VILLAGE OF DOWNERS GROVE
Report for the Village
2/18/2025

SUBJECT:	SUBMITTED BY:
1250-1254 Ogden Avenue - Special Use for a drive-through restaurant	Stan Popovich, AICP Director of Community Development

SYNOPSIS

The petitioner is requesting approval of a Special Use for a drive-through at 1250-1254 Ogden Avenue.

STRATEGIC PLAN ALIGNMENT

The goals for 2023-2025 include a *Strong and Diverse Local Economy*.

FISCAL IMPACT

N/A

RECOMMENDATION

Approval on the March 4, 2025 active agenda per the Planning and Zoning Commission's 8:0 positive recommendation. The Planning and Zoning Commission found that the proposal is an appropriate use in the district compatible with the Comprehensive Plan and meets all standards for approval for a Special Use found in Section 28.12.050 of the Municipal Code.

BACKGROUND

Property Information and Zoning Request

The petitioner is requesting approval of a Special Use to construct a drive-through facility for a multi-tenant commercial building at 1250-1254 Ogden Avenue. The property is located west of the intersection of Saratoga and Ogden Avenue and is zoned B3, General Services and Highway Business. The petitioner is proposing to construct a new 9,606 square foot multi-tenant retail building, with related parking lot improvements and landscaping.

The drive-through provides queueing for thirteen vehicles. The property is currently served by two existing full movement accesses onto Ogden Avenue, which will remain in place. Per the site plan, cross access to both neighboring properties will be provided.

Compliance with the Comprehensive Plan

The subject property is designated as Corridor Commercial in the Comprehensive Plan and specifically the site is designated as part of the Ogden Avenue Focus Area. The Ogden Avenue Focus Area key concepts include a blend of neighborhood-oriented commercial retail, offices, smaller regional retail and service uses, special attention to pedestrian circulation, cross-access between lots and overall enhanced appearance and the installation of perimeter and interior landscaping in all parking lots within the subarea.

The proposed development improves pedestrian connectivity by installing a new sidewalk along Ogden Avenue, provides enhanced landscaping and screening in order to provide a buffer to the residential uses to the north and continues to build on a more attractive image along Ogden Avenue, and allows for a potential cross-access agreement with the property immediately to the east and west.

Compliance with the Zoning Ordinance

The property is zoned B-3, General Services and Highway Business District. The proposed multi-tenant retail building with a drive-through use is listed as an allowable Special Use in this district. The bulk requirements of the proposed building in the B-3 zoning district is summarized in the Planning and Zoning Commission Staff Report.

Public Comment

Prior to the Planning and Zoning Commission meeting, staff received two inquiries regarding the proposed development, which were general in nature. One person provided public comment during the public hearing. Their comments were concerning traffic from the proposed development. The petitioner stated that the traffic study found that the traffic generated by the development can be accommodated by the existing area roadway system.

ATTACHMENTS

Aerial Map
Ordinance
Staff Report with attachments dated February 3, 2025
Draft Planning and Zoning Commission Minutes dated February 3, 2025


4221
4227
4235
4248
VENARD RD
1308
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OGDEN AVE
MIDDAUGH AVE
LINSCOTT AVE
1303
1313
1245
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1229
1227
1219
1205
4336
R2
B3
B3
B3
B3
B3
R6
OGDEN AVE
LINSCOTT AVE
N
0 40 80 160 240
Feet
1250 Ogden - Location Map
Subject Property
Project Location

ORDINANCE NO. _____

AN ORDINANCE AUTHORIZING A SPECIAL USE FOR
1250-1254 OGDEN AVENUE TO PERMIT A DRIVE-THROUGH

WHEREAS, the following described property, to wit:

THAT PART OF LOT 1 IN AMERICAN LEGION POST 80 SUBDIVISION PLAT OF PART OF KALBRIER AND CASSIDY'S SURVEY OF PART OF THE EAST HALF OF SECTION 6, TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED JANUARY 12, 1959, AS DOCUMENT 908714, LYING WESTERLY OF A LINE JOINING A POINT IN THE NORTH LINE OF SAID LOT, 183.92 FEET EAST OF THE NORTHWEST CORNER THEREOF AND A POINT IN THE SOUTHERLY LINE OF SAID LOT 205.69 FEET EASTERLY OF THE SOUTHWEST CORNER THEREOF, IN DUPAGE COUNTY, ILLINOIS.

Commonly known as: 1250 Ogden Avenue, Downers Grove, IL 60515
PIN: 09-06-403-005

(hereinafter referred to as the "Property") is presently zoned in the *"B-3, General Services and Highway Business District"* under the Comprehensive Zoning Ordinance of the Village of Downers Grove; and

WHEREAS, the owner of the Property has filed with the Planning and Zoning Commission, a written petition conforming to the requirements of the Zoning Ordinance, requesting that a Special Use per Section 28.12.050 of the Zoning Ordinance be granted to allow a drive-through.

WHEREAS, such petition was referred to the Planning and Zoning Commission of the Village of Downers Grove, and said Planning and Zoning Commission has given the required public notice, has conducted a public hearing for the petition on February 3, 2025 and has made its findings and recommendations, all in accordance with the statutes of the State of Illinois and the ordinances of the Village of Downers Grove; and,

WHEREAS, the Planning and Zoning Commission has recommended approval of the Special Use, subject to certain conditions; and,

WHEREAS, the Village Council finds that the evidence presented in support of said petition, as stated in the aforesaid findings and recommendations of the Planning and Zoning Commission, is such as to establish the following:

(1) that the proposed use is expressly authorized as a special use in the district in which it is to be located;

(2) that the proposed use will not, in the particular case, be detrimental to the health, safety, or general welfare of the community;

(3) that the proposed use will not be injurious to the use and enjoyment of other property in the immediate area for the purposes already permitted, nor substantially diminish or impair property values within the neighborhood;

(4) that the establishment of the special use will not impede the normal and orderly development

and improvement of adjacent property for uses permitted in the district.

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

SECTION 1. That Special Use of the Property is hereby granted to allow a drive-through.

SECTION 2. This approval is subject to the following conditions:

1. The proposed Special Use for a drive-through use shall substantially conform to the proposed New Multi-Tenant Building Plans for 1250-1254 Ogden Avenue drawings prepared by Bono Consulting Civil Engineering dated December 26, 2024, last revised January 21, 2025, architectural drawings prepared by CJ Architects dated December 27, 2024, last revised January 21, 2025, except as such plans may be modified to conform to Village codes, ordinances, and policies.

2. Prior to the issuance of a building permit, the Petitioner shall submit evidence of a cross access easement for the immediately adjacent properties to the west and east of the subject property.

3. That the brick building materials constructed at the base of the building will be carried through to the roofline in columns, pending initial tenant sign placement.

SECTION 3. The above conditions are hereby made part of the terms under which the Special Use is granted. Violation of any or all of such conditions shall be deemed a violation of the Village of Downers Grove Zoning Ordinance, the penalty for which may include, but is not limited to, a fine and/or revocation of the Special Use granted herein.

SECTION 4. It is the Petitioner's obligation to maintain compliance with all applicable Federal, State, County and Village laws, ordinances, regulations, and policies.

SECTION 5. That all ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

_____
Mayor

Passed:
Published:
Attest: _____
Village Clerk

1\mw\ord.25\SU-1250-1254-Ogden-25-PZC-0008

VILLAGE OF DOWNERS GROVE
REPORT FOR THE PLANNING AND ZONING COMMISSION
FEBRUARY 3, 2025 AGENDA

SUBJECT:	TYPE:	SUBMITTED BY:
24-PZC-0008 1250-1254 Ogden Avenue	Special Use for a drive-through	Jason Zawila, AICP Planning Manager

REQUEST
The petitioner is requesting approval of a Special Use for a drive-through at 1250 Ogden Avenue.

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

GENERAL INFORMATION

OWNER: 1254 Ogden Avenue, LLC
1254 Ogden Avenue
Downers Grove, IL 60515

PETITIONER: Vick Mehta
718 Ogden Avenue
Downers Grove, IL 60515

PROPERTY INFORMATION

EXISTING ZONING: B-3, General Services and Highway Business
EXISTING LAND USE: Commercial Building (Vacant)
PROPERTY SIZE: 41,505 square feet (0.95 acres)
PINS: 09-06-403-005

SURROUNDING ZONING AND LAND USES

	ZONING	FUTURE LAND USE
NORTH:	B-3, General Services and Highway Business	Multi-Family
SOUTH:	B-3, General Services and Highway Business	Corridor Commercial
EAST:	B-3, General Services and Highway Business	Corridor Commercial
WEST:	B-3, General Services and Highway Business	Corridor Commercial

ANALYSIS

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

1. Application/Petition for Public Hearing
2. Project Summary
3. ALTA/ACSM Land Title Survey
4. Architectural Plans
5. Engineering Plans
6. Landscape Plans
7. Traffic Impact Study

PROJECT DESCRIPTION

The petitioner is seeking a special use to construct a drive-through facility for a multi-tenant commercial building at 1250-1254 Ogden Avenue. The property is located west of the intersection of Saratoga and Ogden Avenue and is zoned B3, General Services and Highway Business. The proposed drive-through is listed as a permitted Special use pursuant to Section 28.5.010 of the Zoning Ordinance.

The subject property consists of one lot that contains an existing vacant building, parking lot and related improvements. The petitioner is proposing to demolish the existing building and all parking to construct a new 9,606 square foot multi-tenant retail building. The building facades will be composed of grey brick, glass, and metal canopies, with a varied roofline. The design is complimentary of other recent redevelopment projects along Ogden Avenue. The new commercial building includes four tenant spaces. The westernmost tenant space includes the drive-through and a building bump out to the west to serve as a pick-up window. The drive-through lane is designed to accommodate thirteen vehicles, which exceeds the minimum of eight vehicles as required by the Zoning Ordinance.

The petitioner is proposing landscaping around the perimeter of the site, in conformance with the Zoning Ordinance. Landscaping is provided along the north, west, east and southern property lines. Immediately northeast of the building, a new screened trash enclosure area is proposed. As required by the Zoning Ordinance, a pedestrian connection will be provided to Ogden Avenue. The existing two curb cuts onto Ogden Avenue will be maintained for the proposed development. Lastly, as a condition of approval, cross access will be provided to the properties immediately west and east of the subject property.

COMPLIANCE WITH THE COMPREHENSIVE PLAN

The subject property is designated as Corridor Commercial in the Comprehensive Plan and specifically the site is designated as part of the Ogden Avenue Key Focus Area.

The Ogden Avenue Focus Area key concepts include:

- A blend of neighborhood-oriented commercial retail, offices, smaller regional retail and service uses.
- Special attention to pedestrian circulation, cross-access between lots and overall enhanced appearance.
- Installation of perimeter and interior landscaping in all parking lots within the subarea.

The proposed development:

- Improves pedestrian connectivity by installing a new sidewalk along Ogden Avenue.
- Provides enhanced landscaping and screening in order to provide a buffer to the residential uses to the north and continues to build on a more attractive image along Ogden Avenue.
- Development would allow for a potential cross-access agreement with the property immediately to the east and west.

The proposed development meets the goals of the Comprehensive Plan.

COMPLIANCE WITH THE ZONING ORDINANCE

The property is zoned B-3, General Services and Highway Business District. The proposed multi-tenant retail building with a drive-through use is listed as an allowable Special Use in this district. The bulk requirements of the proposed building in the B-3 zoning district are summarized in the following table:

Proposed Commercial Building	**Required**	**Proposed**
Street Setback (South – Ogden)	75' from CL of Ogden	119'
Side Setback (West)	N/A	39.3’
Side Setback (East)	N/A	31.9’
Rear Setback (North)	N/A	65.1
FAR	0.75	0.23
Proposed Parking	**Required**	**Proposed**
Street Setback (South – Ogden)	50 ft. from CL of Ogden	53.5'
Side Setback (West)	N/A	29.7’
Side Setback (East)	N/A	23.9’
Rear Setback (North)	N/A	8.6’
Total Parking Required	31	31
Total ADA Required	2 (on-site)	2 (on-site)
Proposed Drive-through	**Required**	**Proposed**
Street Setback (South – Ogden)	50' from CL of Ogden	119.5’
Side Setback (West)	N/A	24’
Side Setback (East)	N/A	15’
Rear Setback (North)	N/A	34.6’
Stacking Spaces	8	13
Drive-Through Lane Width	10’	12’

Site Plan Elements	**Required**	**Proposed**
Pedestrian Connections (x1)	Yes	Provided
Trash Enclosure	Yes	Yes
Bike Parking	2	2
Open Space	10% of lot area	18.5%

Signage

New wall signs are proposed on the southern facade, in addition to a monument sign. Directional signage to assist with directing vehicles to the drive-through is also proposed. All exterior signage will be required to meet the Sign Ordinance requirements.

ENGINEERING/PUBLIC IMPROVEMENTS

The project will meet all provisions of the Stormwater and Floodplain Ordinance. he existing sidewalk on Ogden Avenue will be replaced in certain portions to address ADA accessibility. The development proposes to connect water and sanitary service to existing mains located in the Ogden Avenue right-of-way.

TRAFFIC AND PARKING

A traffic impact study for the proposed development was prepared by the petitioner. Ingress and egress to the site will be provided via two access points. The drive-through provides queueing for thirteen vehicles. The study notes that the subject property is served by two existing full movement accesses onto Ogden

Avenue which will remain in place. Per the site plan, cross access to both neighboring properties will be provided.

The study found that the traffic generated by the development can be accommodated by the existing area roadway system. The thirteen-vehicle drive-through stacking lane is adequate to accommodate drive-through peak demand without blocking the parking lot drive aisles. As noted in the above table, 31 parking spaces meets the number of spaces required by the Zoning Ordinance.

PUBLIC SAFETY REQUIREMENTS

The Fire Prevention Division has reviewed the proposed plans and determined that the development provides sufficient access for emergency vehicles. As shown in the truck-turning plan, the Village's largest emergency vehicle can maneuver through the site and access the new building. The building will also include a fire alarm system and sprinkler system that meet the Village's code requirements.

NEIGHBORHOOD COMMENT

Notice was provided to all property owners 250 feet or less from the property in addition to posting public hearing notice signs and publishing the legal notice in the *Daily Herald*. Staff received two inquiries regarding the proposed development, which were general in nature.

STANDARDS OF APPROVAL

The petitioner is requesting a Special Use approval to construct a new drive-through. The review and approval criteria is listed below.

The petitioner has submitted a narrative that attempts to address all the standards of approval. The Planning and Zoning Commission should consider the petitioner's documentation, the staff report, and the discussion at the Planning and Zoning Commission meeting in determining whether the standards for approval have been met.

Section 28.12.050.H Standards for Approval of Special Uses

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

> *(1) that the proposed use is expressly authorized as a special use in the district in which it is to be located;*
>
> *(2) that the proposed use will not, in the particular case, be detrimental to the health, safety, or general welfare of the community;.*
>
> *(3) that the proposed use will not be injurious to the use and enjoyment of other property in the immediate area for the purposes already permitted, nor substantially diminish or impair property values within the neighborhood;*
>
> *(4) that the establishment of the special use will not impede the normal and orderly development and improvement of adjacent property for uses permitted in the district.*

DRAFT MOTION

Staff will provide a recommendation at the February 3, 2025 meeting. Should the Planning and Zoning Commission find that the request meets the standards of approval for a Special Use, staff has prepared a

draft motion that the Planning and Zoning Commission may make for the recommended approval of 24-PZC-0008:

Based on the petitioner's submittal, the staff report, and the testimony presented, I find that the petitioner has met the standards of approval for a Special Use as required by the Village of Downers Grove Zoning Ordinance and is in the public interest and therefore, I move that the Planning and Zoning Commission recommend to the Village Council approval of 24-PZC-0008, subject to the following conditions:

1. The proposed Special Use for a drive-through use shall substantially conform to the attached proposed New Multi-Tenant Building Plans for 1250-1254 Ogden Avenue drawings prepared by Bono Consulting Civil Engineering dated December 26, 2024, last revised January 21, 2025, architectural drawings prepared by CJ Architects dated December 27, 2024, last revised January 21, 2025, except as such plans may be modified to conform to Village codes, ordinances, and policies.
2. Provision of cross access for the immediately adjacent properties to the west and east of the subject property.
3. That the brick building materials constructed at the base of the building will be carried through to the roofline in columns, pending initial tenant sign placement.

Staff Report Approved By:

_____
Stanley J. Popovich, AICP
Director of Community Development


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OGDEN AVE
LINSCOTT AVE
B3
B3
B3
R6
B3
N
0 40 80 160 240
Feet
1250 Ogden - Location Map
Subject Property
Project Location

cj architects
773.383.6556
cj-architects.com

To: Village of Downers Grove, IL
Community Development Dept. – Planning Division
850 Curtiss St. - Downers Grove, IL 60515
ATTN: Mr. Jason Zawila, Planning Manager

RE: 1250-54 Ogden Ave.
Site Plan and Special Use review petition

DATE: 14 January 2025

Mr. Zawila-

On behalf of the prospective Owner of the subject property, Mr. Vick Mehta, I am respectively submitting this narrative to Staff, to supplement and guide the petition for a Planning and Zoning Commission hearing.

The property in question is commonly known as 1250-54 Ogden Ave and is currently improved with a roughly 7,855 s.f. 1-story building, which currently serves as an Immediate Care Medical Facility. The entire parcel is mostly paved with a dilapidated asphalt surface lot comprising approximately 43 parking spaces. Minimal open space is provided in a grassy, non-landscaped area along the rear property line. Most exterior utilities and refuse containers are exposed. The building itself is outdated, and most components have reached the end of their serviceable life.

The proposal is to demolish the existing building and completely redevelop the site to bring a fresh infill into this part of the Ogden Avenue corridor. The plan is to build a new 1-story, 9,606 s.f. mixed use retail/commercial building. The front of the building will mostly front on and face Ogden Ave to the south and will thus contain 5 storefronts for a varied mix of potential tenants. The west side of the building will provide for a drive-thru window, with the intended tenant to be a fast-casual, quick-service restaurant with some outdoor seating. The east end tenant is also targeted at a similarly scaled restaurant space, less the drive-thru access, but also with some outdoor seating. The 3 interior spaces will be marketed to retail/office tenants.

For parking, 31 automobile parking spaces will be provided in the front and rear grade-level lot, with 2 spaces reserved for Accessible parking, as required. For the drive-thru, 4 car lengths are available from the pick-up window to the order box, with another 8 spaces of queueing space around the rear of the building for 8 vehicles, and one space in front of the pick-up for waiting and egress. Two bicycle spaces will be provided at the east end of the walkway in front of the building, which is accessible off of the right-of-way by a walkway of contrasting material across the lot, which also provides the main pedestrian access. A dedicated landlord room will be provided to contain house utility services and access to the roof hatch with a ladder. Tenant utilities will be lined along the rear wall.

cj architects
773.383.6556
cj-architects.com

Vehicular Access to the site will be provided by two existing curb cuts, both off of Ogden Ave, and one on each end of the site, to allow flow through of the parking and circulation. Part of the east curb cut is shared with he neighboring property and will be maintained, with some new/continued agreement for improvement, maintenance, and access/easement. Additionally, an existing cross-access agreement with the neighbor to the west will be maintained via curb cut in the NW corner of the new lot, to align with adjoining lot. Vehicles will access the site from either curb entrance, with the option to park at the front, or access the drive-thru or rear parking through split lanes at the east side of the building and around the rear in a counterclockwise pattern. Both lanes will terminate on the west side of the building where they will merge to allow the incoming traffic from the west curb cut, but also provide egress for these lanes, or recirculation back into the parking lot. Refuse containment is provided in the rear NE corner of the property, with truck access in from the east curb cut, to the enclosure, and following the common vehicular circulation around the building.

The proposed exterior facades seek to provide a sleek, modern backdrop for tenant signage, by way of adornment with a mixture of masonry elements and banding, synthetic stucco, large storefronts, and a sophisticated color palette. Storefronts and drive-thru window will be highlighted with metal canopies and fabric awnings above, and decorative lighting in between, with a lighted cornice at decorative parapets. The building will have a low-slope roof with interior drainage. Additionally, the site will be improved with a 5-slot monument sign and a 6ft white PVC refuse container storage enclosure. Future embellishment of outdoor dining areas will be included in tenant improvement plans as they are established.

This application seeks to obtain a Special Use for the drive-thru, with the remaining applicable ordinance requirements provided by right, as no other Variations or Special Uses are being requested. I hope this narrative adequately describes our project proposal and assists staff in review of the details. Should you have any further questions, comments, or concerns, please do not hesitate to contact me directly.

Respectfully Submitted-

Christopher A Jackson, Architect – NCARB, LEED AP
President and Principal - CJ Architects, Inc.

Special Uses

Form #PZC2

Review and Approval Criteria

Address of Project Site: _____

A detailed response to all of the standards shall be provided, specifying how each standard is or is not met.

Section 28.12.050.H. Approval Criteria (Special Uses)
No special use may be recommended for approval or approved unless the respective review or decision-making body determines that the proposed special use is consistent with and in substantial compliance with all Village Council policies and plans, including, but not limited to, the Comprehensive Plan and the Downtown Design Guidelines and that the applicant has presented evidence to support each of the following conclusions:

1. That the proposed use is expressly authorized as a Special Use in the district in which it is to be located.

   Drive-Thru facility is authorized as a Special Use in the B-3, General Services and Highway Business District, in which this property is located.

2. That the proposed use will not, in the particular case, be detrimental to the health, safety, or general welfare of the community.

   The proposed use, by evidence provided here within, will not be detrimental to the health, safety, or general welfare of the community. All efforts are being made to promote such, and new development will be constructed to comply with all local, state, and federal codes, regulations, ordinances, and laws.

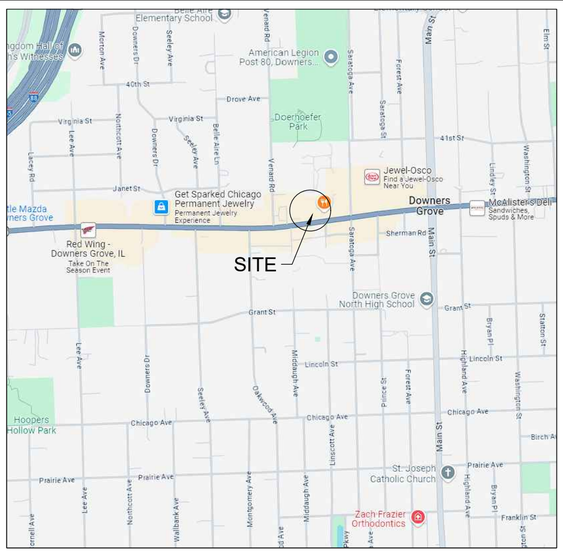
3. That the proposed use will not be injurious to the use and enjoyment of other property in the immediate area for the purposes already permitted, nor substantially diminish or impair property values within the neighborhood.

   The proposed use will not have any negative impact on the surrounding properties, but rather, seeks to enhance them by promoting symbiotic use by providing more services that will lead to patronage of surrounding uses.

4. That the establishment of the special use will not impede the normal and orderly development and improvement of adjacent property for uses permitted in the district.

   The Special Use is proposed to be completely self-contained within the property and will not impede development of adjacent property, but rather hopes to accelerate their improvement in the same.

ALTA/NSPS LAND TITLE & TOPOGRAPHIC SURVEY OF 1250-1254 OGDEN AVENUE DOWNERS GROVE, IL



VICINITY MAP
NOT TO SCALE

UTILITY ATLAS NOTES:

J.U.L.I.E. DESIGN STAGE REQUEST
DIG NUMBER X242700601
RECEIVED 09-26-2024.
CONTACTS PROVIDED BY J.U.L.I.E. & LISTED BELOW WERE CONTACTED BY V3 VIA FAX, REQUESTING UTILITY ATLAS INFORMATION

CONTACTS	RESPONSE
AT&T/DISTRIBUTION	RESPONDED WITH ATLAS
COM-ED	RESPONDED, WITH ATLAS
COMCAST	NO RESPONSE
CROWN CASTLE	RESPONDED WITH ATLAS
DOWNERS GROVE, VILLAGE OF	RESPONDED WITH ATLAS
MCI/VERIZON	RESPONDED WITH ATLAS
NICOR GAS	RESPONDED WITH ATLAS
USIC LOCATING SVCS	NO RESPONSE

LEGEND

- C CABLE TV PEDESTAL
- TRAFFIC LIGHT POLE
- TB TRAFFIC CONTROL BOX
- T TRAFFIC CONTROL VAULT
- TRAFFIC LIGHT
- T TELEPHONE PEDESTAL
- T TELEPHONE MANHOLE
- PAINTED TELEPHONE LINE
- F FIBER OPTIC CABLE LINE
- ANCHOR
- GUY POLE
- UTILITY POLE
- POWER POLE
- LIGHT STANDARD
- E ELECTRIC MANHOLE
- E ELECTRIC PEDESTAL
- TP ELECTRIC TRANSFORMER PAD
- E ELECTRIC METER
- HANDHOLE
- JB ELECTRICAL JUNCTION BOX
- EV ELECTRIC VAULT
- EO ELECTRIC SERVICE OUTLET BOX
- PAINTED ELECTRIC LINE
- TP TRANSFORMER PAD
- PAINTED GAS LINE
- GAS VALVE
- G GAS METER
- G GAS VALVE VAULT
- G GAS METER
- PIPELINE MARKER
- M MONITORING WELL
- P POST INDICATOR VALVE
- W WELL HEAD
- F FLAGPOLE
- MAILBOX
- SIGN
- POST
- PT PUBLIC PAY TELEPHONE
- PARKING METER
- WETLAND MARKER
- BASKETBALL HOOP
- AC AIR CONDITIONER PAD/UNIT
- 12" DECIDUOUS TREE W/ TRUNK SIZE
- 11" NON-DECIDUOUS TREE W/ TRUNK SIZE
- BUSH
- SB# SOIL BORING HOLE W/ NUMBER
- HEADWALL
- CURB INLET
- STORM INLET
- STORM MANHOLE
- FLARED END SECTION
- CLEANOUT
- SANITARY MANHOLE
- HOSE BIB
- B-BOX
- HYDRANT
- WATER VALVE
- WATER VALVE VAULT
- PAINTED WATER LINE
- IRRIGATION HEAD
- IR IRRIGATION CONTROL VALVE
- W WATER METER
- FOUND DISK IN CONCRETE
- FBD FOUND BRASS DISC
- FOUND ROW MARKER
- FIR FOUND IRON ROD
- FRS FOUND RAILROAD SPIKE
- FPK FOUND PK NAIL
- FMG FOUND MAG NAIL
- + FCC FOUND CUT CROSS
- FIP FOUND IRON PIPE
- FIB FOUND IRON BAR
- TP SET TRAVERSE POINT
- SPK SET PK NAIL
- SMG SET MAG NAIL
- SIP SET IRON PIPE
- 3 2 10 11 SECTION CORNER
- 7 QUARTER SECTION CORNER
- SBM SET CONCRETE MONUMENT WITH BRASS DISC
- SCM SET CONCRETE MONUMENT WITH IRON PIPE
- DSP DOWN SPOUT

- PROPERTY LINE
- EXISTING RIGHT-OF-WAY LINE
- PROPOSED RIGHT-OF-WAY LINE
- EXISTING LOT LINE
- PROPOSED LOT LINE
- EX. & PRO. CENTERLINE
- EXISTING EASEMENT LINE
- PROPOSED EASEMENT LINE
- EX. & PRO. BUILDING SETBACK LINE
- SECTION LINE
- EXISTING FENCELINE (CHAIN LINK)
- EXISTING FENCELINE (WOOD)
- EXISTING FENCELINE (WIRE)
- GUARDRAIL
- RAILROAD TRACKS
- CATV UNDERGROUND CABLE TV
- (CATV) UNDERGROUND CABLE TV(ATLAS INFO.)
- (FO) UNDERGROUND FIBER OPTIC CABLE(ATLAS)
- E UNDERGROUND ELECTRIC
- (E) UNDERGROUND ELECTRIC(ATLAS INFO.)
- T UNDERGROUND TELEPHONE
- (T) UNDERGROUND TELEPHONE(ATLAS INFO.)
- G GAS MAIN
- (G) GAS MAIN(ATLAS INFO.)
- W WATER MAIN
- (W) WATER MAIN (ATLAS INFO.)
- SANITARY SEWER
- (SAN) SANITARY SEWER(ATLAS INFO.)
- STORM SEWER
- (STM) STORM SEWER(ATLAS INFO.)
- EDGE OF WATER
- OH OVERHEAD WIRES
- CURB
- DEPRESSED CURB
- 700 EXISTING CONTOUR LINE
- ASPHALT PAVING OR WATER (LABELED)
- UNPAVED ROAD
- CONCRETE
- WETLANDS
- EXISTING BUILDING
- MARSH AREA

ABBREVIATIONS

- 782.62 / 782.12 EXISTING TOP OF CURB ELEVATION / EXISTING EDGE OF PAVEMENT ELEVATION
- + 782.62 EXISTING SPOT ELEVATION
- A.P. ACCESSIBLE PARKING
- F.F. FINISHED FLOOR
- T.F. TOP OF FOUNDATION
- CMP CORRUGATED METAL PIPE
- RCP REINFORCED CONCRETE PIPE
- VCP VITRIFIED CLAY PIPE
- FRM. FRAME
- BRK. BRICK
- TC TOP OF CURB
- DEP DEPRESSED CURB
- GUT GUTTER
- EP EDGE OF PAVEMENT
- F.L. FLOW LINE
- CONC. CONCRETE
- BIT. BITUMINOUS
- MH MANHOLE
- CW CONCRETE WALK
- TW TOP OF WALL
- BW BOTTOM OF WALL
- TP TOP OF PIPE
- BW BACK OF WALK
- FES FLARED END SECTION
- INV INVERT
- DIP DUCTILE IRON PIPE
- SD STORM DRAIN
- SAN SANITARY SEWER
- N NORTH
- S SOUTH
- E EAST
- W WEST
- CB CHORD BEARING
- A ARC LENGTH
- R RADIUS
- U.E. UTILITY EASEMENT
- P.U.E. PUBLIC UTILITY EASEMENT
- D.E. DRAINAGE EASEMENT
- M.U.E. MUNICIPAL UTILITY EASEMENT
- I.E. INGRESS & EGRESS EASEMENT
- PC POINT OF CURVATURE
- PCC POINT OF COMPOUND CURVATURE
- PRC POINT OF REVERSE CURVATURE
- PT POINT OF TANGENCY
- (REC) RECORD DATUM
- MEAS. MEASURED DATUM
- [CALC] CALCULATED DATUM
- <DEED> INFORMATION TAKEN FROM DEED
- ETBE EXCEPTION TO BLANKET EASEMENT

GENERAL NOTES

1. COMPARE THIS PLAT, LEGAL DESCRIPTION AND ALL SURVEY POINTS AND MONUMENTS BEFORE ANY CONSTRUCTION, AND IMMEDIATELY REPORT ANY DISCREPANCIES TO SURVEYOR.
2. DO NOT SCALE DIMENSIONS FROM THIS PLAT.
3. THE LOCATION OF THE PROPERTY LINES SHOWN ON THE FACE OF THIS PLAT ARE BASED UPON THE DESCRIPTION AND INFORMATION FURNISHED BY THE CLIENT, TOGETHER WITH THE TITLE COMMITMENT. THE PARCEL WHICH IS DEFINED MAY NOT REFLECT ACTUAL OWNERSHIP, BUT REFLECTS WHAT WAS SURVEYED. FOR OWNERSHIP, CONSULT YOUR TITLE COMPANY.
4. MANHOLES, INLETS AND OTHER UTILITY RIMS OR GRATES SHOWN HEREON ARE FROM FIELD LOCATION OF SUCH, AND ONLY REPRESENT SUCH UTILITY IMPROVEMENTS WHICH ARE VISIBLE FROM ABOVE GROUND AT TIME OF SURVEY, THROUGH A NORMAL SEARCH AND WALK THROUGH OF THE SITE. THE LABELING OF THESE MANHOLES (SANITARY, WATER, ETC.) IS BASED SOLELY ON THE "STAMPED" MARKINGS OF THE RIM. NO UNDERGROUND OBSERVATIONS HAVE BEEN MADE TO VERIFY THE ACTUAL USE OR EXISTENCE OF UNDERGROUND UTILITIES. UNDERGROUND UTILITY LINES SHOWN HEREON, IF ANY, ARE BASED ON FIELD LOCATED STRUCTURES IN COORDINATION WITH ATLAS INFORMATION PROVIDED BY UTILITY COMPANIES THROUGH J.U.L.I.E.'S DESIGN STAGE PROCESS. SEE "UTILITY ATLAS NOTES" HEREON FOR SPECIFICS.
5. NO DRAIN TILES, IF ANY EXIST, SHOWN HEREON.
6. THIS SURVEY MAY NOT REFLECT ALL UTILITIES OR IMPROVEMENTS IF SUCH ITEMS ARE HIDDEN BY LANDSCAPING OR ARE COVERED BY SUCH ITEMS AS DUMPSTERS, TRAILERS, CARS, DIRT, PAVING OR SNOW. AT THE TIME OF THIS SURVEY, SNOW DID NOT COVER THE SITE. LAWN SPRINKLER SYSTEMS, IF ANY, ARE NOT SHOWN ON THIS SURVEY.
7. OTHER THAN VISIBLE OBSERVATIONS NOTED HEREON, THIS SURVEY MAKES NO STATEMENT REGARDING THE ACTUAL PRESENCE OR ABSENCE OF ANY SERVICE.
8. CALL J.U.L.I.E. AT 1-800-892-0123 FOR FIELD LOCATION OF UNDERGROUND UTILITIES PRIOR TO ANY DIGGING OR CONSTRUCTION.
9. PUBLIC AND/OR PRIVATE RECORDS HAVE NOT BEEN SEARCHED TO PROVIDE ADDITIONAL INFORMATION. OVERHEAD WIRES AND POLES (IF ANY EXIST) ARE SHOWN HEREON, HOWEVER THEIR FUNCTION AND DIMENSIONS HAVE NOT BEEN SHOWN.
10. RESTRICTIONS THAT MAY BE FOUND IN LOCAL BUILDING AND/OR ZONING CODES HAVE NOT BEEN SHOWN. HEIGHTS AND BUILDING RESTRICTIONS (IF ANY) HAVE NOT BEEN SHOWN. ONLY THOSE SETBACK RESTRICTIONS SHOWN ON THE RECORDED SUBDIVISION PLAT OR IN THE TITLE COMMITMENT HAS BEEN SHOWN. THIS PROPERTY IS SUBJECT TO SETBACKS AS ESTABLISHED PURSUANT TO VILLAGE OF DOWNERS GROVE ZONING ORDINANCES AS AMENDED. IN REFERENCE TO TABLE A ITEM 6, THERE MAY BE A NEED FOR AN INTERPRETATION OF A RESTRICTION, THE SURVEYOR CANNOT MAKE A CERTIFICATION ON THE BASIS OF AN INTERPRETATION.
11. THIS PROPERTY IS ZONED B-3 PER VILLAGE OF DOWNERS GROVE ZONING MAP DATED JANUARY 1, 2024. SEE VILLAGE OF DOWNERS GROVE ZONING ORDINANCE FOR SPECIFICS.
12. THERE IS NO OBSERVABLE EVIDENCE OF CEMETERIES ON THE PROPERTY.
13. THERE IS NO OBSERVABLE EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.
14. THE SURVEYOR IS NOT AWARE OF ANY NEW OR PROPOSED RIGHT OF WAY CHANGES. UNLESS SHOWN OR NOTED HEREON, THERE WAS NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.
15. WETLANDS WERE NOT OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.
16. A CURRENT CHICAGO TITLE INSURANCE COMPANY TITLE COMMITMENT FILE NO. 24NW7153070WH DATED SEPTEMBER 9, 2024 WAS PROVIDED FOR SURVEYOR'S USE AT THE TIME OF PREPARATION OF THIS SURVEY. SEE "NOTES FROM SCHEDULE B PART II" SHOWN HEREON FOR DETAILS.

LEGAL DESCRIPTION

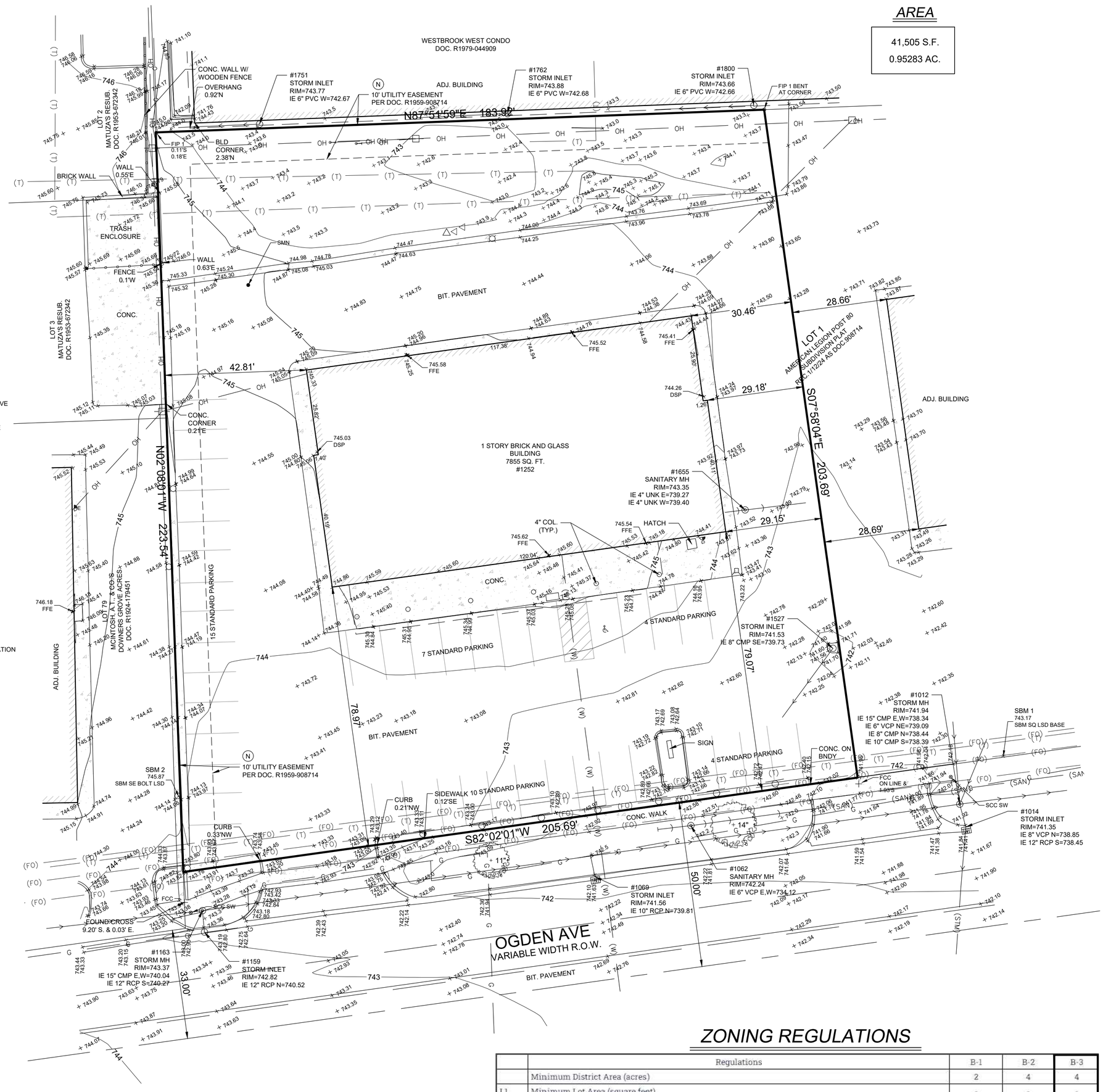
THAT PART OF LOT 1 IN AMERICAN LEGION POST 80 SUBDIVISION PLAT OF PART OF KALBRIER AND CASSIDY'S SURVEY OF PART OF THE EAST HALF OF SECTION 6, TOWNSHIP 38 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED JANUARY 12, 1959, AS DOCUMENT 908714, LYING WESTERLY OF A LINE JOINING A POINT IN THE NORTH LINE OF SAID LOT, 183.92 FEET EAST OF THE NORTHWEST CORNER THEREOF AND A POINT IN THE SOUTHERLY LINE OF SAID LOT 205.69 FEET EASTERLY OF THE SOUTHWEST CORNER THEREOF, IN DUPAGE COUNTY, ILLINOIS.

NOTES FROM SCHEDULE B, PART II

	EXCEPTIONS	RELATED NOTE
N	EASEMENT FOR PUBLIC UTILITIES; DOC. 908714	(a)

ALL OTHER SCHEDULE B ITEMS ARE NON-PLOTTABLE OR NOT A SURVEY MATTER

RELATED NOTES
a. its location is shown;



GRAPHIC SCALE

20' 0 10' 20' 40' 80'

1" = 20'

BASIS OF BEARINGS

THE BASIS OF BEARINGS IS THE STATE PLANE COORDINATE SYSTEM (SPCS) NAD 83 (2011) ZONE 1201 (ILLINOIS EAST) WITH PROJECT ORIGIN AT
LATITUDE: 41° 48' 30.82379" N
LONGITUDE: 88° 01' 01.31273" W
ELLIPSOIDAL HEIGHT: 632.224 SFT
GROUND SCALE FACTOR: 1.0000467276
ALL MEASUREMENTS ARE ON THE GROUND.

STATE PLANE MERIDIAN

PARKING STALLS

STANDARD PARKING STALLS= 40
ACCESSIBLE PARKING STALLS=01
TOTAL PARKING STALLS=41

FLOOD HAZARD NOTE

THIS PROPERTY IS IN AN AREA OF MINIMAL FLOOD HAZARD (ZONE X) AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP OF DOWNERS GROVE, DUPAGE COUNTY, ILLINOIS (COMMUNITY PANEL NO. 17043C0167J) EFFECTIVE DATE 08/01/2019.

AREA

41,505 S.F.
0.95283 AC.

ZONING REGULATIONS

	Regulations	B-1	B-2	B-3
	Minimum District Area (acres)	2	4	4
L1	Minimum Lot Area (square feet)	-	-	-
	Minimum Lot Area Per Dwelling Unit (square feet)	Same as R6		-
	Maximum Floor Area Ratio (FAR)	0.40	0.75	0.75
	Maximum Building Coverage (% of lot)	-	-	-
	Building Setbacks (feet)			
S1	Street (see also Sec. 3.040)	25	25	25
S2	Side (interior)	-[4]	-[4]	-[4]
S3	Rear (residential floors)	30	30	30
S3	Rear (nonresidential floors)	-[5]	-[5]	-[5]
	Min. Landscaped Open Space (% of lot)[10]	10	10	10
	Maximum Building Height (feet)	35	35	60

BENCHMARK

SOURCE:

STATION DESIGNATION: DK3214
ESTABLISHED BY: DUPAGE COUNTY
DATE: MARCH 2006

ELEVATION: 770.91 (MEASURED & HELD)
DATUM: NAVD88
DESCRIPTION: 3.5" BRASS GEODETIC MARKER DISC LOCATED ON SOUTH END OF EAST BRIDGE WALL BEING 110' NORTH OF CENTERLINE OF CAR DEALERSHIP ENTRANCE & 32' EAST OF CENTERLINE OF FINLEY ROAD NORTHBOUND.

SITE:

STATION DESIGNATION: SBM 1
ESTABLISHED BY: V3 COMPANIES
DATE:09/30/2024

ELEVATION: 743.17 (MEASURED)
DATUM: NAVD88
DESCRIPTION: SCRIBED SQUARE STAND OF LIGHT STANDARD, LOCATED NORTH OF SIDEWALK AND EAST OF EASTERLY ENTRANCE TO SUBJECT PROPERTY.

STATION DESIGNATION: SBM 2
ESTABLISHED BY: V3 COMPANIES
DATE:09/30/2024

ELEVATION: 745.87 (MEASURED)
DATUM: NAVD88
DESCRIPTION: SOUTHEAST BOLT ON LIGHT STANDARD LOCATED IN CONC. PARKING LOT DIVIDER BEING EASTERLY OF SOUTHEAST CORNER OF BUILDING ADJACENT TO THE WEST.

THE ELEVATIONS ABOVE WERE KNOWN TO BE ACCURATE AT THE TIME THEY WERE ESTABLISHED. V3 DOES NOT CERTIFY TO THE ACCURACY THEREAFTER, NOR ASSUMES RESPONSIBILITY FOR THE MIS-USE OR MIS-INTERPRETATION OF THE INFORMATION SHOWN HEREON.

IT IS ADVISED THAT ALL OF THE ABOVE ELEVATIONS BE CHECKED BETWEEN EACH OTHER AND VERIFY A MINIMUM OF 3 SURROUNDING UTILITY RIM ELEVATIONS AND ANY ADJACENT BUILDING FINISHED FLOOR OR TOP OF FOUNDATION ELEVATIONS SHOWN HEREON PRIOR TO USE OR COMMENCEMENT OF ANY CONSTRUCTION OR OTHER WORK.

PERSONS USING THIS INFORMATION ARE TO CONTACT V3 IMMEDIATELY WITH ANY DISCREPANCIES FOUND PRIOR TO THE START OF ANY WORK.

SURVEYOR CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF DUPAGE)

TO: INDVESTIA CAPITAL LLC
1254 OGDEN AVE LLC, AN ILLINOIS LIMITED LIABILITY COMPANY
CHICAGO TITLE INSURANCE 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, 6,(a), 7(a), 7(b), 8, 9, 11(a), 16, AND 20 OF TABLE A THEREOF.

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR BOUNDARY AND TOPOGRAPHIC SURVEYS.

THE FIELD WORK WAS COMPLETED ON SEPTEMBER 30, 2023.

DATED THIS 14TH DAY OF OCTOBER, A.D., 2024.

PROFESSIONAL LAND SURVEYOR EDWARD J. MURRAY 4037 WOODRIDGE, ILLINOIS STATE OF ILLINOIS

EDWARD J. MURRAY
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-4037
MY LICENSE EXPIRES ON NOVEMBER 30, 2024.
V3 COMPANIES OF ILLINOIS, LTD. PROFESSIONAL DESIGN FIRM NO. 184000902
THIS DESIGN FIRM NUMBER EXPIRES APRIL 30, 2025.
emurray@v3co.com

Engineers
Scientists
Surveyors
7325 Janes Avenue, Suite 100
Woodridge, IL 60517
630.724.9200 voice
630.724.0384 fax
v3co.com

PREPARED FOR:
INDVESTIA CAPITAL
2777 FINLEY RD
DOWNERS GROVE, IL 60515
630.850.0500

REVISIONS

NO.	DATE	DESCRIPTION
1.	10/22/24	TIES TO ADJACENT BUILDING

ALTA/NSPS LAND TITLE & TOPOGRAPHIC SURVEY
1250-1254 OGDEN AVENUE - DOWNERS GROVE, IL

Project No: 241167
Group No: VP03.1

DRAFTING COMPLETED: 10/10/2024 | DRAWN BY: ADS | PROJECT MANAGER: EJM
FIELD WORK COMPLETED: 09/30/2024 | CHECKED BY: EJM | SCALE: 1" = 20'

SHEET NO. 1 of 1

N:\2024\241167\Drawings\ACAD\SVY\ALTTOP241167_R1.dwg, 10/22/2024 7:11:14 AM, emurray

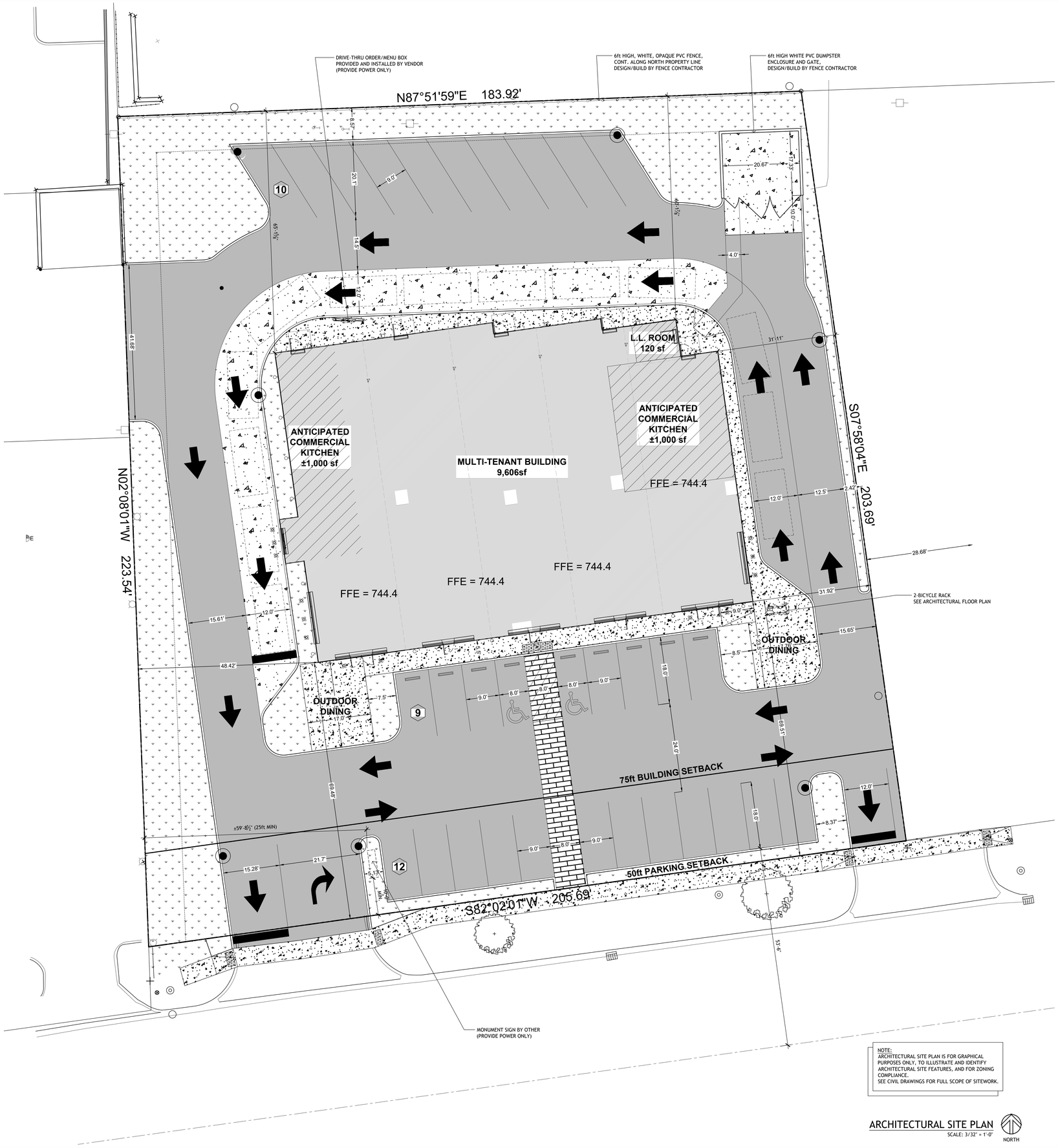
ZONING ANALYSIS

Project Name:	**New Retail Development**				
Address:	1250-1254 Ogden Ave.				
PIN(s):	09-06-403-005				
Zoning District:	B3 - General Services and Highway Business District.				
Existing Use:	Retail/Commercial Building and Parking				
Proposed Use:	Retail/Commercial Building and Parking				
Petition Type:					
Deviations:	Special Use - Drive through				
Requirement	Factor	Required	Proposed/Existing	Meets Req.?	Difference
District Area	Minimum	4 acres	N/A	N/A	N/A
Lot Area	Minimum	Not Required	41,505 sq. ft.	N/A	N/A
Building Coverage	Maximum	Not Restricted by ordinance	N/A	N/A	N/A
Ogden Ave. (℄ row)	Minimum	75' buildings, 50' canopies/pkng	119', 53'	YES	
Rear Yard	Minimum	Not Required	N/A	YES	
Int. Side Yard		Not Required	N/A	N/A	N/A
Height	Maximum	60'	24ft	YES	
Open Space	Minimum	10% of lot (4,150.5 sq. ft.)	18.5% (7,678 sq. ft.)	YES	
FAR	Maximum	0.75 (31,128.75)	0.231 (9,606 sq. ft.)	YES	
Parking	Minimum	Mixed use = 4 per 1,000sf (30)	31	YES	
	Minimum	BICYCLE: 2	2	YES	
Donations*		Not Required	N/A	N/A	N/A

Remarks:
N/A

VILLAGE OF DOWNERS GROVE CODES:

- Current Downers Grove Zoning Ordinance
- Current Downers Grove Stormwater and Flood Plain Ordinance
- 2021 International Building Code with D.G. amendments
- 2020 National Electric Code with D.G. amendments
- Current State of Illinois Plumbing Code with D.G. amendments
- 2021 International Mechanical Code with D.G. amendments
- 2021 International Fuel Gas Code with D.G. amendments
- 2021 International Energy Conservation Code with D.G. amendments & State of Illinois amendments
- 2021 International Property Maintenance Code with D.G. amendments
- 2021 International Fire Code with D.G. amendments
- 2015 Life Safety Code - NFPA 101
- Current State of Illinois Accessibility Code



NOTE:
ARCHITECTURAL SITE PLAN IS FOR GRAPHICAL PURPOSES ONLY, TO ILLUSTRATE AND IDENTIFY ARCHITECTURAL SITE FEATURES, AND FOR ZONING COMPLIANCE.
SEE CIVIL DRAWINGS FOR FULL SCOPE OF SITEWORK.

