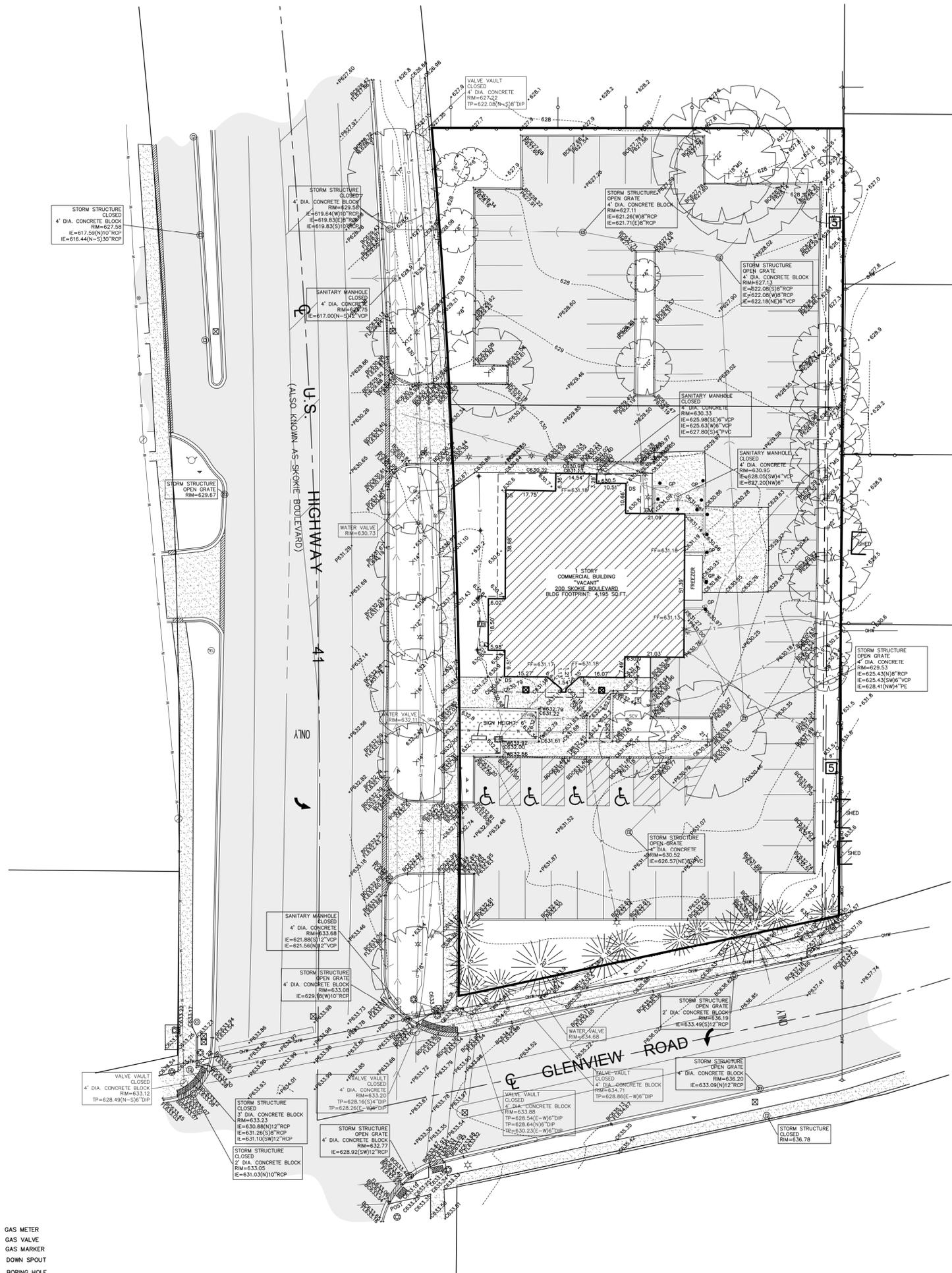
# ALTA/NSPS LAND TITLE AND TOPOGRAPHIC SURVEY

GRAPHIC SCALE



( IN FEET )  
1 inch = 20 ft.

GRID NORTH



- LINE LEGEND**
- LIMITS OF LAND PER LEGAL DESCRIPTION
  - - - ADJACENT LAND
  - - - PARCEL LINE
  - - - EASEMENT LINE
  - - - CENTERLINE
  - - - BUILDING SETBACK LINE
  - - - SECTION LINE
  - - - EXISTING CONTOUR

- LEGEND**
- FOUND 7/8" O.D.I.P. UNLESS OTHERWISE NOTED (HOLD LOCATION)
  - CONCRETE MONUMENT
  - ⊕ CROSS IN CONCRETE
  - ⊙ MANHOLE
  - ⊙ STORM STRUCTURE
  - ⊙ SANITARY MANHOLE
  - ⊙ CLEANOUT
  - ⊙ FLARED END SECTION
  - ⊙ TRANSFORMER PAD
  - ⊙ ELECTRIC MANHOLE
  - ⊙ ELECTRIC BOX
  - ⊙ ELECTRIC PEDESTAL
  - ⊙ ELECTRIC MARKER
  - ⊙ ELECTRIC METER
  - ⊙ UTILITY POLE
  - ⊙ UTILITY POLE W/LIGHT
  - ⊙ UTILITY POLE W/TSF
  - ⊙ GUY POLE
  - ⊙ OVERHEAD TRAFFIC SIGNAL
  - ⊙ TRAFFIC SIGNAL MANHOLE
  - ⊙ LIGHT
  - ⊙ LIGHT POLE
  - ⊙ HAND HOLE
  - ⊙ VALVE VAULT
  - ⊙ FIRE HYDRANT
  - ⊙ IRRIGATION CONTROL VALVE
  - ⊙ POST INDICATOR VALVE
  - ⊙ SIAMESE WATER CONNECTION
  - ⊙ WATER MARKER
  - ⊙ WATER METER
  - ⊙ VALVE BOX
  - ⊙ E/B/BOX
  - ⊙ SPRINKLER CONTROL VALVE
  - ⊙ TELEPHONE MANHOLE
  - ⊙ TELEPHONE NETWORK INTERFACE
  - ⊙ TELEPHONE PEDESTAL
  - ⊙ CABLE TELEVISION PEDESTAL
  - ⊙ CONTROL BOX
  - ⊙ WETLAND FLAG
  - ⊙ GAS METER
  - ⊙ GAS VALVE
  - ⊙ GAS MARKER
  - ⊙ DOWN SPOUT
  - ⊙ BORING HOLE
  - ⊙ MONITORING WELL
  - ⊙ GATE POST
  - ⊙ BOLLARD POLE
  - ⊙ SIGN
  - ⊙ FLAG POLE
  - ⊙ MAILBOX
  - ⊙ SANITARY SEWER
  - ⊙ STORM SEWER
  - ⊙ WATER MAIN
  - ⊙ GAS MAIN
  - ⊙ ELECTRIC LINE
  - ⊙ OVERHEAD WIRES
  - ⊙ UTILITY POLE W/TSF
  - ⊙ GUY POLE
  - ⊙ OVERHEAD TRAFFIC SIGNAL
  - ⊙ TRAFFIC SIGNAL MANHOLE
  - ⊙ LIGHT
  - ⊙ LIGHT POLE
  - ⊙ HAND HOLE
  - ⊙ VALVE VAULT
  - ⊙ FIRE HYDRANT
  - ⊙ IRRIGATION CONTROL VALVE
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  - ⊙ WATER MARKER
  - ⊙ WATER METER
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  - ⊙ E/B/BOX
  - ⊙ SPRINKLER CONTROL VALVE
  - ⊙ TELEPHONE MANHOLE
  - ⊙ TELEPHONE NETWORK INTERFACE
  - ⊙ TELEPHONE PEDESTAL
  - ⊙ CABLE TELEVISION PEDESTAL
  - ⊙ CONTROL BOX
  - ⊙ WETLAND FLAG

- ABBREVIATIONS**
- O.D.I.P. = OUTSIDE DIAMETER IRON PIPE
  - TF = TOP OF FOUNDATION
  - FF = FINISHED FLOOR
  - FE3 = FLARED END SECTION
  - VCP = VITRIFIED CLAY PIPE
  - DIP = DUCTILE IRON PIPE
  - P.V.C. = POLY-VINYL CHLORIDE
  - RCP = REINFORCED CONCRETE PIPE
  - CMP = CORRUGATED METAL PIPE
  - (R) = RECORD BEARING OR DISTANCE
  - (M) = MEASURED BEARING OR DISTANCE
  - (C) = CALCULATED BEARING OR DISTANCE
  - (D) = DEED BEARING OR DISTANCE
  - N = NORTH
  - S = SOUTH
  - E = EAST
  - W = WEST
  - A = ARC LENGTH
  - R = RADIUS
  - CH = CHORD
  - CB = CHORD BEARING
  - B.S.L. = BUILDING SETBACK LINE
  - U.E. = UTILITY EASEMENT
  - D.E. = DRAINAGE EASEMENT
  - P.U.E. = PUBLIC UTILITY EASEMENT
  - P.O.C. = POINT OF COMMENCEMENT
  - P.O.B. = POINT OF BEGINNING
  - P.U.I. & D.E. = PUBLIC UTILITY AND DRAINAGE EASEMENT
  - BC = BACK OF CURB
  - BOB = BACK OF DEPRESSED
  - FL = FLOW LINE
  - C = CONCRETE
  - P = PAVEMENT
  - G = GRAVEL
  - EW = EDGE OF WALK
  - TW = TOP OF WALL
  - TP = TOP OF PIPE
  - IE = INVERT ELEVATION
  - PL = PROPERTY LINE
  - DS = DOWN SPOUT
  - S.F. = SQUARE FEET
  - SL = SHORE LINE
  - TSE = TRANSFORMER
  - B = PAVERS

- BENCHMARKS**
- REFERENCE BENCHMARK:**  
NGS MONUMENT N00129
- DATUM:** NAVD83  
**ELEVATION:** = 633.73
- SITE BENCHMARKS:**
- SITE BENCHMARK #1**  
WESTERLY BOLLARD ON FIRE HYDRANT ALONG THE NORTH SIDE OF GLENVIEW ROAD AND NEAR THE SOUTHWEST CORNER OF SITE.  
ELEVATION = 636.72
- SITE BENCHMARK #2**  
ARROW BOLT ON FIRE HYDRANT ALONG THE EAST SIDE OF SKOKIE ROAD AND NEAR THE NORTHWEST CORNER OF BUILDING.  
ELEVATION = 632.86

**COMPASS SURVEYING LTD.**  
ALTA SURVEYS • TOPOGRAPHY • CONSTRUCTION STAKING  
2631 GINGER WOODS PARKWAY, STE. 100  
AURORA, IL 60502  
PHONE: (630) 820-9100 FAX: (630) 820-7030 EMAIL: ADMIN@CLSURVEYING.COM

**PROJECT**  
McDonald's - Wilmette 12-1278  
200 Skokie Blvd.

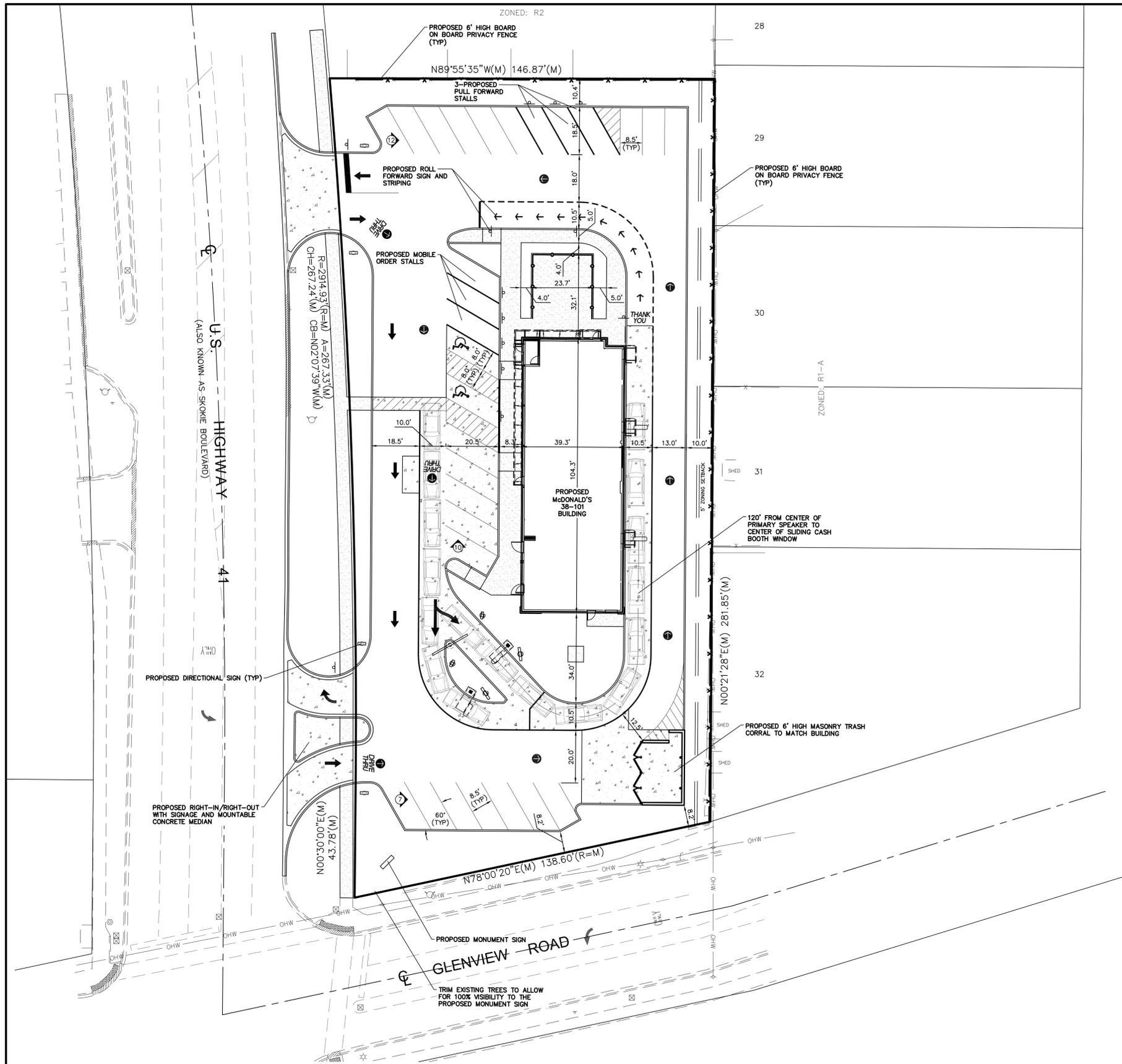
**CLIENT**  
McDonald's Corporation  
110 N. Carpenter Street  
Chicago, IL 60607-2101

<b>DATE:</b> 10-06-22	<b>BOOK:</b> MCD26, PG: 55
<b>NO.</b>	<b>DATE</b>

**UTILITY STATEMENT**

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM VISIBLE FIELD EVIDENCE AND EXISTING DRAWINGS, MAPS AND RECORDS SUPPLIED TO SURVEYOR. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM AVAILABLE INFORMATION. THE SURVEYOR HAS PHYSICALLY LOCATED VISIBLE STRUCTURES; HOWEVER, HE HAS NOT PHYSICALLY LOCATED THE UNDERGROUND LINES.

**811**  
Know what's below.  
Call before you dig.



**GENERAL NOTES:**  
 1. THESE PLANS ARE BASED ON THE ALTA/NSPS LTS (SURVEY PROJECT #22.0250 DATED 10/06/22) PREPARED BY: COMPASS SURVEYING LTD 2631 GINGER WOODS PARKWAY, STE 100, AURORA, IL 60502 (630) 820-9100  
 2. PRIOR TO CONSTRUCTION, CONTRACTOR TO CONTACT THE DESIGN ENGINEER AND ARCHITECT TO VERIFY THAT THEY ARE WORKING FROM THE MOST CURRENT SET OF PLANS AND SPECIFICATIONS.

**ON SITE PARKING DATA**

REGULAR SPACES	27
ADA ACCESSIBLE SPACES	2
TOTAL SPACES	29

PARKING REQUIREMENT: RESTAURANT, LIMITED SERVICE 8 PER 1,000 S.F. GFA  
 ASSUMED 3,000 SF OF GFA / 1000 \* 8 = 24  
 24 REQUIRED < 29 PROPOSED = OK

**SITE DATA**

ZONING	=	NR
LOT AREA	=	41,091 S.F. (0.94 AC.)
PROP. PERVIOUS AREA	=	9,996 S.F. (0.23 AC.)(24.3%)
PROP. IMPERVIOUS AREA	=	31,095 S.F. (0.71 AC.)(75.7%)
EX. PERVIOUS AREA	=	9,313 S.F. (0.21 AC.)(22.7%)
EX. IMPERVIOUS AREA	=	31,778 S.F. (0.73 AC.)(77.3%)
BUILDING AREA	=	4,085 S.F. ±
F.A.R.	=	0.11

REVISIONS

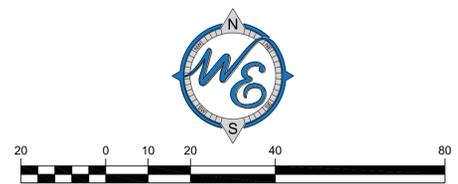

Prepared For:  
 McDonald's  
 711 Jorie Blvd., 3rd Floor  
 Oak Brook, IL 60523  
 McDONALD'S - WILMETTE, IL  
 Skokie Blvd and Old Glenview Rd  
 Wilmette, Illinois  


Prepared By:

watermark-engineering.com | 2631 Ginger Woods Pkwy | Aurora, IL 60502 | (630) 375-1800



CHECKED BY: J.MILLER
DESIGN BY: D.OLSON
DRAWN BY: J.VOLANTI
DATE: JULY 3, 2023
SCALE: 1" = 20'
PROJECT NO.: 22-058



**SITE PLAN 1**

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**BRAND REVIEW**  
 BB20 - 38101  
 WOOD BRICK

STATE ID: 122758	NATIONAL #: 40917
PROJECT #: 23-245	DATE: 06/13/23
DRAWN BY: RP	CHECKED BY: JK

**REVISIONS**

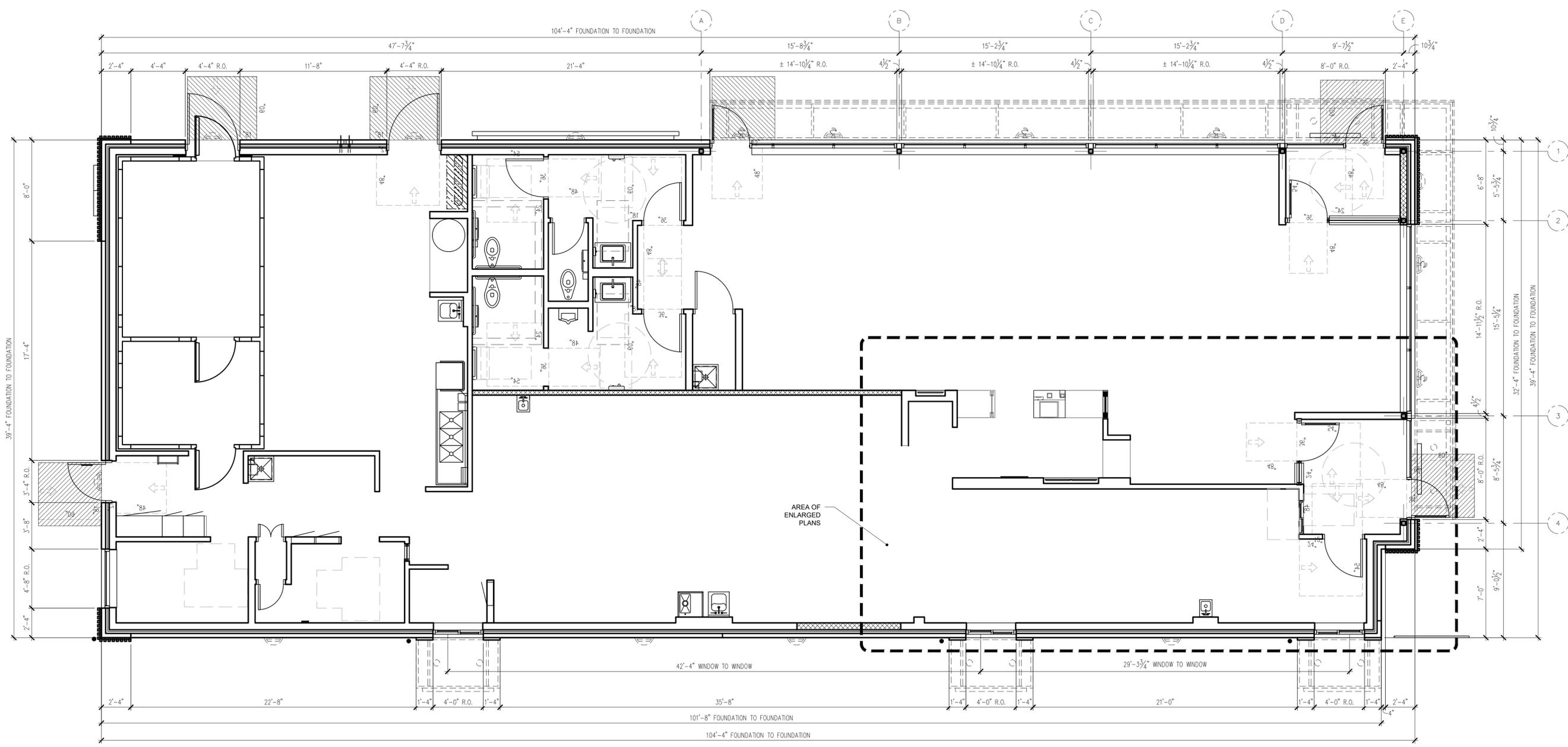
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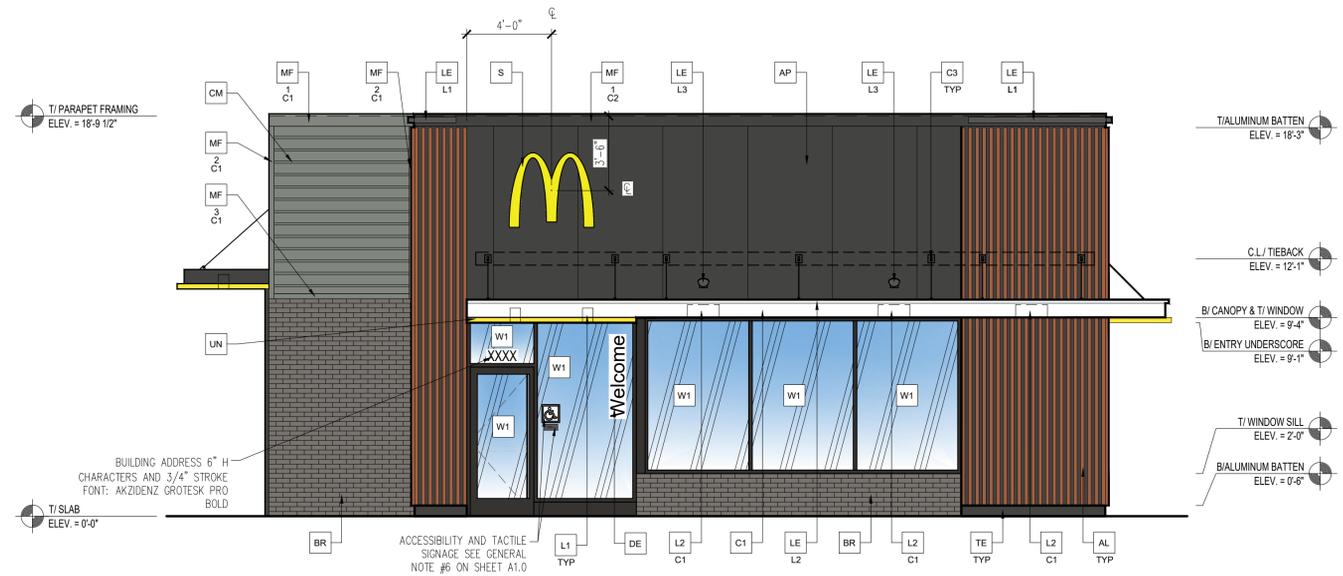
**CLIENT**  
**McDonald's**  
**USA, LLC**

**ADDRESS**  
 200 SKOKIE ROAD  
 WILMETTE, IL 60091

**SHEET TITLE**  
 PROPOSED  
 FLOOR  
 PLAN

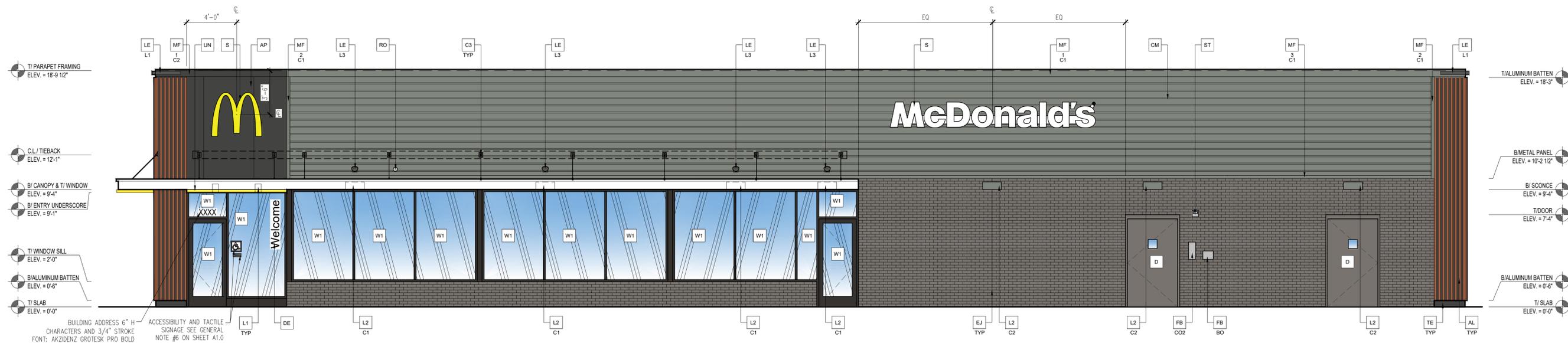
**SHEET NUMBER:**  
**A1.0**





2 NORTH ELEVATION

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



1 WEST ELEVATION

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

ELEVATION KEY NOTES:

COLOR SCHEME: 'STEEL' SCHEME

<p><b>AL</b> ALUMINUM BATTEN SYSTEM MFR: B+N INDUSTRIES COLOR: WHITE</p> <p><b>AP</b> ALPOLIC METAL PANEL COLOR: RAL 7022</p> <p><b>BR</b> BRICK VENEER BY HEBRON SLATE GRAY - SMOOTH MORTAR: SM750 SILVERSTONE BY SPEC MIX</p>	<p><b>C1</b> ALUMINUM CANOPY SYSTEM W/FASCIA COLOR: WHITE</p> <p><b>C2</b> ALUMINUM CANOPY SYSTEM COLOR: RAL 7022</p> <p><b>C3</b> ALUMINUM CANOPY TIEBACK COLOR: RAL 7022 GC TO PROVIDE CONTINUOUS BLOCKING ON WALL BEHIND TIEBACKS, WHEN TIEBACKS ARE INSTALLED ON METAL PANELING. SEE DETAIL 3/A5.0</p> <p><b>CM</b> 7" REVEAL METAL WALL PANEL SYSTEM BY METAL ERA COLOR: WEATHERED ZINC</p> <p><b>D</b> HOLLOW METAL DOOR PAINT: GAUNTLET GRAY SW 7019 BY SHERWIN WILLIAMS</p> <p><b>DE</b> DECAL BY GRAPHICS SUPPLIER SURFACE APPLIED, FIELD INSTALLED, PRE CUT, PRE SPACED. SUPPLIERS: VOMELA (865) 330-7337, orn.bowen@vomela.com GEX INTERNATIONAL (847) 543-4600, mcdonaldsdecor@gfxi.com</p>	<p><b>EJ</b> EXPANSION JOINT, SEE DETAIL 7/A4.1</p> <p><b>FB</b> FILL BOX # - TYPE: C02 = BULK CO2 B0 = BULK OIL</p> <p><b>GR</b> GUARD RAIL - SEE SITE PLAN AND DETAIL 5/A2.1 COLOR: "IRON ORE" SW 7069 BY SHERWIN WILLIAMS</p> <p><b>L1</b> RECESSED DOWN LIGHT FIXTURE - SEE ELECTRICAL COLOR: GOLD</p> <p><b>L2</b> RADIAL SCONCE LIGHT FIXTURE - SEE ELECTRICAL # - COLOR: C1 = WHITE C2 = PLATINUM SILVER</p>	<p><b>LE</b> LED ACCENT LIGHTING - SEE ELECTRICAL # - TYPE: L1 = SLIM LED (DOWN ONLY) L2 = INTEGRAL CANOPY FIXTURE L3 = UP ONLY FLOOD FIXTURE</p> <p><b>MF</b> METAL FASCIA # - TYPE: 1 = PRE-FAB ANCHOR-TITE FASCIA 2 = BOTTOM TRIM AT METAL REVEAL PANEL 3 = VERTICAL TRIM AT METAL REVEAL PANEL CORNERS, CLOSURES COLOR: C1 = WEATHERED ZINC C2 = RAL 7022</p> <p><b>PB</b> PIPE BOLLARD - PAINTED YELLOW</p> <p><b>PT</b> (RMHC) COIN COLLECTOR. SEE DETAIL 4/A2.1 MODEL: #WPT STD CALL 1-888-743-7435 TO ORDER</p>	<p><b>RO</b> ROOF DRAIN OVERFLOW PIPE PAINT TO MATCH SURROUNDING MATERIAL</p> <p><b>S</b> McDONALD'S SIGNAGE BY OTHERS - UNDER SEPARATE PERMIT WEATHERED ZINC RACEWAY WHERE OCCURS</p> <p><b>ST</b> C02 STROBE/ALARM. SEE MECHANICAL DRAWINGS FOR SPECIFICATION.</p> <p><b>TE</b> TRU EXTERIOR 1"x6" TRIM, PAINTED ON SITE COLOR: "IRON ORE" SW 7069 BY SHERWIN WILLIAMS</p> <p><b>UN</b> METAL UNDERSCORE COLOR: GOLD</p> <p><b>W1</b> EXTERIOR WINDOW ASSEMBLY - TEMPERED GLASS COLOR: DARK BRONZE</p> <p><b>W2</b> DRIVE-THRU WINDOW BY READY ACCESS MODEL: 600 SERIES, 36" SERVICE HEIGHT WITH TRANSOM, MANUAL OPEN; ELECTRONIC RELEASE COLOR: DEEP BRONZE # - TYPE: SLIDE DIRECTION: RL = RIGHT TO LEFT LR = LEFT TO RIGHT</p>
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BRAND REVIEW  
BB20 - 38101  
WOOD BRICK

STATE ID: 122758	NATIONAL #: 40917
PROJECT #: 23-245	DATE: 06/13/23
DRAWN BY: RP	CHECKED BY: JK

REVISIONS

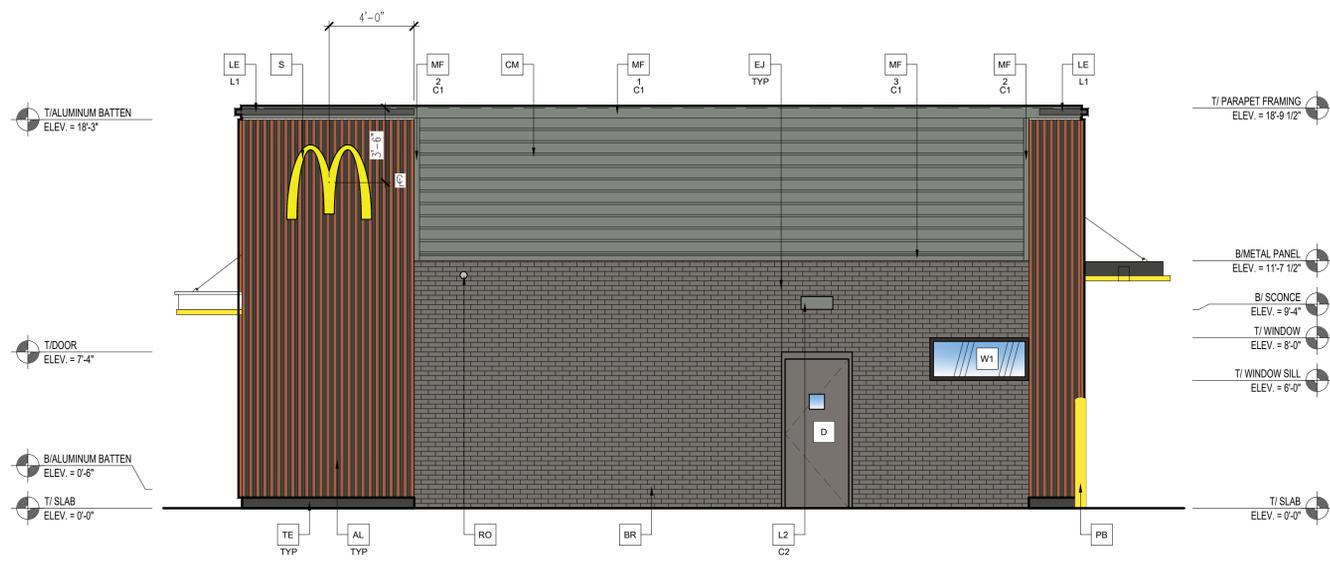
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CLIENT  
**McDonald's USA, LLC**

ADDRESS  
200 SKOKIE ROAD  
WILMETTE, IL 60091

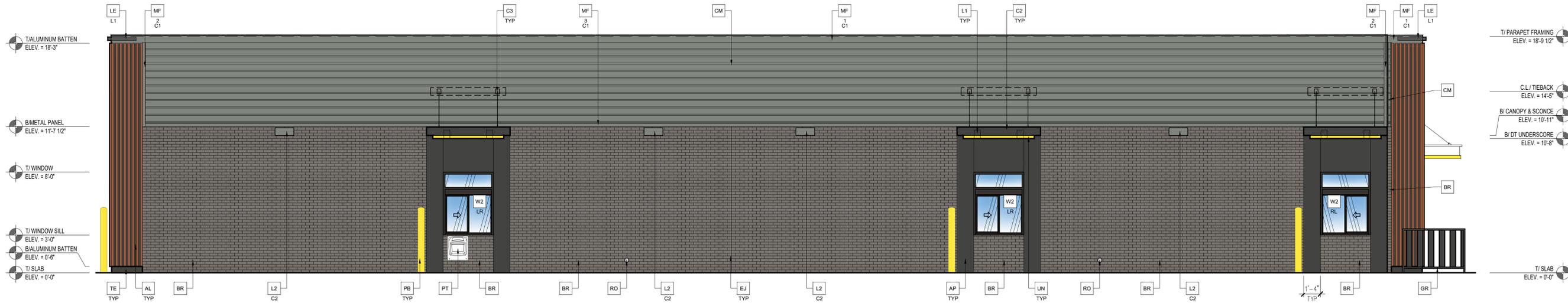
SHEET TITLE  
EXTERIOR ELEVATIONS

SHEET NUMBER:  
**A2.0**



2 SOUTH ELEVATION

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



1 EAST ELEVATION

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

ELEVATION KEY NOTES:			
<b>COLOR SCHEME: 'STEEL' SCHEME</b>			
<p><b>AL</b> ALUMINUM BATTEN SYSTEM MFR: B+N INDUSTRIES SIZE: 2"x2" PROFILE COLOR: FORTINA, WOOD GRAIN, BACKRAIL UNFINISHED, ENDCAP PAINTED TO MATCH SUBSTRATE: 1/2" EXTERIOR HIGH DENSITY OVERLAY (HDO) PLYWOOD, BB, GROUP 1, HDO BOTH FACES. APAP TRADEMARKED. COURSE GRIT SAND SURFACES PRIOR TO PRIMING. PRIME AND PAINT BOTH SIDES AND ALL EDGES. SUBSTRATE COLOR: "IRON ORE" SW 7069 BY SHERWIN WILLIAMS</p> <p><b>AP</b> ALPOLIC METAL PANEL COLOR: RAL 7022</p> <p><b>BR</b> BRICK VENEER BY HEBRON SLATE GRAY - SMOOTH MORTAR: SM750 SILVERSTONE BY SPEC MIX</p>	<p><b>C1</b> ALUMINUM CANOPY SYSTEM W/FASCIA COLOR: WHITE</p> <p><b>C2</b> ALUMINUM CANOPY SYSTEM COLOR: RAL 7022</p> <p><b>C3</b> ALUMINUM CANOPY TIEBACK COLOR: RAL 7022 GC TO PROVIDE CONTINUOUS BLOCKING ON WALL BEHIND TIEBACKS, WHEN TIEBACKS ARE INSTALLED ON METAL PANELING. SEE DETAIL 3/A5.0</p> <p><b>CM</b> 7" REVEAL METAL WALL PANEL SYSTEM BY METAL ERA COLOR: WEATHERED ZINC</p> <p><b>D</b> HOLLOW METAL DOOR PAINT: GAUNTLET GRAY SW 7019 BY SHERWIN WILLIAMS</p> <p><b>DE</b> DECAL BY GRAPHICS SUPPLIER SURFACE APPLIED, FIELD INSTALLED, PRE CUT, PRE SPACED. SUPPLIERS: VOMELA (865) 330-7337, om.bowen@vomela.com GEX INTERNATIONAL (847) 543-4600, mcdonaldsdecor@gix.com</p>	<p><b>EJ</b> EXPANSION JOINT, SEE DETAIL 7/A4.1</p> <p><b>FB</b> FILL BOX ## - TYPE: CO2 = BULK CO2 BO = BULK OIL</p> <p><b>GR</b> GUARD RAIL - SEE SITE PLAN AND DETAIL 5/A2.1 COLOR: "IRON ORE" SW 7069 BY SHERWIN WILLIAMS</p> <p><b>L1</b> RECESSED DOWN LIGHT FIXTURE - SEE ELECTRICAL COLOR: GOLD</p> <p><b>L2</b> RADIAL SCIENCE LIGHT FIXTURE - SEE ELECTRICAL ## - COLOR: C1 = WHITE C2 = PLATINUM SILVER</p>	<p><b>LE</b> LED ACCENT LIGHTING - SEE ELECTRICAL ## - TYPE: L1 = SLIM LED (DOWN ONLY) L2 = INTEGRAL CANOPY FIXTURE L3 = UP ONLY FLOOD FIXTURE</p> <p><b>MF</b> METAL FASCIA ## - TYPE: 1 = PRE-FAB ANCHOR-TITE FASCIA 2 = BOTTOM TRIM AT METAL REVEAL PANEL 3 = VERTICAL TRIM AT METAL REVEAL PANEL CORNERS, CLOSURES - COLOR: C1 = WEATHERED ZINC C2 = RAL 7022</p> <p><b>PB</b> PIPE BOLLARD - PAINTED YELLOW</p> <p><b>PT</b> (RMHC) CON COLLECTOR. SEE DETAIL 4/A2.1 MODEL: #WPT STD CALL 1-888-743-7435 TO ORDER</p>
<p><b>RO</b> ROOF DRAIN OVERFLOW PIPE PAINT TO MATCH SURROUNDING MATERIAL</p> <p><b>S</b> McDONALD'S SIGNAGE BY OTHERS - UNDER SEPARATE PERMIT WEATHERED ZINC RACEWAY WHERE OCCURS</p> <p><b>ST</b> CO2 STROBE/ALARM. SEE MECHANICAL DRAWINGS FOR SPECIFICATION.</p> <p><b>TE</b> TRU EXTERIOR 1"x6" TRIM, PAINTED ON SITE COLOR: "IRON ORE" SW 7069 BY SHERWIN WILLIAMS</p> <p><b>UN</b> METAL UNDERSCORE COLOR: GOLD</p> <p><b>W1</b> EXTERIOR WINDOW ASSEMBLY - TEMPERED GLASS COLOR: DARK BRONZE</p> <p><b>W2</b> DRIVE-THRU WINDOW BY READY ACCESS MODEL: 600 SERIES, 36" SERVICE HEIGHT WITH TRANSOM, MANUAL OPEN; ELECTRONIC RELEASE COLOR: DEEP BRONZE SLIDE DIRECTION: RL = RIGHT TO LEFT LR = LEFT TO RIGHT</p>			



