Village of Morton Grove

PLAN COMMISSION MEETING

Tuesday, July 29, 2025 - 7:00 P.M.
Flickinger Municipal Center, 6101 Capulina Avenue, Morton Grove, IL 60053

AGENDA

I. CALL TO ORDER

II. APPROVAL OF MINUTES: June 17, 2025

III. PUBLIC HEARINGS:

CASE: PC 25-06

PETITION: Request for approval of a Preliminary Plat of Subdivision with associated waivers in accordance with Chapter 12-8 of the Morton Grove Municipal Code, and a Special Use Permit for redevelopment to establish warehousing, distribution centers, and light manufacturing uses at the properties commonly known as 8125-45 River Drive and 8120-40 Lehigh Avenue, Morton Grove, Illinois (PIN 10-20-303-001-000; 10-20-303-002-000), all within M-O/R Office/Research Manufacturing District per Section 12-4-4:E, with select waivers regarding setbacks, landscaping, signage, and parking located in a street side yard per Sections 12-2-6 and 12-4-4 and Chapters 10-10 and 12-11; and approval of a Preliminary and Final Plat of Subdivision in accordance with Chapter 12-8. The applicant is Midwest RE Acquisitions, LLC which is an entity of Bridge Industrial.

IV. CLOSE MEETING

Note that all persons are welcome to attend the public meeting in-person as regularly scheduled. Comments relating to this case may also be submitted no later than 12:00 p.m. on Tuesday, July 29, 2025, to bnolin@mortongroveil.org. All comments received in relation to this case will be read at the public hearing for consideration by the Plan Commission.

MINUTES OF THE JUNE 17, 2025
MEETING OF THE MORTON GROVE PLAN COMMISSION
MORTON GROVE VILLAGE HALL, 6101 CAPULINA AVENUE, MORTON GROVE, IL 60053

Pursuant to proper notice in accordance with the Open Meetings Act, the regular meeting of the Plan Commission was called to order at 7:27 p.m. by Chairman Chris Kintner. Secretary Kirchner called the roll.

Commissioners Present:	Dorgan, Liston, Mohr, Stein, and Kintner
Commissioners Absent:	Hussaini with notice
Village Staff Present:	Brandon Nolin, AICP, Community Development Administrator; Anne Kirchner, Planner/Zoning Administrator and Secretary; Jim English, Building and Inspectional Services; Rick Dobrowski, Fire Prevention Coordinator
Trustees Present:	Minx, Thill and White

Chairman Kintner described the procedures for the meeting. The Village will present the case and the Plan Commission may ask questions of the applicant. Then, anyone from the audience will be allowed to provide comment to the Plan Commission on the case. The Commission's decision is a recommendation to the Village Board. Chairman Kintner acknowledged there were 5 Commissioners present, one absent and one vacancy.

A motion to approve the minutes of the May 20, 2025 meeting was made by Commissioner Dorgan and was seconded by Commissioner Mohr.

Commissioner Dorgan	voting	aye
Commissioner Liston	voting	aye
Commissioner Mohr	voting	aye
Commissioner Stein	voting	aye
Chairman Kintner	voting	aye

Motion passed (5-0).

CASE: PC 25-06

APPLICANT: Bridge Industrial

LOCATION: 8125-45 River Drive and 8120-40 Lehigh Avenue
Morton Grove, Illinois 60053

PETITION: Request for approval of a Preliminary Plat of Subdivision with associated waivers in accordance with Chapter 12-8 of the Morton Grove Municipal Code, and a Special Use Permit for redevelopment to establish warehousing, distribution centers, and light manufacturing uses at the properties commonly known as 8125-45 River Drive and 8120-40 Lehigh Avenue, Morton Grove, Illinois (PIN 10-20-303-001-000; 10-20-303-002-000), all within M-O/R Office/Research Manufacturing District per Section 12-4-4:E, with select waivers regarding setbacks, landscaping,

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signage, and parking located in a street side yard per Sections 12-2-6 and 12-4-4 and Chapters 10-10 and 12-11; and approval of a Preliminary and Final Plat of Subdivision in accordance with Chapter 12-8. The applicant is Midwest RE Acquisitions, LLC which is an entity of Bridge Industrial.

Mr. Nolin stated in the case of PC 25-06, the applicant Midwest RE Acquisitions, LLC (which is an entity of Bridge Industrial) is requesting approval of a Special Use Permit to demolish the existing office buildings at the North Grove Corporate Park and establish warehousing, distribution centers, and light manufacturing uses at the property. The property is zoned MOR and all surrounding properties are zoned M-2 General Manufacturing.

Bridge Industrial is proposing an approximately 227,600-square-foot speculative single-story industrial building including 35 truck loading berths, approximately 212 off-street parking spaces, underground stormwater detention, and various site improvements.

- Regarding landscaping, the applicant is proposing dense perimeter landscaping to compensate for less-than-required shade tree plantings in the parking lot and surrounding parkway which are hindered by utilities.
- The applicant is proposing the construction of an insulated precast concrete building and would rely on the use of brick, glass, and colored concrete to provide for some articulation in the building's large façades. Emphasis on brick and use of glass and aluminum fascia is placed on the corners and Lehigh Frontage.
- Building signage would consist of four tenant signs, a name and address plate, and a monument sign. Location details are needed for the monument sign to ensure compliance.
- Proposed lighting consists of light poles and wall packs and staff have concerns regarding low light levels in the parking lot, spillover along the northern property edge, and glare from wall packs placed toward the top of the façade.
- The applicant has also land banked 61 parking spaces on the southern side of the property in the event that future parking demand is greater than 212 parking spaces.
- Primary access to the south parking lot for use by employee and visitor passenger vehicles will be provided by a pair of entry points off of Park just west of Lehigh, and River Drive just north of Park. Primary access to the truck court on the north side of the property will be provided by a drive centered on the River Drive frontage on the north, and River Drive as it bends around the northwest corner of the site.
- Proposed lighting consists of light poles and wall packs and staff have concerns regarding low light levels in the parking lot. The applicant's engineer contacted Staff regarding these concerns and has expressed a willingness to revise the lighting plan to meet Village Code.

Curt Pascoe, Executive Vice President of Development for Bridge Industrial introduced the team for the site, and provided the group's history with examples of their other work. He noted the site held a heavy manufacturing use from the 1940's to the 1980's when it was redeveloped into the 2 current office buildings in an office park. The offices are predominately vacant and the land is a brownfield site requiring environmental clean-up.

The elevations and façade elements were presented.as approved by the Appearance Commission. It was noted that bird strike glass will be considered and roof top mechanicals will be screened. Mr. Pascoe noted the landscape plans preserves trees and adds more trees than required. Signage has been modified to not require a waiver for the monument sign.

Comments from the staff report were noted and will be addressed, namely, pedestrian access, Lehigh street lighting, traffic study, and truck turning movements.

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Chairman Kintner asked for questions from the Commissioners. Commissioner Dorgan asked about LEED qualifications. The roof will be reinforced to support a possible future solar installation dependent on acceptance by a utility.

Chairman Kintner asked about landscape requirements. They are not complying with trees in the parking lot and in the parkway. He noted that additional trees are being planted elsewhere to exceed the amount allowed.

Mr. Pascoe said it would not be prudent to plant too many trees in parking lot islands.

Chairman Kintner asked if the preserved trees are mature and would hope that their preservation is a priority, recognizing that trees in the center of the property would be lost.

Kathryn Tully, landscape architect, said they have re-graded to save trees along the perimeter and range ins size from 16-inch caliper to 21-inch caliper. There are risks during construction, but the trees will be tagged to be saved, root trimmed when necessary, fenced, and the roots will be bridged. Many of the trees to be preserved are tolerant of constructions.

Mr. Nolin noted the 10 new trees added for protection fall within size protected by the Village tree ordinance.

Chairman Kintner asked about low foot candle measurements and their locations. The height of the wall mounted lights along the north wall are being lowered, the north property line lighting will have shields to prevent spill over and the low foot candles will be made code compliant along the pedestrian access areas in the parking lots.

Chairman Kintner asked about the new sidewalk along the south building line and the need for lighting on the building for that area. Mr. Nolin noted that new street lighting is being required along Lehigh and along the building adjacent to the new sidewalk.

Chairman Kintner asked if the storm water detention is more than adequate, it was noted as correct.

Chairman Kintner asked about the semi-truck turning movements along the north side. Will the River drive turning radius be a problem with trucks interfering in the west bound lane? Mr. Pascoe said they do not perceive that being a problem but are having their civil engineer is running that study. He further asked if there would be any staging or parking of trucks along River Drive. There will be no parking or staging of trucks/vehicles on any streets. Chairman Kintner noted that there have been trucks staged on River and Park in the past.

Commissioner Stein asked if the south center entrance on the Park Avenue elevation would be used by a tenant as there would need to be additional handicap parking in that area. That is a possibility, they are seeking 2 tenants for the building.

Chairman Kintner had questions about the traffic study. The existing conditions need to be updated to include the new residential development on Lehigh. The study is missing the new impacts.

Mr. Aboona, traffic engineer, said they will add that information. There are 89 units being added and a new planned development across from the train station. On page 14 of the study notes that the proposed use would have fewer trips than the current office use, but as the office spaces are vacant this is subjective. A more accurate study of the traffic is needed. Mr. Aboona said that trucks and passenger vehicles were considered in the study, noting that large trucks take more space and move more slowly.

Chairman Kintner asked about the intersection information on page 21 of the study. He confirmed that trucks will not be traveling north on Lehigh from the site. He asked how the traffic will maneuver to travel to the nearby expressways. There are two routes with controlled intersections on Oakton from the site.

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Mr. Aboona said the truck traffic will be evenly distributed throughout the day. The trucks will be traveling in multiple directions away from the site.

Commissioner Dorgan asked if the tenants would conduct business on a 24-hour basis. Mr. Pascoe said typically it would not be a 24-hour use, the majority would take place during normal business hours. The special use is asking uses with traffic generation that would not exceed 410 trucks per day. Mr. Dorgan said that would amount to 50 trucks per hour during a 3-shift operation. He asked if trucks would be on site overnight. There will not be people in trucks overnight, but the trailers will be at the docks.

Commissioner Dorgan asked how many employees will be on site. Mr. Pascoe said there could be anywhere from 50 to 250, it is a good employment opportunity. Mr. Dorgan said in addition to over 400 trucks, there could be 250 employee vehicles. Mr. Aboona said the traffic study looked at rush hour traffic and said the highest concentration of traffic is during those hours with 150 trips. This is more than what the office development had during full occupancy. The critical intersections are shown to handle this level of trips.

Mr. Nolin clarified that the study refers to 410 truck movements in and out, so 205 trucks in total. Any tenant will have to comply with these restrictions.

Chairman Kintner asked for public comment. Mr. Adam Finlay and Mike Tracy representing, 8110-20 River Drive came forward. Mr. Finlay said there was very little discussion on the effects to surrounding property owners who are captive to the development of the site. Uses are not identified, but the traffic study is related to light industrial use which is not one of the threes special uses being asked. He said the uses are required to not be injurious to adjacent properties as noted in the special use standards. Discussion ensued regarding possible truck staging and the 3505 increase in the number of loading docks in the area. The MOR district permitted uses are to coexist with the surrounding properties. This will be a new constant flow of traffic, 400 trips. He referred to page 206 of the traffic study and the turning movements of 53-foot trailers, showing a non-linear path to the loading dock from River Drive. There will be staging due to the limits of the movements.

Chairman Kintner asked for Mr. Finlay to finish his remarks, as he had been speaking for over 10 minutes. Mr. Finlay asked if the new business could be beneficial to the Village, it is premature to know without a tenant identified. He noted a Cook Count class B exemption is being sought by the developer. He touched on the LaSalle and Sinclair factors effecting surrounding properties. He requested that the application be denied.

Chairman Kintner acknowledged the proposed possible special uses are an unknown, but the parameters of approval for those sues will need to be met.

Mr. Pozerycki clarified that the truck turning analysis shows a truck can work within the site. The proposed building is designed to not have truck staging, unlike the surrounding older buildings. He noted the building will be LEED certified. They are looking to make a modern building and site that can support the uses.

Mr. Pascoe said hey are not asking for any uses not allowed in the MOR district, and are asking for a standard to apply to proposed uses in order to comply, instead of seeking a special use with each tenant as they are leased.

Chairman Kintner acknowledged condition number 8, Mr. Nolin said the applicant is asking for the limits of the truck volumes to allow administrative review for zoning compliance.

Chairman Kintner asked that condition 15 include a revised traffic study to include the Metro on Main development and possible tenants of the proposed development to reduce traffic speculation. Traffic is the main concern of the Commission.

Commissioner Liston asked if the Commission should abstain from taking an action without an update traffic study.

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Mr. Pascoe said they could update the traffic study within a matter of days if they have the material from the Metro on Mail study. He noted that any use that did comply with the volume numbers would not be permitted. A traffic study for each tenant would not be required, but they would need to supply the number of trips as part of the business license approval process.

Chairman Kintner said an updated study may need further review by the Commission. He does not agree that the prosed project would generate less traffic than the current office use.

It is the intent of the applicant to supply an updated traffic study for the Village Board to review. Chairman Kintner said the Commission will decide if they are comfortable with the study going to the Board or to the Plan Commission for another review.

Mr. Nolin read a letter from Mr. Tracy (see below)

Mr. Nolin:
I am writing to inform you of several concerns I have regarding the potential new development located at 8125-45 River Dr. in Morton Grove. I have been located at 8110 and 8120 River Dr for over 35 years now and consider myself to be quite invested in the subdivision. The proposed redevelopment poses issues both esthetically and operationally to the immediate area. Please review the following items below as I feel they will need to be addressed for this development to be successful for all interested parties.
In the plans made available to the public, there is no west elevation drawing. I would assume that this drawing will have to be provided prior to any approvals from the Village.

We believe the building should be rotated by one axis to the east which would put the loading docks onto the Lehigh elevation. This will significantly lessen the impact of the thirty-five new docks and the additional semi congestion on the properties along River Dr and Park Ave. In addition, side yard setbacks for the property should follow as closely as possible to match the footprint of the existing two office buildings current setbacks.

There are currently 10-12 loading docks servicing the entire subdivision. The petitioner is asking to add 35 to this number tripling it. This is precisely why locating the docks along Lehigh is necessary to reduce trailer parking and traffic along Park and River. Trailer traffic is of the upmost concern.

There is no height stated for the new building at this time. It is my understanding that 40 ft. is the maximum height allowed for this location. Roof top mechanicals and penthouses should also be calculated into the 40 ft. allowance. We believe the height should be reduced to approximately 30 ft. which is similar to the Grainger location which currently is the tallest structure in the area. The height also poses sunlight issues to the surrounding properties.

Are there any existing covenants or conditions place on the petitioner's property that relate to the subdivision? What are those if any and how do they plan to address them?

There is a Special Use request that is being considered. I do not support or think it wise to grant a blanket special use waiver without knowing the Tenant, their business model, and the impact they may have on the community. The Village and the Community have the right to know exactly how a building will be utilized prior to granting Special Use. We currently do not see any issues with the current use of the existing buildings. They have operated as industrial offices for the last thirty-five plus years. I do not agree with any

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of the seven responses from the petitioner to the Village in regard to the standards for special use and will address those in detail at the special use meeting.

To ensure uniformity and esthetic appropriateness, the façade design should remain the same and be consistent along all four elevations as all existing properties in the subdivision currently have.

As Morton Grove recently adopted a new tree ordinance, it should be strictly complied with since this is a completely new development. There are unresolved landscaping items in the plans that still need to be addressed. In addition to the existing ordinance requirements, additional tree plantings are required to adequately soften the additional bulk and height of the new building.

The current building's square footage is approx. 147,000 sf. The proposed increase in square footage is an additional 75,000sf, bringing total square footage to 222,000sf. In keeping with the spirit and layout of the existing subdivision buildings, does this proposal meet the current esthetic of the surrounding properties? I look forward to listening and contributing at both the appearance and the zoning meetings, and I hope that all of these concerns are answered and addressed at that time. Feel free to reach out to me if you would like to discuss further.
Regards,
Michael Tracy

Chairman Kintner asked for further discussion. He would like the traffic study to be updated and resubmitted for evaluation.

Commissioner Stein asked what would be the method of re-evaluation. Chairman Kintner said he would the case to be continued to update the traffic study and for the packet to be updated in regards to other comments if needed.

Commissioner Dorgan moved to continue the case and update the traffic study to include the neighboring new uses north of Lehigh Avenue, the motion was seconded by Commissioner Stein. Chairman Kintner called for the vote.

Commissioner Dorgan	voting	aye
Commissioner Liston	voting	aye
Commissioner Mohr	voting	aye
Commissioner Stein	voting	aye
Chairman Kintner	voting	aye

Motion passed (5-0)

There was no further business.

Commissioner Liston moved to adjourn the meeting by acclamation. The motion was seconded by Commissioner Dorgan.

The motion to adjourn the meeting was approved unanimously pursuant to a voice vote at 8:55 p.m.

Minutes by: Anne Kirchner

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MORTON GROVE
Incredibly Close ✦ Amazingly Open

To: Chairperson Kintner and Members of the Plan Commission

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

Date: July 22, 2025

Re: Plan Commission Case PC 25-06
Request for approval of a Preliminary Plat of Subdivision with associated waivers in accordance with Chapter 12-8 of the Morton Grove Municipal Code, and a Special Use Permit for redevelopment to establish warehousing, distribution centers, and light manufacturing uses at the properties commonly known as 8125-45 River Drive and 8120-40 Lehigh Avenue, Morton Grove, Illinois (PIN 10-20-303-001-000; 10-20-303-002-000), all within M-O/R Office/Research Manufacturing District per Section 12-4-4:E, with select waivers regarding setbacks, landscaping, signage, and parking located in a street side yard per Sections 12-2-6 and 12-4-4 and Chapters 10-10 and 12-11; and approval of a Preliminary and Final Plat of Subdivision in accordance with Chapter 12-8. The applicant is Midwest RE Acquisitions, LLC which is an entity of Bridge Industrial.

STAFF REPORT

Public Notice

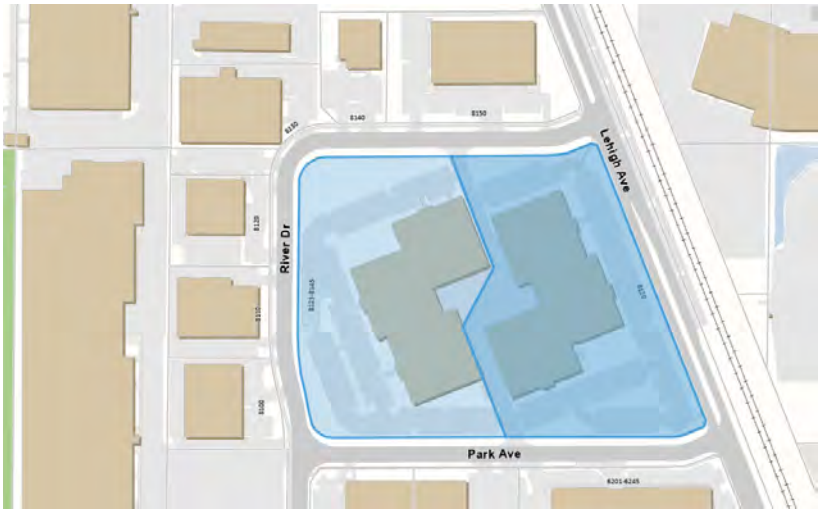
The Village provided Public Notice for the July 29, 2025, Plan Commission public hearing for PC 25-06 in accordance with the Unified Development Code. The Morton Grove Champion published a public notice on July 14, 2025. The Village notified surrounding property owners via mail and placed a public notice sign on the subject property on July 14, 2025.

Application Summary

Bridge Industrial ("applicant"), submitted a complete Special Use Permit application to the Department of Community and Economic Development and an Appearance Certificate is requested for the redevelopment of a pair of existing office buildings (North Grove Corporate Park). The proposed project consists of the construction of a new industrial building with a mix of warehousing, distribution, and light manufacturing uses. The applicant initially proposed a 227,600-square-foot building with 34 truck loading berths, but has revised their application to include a smaller 196,333-square-foot building with 28 loading berths.

Subject Property

The subject property is approximately 11 acres in size and consists of two (2) parcels occupied by the existing North Grove Corporate Park comprising two single-story office buildings located at 8125-45 River Drive and 8120-40 Lehigh Avenue in Morton Grove, Illinois. The parcels are zoned M-O/R Office/Research Manufacturing. The proposed development would occupy the entire block bound by River Drive on the north and west, Lehigh Avenue on the east, and Park Avenue on the south. The subject property is surrounded in all directions by industrial properties within the M-2 General Manufacturing District.



Subject Property Location Map

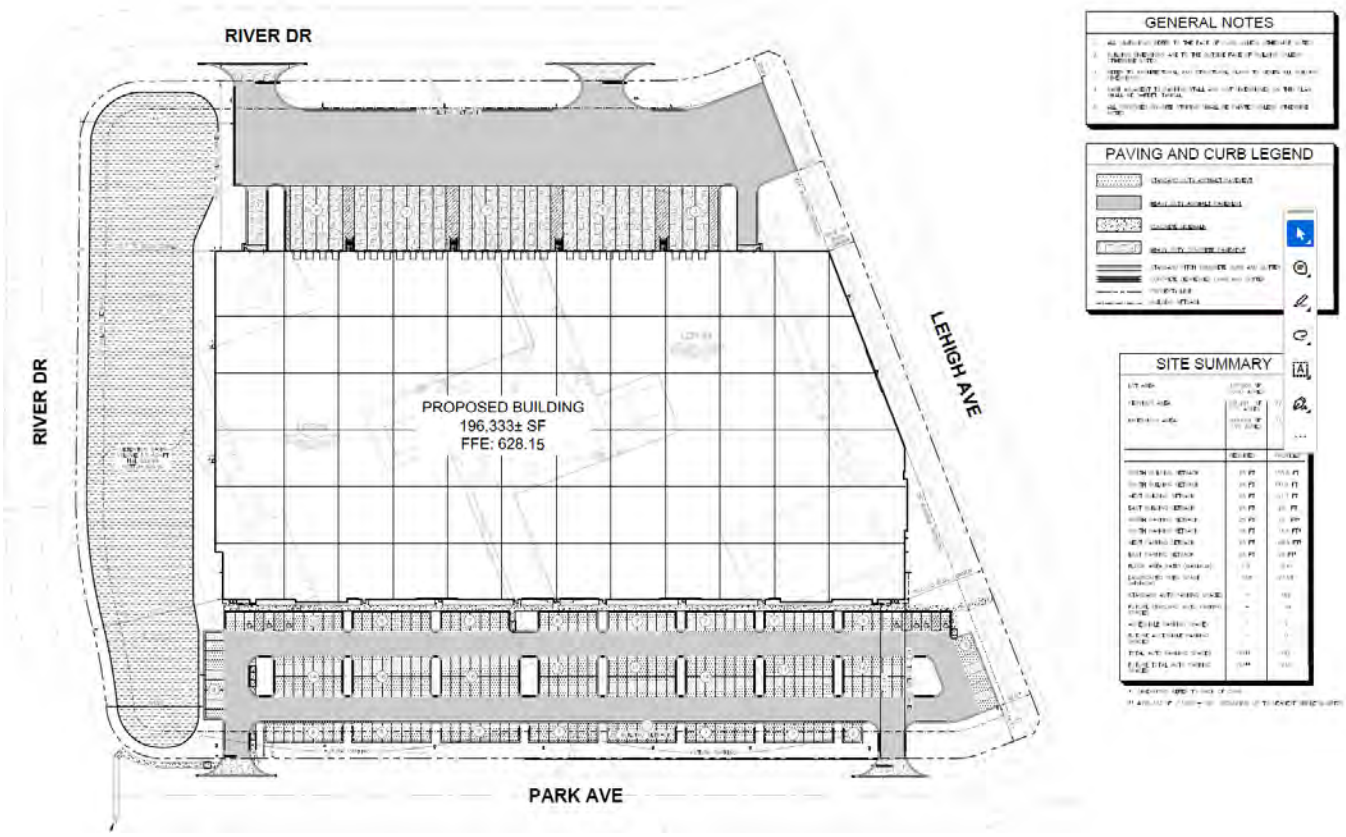
Project Overview

Bridge Industrial is proposing to demolish the North Grove Corporate Park and redevelop the subject property with an approximately 196,333-square-foot single-story industrial building including 28 external truck loading berths, two drive-in truck bays, approximately 192 off-street parking spaces, a stormwater detention basin, and various site improvements. The proposal also includes the land banking of 54 parking spaces on the southern edge of the property in the event that future parking demand is greater than the initially proposed 192 parking spaces. The south parking lot for employee and visitor parking will be accessed via a pair of drives from Park Avenue, while the north parking lot will be used primarily for truck access and will be accessed via a pair of drives from River Drive.

The proposed building varies in height from 40 to 43 feet above grade, with a design that achieves a consistent 40-foot height above finished floor. Per proposed elevations, the single-story façade will feature window bays and columns that provide the appearance of a three-story building. Brick surface treatments and glass will be used along the east façade and corners of the building to provide an aesthetic that mimics materials used in the nearby Lexington Homes development along Lehigh Avenue.

The proposed project is speculative and while Bridge Development has not identified specific tenants for the building, they anticipate prospective users will be consistent with those land uses permitted in the M-O/R Office/Research Manufacturing District as well as uses in the surrounding area. Those tenants may include warehousing and/or distribution firms, companies engaged in limited industrial uses such as food processing, and/or designers/fabricators of custom interior finishes for high end residential and commercial customers. Due to the range of prospective users, Bridge Development is seeking approval of multiple special uses as part of their application.

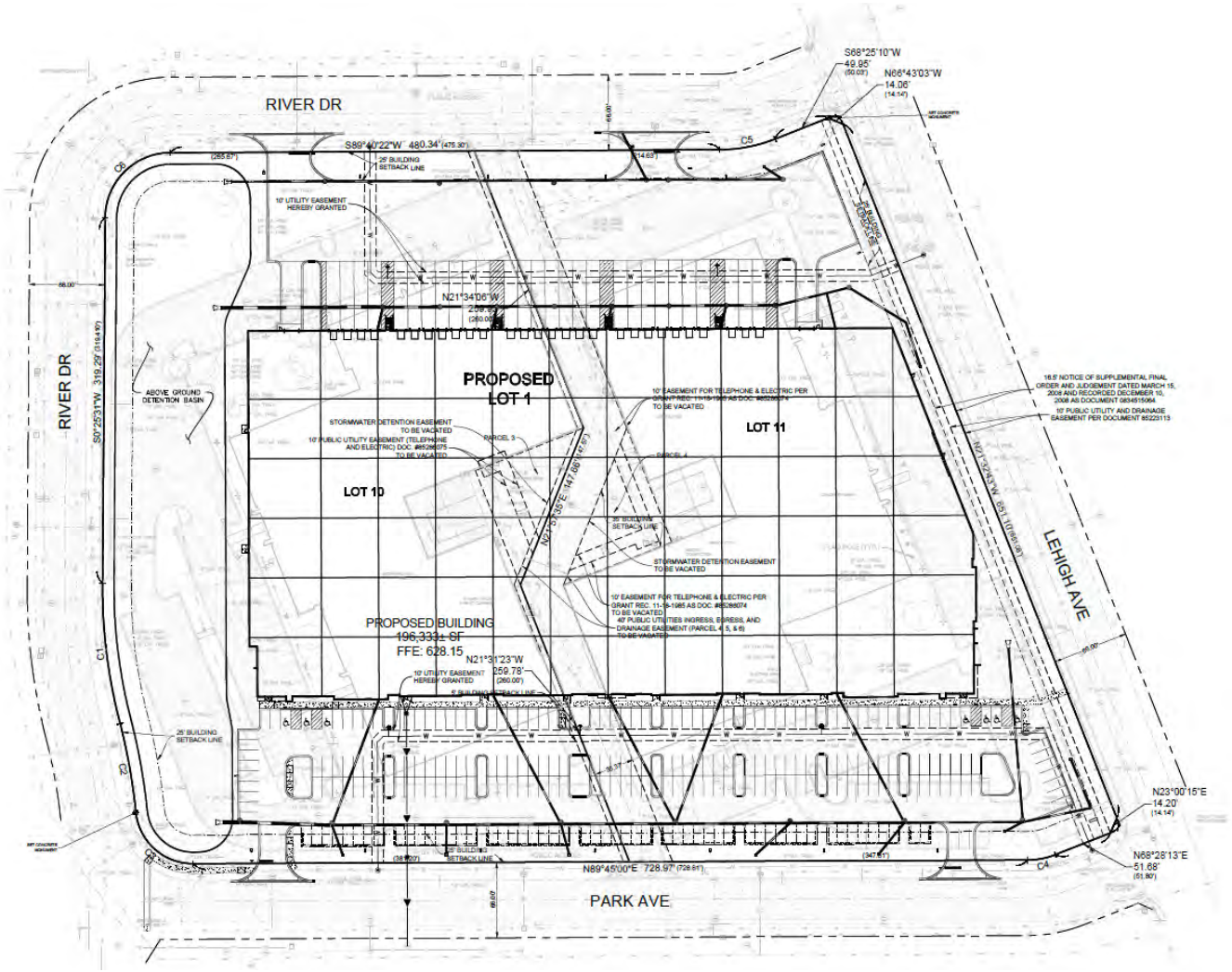
The applicant intends to acquire the subject property on or about Q3 2025. Subject to receipt of all necessary Village approvals and permits and existing tenant departures, demolition is anticipated to begin on or near Q4 2025. Construction is expected to be substantially complete on or near Q1 2027.