ARCHITECTURAL SITE PLAN
SCALE: 3/32" = 1'-0"

NORTH

SEAL:

CHRISTOPHER JACKSON
001.020482
EXP: 11/30/2026
STATE OF ILLINOIS
1/21/25

SUBMITTAL HISTORY:	REV:
• DEC. 27, 2024 PZC SUBMITTAL 1	
• JAN. 21, 2024 PZC SUBMITTAL 2	

cj architects, inc.
Darien, IL
773.383.6556
DESIGN FIRM PROF. REG.#: 184.005807

CONSULTANT:

NEW MULTI-TENANT BUILDING
LANDLORD WORK - SITE/SHELL
1250-1254 OGDEN AVE.
DOWNERS GROVE, IL 60561

PROJECT CODE: IVC-24.04

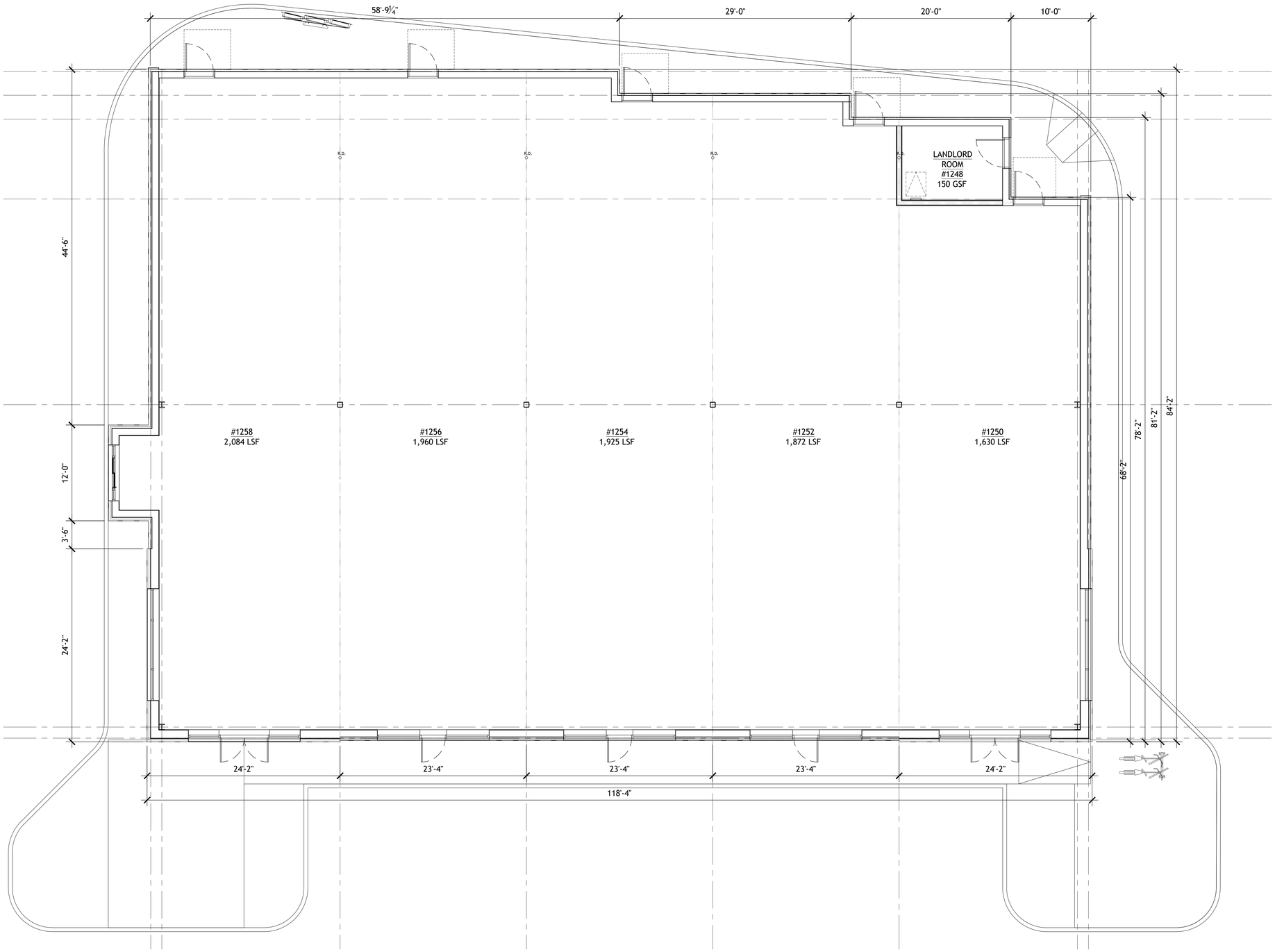
SHEET NAME

ARCHITECTURAL SITE PLAN

PZC SUBMITTAL ONLY

SA-1.1

1.21.2025



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

GRAPHIC SCALE: 3/16" = 1'-0"
0 2 4 8

NORTH

SEAL:
GREGORY D. JACKSON
001.020482
EXP: 11/30/2026
STATE OF ILLINOIS
1/21/25

SUBMITTAL HISTORY:	REV:
• DEC. 27, 2024 PZC SUBMITTAL 1	
• JAN. 21, 2024 PZC SUBMITTAL 2	

cj architects, inc.
Darien, IL
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CONSULTANT:

NEW MULTI-TENANT BUILDING
LANDLORD WORK - SITE/SHELL
1250-1254 OGDEN AVE.
DOWNERS GROVE, IL 60561
PROJECT CODE: IVC.24.04

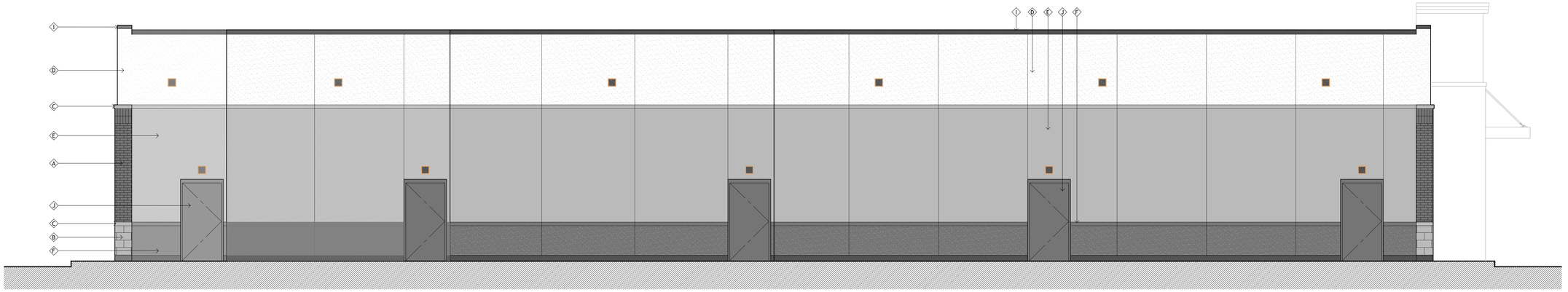
SHEET NAME

FLOOR PLAN

PZC SUBMITTAL ONLY

A-1.1

1.21.2025

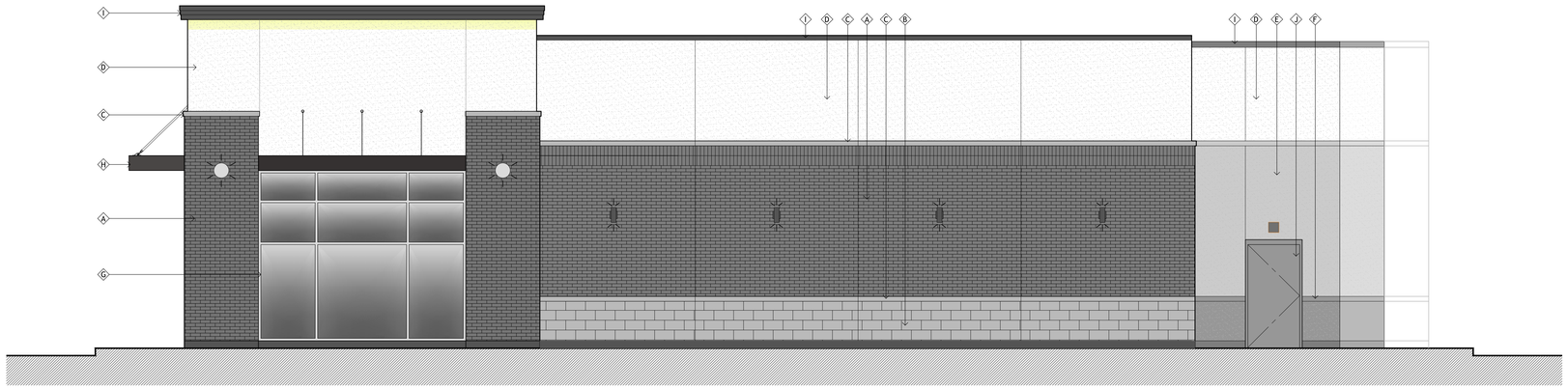


PROPOSED ELEVATION - REAR (NORTH-FACING) 4

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

EXTERIOR MATERIAL AND FINISH SCHEDULE:				
MARK	MATERIAL	MANUF	PRODUCT	COLOR
(A)	ADHERED BRICK VENEER	CULTURED STONE	TENLEY BRICK	NORI
(B)	ADHERED MASONRY VENEER	CULTURED STONE	CAST-FIT	CARBON
(C)	ADHERED STONE WATERTABLE/SILL	CULTURED STONE	CAST-FIT	CARBON
(D)	SYNTHETIC STUCCO (E.I.F.S.)	DRYVIT BY TREMCO	LYMESTONE	628 WHITE HAZE
(E)	SYNTHETIC STUCCO (E.I.F.S.)	DRYVIT BY TREMCO	SANDPEBBLE FINE	618 ANTIQUE GRAY
(F)	SYNTHETIC STUCCO (E.I.F.S.)	DRYVIT BY TREMCO	SANDPEBBLE FINE	152 ANTHRACITE COAL
(G)	ALUMINUM STOREFRONT	*(OPEN SPEC)*	SEE PLANS/ELEVS	CLEAR ANODIZED
(H)	STEEL CANOPY	*(OPEN SPEC)*	SEE PLANS/ELEVS	BLACK
(I)	STEEL COPING CAP	*(OPEN SPEC)*	SEE PLANS/ELEVS	BLACK
(J)	STEEL SERVICE DOOR	*(OPEN SPEC)*	SEE PLANS/ELEVS	GRAY
(K)	ALUMINUM DRIVE-THRU WINDOW	READY ACCESS	275 W/ AIR CURTAIN	CLEAR ANODIZED
(L)	DRIVE-THRU HAND-OFF SHELF	*(OPEN SPEC)*	SEE PLANS/ELEVS	STAINLESS STEEL
(M)	CONDUCTOR HEAD & DOWNSPOUT	*(OPEN SPEC)*	SEE PLANS/ELEVS	BLACK

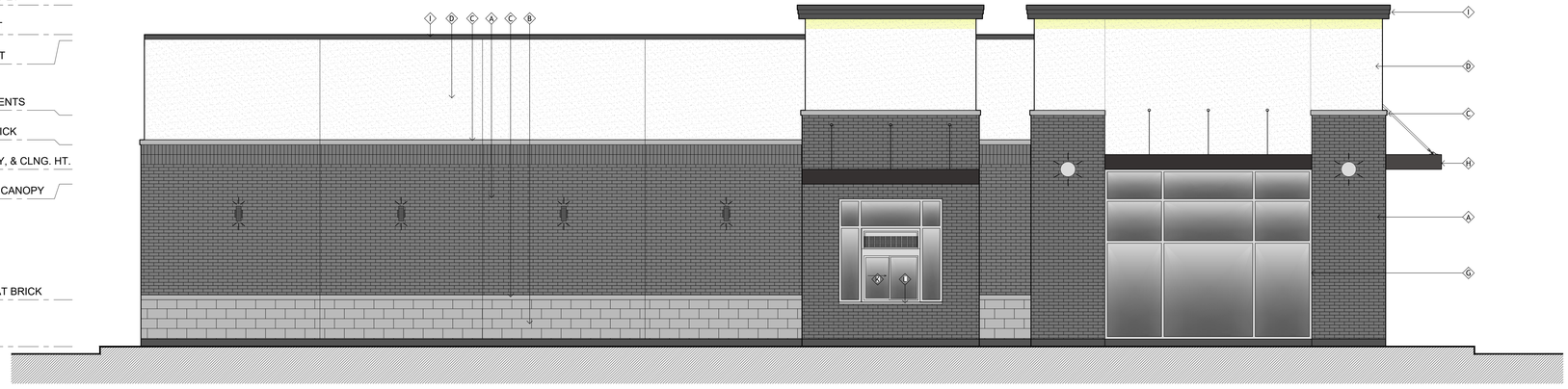
NOTE:
ALL SIGNAGE TO BE PROVIDED BY VENDOR AND PERMITTED SEPARATELY - SHOWN HERE ONLY FOR REFERENCE



PROPOSED ELEVATION - EAST SIDE 3

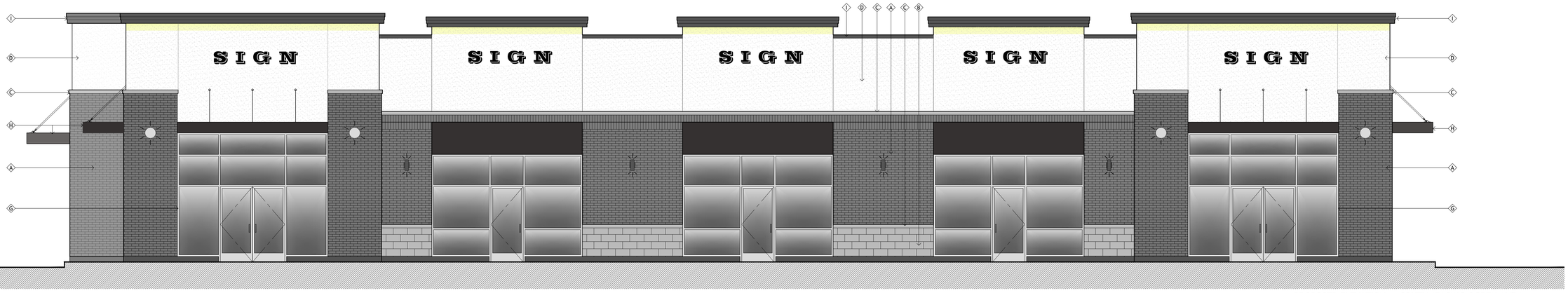
SCALE: 1/4" = 1'-0"

TOP OF ACCENT PARAPET
23'-1 1/2"
TOP OF MAIN PARAPET
21'-1 1/2"
TOP OF REAR PARAPET
20'-9"
TOP OF BRICK AT ACCENTS
15'-8"
TOP OF STANDARD BRICK
13'-8"
STOREFRONT, CANOPY, & CLNG. HT.
12'-0"
BOTT. OF DRIVE-THRU CANOPY
11'-0"
TOP OF LARGE-FORMAT BRICK
3'-2"
TOP OF SLAB
0'-0"



PROPOSED ELEVATION - WEST SIDE 2

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



PROPOSED ELEVATION - SOUTH (FACING OGDEN AVE.) 1

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

SEAL:

SUBMITTAL HISTORY:	REV:
• DEC. 27, 2024 PZC SUBMITTAL 1	
• JAN. 21, 2024 PZC SUBMITTAL 2	

cj architects, inc.
Darien, IL
773.383.6556
DESIGN FIRM PROF. REG.#: 184.005807

CONSULTANT:

NEW MULTI-TENANT BUILDING
LANDLORD WORK - SITE/SHELL
1250-1254 OGDEN AVE.
DOWNERS GROVE, IL 60561

PROJECT CODE: IVC-24.04

SHEET NAME

EXTERIOR ELEVATIONS

PZC SUBMITTAL ONLY

A-2.1

1.21.2025

1250-54 OGDEN AVE. - PROPOSED MULTI-TENANT RETAIL DEVELOPMENT - EXTERIOR MATERIALS

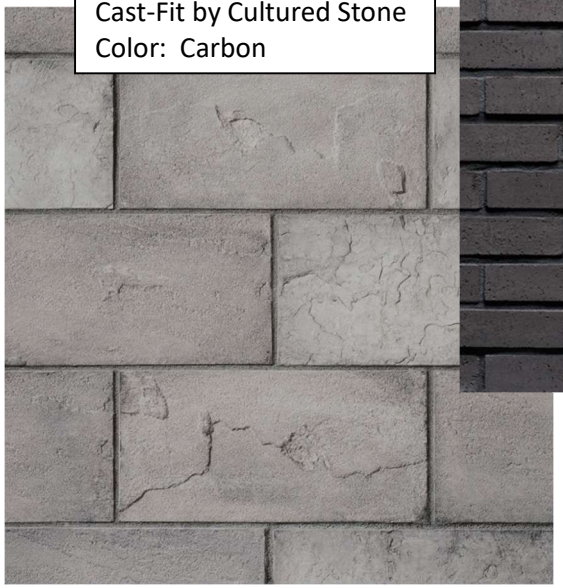
VIEW FROM OGDEN AVE.

1250-54 OGDEN AVE. - PROPOSED MULTI-TENANT RETAIL DEVELOPMENT - EXTERIOR MATERIALS

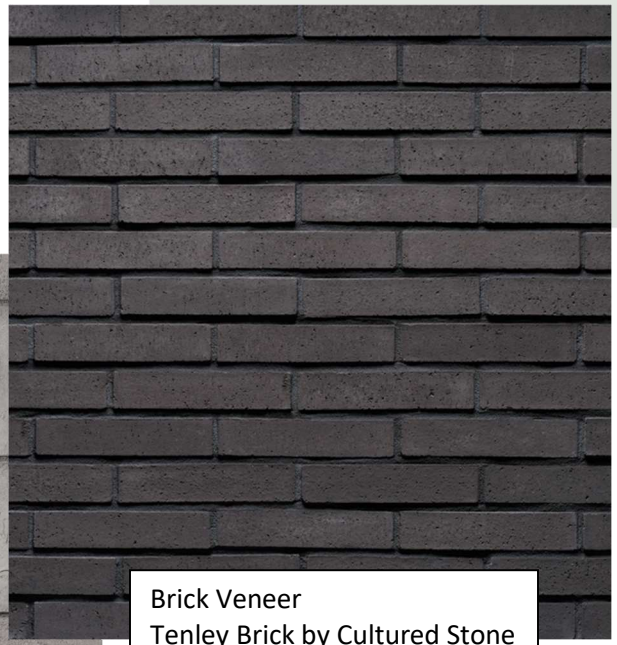
628
White Haze

Synthetic Stucco Finished Insulating System
DRYVIT by Tremco
Colors: As noted

618
Antique Gray



Stone Masonry Veneer
Cast-Fit by Cultured Stone
Color: Carbon



Brick Veneer
Tenley Brick by Cultured Stone
Color: Nori

152
Anthracite Coal

1250-54 OGDEN AVE. - PROPOSED MULTI-TENANT RETAIL DEVELOPMENT - EXTERIOR MATERIALS

CANOPY EXAMPLE

DUMPSTER ENCLOSURE EXAMPLE

1250-54 OGDEN AVE. - PROPOSED MULTI-TENANT RETAIL DEVELOPMENT - EXTERIOR MATERIALS

AERIAL VIEW

ZONING ANALYSIS

Project Name:	**New Retail Development**				
Address:	1250-1254 Ogden Ave.				
PIN(s):	09-06-403-005				
Zoning District:	B3 - General Services and Highway Business District.				
Existing Use:	Retail/Commercial Building and Parking				
Proposed Use:	Retail/Commercial Building and Parking				
Petition Type:					
Deviations:	Special Use - Drive through				
Requirement	Factor	Required	Proposed/Existing	Meets Req.?	Difference
District Area	Minimum	4 acres	N/A	N/A	N/A
Lot Area	Minimum	Not Required	41,505 sq. ft.	N/A	N/A
Building Coverage	Maximum	Not Restricted by ordinance	N/A	N/A	N/A
Ogden Ave. (℄ row)	Minimum	75' buildings, 50' canopies/pkng	119', 53'	YES	
Rear Yard	Minimum	Not Required	N/A	YES	
Int. Side Yard		Not Required	N/A	N/A	N/A
Height	Maximum	60'	24ft	YES	
Open Space	Minimum	10% of lot (4,150.5 sq. ft.)	18.5% (7,678 sq. ft.)	YES	
FAR	Maximum	0.75 (31,128.75)	0.231 (9,606 sq. ft.)	YES	
Parking	Minimum	Mixed use = 4 per 1,000sf (30)	31	YES	
	Minimum	BICYCLE: 2	2	YES	
Donations*		Not Required	N/A	N/A	N/A

Remarks:
N/A

VILLAGE OF DOWNERS GROVE CODES:

- Current Downers Grove Zoning Ordinance
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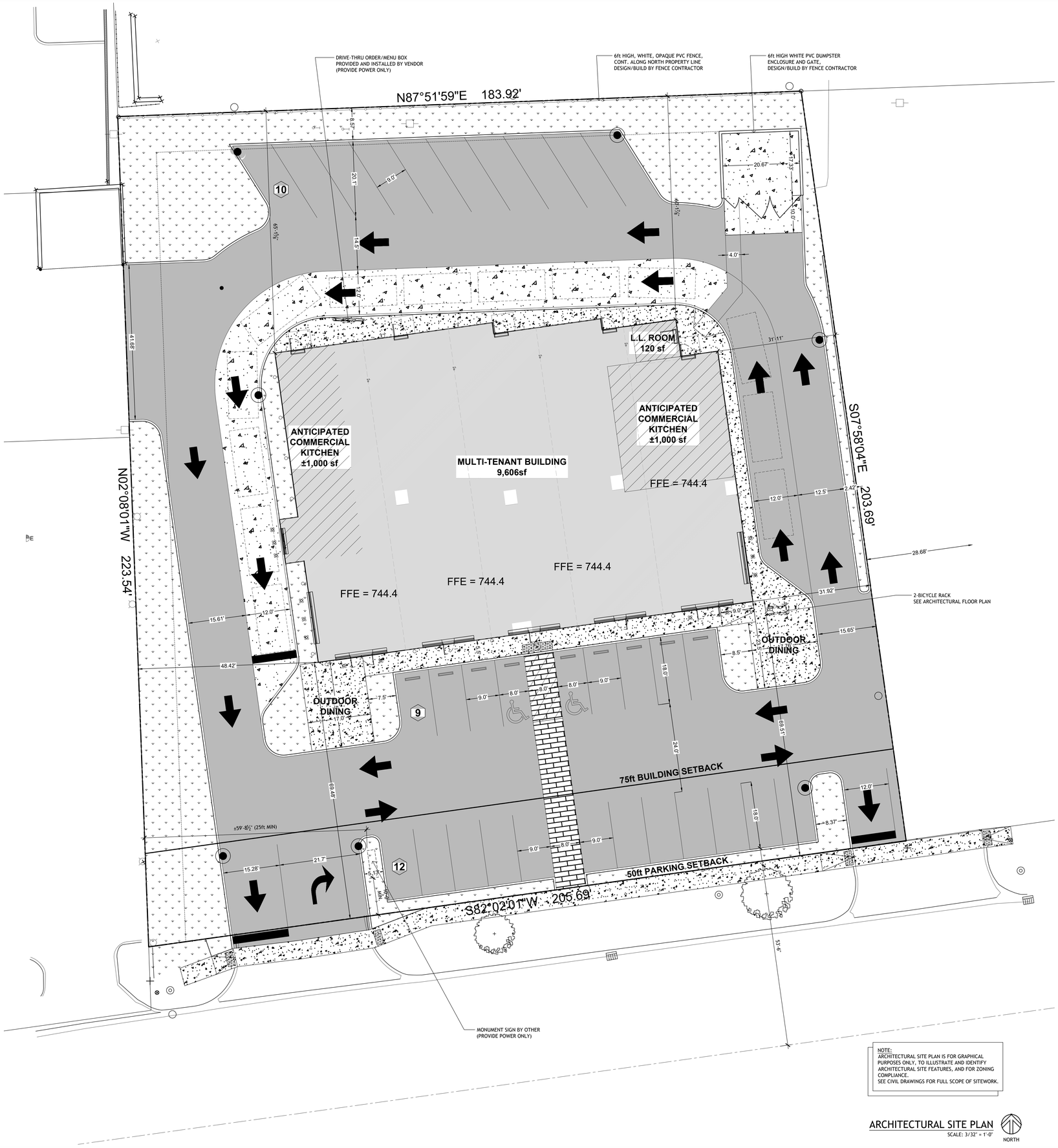
- 2020 National Electric Code with D.G. amendments
- Current State of Illinois Plumbing Code with D.G. amendments
- 2021 International Mechanical Code with D.G. amendments
- 2021 International Fuel Gas Code with D.G. amendments
- 2021 International Energy Conservation Code with D.G. amendments & State of Illinois amendments
- 2021 International Property Maintenance Code with D.G. amendments
- 2021 International Fire Code with D.G. amendments
- 2015 Life Safety Code - NFPA 101
- Current State of Illinois Accessibility Code



NOTE:
ARCHITECTURAL SITE PLAN IS FOR GRAPHICAL PURPOSES ONLY, TO ILLUSTRATE AND IDENTIFY ARCHITECTURAL SITE FEATURES, AND FOR ZONING COMPLIANCE.
SEE CIVIL DRAWINGS FOR FULL SCOPE OF SITEWORK.

ARCHITECTURAL SITE PLAN
SCALE: 3/32" = 1'-0"

NORTH

SEAL:

CHRISTOPHER JACKSON
001.020482
EXP: 11/30/2026
STATE OF ILLINOIS
1/21/25

SUBMITTAL HISTORY:	REV:
• DEC. 27, 2024 PZC SUBMITTAL 1	
• JAN. 21, 2024 PZC SUBMITTAL 2	

cj architects, inc.
Darien, IL
773.383.6556
DESIGN FIRM PROF. REG.#: 184.005807

CONSULTANT:

NEW MULTI-TENANT BUILDING
LANDLORD WORK - SITE/SHELL
1250-1254 OGDEN AVE.
DOWNERS GROVE, IL 60561

PROJECT CODE: IVC-24.04

SHEET NAME

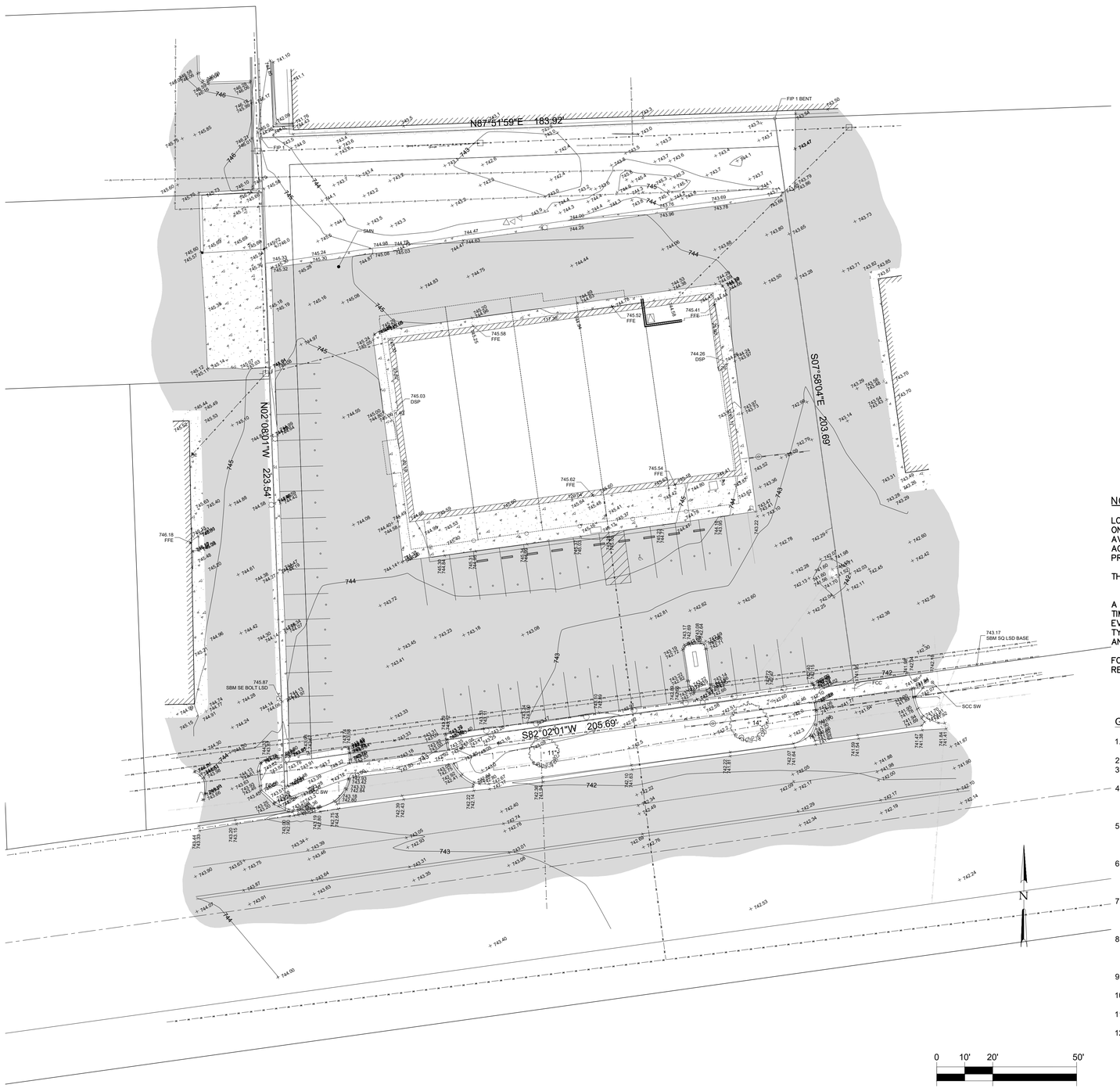
ARCHITECTURAL SITE PLAN

PZC SUBMITTAL ONLY

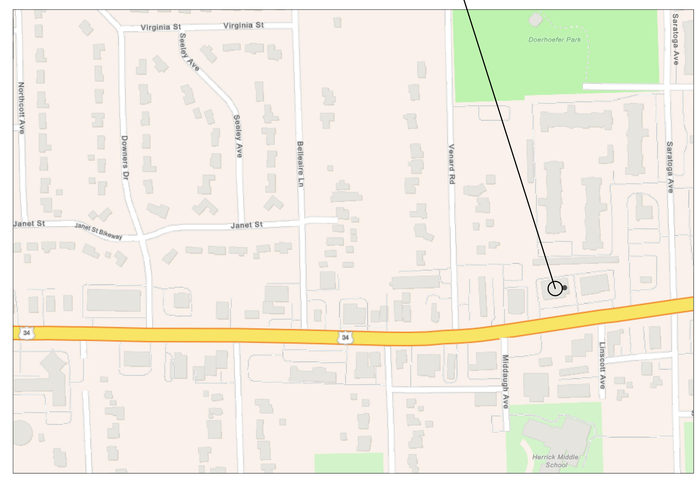
SA-1.1

1.21.2025

SITE ENGINEERING
COMMERCIAL REDEVELOPMENT
1250-54 OGDEN AVE., DOWNERS GROVE, IL



LOCATION MAP
NOT TO SCALE



SURVEY LEGEND

LEGEND	ABBREVIATIONS
SAN-MH	SANITARY MANHOLE
ST-MH	STORM MANHOLE
CB	CATCH BASIN
INLET	INLET
WVV	WATER VALVE VAULT
B-BOX	B-BOX
FH	FIRE HYDRANT
LP	LIGHT POLE
WUP	WOOD UTILITY POLE
GV	GAS VALVE
UB	UTILITY BOX
F-POLE	FLAG POLE
T/F=TOP OF FOUNDATION	
F/F=FINISH FLOOR	
C=TOP OF CURB	
G=GUTTER	
T/W=TOP OF WALL	

NOTES:

LOCATION OF UTILITIES SHOWN HEREON IS CERTIFIED AT SURFACE STRUCTURES ONLY. UNDERGROUND LINES AS SHOWN ARE ESTIMATED LOCATIONS BASED ON AVAILABLE VISIBLE EVIDENCE, ENGINEERING PLANS AND OUR BEST JUDGMENT. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES IN THE VICINITY OF ANY PROPOSED CONSTRUCTION SHALL BE VERIFIED BY EXCAVATION.

THE BASIS OF BEARINGS IS THE ILLINOIS STATE PLANE COORDINATE SYSTEM.

A J.U.L.I.E. LOCATE FOR THE UNDERGROUND UTILITIES WAS NOT PROVIDED AT THE TIME OF THE SURVEY. UNDERGROUND UTILITIES SHOWN ARE BASED ON OBSERVED EVIDENCE IN THE FIELD AND OUR BEST JUDGEMENT. LACKING EXCAVATION, THE TYPE AND LOCATION OF SAID UTILITIES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED.

FOR BUILDING LINES, EASEMENTS AND OTHER RESTRICTIONS NOT SHOWN HEREON, REFER TO YOUR DEED, TITLE POLICY, ZONING ORDINANCE, ETC

GENERAL NOTES:

1. The contractor is responsible for contacting JULIE for utility locates a minimum of 48 hours in advance of beginning excavation.
2. The contractor is solely responsible for safety on the job site.
3. The contractor shall be required to obtain all necessary permits as required, prior to commencing construction.
4. The Illinois Department of Transportation " Standard Specifications for Road and Bridge Construction", latest edition, and all addenda thereto, and Village of Downers Grove requirements shall govern the earthwork and paving work under this contract.
5. The " Standard Specifications for Water and Sewer Main Construction in Illinois," latest edition, shall govern the underground work under this contract, except as modified by these specifications, or where in conflict with Village of Downers Grove Standards.
6. All work shall be conducted in accordance with OSHA requirements and Village of Downers Grove regulations and standards,and shall confirm in all respects to all state and federal laws and regulations. The contractor is solely responsible for safety on job site.
7. The Contractors shall notify all utility companies for filed locations of their facilities prior to beginning construction. The Contractor will be responsible for the maintenance and preservation of these facilities. Any utility locations shown on the plans are based on available records and are for general direction only.
8. Construction operation shall be conducted in such a way as to prevent tracking of mud or soil, debris, asphalt and concrete onto public thoroughfares. At the end of each day, the contractor shall remove materials deposited onto public streets and alleys.
9. Public streets and alleys shall be restored promptly meeting Village of Downers Grove standards and specifications.
10. The contractor shall verify the exact elevation and location of all existing utilities and appurtenances prior to construction, to avoid interferences.
11. Appropriate precautions shall be taken to avoid damage to and to protect existing utilities and appurtenances in the vicinity of work.
12. All building layouts should be done by a registered land surveyor after confirming the property corners in the field. Any discrepancies should be brought to the attention of the design engineer prior to initiating construction.

TONI M. SWIONTEK
062-059561
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS
EXP. 11-30-25

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF ILLINOIS.

1-21-2025
SIGNATURE DATE

MY LICENSE EXPIRES ON NOVEMBER 30, 2025

INDEX TO SHEETS

REVISIONS			DATE
INITIAL SUBMITTAL	1		12-06-2024
PER 04-PZC-0009 (1ST REVIEW COMMENT SET #1)	2		1-21-2025
	3		
	4		
	5		
	6		
	7		
	8		
	9		

PROJECT STAFF

		ISSUE
PROJECT MANAGER:	R. WALKER P.E.	
ENGINEER:	T. SWIONTEK P.E.	
ENGINEER:		
TECHNICIAN:		

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BONO CONSULTING
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tbono@bonoconsulting.com

COVER SHEET
EXISTING CONDITIONS
1250-54 OGDEN AVE., DOWNERS GROVE
COMMERCIAL REDEVELOPMENT

PROJECT NO.:	241551
BASE FILE:	
SHEET FILE:	
ISSUE DATE:	JAN. 21, 2025
SCALE:	1"=20'

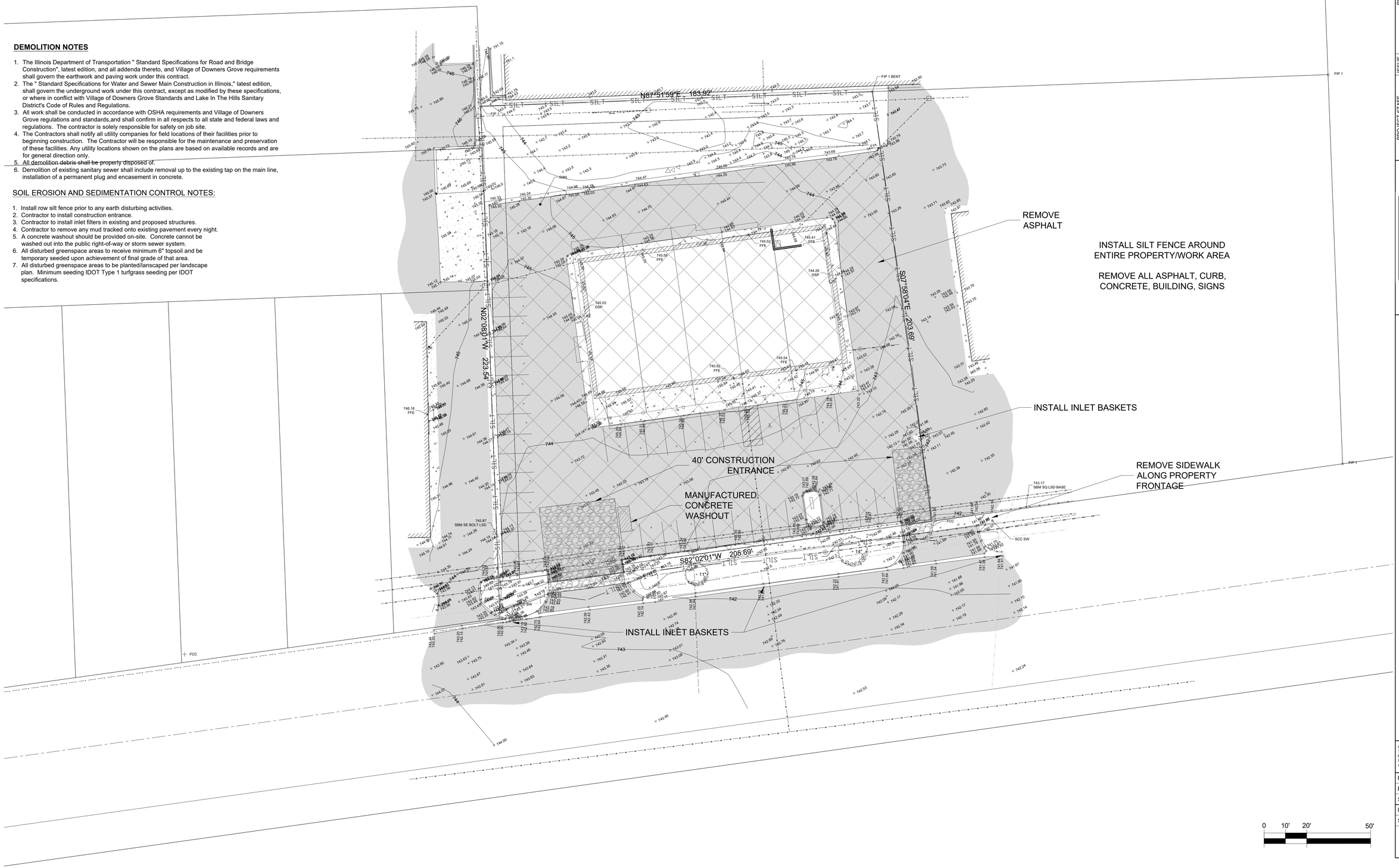
SHEET NUMBER
C-0

DEMOLITION NOTES

1. The Illinois Department of Transportation " Standard Specifications for Road and Bridge Construction", latest edition, and all addenda thereto, and Village of Downers Grove requirements shall govern the earthwork and paving work under this contract.
2. The " Standard Specifications for Water and Sewer Main Construction in Illinois," latest edition, shall govern the underground work under this contract, except as modified by these specifications, or where in conflict with Village of Downers Grove Standards and Lake In The Hills Sanitary District's Code of Rules and Regulations.
3. All work shall be conducted in accordance with OSHA requirements and Village of Downers Grove regulations and standards,and shall confirm in all respects to all state and federal laws and regulations. The contractor is solely responsible for safety on job site.
4. The Contractors shall notify all utility companies for field locations of their facilities prior to beginning construction. The Contractor will be responsible for the maintenance and preservation of these facilities. Any utility locations shown on the plans are based on available records and are for general direction only.
5. All demolition debris shall be properly disposed of.
6. Demolition of existing sanitary sewer shall include removal up to the existing tap on the main line, installation of a permanent plug and encasement in concrete.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

1. Install row silt fence prior to any earth disturbing activities.
2. Contractor to install construction entrance.
3. Contractor to install inlet filters in existing and proposed structures.
4. Contractor to remove any mud tracked onto existing pavement every night.
5. A concrete washout should be provided on-site. Concrete cannot be washed out into the public right-of-way or storm sewer system.
6. All disturbed greenspace areas to receive minimum 6" topsoil and be temporary seeded upon achievement of final grade of that area.
7. All disturbed greenspace areas to be planted/lanscaped per landscape plan. Minimum seeding IDOT Type 1 turfgrass seeding per IDOT specifications.



0 10' 20' 50'

PROJECT STAFF		ISSUE	REVISIONS	DATE
PROJECT MANAGER:	R. WALKER P.E.	1	INITIAL SUBMITTAL	12-26-2024
ENGINEER:	T. SWIONTEK P.E.	2	PER 04-PZC-0009 (1ST REVIEW COMMENT SET #1)	1-21-2025
ENGINEER:		3		
TECHNICIAN:		4		
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bbono@bonoconsulting.com

DEMOLITION AND EROSION CONTROL PLAN

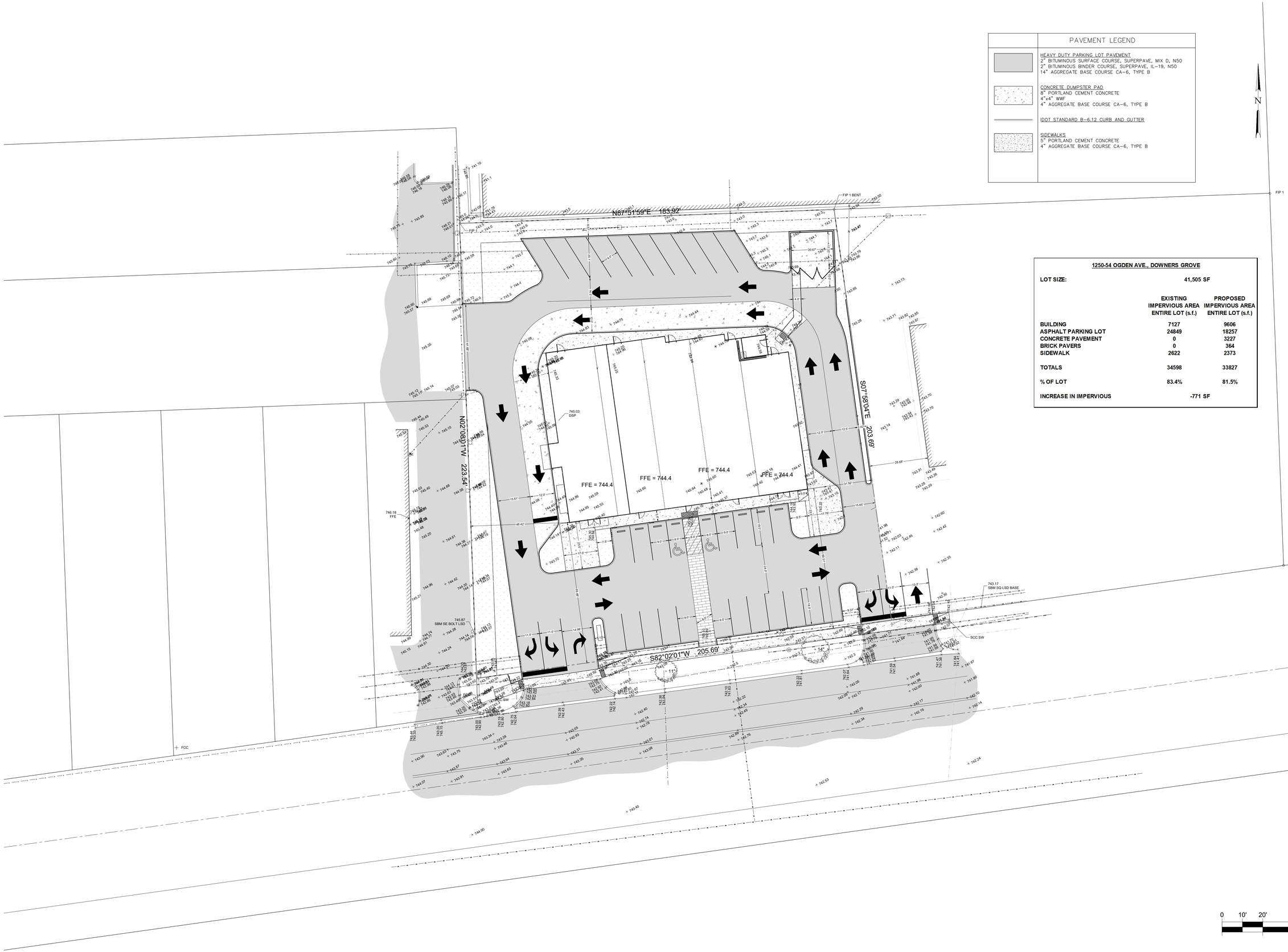
1250-54 OGDEN AVE., DOWNERS GROVE

COMMERCIAL REDEVELOPMENT

PROJECT NO.:	241551
BASE FILE:	
SHEET FILE:	
ISSUE DATE:	JAN. 21, 2025
SCALE:	1"=20'

SHEET NUMBER

C-0.1



1250-54 OGDEN AVE., DOWNERS GROVE

LOT SIZE: 41,505 SF

	EXISTING IMPERVIOUS AREA ENTIRE LOT (s.f.)	PROPOSED IMPERVIOUS AREA ENTIRE LOT (s.f.)
BUILDING	7127	9606
ASPHALT PARKING LOT	24849	18257
CONCRETE PAVEMENT	0	3227
BRICK PAVERS	0	364
SIDEWALK	2622	2373
TOTALS	34598	33827
% OF LOT	83.4%	81.5%
INCREASE IN IMPERVIOUS		-771 SF

0 10' 20' 50'

GEOMETRIC PLAN

1250-54 OGDEN AVE., DOWNERS GROVE
COMMERCIAL REDEVELOPMENT

PROJECT STAFF		ISSUE	REVISIONS	DATE
PROJECT MANAGER:	R. WALKER P.E.	1	INITIAL SUBMITTAL	12-06-2024
ENGINEER:	T. SWIONTEK P.E.	2	PER 24-PZC-0058 (1ST REVIEW COMMENT SET #1)	1-21-2025
ENGINEER:		3		
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PROJECT NO.:	241551
BASE FILE:	
SHEET FILE:	
ISSUE DATE:	JAN. 21, 2025
SCALE:	1"=20'

SHEET NUMBER

C-1

SANITARY SEWER NOTES:

1. FIELD VERIFY SANITARY SEWER LOCATION AND ELEVATION AND ALL CROSSINGS TO BE SURE SYSTEM WORKS AND ALL CONFLICTS ARE AVOIDED.
2. INSTALL NEW 6" SANITARY SEWER SERVICES AS SHOWN.
3. SEWER TO BE 8" AND 6" PVC SDR 26 PER ASTM D-3034 AND PUSH ON JOINTS PER ASTM D-3212.
4. PROVIDE CA-7 TRENCH BACKFILL UNDER ALL PAVEMENT.
5. SANITARY MANHOLES TO BE PRE-CAST PER ASTM C478 WITH WATERTIGHT BOOT CONNECTIONS AND IDOT TYPE 1 FRAME AND LID WITH "SANITARY" CAST INTO LID.
6. FOLLOW ALL REQUIREMENTS OF DUPAGE COUNTY AND THE VILLAGE OF DOWNERS GROVE.
7. SANITARY SEWER SHALL BE AWWA C900 WATER MAIN QUALITY PIPE (OR APPROVED EQUAL) WITH PRESSURE RATED JOINTS PER ASTM D-3139 WITHIN 10' OF ANY WATER MAIN/SERVICE CROSSING.
8. ALL MATERIALS SHALL COMPLY WITH DUPAGE COUNTY AND THE VILLAGE OF DOWNERS GROVE CODE.