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BRAND REVIEW  
BB20 - 38101  
WOOD BRICK

STATE ID: 122758	NATIONAL #: 40917
PROJECT #: 23-245	DATE: 06/13/23
DRAWN BY: RP	CHECKED BY: JK

REVISIONS

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CLIENT  
**McDonald's USA, LLC**

ADDRESS  
200 SKOKIE ROAD  
WILMETTE, IL 60091

SHEET TITLE  
EXTERIOR ELEVATIONS

SHEET NUMBER:  
**A2.1**

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**BRAND REVIEW**  
 BB20 - 38101  
 WOOD BRICK

STATE ID: 122758	NATIONAL #: 40917
PROJECT #: 23-245	DATE: 06/13/23
DRAWN BY: RP	CHECKED BY: JK

**REVISIONS**

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CLIENT

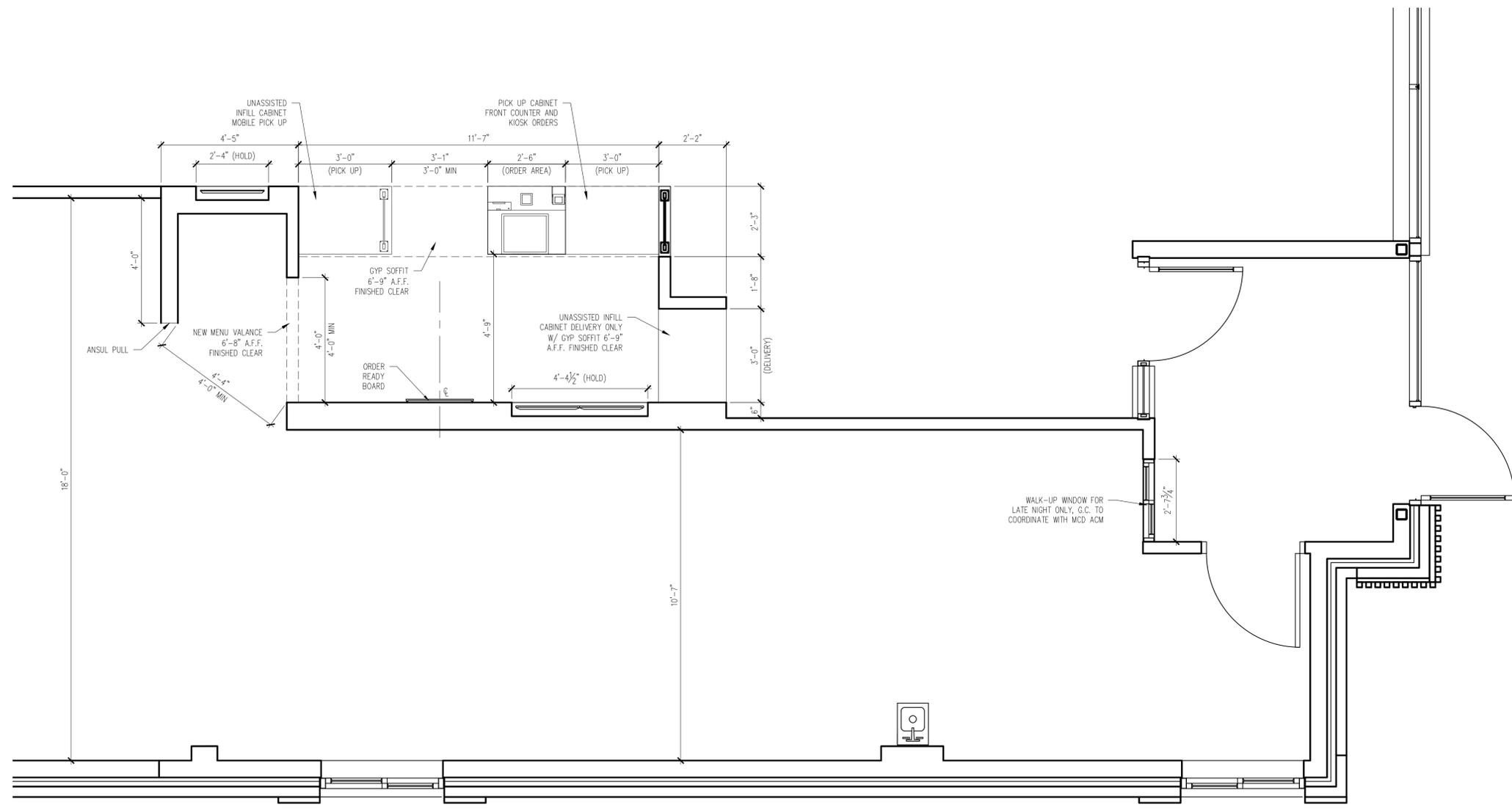
**McDonald's  
USA, LLC**

ADDRESS  
 200 SKOKIE ROAD  
 WILMETTE, IL 60091

SHEET TITLE  
**FRONT COUNTER  
PLAN  
AND DETAILS**

SHEET NUMBER:

**A4.2**



# Traffic Impact Study Proposed McDonald's Restaurant

Wilmette, Illinois



Prepared For:



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

July 20, 2023

# 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 a proposed McDonald's restaurant to be located in Wilmette, Illinois. The site, which was previously occupied by a Bakers Square restaurant, is located in the northeast corner of the intersection of Skokie Road with Old Glenview Road in Wilmette, Illinois. As proposed, the plans call for an approximately 4,100 square-foot McDonald's restaurant with dual (side-by-side) drive-through ordering boards and 29 parking spaces. Access to the proposed restaurant will be provided via two access drives off Skokie Road. The existing south access drive should be restricted to right turns in and out only while the existing north access drive will be relocated further north and will continue to allow full movements.

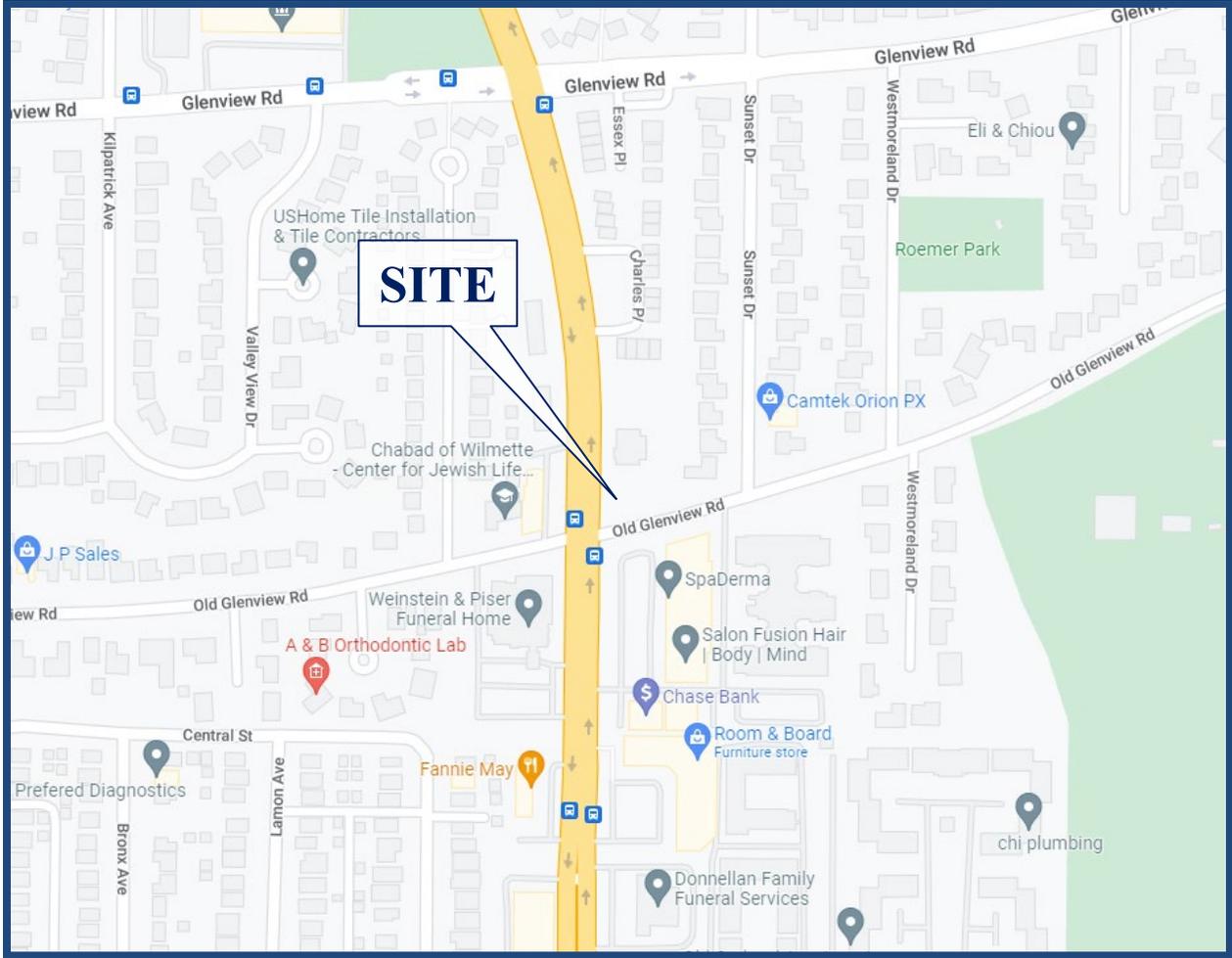
The purpose of this study was to examine background traffic conditions, assess the impact that the proposed restaurant will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate traffic generated by the proposed restaurant. **Figure 1** 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 development
- Directional distribution of the development traffic
- Vehicle trip generation for the development
- Future traffic conditions including access to the development
- Traffic analyses for the weekday morning, weekday midday, weekday evening, and Saturday midday peak hours
- Parking evaluation
- Recommendations with respect to adequacy of the site access and adjacent roadway system

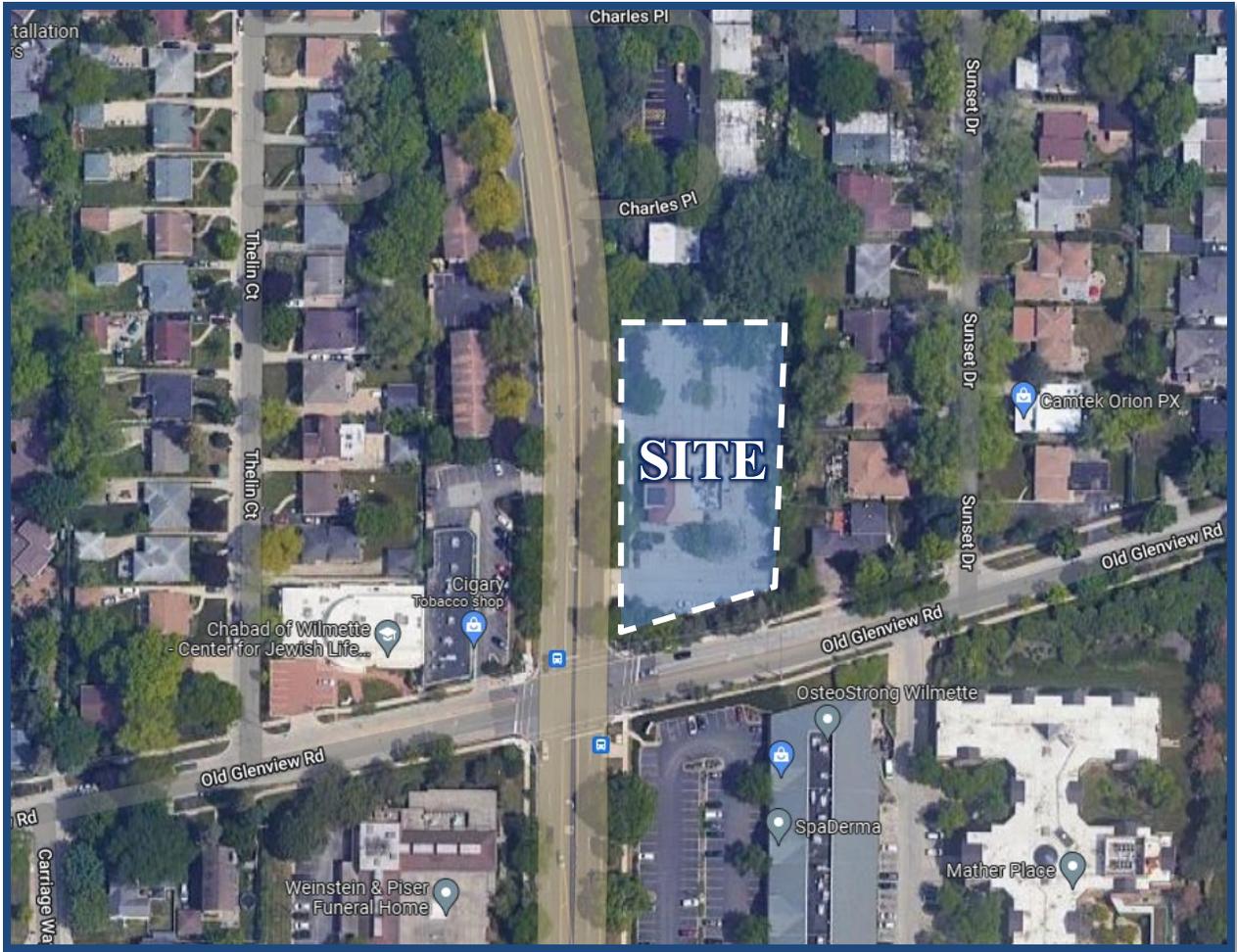
Traffic capacity analyses were conducted for the weekday morning, weekday midday, weekday evening, and Saturday midday peak hours for the following conditions:

1. Base Conditions – Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding.
2. No-Build Conditions – Analyzes the capacity of the existing roadway system using the existing traffic volumes increased by an ambient area growth not attributable to any particular development and any additional developments not associated with the proposed development.
3. Projected Conditions – Analyzes the capacity of the future roadway system using the traffic volumes that include the base traffic volumes, ambient area growth not attributable to any particular development, and the traffic estimated to be generated by the proposed development.



Site Location

Figure 1



Aerial View of Site

Figure 2

## 2. Existing 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

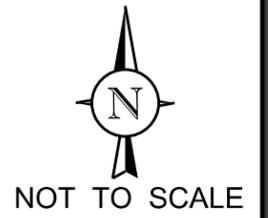
The site, which was previously occupied by Bakers Square Restaurant, is located in the northeast quadrant of the intersection of Skokie Road with Old Glenview Road in Wilmette, Illinois. Land uses in the vicinity of the site are primarily commercial and residential. The commercial land uses include Top Spa Nails and Cigary Tobacco shop to the west, Wilmette Commons to the south, and Weinstein & Piser Funeral Home to the southwest of the site. Residential land uses are located to the east, west, and north of the site.

### Existing Roadway System Characteristics

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

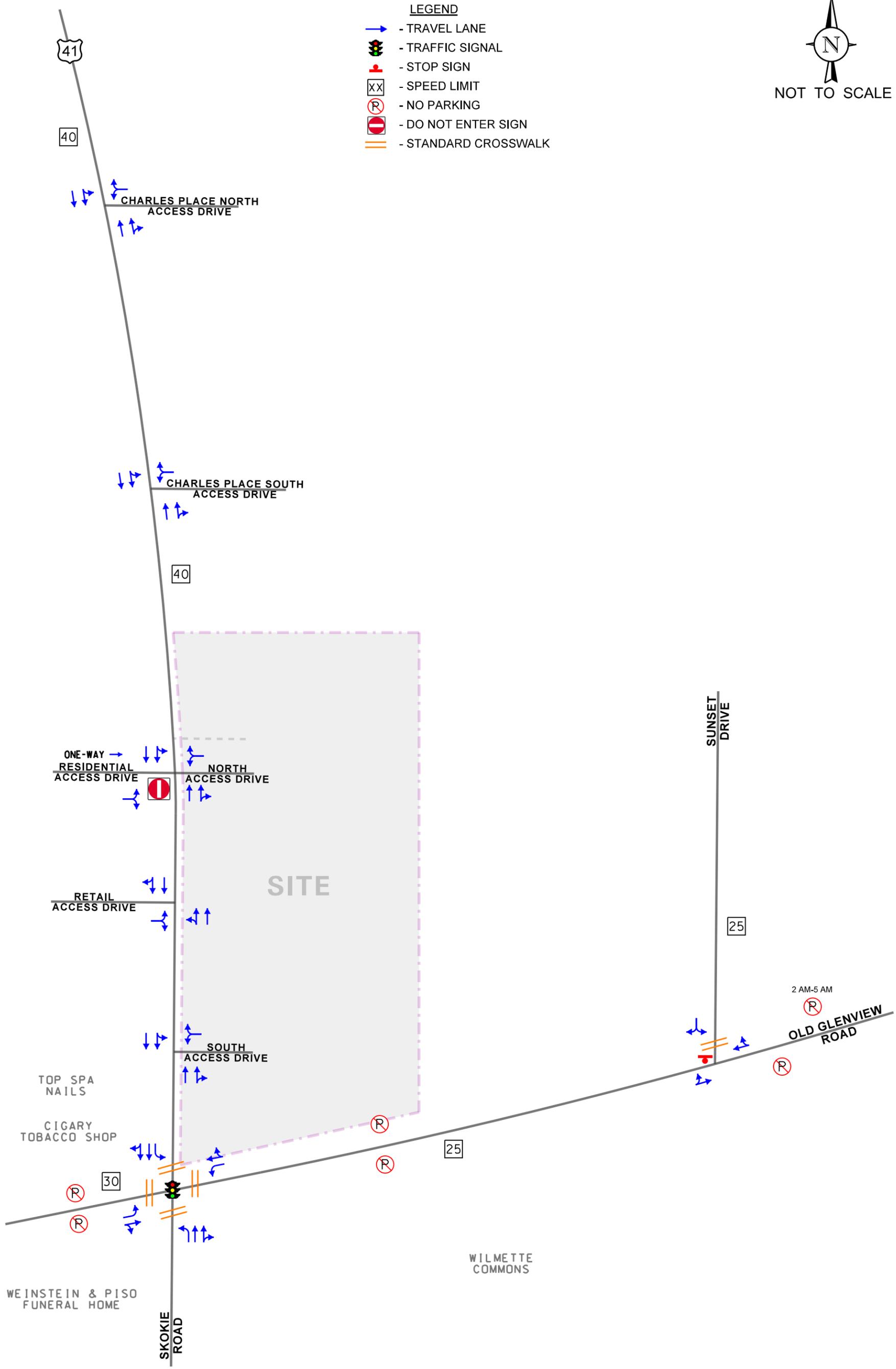
*Skokie Road (US Highway Route 41)* is a north-south other principal arterial roadway that in the vicinity of the site provides two travel lanes in each direction separated by a striped median. At its signalized intersection with Old Glenview Road, Skokie Road provides an exclusive left-turn lane, a through lane, and a shared through/right-turn lane on the northbound and southbound approaches. Both legs provide a standard style crosswalk and pedestrian countdown signals. At its unsignalized intersections with the existing site access drives and the Charles Place north and south access drives, left turn movements are accommodated via the existing striped median. Skokie Road is under the jurisdiction of the Illinois Department of Transportation (IDOT), carries an annual average daily traffic (AADT) volume of 12,400 vehicles (IDOT 2021), and has a posted speed limit of 40 miles per hour.

*Old Glenview Road* is an east-west major collector roadway east of Skokie Road and a local roadway west of it. Old Glenview Road provides one lane in each direction and parking is prohibited on both sides of the road in the vicinity of the site. At its signalized intersection with Skokie Road, Old Glenview Road provides an exclusive left-turn lane and a shared through/right-turn lane on the eastbound and westbound approaches. Both legs provide a standard style crosswalk with pedestrian countdown signals. At its unsignalized intersection with Sunset Drive, Old Glenview Road provides a shared left-turn/through lane on the eastbound approach and a shared through/right-turn lane on the westbound approach. Old Glenview Road is under the jurisdiction of the Village of Wilmette and carries an AADT volume of 12,000 vehicles (IDOT 2020). Old Glenview Road has a posted speed limit of 25 miles per hour east of Skokie Road and 30 miles per hour west of it.



**LEGEND**

-  - TRAVEL LANE
-  - TRAFFIC SIGNAL
-  - STOP SIGN
-  - SPEED LIMIT
-  - NO PARKING
-  - DO NOT ENTER SIGN
-  - STANDARD CROSSWALK



*Sunset Drive* is a north-south local roadway that in the vicinity of the site provides one lane in each direction. At its unsignalized intersection with Old Glenview Road, Sunset Drive provides a shared left-turn/right-turn lane on the southbound approach with the outbound movements under stop sign control. Sunset Drive is under the jurisdiction of the Village of Wilmette and has a posted speed limit of 25 miles per hour.

The *Charles Place access drive* is a half loop access road that provides access to the Charles Place residential buildings east of Skokie Road. At its two unsignalized intersections with Skokie Road, the Charles Place access drive provides a shared left-turn/right-turn lane on the westbound approach. The Charles Place access drive is under the jurisdiction of the Village of Wilmette.

## Existing Traffic Volumes

To determine current traffic conditions within the study area, KLOA, Inc. conducted peak period traffic, pedestrian, and bicycle counts using Miovision Video Scout Collection Units at the following intersections:

- Old Glenview Road with Sunset Drive
- Old Glenview Road with Skokie Road
- Skokie Road with the Existing North Access Drive/Residential Access Drive
- Skokie Road with Retail Plaza Access Drive
- Skokie Road with North and South Charles Place Access Drives

The counts were conducted on Wednesday, November 11, 2022 during the morning (7:00 to 9:00 A.M.), midday (11:30 A.M. to 1:30 P.M.), and evening (4:00 to 6:00 P.M.) peak periods and on Saturday, November 19, 2022 during the midday (11:30 A.M. to 1:30 P.M.) peak period.

The results of the traffic counts indicate that the peak hours of traffic generally occur between 7:30 and 8:30 A.M. during the weekday morning peak period, between 12:00 and 1:00 P.M. during the weekday midday peak period, between 5:00 and 6:00 P.M. during the weekday evening peak period, and between 12:30 and 1:30 P.M. during the Saturday midday peak period.

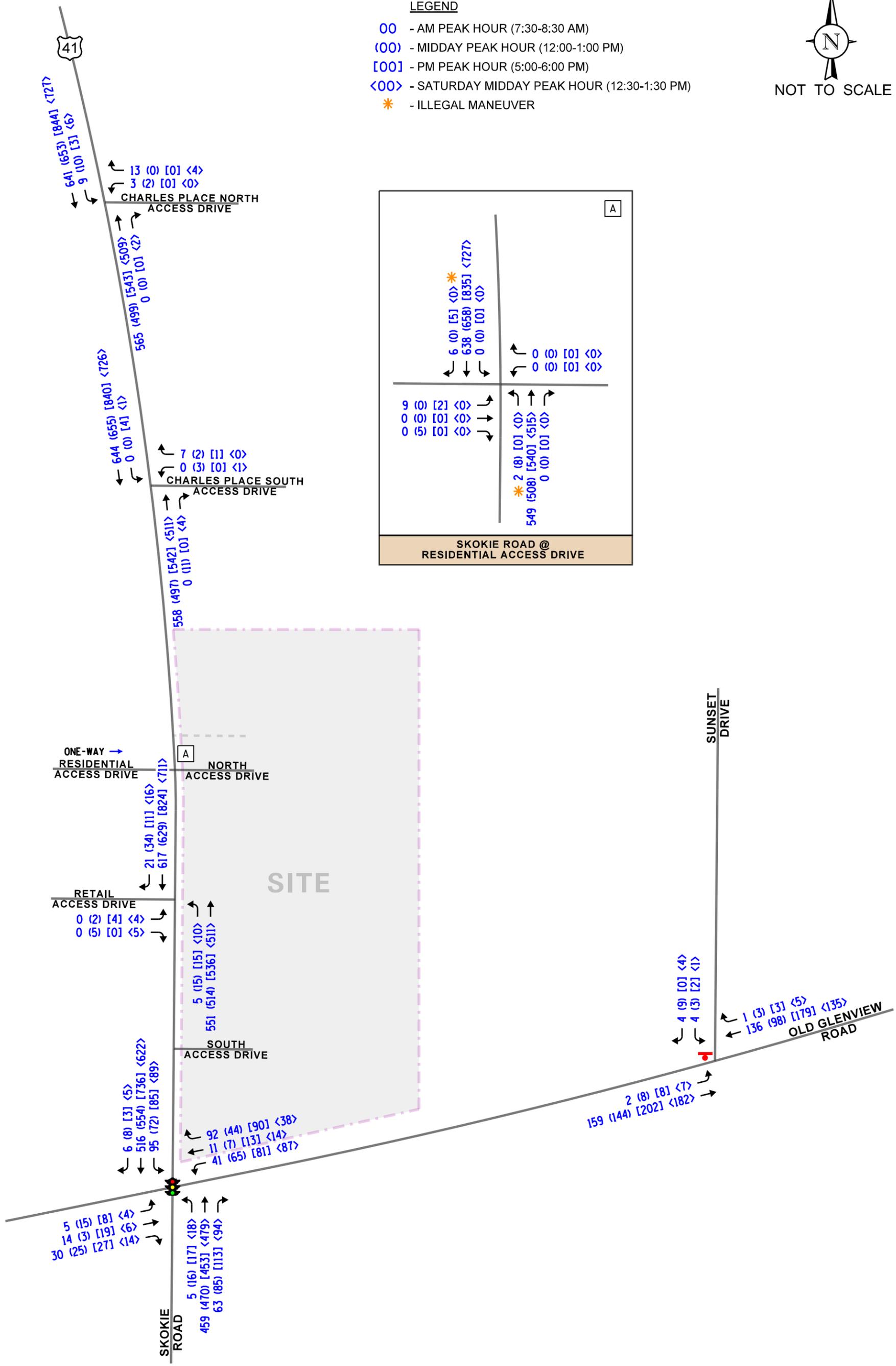
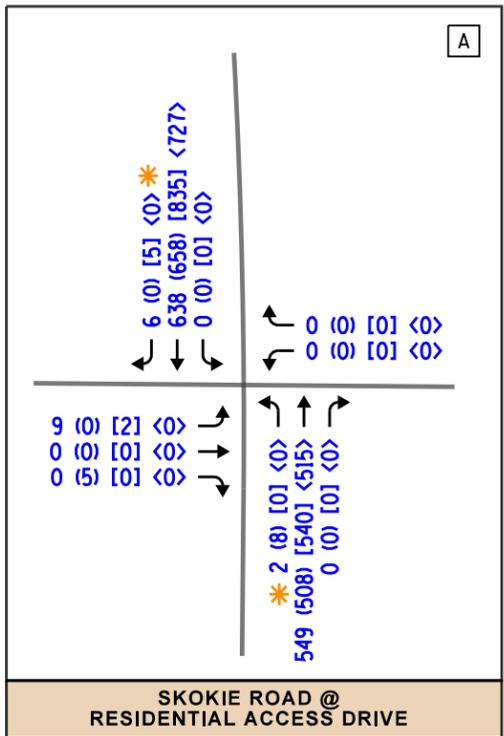
In order to ensure that the traffic counts conducted reflect normal traffic conditions, the Year 2022 traffic counts were compared to historic hourly count data along Old Glenview Road provided on the IDOT Traffic Count Database System (TCDS) website from 2018. The results of the comparison indicated that the Year 2022 traffic volumes during all four peak hours are higher than the previous counts, as such no adjustments were needed. **Figure 4** illustrates the Year 2022 existing traffic volumes. Copies of the traffic count summary sheets are included in the Appendix.



NOT TO SCALE

LEGEND

- 00 - AM PEAK HOUR (7:30-8:30 AM)
- (00) - MIDDAY PEAK HOUR (12:00-1:00 PM)
- [00] - PM PEAK HOUR (5:00-6:00 PM)
- <00> - SATURDAY MIDDAY PEAK HOUR (12:30-1:30 PM)
- \* - ILLEGAL MANEUVER



## Crash Data Summary

KLOA, Inc. obtained crash data<sup>1</sup> for the most recent available past five years (2017 to 2021) for the intersections of Skokie Road with Old Glenview Road, the Charles Place access drives, and the existing north access drive/residential access drive and Old Glenview Road with Sunset Drive. During the review period, no crashes were reported at the intersections of Skokie Road with the Charles Place access drives and Old Glenview Road with Sunset Drive. The crash data for the remaining intersections are summarized in **Tables 1** and **2**. A review of the crash data revealed that no fatalities were reported at the intersections during the reviewed period.

Table 1  
SKOKIE ROAD WITH OLD GLENVIEW ROAD – CRASH SUMMARY

Year	Type of Crash Frequency							Total
	Angle	Head On	Object	Rear End	Sideswipe	Turning	Other	
2017	1	0	0	1	0	1	0	3
2018	0	0	0	3	0	3	0	6
2019	1	0	0	1	0	0	0	2
2020	0	0	0	0	0	3	0	3
2021	0	0	0	0	0	0	0	0
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>14</b>
<b>Average</b>	<b>&lt;1.0</b>	<b>--</b>	<b>--</b>	<b>1.0</b>	<b>--</b>	<b>1.4</b>	<b>--</b>	<b>2.8</b>

Table 2  
SKOKIE ROAD WITH EXISTING NORTH ACCESS DRIVE/RESIDENTIAL ACCESS DRIVE – CRASH SUMMARY

Year	Type of Crash Frequency							Total
	Angle	Head On	Object	Rear End	Sideswipe	Turning	Other	
2017	0	0	0	0	0	0	0	0
2018	0	0	0	1	0	0	0	1
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>Average</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>&lt;1.0</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>&lt;1.0</b>

<sup>1</sup> IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s).

### 3. Traffic Characteristics of the Proposed Restaurant

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

#### Proposed Site and Development Plan

As proposed, the site will be redeveloped to provide an approximately 4,100 square-foot McDonald's restaurant with double ordering boards and 29 parking spaces. Of the 29 parking spaces, two will be accessible parking spaces, two will be mobile ordering parking spaces, and three will be for drive-through customers waiting for their order. Access to the proposed restaurant will be provided via the following:

- An existing access drive off Skokie Road located approximately 100 feet north of the intersection of Skokie Road with Old Glenview Road. Due to its proximity to the signalized intersection, the access drive should be designed to restrict movements to right turns in and out only. The restriction should be enforced via signage, striping, and a mountable median. Outbound movements should be under stop sign control.
- The existing northern full movement access drive off Skokie Road will be relocated further north to approximately 315 feet north of the intersection of Skokie Road with Old Glenview Road. This access drive will provide one inbound lane and one outbound lane with outbound movements should be under stop sign control. Left turns will be accommodated by the existing striped median.

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

#### Restaurant Operations and Circulation

The restaurant building will be located centrally to the site with the primary parking field providing 29 parking spaces located on the west, north, and south sides of the site. The site will be designed with one-way counterclockwise circulation which will be reinforced via signage, pavement marking, and angled parking.

#### Restaurant Drive-Through Stacking

According to the site plan, the proposed drive-through operations will occur on the south, east, and north sides of the building with the entrance to the drive-through located on the south side of the building with the pay and pick-up windows located on the east side of the building.

There will be stacking for a total of approximately 14 vehicles to queue within the drive-through with eleven vehicles to queue between the dual ordering boards and the pay window and three vehicles to queue between the pay window and the second pick-up window. It should be noted that additional stacking can occur along the west side of the building without impeding the on-site

circulation. As discussed later, the proposed stacking of 14 vehicles will be adequate in accommodating the peak drive-through operations of the proposed restaurant.

## Restaurant Wayfinding and Traffic Control Signage

Wayfinding signage and striping will be provided at the two access drives to direct vehicles around the site to the entrance of the drive-through and pavement marking will be provided around the proposed restaurant building to reinforce the one-way counterclockwise circulation.

## Directional Distribution of Site Traffic

The directions from which employees and patrons will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts. **Figure 5** illustrates the directional distribution of vehicles to/from the proposed restaurant.

## Development-Generated Traffic Volumes

The number of peak hour trips estimated to be generated by the proposed restaurant was based on vehicle trip generation rates contained in *Trip Generation Manual*, 11<sup>th</sup> Edition, published by the Institute of Transportation Engineers (ITE). The “Fast-Food Restaurant with Drive-Through” (Land-Use Code 934) rate was utilized for the proposed restaurant.

It is important to note that surveys conducted by ITE have shown that a considerable number of trips made to restaurants 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. Based on information published in the ITE *Trip Generation Manual*, approximately 50 percent of trips generated by fast-food restaurants with drive-throughs are pass-by trips. As such, the trips anticipated to be generated by the proposed McDonald’s were reduced by 50 percent.

**Table 3** summarizes the estimated peak hour trips.

LEGEND

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



NOT TO SCALE

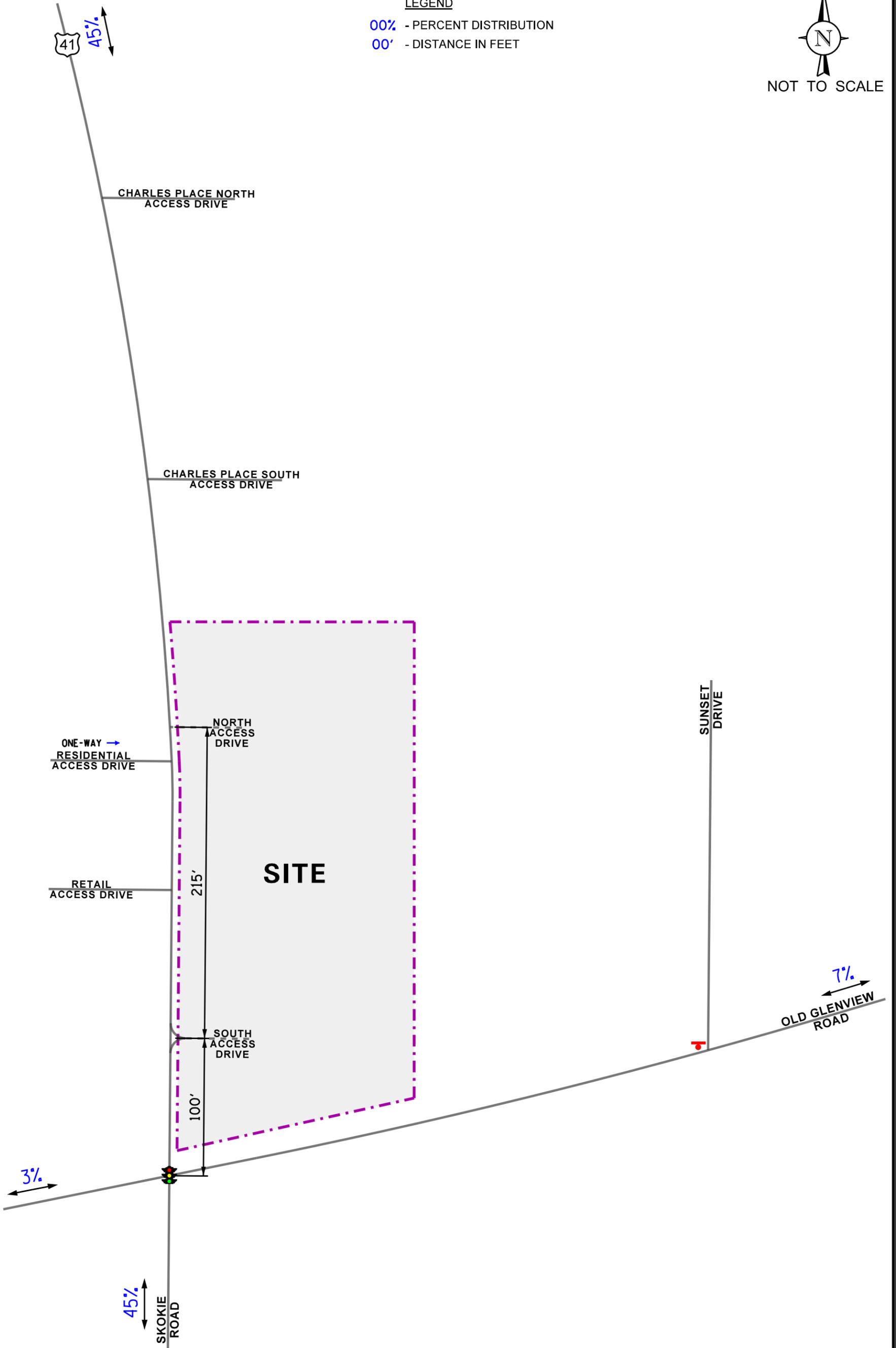


Table 3  
PEAK HOUR SITE-GENERATED TRAFFIC VOLUMES

ITE Land-Use Code	Type	Weekday Morning Peak Hour			Weekday Midday Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
934	Fast Food Restaurant with Drive-Through (4,100 s.f.)	93	90	183	114	115	229	70	65	135	116	111	227
	<i>50% Pass-By Trips</i>	<i>-45</i>	<i>-45</i>	<i>-90</i>	<i>-57</i>	<i>-57</i>	<i>-114</i>	<i>-33</i>	<i>-33</i>	<i>-66</i>	<i>-56</i>	<i>-56</i>	<i>-112</i>
	<b>Total New Trips</b>	<b>48</b>	<b>45</b>	<b>93</b>	<b>57</b>	<b>58</b>	<b>115</b>	<b>37</b>	<b>32</b>	<b>69</b>	<b>60</b>	<b>55</b>	<b>115</b>

## 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 restaurant.

### Restaurant Traffic Assignment

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

### Background (No-Build) Traffic Conditions

The base traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on 2050 Annual Average Daily Traffic (AADT) projections provided by the Chicago Metropolitan Agency for Planning (CMAP) in a letter, the base traffic volumes were increased by an annually compounded growth rate of 0.46 percent for six years (one-year buildout plus five years) for a total of approximately three percent to represent Year 2028 no-build conditions. A copy of the CMAP letter is included in the Appendix. **Figure 8** shows the Year 2028 no-build traffic volumes.