Proposed Site Plan

Preliminary & Final Plat of Subdivision

The applicant submitted a Preliminary Plat of Subdivision entitled "North Grove Corporate Park 1st Resubdivision," which proposes the consolidation of two (2) lots. The property is currently occupied by two office buildings with approximately 150,000 gross square feet. The applicant is seeking the subdivision to combine the two existing lots to create one lot of record. The subdivision would enable the Bridge Development to utilize existing public water and sewer infrastructure that is routed between the two parcels. To the extent such facilities are not adequate to service the proposed development, the applicant will make the necessary and appropriate upgrades.



Proposed Preliminary Plat of Subdivision

Development Controls

The proposed project meets all of the applicable dimensional and off-street parking requirements for light industrial, distribution, and warehousing uses in the M-O/R Office/Research Manufacturing District. Applicable requirements and the project's compliance are outlined in the following table:

M-O/R District Dimensional Controls	Requirement	Proposed	Compliance
Front Setback (12-4-4:F)	Min. 25 ft.	Lehigh Avenue: 25 ft.	*Compliant*
Side Yard Abutting a Public Street Setback (12-4-4:F)	Min. 25 ft.	River Drive (north) Street: 155.5 ft. River Drive (west): 25 ft. Park Avenue: 145.5 ft.	*Compliant*
Building Height (12-4-4:F)	Max. 40 ft.	Max. height 43 ft. from grade; Max. 41 ft. from finish floor elevation; Rooftop mechanicals to be screened	*Noncompliant – Waiver of 3 ft. needed to permit a maximum height of 43 ft. in addition to rooftop-mounted mechanicals*
Floor Area Ratio (12-4-4:F)	Max. 1.8	0.48	*Compliant*
Location of Surface Parking (12-5-7:A.3.j)	Not in front of buildings facing a public street	Street side yard facing River Drive	*Noncompliant – Waiver needed to permit parking in a street side yard*
Off-Street Parking (12-7-3:I, 12-5-7:A.2.b)	Varies by use dependent on gross floor area or employee counts	192 spaces; Landbank for potential 54 spaces	*Business Compliance Certificate Review Required*
Loading Berth Location (12-7-4:A)	Located on the same zoning lot; No portion of the vehicle shall project into a street, alley, access drive or parking area; Shall not be located within twenty five feet (25') of the nearest point of intersection of any two (2) streets; No loading berth shall be located in a required front yard or side yard.	28 loading berths located in a street side yard; Setback approx. 95.5 ft. from River Drive	*Noncompliant – Waiver needed to locate loading 28 berths in a street side yard location*
Loading Berth Size (12-7-4:B)	At least twelve feet (12') wide by at least fifty feet (50') in length, exclusive of aisle and maneuvering space with vertical clearance of at least fifteen feet (15').	12' wide min.; 60' long; Approx. 16 ft.	*Compliant*
Loading Berth Access (12-7-4:C)	Adjacent paved area, other than street or public way, to provide for all required truck maneuvering; vehicular access to provide for safe traffic movements	Large contiguous truck court per Truck Turn Exhibit	*Compliant*

Building Design

The applicant provided elevations and renderings of the proposed expansion. Sample imagery of the proposed façade materials are provided below. The applicant is proposing the construction of an insulated precast concrete building that uses concrete color variation to imitate articulation and integrates brick treatments, aluminum fascia, and additional windows. Emphasis has been placed the Lehigh Avenue frontage and the corners of the building, with the longer north and south facades being more industrial in character.

All components of the addition would have a flat roof with total height ranging from 40 ft. to 43 ft. from grade. The applicant is designing the building to have a 40-foot height from finish floor (as opposed to grade) with overall building height varying due to changes in grade across the large site. In discussion with the Appearance Commission, the applicant indicated that rooftop mechanicals are not included in the proposed height and would be screened using attached metal screen walls.

Bird-Friendly Building Design

The subject property is located near the St. Paul Woods portion of the Forest Preserves of Cook County. To mitigate bird collisions, Staff recommend requiring bird strike film or glazing as a condition of approval. Recently approved projects near the forest preserve have installed 2x2 dot pattern window film in alignment with bird-friendly design guidelines contained in the "Bird-Friendly Building Design" manual of the *American Bird Conservancy (2015, https://abcbirds.org/wp-content/uploads/2015/05/Bird-friendly-Building-Guide_2015.pdf). Per discussion with the Appearance Commission, the inclusion of bird-friendly treatments to the high threat façade areas like glass has been included as a condition of approval for the Plan Commission's consideration.*



Proposed Elevations



Rendering of Proposed Southeast Corner Façade (looking northwest)

Stormwater & Utilities

Kimley-Horn Associates, Inc. submitted a preliminary Stormwater Management memorandum that describes how the detention volume, volume control, and release rates for the stormwater improvements will be designed in accordance with Metropolitan Water Reclamation District (MWRD) and Village requirements. The on-site detention is proposed to be provided in a detention basin that will stretch along the entire length of the west side of the site. Storm inlets and sewers throughout the site would convey runoff to the detention basin. A preliminary review by the Village Engineer indicates that the report adequately illustrates the feasibility of meeting the Village's stormwater management requirements. The analysis will be refined as the development moves into the permit process.

Street Lighting

The Village requires street lighting for new development. As noted by the Village Engineer, "Street lighting exists along River Drive and Park Avenue, but does not exist along Lehigh Avenue. The Village is developing a project to install street lighting in the right-of-way along Lehigh Avenue from just south of Main Street to Lincoln Avenue. *The Special Use Permit should include a condition to require street lighting along Lehigh Avenue constructed by the developer according to the requirements of the Village. The Village may be amendable to extending the limits of the Village, the frontage of this development, if the developer will pay for the associated cost of the street lighting.*"

Public Sidewalks

Public sidewalk exists along Lehigh Avenue, but not along River Drive or Park Avenue frontages of the subject property. The proposed development shows a new sidewalk segment traveling from the corner of Park Avenue and River Drive at the southwest corner of the site to the westernmost driveway along Park Avenue. The sidewalk then turns north-south connecting into the site, a sidewalk segment along a parking lot island, and then a sidewalk along the south façade of the building traveling east-west to Lehigh Avenue.

The Village can require sidewalks be installed in select locations in a subdivision with larger lots such as the subject property. The Metra Station is being reconstructed and expanded and transit-oriented development is being encouraged surrounding the station. Metra parking extends to the segment of Lehigh Avenue adjacent the subject property. Village plans also support the policy of increasing pedestrian accommodations and access to transit along the Lehigh Avenue corridor. Staff has also received input from multiple representatives of tenants at the existing North Grove Corporate Park facility indicating a desire for better accommodations for disabled workers and better access to the bus route at Oakton Street.

Staff recognize that there may be concerns regarding establishing sidewalks in areas with truck access, such as the north and northwestern edge of the subject property. In response to Staff comments, the applicant proposed providing pedestrian access to the business entrances and south parking lot. *The applicant should speak to the proposed sidewalk alignment at the subject property.*

Landscape Design

The applicant submitted a landscape plan prepared by Kathryn Talty Landscape Architecture. With the proposed demolition of the existing North Grove Corporate Park to make way for a new structure and related parking, much of the landscaping internal to the subject property would be removed and replaced. Overall, the proposed landscape plan includes 142,053 sq. ft. of greenspace which is 29.7% of the site. This exceeds the Village's require of 15% for industrial lots.

The Interior landscaping trees and parkway tree plantings will require waivers, however the landscape plan features extensive perimeter landscaping well in excess of Village requirements. The applicant has noted that utility locations inhibit the ability to plant trees in the parkway and they are proposing tree plantings in adjacent perimeter planting areas. The Village Engineer has confirmed that each right of way that surrounds the subject property has a water main and that a tree planting on private property adjacent to right of way would be desirable to minimize maintenance costs and lower risk to the Village.

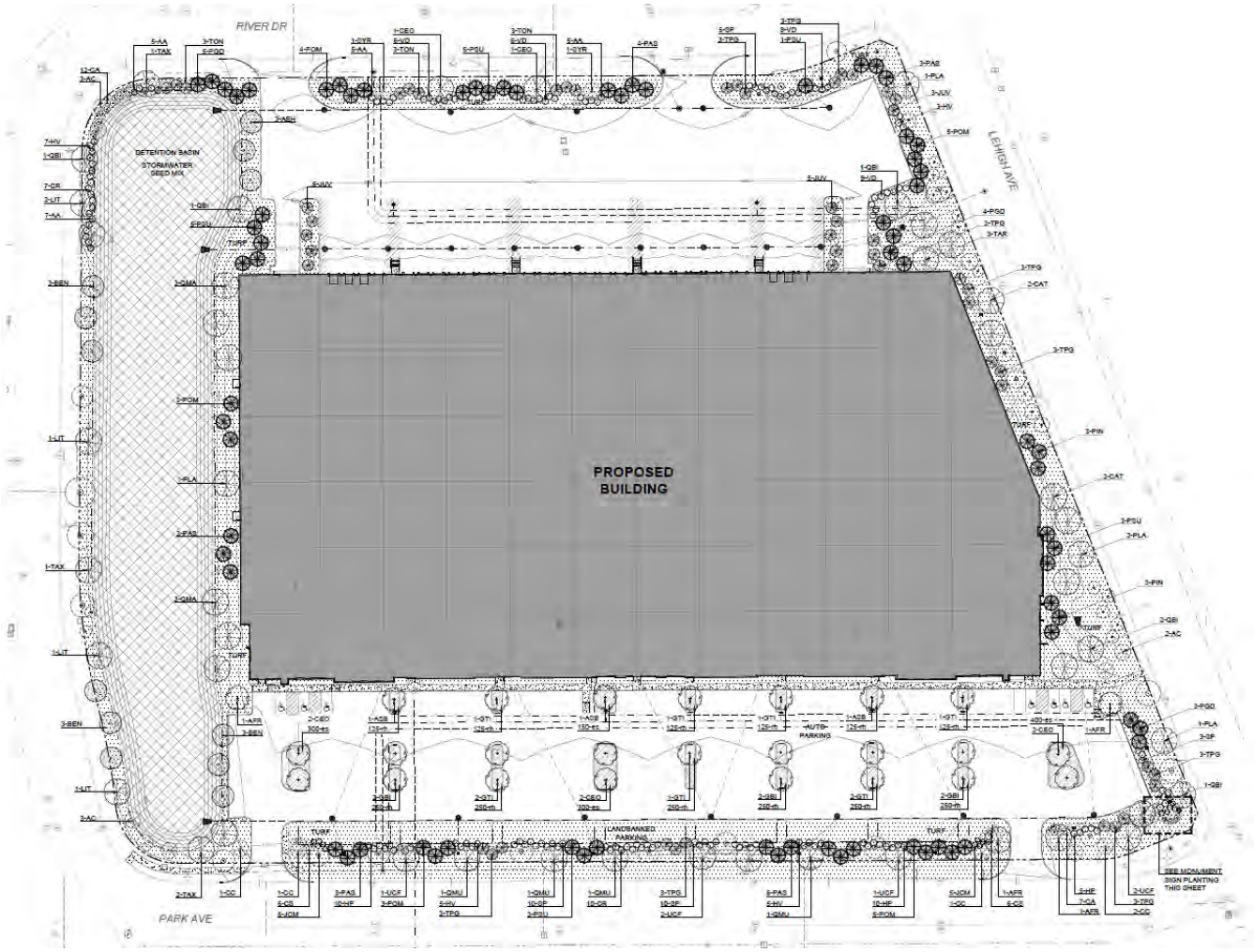
Tree Preservation

A tree survey submitted by the applicant identifies 128 existing trees on the subject property, 34 of which are considered to be protected trees which are non-nuisance species with a diameter at breast height of 12 inches or greater per the Village's recently approved Tree Ordinance (Ord. 24-28). The landscape plan proposes the preservation of 41 of the 128 existing trees including preserving seven (7) protected trees. As such, a total of 27 replacement trees are required to be identified. The applicant has identified 85 shade trees and 123 evergreen trees for a total of 208 trees to meet Village requirements.

Interior landscaping trees and parkway tree plantings will require waivers, however the landscape plan features extensive perimeter landscaping well in excess of Village requirements. Overall, there are 249 trees proposed to planted or preserved on the subject property. The combined total number of trees required for the parkway, interior landscaping, and replacement trees is only 160 trees.

While replacement trees are proposed, the Appearance Commission noted concerns with the loss of established trees on the site and the applicant has indicated that they will review the tree preservation plan to identify what additional trees could be saved. *The applicant should speak to efforts made to protect large, established and non-nuisance trees.*

M-O/R DISTRICT DIMENSIONAL CONTROLS	REQUIREMENT	PROPOSED	COMPLIANCE
General Landscaping Requirements			
Landscaping Required (12-11-1:B.1.C)	15% of industrial lot (71,694 sq. ft.)	142,053 sq. ft. greenspace (29.7%)	*Compliant*
Trees in Public Parkways (12-11-1:B.4)	Max. 40 ft. separation, min. 2.5 in. caliper (2,749 linear feet with 69 trees req.)	1 – Applicant notes utility locations as limitation	*Noncompliant – Waiver needed to allow 68 fewer parkway trees.*
Interior Landscaping in Parking Lots (12-11-4:B.3)	7% of the paved area not including buffer landscape areas (6,435 sq. ft.).	4,885 sq. ft. interior greenspace (6.99%)	*Compliant*
Trees in Parking Lots (12-11-4:B.3)	Where practical, each separate landscaped area shall contain at least one tree, and a tree shall be planted for each one hundred (100) square feet of interior landscaping. …Each parking bay shall have a maximum of twenty (20) spaces in an uninterrupted row. (64 trees req.)	26 trees; Max. 18 cars per row	*Noncompliant – Waiver needed to allow 41 fewer shade trees.*
Landscaping Adjacent to Public ROW - Sidewalks & Streets (12-11-3:B.1)	Landscape yard min. 5 ft. width containing a year-round dense opaque screen measuring min. 3 ft. in height.	Lehigh Ave.: 25 ft. min. Park Ave.: 14.5 ft. after future parking install River Dr - West: 88.9 ft. min. River Dr - North: 25 ft. min.	*Compliant*
Tree Preservation Requirements			
Trees Preservation (12-11-7:C)	Unless otherwise provided by this section, tree replacement or a fee-in-lieu shall be required for the removal as follows: Replacement Tree(s) - 1 (one) Replacement Tree per Protected Tree(s) being removed must be planted on a privately owned property. Fee-In-Lieu - Fee per Protected Tree(s) as provided for in Section 1-11-4.	Protected Trees Preserved: 7 Protected Trees Removed: 27 Replacement Trees (not incl. parkway and parking lot deficit): 75	*Compliant*
Screening Requirements			
Screening of Loading Area (12-11-4:B.1)	For all paved ground surface areas adjacent to alleys not screened by buildings, screening shall be required at five feet (5') in height.	Two 15 ft. by 60 ft. islands; 5 ft. tall	*Compliant*



Proposed Landscape Plan

On-site Lighting

The applicant submitted a photometric plan showing levels of illumination along all lot lines. Per Section 12-12-3, for off-street parking areas, lighting must be directed away from adjacent property, streets, and other public rights-of-way. Per discussion with the Appearance Commission, the applicant has indicated that the fixtures proposed in the submitted lighting plan will be configured as full cutoff fixtures with color temperature of 4,000 K (degrees Kelvin).

Per Section 12-4-3:B.5, the lighting of parking and loading areas shall be a minimum of one foot-candle on the surface. In response to Staff comments and Plan Commission discussion, the applicant has revised the proposed lighting plan to address low-level concerns near building entrances and in parking lots. The revised photometric plan also confirms light levels of less than one foot-candle (1 ft-c) along all property lines. The applicant also confirmed in discussion with the Plan Commission that all wall-mounted lighting would be installed at a height less than 25 feet which is the maximum permitted height for pole-mounted site lighting.



Proposed Light Pole Fixtures (Source: Lithonia)

Traffic and Parking Impact

A traffic impact study was prepared by KLOA, Inc. and is included in the hearing packet for Case PC 25-06. The study demonstrates that the projected future traffic can be successfully accommodated on the surrounding roadway network and intersection controls. The study also demonstrates that parking is adequate with the potential to create additional parking in a landbank area if needed. The report pertaining to the previously proposed larger 227,600-square-foot building with 34 truck loading berths was presented to the Traffic Safety Commission (TSC) on June 5, 2025. Since the previously proposed building received unanimous approval from the TSC with no additional comments, the TSC did not review the traffic impact study for the less intense industrial building proposed in the revised application

Roadway Capacity

Capacity analyses were conducted for each intersection surrounding the proposed development as well as for the intersections along Oakton Street that would provide the primary route leading to Lehigh Avenue and River Drive access points. Following discussion with the Plan Commission, the analysis was revised to account for traffic projected to be generated by proposed development along Lehigh Avenue. Per the Traffic Impact Study, the signalized intersections of Oakton Street with Lehigh Avenue and River Drive have sufficient reserve capacity to accommodate site-generated traffic, as do the River Drive and Park Avenue segments serving the project.

Park Avenue Reconstruction

Park Avenue is in poor condition and in need of replacement. Projected truck volumes will exacerbate the poor roadway condition. *As a condition of approval, Staff recommends that reconstruction of Park Avenue pavement be required at no cost to the Village.*

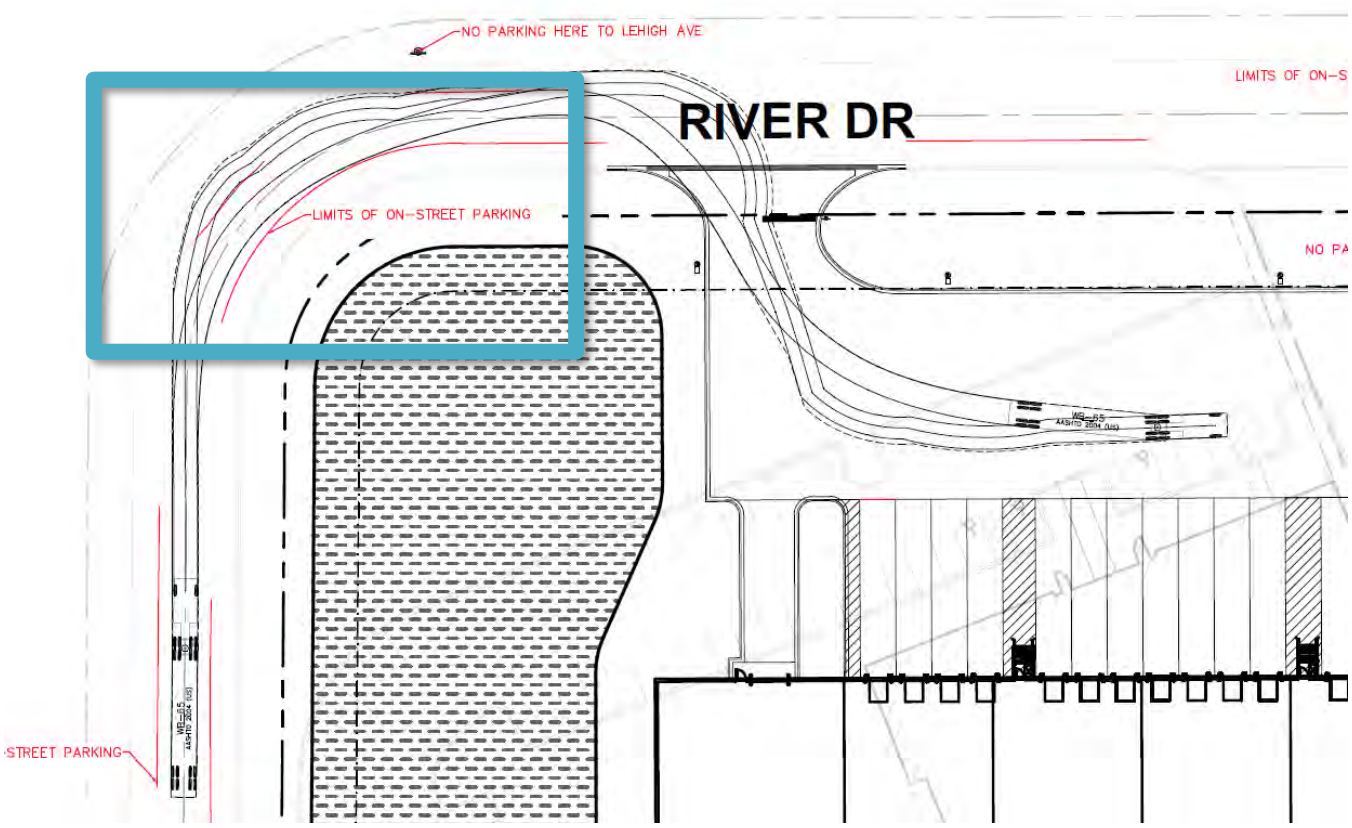
Snow and Garbage Removal

The Traffic Impact Study does not describe snow and garbage removal and garbage handling processes. *Staff recommends that as a condition of approval, the applicant should be required to submit a description of snow removal, garbage collection, and courier services to be submitted for review and approval by the Village.*

Semi-truck Turning Movements

Kimley-Horn and Associates, Inc. provided a truck turning diagram and fire truck turning diagram that were not included or referenced in the Traffic Impact Study. Per the Village Engineer, "The turning path exhibit shows a northbound entering truck encroaching into the westbound lane of traffic on River Drive. Encroachments are undesirable, but can be tolerated for lower conflicting traffic volumes. Additional turning movements may need to be modeled to gain a full understanding of the compatibility of the Village's street network with the proposed facility. There are two methods for accommodating this development: make improvements to the driveway and street geometry to eliminate the encroachments or the Special Use Permit should include a condition limiting the allowable volume of trucks trips." Furthermore, the truck turning diagram shows that the west bound lane of River Drive has on-street parking in the section impacted by potential truck movements.

The Traffic Impact Study also states that "Truck traffic will be prohibited from travelling to and from the north on Lehigh Avenue as truck traffic is restricted on Lincoln Avenue."



Proposed WB-65 Truck Turning Diagram – Northbound from River Dr. On-street Parking Conflict (BLUE)

Fire Truck Movements
Fire truck access is generally sufficient, however the turning diagram provided for fire trucks indicates an encroachment onto the curb at the eastern most island in the southern parking lot. *The applicant should speak to this encroachment and potential changes in the parking lot island geometry.*

Parking Demand
As part of the Traffic Impact Study, KLOA, Inc. also provided an analysis of on-site parking demand and capacity. Based on industry standards from the Institute of Transportation Engineers, the peak demand for parking generated by potential tenants at the subject property would be 181 spaces. The proposed 192 parking spaces (or 246 spaces after improving a landbank area) would be sufficient. This demand is based on a more employee intense manufacturing use compared to less intense warehousing or light industrial.

Per Section 12-7-3:I of the Village Code, the parking requirements for light manufacturing uses are based on employee counts, while warehousing parking requirements are based on either gross floor area or employee count depending which is greater. If the employee count requirement is ignored, based on 1 space per 1,000 sq. ft. of warehouse gross floor area, the proposed building size of 196,333 square feet would require 197 spaces.

KLOA, Inc. concludes the analysis by stating that, "the proposed 194-space parking lot is projected to adequately accommodate the parking demand of the proposed development and the future reserved [54] spaces can be implemented in the future if demand for them is realized."

Warehouse and Distribution Center Administrator Review
Currently, warehouse and distribution centers within all Manufacturing Zoning districts are subject to review by the Village Administrator to ensure they are not a nuisance. *In considering future warehouse and distribution center uses at the subject property, Staff recommends retaining the Village's ability to review and approve tenants as part of the Business Compliance*

Certificate zoning review. Retaining this review and approval process, will ensure that proposed tenants would not generate significant noise, odors, vibrations, or heavy truck traffic volumes. If the Village Administrator does not believe that the proposed use would be in keeping with the representations made during this Special Use Permit approval process, particularly as it relates to truck volume, then they could require additional information such as an updated traffic impact study related specifically to the proposed tenant, or require an amendment to the previously Special Use Permit.

Commission Review

Appearance Commission

On June 3, 2025, the Appearance Commission reviewed the initially proposed 227,600-square-foot building concept for Case PC 25-06. At the conclusion of the discussion, the Appearance Commission recommended approval (4-0-2) of the application with recommended conditions. The Staff Report to the Appearance Commission has been included as "Attachment A." The Appearance Commission chairperson indicated that a review of the revised smaller building proposal was not required since landscaping and elevations remained consistent with the previous proposal.

Traffic Safety Commission

On June 5, 2025, the Traffic Safety Commission (TSC) reviewed the initially proposed 227,600-square-foot building concept for Case PC 25-06 and the related Traffic Impact Study. At the conclusion of the discussion, the TSC voted unanimously (6-0) to recommend approval of the application (see "Attachment B").

Departmental Review

The proposed project was reviewed by several department representatives with the Department of Public Works being the only department to provide comments (see "Attachment C").

- Building Department: No comments at this time.
- Fire Department: No comments at this time.
- Public Works Department/Engineering: In review of the proposed project, the Village Engineer issued several comments dated July 21, 2025, regarding:
    - Lack of snow and garbage removal details.
    - Additional information needed regarding truck turning movements and on-street parking.
    - Concerns regarding sight lines for trucks utilizing the easternmost access drive.
    - Impacts to Park Avenue pavement condition.
    - The need for street lighting along Lehigh Avenue and public sidewalks in line with Village requirements.

Standards for Review

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

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

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

of this title or amendments thereto. Variation from provisions of this title as provided for in subsection 12-16-3A, "Variations", of this chapter, may be considered by the plan commission and the Village Board of Trustees as a part of the special use permit.

Recommendation

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

Motion to recommend approval of Case PC 25-06, a request for approval of a Preliminary Plat of Subdivision with associated waivers in accordance with Chapter 12-8 of the Morton Grove Municipal Code, and a Special Use Permit for redevelopment to establish warehousing, distribution centers, and light manufacturing uses at the properties commonly known as 8125-45 River Drive and 8120-40 Lehigh Avenue, Morton Grove, Illinois, subject to the following conditions:

1. *Prior to filing any Building Permit Application, the owner/applicant shall provide the Village with final elevations and material specifications for review and approval. Final elevations and materials must be deemed consistent with the approved elevations and materials, as determined by the Community Development Administrator and Appearance Commission Chairperson. If such designs are deemed to be inconsistent with the approved plans or if materials are deemed to be of a lower quality than the approved materials, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*
2. *Prior to filing any Building Permit Application, the owner/applicant shall provide the Village with final landscape plans and a tree preservation plans for review and approval. Final plan selections, locations, and sizes must be deemed consistent with the approved selections, as determined by the Community Development Administrator and Appearance Commission Chairperson. If such designs are deemed to be inconsistent with the approved plans or if materials are deemed to be of a lower quality than the approved materials, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*
3. *Any proposed or future illuminated signs at the subject property shall not have a color temperature that exceeds 5,000 K (degrees Kelvin).*
4. *The development shall adhere to bird-friendly design guidelines contained in the "Bird-Friendly Building Design" manual of the American Bird Conservancy (2015, https://abcbirds.org/wp-content/uploads/2015/05/Bird-friendly-Building-Guide_2015.pdf) where practicable, subject to review and approval by the Community Development Administrator. Mirrored coatings may not be used, and inconspicuous window films featuring simple dot or lined patterns are strongly encouraged.*
5. *Prior to filing any Building Permit Application, the owner/applicant shall provide the Village with final sign plan indicating the location of the monument sign that adheres to all setbacks and landscaping requirements. Final sign plans must be deemed consistent with Appearance Commission discussion, as determined by the Community Development Administrator. If the sign plan is deemed to be inconsistent with the approved plans, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*
6. *The Business Compliance Certificates issued for all existing and future businesses to be located at 8125-45 River Drive and 8120-40 Lehigh Avenue shall include conditions related to parking to ensure that no combination of uses results in a demand for parking in excess of the parking provided on-site at the subject property.*

7. *As part of zoning review for future Business Compliance Certificate applications, the Village shall retain its right to review and approve proposed distribution center and warehouse uses to ensure the uses collectively do not, in addition to other applicable performance standards, generate semi-truck traffic volumes in excess of 354 semi-truck trips per day, inclusive of inbound and outbound semi-truck trips. If the Village Administrator believes that a user of the property will cause semi-truck traffic volumes to exceed 354 semi-truck trips per day at the property, the Village Administrator may require additional information such as an updated traffic impact study related specifically to the proposed user(s), or require an amendment to the Special Use Permit. Future light manufacturing uses shall be permitted at 8125-45 River Drive and 8120-40 Lehigh Avenue without Village Administrator review.*

8. *Prior to filing any Building Permit Application, the owner/applicant shall submit a description of how snow removal, garbage collection, and courier services will be provided to the subject property, subject to review and approval by the Village Engineer.*

9. *Prior to filing any Building Permit Application, the owner/applicant shall provide the Village with a revised site and utility plans that indicates the proposed location of street lighting along Lehigh Avenue frontage, or engage in an agreement with the Village to reimburse the Village for the installation of street lighting, subject to review and approval by the Village Engineer.*

10. *Prior to filing any Building Permit Application, the owner/applicant shall provide the Village with revised site and utility plans for the reconstruction of pavement along Park Avenue, or engage in an agreement with the Village to reimburse the Village for the pavement reconstruction, subject to review and approval by the Village Engineer.*

11. *Truck traffic to the subject property, or leading from the subject property, from/to the north along Lehigh Avenue shall be prohibited.*

12. *The Applicant shall comply with all comments issued by the Village Engineer in the departmental comment form dated July 21, 2025, by strict or alternative compliance, subject to their approval.*

Attachments

- Attachment A – Staff Report to the Appearance Commission for PC 25-06, prepared by Brandon Nolin, AICP, Community Development Administrator, dated May 27, 2025
- Attachment B – Plan Review Comment Form for PC 25-06, prepared by Keith White, Traffic Safety Commission Chair dated June 9, 2025
- Attachment C – Plan Review Comment Forms for PC 25-01, prepared by Chris Tomich, Village Engineer dated July 21, 2025
- Attachment D – Final Plans and Supporting Documents for PC 25-06

Attachment A
Staff Report to the Appearance Commission for PC 25-06
Prepared by Brandon Nolin, AICP, Community Development Administrator
Dated May 27, 2025

To: Chairperson Pietron and Members of the Appearance Commission

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

Date: May 27, 2025

Re: Appearance Commission Case AC 25-08
Request for approval of an Appearance Certificate for site, landscape, and building plans associated with Case PC 25-06, a request for a Special Use Permit for redevelopment to establish warehousing, distribution centers, and light manufacturing uses at the properties commonly known as 8125-45 River Drive and 8120-40 Lehigh Avenue, Morton Grove, Illinois (PIN 10-20-303-001-000; 10-20-303-002-000), all within M-O/R Office/Research Manufacturing District per Section 12-4-4:E, with select waivers regarding setbacks, landscaping, signage, and parking located in a street side yard per Sections 12-2-6 and 12-4-4 and Chapters 10-10 and 12-11; and approval of a Preliminary and Final Plat of Subdivision in accordance with Chapter 12-8. The applicant is Midwest RE Acquisitions, LLC which is an entity of Bridge Industrial.