WATER NOTES :

1. FIELD VERIFY WATER MAIN LOCATION AND SIZE
2. INSTALL NEW 6" WATER SERVICES AS SHOWN.
3. WATER SERVICE TO BE 6" DUCTILE IRON, CLASS 52 PER ANSI/AWWA C151/A21.5 WITH CEMENT MORTAR LINING PER ANSI/AWWA C104/A21.4 AND PUSH ON JOINTS PER ANSI/AWWA C111/A21.11 AND POLYETHYLENE ENCASEMENT PER ANSI/AWWA C105/A21.5.
4. WATER MAIN TO BE 8" DUCTILE IRON, CLASS 52 PER ANSI/AWWA C151/A21.5 WITH CEMENT MORTAR LINING PER ANSI/AWWA C104/A21.4 AND PUSH ON JOINTS PER ANSI/AWWA C111/A21.11 AND POLYETHYLENE ENCASEMENT PER ANSI/AWWA C105/A21.5.
5. PROVIDE CA-7 TRENCH BACKFILL UNDER ALL PAVEMENT.
6. VALVE VAULT TO BE PRE-CAST PER ASTM C478 WITH IDOT TYPE 1 FRAME AND LID WITH "WATER" CAST INTO LID.
7. FOLLOW ALL REQUIREMENTS OF THE VILLAGE OF DOWNERS GROVE.
8. WATER SERVICE TO BE ENCASED WHERE NOTED. ENCASEMENT TO BE 12" C900 WATER MAIN QUALITY PIPE AND SHALL EXTEND 10' FROM EITHER SIDE OF THE CROSSING AND BE SEALED WITH A CASING SEAL.
9. ALL MATERIALS SHALL COMPLY WITH VILLAGE OF DOWNERS GROVE CODE.

STORM SEWER NOTES:

1. FIELD VERIFY STORM SEWER LOCATION AND ELEVATION AND ALL CROSSINGS TO BE SURE SYSTEM WORKS AND ALL CONFLICTS ARE AVOIDED.
2. CONNECT TO EXISTING STORM SEWER STRUCTURE. FIELD VERIFY LOCATION AND ELEVATION PRIOR TO ANY STORM SEWER CONSTRUCTION.
3. STORM SEWER TO BE REINFORCED CONCRETE PIPE PER ASTM C76 OR PVC SDR 26 PIPE PER ASTM D3034
4. PROVIDE CA-7 TRENCH BACKFILL UNDER ALL PAVEMENT.
5. STORM SEWER STRUCTURES TO BE PRE-CAST PER ASTM C478 WITH STEPS 16" ON CENTER PER ASTM C478-05

STORM SEWER SHALL BE AWWA C900 WATER MAIN QUALITY PIPE (OR APPROVED EQUAL) WITH PRESSURE RATED JOINTS PER ASTM D-3139 WITHIN 10' OF ANY WATER MAIN/SERVICE CROSSING.

6. FOLLOW ALL REQUIREMENTS OF THE VILLAGE OF DOWNERS GROVE.
7. ALL MATERIALS SHALL COMPLY WITH VILLAGE OF DOWNERS GROVE PLUMBING CODE.

ROOF DRAIN NOTES:

1. ROOF DRAINS TO BE 6" PVC SDR 26 PIPE AT A MINIMUM 1.00% SLOPE.
2. ROOF DRAINS TO BE C900 WATER MAIN QUALITY PIPE WITHIN 10' OF WATER SERVICE. SEE NOTE #6 UNDER STORM SEWER NOTES.
3. FIELD ENGINEER ALL SLOPES TO AVOID CONFLICTS WITH OTHER PIPES.
4. PROVIDE CA-7 TRENCH BACKFILL UNDER ALL PAVEMENT.

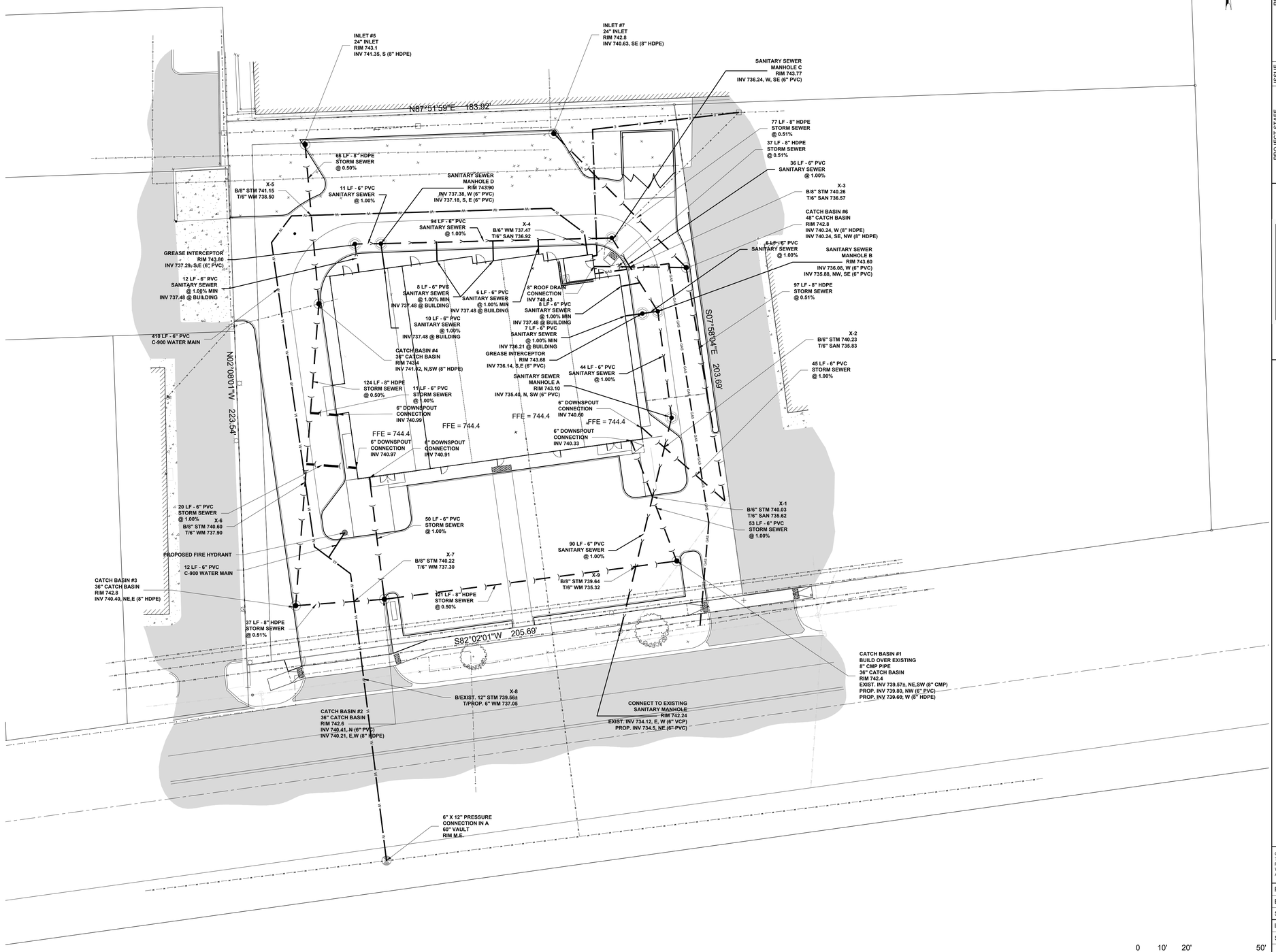
STORMWATER MANAGEMENT NARRATIVE

SITE GRADED TO MAXIMIZE STORAGE AVAILABLE

SURFACE DETENTION BASIN MAXIMIZED

EXISTING RUNOFF IS DIRECTED TO THE STORM SEWER ALONG OGDEN AVENUE.

NOTE:
INSTALL INLET BASKETS IN ALL PROPOSED OPEN LID STORM STRUCTURES WITHIN OR ADJACENT TO THE PROPOSED WORK LIMITS



PROJECT STAFF		ISSUE	REVISIONS	DATE
PROJECT MANAGER:	R. WALKER P.E.	1	INITIAL SUBMITTAL	12-06-2024
ENGINEER:	T. SWIONTEK P.E.	2	PER 24-PZC-0069 (1ST REVIEW- COMMENT SET #1)	1-21-2025
ENGINEER:		3		
TECHNICIAN:		4		
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bbono@bonoconsulting.com

UTILITY PLAN

1250-54 OGDEN AVE., DOWNERS GROVE
COMMERCIAL REDEVELOPMENT

PROJECT NO.:	241551
BASE FILE:	
SHEET FILE:	
ISSUE DATE:	JAN. 21, 2025
SCALE:	1"=20'

SHEET NUMBER
C-2

TO THE BEST OF OUR KNOWLEDGE AND BELIEF THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF SUCH SUBDIVISION OR ANY PART THEREOF, OR, THAT IF SUCH SURFACE WATER DRAINAGE WILL BE CHANGED, ADEQUATE PROVISION HAS BEEN MADE FOR COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREAS, OR DRAINS WHICH THE SUBDIVIDER HAS A RIGHT TO USE, AND THAT SUCH SURFACE WATERS WILL NOT BE DEPOSITED ON THE PROPERTY OF ADJOINING LAND OWNERS IN SUCH CONCENTRATIONS AS MAY CAUSE DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THE SUBDIVISION.

DATED THIS 26 **DAY OF** DECEMBER **, A. D. 2024**

ENGINEER _____ **OWNER OR ATTORNEY** _____

N

0 10' 20' 50'

PROJECT STAFF		ISSUE	REVISIONS	DATE
PROJECT MANAGER:	R. WALKER P.E.	1	INITIAL SUBMITTAL	12-06-2024
ENGINEER:	T. SWIONTEK P.E.	2	PER 04-PZC-0009 (1ST REVIEW- COMMENT SET #1)	1-21-2025
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TECHNICIAN:		4		
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AURORA, IL 60504 PARK RIDGE, IL 60018
331-228-3512 847-803-3300
rwalker@bonoconsulting.com bono@bonoconsulting.com

GRADING PLAN

1250-54 OGDEN AVE., DOWNERS GROVE
COMMERCIAL REDEVELOPMENT

PROJECT NO.:	241551
BASE FILE:	
SHEET FILE:	
ISSUE DATE:	JAN. 21, 2025
SCALE:	1"=20'

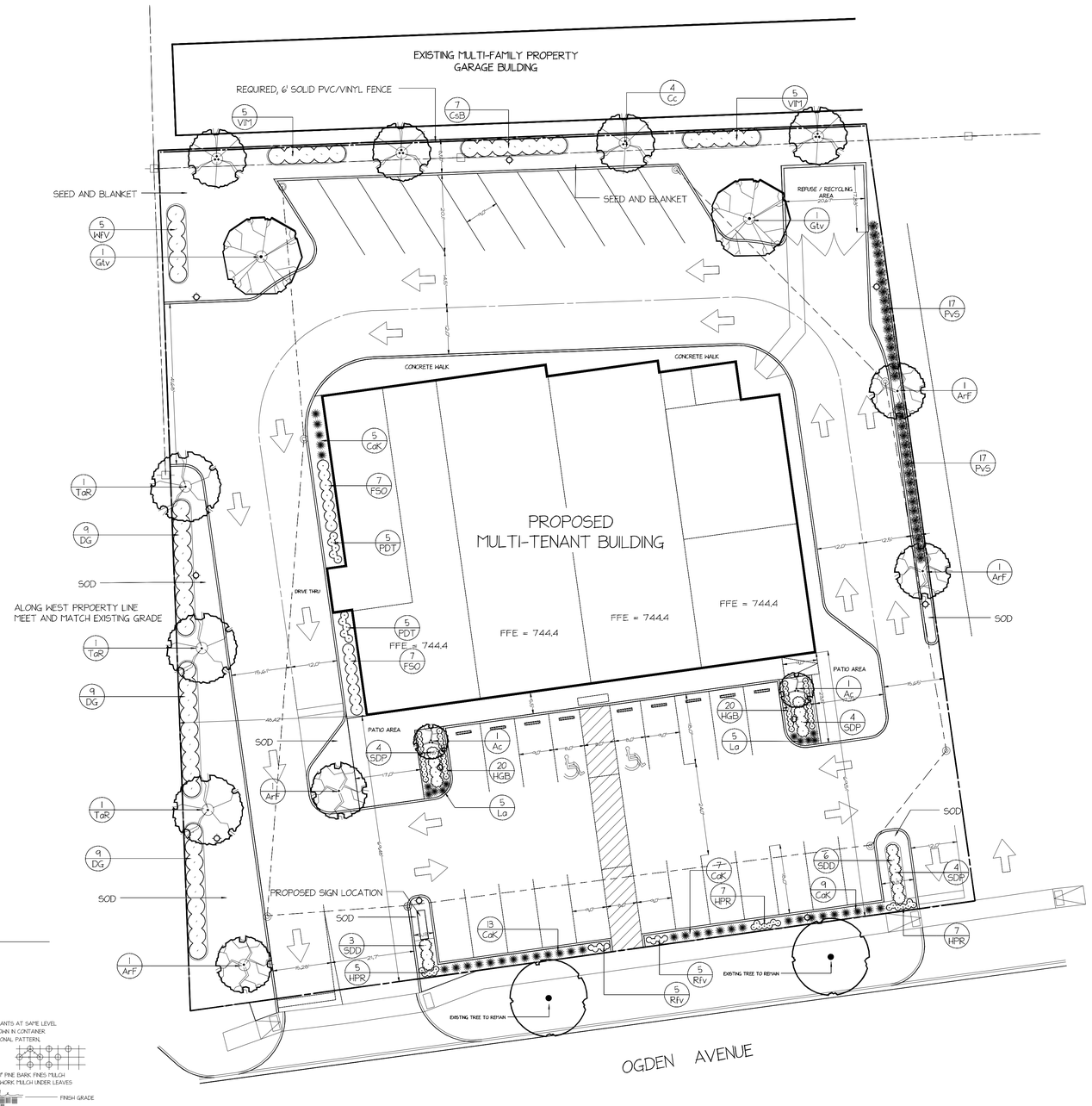
SHEET NUMBER
C-3

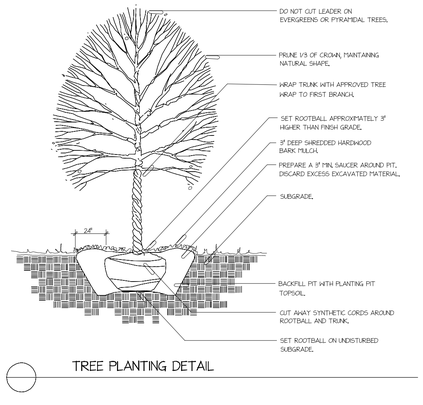
PLANT MATERIAL LIST

Key	Qty	Botanical Name	Common Name	Size/Condition
TREES				
Ac	2	Amelanchier canadensis	SHADBLOW SERVICEBERRY	7'
ArF	4	Acer rubrum 'Frank Jr'	REDPOINTE MAPLE	25"
Cc	4	Cercis canadensis	EASTERN REDBUD	7'
Gtv	2	Gleditsia triacanthos var. inermis 'Shademaster'	SHADEMASTER HONEYLOCUST	25"
ToR	3	Tilia americana 'Redmond'	REDMOND LINDEN	25"
ORNAMENTAL SHRUBS				
CsB	7	Cornus sericea 'Bailey'	BAILEY REDTWIG DOGWOOD	3'
DG	27	Diervilla 'G2X88541'	KODIAK RED BUSH HONEYSUCKLE	18"
FSO	14	Forsythia Show Off Sugar Baby	SHOW OFF SUGAR BABY FORSYTHIA	18"
SDP	8	Spirea 'Double Play Blue Kazoo'	DOUBLE PLAY BLUE KAZOO SPIREA	18"
SDD	9	Spirea 'Double Play Doozie'	DOUBLE PLAY BLUE DOOZIE SPIREA	18"
VIM	10	Viburnum lantana 'Mohican'	MOHICAN VIBURNUM	24"
WFV	5	Weigela florida 'Verweig 6'	SONIC BLOOM RED WEIGELA	24"
ORNAMENTAL GRASSES				
CaK	34	Calamagrostis acutiflora Karl Foerster'	KARL FOERSTER FEATHER REED GRASS	#3, 12"
La	10	Leymus arenarius	BLUE LYME GRASS	#1
PVS	34	Panicum virigatum 'Shenandoah'	SHENANDOAH RED SWITCH GRASS	#3, 12"
PERENNIALS				
HGB	40	Hemerocallis 'Going Bananas'	GOING BANANAS DAYLILY	#1
HPR	14	Hemerocallis 'Passionate Returns'	PASSIONATE RETURNS DAYLLY	#1
PDT	10	Penstemon 'Dark Towers'	DARK TOWERS BEARDTONGUE	#1
Rfv	10	Rudbeckia fulgida var. speciosa	SHOWY BLACK-EYED SUSAN	#1

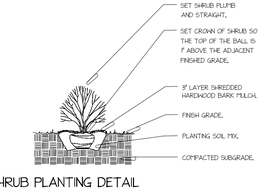
NOTES

1. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ALL CONCRETE, ASPHALT, GRAVEL AND CONSTRUCTION DEBRIS DUE TO DEMOLITION OF EXISTING PARKING LOT.
2. GENERAL CONTRACTOR SHALL FILL TURF AND PLANTING AREAS WITH CLEAN FILL AND ROUGH GRADE TO WITHIN 4" OF FINISH GRADE.
3. ALL LANDSCAPE PLANTING BEDS MUST BE CROWNED TO PROVIDE POSITIVE DRAINAGE PER VILLAGE ORDINANCE
4. NEW BED AREAS WILL RECEIVE 2" MUSHROOM COMPOST ROTOTILLED BEFORE PLANT INSTALLATION.
5. NEW BED SHALL RECEIVE A SPADE CUT EDGE AND 2" BARK MULCH AFTER PLANTING.
6. TURF AREAS SHALL BE FINISHED GRADED, SODDED, OR SEED AND BLANKET AS NOTED ON PLAN.
7. AREAS TO BE GRADED AND PREPARED FOR SEEDING OR SOD SHALL INDICATE A MINIMUN OF FOUR (4) INCHES OF TOPSOIL.
8. BASED ON FINAL LIGHT POLE LOCATIONS PLANTINGS SHALL BE ADJUSTED IN THE FIELD AS NECESSARY TO AVOID CONFLICTS

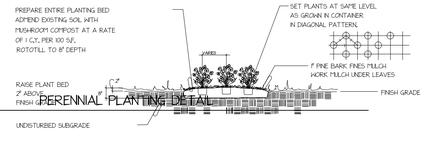




TREE PLANTING DETAIL



SHRUB PLANTING DETAIL



PERENNIAL PLANTING DETAIL

LANDSCAPE DEVELOPMENT PLAN

Indvestia Real Estate Partners

NEW MULTI-TENANT BUILDING

1250 OGDEN AVENUE
DOWNERS GROVE, ILLINOIS

GREEN GRASS
LANDSCAPE CONSTRUCTION & MAINTENANCE
www.greengrasslandscape.com
1597 Warren Avenue
Downers Grove, IL 60515
Phone: 630.355.1709

NORTH

SCALE: 1 INCH = 16 FEET
0 8' 16' 32'
SCALE IN FEET

DESIGNED BY: JAMES KONRAD
SALES: BRYAN EASTMAN
DATE: NOVEMBER 26, 2024
SHEET NO. L.1

REVISIONS		
NO	DATE	DESCRIPTION
1	1/21/25	PER VILLAGE COMENTS

Traffic Impact Study

Proposed Mixed-Use Development
1250-1254 Ogden Ave
Downers Grove, Illinois

December 24, 2024

Prepared For:

INDVESTIA CAPITAL

Prepared by:

David W Westergreen, EIT

Daniel P Brinkman, PE, PTOE

GHA GEWALT HAMILTON ASSOCIATES, INC.

Part I. Introduction and Project Context

Gewalt Hamilton Associates, Inc. (GHA) has conducted a Traffic Impact Study (TIS) on behalf of Indvestia Capital for the proposed mixed-use development to be constructed at 1250-1254 Ogden Avenue. The approximately 1-acre subject site is located on the north side of US Rte 34 (Ogden Avenue), west of the signalized intersection with Saratoga Avenue in Downers Grove, Illinois. Per the December 17th, 2024, Overall Site Plan, prepared by cj architects, inc, Indvestia Capital is proposing to demolish the existing building and construct a single 9,606 square foot multi-tenant building. The site is served by two existing full movement accesses onto Ogden Avenue which will remain in place. The eastern of the two accesses is shared with the adjacent commercial development to the east. The western access is aligned with an access to a used car dealership "*Auto House"*.

The following summarizes our findings and provides various recommendations for your consideration. *Appendices* referenced are in the Technical Addendum at the end of this document.

Part II. Background Information

Site Location Map and Roadway Inventory

Exhibit 1 provides a site location map. The existing traffic operations in the site area are illustrated on ***Exhibit 2***. ***Appendix A*** provides a photo inventory of operations along the site frontage. Pertinent comments to the adjacent roadways include:

Ogden Avenue (US Route 34)

- Ogden Avenue is an east-west Principal Arterial under the jurisdiction of the Illinois Department of Transportation (IDOT).
- Along the site frontage, Ogden Avenue provides two travel lanes in each direction separated by a wide (±12-foot), flush median marked as a Two Way Left Turn Lane (TWLTL).
- Ogden Avenue has a posted speed limit of 35 miles per hour (mph) in the vicinity of the site.
- Separate eastbound and westbound left turn lanes are provided at the signalized intersection with Saratoga Avenue.
- The Annual Average Daily Traffic (AADT), year 2023, on Ogden Avenue was 30,000 vehicles per day.

Saratoga Avenue

- Saratoga Avenue is a north south, local route under the jurisdiction of the Village of Downers Grove.
- Saratoga Avenue provides one travel lane in each direction and provides dedicated left turn lanes at its signalized intersection at Ogden Avenue.
- Saratoga Avenue has a posted speed limit of 25 mph.
- No historic Annual Average Daily Traffic is available for Saratoga Avenue.
- Saratoga Avenue provides access to Downers Grove North High School to the south of the intersection.

Linscott Avenue

- Linscott Avenue is a local roadway that intersects Ogden Avenue approximately 90 feet east of the east driveway to the site.
- Linscott Avenue is stop-controlled at its intersection with Ogden Avenue and provides one travel lane in each direction.
- No speed limit is posted on Linscott Avenue and no historical AADT volume is available.

Pedestrian Facilities

- Sidewalks are provided on both sides of Ogden Avenue in the site vicinity.
- Sidewalks are provided on both sides of Saratoga Avenue in the site's vicinity.
- Crosswalks are provided at all four legs of the signalized Ogden Avenue and Saratoga Avenue intersection. Pushbuttons and Pedestrian signals are also provided.
- School crossing signs are provided along Ogden Avenue.

Transit

- PACE Route 722 operates along Ogden Avenue in the site vicinity, and has an eastbound stop located southwest of the site and has east and westbound stops located to the east of the Ogden Avenue and Saratoga Avenue intersection. These stops were observed in the field and verified on the PACE website www.pacebus.com .

Surrounding Area Land Use

- The surrounding area includes mostly commercial land use along Ogden Avenue. The lot shares access with a restaurant to the west and a second mixed-use building to the east.
- Saratoga Avenue provides access to Downers Grove North High School. Middle and elementary schools are also located south of the development site.

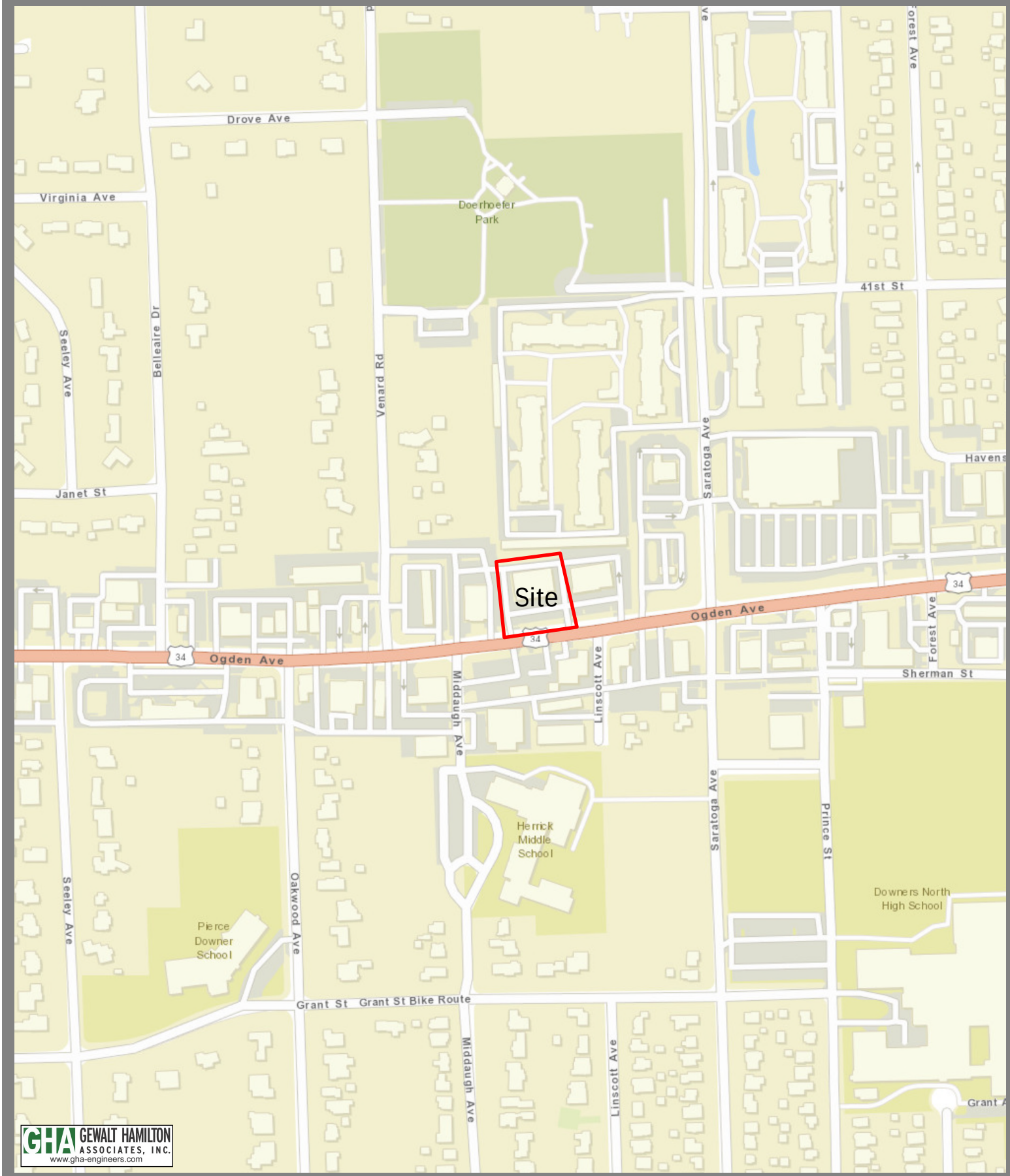


Exhibit 1 - Location Map

1 inch = 500 Feet

Proposed Mixed-Use Development
1250-1254 Ogden Avenue
Downers Grove, IL

Map Center: 88.01693°W 41.80828°N

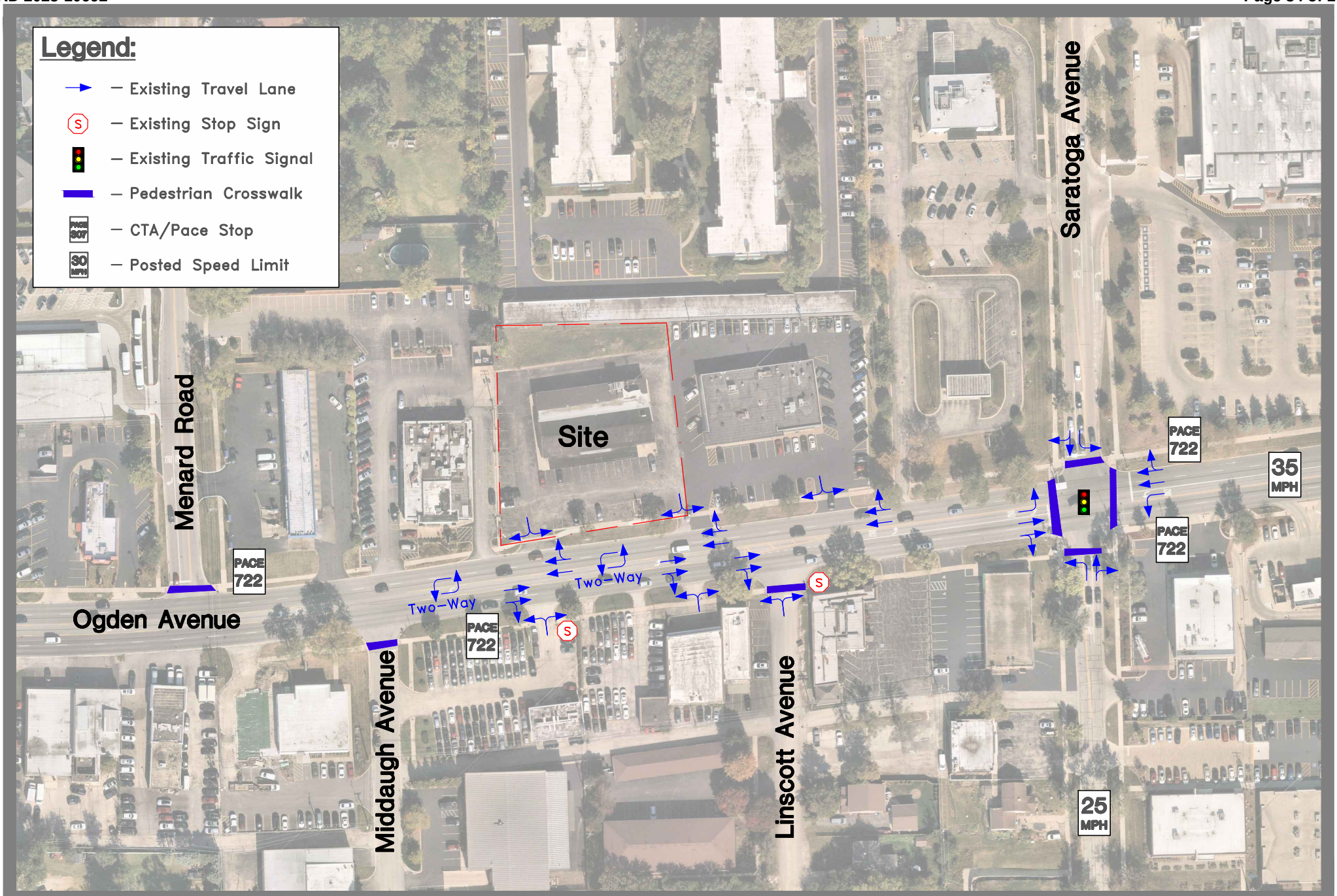


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Exhibit 2
Existing Traffic Operations

Existing Traffic

Exhibit 3 summarizes the existing weekday morning, evening, and Saturday midday peak hour traffic volumes. Peak period traffic turning movement counts were conducted by GHA on Thursday, December 5th, 2024, from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM, and on Saturday, December 7th, 2024, from 11:00 AM to 1:00 PM at the Ogden Avenue intersections with the west site drive/*Auto House* access, Linscott Avenue/east site drive, and Saratoga Avenue. The observed weekday morning and evening peak hours generally occurred from 7:30 to 8:30 AM, 4:30 to 5:30 PM respectively, and the Saturday midday peak hour generally occurred from 12:00 to 1:00 PM. *Exhibit 3* also provides the AADT (24-hour volume) along Ogden Avenue as published by IDOT on their website: www.gettingaroundillinois.com.

No unusual activities (e.g., roadway construction, or inclement weather) were observed during our counts that would be expected to impact traffic volumes or travel patterns in the vicinity. Summaries of the 2024 existing traffic counts can be found in ***Appendix B***.

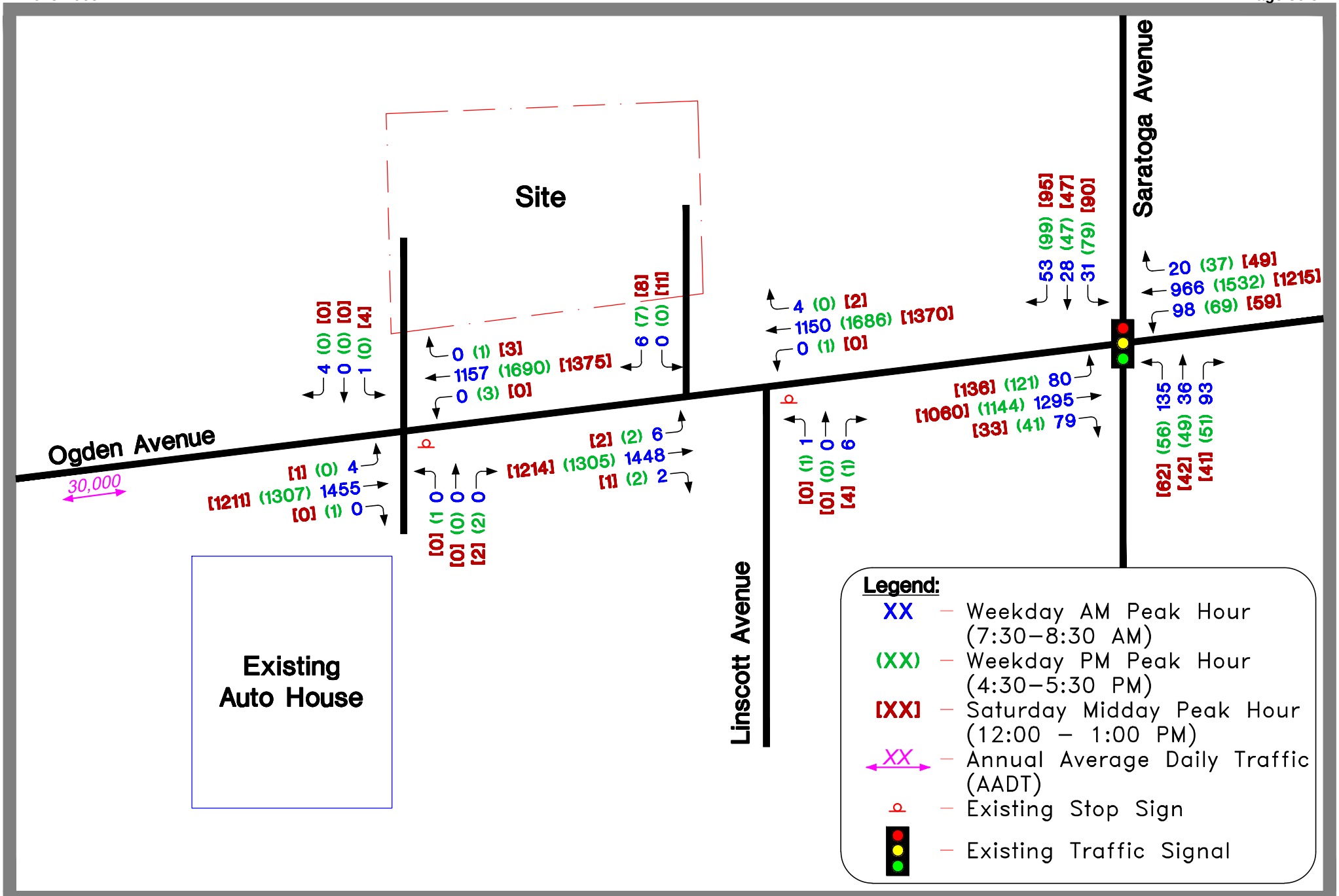

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Exhibit 3
Existing Traffic
Sources: 1) GHA December, 2024 2) IDOT 2023 AADT

Crash Analysis

Crash data was obtained from the IDOT Division of Transportation and Safety for the last five available calendar years, 2019 through 2023. A summary of the crash data is provided in ***Table 1*** with the locations mapped on the exhibit contained in ***Appendix C***.

Table 1: Crash Summary (2019-2023)

Location	No. of Crashes	PD	Severity[A]			F	Crash Type[B]									Percent Wet / Icy
			A	B	C		A	FO	FTF	FTR	SS	T	PED	BIKE	O	
Intersections (Crashes within 250 ft of Intersection)																
Ogden Avenue at Saratoga Avenue	35	26	2	3	4	-	1	-	-	11	4	14	2	2	1	20%
Ogden Avenue at Linscott Ave/east dr	5	4	-	-	1	-	-	-	-	4	1	-	-	-	-	0%
Ogden Avenue at west drive	3	1	-	1	1	-	-	-	-	2	-	1	-	-	-	33%
Total =	43	31	2	4	6	0	1	0	0	17	5	15	2	2	1	19%

[A] PD=Property Damage Only, A=Type A (incapacitating injury), B=Type B (non-incapacitating injury), C=Type C (possible injury), F= Fatal Injury

[B] A=Angle, FO=Fixed Object, FTF=Front-to-Front, FTR=Front-to-Rear, SSD=Sideswipe Same Direction, T=Turning, PED=Pedestrian, BIKE=Pedacyclist, O=Other

As shown in **Table 1**, the intersection of Ogden Avenue and Saratoga Avenue experienced the highest number of crashes within the study area over the five-year analyses period, with an average of 7 crashes per year. Approximately 74 percent (26 of 35) of the crashes involved property damage only. The most prevalent crash type was turning crashes, with 40 percent (14 of 35), and the second highest crash type was front to rear, with 31 percent (11 of 35). Of the injury crashes at this intersection, two were Type-A, three were Type-B, and four were Type-C.

The intersection of Ogden Avenue and Linscott Avenue experienced the next highest number of crashes with an average of 1 crash per year. Approximately 80 percent (4 of 5) of the crashes at this intersection involved property damage only and 80 percent were front-to-rear collisions. One crash at this intersection during the study period was a Type-C injury crash.

The intersection of Ogden Avenue and the west site drive experienced the lowest number of crashes with an average of 1 crash every 2 years. Approximately 33 percent (1 of 3) of the crashes at this intersection involved property damage only and 67 percent were front-to-rear collisions. One crash at this intersection during the study period was a Type-B injury crash, and one was a Type-C injury crash.

There were four crashes that involved pedestrians or bicyclists during the study period. All four of these crashes occurred at the Ogden Avenue intersection with Saratoga Avenue. Three of the four crashes occurred during dry, daytime conditions, and one occurred in dark, snowy conditions. The four crashes resulted in one Type-A injury, two Type-B injuries, and one Type-C injury.

No-Build Traffic

Traffic growth in the area is a function of expected land development in the region. Future traffic volume conditions were developed for the year 2031, build-out year of the development (year 2026) plus five years. Based on a review of historical traffic volumes and the Chicago Metropolitan Agency for Planning (CMAP) 2050 projections (see ***Appendix D***), traffic volumes along the roadways surrounding the site are assumed to experience an overall annual compounded growth rate of 0.50% per year. Accordingly, the 2031 No-Build peak hour traffic volumes (see ***Exhibit 4***) were developed by applying the predicted growth rates to the existing traffic.

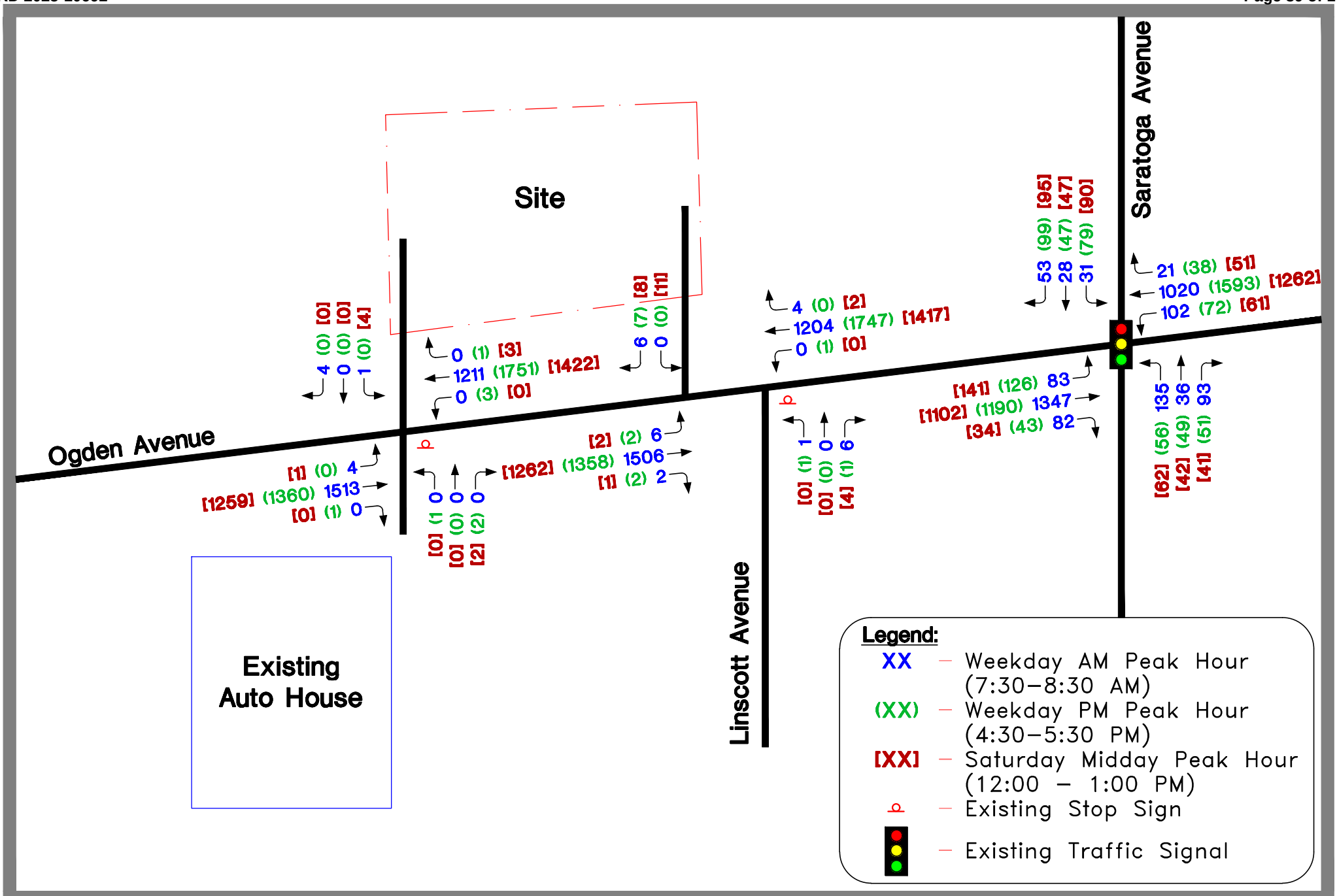

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Exhibit 4
Year 2031 No-Build Traffic

Part III. Traffic Evaluation

Future Site Characteristics

Proposed Development Plan

Indvestia Capital proposes to construct a single 9,606 square-foot mixed-use building on the approximately 1-acre subject site located on the north side of Ogden Avenue west of the Saratoga Avenue intersection in Downers Grove, Illinois. Site access onto Ogden Avenue is provided by two full-access drives, with one located approximately 420 feet west of the Ogden Avenue and Saratoga Avenue intersection, and one located approximately 155 feet further west. Cross access to both neighboring properties is available but to be conservative, all new site traffic was assigned to the on-site access points. The building is anticipated to be broken out into 5 units, with at least two restaurants (one with drive-through) anticipated. Tenants are not known at this time, so general land use of "Strip Retail Plaza" was applied. 31 parking spaces are proposed to be provided for the new development. A one-way counter-clockwise flow is proposed around the building to facilitate drive-through stacking and to provide access to parking in the rear of the building.

Access spacing dimensions are also illustrated on ***Exhibit 5A & 5B.***

The December 17th, 2024, Overall Site Plan is provided in ***Appendix E***.

Trip Generation

Table 2 summarizes the traffic generation calculations for the proposed development. Trip generation rates published by the Institute of Transportation Engineers (ITE) in the 11th Edition of the Manual *Trip Generation* were used to determine the anticipated traffic generated by the proposed development. Saturday data for fast-food restaurant without a drive through is not available so the most similar use (Fast Casual Restaurant) was used to estimate Saturday midday trips for that land use. Also included in our calculations are the estimated traffic volumes associated with the re-use of the existing building as a medical office space.

Unlike the existing medical use, not all vehicle trips expected to be generated by the proposed project represent new trips on the study area roadway system. Studies have shown that for restaurant developments, a substantial portion of the site generated vehicle trips are already present in the adjacent passing stream of traffic or are diverted from another route to the proposed site. Based on data presented in the ITE *Trip Generation Handbook*, 3rd Edition, the average pass-by trip percentage for the Restaurant with Drive-Through use is 50 percent in the weekday morning peak hour, and 55 percent in the weekday evening peak hour. In addition, to provide a conservative analysis for the balance of the building, a 20 percent reduction for pass-by traffic was applied to the Saturday and non-drive-through restaurant-generated trips. It should be noted that the volume of pass-by traffic does not reduce the total trips generated and those trip volumes will still be realized as turning movements at the site driveways.

As can be seen in ***Table 2*** the proposed mixed-use development is expected to generate approximately 119 new trips (combined inbound and outbound) during the weekday morning peak hour, 129 new trips (combined inbound and outbound) during the weekday evening peak hour, and 171 new trips (combined inbound and outbound) during the Saturday midday peak hour.

See ***Appendix F*** for excerpts of the ITE manual and ***Appendix G*** for excerpts of the ITE *Trip Generation Handbook* detailing the pass-by trip percentage.

Table 2: Trip Generation Calculations

Land Use	Size	ITE Code	Weekday Peak Hours								
			Morning 7:30-8:30 AM			Evening 4:30-5:30 PM			Saturday 12:00-1:00 PM		
			In	Out	Sum	In	Out	Sum	In	Out	Sum
Existing Medical Office Building											
Medical Office	7,855 SF	720	19	5	24	9	22	31	14	10	24
Multi-Use Commercial Building											
Restaurant With Drive-Through Window	2,084 SF	934	48	45	93	36	33	69	59	56	115
Fast Food Restaurant (No Drive Through Window)	1,630 SF	933	41	29	70	30	29	59	29	23	52
Strip Retail Plaza (<40k SF)	5,892 SF	822	12	8	20	27	26	53	20	19	39
Total Trips			**101**	**82**	**183**	**93**	**88**	**181**	**108**	**98**	**206**
Less Pass-By Trips, Published Values		N/A	-24	-24	-48	-20	-20	-40	0	0	0
Less Pass-By Trips, 20% Estimate		N/A	-8	-8	-16	-6	-6	-12	-18	-18	-35
New Trips			**69**	**50**	**119**	**67**	**62**	**129**	**90**	**80**	**171**
NET New Trips			**50**	**45**	**95**	**58**	**40**	**98**	**76**	**70**	**147**

Sources:ITE Trip Generation Manual, 11th Edition - See Appendix F, ITE Trip Gen Pass-By Table - See Appendix G

Trip Distribution

Table 3 provides the anticipated distribution of site traffic. This was based on existing site travel patterns, proposed access, and the operational characteristics of the adjacent street system.

Table 3: Trip Distribution

Route & Direction	Percent Route To/From Site
Ogden Avenue	
West of Saratoga Avenue	45%
East of Saratoga Avenue	45%
Saratoga Avenue	
North of Ogden Avenue	5%
South of Ogden Avenue	5%
Linscott Avenue	
South of Ogden Avenue	0%
Totals =	***100%***

Traffic usage of the area roadway network is also illustrated on ***Exhibits 5A & 5B.***

Site and Total Traffic Assignments

Exhibits 5A & 5B illustrate the site traffic assignments for the development's trips, which are based on the traffic characteristics summarized in ***Tables 2 and 3*** (traffic generation and trip distribution) and assigned to the area roadways. As previously noted, the proposed development is anticipated to open in 2026. Therefore, we have considered the total impacts of the complete development for the year 2031, or buildout plus five years.