### Year 2028 Total Projected Traffic Volumes

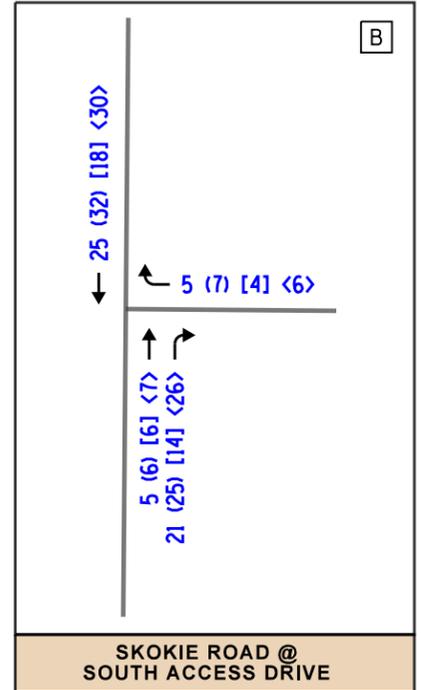
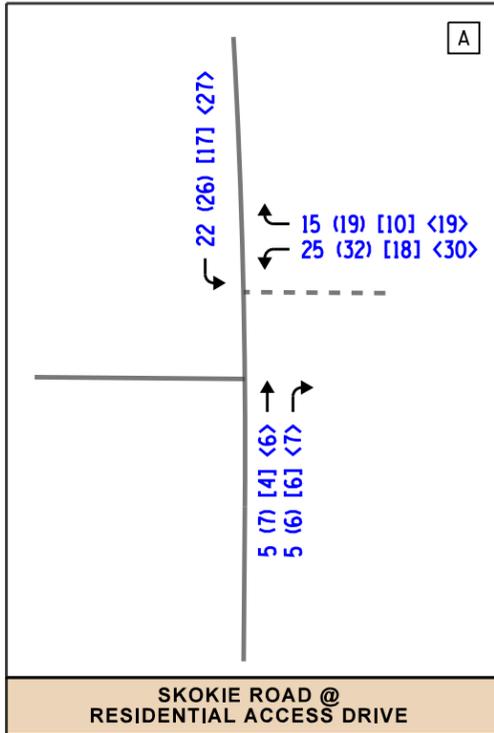
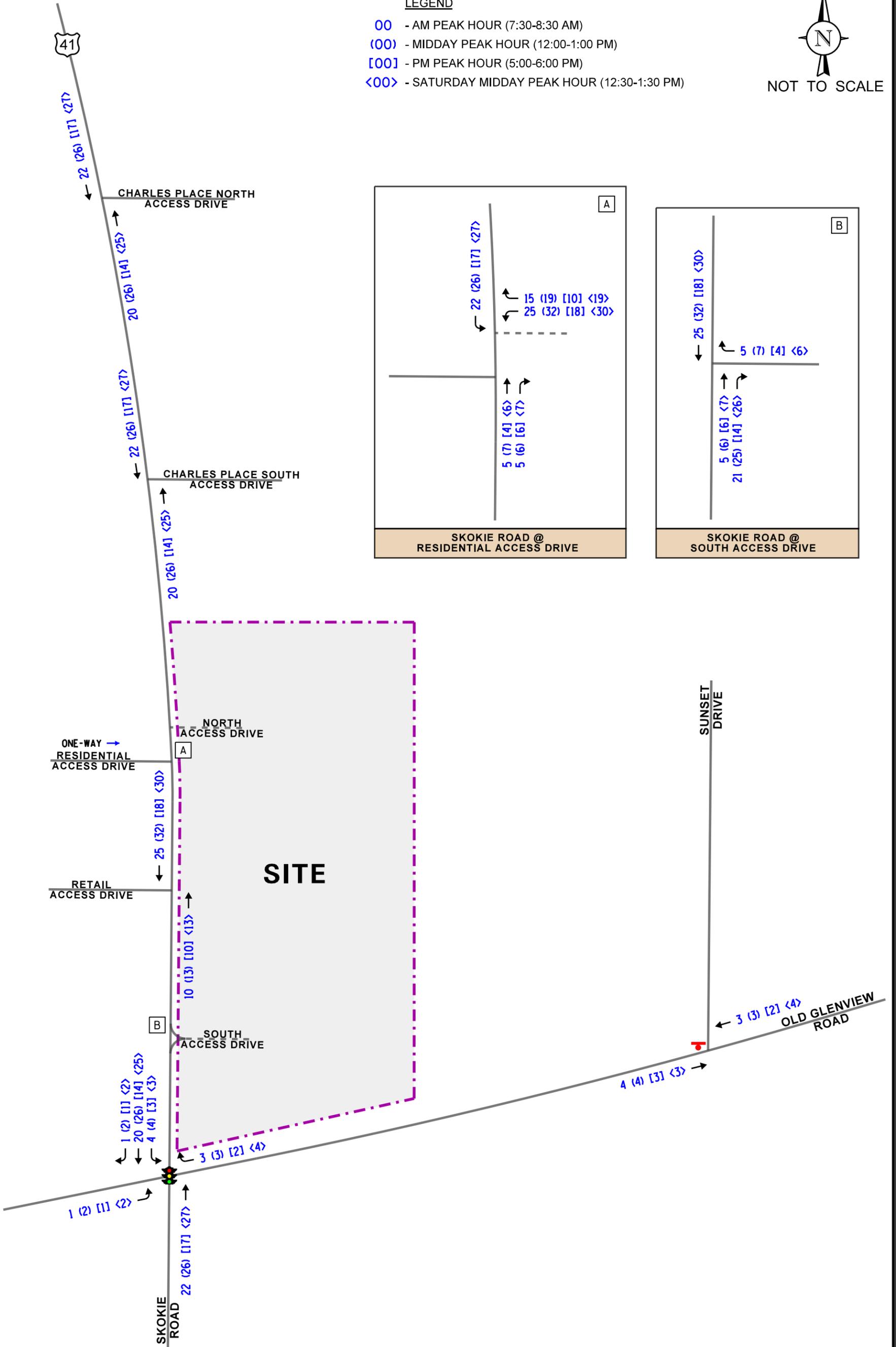
The Year 2028 total projected traffic volumes include the no-build traffic volumes and the traffic estimated to be generated by the proposed restaurant (Figures 6 and 7). **Figure 9** shows the Year 2028 total projected traffic volumes.

**LEGEND**

- 00 - AM PEAK HOUR (7:30-8:30 AM)
- (00) - MIDDAY PEAK HOUR (12:00-1:00 PM)
- [00] - PM PEAK HOUR (5:00-6:00 PM)
- <00> - SATURDAY MIDDAY PEAK HOUR (12:30-1:30 PM)



NOT TO SCALE





LEGEND

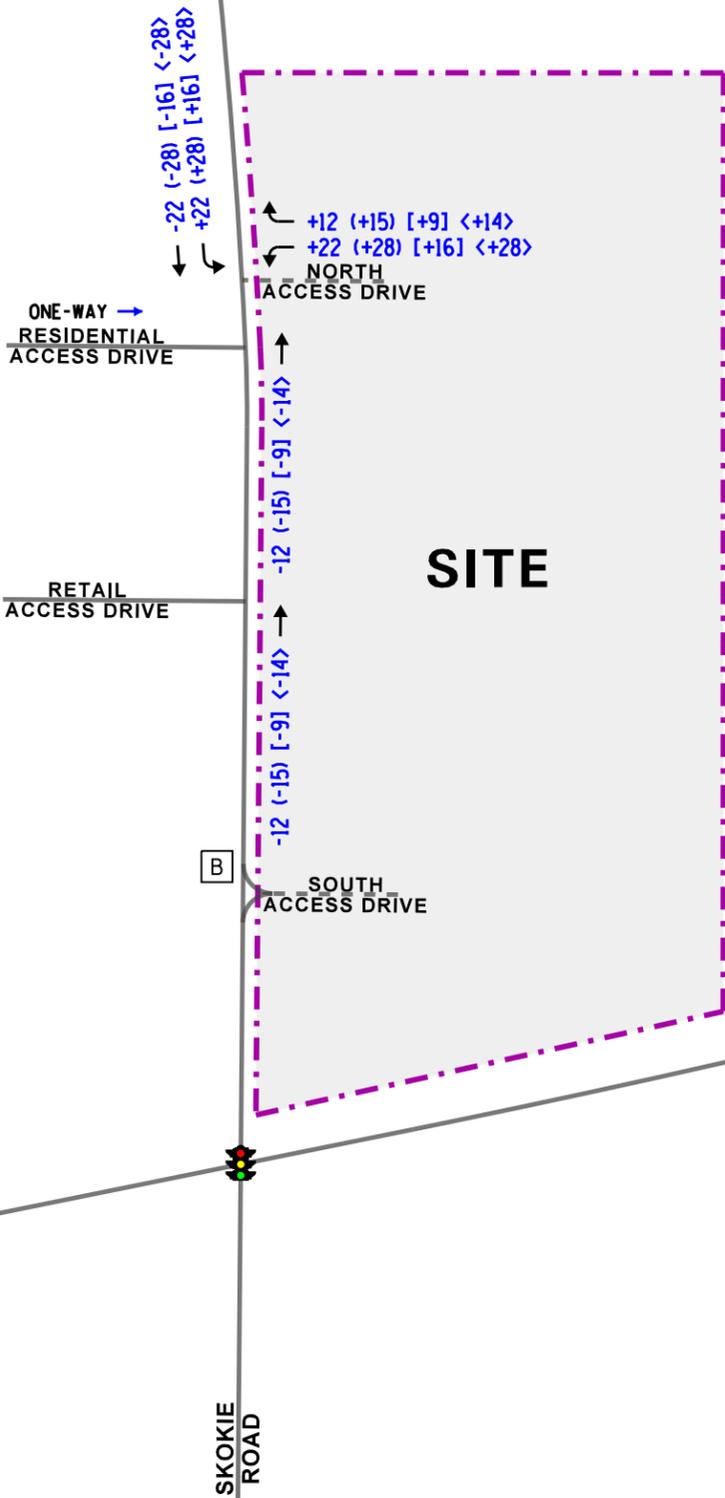
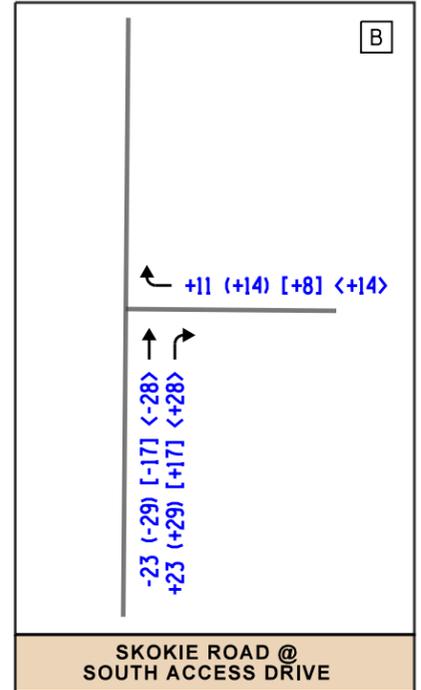
- 00 - AM PEAK HOUR (7:30-8:30 AM)
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- [00] - PM PEAK HOUR (5:00-6:00 PM)
- <00> - SATURDAY MIDDAY PEAK HOUR (12:30-1:30 PM)



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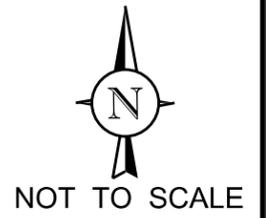
CHARLES PLACE NORTH ACCESS DRIVE

CHARLES PLACE SOUTH ACCESS DRIVE



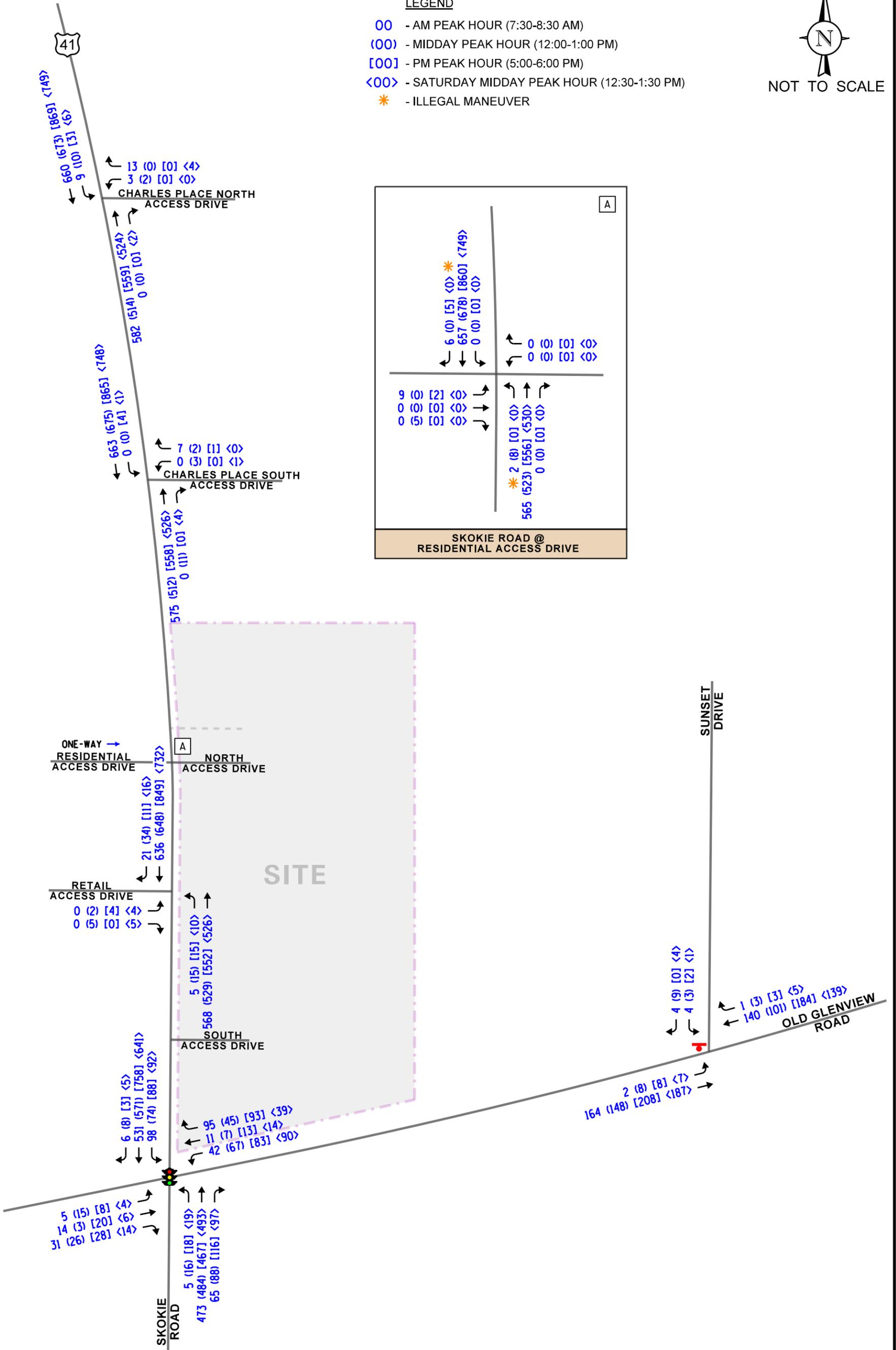
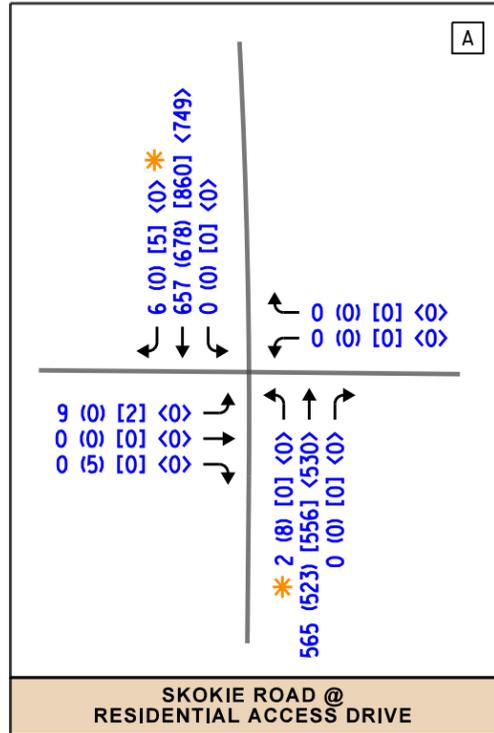
SUNSET DRIVE

OLD GLENVIEW ROAD



**LEGEND**

- 00 - AM PEAK HOUR (7:30-8:30 AM)
- (00) - MIDDAY PEAK HOUR (12:00-1:00 PM)
- [00] - PM PEAK HOUR (5:00-6:00 PM)
- <00> - SATURDAY MIDDAY PEAK HOUR (12:30-1:30 PM)
- \* - ILLEGAL MANEUVER

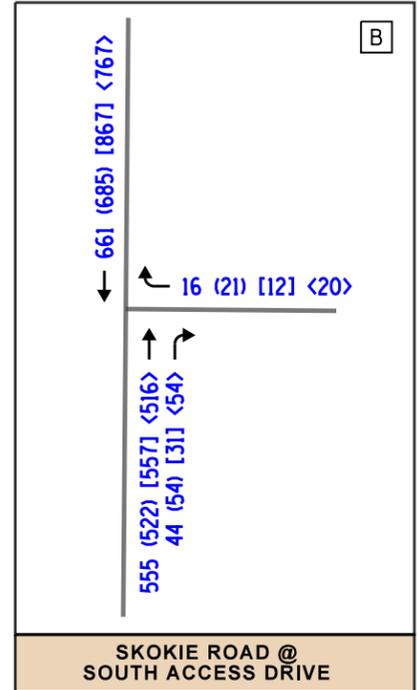
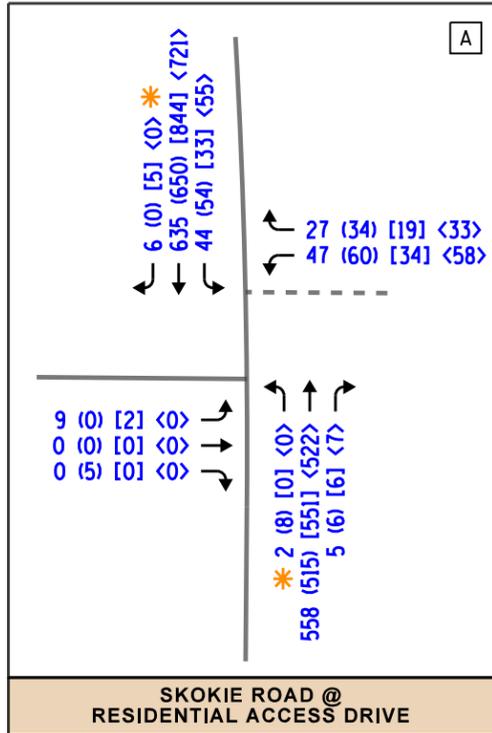
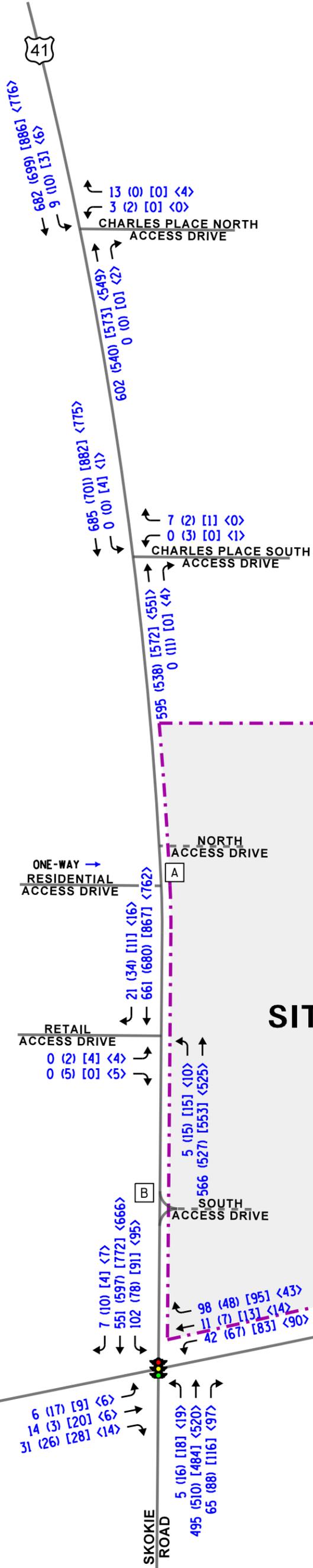


**LEGEND**

- 00 - AM PEAK HOUR (7:30-8:30 AM)
- (00) - MIDDAY PEAK HOUR (12:00-1:00 PM)
- [00] - PM PEAK HOUR (5:00-6:00 PM)
- <00> - SATURDAY MIDDAY PEAK HOUR (12:30-1:30 PM)



NOT TO SCALE



## 5. Traffic Analysis and Recommendations

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

### Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning, weekday midday, weekday evening, and Saturday midday peak hours for the base (Year 2022), no-build, and future projected (Year 2028) traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)*, 6<sup>th</sup> Edition and analyzed using Synchro/SimTraffic 11 software. The analysis for the traffic-signal controlled intersection were accomplished using actual cycle lengths and phasings to determine the average overall vehicle delay and levels of service.

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, Year 2028 no-build, and Year 2028 total projected conditions are presented in **Tables 4** through **8**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 4

CAPACITY ANALYSIS RESULTS – SKOKIE ROAD WITH OLD GLENVIEW ROAD – SIGNALIZED

	Peak Hour	Eastbound		Westbound		Northbound		Southbound		Overall
		L	T/R	L	T/R	L	T/R	L	T/R	
Weekday Morning Peak Hour	Existing Conditions	C 30.2	D 48.1	C 33.9	D 45.8	A 6.4	B 11.6	A 6.0	A 7.8	B 14.3
		D – 46.3		D – 42.4		B – 11.5		A – 7.6		
	No-Build Conditions	C 30.0	D 48.9	C 33.1	D 44.1	A 6.4	B 12.3	A 6.3	A 8.3	B 14.7
		D – 47.1		D – 41.0		B – 12.3		A – 8.0		
	Projected Conditions	C 30.0	D 48.7	C 33.0	D 44.2	A 6.4	B 12.6	A 6.5	A 8.5	B 14.7
		D – 46.6		D – 41.1		B – 12.5		A – 8.1		
Weekday Midday Peak Hour	Existing Conditions	C 26.3	D 41.4	C 30.2	D 38.3	A 6.2	B 11.5	A 6.1	A 9.3	B 12.9
		D – 36.2		C – 33.8		B – 11.4		A – 8.9		
	No-Build Conditions	C 26.1	D 41.4	C 30.1	D 38.1	A 6.3	B 11.8	A 6.2	A 9.4	B 13.1
		D – 36.2		C – 33.6		B – 11.6		A – 9.1		
	Projected Conditions	C 26.4	D 41.4	C 30.1	D 38.4	A 6.4	B 12.0	A 6.3	A 9.6	B 13.2
		D – 35.9		C – 33.9		B – 11.8		A – 9.2		
Letter denotes Level of Service		L – Left Turns		R – Right Turns						
Delay is measured in seconds.		T – Through								

Table 4 – Cont.

CAPACITY ANALYSIS RESULTS – SKOKIE ROAD WITH OLD GLENVIEW ROAD – SIGNALIZED

	Peak Hour	Eastbound		Westbound		Northbound		Southbound		Overall
		L	T/R	L	T/R	L	T/R	L	T/R	
Weekday Evening Peak Hour	Existing Conditions	C 31.9	D 51.0	D 37.3	D 45.0	A 6.5	B 12.0	A 6.5	B 10.3	B 15.4
		D – 48.0		D – 41.6		B – 11.9		A – 9.9		
	No-Build Conditions	C 32.0	D 51.0	D 37.5	D 45.2	A 6.5	B 12.6	A 6.5	B 10.4	B 15.7
		D – 48.1		D – 41.8		B – 12.4		B – 10.0		
	Projected Conditions	C 31.9	D 50.9	D 37.4	D 45.3	A 6.6	B 12.7	A 6.6	B 10.6	B 15.7
		D – 47.7		D – 41.9		B – 12.5		B – 10.1		
Saturday Midday Peak Hour	Existing Conditions	C 27.0	D 41.0	C 34.1	D 36.8	A 5.7	B 10.4	A 5.4	A 8.5	B 12.0
		D – 38.8		D – 35.1		B – 10.3		A – 8.1		
	No-Build Conditions	C 27.0	D 41.0	C 34.2	D 36.8	A 5.7	B 10.6	A 5.5	A 8.6	B 12.1
		D – 38.8		D – 35.2		B – 10.4		A – 8.2		
	Projected Conditions	C 27.3	D 41.0	C 34.2	D 37.2	A 5.7	B 10.7	A 5.5	A 8.7	B 12.2
		D – 38.0		D – 35.3		B – 10.6		A – 8.3		
Letter denotes Level of Service      L – Left Turns      R – Right Turns Delay is measured in seconds.      T – Through										

Table 5  
 CAPACITY ANALYSIS RESULTS – WEEKDAY MORNING PEAK HOUR  
 UNSIGNALIZED

Intersection	Existing Conditions		No-Build Conditions		Projected Conditions	
	LOS	Delay	LOS	Delay	LOS	Delay
<b>Old Glenview Road with Sunset Drive</b>						
• Southbound Approach	A	9.6	A	9.7	A	9.7
• Eastbound Left-Turn	A	8.1	A	8.1	A	8.1
<b>Skokie Road with Retail Plaza Access Drive</b>						
• Eastbound Approach	--	--	--	--	--	--
• Northbound Left Turn	A	9.0	A	9.1	A	9.2
<b>Skokie Road with Residential Access Drive/Site North Access Drive</b>						
• Eastbound Approach	C	15.6	C	15.2	C	18.9
• Westbound Approach	--	--	--	--	C	16.4
• Southbound Left Turn	--	--	--	--	A	8.0
<b>Skokie Road with North Charles Place Access Drive</b>						
• Westbound Approach	B	10.1	B	10.2	B	10.3
• Southbound Left Turn	A	7.8	A	7.8	A	7.9
<b>Skokie Road with South Charles Place Access Drive</b>						
• Westbound Approach	A	9.1	A	9.3	A	9.3
• Southbound Left Turn	--	--	--	--	--	--
<b>Skokie Road with Site Right-In/Right-Out South Access Drive</b>						
• Westbound Approach	--	--	--	--	A	8.9
LOS = Level of Service      1 – Two Way Stop Sign Control Delay is measured in seconds.      2 – All Way Stop Sign Control						

Table 6  
 CAPACITY ANALYSIS RESULTS – WEEKDAY MIDDAY PEAK HOUR  
 UNSIGNALIZED

Intersection	Existing Conditions		No-Build Conditions		Projected Conditions	
	LOS	Delay	LOS	Delay	LOS	Delay
<b>Old Glenview Road with Sunset Drive</b>						
• Southbound Approach	A	9.1	A	9.1	A	9.2
• Eastbound Left Turn	A	7.4	A	7.4	A	7.4
<b>Skokie Road with Retail Plaza Access Drive</b>						
• Eastbound Approach	B	12.0	B	12.2	B	12.5
• Northbound Left Turn	A	9.2	A	9.3	A	9.4
<b>Skokie Road with Residential Access Drive/ Site North Access Drive</b>						
• Eastbound Approach	B	10.7	B	10.8	B	10.7
• Westbound Approach	--	--	--	--	C	17.1
• Southbound Left Turn	--	--	--	--	A	7.9
<b>Skokie Road with North Charles Place Access Drive</b>						
• Westbound Approach	B	13.3	B	13.7	B	14.4
• Southbound Left Turn	A	7.8	A	7.8	A	7.8
<b>Skokie Road with South Charles Place Access Drive</b>						
• Westbound Approach	B	11.4	B	11.7	B	12.1
• Southbound Left Turn	--	--	--	--	--	--
<b>Skokie Road with Site Right-In/Right-Out South Access Drive</b>						
• Westbound Approach	--	--	--	--	A	8.9
LOS = Level of Service      1 – Two Way Stop Sign Control Delay is measured in seconds.      2 – All Way Stop Sign Control						

Table 7  
 CAPACITY ANALYSIS RESULTS – WEEKDAY EVENING PEAK HOUR  
 UNSIGNALIZED

Intersection	Existing Conditions		No-Build Conditions		Projected Conditions	
	LOS	Delay	LOS	Delay	LOS	Delay
<b>Old Glenview Road with Sunset Drive</b>						
• Southbound Approach	B	10.9	B	11.0	B	11.1
• Eastbound Left Turn	A	7.6	A	7.6	A	7.7
<b>Skokie Road with Retail Plaza Access Drive</b>						
• Eastbound Approach	C	19.2	C	20.1	C	20.8
• Northbound Left Turn	A	9.9	B	10.1	B	10.1
<b>Skokie Road with Residential Access Drive/Site North Access Drive</b>						
• Eastbound Approach	C	20.1	C	21.3	C	24.1
• Westbound Approach	--	--	--	--	C	16.9
• Southbound Left Turn	--	--	--	--	A	7.9
<b>Skokie Road with North Charles Place Access Drive</b>						
• Westbound Approach	--	--	--	--	--	--
• Southbound Left Turn	A	7.8	A	7.8	A	7.8
<b>Skokie Road with South Charles Place Access Drive</b>						
• Westbound Approach	A	9.2	A	9.2	A	9.2
• Southbound Left Turn	A	7.8	A	7.8	A	7.8
<b>Skokie Road with Site Right-In/Right-Out South Access Drive</b>						
• Westbound Approach	--	--	--	--	A	9.0
LOS = Level of Service      1 – Two Way Stop Sign Control Delay is measured in seconds.      2 – All Way Stop Sign Control						

Table 8  
CAPACITY ANALYSIS RESULTS – SAT. MIDDAY PEAK HOUR – UNSIGNALIZED

Intersection	Existing Conditions		No-Build Conditions		Projected Conditions	
	LOS	Delay	LOS	Delay	LOS	Delay
<b>Old Glenview Road with Sunset Drive</b>						
• Southbound Approach	A	9.5	A	9.5	A	9.6
• Eastbound Left Turn	A	7.6	A	7.6	A	7.6
<b>Skokie Road with Retail Plaza Access Drive</b>						
• Eastbound Approach	B	13.4	B	13.8	B	14.2
• Northbound Left Turn	A	9.4	A	9.5	A	9.6
<b>Skokie Road with Residential Access Drive/Site North Access Drive</b>						
• Eastbound Approach	--	--	--	--	--	--
• Westbound Approach	--	--	--	--	C	18.2
• Southbound Left Turn	--	--	--	--	A	7.9
<b>Skokie Road with North Charles Place Access Drive</b>						
• Westbound Approach	A	9.1	A	9.1	A	9.1
• Southbound Left Turn	A	7.7	A	7.8	A	7.9
<b>Skokie Road with South Charles Place Access Drive</b>						
• Westbound Approach	B	13.7	B	14.2	B	14.9
• Southbound Left Turn	A	7.7	A	7.8	A	7.9
<b>Skokie Road with Site Right-In/Right-Out South Access Drive</b>						
• Westbound Approach	--	--	--	--	A	8.9
LOS = Level of Service      1 – Two Way Stop Sign Control Delay is measured in seconds.      2 – All Way Stop Sign 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 development-generated traffic.

### *Skokie Road with Old Glenview Road*

The results of the capacity analysis indicate that overall, this intersection currently operates at Level of Service (LOS) B during all four peak hours. All the approaches operate at LOS D or better during all the peak hours. The maximum southbound 95<sup>th</sup> percentile queue is 217 feet during the weekday evening peak hour and does not block the north access drive.

Under Year 2028 no-build conditions, this intersection overall is projected to continue operating at LOS B during all four peak hours with increases in delay of less than one second. All the approaches will continue to operate at the same existing levels of service with increases in delay of less than one second.

Under Year 2028 total projected conditions, this intersection and all of its approaches are projected to operate at the same existing levels of service during all four peak hours with increases in delay of less than one second. The maximum southbound 95<sup>th</sup> percentile queue is projected to be 233 feet during the weekday evening peak hour which will not block the relocated north access drive. As such, the traffic estimated to be generated by the proposed McDonald's restaurant will have a limited impact on the operations of this intersection and no roadway improvements or traffic control modifications are required.

### *Old Glenview Road with Sunset Drive*

The results of the capacity analysis indicate that the southbound approach currently operates at LOS A during the weekday morning, weekday midday, and Saturday midday peak hours and LOS B during the weekday evening peak hour. The eastbound left-turn movement operates at LOS A during all four peak hours.

Under Year 2028 no-build and total projected conditions, the southbound approach and eastbound left-turn movement will continue to operate at the same existing levels of service during all peak hours with increases in delay of less than one second. As such, the traffic estimated to be generated by the proposed McDonald's restaurant will have a limited impact on the operations of this intersection and no roadway improvements or traffic control modifications are required.

### *Skokie Road with Retail Plaza Access Drive*

The results of the capacity analysis indicate that the eastbound approach currently operates at LOS B during the weekday midday and Saturday midday peak hours and LOS C during the weekday evening peak hour. The northbound left-turn movement operates at LOS A during all peak hours.

Under Year 2028 no-build and projected conditions, the eastbound approach is projected to continue operating at the same existing levels of service during all four peak hours with increases in delay of less than one second. The northbound left-turn movement will continue to operate at LOS A during the weekday morning, weekday midday, and Saturday midday peak hours with increases in delay of less than one second and it is projected to operate at LOS B during the weekday evening peak hour with an increase in delay of less than one second. As such, this intersection has adequate reserved capacity to accommodate the traffic that will be generated by the proposed McDonald's restaurant.

#### *Skokie Road with Charles Place North Access Drive*

The results of the capacity analysis indicate that the westbound approach currently operates at LOS B during the weekday morning and weekday midday peak hours and LOS A during the Saturday midday peak hour. The southbound left-turn movement operates at LOS A during all peak hours.

Under Year 2028 no-build and total projected conditions, the westbound approach and the southbound left-turn movement are projected to operate at the same existing levels of service during all peak hours with increases in delay of less than one second. As such, the traffic estimated to be generated by the proposed McDonald's restaurant will have a limited impact on the operations of this intersection.

#### *Skokie Road with Charles Place South Access Drive*

The results of the capacity analysis indicate that the westbound approach currently operates at LOS A during the weekday morning and weekday evening peak hours and LOS B during the weekday midday and Saturday midday peak hours. The southbound left-turn movement operates at LOS A during all four peak hours.

Under Year 2028 no-build and total projected conditions, the westbound approach and the southbound left-turn movement are projected to operate at the same existing levels of service during all peak hours with increases in delay of less than one second. As such, the traffic estimated to be generated by the proposed McDonald's restaurant will have a limited impact on the operations of this intersection.

#### *Skokie Road with Restaurant's North Access Drive/Residential Access Drive*

The results of the capacity analysis indicate that the eastbound approach currently operates at LOS C during the weekday morning and weekday evening peak hours and LOS B during the weekday midday peak hour.

Under Year 2028 no-build conditions, the eastbound approach is projected to operate at the same existing levels of service during all peak hours with increases in delay of less than two seconds.

Under Year 2028 total projected conditions, the eastbound approach will continue to operate at the same existing levels of service during all peak hours with increases in delay of approximately three seconds or less over no-build conditions. The westbound approach is projected to operate at LOS C during all four peak hours and the southbound left-turn movement is projected to operate at LOS A during all peak hours.

As such, this intersection has adequate reserve capacity to accommodate the traffic that will be generated by the proposed McDonald's restaurant and the north access drive is projected to provide efficient access to the restaurant. A comparison of the projected volumes with the right-turn lane warrants published in Chapter 36 of the IDOT *Bureau of Design and Environment* (BDE) Manual shows that an exclusive right-turn lane will **not be** warranted on Skokie Road serving the site access drive. A copy of the turn lane warrant is included in the Appendix.

#### *Skokie Road with Restaurant's South Right-In/Right-Out Access Drive*

The results of the capacity analysis indicate that under projected conditions, the outbound movements are projected to operate at LOS A during all four peak hours. As such, this access drive will be adequate to provide efficient access to the restaurant. A comparison of the projected volumes with the right-turn lane warrants published in Chapter 36 of the IDOT *Bureau of Design and Environment* (BDE) Manual shows that an exclusive right-turn lane will **not be** warranted on Skokie Road serving the site access drive. A copy of the turn lane warrant is included in the Appendix.