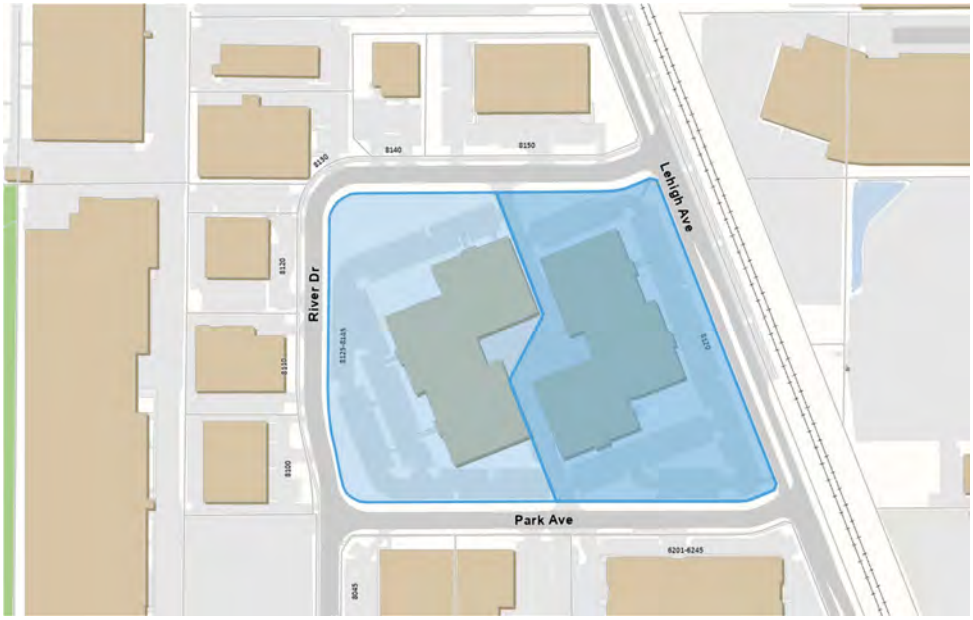
STAFF REPORT

Application Summary

Bridge Industrial ("applicant"), submitted a complete Special Use Permit application to the Department of Community and Economic Development and an Appearance Certificate is requested for the redevelopment of a pair of existing office buildings (North Grove Corporate Park). The proposed project consists of the construction of a new 227,600-square-foot industrial building with a mix of warehousing, distribution, and light manufacturing uses.

Subject Property

The subject property is approximately 11 acres in size and consists of two (2) parcels occupied by the existing North Grove Corporate Park comprising two single-story office buildings located at 8125-45 River Drive and 8120-40 Lehigh Avenue in Morton Grove, Illinois. The parcels are zoned M-O/R Office/Research Manufacturing. The proposed development would occupy the entire block bound by River Drive on the north and west, Lehigh Avenue on the east, and Park Avenue on the south. The subject property is surrounded in all directions by industrial properties within the M-2 General Manufacturing District.



Subject Property Location Map

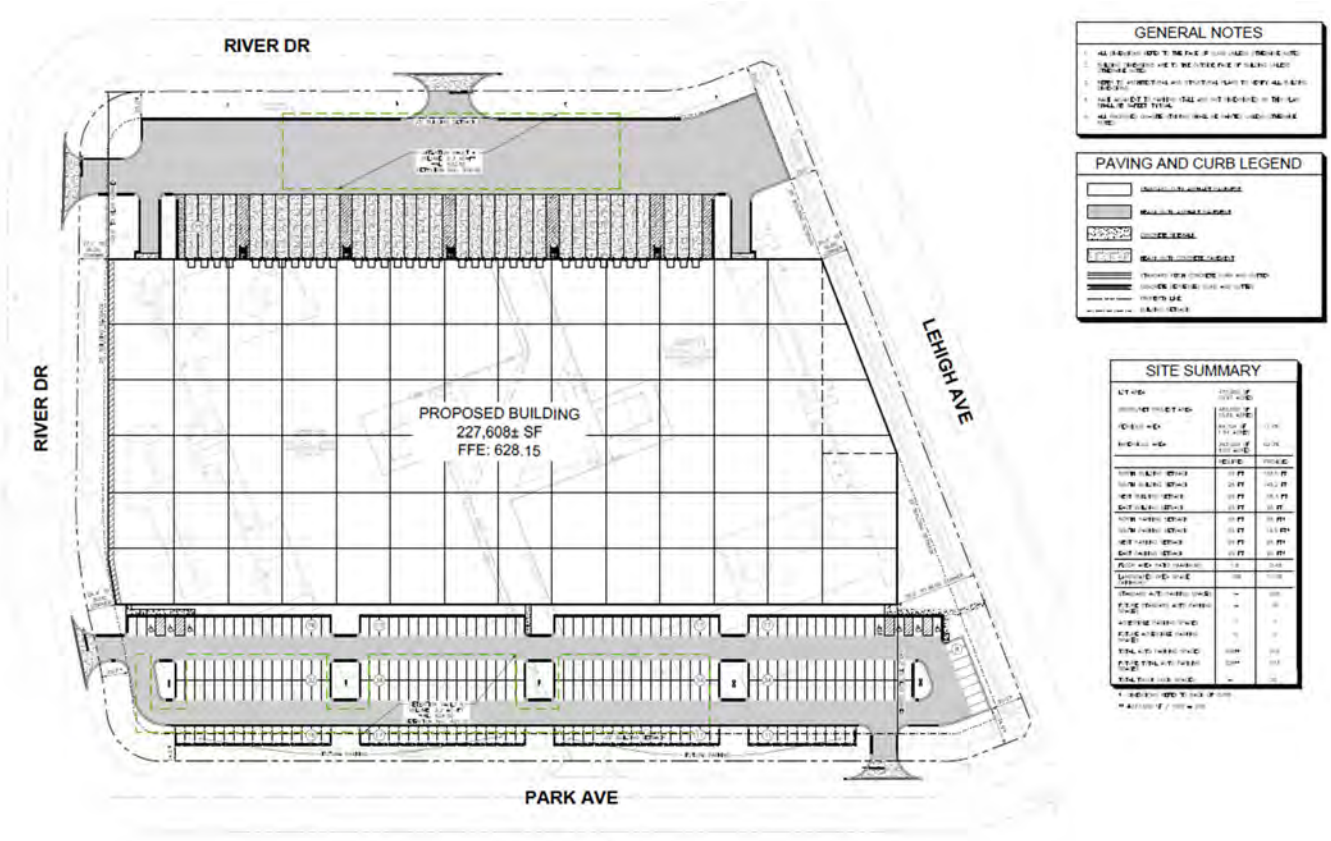
Project Overview

Bridge Industrial is proposing to demolish the North Grove Corporate Park and redevelop the subject property with an approximately 227,600-square-foot single-story industrial building including 35 truck loading berths, approximately 212 off-street parking spaces, underground stormwater detention, and various site improvements. The proposal also includes the land banking of 61 parking spaces on the southern edge of the property in the event that future parking demand is greater than the initially proposed 212 parking spaces. The south parking lot for employee and visitor parking will be accessed via Park Avenue and River Drive, while the north parking lot will be used primarily for truck access and will be accessed via River Drive from the north and west.

The proposed building height is noted to be less than 40 feet, but an exact height was not provided. Per proposed elevations, the single-story façade will feature window bays and columns that provide the appearance of a three-story building. Brick-like surface treatments and glass will be used along the east façade and corners of the building to provide an aesthetic that mimics materials used in the nearby Lexington Homes development along Lehigh Avenue.

The proposed project is speculative and while Bridge Development has not identified specific tenants for the building, they anticipate prospective users will be consistent with those land uses permitted in the M-O/R Office/Research Manufacturing District as well as uses in the surrounding area. Those tenants may include warehousing and/or distribution firms, companies engaged in limited industrial uses such as food processing, and/or designers/fabricators of custom interior finishes for high end residential and commercial customers. Due to the range of prospective users, Bridge Development is seeking approval of multiple special uses as part of their application.

The applicant intends to acquire the subject property on or about Q3 2025. Subject to receipt of all necessary Village approvals and permits and existing tenant departures, demolition is anticipated to begin on or near Q4 2025. Construction is expected to be substantially complete on or near Q1 2027.



Proposed Site Plan

Building Design

The applicant provided elevations and renderings of the proposed development. Sample imagery of the proposed façade materials are provided in the following pages.

The applicant is proposing the construction of an insulated precast concrete building. As such, many of the design aspects introduced into the façade, including variation in materials and most of the windows, are purely for aesthetics and not needed for building function. After reviewing preliminary façade treatments with Staff that relied more heavily on concrete color variation to imitate articulation, the applicant reviewed materials used at the nearby Lexington Homes townhome development and revised the façade elevations to include brick-like treatments, aluminum fascia, and additional windows. Emphasis has been placed the Lehigh Avenue frontage and the corners of the building, with the longer north and south facades being more industrial in character.

The applicant has indicated that the single-story building will be less than 40 ft. which is the maximum permitted within the M-O/R district. *The estimated height of the proposed building was not provided and the applicant should speak to this aspect of the proposal.*



Proposed South (Top) and North (Bottom) Elevations



Proposed East Elevation (Lehigh Avenue Frontage)



Proposed Elevations – Southeast Entrance Details)

Materials

As the building utilizes an insulated precast concrete construction, the proposed "brick" is essentially a pattern applied to the precast concrete exterior and then painted to achieve a brick-like appearance. Bans of windows and metal canopies are used to create the impression of a multi-story building. On the longer facades of the building (facing north River Drive and Park Avenue), three different colors of concrete are used to create horizontal and vertical reveals to vary the façade.

Rooftop mechanicals were not included in the application materials and Staff recommend requiring screening of mechanicals as a condition of approval unless the applicant and provide sufficient information regarding limitations to sight lines from surrounding rights-of-way. ***The applicant should speak to the anticipated location of rooftop mechanicals and the potential need for screening.***

Bird-Friendly Building Design

The subject property is located near the St. Paul Woods portion of the Forest Preserves of Cook County. To mitigate bird collisions, Staff recommend requiring bird strike film or glazing as a condition of approval. Recently approved projects near the forest preserve have installed 2x2 dot pattern window film in alignment with bird-friendly design guidelines contained in the "Bird-Friendly Building Design" manual of the *American Bird Conservancy (2015, https://abcbirds.org/wp-content/uploads/2015/05/Bird-friendly-Building-Guide_2015.pdf*). ***The applicant should speak to their ability to incorporate this design aspect as part of their façade materials.***

Proposed Façade Materials
(Base Material - Insulated Precast Concrete)



Landscape Design

The applicant submitted a landscape plan prepared by Kathryn Talty Landscape Architecture. With the proposed demolition of the existing North Grove Corporate Park to make way for a new structure and related parking, much of the landscaping internal to the subject property would be removed and replaced. Overall, the proposed landscape plan includes 87,754 sq. ft. of greenspace which is 18.4% of the site. This exceeds the Village's require of 15% for industrial lots. The proposed landscape plan will require waivers for parkway tree plantings, parking lot landscaping, and paved ground surface landscaping.

C-1 DISTRICT - MIXED USE DIMENSIONAL CONTROLS	REQUIREMENT	PROPOSED	COMPLIANCE
General Landscaping Requirements			
Landscaping Required (12-11-1:B.1.C)	15% of industrial lot (71,694 sq. ft.)	87,754 sq. ft. greenspace (18.4%)	*Compliant*
Trees in Public Parkways (12-11-1:B.4)	Max. 40 ft. separation, min. 2.5 in. caliper (2,098 linear feet with 53 trees req.)	1 – Applicant notes utility locations as limitation	*Noncompliant – Waiver needed to allow 52 fewer parkway trees.*
Interior Landscaping in Parking Lots (12-11-4:B.3)	7% of the paved area not including buffer landscape areas (6,435 sq. ft.).	6,534 sq. ft. interior greenspace (7.1%)	*Compliant*
Trees in Parking Lots (12-11-4:B.3)	Where practical, each separate landscaped area shall contain at least one tree, and a tree shall be planted for each one hundred (100) square feet of interior landscaping. …Each parking bay	23 trees; Max. 18 cars per row	*Noncompliant – Waiver needed to allow 41 fewer shade trees.*

	shall have a maximum of twenty (20) spaces in an uninterrupted row. (64 trees req.)		
Landscaping Adjacent to Public ROW - Sidewalks & Streets (12-11-3:B.1)	Landscape yard min. 5 ft. width containing a year-round dense opaque screen measuring min. 3 ft. in height.	Lehigh Ave.: 25 ft. min. Park Ave.: 14.5 ft. after future parking install River Dr - West: 26.4 ft. min. River Dr - North: 25 ft. min.	*Compliant*
Tree Preservation Requirements			
Trees Preservation (12-11-7:C)	Unless otherwise provided by this section, tree replacement or a fee-in-lieu shall be required for the removal as follows: Replacement Tree(s) - 1 (one) Replacement Tree per Protected Tree(s) being removed must be planted on a privately owned property. Fee-In-Lieu - Fee per Protected Tree(s) as provided for in Section 1-11-4.	Protected Trees Preserved: 1 Protected Trees Removed: 33 Replacement Trees: 114	*Compliant*
Screening Requirements			
Screening of Loading Area (12-11-4:B.1)	For all paved ground surface areas adjacent to alleys not screened by buildings, screening shall be required at five feet (5') in height.	Two 15 ft. by 60 ft. islands; 5 ft. tall	*Compliant*

Parking Lot Landscaping

The proposed south parking lot is 91,928 sq. ft. in area. Per Section 12-11-4, a parking lot of that size requires the installation of interior greenspace equal to 7% of the paved areas including one (1) shade tree for every 100 square feet of greenspace provided. The proposed south parking lot requires 6,435 sq. ft. of greenspace and 64 shade trees. The applicant proposes sufficient interior greenspace, but is proposing only 23 shade trees which is approximately one-third (35.9%) of the total required. The applicant should speak to the limited number of shade trees proposed within the interior of the parking lot and the need for a waiver from this requirement.

Tree Preservation

A tree survey submitted by the applicant identifies 128 existing trees on the subject property, 34 of which are considered to be protected trees which are non-nuisance species with a diameter at breast height of 12 inches or greater per the Village's recently approved Tree Ordinance (Ord. 24-28). The landscape plan proposes the preservation of 19 of the 128 existing trees including preserving one (1) protected tree. As such, a total of 33 replacement trees are required to be identified. The applicant has identified 27 shade trees and 87 evergreen trees for a total of 114 replacement trees that will meet Village requirements.

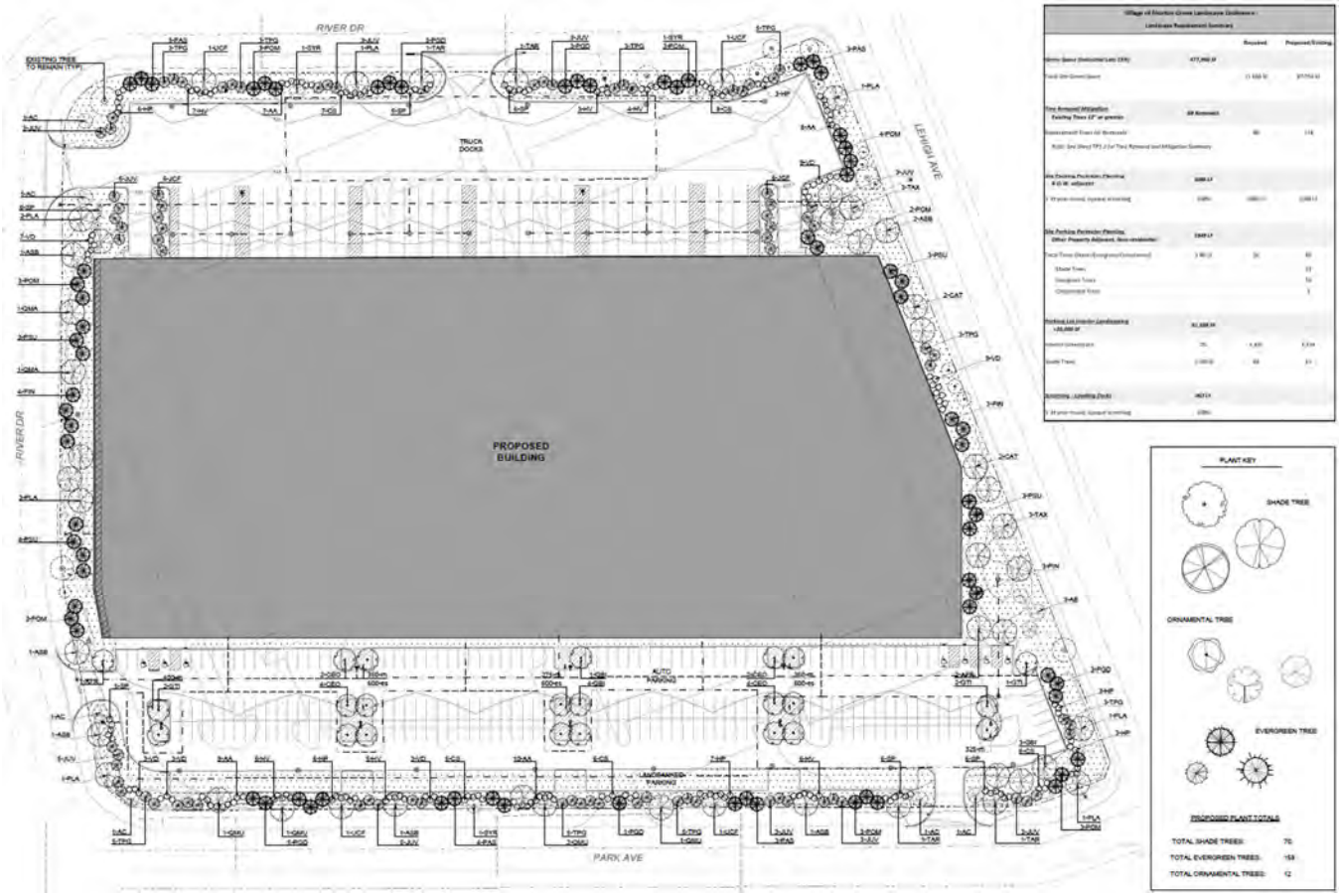
Parkway Trees

Only one (1) parkway tree is proposed. Per Section 12-11-2, parkway trees are to be installed every 40 feet which would result in a requirement of approximately 53 trees being planted in public right of way surrounding the subject property. The applicant has noted that utility locations inhibit the ability to plant trees in the parkway. Adjacent perimeter planting areas which are typically at least 25 feet deep are proposed to be used to accommodate trees in areas immediately adjacent the parkway. The applicant should speak to presence of utilities and their proposed approach to providing adequate shade tree installation at the subject property.

Perimeter Landscaping

While interior landscaping trees and parkway tree plantings will require waivers, the landscape plan features extensive perimeter landscaping well in excess of Village requirements. Per the landscape plan, the applicant is proposing to install a total of 85 trees consisting of 21 shade trees, 59 pine trees, and 5 ornamentals. The code requires a 5 ft. landscaped buffer surrounding the property where it abut public rights-of-way. Landscaped areas are at least 25 ft. deep on the Lehigh Avenue and River Drive frontages and 14.5 ft. along Park Avenue where potential future parking limits landscaping on part of the setback.

Overall, there are 240 trees proposed to planted or preserved on the subject property. The combined total number of trees required for the parkway and interior landscaping is only 117 trees.



Proposed Landscape Plan

Lighting

The applicant submitted a photometric plan showing levels of illumination along all lot lines. Per Section 12-12-3, for off-street parking areas, lighting must be directed away from adjacent property, streets, and other public rights-of-way. All lighting units must be of the full cutoff type, meaning luminaires may not emit any light above the source's horizontal plane. The International Dark-Sky Association (IDA) recommends full cutoff fixtures, which minimize glare and light trespass. The fixtures proposed in the submitted lighting plan can be configured as full cutoff fixtures. All proposed lighting would have a color temperature of 4,000 K (degrees Kelvin).

The applicant proposes the installation of four (4) light poles measuring 25 ft. (25') in height along the north property edge to illuminate the truck loading and maneuvering area. Parking lot lighting is also proposed consisting of five (5) pairs of lights mounted on single poles in each central parking aisle landscape island. Proposed light poles in both locations would be 25 ft. (25') which is the maximum height permitted.

The applicant also proposes the installation of four (4) building-mounted lights that would be located at a height of 35 feet (35') along the north wall to illuminate the truck loading and maneuvering area. Per Section 12-2-2:A, there are no strict limits on the height of building-mounted lights, but there is an expectation that the lights will be harmonious with building design. Staff are concerned that the proposed light height would result in excessive glare and minimize the effect of a full cut-off fixture. The applicant should speak to the proposed height of the building-mounted lights and the potential for glare.

Parking Lot and Entrance Lighting

Per Section 12-4-3:B.5, the lighting of parking and loading areas shall be a minimum of one foot-candle on the surface. Per the submitted photometric plan, many of the parking stalls located between parking lot islands would have light levels of less than one foot-candle (1 ft-c). The building entrances also generally have low light levels. While lighting at the central entrance exceeds 1 ft-c, lighting at the west and east entrances ranges between 0.5 and 0.8 ft-c. The applicant should speak to the types of lighting fixtures proposed in the photometric plan and address concerns regarding sufficient safety lighting.

Property Edge Lighting

Per Section 12-4-3:B.5, lighting must be confined to the property boundary and reach as close to zero illumination at the property boundaries as possible. Glare may not be evident from surrounding properties or adjacent public rights of way. Footcandles are generally less than one foot-candle (1 ft-c) at the property edge, with the exception of the north property line. Light poles proposed for north side of the truck loading and maneuvering area provide light levels of up to 1.7 ft-c at the property line. The applicant should speak potential for excessive light spillover at the north property line.



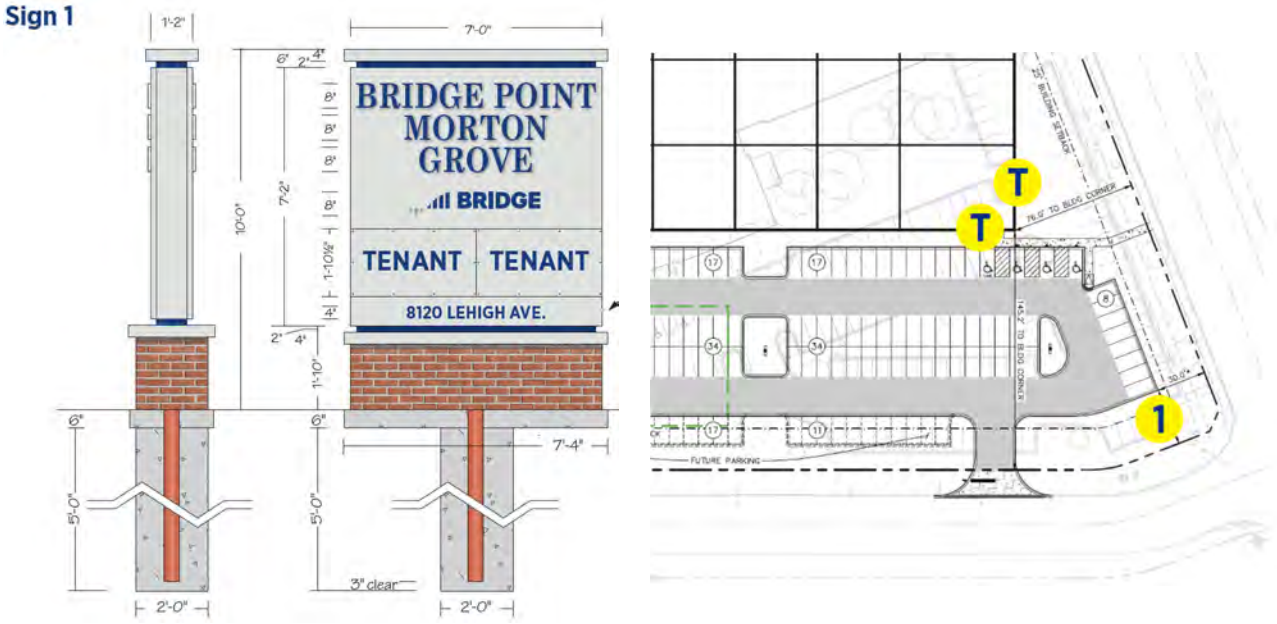
Proposed Light Pole Fixtures (Source: Lithonia)

Signage

The proposed sign package comprises one (1) monument sign to be located at the southeast corner of the subject property near the primary parking lot entrance, one (1) building name plate and address with the Bridge Development logo to be located on the upper northeast corner of the building on the east façade, and three (3) tenant identification signs to be located toward the top of the south façade.

Monument Sign

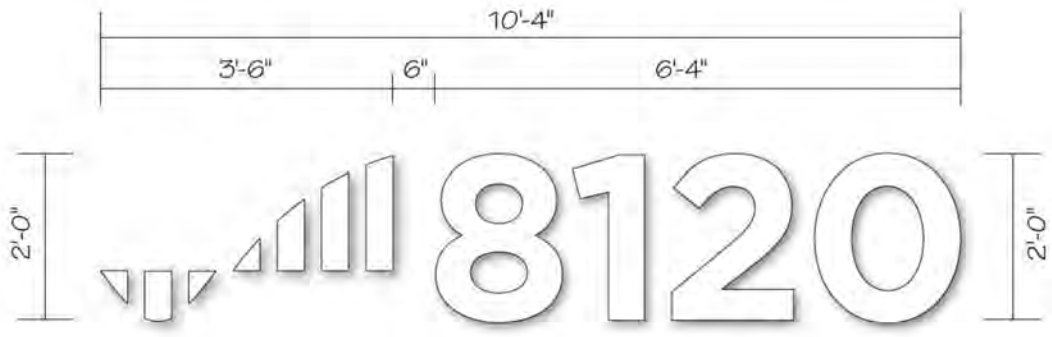
The proposed monument sign would be ten feet (10') tall with a sign area of 50.2 sq. ft. The proposed sign is required to be located at least five feet (5') from the public right of way along Park Avenue and Lehigh Avenue. The sign plan does not provide the precise location of the proposed monument sign, but there appears to sufficient space for a compliant sign location given that the parking lot is located 30 feet (30') from either right of way. A landscape bed extending two feet (2') from the sign base is required, but not provided for in the sign plan. ***The applicant should speak to the proposed sign location, proposed landscaping, and confirm whether related waivers are requested.***



Proposed Monument Sign Size (Left) and Location (Right – Labeled '1')

Address Sign

The address sign would consist of a Bridge Development logo and street number and would be 20.7 sq. ft. The address sign would be constructed of one inch (1") thick acrylic that is painted white and flush mounted to the building. The proposed sign is in excess of the two (2) sq. ft. maximum permitted, however Staff note that the sign size is proportional to the building are not concerned with the request. Similarly sized address numbers are located on other industrial buildings in the area and the Bridge Development logo measures seven (7) sq. ft. which is smaller than tenant signage typically permitted.



Proposed Address Sign

Tenant Identification

Three tenant signs each measuring 40 sq. ft. are proposed for the south façade along Park Avenue. Park Avenue is considered the primary frontage of the proposed development due to the southern location of the parking lot and main tenant entrances. The combined sign area of 120 sq. ft. is within the maximum permitted for a primary frontage. A fourth tenant sign is proposed for the southeast corner of the building along the Lehigh Avenue frontage which is considered the secondary frontage of the proposed building. The proposed tenant sign would be 32 sq. ft. which is the maximum sign size permitted. The final sign material is not yet known, but the applicant with requesting approval for either non-illuminated acrylic (similar to the proposed name plate sign) or internally illuminated channel lettering.



Typical Proposed Tenant Sign – East Elevation

The wall signs would be face lit and would have no unshielded direct light sources that may require additional guidance regarding light intensity or brightness. The Village's applicable sign requirements are outlined in the following table.