The site traffic (***Exhibits 5A & 5B***) and 2031 No-Build traffic (***Exhibit 4***) were combined to produce the 2031 Total traffic, which is illustrated on ***Exhibit 6.***

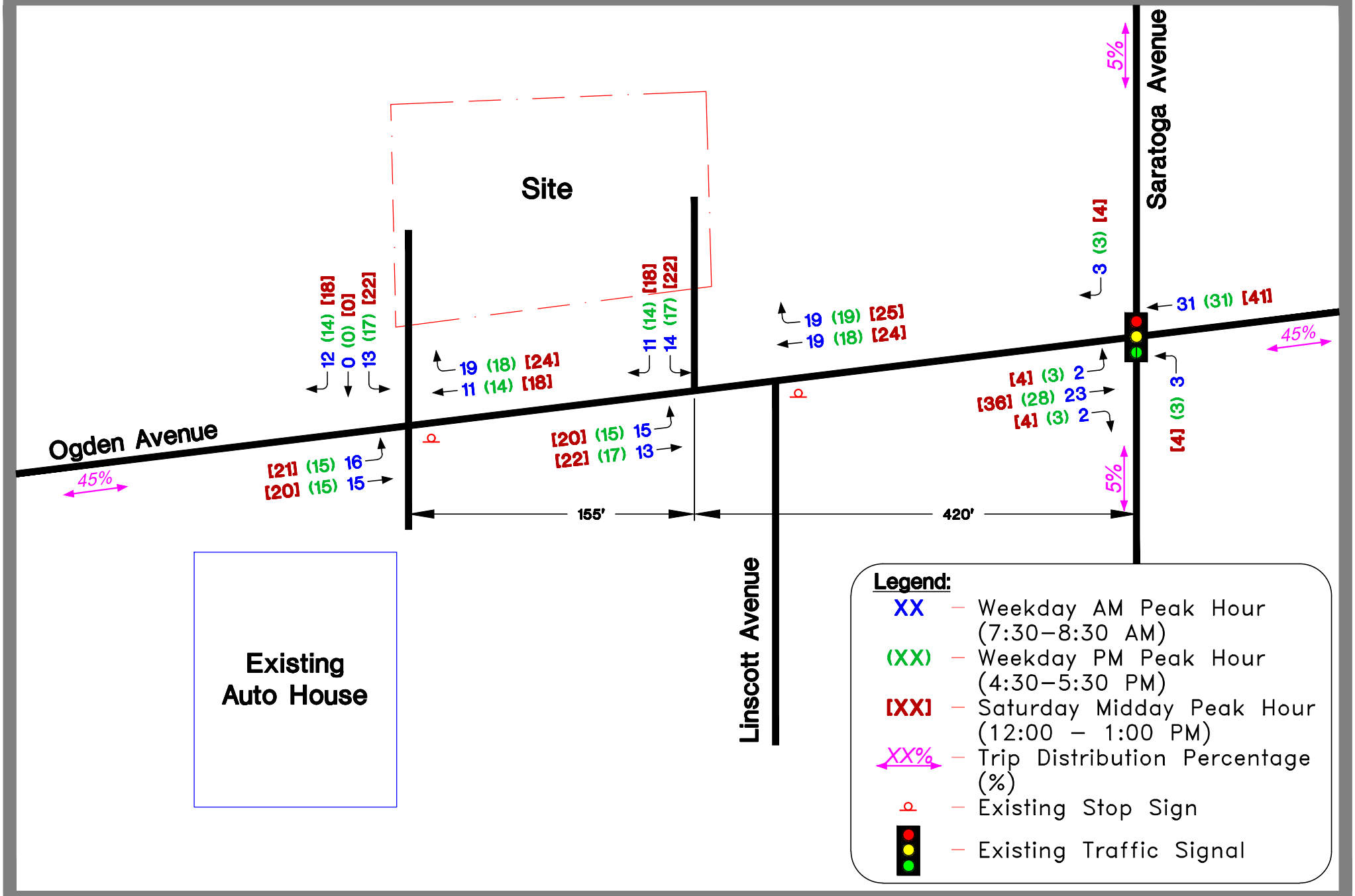

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Exhibit 5A
Site Traffic

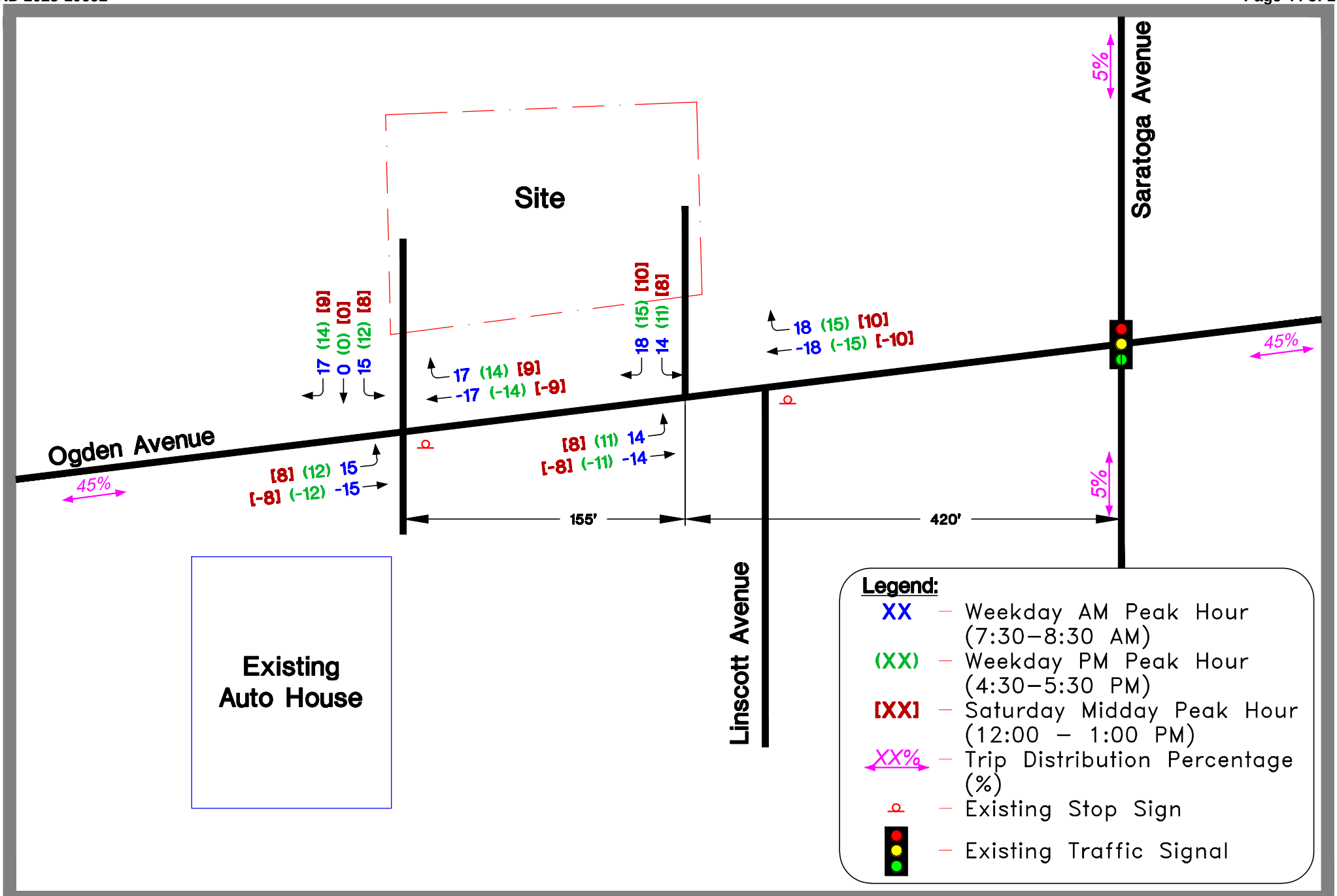

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Exhibit 5B
Pass-By Traffic

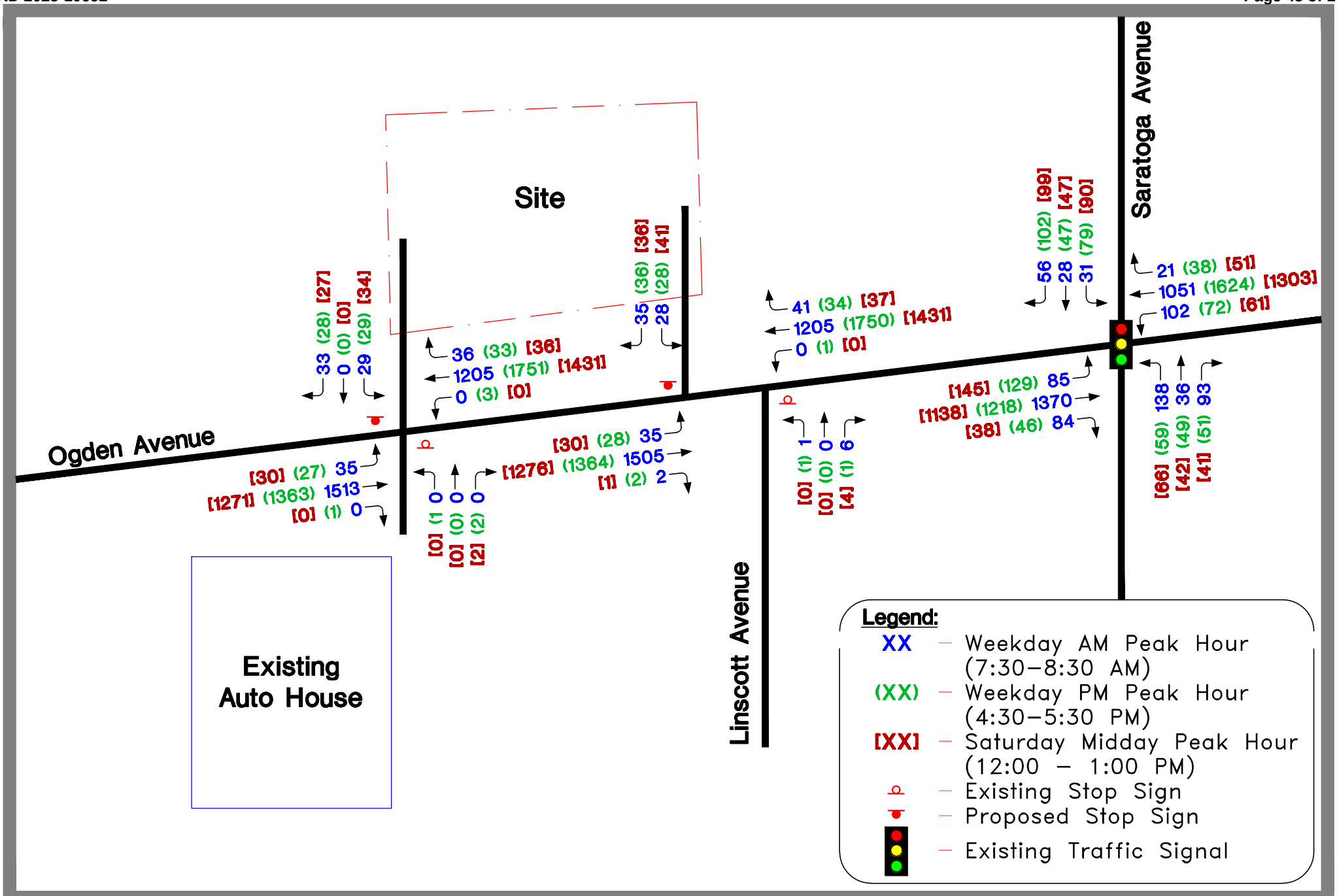

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Exhibit 6
Year 2031 Total Traffic

Capacity Analysis

Capacity analyses are a standard measurement that identifies how an intersection operates. They are measured in terms of Level of Service (LOS). The concept of LOS is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A level-of-service definition provides an index to quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

Six Levels of Service are defined for each type of facility. They are given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst. LOS C is often considered acceptable for design purposes and LOS D is usually considered as providing the lower threshold of acceptable operations. Since the level of service is a function of the traffic flows placed upon it, the facility may operate at a wide range of levels of service, depending on the time of day, day of week or period of year. A description of the operating condition under each level of service, based on the analysis parameters as published in the Transportation Research Board's (TRB) Highway Capacity Manual (HCM), Seventh Edition, is provided in ***Table 4***.

Table 4: Level of Service (LOS) Summary

LOS	Description	Delay (sec/veh)	
		Traffic Signal	Stop Sign
A	Describes conditions with little to no delay to motorists.	<10	< 10
B	Represents a desirable level with relatively low delay to motorists.	>10 and < 20	>10 and < 15
C	Describes conditions with average delays to motorists.	>20 and < 35	>15 and < 25
D	Describes operations where the influence of congestion becomes more noticeable. Delays are still within an acceptable range.	>35 and < 55	>25 and < 35
E	Represents operating conditions with high delay values. This level is often considered within urban settings or for minor streets intersecting major arterial roadways to be the limit of acceptable delay.	>55 and < 80	>35 and < 50
F	Is unacceptable to most drivers with high delay values that often occur when arrival flow rates exceed the capacity of the intersection.	>80	>50

Capacity analyses were performed using the methodologies outlined in the HCM, for the following scenarios:

- *Existing Traffic* –Existing traffic (year 2024),
- *No-Build Traffic* – Future (non-site, year 2031) traffic with background growth, and
- *Total Traffic* – Future No-Build traffic volumes (year 2031) plus the addition of the site generated traffic.

2031 Total traffic conditions assumed the following:

- The site entrances operate with stop control, as no existing stop signs or stop bars were observed.
- The site entrances were analyzed in the existing condition, as well as with the recommended left-turn lane added to each entrance.

Table 5 summarizes the intersection capacity and queue analysis results.

Table 5: Level-of-Service Summary

Intersection / Timeframe		Roadway Conditions	Movement Group By Approach (> = Shared Lane - = Non Critical or Not Allowed Movement)												Overall Intersection
			Eastbound			Westbound			Northbound			Southbound			
1. Ogden Avenue at Saratoga Avenue		**Traffic Signal**	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
AM Peak	**A. Existing Traffic (See Exhibit 3)**	• LOS	**A**	**B**	**B**	**A**	**A**	**A**	**E**	**D**	<	**E**	**D**	<	**B**
		• Delay	6.5	11.5	11.5	8.7	9	9	67.1	51.6	-	56.8	49.3	-	16.3
		• 95th Queue Length (ft)	28	378	375	34	247	246	222	185	-	46	112	-	-
		• Approach LOS (Delay)		**B (11.2)**			**A (9.0)**			**E (59.5)**			**D (51.3)**		-
	B. 2031 No-Build Traffic (See Exhibit 4)	• LOS	**A**	**B**	**B**	**B**	**A**	**A**	**E**	**D**	<	**E**	**D**	<	**B**
		• Delay	6.7	12.5	12.9	10.1	9.3	9.3	67.2	51.6	-	56.8	49.3	-	16.8
		• 95th Queue Length (ft)	29	431	395	36	263	262	224	189	-	46	114	-	-
		• Approach LOS (Delay)		**B (12.4)**			**A (9.4)**			**E (59.6)**			**D (51.4)**		-
	C. 2031 Total Traffic (See Exhibit 6)	• LOS	**A**	**B**	**B**	**A**	**A**	**A**	**E**	**D**	<	**E**	**D**	<	**B**
		• Delay	6.9	12.1	12.2	9.7	9.5	9.5	69.8	51.6	-	56.8	49.4	-	16.7
		• 95th Queue Length (ft)	30	411	408	36	272	271	230	185	-	46	116	-	-
		• Approach LOS (Delay)		**B (11.9)**			**A (9.5)**			**E (61.0)**			**D (51.4)**		-
PM Peak	**A. Existing Traffic (See Exhibit 3)**	• LOS	**B**	**A**	**A**	**A**	**B**	**B**	**E**	**D**	<	**E**	**E**	<	**B**
		• Delay	11.6	9.4	9.5	7.1	12.6	12.7	65.7	54.7	-	62.5	59.3	-	16.7
		• 95th Queue Length (ft)	58	311	306	25	468	468	94	153	-	130	227	-	-
		• Approach LOS (Delay)		**A (9.6)**			**B (12.4)**			**E (58.7)**			**E (60.4)**		-
	B. 2031 No-Build Traffic (See Exhibit 4)	• LOS	**B**	**A**	**A**	**A**	**B**	**B**	**E**	**D**	<	**E**	**E**	<	**B**
		• Delay	13.4	9.7	9.8	7.3	13.2	13.3	65.7	54.7	-	62.5	59.3	-	17.0
		• 95th Queue Length (ft)	73	328	323	26	498	498	94	153	-	130	227	-	-
		• Approach LOS (Delay)		**B (10.1)**			**B (13.0)**			**E (58.7)**			**E (60.4)**		-
	C. 2031 Total Traffic (See Exhibit 6)	• LOS	**B**	**B**	**B**	**A**	**B**	**B**	**E**	**D**	<	**E**	**E**	<	**B**
		• Delay	14.9	10.2	10.2	7.7	13.9	14.1	65.7	54.7	-	61.9	59.1	-	17.5
		• 95th Queue Length (ft)	84	344	339	27	524	524	100	152	-	130	231	-	-
		• Approach LOS (Delay)		**B (10.6)**			**B (13.7)**			**E (58.5)**			**E (60.1)**		-
SAT Peak	**A. Existing Traffic (See Exhibit 3)**	• LOS	**A**	**A**	**A**	**A**	**B**	**B**	**E**	**D**	<	**E**	**E**	<	**B**
		• Delay	8.4	9.0	9.1	6.8	11.0	11.0	65.5	53.6	-	61.5	58.2	-	16.3
		• 95th Queue Length (ft)	50	284	282	22	360	357	106	126	-	151	222	-	-
		• Approach LOS (Delay)		**A (9.0)**			**B (10.8)**			**E (58.7)**			**E (59.5)**		-
	B. 2031 No-Build Traffic (See Exhibit 4)	• LOS	**A**	**A**	**A**	**A**	**B**	**AB**	**E**	**D**	<	**E**	**E**	<	**B**
		• Delay	9.0	9.3	9.3	7	11.3	11.4	65.5	53.6	-	61.5	58.2	-	16.3
		• 95th Queue Length (ft)	51	298	295	23	380	378	106	126	-	151	222	-	-
		• Approach LOS (Delay)		**A (9.3)**			**B (11.2)**			**E (58.7)**			**E (59.5)**		-
	C. 2031 Total Traffic (See Exhibit 6)	• LOS	**A**	**A**	**B**	**A**	**B**	**B**	**E**	**D**	<	**E**	**E**	<	**B**
		• Delay	9.7	9.5	9.5	7.2	11.7	11.8	67.1	53.6	-	61.4	58.8	-	16.7
		• 95th Queue Length (ft)	53	312	309	24	398	396	115	126	-	151	228	-	-
		• Approach LOS (Delay)		**A (9.6)**			**B (11.6)**			**E (59.6)**			**E (59.8)**		-

Table 5: Level-of-Service Summary (cont.)

Intersection / Timeframe		Roadway Conditions	Movement Group By Approach > = Shared Lane - = Non Critical or Not Allowed Movement											
			Eastbound			Westbound			Northbound			Southbound		
2. Ogden Avenue at Linscott Ave/east site drive		**TWSC - NB/SB Stop**	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak	**A. Existing Traffic (See Exhibit 3)**	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**>**	**D**	**<**	**>**	**B**	**<**
		• Delay	11.2	-	-	13.0	-	-	-	33.3	-	-	13.1	-
		• 95th Queue Length (ft)	0	-	-	0	-	-	-	5	-	-	0	-
		• Approach LOS (Delay)	**B (11.2)**			**B (13.0)**			**D (33.3)**			**B (13.1)**		
	B. 2031 No-Build Traffic (See Exhibit 4)	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**>**	**E**	**<**	**>**	**B**	**<**
		• Delay	11.5	-	-	13.5	-	-	-	37.2	-	-	B	-
		• 95th Queue Length (ft)	0	-	-	0	-	-	-	5	-	-	0	-
		• Approach LOS (Delay)	**B (11.5)**			**B (13.5)**			**E (37.2)**			**B (13.5)**		
	C. 2031 Total Traffic (See Exhibit 6)	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**>**	**E**	**<**	**>**	**F**	**<**
		• Delay	12.1	-	-	13.5	-	-	-	44.9	-	-	309.8	-
		• 95th Queue Length (ft)	5	-	-	0	-	-	-	5	-	-	143	-
		• Approach LOS (Delay)	**B (12.1)**			**B (13.5)**			**E (44.9)**			**F (309.8)**		
	D. 2031 Total Traffic W/ left turn lane (See Exhibit 6)	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**>**	**E**	**<**	**F**	**-**	**B**
		• Delay	12.1	-	-	13.5	-	-	-	44.9	-	431.3	-	14.4
		• 95th Queue Length (ft)	5	-	-	0	-	-	-	5	-	88	-	8
		• Approach LOS (Delay)	**B (12.1)**			**B (13.5)**			**E (44.9)**			**F (199.7)**		
PM Peak	**A. Existing Traffic (See Exhibit 3)**	• LOS	**C**	**-**	**-**	**B**	**-**	**-**	**>**	**F**	**<**	**>**	**C**	**<**
		• Delay	15.2	-	-	12.1	-	-	-	96.6	-	-	17.7	-
		• 95th Queue Length (ft)	0	-	-	0	-	-	-	5	-	-	3	-
		• Approach LOS (Delay)	**C (15.2)**			**B (12.1)**			**F (96.6)**			**C (17.7)**		
	B. 2031 No-Build Traffic (See Exhibit 4)	• LOS	**C**	**-**	**-**	**B**	**-**	**-**	**>**	**F**	**<**	**>**	**C**	**<**
		• Delay	15.8	-	-	12.5	-	-	-	112.4	-	>	18.3	<
		• 95th Queue Length (ft)	0	-	-	0	-	-	-	5	-	-	3	-
		• Approach LOS (Delay)	**C (15.8)**			**B (12.5)**			**F (112.4)**			**C (18.3)**		
	C. 2031 Total Traffic (See Exhibit 6)	• LOS	**C**	**-**	**-**	**B**	**-**	**-**	**>**	**F**	**<**	**>**	**F**	**<**
		• Delay	17.2	-	-	12.5	-	-	-	160.0	-	-	1224.0	-
		• 95th Queue Length (ft)	8	-	-	0	-	-	-	8	-	-	213	-
		• Approach LOS (Delay)	**C (17.2)**			**B (12.5)**			**F (160)**			**F (1224)**		
	D. 2031 Total Traffic W/ left turn lane (See Exhibit 6)	• LOS	**C**	**-**	**-**	**B**	**-**	**-**	**>**	**F**	**<**	**F**	**-**	**C**
		• Delay	17.2	-	-	12.5	-	-	-	160.0	-	1515.5	-	20.6
		• 95th Queue Length (ft)	8	-	-	0	-	-	-	8	-	118	-	13
		• Approach LOS (Delay)	**C (17.2)**			**B (12.5)**			**F (160)**			**F (674.6)**		

Table 5: Level-of-Service Summary (cont.)

Intersection / Timeframe		Roadway Conditions	Movement Group By Approach > = Shared Lane - = Non Critical or Not Allowed Movement											
			Eastbound			Westbound			Northbound			Southbound		
2. Ogden Avenue at Linscott Ave/east site drive		**TWSC - NB/SB Stop**	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
SAT Peak	**A. Existing Traffic (See Exhibit 3)**	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**>**	**B**	**<**	**A**	**F**	**<**
		• Delay	12.7	-	-	11.6	-	-	-	13.7	-	-	125.9	-
		• 95th Queue Length (ft)	3	-	-	15	-	-	-	0	-	5	38	-
		• Approach LOS (Delay)	**B (12.7)**			**B (11.6)**			**B (13.7)**			**F (125.9)**		
	B. 2031 No-Build Traffic (See Exhibit 4)	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**>**	**B**	**<**	**A**	**F**	**<**
		• Delay	13.1	-	-	11.9	-	-	-	14.0	-	-	151.7	-
		• 95th Queue Length (ft)	3	-	-	15	-	-	-	0	-	5	43	-
		• Approach LOS (Delay)	**B (13.1)**			**B (11.9)**			**B (14.0)**			**F (151.7)**		
	C. 2031 Total Traffic (See Exhibit 6)	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**>**	**B**	**<**	**A**	**F**	**<**
		• Delay	14.1	-	-	12.0	-	-	-	14.1	-	-	825.8	-
		• 95th Queue Length (ft)	5	-	-	15	-	-	-	0	-	5	228	-
		• Approach LOS (Delay)	**B (14.1)**			**B (12.0)**			**B (14.1)**			**F (825.8)**		
	D. 2031 Total Traffic W/ left turn lane (See Exhibit 6)	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**>**	**B**	**<**	**F**	**-**	**C**
		• Delay	14.1	-	-	12.0	-	-	-	14.1	-	942.1	-	16.8
		• 95th Queue Length (ft)	5	-	-	0	-	-	-	0	-	145	-	10
		• Approach LOS (Delay)	**B (14.1)**			**B (12.0)**			**B (14.1)**			**F (509.5)**		

Table 5: Level-of-Service Summary (cont.)

Intersection / Timeframe		Roadway Conditions	Movement Group By Approach > = Shared Lane - = Non Critical or Not Allowed Movement											
			Eastbound			Westbound			Northbound			Southbound		
3. Ogden Avenue at west site drive		**TWSC - NB/SB Stop**	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak	**A. Existing Traffic (See Exhibit 3)**	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**-**	**-**	**-**	**>**	**D**	**<**
		• Delay	11.3	-	-	13.2	-	-	-	-	-	-	32.3	-
		• 95th Queue Length (ft)	0	-	-	0	-	-	-	-	-	-	3	-
		• Approach LOS (Delay)	**B (11.3)**			**B (13.2)**				**-**			**D (32.3)**	
	B. 2031 No-Build Traffic (See Exhibit 4)	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**-**	**-**	**-**	**>**	**E**	**<**
		• Delay	11.6	-	-	13.6	-	-	-	-	-	-	36.2	-
		• 95th Queue Length (ft)	0	-	-	0	-	-	-	-	-	-	3	-
		• Approach LOS (Delay)	**B (11.6)**			**B (13.6)**				-			**E (36.2)**	
	C. 2031 Total Traffic (See Exhibit 6)	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**-**	**-**	**-**	**>**	**F**	**<**
		• Delay	12.2	-	-	13.6	-	-	-	-	-	-	355.4	-
		• 95th Queue Length (ft)	5	-	-	0	-	-	-	-	-	-	150	-
		• Approach LOS (Delay)	**B (12.2)**			**B (13.6)**				**-**			**F (355.4)**	
	D. 2031 Total Traffic W/ left turn lane (See Exhibit 6)	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**-**	**-**	**-**	**F**	**-**	**B**
		• Delay	12.2	-	0.0	13.6	-	0.0	-	-	0.0	475.8	-	14.5
		• 95th Queue Length (ft)	5	-	0	0	-	0	-	-	0	93	-	8
		• Approach LOS (Delay)	**B (12.2)**			**B (13.6)**				**-**			**F (230.3)**	
PM Peak	**A. Existing Traffic (See Exhibit 3)**	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**>**	**F**	**<**	**-**	**-**	**-**
		• Delay	14.9	-	-	12.0	-	-	-	63.3	-	-	-	-
		• 95th Queue Length (ft)	0	-	-	0	-	-	-	3	-	-	-	-
		• Approach LOS (Delay)	**B (14.9)**			**B (12.0)**				**F (63.3)**			-	
	B. 2031 No-Build Traffic (See Exhibit 4)	• LOS	**C**	**-**	**-**	**B**	**-**	**-**	**>**	**F**	**<**	**-**	**-**	**-**
		• Delay	15.4	-	-	12.3	-	-	-	72.6	-	-	-	-
		• 95th Queue Length (ft)	0	-	-	0	-	-	-	5	-	-	-	-
		• Approach LOS (Delay)	**C (15.4)**			**B (12.3)**				**F (72.6)**			**-**	
	C. 2031 Total Traffic (See Exhibit 6)	• LOS	**C**	**-**	**-**	**B**	**-**	**-**	**>**	**F**	**<**	**>**	**F**	**<**
		• Delay	16.7	-	-	12.4	-	-	-	98.3	-	-	1126.9	-
		• 95th Queue Length (ft)	8	-	-	0	-	-	-	5	-	-	188	-
		• Approach LOS (Delay)	**C (16.7)**			**B (12.4)**				**F (98.3)**			**F (1126.9)**	
	D. 2031 Total Traffic W/ left turn lane (See Exhibit 6)	• LOS	**C**	**-**	**-**	**B**	**-**	**-**	**>**	**F**	**<**	**F**	**-**	**C**
		• Delay	16.7	-	0.0	12.4	-	0.0	-	98.3	-	1361.4	-	19.5
		• 95th Queue Length (ft)	8	-	0	0	-	0	-	5	-	118	-	8
		• Approach LOS (Delay)	**C (16.7)**			**B (12.4)**				**F (98.3)**			**F (702.2)**	

Table 5: Level-of-Service Summary (cont.)

Intersection / Timeframe		Roadway Conditions	Movement Group By Approach > = Shared Lane - = Non Critical or Not Allowed Movement											
			Eastbound			Westbound			Northbound			Southbound		
3. Ogden Avenue at west site drive		**TWSC - NB/SB Stop**	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
SAT Peak	**A. Existing Traffic (See Exhibit 3)**	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**>**	**B**	**<**	**>**	**F**	**<**
		• Delay	13.1	-	-	11.9	-	-	-	13.9	-	-	168.4	-
		• 95th Queue Length (ft)	0	-	-	0	-	-	-	0	-	-	13	-
		• Approach LOS (Delay)	**B (13.1)**			**B (11.9)**			**B (13.9)**			**F (168.4)**		
	B. 2031 No-Build Traffic (See Exhibit 4)	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**>**	**B**	**<**	**>**	**F**	**<**
		• Delay	13.4	-	-	12.2	-	-	-	14.3	-	-	197.2	-
		• 95th Queue Length (ft)	0	-	-	0	-	-	-	0	-	-	15	-
		• Approach LOS (Delay)	**B (13.4)**			**B (12.2)**			**B (14.3)**			**F (197.2)**		
	C. 2031 Total Traffic (See Exhibit 6)	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**>**	**B**	**<**	**>**	**F**	**<**
		• Delay	14.5	-	-	12.3	-	-	-	14.3	-	-	830.6	-
		• 95th Queue Length (ft)	8	-	-	0	-	-	-	0	-	-	195	-
		• Approach LOS (Delay)	**B (14.5)**			**B (12.3)**			**B (14.3)**			**F (830.6)**		
	D. 2031 Total Traffic W/ left turn lane (See Exhibit 6)	• LOS	**B**	**-**	**-**	**B**	**-**	**-**	**>**	**B**	**<**	**F**	**-**	**C**
		• Delay	14.5	-	-	12.3	-	-	-	14.3	-	965.3	-	17.0
		• 95th Queue Length (ft)	8	-	-	0	-	-	-	0	-	130	-	8
		• Approach LOS (Delay)	**B (14.5)**			**B (12.3)**			**B (14.3)**			**F (545.5)**		

Capacity analysis summary printouts are provided in ***Appendix H***

The following summarizes the findings of the Capacity Analyses.

Ogden Avenue at Saratoga Avenue
At the signalized intersection between Ogden Avenue and Saratoga Avenue, increased delay is expected to be negligible during all three peak hours due to the proposed development. No changes to the existing signal timing and phasing are required to accommodate the development traffic. Saratoga experiences typical delays associated with minor side streets intersecting major roadways such as Ogden Avenue. Overall intersection operations are expected to remain at LOS B during all three Peak Hours analyzed.

Ogden Avenue at Linscott Avenue/east site drive
Left turning movements are expected to experience "unacceptable" LOS F levels of delay during all three Peak Hours analyzed. In an effort to mitigate some of the impact we recommend marking the driveway to provide separate right and left turn lanes. This will allow vehicles making a right turn to operate at LOS B and LOS C while the left turn traffic awaits gaps in through traffic along Ogden Avenue. The maximum queue anticipated with the separate turn lanes is 145-feet on a Saturday Midday, which could negatively impact traffic exiting the drive-thru lane. IDOT may look to limit movements at this location to ¾ (i.e., restricting left turns out).

Ogden Avenue at west site drive
Left turning movements are expected to experience "unacceptable" LOS F levels of delay during all three Peak Hours analyzed. In an effort to mitigate some of the impact we recommend marking the driveway to provide a separate right turn lane and shared thru-left turn lane. This will allow vehicles making a right turn to operate at LOS B and LOS C while the left turn and crossing traffic awaits gaps in through traffic along Ogden Avenue. The maximum queue anticipated with the separate turn lanes is 130-feet on a Saturday Midday, which could negatively impact traffic exiting the drive-thru lane. IDOT may look to limit movements at this location to ¾ (i.e., restricting left turns out).

Drive-Thru Queuing (Stacking) Review

A drive-thru queueing (stacking) review was conducted to determine whether the proposed storage space is adequate to accommodate the drive-through vehicles in accordance with the Village of Downers Grove. Based on the Site Plan prepared by cj architects, inc, the on-site vehicle storage space of the proposed drive-through window lane between the order station and pickup window is four (4) vehicles without disruption of site access or on-site circulation. An additional 9 vehicles along the north and east side of the proposed building can be stacked on site (for a total storage of 13 total vehicles), prior to impacting on-site circulation.

The Village of Downers Grove requires stacking of 8 vehicles per serving window with at least 3 spaces between the order station and the pickup window, per Section 28.7.130 of the Code of Ordinances. The proposed site plan meets these requirements.

Part IV. Parking Evaluation

Parking Requirements

As the future tenant mix is unknown, it is our understanding that Village Staff will calculate the parking requirement for the proposed building as a Multi-Tenant shopping center having a requirement of 4 spaces per 1,000 gross square feet excluding any kitchen or landlord spaces. Thus, the proposed building has a net square footage of approximately 7,500 square feet requiring 30 parking spaces. The proposed site plan shows 31 spaces including two accessible spaces and meets this requirement.

Part IV. Recommendations and Conclusions

Analyses have been conducted under existing and future conditions to determine the impact from the proposed multi-tenant development on the study area intersections. The capacity analysis results indicate that the increase in project site-generated traffic has little to no effect upon the Peak Hour operations of the signalized intersection of Ogden Avenue and Saratoga Avenue to the east of the subject site. Traffic exiting the site is expected to experience longer than desirable delays (particularly left-turning vehicles) due to the volume of through traffic along Ogden Avenue in the site vicinity.

Operational recommendations to consider:

- Mark the site access drives to provide separate left and right turn lanes for exiting traffic. This may require coordination with the property owner to the east to accomplish.
- Add stop signs and stop bars for exiting site traffic.

Part V. Technical Addendum

The following Appendices were previously referenced. They provide technical support for our observations, findings and recommendations discussed in the text.

Appendices

A. Photo Inventory
B. 2024 Traffic Count Summaries
C. Crash Summary Map
D. CMAP 2050 Traffic Projections
E. December 17, 2024, Site Plan
F. ITE Trip Generation Manual Excerpts
G. ITE Pass-By Tables
H. Capacity Analysis Worksheets

5816.910 1250-1254 Ogden Avenue TIS-122424.docx

Proposed Mixed-Use Development
1250-1254 Ogden Avenue
Downers Grove, Illinois

TECHNICAL ADDENDUM

GHA GEWALT HAMILTON ASSOCIATES, INC.

APPENDICES

A. PHOTO INVENTORY
B. 2024 TRAFFIC COUNT SUMMARIES
C. CRASH SUMMARY MAP
D. CMAP 2050 TRAFFIC PROJECTIONS
E. DECEMBER 17TH, 2024, SITE PLAN
F. ITE TRIP GENERATION MANUAL EXCERPTS
G. ITE PASS-BY TABLES
H. CAPACITY ANALYSIS WORKSHEETS

APPENDIX A

Photo Inventory

Looking West along Ogden Avenue approaching West Site Drive

Looking South across Ogden Avenue at Auto House Entrance

Looking East along Ogden Avenue approaching West Site Drive

Looking North across Ogden Avenue at West Site Drive

Looking East along Ogden Avenue approaching Auto House Entrance

Looking East along Ogden Avenue approaching Linscott Avenue

Looking West along Ogden Avenue approaching Linscott Avenue

Looking East along Ogden Avenue approaching East Site Drive

Looking West along Ogden Avenue approaching East Site Drive

Looking East along Ogden Avenue approaching Saratoga Avenue

Looking South along Saratoga Avenue approaching Ogden Avenue

Looking West along Ogden Avenue approaching Saratoga Avenue

Looking West along Ogden Avenue approaching Saratoga Avenue

Looking North along Saratoga Avenue approaching Ogden Avenue

Looking North along Saratoga Avenue approaching Ogden Avenue

Looking East along Ogden Avenue approaching Saratoga Avenue

APPENDIX B

2024 Traffic Count Summaries

Ogden Ave & Saratoga Ave
5816.910 - 1250-1254 Ogden TIS
7-9AM; 4-6PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: Ogden Ave & Saratoga Ave
Site Code:
Start Date: 12/05/2024
Page No: 1

Turning Movement Data

Start Time	Saratoga Ave Southbound					Ogden Ave Westbound					Saratoga Ave Northbound					Ogden Ave Eastbound					Int. 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	
7:00 AM	0	6	3	16	25	0	12	163	3	178	0	14	2	7	23	0	8	211	10	229	455
7:15 AM	0	3	6	11	20	0	16	201	6	223	0	17	2	15	34	0	12	310	14	336	613
7:30 AM	0	7	5	16	28	0	18	246	4	268	0	18	4	21	43	0	10	336	15	361	700
7:45 AM	0	3	3	16	22	0	16	230	3	249	0	42	4	21	67	0	15	369	13	397	735
Hourly Total	0	19	17	59	95	0	62	840	16	918	0	91	12	64	167	0	45	1226	52	1323	2503
8:00 AM	0	9	11	8	28	0	33	240	1	274	0	36	11	22	69	0	31	343	40	414	785
8:15 AM	0	12	9	13	34	0	31	265	12	308	0	39	17	29	85	0	24	332	11	367	794
8:30 AM	0	16	8	21	45	1	12	262	7	282	0	16	4	13	33	0	16	316	7	339	699
8:45 AM	0	11	5	8	24	0	17	272	6	295	0	9	8	9	26	0	19	284	15	318	663
Hourly Total	0	48	33	50	131	1	93	1039	26	1159	0	100	40	73	213	0	90	1275	73	1438	2941
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	12	9	19	40	0	15	355	14	384	0	17	13	8	38	0	24	271	5	300	762
4:15 PM	0	22	14	21	57	0	18	351	11	380	0	21	14	20	55	0	25	295	7	327	819
4:30 PM	0	20	11	24	55	0	21	357	11	389	0	18	18	10	46	0	30	282	11	323	813
4:45 PM	0	14	10	20	44	0	21	392	3	416	0	13	12	13	38	0	28	267	11	306	804
Hourly Total	0	68	44	84	196	0	75	1455	39	1569	0	69	57	51	177	0	107	1115	34	1256	3198
5:00 PM	0	27	14	32	73	0	10	322	15	347	0	16	13	13	42	0	34	281	10	325	787
5:15 PM	0	18	12	23	53	0	17	447	8	472	0	9	6	15	30	0	29	262	9	300	855
5:30 PM	0	25	13	28	66	0	18	344	10	372	0	11	9	20	40	0	25	268	18	311	789
5:45 PM	0	16	12	23	51	0	29	309	15	353	0	18	15	19	52	0	26	237	15	278	734
Hourly Total	0	86	51	106	243	0	74	1422	48	1544	0	54	43	67	164	0	114	1048	52	1214	3165
Grand Total	0	221	145	299	665	1	304	4756	129	5190	0	314	152	255	721	0	356	4664	211	5231	11807
Approach %	0.0	33.2	21.8	45.0	-	0.0	5.9	91.6	2.5	-	0.0	43.6	21.1	35.4	-	0.0	6.8	89.2	4.0	-	-
Total %	0.0	1.9	1.2	2.5	5.6	0.0	2.6	40.3	1.1	44.0	0.0	2.7	1.3	2.2	6.1	0.0	3.0	39.5	1.8	44.3	-
Lights	0	220	145	296	661	1	299	4675	128	5103	0	300	152	246	698	0	353	4561	211	5125	11587
% Lights	-	99.5	100.0	99.0	99.4	100.0	98.4	98.3	99.2	98.3	-	95.5	100.0	96.5	96.8	-	99.2	97.8	100.0	98.0	98.1
Mediums	0	0	0	3	3	0	5	69	1	75	0	14	0	9	23	0	2	83	0	85	186
% Mediums	-	0.0	0.0	1.0	0.5	0.0	1.6	1.5	0.8	1.4	-	4.5	0.0	3.5	3.2	-	0.6	1.8	0.0	1.6	1.6
Articulated Trucks	0	1	0	0	1	0	0	12	0	12	0	0	0	0	0	0	1	20	0	21	34
% Articulated Trucks	-	0.5	0.0	0.0	0.2	0.0	0.0	0.3	0.0	0.2	-	0.0	0.0	0.0	0.0	-	0.3	0.4	0.0	0.4	0.3

Ogden Ave & Saratoga Ave
5816.910 - 1250-1254 Ogden TIS
11 AM-1 PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: Ogden Ave & Saratoga Ave
Site Code:
Start Date: 12/07/2024
Page No: 1

Turning Movement Data

Start Time	Saratoga Ave Southbound					Ogden Ave Westbound					Saratoga Ave Northbound					Ogden Ave Eastbound					Int. 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	
11:00 AM	0	27	5	26	58	0	10	280	13	303	0	9	7	11	27	0	28	270	9	307	695
11:15 AM	0	22	15	19	56	0	11	262	18	291	0	14	9	11	34	0	27	279	6	312	693
11:30 AM	0	25	12	23	60	0	15	281	16	312	0	13	10	12	35	0	30	260	16	306	713
11:45 AM	0	24	5	25	54	0	12	282	19	313	0	16	9	14	39	0	29	275	11	315	721
Hourly Total	0	98	37	93	228	0	48	1105	66	1219	0	52	35	48	135	0	114	1084	42	1240	2822
12:00 PM	0	15	13	30	58	0	13	342	16	371	0	26	9	11	46	0	42	267	5	314	789
12:15 PM	0	24	10	21	55	0	18	301	5	324	0	13	11	8	32	0	46	308	11	365	776
12:30 PM	0	25	7	19	51	0	16	278	18	312	0	12	11	11	34	0	20	252	8	280	677
12:45 PM	0	26	17	25	68	0	12	292	10	314	0	11	11	11	33	0	28	260	9	297	712
Hourly Total	0	90	47	95	232	0	59	1213	49	1321	0	62	42	41	145	0	136	1087	33	1256	2954
Grand Total	0	188	84	188	460	0	107	2318	115	2540	0	114	77	89	280	0	250	2171	75	2496	5776
Approach %	0.0	40.9	18.3	40.9	-	0.0	4.2	91.3	4.5	-	0.0	40.7	27.5	31.8	-	0.0	10.0	87.0	3.0	-	-
Total %	0.0	3.3	1.5	3.3	8.0	0.0	1.9	40.1	2.0	44.0	0.0	2.0	1.3	1.5	4.8	0.0	4.3	37.6	1.3	43.2	-
Lights	0	187	84	188	459	0	106	2298	113	2517	0	113	77	88	278	0	248	2154	75	2477	5731
% Lights	-	99.5	100.0	100.0	99.8	-	99.1	99.1	98.3	99.1	-	99.1	100.0	98.9	99.3	-	99.2	99.2	100.0	99.2	99.2
Mediums	0	0	0	0	0	0	1	17	2	20	0	0	0	1	1	0	2	15	0	17	38
% Mediums	-	0.0	0.0	0.0	0.0	-	0.9	0.7	1.7	0.8	-	0.0	0.0	1.1	0.4	-	0.8	0.7	0.0	0.7	0.7
Articulated Trucks	0	1	0	0	1	0	0	3	0	3	0	1	0	0	1	0	0	2	0	2	7
% Articulated Trucks	-	0.5	0.0	0.0	0.2	-	0.0	0.1	0.0	0.1	-	0.9	0.0	0.0	0.4	-	0.0	0.1	0.0	0.1	0.1

Ogden Ave & West Site Drive
5816.910 - 1250-1254 Ogden TIS
7-9AM; 4-6PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: Ogden Ave & West Site Drive
Site Code:
Start Date: 12/05/2024
Page No: 1

Turning Movement Data

Start Time	West Site Access Southbound					Ogden Ave Westbound					Auto House Access Northbound					Ogden Ave Eastbound					Int. 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	
7:00 AM	0	0	0	0	0	0	0	194	0	194	0	0	0	0	0	0	0	226	0	226	420
7:15 AM	0	0	0	0	0	0	0	223	0	223	0	0	0	0	0	0	0	299	0	299	522
7:30 AM	0	0	0	0	0	0	0	282	1	283	0	0	0	0	0	0	0	324	0	324	607
7:45 AM	0	0	0	0	0	0	0	288	0	288	0	0	0	0	0	0	1	323	0	324	612
Hourly Total	0	0	0	0	0	0	0	987	1	988	0	0	0	0	0	0	1	1172	0	1173	2161
8:00 AM	0	0	0	0	0	0	0	279	0	279	0	0	0	0	0	0	1	405	0	406	685
8:15 AM	0	0	0	2	2	0	0	305	0	305	0	0	0	0	0	0	1	384	0	385	692
8:30 AM	0	1	0	1	2	0	0	285	0	285	0	0	0	0	0	0	1	343	0	344	631
8:45 AM	0	0	0	0	0	0	0	281	0	281	0	0	0	0	0	0	0	307	0	307	588
Hourly Total	0	1	0	3	4	0	0	1150	0	1150	0	0	0	0	0	0	3	1439	0	1442	2596
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	0	0	0	0	1	394	0	395	0	0	0	1	1	0	0	310	0	310	706
4:15 PM	0	0	0	0	0	0	1	426	0	427	0	0	0	1	1	0	0	347	1	348	776
4:30 PM	0	0	0	0	0	0	0	399	0	399	0	1	0	0	1	0	0	345	0	345	745
4:45 PM	0	0	0	0	0	0	1	471	1	473	0	0	0	0	0	0	0	305	0	305	778
Hourly Total	0	0	0	0	0	0	3	1690	1	1694	0	1	0	2	3	0	0	1307	1	1308	3005
5:00 PM	0	0	0	0	0	0	0	376	0	376	0	0	0	2	2	0	0	321	0	321	699
5:15 PM	0	0	0	0	0	0	0	481	1	482	0	0	0	0	0	0	0	298	0	298	780
5:30 PM	0	1	0	2	3	0	0	398	1	399	0	0	0	0	0	0	0	319	0	319	721
5:45 PM	0	0	0	0	0	0	0	353	0	353	0	0	0	1	1	0	0	261	0	261	615
Hourly Total	0	1	0	2	3	0	0	1608	2	1610	0	0	0	3	3	0	0	1199	0	1199	2815
Grand Total	0	2	0	5	7	0	3	5435	4	5442	0	1	0	5	6	0	4	5117	1	5122	10577
Approach %	0.0	28.6	0.0	71.4	-	0.0	0.1	99.9	0.1	-	0.0	16.7	0.0	83.3	-	0.0	0.1	99.9	0.0	-	-
Total %	0.0	0.0	0.0	0.0	0.1	0.0	0.0	51.4	0.0	51.5	0.0	0.0	0.0	0.0	0.1	0.0	0.0	48.4	0.0	48.4	-
Lights	0	2	0	5	7	0	3	5334	3	5340	0	1	0	5	6	0	4	5012	1	5017	10370
% Lights	-	100.0	-	100.0	100.0	-	100.0	98.1	75.0	98.1	-	100.0	-	100.0	100.0	-	100.0	97.9	100.0	98.0	98.0
Mediums	0	0	0	0	0	0	0	91	1	92	0	0	0	0	0	0	0	85	0	85	177
% Mediums	-	0.0	-	0.0	0.0	-	0.0	1.7	25.0	1.7	-	0.0	-	0.0	0.0	-	0.0	1.7	0.0	1.7	1.7
Articulated Trucks	0	0	0	0	0	0	0	10	0	10	0	0	0	0	0	0	0	20	0	20	30
% Articulated Trucks	-	0.0	-	0.0	0.0	-	0.0	0.2	0.0	0.2	-	0.0	-	0.0	0.0	-	0.0	0.4	0.0	0.4	0.3

Ogden Ave & West Site Drive
5816.910 - 1250-1254 Ogden TIS
11 AM-1 PM
GHA Mio

Gewalt Hamilton Associates Inc.
625 Forest Edge Drive

Vernon Hills, Illinois, United States 60061
(847) 478-9700 poster@gha-engineers.com

Count Name: Ogden Ave & West Site Drive
Site Code:
Start Date: 12/07/2024
Page No: 1

Turning Movement Data

Start Time	West Site Access Southbound					Ogden Ave Westbound					Auto House Access Northbound					Ogden Ave Eastbound					Int. 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	
11:00 AM	0	0	0	1	1	0	1	315	0	316	0	0	0	2	2	0	0	330	0	330	649
11:15 AM	0	1	0	0	1	0	1	281	1	283	0	0	0	0	0	0	1	360	0	361	645
11:30 AM	0	2	0	0	2	0	0	331	0	331	0	1	1	0	2	0	1	292	0	293	628
11:45 AM	0	1	0	0	1	0	1	349	0	350	0	0	0	0	0	0	0	333	1	334	685
Hourly Total	0	4	0	1	5	0	3	1276	1	1280	0	1	1	2	4	0	2	1315	1	1318	2607
12:00 PM	0	2	0	0	2	1	0	366	0	367	0	0	0	0	0	0	0	307	0	307	676
12:15 PM	0	0	0	1	1	0	0	356	0	356	0	0	0	0	0	0	0	355	0	355	712
12:30 PM	0	1	0	0	1	0	0	327	3	330	0	0	0	1	1	0	1	261	0	262	594
12:45 PM	0	1	0	3	4	0	0	326	0	326	0	0	0	1	1	0	0	288	0	288	619
Hourly Total	0	4	0	4	8	1	0	1375	3	1379	0	0	0	2	2	0	1	1211	0	1212	2601
Grand Total	0	8	0	5	13	1	3	2651	4	2659	0	1	1	4	6	0	3	2526	1	2530	5208
Approach %	0.0	61.5	0.0	38.5	-	0.0	0.1	99.7	0.2	-	0.0	16.7	16.7	66.7	-	0.0	0.1	99.8	0.0	-	-
Total %	0.0	0.2	0.0	0.1	0.2	0.0	0.1	50.9	0.1	51.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	48.5	0.0	48.6	-
Lights	0	8	0	5	13	1	3	2631	4	2639	0	1	0	4	5	0	3	2509	1	2513	5170
% Lights	-	100.0	-	100.0	100.0	100.0	100.0	99.2	100.0	99.2	-	100.0	0.0	100.0	83.3	-	100.0	99.3	100.0	99.3	99.3
Mediums	0	0	0	0	0	0	0	17	0	17	0	0	1	0	1	0	0	15	0	15	33
% Mediums	-	0.0	-	0.0	0.0	0.0	0.0	0.6	0.0	0.6	-	0.0	100.0	0.0	16.7	-	0.0	0.6	0.0	0.6	0.6
Articulated Trucks	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	2	0	2	5
% Articulated Trucks	-	0.0	-	0.0	0.0	0.0	0.0	0.1	0.0	0.1	-	0.0	0.0	0.0	0.0	-	0.0	0.1	0.0	0.1	0.1

Ogden Ave & Linscott Ave/E Site Drive - TMC

Thu Dec 5, 2024
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1253426, Location: 41.808368, -88.016023