### Drive-Through Stacking Evaluation

As proposed, the proposed drive-through will provide stacking for a total of approximately 14 vehicles without blocking the parking spaces. However, the site plan shows a maximum stacking of 17 vehicles if needed. Based on observations of existing restaurants and KLOA, Inc.'s experience in similar types of land uses, the proposed drive-through stacking will be adequate to accommodate the projected demand. In the unlikely event that queues at the drive-through facility are longer, the additional vehicles can queue internally within the site without impacting traffic operations on Skokie Road.

### Parking Evaluation

As proposed, the restaurant will provide a total of 29 parking spaces, resulting in a parking ratio of 7.07 spaces per 1,000 square feet. Based on the Village of Wilmette Code of Ordinances, full-service restaurants are required to provide parking at a ratio of five spaces per 1,000 square feet. As such, the proposed McDonald's is required to provide 21 parking spaces, resulting in a surplus of eight parking spaces. In addition, based on parking surveys conducted at existing McDonald's restaurants located in the Chicagoland area, these restaurants had a peak parking demand ranging from 4.74 to 7.14 spaces per 1,000 square feet, for an average of 5.79 spaces per 1,000 square feet. As such, the proposed parking ratio of 7.07 spaces per 1,000 square feet will be adequate in accommodating the estimated peak parking demand for the restaurant based on the average peak parking demands of other Chicagoland McDonald's restaurants. **Table 9** summarizes the peak parking demand ratios for each location.

Table 9

PEAK PARKING DEMANDS OF OTHER MCDONALD'S RESTAURANTS

Address	Municipality	Size	Number of Seats	Peak Demand (per 1,000 s.f.)	Peak Parking Demand <sup>1</sup>
31 E. 63 <sup>rd</sup> Street <sup>2</sup>	Westmont	5,880 s.f.	114	7.14 spaces	30
355 S. Schmale Road	Carol Stream	3,700 s.f.	63	4.86 spaces	20
2111 Midwest Road	Oak Brook	5,223 s.f.	90	5.74 spaces	24
1657 W. 95 <sup>th</sup> Street	Chicago	3,235 s.f.	43	5.87 spaces	25
10 S. 710 Kingery Highway <sup>3</sup>	Burr Ridge	4,400 s.f.	40	6.36 spaces	27
225 E. Ogden Avenue <sup>2</sup>	Downers Grove	5,700 s.f.	105	4.74 spaces	20
<b>Average</b>		<b>4,690 s.f.</b>	<b>76</b>	<b>5.79 spaces</b>	<b>24</b>
1 – For the proposed 4,100 s.f. restaurant 2 – Restaurant contains a playplace 3 – This restaurant has since been relocated to 9101 S. Kingery Highway					

## 6. Conclusion

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

- The new traffic projected to be generated by the proposed restaurant will be reduced due to the volume of pass-by traffic generated by fast-food restaurants.
- The results of the capacity analysis indicated that the existing roadway system will have sufficient reserve capacity to accommodate the traffic that will be generated by the proposed restaurant and no roadway or traffic control improvements are required.
- Access to the proposed restaurant will be provided via a full-movement access drive and a right-in/right-out access drive off Skokie Road. The access system will be adequate to provide efficient access to the restaurant.
- The proposed drive-through stacking of 14 vehicles will be adequate in accommodating the peak drive-through demand based on surveys conducted by KLOA, Inc. at other McDonald's restaurants in the Chicagoland area.
- The proposed 29 parking spaces will be adequate in accommodating the estimated peak parking demand based on parking occupancy surveys conducted at other McDonald's restaurants in the Chicagoland area.
- An exclusive right-turn lane will **not** be warranted at the intersection of Skokie Road with both access drives.

# Appendix

Traffic Count Summary Sheets

Site Plan

ITE Trip Generation Summary Sheets

CMAP 2050 Projections Letter

Level of Service Criteria

Capacity Analysis Summary Sheets

Turn Lane Warrant Diagram

# Traffic Count Summary Sheets



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Count Name: Old Glenview Rd with Skokie Blvd  
Site Code:  
Start Date: 11/19/2022  
Page No: 1

### Turning Movement Data

Start Time	Old Glenview Rd Eastbound					Old Glenview Rd Westbound					Skokie Blvd Northbound					Skokie Blvd Southbound					
	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	
12:00 PM	0	0	1	9	10	0	10	2	9	21	0	1	113	26	140	0	19	186	1	206	377
12:15 PM	0	0	2	3	5	0	26	1	14	41	0	7	103	29	139	0	13	128	3	144	329
12:30 PM	0	2	2	3	7	0	21	1	15	37	0	3	117	25	145	0	16	139	2	157	346
12:45 PM	0	0	4	5	9	0	16	2	8	26	0	3	140	22	165	0	33	157	3	193	393
Hourly Total	0	2	9	20	31	0	73	6	46	125	0	14	473	102	589	0	81	610	9	700	1445
1:00 PM	0	2	0	3	5	0	28	3	5	36	0	6	107	23	136	0	30	164	0	194	371
1:15 PM	0	0	0	3	3	0	22	3	10	35	0	6	115	24	145	0	10	162	0	172	355
1:30 PM	0	3	0	1	4	0	27	2	13	42	0	2	124	46	172	0	16	134	0	150	368
1:45 PM	0	0	1	0	1	0	18	0	12	30	0	8	105	38	151	0	13	156	2	171	353
Hourly Total	0	5	1	7	13	0	95	8	40	143	0	22	451	131	604	0	69	616	2	687	1447
Grand Total	0	7	10	27	44	0	168	14	86	268	0	36	924	233	1193	0	150	1226	11	1387	2892
Approach %	0.0	15.9	22.7	61.4	-	0.0	62.7	5.2	32.1	-	0.0	3.0	77.5	19.5	-	0.0	10.8	88.4	0.8	-	-
Total %	0.0	0.2	0.3	0.9	1.5	0.0	5.8	0.5	3.0	9.3	0.0	1.2	32.0	8.1	41.3	0.0	5.2	42.4	0.4	48.0	-
Lights	0	7	10	26	43	0	168	14	85	267	0	35	916	231	1182	0	150	1216	10	1376	2868
% Lights	-	100.0	100.0	96.3	97.7	-	100.0	100.0	98.8	99.6	-	97.2	99.1	99.1	99.1	-	100.0	99.2	90.9	-	99.2
Buses	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	0	2	4
% Buses	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.2	0.0	0.2	-	0.0	0.2	0.0	-	0.1
Single-Unit Trucks	0	0	0	0	0	0	0	0	1	1	0	1	4	2	7	0	0	6	1	7	15
% Single-Unit Trucks	-	0.0	0.0	0.0	0.0	-	0.0	0.0	1.2	0.4	-	2.8	0.4	0.9	0.6	-	0.0	0.5	9.1	-	0.5
Articulated Trucks	0	0	0	1	1	0	0	0	0	0	0	0	2	0	2	0	0	2	0	2	5
% Articulated Trucks	-	0.0	0.0	3.7	2.3	-	0.0	0.0	0.0	0.0	-	0.0	0.2	0.0	0.2	-	0.0	0.2	0.0	-	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 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	-	-	-	-	2	-	-	-	-	0	-	-	-	-	1	-	-	-	-	7	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-



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Count Name: Old Glenview Rd with Skokie Blvd  
Site Code:  
Start Date: 11/19/2022  
Page No: 2

### Turning Movement Peak Hour Data (12:30 PM)

Start Time	Old Glenview Rd Eastbound						Old Glenview Rd Westbound						Skokie Blvd Northbound						Skokie Blvd Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
12:30 PM	0	2	2	3	0	7	0	21	1	15	0	37	0	3	117	25	0	145	0	16	139	2	0	157	346
12:45 PM	0	0	4	5	2	9	0	16	2	8	0	26	0	3	140	22	1	165	0	33	157	3	0	193	393
1:00 PM	0	2	0	3	0	5	0	28	3	5	0	36	0	6	107	23	0	136	0	30	164	0	1	194	371
1:15 PM	0	0	0	3	0	3	0	22	3	10	0	35	0	6	115	24	0	145	0	10	162	0	2	172	355
Total	0	4	6	14	2	24	0	87	9	38	0	134	0	18	479	94	1	591	0	89	622	5	3	716	1465
Approach %	0.0	16.7	25.0	58.3	-	-	0.0	64.9	6.7	28.4	-	-	0.0	3.0	81.0	15.9	-	-	0.0	12.4	86.9	0.7	-	-	-
Total %	0.0	0.3	0.4	1.0	-	1.6	0.0	5.9	0.6	2.6	-	9.1	0.0	1.2	32.7	6.4	-	40.3	0.0	6.1	42.5	0.3	-	48.9	-
PHF	0.000	0.500	0.375	0.700	-	0.667	0.000	0.777	0.750	0.633	-	0.905	0.000	0.750	0.855	0.940	-	0.895	0.000	0.674	0.948	0.417	-	0.923	0.932
% Lights	0	4	6	14	-	24	0	87	9	38	-	134	0	18	476	93	-	587	0	89	619	4	-	712	1457
% Lights	-	100.0	100.0	100.0	-	100.0	-	100.0	100.0	100.0	-	100.0	-	100.0	99.4	98.9	-	99.3	-	100.0	99.5	80.0	-	99.4	99.5
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	1	0	-	1	2
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.2	0.0	-	0.2	-	0.0	0.2	0.0	-	0.1	0.1
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	2	1	-	3	0	0	2	1	-	3	6
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.4	1.1	-	0.5	-	0.0	0.3	20.0	-	0.4	0.4
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	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
% 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	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



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TMC  
Site Code:  
Start Date: 11/16/2022  
Page No: 1

### Turning Movement Data

Start Time	Old Glenview Rd Eastbound					Old Glenview Rd Westbound					Skokie Blvd Northbound					Skokie Blvd Southbound											
	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	Int. Total	
7:00 AM	0	1	1	1	3	0	13	1	12	0	26	0	1	68	16	85	0	12	64	1	77	0	12	64	1	1	191
7:15 AM	0	3	3	4	10	0	5	3	16	0	24	0	1	95	14	110	0	15	86	1	102	0	15	86	1	0	246
7:30 AM	0	0	3	6	9	0	9	2	27	0	38	0	1	133	24	158	0	22	121	3	146	0	22	121	3	0	351
7:45 AM	0	0	7	7	14	0	15	1	26	0	42	0	1	89	17	107	0	26	142	2	170	0	26	142	2	1	333
Hourly Total	0	4	14	18	36	0	42	7	81	0	130	0	4	385	71	460	0	75	413	7	495	0	75	413	7	2	1121
8:00 AM	0	3	1	12	16	0	8	2	20	0	30	0	1	125	10	136	0	21	114	0	135	0	21	114	0	0	317
8:15 AM	0	2	3	5	10	0	9	4	19	1	32	0	2	112	12	126	0	26	139	1	166	0	26	139	1	1	334
8:30 AM	0	0	2	5	7	0	17	0	13	0	30	0	3	88	13	104	0	40	149	0	189	0	40	149	0	0	330
8:45 AM	0	0	3	6	9	0	9	2	8	0	19	0	2	78	16	96	0	30	119	1	150	0	30	119	1	1	274
Hourly Total	0	5	9	28	42	0	43	8	60	1	111	0	8	403	51	462	0	117	521	2	640	0	117	521	2	2	1255
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:30 AM	0	4	0	9	13	0	29	0	10	0	39	0	2	85	19	106	0	15	125	0	140	0	15	125	0	0	298
11:45 AM	0	0	1	5	6	0	19	0	8	0	27	0	6	108	20	134	0	17	118	0	135	0	17	118	0	0	302
Hourly Total	0	4	1	14	19	0	48	0	18	0	66	0	8	193	39	240	0	32	243	0	275	0	32	243	0	0	600
12:00 PM	0	4	0	11	15	0	15	3	12	0	30	0	4	111	14	129	0	17	125	2	144	0	17	125	2	0	318
12:15 PM	0	2	0	5	7	0	12	1	11	0	24	0	2	107	30	139	0	17	141	2	160	0	17	141	2	0	330
12:30 PM	0	4	2	2	8	0	15	1	12	0	28	0	7	120	26	153	0	25	153	2	180	0	25	153	2	0	369
12:45 PM	0	5	1	7	13	0	23	2	9	0	34	0	3	132	15	150	0	13	135	0	148	0	13	135	0	0	345
Hourly Total	0	15	3	25	43	0	65	7	44	0	116	0	16	470	85	571	0	72	554	6	632	0	72	554	6	0	1362
1:00 PM	0	0	3	3	6	0	20	1	13	0	34	0	3	99	30	132	0	11	128	2	141	0	11	128	2	0	313
1:15 PM	0	1	1	5	7	0	7	1	11	0	19	0	3	120	13	136	0	19	135	2	156	0	19	135	2	0	318
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	1	4	8	13	0	27	2	24	0	53	0	6	219	43	268	0	30	263	4	297	0	30	263	4	0	631
4:00 PM	0	3	1	5	9	0	30	0	24	1	54	0	2	145	35	182	0	20	184	3	207	0	20	184	3	1	452
4:15 PM	0	2	2	0	4	0	15	1	21	1	37	0	2	107	23	132	0	26	173	4	203	0	26	173	4	0	376
4:30 PM	0	1	2	6	9	0	18	0	21	1	39	0	1	110	23	134	0	16	163	2	181	0	16	163	2	1	363
4:45 PM	0	2	5	7	14	0	14	1	12	3	27	0	7	111	32	150	0	22	155	2	179	0	22	155	2	1	370
Hourly Total	0	8	10	18	36	0	77	2	78	6	157	0	12	473	113	598	0	84	675	11	770	0	84	675	11	3	1561
5:00 PM	0	3	2	3	8	0	23	3	28	0	54	0	5	133	29	167	0	25	183	0	208	0	25	183	0	0	437
5:15 PM	0	2	1	11	14	0	22	3	26	0	51	0	2	93	20	115	0	17	179	1	197	0	17	179	1	0	377
5:30 PM	0	2	4	7	13	0	19	5	15	0	39	0	7	133	31	171	0	18	189	1	208	0	18	189	1	0	431
5:45 PM	0	1	3	6	10	0	17	2	21	0	40	0	3	94	33	130	0	25	185	1	211	0	25	185	1	0	391
Hourly Total	0	8	10	27	45	0	81	13	90	0	184	0	17	453	113	583	0	85	736	3	824	0	85	736	3	0	1636
Grand Total	0	45	51	138	234	0	383	39	395	7	817	0	71	2596	515	3182	0	495	3405	33	3933	0	495	3405	33	7	8166
Approach %	0.0	19.2	21.8	59.0	-	0.0	46.9	4.8	48.3	-	-	0.0	2.2	81.6	16.2	-	0.0	12.6	86.6	0.8	-	0.0	12.6	86.6	0.8	-	-

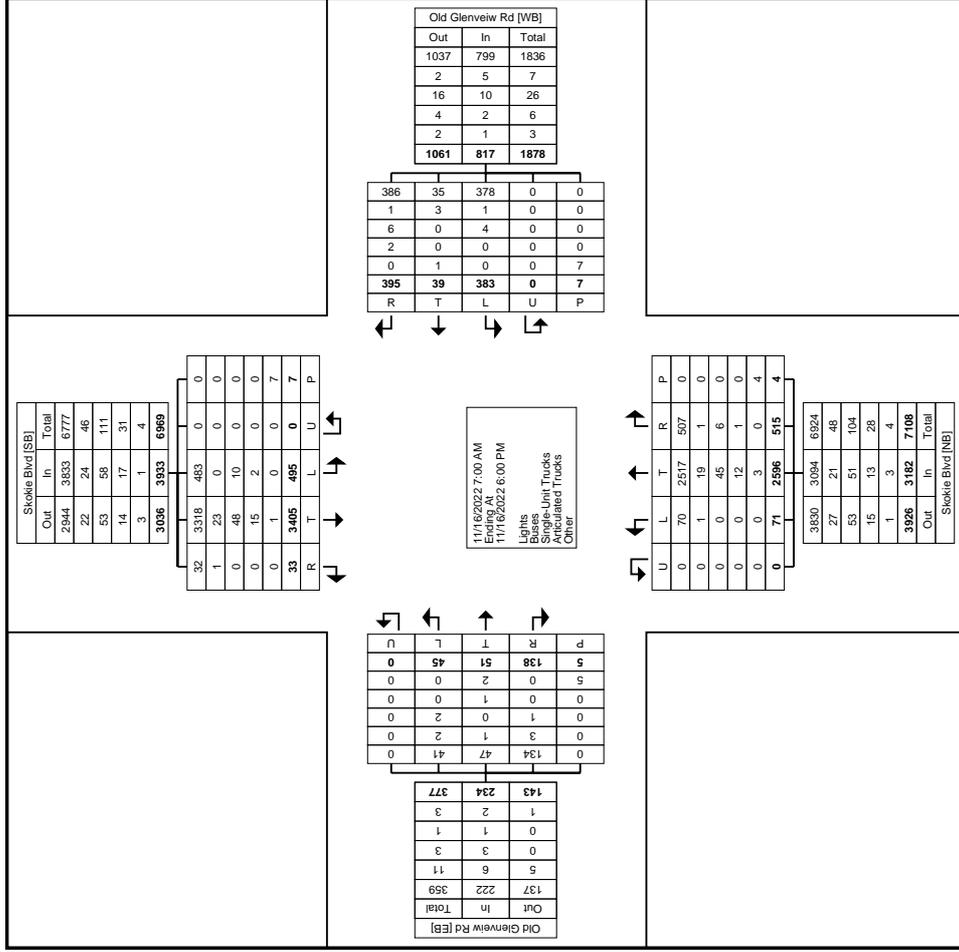
Total %	0.0	0.6	0.6	1.7	-	2.9	0.0	4.7	0.5	4.8	-	10.0	0.0	0.9	31.8	6.3	-	39.0	0.0	6.1	41.7	0.4	-	48.2	-
Lights	0	41	47	134	-	222	0	378	35	386	-	799	0	70	2517	507	-	3094	0	483	3318	32	-	3833	7948
% Lights	-	91.1	92.2	97.1	-	94.9	-	98.7	89.7	97.7	-	97.8	-	98.6	97.0	98.4	-	97.2	-	97.6	97.4	97.0	-	97.5	97.3
Buses	0	2	1	3	-	6	0	1	3	1	-	5	0	1	19	1	-	21	0	0	23	1	-	24	56
% Buses	-	4.4	2.0	2.2	-	2.6	-	0.3	7.7	0.3	-	0.6	-	1.4	0.7	0.2	-	0.7	-	0.0	0.7	3.0	-	0.6	0.7
Single-Unit Trucks	0	2	0	1	-	3	0	4	0	6	-	10	0	0	45	6	-	51	0	10	48	0	-	58	122
% Single-Unit Trucks	-	4.4	0.0	0.7	-	1.3	-	1.0	0.0	1.5	-	1.2	-	0.0	1.7	1.2	-	1.6	-	2.0	1.4	0.0	-	1.5	1.5
Articulated Trucks	0	0	1	0	-	1	0	0	0	2	-	2	0	0	12	1	-	13	0	2	15	0	-	17	33
% Articulated Trucks	-	0.0	2.0	0.0	-	0.4	-	0.0	0.0	0.5	-	0.2	-	0.0	0.5	0.2	-	0.4	-	0.4	0.4	0.0	-	0.4	0.4
Bicycles on Road	0	0	2	0	-	2	0	0	1	0	-	1	0	0	3	0	-	3	0	0	1	0	-	1	7
% Bicycles on Road	-	0.0	3.9	0.0	-	0.9	-	0.0	2.6	0.0	-	0.1	-	0.0	0.1	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	0.1
Pedestrians	-	-	-	-	5	-	-	-	-	-	7	-	-	-	-	-	-	4	-	-	-	-	7	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-



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Count Name: Old Glenview Rd with Skokie Blvd  
TMC  
Site Code:  
Start Date: 11/16/2022  
Page No: 3



Turning Movement Data Plot



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Start Date: 11/16/2022  
Page No: 4

### Turning Movement Peak Hour Data (7:30 AM)

Start Time	Old Glenview Rd Eastbound						Old Glenview Rd Westbound						Skokie Blvd Northbound						Skokie Blvd Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
7:30 AM	0	0	3	6	0	9	0	9	2	27	0	38	0	1	133	24	0	158	0	22	121	3	0	146	351
7:45 AM	0	0	7	7	0	14	0	15	1	26	0	42	0	1	89	17	0	107	0	26	142	2	1	170	333
8:00 AM	0	3	1	12	0	16	0	8	2	20	0	30	0	1	125	10	0	136	0	21	114	0	0	135	317
8:15 AM	0	2	3	5	0	10	0	9	4	19	1	32	0	2	112	12	2	126	0	26	139	1	1	166	334
Total	0	5	14	30	0	49	0	41	9	92	1	142	0	5	459	63	2	527	0	95	516	6	2	617	1335
Approach %	0.0	10.2	28.6	61.2	-	-	0.0	28.9	6.3	64.8	-	-	0.0	0.9	87.1	12.0	-	-	0.0	15.4	83.6	1.0	-	-	-
Total %	0.0	0.4	1.0	2.2	-	3.7	0.0	3.1	0.7	6.9	-	10.6	0.0	0.4	34.4	4.7	-	39.5	0.0	7.1	38.7	0.4	-	46.2	-
PHF	0.000	0.417	0.500	0.625	-	0.766	0.000	0.683	0.563	0.852	-	0.845	0.000	0.625	0.863	0.656	-	0.834	0.000	0.913	0.908	0.500	-	0.907	0.951
% Lights	0	5	13	27	-	45	0	39	8	90	-	137	0	5	442	59	-	506	0	93	502	6	-	601	1289
% Lights	-	100.0	92.9	90.0	-	91.8	-	95.1	88.9	97.8	-	96.5	-	100.0	96.3	93.7	-	96.0	-	97.9	97.3	100.0	-	97.4	96.6
Buses	0	0	1	3	-	4	0	0	1	0	-	1	0	0	7	1	-	8	0	0	3	0	-	3	16
% Buses	-	0.0	7.1	10.0	-	8.2	-	0.0	11.1	0.0	-	0.7	-	0.0	1.5	1.6	-	1.5	-	0.0	0.6	0.0	-	0.5	1.2
Single-Unit Trucks	0	0	0	0	-	0	0	2	0	1	-	3	0	0	10	3	-	13	0	1	8	0	-	9	25
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	-	4.9	0.0	1.1	-	2.1	-	0.0	2.2	4.8	-	2.5	-	1.1	1.6	0.0	-	1.5	1.9
Articulated Trucks	0	0	0	0	-	0	0	0	0	1	-	1	0	0	0	0	-	0	0	1	3	0	-	4	5
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	1.1	-	0.7	-	0.0	0.0	0.0	-	0.0	-	1.1	0.6	0.0	-	0.6	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	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-





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Count Name: Old Glenview Rd with Skokie Blvd  
TMC  
Site Code:  
Start Date: 11/16/2022  
Page No: 6

### Turning Movement Peak Hour Data (12:00 PM)

Start Time	Old Glenview Rd Eastbound						Old Glenview Rd Westbound						Skokie Blvd Northbound						Skokie Blvd Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
12:00 PM	0	4	0	11	0	15	0	15	3	12	0	30	0	4	111	14	0	129	0	17	125	2	0	144	318
12:15 PM	0	2	0	5	0	7	0	12	1	11	0	24	0	2	107	30	1	139	0	17	141	2	0	160	330
12:30 PM	0	4	2	2	0	8	0	15	1	12	0	28	0	7	120	26	0	153	0	25	153	2	0	180	369
12:45 PM	0	5	1	7	0	13	0	23	2	9	0	34	0	3	132	15	0	150	0	13	135	0	0	148	345
Total	0	15	3	25	0	43	0	65	7	44	0	116	0	16	470	85	1	571	0	72	554	6	0	632	1362
Approach %	0.0	34.9	7.0	58.1	-	-	0.0	56.0	6.0	37.9	-	-	0.0	2.8	82.3	14.9	-	-	0.0	11.4	87.7	0.9	-	-	-
Total %	0.0	1.1	0.2	1.8	-	3.2	0.0	4.8	0.5	3.2	-	8.5	0.0	1.2	34.5	6.2	-	41.9	0.0	5.3	40.7	0.4	-	46.4	-
PHF	0.000	0.750	0.375	0.568	-	0.717	0.000	0.707	0.583	0.917	-	0.853	0.000	0.571	0.890	0.708	-	0.933	0.000	0.720	0.905	0.750	-	0.878	0.923
Lights	0	15	3	25	-	43	0	65	7	41	-	113	0	16	451	83	-	550	0	70	537	6	-	613	1319
% Lights	-	100.0	100.0	100.0	-	100.0	-	100.0	100.0	93.2	-	97.4	-	100.0	96.0	97.6	-	96.3	-	97.2	96.9	100.0	-	97.0	96.8
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	2	0	-	2	0	0	2	0	-	2	4
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.4	0.0	-	0.4	-	0.0	0.4	0.0	-	0.3	0.3
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	2	-	2	0	0	13	1	-	14	0	2	10	0	-	12	28
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	4.5	-	1.7	-	0.0	2.8	1.2	-	2.5	-	2.8	1.8	0.0	-	1.9	2.1
Articulated Trucks	0	0	0	0	-	0	0	0	0	1	-	1	0	0	4	1	-	5	0	0	4	0	-	4	10
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	2.3	-	0.9	-	0.0	0.9	1.2	-	0.9	-	0.0	0.7	0.0	-	0.6	0.7
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	1
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.2	0.0	-	0.2	0.1
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-









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Count Name: Old Glenview Rd with Sunset Dr  
Site Code:  
Start Date: 11/19/2022  
Page No: 1

### Turning Movement Data

Start Time	Old Glenview Rd Eastbound					Old Glenview Rd Westbound					Sunset Dr Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
12:00 PM	0	2	46	0	48	0	30	0	0	30	0	0	0	0	0	78
12:15 PM	0	2	41	0	43	0	40	0	0	40	0	0	2	0	2	85
12:30 PM	0	3	45	0	48	0	31	1	0	32	0	0	2	0	2	82
12:45 PM	0	3	57	0	60	0	26	4	0	30	0	0	0	1	0	90
Hourly Total	0	10	189	0	199	0	127	5	0	132	0	0	4	1	4	335
1:00 PM	0	1	42	0	43	0	40	0	0	40	0	1	1	0	2	85
1:15 PM	0	0	35	0	35	0	38	0	0	38	0	0	1	2	1	74
1:30 PM	0	2	67	0	69	0	41	2	0	43	0	1	2	0	3	115
1:45 PM	0	0	42	0	42	0	27	0	0	27	0	0	0	0	0	69
Hourly Total	0	3	186	0	189	0	146	2	0	148	0	2	4	2	6	343
Grand Total	0	13	375	0	388	0	273	7	0	280	0	2	8	3	10	678
Approach %	0.0	3.4	96.6	-	-	0.0	97.5	2.5	-	-	0.0	20.0	80.0	-	-	-
Total %	0.0	1.9	55.3	-	57.2	0.0	40.3	1.0	-	41.3	0.0	0.3	1.2	-	1.5	-
Lights	0	13	373	-	386	0	272	7	-	279	0	2	8	-	10	675
% Lights	-	100.0	99.5	-	99.5	-	99.6	100.0	-	99.6	-	100.0	100.0	-	100.0	99.6
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	2	-	2	0	1	0	-	1	0	0	0	-	0	3
% Single-Unit Trucks	-	0.0	0.5	-	0.5	-	0.4	0.0	-	0.4	-	0.0	0.0	-	0.0	0.4
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	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
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



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Count Name: Old Glenview Rd with Sunset Dr  
Site Code:  
Start Date: 11/19/2022  
Page No: 2

### Turning Movement Peak Hour Data (12:30 PM)

Start Time	Old Glenview Rd Eastbound				Old Glenview Rd Westbound				Sunset Dr Southbound							
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
12:30 PM	0	3	45	0	48	0	31	1	0	32	0	0	2	0	2	82
12:45 PM	0	3	57	0	60	0	26	4	0	30	0	0	0	1	0	90
1:00 PM	0	1	42	0	43	0	40	0	0	40	0	1	1	0	2	85
1:15 PM	0	0	35	0	35	0	38	0	0	38	0	0	1	2	1	74
Total	0	7	179	0	186	0	135	5	0	140	0	1	4	3	5	331
Approach %	0.0	3.8	96.2	-	-	0.0	96.4	3.6	-	-	0.0	20.0	80.0	-	-	-
Total %	0.0	2.1	54.1	-	56.2	0.0	40.8	1.5	-	42.3	0.0	0.3	1.2	-	1.5	-
PHF	0.000	0.583	0.785	-	0.775	0.000	0.844	0.313	-	0.875	0.000	0.250	0.500	-	0.625	0.919
Lights	0	7	178	-	185	0	135	5	-	140	0	1	4	-	5	330
% Lights	-	100.0	99.4	-	99.5	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	99.7
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	1	-	1	0	0	0	-	0	0	0	0	-	0	1
% Single-Unit Trucks	-	0.0	0.6	-	0.5	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.3
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	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
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



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

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Count Name: Old Glenview Rd with Sunset Dr  
TMC  
Site Code:  
Start Date: 11/16/2022  
Page No: 1

### Turning Movement Data

Start Time	Old Glenview Rd Eastbound					Old Glenview Rd Westbound					Access Dr Northbound					Sunset Dr Southbound												
	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	Int. Total		
7:00 AM	0	0	28	2	0	30	0	2	24	0	26	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	1	59
7:15 AM	0	1	35	1	0	37	0	0	24	1	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62
7:30 AM	0	1	39	5	0	45	0	0	37	0	37	0	1	0	0	2	1	0	3	0	1	0	0	1	0	0	4	87
7:45 AM	0	0	48	1	0	49	0	0	40	0	40	0	2	0	0	0	2	0	0	0	1	0	1	0	1	0	1	92
Hourly Total	0	2	150	9	0	161	0	2	125	1	128	0	5	0	0	5	0	3	0	3	0	0	3	0	6	0	6	300
8:00 AM	0	0	32	1	0	33	0	0	27	0	27	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	61
8:15 AM	0	1	36	4	0	41	0	0	32	1	33	0	0	0	1	2	1	0	1	0	2	1	0	2	1	3	78	
8:30 AM	0	1	53	3	0	57	0	0	27	2	29	0	0	1	1	1	2	0	1	0	1	1	1	1	1	2	90	
8:45 AM	0	0	45	2	0	47	0	1	15	0	16	0	1	0	0	0	1	0	0	1	2	0	2	0	2	0	3	67
Hourly Total	0	2	166	10	0	178	0	1	101	3	105	0	2	1	2	3	5	0	2	1	5	2	2	1	5	2	8	296
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:30 AM	0	0	30	4	0	34	0	2	36	1	39	0	1	0	4	0	5	0	0	0	0	0	0	0	0	0	0	78
11:45 AM	1	0	35	1	0	37	0	0	24	0	24	0	1	0	1	2	2	0	0	1	0	0	0	0	0	1	64	
Hourly Total	1	0	65	5	0	71	0	2	60	1	63	0	2	0	5	2	7	0	0	1	0	0	0	0	0	1	142	
12:00 PM	0	3	25	2	0	30	0	1	23	0	24	0	2	0	2	0	4	0	1	0	2	0	2	0	2	0	3	61
12:15 PM	1	1	45	1	0	48	0	3	23	0	26	0	4	0	3	1	7	0	0	0	2	0	2	0	3	0	2	83
12:30 PM	1	2	47	3	0	53	0	1	19	3	23	0	1	0	1	0	2	0	2	0	3	0	2	0	3	0	5	83
12:45 PM	0	0	27	2	0	29	0	2	31	0	33	0	2	0	1	0	3	0	0	1	2	0	0	1	2	0	3	68
Hourly Total	2	6	144	8	0	160	0	7	96	3	106	0	9	0	7	1	16	0	3	1	9	0	3	1	9	0	13	295
1:00 PM	0	0	38	5	0	43	0	1	27	0	28	0	2	0	1	1	3	0	0	0	1	1	0	0	1	0	1	75
1:15 PM	0	1	29	3	0	33	0	1	18	1	20	0	4	1	0	0	5	0	0	0	0	0	0	0	0	0	0	58
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	1	67	8	0	76	0	2	45	1	48	0	6	1	1	1	8	0	0	0	1	1	0	1	0	1	133	
4:00 PM	0	2	46	2	0	50	0	1	45	2	48	0	4	1	2	0	7	0	1	0	1	2	0	2	2	2	107	
4:15 PM	0	2	49	3	0	54	0	2	38	1	41	0	1	0	1	0	2	0	1	0	0	0	0	2	1	1	98	
4:30 PM	0	0	38	1	0	39	0	0	36	1	37	0	1	1	1	0	3	0	0	0	2	1	0	2	1	2	81	
4:45 PM	0	0	56	1	0	57	0	2	23	0	25	0	2	1	0	0	3	0	0	0	0	0	0	0	2	0	85	
Hourly Total	0	4	189	7	0	200	0	5	142	4	151	0	8	3	4	0	15	0	2	0	3	7	5	3	7	5	371	
5:00 PM	0	1	60	1	0	62	0	1	46	0	47	0	4	0	2	0	6	0	1	0	0	1	1	0	1	1	116	
5:15 PM	0	3	38	3	0	44	0	2	47	0	49	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	94	
5:30 PM	0	3	48	0	0	51	0	0	39	3	42	0	1	0	0	1	1	0	1	0	0	0	0	0	0	0	95	
5:45 PM	0	1	56	3	0	60	0	1	37	0	38	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	99	
Hourly Total	0	8	202	7	0	217	0	4	169	3	176	0	5	1	3	0	9	0	2	0	0	1	2	0	1	2	404	
Grand Total	3	23	983	54	0	1063	0	23	738	16	777	0	37	6	22	9	65	0	12	3	21	10	36	3	36	1941		
Approach %	0.3	2.2	92.5	5.1	-	-	0.0	3.0	95.0	2.1	-	0.0	56.9	9.2	33.8	-	-	0.0	33.3	8.3	58.3	-	-	-	-	-	-	

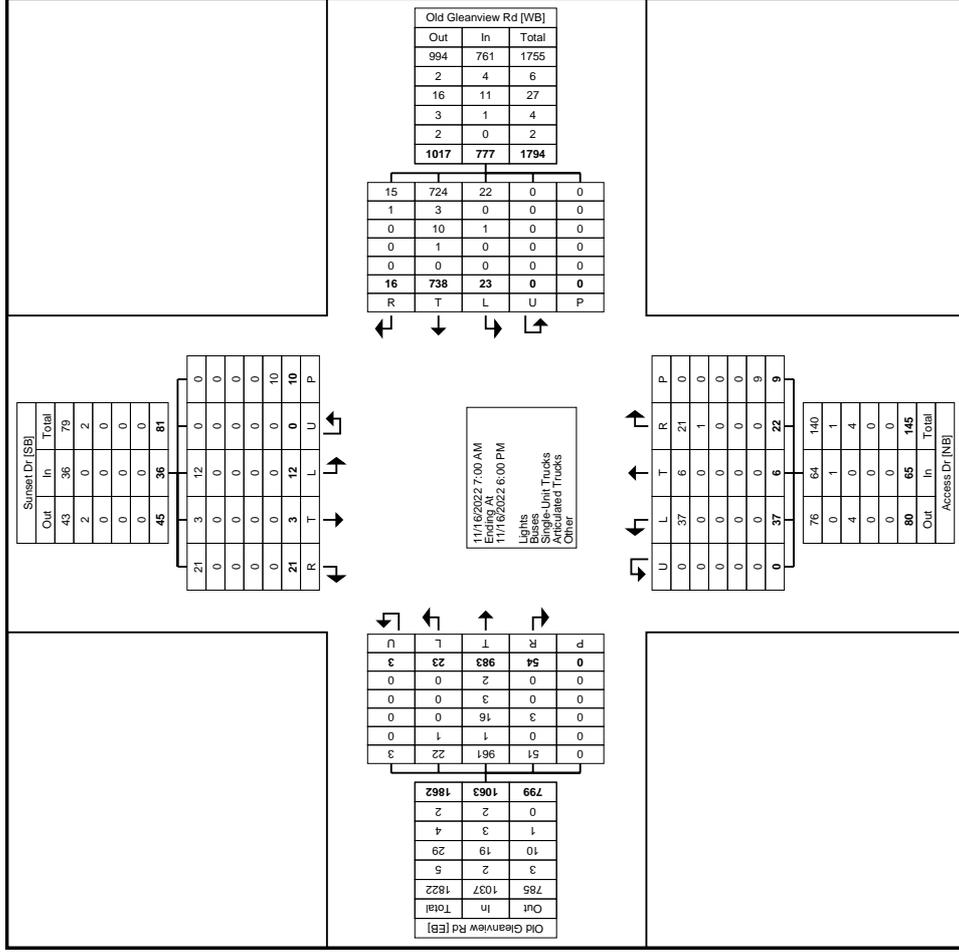
Total %	0.2	1.2	50.6	2.8	-	54.8	0.0	1.2	38.0	0.8	-	40.0	0.0	1.9	0.3	1.1	-	3.3	0.0	0.6	0.2	1.1	-	1.9	-
Lights	3	22	961	51	-	1037	0	22	724	15	-	761	0	37	6	21	-	64	0	12	3	21	-	36	1898
% Lights	100.0	95.7	97.8	94.4	-	97.6	-	95.7	98.1	93.8	-	97.9	-	100.0	100.0	95.5	-	98.5	-	100.0	100.0	100.0	-	100.0	97.8
Buses	0	1	1	0	-	2	0	0	3	1	-	4	0	0	0	1	-	1	0	0	0	0	-	0	7
% Buses	0.0	4.3	0.1	0.0	-	0.2	-	0.0	0.4	6.3	-	0.5	-	0.0	0.0	4.5	-	1.5	-	0.0	0.0	0.0	-	0.0	0.4
Single-Unit Trucks	0	0	16	3	-	19	0	1	10	0	-	11	0	0	0	0	-	0	0	0	0	0	-	0	30
% Single-Unit Trucks	0.0	0.0	1.6	5.6	-	1.8	-	4.3	1.4	0.0	-	1.4	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	1.5
Articulated Trucks	0	0	3	0	-	3	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	4
% Articulated Trucks	0.0	0.0	0.3	0.0	-	0.3	-	0.0	0.1	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.2
Bicycles on Road	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	2
% Bicycles on Road	0.0	0.0	0.2	0.0	-	0.2	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.1
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	9	-	-	-	-	-	10	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