SIGNAGE CONTROL	CODE REQUIREMENT	PROPOSED SIGN	WAIVER NEEDED
Nameplates (10-10-4:E)	Individual professional or occupational nameplates and address signs permanently affixed to a structure, each limited to two (2) square feet.	20.7 sq. ft.	*Noncompliant – Waiver needed to increase permitted sign area by 18.7 sq. ft.*
Max. sign quantity (10-10-7:G.3)	Max. 1 sign per 150 ft. street frontage	1 monument sign	*Compliant*
Max. permitted height (10-10-7:G.3)	Max. 10.0 ft.	10.0 ft.	*Compliant*
Max. ground monument sign area (10-10-7:G.3, 10-10-6:H.3)	50 sq. ft. of sign face area measured to include only the portion of signage visible from a single vantage point for multifaced signs	50.2 sq. ft. per face	*Noncompliant – Waiver needed to increase sign area by 0.2 sq. ft.*
Monument sign location (10-10-7:G.6)	Min. greater of half height or 4 ft. from public ROW = Min. 4.1 ft. from ROW	Location not specified	*Noncompliant – Waiver needed to allow for location less than 5 ft.*
Monument sign landscape bed (10-10-7:G.5)	Min. 2 ft. radius from base of sign, min. 3 ft. height at planting	2 ft. landscape bed with groundcover to remain	*Noncompliant – Waiver needed to allow for no landscape bed*

Wall Signs Size – Primary Frontage (South Elevation – Park Avenue) (10-10-7:F.3)	Up to one and one-half (1.5) sq. ft. of wall signage per each linear foot of frontage or one hundred twenty (120) sq. ft. of signage (whichever is less) shall be allowed on the primary frontage of each tenant space of a nonresidential building. Max. 120 sq. ft.	120 sq. ft.	*Compliant*
Wall Signs Size – Secondary Frontage (East Elevation – Lehigh Avenue) (10-10-7:F.4)	Up to one and one-half (1.5) sq. ft. of additional wall signage per each linear foot of frontage or thirty two (32) sq. ft. of signage (whichever is less) shall be allowed on the secondary frontage of each tenant space of a nonresidential building. Max. 32. sq. ft.	32 sq. ft.	*Compliant*

As outlined in the table above, the proposed monument sign and nameplate require four waivers to the following sections of the Morton Grove Municipal Code:

- *Section 10-10-4:E* – A waiver to the maximum nameplate sign area permitted to allow a nameplate sign measuring 20.7 sq. ft.
- *Section 10-10-7:G.3* – A waiver to the maximum monument sign area permitted to allow a monument sign measuring 50.2 sq. ft.
- *Section 10-10-7:G.5* – A waiver for the required landscape bed.
- *Section 10-10-7:G.6* – A waiver to the minimum required setback to allow a setback less than 5 ft. (5') from Park Avenue and Lehigh Avenue.

Appearance Commission Review

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

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

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

1. Evaluation Standards:
    a. Property Values: Where a substantial likelihood exists that a building will depreciate property values of adjacent properties or throughout the community, construction of that building should be barred.
    b. Inappropriateness: A building that is obviously incongruous with its surroundings or unsightly and grotesque can be inappropriate in light of the comprehensive plan goal of preserving the character of the municipality.
    c. Similarity/Dissimilarity: A builder should avoid excessively similar or excessively dissimilar adjacent buildings.
    d. Safety: A building whose design or color might, because of the building's location, be distracting to vehicular traffic may be deemed a safety hazard.
2. Design Criteria:
    a. Standards: Appearance standards as set forth in this chapter.
    b. Logic Of Design: Generally accepted principles, parameters and criteria of validity in the solution of design problems.
    c. Architectural Character: The composite or aggregate of the components of structure, form, materials and functions of a building or group of buildings and other architectural and site composing elements.
    d. Attractiveness: The relationship of compositional qualities of commonly accepted design parameters such as scale, mass, volume, texture, color and line, which are pleasing and interesting to the reasonable observer.

e. Compatibility: The characteristics of different uses of activities that permit them to be located near each other in harmony and without conflict. Some elements affecting compatibility include intensity of occupancy as measured by dwelling units per acre; floor area ratio; pedestrian or vehicular traffic generated; parking required; volume of goods handled; and such environmental effects as noise, vibration, glare, air pollution, erosion, or radiation.
f. Harmony: A quality which produces an aesthetically pleasing whole as in an arrangement of varied architectural and landscape elements.
g. Material Selection: Material selection as it relates to the evaluation standards and ease and feasibility of future maintenance.
h. Landscaping: All requirements set forth in chapter 11, "Landscaping and Trees", of this title. (Ord. 07-07, 3-26-2007)

In accordance with Section 10-10-3:C.2, the Appearance Commission is charged with reviewing sign permit applications that do not meet technical requirements and determining whether the submitted plans comply with the provisions of the regulations and standards set forth in Chapter 10, “Sign Regulations” as follows:

The Sign Variance Standards (Sec. 10-10-3:E) established in the Code are as follows:

1. *In the opinion of the appearance commission the proposed sign displays a level of creativity which might not be achieved if strict adherence to the technical requirements of this chapter were imposed; or*
2. *There are special circumstances unique to the property that would create practical difficulties if the technical requirement of this chapter were imposed. By way of example, but not by way of limitation, such circumstances include the size, shape, topography, location or surroundings affecting the property; however,*
3. *Under no circumstances may a sign be approved if the proposed sign violates the standards set forth in subsection D2 or D3 of this section. (See below)*
4. *The appearance commission may approve and amend a sign plan for a building or development with multiple tenants. Upon such approval, the village administrator shall approve all signs for such building or developments which conform to said plan without further design review by the appearance commission.*

As referenced in Section 10-10-3:E, the standards established in subsections D2 and D3 are as follows:

D. Standards For Permit Approval: The village administrator shall approve an application if all of the following standards have been met or can be met with conditions as may be included in a conditional approval:

2. *The sign as proposed does not violate any other applicable code provisions and/or standards of the village of Morton Grove, state of Illinois, or federal government; and*
3. *The sign will not:*
    a. *Cause substantial injury to the value of other properties in the vicinity, or*
    b. *Be detrimental to the public safety or welfare in the neighborhood where it is located, or*
    c. *Unreasonably impair the visibility to adjacent property or public right of way, or*
    d. *Be inconsistent with any approved plan for the building or the district or area where it is located, or*
    e. *Be inconsistent with other signs on the property, or with the architectural character of the building, or*
    f. *Alter the essential character of the neighborhood, or*
    g. *Violate the purpose, spirit, or intent of this code.*

Recommendation

If the Appearance Commission approves the request for an Appearance Certificate for site, landscape, and building plans, for redevelopment to establish warehousing, distribution centers, and light manufacturing uses under Special Use Permit (PC 25-06) at the properties commonly known as 8125-45 River Drive and 8120-40 Lehigh Avenue, staff recommends the following conditions of approval:

1. *Prior to filing any Building Permit Application, the owner/applicant shall provide the Village with final elevations and material specifications for review and approval. Final elevations and materials must be deemed consistent with the approved elevations and materials, as determined by the Community Development Administrator and Appearance Commission Chairperson. If such designs are deemed to be inconsistent with the approved plans or if materials are deemed to be of a lower quality than the approved materials, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*
2. *Prior to filing any Building Permit Application, the owner/applicant shall provide the Village with final lighting plan and photometric analysis that meets the minimum requirements of Village Code for review and approval by the Community Development Administrator and Village Engineer.*
3. *Prior to filing any Building Permit Application, the owner/applicant shall provide the Village with final landscape plans and a tree preservation plans for review and approval. Final plan selections, locations, and sizes must be deemed consistent with the approved selections, as determined by the Community Development Administrator and Appearance Commission Chairperson. If such designs are deemed to be inconsistent with the approved plans or if materials are deemed to be of a lower quality than the approved materials, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*
4. *Any proposed or future illuminated signs at the subject property shall not have a color temperature that exceeds 5,000 K (degrees Kelvin).*
5. *Prior to filing any Building Permit Application, the owner/applicant shall provide the Village with final sign plan indicating the location of the monument sign that adheres to all setbacks and landscaping requirements. Final sign plans must be deemed consistent with Appearance Commission discussion, as determined by the Community Development Administrator. If the sign plan is deemed to be inconsistent with the approved plans, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*
6. *[Any other condition(s) deemed appropriate by the Appearance Commission]*

Attachment B
Plan Review Comment Form for PC 25-06,
Prepared by Keith White, Traffic Safety Commission Chair
Dated June 9, 2025

REVIEWING: **BUILDING** **FIRE** POLICE **PUBLIC WORKS/ENGINEERING** **TSC**

VILLAGE OF MORTON GROVE, ILLINOIS

PLAN REVIEW COMMENT FORM

DATE DISTRIBUTED: 5/20/2025

CASE NUMBER: PC 25-06

APPLICATION: Request for a Special Use for the operation of warehouses, distribution centers, and light manufacturing uses at the properties commonly known as 8125-45 River Drive and 8120-40 Lehigh Avenue in Morton Grove, Illinois (PIN 10-20-303-001-0000; 10-20-303-002-0000), all within a M-O/R Office/Research Manufacturing District pursuant to Section 12-4-4:E. The applicant is Midwest RE Acquisitions, LLC.

A Special Permit Application has been submitted to the Plan Commission for action. Please return your review to the Department of Community and Economic Development by **Friday, June 6, 2025**.

Thank you,
Brandon Nolin, AICP
Community Development Administrator

COMMENTS OR CONCERNS

No comments.

These comments accurately represent existing Village regulations or policies.

Name (please print): Amit Shah, Chairman Pro Tem Traffic Safety Commiission

Signed: Amit Shah

Date: 06/09/2025

Attachment C
Plan Review Comment Forms for PC 25-06
Prepared by Chris Tomich, Village Engineer
Dated July 21, 2025

REVIEWING: BUILDING FIRE POLICE PUBLIC WORKS/ENGINEERING TSC

VILLAGE OF MORTON GROVE, ILLINOIS

PLAN REVIEW COMMENT FORM

DATE DISTRIBUTED: 7/16/2025

CASE NUMBER: PC 25-06

APPLICATION: Request for a Special Use for the operation of warehouses, distribution centers, and light manufacturing uses at the properties commonly known as 8125-45 River Drive and 8120-40 Lehigh Avenue in Morton Grove, Illinois (PIN 10-20-303-001-0000; 10-20-303-002-0000), all within a M-O/R Office/Research Manufacturing District pursuant to Section 12-4-4:E. The applicant is Midwest RE Acquisitions, LLC.

A Special Permit Application has been submitted to the Plan Commission for action. Please return your review to the Department of Community and Economic Development by XXXXX.

Thank you,
Brandon Nolin, AICP
Community Development Administrator

COMMENTS OR CONCERNS

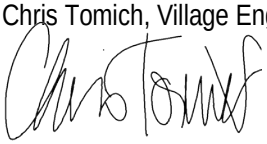
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1. GENERAL – The Traffic Study should be revised to describe snow removal and garbage handling processes. The exterior of the site is parking spaces, loading docks, or traffic circulation areas. The Special Use Permit should include a condition requiring describing snow removal, garbage collection, and courier services to be submitted for approval by the Village.
2. GENERAL – The Traffic Study should include an exhibit of the pedestrian access routes from the parking area into the building.
3. TRAFFIC – The Traffic Study does not reference the vehicle turning templates created by Kimley-Horn and Associates, Inc. and included with the application materials. The Traffic Study should include an analysis of turning paths for all design vehicles. The turning path exhibit shows a northbound exiting truck encroaching into the westbound lane of traffic. Encroachments are undesirable, but can be tolerated for lower conflicting traffic volumes. Additional turning movements may need to be modeled to gain a full understanding of the compatibility of the Village's street network with the proposed facility. There are two methods for accommodating this development: make improvements to the driveway and street geometry to eliminate the encroachments or the Special Use Permit should include a condition limiting the allowable volume of trucks trips.
4. TRAFFIC - The turning exhibit provided for fire trucks appears to show encroachment onto the curb at the eastern most island. Please demonstrate that this movement can be made without this encroachment.
5. TRAFFIC - In the WB-65 turning exhibit please clarify if parking is currently allowed on the west bound lane of River Dr where it turns south. The exhibit shows a red line between the two entrances where the movement encroaches but does not label what that line represents.
6. TRAFFIC - The Traffic Study should state any sight distance concerns with the movements from the easternmost access point on River Road. The proximity to the curve in the roadway could create issues.
7. INFRASTRUCTURE – The impact of truck traffic on the Village's streets is forecasted to be significant. The condition of Park Drive abutting the site is poor. The Special Use Permit should include a condition to reconstruct Park Drive pavement as part of these improvements at no cost to the Village.

8. INFRASTRUCTURE – Street lighting is required as part of the development. Street lighting exists along River Drive and Park Avenue, but does not exist along Lehigh Avenue. The Village is developing a project to install street lighting in the right-of-way along Lehigh Avenue from just south of Main Street to Lincoln Avenue. The Special Use Permit should include a condition to require street lighting along Lehigh Avenue constructed by the developer according to the requirements of the Village. The Village may be amendable to extending the limits of the Village's project across the frontage of this development, if the developer will pay for the associated cost of the street lighting.
9. INFRASTRUCTURE – Public sidewalk exists along Lehigh Avenue, but not along River Drive or Park Avenue. The proposed development shows no new sidewalk. The Municipal Code specifies sidewalk may be required at selected locations in subdivision with lots of this size. The current trend is to increase pedestrian accommodations and access to transit to decrease reliance on driving trips and to improve healthy opportunities. It is known that multiple representatives from tenants of the existing facility have desired better accommodations for disabled workers and better access to the bus route at Oakton Street. The existing public infrastructure, as described above, provides a satisfactory pedestrian accommodation. If it is desirable and recommended by the Plan Commission, adding public sidewalk to the property frontage would enhance the pedestrian accommodation beyond the existing condition. The proposed site should have complete pedestrian access routes to the public sidewalk, but the proposed site plan shows basic connections.
10. UTILITIES – The area and scale of development will require a permit from the Metropolitan Water Reclamation District of Greater Chicago for stormwater management, erosion control, and sanitary sewer connections. The Village has similar requirements. The developer has prepared a report for preliminary stormwater management analysis that has been reviewed. The report adequately illustrates the feasibility of meeting the Village's requirements. The analysis will be refined as the development moves into the permit process.
11. STORMWATER MANAGEMENT - Sheet V0.1 shows that a catch basin in the west gutter line of Lehigh Avenue (approximately 300 feet north of Park Avenue) flows into the existing storm sewer system of the development via a 12" pipe. The structure dip callouts show that this pipe may continue to flow northwest parallel to the road for ~350 feet to the next Lehigh manhole rather than into the development. Confirm the existing pipe alignment. If the existing pipe alignment is correct as currently shown, the proposed storm sewer system does not appear to account for it unless it is intended to remain underneath the proposed building; revise the design to ensure connectivity and update the pond hydrologic model to account for the additional offsite area flowing to this structure.
12. STORMWATER MANAGEMENT - The existing site has two storm sewer outlets (one north, one west) to different points along the River Drive drainage system, but the proposed system is only using the north outlet via a 7.5" orifice. It is recommended that both existing outlets be used in the proposed condition via two pond outlet control structures with smaller orifices. The existing north outlet, a 12" pipe lateral beneath River Drive, appears to be flat (0% slope) based on the dip callouts provided, and is not ideal for use as the sole outlet for the site. A dual outlet will more closely replicate existing conditions and will create redundancy in the system.
13. STORMWATER MANAGEMENT - The drainage memorandum notes that on-site retention practices to meet MWRD volume control requirements are not feasible due to groundwater levels, and that a flow-through BMP will be used instead. MWRD may require that offsite retention be explored. It is recommended that the developer request a pre-application meeting with MWRD to confirm the site constraint and the appropriate volume control approach. The minutes from the meeting should be included in the next plan submittal to the Village.

These comments accurately represent existing Village regulations or policies.

Name (please print): Chris Tomich, Village Engineer

Signed: 

Date: 07/21/2025

Attachment D
Final Plans and Supporting Documents for PC 25-06

1. *Subdivision Application, submitted by Midwest RE Acquisitions, LLC, received May 12, 2025*
2. *Subdivision Standards Applicant Response, submitted by Midwest RE Acquisitions, LLC, received May 12, 2025*
3. *Written Authorization for Subdivision Application from Property Owner, CRE NORTH GROVE CP I & II LLC, dated April 30, 2025*
4. *Preliminary Plat of Subdivision, submitted by Midwest RE Acquisitions, LLC, revised June 27, 2025*
5. *Special Use Application, submitted by Midwest RE Acquisitions, LLC, received May 12, 2025*
6. *Legal Description, submitted by Midwest RE Acquisitions, LLC, received May 12, 2025*
7. *Special Use Standards Applicant Response, submitted by Midwest RE Acquisitions, LLC, received May 12, 2025*
8. *Project Narrative, submitted by Midwest RE Acquisitions, LLC, received July 5, 2025*
9. *Detailed Landscape Plans, prepared by Kathryn Talty Landscape Architecture, revised July 1, 2025*
10. *Signage Plan, prepared by Parvin-Clauss Sign Company, revised July 1, 2025*
11. *Preliminary Engineering Plans, prepared by Kimley-Horn Associates, Inc., revised June 28, 2025*
12. *Building Elevations, prepared by Cornerstone Architects, Ltd., revised July 2, 2025*
13. *Building Materials Palette, prepared by Cornerstone Architects, Ltd., dated May 2, 2025*
14. *Stormwater Management Memo, prepared by Kimley-Horn Associates, Inc., revised June 27, 2025*
15. *Traffic Impact Study, prepared by KLOA, Inc., dated July 1, 2025*
16. *Truck Turning Exhibit, prepared by Kimley-Horn Associates, Inc., revised June 28, 2025*
17. *Fire Truck Turning Exhibit, prepared by Kimley-Horn Associates, Inc., revised July 10, 2025*

Docusign Envelope ID: 1319E330-CFDB-4043-BB23-2105C09E2B4C

SUBDIVISION APPLICATION

Village of Morton Grove
Department of Community Development
6101 Capulina Avenue Morton Grove, Illinois 60053
(847)470-5231 (p) (847)965-4162 (f)

CASE NUMBER: PC 25-06 DATE APPLICATION FILED: May 12, 2025

APPLICANT INFORMATION

Applicant Name: Doug Klein

Applicant Organization: Midwest RE Acquisitions, LLC

Applicant Address: 9525 West Bryn Mawr Avenue, Suite 700

Applicant City / State / Zip Code: Rosemont, IL 60018

Applicant Phone: Work: (630) 423 - 7478 Home: (____) _____

Mobil / Other: (____) _____

Applicant Fax: Work :(____) _____ Home :(____) _____

Applicant Email: dklein@bridgeindustrial.com

Applicant Relationship to Property Owner: Contract purchaser

Applicant Signature: _____

PROPERTY OWNER INFORMATION (IF DIFFERENT FROM APPLICANT)

Owner Name: CRE North Grove CP I & II LLC c/o Woodside Capital Partners

Owner Address: 801 Cherry Street, Suite 1800

Owner City / State / Zip Code: Fort Worth, TX 76102

Owner Phone: Work: (817) 233-7360 Home: (____) _____

Mobil / Other: (____) _____

Owner Fax: Work :(____) _____ Home :(____) _____

Owner Email: mark@woodsidecp.com

Owner Signature: DocuSigned by: Mark B. Horrell B7DDD82C37FF4B0...

PROPERTY INFORMATION

Common Address of Property: 8120 Lehigh Avenue

Property Identification Number (PIN): 10-20-303-001-0000; 10-20-303-002-0000

Legal Description (Attach additional sheets as necessary): See attached.

MORTON GROVE RESPONSES TO STANDARDS FOR A SUBDIVISION

Provide responses to the Subdivision standards as listed in Section 12-16-4.D.3 of the Unified Development Code. The Subdivision standards are as follows:

a. Orderly Development: The proposed subdivision will encourage orderly and harmonious development within the Village.

The proposed subdivision will encourage orderly and harmonious development within the surrounding area. The property is currently occupied by two office and industrial buildings, and the proposed subdivision would support a project to demolish the existing buildings at the property and allow for the construction of a single industrial building. The applicant is seeking the subdivision to combine the two existing lots to create one lot of record. The overall project will not impede the normal and orderly development and improvement of the surrounding property as the property is already developed with industrial uses and is surrounded by other industrial uses to the north, east, south, and west.

b. Coordination of Streets: The streets within the proposed subdivision will coordinate with other existing and planned streets.

No new streets are proposed in connection with the subdivision, Petitioner will utilize the existing roadways which already coordinate with the existing street system.

c. Coordination of Utilities: The utilities within the proposed subdivision will coordinate with other existing and planned utilities, and create a uniform system of utilities within the Village.

As the property is currently occupied by two industrial office buildings with approximately 150,000 gross square feet, the proposed subdivision will seek to utilize existing public infrastructure for sewer and water service. To the extent such facilities are not adequate to service the proposed development, the applicant will make the necessary and appropriate upgrades.

d. Consistency with Comprehensive Plan: The proposed subdivision will be evaluated based on its consistency with the overall land use policies of the Village as may be expressed in the Village's comprehensive plan.

The proposed subdivision is not contrary to, but rather is in furtherance of the objectives of the current Comprehensive Plan for the Village of Morton Grove (the "Comp Plan"). The Comp Plan calls for industrial uses to be located at the property. In addition, the Comp Plan calls for the continuation of upgrades and enhancements of the southern industrial district including the replacement of obsolete industrial facilities. The proposed subdivision also supports the Comp Plan's goal of having industrial development which maintains a diversified economic base. In furtherance of this goal, the proposed subdivision supports the Comp Plan's objective of the replacement or redevelopment of marginal, deteriorated, or obsolete industrial properties as the

existing improvements on the property are more than 35 years old and do not meet the standards of modern industrial buildings.

Docusign Envelope ID: 13592910-2DAE-46C3-B86E-0B484DB7D778

CRE NORTH GROVE CP I & II LLC
801 Cherry St, Suite 1800
Fort Worth, Texas 76102

April 30, 2025

Mr. Brandon Nolin
Community Development Administrator
Village of Morton Grove
6101 Capulina Avenue
Morton Grove, Illinois 60053

Re: Authorization to file Applications for a Special Use, the Appearance Commission, and a Preliminary Plat of Subdivision; 8120 Lehigh Avenue, Morton Grove, Illinois

Dear Mr. Nolin:

The undersigned (the "Owner") holds title to that certain property commonly known as 8120 Lehigh Avenue, Morton Grove, Illinois (the "Property"). Midwest RE Acquisitions, LLC (the "Contract Purchaser") has executed a purchase and sale agreement for the Property. The Contract Purchaser intends to file applications for (a) approval of one or more special uses at the Property, (b) for a hearing before the Village's Appearance Commission; (c) a preliminary plat of subdivision; and (d) such other zoning relief as may be necessary in furtherance of the Contract Purchaser's intended development. In connection with these applications, the Owner hereby consents to the Contract Purchaser, and any affiliated or authorized entity or entities (including, without limitation, legal counsel), to: (xx) file such applications; (yy) pursue approval of said applications; and (zz) take any and all related actions which may be necessary or appropriate in connection with processing such applications. The Owner also agrees to accept the conditions of approval of such applications.

Thank you for your consideration. If you have any questions regarding the foregoing consent, please contact the undersigned.

[SIGNATURE PAGE FOLLOWS]

Docusign Envelope ID: 13592910-2DAE-46C3-B86E-0B484DB7D778

OWNER: CRE NORTH GROVE CP I & II LLC

By: DocuSigned by: Mark B. Horrell B7DDD82C37FF4B0...

Name: Mark B. Horrell

Its: President

Midwest RE Acquisitions, LLC – 8120 Lehigh Avenue – Legal Description

PARCEL 1:
LOT 11 IN NORTH GROVE CORPORATE PARK, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 20. TOWNSHIP 41 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 7, 1985 AS DOCUMENT 85223113, IN COOK COUNTY. ILLINOIS.

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PIN: 10-20-303-001
10-20-303-002

PRELIMINARY PLAT OF SUBDIVISION
NORTH GROVE CORPORATE PARK 1ST RESUBDIVISION

OF

LOTS 10 AND 11 IN NORTH GROVE CORPORATE PARK, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 20, TOWNSHIP 41 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 7, 1985 AS DOCUMENT 85223113, IN COOK COUNTY, ILLINOIS.

VICINITY MAP

N.T.S.



HATCH LEGEND

- BUILDING OUTLINE AREA
- CONCRETE AREA
- ASPHALT PAVEMENT AREA

LINE TYPE LEGEND

- SANITARY SEWER LINE
- STORM SEWER LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND ELECTRIC LINE
- WATER LINE
- GAS LINE
- COMM. LINE

LEGEND

	UTILITY POLE W/ LIGHT		FIBER OPTIC HAND HOLE
	WATER VALVE		TELECOM. PEDESTAL
	STORM CULVERT		GAS UTILITY MARKER
	FOUND IRON ROD		LIGHT POLE
	GUY WIRE ANCHOR		FIRE HYDRANT
	SIGN POST		CABLE TV PEDESTAL
	WATER UTILITY MARKER		FOUND RAIL ROAD SPIKE
	SURVEY BENCHMARK		FOUND IRON PIPE
	UTILITY POLE		TREE (DECIDUOUS)
	TELECOM MANHOLE		

SURVEY PREPARED FOR / OWNER:

BRIDGE INDUSTRIAL
9525 W. BRYN MAWR AVE. SUITE 700
ROSEMONT, IL 60018

SITE AREA:

ACREAGE: 10.97 AC.
SF.: 477,960 SF.

EXISTING PARKING: 440 SPACES (15 HANDICAP)

CURVE TABLE					
NO.	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD
C1	15°11'44"	467.00'	123.85'	S07°10'21"E	123.49'
C2	8°28'25"	533.00'	78.83'	S10°04'33"E	78.75'
C3	84°09'03"	50.00'	73.44'	S48°10'28"E	67.01'
C4	21°16'47"	67.00'	24.88'	N79°06'37"E	24.74'
C5	21°15'12"	133.00'	49.33'	S79°02'46"W	49.05'
C6	89°14'51"	57.00'	88.79'	S45°02'57"W	80.08'

FLOOD STATEMENT:

According to Federal Emergency Management Agency's Flood Insurance Rate Map No. 17031C0243J, for Cook County, Illinois and incorporated areas, dated August 19, 2008 this property is located within

Zone X (unshaded) defined as "Areas determined to be outside the 0.2% annual chance floodplain"

If this site is not within an identified special flood hazard area, this flood statement does not imply that the property and/or the structures thereon will be free from flooding or flood damage. On rare occasions, greater floods can and will occur and flood heights may be increased by man-made or natural causes. This flood statement shall not create liability on the part of the surveyor.

REFERENCE DATUM

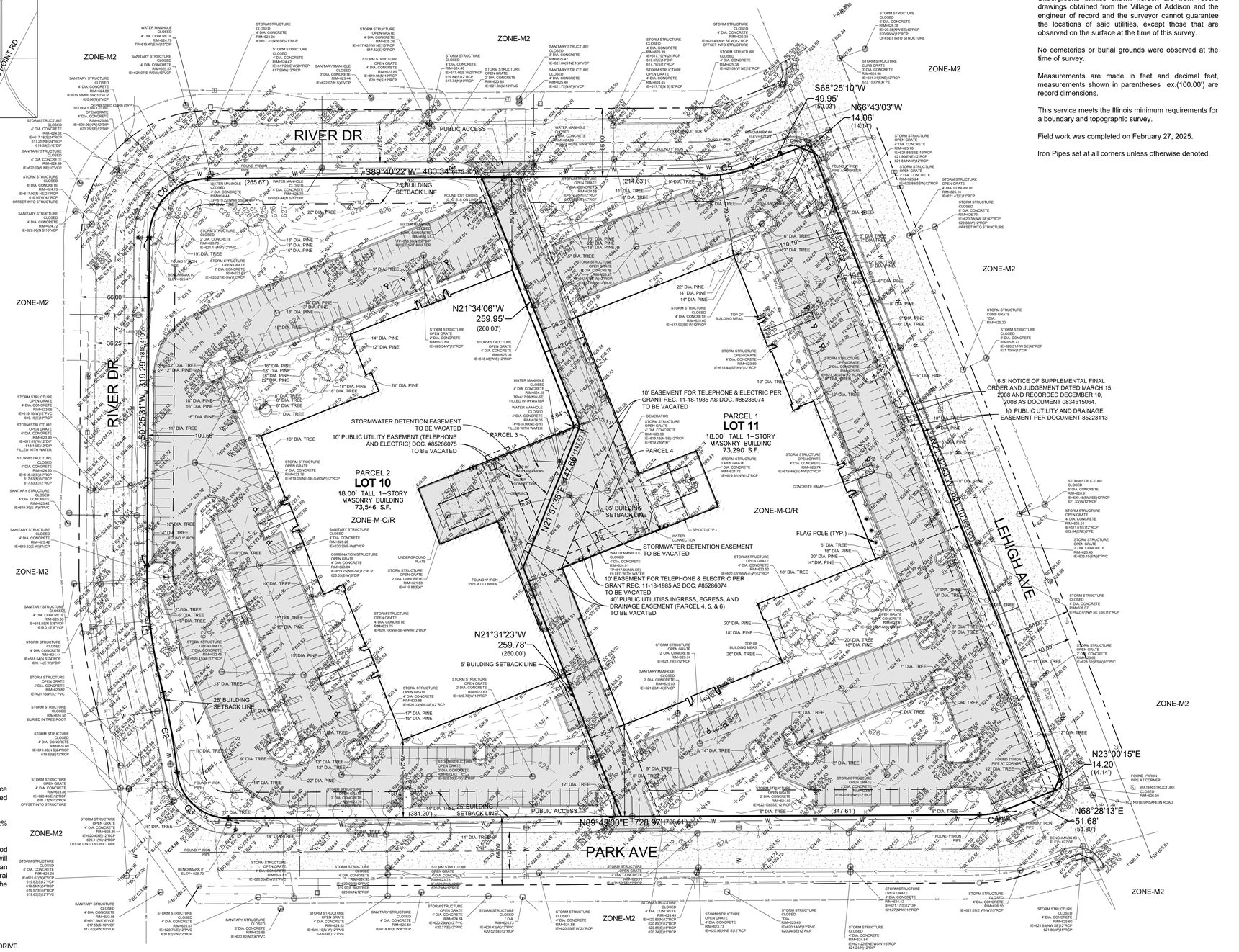
NORTH AMERICAN VERTICAL DATUM 1988

BENCHMARK #1 ELEVATION = 626.70'
NORTHWEST BOLT ON FIRE HYDRANT ON NORTHEAST CORNER OF RIVER DRIVE AND PARK AVENUE INTERSECTION.