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	NE Access						Ogden Ave						Linscott Ave					
Direction	Southwestbound						Westbound						Northbound					
Time	R	BR	BL	HL	U	App	HR	BR	T	L	U	App	R	BR	BL	L	U	App
2024-12-05 7:00AM	0	0	0	0	0	**0**	0	0	195	0	0	**195**	1	0	0	1	0	**2**
7:15AM	0	0	0	0	0	**0**	5	1	222	0	0	**228**	2	0	0	0	0	**2**
7:30AM	0	0	0	0	0	**0**	0	0	281	0	0	**281**	1	0	0	1	0	**2**
7:45AM	0	0	0	0	0	**0**	1	0	282	0	0	**283**	1	0	0	0	0	**1**
Hourly Total	0	0	0	0	0	**0**	6	1	980	0	0	**987**	5	0	0	2	0	**7**
8:00AM	0	0	0	0	0	**0**	3	2	277	0	0	**282**	2	0	0	0	0	**2**
8:15AM	0	0	0	0	0	**0**	3	2	308	0	0	**313**	2	0	0	0	0	**2**
8:30AM	0	0	0	1	0	**1**	6	2	283	2	0	**293**	1	0	0	0	0	**1**
8:45AM	0	1	0	1	0	**2**	1	1	279	0	0	**281**	0	0	0	0	0	**0**
Hourly Total	0	1	0	2	0	**3**	13	7	1147	2	0	**1169**	5	0	0	0	0	**5**
4:00PM	0	0	0	0	0	**0**	3	0	382	0	0	**385**	1	0	0	0	0	**1**
4:15PM	0	0	0	0	0	**0**	1	0	406	1	0	**408**	1	0	0	0	0	**1**
4:30PM	0	0	0	0	0	**0**	1	0	398	0	0	**399**	2	0	0	1	0	**3**
4:45PM	0	0	0	0	0	**0**	0	0	467	1	0	**468**	0	0	0	0	0	**0**
Hourly Total	0	0	0	0	0	**0**	5	0	1653	2	0	**1660**	4	0	0	1	0	**5**
5:00PM	0	0	0	0	0	**0**	0	0	372	0	1	**373**	1	0	0	0	0	**1**
5:15PM	0	0	0	0	0	**0**	0	0	483	0	0	**483**	0	0	0	0	0	**0**
5:30PM	0	0	0	1	0	**1**	0	0	403	0	0	**403**	0	0	0	1	0	**1**
5:45PM	0	0	0	2	0	**2**	0	0	346	0	0	**346**	0	0	0	1	0	**1**
Hourly Total	0	0	0	3	0	**3**	0	0	1604	0	1	**1605**	1	0	0	2	0	**3**
Total	0	1	0	5	0	**6**	24	8	5384	4	1	**5421**	15	0	0	5	0	**20**
% Approach	0%	16.7%	0%	83.3%	0%	**-**	0.4%	0.1%	99.3%	0.1%	0%	**-**	75.0%	0%	0%	25.0%	0%	**-**
% Total	0%	0%	0%	0%	0%	**0.1%**	0.2%	0.1%	50.8%	0%	0%	**51.1%**	0.1%	0%	0%	0%	0%	**0.2%**
Lights	0	1	0	5	0	**6**	24	8	5294	4	1	**5331**	13	0	0	5	0	**18**
% Lights	0%	100%	0%	100%	0%	**100%**	100%	100%	98.3%	100%	100%	**98.3%**	86.7%	0%	0%	100%	0%	**90.0%**
Articulated Trucks	0	0	0	0	0	**0**	0	0	11	0	0	**11**	0	0	0	0	0	**0**
% Articulated Trucks	0%	0%	0%	0%	0%	**0%**	0%	0%	0.2%	0%	0%	**0.2%**	0%	0%	0%	0%	0%	**0%**
Buses and Single-Unit Trucks	0	0	0	0	0	**0**	0	0	79	0	0	**79**	2	0	0	0	0	**2**
% Buses and Single-Unit Trucks	0%	0%	0%	0%	0%	**0%**	0%	0%	1.5%	0%	0%	**1.5%**	13.3%	0%	0%	0%	0%	**10.0%**

*BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Ogden Ave & Linscott Ave/E Site Drive - TMC

Thu Dec 5, 2024
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1253426, Location: 41.808368, -88.016023

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Ngden Ave						OW Access						
Direction	Eastbound						Southeastbound						
Time	R	T	BL	HL	U	App	HR	BR	BL	L	U	App	Int
2024-12-05 7:00AM	0	228	2	0	0	**230**	1	0	0	0	0	**1**	**428**
7:15AM	0	308	0	0	0	**308**	0	0	0	0	0	**0**	**538**
7:30AM	0	351	1	1	0	**353**	4	0	0	0	0	**4**	**640**
7:45AM	0	363	0	0	0	**363**	2	0	0	0	0	**2**	**649**
Hourly Total	0	1250	3	1	0	**1254**	7	0	0	0	0	**7**	**2255**
8:00AM	0	406	0	2	0	**408**	0	0	0	0	0	**0**	**692**
8:15AM	2	354	0	3	0	**359**	0	0	0	0	0	**0**	**674**
8:30AM	0	339	0	1	0	**340**	2	0	1	0	0	**3**	**638**
8:45AM	0	334	2	3	0	**339**	1	0	2	0	0	**3**	**625**
Hourly Total	2	1433	2	9	0	**1446**	3	0	3	0	0	**6**	**2629**
4:00PM	2	300	0	1	0	**303**	3	0	0	0	0	**3**	**692**
4:15PM	0	347	0	0	0	**347**	1	0	0	0	0	**1**	**757**
4:30PM	0	299	0	2	0	**301**	0	0	0	0	0	**0**	**703**
4:45PM	0	310	0	0	0	**310**	1	0	0	0	0	**1**	**779**
Hourly Total	2	1256	0	3	0	**1261**	5	0	0	0	0	**5**	**2931**
5:00PM	1	302	0	1	0	**304**	3	0	0	0	0	**3**	**681**
5:15PM	1	294	0	1	0	**296**	2	0	0	0	0	**2**	**781**
5:30PM	0	320	0	0	0	**320**	1	0	0	0	0	**1**	**726**
5:45PM	0	249	0	0	1	**250**	1	0	0	0	0	**1**	**600**
Hourly Total	2	1165	0	2	1	**1170**	7	0	0	0	0	**7**	**2788**
Total	6	5104	5	15	1	**5131**	22	0	3	0	0	**25**	**10603**
% Approach	0.1%	99.5%	0.1%	0.3%	0%	-	88.0%	0%	12.0%	0%	0%	-	-
% Total	0.1%	48.1%	0%	0.1%	0%	**48.4%**	0.2%	0%	0%	0%	0%	**0.2%**	-
Lights	6	5005	5	15	1	**5032**	21	0	3	0	0	**24**	10411
% Lights	100%	98.1%	100%	100%	100%	**98.1%**	95.5%	0%	100%	0%	0%	**96.0%**	98.2%
Articulated Trucks	0	13	0	0	0	**13**	0	0	0	0	0	**0**	24
% Articulated Trucks	0%	0.3%	0%	0%	0%	**0.3%**	0%	0%	0%	0%	0%	**0%**	0.2%
Buses and Single-Unit Trucks	0	86	0	0	0	**86**	1	0	0	0	0	**1**	168
% Buses and Single-Unit Trucks	0%	1.7%	0%	0%	0%	**1.7%**	4.5%	0%	0%	0%	0%	**4.0%**	1.6%

*BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Ogden Ave & Linscott/E Site Drive - TMC

Sat Dec 7, 2024
Full Length (11 AM-1 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1253429, Location: 41.808386, -88.01608

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	NE Access						Ogden Ave						Linscott Ave					
Direction	Southwestbound						Westbound						Northbound					
Time	R	BR	BL	HL	U	**App**	HR	BR	T	L	U	**App**	R	BR	BL	L	U	**App**
2024-12-07 11:00AM	0	0	0	3	0	**3**	5	0	311	1	0	**317**	2	0	0	0	0	**2**
11:15AM	0	1	0	1	0	**2**	8	1	278	1	0	**288**	2	0	0	1	0	**3**
11:30AM	0	2	0	0	0	**2**	7	1	322	0	0	**330**	2	0	0	0	0	**2**
11:45AM	0	2	0	0	0	**2**	7	0	342	0	0	**349**	1	0	0	0	0	**1**
Hourly Total	0	5	0	4	0	**9**	27	2	1253	2	0	**1284**	7	0	0	1	0	**8**
12:00PM	0	1	0	2	0	**3**	5	1	367	0	0	**373**	0	0	0	0	0	**0**
12:15PM	0	3	0	9	0	**12**	4	0	340	0	0	**344**	1	0	0	0	0	**1**
12:30PM	0	1	0	1	0	**2**	1	0	330	0	0	**331**	0	0	0	0	0	**0**
12:45PM	0	2	0	2	0	**4**	5	0	323	0	0	**328**	0	0	0	0	0	**0**
Hourly Total	0	7	0	14	0	**21**	15	1	1360	0	0	**1376**	1	0	0	0	0	**1**
Total	0	12	0	18	0	**30**	42	3	2613	2	0	**2660**	8	0	0	1	0	**9**
% Approach	0%	40.0%	0%	60.0%	0%	**-**	1.6%	0.1%	98.2%	0.1%	0%	**-**	88.9%	0%	0%	11.1%	0%	**-**
% Total	0%	0.2%	0%	0.3%	0%	**0.6%**	0.8%	0.1%	50.2%	0%	0%	**51.1%**	0.2%	0%	0%	0%	0%	**0.2%**
Lights	0	12	0	18	0	**30**	42	3	2592	2	0	**2639**	8	0	0	1	0	**9**
% Lights	0%	100%	0%	100%	0%	**100%**	100%	100%	99.2%	100%	0%	**99.2%**	100%	0%	0%	100%	0%	**100%**
Articulated Trucks	0	0	0	0	0	**0**	0	0	4	0	0	**4**	0	0	0	0	0	**0**
% Articulated Trucks	0%	0%	0%	0%	0%	**0%**	0%	0%	0.2%	0%	0%	**0.2%**	0%	0%	0%	0%	0%	**0%**
Buses and Single-Unit Trucks	0	0	0	0	0	**0**	0	0	17	0	0	**17**	0	0	0	0	0	**0**
% Buses and Single-Unit Trucks	0%	0%	0%	0%	0%	**0%**	0%	0%	0.7%	0%	0%	**0.6%**	0%	0%	0%	0%	0%	**0%**

*BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

APPENDIX C

Crash Summary Map

Appendix C - IDOT Crash Data 2019-23

1 inch = 130 Feet

Proposed Mixed-Use Development
1250-1254 Ogden Avenue
Downers Grove, IL

Map Center: 88.01637°W 41.80869°N

APPENDIX D

CMAP 2050 Traffic Projections

Appendix D

Chicago Metropolitan Agency for Planning

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

December 16, 2024

David Westergreen, E. I.
Transportation Engineer
Gewalt Hamilton Associates
625 Forest Edge Drive
Vernon Hills, IL 600061

Subject: Ogden Avenue and Saratoga Avenue
IDOT

Dear Mr. Westergreen:

In response to a request made on your behalf and dated December 13, 2024, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT (2023)	Year 2050 ADT
Ogden Ave west of Saratoga Ave	30,000	34,200

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2024 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806 or email me at jrodriguez@cmap.illinois.gov

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

cc: Rios (IDOT)
2024_TrafficForecasts\DownersGrove\du-59-24\du-59-24.docx

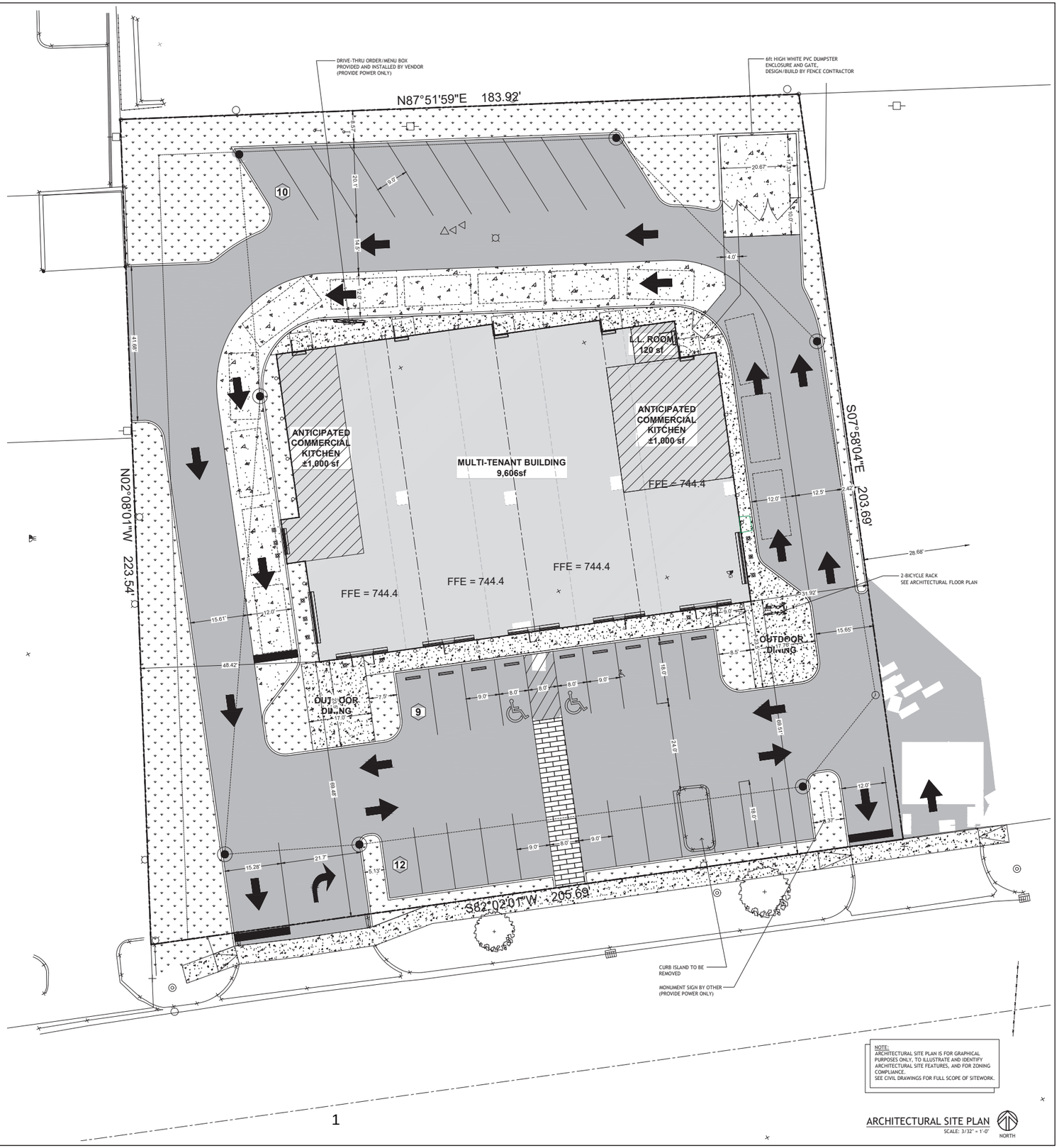
APPENDIX E

December 17th, 2024 Site Plan

ZONING ANALYSIS

Project Name:	**New Retail Development**				
Address:	1250-1254 Ogden Ave.				
PIN(s):	09-06-403-005				
Zoning District:	B3 - General Services and Highway Business District.				
Existing Use:	Retail/Commercial Building and Parking				
Proposed Use:	Retail/Commercial Building and Parking				
Petition Type:	Planned Unit Development - Site Plan Review				
Deviations:	Special Use - Drive through				
Requirement	Factor	Required	Proposed/Existing	Meets Req.?	Difference
District Area	Minimum	4 acres	N/A	N/A	N/A
Lot Area	Minimum	Not Required	41,505 sq. ft.	N/A	N/A
Building Coverage	Maximum	Not Restricted by ordinance	N/A	N/A	N/A
Ogden Ave. (1 row)	Minimum	75' buildings, 50' canopies/pkng	119', 53'	YES	
Rear Yard	Minimum	Not Required	N/A	YES	
Int. Side Yard		Not Required	N/A	N/A	N/A
Height	Maximum	60'	24ft	YES	
Open Space	Minimum	10% of lot (4,150.5 sq. ft.)	5,709 sq. ft.	YES	
FAR	Maximum	0.75 (31,128.75)	0.231 (9,606 sq. ft.)	YES	
Parking	Minimum	Mixed use = 4 per 1,000sf (30)	31	YES	
	Minimum	BICYCLE: 2	2	YES	
Donations*		Not Required	N/A	N/A	N/A

Remarks:
N/A



NOTE:
ARCHITECTURAL SITE PLAN IS FOR GRAPHICAL PURPOSES ONLY, TO ILLUSTRATE AND IDENTIFY ARCHITECTURAL SITE FEATURES, AND FOR ZONING COMPLIANCE.
SEE CIVIL DRAWINGS FOR FULL SCOPE OF SITEWORK.

ARCHITECTURAL SITE PLAN
SCALE: 3/32" = 1'-0"

NORTH

1

SEAL:

SUBMITTAL HISTORY:	REV:
• DEC. 27, 2024 PZC SUBMITTAL 1	

cj architects, inc.
Darien, IL
773.383.6556
DESIGN FIRM PROF. REG.#: 184.005807

CONSULTANT:

NEW MULTI-TENANT BUILDING
LANDLORD WORK - SITE/SHELL
1250-1254 OGDEN AVE.
DOWNERS GROVE, IL 60561
PROJECT CODE: LWC-24.04

SHEET NAME
ARCHITECTURAL SITE PLAN

PZC SUBMITTAL ONLY

SA-1.1

12.27.2024

APPENDIX F

ITE Trip Generation Manual Excerpts

Land Use: 720
Medical-Dental Office Building

Description

A medical-dental office building is a facility that provides diagnoses and outpatient care on a routine basis but is unable to provide prolonged in-house medical and surgical care. One or more private physicians or dentists generally operate this type of facility. General office building (Land Use 710) and clinic (Land Use 630) are related uses.

Land Use Subcategory

Analysis of medical-dental office building data found that trip generation rates are measurably different for sites located within or adjacent to a hospital campus and sites that are stand-alone. Data plots are presented for these two land use subcategories.

Additional Data

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 Alberta (CAN), California, Connecticut, Kentucky, Maryland, Minnesota, New Jersey, New York, Ohio, Oregon, Pennsylvania, South Dakota, Texas, Virginia, Washington, and Wisconsin.

Source Numbers

104, 109, 120, 157, 184, 209, 211, 253, 287, 294, 295, 304, 357, 384, 404, 407, 423, 444, 509, 601, 715, 867, 879, 901, 902, 908, 959, 972

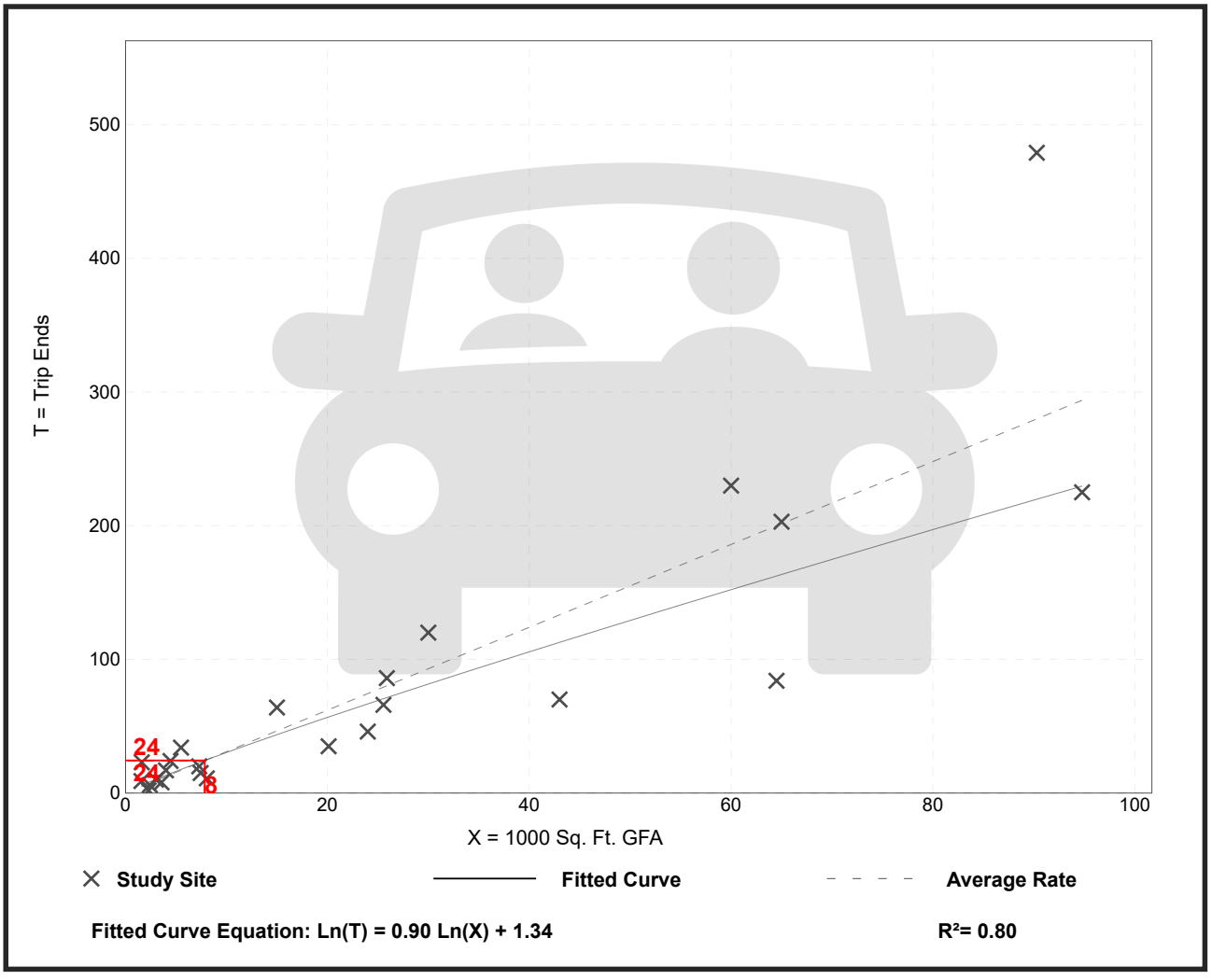
Medical-Dental Office Building - Stand-Alone
(720)

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: 24
Avg. 1000 Sq. Ft. GFA: 25
Directional Distribution: 79% entering, 21% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.10	0.87 - 14.30	1.49

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.90 Ln(X) + 1.34 **R^2= 0.80**

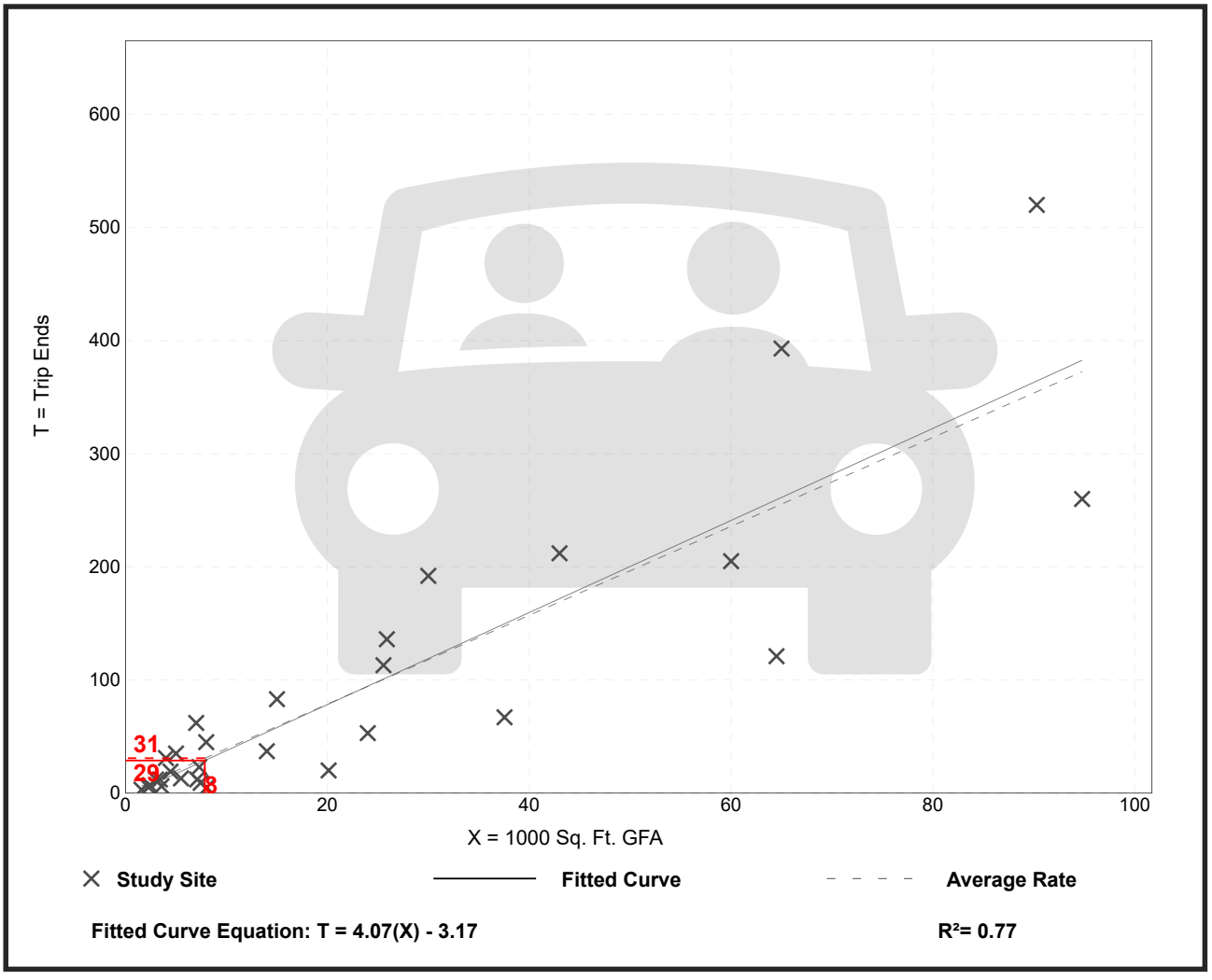
Medical-Dental Office Building - Stand-Alone
(720)

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: 30
Avg. 1000 Sq. Ft. GFA: 23
Directional Distribution: 30% entering, 70% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.93	0.62 - 8.86	1.86

Data Plot and Equation



Medical-Dental Office Building - Stand-Alone
(720)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday, Peak Hour of Generator**

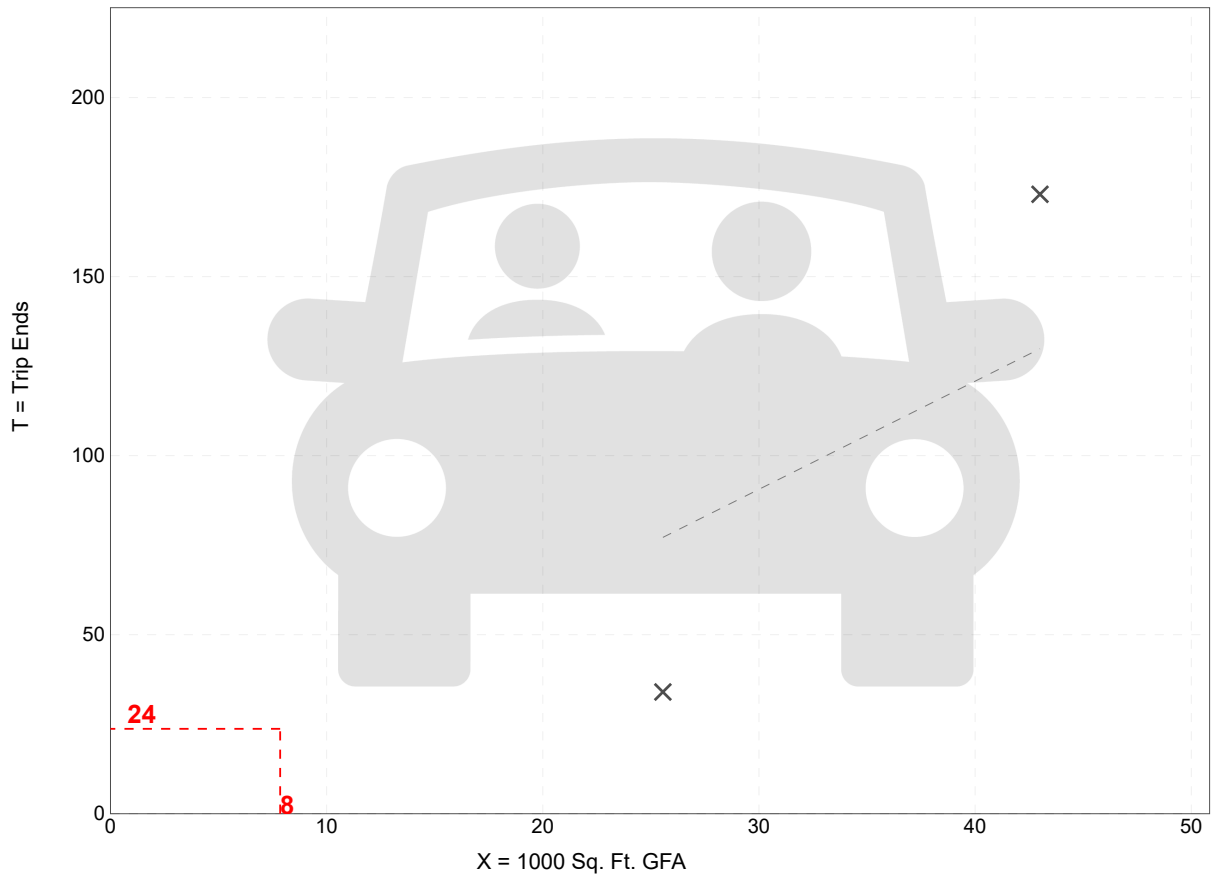
Setting/Location: **General Urban/Suburban**
Number of Studies: 2
Avg. 1000 Sq. Ft. GFA: 34
Directional Distribution: 57% entering, 43% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.02	1.33 - 4.02	*

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Land Use: 934
Fast-Food Restaurant with Drive-Through Window

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

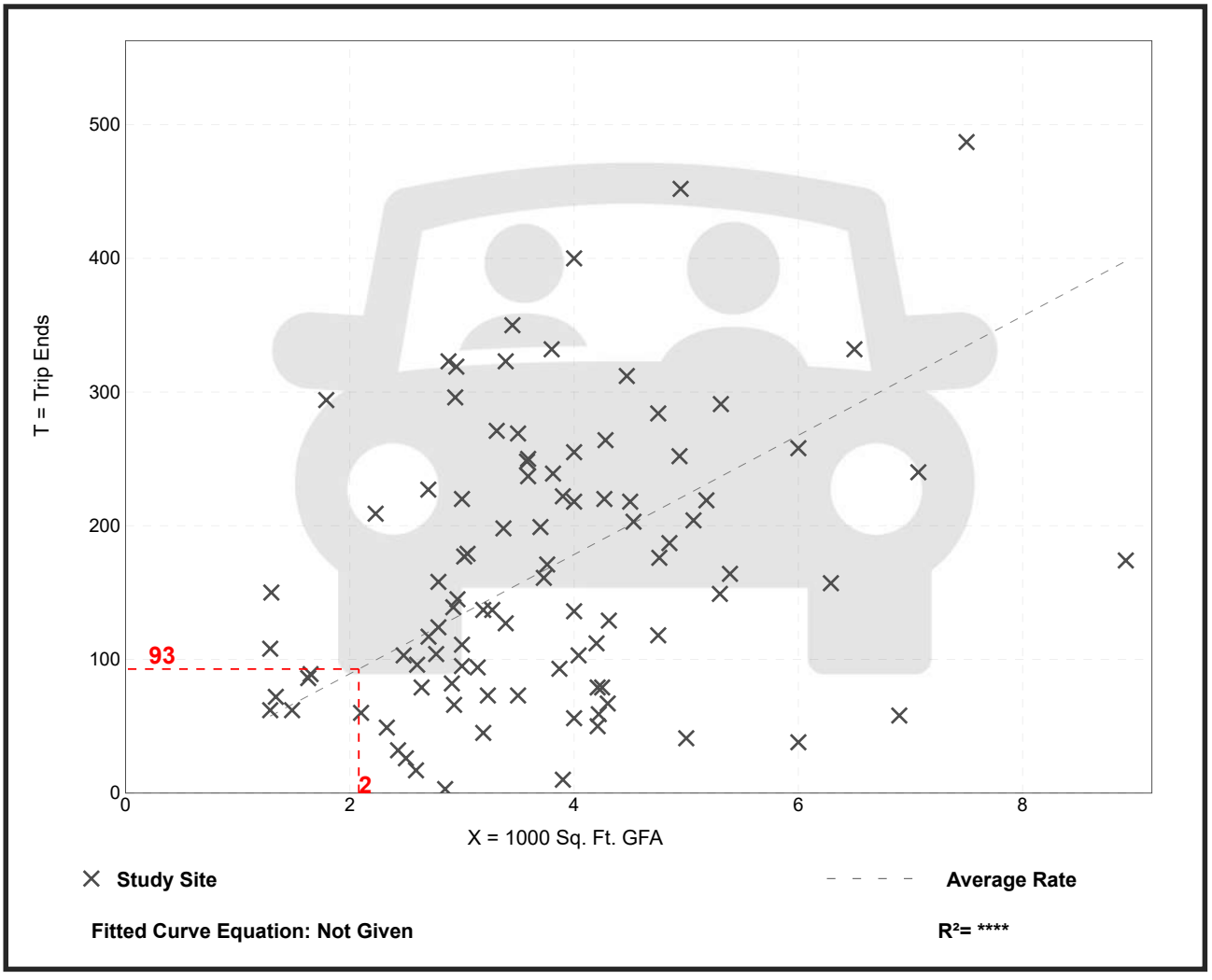
Fast-Food Restaurant with Drive-Through Window
(934)

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



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

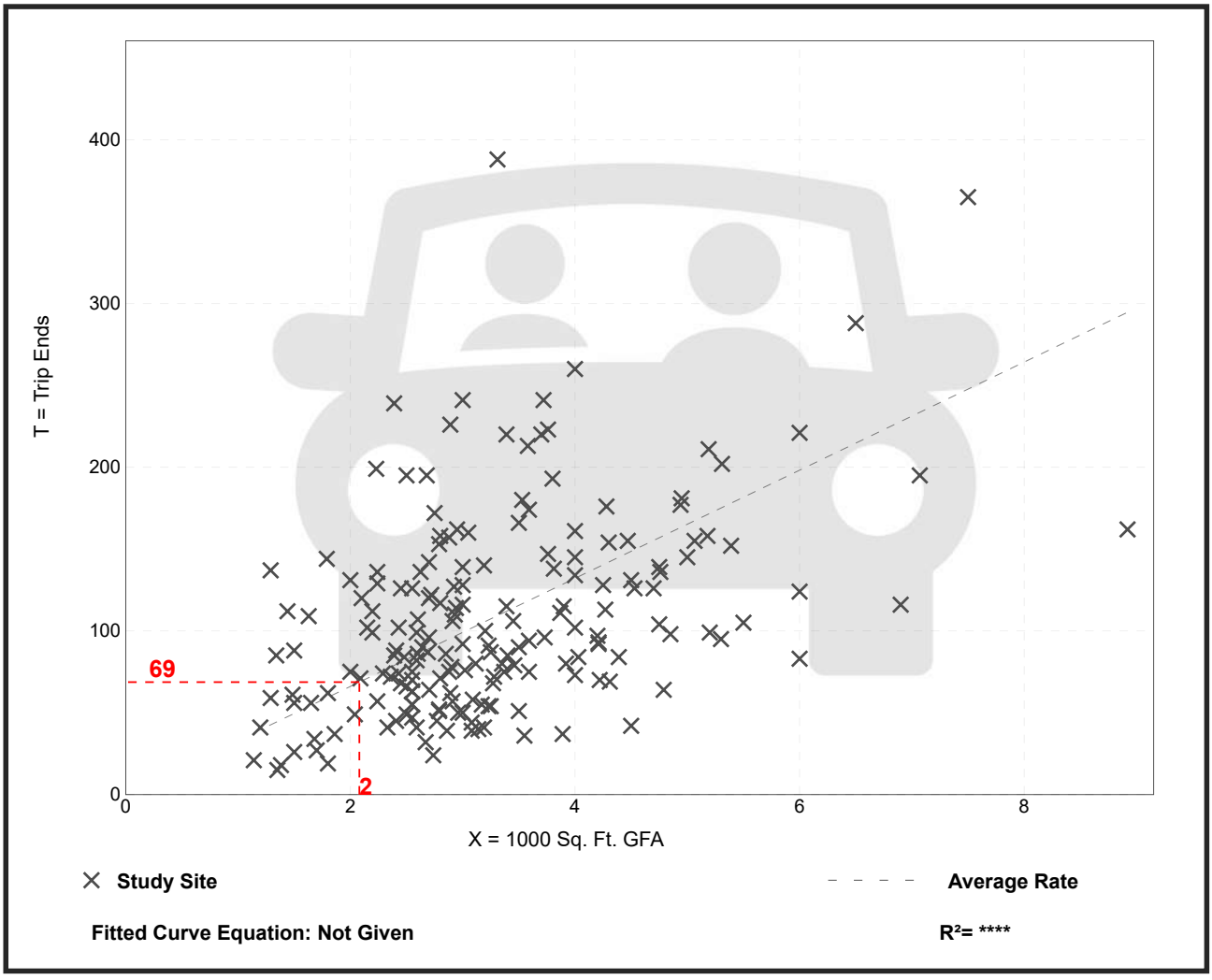
Fast-Food Restaurant with Drive-Through Window
(934)

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



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Appendix F

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

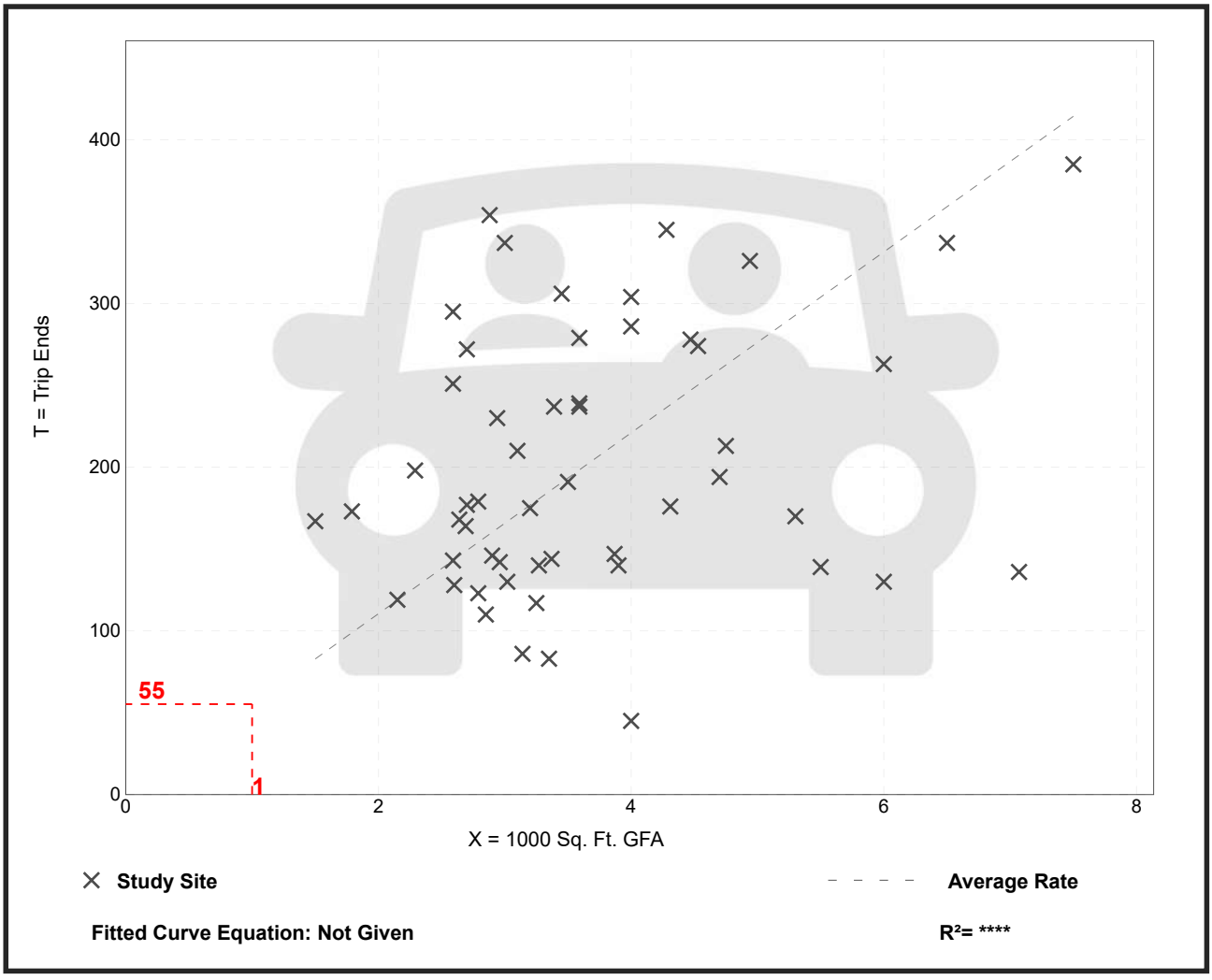
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday, Peak Hour of Generator**

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



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Land Use: 933
Fast-Food Restaurant without Drive-Through Window

Description

This land use includes any fast-food restaurant without a drive-through window. This type of restaurant is characterized by a 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. These limited-service eating establishments do 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 customer is less than 30 minutes. Fast casual restaurant (Land Use 930), high-turnover (sit-down) restaurant (Land Use 932), and fast-food restaurant with drive-through window (Land Use 934) are related uses.

Additional Data

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 and the 2010s in Alberta (CAN), California, Colorado, Connecticut, Maryland, Montana, Pennsylvania, and Texas.

Source Numbers

163, 247, 278, 319, 342, 885, 977, 1020

Fast-Food Restaurant without Drive-Through Window
(933)

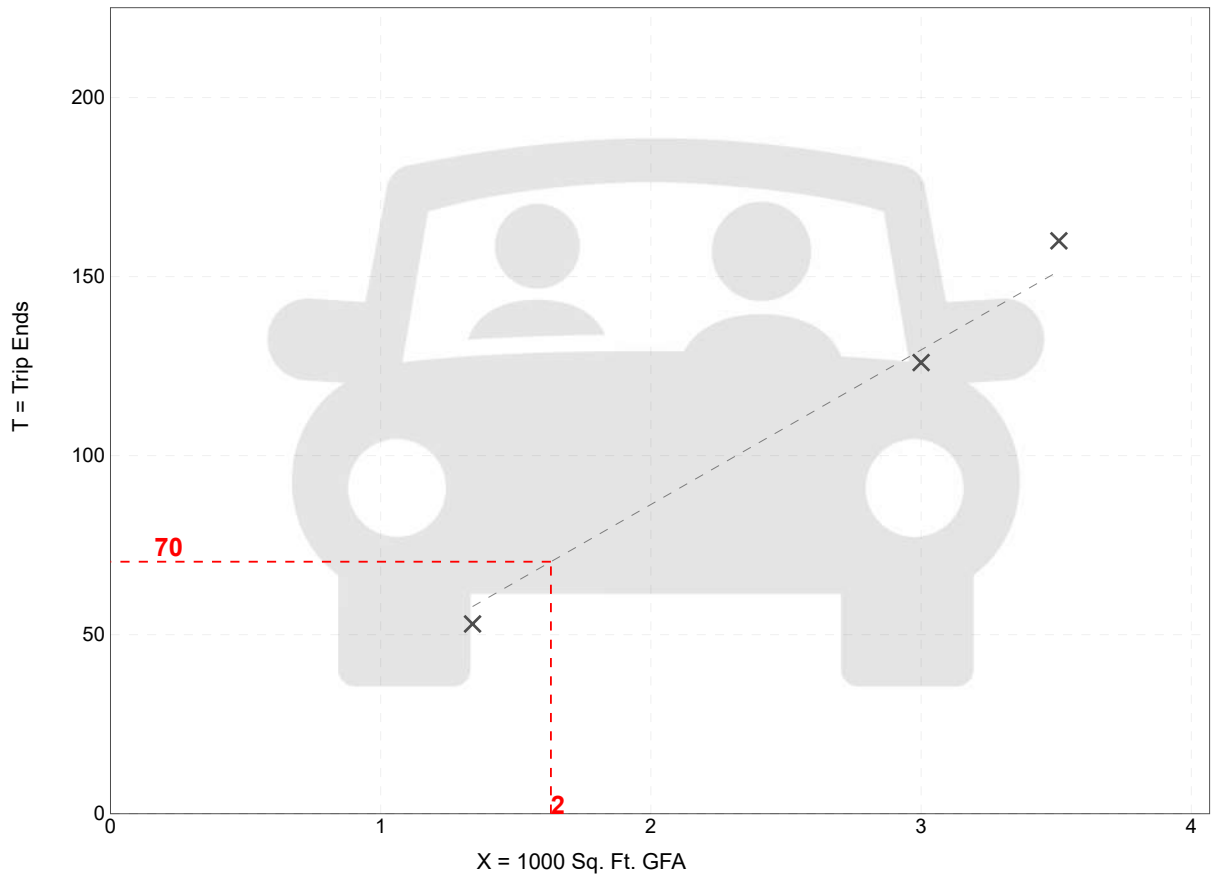
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 3
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 58% entering, 42% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
43.18	39.55 - 45.58	2.84

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= ****

Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Appendix F

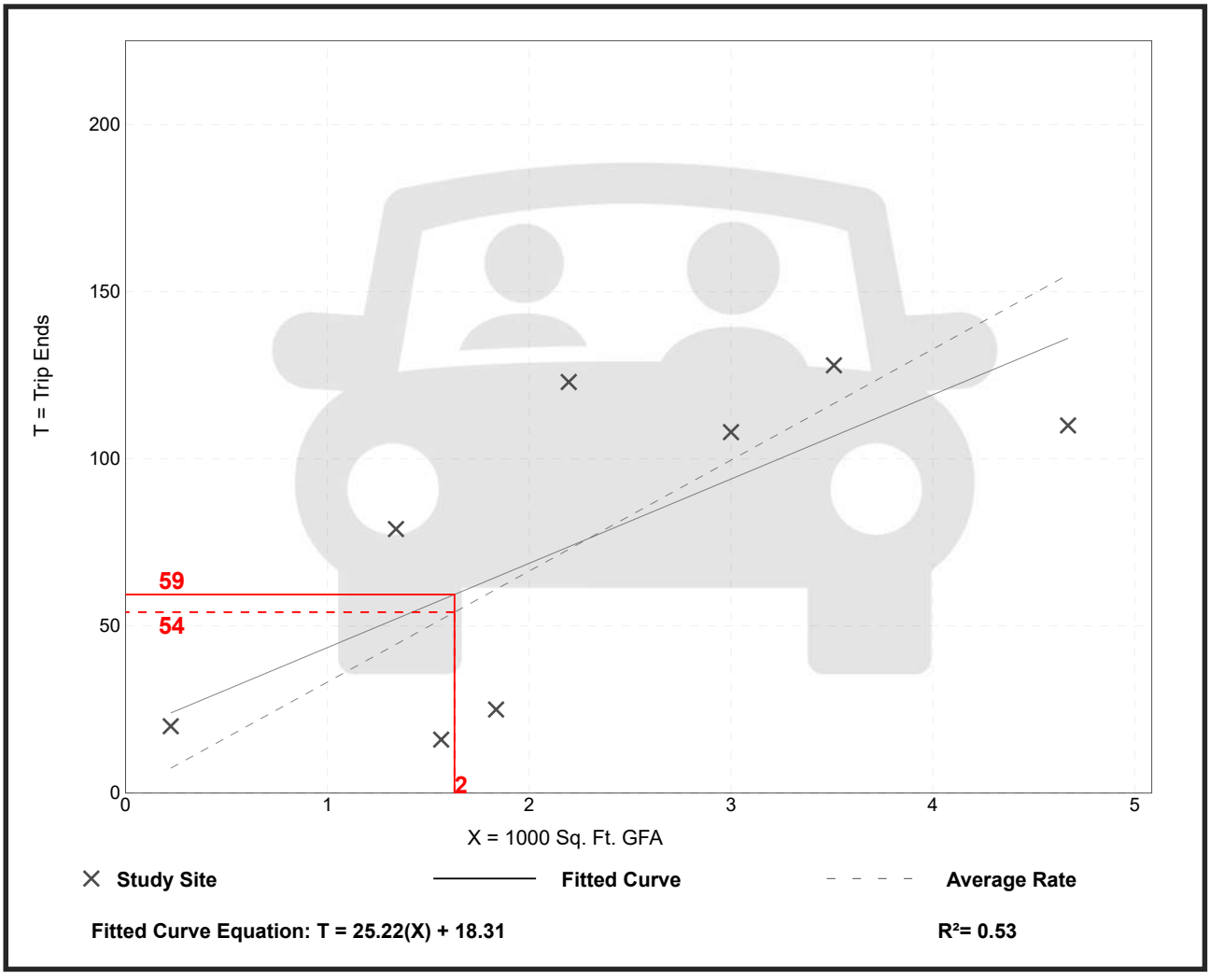
Fast-Food Restaurant without Drive-Through Window
(933)

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: 8
Avg. 1000 Sq. Ft. GFA: 2
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
33.21	10.23 - 89.29	17.22

Data Plot and Equation



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Fast Casual Restaurant
(930)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday, Peak Hour of Generator**

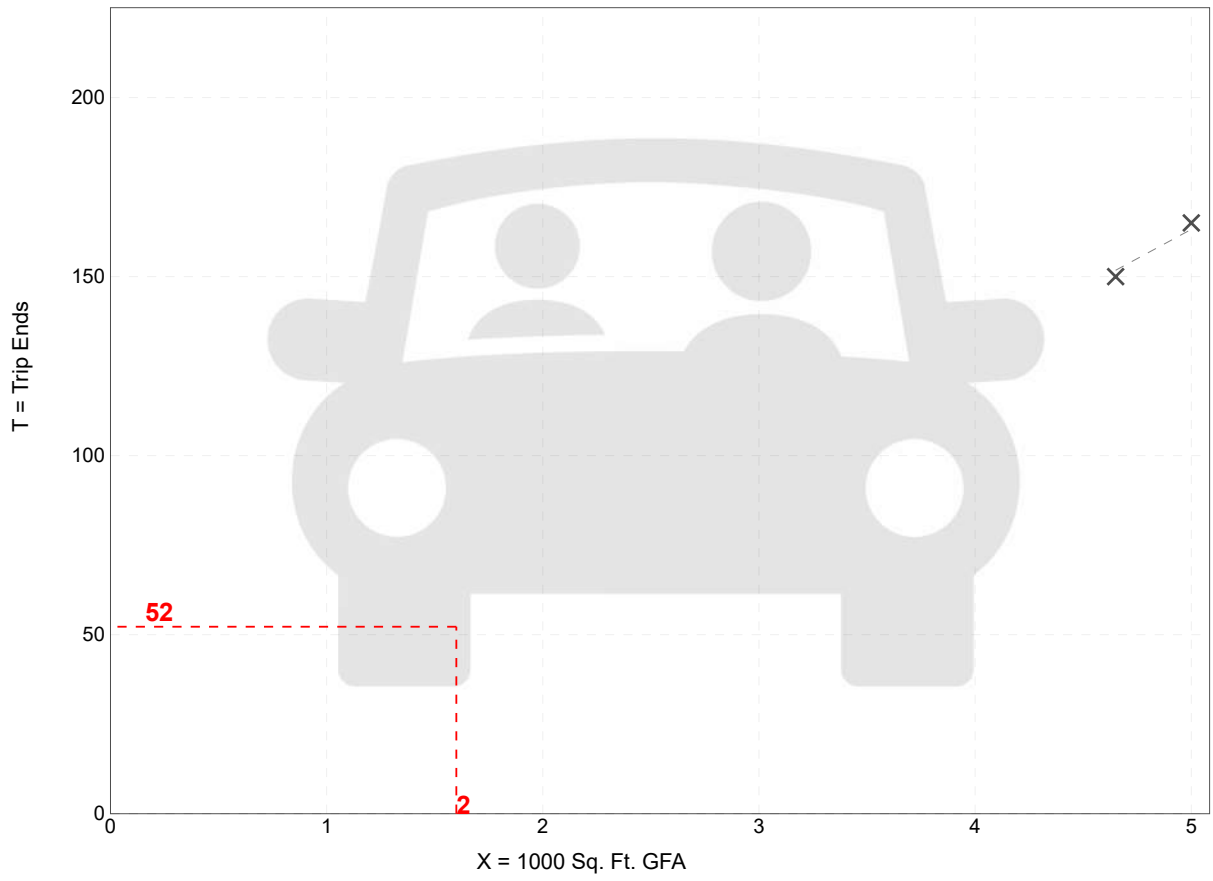
Setting/Location: **General Urban/Suburban**
Number of Studies: 2
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
32.64	32.26 - 33.00	*

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Land Use: 822
Strip Retail Plaza (<40k)

Description

A strip retail plaza is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. Each study site in this land use has less than 40,000 square feet of gross leasable area (GLA). Because a strip retail plaza is open-air, the GLA is the same as the gross floor area of the building.