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Count Name: Old Glenview Rd with Sunset Dr  
TMC  
Site Code:  
Start Date: 11/16/2022  
Page No: 3



Turning Movement Data Plot



Kenig Lindgren O'Hara Aboona, Inc.  
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Count Name: Old Glenview Rd with Sunset Dr  
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Start Date: 11/16/2022  
Page No: 4

### Turning Movement Peak Hour Data (7:30 AM)

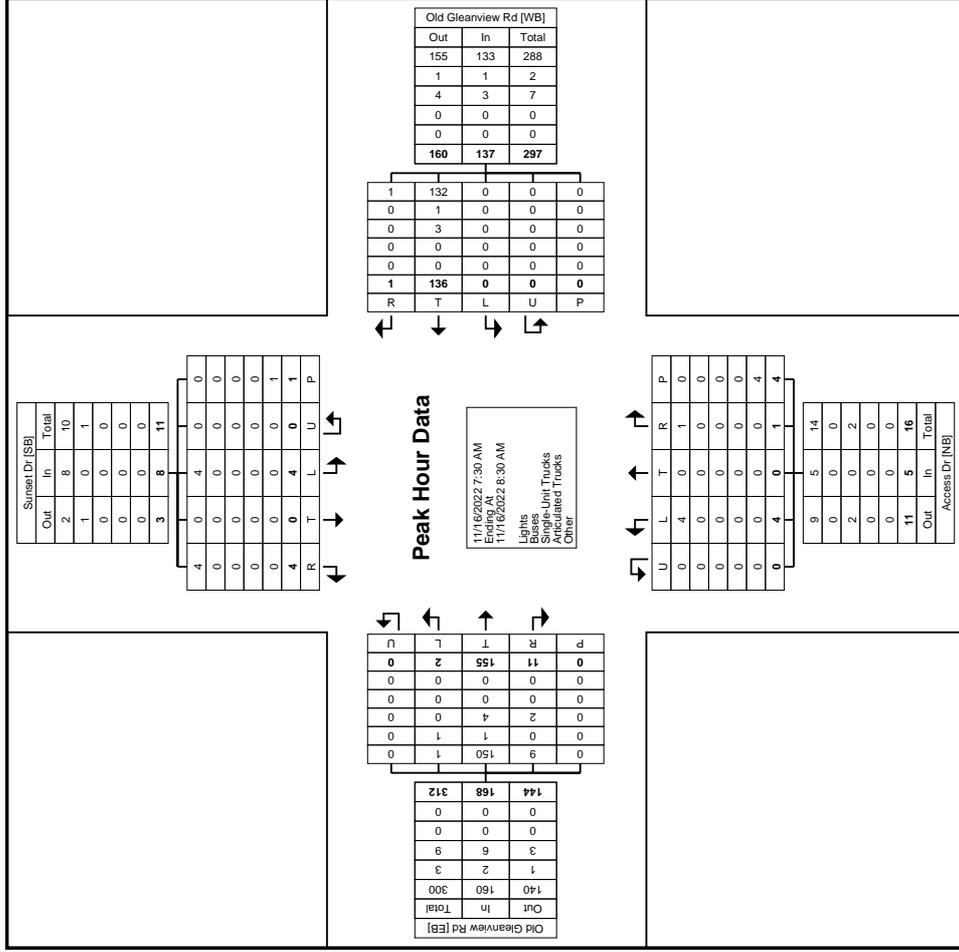
Start Time	Old Glenview Rd Eastbound					Old Glenview Rd Westbound					Access Dr Northbound					Sunset Dr Southbound												
	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	Int. Total		
7:30 AM	0	1	39	5	0	45	0	0	37	0	0	1	0	0	2	1	0	3	0	1	0	0	0	0	1	0	4	87
7:45 AM	0	0	48	1	0	49	0	0	40	0	0	2	0	0	2	2	0	0	0	1	0	0	0	1	0	1	92	
8:00 AM	0	0	32	1	0	33	0	0	27	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	61	
8:15 AM	0	1	36	4	0	41	0	0	32	1	0	0	0	1	2	1	0	1	0	2	0	2	1	3	78			
Total	0	2	155	11	0	168	0	0	136	1	0	4	0	1	4	5	0	4	0	4	1	4	1	8	318			
Approach %	0.0	1.2	92.3	6.5	-	-	0.0	0.0	99.3	0.7	-	0.0	80.0	0.0	20.0	-	0.0	50.0	0.0	50.0	-	-	-	-	-	-	-	-
Total %	0.0	0.6	48.7	3.5	-	52.8	0.0	0.0	42.8	0.3	-	0.0	1.3	0.0	0.3	-	0.0	1.3	0.0	1.3	-	-	-	-	-	-	-	-
PHF	0.000	0.500	0.807	0.550	-	0.857	0.000	0.000	0.850	0.250	-	0.000	0.500	0.000	0.250	-	0.000	0.333	0.000	0.500	-	-	-	-	-	-	0.500	0.864
% Lights	0	1	150	9	-	160	0	0	132	1	-	4	0	1	-	5	0	4	0	4	-	-	-	-	-	-	8	306
% Buses	-	50.0	96.8	81.8	-	95.2	-	-	97.1	100.0	-	100.0	0	0	-	100.0	-	100.0	0	0	-	-	-	-	-	-	100.0	96.2
% Single-Unit Trucks	0	1	1	0	-	2	0	0	1	0	-	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	0	3
% Articulated Trucks	0	0	4	2	-	6	0	0	3	0	-	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	0	9
% Bicycles on Road	-	0.0	2.6	18.2	-	3.6	-	-	2.2	0.0	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	-	-	-	-	-	0.0	2.8
% Pedestrians	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	0	0
% Pedestrians	-	-	-	-	-	-	-	-	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	-	0.0	-	-	-	-	-	-	0.0	0.0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	100.0



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Count Name: Old Glenview Rd with Sunset Dr  
TMC  
Site Code:  
Start Date: 11/16/2022  
Page No: 5



Turning Movement Peak Hour Data Plot (7:30 AM)



Kenig Lindgren O'Hara Aboona, Inc.  
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Count Name: Old Glenview Rd with Sunset Dr  
TMC  
Site Code:  
Start Date: 11/16/2022  
Page No: 6

### Turning Movement Peak Hour Data (12:00 PM)

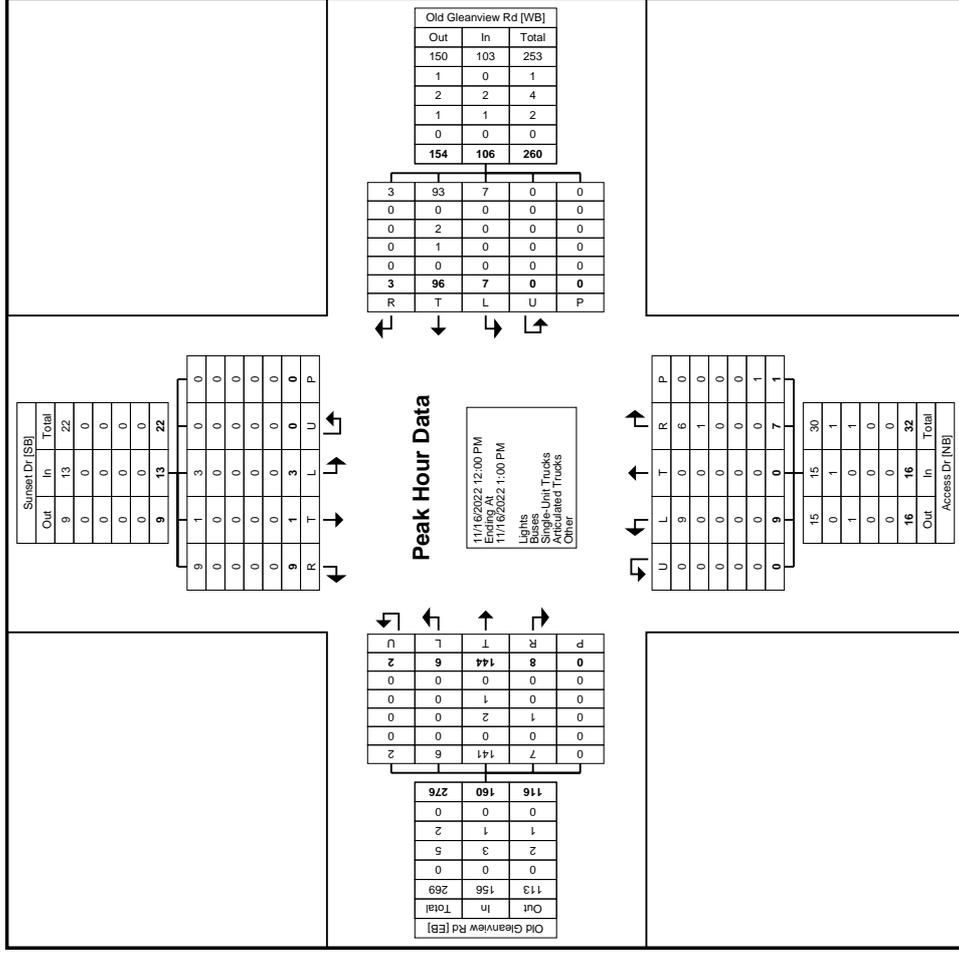
Start Time	Old Glenview Rd Eastbound						Old Glenview Rd Westbound						Access Dr Northbound						Sunset Dr Southbound													
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total							
12:00 PM	0	3	25	2	0	30	0	1	23	0	0	24	0	2	0	2	0	4	0	0	0	0	0	0	0	0	1	0	2	0	3	61
12:15 PM	1	1	45	1	0	48	0	3	23	0	0	26	0	4	0	3	1	7	0	0	0	2	0	2	0	0	0	2	0	2	83	
12:30 PM	1	2	47	3	0	53	0	1	19	3	0	23	0	1	0	1	0	2	0	2	0	3	0	5	0	2	0	3	0	5	83	
12:45 PM	0	0	27	2	0	29	0	2	31	0	0	33	0	2	0	1	0	3	0	0	1	2	0	3	0	0	1	2	0	3	68	
Total	2	6	144	8	0	160	0	7	96	3	0	106	0	9	0	7	1	16	0	3	1	9	0	13	0	3	1	9	0	13	295	
Approach %	1.3	3.8	90.0	5.0	-	-	0.0	6.6	90.6	2.8	-	-	0.0	56.3	0.0	43.8	-	-	0.0	23.1	7.7	69.2	-	-	0.0	0.0	0.0	0.0	-	-	-	
Total %	0.7	2.0	48.8	2.7	-	54.2	0.0	2.4	32.5	1.0	-	35.9	0.0	3.1	0.0	2.4	-	5.4	0.0	1.0	0.3	3.1	-	4.4	0.0	0.0	0.0	0.0	-	-	-	
PHF	0.500	0.500	0.766	0.667	-	0.755	0.000	0.583	0.774	0.250	-	0.803	0.000	0.563	0.000	0.583	-	0.571	0.000	0.375	0.250	0.750	-	0.650	0.000	0.000	0.250	0.250	-	0.650	0.889	
% Lights	2	6	141	7	-	156	0	7	93	3	-	103	0	9	0	6	-	15	0	3	1	9	-	13	0	3	1	9	-	13	287	
% Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1	
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	14.3	-	6.3	0	0	0	0	-	0	0	0	0	0	-	0	0.3	
% Single-Unit Trucks	0.0	0.0	1.4	12.5	-	1.9	0.0	0.0	2.1	0.0	-	1.9	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	1.7	
Articulated Trucks	0	0	1	0	-	1	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	2	
% Articulated Trucks	0.0	0.0	0.7	0.0	-	0.6	0.0	0.0	1.0	0.0	-	0.9	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.7	
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-		
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-		



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Count Name: Old Glenview Rd with Sunset Dr  
TMC  
Site Code:  
Start Date: 11/16/2022  
Page No: 7



Turning Movement Peak Hour Data Plot (12:00 PM)



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TMC  
Site Code:  
Start Date: 11/16/2022  
Page No: 8

### Turning Movement Peak Hour Data (5:00 PM)

Start Time	Old Glenview Rd Eastbound						Old Glenview Rd Westbound						Access Dr Northbound						Sunset Dr Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
5:00 PM	0	1	60	1	0	62	0	1	46	0	0	47	0	4	0	2	0	6	0	1	0	0	0	1	116
5:15 PM	0	3	38	3	0	44	0	2	47	0	0	49	0	0	0	1	0	1	0	0	0	0	0	0	94
5:30 PM	0	3	48	0	0	51	0	0	39	3	0	42	0	0	1	0	0	1	0	1	0	0	0	0	95
5:45 PM	0	1	56	3	0	60	0	1	37	0	0	38	0	1	0	0	0	1	0	0	0	0	0	0	99
Total	0	8	202	7	0	217	0	4	169	3	0	176	0	5	1	3	0	9	0	2	0	0	0	1	404
Approach %	0.0	3.7	93.1	3.2	-	-	0.0	2.3	96.0	1.7	-	-	0.0	55.6	11.1	33.3	-	-	0.0	100.0	0.0	0.0	0.0	-	-
Total %	0.0	2.0	50.0	1.7	-	53.7	0.0	1.0	41.8	0.7	-	43.6	0.0	1.2	0.2	0.7	-	2.2	0.0	0.5	0.0	0.0	0.0	-	-
PHF	0.000	0.667	0.842	0.583	-	0.875	0.000	0.500	0.899	0.250	-	0.898	0.000	0.313	0.250	0.375	-	0.375	0.000	0.500	0.000	0.000	0.000	-	0.500
Lights	0	8	202	7	-	217	0	4	169	3	-	176	0	5	1	3	-	9	0	2	0	0	0	-	2
% Lights	-	100.0	100.0	100.0	-	100.0	-	100.0	100.0	100.0	-	100.0	-	100.0	100.0	100.0	-	100.0	-	100.0	-	-	-	-	100.0
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	0	-	0
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	-	-	-	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	0	-	0
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	-	-	-	0.0
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	0	-	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	-	-	-	0.0
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
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-







Wilmette, IL Weather: Warm and Dry  
 Skokie Blvd and Residential Access Drive  
 Thursday November 3, 2022

11/06/22  
 20:40:31

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

Intersection # 4 skokie/residentialacc

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT										
700	0	0	0	0	0	0	0	0	0	0	0	0	0
715	0	0	0	0	0	0	0	0	0	0	0	0	0
730	0	0	0	0	0	0	0	0	0	0	0	0	0
745	0	0	0	0	0	0	0	0	0	0	0	1	1
800	1	0	0	0	0	0	0	0	0	0	0	0	1
815	0	0	0	0	0	0	0	0	0	0	0	0	0
830	1	0	0	0	0	0	0	0	0	0	0	1	2
845	0	0	0	0	0	0	0	0	1	0	0	2	3
1130	0	0	0	0	0	0	0	0	1	0	0	1	2
1145	0	0	0	0	0	0	0	0	0	1	0	0	1
1200	0	0	0	0	0	0	0	0	1	1	0	0	2
1215	0	0	0	0	0	0	0	0	0	1	0	0	1
1230	0	0	0	0	0	0	0	0	0	0	0	0	0
1245	0	0	0	0	0	0	0	0	1	0	0	0	1
1300	0	0	0	0	0	0	0	0	1	0	0	0	1
1315	0	0	0	0	0	0	0	0	0	1	0	0	1
1600	0	0	0	0	0	0	0	0	0	0	0	0	0
1615	0	0	0	0	0	0	0	0	0	0	0	0	0
1630	0	0	0	0	0	0	0	0	0	0	0	0	0
1645	1	0	0	0	0	0	0	0	0	0	0	0	1
1700	1	0	0	0	0	0	0	0	0	0	0	0	1
1715	0	0	0	0	0	0	0	0	0	0	0	1	1
1730	0	0	0	0	0	0	0	0	0	0	0	0	0
1745	1	0	0	0	0	0	0	0	0	0	0	0	1
<b>Total</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>4</b>	<b>0</b>	<b>6</b>	<b>20</b>

Wilmette, IL Weather: Warm and Dry  
 Skokie Blvd and Residential Access Drive  
 Thursday November 3, 2022

11/06/22  
 20:40:31

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

Intersection # 4 skokie/residentialacc

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
700	0	0	0	0	0	0	0	0	0
715	0	0	0	0	0	0	0	0	0
730	0	0	0	0	0	0	0	0	0
745	0	0	0	1	1	0	0	0	1
800	1	0	0	0	0	0	0	1	1
815	0	0	0	0	0	0	0	0	0
830	1	0	0	1	1	0	0	1	2
845	0	0	1	2	2	0	0	1	3
1130	0	0	1	1	1	0	0	1	2
1145	0	0	0	1	0	0	1	0	1
1200	0	0	1	1	0	0	1	1	2
1215	0	0	0	1	0	0	1	0	1
1230	0	0	0	0	0	0	0	0	0
1245	0	0	1	0	0	0	0	1	1
1300	0	0	1	0	0	0	0	1	1
1315	0	0	0	1	0	0	1	0	1
1600	0	0	0	0	0	0	0	0	0
1615	0	0	0	0	0	0	0	0	0
1630	0	0	0	0	0	0	0	0	0
1645	1	0	0	0	0	0	0	1	1
1700	1	0	0	0	0	0	0	1	1
1715	0	0	0	1	1	0	0	0	1
1730	0	0	0	0	0	0	0	0	0
1745	1	0	0	0	0	0	0	1	1
<b>Total</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>10</b>	<b>6</b>	<b>0</b>	<b>4</b>	<b>10</b>	<b>20</b>









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

Intersection # 5 skokie/retail/sat

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT										
1130	1	0	0	0	0	0	0	0	2	1	0	0	4
1145	2	0	0	0	0	0	0	0	1	0	0	0	3
1200	2	0	0	0	0	0	0	0	3	1	0	0	6
1215	1	0	0	0	0	0	0	0	1	0	0	1	3
1230	1	0	0	0	0	0	0	0	2	1	0	0	4
1245	2	0	0	0	0	0	0	0	2	0	0	1	5
1300	1	0	0	0	0	0	0	0	0	0	0	0	1
1315	2	0	0	0	0	0	0	0	1	1	0	1	5
Total	12	0	0	0	0	0	0	0	12	4	0	3	31

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

Intersection # 5 skokie/retail/sat

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
1130	1	0	2	1	0	0	1	3	4
1145	2	0	1	0	0	0	0	3	3
1200	2	0	3	1	0	0	1	5	6
1215	1	0	1	1	1	0	0	2	3
1230	1	0	2	1	0	0	1	3	4
1245	2	0	2	1	1	0	0	4	5
1300	1	0	0	0	0	0	0	1	1
1315	2	0	1	2	1	0	1	3	5
Total	12	0	12	7	3	0	4	24	31

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

Intersection # 5 skokie/retail/sat

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT										
1130	4	0	0	0	0	0	0	0	8	4	0	0	16
1145	8	0	0	0	0	0	0	0	4	0	0	0	12
1200	8	0	0	0	0	0	0	0	12	4	0	0	24
1215	4	0	0	0	0	0	0	0	4	0	0	4	12
1230	4	0	0	0	0	0	0	0	8	4	0	0	16
1245	8	0	0	0	0	0	0	0	8	0	0	4	20
1300	4	0	0	0	0	0	0	0	0	0	0	0	4
1315	8	0	0	0	0	0	0	0	4	4	0	4	20

Wilmette, IL Weather: Warm and Dry  
 Skokie Blvd and Retail Center Access  
 Saturday November 5, 2022

11/06/22  
 20:43:03

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

Intersection # 5 skokie/retail/sat

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
1130	4	0	8	4	0	0	4	12	16
1145	8	0	4	0	0	0	0	12	12
1200	8	0	12	4	0	0	4	20	24
1215	4	0	4	4	4	0	0	8	12
1230	4	0	8	4	0	0	4	12	16
1245	8	0	8	4	4	0	0	16	20
1300	4	0	0	0	0	0	0	4	4
1315	8	0	4	8	4	0	4	12	20

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

Intersection # 5 skokie/retail/sat

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT										
1130	6	0	0	0	0	0	0	0	7	2	0	1	16
1145	6	0	0	0	0	0	0	0	7	2	0	1	16
1200	6	0	0	0	0	0	0	0	8	2	0	2	18
1215	5	0	0	0	0	0	0	0	5	1	0	2	13
1230	6	0	0	0	0	0	0	0	5	2	0	2	15
1245	5	0	0	0	0	0	0	0	3	1	0	2	11*
1300	3	0	0	0	0	0	0	0	1	1	0	1	6*
1315	2	0	0	0	0	0	0	0	1	1	0	1	5*

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

Intersection # 5 skokie/retail/sat

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
1130	6	0	7	3	1	0	2	13	16
1145	6	0	7	3	1	0	2	13	16
1200	6	0	8	4	2	0	2	14	18
1215	5	0	5	3	2	0	1	10	13
1230	6	0	5	4	2	0	2	11	15
1245	5	0	3	3	2	0	1	8	11*
1300	3	0	1	2	1	0	1	4	6*
1315	2	0	1	2	1	0	1	3	5*

Wilmette, IL Weather: Warm and Dry  
 Skokie Blvd and Retail Center Access  
 Thursday November 3, 2022

11/06/22  
 20:31:25

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

Intersection # 1 skokie/retailcenteracc

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT										
700	0	0	0	0	0	0	0	0	0	0	0	0	0
715	0	0	0	0	0	0	0	0	0	0	0	0	0
730	0	0	0	0	0	0	0	0	0	0	0	0	0
745	0	0	0	0	0	0	0	0	0	0	0	0	0
800	1	0	0	0	0	0	0	0	0	0	0	0	1
815	3	0	0	0	0	0	0	0	0	0	0	0	3
830	2	0	0	0	0	0	0	0	1	0	0	0	3
845	0	0	0	0	0	0	0	0	1	0	0	0	1
-----													
1130	1	0	0	0	0	0	0	0	1	0	0	0	2
1145	2	0	0	0	0	0	0	0	3	0	0	0	5
1200	5	0	0	0	0	0	0	0	1	0	0	0	6
1215	3	0	0	0	0	0	0	0	1	0	0	1	5
1230	2	0	0	0	0	0	0	0	1	1	0	0	4
1245	1	0	0	0	0	0	0	0	1	0	0	0	2
1300	3	0	0	0	0	0	0	0	1	0	0	0	4
1315	2	0	0	0	0	0	0	0	1	1	0	0	4
-----													
1600	1	0	0	0	0	0	0	0	5	0	0	0	6
1615	0	0	0	0	0	0	0	0	1	0	0	1	2
1630	0	0	0	0	0	0	0	0	1	0	0	0	1
1645	2	0	0	0	0	0	0	0	0	0	0	0	2
1700	0	0	0	0	0	0	0	0	6	0	0	1	7
1715	0	0	0	0	0	0	0	0	3	0	0	0	3
1730	1	0	0	0	0	0	0	0	1	0	0	1	3
1745	2	0	0	0	0	0	0	0	0	0	0	0	2
=====													
Total	31	0	0	0	0	0	0	0	29	2	0	4	66

Wilmette, IL Weather: Warm and Dry  
 Skokie Blvd and Retail Center Access  
 Thursday November 3, 2022

11/06/22  
 20:31:25

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

Intersection # 1 skokie/retailcenteracc

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
700	0	0	0	0	0	0	0	0	0
715	0	0	0	0	0	0	0	0	0
730	0	0	0	0	0	0	0	0	0
745	0	0	0	0	0	0	0	0	0
800	1	0	0	0	0	0	0	1	1
815	3	0	0	0	0	0	0	3	3
830	2	0	1	0	0	0	0	3	3
845	0	0	1	0	0	0	0	1	1
-----									
1130	1	0	1	0	0	0	0	2	2
1145	2	0	3	0	0	0	0	5	5
1200	5	0	1	0	0	0	0	6	6
1215	3	0	1	1	1	0	0	4	5
1230	2	0	1	1	0	0	1	3	4
1245	1	0	1	0	0	0	0	2	2
1300	3	0	1	0	0	0	0	4	4
1315	2	0	1	1	0	0	1	3	4
-----									
1600	1	0	5	0	0	0	0	6	6
1615	0	0	1	1	1	0	0	1	2
1630	0	0	1	0	0	0	0	1	1
1645	2	0	0	0	0	0	0	2	2
1700	0	0	6	1	1	0	0	6	7
1715	0	0	3	0	0	0	0	3	3
1730	1	0	1	1	1	0	0	2	3
1745	2	0	0	0	0	0	0	2	2
=====									
Total	31	0	29	6	4	0	2	60	66











Wilmette, IL Weather: Warm and Dry  
 Skokie Blvd and St Charles Place North Access  
 Saturday November 5, 2022

11/06/22  
 20:48:37

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

Intersection # 8 skokie/stcharles/north/sat

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
1130	0	0	0	0	0	0	0	0	0
1145	0	0	0	0	0	0	0	0	0
1200	0	0	0	0	0	0	0	0	0
1215	4	4	0	0	4	4	0	0	8
1230	0	0	0	0	0	0	0	0	0
1245	4	8	4	0	8	8	0	0	16
1300	0	0	0	0	0	0	0	0	0
1315	4	0	0	0	0	4	0	0	4

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

Intersection # 8 skokie/stcharles/north/sat

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT										
1130	0	0	1	1	0	0	0	0	0	0	0	0	2
1145	0	0	1	1	0	0	0	0	0	0	0	0	2
1200	0	0	2	3	0	0	1	0	0	0	0	0	6
1215	0	0	2	3	0	0	1	0	0	0	0	0	6
1230	0	0	2	2	0	0	1	0	0	0	0	0	5
1245	0	0	2	2	0	0	1	0	0	0	0	0	5*
1300	0	0	1	0	0	0	0	0	0	0	0	0	1*
1315	0	0	1	0	0	0	0	0	0	0	0	0	1*

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

Intersection # 8 skokie/stcharles/north/sat

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
1130	1	1	0	0	1	1	0	0	2
1145	1	1	0	0	1	1	0	0	2
1200	2	3	1	0	3	3	0	0	6
1215	2	3	1	0	3	3	0	0	6
1230	2	2	1	0	2	3	0	0	5
1245	2	2	1	0	2	3	0	0	5*
1300	1	0	0	0	0	1	0	0	1*
1315	1	0	0	0	0	1	0	0	1*

Wilmette, IL Weather: Warm and Dry  
 Skokie Blvd and St Charles Place North Access  
 Thursday November 3, 2022

11/06/22  
 20:35:35

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

Intersection # 2 skokie/stcharlesnorth

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT										
700	0	0	0	0	0	0	0	0	0	0	0	0	0
715	0	0	0	0	0	0	0	0	0	0	0	0	0
730	0	0	0	1	0	0	0	0	0	0	0	0	1
745	0	0	0	1	0	0	0	0	0	0	0	0	1
800	0	0	1	0	0	1	0	0	0	0	0	0	2
815	0	0	0	2	0	0	0	0	0	0	0	0	2
830	0	0	2	0	0	0	0	0	0	0	0	0	2
845	0	0	0	1	0	0	0	0	0	0	0	0	1
1130	0	0	0	1	0	0	0	0	0	0	0	0	1
1145	0	0	0	0	0	1	0	0	0	0	0	0	1
1200	0	0	1	0	0	0	0	0	0	0	0	0	1
1215	0	0	0	0	0	0	0	0	0	0	0	0	0
1230	0	0	0	0	0	0	0	0	0	0	0	0	0
1245	0	0	1	0	0	0	0	0	0	0	0	0	1
1300	0	0	1	0	0	0	0	0	0	0	0	0	1
1315	0	0	1	0	0	1	0	0	0	0	0	0	2
1600	0	0	0	0	0	0	0	0	0	0	0	0	0
1615	0	0	1	1	0	0	0	0	0	0	0	0	2
1630	0	0	0	0	0	0	0	0	0	0	0	0	0
1645	0	0	0	2	0	0	0	0	0	0	0	0	2
1700	0	0	0	0	0	0	0	0	0	0	0	0	0
1715	0	0	0	0	0	0	0	0	0	0	0	0	0
1730	0	0	1	0	0	0	0	0	0	0	0	0	1
1745	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	9	9	0	3	0	0	0	0	0	0	21

Wilmette, IL Weather: Warm and Dry  
 Skokie Blvd and St Charles Place North Access  
 Thursday November 3, 2022

11/06/22  
 20:35:35

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

Intersection # 2 skokie/stcharlesnorth

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
700	0	0	0	0	0	0	0	0	0
715	0	0	0	0	0	0	0	0	0
730	0	1	0	0	1	0	0	0	1
745	0	1	0	0	1	0	0	0	1
800	1	1	0	0	0	1	1	0	2
815	0	2	0	0	2	0	0	0	2
830	2	0	0	0	0	2	0	0	2
845	0	1	0	0	1	0	0	0	1
1130	0	1	0	0	1	0	0	0	1
1145	0	1	0	0	0	0	1	0	1
1200	1	0	0	0	0	1	0	0	1
1215	0	0	0	0	0	0	0	0	0
1230	0	0	0	0	0	0	0	0	0
1245	1	0	0	0	0	1	0	0	1
1300	1	0	0	0	0	1	0	0	1
1315	1	1	0	0	0	1	1	0	2
1600	0	0	0	0	0	0	0	0	0
1615	1	1	0	0	1	1	0	0	2
1630	0	0	0	0	0	0	0	0	0
1645	0	2	0	0	2	0	0	0	2
1700	0	0	0	0	0	0	0	0	0
1715	0	0	0	0	0	0	0	0	0
1730	1	0	0	0	0	1	0	0	1
1745	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>9</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>9</b>	<b>3</b>	<b>0</b>	<b>21</b>















Wilmette, IL Weather: Warm and Dry  
 Skokie Blvd and St Charles Place South Access  
 Thursday November 3, 2022

11/06/22  
 20:37:52

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

Intersection # 3 skokie/stcharles/south

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
700	0	1	0	0	1	0	0	0	1
715	0	0	0	0	0	0	0	0	0
730	0	0	0	0	0	0	0	0	0
745	0	0	0	0	0	0	0	0	0
800	0	0	0	0	0	0	0	0	0
815	0	1	0	0	1	0	0	0	1
830	0	1	0	0	1	0	0	0	1
845	0	0	0	0	0	0	0	0	0
1130	0	0	0	0	0	0	0	0	0
1145	0	2	0	0	1	0	1	0	2
1200	0	1	0	0	0	0	1	0	1
1215	0	2	2	0	1	2	1	0	4
1230	0	0	0	0	0	0	0	0	0
1245	0	0	1	0	0	1	0	0	1
1300	0	0	1	0	0	1	0	0	1
1315	0	0	0	0	0	0	0	0	0
1600	0	0	0	0	0	0	0	0	0
1615	1	1	0	0	1	1	0	0	2
1630	0	0	0	0	0	0	0	0	0
1645	0	0	0	0	0	0	0	0	0
1700	0	1	0	0	1	0	0	0	1
1715	0	0	0	0	0	0	0	0	0
1730	0	0	0	0	0	0	0	0	0
1745	1	0	0	0	0	1	0	0	1
<b>Total</b>	<b>2</b>	<b>10</b>	<b>4</b>	<b>0</b>	<b>7</b>	<b>6</b>	<b>3</b>	<b>0</b>	<b>16</b>



Wilmette, IL Weather: Warm and Dry  
 Skokie Blvd and St Charles Place South Access  
 Thursday November 3, 2022

11/06/22  
 20:37:52

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

Intersection # 3 skokie/stcharles/south

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
700	0	4	0	0	4	0	0	0	4
715	0	0	0	0	0	0	0	0	0
730	0	0	0	0	0	0	0	0	0
745	0	0	0	0	0	0	0	0	0
800	0	0	0	0	0	0	0	0	0
815	0	4	0	0	4	0	0	0	4
830	0	4	0	0	4	0	0	0	4
845	0	0	0	0	0	0	0	0	0
1130	0	0	0	0	0	0	0	0	0
1145	0	8	0	0	4	0	4	0	8
1200	0	4	0	0	0	0	4	0	4
1215	0	8	8	0	4	8	4	0	16
1230	0	0	0	0	0	0	0	0	0
1245	0	0	4	0	0	4	0	0	4
1300	0	0	4	0	0	4	0	0	4
1315	0	0	0	0	0	0	0	0	0
1600	0	0	0	0	0	0	0	0	0
1615	4	4	0	0	4	4	0	0	8
1630	0	0	0	0	0	0	0	0	0
1645	0	0	0	0	0	0	0	0	0
1700	0	4	0	0	4	0	0	0	4
1715	0	0	0	0	0	0	0	0	0
1730	0	0	0	0	0	0	0	0	0
1745	4	0	0	0	0	4	0	0	4



Wilmette, IL Weather: Warm and Dry  
 Skokie Blvd and St Charles Place South Access  
 Thursday November 3, 2022

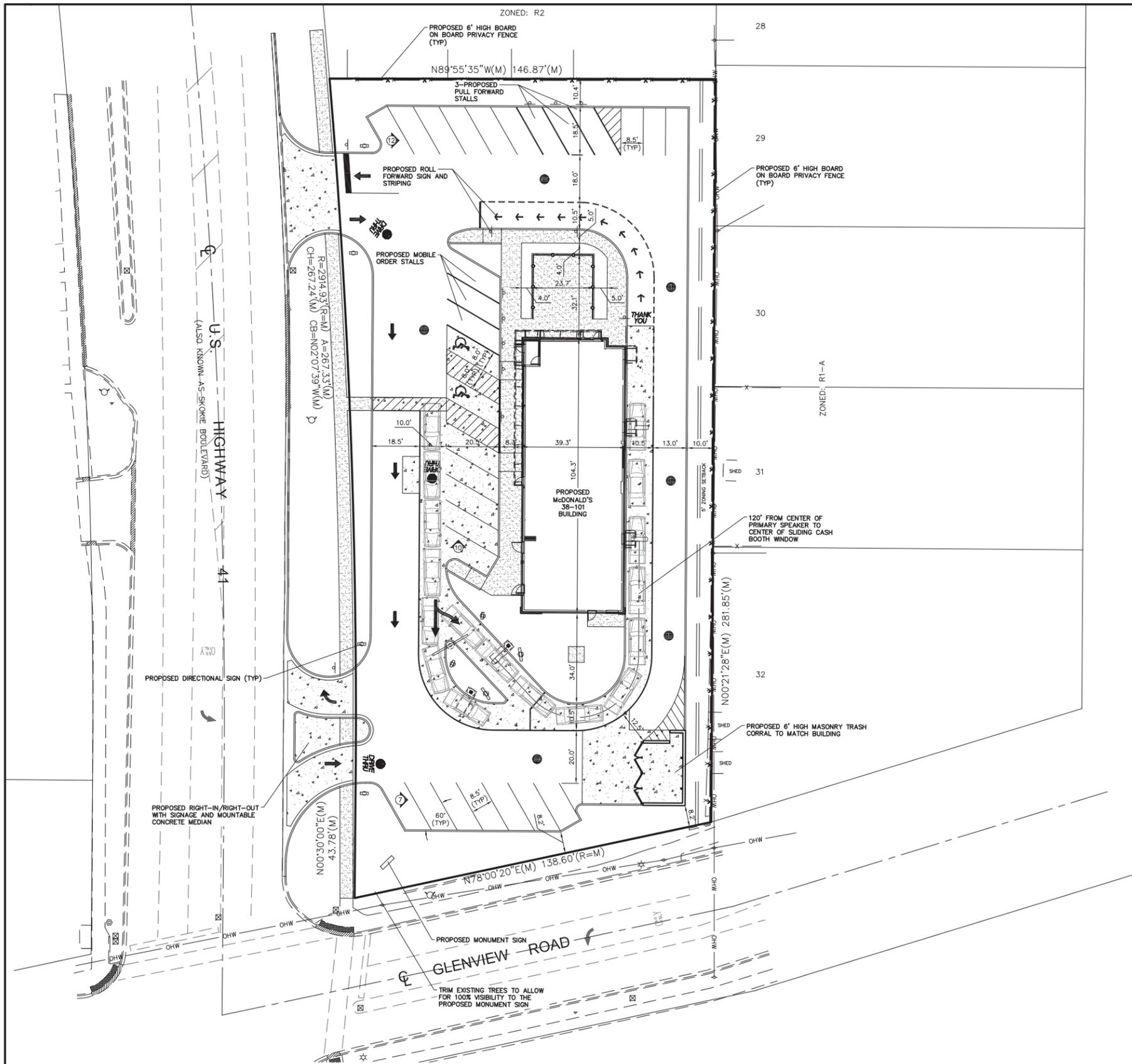
11/06/22  
 20:37:52

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

Intersection # 3 skokie/stcharles/south

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
700	0	1	0	0	1	0	0	0	1
715	0	0	0	0	0	0	0	0	0
730	0	1	0	0	1	0	0	0	1
745	0	2	0	0	2	0	0	0	2
800	0	2	0	0	2	0	0	0	2
815	0	2	0	0	2	0	0	0	2*
830	0	1	0	0	1	0	0	0	1*
845	0	0	0	0	0	0	0	0	0*
1130	0	5	2	0	2	2	3	0	7
1145	0	5	2	0	2	2	3	0	7
1200	0	3	3	0	1	3	2	0	6
1215	0	2	4	0	1	4	1	0	6
1230	0	0	2	0	0	2	0	0	2
1245	0	0	2	0	0	2	0	0	2*
1300	0	0	1	0	0	1	0	0	1*
1315	0	0	0	0	0	0	0	0	0*
1600	1	1	0	0	1	1	0	0	2
1615	1	2	0	0	2	1	0	0	3
1630	0	1	0	0	1	0	0	0	1
1645	0	1	0	0	1	0	0	0	1
1700	1	1	0	0	1	1	0	0	2
1715	1	0	0	0	0	1	0	0	1*
1730	1	0	0	0	0	1	0	0	1*
1745	1	0	0	0	0	1	0	0	1*

# Site Plan



**GENERAL NOTES:**  
 1. THESE PLANS ARE BASED ON THE ALTA/NSPS LTS (SURVEY PROJECT #22.0250 DATED 10/06/22) PREPARED BY: COMPASS SURVEYING LTD 2631 GINGER WOODS PARKWAY, STE 100, AURORA, IL 60502 (630) 820-9100  
 2. PRIOR TO CONSTRUCTION, CONTRACTOR TO CONTACT THE DESIGN ENGINEER AND ARCHITECT TO VERIFY THAT THEY ARE WORKING FROM THE MOST CURRENT SET OF PLANS AND SPECIFICATIONS.