BENCHMARK #2 ELEVATION = 625.47'
EAST BOLT ON FIRE HYDRANT ON SOUTHEAST CORNER OF RIVER DRIVE NORTH WEST CORNER OF SITE.

BENCHMARK #3 ELEVATION = 627.08'
NORTHEAST BOLT ON FIRE HYDRANT AT NORTHWEST CORNER OF LEHIGH AVENUE AND PARK AVENUE INTERSECTION.

BENCHMARK #4 ELEVATION = 627.23'
SOUTHWEST TAG BOLT OF FIRE HYDRANT ON SOUTHWEST SIDE OF RIVER DRIVE AND LEHIGH AVENUE INTERSECTION.





BASIS OF BEARINGS

All bearings shown are based on grid north of the Illinois Coordinate System of 1983, East Zone (1201), North American Datum of 1983.

GRAPHIC SCALE IN FEET
50 0 25 50 100
1" =50' @ 24X36

SURVEY NOTES:

The surveyed property does not appear to be in use as a dump, sump or sanitary landfill.

No visible evidence of current earth moving work, building construction or building additions were observed at the time of survey.

There are no known proposed changes in street right-of-way lines.

Underground utilities shown hereon are from record drawings obtained from the Village of Addison and the engineer of record and the surveyor cannot guarantee the locations of said utilities, except those that are observed on the surface at the time of this survey.

No cemeteries or burial grounds were observed at the time of survey.

Measurements are made in feet and decimal feet, measurements shown in parentheses ex.(100.00') are record dimensions.

This service meets the Illinois minimum requirements for a boundary and topographic survey.

Field work was completed on February 27, 2025.

Iron Pipes set at all corners unless otherwise denoted.

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SHEET 1:
BOUNDARY AND EXISTING TOPOGRAPHIC CONDITIONS

No.	DATE	REVISION DESCRIPTION
1	6/27/25	REVISED SITE PLAN

Kimley»Horn
4201 Winfield Road Suite 600
Warrenville, Illinois 60555
Tel. No. (630) 487-5550
Fax No. (630) 335-3779
DESIGN FIRM # 184002012-0006

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 50'	JI	MGJ	04/30/25	268915000	1 OF 2

©2025 Kimley-Horn and Associates, Inc. All rights reserved

DWG NAME: K:\CHS_LDEV\268915000_BRIDGE - NORTON GROVE\E2 DESIGN\CAD\REFERENCES\SURVEY\PRELIM PLAT - 268915000.DWG PLOTTED BY INFANTE, JESSEE 6/27/2025 11:57 AM LAST SAVED 6/27/2025 10:14 AM

PIN: 10-20-303-001
10-20-303-002

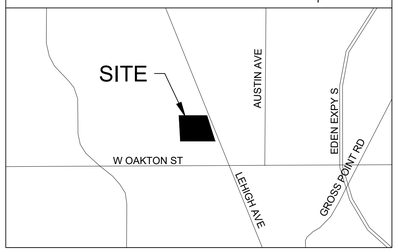
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VICINITY MAP

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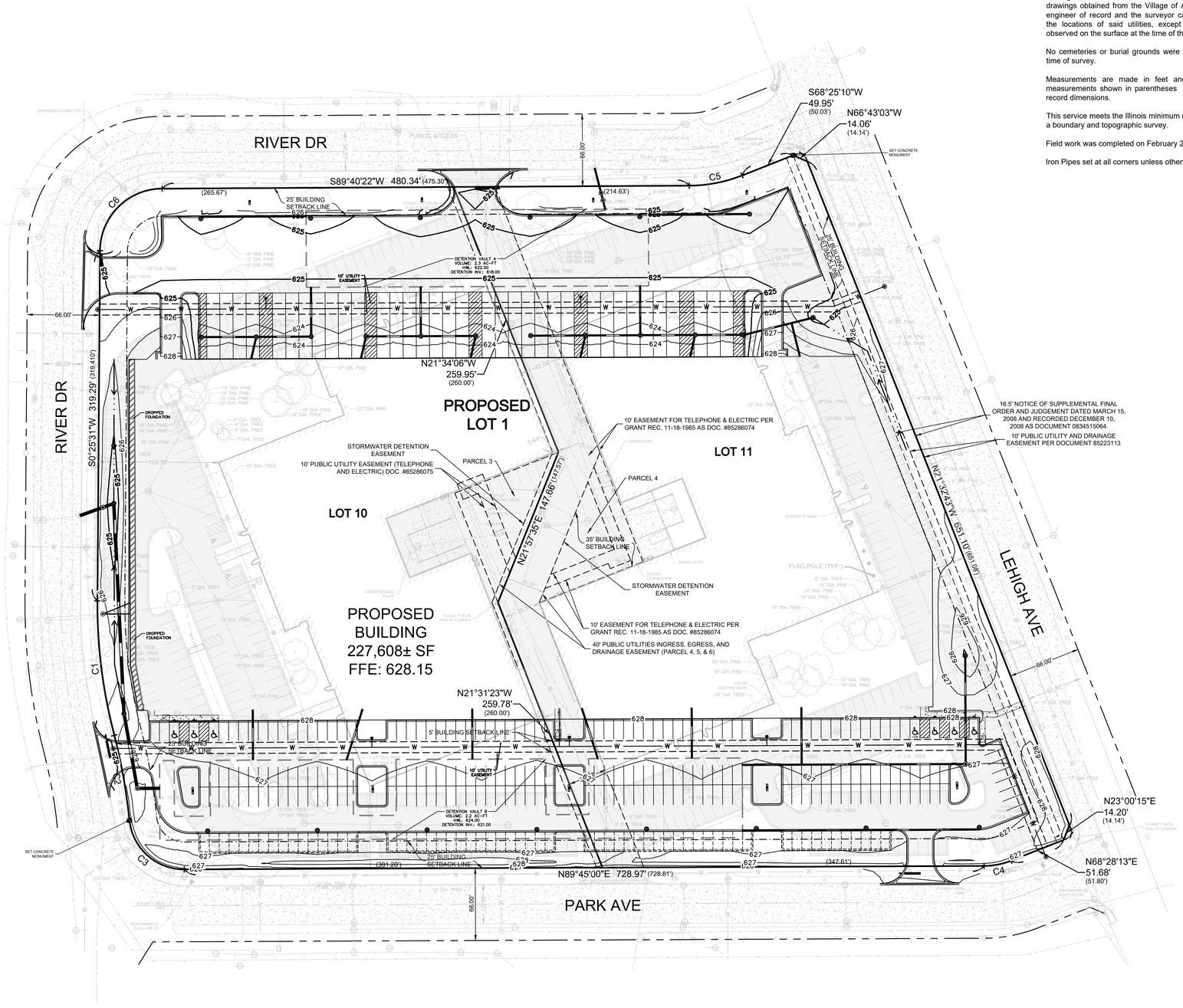
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NORTH

BASIS OF BEARINGS

All bearings shown are based on grid north of the Illinois Coordinate System of 1983, East Zone (1201), North American Datum of 1983.

GRAPHIC SCALE IN FEET
50 0 25 50 100
1" =50' @ 24X36

No.	DATE	REVISION DESCRIPTION
1		

Kimley»Horn
4201 Winfield Road Suite 600
Warrenville, Illinois 60555
Tel. No. (630) 487-5550
Fax No. (630) 335-3779
DESIGN FIRM # 184002012-0006

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 50'	JI	MGJ	04/30/25	268915000	1 OF 2

SHEET 2:
PROPOSED CONDITIONS

DWG NAME: K:\CHS_LDEV\268915000_BRIDGE - MORTON GROVE\2 DESIGN\CAD\REFERENCES\SURVEY\VP\RELIM-PLAT - 268915000.DWG PLOTTED BY STROHL, BRAD 5/1/2025 8:23 AM LAST SAVED 4/30/2025 6:15 PM Copyright © 2025 Kimley-Horn and Associates, Inc. All rights reserved

Docusign Envelope ID: 1319E330-CFDB-4043-BB23-2105C09E2B4C

SPECIAL USE APPLICATION

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

Case Number: PC 25-06 Date Application Filed: May 12, 2205

APPLICANT INFORMATION

Applicant Name: Doug Klein
Applicant Organization: Midwest RE Acquisitions, LLC
Applicant Address: 9525 West Bryn Mawr Avenue, Suite 700
Applicant City / State / Zip Code: Rosemont, IL 60018
Applicant Phone: (630) 423 - 7478
Applicant Email: dklein@bridgeindustrial.com
Applicant Relationship to Property Owner: Contract purchaser
Applicant Signature:

PROPERTY OWNER INFORMATION (IF DIFFERENT FROM APPLICANT)

Owner Name: CRE North Grove CP I & II LLC c/o Woodside Capital Partners
Owner Address: 801 Cherry Street, Suite 1800
Owner City / State / Zip Code: Fort Worth, TX 76102
Owner Phone: (817) 233-7360
Owner Email: mark@woodsidecp.com
Owner Signature: DocuSigned by: Mark B. Horrell B7DDD82C37FF4B0...

PROPERTY INFORMATION

Common Address of Property: 8120 Lehigh Avenue
Property Identification Number (PIN): 10-20-303-001-0000; 10-20-303-002-0000
Property Square Footage: 477,960 square feet
Legal Description (attach as necessary): See attached
Property Zoning District: M-O/R Office/Research Manufacturing

APPLICATION INFORMATION

Requested Special Use: Warehouses, distribution centers, and light manufacturing uses
Purpose of Special Use (attach as necessary): The applicant intents to demolish the existing improvements at the property and construct a new, approximately 227,000 square foot industrial building. The applicant is requesting the special use to allow for warehouses, distribution centers, and light manufacturing uses to operate at the property.

MORTON GROVE RESPONSES TO STANDARDS FOR SPECIAL USE

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

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

The establishment, maintenance, or operation of the special uses to allow warehouse, distribution center, and light manufacturing uses at the property will not be detrimental to, or endanger the public health, safety, morals, comfort, or general welfare. The special uses will have a positive impact. For example, buildings that were constructed more than 35 years ago will be replaced with new, modern light industrial buildings constructed in accordance with the latest codes thus improving public health, safety and welfare.

The special uses will also promote the general welfare by stabilizing the Village's tax base, diversifying its employment base and creating new employment opportunities. In addition, the new business activity will create new opportunities for existing Village businesses which should enhance the sales tax base. The current buildings on the property are experiencing high vacancies due, in part to their obsolescence. The new buildings will meet the high demand for new light industrial buildings which should result in higher occupancies

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

The special uses to allow warehouse, distribution center, and light manufacturing uses will not be injurious to the uses and enjoyment of other property in the immediate vicinity as they will support a project that will complement the existing commercial and industrial areas located to the north, east, south, and west. The subject property is located in the core of the Village's manufacturing area. All surrounding properties are zoned for heavier manufacturing uses. Accordingly, there should be a compatibility with existing uses in the area. The proposed project will likely add to commercial and industrial property values in the surrounding area due to the reinvestment and redevelopment of an existing older property. Truck traffic will be directed south to Touhy Avenue so that commercial and residential uses to the north are not impacted by the proposed uses

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

The establishment of the Special Uses to allow warehouse, distribution center, and light manufacturing use at the property will not impede the normal and orderly development and improvement of the surrounding property for the uses permitted. The property has historically been used for light industrial uses. The roadway system, infrastructure and land platting of the

area are well established. The property is also surrounded by other industrial uses to the north, east, south, and west.

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

As the property is currently occupied by two industrial office buildings with approximately 147,000 gross square feet, the proposed special uses to allow warehouses, distribution centers, and light manufacturing uses to operate at the property will utilize the existing public infrastructure for sewer and water service and surrounding roadway system. To the extent such facilities are not adequate to service the proposed development, the applicant will make the necessary and appropriate upgrades. The property will also have two new stormwater detention vaults to ensure that stormwater is properly managed. The detention vaults will connect to the Village's existing stormwater system which is adequate to serve the property.

Also, as the property is located in an existing industrial area, there are existing roads and driveways that will provide access to the site.

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

Adequate measures have been taken to provide ingress and egress as to minimize traffic congestions. As mentioned above, the property is currently in use by multiple commercial and industrial tenants. There are also multiple points of ingress/egress to the site from Lehigh Avenue and the site is served by River Drive, which runs south to connect to Oakton Street and Touhy Avenue. In addition, the applicant has commissioned a traffic study which concluded that the proposed development will generate less traffic than the existing site at full occupancy. Moreover, the existing intersections have sufficient reserve capacity to accommodate traffic generated from the project site.

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

The proposed Special Use is not contrary to, but rather is in furtherance of the objectives of the current Comprehensive Plan for the Village of Morton Grove (the "Comp Plan"). The Comp Plan calls for industrial uses to be located at the property. In addition, the Comp Plan calls for the continuation of upgrades and enhancements of the southern industrial district including the replacement of obsolete industrial facilities. The proposed Special Uses also support the Comp Plan's goal of having industrial development which maintains a diversified economic base. In furtherance of this goal, the proposed Special Uses support the Comp Plan's objective of the replacement or redevelopment of marginal, deteriorated, or obsolete industrial properties as the existing improvements on the property are more than 35 years old and do not meet the standards of modern industrial buildings.

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

The proposed Special Uses will conform to the applicable regulations of the M-O/R zoning district, except to the extent that relief is granted by the Village and shall adhere to any applicable modifications in the regulations as recommended by the Commission.

Midwest RE Acquisitions, LLC – 8120 Lehigh Avenue – Legal Description

PARCEL 1:
LOT 11 IN NORTH GROVE CORPORATE PARK, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 20. TOWNSHIP 41 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 7, 1985 AS DOCUMENT 85223113, IN COOK COUNTY. ILLINOIS.

PARCEL 2:
LOT 10 IN NORTH GROVE CORPORATE PARK, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 20, TOWNSHIP 41 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 7, 1985 AS DOCUMENT 85223113, IN COOK COUNTY. ILLINOIS.

PARCEL 3:
EASEMENT FOR STORM WATER DETENTION CREATED BY NORTH GROVE CORPORATE PARK SUBDIVISION RECORDED OCTOBER 7, 1985 AS DOCUMENT 85223113 ON AND OVER A PORTION OF LOT 10 IN NORTH GROVE CORPORATE PARK, AFORESAID.

PARCEL 4:
EASEMENT FOR PUBLIC UTILITIES, DRAINAGE AND STORM WATER DETENTION CREATED BY NORTH GROVE CORPORATE PARK SUBDIVISION RECORDED OCTOBER 7, 1985 AS DOCUMENT 85223113 ON AND OVER A PORTION OF LOT 11 IN NORTH GROVE CORPORATE PARK AFORESAID.

PARCEL 5:
PERPETUAL, NON-EXCLUSIVE EASEMENT FOR THE BENEFIT OF PARCEL 1 OVER THE EAST 5 FEET OF LOT 10 IN NORTH GROVE CORPORATE PARK SUBDIVISION, AFORESAID. FOR VEHICULAR AND PEDESTRIAN INGRESS AND EGRESS TO AND FROM THE PUBLIC ROADWAY COMMONLY KNOWN AS PARK AVENUE AND RIVER DRIVE AS CREATED IN THE PROTECTIVE COVENANTS APPENDED TO THE PLAT OF NORTH GROVE CORPORATE PARK SUBDIVISION RECORDED OCTOBER 7, 1985 AS DOCUMENT 85223113 IN COOK COUNTY, ILLINOIS.

PARCEL 6:
PERPETUAL, NON-EXCLUSIVE EASEMENT FOR THE BENEFIT OF PARCEL 2 OVER THE WEST 35 FEET OF LOT 11 IN NORTH GROVE CORPORATE PARK SUBDIVISION, AFORESAID. FOR VEHICULAR AND PEDESTRIAN INGRESS AND EGRESS TO AND FROM THE PUBLIC ROADWAY COMMONLY KNOWN AS PARK AVENUE AND RIVER DRIVE AS CREATED IN THE PROTECTIVE COVENANTS APPENDED TO THE PLAT OF NORTH GROVE CORPORATE PARK SUBDIVISION RECORDED OCTOBER 7, 1985 AS DOCUMENT 85223113 IN COOK COUNTY, ILLINOIS.

8120 LEHIGH AVENUE
PROJECT NARRATIVE

THE APPLICANT

Midwest RE Acquisitions, LLC, an Illinois limited liability company ("Applicant"), is the contract purchaser of a portion of the property commonly known as 8120 Lehigh Avenue, Morton Grove, Illinois (the "Property"). Applicant makes this application for zoning approvals for the Project, as defined below and as described in greater detail below.

Midwest RE Acquisitions, LLC is controlled by Bridge Development Partners LLC, an Illinois limited liability company.

Applicant makes this application with the consent of the owner of the Property, CRE North Grove CP I & II LLC.

THE PROPERTY

The Property is an approximately +/- 11-acre parcel of land located at the northwest intersection of Lehigh Avenue and Park Avenue. The Property is improved with two, outdated one-story industrial/office buildings built in 1988, totaling approximately 147,000 square feet, together with off street parking, loading and other ancillary improvements. The Property is zoned M-O/R Office/Research Manufacturing District.

THE PROJECT

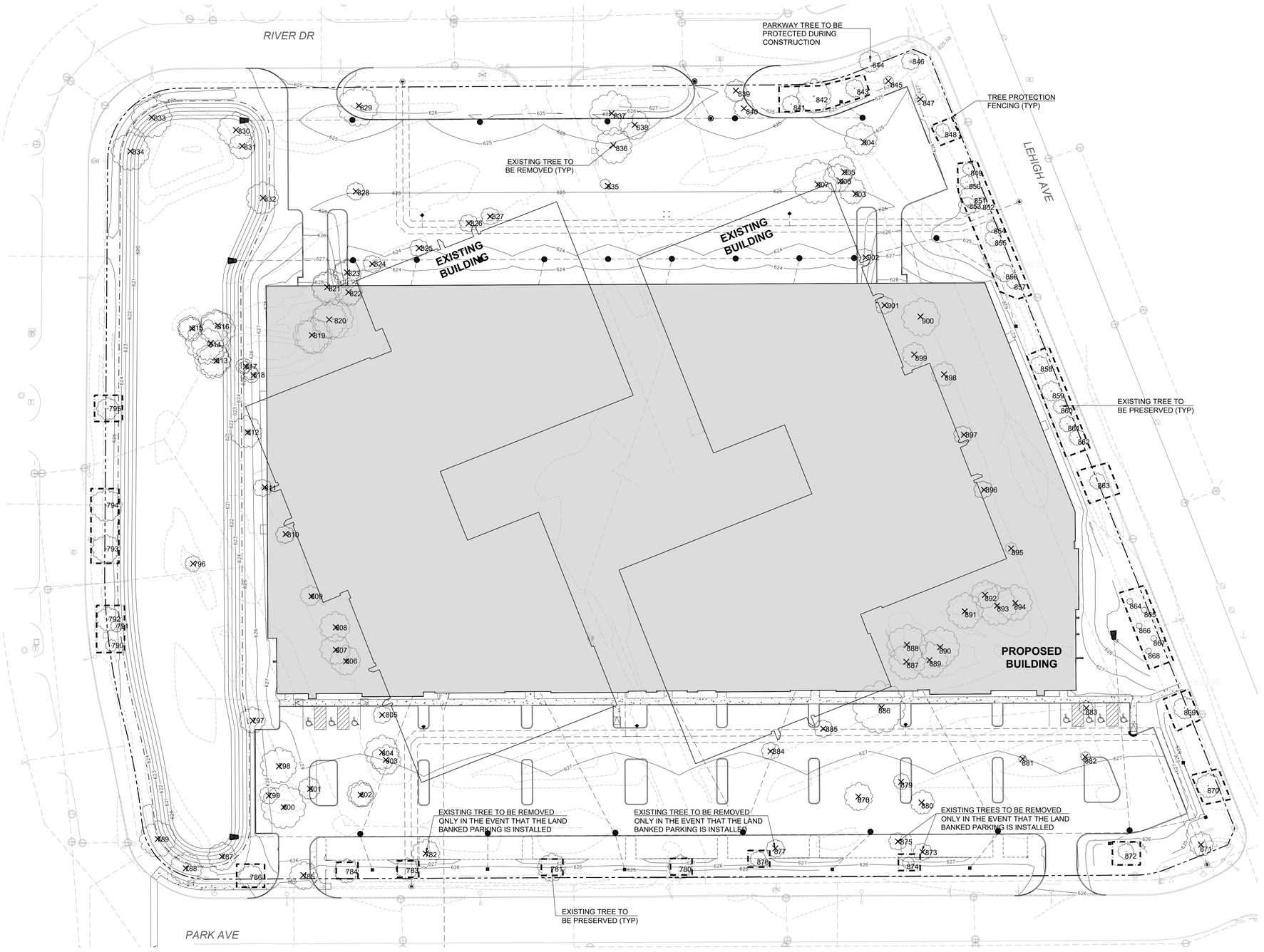
The Applicant proposes to demolish all of the improvements on the Property and redevelop the Property with an approximately 196,000 square foot single-story building, truck docks, approximately 192 off street parking spaces, underground detention and various ancillary improvements. The Applicant has also land banked 54 parking spaces on the southern side of the Property in the event that future parking demand is greater than 192 parking spaces. The height of the building is 44. There will be multiple points of ingress/egress to the site – two on east/west River Drive and two on Park Avenue.

While the Applicant has not identified specific tenants for the building, it anticipates prospective users will be consistent with those land uses permitted in the M-O/R Office/Research Manufacturing District as well as uses in the surrounding area. Those tenants may include warehousing and/or distribution firms, companies engaged in limited industrial uses such as food processing, and/or designers/fabricators of custom interior finishes for high end residential and commercial customers. Because of the range of prospective users, the Applicant is seeking approval of multiple special uses.

The Applicant intends to acquire the Property on or about Q3 2025. Subject to receipt of all necessary government approvals and permits and existing tenant departures, the Applicant anticipates that it will commence demolition on or about Q4 2025. Substantial completion of the project is expected on or about Q1 2027.

PROPOSED ZONING AND REQUESTED RELIEF

In order to accomplish the Project, the Applicant seeks a special use to include warehouse, manufacturing (light), and distribution center uses as allowed uses at the Property, together with relief as may be identified by staff. The Applicant also seeks approval of its proposed building by the Appearance Commission. Lastly, the Applicant also seeks a final plat of subdivision to create a lot of record for the parcel it is buying and to consolidate the Property into a single lot of record.



TREE PRESERVATION PLAN

SCALE: 1" = 40'-0"

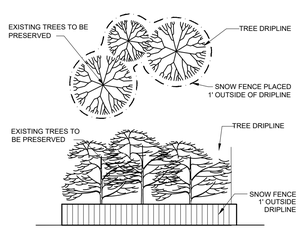
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0 20' 40' 80'

NOTE: SEE SHEET TP1.1 FOR TREE REMOVAL AND MITIGATION TOTALS

TREE PROTECTION NOTES

1. BEFORE ANY EXCAVATION, CALL TO LOCATE ANY EXISTING UTILITIES ON THE SITE. THE CONTRACTOR SHALL FAMILIARIZE HIM/HERSELF WITH THE LOCATIONS OF ALL BURIED UTILITIES IN THE AREAS OF WORK BEFORE STARTING OPERATIONS. THE CONTRACTOR SHALL BE LIABLE FOR THE COST OF REPAIRING OR REPLACING ANY BURIED CONDUITS, CABLES OR PIPING DAMAGED DURING THE INSTALLATION OF THIS WORK.
2. FOUR FOOT HIGH SNOW FENCING OR OTHER RIGID MATERIAL IS TO BE ERECTED AROUND THE DRIPLINE OF ALL TREES TO BE SAVED IN ACCORDANCE WITH THE MORTON GROVE ZONING ORDINANCE.
3. A TREE REMOVAL PERMIT MUST BE OBTAINED FROM THE PLANNING OFFICE PRIOR TO ALL TREE REMOVAL ACTIVITY INVOLVING TREES SIX (6) INCHES OR MORE D.B.H. IN ACCORDANCE WITH MORTON GROVE ZONING ORDINANCE.
4. TREES TO BE REMOVED MUST BE MARKED IN THE FIELD WITH RED PAINT OR FLAGS AND INSPECTED BY THE MORTON GROVE FORESTRY OFFICE PRIOR TO ANY TREES BEING REMOVED.
5. IF NECESSARY TO CONDUCT WORK OR DIGGING WITHIN THE ROOT ZONE OF TREES TO REMAIN, THE LANDSCAPE ARCHITECT MUST BE NOTIFIED AND ADDITIONAL PROTECTIVE MEASURES, SUCH AS ROOT PRUNING OR BRIDGING, MUST BE EMPLOYED BY A LICENSED TREE SERVICE.
6. PROTECT STRUCTURES, SIDEWALKS, PAVEMENTS AND UTILITIES TO REMAIN FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUTS AND OTHER HAZARDS CAUSED BY SITE IMPROVEMENT OPERATIONS.
7. CAREFULLY MAINTAIN PRESENT GRADE AT BASE OF ALL EXISTING TREES TO REMAIN. PREVENT ANY DISTURBANCE OF EXISTING TREES INCLUDING ROOT ZONES. USE TREE PROTECTION BARRICADES WHERE INDICATED. PROTECT EXISTING TREES TO REMAIN AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, BRUISING OF BARK OR SMOTHERING OF TREES. DRIVING, PARKING, DUMPING, STOCKPILING AND/OR STORAGE OF VEHICLES, EQUIPMENT, SUPPLIES, MATERIALS OR DEBRIS ON TOP THE ROOT ZONES AND/OR WITHIN THE DRIPLINE OF EXISTING TREES OR OTHER PLANT MATERIAL TO REMAIN IS STRICTLY PROHIBITED.
8. EXERCISE CAUTION WHEN WORKING AND DIGGING NEAR TREES LOCATED ON ADJACENT PROPERTY.
9. THE CONTRACTOR AT ALL TIMES SHALL KEEP THE PREMISES ON WHICH WORK IS BEING DONE, CLEAR OF RUBBISH AND DEBRIS. ALL PAVEMENT AND DEBRIS REMOVED FROM THE SITE SHALL BE DISPOSED OF LEGALLY.
10. ALL WORK AND OPERATIONS SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES.
11. TREE INVENTORY CONDUCTED BY DAVID COULTER, OSAGE INC. ISA CERTIFIED ARBORIST #IL-0094 (EXP. 12-31-25)
12. EXISTING TREES HAVE BEEN LOCATED WITH GIS COORDINATES. LOCATIONS ARE APPROXIMATE BUT ACCURATE. FIELD VERIFICATION IS RECOMMENDED PRIOR TO REMOVAL ACTIVITY.