The 40,000 square feet GFA threshold between strip retail plaza and shopping plaza (Land Use 821) was selected based on an examination of the overall shopping center/plaza database. No shopping plaza with a supermarket as its anchor is smaller than 40,000 square feet GLA.

Shopping center (>150k) (Land use 820), shopping plaza (40-150k) (Land Use 821), and factory outlet center (Land Use 823) are related uses.

Additional Data

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 Alberta (CAN), California, Delaware, Florida, New Jersey, Ontario (CAN), South Dakota, Vermont, Washington, and Wisconsin.

Source Numbers

304, 358, 423, 428, 437, 507, 715, 728, 936, 960, 961, 974, 1009

Strip Retail Plaza (<40k)
(822)

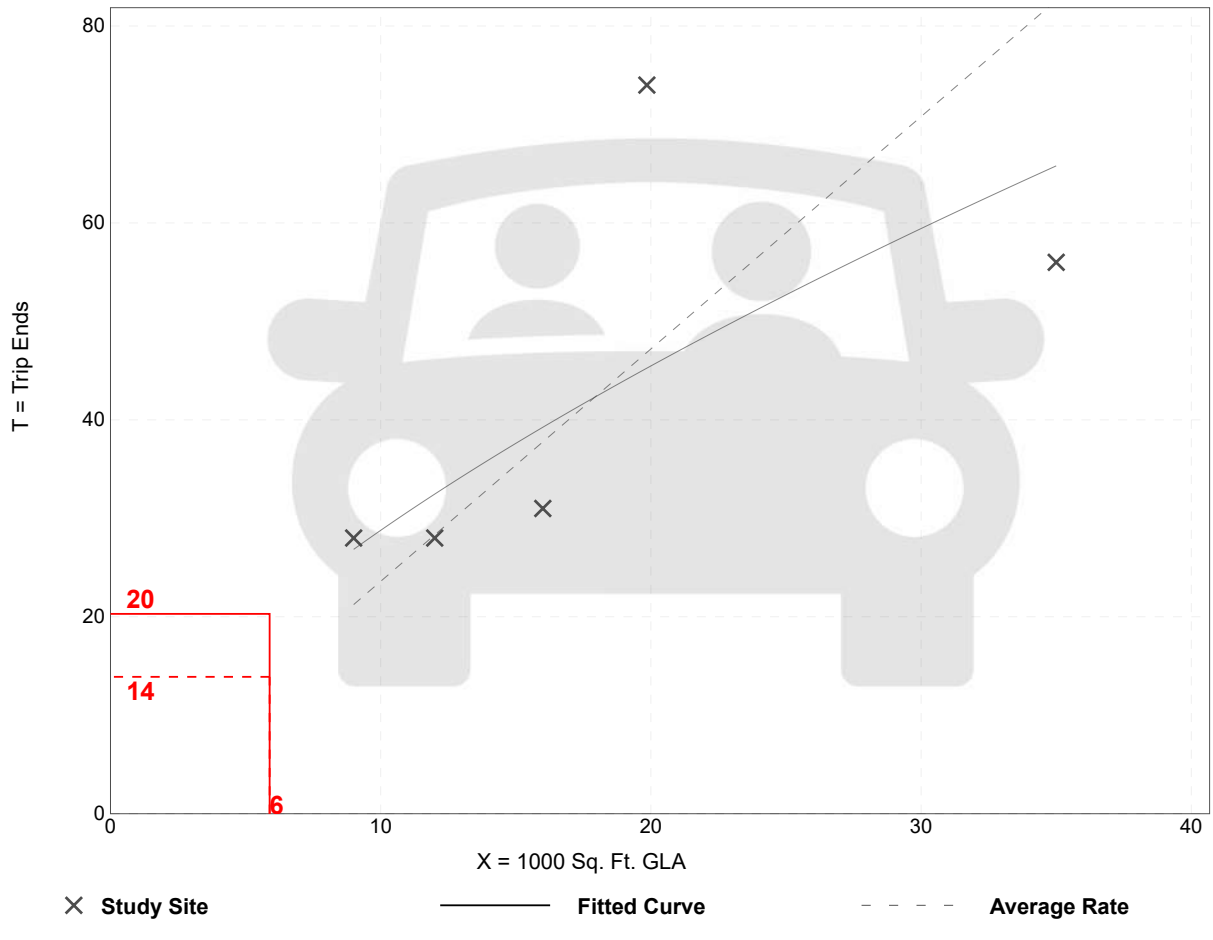
Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 5
Avg. 1000 Sq. Ft. GLA: 18
Directional Distribution: 60% entering, 40% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
2.36	1.60 - 3.73	0.94

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Ln(T) = 0.66 Ln(X) + 1.84 **R^2= 0.57**

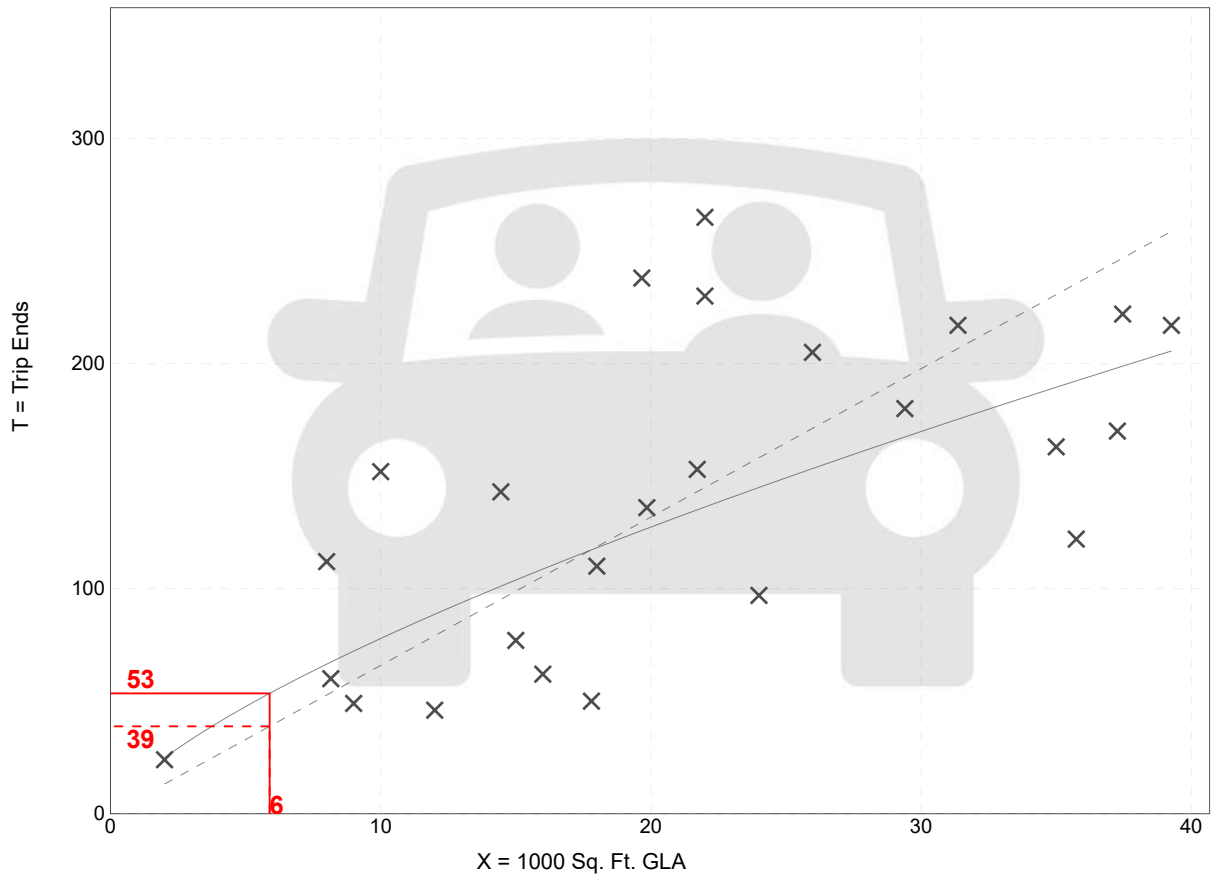
Strip Retail Plaza (<40k)
(822)

Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
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: 25
Avg. 1000 Sq. Ft. GLA: 21
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
6.59	2.81 - 15.20	2.94

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.71 Ln(X) + 2.72 **R^2= 0.56**

Strip Retail Plaza (<40k)
(822)

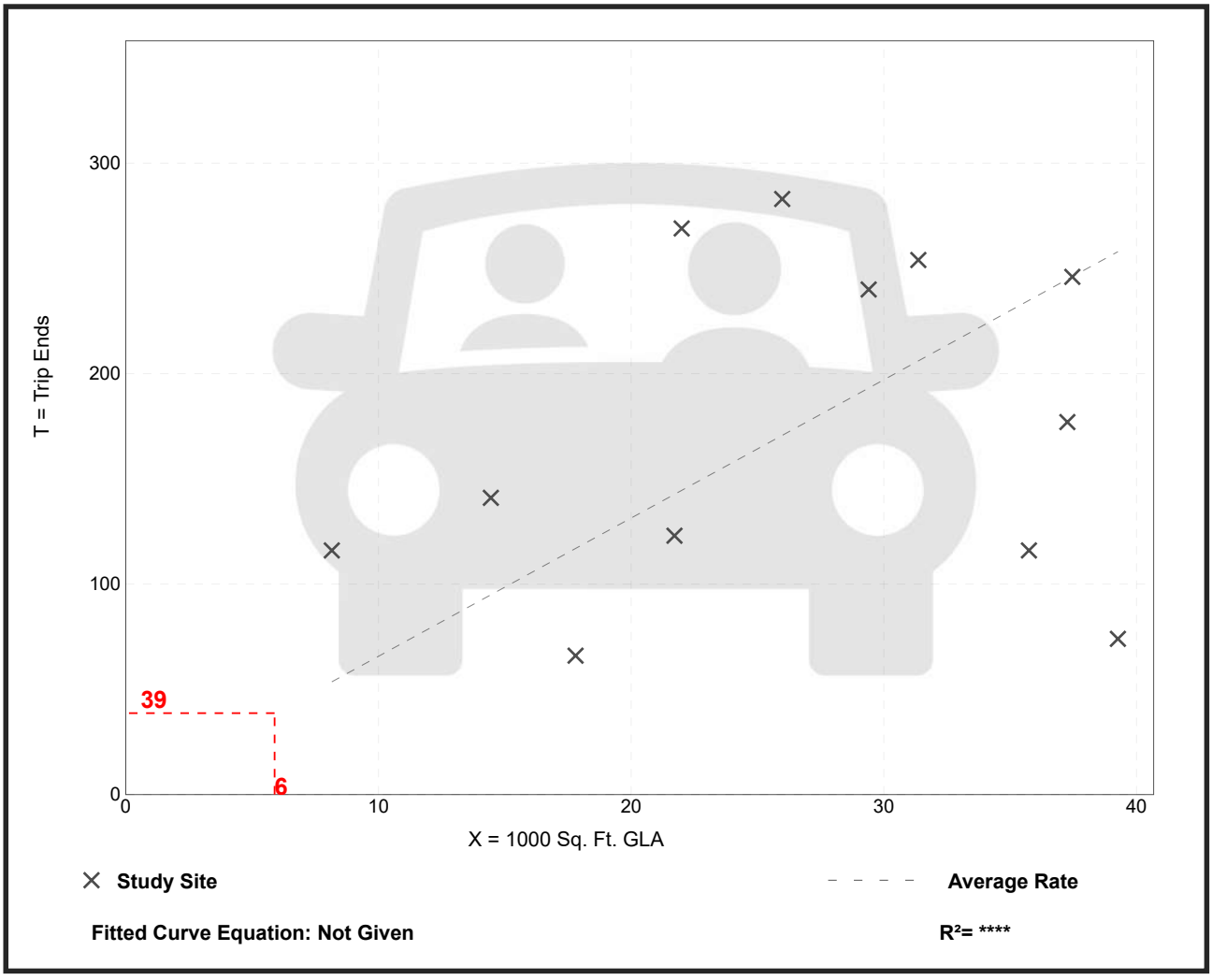
Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Saturday, Peak Hour of Generator**

Setting/Location: **General Urban/Suburban**
Number of Studies: 12
Avg. 1000 Sq. Ft. GLA: 27
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
6.57	1.88 - 14.23	3.45

Data Plot and Equation



APPENDIX G

ITE Pass-By Tables

Appendix G

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	934
Land Use	Fast-Food Restaurant with Drive-Through Window
Setting	General Urban/Suburban
Time Period	Weekday AM Peak Period
# Data Sites	5
Average Pass-By Rate	50%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
1.4	Kentucky	1993	—	62	22	16	38	1407	2
3	Kentucky	1993	—	43	14	43	57	2903	2
3.3	--	1996	—	68	—	—	32	—	21
3.6	Kentucky	1993	—	32	47	21	68	437	2
4.2	Indiana	1993	—	46	23	31	54	1049	2

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	934
Land Use	Fast-Food Restaurant with Drive-Through Window
Setting	General Urban/Suburban
Time Period	Weekday PM Peak Period
# Data Sites	11
Average Pass-By Rate	55%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
1.3	Kentucky	1993	—	68	22	10	32	2055	2
1.9	Kentucky	1993	33	67	24	9	33	2447	2
2.8	Florida	1995	47	66	—	—	34	—	30
2.9	Florida	1996	271	41	41	18	59	—	30
3	Kentucky	1993	—	31	31	38	69	4250	2
3.1	Florida	1995	28	71	—	—	29	—	30
3.1	Florida	1996	29	38	—	—	62	—	30
3.2	Florida	1996	202	40	39	21	60	—	30
3.3	—	1996	—	62	—	—	38	—	21
4.2	Indiana	1993	—	56	25	19	44	1632	2
4.3	Florida	1994	304	62	—	—	38	—	30

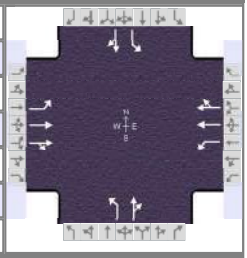
APPENDIX H

Capacity Analysis Worksheets

HCS Signalized Intersection Input Data

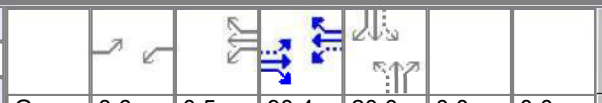
Appendix H

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	7:30-8:30 AM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	AM Existing.xus		
Project Description	AM Existing				

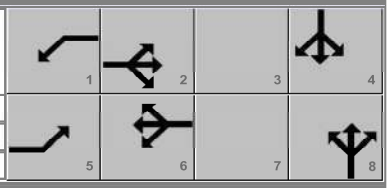


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	80	1295	79	98	966	20	135	36	93	31	28	53

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.6	0.5	90.4	20.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	80	1295	79	98	966	20	135	36	93	31	28	53
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	0		0	0		0	0		0	0	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	200	0		315	0		85	0		85	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	35	35	35	35	35	35

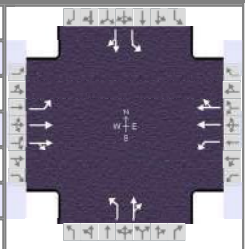
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.0	91.0	13.0	91.0		26.0		26.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	3	15		6		6
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0		2.0		2.0
Recall Mode	Off	Min	Off	Min		Off		Off
Dual Entry	No	Yes	No	Yes		Yes		Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

Appendix H

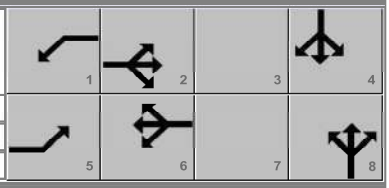
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	7:30-8:30 AM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	AM Existing.xus		
Project Description	AM Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	80	1295	79	98	966	20	135	36	93	31	28	53

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.6	0.5	90.4	20.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		6.0		6.0
Phase Duration, s	7.1	96.4	7.6	96.9		26.0		26.0
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0		6.0		6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (g_s), s	3.8		4.1			21.6		14.8
Green Extension Time (g_e), s	0.0	0.0	0.1	0.0		0.0		0.4
Phase Call Probability	0.95		0.98			1.00		1.00
Max Out Probability	0.02		0.05			1.00		0.28

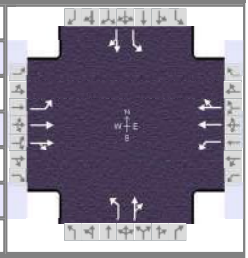
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	84	729	717	103	521	517	142	136		33	85	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1861	1810	1900	1886	1333	1682		1273	1700	
Queue Service Time (g_s), s	1.8	24.7	24.8	2.1	14.8	14.8	13.8	9.7		3.1	5.8	
Cycle Queue Clearance Time (g_c), s	1.8	24.7	24.8	2.1	14.8	14.8	19.6	9.7		12.8	5.8	
Green Ratio (*g/C*)	0.72	0.70	0.70	0.73	0.70	0.70	0.15	0.15		0.15	0.15	
Capacity (*c*), veh/h	421	1321	1294	301	1328	1319	201	259		157	262	
Volume-to-Capacity Ratio (*X*)	0.200	0.552	0.554	0.342	0.392	0.392	0.707	0.525		0.208	0.326	
Back of Queue (*Q*), ft/ln (95 th percentile)	28	378	375	34	247	246	222	185		46	112	
Back of Queue (*Q*), veh/ln (95 th percentile)	1.1	15.1	15.0	1.4	9.9	9.8	8.9	7.4		1.8	4.5	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.14	0.00	0.00	0.11	0.00	0.00	2.61	0.00		0.54	0.00	
Uniform Delay (d_1), s/veh	6.4	9.8	9.8	8.4	8.1	8.1	57.7	50.6		56.5	49.0	
Incremental Delay (d_2), s/veh	0.1	1.7	1.7	0.2	0.9	0.9	9.3	1.0		0.2	0.3	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	6.5	11.5	11.5	8.7	9.0	9.0	67.1	51.6		56.8	49.3	
Level of Service (LOS)	A	B	B	A	A	A	E	D		E	D	
Approach Delay, s/veh / LOS	11.2	B		9.0	A		59.5	E		51.3	D	
Intersection Delay, s/veh / LOS	16.3						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.87	B	1.87	B	2.31	B	2.31	B
Bicycle LOS Score / LOS	1.75	B	1.43	A	0.95	A	0.68	A

HCS Signalized Intersection Intermediate Values

Appendix H

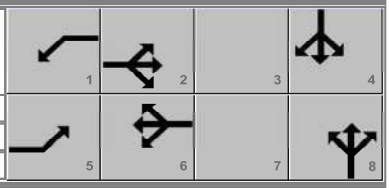
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	7:30-8:30 AM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	AM Existing.xus		
Project Description	AM Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	80	1295	79	98	966	20	135	36	93	31	28	53

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.6	0.5	90.4	20.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.702	0.000		0.670	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.980	0.980		0.993	0.993		0.885	0.885		0.895	0.895
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Prot. CAV Adj. Factor ($f_{CAV,prot}$)	1.00			1.00								
Left-Turn Perm. CAV Adj. Factor ($f_{CAV,perm}$)							1.00			1.00		
Movement Saturation Flow Rate (s), veh/h	1810	3545	216	1810	3709	77	1333	469	1212	1273	588	1112
Proportion of Vehicles Arriving on Green (P)	0.03	0.70	0.70	0.03	0.70	0.70	0.15	0.15	0.15	0.15	0.15	0.15
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50	0.23	0.06		0.04	0.04	

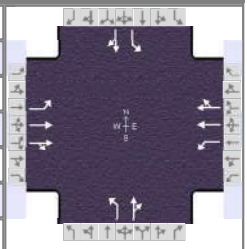
Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0		6.0		6.0
Green Ratio (g/C)	0.72	0.70	0.73	0.70		0.15		0.15
Permitted Saturation Flow Rate (s_p), veh/h/ln	552	0	374	0		1333		1273
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	90.4	0.0	90.4	0.0		20.0		20.0
Permitted Service Time (g_u), s	74.1	0.0	65.5	0.0		14.2		10.3
Permitted Queue Service Time (g_{ps}), s	2.9		9.5			13.8		3.1
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0		0.0		0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.198	0.000	1.198	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.072	0.000	0.071	0.000	0.154	0.000	0.154
Pedestrian M_{corner} / M_{cw}	0.00		0.00		0.00		0.00	
Bicycle c_b / d_b	1390.66	6.03	1398.11	5.89	307.69	46.54	307.69	46.54
Bicycle F_w / F_v	-3.64	1.26	-3.64	0.94	-3.64	0.46	-3.64	0.19

HCS Signalized Intersection Results Graphical Summary

Appendix H

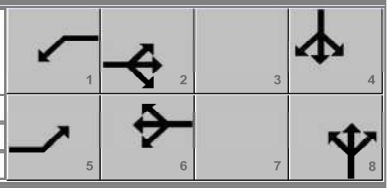
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	7:30-8:30 AM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	AM Existing.xus		
Project Description	AM Existing				



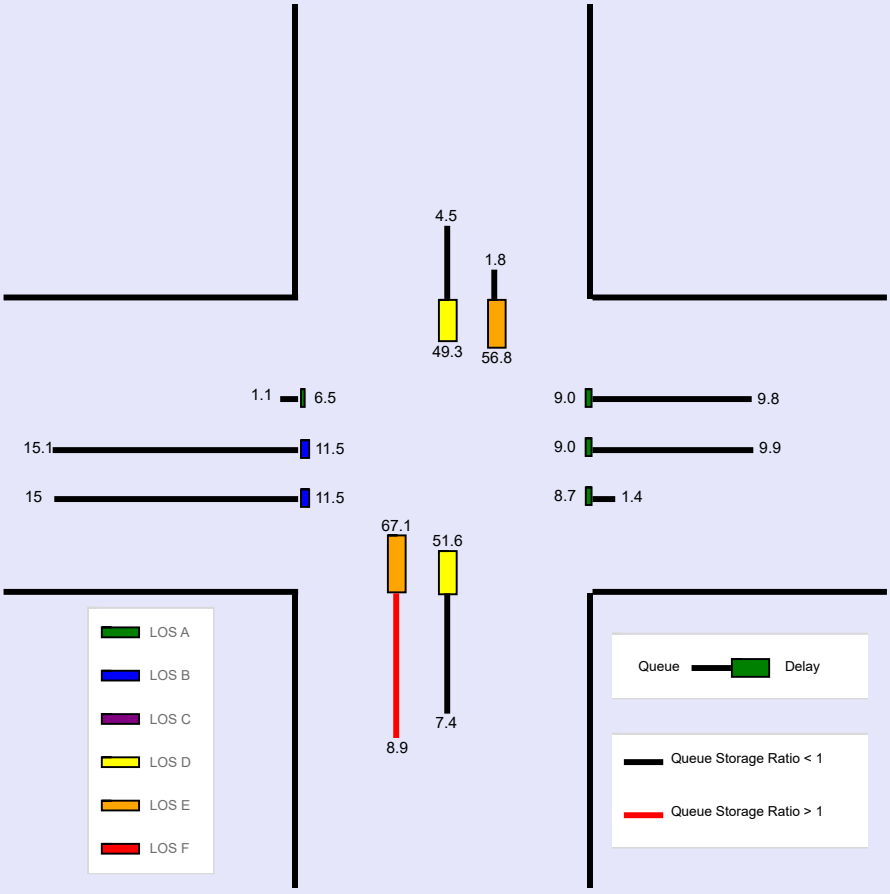
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	80	1295	79	98	966	20	135	36	93	31	28	53

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.6	0.5	90.4	20.0	0.0	0.0						
Yellow	3.5	0.0	4.5	4.5	0.0	0.0						
Red	0.0	0.0	1.5	1.5	0.0	0.0						



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	28	378	375	34	247	246	222	185		46	112	
Back of Queue (*Q*), veh/ln (95 th percentile)	1.1	15.1	15.0	1.4	9.9	9.8	8.9	7.4		1.8	4.5	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.14	0.00	0.00	0.11	0.00	0.00	2.61	0.00		0.54	0.00	
Control Delay (*d*), s/veh	6.5	11.5	11.5	8.7	9.0	9.0	67.1	51.6		56.8	49.3	
Level of Service (LOS)	A	B	B	A	A	A	E	D		E	D	
Approach Delay, s/veh / LOS	11.2	B		9.0	A		59.5	E		51.3	D	
Intersection Delay, s/veh / LOS	16.3						B					



--- Messages ---

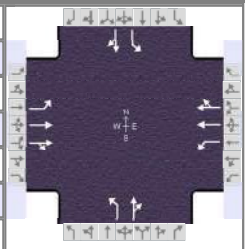
WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

HCS Signalized Intersection Input Data

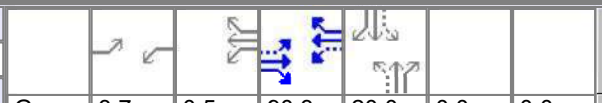
Appendix H

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	12/19/2024	Area Type	Other
Jurisdiction	IDOT	Time Period	7:30-8:30 AM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	AM NB.xus		
Project Description	AM No-Build				

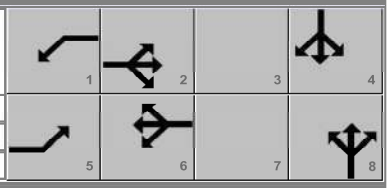


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	83	1347	82	102	1020	21	135	36	93	31	28	53

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.7	0.5	90.3	20.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	83	1347	82	102	1020	21	135	36	93	31	28	53
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h	0	L + R	0		None			None			None	
Heavy Vehicles (P_{HV}), %	0	0		0	0		0	0		0	0	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	200	0		315	0		85	0		85	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	25	25	25	25	25	25

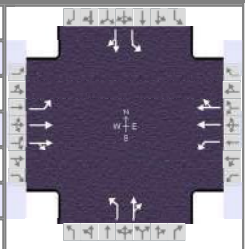
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.0	91.0	13.0	91.0		26.0		26.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	3	15		6		6
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0		2.0		2.0
Recall Mode	Off	Min	Off	Min		Off		Off
Dual Entry	No	Yes	No	Yes		Yes		Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

Appendix H

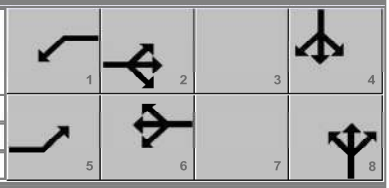
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	12/19/2024	Area Type	Other
Jurisdiction	IDOT	Time Period	7:30-8:30 AM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	AM NB.xus		
Project Description	AM No-Build				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	83	1347	82	102	1020	21	135	36	93	31	28	53

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.7	0.5	90.3	20.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		6.0		6.0
Phase Duration, s	7.2	96.3	7.7	96.8		26.0		26.0
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0		6.0		6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.4		3.4
Queue Clearance Time (g_s), s	3.8		4.2			21.7		14.8
Green Extension Time (g_e), s	0.1	0.0	0.1	0.0		0.0		0.5
Phase Call Probability	0.96		0.98			1.00		1.00
Max Out Probability	0.03		0.06			1.00		0.33

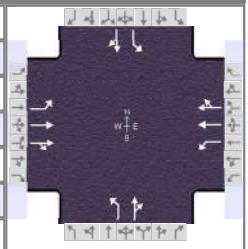
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	87	797	707	107	550	546	142	136		33	85	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1673	1810	1900	1886	1333	1682		1273	1700	
Queue Service Time (g_s), s	1.8	28.7	29.0	2.2	16.0	16.0	13.8	9.7		3.1	5.8	
Cycle Queue Clearance Time (g_c), s	1.8	28.7	29.0	2.2	16.0	16.0	19.7	9.7		12.8	5.8	
Green Ratio (*g/C*)	0.72	0.69	0.69	0.73	0.70	0.70	0.15	0.15		0.15	0.15	
Capacity (*c*), veh/h	400	1320	1162	281	1327	1317	201	259		156	261	
Volume-to-Capacity Ratio (*X*)	0.218	0.604	0.608	0.382	0.414	0.414	0.708	0.525		0.209	0.326	
Back of Queue (*Q*), ft/ln (95 th percentile)	29	431	395	36	263	262	224	189		46	114	
Back of Queue (*Q*), veh/ln (95 th percentile)	1.2	17.3	15.8	1.4	10.5	10.5	9.0	7.5		1.9	4.5	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.14	0.00	0.00	0.11	0.00	0.00	2.64	0.00		0.55	0.00	
Uniform Delay (d_1), s/veh	6.6	10.5	10.5	9.8	8.3	8.3	57.8	50.6		56.6	49.0	
Incremental Delay (d_2), s/veh	0.1	2.1	2.4	0.3	1.0	1.0	9.4	1.0		0.2	0.3	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	6.7	12.5	12.9	10.1	9.3	9.3	67.2	51.6		56.8	49.3	
Level of Service (LOS)	A	B	B	B	A	A	E	D		E	D	
Approach Delay, s/veh / LOS	12.4	B		9.4	A		59.6	E		51.4	D	
Intersection Delay, s/veh / LOS	16.8						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.87	B	1.87	B	2.31	B	2.31	B
Bicycle LOS Score / LOS	1.80	B	1.48	A	0.95	A	0.68	A

HCS Signalized Intersection Intermediate Values

Appendix H

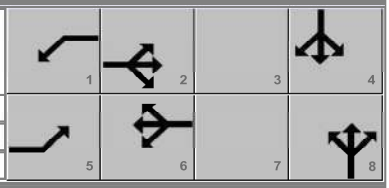
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	12/19/2024	Area Type	Other
Jurisdiction	IDOT	Time Period	7:30-8:30 AM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	AM NB.xus		
Project Description	AM No-Build				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	83	1347	82	102	1020	21	135	36	93	31	28	53

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.7	0.5	90.3	20.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.702	0.000		0.670	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.881	0.881		0.993	0.993		0.885	0.885		0.895	0.895
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Prot. CAV Adj. Factor ($f_{CAV,prot}$)	1.00			1.00								
Left-Turn Perm. CAV Adj. Factor ($f_{CAV,perm}$)							1.00			1.00		
Movement Saturation Flow Rate (s), veh/h	1810	3369	204	1810	3710	76	1333	469	1212	1273	588	1112
Proportion of Vehicles Arriving on Green (P)	0.03	0.69	0.69	0.03	0.70	0.70	0.15	0.15	0.15	0.15	0.15	0.15
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50	0.23	0.06		0.04	0.04	

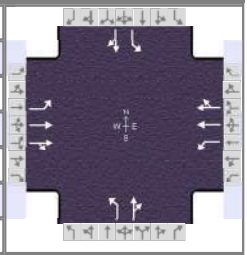
Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0		6.0		6.0
Green Ratio (g/C)	0.72	0.69	0.73	0.70		0.15		0.15
Permitted Saturation Flow Rate (s_p), veh/h/ln	523	0	354	0		1333		1273
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	90.3	0.0	90.3	0.0		20.0		20.0
Permitted Service Time (g_u), s	72.9	0.0	61.3	0.0		14.2		10.3
Permitted Queue Service Time (g_{ps}), s	3.5		12.6			13.8		3.1
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0		0.0		0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.198	0.000	1.198	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.072	0.000	0.071	0.000	0.154	0.000	0.154
Pedestrian M_{corner} / M_{cw}	0.00		0.00		0.00		0.00	
Bicycle c_b / d_b	1389.05	6.07	1396.80	5.91	307.65	46.54	307.65	46.54
Bicycle F_w / F_v	-3.64	1.31	-3.64	0.99	-3.64	0.46	-3.64	0.19

HCS Signalized Intersection Results Graphical Summary

Appendix H

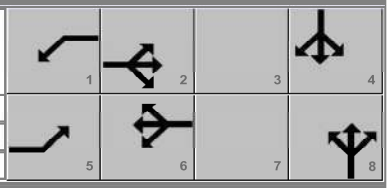
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	12/19/2024	Area Type	Other
Jurisdiction	IDOT	Time Period	7:30-8:30 AM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	AM NB.xus		
Project Description	AM No-Build				



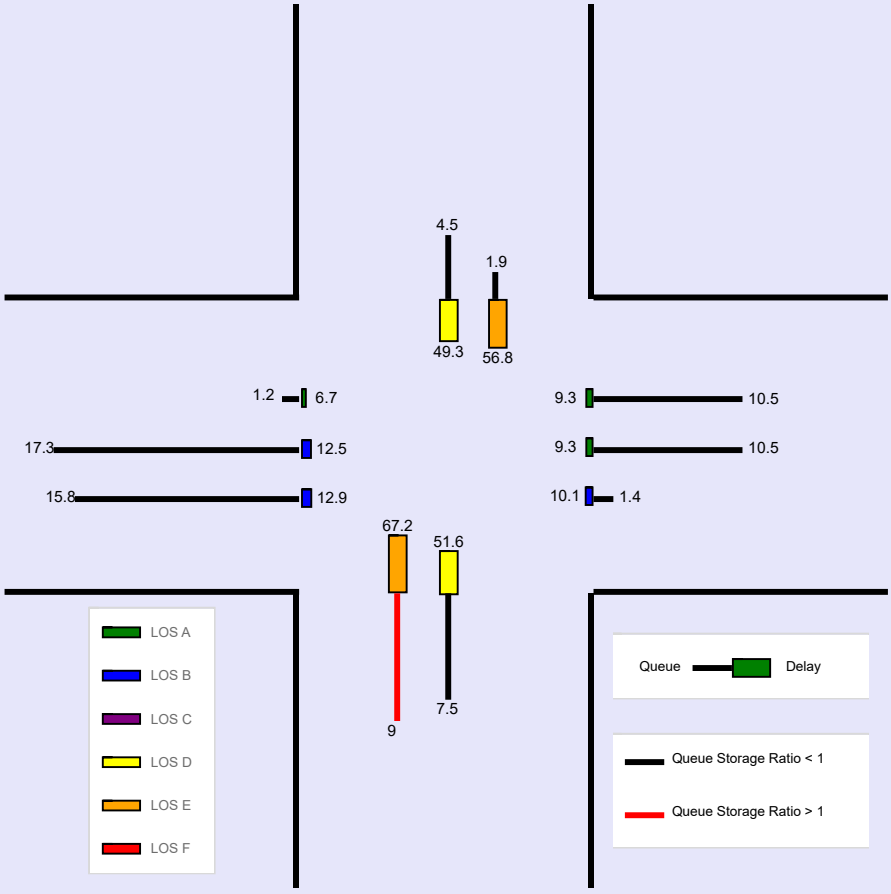
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	83	1347	82	102	1020	21	135	36	93	31	28	53

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.7	0.5	90.3	20.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	29	431	395	36	263	262	224	189		46	114	
Back of Queue (*Q*), veh/ln (95 th percentile)	1.2	17.3	15.8	1.4	10.5	10.5	9.0	7.5		1.9	4.5	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.14	0.00	0.00	0.11	0.00	0.00	2.64	0.00		0.55	0.00	
Control Delay (*d*), s/veh	6.7	12.5	12.9	10.1	9.3	9.3	67.2	51.6		56.8	49.3	
Level of Service (LOS)	A	B	B	B	A	A	E	D		E	D	
Approach Delay, s/veh / LOS	12.4	B		9.4	A		59.6	E		51.4	D	
Intersection Delay, s/veh / LOS	16.8						B					



--- Messages ---

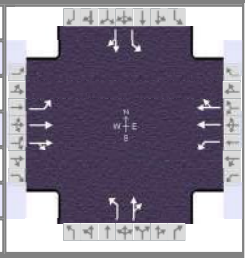
WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

HCS Signalized Intersection Input Data

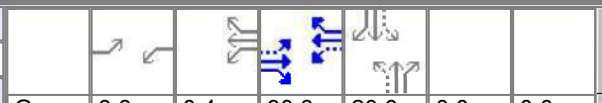
Appendix H

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	7:30-8:30 AM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	AM Total.xus		
Project Description	AM Total				

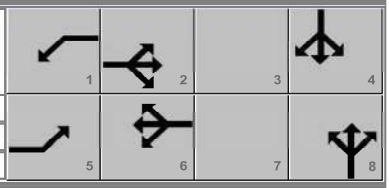


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	85	1370	84	102	1051	21	138	36	93	31	28	56

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.8	0.4	90.3	20.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	85	1370	84	102	1051	21	138	36	93	31	28	56
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	0		0	0		0	0		0	0	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	200	0		315	0		85	0		85	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	35	35	35	35	35	35

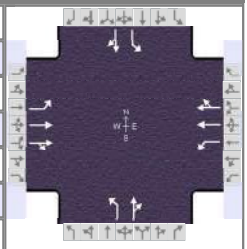
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.0	91.0	13.0	91.0		26.0		26.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	3	15		6		6
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0		2.0		2.0
Recall Mode	Off	Min	Off	Min		Off		Off
Dual Entry	No	Yes	No	Yes		Yes		Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

Appendix H

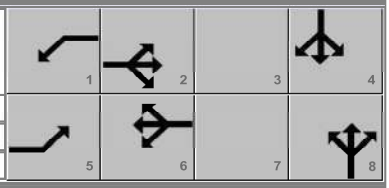
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	7:30-8:30 AM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	AM Total.xus		
Project Description	AM Total				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	85	1370	84	102	1051	21	138	36	93	31	28	56

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.8	0.4	90.3	20.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		6.0		6.0
Phase Duration, s	7.3	96.3	7.7	96.7		26.0		26.0
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0		6.0		6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (g_s), s	3.9		4.2			22.0		14.8
Green Extension Time (g_e), s	0.1	0.0	0.1	0.0		0.0		0.4
Phase Call Probability	0.96		0.98			1.00		1.00
Max Out Probability	0.03		0.06			1.00		0.28

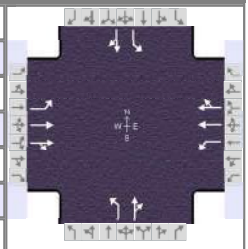
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	89	771	760	107	566	562	145	136		33	88	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1861	1810	1900	1887	1329	1682		1273	1696	
Queue Service Time (g_s), s	1.9	27.1	27.4	2.2	16.7	16.7	14.0	9.7		3.1	6.0	
Cycle Queue Clearance Time (g_c), s	1.9	27.1	27.4	2.2	16.7	16.7	20.0	9.7		12.8	6.0	
Green Ratio (*g/C*)	0.72	0.69	0.69	0.73	0.70	0.70	0.15	0.15		0.15	0.15	
Capacity (*c*), veh/h	389	1320	1292	281	1326	1317	198	259		157	261	
Volume-to-Capacity Ratio (*X*)	0.230	0.584	0.588	0.382	0.427	0.427	0.733	0.525		0.208	0.339	
Back of Queue (*Q*), ft/ln (95 th percentile)	30	411	408	36	272	271	230	185		46	116	
Back of Queue (*Q*), veh/ln (95 th percentile)	1.2	16.4	16.3	1.4	10.9	10.8	9.2	7.4		1.8	4.6	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.15	0.00	0.00	0.11	0.00	0.00	2.70	0.00		0.54	0.00	
Uniform Delay (d_1), s/veh	6.8	10.2	10.3	9.3	8.4	8.4	58.1	50.6		56.5	49.1	
Incremental Delay (d_2), s/veh	0.1	1.9	2.0	0.3	1.0	1.0	11.6	1.0		0.2	0.3	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	6.9	12.1	12.2	9.7	9.5	9.5	69.8	51.6		56.8	49.4	
Level of Service (LOS)	A	B	B	A	A	A	E	D		E	D	
Approach Delay, s/veh / LOS	11.9	B		9.5	A		61.0	E		51.4	D	
Intersection Delay, s/veh / LOS	16.7						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.87	B	1.87	B	2.31	B	2.31	B
Bicycle LOS Score / LOS	1.82	B	1.51	B	0.95	A	0.69	A

HCS Signalized Intersection Intermediate Values

Appendix H

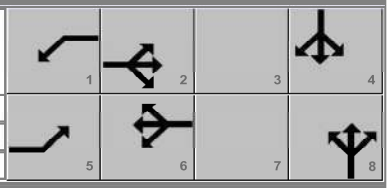
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	7:30-8:30 AM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	AM Total.xus		
Project Description	AM Total				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	85	1370	84	102	1051	21	138	36	93	31	28	56

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.8	0.4	90.3	20.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.700	0.000		0.670	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.979	0.979		0.993	0.993		0.885	0.885		0.893	0.893
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Prot. CAV Adj. Factor ($f_{CAV,prot}$)	1.00			1.00								
Left-Turn Perm. CAV Adj. Factor ($f_{CAV,perm}$)							1.00			1.00		
Movement Saturation Flow Rate (s), veh/h	1810	3544	217	1810	3712	74	1329	469	1212	1273	565	1131
Proportion of Vehicles Arriving on Green (P)	0.03	0.69	0.69	0.03	0.70	0.70	0.15	0.15	0.15	0.15	0.15	0.15
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50	0.25	0.06		0.04	0.04	

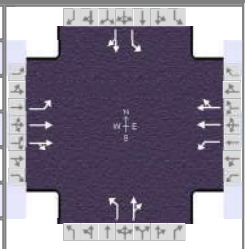
Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0		6.0		6.0
Green Ratio (g/C)	0.72	0.69	0.73	0.70		0.15		0.15
Permitted Saturation Flow Rate (s_p), veh/h/ln	507	0	345	0		1329		1273
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	90.3	0.0	90.3	0.0		20.0		20.0
Permitted Service Time (g_u), s	72.1	0.0	62.9	0.0		14.0		10.3
Permitted Queue Service Time (g_{ps}), s	3.9		12.4			14.0		3.1
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0		0.0		0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.198	0.000	1.198	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.072	0.000	0.071	0.000	0.154	0.000	0.154
Pedestrian M_{corner} / M_{cw}	0.00		0.00		0.00		0.00	
Bicycle c_b / d_b	1388.99	6.07	1395.89	5.93	307.69	46.54	307.69	46.54
Bicycle F_w / F_v	-3.64	1.34	-3.64	1.02	-3.64	0.46	-3.64	0.20

HCS Signalized Intersection Results Graphical Summary

Appendix H

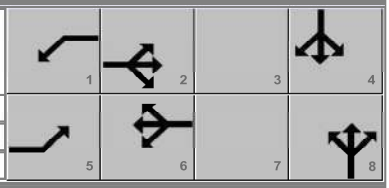
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	7:30-8:30 AM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	AM Total.xus		
Project Description	AM Total				



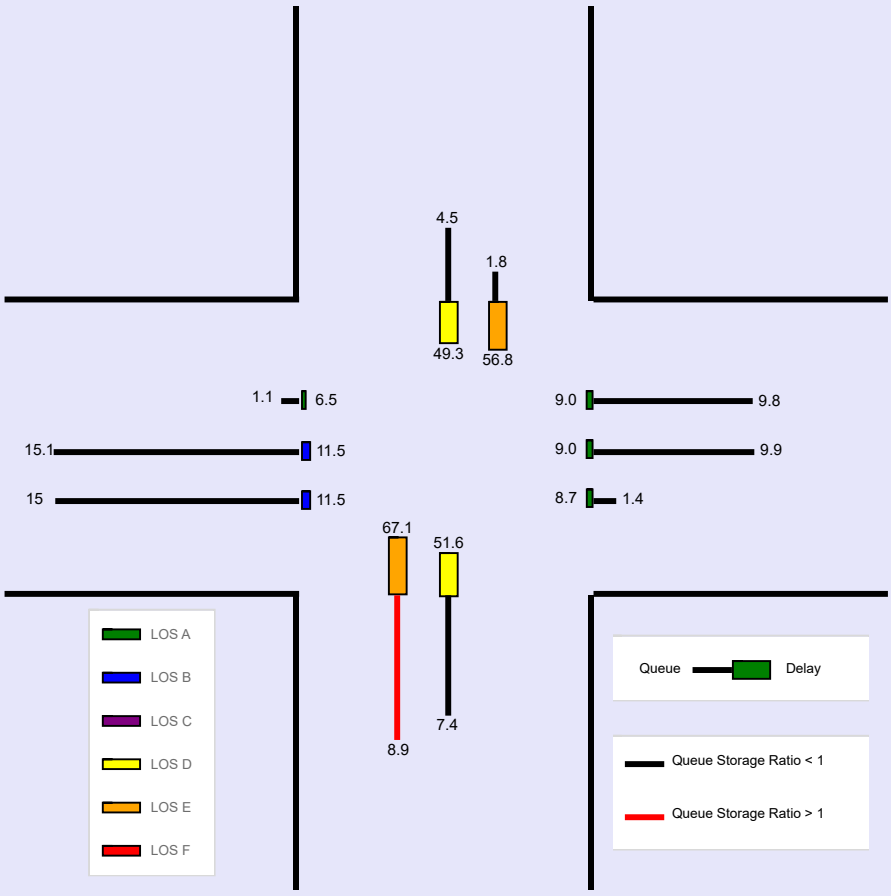
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	85	1370	84	102	1051	21	138	36	93	31	28	56

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.8	0.4	90.3	20.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	30	411	408	36	272	271	230	185		46	116	
Back of Queue (*Q*), veh/ln (95 th percentile)	1.2	16.4	16.3	1.4	10.9	10.8	9.2	7.4		1.8	4.6	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.15	0.00	0.00	0.11	0.00	0.00	2.70	0.00		0.54	0.00	
Control Delay (*d*), s/veh	6.9	12.1	12.2	9.7	9.5	9.5	69.8	51.6		56.8	49.4	
Level of Service (LOS)	A	B	B	A	A	A	E	D		E	D	
Approach Delay, s/veh / LOS	11.9		B	9.5		A	61.0		E	51.4		D
Intersection Delay, s/veh / LOS	16.7						B					



--- Messages ---

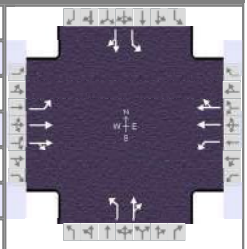
WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

HCS Signalized Intersection Input Data

Appendix H

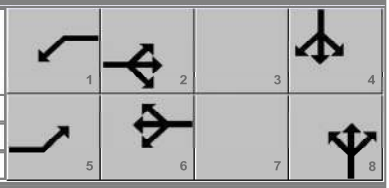
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	4:30-5:30 PM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	PM Existing.xus		
Project Description	PM Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	121	1144	41	69	1532	37	56	49	51	79	47	99

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.4	1.4	99.2	20.5	0.0	0.0						
Yellow	3.5	0.0	4.5	4.5	0.0	0.0						
Red	0.0	0.0	1.5	1.5	0.0	0.0						



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	121	1144	41	69	1532	37	56	49	51	79	47	99
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	1		0	0		0	0		0	0	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	200	0		315	0		85	0		85	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	35	35	35	35	35	35

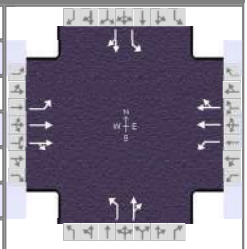
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.0	100.0	13.0	100.0		27.0		27.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	3	15		6		6
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0		2.0		2.0
Recall Mode	Off	Min	Off	Min		Off		Off
Dual Entry	No	Yes	No	Yes		Yes		Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

Appendix H

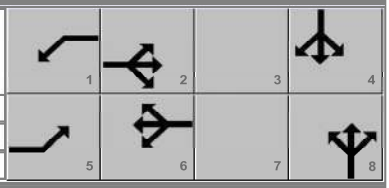
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	4:30-5:30 PM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	PM Existing.xus		
Project Description	PM Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	121	1144	41	69	1532	37	56	49	51	79	47	99

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.4	1.4	99.2	20.5	0.0	0.0	
Yellow	3.5	0.0	4.5	4.5	0.0	0.0	
Red	0.0	0.0	1.5	1.5	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		6.0		6.0
Phase Duration, s	8.3	106.6	6.9	105.2		26.5		26.5
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0		6.0		6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (g_s), s	4.7		3.6			20.4		18.3
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0		0.1		0.3
Phase Call Probability	0.99		0.94			1.00		1.00
Max Out Probability	0.07		0.01			1.00		1.00

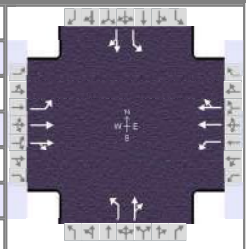
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	127	627	620	73	828	824	59	105		83	154	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1885	1862	1810	1900	1884	1253	1740		1309	1693	
Queue Service Time (g_s), s	2.7	19.6	19.7	1.6	31.4	31.7	6.5	7.7		8.6	11.9	
Cycle Queue Clearance Time (g_c), s	2.7	19.6	19.7	1.6	31.4	31.7	18.4	7.7		16.3	11.9	
Green Ratio (*g/C*)	0.74	0.72	0.72	0.73	0.71	0.71	0.15	0.15		0.15	0.15	
Capacity (*c*), veh/h	261	1355	1338	351	1347	1336	128	255		171	248	
Volume-to-Capacity Ratio (*X*)	0.487	0.463	0.463	0.207	0.614	0.617	0.461	0.414		0.486	0.621	
Back of Queue (*Q*), ft/ln (95 th percentile)	58	311	306	25	468	468	94	153		130	227	
Back of Queue (*Q*), veh/ln (95 th percentile)	2.3	12.4	12.2	1.0	18.7	18.7	3.8	6.1		5.2	9.1	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.29	0.00	0.00	0.08	0.00	0.00	1.11	0.00		1.54	0.00	
Uniform Delay (d_1), s/veh	11.1	8.3	8.3	6.9	10.5	10.5	64.8	54.3		61.7	56.1	
Incremental Delay (d_2), s/veh	0.5	1.1	1.2	0.1	2.1	2.1	1.0	0.4		0.8	3.2	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	11.6	9.4	9.5	7.1	12.6	12.7	65.7	54.7		62.5	59.3	
Level of Service (LOS)	B	A	A	A	B	B	E	D		E	E	
Approach Delay, s/veh / LOS	9.6	A		12.4	B		58.7	E		60.4	E	
Intersection Delay, s/veh / LOS	16.7						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.87	B	1.87	B	2.31	B	2.31	B
Bicycle LOS Score / LOS	1.62	B	1.91	B	0.76	A	0.88	A