**ON SITE PARKING DATA**

REGULAR SPACES	27
ADA ACCESSIBLE SPACES	2
TOTAL SPACES	29

PARKING REQUIREMENT: RESTAURANT, LIMITED SERVICE 8 PER 1,000 S.F. GFA  
 ASSUMED 3,000 SF OF GFA / 1000 \* 8 = 24  
 24 REQUIRED < 29 PROPOSED = OK

**SITE DATA**

ZONING	=	NR
LOT AREA	=	41,091 S.F. (0.94 AC.)
PROP. PERVIOUS AREA	=	9,996 S.F. (0.23 AC.)(24.3%)
PROP. IMPERVIOUS AREA	=	31,095 S.F. (0.71 AC.)(75.7%)
EX. PERVIOUS AREA	=	9,313 S.F. (0.21 AC.)(22.7%)
EX. IMPERVIOUS AREA	=	31,778 S.F. (0.73 AC.)(77.3%)
BUILDING AREA	=	4,085 S.F. ±
F.A.R.	=	0.11

REVISIONS


Prepared For:

McDonald's  
 711 Jorie Blvd., 3rd Floor  
 Oak Brook, IL 60523

McDONALD'S - WILMETTE, IL  
 Skokie Blvd and Old Glenview Rd  
 Wilmette, Illinois

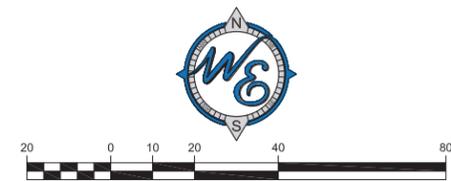


Prepared By:



watermark-engineering.com | 2631 Ginger Woods Pkwy | Aurora, IL 60502 | (630) 375-1800

CHECKED BY: J.MILLER  
 DESIGN BY: D.DOLSON  
 DRAWN BY: J.VOLANTI  
 DATE: JULY 3, 2023  
 SCALE: 1" = 20'  
 PROJECT NO.: 22-188



**SITE PLAN 1**

# ITE Trip Generation Summary Sheets

# Land Use: 934

## Fast-Food Restaurant with Drive-Through Window

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### Description

This land use includes any fast-food restaurant with a drive-through window. This type of restaurant is characterized by a large drive-through and large carry-out clientele, long hours of service (some are open for breakfast, all are open for lunch and dinner, some are open late at night or 24 hours a day) and high turnover rates for eat-in customers. The restaurant does not provide table service. A patron generally orders from a menu board and pays before receiving the meal. A typical duration of stay for an eat-in patron is less than 30 minutes. Fast casual restaurant (Land Use 930), high-turnover (sit-down) restaurant (Land Use 932), fast-food restaurant without drive-through window (Land Use 933), and fast-food restaurant with drive-through window and no indoor seating (Land Use 935) are related uses.

### Additional Data

***Users should exercise caution when applying statistics during the AM peak periods, as the sites contained in the database for this land use may or may not be open for breakfast. In cases where it was confirmed that the sites were not open for breakfast, data for the AM peak hour of the adjacent street traffic were removed from the database.***

If the restaurant has outdoor seating, its area is not included in the overall gross floor area. For a restaurant that has significant outdoor seating, the number of seats may be more reliable than GFA as an independent variable on which to establish a trip generation rate.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alaska, Alberta (CAN), California, Colorado, Florida, Indiana, Kentucky, Maryland, Massachusetts, Minnesota, Montana, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Dakota, Texas, Vermont, Virginia, Washington, and Wisconsin.

### Source Numbers

163, 164, 168, 180, 181, 241, 245, 278, 294, 300, 301, 319, 338, 340, 342, 358, 389, 438, 502, 552, 577, 583, 584, 617, 640, 641, 704, 715, 728, 810, 866, 867, 869, 885, 886, 927, 935, 962, 977, 1050, 1053, 1054

# Fast-Food Restaurant with Drive-Through Window (934)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA  
 On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 71

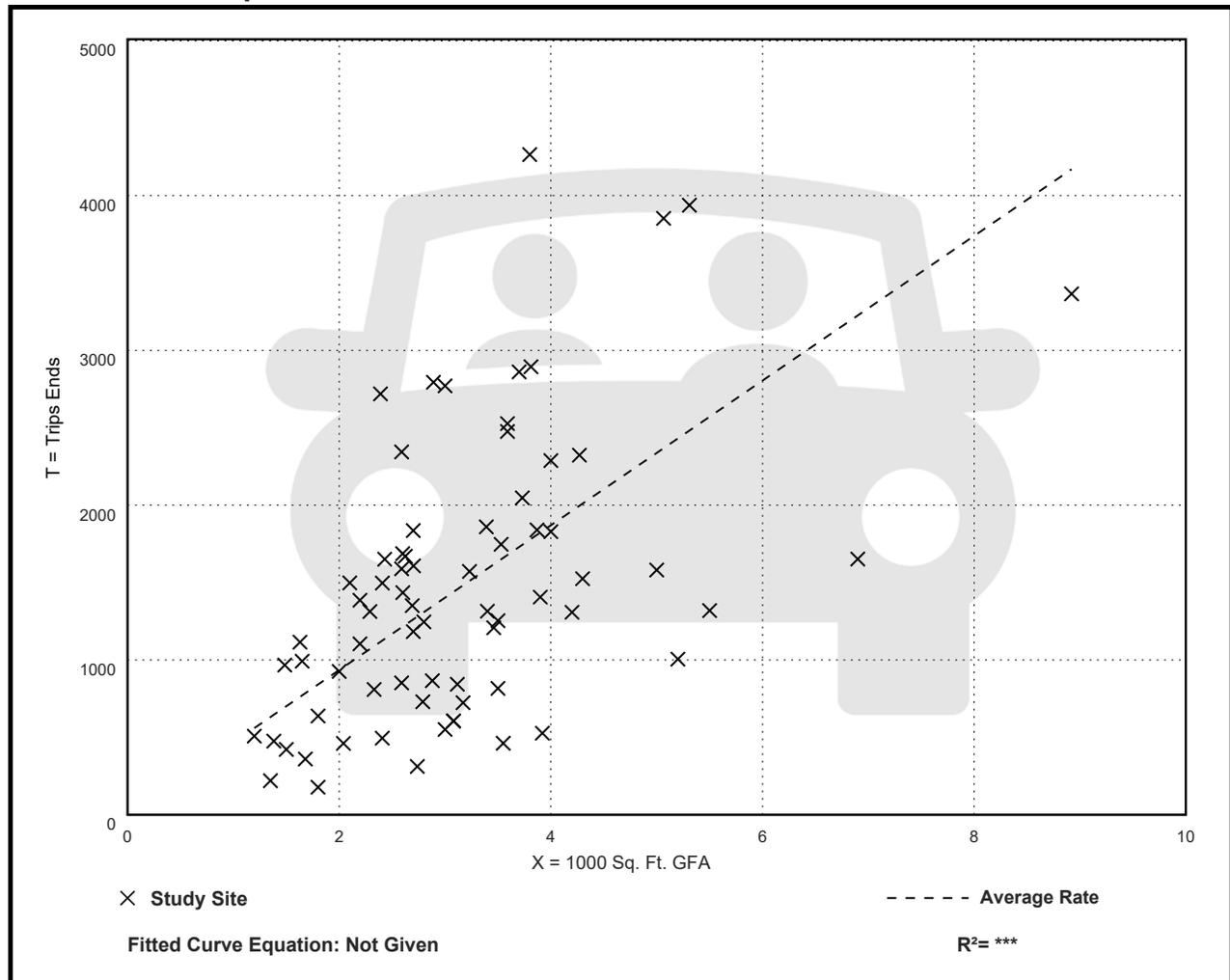
Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
467.48	98.89 - 1137.66	238.62

## Data Plot and Equation



# Fast-Food Restaurant with Drive-Through Window (934)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

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: 96

Avg. 1000 Sq. Ft. GFA: 4

Directional Distribution: 51% entering, 49% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
44.61	1.05 - 164.25	27.14

## Data Plot and Equation



# Fast-Food Restaurant with Drive-Through Window (934)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

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: 190

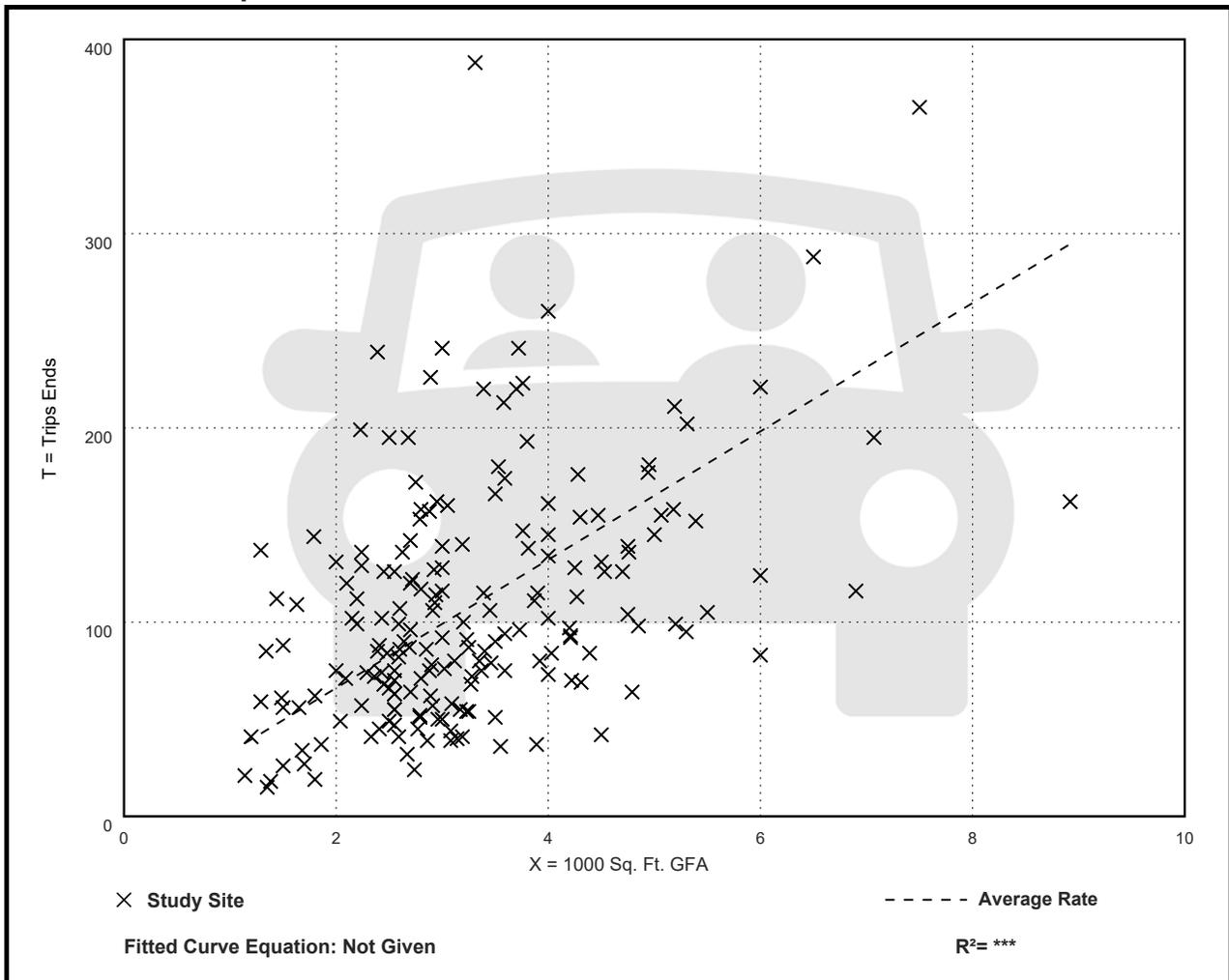
Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 52% entering, 48% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
33.03	8.77 - 117.22	17.59

## Data Plot and Equation



# Fast-Food Restaurant with Drive-Through Window (934)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 53

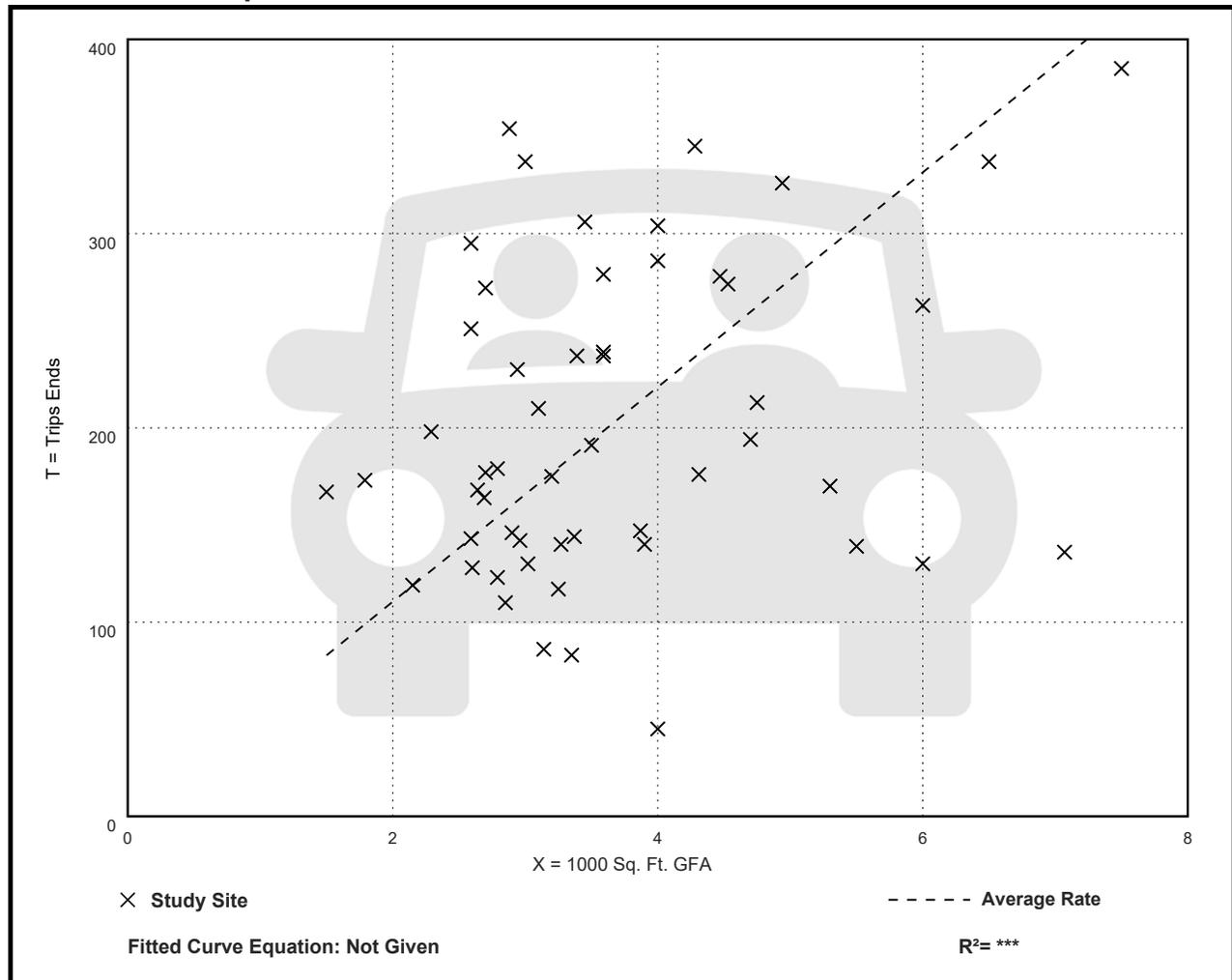
Avg. 1000 Sq. Ft. GFA: 4

Directional Distribution: 51% entering, 49% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
55.25	11.25 - 122.92	24.62

## Data Plot and Equation



# CMAP 2050 Projections Letter



Chicago Metropolitan Agency for Planning

433 West Van Buren Street  
Suite 450  
Chicago, IL 60607  
312-454-0400  
cmap.illinois.gov

November 18, 2022

Shahrzad Ainkeshavarzi  
Traffic Engineer  
Kenig, Lindgren, O'Hara and Aboona  
9575 West Higgins Road  
Suite 400  
Rosemont, IL 60018

**Subject: Skokie Road (US 41) @ Old Glenview Road**  
IDOT

Dear Ms. Ainkeshavarzi:

In response to a request made on your behalf and dated November 17, 2022, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
Skokie Rd (US 41)	15,200	19,200
Old Glenview Rd	3,550	3,750

Traffic projections are developed using existing ADT data provided in the request letter and the results from the October 2022 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

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

Sincerely,

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

cc: Rios (IDOT)  
2022\_ForecastTraffic\Wilmette\ck-151-22\ck-151-22.docx

## Level of Service Criteria

LEVEL OF SERVICE CRITERIA

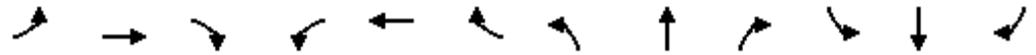
<b>Signalized Intersections</b>		
<b>Level of Service</b>	<b>Interpretation</b>	<b>Average Control Delay (seconds per vehicle)</b>
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles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

Source: *Highway Capacity Manual*, 2010.

Capacity Analysis Summary Sheets  
Existing Weekday Morning Peak Hour

Lanes, Volumes, Timings  
3: Skokie Road & Old Glenview Road

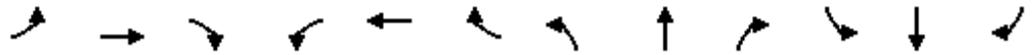
11/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	14	30	41	11	92	5	459	63	95	516	6
Future Volume (vph)	5	14	30	41	11	92	5	459	63	95	516	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Fr <sub>t</sub>		0.898			0.867			0.982			0.998	
Fl <sub>t</sub> Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1565	0	1719	1599	0	1805	3401	0	1770	3499	0
Fl <sub>t</sub> Permitted	0.687			0.578			0.447			0.407		
Satd. Flow (perm)	1305	1565	0	1046	1599	0	849	3401	0	758	3499	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			25			40			40	
Link Distance (ft)		253			390			574			113	
Travel Time (s)		5.8			10.6			9.8			1.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	7%	10%	5%	11%	2%	0%	4%	6%	2%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	47	0	43	109	0	5	549	0	100	549	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	14.0	29.0		14.0	29.0		14.0	53.0		14.0	53.0	
Total Split (%)	12.7%	26.4%		12.7%	26.4%		12.7%	48.2%		12.7%	48.2%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	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		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	18.4	12.2		22.0	17.5		75.7	67.6		81.0	76.6	
Actuated g/C Ratio	0.17	0.11		0.20	0.16		0.69	0.61		0.74	0.70	
v/c Ratio	0.02	0.27		0.17	0.43		0.01	0.26		0.16	0.23	
Control Delay	30.2	48.1		33.9	45.8		6.4	11.6		6.0	7.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	30.2	48.1		33.9	45.8		6.4	11.6		6.0	7.8	
LOS	C	D		C	D		A	B		A	A	
Approach Delay		46.3			42.4			11.5			7.6	
Approach LOS		D			D			B			A	
Queue Length 50th (ft)	3	31		24	67		1	92		19	65	
Queue Length 95th (ft)	12	66		50	123		5	154		45	141	
Internal Link Dist (ft)		173			310			494			33	
Turn Bay Length (ft)												
Base Capacity (vph)	297	327		273	337		710	2088		654	2437	

Lanes, Volumes, Timings  
 3: Skokie Road & Old Glenview Road

11/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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	0.02	0.14		0.16	0.32		0.01	0.26		0.15	0.23	

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	110
Offset:	96.8 (88%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.43
Intersection Signal Delay:	14.3
Intersection LOS:	B
Intersection Capacity Utilization	42.2%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 3: Skokie Road & Old Glenview Road

14 s	53 s	14 s	29 s
14 s	53 s	14 s	29 s

HCM 6th TWSC  
7: Old Glenview Road & Sunset Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	2	159	136	1	4	4
Future Vol, veh/h	2	159	136	1	4	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	86	86	86	86	86	86
Heavy Vehicles, %	50	3	0	0	0	0
Mvmt Flow	2	185	158	1	5	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	159	0	-	0	348
Stage 1	-	-	-	-	159
Stage 2	-	-	-	-	189
Critical Hdwy	4.6	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.65	-	-	-	3.5
Pot Cap-1 Maneuver	1175	-	-	-	705
Stage 1	-	-	-	-	875
Stage 2	-	-	-	-	895
Platoon blocked, %		-	-	-	1
Mov Cap-1 Maneuver	1175	-	-	-	704
Mov Cap-2 Maneuver	-	-	-	-	704
Stage 1	-	-	-	-	873
Stage 2	-	-	-	-	895

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1175	-	-	-	787
HCM Lane V/C Ratio	0.002	-	-	-	0.012
HCM Control Delay (s)	8.1	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 6th TWSC  
 8: Skokie Road & Charles Place North Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕↔		↔	↕↔
Traffic Vol, veh/h	3	13	565	0	9	641
Future Vol, veh/h	3	13	565	0	9	641
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	14	614	0	10	697

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	983	307	0	0	614
Stage 1	614	-	-	-	-
Stage 2	369	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	*428	*854	-	-	*1278
Stage 1	*806	-	-	-	-
Stage 2	*670	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	*425	*854	-	-	*1278
Mov Cap-2 Maneuver	*425	-	-	-	-
Stage 1	*806	-	-	-	-
Stage 2	*665	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	718	* 1278
HCM Lane V/C Ratio	-	-	0.024	0.008
HCM Control Delay (s)	-	-	10.1	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: Skokie Road & Charles Place South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	0	7	558	0	0	644
Future Vol, veh/h	0	7	558	0	0	644
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	607	0	0	700

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	957	304	0	0	607	0
Stage 1	607	-	-	-	-	-
Stage 2	350	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	412	*882	-	-	1254	-
Stage 1	776	-	-	-	-	-
Stage 2	684	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	412	*882	-	-	1254	-
Mov Cap-2 Maneuver	412	-	-	-	-	-
Stage 1	776	-	-	-	-	-
Stage 2	684	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	882	1254
HCM Lane V/C Ratio	-	-	0.009	-
HCM Control Delay (s)	-	-	9.1	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Vol, veh/h	9	0	0	0	0	0	0	549	0	0	638	0
Future Vol, veh/h	9	0	0	0	0	0	0	549	0	0	638	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	0	0	0	0	0	0	597	0	0	693	0

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	992	1290	347	944	1290	299	-	0	0	597	0	0
Stage 1	693	693	-	597	597	-	-	-	-	-	-	-
Stage 2	299	597	-	347	693	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	*349	226	649	384	226	*882	0	-	-	1267	-	0
Stage 1	*400	443	-	780	695	-	0	-	-	-	-	0
Stage 2	*832	695	-	642	443	-	0	-	-	-	-	0
Platoon blocked, %	1	1		1	1	1		-	-	1		-
Mov Cap-1 Maneuver	*349	226	649	384	226	*882	-	-	-	1267	-	-
Mov Cap-2 Maneuver	*349	226	-	384	226	-	-	-	-	-	-	-
Stage 1	*400	443	-	780	695	-	-	-	-	-	-	-
Stage 2	*832	695	-	642	443	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.6	0	0	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBL	SBT
Capacity (veh/h)	-	-	349	-	1267
HCM Lane V/C Ratio	-	-	0.028	-	-
HCM Control Delay (s)	-	-	15.6	0	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
17: Skokie Road & Retail Plaza Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔			↕↕	↕↕	
Traffic Vol, veh/h	0	0	5	551	617	21
Future Vol, veh/h	0	0	5	551	617	21
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, %	2	2	2	2	2	2
Mvmt Flow	0	0	5	599	671	23

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	993	347	694	0	0
Stage 1	683	-	-	-	-
Stage 2	310	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-
Pot Cap-1 Maneuver	*387	649	897	-	-
Stage 1	*463	-	-	-	-
Stage 2	*832	-	-	-	-
Platoon blocked, %	1			-	-
Mov Cap-1 Maneuver	*384	649	897	-	-
Mov Cap-2 Maneuver	*384	-	-	-	-
Stage 1	*459	-	-	-	-
Stage 2	*832	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	897	-	-	-	-
HCM Lane V/C Ratio	0.006	-	-	-	-
HCM Control Delay (s)	9	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Notes  
~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Capacity Analysis Summary Sheets  
Existing Weekday Midday Peak Hour

Lanes, Volumes, Timings  
3: Skokie Road & Old Glenview Road

11/23/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	3	25	65	7	44	16	470	85	72	554	8
Future Volume (vph)	15	3	25	65	7	44	16	470	85	72	554	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt	0.865		0.871				0.977		0.998			
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1644	0	1805	1561	0	1805	3401	0	1752	3499	0
Flt Permitted	0.720			0.477			0.421			0.383		
Satd. Flow (perm)	1368	1644	0	906	1561	0	800	3401	0	707	3499	0
Right Turn on Red			No				No				No	
Satd. Flow (RTOR)												
Link Speed (mph)	30			25			40			40		
Link Distance (ft)	253			390			574			113		
Travel Time (s)	5.8			10.6			9.8			1.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	7%	0%	4%	2%	3%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	30	0	71	56	0	17	603	0	78	611	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	22.5		12.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	15.0	32.0		15.0	32.0		14.0	34.0		14.0	34.0	
Total Split (%)	15.8%	33.7%		15.8%	33.7%		14.7%	35.8%		14.7%	35.8%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	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		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	13.9	9.4		19.0	13.4		66.8	60.8		70.1	65.5	
Actuated g/C Ratio	0.15	0.10		0.20	0.14		0.70	0.64		0.74	0.69	
v/c Ratio	0.07	0.19		0.26	0.26		0.03	0.28		0.13	0.25	
Control Delay	26.3	41.4		30.2	38.3		6.2	11.5		6.1	9.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	26.3	41.4		30.2	38.3		6.2	11.5		6.1	9.3	
LOS	C	D		C	D		A	B		A	A	
Approach Delay	36.2		33.8				11.4		8.9			
Approach LOS	D		C				B		A			
Queue Length 50th (ft)	7	17		34	27		3	101		14	73	
Queue Length 95th (ft)	22	44		64	66		11	160		34	153	
Internal Link Dist (ft)	173		310				494		33			
Turn Bay Length (ft)												
Base Capacity (vph)	328	449		302	427		702	2176		641	2414	

Lanes, Volumes, Timings  
 3: Skokie Road & Old Glenview Road

11/23/2022

	↖	→	↘	↙	←	↖	↘	↑	↖	↘	↓	↙
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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	0.05	0.07		0.24	0.13		0.02	0.28		0.12	0.25	

Intersection Summary

Area Type:	Other
Cycle Length:	95
Actuated Cycle Length:	95
Offset:	56 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	70
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.28
Intersection Signal Delay:	12.9
Intersection LOS:	B
Intersection Capacity Utilization	43.3%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 3: Skokie Road & Old Glenview Road

↙ Ø1 14 s	↖ Ø2 (R) 34 s	↘ Ø3 15 s	↖ Ø4 32 s
↙ Ø5 14 s	↖ Ø6 (R) 34 s	↘ Ø7 15 s	↖ Ø8 32 s

HCM 6th TWSC  
7: Old Glenview Road & Sunset Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	8	144	98	3	3	9
Future Vol, veh/h	8	144	98	3	3	9
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	89	89	89	89	89	89
Heavy Vehicles, %	0	2	3	0	0	0
Mvmt Flow	9	162	110	3	3	10

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	113	0	-	0	292
Stage 1	-	-	-	-	112
Stage 2	-	-	-	-	180
Critical Hdwy	4.1	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	1489	-	-	-	757
Stage 1	-	-	-	-	918
Stage 2	-	-	-	-	897
Platoon blocked, %		-	-	-	1
Mov Cap-1 Maneuver	1489	-	-	-	752
Mov Cap-2 Maneuver	-	-	-	-	752
Stage 1	-	-	-	-	912
Stage 2	-	-	-	-	897

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1489	-	-	-	889
HCM Lane V/C Ratio	0.006	-	-	-	0.015
HCM Control Delay (s)	7.4	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 6th TWSC  
 8: Skokie Road & Charles Place North Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	2	0	499	0	10	653
Future Vol, veh/h	2	0	499	0	10	653
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	4	2	2	2
Mvmt Flow	2	0	542	0	11	710

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	919	271	0	0	542
Stage 1	542	-	-	-	-
Stage 2	377	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	*440	*883	-	-	*1320
Stage 1	*833	-	-	-	-
Stage 2	*663	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	*437	*883	-	-	*1320
Mov Cap-2 Maneuver	*437	-	-	-	-
Stage 1	*833	-	-	-	-
Stage 2	*658	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.3	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	437	* 1320
HCM Lane V/C Ratio	-	-	0.005	0.008
HCM Control Delay (s)	-	-	13.3	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: Skokie Road & Charles Place South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	3	2	497	11	0	655
Future Vol, veh/h	3	2	497	11	0	655
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	4	2	2	2
Mvmt Flow	3	2	540	12	0	712

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	902	276	0	0	552	0
Stage 1	546	-	-	-	-	-
Stage 2	356	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*454	*883	-	-	*1320	-
Stage 1	*833	-	-	-	-	-
Stage 2	*680	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	*454	*883	-	-	*1320	-
Mov Cap-2 Maneuver	*454	-	-	-	-	-
Stage 1	*833	-	-	-	-	-
Stage 2	*680	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	564 * 1320	-
HCM Lane V/C Ratio	-	-	0.01	-
HCM Control Delay (s)	-	-	11.4	0
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Vol, veh/h	0	0	5	0	0	0	0	508	0	0	658	0
Future Vol, veh/h	0	0	5	0	0	0	0	508	0	0	658	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	4	2	2	2	2
Mvmt Flow	0	0	5	0	0	0	0	552	0	0	715	0

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	991	1267	358	910	1267	276	-	0	0	552	0	0
Stage 1	715	715	-	552	552	-	-	-	-	-	-	-
Stage 2	276	552	-	358	715	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	*349	*234	638	*411	*234	*883	0	-	-	*1320	-	0
Stage 1	*388	*433	-	*832	*729	-	0	-	-	-	-	0
Stage 2	*832	*729	-	*633	*433	-	0	-	-	-	-	0
Platoon blocked, %	1	1		1	1	1	-	-	-	1	-	-
Mov Cap-1 Maneuver	*349	*234	638	*407	*234	*883	-	-	-	*1320	-	-
Mov Cap-2 Maneuver	*349	*234	-	*407	*234	-	-	-	-	-	-	-
Stage 1	*388	*433	-	*832	*729	-	-	-	-	-	-	-
Stage 2	*832	*729	-	*628	*433	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBL	SBT
Capacity (veh/h)	-	-	638	-	* 1320
HCM Lane V/C Ratio	-	-	0.009	-	-
HCM Control Delay (s)	-	-	10.7	0	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
17: Skokie Road & Retail Plaza Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖			↗	↗	
Traffic Vol, veh/h	2	5	15	514	629	34
Future Vol, veh/h	2	5	15	514	629	34
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, %	2	2	2	4	2	2
Mvmt Flow	2	5	16	559	684	37

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1015	361	721	0	-	0
Stage 1	703	-	-	-	-	-
Stage 2	312	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*371	636	877	-	-	-
Stage 1	*452	-	-	-	-	-
Stage 2	*833	-	-	-	-	-
Platoon blocked, %	1			-	-	-
Mov Cap-1 Maneuver	*361	636	877	-	-	-
Mov Cap-2 Maneuver	*361	-	-	-	-	-
Stage 1	*440	-	-	-	-	-
Stage 2	*833	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	0.4	0
HCM LOS	B		

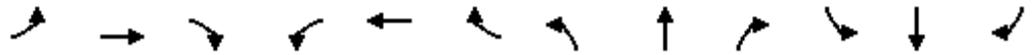
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	877	-	522	-	-
HCM Lane V/C Ratio	0.019	-	0.015	-	-
HCM Control Delay (s)	9.2	0.1	12	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Capacity Analysis Summary Sheets  
Existing Weekday Evening Peak Hour

Lanes, Volumes, Timings  
3: Skokie Road & Old Glenview Road

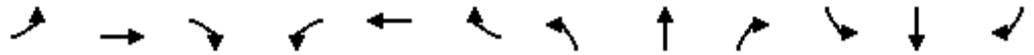
11/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	19	27	81	13	90	17	453	113	85	736	3
Future Volume (vph)	8	19	27	81	13	90	17	453	113	85	736	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Fr <sub>t</sub>		0.911			0.869			0.970			0.999	
Fl <sub>t</sub> Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1597	1731	0	1805	1634	0	1703	3474	0	1805	3571	0
Fl <sub>t</sub> Permitted	0.686			0.578			0.338			0.380		
Satd. Flow (perm)	1153	1731	0	1098	1634	0	606	3474	0	722	3571	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			25			40			40	
Link Distance (ft)		253			390			574			113	
Travel Time (s)		5.8			10.6			9.8			1.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	13%	0%	0%	0%	8%	0%	6%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	49	0	86	110	0	18	602	0	90	786	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	14.0	29.0		14.0	29.0		14.0	58.0		14.0	58.0	
Total Split (%)	12.2%	25.2%		12.2%	25.2%		12.2%	50.4%		12.2%	50.4%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	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		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	19.1	11.6		24.8	20.2		79.0	71.7		82.7	76.8	
Actuated g/C Ratio	0.17	0.10		0.22	0.18		0.69	0.62		0.72	0.67	
v/c Ratio	0.04	0.28		0.29	0.38		0.04	0.28		0.15	0.33	
Control Delay	31.9	51.0		37.3	45.0		6.5	12.0		6.5	10.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	31.9	51.0		37.3	45.0		6.5	12.0		6.5	10.3	
LOS	C	D		D	D		A	B		A	B	
Approach Delay		48.0			41.6			11.9			9.9	
Approach LOS		D			D			B			A	
Queue Length 50th (ft)	5	34		52	70		3	107		18	108	
Queue Length 95th (ft)	18	70		89	130		12	171		41	217	
Internal Link Dist (ft)		173			310			494			33	
Turn Bay Length (ft)												
Base Capacity (vph)	266	346		301	338		534	2166		621	2383	

Lanes, Volumes, Timings  
 3: Skokie Road & Old Glenview Road

11/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.03	0.14		0.29	0.33		0.03	0.28		0.14	0.33	

Intersection Summary

Area Type:	Other
Cycle Length:	115
Actuated Cycle Length:	115
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.38
Intersection Signal Delay:	15.4
Intersection LOS:	B
Intersection Capacity Utilization	48.3%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 3: Skokie Road & Old Glenview Road

Ø1	Ø2 (R)	Ø3	Ø4
14 s	58 s	14 s	29 s
Ø5	Ø6 (R)	Ø7	Ø8
14 s	58 s	14 s	29 s

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	8	202	179	3	2	0
Future Vol, veh/h	8	202	179	3	2	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	232	206	3	2	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	209	0	-	0	458 208
Stage 1	-	-	-	-	208 -
Stage 2	-	-	-	-	250 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	1374	-	-	-	619 837
Stage 1	-	-	-	-	832 -
Stage 2	-	-	-	-	856 -
Platoon blocked, %		-	-	-	1
Mov Cap-1 Maneuver	1374	-	-	-	614 837
Mov Cap-2 Maneuver	-	-	-	-	614 -
Stage 1	-	-	-	-	825 -
Stage 2	-	-	-	-	856 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1374	-	-	-	614
HCM Lane V/C Ratio	0.007	-	-	-	0.004
HCM Control Delay (s)	7.6	0	-	-	10.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 6th TWSC  
 8: Skokie Road & Charles Place North Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	0	0	543	0	3	844
Future Vol, veh/h	0	0	543	0	3	844
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	590	0	3	917

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1055	295	0	0	590
Stage 1	590	-	-	-	-
Stage 2	465	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	*364	*864	-	-	*1293
Stage 1	*816	-	-	-	-
Stage 2	*599	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	*363	*864	-	-	*1293
Mov Cap-2 Maneuver	*363	-	-	-	-
Stage 1	*816	-	-	-	-
Stage 2	*598	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	- * 1293	-
HCM Lane V/C Ratio	-	-	- 0.003	-
HCM Control Delay (s)	-	-	0 7.8	-
HCM Lane LOS	-	-	A A	-
HCM 95th %tile Q(veh)	-	-	- 0	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: Skokie Road & Charles Place South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕		↔	↕
Traffic Vol, veh/h	0	1	542	0	4	840
Future Vol, veh/h	0	1	542	0	4	840
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	589	0	4	913

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1054	295	0	0	589	0
Stage 1	589	-	-	-	-	-
Stage 2	465	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*365	*864	-	-	*1293	-
Stage 1	*816	-	-	-	-	-
Stage 2	*599	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	*364	*864	-	-	*1293	-
Mov Cap-2 Maneuver	*364	-	-	-	-	-
Stage 1	*816	-	-	-	-	-
Stage 2	*597	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	864	* 1293
HCM Lane V/C Ratio	-	-	0.001	0.003
HCM Control Delay (s)	-	-	9.2	7.8
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Vol, veh/h	2	0	0	0	0	0	0	540	0	0	835	0
Future Vol, veh/h	2	0	0	0	0	0	0	540	0	0	835	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	0	0	0	0	0	587	0	0	908	0

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1202	1495	454	1041	1495	294	-	0	0	587	0	0
Stage 1	908	908	-	587	587	-	-	-	-	-	-	-
Stage 2	294	587	-	454	908	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	*240	*165	553	*336	*165	*864	0	-	-	*1293	-	0
Stage 1	*296	*352	-	*815	*714	-	0	-	-	-	-	0
Stage 2	*815	*714	-	*555	*352	-	0	-	-	-	-	0
Platoon blocked, %	1	1		1	1	1		-	-	1		-
Mov Cap-1 Maneuver	*240	*165	553	*336	*165	*864	-	-	-	*1293	-	-
Mov Cap-2 Maneuver	*240	*165	-	*336	*165	-	-	-	-	-	-	-
Stage 1	*296	*352	-	*815	*714	-	-	-	-	-	-	-
Stage 2	*815	*714	-	*555	*352	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.1	0	0	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBL	SBT
Capacity (veh/h)	-	-	240	-	* 1293
HCM Lane V/C Ratio	-	-	0.009	-	-
HCM Control Delay (s)	-	-	20.1	0	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
17: Skokie Road & Retail Plaza Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔			↕↕	↕↕	
Traffic Vol, veh/h	4	0	15	536	824	11
Future Vol, veh/h	4	0	15	536	824	11
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, %	2	2	2	2	2	2
Mvmt Flow	4	0	16	583	896	12