1 TP1.0 TREE FENCING DETAIL

SCALE: NO SCALE

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REGISTERED LANDSCAPE ARCHITECT
KATHRYN MAXWELL TALTY
157-0011
STATE OF ILLINOIS

no.	revision description	initial	date
1	ISSUED FOR REVIEW	KMT	04-29-25
2	PER VILLAGE COMMENTS	KMT	07-01-25

BRIDGE INDUSTRIAL
MORTON GROVE, ILLINOIS

TREE PRESERVATION PLAN
TREE PROTECTION NOTES
TREE FENCING DETAIL

date. 04-29-25
drawn DJW/DSP
checked KMT

job no. 25080

sheet no. TP 1.0

EXISTING TREE INVENTORY

Tag number	Cal. size	Species	Location	Health	Form	Action
780	11	Norway Maple	Parking Lot	Very Good	Very Good	Parking lot tree to be protected during construction
781	14	Norway Maple	Parking Lot	Very Good	Very Good	Parking lot tree to be protected during construction
782	14	Linden	Parking Lot	Very Good	Good	Tree to be removed due to construction.
783	11	Linden	Parking Lot	Very Good	Very Good	Parking lot tree to be protected during construction
784	11	Linden	Parking Lot	Very Good	Very Good	Parking lot tree to be protected during construction
785	14	Honeylocust	Parking Lot	Very Good	Excellent	Tree to be removed due to construction.
786	12	Honeylocust	Parking Lot	Very Good	Excellent	Parking lot tree to be protected during construction
787	13	Honeylocust	Parking Lot	Very Good	Excellent	Tree to be removed due to construction.
788	16	Honeylocust	Parking Lot	Very Good	Excellent	Tree to be removed due to construction.
789	16	Honeylocust	Parking Lot	Very Good	Excellent	Tree to be removed due to construction.
790	7,7,7,3,2	Cockspur Hawthorn	Parking Lot	Good	Good	Perimeter tree to be protected during construction
791	7,6,3,3	Cockspur Hawthorn	Parking Lot	Good	Good	Perimeter tree to be protected during construction
792	7,5,5,4	Cockspur Hawthorn	Parking Lot	Good	Good	Perimeter tree to be protected during construction
793	15	Linden	Parking Lot	Very Good	Very Good	Perimeter tree to be protected during construction
794	14	Linden	Parking Lot	Very Good	Very Good	Perimeter tree to be protected during construction
795	10	Linden	Parking Lot	Good	Very Good	Perimeter tree to be protected during construction
796	8	Norway Maple	Parking Lot	Excellent	Excellent	Tree to be removed due to construction.
797	13	Honeylocust	Parking Lot	Very Good	Excellent	Tree to be removed due to construction.
798	16	Austrian Pine	Parking Lot	Very Good	Excellent	Tree to be removed due to construction.
799	9	Honeylocust	Parking Lot	Good	Good	Tree to be removed due to construction.
800	18	Austrian Pine	Parking Lot	Very Good	Excellent	Tree to be removed due to construction.
801	11	Honeylocust	Parking Lot	Very Good	Very Good	Tree to be removed due to construction.
802	13	Honeylocust	Parking Lot	Very Good	Excellent	Tree to be removed due to construction.
803	15	Austrian Pine	Building Perimeter	Very Good	Very Good	Tree to be removed due to construction.
804	19	Austrian Pine	Building Perimeter	Excellent	Very Good	Tree to be removed due to construction.
805	5,5,4,4	Cockspur Hawthorn	Building Perimeter	Good	Good	Tree to be removed due to construction.
806	15	Austrian Pine	Building Perimeter	Very Good	Very Good	Tree to be removed due to construction.
807	16	Austrian Pine	Building Perimeter	Very Good	Very Good	Tree to be removed due to construction.
808	13	Honeylocust	Building Perimeter	Excellent	Very Good	Tree to be removed due to construction.
809	12	Honeylocust	Building Perimeter	Excellent	Good	Tree to be removed due to construction.
810	8	Crabapple	Building Perimeter	Very Good	Good	Tree to be removed due to construction.
811	4,3,3, 2" x 8	Serviceberry	Building Perimeter	Good	Good	Tree to be removed due to construction.
812	16	Red Maple	Building Perimeter	Very Good	Very Good	Tree to be removed due to construction.
813	15	Austrian Pine	Building Perimeter	Very Good	Good	Tree to be removed due to construction.
814	18	Austrian Pine	Building Perimeter	Very Good	Very Good	Tree to be removed due to construction.
815	10	Red Maple	Building Perimeter	Good	Very Good	Tree to be removed due to construction.
816	14,8	Austrian Pine	Building Perimeter	Excellent	Very Good	Tree to be removed due to construction.
817	6,6	Cockspur Hawthorn	Building Perimeter	Good	Very Good	Tree to be removed due to construction.
818	8,7,6,6,5	Crabapple	Building Perimeter	Below Average	Below Average	Tree to be removed due to construction.
819	16	Red Maple	Building Perimeter	Good	Good	Tree to be removed due to construction.
820	23	Austrian Pine	Building Perimeter	Excellent	Excellent	Tree to be removed due to construction.
821	16,5	Scotch Pine	Building Perimeter	Very Good	Very Good	Tree to be removed due to construction.
822	14	Scotch Pine	Building Perimeter	Very Good	Very Good	Tree to be removed due to construction.
823	14	Austrian Pine	Building Perimeter	Good	Good	Tree to be removed due to construction.
824	22	Austrian Pine	Building Perimeter	Excellent	Very Good	Tree to be removed due to construction.
825	1" x 12	Serviceberry	Building Perimeter	Very Good	Good	Tree to be removed due to construction.
826	2,2,2,2,1	Serviceberry	Building Perimeter	Very Good	Good	Tree to be removed due to construction.
827	15	Honeylocust	Building Perimeter	Excellent	Very Good	Tree to be removed due to construction.
828	9	Norway Maple	Building Perimeter	Below Average	Below Average	Tree to be removed due to construction.
829	17	Norway Maple	Parking Lot	Good	Very Good	Tree to be removed due to construction.
830	18	Austrian Pine	Parking Lot	Good	Very Good	Tree to be removed due to construction.
831	14,7,6	Austrian Pine	Parking Lot	Below Average	Below Average	Tree to be removed due to construction.
832	12	Austrian Pine	Parking Lot	Very Good	Very Good	Tree to be removed due to construction.
833	20	Honeylocust	Parking Lot	Very Good	Excellent	Tree to be removed due to construction.
834	18	Honeylocust	Parking Lot	Excellent	Excellent	Tree to be removed due to construction.
835	7	Red Maple	Parking Lot	Below Average	Below Average	Tree to be removed due to construction.
836	21	Austrian Pine	Parking Lot	Very Good	Excellent	Tree to be removed due to construction.
837	22	Austrian Pine	Parking Lot	Very Good	Excellent	Tree to be removed due to construction.
838	17	Austrian Pine	Parking Lot	Very Good	Very Good	Tree to be removed due to construction.
839	13	Callery Pear	Parking Lot	Good	Good	Tree to be removed due to construction.
840	11	Crabapple	Parking Lot	Very Good	Very Good	Tree to be removed due to construction.
841	13	Crabapple	Parking Lot	Good	Good	Parking lot tree to be protected during construction
842	19	Pin Oak	Parking Lot	Excellent	Excellent	Parking lot tree to be protected during construction
843	10	Red Maple	Parking Lot	Good	Good	Parking lot tree to be protected during construction
844	14	Norway Maple	Parkway	Poor	Poor	Parkway tree to be protected during construction
845	7,7,6,5,5,2	Cockspur Hawthorn	Parking Lot	Below Average	Good	Tree to be removed due to construction.
846	8,3,2,7,7	Cockspur Hawthorn	Perimeter	Good	Good	Perimeter tree to be protected during construction
847	8,8,5,4,4	Cockspur Hawthorn	Perimeter	Good	Very Good	Tree to be removed due to construction.
848	9	Sugar Maple	Perimeter	Very Good	Very Good	Perimeter tree to be protected during construction
849	8	Red Maple	Perimeter	Poor	Poor	Perimeter tree to be protected during construction
850	8,9	Mulberry	Perimeter	Very Good	Good	Perimeter tree to be protected during construction
851	13	Norway Maple	Perimeter	Very Good	Very Good	Perimeter tree to be protected during construction
852	8	Colorado Spruce	Perimeter	Poor	Poor	Perimeter tree to be protected during construction
853	6,6,5	American Elm	Perimeter	Very Good	Good	Perimeter tree to be protected during construction
854	9	Douglas Fir	Perimeter	Very Good	Very Good	Perimeter tree to be protected during construction
855	11	Douglas Fir	Perimeter	Very Good	Very Good	Perimeter tree to be protected during construction
856	15	Colorado Spruce	Perimeter	Very Good	Good	Perimeter tree to be protected during construction
857	8,8,7,6	Crabapple	Perimeter	Good	Good	Perimeter tree to be protected during construction
858	11	Douglas Fir	Perimeter	Very Good	Very Good	Perimeter tree to be protected during construction
859	12	Red Maple	Perimeter	Very Good	Very Good	Perimeter tree to be protected during construction
860	10	Colorado Spruce	Perimeter	Good	Good	Perimeter tree to be protected during construction
861	10	Douglas Fir	Perimeter	Very Good	Very Good	Perimeter tree to be protected during construction
862	11	Douglas Fir	Perimeter	Very Good	Very Good	Perimeter tree to be protected during construction
863	9,8	Douglas Fir	Perimeter	Very Good	Very Good	Tree to be removed due to construction.
864	5,5,5,4,4,4,3	Corneliancherry Dogwood	Perimeter	Excellent	Excellent	Perimeter tree to be protected during construction
865	3" x 10	Corneliancherry Dogwood	Perimeter	Excellent	Excellent	Perimeter tree to be protected during construction
866	4,4, 3" x 12	Corneliancherry Dogwood	Perimeter	Excellent	Excellent	Perimeter tree to be protected during construction
867	4,4,4,4,3,3,3	Corneliancherry Dogwood	Perimeter	Excellent	Excellent	Perimeter tree to be protected during construction
868	3" x 15	Corneliancherry Dogwood	Perimeter	Excellent	Excellent	Perimeter tree to be protected during construction
869	11	Norway Maple	Perimeter	Very Good	Very Good	Perimeter tree to be protected during construction
870	14	Norway Maple	Perimeter	Good	Very Good	Perimeter tree to be protected during construction
871	15	Norway Maple	Parking Lot	Very Good	Very Good	Tree to be removed due to construction.
872	8	Red Maple	Parking Lot	Below Average	Below Average	Perimeter tree to be protected during construction
873	3" x 10	Corneliancherry Dogwood	Parking Lot	Excellent	Very Good	Tree to be removed due to construction.
874	10,8,8,7,7	Crabapple	Parking Lot	Very Good	Excellent	Perimeter tree to be protected during construction
875	3" x 12	Corneliancherry Dogwood	Parking Lot	Excellent	Very Good	Tree to be removed due to construction.
876	15	Honeylocust	Parking Lot	Very Good	Excellent	Tree to be removed due to construction.
877	11	Crabapple	Parking Lot	Below Average	Good	Tree to be removed due to construction.
878	10	Crabapple	Parking Lot	Below Average	Good	Perimeter tree to be protected during construction
879	9	Honeylocust	Parking Lot	Very Good	Very Good	Tree to be removed due to construction.
880	13	Honeylocust	Parking Lot	Very Good	Very Good	Tree to be removed due to construction.
881	7,6,6	Cockspur Hawthorn	Parking Lot	Good	Very Good	Tree to be removed due to construction.
882	9,9,9,3	Cockspur Hawthorn	Parking Lot	Below Average	Good	Tree to be removed due to construction.
883	8	Red Maple	Parking Lot	Below Average	Below Average	Tree to be removed due to construction.
884	1" x 12	Serviceberry	Building Perimeter	Very Good	Good	Tree to be removed due to construction.
885	2" x 3	Serviceberry	Building Perimeter	Good	Good	Tree to be removed due to construction.
886	25	Honeylocust	Building Perimeter	Very Good	Excellent	Tree to be removed due to construction.
887	17	Austrian Pine	Building Perimeter	Good	Good	Tree to be removed due to construction.
888	20	Austrian Pine	Building Perimeter	Very Good	Good	Tree to be removed due to construction.
889	17	Austrian Pine	Building Perimeter	Good	Good	Tree to be removed due to construction.
890	22	Pin Oak	Building Perimeter	Good	Very Good	Tree to be removed due to construction.
891	16	Pin Oak	Building Perimeter	Good	Good	Tree to be removed due to construction.
892	11,10,10,7	Austrian Pine	Building Perimeter	Good	Good	Tree to be removed due to construction.
893	18	Austrian Pine	Building Perimeter	Good	Very Good	Tree to be removed due to construction.
894	16	Austrian Pine	Building Perimeter	Very Good	Very Good	Tree to be removed due to construction.
895	7	Red Maple	Building Perimeter	Very Good	Good	Tree to be removed due to construction.
896	1" x 16	Serviceberry	Building Perimeter	Very Good	Good	Tree to be removed due to construction.
897	1" x 10	Serviceberry	Building Perimeter	Very Good	Good	Tree to be removed due to construction.
898	15	Honeylocust	Building Perimeter	Very Good	Very Good	Tree to be removed due to construction.
899	14	Honeylocust	Building Perimeter	Very Good	Good	Tree to be removed due to construction.
900	19	Honeylocust	Building Perimeter	Very Good	Excellent	Tree to be removed due to construction.
901	3, 1" x 9	Serviceberry	Building Perimeter	Very Good	Good	Tree to be removed due to construction.
902	1" x 12	Serviceberry	Building Perimeter	Very Good	Good	Tree to be removed due to construction.
903	18	Honeylocust	Building Perimeter	Very Good	Good	Tree to be removed due to construction.
904	17	Honeylocust	Building Perimeter	Very Good	Very Good	Tree to be removed due to construction.
905	17	Austrian Pine	Building Perimeter	Very Good	Good	Tree to be removed due to construction.
906	16	Austrian Pine	Building Perimeter	Very Good	Good	Tree to be removed due to construction.
907	20	Austrian Pine	Building Perimeter	Very Good	Very Good	Tree to be removed due to construction.

TREE REMOVAL SUMMARY

Total Trees Inventoried	***128***
Existing trees under 12"	29
Existing trees 12" or greater	99
Trees to be preserved	***41***
Trees to be removed	***97***
Existing trees under 12" to be removed	14
Existing trees 12" or greater to be removed	73

TREE MITIGATION SUMMARY

Existing trees 12" or greater to be removed	***77***
Required mitigation for removals (1 replacement per removal)	***77***
Proposed mitigation for removals	***102***
Proposed shade trees (3" cal.)	61
Proposed evergreen trees (6' ht.)	41

Note: Proposed mitigation trees are located on the east, north, and west sides of the property. Proposed mitigation trees are not counted towards the required parking lot screening.

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Glenview, Illinois 60025
c 847.612.5154 | www.ktlandarch.com

KATHRYN MAXWELL TALTY 157-001194 REGISTERED LANDSCAPE ARCHITECT STATE OF ILLINOIS

no.	revision description	initial	date
1	ISSUED FOR REVIEW	KMT	04-29-25
2	PER VILLAGE COMMENTS	KMT	07-01-25

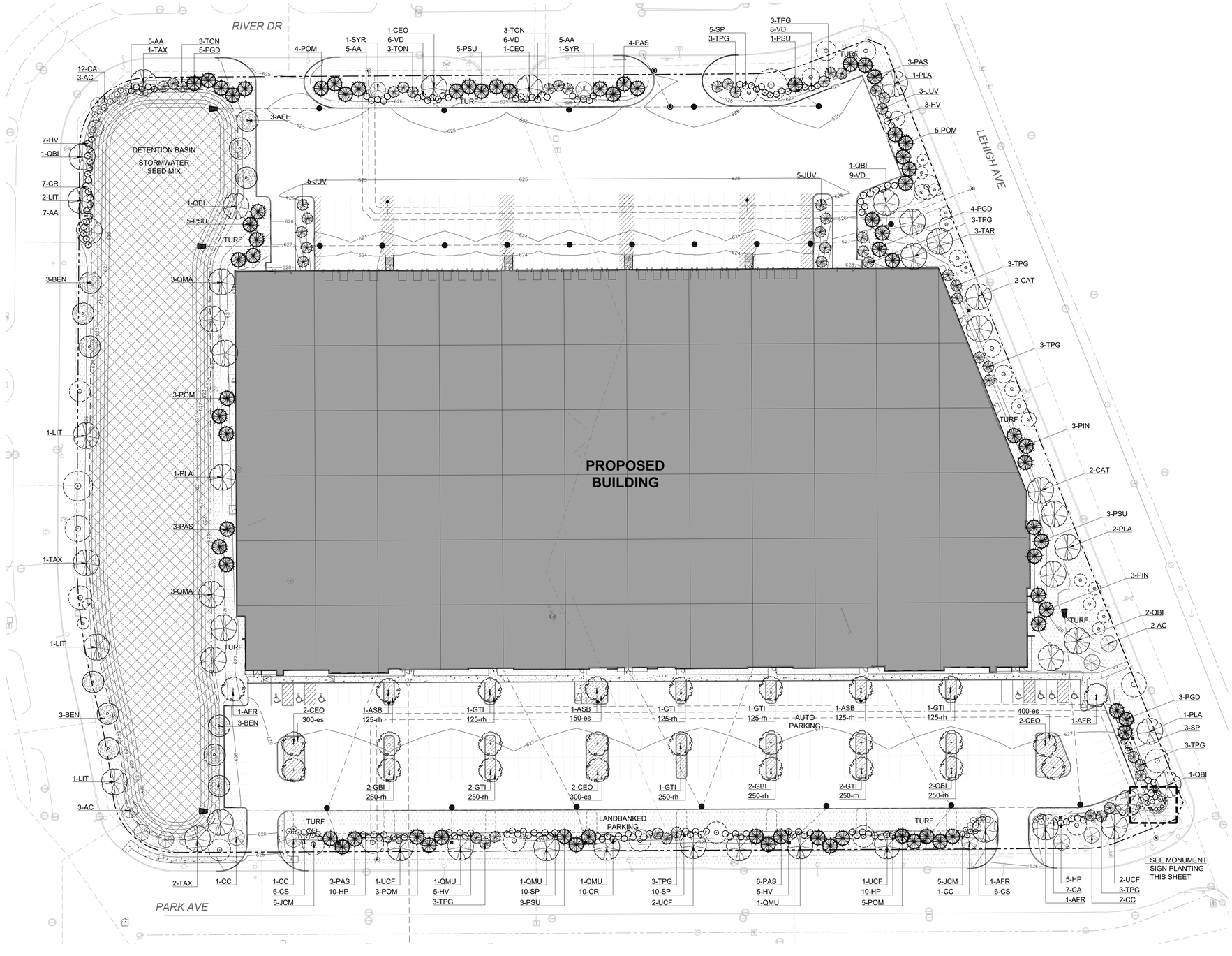
BRIDGE INDUSTRIAL
MORTON GROVE, ILLINOIS

EXISTING TREE INVENTORY

date. 04-29-25
drawn DJW/DSP
checked KMT

job no. 25080

sheet no. TP 1.1

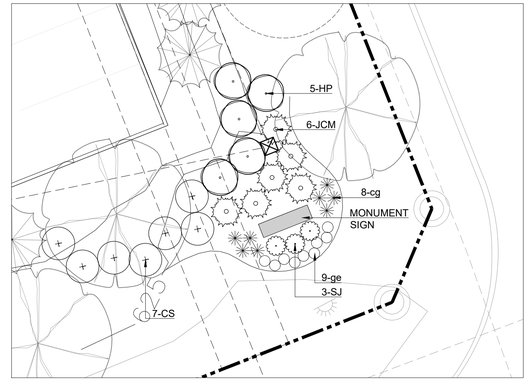


OVERALL LANDSCAPE PLAN KEY

SCALE: 1" = 40'-0"

N

0 20' 40' 80'



MONUMENT SIGN PLANTING

SCALE: 1" = 10'-0"

N

Village of Morton Grove Landscape Ordinance Landscape Requirement Summary			
		Required	Proposed/Existing
Green Space (Industrial Lots 15%)	***477,960 SF***		
Total Site Green Space		71,694 SF	142,053 SF
Tree Removal Mitigation ***Existing Trees 12" or greater***	***79 Removals***		
Replacement Trees for Removals		79	102
Note: See Sheet TP1.1 for Tree Removal and Mitigation Summary			
Site Parking Perimeter Planting ***R.O.W. adjacent***	***804 LF***		
3' ht year-round, opaque screening	100%	100%	100%
Site Parking Perimeter Planting ***Other Property Adjacent, Non-residential***	***1949 LF***		
Total Trees (Shade/Evergreen/Ornamental)	1:80 LF	24	109
Shade Trees			23
Evergreen Trees			35
Ornamental Trees			5
Parking Lot Interior Landscaping ***>20,000 SF***	***69,789 SF***		
Interior Greenspace	7%	4,885 SF	4,885 SF
Shade Trees	1:100 SF	48	26
Screening - Loading Docks	***789 LF***		
5' ht year-round, opaque screening		100%	100%

PLANT KEY

SHADE TREE

ORNAMENTAL TREE

EVERGREEN TREE

PROPOSED PLANT TOTALS

TOTAL SHADE TREES:	85
TOTAL EVERGREEN TREES:	123
TOTAL ORNAMENTAL TREES:	15

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REGISTERED LANDSCAPE ARCHITECT
KATHRYN MAXWELL TALLY
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BRIDGE INDUSTRIAL
MORTON GROVE, ILLINOIS

OVERALL LANDSCAPE PLAN
MONUMENT SIGN PLANTING
LANDSCAPE REQUIREMENTS
PLANT SYMBOL KEY

date: 04-29-25
drawn: DJWDSP
checked: KMT

job no. 25080

sheet no. L1.0

Master Plant List

Symbol	Quantity	Botanical Name	Common Name	Size	Origin	Notes
Shade Trees						
AFR	4	ACER X FREEMANII 'AUTUMN BLAZE'	AUTUMN BLAZE FREEMAN MAPLE	3" BB	NATIVAR	
ASB	3	ACER SACCHARUM 'BARRETT COLE'	APOLLO SUGAR MAPLE	3" BB	NATIVAR	COLUMNAR
AEH	3	AESCULUS HIPPOCASTANUM	COMMON HORSECHESTNUT	3" BB	NATIVE	
BEN	9	BETULA NIGRA	RIVER BIRCH	10' BB	NATIVE	
CAT	4	CATALPA SPECIOSA	NORTHERN CATALPA	3" BB	NATIVE	
CEO	8	CELTUS OCCIDENTALIS	HACKBERRY	3" BB	NATIVE	
GBI	6	GINKGO BILOBA 'AUTUMN GOLD'	GINKGO	3" BB		MALE SPEC. ONLY
GTI	9	GLEDITSIA TRIACANTHOS 'SHADEMASTER'	SHADEMASTER HONEYLOCUST	3" BB		
LIT	5	LIRODENDRON TULIPIFERA	TULIPTREE	3" BB	NATIVE	
PLA	5	PLATANUS x ACERIFOLIA 'MORTON CIRCLE'	EXCLAMATION LONDON PLANETREE	3" BB		
QBI	6	QUERCUS BICOLOR	SWAMP WHITE OAK	3" BB	NATIVE	
QMA	6	QUERCUS MACROCARPA	BUR OAK	3" BB	NATIVE	
QMU	4	QUERCUS MUEHLENBERGII	CHINKAPIN OAK	3" BB	NATIVE	
TAX	4	TAXODIUM DISTICHUM	BALD-CYPRESS	3" BB		
TAR	5	TILIA AMERICANA 'REDMOND'	REDMOND AMERICAN LINDEN	3" BB	NATIVAR	
UCF	4	ULMUS x 'FRONTIER'	FRONTIER ELM	3" BB		
Evergreen Trees						
JUV	13	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	8' BB	NATIVE	
PAS	19	PICEA AIBES	NORWAY SPRUCE	8' BB		
PGD	12	PICEA GLAUCA VAR. DENSATA	BLACK HILLS SPRUCE	8' BB		
POM	20	PICEA OMORIKA	SERBIAN SPRUCE	8' BB		
PIN	6	PINUS STROBUS	EASTERN WHITE PINE	8' BB		
PSU	17	PSEUDOSTUGA MENZIESII	DOUGLAS FIR	8' BB		
TON	9	THUJA OCCIDENTALIS 'NIGRA'	DARK GREEN ARBORVITAE	8' BB	NATIVAR	
TPG	27	THUJA PLICATA 'GREEN GIANT'	GREEN GIANT ARBORVITAE	8' BB		
Ornamental Trees						
AC	8	AMELANCHIER CANADENSIS	SHADBLOW SERVICEBERRY	6' BB	NATIVE	
CC	5	CERCIS CANADENSIS	EASTERN REDBUD	8' BB	NATIVE	
SYR	2	SYRINGA RETICULATA 'IVORY SILK'	IVORY SILK TREE LILAC	8' BB		
Evergreen Shrubs						
JCM	16	JUNIPERUS CHINENSIS 'MINT JULIP'	MINT JULIP SPREADING JUNIPER	24" BB		
Deciduous Shrubs						
AA	43	ARONIA ARBUTIFOLIA 'BRILLIANTISSIMA'	RED CHOKEBERRY	5 GAL	NATIVAR	
CA	19	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	HUMMINGBIRD CLETHRA	5 GAL	NATIVAR	
CR	17	CORNUS RACEMOSA	GRAY DOGWOOD	5 GAL	NATIVE	
CS	19	CORNUS SERICEA 'ISANTI'	ISANTI RED TWIG DOGWOOD	24" BB	NATIVAR	
HV	20	HAMMAMELIS VERNALIS	VERNAL WITCHHAZEL	4' BB	NATIVE	
HP	30	HYDRANGEA PANICULATA 'TARDIVA'	TARDIVA HYDRANGEA	36" BB		
SJ	3	SPIREA JAPONICA 'LITTLE PRINCESS'	LITTLE PRINCESS SPIREA	24" BB		
SP	28	SYRINGA PATULA 'MISS KIM'	MISS KIM LILAC	24" BB		
VD	29	VIBURNUM DENTATUM 'CHICAGO LUSTRE'	CHICAGO LUSTRE ARROWWOOD VIBURNUM	48" BB	NATIVAR	
Groundcover						
es	1150	ERAGROSTIS SPECTABILIS	PURPLE LOVEGRASS	3" POTS	NATIVE	
rh	2250	RUELLIA HUMILIS	WILD PETUNIA	3" POTS	NATIVE	
Perennials						
ge	9	GERANIUM X 'JOHNSON'S BLUE'	JOHNSON'S BLUE GERANIUM	1 GAL		
Grasses						
cg	8	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER'	FEATHER REED GRASS	3 GAL		

PROPOSED PLANT TOTALS

TOTAL SHADE TREES:	85
TOTAL EVERGREEN TREES:	123
TOTAL ORNAMENTAL TREES:	15

Stormwater Seed Mix

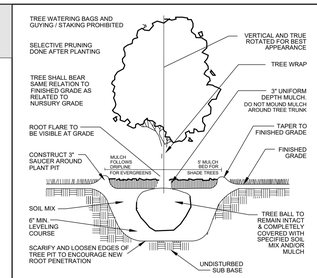
Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses/Sedges/Rushes:		
Bolboschoenus fluviatilis	River Bulrush	1.00
Carex cristatella	Crested Oval Sedge	0.50
Carex lurida	Bottlebrush Sedge	3.00
Carex vulpinoidea	Brown Fox Sedge	2.00
Elymus virginicus	Virginia Wild Rye	24.00
Glyceria striata	Fowl Manna Grass	1.00
Juncus effusus	Common Rush	1.00
Leersia oryzoides	Rice Cut Grass	1.00
Panicum virgatum	Switch Grass	2.00
Schoenoplectus tabernaemontani	Great Bulrush	3.00
Scirpus atrovirens	Dark Green Rush	2.00
Scirpus cyperinus	Wool Grass	1.00
	Total	**41.50**
Temporary Cover:		
Avena sativa	Common Oat	512.00
	Total	**512.00**
Forbs & Shrubs:		
Alisma subcordatum	Common Water Plantain	2.50
Asclepias incarnata	Swamp Milkweed	2.00
Bidens spp.	Bidens Species	2.00
Eupatorium perfoliatum	Common Boneset	1.00
Helenium autumnale	Sneezeweed	2.00
Iris virginica v. shrevei	Blue Flag	4.00
Lycopus americanus	Common Water Horehound	0.50
Mimulus ringens	Monkey Flower	1.00
Penthorum sedoides	Ditch Stonecrop	0.50
Persicaria spp.	Pinkweed Species	2.00
Rudbeckia subtomentosa	Sweet Black-Eyed Susan	1.00
Rudbeckia triloba	Brown-Eyed Susan	1.50
Sagittaria latifolia	Common Arrowhead	1.00
Senna hebecarpa	Wild Senna	2.00
Symphyotrichum lanceolatum	Panicled Aster	0.50
Symphyotrichum novae-angliae	New England Aster	0.50
Thalictrum dasycarpum	Purple Meadow Rue	2.00
	Total	**26.00**

Mix Statistics

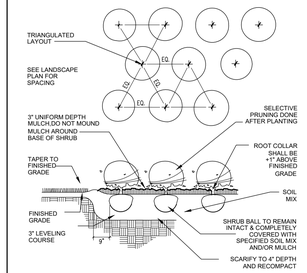
Native Component	PLS lbs./Acre	PLS Seeds/Acre	PLS Seeds/Sq. Ft.	% of Native Mix
Forbs	1.63	1,334,949	30.65	32.19%
Grasses	2.59	2,812,650	64.57	67.81%
Total Natives	4.22	4,147,599	95.22	100.00%
Cover	32.00	576,000	13.22	
Totals	36.22	4,723,599	108.44	

GENERAL CONSTRUCTION NOTES

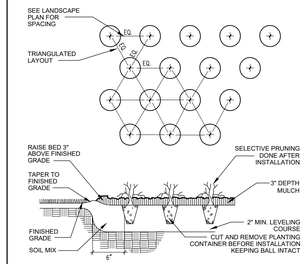
1. REQUIRED LANDSCAPE MATERIAL SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS AND BE STAKED, WRAPPED, WATERED AND MULCHED PER ORDINANCE.
2. BEFORE ANY EXCAVATION ON THE SITE, CALL TO LOCATE ANY EXISTING UTILITIES ON THE SITE. THE CONTRACTOR SHALL FAMILIARIZE HIM/HERSELF WITH THE LOCATIONS OF ALL BURIED UTILITIES IN THE AREAS OF WORK BEFORE STARTING OPERATIONS. THE CONTRACTOR SHALL BE LIABLE FOR THE COST OF REPAIRING OR REPLACING ANY BURIED CONDUITS, CABLES OR PIPING DAMAGED DURING THE INSTALLATION OF THIS WORK.
3. FOUR FOOT HIGH FENCING OR OTHER RIGID MATERIAL IS TO BE ERECTED AROUND THE DRIP-LINE OF ALL TREES TO BE SAVED.
4. PLANT QUANTITIES ON PLANT LIST INTENDED TO BE A GUIDE. ALL QUANTITIES SHALL BE CHECKED AND VERIFIED ON PLANTING PLAN. ANY DISCREPANCIES SHALL BE DISCUSSED WITH THE LANDSCAPE ARCHITECT.
5. ANY DEVIATIONS FROM OR MODIFICATIONS TO THIS PLAN SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
6. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT UPON DELIVERY OF PLANT MATERIAL TO THE SITE. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL THAT DOESN'T MEET STANDARDS OR SPECIFICATIONS OF THE PROJECT.
7. ALL PLANT MATERIAL TO BE INSTALLED PER THE PLANTING DETAILS PROVIDED ON THIS PLAN SET.
8. ALL BED EDGES TO BE WELL SHAPED, SPADE CUT, WITH LINES AND CURVES AS SHOWN ON THIS PLAN SET.
9. ALL PLANTING BEDS TO BE PREPARED WITH PLANTING MIX: 50% TOPSOIL, 50% SOIL AMENDMENTS (3 PARTS PEATMOSS, 1 PART COMPOST, 1 PART SAND)
10. ALL PARKING LOT ISLANDS SHALL BE BACKFILLED WITH THE FOLLOWING: 2' OF BLENDED GARDEN SOIL MIX (60% TOPSOIL, 30% COMPOST, 10% SAND) OR 6" OF *ONE STEP* BY MIDWEST TRADING, TOP DRESSED AND TILLED INTO 18" OF TOPSOIL.
11. ALL SPECIFIED LANDSCAPE MATERIAL INDICATED ON THE CONSTRUCTION DOCUMENTS WILL BE REQUIRED TO BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT AND MUST BE REPLACED SHOULD IT DIE OR BECOME DAMAGED.
12. ALL PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE FROM SUBSTANTIAL COMPLETION AS DETERMINED BY THE LANDSCAPE ARCHITECT, AND SHALL BE REPLACED SHOULD IT DIE WITHIN THAT PERIOD.
13. PROTECT STRUCTURES, SIDEWALKS, PAVEMENTS AND UTILITIES TO REMAIN FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUTS AND OTHER HAZARDS CAUSED BY SITE IMPROVEMENT OPERATIONS.
14. ALL LAWN AREAS TO BE SEEDED WITH STANDARD TURF GRASS SEED AND COVERED WITH EROSION CONTROL BLANKET. UNLESS OTHERWISE SPECIFIED ON THE PLAN.
15. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, EXCLUDING SHRUB BEDS, TO BE RESTORED WITH TURF GRASS SEED AND COVERED WITH AN EROSION CONTROL BLANKET.
16. CAREFULLY MAINTAIN PRESENT GRADE AT BASE OF ALL EXISTING TREES TO REMAIN. PREVENT ANY DISTURBANCE OF EXISTING TREES INCLUDING ROOT ZONES. USE TREE PROTECTION BARRICADES WHERE INDICATED. PROTECT EXISTING TREES TO REMAIN AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, BRUISING OF BARK OR SMOTHERING OF TREES. DRIVING, PARKING, DUMPING, STOCKPILING AND/OR STORAGE OF VEHICLES, EQUIPMENT, SUPPLIES, MATERIALS OR DEBRIS ON TOP THE ROOT ZONES AND/OR WITHIN THE DRIPLINE OF EXISTING TREES OR OTHER PLANT MATERIAL TO REMAIN IS STRICTLY PROHIBITED.
17. THE CONTRACTOR AT ALL TIMES SHALL KEEP THE PREMISES ON WHICH WORK IS BEING DONE, CLEAR OF RUBBISH AND DEBRIS. ALL PAVEMENT AND DEBRIS REMOVED FROM THE SITE SHALL BE DISPOSED OF LEGALLY
18. ALL WORK AND OPERATIONS SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES.