HCS Signalized Intersection Intermediate Values

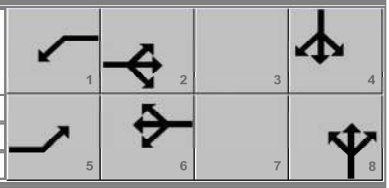
Appendix H

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	4:30-5:30 PM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	PM Existing.xus		
Project Description	PM Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	121	1144	41	69	1532	37	56	49	51	79	47	99

Signal Information												
Cycle, s	140.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
				Green	3.4	1.4	99.2	20.5	0.0	0.0		
				Yellow	3.5	0.0	4.5	4.5	0.0	0.0		
				Red	0.0	0.0	1.5	1.5	0.0	0.0		



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	1.000	0.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.659	0.000		0.689	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.988	0.988		0.992	0.992		0.916	0.916		0.891	0.891
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Prot. CAV Adj. Factor ($f_{CAV,prot}$)	1.00			1.00								
Left-Turn Perm. CAV Adj. Factor ($f_{CAV,perm}$)							1.00			1.00		
Movement Saturation Flow Rate (s), veh/h	1810	3617	130	1810	3695	89	1253	853	888	1309	545	1148
Proportion of Vehicles Arriving on Green (P)	0.03	0.72	0.72	0.02	0.71	0.71	0.15	0.15	0.15	0.15	0.15	0.15
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04		0.04	0.14	

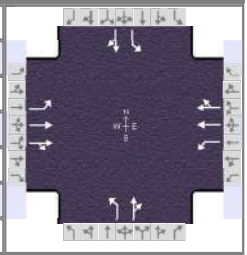
Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0		6.0		6.0
Green Ratio (g/C)	0.74	0.72	0.73	0.71		0.15		0.15
Permitted Saturation Flow Rate (s_p), veh/h/ln	307	0	453	0		1253		1309
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	99.2	0.0	99.2	0.0		20.5		20.5
Permitted Service Time (g_u), s	67.5	0.0	78.9	0.0		8.6		12.8
Permitted Queue Service Time (g_{ps}), s	22.5		3.9			6.5		8.6
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0		0.0		0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.198	0.000	1.198	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.069	0.000	0.071	0.000	0.158	0.000	0.158
Pedestrian M_{corner} / M_{cw}	0.00		0.00		0.00		0.00	
Bicycle c_b / d_b	1437.61	5.53	1417.83	5.93	292.52	51.02	292.52	51.02
Bicycle F_w / F_v	-3.64	1.13	-3.64	1.42	-3.64	0.27	-3.64	0.39

HCS Signalized Intersection Results Graphical Summary

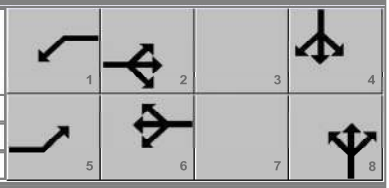
Appendix H

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	4:30-5:30 PM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	PM Existing.xus		
Project Description	PM Existing				

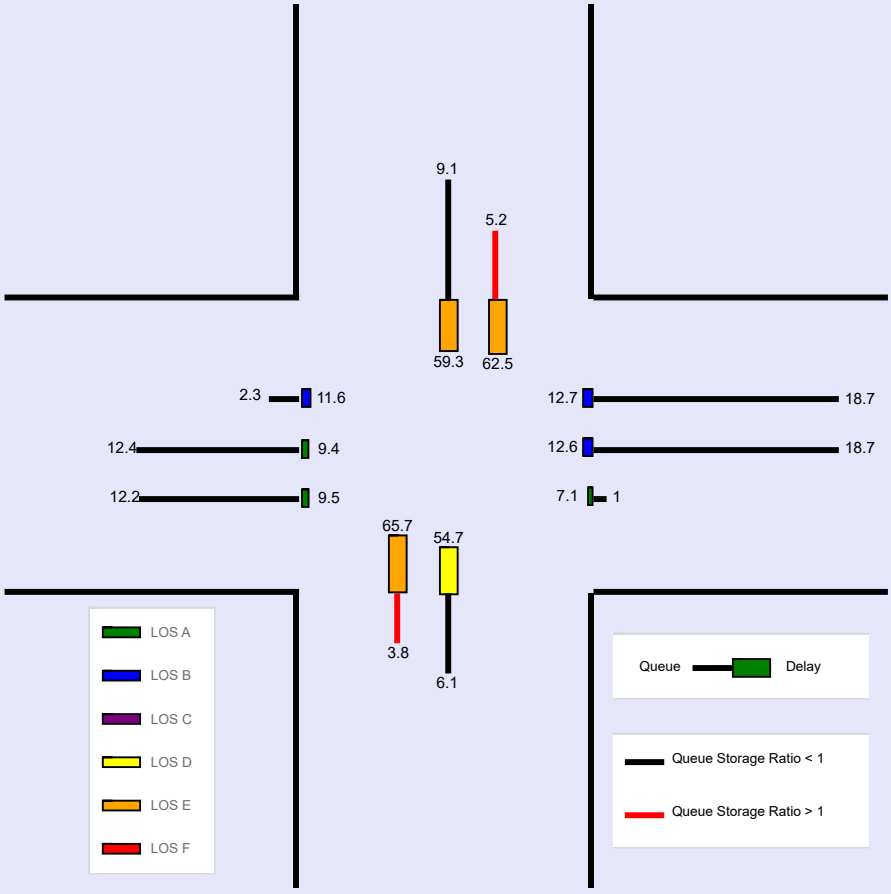


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	121	1144	41	69	1532	37	56	49	51	79	47	99

Signal Information												
Cycle, s	140.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	3.4	1.4	99.2	20.5	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.5	4.5	0.0	0.0		
				Red	0.0	0.0	1.5	1.5	0.0	0.0		



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	58	311	306	25	468	468	94	153		130	227	
Back of Queue (*Q*), veh/ln (95 th percentile)	2.3	12.4	12.2	1.0	18.7	18.7	3.8	6.1		5.2	9.1	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.29	0.00	0.00	0.08	0.00	0.00	1.11	0.00		1.54	0.00	
Control Delay (*d*), s/veh	11.6	9.4	9.5	7.1	12.6	12.7	65.7	54.7		62.5	59.3	
Level of Service (LOS)	B	A	A	A	B	B	E	D		E	E	
Approach Delay, s/veh / LOS	9.6	A		12.4	B		58.7	E		60.4	E	
Intersection Delay, s/veh / LOS	16.7						B					



--- Messages ---

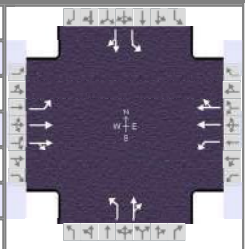
WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

HCS Signalized Intersection Input Data

Appendix H

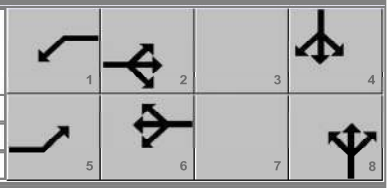
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	4:30-5:30 PM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	PM No-Buildxus.xus		
Project Description	PM No-Build				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	126	1190	43	72	1593	38	56	49	51	79	47	99

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.5	1.4		99.1	20.5	0.0	0.0					
Yellow	3.5	0.0		4.5	4.5	0.0	0.0					
Red	0.0	0.0		1.5	1.5	0.0	0.0					



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	126	1190	43	72	1593	38	56	49	51	79	47	99
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	1		0	0		0	0		0	0	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	200	0		315	0		85	0		85	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	35	35	35	35	35	35

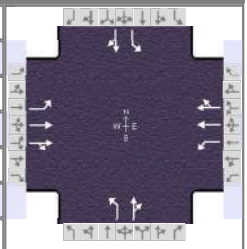
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.0	100.0	13.0	100.0		27.0		27.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	3	15		6		6
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0		2.0		2.0
Recall Mode	Off	Min	Off	Min		Off		Off
Dual Entry	No	Yes	No	Yes		Yes		Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

Appendix H

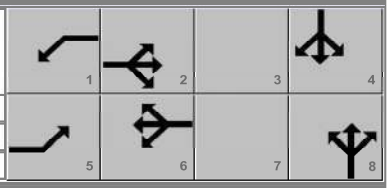
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	4:30-5:30 PM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	PM No-Buildxus.xus		
Project Description	PM No-Build				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	126	1190	43	72	1593	38	56	49	51	79	47	99

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.5	1.4		99.1	20.5	0.0	0.0					
Yellow	3.5	0.0		4.5	4.5	0.0	0.0					
Red	0.0	0.0		1.5	1.5	0.0	0.0					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		6.0		6.0
Phase Duration, s	8.4	106.5	7.0	105.1		26.5		26.5
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0		6.0		6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (g_s), s	4.8		3.6			20.4		18.3
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0		0.1		0.3
Phase Call Probability	0.99		0.95			1.00		1.00
Max Out Probability	0.09		0.01			1.00		1.00

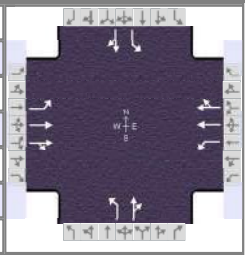
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	133	653	645	76	860	857	59	105		83	154	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1885	1862	1810	1900	1884	1253	1740		1309	1693	
Queue Service Time (g_s), s	2.8	20.9	20.9	1.6	33.8	34.1	6.5	7.7		8.6	11.9	
Cycle Queue Clearance Time (g_c), s	2.8	20.9	20.9	1.6	33.8	34.1	18.4	7.7		16.3	11.9	
Green Ratio (*g/C*)	0.74	0.72	0.72	0.73	0.71	0.71	0.15	0.15		0.15	0.15	
Capacity (*c*), veh/h	249	1354	1337	336	1345	1334	128	255		171	248	
Volume-to-Capacity Ratio (*X*)	0.533	0.482	0.483	0.226	0.639	0.642	0.461	0.414		0.486	0.621	
Back of Queue (*Q*), ft/ln (95 th percentile)	73	328	323	26	498	498	94	153		130	227	
Back of Queue (*Q*), veh/ln (95 th percentile)	2.9	13.0	12.9	1.1	19.9	19.9	3.8	6.1		5.2	9.1	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.36	0.00	0.00	0.08	0.00	0.00	1.11	0.00		1.54	0.00	
Uniform Delay (d_1), s/veh	12.7	8.5	8.5	7.2	10.9	10.9	64.8	54.3		61.7	56.1	
Incremental Delay (d_2), s/veh	0.7	1.2	1.2	0.1	2.3	2.4	1.0	0.4		0.8	3.2	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	13.4	9.7	9.8	7.3	13.2	13.3	65.7	54.7		62.5	59.3	
Level of Service (LOS)	B	A	A	A	B	B	E	D		E	E	
Approach Delay, s/veh / LOS	10.1	B		13.0	B		58.7	E		60.4	E	
Intersection Delay, s/veh / LOS	17.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.87	B	1.87	B	2.31	B	2.31	B
Bicycle LOS Score / LOS	1.67	B	1.97	B	0.76	A	0.88	A

HCS Signalized Intersection Intermediate Values

Appendix H

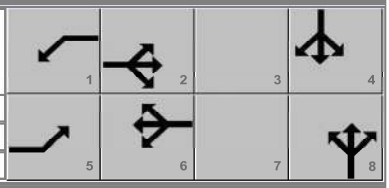
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	4:30-5:30 PM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	PM No-Buildxus.xus		
Project Description	PM No-Build				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	126	1190	43	72	1593	38	56	49	51	79	47	99

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.5	1.4	99.1	20.5	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	1.000	0.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.659	0.000		0.689	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.988	0.988		0.992	0.992		0.916	0.916		0.891	0.891
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Prot. CAV Adj. Factor ($f_{CAV,prot}$)	1.00			1.00								
Left-Turn Perm. CAV Adj. Factor ($f_{CAV,perm}$)							1.00			1.00		
Movement Saturation Flow Rate (s), veh/h	1810	3616	131	1810	3696	88	1253	853	888	1309	545	1148
Proportion of Vehicles Arriving on Green (P)	0.04	0.72	0.72	0.02	0.71	0.71	0.15	0.15	0.15	0.15	0.15	0.15
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04		0.04	0.14	

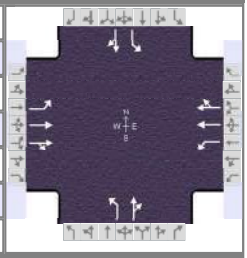
Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0		6.0		6.0
Green Ratio (g/C)	0.74	0.72	0.73	0.71		0.15		0.15
Permitted Saturation Flow Rate (s_p), veh/h/ln	288	0	431	0		1253		1309
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	99.1	0.0	99.1	0.0		20.5		20.5
Permitted Service Time (g_u), s	65.0	0.0	77.6	0.0		8.6		12.8
Permitted Queue Service Time (g_{ps}), s	29.1		4.6			6.5		8.6
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0		0.0		0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.198	0.000	1.198	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.069	0.000	0.072	0.000	0.158	0.000	0.158
Pedestrian M_{corner} / M_{cw}	0.00		0.00		0.00		0.00	
Bicycle c_b / d_b	1436.24	5.56	1415.96	5.97	292.52	51.02	292.52	51.02
Bicycle F_w / F_v	-3.64	1.18	-3.64	1.48	-3.64	0.27	-3.64	0.39

HCS Signalized Intersection Results Graphical Summary

Appendix H

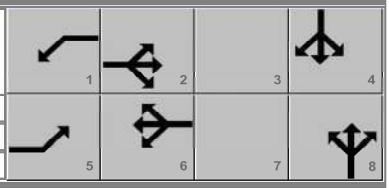
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	4:30-5:30 PM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	PM No-Buildxus.xus		
Project Description	PM No-Build				



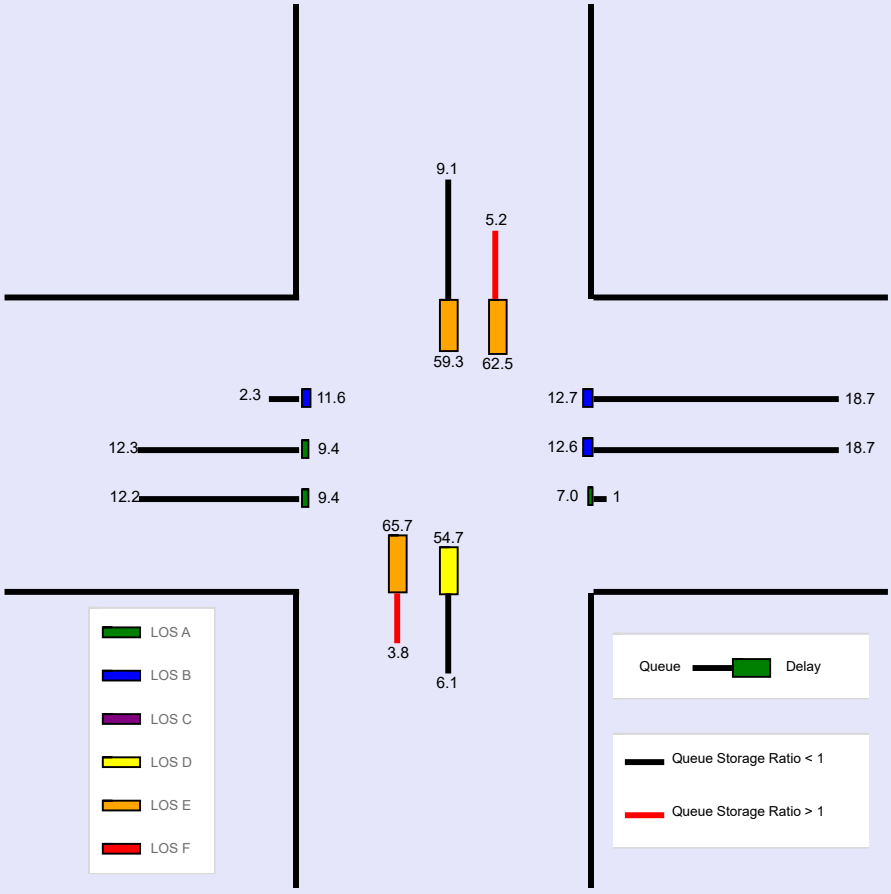
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	126	1190	43	72	1593	38	56	49	51	79	47	99

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.5	1.4		99.1	20.5	0.0	0.0					
Yellow	3.5	0.0		4.5	4.5	0.0	0.0					
Red	0.0	0.0		1.5	1.5	0.0	0.0					



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	73	328	323	26	498	498	94	153		130	227	
Back of Queue (*Q*), veh/ln (95 th percentile)	2.9	13.0	12.9	1.1	19.9	19.9	3.8	6.1		5.2	9.1	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.36	0.00	0.00	0.08	0.00	0.00	1.11	0.00		1.54	0.00	
Control Delay (*d*), s/veh	13.4	9.7	9.8	7.3	13.2	13.3	65.7	54.7		62.5	59.3	
Level of Service (LOS)	B	A	A	A	B	B	E	D		E	E	
Approach Delay, s/veh / LOS	10.1	B		13.0	B		58.7	E		60.4	E	
Intersection Delay, s/veh / LOS	17.0						B					



--- Messages ---

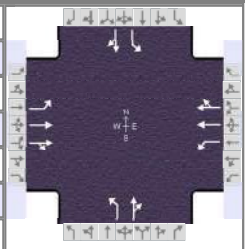
WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

HCS Signalized Intersection Input Data

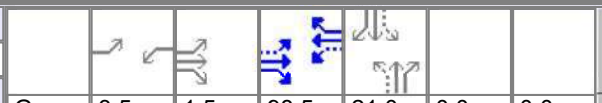
Appendix H

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	4:30-5:30 PM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	PM Total.xus		
Project Description	PM Total				

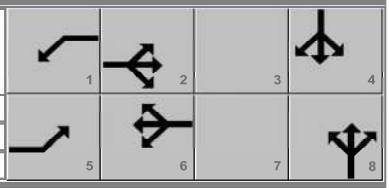


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	129	1218	46	72	1624	38	59	49	51	79	47	102

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.5	1.5	98.5	21.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	129	1218	46	72	1624	38	59	49	51	79	47	102
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	1		0	0		0	0		0	0	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	200	0		315	0		85	0		85	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	35	35	35	35	35	35

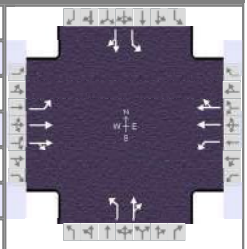
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.0	100.0	13.0	100.0		27.0		27.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	3	15		6		6
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0		2.0		2.0
Recall Mode	Off	Min	Off	Min		Off		Off
Dual Entry	No	Yes	No	Yes		Yes		Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

Appendix H

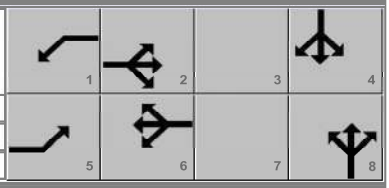
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	4:30-5:30 PM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	PM Total.xus		
Project Description	PM Total				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	129	1218	46	72	1624	38	59	49	51	79	47	102

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.5	1.5	98.5	21.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		6.0		6.0
Phase Duration, s	8.5	106.0	7.0	104.5		27.0		27.0
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0		6.0		6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (g_s), s	5.0		3.7			21.0		18.3
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0		0.0		0.3
Phase Call Probability	0.99		0.95			1.00		1.00
Max Out Probability	0.19		0.02			1.00		1.00

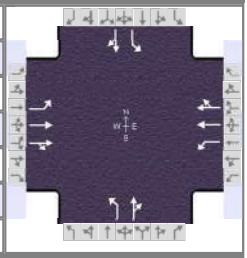
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	136	669	661	76	876	873	62	105		83	157	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1885	1861	1810	1900	1884	1249	1740		1309	1692	
Queue Service Time (g_s), s	3.0	22.0	22.1	1.7	35.5	35.9	6.9	7.7		8.6	12.2	
Cycle Queue Clearance Time (g_c), s	3.0	22.0	22.1	1.7	35.5	35.9	19.0	7.7		16.3	12.2	
Green Ratio (*g/C*)	0.74	0.71	0.71	0.73	0.70	0.70	0.15	0.15		0.15	0.15	
Capacity (*c*), veh/h	241	1346	1329	324	1337	1326	130	261		176	254	
Volume-to-Capacity Ratio (*X*)	0.563	0.497	0.498	0.234	0.655	0.659	0.477	0.403		0.472	0.618	
Back of Queue (*Q*), ft/ln (95 th percentile)	84	344	339	27	524	524	100	152		130	231	
Back of Queue (*Q*), veh/ln (95 th percentile)	3.4	13.7	13.6	1.1	20.9	21.0	4.0	6.1		5.2	9.2	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.42	0.00	0.00	0.09	0.00	0.00	1.17	0.00		1.53	0.00	
Uniform Delay (d_1), s/veh	14.1	8.9	8.9	7.6	11.4	11.5	64.7	53.8		61.2	55.7	
Incremental Delay (d_2), s/veh	0.8	1.3	1.3	0.1	2.5	2.6	1.0	0.4		0.7	3.4	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	14.9	10.2	10.2	7.7	13.9	14.1	65.7	54.2		61.9	59.1	
Level of Service (LOS)	B	B	B	A	B	B	E	D		E	E	
Approach Delay, s/veh / LOS	10.6	B		13.7	B		58.5	E		60.1	E	
Intersection Delay, s/veh / LOS	17.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.87	B	1.87	B	2.31	B	2.31	B
Bicycle LOS Score / LOS	1.70	B	1.99	B	0.76	A	0.88	A

HCS Signalized Intersection Intermediate Values

Appendix H

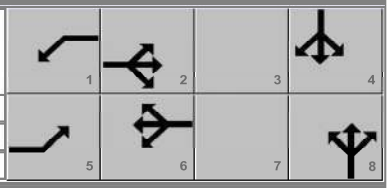
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	4:30-5:30 PM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	PM Total.xus		
Project Description	PM Total				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	129	1218	46	72	1624	38	59	49	51	79	47	102

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.5	1.5	98.5	21.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	1.000	0.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.658	0.000		0.689	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.987	0.987		0.992	0.992		0.916	0.916		0.890	0.890
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Prot. CAV Adj. Factor ($f_{CAV,prot}$)	1.00			1.00								
Left-Turn Perm. CAV Adj. Factor ($f_{CAV,perm}$)							1.00			1.00		
Movement Saturation Flow Rate (s), veh/h	1810	3610	136	1810	3698	86	1249	853	888	1309	534	1158
Proportion of Vehicles Arriving on Green (P)	0.04	0.71	0.71	0.03	0.70	0.70	0.15	0.15	0.15	0.15	0.15	0.15
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04		0.04	0.15	

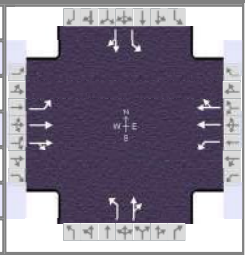
Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0		6.0		6.0
Green Ratio (g/C)	0.74	0.71	0.73	0.70		0.15		0.15
Permitted Saturation Flow Rate (s_p), veh/h/ln	279	0	418	0		1249		1309
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	98.5	0.0	98.5	0.0		21.0		21.0
Permitted Service Time (g_u), s	62.6	0.0	75.9	0.0		8.8		13.3
Permitted Queue Service Time (g_{ps}), s	33.9		5.0			6.9		8.6
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0		0.0		0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.198	0.000	1.198	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.070	0.000	0.073	0.000	0.157	0.000	0.157
Pedestrian M_{corner} / M_{cw}	0.00		0.00		0.00		0.00	
Bicycle c_b / d_b	1428.45	5.72	1406.89	6.16	300.00	50.58	300.00	50.58
Bicycle F_w / F_v	-3.64	1.21	-3.64	1.51	-3.64	0.28	-3.64	0.40

HCS Signalized Intersection Results Graphical Summary

Appendix H

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	4:30-5:30 PM	PHF	0.95
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	PM Total.xus		
Project Description	PM Total				

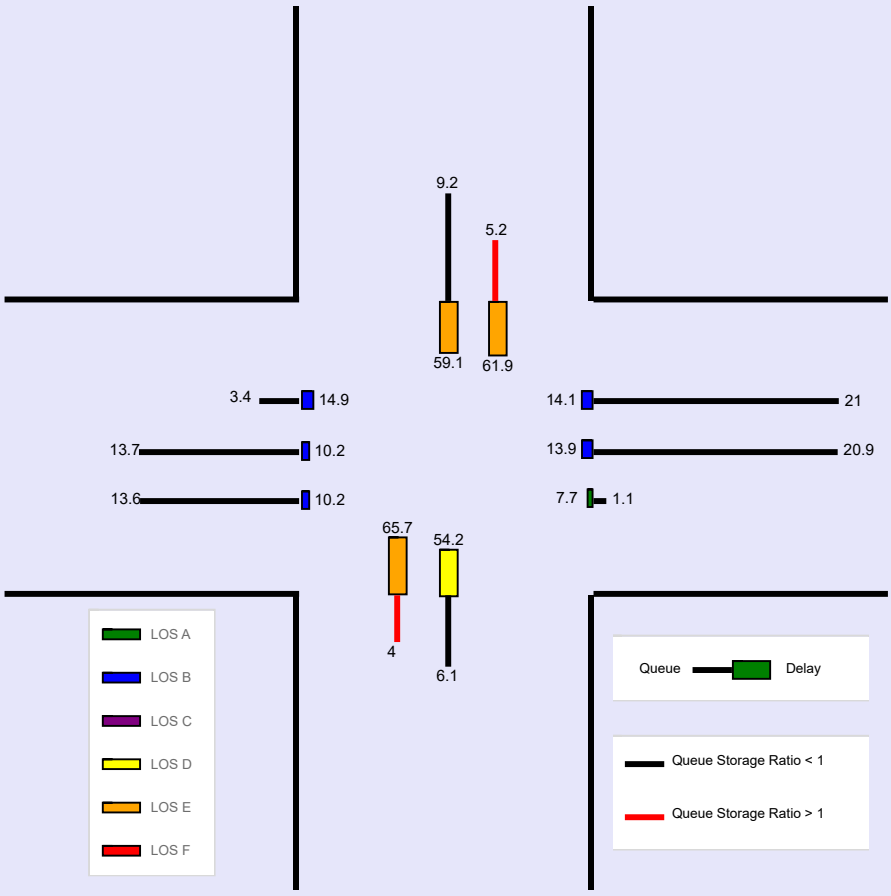


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	129	1218	46	72	1624	38	59	49	51	79	47	102

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.5	1.5	98.5	21.0	0.0	0.0	1	2	3	4		
Yellow	3.5	0.0	4.5	4.5	0.0	0.0						
Red	0.0	0.0	1.5	1.5	0.0	0.0	5	6	7	8		

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	84	344	339	27	524	524	100	152		130	231	
Back of Queue (*Q*), veh/ln (95 th percentile)	3.4	13.7	13.6	1.1	20.9	21.0	4.0	6.1		5.2	9.2	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.42	0.00	0.00	0.09	0.00	0.00	1.17	0.00		1.53	0.00	
Control Delay (*d*), s/veh	14.9	10.2	10.2	7.7	13.9	14.1	65.7	54.2		61.9	59.1	
Level of Service (LOS)	B	B	B	A	B	B	E	D		E	E	
Approach Delay, s/veh / LOS	10.6	B		13.7	B		58.5	E		60.1	E	
Intersection Delay, s/veh / LOS	17.5						B					



--- Messages ---

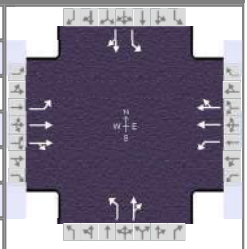
WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

HCS Signalized Intersection Input Data

Appendix H

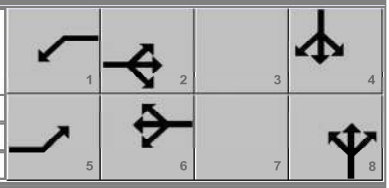
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	12:00 - 1:00 PM	PHF	0.94
Urban Street	Ogden Avenue	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	SAT Existing.xus		
Project Description	SAT Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	136	1060	33	59	1215	49	62	42	41	90	47	95

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.1	2.1		98.4	20.9	0.0	0.0					
Yellow	3.5	0.0		4.5	4.5	0.0	0.0					
Red	0.0	0.0		1.5	1.5	0.0	0.0					



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	136	1060	33	59	1215	49	62	42	41	90	47	95
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	0		0	0		0	0		1	0	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	200	0		315	0		85	0		85	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	35	35	35	35	35	35

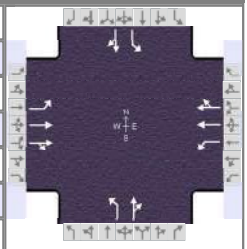
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.0	100.0	13.0	100.0		27.0		27.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	3	15		6		6
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0		2.0		2.0
Recall Mode	Off	Min	Off	Min		Off		Off
Dual Entry	No	Yes	No	Yes		Yes		Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

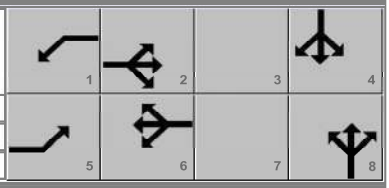
Appendix H

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	12:00 - 1:00 PM	PHF	0.94
Urban Street	Ogden Avenue	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	SAT Existing.xus		
Project Description	SAT Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	136	1060	33	59	1215	49	62	42	41	90	47	95

Signal Information												
Cycle, s	140.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
				Green	3.1	2.1	98.4	20.9	0.0	0.0		
				Yellow	3.5	0.0	4.5	4.5	0.0	0.0		
				Red	0.0	0.0	1.5	1.5	0.0	0.0		



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		6.0		6.0
Phase Duration, s	8.7	106.5	6.6	104.4		26.9		26.9
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0		6.0		6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (g_s), s	5.1		3.4			20.9		18.2
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0		0.0		0.3
Phase Call Probability	1.00		0.91			1.00		1.00
Max Out Probability	0.21		0.01			1.00		1.00

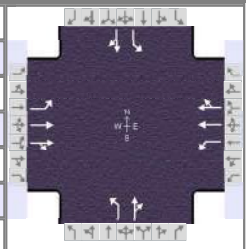
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	145	584	578	63	676	668	66	88		96	151	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1879	1810	1900	1874	1256	1745		1319	1696	
Queue Service Time (g_s), s	3.1	17.6	17.6	1.4	23.0	23.1	7.2	6.3		9.8	11.6	
Cycle Queue Clearance Time (g_c), s	3.1	17.6	17.6	1.4	23.0	23.1	18.9	6.3		16.2	11.6	
Green Ratio (*g/C*)	0.74	0.72	0.72	0.73	0.70	0.70	0.15	0.15		0.15	0.15	
Capacity (*c*), veh/h	340	1364	1349	375	1336	1317	134	260		189	253	
Volume-to-Capacity Ratio (*X*)	0.425	0.429	0.429	0.167	0.506	0.507	0.490	0.339		0.508	0.597	
Back of Queue (*Q*), ft/ln (95 th percentile)	50	284	282	22	360	357	106	126		151	222	
Back of Queue (*Q*), veh/ln (95 th percentile)	2.0	11.4	11.3	0.9	14.4	14.3	4.2	5.1		6.0	8.9	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.25	0.00	0.00	0.07	0.00	0.00	1.24	0.00		1.77	0.00	
Uniform Delay (d_1), s/veh	8.1	8.1	8.1	6.7	9.6	9.6	64.4	53.4		60.6	55.6	
Incremental Delay (d_2), s/veh	0.3	1.0	1.0	0.1	1.4	1.4	1.0	0.3		0.9	2.6	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	8.4	9.0	9.1	6.8	11.0	11.0	65.5	53.6		61.5	58.2	
Level of Service (LOS)	A	A	A	A	B	B	E	D		E	E	
Approach Delay, s/veh / LOS	9.0	A		10.8	B		58.7	E		59.5	E	
Intersection Delay, s/veh / LOS	16.3						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.87	B	1.87	B	2.31	B	2.31	B
Bicycle LOS Score / LOS	1.57	B	1.65	B	0.74	A	0.89	A

HCS Signalized Intersection Intermediate Values

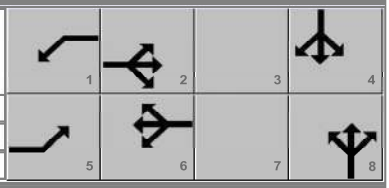
Appendix H

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	12:00 - 1:00 PM	PHF	0.94
Urban Street	Ogden Avenue	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	SAT Existing.xus		
Project Description	SAT Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	136	1060	33	59	1215	49	62	42	41	90	47	95

Signal Information												
Cycle, s	140.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
				Green	3.1	2.1	98.4	20.9	0.0	0.0		
				Yellow	3.5	0.0	4.5	4.5	0.0	0.0		
				Red	0.0	0.0	1.5	1.5	0.0	0.0		



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.992	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.661	0.000		0.694	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.989	0.989		0.986	0.986		0.918	0.918		0.893	0.893
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Prot. CAV Adj. Factor ($f_{CAV,prot}$)	1.00			1.00								
Left-Turn Perm. CAV Adj. Factor ($f_{CAV,perm}$)							1.00			1.00		
Movement Saturation Flow Rate (s), veh/h	1810	3665	114	1810	3628	146	1256	883	862	1319	561	1135
Proportion of Vehicles Arriving on Green (P)	0.04	0.72	0.72	0.02	0.70	0.70	0.15	0.15	0.15	0.15	0.15	0.15
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04		0.04	0.13	

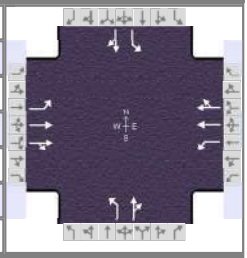
Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0		6.0		6.0
Green Ratio (g/C)	0.74	0.72	0.73	0.70		0.15		0.15
Permitted Saturation Flow Rate (s_p), veh/h/ln	413	0	491	0		1256		1319
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	99.0	0.0	98.4	0.0		20.9		20.9
Permitted Service Time (g_u), s	75.3	0.0	80.9	0.0		9.3		14.6
Permitted Queue Service Time (g_{ps}), s	12.8		2.6			7.2		9.8
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0		0.0		0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.198	0.000	1.198	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.069	0.000	0.073	0.000	0.157	0.000	0.157
Pedestrian M_{corner} / M_{cw}	0.00		0.00		0.00		0.00	
Bicycle c_b / d_b	1435.48	5.58	1405.93	6.18	298.56	50.66	298.56	50.66
Bicycle F_w / F_v	-3.64	1.08	-3.64	1.16	-3.64	0.25	-3.64	0.41

HCS Signalized Intersection Results Graphical Summary

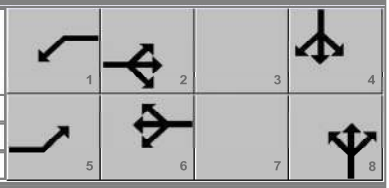
Appendix H

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	12:00 - 1:00 PM	PHF	0.94
Urban Street	Ogden Avenue	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	SAT Existing.xus		
Project Description	SAT Existing				

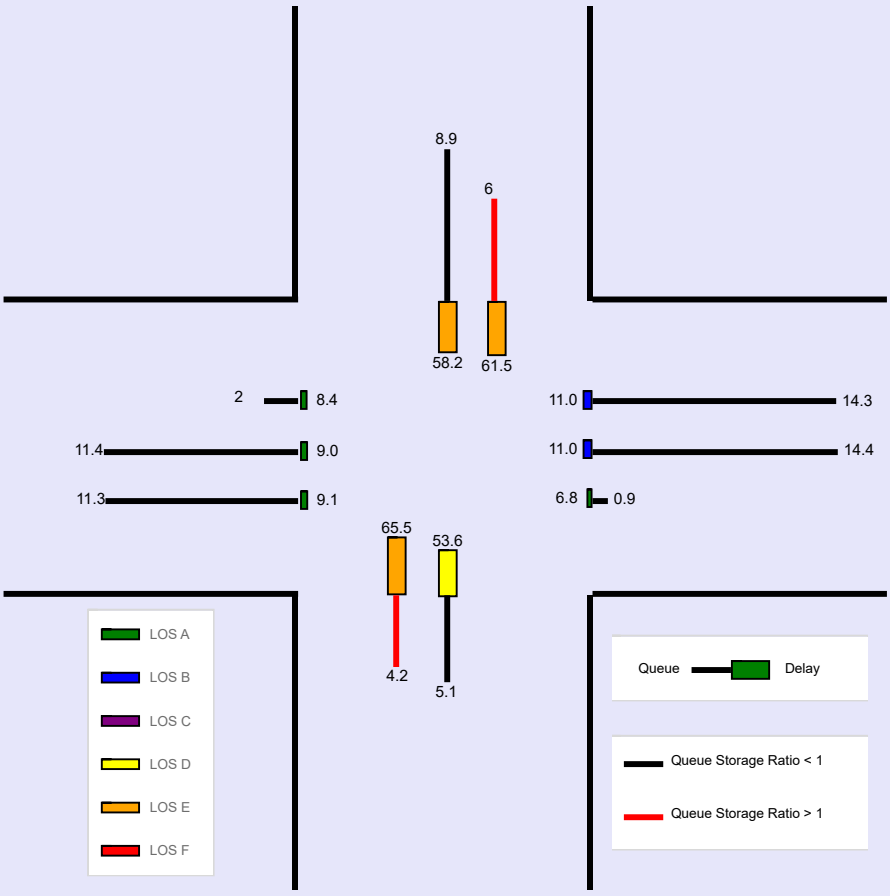


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	136	1060	33	59	1215	49	62	42	41	90	47	95

Signal Information												
Cycle, s	140.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	3.1	2.1	98.4	20.9	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.5	4.5	0.0	0.0		
				Red	0.0	0.0	1.5	1.5	0.0	0.0		



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	50	284	282	22	360	357	106	126		151	222	
Back of Queue (*Q*), veh/ln (95 th percentile)	2.0	11.4	11.3	0.9	14.4	14.3	4.2	5.1		6.0	8.9	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.25	0.00	0.00	0.07	0.00	0.00	1.24	0.00		1.77	0.00	
Control Delay (*d*), s/veh	8.4	9.0	9.1	6.8	11.0	11.0	65.5	53.6		61.5	58.2	
Level of Service (LOS)	A	A	A	A	B	B	E	D		E	E	
Approach Delay, s/veh / LOS	9.0	A		10.8	B		58.7	E		59.5	E	
Intersection Delay, s/veh / LOS	16.3						B					



--- Messages ---

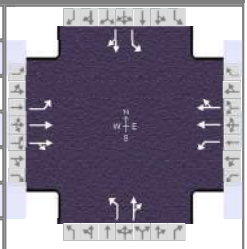
WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

HCS Signalized Intersection Input Data

Appendix H

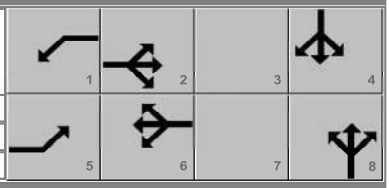
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	12:00 - 1:00 PM	PHF	0.94
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	SAT N-Build.xus		
Project Description	SAT No-Build				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	141	1102	34	61	1262	51	62	42	41	90	47	95

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.2	2.1		98.3	20.9	0.0	0.0					
Yellow	3.5	0.0		4.5	4.5	0.0	0.0					
Red	0.0	0.0		1.5	1.5	0.0	0.0					



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	141	1102	34	61	1262	51	62	42	41	90	47	95
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	0		0	0		0	0		1	0	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	200	0		315	0		85	0		85	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	35	35	35	35	35	35

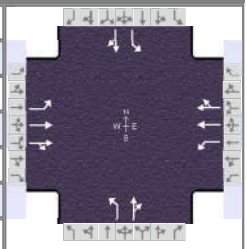
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.0	100.0	13.0	100.0		27.0		27.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	3	15		6		6
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0		2.0		2.0
Recall Mode	Off	Min	Off	Min		Off		Off
Dual Entry	No	Yes	No	Yes		Yes		Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

Appendix H

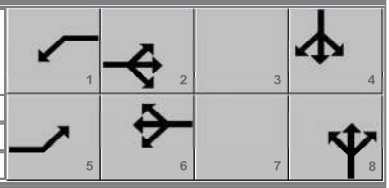
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	12:00 - 1:00 PM	PHF	0.94
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	SAT N-Build.xus		
Project Description	SAT No-Build				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	141	1102	34	61	1262	51	62	42	41	90	47	95

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.2	2.1	98.3	20.9	0.0	0.0	
Yellow	3.5	0.0	4.5	4.5	0.0	0.0	
Red	0.0	0.0	1.5	1.5	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		6.0		6.0
Phase Duration, s	8.8	106.4	6.7	104.3		26.9		26.9
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0		6.0		6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (g_s), s	5.2		3.4			20.9		18.2
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0		0.0		0.3
Phase Call Probability	1.00		0.92			1.00		1.00
Max Out Probability	0.24		0.01			1.00		1.00

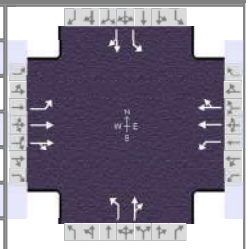
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	150	607	601	65	702	694	66	88		96	151	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1880	1810	1900	1874	1256	1745		1319	1696	
Queue Service Time (g_s), s	3.2	18.6	18.6	1.4	24.5	24.6	7.2	6.3		9.8	11.6	
Cycle Queue Clearance Time (g_c), s	3.2	18.6	18.6	1.4	24.5	24.6	18.9	6.3		16.2	11.6	
Green Ratio (*g/C*)	0.74	0.72	0.72	0.72	0.70	0.70	0.15	0.15		0.15	0.15	
Capacity (*c*), veh/h	327	1363	1348	360	1334	1315	134	260		189	253	
Volume-to-Capacity Ratio (*X*)	0.459	0.446	0.446	0.180	0.527	0.528	0.490	0.339		0.508	0.597	
Back of Queue (*Q*), ft/ln (95 th percentile)	51	298	295	23	380	378	106	126		151	222	
Back of Queue (*Q*), veh/ln (95 th percentile)	2.1	11.9	11.8	0.9	15.2	15.1	4.2	5.1		6.0	8.9	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.26	0.00	0.00	0.07	0.00	0.00	1.24	0.00		1.77	0.00	
Uniform Delay (d_1), s/veh	8.7	8.2	8.2	6.9	9.9	9.9	64.4	53.4		60.6	55.6	
Incremental Delay (d_2), s/veh	0.4	1.1	1.1	0.1	1.5	1.5	1.0	0.3		0.9	2.6	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	9.0	9.3	9.3	7.0	11.3	11.4	65.5	53.6		61.5	58.2	
Level of Service (LOS)	A	A	A	A	B	B	E	D		E	E	
Approach Delay, s/veh / LOS	9.3	A		11.2	B		58.7	E		59.5	E	
Intersection Delay, s/veh / LOS	16.3						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.87	B	1.87	B	2.31	B	2.31	B
Bicycle LOS Score / LOS	1.61	B	1.69	B	0.74	A	0.89	A

HCS Signalized Intersection Intermediate Values

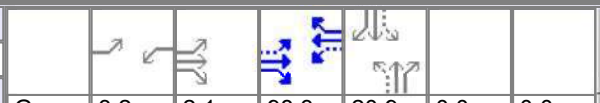
Appendix H

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	12:00 - 1:00 PM	PHF	0.94
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	SAT N-Build.xus		
Project Description	SAT No-Build				

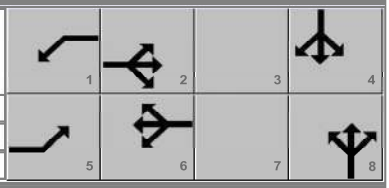


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	141	1102	34	61	1262	51	62	42	41	90	47	95

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.2	2.1	98.3	20.9	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.992	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.661	0.000		0.694	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.989	0.989		0.986	0.986		0.918	0.918		0.893	0.893
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Prot. CAV Adj. Factor ($f_{CAV,prot}$)	1.00			1.00								
Left-Turn Perm. CAV Adj. Factor ($f_{CAV,perm}$)							1.00			1.00		
Movement Saturation Flow Rate (s), veh/h	1810	3667	113	1810	3627	146	1256	883	862	1319	561	1135
Proportion of Vehicles Arriving on Green (P)	0.04	0.72	0.72	0.02	0.70	0.70	0.15	0.15	0.15	0.15	0.15	0.15
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50	0.04	0.04		0.04	0.13	

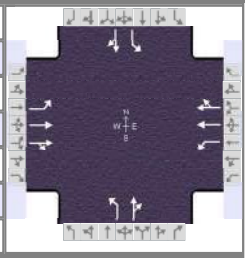
Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0		6.0		6.0
Green Ratio (g/C)	0.74	0.72	0.72	0.70		0.15		0.15
Permitted Saturation Flow Rate (s_p), veh/h/ln	392	0	470	0		1256		1319
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	98.9	0.0	98.3	0.0		20.9		20.9
Permitted Service Time (g_u), s	73.7	0.0	79.8	0.0		9.3		14.6
Permitted Queue Service Time (g_{ps}), s	15.6		3.0			7.2		9.8
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0		0.0		0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.198	0.000	1.198	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.069	0.000	0.073	0.000	0.157	0.000	0.157
Pedestrian M_{corner} / M_{cw}	0.00		0.00		0.00		0.00	
Bicycle c_b / d_b	1434.45	5.60	1404.12	6.21	298.56	50.66	298.56	50.66
Bicycle F_w / F_v	-3.64	1.12	-3.64	1.21	-3.64	0.25	-3.64	0.41

HCS Signalized Intersection Results Graphical Summary

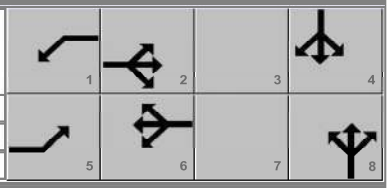
Appendix H

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	12:00 - 1:00 PM	PHF	0.94
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	SAT N-Build.xus		
Project Description	SAT No-Build				

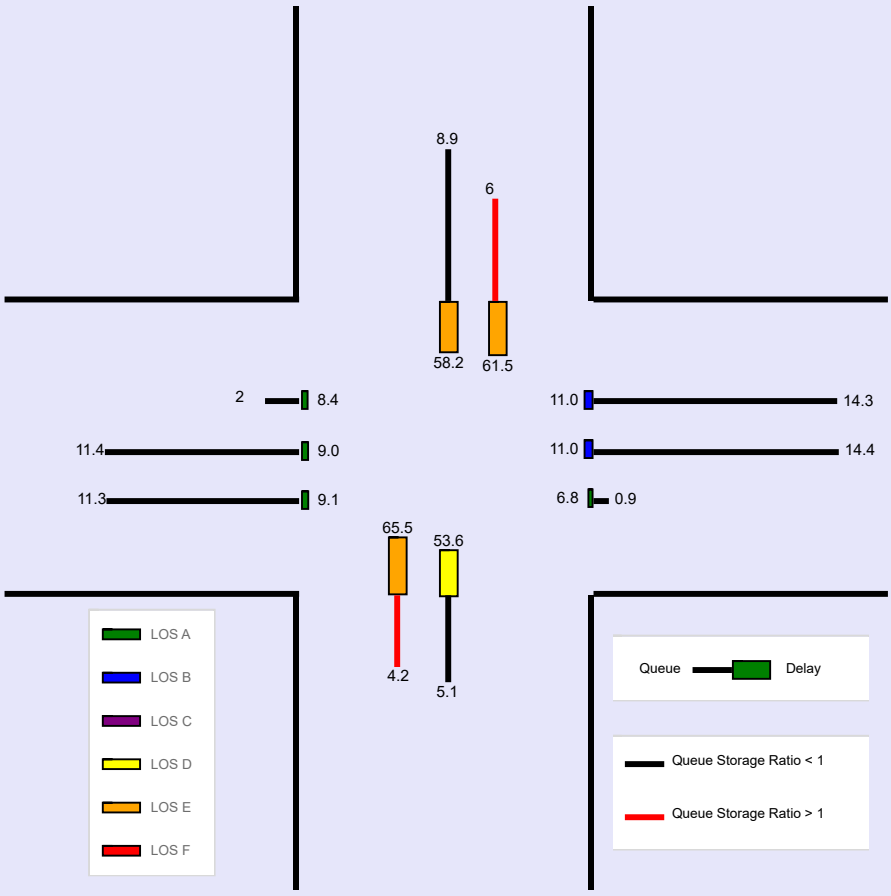


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	141	1102	34	61	1262	51	62	42	41	90	47	95

Signal Information												
Cycle, s	140.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	3.2	2.1	98.3	20.9	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.5	4.5	0.0	0.0		
				Red	0.0	0.0	1.5	1.5	0.0	0.0		



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	51	298	295	23	380	378	106	126		151	222	
Back of Queue (*Q*), veh/ln (95 th percentile)	2.1	11.9	11.8	0.9	15.2	15.1	4.2	5.1		6.0	8.9	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.26	0.00	0.00	0.07	0.00	0.00	1.24	0.00		1.77	0.00	
Control Delay (*d*), s/veh	9.0	9.3	9.3	7.0	11.3	11.4	65.5	53.6		61.5	58.2	
Level of Service (LOS)	A	A	A	A	B	B	E	D		E	E	
Approach Delay, s/veh / LOS	9.3	A		11.2	B		58.7	E		59.5	E	
Intersection Delay, s/veh / LOS	16.3						B					



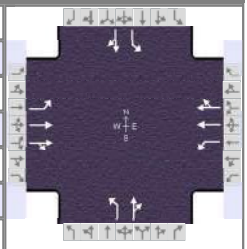
WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

HCS Signalized Intersection Input Data

Appendix H

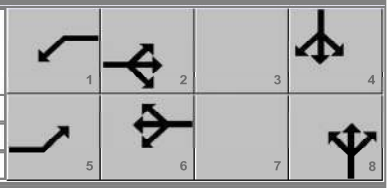
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	12:00 - 1:00 PM	PHF	0.94
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	SAT Total.xus		
Project Description	SAT Total				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	145	1138	38	61	1303	51	66	42	41	90	47	99