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1226	454	908	0	0
Stage 1	902	-	-	-	-
Stage 2	324	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-
Pot Cap-1 Maneuver	*267	553	745	-	-
Stage 1	*356	-	-	-	-
Stage 2	*816	-	-	-	-
Platoon blocked, %	1	-	-	-	-
Mov Cap-1 Maneuver	*258	553	745	-	-
Mov Cap-2 Maneuver	*258	-	-	-	-
Stage 1	*345	-	-	-	-
Stage 2	*816	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.2	0.5	0
HCM LOS	C		

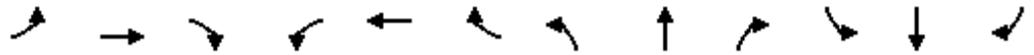
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	745	-	258	-	-
HCM Lane V/C Ratio	0.022	-	0.017	-	-
HCM Control Delay (s)	9.9	0.2	19.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Capacity Analysis Summary Sheets  
Existing Saturday Midday Peak Hour

Lanes, Volumes, Timings  
3: Skokie Road & Old Glenview Road

11/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	6	14	87	14	38	18	479	94	89	622	5
Future Volume (vph)	4	6	14	87	14	38	18	479	94	89	622	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Fr <sub>t</sub>		0.893			0.891			0.975			0.999	
Fl <sub>t</sub> Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1697	0	1805	1693	0	1805	3485	0	1805	3601	0
Fl <sub>t</sub> Permitted				0.533			0.401			0.385		
Satd. Flow (perm)	1900	1697	0	1013	1693	0	762	3485	0	732	3601	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			25			40			40	
Link Distance (ft)		253			390			574			113	
Travel Time (s)		5.8			10.6			9.8			1.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	20%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	21	0	92	55	0	19	603	0	94	660	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	15.0	32.0		15.0	32.0		14.0	34.0		14.0	34.0	
Total Split (%)	15.8%	33.7%		15.8%	33.7%		14.7%	35.8%		14.7%	35.8%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	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		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	10.7	8.9		17.0	13.4		69.0	63.0		72.5	67.8	
Actuated g/C Ratio	0.11	0.09		0.18	0.14		0.73	0.66		0.76	0.71	
v/c Ratio	0.02	0.13		0.34	0.23		0.03	0.26		0.15	0.26	
Control Delay	27.0	41.0		34.1	36.8		5.7	10.4		5.4	8.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	27.0	41.0		34.1	36.8		5.7	10.4		5.4	8.5	
LOS	C	D		C	D		A	B		A	A	
Approach Delay		38.8			35.1			10.3			8.1	
Approach LOS		D			D			B			A	
Queue Length 50th (ft)	2	12		51	31		2	70		10	48	
Queue Length 95th (ft)	9	34		80	64		12	158		39	163	
Internal Link Dist (ft)		173			310			494			33	
Turn Bay Length (ft)												
Base Capacity (vph)	318	464		290	463		696	2310		681	2569	

Lanes, Volumes, Timings  
 3: Skokie Road & Old Glenview Road

11/22/2022

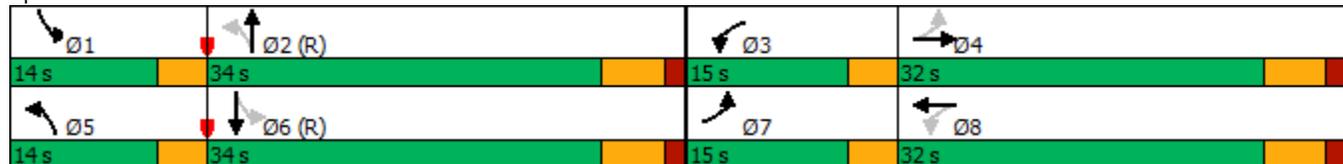


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.01	0.05		0.32	0.12		0.03	0.26		0.14	0.26	

Intersection Summary

Area Type:	Other
Cycle Length:	95
Actuated Cycle Length:	95
Offset:	56 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.34
Intersection Signal Delay:	12.0
Intersection LOS:	B
Intersection Capacity Utilization	46.0%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 3: Skokie Road & Old Glenview Road



HCM 6th TWSC  
7: Old Glenview Road & Sunset Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	7	182	135	5	1	4
Future Vol, veh/h	7	182	135	5	1	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	79	79	79	79	79	79
Heavy Vehicles, %	0	1	0	0	0	0
Mvmt Flow	9	230	171	6	1	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	177	0	-	0	422 174
Stage 1	-	-	-	-	174 -
Stage 2	-	-	-	-	248 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	1411	-	-	-	640 875
Stage 1	-	-	-	-	861 -
Stage 2	-	-	-	-	844 -
Platoon blocked, %		-	-	-	1
Mov Cap-1 Maneuver	1411	-	-	-	636 875
Mov Cap-2 Maneuver	-	-	-	-	636 -
Stage 1	-	-	-	-	855 -
Stage 2	-	-	-	-	844 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1411	-	-	-	814
HCM Lane V/C Ratio	0.006	-	-	-	0.008
HCM Control Delay (s)	7.6	0	-	-	9.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 6th TWSC  
 8: Skokie Road & Charles Place North Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	0	4	509	2	6	727
Future Vol, veh/h	0	4	509	2	6	727
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	553	2	7	790

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	963	278	0	0	555
Stage 1	554	-	-	-	-
Stage 2	409	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	*407	*883	-	-	*1320
Stage 1	*833	-	-	-	-
Stage 2	*639	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	*405	*883	-	-	*1320
Mov Cap-2 Maneuver	*405	-	-	-	-
Stage 1	*833	-	-	-	-
Stage 2	*636	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	883	* 1320
HCM Lane V/C Ratio	-	-	0.005	0.005
HCM Control Delay (s)	-	-	9.1	7.7
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: Skokie Road & Charles Place South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	1	0	511	4	1	726
Future Vol, veh/h	1	0	511	4	1	726
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	555	4	1	789

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	954	280	0	0	559	0
Stage 1	557	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	414	*883	-	-	1316	-
Stage 1	831	-	-	-	-	-
Stage 2	648	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	414	*883	-	-	1316	-
Mov Cap-2 Maneuver	414	-	-	-	-	-
Stage 1	831	-	-	-	-	-
Stage 2	647	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	414	1316
HCM Lane V/C Ratio	-	-	0.003	0.001
HCM Control Delay (s)	-	-	13.7	7.7
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	515	0	0	727	0
Future Vol, veh/h	0	0	0	0	0	0	0	515	0	0	727	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	560	0	0	790	0

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1070	1350	395	955	1350	280	-	0	0	560	0	0
Stage 1	790	790	-	560	560	-	-	-	-	-	-	-
Stage 2	280	560	-	395	790	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	*297	204	604	376	204	*883	0	-	-	1315	-	0
Stage 1	*350	400	-	826	725	-	0	-	-	-	-	0
Stage 2	*832	725	-	602	400	-	0	-	-	-	-	0
Platoon blocked, %	1	1		1	1	1		-	-	1		-
Mov Cap-1 Maneuver	*297	204	604	376	204	*883	-	-	-	1315	-	-
Mov Cap-2 Maneuver	*297	204	-	376	204	-	-	-	-	-	-	-
Stage 1	*350	400	-	826	725	-	-	-	-	-	-	-
Stage 2	*832	725	-	602	400	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-	1315
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	-	-	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 17: Skokie Road & Retail Plaza Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔			↕↕	↕↕	
Traffic Vol, veh/h	4	5	10	511	711	16
Future Vol, veh/h	4	5	10	511	711	16
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, %	2	2	2	2	2	2
Mvmt Flow	4	5	11	555	773	17

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1082	395	790	0	0
Stage 1	782	-	-	-	-
Stage 2	300	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-
Pot Cap-1 Maneuver	*329	604	826	-	-
Stage 1	*411	-	-	-	-
Stage 2	*833	-	-	-	-
Platoon blocked, %	1			-	-
Mov Cap-1 Maneuver	*323	604	826	-	-
Mov Cap-2 Maneuver	*323	-	-	-	-
Stage 1	*403	-	-	-	-
Stage 2	*833	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	826	-	436	-	-
HCM Lane V/C Ratio	0.013	-	0.022	-	-
HCM Control Delay (s)	9.4	0.1	13.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Capacity Analysis Summary Sheets  
Year 2028 No-Build Weekday Morning Peak Hour

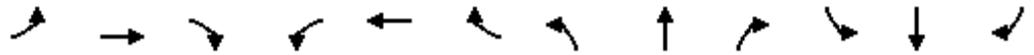
Lanes, Volumes, Timings  
3: Skokie Road & Old Glenview Road

11/22/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	14	31	42	11	95	5	473	65	98	531	6
Future Volume (vph)	5	14	31	42	11	95	5	473	65	98	531	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.897			0.866			0.982			0.998	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1563	0	1719	1598	0	1805	3401	0	1770	3499	0
Flt Permitted	0.685			0.579			0.440			0.395		
Satd. Flow (perm)	1302	1563	0	1048	1598	0	836	3401	0	736	3499	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			25			40			40	
Link Distance (ft)		253			390			574			113	
Travel Time (s)		5.8			10.6			9.8			1.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	7%	10%	5%	11%	2%	0%	4%	6%	2%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	48	0	44	112	0	5	566	0	103	565	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	14.0	29.0		14.0	29.0		14.0	53.0		14.0	53.0	
Total Split (%)	12.7%	26.4%		12.7%	26.4%		12.7%	48.2%		12.7%	48.2%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	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		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	18.9	11.7		23.5	19.0		74.0	65.9		79.5	75.1	
Actuated g/C Ratio	0.17	0.11		0.21	0.17		0.67	0.60		0.72	0.68	
v/c Ratio	0.02	0.29		0.16	0.41		0.01	0.28		0.17	0.24	
Control Delay	30.0	48.9		33.1	44.1		6.4	12.3		6.3	8.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	30.0	48.9		33.1	44.1		6.4	12.3		6.3	8.3	
LOS	C	D		C	D		A	B		A	A	
Approach Delay		47.1			41.0			12.3			8.0	
Approach LOS		D			D			B			A	
Queue Length 50th (ft)	3	32		25	69		1	96		19	68	
Queue Length 95th (ft)	12	66		50	127		5	161		46	147	
Internal Link Dist (ft)		173			310			494			33	
Turn Bay Length (ft)												
Base Capacity (vph)	314	326		287	337		689	2038		630	2389	

Lanes, Volumes, Timings  
 3: Skokie Road & Old Glenview Road

11/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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	0.02	0.15		0.15	0.33		0.01	0.28		0.16	0.24	

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	110
Offset:	96.8 (88%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.41
Intersection Signal Delay:	14.7
Intersection LOS:	B
Intersection Capacity Utilization	42.9%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 3: Skokie Road & Old Glenview Road

14 s	53 s	14 s	29 s
14 s	53 s	14 s	29 s

HCM 6th TWSC  
7: Old Glenview Road & Sunset Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	2	164	140	1	4	4
Future Vol, veh/h	2	164	140	1	4	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	86	86	86	86	86	86
Heavy Vehicles, %	50	3	0	0	0	0
Mvmt Flow	2	191	163	1	5	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	164	0	-	0	359
Stage 1	-	-	-	-	164
Stage 2	-	-	-	-	195
Critical Hdwy	4.6	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.65	-	-	-	3.5
Pot Cap-1 Maneuver	1169	-	-	-	694
Stage 1	-	-	-	-	870
Stage 2	-	-	-	-	889
Platoon blocked, %		-	-	-	1
Mov Cap-1 Maneuver	1169	-	-	-	692
Mov Cap-2 Maneuver	-	-	-	-	692
Stage 1	-	-	-	-	868
Stage 2	-	-	-	-	889

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1169	-	-	-	777
HCM Lane V/C Ratio	0.002	-	-	-	0.012
HCM Control Delay (s)	8.1	0	-	-	9.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕		↔	↕
Traffic Vol, veh/h	3	13	582	0	9	660
Future Vol, veh/h	3	13	582	0	9	660
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	14	633	0	10	717

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1012	317	0	0	633
Stage 1	633	-	-	-	-
Stage 2	379	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	*406	*854	-	-	*1278
Stage 1	*806	-	-	-	-
Stage 2	*662	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	*403	*854	-	-	*1278
Mov Cap-2 Maneuver	*403	-	-	-	-
Stage 1	*806	-	-	-	-
Stage 2	*657	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	706	* 1278
HCM Lane V/C Ratio	-	-	0.025	0.008
HCM Control Delay (s)	-	-	10.2	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: Skokie Road & Charles Place South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	0	7	575	0	0	663
Future Vol, veh/h	0	7	575	0	0	663
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	625	0	0	721

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	986	313	0	0	625	0
Stage 1	625	-	-	-	-	-
Stage 2	361	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*426	*854	-	-	*1278	-
Stage 1	*806	-	-	-	-	-
Stage 2	*676	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	*426	*854	-	-	*1278	-
Mov Cap-2 Maneuver	*426	-	-	-	-	-
Stage 1	*806	-	-	-	-	-
Stage 2	*676	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	854	* 1278
HCM Lane V/C Ratio	-	-	0.009	-
HCM Control Delay (s)	-	-	9.3	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Vol, veh/h	9	0	0	0	0	0	0	565	0	0	657	0
Future Vol, veh/h	9	0	0	0	0	0	0	565	0	0	657	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	0	0	0	0	0	0	614	0	0	714	0

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1021	1328	357	971	1328	307	-	0	0	614	0	0
Stage 1	714	714	-	614	614	-	-	-	-	-	-	-
Stage 2	307	614	-	357	714	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	*363	*224	639	*403	*224	*854	0	-	-	*1278	-	0
Stage 1	*388	*433	-	*805	*706	-	0	-	-	-	-	0
Stage 2	*805	*706	-	*633	*433	-	0	-	-	-	-	0
Platoon blocked, %	1	1		1	1	1				1		
Mov Cap-1 Maneuver	*363	*224	639	*403	*224	*854	-	-	-	*1278	-	-
Mov Cap-2 Maneuver	*363	*224	-	*403	*224	-	-	-	-	-	-	-
Stage 1	*388	*433	-	*805	*706	-	-	-	-	-	-	-
Stage 2	*805	*706	-	*633	*433	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.2	0	0	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBL	SBT
Capacity (veh/h)	-	-	363	-	* 1278
HCM Lane V/C Ratio	-	-	0.027	-	-
HCM Control Delay (s)	-	-	15.2	0	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 17: Skokie Road & Retail Plaza Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔			↕↕	↕↕	
Traffic Vol, veh/h	0	0	5	568	636	21
Future Vol, veh/h	0	0	5	568	636	21
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, %	2	2	2	2	2	2
Mvmt Flow	0	0	5	617	691	23

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1022	357	714	0	0
Stage 1	703	-	-	-	-
Stage 2	319	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-
Pot Cap-1 Maneuver	*398	639	882	-	-
Stage 1	*452	-	-	-	-
Stage 2	*806	-	-	-	-
Platoon blocked, %	1			-	-
Mov Cap-1 Maneuver	*395	639	882	-	-
Mov Cap-2 Maneuver	*395	-	-	-	-
Stage 1	*448	-	-	-	-
Stage 2	*806	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	882	-	-	-	-
HCM Lane V/C Ratio	0.006	-	-	-	-
HCM Control Delay (s)	9.1	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Capacity Analysis Summary Sheets  
Year 2028 No-Build Weekday Midday Peak Hour

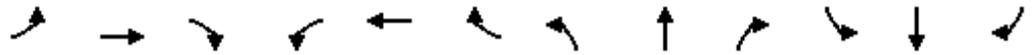
Lanes, Volumes, Timings  
3: Skokie Road & Old Glenview Road

11/22/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	3	26	67	7	45	16	484	88	74	571	8
Future Volume (vph)	15	3	26	67	7	45	16	484	88	74	571	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Fr <sub>t</sub>		0.865			0.871			0.977			0.998	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1644	0	1805	1561	0	1805	3401	0	1752	3499	0
Flt Permitted	0.720			0.479			0.413			0.372		
Satd. Flow (perm)	1368	1644	0	910	1561	0	785	3401	0	686	3499	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			25			40			40	
Link Distance (ft)		253			390			574			113	
Travel Time (s)		5.8			10.6			9.8			1.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	7%	0%	4%	2%	3%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	31	0	73	57	0	17	622	0	80	630	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	22.5		12.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	15.0	32.0		15.0	32.0		14.0	34.0		14.0	34.0	
Total Split (%)	15.8%	33.7%		15.8%	33.7%		14.7%	35.8%		14.7%	35.8%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	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		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	13.9	9.4		19.2	13.6		66.6	60.6		69.9	65.4	
Actuated g/C Ratio	0.15	0.10		0.20	0.14		0.70	0.64		0.74	0.69	
v/c Ratio	0.07	0.19		0.27	0.26		0.03	0.29		0.14	0.26	
Control Delay	26.1	41.4		30.1	38.1		6.3	11.8		6.2	9.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	26.1	41.4		30.1	38.1		6.3	11.8		6.2	9.4	
LOS	C	D		C	D		A	B		A	A	
Approach Delay		36.2			33.6			11.6			9.1	
Approach LOS		D			C			B			A	
Queue Length 50th (ft)	7	18		34	28		3	105		15	77	
Queue Length 95th (ft)	22	44		66	66		11	167		35	159	
Internal Link Dist (ft)		173			310			494			33	
Turn Bay Length (ft)												
Base Capacity (vph)	329	449		305	427		691	2169		627	2407	

Lanes, Volumes, Timings  
 3: Skokie Road & Old Glenview Road

11/22/2022

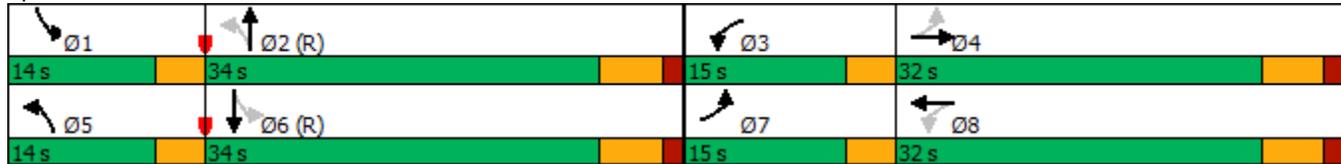


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.05	0.07		0.24	0.13		0.02	0.29		0.13	0.26	

Intersection Summary

Area Type:	Other
Cycle Length:	95
Actuated Cycle Length:	95
Offset:	56 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	70
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.29
Intersection Signal Delay:	13.1
Intersection LOS:	B
Intersection Capacity Utilization	44.0%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 3: Skokie Road & Old Glenview Road



HCM 6th TWSC  
7: Old Glenview Road & Sunset Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	8	148	101	3	3	9
Future Vol, veh/h	8	148	101	3	3	9
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	89	89	89	89	89	89
Heavy Vehicles, %	0	2	3	0	0	0
Mvmt Flow	9	166	113	3	3	10

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	116	0	-	0	299
Stage 1	-	-	-	-	115
Stage 2	-	-	-	-	184
Critical Hdwy	4.1	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	1485	-	-	-	749
Stage 1	-	-	-	-	915
Stage 2	-	-	-	-	894
Platoon blocked, %		-	-	-	1
Mov Cap-1 Maneuver	1485	-	-	-	744
Mov Cap-2 Maneuver	-	-	-	-	744
Stage 1	-	-	-	-	909
Stage 2	-	-	-	-	894

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1485	-	-	-	884
HCM Lane V/C Ratio	0.006	-	-	-	0.015
HCM Control Delay (s)	7.4	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 6th TWSC  
 8: Skokie Road & Charles Place North Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	2	0	514	0	10	673
Future Vol, veh/h	2	0	514	0	10	673
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	4	2	2	2
Mvmt Flow	2	0	559	0	11	732

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	947	280	0	0	559	0
Stage 1	559	-	-	-	-	-
Stage 2	388	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	419	*883	-	-	1316	-
Stage 1	829	-	-	-	-	-
Stage 2	655	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	416	*883	-	-	1316	-
Mov Cap-2 Maneuver	416	-	-	-	-	-
Stage 1	829	-	-	-	-	-
Stage 2	650	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.7	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	416	1316
HCM Lane V/C Ratio	-	-	0.005	0.008
HCM Control Delay (s)	-	-	13.7	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: Skokie Road & Charles Place South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	3	2	512	11	0	675
Future Vol, veh/h	3	2	512	11	0	675
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	4	2	2	2
Mvmt Flow	3	2	557	12	0	734

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	930	285	0	0	569
Stage 1	563	-	-	-	-
Stage 2	367	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	432	*883	-	-	1302
Stage 1	824	-	-	-	-
Stage 2	671	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	432	*883	-	-	1302
Mov Cap-2 Maneuver	432	-	-	-	-
Stage 1	824	-	-	-	-
Stage 2	671	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	543	1302
HCM Lane V/C Ratio	-	-	0.01	-
HCM Control Delay (s)	-	-	11.7	0
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Vol, veh/h	0	0	5	0	0	0	0	523	0	0	678	0
Future Vol, veh/h	0	0	5	0	0	0	0	523	0	0	678	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	4	2	2	2	2
Mvmt Flow	0	0	5	0	0	0	0	568	0	0	737	0

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1021	1305	369	937	1305	284	-	0	0	568	0	0
Stage 1	737	737	-	568	568	-	-	-	-	-	-	-
Stage 2	284	568	-	369	737	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	*328	219	628	390	219	*883	0	-	-	1304	-	0
Stage 1	*376	423	-	816	719	-	0	-	-	-	-	0
Stage 2	*832	719	-	623	423	-	0	-	-	-	-	0
Platoon blocked, %	1	1		1	1	1		-	-	1		-
Mov Cap-1 Maneuver	*328	219	628	386	219	*883	-	-	-	1304	-	-
Mov Cap-2 Maneuver	*328	219	-	386	219	-	-	-	-	-	-	-
Stage 1	*376	423	-	816	719	-	-	-	-	-	-	-
Stage 2	*832	719	-	618	423	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.8	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBL	SBT
Capacity (veh/h)	-	-	628	-	1304
HCM Lane V/C Ratio	-	-	0.009	-	-
HCM Control Delay (s)	-	-	10.8	0	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
17: Skokie Road & Retail Plaza Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔			↕↕	↕↕	
Traffic Vol, veh/h	2	5	15	529	648	34
Future Vol, veh/h	2	5	15	529	648	34
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, %	2	2	2	4	2	2
Mvmt Flow	2	5	16	575	704	37

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1043	371	741	0	0
Stage 1	723	-	-	-	-
Stage 2	320	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-
Pot Cap-1 Maneuver	*353	626	862	-	-
Stage 1	*441	-	-	-	-
Stage 2	*833	-	-	-	-
Platoon blocked, %	1			-	-
Mov Cap-1 Maneuver	*343	626	862	-	-
Mov Cap-2 Maneuver	*343	-	-	-	-
Stage 1	*429	-	-	-	-
Stage 2	*833	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.2	0.4	0
HCM LOS	B		

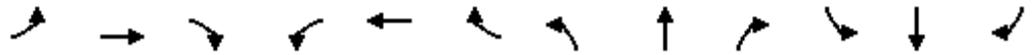
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	862	-	507	-	-
HCM Lane V/C Ratio	0.019	-	0.015	-	-
HCM Control Delay (s)	9.3	0.1	12.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Capacity Analysis Summary Sheets  
Year 2028 No-Build Weekday Evening Peak Hour

Lanes, Volumes, Timings  
3: Skokie Road & Old Glenview Road

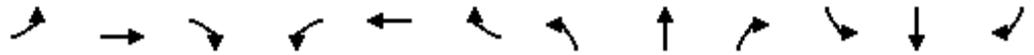
11/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	20	28	83	13	93	18	467	116	88	758	3
Future Volume (vph)	8	20	28	83	13	93	18	467	116	88	758	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Fr <sub>t</sub>		0.912			0.869			0.970			0.999	
Fl <sub>t</sub> Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1597	1733	0	1805	1635	0	1703	3474	0	1805	3571	0
Fl <sub>t</sub> Permitted	0.684			0.577			0.333			0.369		
Satd. Flow (perm)	1150	1733	0	1096	1635	0	597	3474	0	701	3571	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			25			40			40	
Link Distance (ft)		253			390			574			113	
Travel Time (s)		5.8			10.6			9.8			1.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	13%	0%	0%	0%	8%	0%	6%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	51	0	88	113	0	19	620	0	94	809	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	14.0	29.0		14.0	29.0		14.0	58.0		14.0	58.0	
Total Split (%)	12.2%	25.2%		12.2%	25.2%		12.2%	50.4%		12.2%	50.4%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	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		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	19.3	11.8		24.8	20.2		78.2	69.7		82.7	76.7	
Actuated g/C Ratio	0.17	0.10		0.22	0.18		0.68	0.61		0.72	0.67	
v/c Ratio	0.04	0.29		0.30	0.39		0.04	0.29		0.16	0.34	
Control Delay	32.0	51.0		37.5	45.2		6.5	12.6		6.5	10.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	32.0	51.0		37.5	45.2		6.5	12.6		6.5	10.4	
LOS	C	D		D	D		A	B		A	B	
Approach Delay		48.1			41.8			12.4			10.0	
Approach LOS		D			D			B			B	
Queue Length 50th (ft)	5	36		53	72		4	112		19	114	
Queue Length 95th (ft)	18	72		90	133		13	178		43	226	
Internal Link Dist (ft)		173			310			494			33	
Turn Bay Length (ft)												
Base Capacity (vph)	267	346		301	338		528	2106		607	2380	

Lanes, Volumes, Timings  
 3: Skokie Road & Old Glenview Road

11/22/2022

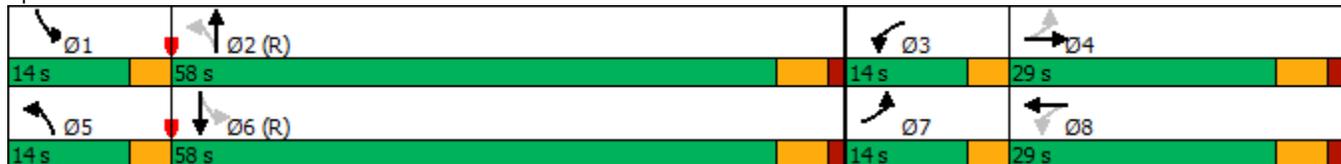


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.03	0.15		0.29	0.33		0.04	0.29		0.15	0.34	

Intersection Summary

Area Type:	Other
Cycle Length:	115
Actuated Cycle Length:	115
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.39
Intersection Signal Delay:	15.7
Intersection LOS:	B
Intersection Capacity Utilization	49.0%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 3: Skokie Road & Old Glenview Road



HCM 6th TWSC  
7: Old Glenview Road & Sunset Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	8	208	184	3	2	0
Future Vol, veh/h	8	208	184	3	2	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	239	211	3	2	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	214	0	-	0	470 213
Stage 1	-	-	-	-	213 -
Stage 2	-	-	-	-	257 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	1368	-	-	-	607 832
Stage 1	-	-	-	-	827 -
Stage 2	-	-	-	-	848 -
Platoon blocked, %		-	-	-	1
Mov Cap-1 Maneuver	1368	-	-	-	602 832
Mov Cap-2 Maneuver	-	-	-	-	602 -
Stage 1	-	-	-	-	820 -
Stage 2	-	-	-	-	848 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1368	-	-	-	602
HCM Lane V/C Ratio	0.007	-	-	-	0.004
HCM Control Delay (s)	7.6	0	-	-	11
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 6th TWSC  
 8: Skokie Road & Charles Place North Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	0	0	559	0	3	869
Future Vol, veh/h	0	0	559	0	3	869
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	608	0	3	945

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1087	304	0	0	608
Stage 1	608	-	-	-	-
Stage 2	479	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	344	*864	-	-	1291
Stage 1	814	-	-	-	-
Stage 2	589	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	343	*864	-	-	1291
Mov Cap-2 Maneuver	343	-	-	-	-
Stage 1	814	-	-	-	-
Stage 2	588	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1291
HCM Lane V/C Ratio	-	-	-	0.003
HCM Control Delay (s)	-	-	0	7.8
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: Skokie Road & Charles Place South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕		↔	↕
Traffic Vol, veh/h	0	1	558	0	4	865
Future Vol, veh/h	0	1	558	0	4	865
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	607	0	4	940

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1085	304	0	0	607	0
Stage 1	607	-	-	-	-	-
Stage 2	478	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	345	*864	-	-	1293	-
Stage 1	815	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	344	*864	-	-	1293	-
Mov Cap-2 Maneuver	344	-	-	-	-	-
Stage 1	815	-	-	-	-	-
Stage 2	588	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	864	1293
HCM Lane V/C Ratio	-	-	0.001	0.003
HCM Control Delay (s)	-	-	9.2	7.8
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Vol, veh/h	2	0	0	0	0	0	0	556	0	0	860	0
Future Vol, veh/h	2	0	0	0	0	0	0	556	0	0	860	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	0	0	0	0	0	604	0	0	935	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1237	1539	468	1072	1539	302	-	0	0	604	0	0
Stage 1	935	935	-	604	604	-	-	-	-	-	-	-
Stage 2	302	604	-	468	935	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	*223	*153	542	*315	*153	*864	0	-	-	*1293	-	0
Stage 1	*285	*342	-	*815	*714	-	0	-	-	-	-	0
Stage 2	*815	*714	-	*545	*342	-	0	-	-	-	-	0
Platoon blocked, %	1	1		1	1	1	-	-	-	1	-	-
Mov Cap-1 Maneuver	*223	*153	542	*315	*153	*864	-	-	-	*1293	-	-
Mov Cap-2 Maneuver	*223	*153	-	*315	*153	-	-	-	-	-	-	-
Stage 1	*285	*342	-	*815	*714	-	-	-	-	-	-	-
Stage 2	*815	*714	-	*545	*342	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	21.3	0	0	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBL	SBT
Capacity (veh/h)	-	-	223	-	* 1293
HCM Lane V/C Ratio	-	-	0.01	-	-
HCM Control Delay (s)	-	-	21.3	0	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
17: Skokie Road & Retail Plaza Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖			↗	↗	
Traffic Vol, veh/h	4	0	15	552	849	11
Future Vol, veh/h	4	0	15	552	849	11
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, %	2	2	2	2	2	2
Mvmt Flow	4	0	16	600	923	12

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1261	468	935	0	-	0
Stage 1	929	-	-	-	-	-
Stage 2	332	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*250	542	728	-	-	-
Stage 1	*345	-	-	-	-	-
Stage 2	*816	-	-	-	-	-
Platoon blocked, %	1			-	-	-
Mov Cap-1 Maneuver	*242	542	728	-	-	-
Mov Cap-2 Maneuver	*242	-	-	-	-	-
Stage 1	*334	-	-	-	-	-
Stage 2	*816	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.1	0.5	0
HCM LOS	C		

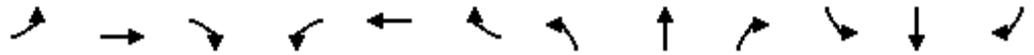
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	728	-	242	-	-
HCM Lane V/C Ratio	0.022	-	0.018	-	-
HCM Control Delay (s)	10.1	0.2	20.1	-	-
HCM Lane LOS	B	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Capacity Analysis Summary Sheets  
Year 2028 No-Build Saturday Midday Peak Hour

Lanes, Volumes, Timings  
3: Skokie Road & Old Glenview Road

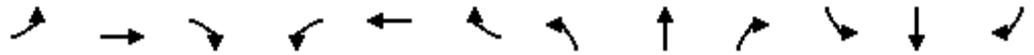
11/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	6	14	90	14	39	19	493	97	92	641	5
Future Volume (vph)	4	6	14	90	14	39	19	493	97	92	641	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Fr <sub>t</sub>		0.893			0.890			0.975			0.999	
Fl <sub>t</sub> Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1697	0	1805	1691	0	1805	3485	0	1805	3601	0
Fl <sub>t</sub> Permitted				0.533			0.393			0.375		
Satd. Flow (perm)	1900	1697	0	1013	1691	0	747	3485	0	712	3601	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			25			40			40	
Link Distance (ft)		253			390			574			113	
Travel Time (s)		5.8			10.6			9.8			1.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	20%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	21	0	95	56	0	20	621	0	97	680	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	15.0	32.0		15.0	32.0		14.0	34.0		14.0	34.0	
Total Split (%)	15.8%	33.7%		15.8%	33.7%		14.7%	35.8%		14.7%	35.8%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	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		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	10.7	8.9		17.1	13.4		68.9	62.8		72.4	67.7	
Actuated g/C Ratio	0.11	0.09		0.18	0.14		0.73	0.66		0.76	0.71	
v/c Ratio	0.02	0.13		0.35	0.23		0.03	0.27		0.16	0.27	
Control Delay	27.0	41.0		34.2	36.8		5.7	10.6		5.5	8.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	27.0	41.0		34.2	36.8		5.7	10.6		5.5	8.6	
LOS	C	D		C	D		A	B		A	A	
Approach Delay		38.8			35.2			10.4			8.2	
Approach LOS		D			D			B			A	
Queue Length 50th (ft)	2	12		53	32		2	73		10	50	
Queue Length 95th (ft)	9	34		82	65		12	164		40	169	
Internal Link Dist (ft)		173			310			494			33	
Turn Bay Length (ft)												
Base Capacity (vph)	318	464		291	462		685	2305		667	2565	

Lanes, Volumes, Timings  
 3: Skokie Road & Old Glenview Road

11/22/2022

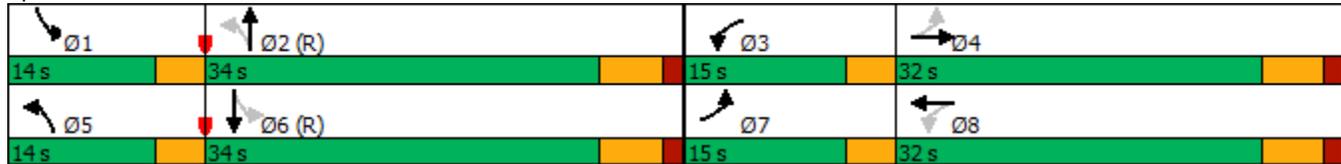


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.01	0.05		0.33	0.12		0.03	0.27		0.15	0.27	

Intersection Summary

Area Type:	Other
Cycle Length:	95
Actuated Cycle Length:	95
Offset:	56 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.35
Intersection Signal Delay:	12.1
Intersection LOS:	B
Intersection Capacity Utilization	46.8%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 3: Skokie Road & Old Glenview Road



HCM 6th TWSC  
7: Old Glenview Road & Sunset Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	7	187	139	5	1	4
Future Vol, veh/h	7	187	139	5	1	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	79	79	79	79	79	79
Heavy Vehicles, %	0	1	0	0	0	0
Mvmt Flow	9	237	176	6	1	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	182	0	-	0	434
Stage 1	-	-	-	-	179
Stage 2	-	-	-	-	255
Critical Hdwy	4.1	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	1405	-	-	-	628
Stage 1	-	-	-	-	857
Stage 2	-	-	-	-	837
Platoon blocked, %		-	-	-	1
Mov Cap-1 Maneuver	1405	-	-	-	624
Mov Cap-2 Maneuver	-	-	-	-	624
Stage 1	-	-	-	-	851
Stage 2	-	-	-	-	837

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1405	-	-	-	806
HCM Lane V/C Ratio	0.006	-	-	-	0.008
HCM Control Delay (s)	7.6	0	-	-	9.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 6th TWSC  
 8: Skokie Road & Charles Place North Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	0	4	524	2	6	749
Future Vol, veh/h	0	4	524	2	6	749
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	570	2	7	814

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	992	286	0	0	572
Stage 1	571	-	-	-	-
Stage 2	421	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	386	*883	-	-	1298
Stage 1	815	-	-	-	-
Stage 2	630	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	384	*883	-	-	1298
Mov Cap-2 Maneuver	384	-	-	-	-
Stage 1	815	-	-	-	-
Stage 2	627	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	883	1298
HCM Lane V/C Ratio	-	-	0.005	0.005
HCM Control Delay (s)	-	-	9.1	7.8
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: Skokie Road & Charles Place South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕		↔	↕
Traffic Vol, veh/h	1	0	526	4	1	748
Future Vol, veh/h	1	0	526	4	1	748
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	572	4	1	813

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	983	288	0	0	576	0
Stage 1	574	-	-	-	-	-
Stage 2	409	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	393	*883	-	-	1293	-
Stage 1	812	-	-	-	-	-
Stage 2	639	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	392	*883	-	-	1293	-
Mov Cap-2 Maneuver	392	-	-	-	-	-
Stage 1	812	-	-	-	-	-
Stage 2	638	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	392	1293
HCM Lane V/C Ratio	-	-	0.003	0.001
HCM Control Delay (s)	-	-	14.2	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	530	0	0	749	0
Future Vol, veh/h	0	0	0	0	0	0	0	530	0	0	749	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	576	0	0	814	0

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1102	1390	407	983	1390	288	-	0	0	576	0	0
Stage 1	814	814	-	576	576	-	-	-	-	-	-	-
Stage 2	288	576	-	407	814	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	*279	191	593	355	191	*883	0	-	-	1293	-	0
Stage 1	*338	390	-	805	711	-	0	-	-	-	-	0
Stage 2	*832	711	-	592	390	-	0	-	-	-	-	0
Platoon blocked, %	1	1		1	1	1		-	-	1		-
Mov Cap-1 Maneuver	*279	191	593	355	191	*883	-	-	-	1293	-	-
Mov Cap-2 Maneuver	*279	191	-	355	191	-	-	-	-	-	-	-
Stage 1	*338	390	-	805	711	-	-	-	-	-	-	-
Stage 2	*832	711	-	592	390	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-	1293
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	-	-	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
17: Skokie Road & Retail Plaza Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖			↗	↗	
Traffic Vol, veh/h	4	5	10	526	732	16
Future Vol, veh/h	4	5	10	526	732	16
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, %	2	2	2	2	2	2
Mvmt Flow	4	5	11	572	796	17