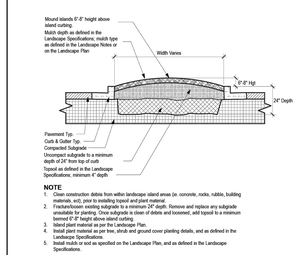
1 L2.0 TREE PLANTING DETAIL
SCALE: NO SCALE



2 L2.0 SHRUB PLANTING DETAIL
SCALE: NO SCALE

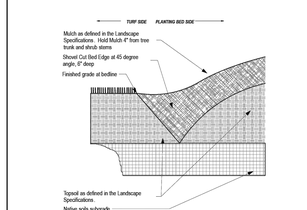


3 L2.0 GROUNDCOVER DETAIL
SCALE: NO SCALE



NOTE
1. Clean construction debris from within landscape island areas (ie. concrete, rocks, rubble, building materials, ect), prior to installing topsoil and plant material.
2. Fracture/loosen existing subgrade to a minimum 24" depth. Remove and replace any subgrade unsuitable for planting. Once subgrade is clean of debris and loosened, add topsoil to a minimum bermed 6"-8" height above island curbing.
3. Island plant material as per the Landscape Plan.
4. Install plant material as per tree, shrub and ground cover planting details, and as defined in the Landscape Specifications.
5. Install mulch or sod as specified on the Landscape Plan, and as defined in the Landscape Specifications.

4 L2.0 PARKING ISLAND DETAIL
SCALE: NO SCALE



5 L2.0 SPADED PLANTING BED EDGE DETAIL
SCALE: NO SCALE

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REGISTERED LANDSCAPE ARCHITECT
KATHRYN MAXWELL TALTY
157-001196
STATE OF ILLINOIS

no.	revision description	initial	date
1	ISSUED FOR REVIEW	KMT	04-29-25
2	PER VILLAGE COMMENTS	KMT	07-01-25

BRIDGE INDUSTRIAL
MORTON GROVE, ILLINOIS

MASTER PLANT LIST
SEED MIX SCHEDULE
CONSTRUCTION NOTES
PLANTING DETAILS

date: 04-29-25
drawn: DJW/DSP
checked: KMT

job no. 25080

sheet no. L2.0

NATIVE PLANT & SEED INSTALLATION MANAGEMENT AND MONITORING PLAN

ALL NATIVE PLANTING AND SEEDING INSTALLATION, MANAGEMENT AND MONITORING TO BE CONDUCTED BY A QUALIFIED, EXPERIENCED CONTRACTOR SPECIALIZING IN RESTORING AND MANAGING NATURAL LANDSCAPES IN THE MIDWEST.
THE SELECTED CONTRACTOR IS TO BE HELD ACCOUNTABLE FOR THE APPROPRIATE INSTALLATION METHODS AND MANAGEMENT AND MONITORING OF ALL NATIVE AREAS.

PLANT MATERIAL INSTALLATION - NATIVE SEEDING

PREPARE AREA FOR SEEDING - PREPARE THE SOIL AND CREATE OPTIMAL PLANT CONDITIONS, BEFORE DISTURBING ANY GROUND:

- CHECK FOR ANY BURIED UTILITIES
- CLEAR AREA OF DEBRIS THAT WOULD INTERFERE WITH PLANTING
- MOW ANY EXCESS EXISTING VEGETATION GROWTH
- APPLY BROAD-SPECTRUM OR TARGETED HERBICIDE, DEPENDING ON SPECIES PRESENT
- DE-COMPACT ANY AREAS OF SPECIAL CONCERN
  - LIGHTLY DE-COMPACT TILLED OR LOOSE SOIL WITH A ROLLER, CULTIPACKER, OR SIMILAR EQUIPMENT. IF USING A NO-TILL SEED DRILL, TILLING CAN USUALLY BE OMITTED.
  - IF GROUND IS WET, TILLING SHOULD NOT OCCUR UNTIL THE SOIL DRIES ENOUGH TO BREAK APART WHEN TILLED.

FOLLOW THE APPROPRIATE TIMING:

- THE OPTIMAL TIME TO INSTALL SEED IS FROM THE FALL (NOVEMBER 1) TO LATE SPRING (JUNE 15).
- WETLANDS SHOULD BE SEEDED IN THE WINTER WHILE THE SITE IS FROZEN AND EQUIPMENT CAN MORE EASILY ACCESS THE SITE.

METHOD FOR SEEDING AND EROSION CONTROL:

- BROADCASTING:
  - FOR SMALL (TYPICALLY TWO ACRES OR LESS) OR IRREGULARLY SHAPED AREAS, SEED CAN BE PLANTED BY HAND BROADCASTING TO AID SEED DISTRIBUTION, COMBINE THE SEED MIX WITH FILLER MATERIALS, SUCH AS DRY SAWDUST, SAND, OR VERMICULITE.
  - USING A HAND-CRANK OR TOW-BEHIND BROADCASTER, START WITH HALF OF THE SEED AND TRY TO COVER THE ENTIRE AREA WITH THAT AMOUNT OF SEED. TAKE THE REMAINING HALF OF THE SEED, GO TO THE OPPOSITE END OF THE SITE AND COVER IT AGAIN. AFTER BROADCASTING IS COMPLETE, IT IS IMPORTANT TO USE A CULTIPACKER OR ROLLER OVER THE AREA TO MAKE GOOD SEED-TO-SOIL CONTACT. DO NOT COVER SEED MORE THAN 1/4-INCH DEEP.
- NO-TILL DRILL:
  - FOR LARGER AREAS AND SITES WITH EXISTING VEGETATION, USE A NO-TILL SEED DRILL, WHICH DOES NOT REQUIRE THE SOIL TO BE TILLED BEFORE PLANTING, RESULTING IN MINIMAL SOIL DISTURBANCE. NO-TILL DRILLS PLANT SEED IN ROWS BY OPENING SLITS IN THE SOIL, INTO WHICH SEED IS DEPOSITED. IF USING A NO-TILL DRILL, SEED SHOULD NOT BE BURIED BELOW 1/8" DEPTH PER SPECIFIC MANUFACTURER'S RECOMMENDATIONS. BECAUSE THE DIVERSITY OF SEED SIZES MAKES DRILL CALIBRATION A CHALLENGE, PERFORM A FEW TEST AREAS FIRST TO HELP PREVENT RUNNING OUT OF SEED.
- EROSION CONTROL METHOD:
  - INSTALL BIODEGRADABLE EROSION CONTROL BLANKET (NAG S75BN OR EQUAL) UNTIL SEED HAS GERMINATED.

PLANT MATERIAL MANAGEMENT - NATIVE SEEDING - 5-YEAR PERIOD

TO HELP ENSURE SUCCESS, PROJECTS NEED A MAINTENANCE AND MONITORING PLAN THAT IS FLEXIBLE AND SUPPORTS SITE DEVELOPMENT GOALS. WHILE NATIVE PLANTS TEND TO GERMINATE AND DEVELOP AT A SLOWER RATE THAN ORNAMENTAL PERENNIALS OR TURF GRASS, REGULAR MAINTENANCE DURING THE ESTABLISHMENT PERIOD GREATLY IMPROVES PROJECT SUCCESS. REGULAR MAINTENANCE AND MONITORING CONTROLS INVASIVE SPECIES, ENSURES OPTIMAL MOISTURE LEVELS ARE PRESENT, AND IDENTIFIES OTHER NECESSARY MANAGEMENT ACTIONS.

- NATIVE AREAS NEED BETWEEN 3 TO 5 YEARS TO ESTABLISH.
- PREFERRED PLANTING LATE FALL (ANY TIME AFTER NOVEMBER 1; IF THE SOIL SURFACE IS DRY AND COLD ENOUGH TO PREVENT GERMINATION AND SEED CAN BE WORKED INTO SOIL.
- LET SEED GERMINATE AND GROW FOR ONE FULL SEASON. **DO NOT** APPLY HERBICIDES FOR WEED CONTROL WITHIN THE FIRST GROWING SEASON. IF LARGE WEEDS ARE UNSIGHTLY, CLIP OFF; **DO NOT PULL** WEEDS TO KEEP GROWTH DOWN. **DO NOT** ALLOW SEED HEADS TO FORM.
- MOW FIRST TIME WHEN ESTABLISHED IN FIRST SEASON TO 12"-18" HIGH, TO SCATTER SEED HEADS. IF CLUMPING OCCURS LIGHTLY RAKE TO DISBURSE SEED.
- MOW 2-3 ADDITIONAL TIMES TO MAINTAIN 6-9 INCHES IN HEIGHT.
- SOME PERENNIAL SEEDS MAY NOT GERMINATE UNTIL THE FOLLOWING YEAR.
- IF FALL PLANTING IS NOT POSSIBLE, SPRING SEEDING CAN BE DONE (WEATHER PERMITTING) AS EARLY AS JANUARY - PREFERABLY BEFORE APRIL 15.
- SECOND SEASON MOW 3-4 TIMES TO MAINTAIN 8-10 INCHES IN HEIGHT.
- AT THE END OF THE THIRD SEASON A CONTROLLED BURN PROGRAM TO BE PERFORMED.
- 4 (FOUR) ANNUAL WEED CONTROL EVENTS (SELECTIVE HERBICIDE AND MECHANICAL) TO BE PERFORMED THROUGHOUT ALL NATIVE PLAN COMMUNITIES STARTING ONCE THE SEED IS SOWN UNTIL SIGN-OFF IS GRANTED.

MINIMUM PERFORMANCE STANDARDS AND MONITORING ACTIVITIES

NATIVE PLANT MATERIALS

PERFORMANCE STANDARDS ARE ESTABLISHED FOR ALL PROPOSED PROJECTS INVOLVING NATURALIZED AREAS SO THAT THE RELATIVE SUCCESS OF CREATION AND ENHANCEMENT EFFORTS MAY BE EVALUATED. IF THE PERFORMANCE STANDARDS ARE NOT ACHIEVED BY THE END OF THE FIVE-YEAR MANAGEMENT AND MONITORING PROGRAM, ACCEPTANCE MEETINGS SHALL BE HELD TO DETERMINE THE FUTURE COURSE OF ACTION. IT IS LIKELY THAT IN SUCH A CASE THAT THE MAINTENANCE AND MONITORING PERIOD WILL BE EXTENDED.

- NOTIFICATION - THE DEVELOPER SHALL NOTIFY [MUNICIPALITY] UPON COMPLETION OF PLANTINGS.
  - THE OWNER'S ENVIRONMENTAL SPECIALIST SHALL INSPECT THE PLANTINGS UPON COMPLETION OF ALL MAINTENANCE PROCEDURES AND NOTIFY [MUNICIPALITY] OF THE REMEDIAL ACTIONS TAKEN.
- NATIVE AREAS ARE TO BE MONITORED FOR A MINIMUM OF 5 (FIVE) YEARS FROM DATE OF INSTALLATION.
  - MONITOR ALL NATIVE AREAS 2 (TWO) TIMES ANNUALLY AT A TIME OF YEAR WHEN PLANTS ARE EVIDENT AND IDENTIFIABLE. VISITS SHOULD OCCUR AT SPACED INTERVALS THROUGHOUT THE GROWING SEASON.
  - CONDUCT MONITORING VISITS UTILIZING SYSTEMATIC FIELD TECHNIQUES. TRAVERSE ENTIRE NATIVE AREA, DOCUMENT FLORA AND NOTE TOP 3 DOMINANT SPECIES.
- WITHIN 3 MONTHS OF SEED INSTALLATION, AT LEAST 90% OF THE SEEDED AREAS ("LOW PROFILE", "STORMWATER" AND "SWALE" SEED MIX), AS MEASURED BY AERIAL COVERAGE, SHALL BE VEGETATED. A MINIMUM 100% VEGETATIVE COVERAGE SHALL BE MAINTAINED THROUGHOUT, AND AT THE END OF, THE FIVE-YEAR PERIOD FOR THESE AREAS.
  - THIS STANDARD DOES NOT APPLY TO THE EMERGENT ZONES.
- THE NATURALIZED AREAS SHALL NOT CONTAIN ANY RILLS GREATER THAN 4 INCHES WIDE AND 4 INCHES DEEP THROUGHOUT, AND AT THE END, OF THE THREE-YEAR PERIOD.
- AT THE END OF THE SECOND GROWING SEASON, 30% SEED MIX PRESENCE FOR THE "LOW PROFILE", "STORMWATER" AND "SWALE" SEED MIXES SHALL BE ACHIEVED. AT THE END OF THE THIRD GROWING SEASON, 50% SEED MIX PRESENCE FOR THE "LOW PROFILE", "STORMWATER" AND "SWALE" SEED MIXES SHALL BE ACHIEVED.
  - SEED MIX PRESENCE SHALL BE EVALUATED SEPARATELY FOR THESE THREE MIXES.
- NO AREA OVER THE ENTIRE NATIVE PLANTED SITE GREATER THAN 1 SQUARE METER WILL BE DEVOID OF VEGETATION (AS MEASURED BY AERIAL COVERAGE/OCULAR ESTIMATION), UNLESS SPECIFIED ON APPROVED PLANS.
  - THIS ANNUAL PERFORMANCE STANDARD DOES NOT APPLY TO EMERGENT AND AQUATIC COMMUNITIES.
- THE NATIVE PLANTED AREAS WILL MEET THE FOLLOWING ANNUAL STANDARDS FOR THE PRESENCE OF NATIVE, NON-INVASIVE PERENNIAL SPECIES (AS MEASURED BY AERIAL COVERAGE/OCULAR ESTIMATION): YEAR 1 - 15%, YEAR 2 - 50%, YEAR 3 - 75%, YEAR 4 & 5 - 85%
  - THIS STANDARD TO BE MEASURED SEPARATELY FOR EACH SEED MIX ZONE.
- AT THE END OF THE THIRD GROWING SEASON, NONE OF THE THREE MOST DOMINANT SPECIES WITHIN THE PLANTED AREAS WILL BE INVASIVE OR NON-NATIVE SPECIES AS INSPECTED ANNUALLY. THE PROJECT MANAGER WILL DETERMINE THE APPROPRIATE TARGET INVASIVE OR NON-NATIVE SPECIES. THEY WILL TYPICALLY INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING: RAGWEED (AMBROSIA SPP.), CATTAIL (TYPHA SPP.), REED CANARY GRASS (PHALARIS ARUNDINACEA), PURPLE LOOSESTRIFE (LYTHRUM SALICARIA), COMMON REED (PHRAGMITES AUSTRALIS), CANADIAN THISTLE (CIRSIUM ARVENSE), SANDBAR WILLOW (SALIX INTERIOR), KENTUCKY BLUE GRASS (POA PRATENSIS), YELLOW SWEET-CLOVER (MELILOTUS OFFICINALIS), TEASEL (DIPSACUS SPP.), JAPANESE-KNOTWEED (REYNOUTRIA JAPONICA), AND ASIAN BITTERSWEET (CELASTRUS ORBICULATUS), BUCKTHORN (RHAMNUS SPP.).
  - THIS STANDARD TO BE MEASURED SEPARATELY FOR EACH SEED MIX ZONE.
- SEED: AT THE END OF THE THIRD GROWING SEASON, 50% VEGETATIVE COVERAGE SHALL BE ACHIEVED (AS MEASURED BY AERIAL COVERAGE/OCULAR ESTIMATION).
- EMERGENTS: RELATIVE COVERAGE OF CATTAILS (AS MEASURED BY AERIAL COVERAGE/OCULAR ESTIMATION) SHALL BE LESS THAN 5% THROUGHOUT, AND AT THE END OF, THE THREE YEAR MONITORING PERIOD.
- PLUGS: 90% OF THE PLANTS WILL BE ALIVE, IN HEALTHY CONDITION, AND REPRESENTATIVE OF THE INDIVIDUAL SPECIES AT THE END OF EACH GROWING SEASON. REPLANTING WILL TAKE PLACE UNTIL THIS STANDARD IS ACHIEVED.
- WOODY PLANTS: 100% OF THE PLANTED TREES AND SHRUBS WILL BE ALIVE, IN HEALTHY CONDITION, AND REPRESENTATIVE OF THE INDIVIDUAL SPECIES AT THE END OF THE 3RD GROWING SEASON.
  - ANNUAL REPLACEMENTS ARE REQUIRED TO ACHIEVE THIS STANDARD.
- RELATIVE COVERAGE (DETERMINED BY OCULAR ESTIMATION) OF INVASIVE SPECIES (I.E., COMMON REED, REED CANARY GRASS, PURPLE LOOSESTRIFE, ETC.) IN AGGREGATE SHALL BE LESS THAN 5% THROUGHOUT, AND AT THE END OF, THE THREE-YEAR PERIOD.
  - THIS STANDARD SHALL BE EVALUATED SEPARATELY FOR EACH SEED AND PLANT MIX ZONE (I.E., "LOW PROFILE", "STORMWATER" AND "SWALE" SEED MIX, EMERGENT).
- NATIVE MEAN C VALUE > 3.0 AND NATIVE FQI VALUE > 20.0 FOR ALL NATIVE PLANT COMMUNITIES.
  - THIS STANDARD SHALL BE EVALUATED SEPARATELY FOR EACH SEED AND PLANT MIX ZONE (I.E., "LOW PROFILE", "STORMWATER" AND "SWALE" SEED MIX, EMERGENT).
- SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REGULARLY MAINTAINED. ANY EROSION OBSERVED ON-SITE SHALL BE REPAIRED TO THE DESIGNED CONDITION WITHIN 30 DAYS OF OBSERVATION.

PLANTING NOTES FOR DETENTION AREAS

1. REFER TO CIVIL ENGINEERING DRAWINGS FOR CONSTRUCTION DETAILS OF DETENTION AREAS
2. REQUIRED LANDSCAPE MATERIAL SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS AND BE WATERED AND MULCHED PER CONSTRUCTION DOCUMENTS.
3. ALL PROPOSED PLANT SUBSTITUTIONS WITHIN DETENTION AREAS MUST BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
4. ALL REQUIRED LANDSCAPE MATERIAL INDICATED ON THE APPROVED PLANS WILL BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT AND MUST BE REPLACED SHOULD IT DIE.
5. CONTRACTOR RESPONSIBLE FOR THE MAINTENANCE ALL PLANT MATERIAL WITHIN DETENTION AREAS AS SPECIFIED BY THE LANDSCAPE ARCHITECT FOR THE FIRST YEAR AFTER INSTALLATION.
6. ALL PLANT MATERIAL WITHIN DETENTION AREAS TO HAVE A 1 YEAR WARRANTEE STARTING UPON LANDSCAPE ARCHITECT ISSUING "SUBSTANTIAL COMPLETION".
7. WATER FOWL BARRIER CONTROL TO BE INSTALLED AT 8" O.C. IN ALL DETENTION AREAS PLANTED WITH PLUGS.
8. METAL SIGNS (12"x18") TO BE INSTALLED AT 150' INTERVALS AROUND ALL NATIVE AREAS STATING "NATIVE PLANTING DO NOT MOW".
9. ALL WORK AND OPERATIONS SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES.

GROUND TREATMENT KEY

DETENTION AREAS BELOW THE HWL

Area of detention below the HWL to be to seeded with "Stormwater Seed Mix" as supplied by Stantec Native Plant Nursery. See Sheet L2.0 for schedule.

TURF GRASS - MOWED LAWN

All areas of restoration, not designated to be planted or mulched, are to be seeded with standard turf seed grass and covered with an erosion control blanket.

NOTE: All other areas disturbed by construction activities, excluding shrub beds, to be restored with turf grass seed and covered with an erosion control blanket.

LANDSCAPE MAINTENANCE SPECIFICATIONS

THE CONTRACTOR SHALL PROVIDE AS A SEPARATE BID, MAINTENANCE FOR A PERIOD OF 1 YEAR AFTER FINAL ACCEPTANCE OF THE PROJECT LANDSCAPING. THE CONTRACTOR MUST BE ABLE TO PROVIDE CONTINUED MAINTENANCE IF REQUESTED BY THE OWNER OR PROVIDE THE NAME OF A REPUTABLE LANDSCAPE CONTRACTOR WHO CAN PROVIDE MAINTENANCE.

STANDARDS

ALL LANDSCAPE MAINTENANCE SERVICES SHALL BE PERFORMED BY TRAINED PERSONNEL USING CURRENT, ACCEPTABLE HORTICULTURAL PRACTICES.

ALL WORK SHALL BE PERFORMED IN A MANNER THAT MAINTAINS THE ORIGINAL INTENT OF THE LANDSCAPE DESIGN.

ALL CHEMICAL APPLICATIONS SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT COUNTY, STATE AND FEDERAL LAWS, USING EPA REGISTERED MATERIALS AND METHODS OF APPLICATION. THESE APPLICATIONS SHALL BE PERFORMED UNDER THE SUPERVISION OF A LICENSED CERTIFIED APPLICATOR.

APPROVALS

ANY WORK PERFORMED IN ADDITION TO THAT WHICH IS OUTLINED IN THE CONTRACT SHALL ONLY BE DONE UPON WRITTEN APPROVAL BY THE OWNER'S REPRESENTATIVE.

ALL SEASONAL COLOR SELECTIONS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO ORDERING AND INSTALLATION.

SOIL TESTING

THE MAINTENANCE CONTRACTOR SHALL PERFORM SOIL TESTS AS NEEDED TO IDENTIFY ANY IMBALANCES OR DEFICIENCIES CAUSING PLANT MATERIAL DECLINE. THE OWNER SHALL BE NOTIFIED OF THE RECOMMENDATION FOR APPROVAL, AND THE NECESSARY CORRECTIONS MADE AT AN ADDITIONAL COST TO THE OWNER.

ACCEPTABLE SOIL TEST RESULTS:

	LANDSCAPE TREES & SHRUBS	TURF
PH RANGE	5.0-7.0	6.0-7.0
ORGANIC MATTER	>1.5%	>2.5%
MAGNESIUM (MG)	100+LBS./ACRE	100+LBS./ACRE
PHOSPHORUS (P2O5)	150+LBS./ACRE	150+LBS./ACRE
POTASSIUM (K2O)	120+LBS./ACRE	120+LBS./ACRE
SOLUBLE SALTS	NOT TO EXCEED 900PPM/1.9 MMHOS/CM IN SOIL; NOT TO EXCEED 1400 PPM/2.5 MMHOS/CM IN HIGH ORGANIC MIX	NOT TO EXCEED 750PPM/0.75 MMHOS/CM IN SOIL; NOT TO EXCEED 2000 PPM/2.0 MMHOS/CM IN HIGH ORGANIC MIX

FOR UNUSUAL SOIL CONDITIONS, THE FOLLOWING OPTIONAL TESTS ARE RECOMMENDED WITH LEVELS NOT TO EXCEED:

BORON	3 POUNDS PER ACRE
MANGANESE	50 POUNDS PER ACRE
POTASSIUM (K2O)	450 POUNDS PER ACRE
SODIUM	20 POUNDS PER ACRE

WORKMANSHIP

DURING LANDSCAPE MAINTENANCE OPERATIONS, ALL AREAS SHALL BE KEPT NEAT AND CLEAN. PRECAUTIONS SHALL BE TAKEN TO AVOID DAMAGE TO EXISTING STRUCTURES. ALL WORK SHALL BE PERFORMED IN A SAFE MANNER TO THE OPERATORS, THE OCCUPANTS AND ANY PEDESTRIANS.

UPON COMPLETION OF MAINTENANCE OPERATIONS, ALL DEBRIS AND WASTE MATERIAL SHALL BE CLEANED UP AND REMOVED FROM THE SITE, UNLESS PROVISIONS HAVE BEEN GRANTED BY THE OWNER TO USE ON-SITE TRASH RECEPTACLES. ANY DAMAGE TO THE LANDSCAPE, STRUCTURES, OR IRRIGATION SYSTEMS CAUSED BY THE MAINTENANCE CONTRACTOR, SHALL BE REPAIRED BY THE MAINTENANCE CONTRACTOR WITHOUT CHARGE TO THE OWNER.

TURF

GENERAL CLEAN UP

PRIOR TO MOWING, ALL TRASH, STICKS, AND OTHER UNWANTED DEBRIS SHALL BE REMOVED FROM LAWNS, PLANT BEDS, AND PAVED AREAS.

MOWING

TURF GRASSES, INCLUDING BLUE GRASS, TALL FESCUE, PERENNIAL RYEGRASS, ETC., SHALL BE MAINTAINED AT A HEIGHT OF 2" TO 3" IN SPRING AND FALL. FROM JUNE THROUGH SEPTEMBER, MOWING HEIGHT SHALL BE MAINTAINED AT NO LESS THAN 3".

THE MOWING OPERATION INCLUDES TRIMMING AROUND ALL OBSTACLES, RAKING EXCESSIVE GRASS CLIPPINGS AND REMOVING DEBRIS FROM WALKS, CURBS, AND PARKING AREAS. CAUTION: MECHANICAL WEEDERS SHOULD NOT BE USED AROUND TREES BECAUSE OF POTENTIAL DAMAGE TO THE BARK.

EDGING

EDGING OF ALL SIDEWALKS, CURBS AND OTHER PAVED AREAS SHALL BE PERFORMED ONCE EVERY OTHER MOWING. DEBRIS FROM THE EDGING OPERATIONS SHALL BE REMOVED AND THE AREAS SWEPT CLEAN. CAUTION SHALL BE USED TO AVOID FLYING DEBRIS.

FERTILIZING

SEASONALLY STEPPED FERTILIZER SHALL BE APPLIED IN AREAS BASED ON THE EXISTING TURF SPECIES.

LAWN WEED CONTROL: HERBICIDES

SELECTION AND PROPER USE OF HERBICIDES SHALL BE THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY. ALL CHEMICAL APPLICATIONS SHALL BE PERFORMED UNDER THE SUPERVISION OF A LICENSED CERTIFIED APPLICATOR. READ THE LABEL PRIOR TO APPLYING ANY CHEMICAL.

INSECT & DISEASE CONTROL FOR TURF

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING THE SITE CONDITIONS ON EACH VISIT TO DETERMINE IF ANY INSECT PEST OR DISEASE PROBLEMS EXIST. THE CONTRACTOR SHALL IDENTIFY THE INSECT PEST OR DISEASE, AS WELL AS THE HOST PLANT, AND THEN CONSULT THE MOST CURRENT EDITION OF THE COOPERATIVE EXTENSION SERVICE'S "COMMERCIAL INSECTICIDE RECOMMENDATION FOR TURF" FOR CONTROL. THE LICENSED APPLICATOR SHALL BE FAMILIAR WITH THE LABEL PROVIDED FOR THE SELECTED PRODUCT PRIOR TO APPLICATION.

INSPECTION AND TREATMENT TO CONTROL INSECT PESTS SHALL BE INCLUDED IN THE CONTRACT PRICE.