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.2	2.2		98.1	21.0	0.0	0.0					
Yellow	3.5	0.0		4.5	4.5	0.0	0.0					
Red	0.0	0.0		1.5	1.5	0.0	0.0					



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	145	1138	38	61	1303	51	66	42	41	90	47	99
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	0	0		0	0		0	0		1	0	
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
Turn Bay Length, ft	200	0		315	0		85	0		85	0	
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	35	35	35	35	35	35	35	35	35	35	35	35

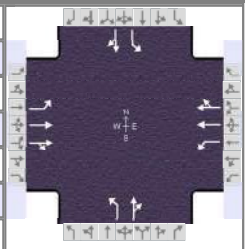
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	13.0	100.0	13.0	100.0		27.0		27.0
Yellow Change Interval (*Y*), s	3.5	4.5	3.5	4.5		4.5		4.5
Red Clearance Interval (R_c), s	0.0	1.5	0.0	1.5		1.5		1.5
Minimum Green (G_{min}), s	3	15	3	15		6		6
Start-Up Lost Time (*l*t), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0		2.0		2.0
Recall Mode	Off	Min	Off	Min		Off		Off
Dual Entry	No	Yes	No	Yes		Yes		Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

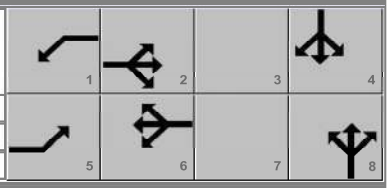
Appendix H

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	12:00 - 1:00 PM	PHF	0.94
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	SAT Total.xus		
Project Description	SAT Total				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	145	1138	38	61	1303	51	66	42	41	90	47	99

Signal Information												
Cycle, s	140.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
				Green	3.2	2.2	98.1	21.0	0.0	0.0		
				Yellow	3.5	0.0	4.5	4.5	0.0	0.0		
				Red	0.0	0.0	1.5	1.5	0.0	0.0		



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		6.0		6.0
Phase Duration, s	8.9	106.3	6.7	104.1		27.0		27.0
Change Period, ($Y+R_c$), s	3.5	6.0	3.5	6.0		6.0		6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (g_s), s	5.3		3.4			21.8		18.2
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0		0.0		0.3
Phase Call Probability	1.00		0.92			1.00		1.00
Max Out Probability	0.31		0.01			1.00		1.00

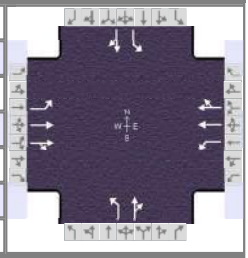
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	154	629	622	65	724	716	70	88		96	155	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1878	1810	1900	1874	1251	1745		1319	1693	
Queue Service Time (g_s), s	3.3	19.6	19.7	1.4	25.8	25.9	7.8	6.3		9.8	12.0	
Cycle Queue Clearance Time (g_c), s	3.3	19.6	19.7	1.4	25.8	25.9	19.8	6.3		16.2	12.0	
Green Ratio (*g/C*)	0.74	0.72	0.72	0.72	0.70	0.70	0.15	0.15		0.15	0.15	
Capacity (*c*), veh/h	315	1361	1346	346	1331	1313	132	262		190	254	
Volume-to-Capacity Ratio (*X*)	0.489	0.462	0.462	0.187	0.544	0.546	0.533	0.337		0.505	0.611	
Back of Queue (*Q*), ft/ln (95 th percentile)	53	312	309	24	398	396	115	126		151	228	
Back of Queue (*Q*), veh/ln (95 th percentile)	2.1	12.5	12.4	0.9	15.9	15.8	4.6	5.1		6.0	9.1	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.27	0.00	0.00	0.07	0.00	0.00	1.35	0.00		1.77	0.00	
Uniform Delay (d_1), s/veh	9.3	8.4	8.4	7.1	10.1	10.2	65.0	53.3		60.5	55.7	
Incremental Delay (d_2), s/veh	0.4	1.1	1.1	0.1	1.6	1.6	2.2	0.3		0.9	3.1	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (*d*), s/veh	9.7	9.5	9.6	7.2	11.7	11.8	67.1	53.6		61.4	58.8	
Level of Service (LOS)	A	A	A	A	B	B	E	D		E	E	
Approach Delay, s/veh / LOS	9.6	A		11.6	B		59.6	E		59.8	E	
Intersection Delay, s/veh / LOS	16.7						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.87	B	1.87	B	2.31	B	2.31	B
Bicycle LOS Score / LOS	1.65	B	1.73	B	0.75	A	0.90	A

HCS Signalized Intersection Intermediate Values

Appendix H

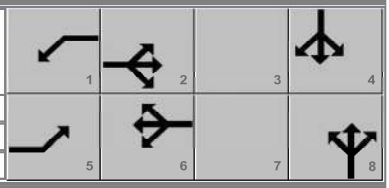
General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	12:00 - 1:00 PM	PHF	0.94
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	SAT Total.xus		
Project Description	SAT Total				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	145	1138	38	61	1303	51	66	42	41	90	47	99

Signal Information			
Cycle, s	140.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.2	2.2	98.1	21.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.5	0.0	0.0
Red	0.0	0.0	1.5	1.5	0.0	0.0



Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles and Grade Factor (f_{HVg})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.992	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.658	0.000		0.694	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.988	0.988		0.987	0.987		0.918	0.918		0.891	0.891
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
DDI Factor (f_{DDI})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Prot. CAV Adj. Factor ($f_{CAV,prot}$)	1.00			1.00								
Left-Turn Perm. CAV Adj. Factor ($f_{CAV,perm}$)							1.00			1.00		
Movement Saturation Flow Rate (s), veh/h	1810	3656	122	1810	3633	142	1251	883	862	1319	545	1148
Proportion of Vehicles Arriving on Green (P)	0.04	0.72	0.72	0.02	0.70	0.70	0.15	0.15	0.15	0.15	0.15	0.15
Incremental Delay Factor (k)	0.04	0.50	0.50	0.04	0.50	0.50	0.07	0.04		0.04	0.14	

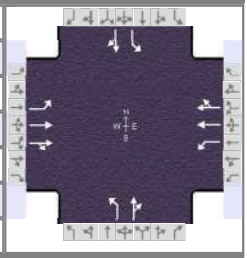
Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	3.5	6.0	3.5	6.0		6.0		6.0
Green Ratio (g/C)	0.74	0.72	0.72	0.70		0.15		0.15
Permitted Saturation Flow Rate (s_p), veh/h/ln	376	0	451	0		1251		1319
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	98.8	0.0	98.1	0.0		21.0		21.0
Permitted Service Time (g_u), s	72.1	0.0	78.6	0.0		9.0		14.7
Permitted Queue Service Time (g_{ps}), s	18.5		3.3			7.8		9.8
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0		0.0		0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln								
Protected Right Effective Green Time (g_R), s								

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.198	0.000	1.198	0.000	1.557	0.000	1.557	0.000
Pedestrian F_s / F_{delay}	0.000	0.069	0.000	0.074	0.000	0.157	0.000	0.157
Pedestrian M_{corner} / M_{cw}	0.00		0.00		0.00		0.00	
Bicycle c_b / d_b	1432.92	5.63	1401.22	6.27	300.00	50.58	300.00	50.58
Bicycle F_w / F_v	-3.64	1.16	-3.64	1.24	-3.64	0.26	-3.64	0.41

HCS Signalized Intersection Results Graphical Summary

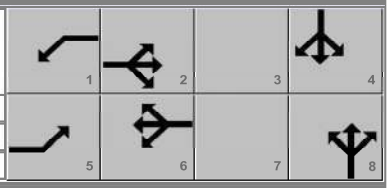
Appendix H

General Information				Intersection Information	
Agency	GHA			Duration, h	0.250
Analyst	David W	Analysis Date	Dec 19, 2024	Area Type	Other
Jurisdiction	IDOT	Time Period	12:00 - 1:00 PM	PHF	0.94
Urban Street	Ogden Avenue	Analysis Year	2031	Analysis Period	1> 7:00
Intersection	Saratoga Avenue	File Name	SAT Total.xus		
Project Description	SAT Total				

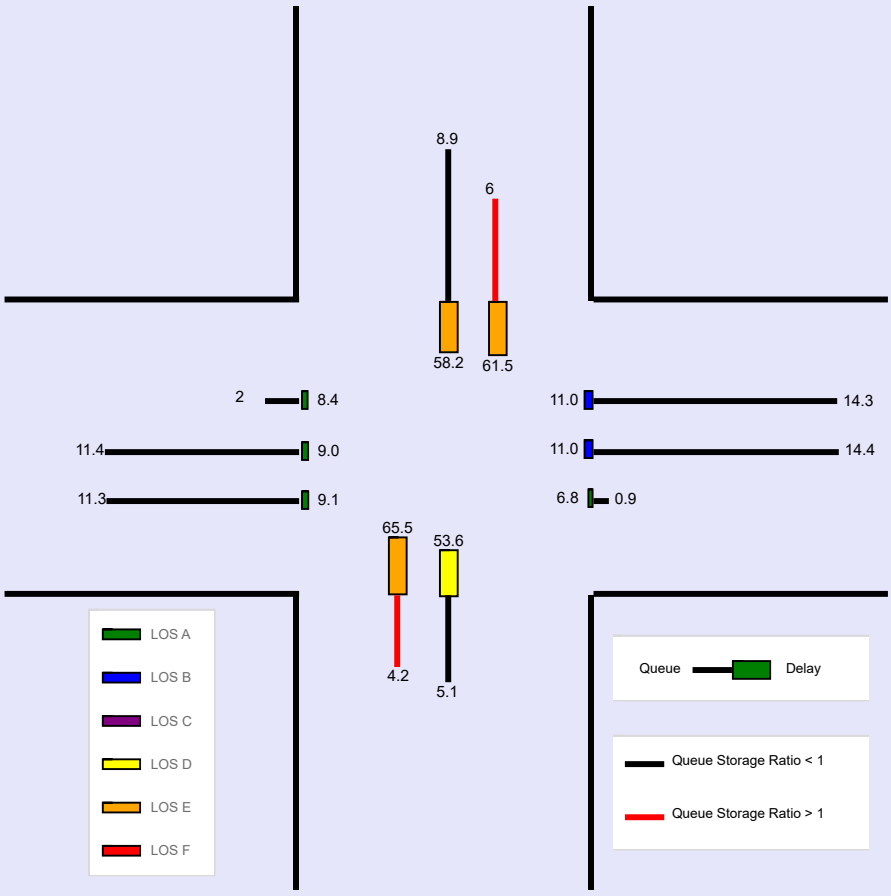


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	145	1138	38	61	1303	51	66	42	41	90	47	99

Signal Information												
Cycle, s	140.0	Reference Phase	2									
Offset, s	0	Reference Point	End	Green	3.2	2.2	98.1	21.0	0.0	0.0		
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.5	0.0	4.5	4.5	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	1.5	1.5	0.0	0.0		



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	53	312	309	24	398	396	115	126		151	228	
Back of Queue (*Q*), veh/ln (95 th percentile)	2.1	12.5	12.4	0.9	15.9	15.8	4.6	5.1		6.0	9.1	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.27	0.00	0.00	0.07	0.00	0.00	1.35	0.00		1.77	0.00	
Control Delay (*d*), s/veh	9.7	9.5	9.6	7.2	11.7	11.8	67.1	53.6		61.4	58.8	
Level of Service (LOS)	A	A	A	A	B	B	E	D		E	E	
Approach Delay, s/veh / LOS	9.6	A		11.6	B		59.6	E		59.8	E	
Intersection Delay, s/veh / LOS	16.7						B					



--- Messages ---

WARNING: Since queue spillover from turn lanes and spillback into upstream intersections is not accounted for in the HCM procedures, use of a simulation tool may be advised in situations where the Queue Storage Ratio exceeds 1.0.

--- Comments ---

HCS Two-Way Stop-Control Report

Appendix H

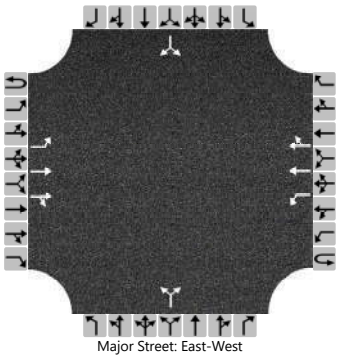
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2024
Time Analyzed	7:30-8:30 AM
Intersection Orientation	East-West
Project Description	AM Existing

Site Information

Intersection	Ogden Avenue at Linscott Ave/East Site Dr
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Linscott Ave
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LR				LR	
Volume (veh/h)	0	6	1448	2	0	0	1150	4		1		6		0		6
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5		6.9		7.5		6.9
Critical Headway (sec)		4.10				4.10				7.50		6.90		7.50		6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3		3.5		3.3
Follow-Up Headway (sec)		2.20				2.20				3.50		3.30		3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6				0					7				6	
Capacity, c (veh/h)		588				449					135				448	
v/c Ratio		0.01				0.00					0.05				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.2				0.0	
95% Queue Length, Q_{95} (ft)		0.0									5.0				0.0	
Control Delay (s/veh)		11.2				13.0					33.3				13.1	
Level of Service (LOS)		B				B					D				B	
Approach Delay (s/veh)	0.0				0.0				33.3				13.1			
Approach LOS	A				A				D				B			

HCS Two-Way Stop-Control Report

Appendix H

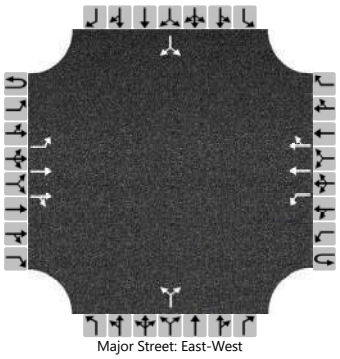
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	7:30-8:30 AM
Intersection Orientation	East-West
Project Description	AM No-Build

Site Information

Intersection	Ogden Avenue at Linscott Ave/East Site Dr
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Linscott Ave
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LR				LR	
Volume (veh/h)	0	6	1506	2	0	0	1204	4		1		6		0		6
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5		6.9		7.5		6.9
Critical Headway (sec)		4.10				4.10				7.50		6.90		7.50		6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3		3.5		3.3
Follow-Up Headway (sec)		2.20				2.20				3.50		3.30		3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6				0					7				6	
Capacity, c (veh/h)		560				425					119				430	
v/c Ratio		0.01				0.00					0.06				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.2				0.0	
95% Queue Length, Q_{95} (ft)		0.0									5.0				0.0	
Control Delay (s/veh)		11.5				13.5					37.2				13.5	
Level of Service (LOS)		B				B					E				B	
Approach Delay (s/veh)	0.0				0.0				37.2				13.5			
Approach LOS	A				A				E				B			

HCS Two-Way Stop-Control Report

Appendix H

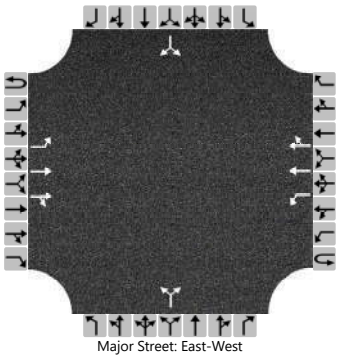
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	7:30-8:30 AM
Intersection Orientation	East-West
Project Description	AM Total

Site Information

Intersection	Ogden Avenue at Linscott Ave/East Site Dr
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Linscott Ave
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LR				LR	
Volume (veh/h)	0	35	1506	2	0	0	1204	41		1		6		28		35
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5		6.9		7.5		6.9
Critical Headway (sec)		4.10				4.10				7.50		6.90		7.50		6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3		3.5		3.3
Follow-Up Headway (sec)		2.20				2.20				3.50		3.30		3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		36				0					7				66	
Capacity, c (veh/h)		541				425					98				55	
v/c Ratio		0.07				0.00					0.07				1.20	
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.2				5.7	
95% Queue Length, Q_{95} (ft)		5.0									5.0				142.5	
Control Delay (s/veh)		12.1				13.5					44.9				309.8	
Level of Service (LOS)		B				B					E				F	
Approach Delay (s/veh)	0.3				0.0				44.9				309.8			
Approach LOS	A				A				E				F			

HCS Two-Way Stop-Control Report

Appendix H

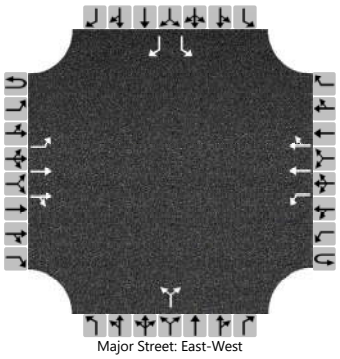
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	7:30-8:30 AM
Intersection Orientation	East-West
Project Description	AM Total W/ Left Turn Lane

Site Information

Intersection	Ogden Avenue at Linscott Ave/East Site Dr
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Linscott Ave
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		1	0	1
Configuration		L	T	TR		L	T	TR			LR			L		R
Volume (veh/h)	0	35	1506	2	0	0	1204	41		1		6		28		35
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized													No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5		6.9		7.5		6.9
Critical Headway (sec)		4.10				4.10				7.50		6.90		7.50		6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3		3.5		3.3
Follow-Up Headway (sec)		2.20				2.20				3.50		3.30		3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		36				0					7			29		36
Capacity, c (veh/h)		541				425					98			26		418
v/c Ratio		0.07				0.00					0.07			1.11		0.09
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.2			3.5		0.3
95% Queue Length, Q_{95} (ft)		5.0									5.0			87.5		7.5
Control Delay (s/veh)		12.1				13.5					44.9			431.3		14.4
Level of Service (LOS)		B				B					E			F		B
Approach Delay (s/veh)	0.3				0.0				44.9				199.7			
Approach LOS	A				A				E				F			

HCS Two-Way Stop-Control Report

Appendix H

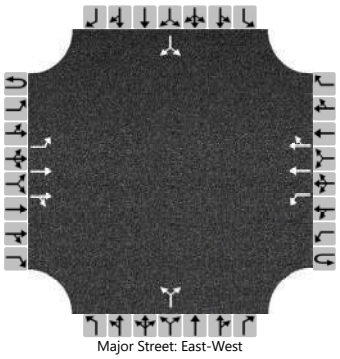
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2024
Time Analyzed	4:30-5:30 PM
Intersection Orientation	East-West
Project Description	PM Existing

Site Information

Intersection	Ogden Avenue at Linscott Ave/East Site Dr
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Linscott Ave
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LR				LR	
Volume (veh/h)	0	2	1305	2	0	1	1686	0		1		1		0		7
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5		6.9		7.5		6.9
Critical Headway (sec)		4.10				4.10				7.50		6.90		7.50		6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3		3.5		3.3
Follow-Up Headway (sec)		2.20				2.20				3.50		3.30		3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2				1					2				7	
Capacity, c (veh/h)		355				505					41				291	
v/c Ratio		0.01				0.00					0.05				0.03	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.2				0.1	
95% Queue Length, Q_{95} (ft)		0.0				0.0					5.0				2.5	
Control Delay (s/veh)		15.2				12.1					96.6				17.7	
Level of Service (LOS)		C				B					F				C	
Approach Delay (s/veh)	0.0				0.0				96.6				17.7			
Approach LOS	A				A				F				C			

HCS Two-Way Stop-Control Report

Appendix H

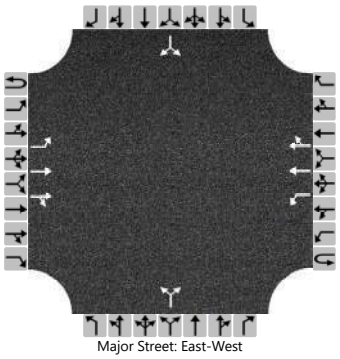
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	4:30-5:30 PM
Intersection Orientation	East-West
Project Description	PM No-Build

Site Information

Intersection	Ogden Avenue at Linscott Ave/East Site Dr
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Linscott Ave
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LR				LR	
Volume (veh/h)	0	2	1358	2	0	1	1747	0		1		1		0		7
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5		6.9		7.5		6.9
Critical Headway (sec)		4.10				4.10				7.50		6.90		7.50		6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3		3.5		3.3
Follow-Up Headway (sec)		2.20				2.20				3.50		3.30		3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2				1					2				7	
Capacity, c (veh/h)		336				481					36				277	
v/c Ratio		0.01				0.00					0.06				0.03	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.2				0.1	
95% Queue Length, Q_{95} (ft)		0.0				0.0					5.0				2.5	
Control Delay (s/veh)		15.8				12.5					112.4				18.3	
Level of Service (LOS)		C				B					F				C	
Approach Delay (s/veh)	0.0				0.0				112.4				18.3			
Approach LOS	A				A				F				C			

HCS Two-Way Stop-Control Report

Appendix H

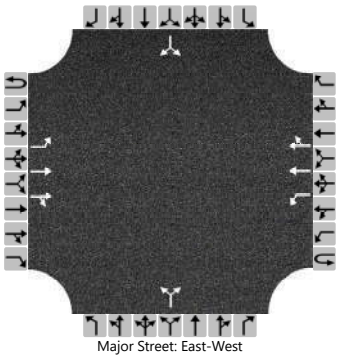
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	4:30-5:30 PM
Intersection Orientation	East-West
Project Description	PM Total

Site Information

Intersection	Ogden Avenue at Linscott Ave/East Site Dr
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Linscott Ave
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LR				LR	
Volume (veh/h)	0	28	1364	2	0	1	1750	34		1		1		28		36
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5		6.9		7.5		6.9
Critical Headway (sec)		4.10				4.10				7.50		6.90		7.50		6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3		3.5		3.3
Follow-Up Headway (sec)		2.20				2.20				3.50		3.30		3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		29				1					2				67	
Capacity, c (veh/h)		324				478					25				23	
v/c Ratio		0.09				0.00					0.08				2.93	
95% Queue Length, Q_{95} (veh)		0.3				0.0					0.3				8.5	
95% Queue Length, Q_{95} (ft)		7.5				0.0					7.5				212.5	
Control Delay (s/veh)		17.2				12.5					160.0				1223.8	
Level of Service (LOS)		C				B					F				F	
Approach Delay (s/veh)	0.3				0.0				160.0				1223.8			
Approach LOS	A				A				F				F			

HCS Two-Way Stop-Control Report

Appendix H

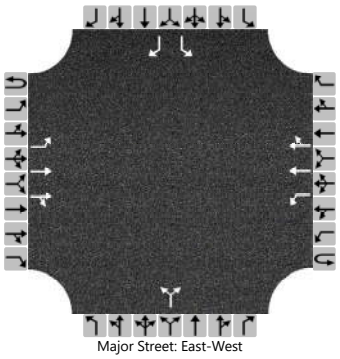
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	4:30-5:30 PM
Intersection Orientation	East-West
Project Description	PM Total w/ Left Turn Lane

Site Information

Intersection	Ogden Avenue at Linscott Ave/East Site Dr
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Linscott Ave
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		1	0	1
Configuration		L	T	TR		L	T	TR			LR			L		R
Volume (veh/h)	0	28	1364	2	0	1	1750	34		1		1		28		36
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized													No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5		6.9		7.5		6.9
Critical Headway (sec)		4.10				4.10				7.50		6.90		7.50		6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3		3.5		3.3
Follow-Up Headway (sec)		2.20				2.20				3.50		3.30		3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		29				1					2			29		38
Capacity, c (veh/h)		324				478					25			11		269
v/c Ratio		0.09				0.00					0.08			2.79		0.14
95% Queue Length, Q_{95} (veh)		0.3				0.0					0.3			4.7		0.5
95% Queue Length, Q_{95} (ft)		7.5				0.0					7.5			117.5		12.5
Control Delay (s/veh)		17.2				12.5					160.0			1515.5		20.6
Level of Service (LOS)		C				B					F			F		C
Approach Delay (s/veh)	0.3				0.0				160.0				674.6			
Approach LOS	A				A				F				F			

HCS Two-Way Stop-Control Report

Appendix H

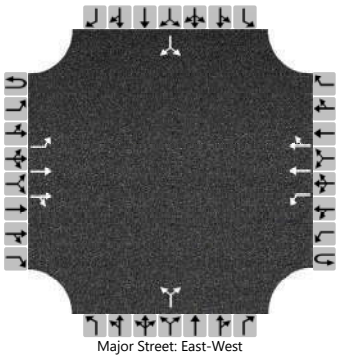
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2024
Time Analyzed	12:00-1:00 PM
Intersection Orientation	East-West
Project Description	SAT Existing

Site Information

Intersection	Ogden Avenue at Linscott Ave/East Site Dr
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Linscott Ave
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LR				LR	
Volume (veh/h)	0	2	1214	1	0	0	1370	2		0		4		11		8
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5		6.9		7.5		6.9
Critical Headway (sec)		4.10				4.10				7.50		6.90		7.50		6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3		3.5		3.3
Follow-Up Headway (sec)		2.20				2.20				3.50		3.30		3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2				0					4				20	
Capacity, c (veh/h)		469				543					419				48	
v/c Ratio		0.00				0.00					0.01				0.42	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.0				1.5	
95% Queue Length, Q_{95} (ft)		0.0									0.0				37.5	
Control Delay (s/veh)		12.7				11.6					13.7				125.9	
Level of Service (LOS)		B				B					B				F	
Approach Delay (s/veh)	0.0				0.0				13.7				125.9			
Approach LOS	A				A				B				F			

HCS Two-Way Stop-Control Report

Appendix H

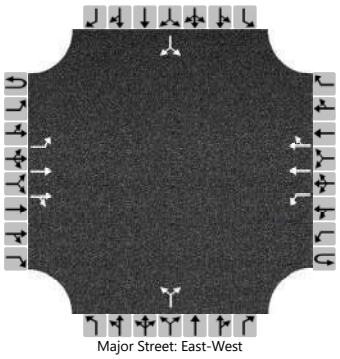
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	12:00-1:00 PM
Intersection Orientation	East-West
Project Description	SAT No-Build

Site Information

Intersection	Ogden Avenue at Linscott Ave/East Site Dr
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Linscott Ave
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LR				LR	
Volume (veh/h)	0	2	1262	1	0	0	1417	2		0		4		11		8
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5		6.9		7.5		6.9
Critical Headway (sec)		4.10				4.10				7.50		6.90		7.50		6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3		3.5		3.3
Follow-Up Headway (sec)		2.20				2.20				3.50		3.30		3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2				0					4				20	
Capacity, c (veh/h)		449				519					403				42	
v/c Ratio		0.00				0.00					0.01				0.48	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.0				1.7	
95% Queue Length, Q_{95} (ft)		0.0									0.0				42.5	
Control Delay (s/veh)		13.1				11.9					14.0				151.7	
Level of Service (LOS)		B				B					B				F	
Approach Delay (s/veh)	0.0				0.0				14.0				151.7			
Approach LOS	A				A				B				F			

HCS Two-Way Stop-Control Report

Appendix H

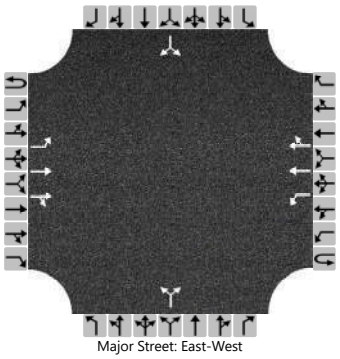
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	12:00-1:00 PM
Intersection Orientation	East-West
Project Description	SAT Total

Site Information

Intersection	Ogden Avenue at Linscott Ave/East Site Dr
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Linscott Ave
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LR				LR	
Volume (veh/h)	0	30	1276	1	0	0	1431	37		0		4		41		36
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5		6.9		7.5		6.9
Critical Headway (sec)		4.10				4.10				7.50		6.90		7.50		6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3		3.5		3.3
Follow-Up Headway (sec)		2.20				2.20				3.50		3.30		3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		32				0					4				82	
Capacity, c (veh/h)		429				513					399				36	
v/c Ratio		0.07				0.00					0.01				2.28	
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.0				9.1	
95% Queue Length, Q_{95} (ft)		5.0									0.0				227.5	
Control Delay (s/veh)		14.1				12.0					14.1				825.8	
Level of Service (LOS)		B				B					B				F	
Approach Delay (s/veh)	0.3				0.0				14.1				825.8			
Approach LOS	A				A				B				F			

HCS Two-Way Stop-Control Report

Appendix H

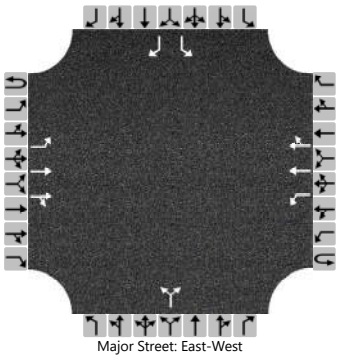
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	12:00-1:00 PM
Intersection Orientation	East-West
Project Description	SAT Total w/ Left Turn Lane

Site Information

Intersection	Ogden Avenue at Linscott Ave/East Site Dr
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	Linscott Ave
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		1	0	1
Configuration		L	T	TR		L	T	TR			LR			L		R
Volume (veh/h)	0	30	1276	1	0	0	1431	37		0		4		41		36
Percent Heavy Vehicles (%)	0	0			0	0				0		0		0		0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized													No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5		6.9		7.5		6.9
Critical Headway (sec)		4.10				4.10				7.50		6.90		7.50		6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5		3.3		3.5		3.3
Follow-Up Headway (sec)		2.20				2.20				3.50		3.30		3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		32				0					4			44		38
Capacity, c (veh/h)		429				513					399			20		342
v/c Ratio		0.07				0.00					0.01			2.17		0.11
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.0			5.8		0.4
95% Queue Length, Q_{95} (ft)		5.0									0.0			145.0		10.0
Control Delay (s/veh)		14.1				12.0					14.1			942.1		16.8
Level of Service (LOS)		B				B					B			F		C
Approach Delay (s/veh)	0.3				0.0				14.1				509.5			
Approach LOS	A				A				B				F			

HCS Two-Way Stop-Control Report

Appendix H

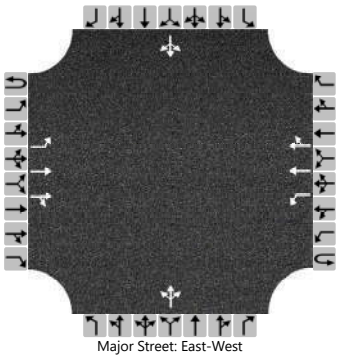
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2024
Time Analyzed	7:30-8:30 AM
Intersection Orientation	East-West
Project Description	Existing AM

Site Information

Intersection	Ogden Avenue at West Site Drive
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	West Site Drive
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	4	1455	0	0	0	1157	0		0	0	0		1	0	4
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10				4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4				0					0				5	
Capacity, c (veh/h)		580				440					0				137	
v/c Ratio		0.01				0.00									0.04	
95% Queue Length, Q_{95} (veh)		0.0				0.0									0.1	
95% Queue Length, Q_{95} (ft)		0.0													2.5	
Control Delay (s/veh)		11.3				13.2									32.3	
Level of Service (LOS)		B				B									D	
Approach Delay (s/veh)	0.0				0.0								32.3			
Approach LOS	A				A								D			

HCS Two-Way Stop-Control Report

Appendix H

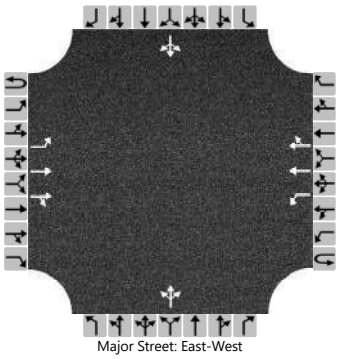
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	7:30-8:30 AM
Intersection Orientation	East-West
Project Description	AM No-Build

Site Information

Intersection	Ogden Avenue at West Site Drive
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	West Site Drive
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	4	1513	0	0	0	1211	0		0	0	0		1	0	4
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10				4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4				0					0				5	
Capacity, c (veh/h)		552				417					0				121	
v/c Ratio		0.01				0.00									0.04	
95% Queue Length, Q_{95} (veh)		0.0				0.0									0.1	
95% Queue Length, Q_{95} (ft)		0.0													2.5	
Control Delay (s/veh)		11.6				13.6									36.2	
Level of Service (LOS)		B				B									E	
Approach Delay (s/veh)	0.0				0.0								36.2			
Approach LOS	A				A								E			

HCS Two-Way Stop-Control Report

Appendix H

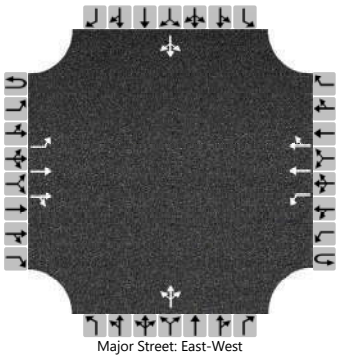
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	7:30-8:30 AM
Intersection Orientation	East-West
Project Description	AM Total

Site Information

Intersection	Ogden Avenue at West Site Drive
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	West Site Drive
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	35	1513	0	0	0	1211	36		0	0	0		29	0	33
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10				4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		37				0					0				65	
Capacity, c (veh/h)		534				417					0				51	
v/c Ratio		0.07				0.00									1.29	
95% Queue Length, Q_{95} (veh)		0.2				0.0									6.0	
95% Queue Length, Q_{95} (ft)		5.0													150.0	
Control Delay (s/veh)		12.2				13.6									355.4	
Level of Service (LOS)		B				B									F	
Approach Delay (s/veh)	0.3				0.0								355.4			
Approach LOS	A				A								F			

HCS Two-Way Stop-Control Report

Appendix H

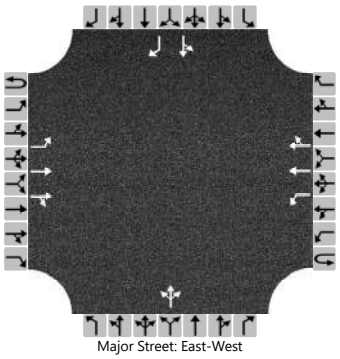
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	7:30-8:30 AM
Intersection Orientation	East-West
Project Description	AM Total w/ Left Turn Lane

Site Information

Intersection	Ogden Avenue at West Site Drive
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	West Site Drive
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	1
Configuration		L	T	TR		L	T	TR			LTR			LT		R
Volume (veh/h)	0	35	1513	0	0	0	1211	36		0	0	0		29	0	33
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized													No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10				4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		37				0					0			31		35
Capacity, c (veh/h)		534				417					0			25		413
v/c Ratio		0.07				0.00								1.21		0.08
95% Queue Length, Q_{95} (veh)		0.2				0.0								3.7		0.3
95% Queue Length, Q_{95} (ft)		5.0												92.5		7.5
Control Delay (s/veh)		12.2				13.6								475.8		14.5
Level of Service (LOS)		B				B								F		B
Approach Delay (s/veh)	0.3				0.0								230.3			
Approach LOS	A				A								F			

HCS Two-Way Stop-Control Report

Appendix H

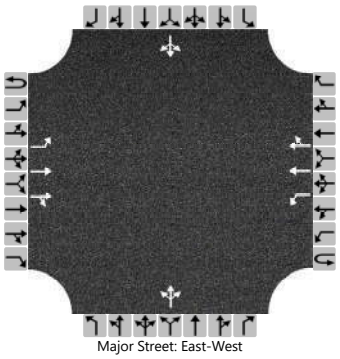
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2024
Time Analyzed	4:30-5:30 PM
Intersection Orientation	East-West
Project Description	Existing PM

Site Information

Intersection	Ogden Avenue at West Site Drive
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	West Site Drive
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	0	1307	1	0	3	1690	1		1	0	2		0	0	0
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10				4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				3					3				0	
Capacity, c (veh/h)		365				517					65				0	
v/c Ratio		0.00				0.01					0.05					
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1					
95% Queue Length, Q_{95} (ft)						0.0					2.5					
Control Delay (s/veh)		14.9				12.0					63.3					
Level of Service (LOS)		B				B					F					
Approach Delay (s/veh)	0.0				0.0				63.3							
Approach LOS	A				A				F							

HCS Two-Way Stop-Control Report

Appendix H

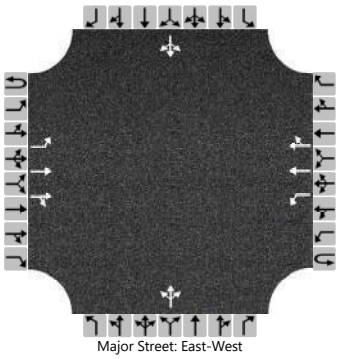
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	4:30-5:30 PM
Intersection Orientation	East-West
Project Description	PM No-Build

Site Information

Intersection	Ogden Avenue at West Site Drive
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	West Site Drive
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	0	1360	1	0	3	1751	1		1	0	2		0	0	0
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10				4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0				3					3				0	
Capacity, c (veh/h)		345				493					56				0	
v/c Ratio		0.00				0.01					0.05					
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.2					
95% Queue Length, Q_{95} (ft)						0.0					5.0					
Control Delay (s/veh)		15.4				12.3					72.6					
Level of Service (LOS)		C				B					F					
Approach Delay (s/veh)	0.0				0.0				72.6							
Approach LOS	A				A				F							

HCS Two-Way Stop-Control Report

Appendix H

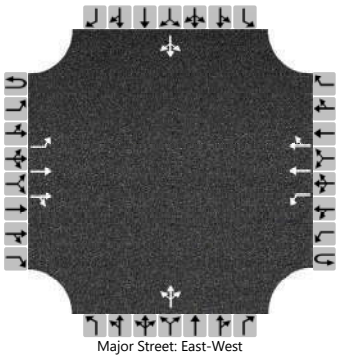
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	4:30-5:30 PM
Intersection Orientation	East-West
Project Description	PM Total

Site Information

Intersection	Ogden Avenue at West Site Drive
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	West Site Drive
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	27	1363	1	0	3	1751	33		1	0	2		29	0	28
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10				4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		28				3					3				59	
Capacity, c (veh/h)		335				492					42				22	
v/c Ratio		0.08				0.01					0.07				2.67	
95% Queue Length, Q_{95} (veh)		0.3				0.0					0.2				7.5	
95% Queue Length, Q_{95} (ft)		7.5				0.0					5.0				187.5	
Control Delay (s/veh)		16.7				12.4					98.3				1126.9	
Level of Service (LOS)		C				B					F				F	
Approach Delay (s/veh)	0.3				0.0				98.3				1126.9			
Approach LOS	A				A				F				F			

HCS Two-Way Stop-Control Report

Appendix H

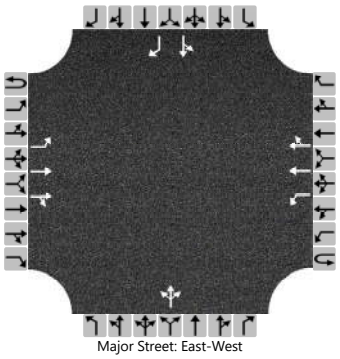
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	4:30-5:30 PM
Intersection Orientation	East-West
Project Description	PM Total w/ Left Turn Lane

Site Information

Intersection	Ogden Avenue at West Site Drive
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	West Site Drive
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	1
Configuration		L	T	TR		L	T	TR			LTR			LT		R
Volume (veh/h)	0	27	1363	1	0	3	1751	33		1	0	2		29	0	28
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized													No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10				4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		28				3					3			30		29
Capacity, c (veh/h)		335				492					42			12		277
v/c Ratio		0.08				0.01					0.07			2.57		0.10
95% Queue Length, Q_{95} (veh)		0.3				0.0					0.2			4.7		0.3
95% Queue Length, Q_{95} (ft)		7.5				0.0					5.0			117.5		7.5
Control Delay (s/veh)		16.7				12.4					98.3			1361.4		19.5
Level of Service (LOS)		C				B					F			F		C
Approach Delay (s/veh)	0.3				0.0				98.3				702.2			
Approach LOS	A				A				F				F			

HCS Two-Way Stop-Control Report

Appendix H

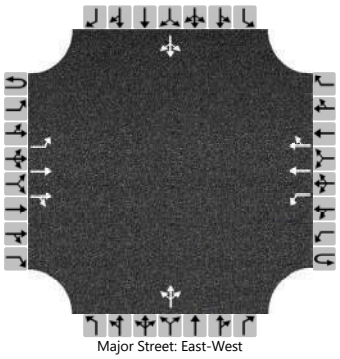
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2024
Time Analyzed	12:00-1:00 PM
Intersection Orientation	East-West
Project Description	SAT Existing

Site Information

Intersection	Ogden Avenue at West Site Drive
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	West Site Drive
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	1	1211	0	0	0	1375	3		0	0	2		4	0	0
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10				4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1				0					2				4	
Capacity, c (veh/h)		447				525					407				26	
v/c Ratio		0.00				0.00					0.01				0.17	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.0				0.5	
95% Queue Length, Q_{95} (ft)		0.0									0.0				12.5	
Control Delay (s/veh)		13.1				11.9					13.9				168.4	
Level of Service (LOS)		B				B					B				F	
Approach Delay (s/veh)	0.0				0.0				13.9				168.4			
Approach LOS	A				A				B				F			

HCS Two-Way Stop-Control Report

Appendix H

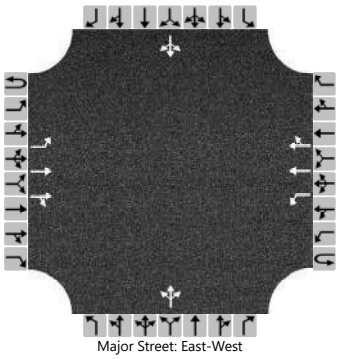
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	12:00-1:00 PM
Intersection Orientation	East-West
Project Description	SAT No-Build

Site Information

Intersection	Ogden Avenue at West Site Drive
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	West Site Drive
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	1	1259	0	0	0	1422	3		0	0	2		4	0	0
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10				4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1				0					2				4	
Capacity, c (veh/h)		427				502					391				23	
v/c Ratio		0.00				0.00					0.01				0.19	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.0				0.6	
95% Queue Length, Q_{95} (ft)		0.0									0.0				15.0	
Control Delay (s/veh)		13.4				12.2					14.3				197.2	
Level of Service (LOS)		B				B					B				F	
Approach Delay (s/veh)	0.0				0.0				14.3				197.2			
Approach LOS	A				A				B				F			

HCS Two-Way Stop-Control Report

Appendix H

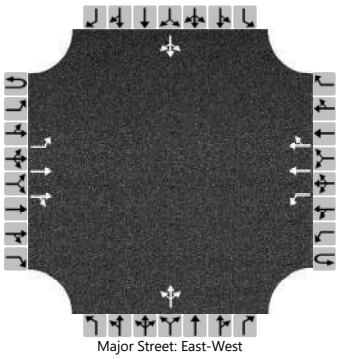
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	12:00-1:00 PM
Intersection Orientation	East-West
Project Description	SAT Total

Site Information

Intersection	Ogden Avenue at West Site Drive
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	West Site Drive
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	30	1271	0	0	0	1431	36		0	0	2		34	0	27
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10				4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		33				0					2				67	
Capacity, c (veh/h)		410				496					387				30	
v/c Ratio		0.08				0.00					0.01				2.20	
95% Queue Length, Q_{95} (veh)		0.3				0.0					0.0				7.8	
95% Queue Length, Q_{95} (ft)		7.5									0.0				195.0	
Control Delay (s/veh)		14.5				12.3					14.3				830.6	
Level of Service (LOS)		B				B					B				F	
Approach Delay (s/veh)	0.3				0.0				14.3				830.6			
Approach LOS	A				A				B				F			

HCS Two-Way Stop-Control Report

Appendix H

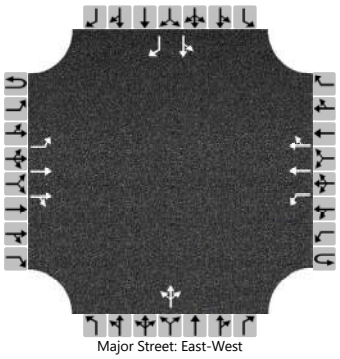
General Information

Analyst	David W
Agency/Co.	GHA
Date Performed	12/18/2024
Analysis Year	2031
Time Analyzed	12:00-1:00 PM
Intersection Orientation	East-West
Project Description	SAT Total w/ Left Turn Lane

Site Information

Intersection	Ogden Avenue at West Site Drive
Jurisdiction	IDOT
East/West Street	Ogden Avenue
North/South Street	West Site Drive
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		0	1	0		0	1	1
Configuration		L	T	TR		L	T	TR			LTR			LT		R
Volume (veh/h)	0	30	1271	0	0	0	1431	36		0	0	2		34	0	27
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized														No		
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10				4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		33				0					2			37		30
Capacity, c (veh/h)		410				496					387			18		329
v/c Ratio		0.08				0.00					0.01			2.11		0.09
95% Queue Length, Q_{95} (veh)		0.3				0.0					0.0			5.2		0.3
95% Queue Length, Q_{95} (ft)		7.5									0.0			130.0		7.5
Control Delay (s/veh)		14.5				12.3					14.3			965.3		17.0
Level of Service (LOS)		B				B					B			F		C
Approach Delay (s/veh)	0.3				0.0				14.3				545.5			
Approach LOS	A				A				B				F			

VILLAGE OF DOWNERS GROVE
PLANNING AND ZONING COMMISSION MEETING

February 3, 2025, 7:00 P.M.

24-PZC-0008: A PETITION SEEKING APPROVAL FOR A SPECIAL USE APPROVAL FOR A DRIVE THROUGH. THE PROPERTY IS CURRENTLY ZONED B-3, GENERAL SERVICES AND HIGHWAY BUSINESS. THE PROPERTY IS LOCATED THE PROPERTY IS LOCATED APPROXIMATELY 390 FEET WEST OF THE INTERSECTION OF SARATOGA AVENUE AND OGDEN AVENUE COMMONLY KNOWN AS 1250 OGDEN AVENUE, DOWNERS GROVE, IL (PIN: 09-06-403-005). VICK MEHTA, PETITIONER, 1254 OGDEN AVENUE, LLC, OWNER.

Vick Mehta, petitioner, explained that he is the petitioner for the proposed drive through special use request and recently completed another similar project where the Mcallisters Deli is. He then introduced his project architect Chris Jackson to provide the presentation for the special use request.

Mr. Jackson proceeded with the presentation showing a 3D rendering of the before and after for the proposed project. He then proceeded to show a map and existing conditions for the subject property. He then showed the site plan and drive through location for the proposed development. Landscaping, elevations and a description of the building materials was provided. Lastly, Mr. Jackson provided and overview of how the standards were met for the proposed drive through.

Chairman Rickard asked for questions for the petitioner.

Commissioner Lincoln asked how employees would get from the rear parking spaces to the building where the office was highlighted.

Mr. Mehta clarified that is actually not an office, but a utility room.

An inquiry was made regarding the proposed screening to the residents of the rear. It was indicted by Mr. Jackson that a 6 foot privacy fence would be installed as part of the project.

Chairman Rickard asked for public input.

Joan McGuire, stated that they lived behind the proposed development and they were concerned about traffic and turning movements from the proposed development.

Chairman Rickard asked for the staff report.

Jason Zawila, Planning Manager, presented on the request for a special use at 1250 Ogden Avenue. He displayed a location map and the public hearing notice sign. He stated that staff sent out mailed notices to all property owners within 250 feet, and received one comment, which general in nature, in addition to the two comments that were received ahead of publication of the agenda. Mr. Zawila then proceeded to present the site plan, and highlighted the proposed landscaping plan, pedestrian connection, dumpster enclosure location and the proposed drive through, which will exceed the required eight stacking spaces with 13 spaces. Mr. Zawila then presented the proposed elevations

and then provided how the proposed development met the recommendations provided in the Village's Comprehensive Plan. Lastly, Mr. Zawila presented the special use criteria, which staff did find the petitioner met and recommended that the Planning and Zoning Commission recommend approval of the proposed special use request.

Chairman Rickard asked for questions for staff.

Commissioner Lincoln noted that there was a slight discrepancy in the access plans for the proposed development. Mr. Zawila clarified that the ultimately the petitioner will need to submit a right-of-way permit with IDOT and that would be finalized with the permit submission, but also deferred to the petitioner to explain.

Chairman Rickard asked the petitioner to return to the podium to address any comments that were made and to provide a closing statement.

Mr. Jackson returned to the podium and stated that the traffic study and engineering plans are correct and what will be installed, but as Mr. Zawila noted that would be finalized during the permit submission.

Chairman Rickard asked for discussion from the commissioners.

General discussion occurred and the Commission did feel that standards were met and that this would be a nice addition to the improvements that are occurring along Ogden Avenue.

Chairman Rickard asked if anyone wanted to make a motion.

WITH RESPECT TO THE PETITIONER'S SUBMITTAL, THE STAFF REPORT, AND THE TESTIMONY PRESENTED, I FIND THAT THE PETITIONER HAS MET THE STANDARDS OF APPROVAL FOR A SPECIAL USE AS REQUIRED BY THE VILLAGE OF DOWNERS GROVE ZONING ORDINANCE AND IS IN THE PUBLIC INTEREST AND THEREFORE, K. PATEL MOVED THAT THE PLANNING AND ZONING COMMISSION RECOMMEND TO THE VILLAGE COUNCIL APPROVAL OF 24-PZC-0008, SUBJECT TO THE FOLLOWING CONDITIONS (1) THE PROPOSED SPECIAL USE FOR A DRIVE-THROUGH USE SHALL SUBSTANTIALLY CONFORM TO THE ATTACHED PROPOSED NEW MULTI-TENANT BUILDING PLANS FOR 1250-1254 OGDEN AVENUE DRAWINGS PREPARED BY BONO CONSULTING CIVIL ENGINEERING DATED DECEMBER 26, 2024, LAST REVISED JANUARY 21, 2025, ARCHITECTURAL DRAWINGS PREPARED BY CJ ARCHITECTS DATED DECEMBER 27, 2024, LAST REVISED JANUARY 21, 2025, EXCEPT AS SUCH PLANS MAY BE MODIFIED TO CONFORM TO VILLAGE CODES, ORDINANCES, AND POLICIES. (2) PROVISION OF CROSS ACCESS FOR THE IMMEDIATELY ADJACENT PROPERTIES TO THE WEST AND EAST OF THE SUBJECT PROPERTY. (3) THAT THE BRICK BUILDING MATERIALS CONSTRUCTED AT THE BASE OF THE BUILDING WILL BE CARRIED THROUGH TO THE ROOFLINE IN COLUMNS, PENDING INITIAL TENANT SIGN PLACEMENT.

SECOND BY COMMISSIONER RUTLEDGE

ROLL CALL:

AYE: BOYLE, FRANKOVIC, K. PATEL, RUTLEDGE, LINCOLN, EBERHARDT, TOTH CHAIRMAN RICKARD

NAY: NONE

MOTION APPROVED. VOTE: 8-0

/s/ Village Staff
Recording Secretary