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1113	407	813	0	0
Stage 1	805	-	-	-	-
Stage 2	308	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-
Pot Cap-1 Maneuver	*311	593	810	-	-
Stage 1	*400	-	-	-	-
Stage 2	*833	-	-	-	-
Platoon blocked, %	1			-	-
Mov Cap-1 Maneuver	*305	593	810	-	-
Mov Cap-2 Maneuver	*305	-	-	-	-
Stage 1	*392	-	-	-	-
Stage 2	*833	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.8	0.3	0
HCM LOS	B		

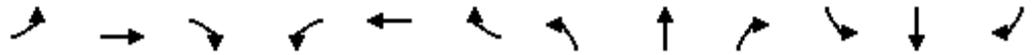
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	810	-	418	-	-
HCM Lane V/C Ratio	0.013	-	0.023	-	-
HCM Control Delay (s)	9.5	0.1	13.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Capacity Analysis Summary Sheets  
Year 2028 Total Projected Weekday Morning Peak Hour

Lanes, Volumes, Timings  
3: Skokie Road & Old Glenview Road

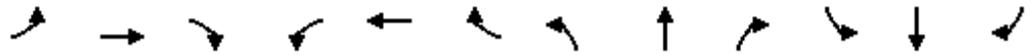
11/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	14	31	42	11	98	5	495	65	102	551	7
Future Volume (vph)	6	14	31	42	11	98	5	495	65	102	551	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Fr <sub>t</sub>		0.897			0.866			0.983			0.998	
Fl <sub>t</sub> Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1563	0	1719	1598	0	1805	3405	0	1770	3499	0
Fl <sub>t</sub> Permitted	0.683			0.580			0.431			0.382		
Satd. Flow (perm)	1298	1563	0	1050	1598	0	819	3405	0	712	3499	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			25			40			40	
Link Distance (ft)		253			390			574			113	
Travel Time (s)		5.8			10.6			9.8			1.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	7%	10%	5%	11%	2%	0%	4%	6%	2%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	48	0	44	115	0	5	589	0	107	587	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	14.0	29.0		14.0	29.0		14.0	53.0		14.0	53.0	
Total Split (%)	12.7%	26.4%		12.7%	26.4%		12.7%	48.2%		12.7%	48.2%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	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		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	19.0	11.8		23.6	19.1		73.9	65.7		79.4	75.0	
Actuated g/C Ratio	0.17	0.11		0.21	0.17		0.67	0.60		0.72	0.68	
v/c Ratio	0.02	0.29		0.16	0.42		0.01	0.29		0.18	0.25	
Control Delay	30.0	48.7		33.0	44.2		6.4	12.6		6.5	8.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	30.0	48.7		33.0	44.2		6.4	12.6		6.5	8.5	
LOS	C	D		C	D		A	B		A	A	
Approach Delay		46.6			41.1			12.5			8.1	
Approach LOS		D			D			B			A	
Queue Length 50th (ft)	3	32		25	71		1	101		20	71	
Queue Length 95th (ft)	13	66		50	128		6	170		48	155	
Internal Link Dist (ft)		173			310			494			33	
Turn Bay Length (ft)												
Base Capacity (vph)	315	326		288	337		678	2035		614	2386	

Lanes, Volumes, Timings  
 3: Skokie Road & Old Glenview Road

11/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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	0.02	0.15		0.15	0.34		0.01	0.29		0.17	0.25	

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	110
Offset:	96.8 (88%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.42
Intersection Signal Delay:	14.7
Intersection LOS:	B
Intersection Capacity Utilization	43.7%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 3: Skokie Road & Old Glenview Road

14 s	53 s	14 s	29 s
14 s	53 s	14 s	29 s

HCM 6th TWSC  
7: Old Glenview Road & Sunset Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	2	168	143	1	4	4
Future Vol, veh/h	2	168	143	1	4	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	86	86	86	86	86	86
Heavy Vehicles, %	50	3	0	0	0	0
Mvmt Flow	2	195	166	1	5	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	167	0	-	0	366
Stage 1	-	-	-	-	167
Stage 2	-	-	-	-	199
Critical Hdwy	4.6	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.65	-	-	-	3.5
Pot Cap-1 Maneuver	1166	-	-	-	687
Stage 1	-	-	-	-	867
Stage 2	-	-	-	-	884
Platoon blocked, %		-	-	-	1
Mov Cap-1 Maneuver	1166	-	-	-	685
Mov Cap-2 Maneuver	-	-	-	-	685
Stage 1	-	-	-	-	865
Stage 2	-	-	-	-	884

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1166	-	-	-	771
HCM Lane V/C Ratio	0.002	-	-	-	0.012
HCM Control Delay (s)	8.1	0	-	-	9.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 6th TWSC  
 8: Skokie Road & Charles Place North Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	3	13	602	0	9	682
Future Vol, veh/h	3	13	602	0	9	682
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	14	654	0	10	741

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1045	327	0	0	654
Stage 1	654	-	-	-	-
Stage 2	391	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	383	*854	-	-	1251
Stage 1	783	-	-	-	-
Stage 2	653	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	380	*854	-	-	1251
Mov Cap-2 Maneuver	380	-	-	-	-
Stage 1	783	-	-	-	-
Stage 2	648	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	692	1251
HCM Lane V/C Ratio	-	-	0.025	0.008
HCM Control Delay (s)	-	-	10.3	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: Skokie Road & Charles Place South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	0	7	595	0	0	685
Future Vol, veh/h	0	7	595	0	0	685
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	647	0	0	745

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1020	324	0	0	647
Stage 1	647	-	-	-	-
Stage 2	373	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	400	*854	-	-	1261
Stage 1	791	-	-	-	-
Stage 2	666	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	400	*854	-	-	1261
Mov Cap-2 Maneuver	400	-	-	-	-
Stage 1	791	-	-	-	-
Stage 2	666	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	854	1261
HCM Lane V/C Ratio	-	-	0.009	-
HCM Control Delay (s)	-	-	9.3	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Vol, veh/h	9	0	0	47	0	27	0	558	5	44	635	0
Future Vol, veh/h	9	0	0	47	0	27	0	558	5	44	635	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	0	0	51	0	29	0	607	5	48	690	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1090	1398	345	1051	1396	306	-	0	0	612	0	0
Stage 1	786	786	-	610	610	-	-	-	-	-	-	-
Stage 2	304	612	-	441	786	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	*286	188	651	310	189	*882	0	-	-	1247	-	0
Stage 1	*351	401	-	763	683	-	0	-	-	-	-	0
Stage 2	*832	682	-	565	401	-	0	-	-	-	-	0
Platoon blocked, %	1	1		1	1	1	-	-	-	1	-	-
Mov Cap-1 Maneuver	*268	181	651	301	182	*882	-	-	-	1247	-	-
Mov Cap-2 Maneuver	*268	181	-	301	182	-	-	-	-	-	-	-
Stage 1	*351	386	-	763	683	-	-	-	-	-	-	-
Stage 2	*804	682	-	543	386	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.9	16.4	0	0.5
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	268	396	1247	-
HCM Lane V/C Ratio	-	-	0.037	0.203	0.038	-
HCM Control Delay (s)	-	-	18.9	16.4	8	-
HCM Lane LOS	-	-	C	C	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.8	0.1	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
17: Skokie Road & Retail Plaza Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔			↕↕	↕↕	
Traffic Vol, veh/h	0	0	5	566	661	21
Future Vol, veh/h	0	0	5	566	661	21
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, %	2	2	2	2	2	2
Mvmt Flow	0	0	5	615	718	23

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1048	371	741	0	0
Stage 1	730	-	-	-	-
Stage 2	318	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-
Pot Cap-1 Maneuver	*380	626	862	-	-
Stage 1	*438	-	-	-	-
Stage 2	*806	-	-	-	-
Platoon blocked, %	1	-	-	-	-
Mov Cap-1 Maneuver	*377	626	862	-	-
Mov Cap-2 Maneuver	*377	-	-	-	-
Stage 1	*434	-	-	-	-
Stage 2	*806	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	862	-	-	-	-
HCM Lane V/C Ratio	0.006	-	-	-	-
HCM Control Delay (s)	9.2	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 19: Skokie Road & Existing South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	16	555	44	0	661
Future Vol, veh/h	0	16	555	44	0	661
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, %	2	2	2	2	2	2
Mvmt Flow	0	17	603	48	0	718

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	326	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	*936	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %		1	-	-	-
Mov Cap-1 Maneuver	-	*936	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	936
HCM Lane V/C Ratio	-	-	0.019
HCM Control Delay (s)	-	-	8.9
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.1

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Capacity Analysis Summary Sheets  
Year 2028 Total Projected Weekday Midday Peak Hour

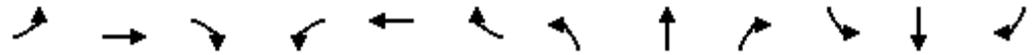
Lanes, Volumes, Timings  
3: Skokie Road & Old Glenview Road

11/22/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	3	26	67	7	48	16	510	88	78	597	10
Future Volume (vph)	17	3	26	67	7	48	16	510	88	78	597	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.865			0.870			0.978			0.997	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1644	0	1805	1571	0	1805	3404	0	1752	3496	0
Flt Permitted	0.718			0.474			0.401			0.358		
Satd. Flow (perm)	1364	1644	0	901	1571	0	762	3404	0	660	3496	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			25			40			40	
Link Distance (ft)		253			390			574			113	
Travel Time (s)		5.8			10.6			9.8			1.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	6%	0%	4%	2%	3%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	31	0	73	60	0	17	650	0	85	660	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	22.5		12.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	15.0	32.0		15.0	32.0		14.0	34.0		14.0	34.0	
Total Split (%)	15.8%	33.7%		15.8%	33.7%		14.7%	35.8%		14.7%	35.8%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	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		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	14.0	9.4		19.2	13.5		66.5	60.5		70.0	65.3	
Actuated g/C Ratio	0.15	0.10		0.20	0.14		0.70	0.64		0.74	0.69	
v/c Ratio	0.08	0.19		0.27	0.27		0.03	0.30		0.15	0.27	
Control Delay	26.4	41.4		30.1	38.4		6.4	12.0		6.3	9.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	26.4	41.4		30.1	38.4		6.4	12.0		6.3	9.6	
LOS	C	D		C	D		A	B		A	A	
Approach Delay		35.9			33.9			11.8			9.2	
Approach LOS		D			C			B			A	
Queue Length 50th (ft)	8	18		34	29		3	112		16	82	
Queue Length 95th (ft)	24	44		66	69		11	175		36	167	
Internal Link Dist (ft)		173			310			494			33	
Turn Bay Length (ft)												
Base Capacity (vph)	328	449		304	429		676	2166		610	2404	

Lanes, Volumes, Timings  
 3: Skokie Road & Old Glenview Road

11/22/2022

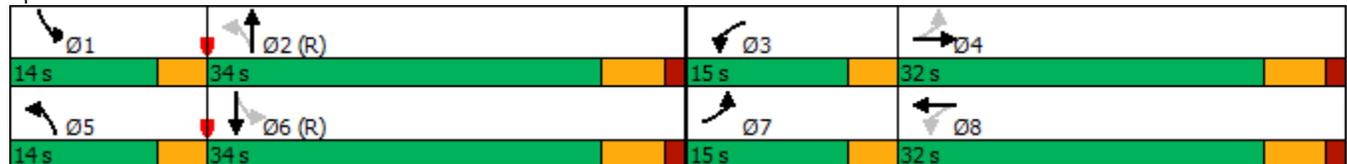


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.05	0.07		0.24	0.14		0.03	0.30		0.14	0.27	

Intersection Summary

Area Type:	Other
Cycle Length:	95
Actuated Cycle Length:	95
Offset:	56 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	70
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.30
Intersection Signal Delay:	13.2
Intersection LOS:	B
Intersection Capacity Utilization	44.9%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 3: Skokie Road & Old Glenview Road



HCM 6th TWSC  
7: Old Glenview Road & Sunset Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	8	152	104	3	3	9
Future Vol, veh/h	8	152	104	3	3	9
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	89	89	89	89	89	89
Heavy Vehicles, %	0	2	3	0	0	0
Mvmt Flow	9	171	117	3	3	10

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	120	0	-	0	308 119
Stage 1	-	-	-	-	119 -
Stage 2	-	-	-	-	189 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	1480	-	-	-	740 938
Stage 1	-	-	-	-	911 -
Stage 2	-	-	-	-	888 -
Platoon blocked, %		-	-	-	1
Mov Cap-1 Maneuver	1480	-	-	-	734 938
Mov Cap-2 Maneuver	-	-	-	-	734 -
Stage 1	-	-	-	-	905 -
Stage 2	-	-	-	-	888 -

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1480	-	-	-	877
HCM Lane V/C Ratio	0.006	-	-	-	0.015
HCM Control Delay (s)	7.4	0	-	-	9.2
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 6th TWSC  
 8: Skokie Road & Charles Place North Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	2	0	540	0	10	699
Future Vol, veh/h	2	0	540	0	10	699
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	4	2	2	2
Mvmt Flow	2	0	587	0	11	760

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	989	294	0	0	587	0
Stage 1	587	-	-	-	-	-
Stage 2	402	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	389	*883	-	-	1279	-
Stage 1	797	-	-	-	-	-
Stage 2	644	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	385	*883	-	-	1279	-
Mov Cap-2 Maneuver	385	-	-	-	-	-
Stage 1	797	-	-	-	-	-
Stage 2	638	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.4	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	385	1279
HCM Lane V/C Ratio	-	-	0.006	0.008
HCM Control Delay (s)	-	-	14.4	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: Skokie Road & Charles Place South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕		↔	↕
Traffic Vol, veh/h	3	2	538	11	0	701
Future Vol, veh/h	3	2	538	11	0	701
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	4	2	2	2
Mvmt Flow	3	2	585	12	0	762

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	972	299	0	0	597	0
Stage 1	591	-	-	-	-	-
Stage 2	381	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	401	*883	-	-	1266	-
Stage 1	793	-	-	-	-	-
Stage 2	660	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	401	*883	-	-	1266	-
Mov Cap-2 Maneuver	401	-	-	-	-	-
Stage 1	793	-	-	-	-	-
Stage 2	660	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	513	1266
HCM Lane V/C Ratio	-	-	0.011	-
HCM Control Delay (s)	-	-	12.1	0
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Vol, veh/h	0	0	5	60	0	34	0	515	6	54	650	0
Future Vol, veh/h	0	0	5	60	0	34	0	515	6	54	650	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	4	2	2	2	2
Mvmt Flow	0	0	5	65	0	37	0	560	7	59	707	0

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1105	1392	354	1036	1389	284	-	0	0	567	0	0
Stage 1	825	825	-	564	564	-	-	-	-	-	-	-
Stage 2	280	567	-	472	825	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	*277	190	642	319	191	*883	0	-	-	1306	-	0
Stage 1	*333	385	-	822	722	-	0	-	-	-	-	0
Stage 2	*832	720	-	542	385	-	0	-	-	-	-	0
Platoon blocked, %	1	1		1	1	1	-	-	-	1	-	-
Mov Cap-1 Maneuver	*256	181	642	305	182	*883	-	-	-	1306	-	-
Mov Cap-2 Maneuver	*256	181	-	305	182	-	-	-	-	-	-	-
Stage 1	*333	368	-	822	722	-	-	-	-	-	-	-
Stage 2	*797	720	-	513	368	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	17.1	0	0.6
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	642	400	1306	-
HCM Lane V/C Ratio	-	-	0.008	0.255	0.045	-
HCM Control Delay (s)	-	-	10.7	17.1	7.9	-
HCM Lane LOS	-	-	B	C	A	-
HCM 95th %tile Q(veh)	-	-	0	1	0.1	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 17: Skokie Road & Retail Plaza Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔			↕↕	↕↕	
Traffic Vol, veh/h	2	5	15	527	680	34
Future Vol, veh/h	2	5	15	527	680	34
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, %	2	2	2	4	2	2
Mvmt Flow	2	5	16	573	739	37

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1077	388	776	0	-	0
Stage 1	758	-	-	-	-	-
Stage 2	319	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*333	611	836	-	-	-
Stage 1	*423	-	-	-	-	-
Stage 2	*833	-	-	-	-	-
Platoon blocked, %	1			-	-	-
Mov Cap-1 Maneuver	*323	611	836	-	-	-
Mov Cap-2 Maneuver	*323	-	-	-	-	-
Stage 1	*411	-	-	-	-	-
Stage 2	*833	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.5	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	836	-	487	-	-
HCM Lane V/C Ratio	0.02	-	0.016	-	-
HCM Control Delay (s)	9.4	0.1	12.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 19: Skokie Road & Existing South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	21	522	54	0	685
Future Vol, veh/h	0	21	522	54	0	685
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, %	2	2	4	2	2	2
Mvmt Flow	0	23	567	59	0	745

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	313	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	*936	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %		1	-	-	-
Mov Cap-1 Maneuver	-	*936	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

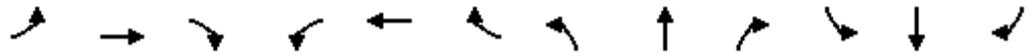
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	936
HCM Lane V/C Ratio	-	-	0.024
HCM Control Delay (s)	-	-	8.9
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.1

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Capacity Analysis Summary Sheets  
Year 2028 Total Projected Weekday Evening Peak Hour

Lanes, Volumes, Timings  
3: Skokie Road & Old Glenview Road

11/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕		↖	↗	
Traffic Volume (vph)	9	20	28	83	13	95	18	484	116	91	772	4
Future Volume (vph)	9	20	28	83	13	95	18	484	116	91	772	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Fr <sub>t</sub>		0.912			0.868			0.971			0.999	
Fl <sub>t</sub> Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1626	1733	0	1805	1633	0	1703	3477	0	1805	3571	0
Fl <sub>t</sub> Permitted	0.683			0.578			0.326			0.360		
Satd. Flow (perm)	1169	1733	0	1098	1633	0	584	3477	0	684	3571	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			25			40			40	
Link Distance (ft)		253			390			574			113	
Travel Time (s)		5.8			10.6			9.8			1.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	11%	0%	0%	0%	8%	0%	6%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	51	0	88	115	0	19	638	0	97	825	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	14.0	29.0		14.0	29.0		14.0	58.0		14.0	58.0	
Total Split (%)	12.2%	25.2%		12.2%	25.2%		12.2%	50.4%		12.2%	50.4%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	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		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	19.4	11.8		24.9	20.3		78.0	69.6		82.7	76.6	
Actuated g/C Ratio	0.17	0.10		0.22	0.18		0.68	0.61		0.72	0.67	
v/c Ratio	0.05	0.29		0.30	0.40		0.04	0.30		0.17	0.35	
Control Delay	31.9	50.9		37.4	45.3		6.6	12.7		6.6	10.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	31.9	50.9		37.4	45.3		6.6	12.7		6.6	10.6	
LOS	C	D		D	D		A	B		A	B	
Approach Delay		47.7			41.9			12.5			10.1	
Approach LOS		D			D			B			B	
Queue Length 50th (ft)	6	36		53	73		4	115		19	116	
Queue Length 95th (ft)	19	71		90	135		13	185		45	233	
Internal Link Dist (ft)		173			310			494			33	
Turn Bay Length (ft)												
Base Capacity (vph)	272	346		301	337		520	2104		596	2379	

Lanes, Volumes, Timings  
 3: Skokie Road & Old Glenview Road

11/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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	0.04	0.15		0.29	0.34		0.04	0.30		0.16	0.35	

Intersection Summary

Area Type:	Other
Cycle Length:	115
Actuated Cycle Length:	115
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.40
Intersection Signal Delay:	15.7
Intersection LOS:	B
Intersection Capacity Utilization	49.4%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 3: Skokie Road & Old Glenview Road

Ø1	Ø2 (R)	Ø3	Ø4
14 s	58 s	14 s	29 s
Ø5	Ø6 (R)	Ø7	Ø8
14 s	58 s	14 s	29 s

HCM 6th TWSC  
7: Old Glenview Road & Sunset Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	8	211	186	3	2	0
Future Vol, veh/h	8	211	186	3	2	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	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	243	214	3	2	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	217	0	-	0	477 216
Stage 1	-	-	-	-	216 -
Stage 2	-	-	-	-	261 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	1365	-	-	-	600 829
Stage 1	-	-	-	-	825 -
Stage 2	-	-	-	-	844 -
Platoon blocked, %		-	-	-	1
Mov Cap-1 Maneuver	1365	-	-	-	595 829
Mov Cap-2 Maneuver	-	-	-	-	595 -
Stage 1	-	-	-	-	818 -
Stage 2	-	-	-	-	844 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1365	-	-	-	595
HCM Lane V/C Ratio	0.007	-	-	-	0.004
HCM Control Delay (s)	7.7	0	-	-	11.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 6th TWSC  
 8: Skokie Road & Charles Place North Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	0	0	573	0	3	886
Future Vol, veh/h	0	0	573	0	3	886
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	623	0	3	963

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1111	312	0	0	623
Stage 1	623	-	-	-	-
Stage 2	488	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	329	*864	-	-	1271
Stage 1	796	-	-	-	-
Stage 2	583	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	328	*864	-	-	1271
Mov Cap-2 Maneuver	328	-	-	-	-
Stage 1	796	-	-	-	-
Stage 2	582	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1271
HCM Lane V/C Ratio	-	-	-	0.003
HCM Control Delay (s)	-	-	0	7.8
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: Skokie Road & Charles Place South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	0	1	572	0	4	882
Future Vol, veh/h	0	1	572	0	4	882
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	622	0	4	959

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1110	311	0	0	622	0
Stage 1	622	-	-	-	-	-
Stage 2	488	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	330	*864	-	-	1272	-
Stage 1	798	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	329	*864	-	-	1272	-
Mov Cap-2 Maneuver	329	-	-	-	-	-
Stage 1	798	-	-	-	-	-
Stage 2	581	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	864	1272
HCM Lane V/C Ratio	-	-	0.001	0.003
HCM Control Delay (s)	-	-	9.2	7.8
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	
Traffic Vol, veh/h	2	0	0	34	0	19	0	551	6	33	844	0
Future Vol, veh/h	2	0	0	34	0	19	0	551	6	33	844	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	0	37	0	21	0	599	7	36	917	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1289	1595	459	1134	1592	303	-	0	0	606	0	0
Stage 1	989	989	-	603	603	-	-	-	-	-	-	-
Stage 2	300	606	-	531	989	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	*200	139	549	*277	*140	*864	0	-	-	1294	-	0
Stage 1	*265	323	-	*815	*714	-	0	-	-	-	-	0
Stage 2	*815	714	-	*500	*323	-	0	-	-	-	-	0
Platoon blocked, %	1	1		1	1	1	-	-	-	1	-	-
Mov Cap-1 Maneuver	*191	135	549	*271	*136	*864	-	-	-	1294	-	-
Mov Cap-2 Maneuver	*191	135	-	*271	*136	-	-	-	-	-	-	-
Stage 1	*265	314	-	*815	*714	-	-	-	-	-	-	-
Stage 2	*795	714	-	*486	*314	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	24.1		16.9		0		0.3	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	191	359	1294	-
HCM Lane V/C Ratio	-	-	0.011	0.16	0.028	-
HCM Control Delay (s)	-	-	24.1	16.9	7.9	-
HCM Lane LOS	-	-	C	C	A	-
HCM 95th %tile Q(veh)	-	-	0	0.6	0.1	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
17: Skokie Road & Retail Plaza Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖			↗	↗	
Traffic Vol, veh/h	4	0	15	553	867	11
Future Vol, veh/h	4	0	15	553	867	11
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, %	2	2	2	2	2	2
Mvmt Flow	4	0	16	601	942	12

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1281	477	954	0	-	0
Stage 1	948	-	-	-	-	-
Stage 2	333	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*240	534	716	-	-	-
Stage 1	*337	-	-	-	-	-
Stage 2	*816	-	-	-	-	-
Platoon blocked, %	1			-	-	-
Mov Cap-1 Maneuver	*232	534	716	-	-	-
Mov Cap-2 Maneuver	*232	-	-	-	-	-
Stage 1	*326	-	-	-	-	-
Stage 2	*816	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.8	0.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	716	-	232	-	-
HCM Lane V/C Ratio	0.023	-	0.019	-	-
HCM Control Delay (s)	10.1	0.2	20.8	-	-
HCM Lane LOS	B	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 19: Skokie Road & Existing South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	12	557	31	0	867
Future Vol, veh/h	0	12	557	31	0	867
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, %	2	2	2	2	2	2
Mvmt Flow	0	13	605	34	0	942

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	320	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	*923	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %		1	-	-	-
Mov Cap-1 Maneuver	-	*923	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0
HCM LOS	A		

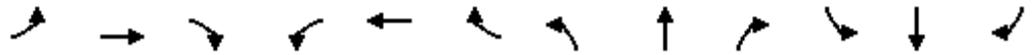
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	923
HCM Lane V/C Ratio	-	-	0.014
HCM Control Delay (s)	-	-	9
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Capacity Analysis Summary Sheets  
Year 2028 Total Projected Saturday Midday Peak Hour

Lanes, Volumes, Timings  
3: Skokie Road & Old Glenview Road

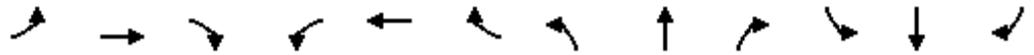
11/22/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	6	14	90	14	43	19	520	97	95	666	7
Future Volume (vph)	6	6	14	90	14	43	19	520	97	95	666	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Fr <sub>t</sub>		0.893			0.887			0.976			0.999	
Fl <sub>t</sub> Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1697	0	1805	1685	0	1805	3488	0	1805	3601	0
Fl <sub>t</sub> Permitted				0.533			0.382			0.361		
Satd. Flow (perm)	1900	1697	0	1013	1685	0	726	3488	0	686	3601	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			25			40			40	
Link Distance (ft)		253			390			574			113	
Travel Time (s)		5.8			10.6			9.8			1.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	14%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	21	0	95	60	0	20	649	0	100	708	0
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	15.0	32.0		15.0	32.0		14.0	34.0		14.0	34.0	
Total Split (%)	15.8%	33.7%		15.8%	33.7%		14.7%	35.8%		14.7%	35.8%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	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		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	10.8	8.9		17.1	13.5		68.8	62.7		72.4	67.6	
Actuated g/C Ratio	0.11	0.09		0.18	0.14		0.72	0.66		0.76	0.71	
v/c Ratio	0.03	0.13		0.35	0.25		0.03	0.28		0.17	0.28	
Control Delay	27.3	41.0		34.2	37.2		5.7	10.7		5.5	8.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	27.3	41.0		34.2	37.2		5.7	10.7		5.5	8.7	
LOS	C	D		C	D		A	B		A	A	
Approach Delay		38.0			35.3			10.6			8.3	
Approach LOS		D			D			B			A	
Queue Length 50th (ft)	4	12		53	34		2	78		10	54	
Queue Length 95th (ft)	12	34		82	68		12	172		41	176	
Internal Link Dist (ft)		173			310			494			33	
Turn Bay Length (ft)												
Base Capacity (vph)	318	464		292	461		670	2302		649	2563	

Lanes, Volumes, Timings  
 3: Skokie Road & Old Glenview Road

11/22/2022

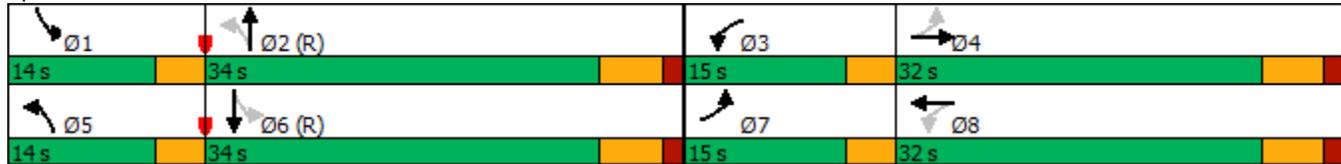


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.02	0.05		0.33	0.13		0.03	0.28		0.15	0.28	

Intersection Summary

Area Type:	Other
Cycle Length:	95
Actuated Cycle Length:	95
Offset:	56 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.35
Intersection Signal Delay:	12.2
Intersection LOS:	B
Intersection Capacity Utilization	47.7%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 3: Skokie Road & Old Glenview Road



HCM 6th TWSC  
7: Old Glenview Road & Sunset Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	7	190	143	5	1	4
Future Vol, veh/h	7	190	143	5	1	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	79	79	79	79	79	100
Heavy Vehicles, %	0	1	0	0	0	0
Mvmt Flow	9	241	181	6	1	4

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	187	0	-	0	443
Stage 1	-	-	-	-	184
Stage 2	-	-	-	-	259
Critical Hdwy	4.1	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	1399	-	-	-	619
Stage 1	-	-	-	-	852
Stage 2	-	-	-	-	833
Platoon blocked, %		-	-	-	1
Mov Cap-1 Maneuver	1399	-	-	-	615
Mov Cap-2 Maneuver	-	-	-	-	615
Stage 1	-	-	-	-	846
Stage 2	-	-	-	-	833

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1399	-	-	-	787
HCM Lane V/C Ratio	0.006	-	-	-	0.007
HCM Control Delay (s)	7.6	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 6th TWSC  
 8: Skokie Road & Charles Place North Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	0	4	549	2	6	776
Future Vol, veh/h	0	4	549	2	6	776
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	597	2	7	843

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1034	300	0	0	599
Stage 1	598	-	-	-	-
Stage 2	436	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	359	*883	-	-	1263
Stage 1	785	-	-	-	-
Stage 2	619	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	356	*883	-	-	1263
Mov Cap-2 Maneuver	356	-	-	-	-
Stage 1	785	-	-	-	-
Stage 2	615	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	883	1263
HCM Lane V/C Ratio	-	-	0.005	0.005
HCM Control Delay (s)	-	-	9.1	7.9
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 10: Skokie Road & Charles Place South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↕		↗	↕
Traffic Vol, veh/h	1	0	551	4	1	775
Future Vol, veh/h	1	0	551	4	1	775
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	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	599	4	1	842

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1024	302	0	0	603
Stage 1	601	-	-	-	-
Stage 2	423	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	365	*883	-	-	1258
Stage 1	782	-	-	-	-
Stage 2	629	-	-	-	-
Platoon blocked, %	1	1	-	-	1
Mov Cap-1 Maneuver	365	*883	-	-	1258
Mov Cap-2 Maneuver	365	-	-	-	-
Stage 1	782	-	-	-	-
Stage 2	628	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	365	1258
HCM Lane V/C Ratio	-	-	0.003	0.001
HCM Control Delay (s)	-	-	14.9	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↕	↕	↕
Traffic Vol, veh/h	0	0	0	58	0	33	0	522	7	55	721	0
Future Vol, veh/h	0	0	0	58	0	33	0	522	7	55	721	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	63	0	36	0	567	8	60	784	0

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1188	1479	392	1083	1475	288	-	0	0	575	0	0
Stage 1	904	904	-	571	571	-	-	-	-	-	-	-
Stage 2	284	575	-	512	904	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	*234	164	607	289	165	*883	0	-	-	1294	-	0
Stage 1	*298	354	-	812	716	-	0	-	-	-	-	0
Stage 2	*832	712	-	513	354	-	0	-	-	-	-	0
Platoon blocked, %	1	1		1	1	1		-	-	1		-
Mov Cap-1 Maneuver	*216	156	607	279	158	*883	-	-	-	1294	-	-
Mov Cap-2 Maneuver	*216	156	-	279	158	-	-	-	-	-	-	-
Stage 1	*298	338	-	812	716	-	-	-	-	-	-	-
Stage 2	*798	712	-	489	338	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	18.2	0	0.6
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	371	1294
HCM Lane V/C Ratio	-	-	-	0.267	0.046
HCM Control Delay (s)	-	-	0	18.2	7.9
HCM Lane LOS	-	-	A	C	A
HCM 95th %tile Q(veh)	-	-	-	1.1	0.1

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 17: Skokie Road & Retail Plaza Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖			↗	↗	
Traffic Vol, veh/h	4	5	10	525	762	16
Future Vol, veh/h	4	5	10	525	762	16
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, %	2	2	2	2	2	2
Mvmt Flow	4	5	11	571	828	17

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1145	423	845	0	0
Stage 1	837	-	-	-	-
Stage 2	308	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-
Pot Cap-1 Maneuver	*294	579	787	-	-
Stage 1	*385	-	-	-	-
Stage 2	*833	-	-	-	-
Platoon blocked, %	1			-	-
Mov Cap-1 Maneuver	*288	579	787	-	-
Mov Cap-2 Maneuver	*288	-	-	-	-
Stage 1	*377	-	-	-	-
Stage 2	*833	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.2	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	787	-	400	-	-
HCM Lane V/C Ratio	0.014	-	0.024	-	-
HCM Control Delay (s)	9.6	0.1	14.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
 19: Skokie Road & Existing South Access Drive

11/23/2022

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	20	516	54	0	767
Future Vol, veh/h	0	20	516	54	0	767
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, %	2	2	2	2	2	2
Mvmt Flow	0	22	561	59	0	834

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	310	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	*936	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %		1	-	-	-
Mov Cap-1 Maneuver	-	*936	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

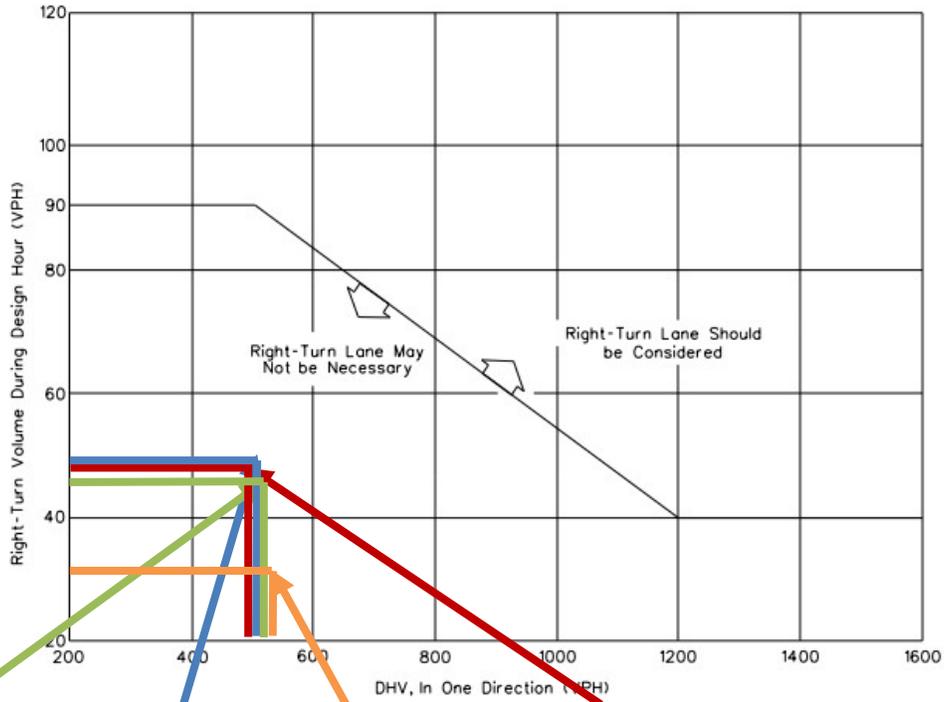
Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	936
HCM Lane V/C Ratio	-	-	0.023
HCM Control Delay (s)	-	-	8.9
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.1

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

# Turn Lane Warrant Diagram

## Skokie Road with Right-In/Right-Out Access Drive

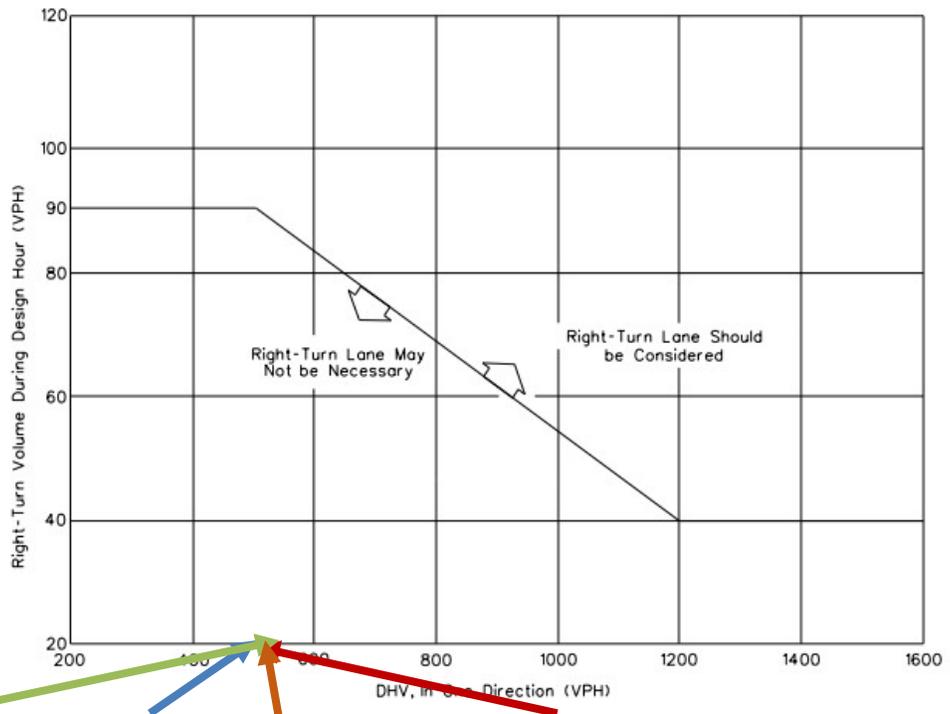


AM Peak Hour (555, 44) MD Peak Hour (522, 54) PM Peak Hour (557, 31) SAT Peak Hour (516, 54)

Note: For speeds less than 50 mph (80 km/hr), see Section 36-3.01(a).

### GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTION ON FOUR-LANE HIGHWAYS (Design Speed of 50 mph (80 km/hr) or Greater)

# Skokie Road with Full Movement Access Drive



AM Peak Hour (558, 5) MD Peak Hour (515, 6) MD Peak Hour (551, 6) SAT Peak Hour (522, 7)

Note: For speeds less than 50 mph (80 km/hr), see Section 36-3.01(a).

## GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTION ON FOUR-LANE HIGHWAYS (Design Speed of 50 mph (80 km/hr) or Greater)