TREES, SHRUBS, & GROUND COVER

PRUNING

ALL ORNAMENTAL TREES, SHRUBS AND GROUND COVER SHALL BE PRUNED WHEN APPROPRIATE TO REMOVE DEAD OR DAMAGED BRANCHES, DEVELOP THE NATURAL SHAPES. DO NOT SHEAR TREES OR SHRUBS. IF PREVIOUS MAINTENANCE PRACTICE HAS BEEN TO SHEAR AND BALL, THEN A NATURAL SHAPE WILL BE RESTORED GRADUALLY.

PRUNING GUIDELINES:

1. PRUNE PLANTS THAT FLOWER BEFORE THE END OF JUNE (SPRING BLOOMING) IMMEDIATELY AFTER FLOWERING. FLOWER BUDS DEVELOP DURING THE PREVIOUS GROWING SEASON. FALL, WINTER OR SPRING PRUNING WOULD REDUCE THE SPRING FLOWERING DISPLAY.
2. PRUNE PLANTS THAT FLOWER IN JULY – SEPTEMBER (SUMMER OR AUTUMN BLOOMING) IN WINTER OR SPRING BEFORE NEW GROWTH BEGINS, SINCE THESE PLANTS DEVELOP FLOWERS ON NEW GROWTH.
3. DELAY PRUNING PLANTS GROWN FOR ORNAMENTAL FRUITS, SUCH AS COTONEASTERS AND VIBURNUMS.
4. HOLLIES AND OTHER EVERGREENS MAY BE PRUNED DURING WINTER IN ORDER TO USE THEIR BRANCHES FOR SEASONAL DECORATION. HOWEVER, SEVERE PRUNING OF EVERGREENS SHOULD BE DONE IN EARLY SPRING ONLY.
5. BROADLEAF EVERGREEN SHRUBS SHALL BE HAND-PRUNED TO MAINTAIN THEIR NATURAL APPEARANCE AFTER THE NEW GROWTH HARDENS OFF.
6. HEDGES OR SHRUBS THAT REQUIRE SHEARING TO MAINTAIN A FORMAL APPEARANCE SHALL BE PRUNED AS REQUIRED. DEAD WOOD SHALL BE REMOVED FROM SHEARED PLANTS BEFORE THE FIRST SHEARING OF THE SEASON.
7. CONIFERS SHALL BE PRUNED, IF REQUIRED, ACCORDING TO THEIR GENUS.
   A. YEWS, JUNIPERS, HEMLOCKS AND ARBORVITAE MAY BE PRUNED AFTER NEW GROWTH HAS HARDENED OFF IN LATE SUMMER. IF SEVERE PRUNING IS NECESSARY, IT MUST BE DONE IN EARLY SPRING.
   B. FIRS AND SPRUCES MAY BE LIGHTLY PRUNED IN LATE SUMMER, FALL, OR WINTER AFTER COMPLETING GROWTH. LEAVE SIDE BUDS. NEVER CUT CENTRAL LEADER.
   C. PINES MAY BE LIGHTLY PRUNED IN EARLY JUNE BY REDUCING CANDLES.
8. GROUNDCOVER SHALL BE EDGED AND PRUNED AS NEEDED TO CONTAIN IT WITHIN ITS BORDERS.
9. THINNING: REMOVE BRANCHES AND WATER SPROUTS BY CUTTING THEM BACK TO THEIR POINT OF ORIGIN ON PARENT STEMS. THIS METHOD RESULTS IN A MORE OPEN PLANT, WITHOUT STIMULATING EXCESSIVE GROWTH. THINNING IS USED ON CRAB APPLES, LILACS, VIBURNUMS, ETC.
10. RENEWAL PRUNING: REMOVE OLDEST BRANCHES OF SHRUB AT GROUND, LEAVING THE YOUNGER, MORE VIGOROUS BRANCHES. ALSO REMOVE WEAK STEMS. ON OVERGROWN PLANTS, THIS METHOD MAY BE BEST DONE OVER A THREE-YEAR PERIOD. RENEWAL PRUNING MAY BE USED ON FORSYTHIA, HYDRANGEA, SPIRAEA, ETC.

PLANTS OVERHANGING PASSAGEWAYS AND PARKING AREAS AND DAMAGED PLANTS SHALL BE PRUNED AS NEEDED.

SHADE TREES THAT CANNOT BE ADEQUATELY PRUNED FROM THE GROUND SHALL NOT BE INCLUDED IN THE MAINTENANCE CONTRACT. A CERTIFIED ARBORIST UNDER A SEPARATE CONTRACT SHALL PERFORM THIS TYPE OF WORK.

SPRING CLEANUP

PLANT BEDS SHALL RECEIVE A GENERAL CLEANUP BEFORE FERTILIZING AND MULCHING. CLEANUP INCLUDES REMOVING DEBRIS AND TRASH FROM BEDS AND CUTTING BACK HERBACEOUS PERENNIALS LEFT STANDING THROUGH WINTER, E.G. ORNAMENTAL GRASSES, SEDUM AUTUMN JOY.

FERTILIZING

FOR TREES, THE RATE OF FERTILIZATION DEPENDS ON THE TREE SPECIES, TREE VIGOR, AREA AVAILABLE FOR FERTILIZATION, AND GROWTH STAGE OF THE TREE. MATURE SPECIMENS BENEFIT FROM FERTILIZATION EVERY 3 TO 4 YEARS; YOUNGER TREES SHALL BE FERTILIZED MORE OFTEN DURING RAPID GROWTH STAGES.

THE CURRENT RECOMMENDATION IS BASED ON THE RATE OF 1000 SQUARE FEET OF AREA UNDER THE TREE TO BE FERTILIZED. FOR DECIDUOUS TREES, 2 TO 6 POUNDS OF NITROGEN PER 1000 SQUARE FEET; FOR NARROW-LEAF EVERGREENS, 1 TO 4 POUNDS OF NITROGEN PER 1000 SQUARE FEET; FOR BROADLEAF EVERGREENS, 1 TO 3 POUNDS OF NITROGEN PER 1000 SQUARE FEET.

SHRUBS AND GROUNDCOVER SHALL BE TOP-DRESSED WITH COMPOST 1" DEEP OR FERTILIZED ONCE IN MARCH WITH 10-6-4 ANALYSIS FERTILIZER AT THE RATE OF 3 POUNDS PER 100 SQUARE FEET OF BED AREA.
ERICACEOUS MATERIAL SHALL BE FERTILIZED WITH AN ERICACEOUS FERTILIZER AT THE MANUFACTURER'S RECOMMENDATION RATE. IF PLANTS ARE GROWING POORLY, A SOIL SAMPLE SHOULD BE TAKEN.

TREES, SHRUBS, & GROUND COVER (CONT.)

MULCHING

ANNUALLY, ALL TREE AND SHRUB BEDS WILL BE PREPARED AND MULCHED, TO A MINIMUM DEPTH OF 3" WITH QUALITY MULCH TO MATCH EXISTING. BED PREPARATION SHALL INCLUDE REMOVING ALL WEEDS, CLEANING UP SAID BED, EDGING AND CULTIVATING DECAYED MULCH INTO THE SOIL. DEBRIS FROM EDGING IS TO BE REMOVED FROM BEDS WHERE APPLICABLE. IF DEEMED NECESSARY, A PRE-EMERGENT HERBICIDE MAY BE APPLIED TO THE SOIL TO INHIBIT THE GROWTH OF FUTURE WEEDS.

ORGANICALLY MAINTAINED GARDENS SHALL NOT RECEIVE ANY PRE-EMERGENT HERBICIDES. MULCH IN EXCESS OF 4" WILL BE REMOVED FROM THE BED AREAS. SPECIAL CARE SHALL BE TAKEN IN THE MULCHING OPERATION NOT TO OVER-MULCH OR COVER THE BASE OF TREES AND SHRUBS. THIS CAN BE DETRIMENTAL TO THE HEALTH OF THE PLANTS.

WEEDING

ALL BEDS SHALL BE WEEDED ON A CONTINUOUS BASIS THROUGHOUT THE GROWING SEASON TO MAINTAIN A NEAT APPEARANCE AT ALL TIMES.

PRE-EMERGENT (SOIL-APPLIED) AND POST-EMERGENT (FOLIAR-APPLIED) HERBICIDES SHALL BE USED WHERE AND WHEN APPLICABLE AND IN ACCORDANCE WITH THE PRODUCT'S LABEL.

INSECT & DISEASE CONTROL: TREES, SHRUBS & GROUNDCOVER

THE MAINTENANCE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING THE LANDSCAPE SITE ON A REGULAR BASIS. THE MONITORING FREQUENCY SHALL BE MONTHLY EXCEPT FOR GROWING SEASON, WHICH WILL BE EVERY OTHER WEEK. TRAINED PERSONNEL SHALL MONITOR FOR PLANT DAMAGING INSECT ACTIVITY, PLANT PATHOGENIC DISEASES AND POTENTIAL CULTURAL PROBLEMS IN THE LANDSCAPE. THE PEST OR CULTURAL PROBLEM WILL BE IDENTIFIED UNDER THE SUPERVISION OF THE CONTRACTOR.

FOR PLANT DAMAGING INSECTS AND MITES IDENTIFIED IN THE LANDSCAPE, THE CONTRACTOR SHALL CONSULT AND FOLLOW THE RECOMMENDATIONS OF THE MOST CURRENT EDITION OF THE STATE COOPERATIVE SERVICE PUBLICATION ON INSECT CONTROL ON LANDSCAPE PLANT MATERIAL.

PLANT PATHOGENIC DISEASE PROBLEMS IDENTIFIED BY THE CONTRACTOR THAT CAN BE RESOLVED BY PRUNING OR PHYSICAL REMOVAL OF DAMAGED PLANT PARTS WILL BE PERFORMED AS PART OF THE CONTRACT. FOR AN ADDITIONAL CHARGE, PLANT PATHOGENIC DISEASES THAT CAN BE RESOLVED THROUGH PROPERLY TIMED APPLICATIONS OF FUNGICIDES SHALL BE MADE WHEN THE OWNER AUTHORIZES IT.

IF THE CONTRACTOR NOTES AN ESPECIALLY INSECT-OR DISEASE-PRONE PLANT SPECIES IN THE LANDSCAPE, HE/SHE WILL SUGGEST REPLACEMENT WITH A MORE PEST-RESISTANT CULTIVAR OR SPECIES THAT IS CONSISTENT WITH THE INTENT OF THE LANDSCAPE DESIGN.

NOTE: FOR IDENTIFICATION OF PLANT-DAMAGING INSECTS AND MITES, A REFERENCE TEXTBOOK THAT CAN BE USED IS INSECTS THAT FEED ON TREES AND SHRUBS BY JOHNSON AND LYON, COMSTOCK PUBLISHING ASSOCIATES. FOR PLAN PATHOGENIC DISEASES, TWO REFERENCES ARE SUGGESTED: SCOUTING AND CONTROLLING WOODY ORNAMENTAL DISEASES IN LANDSCAPES AND NURSERIES, AUTHORIZED BY GARY MORMAN, PUBLISHED BY PENN STATE COLLEGE OF AGRICULTURAL SCIENCES, AND DISEASES OF TREES AND SHRUBS BY SINCLAIR AND LYON, PUBLISHED BY COMSTOCK PUBLISHING PRESS.

TRASH REMOVAL

THE MAINTENANCE CONTRACTOR SHALL REMOVE TRASH FROM ALL SHRUB AND GROUNDCOVER BEDS WITH EACH VISIT.

LEAF REMOVAL

ALL FALLEN LEAVES SHALL BE REMOVED FROM THE SITE IN NOVEMBER AND ONCE IN DECEMBER. IF REQUESTED BY THE OWNER, THE MAINTENANCE CONTRACTOR, AT AN ADDITIONAL COST TO THE OWNER SHALL PERFORM SUPPLEMENTAL LEAF REMOVALS.

WINTER CLEAN-UP

THE PROJECT SHALL RECEIVE A GENERAL CLEAN-UP ONCE DURING EACH OF THE WINTER MONTHS, I.E., JANUARY, FEBRUARY, AND MARCH.

CLEAN-UP INCLUDES:

- CLEANING CURBS AND PARKING AREAS
- REMOVING ALL TRASH AND UNWANTED DEBRIS
- TURNING MULCH WHERE NECESSARY
- INSPECTION OF GROUNDS

SEASONAL COLOR: PERENNIALS, ANNUALS, AND BULBS

THE INSTALLATION OF PERENNIALS, ANNUALS, AND BULBS, UNLESS SPECIFIED HEREIN, SHALL BE REVIEWED WITH THE OWNER, AND, IF ACCEPTED, INSTALLED AND BILLED TO THE OWNER.

SEASONAL COLOR MAINTENANCE

PERENNIALIZATION OF BULBS:

1. AFTER FLOWERING, CUT OFF SPENT FLOWER HEADS.
2. ALLOW LEAVES OF DAFFODILS AND HYACINTHS TO REMAIN FOR SIX WEEKS AFTER FLOWERS HAVE FADED. CUT OFF AT BASE.
3. ALLOW LEAVES OF OTHER BULBS TO YELLOW NATURALLY AND THEN CUT OFF AT BASE.
4. APPLY FERTILIZER AFTER FLOWERING IN SPRING, PO



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PROJECT:

BRIDGE

8120 Lehigh Avenue
Morton Grove, IL 60053

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE
Lisa Staszak /

DRAWN BY
Bill Marlow

DATE
4.30.25

SCALE
NTS

SHEET NO.
1 of 4

ESTIMATE / JOB NUMBER
17402

FILE NAME
BDP17402

REVISIONS:

1 5.08.25
2 7.01.25
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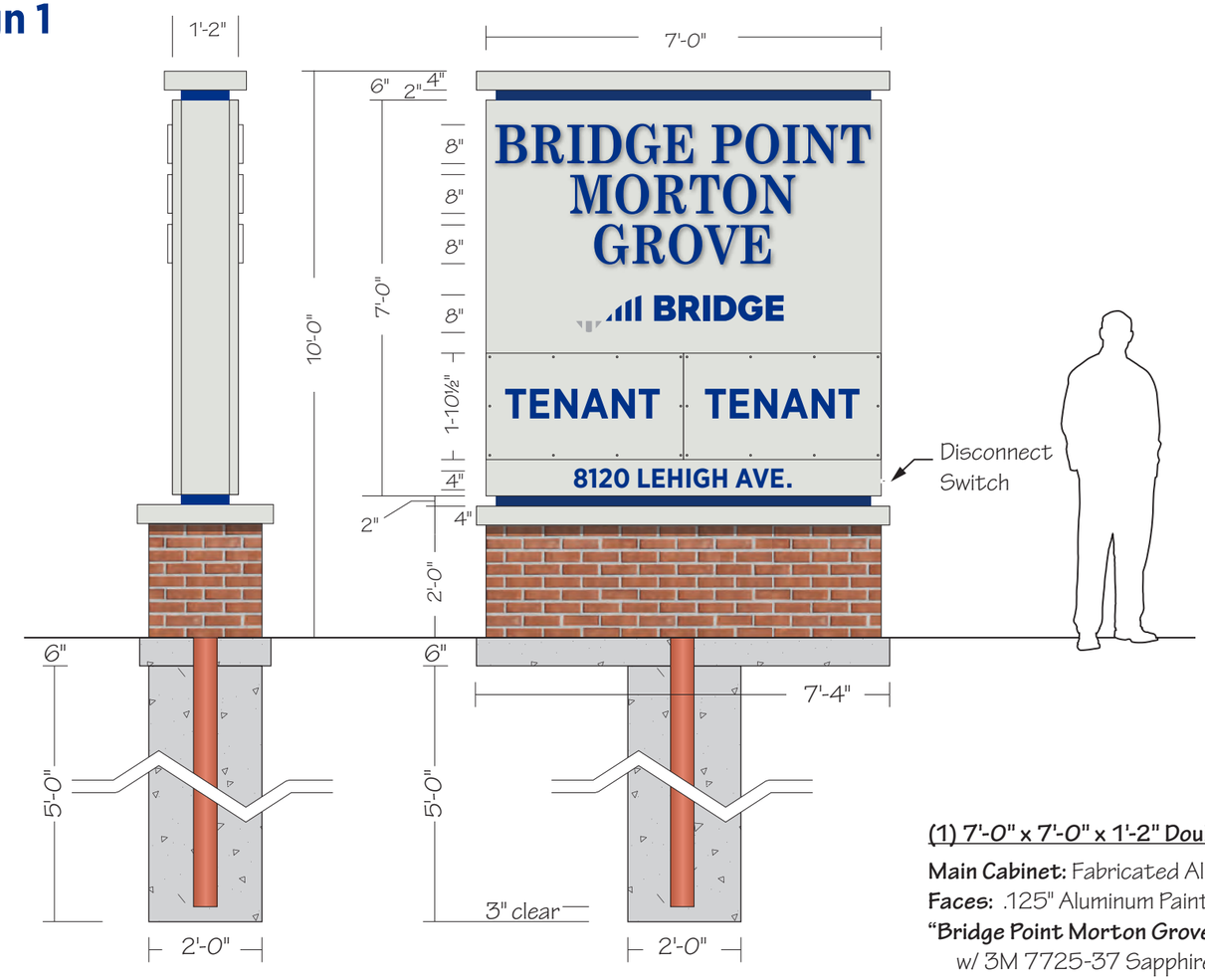
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Sign 1



(1) 7'-0" x 7'-0" x 1'-2" Double Face Internally Illuminated Monument Sign (10'-0" x 7'-4" Overall) - 49 SF

Main Cabinet: Fabricated Aluminum Painted SW 7070 Site White
Faces: .125" Aluminum Painted SW 7070 Site White
"Bridge Point Morton Grove" Graphics: Routed & Push-thru 1" Clear Acrylic
w/ 3M 7725-37 Sapphire Blue Vinyl Applied to Letter Faces
Bridge Logo Graphics: Routed & Backed w/ White Acrylic
w/ 3M 3630-157 Sultan Blue & 3630-51 Silver Gray Translucent Vinyls Applied
Tenant Panels: 0.125" thk. Alum. Painted SW 7070 Site White
Graphics are Routed & Backed w/ White Acrylic - 3M 3630-157 Sultan Blue Translucent Vinyl
Address Graphics: 3M 7725-37 Sapphire Blue Vinyl Applied
Reveal: 2" Fabricated Aluminum Painted PMS 287 Blue
Base: CMU Block w/ Brick Veneer to Match Building - TBD
Base Cap: Aluminum Painted SW 7063 Nebulous White
Illumination: White LEDs w/ 60 Watt Power Supplies
Power: Use Existing Electrical Circuit Run to Site by Others
Mounting: (1) 5" (5½" O. D.) Sch. 40 Steel Pipe set in a 2'-0" Diameter x 5'-6" Deep
Concrete Pier Foundation
- 7'-8" L x 2'-4" W x 6" D Reinforced Concrete Pad for Masonry

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PROJECT:

BRIDGE

8120 Lehigh Avenue
Morton Grove, IL 60053

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE Lisa Staszak /

DRAWN BY Bill Marlow

DATE 4.30.25

SCALE 3/8" = 1'

SHEET NO. 2 of 4

ESTIMATE / JOB NUMBER 17402

FILE NAME BDP17402

REVISIONS:

1 5.08.25
2 7.01.25
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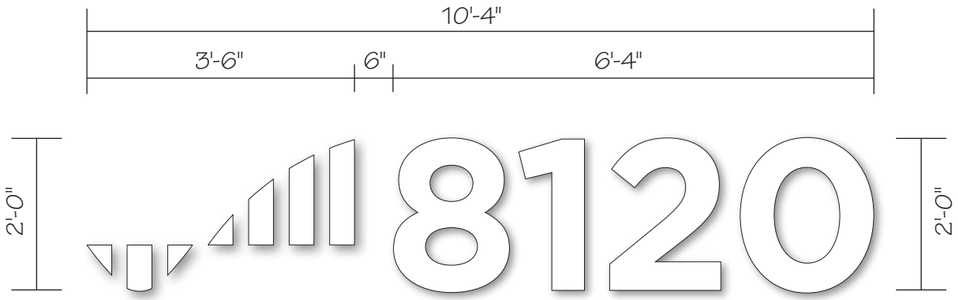
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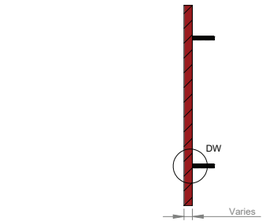
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Sign 2

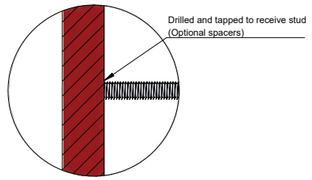


(1) set of 2'-0" x 1" thick FCO acrylic logo and address numerals

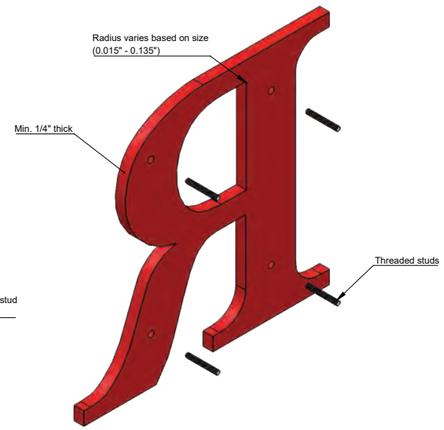
Logo: 1" thick FCO acrylic painted WHITE, satin smooth finish
Address: 1" thick FCO acrylic painted WHITE, satin smooth finish
Mounting: flush stud-mount on exterior wall



SECTION A-A II SCALE 1:5



DETAIL DW II SCALE 1:1



ISOMETRIC BACK VIEW II SCALE 1:3

CUT ACRYLIC - FLUSH STUD MOUNT



3 EAST ELEVATION
SCALE: 1" = 32'-0"

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PROJECT:

BRIDGE

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REPRESENTATIVE Lisa Staszak /
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Tenant Signs



(3) sets of 40 SF Tenant Wall Graphics

Logo: As simple as FCO acrylic or as Complex as internally illuminated channel construction
Letters: As simple as FCO acrylic or as complex as internally illuminated channel construction
Mounting: flush to exterior wall w/ appropriate anchors



2 SOUTH ELEVATION



(1) set of 32 SF Tenant Wall Graphics

Logo: As simple as FCO acrylic or as Complex as internally illuminated channel construction
Letters: As simple as FCO acrylic or as complex as internally illuminated channel construction
Mounting: flush to exterior wall w/ appropriate anchors



3.1 ENLARGED EAST ELEVATION
SCALE: 1" = 8'-0"

Parvin-Clauss
SIGN COMPANY
Design ▪ Fabrication ▪ Installation ▪ Maintenance
165TubewayDrive▪CarolStream▪Illinois60188
Tel/630-510-2020 ▪ Fax/630-510-2074
e-mail/signs@parvinclauss.com
www.parvinclauss.com

PROJECT:

BRIDGE

8120 Lehigh Avenue
Morton Grove, IL 60053

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE
Lisa Staszak /

DRAWN BY
Bill Marlow

DATE
4.30.25

SCALE
NTS

SHEET NO.
4 of 4

ESTIMATE / JOB NUMBER
17402

FILE NAME
BDP17402

REVISIONS:

1 5.08.25
2 7.01.25
3
4
5
6
7
8

This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

Customer is responsible for bringing sufficient power to the location(s) of illuminated signage.

"This Document is owned by, and the information contained in it is proprietary to, Parvin-Clauss Sign Company. By receipt hereof the holder agrees not to use the information, disclose it to any third party, nor reproduce this document without the prior written consent of Parvin-Clauss Sign Company. Holder also agrees to immediately return this document upon request of Parvin-Clauss Sign Company."

© Copyright 2025 by Parvin-Clauss Sign Co.



1 NORTH ELEVATION
SCALE: 1" = 32'-0"



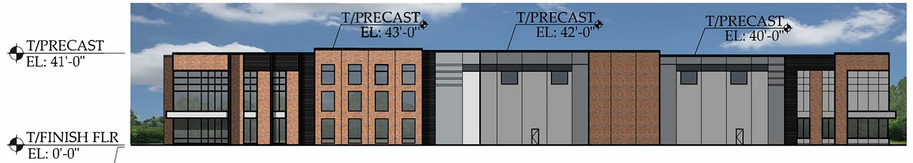
2 SOUTH ELEVATION
SCALE: 1" = 32'-0"



2.1 ENLARGED SOUTH ELEVATION
SCALE: 1" = 8'-0"



3.1 ENLARGED EAST ELEVATION
SCALE: 1" = 8'-0"



3 EAST ELEVATION
SCALE: 1" = 32'-0"



4 WEST ELEVATION
SCALE: 1" = 32'-0"

ACCENT COLOR:
SW7076 CYBERSPACE
DARK FIELD COLOR:
SW7074 SOFTWARE
MEDIUM FIELD COLOR:
SW7073 NETWORK GRAY
LIGHT FIELD COLOR:
SW7070 SITE WHITE

Cornerstone
Architects Ltd.
A NELSON Worldwide Company
NELSONWW.com

CLIENT: BRIDGE INDUSTRIAL
9525 W BRYN MAWR AVE, SUITE 700
ROSEMONT, ILLINOIS

PROJECT: PROPOSED FACILITY
8120 LEHIGH AVE
MORTON GROVE, ILLINOIS

DATE: 07/02/2025
PROJECT: #25023

SHEET: ELEVATIONS

EL-09A



5 CLERESTORY WINDOW



6 PAC-CLAD PRE-FINISHED METAL COPING (PAINTED TO MATCH ACCENT COLOR)



7 HOLLOW METAL DOOR & FRAME, PAINTED





8 LAPPED PRECAST PANELS



9 PUNCHED WINDOW



10 ALUMINUM STOREFRONT SYSTEM



11 PRECAST REVEALS (HORIZONTAL & VERTICAL)



12 METAL CANOPY



13 GALVANIZED METAL STAIR WITH GUARDRAIL & HANDRAIL



14 SECTIONAL OVERHEAD DOCK DOORS



15 DRIVE-IN DOOR

16 FUTURE KNOCK-OUT PANEL



17 BRICK FORM LINER

Cornerstone Architects Ltd.
A NELSON Worldwide Company
NELSONWW.com

CLIENT: BRIDGE INDUSTRIAL
9525 W BRYN MAWR AVE, SUITE 700
ROSEMONT, ILLINOIS

ROJECT: PROPOSED FACILITY
8120 LEHIGH AVE
MORTON GROVE, ILLINOIS

DATE: 05/02/2025
PROJECT: #25023

SH ET: FINISH BOARD ELEVATIONS

EL-09

PRELIMINARY ENGINEERING PLANS

BRIDGE INDUSTRIAL MORTON GROVE

SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR.
MORTON GROVE, ILLINOIS 60053

Call Before You Dig
JULIE
1-800-892-0123

UTILITY AND GOVERNING AGENCY CONTACTS

ENGINEERING DEPARTMENT
VILLAGE OF MORTON GROVE
DEPARTMENT OF PUBLIC WORKS
6101 CAPULINA AVENUE
MORTON GROVE, IL 60053
TEL: (847) 470-5235
CONTACT: CHRIS TOMICH

SANITARY SEWER SERVICE
VILLAGE OF MORTON GROVE
DEPARTMENT OF PUBLIC WORKS
6101 CAPULINA AVENUE
MORTON GROVE, IL 60053
TEL: (847) 470-5235
CONTACT: MIKE LUKICH

STORM SEWER SERVICE
VILLAGE OF MORTON GROVE
DEPARTMENT OF PUBLIC WORKS
6101 CAPULINA AVENUE
MORTON GROVE, IL 60053
TEL: (847) 470-5235
CONTACT: MIKE LUKICH

WATER SERVICE
VILLAGE OF MORTON GROVE
DEPARTMENT OF PUBLIC WORKS
6101 CAPULINA AVENUE
MORTON GROVE, IL 60053
TEL: (847) 470-5235
CONTACT: MIKE LUKICH

ROADWAY AUTHORITY
VILLAGE OF MORTON GROVE
DEPARTMENT OF PUBLIC WORKS
6101 CAPULINA AVENUE
MORTON GROVE, IL 60053
TEL: (847) 470-5235
CONTACT: MIKE LUKICH

POWER COMPANY
TBD

NATURAL GAS COMPANY
TBD

TELEPHONE
TBD

PROJECT TEAM

DEVELOPER
BRIDGE INDUSTRIAL
9525 W. BRYN MAWR AVENUE, SUITE 700
ROSEMONT, IL 60018
TEL: (630) 423-7478
CONTACT: DOUG KLEIN

GEOTECH
TESTING SERVICE CORPORATION (TSC)
360 S. MAIN PLACE
CAROL STREAM, IL 60188
TEL: (630) 432-2600
CONTACT: SAMUEL J. PATRICK, P.E.

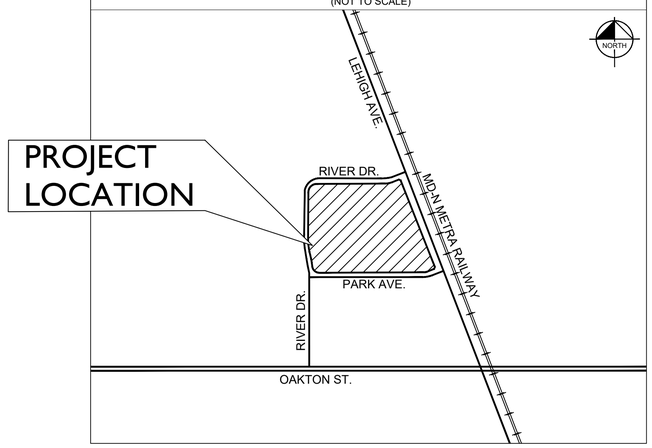
CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
4201 WINFIELD RD, SUITE 600
WARRENVILLE, IL 60555
TEL: (331) 481-7330
CONTACT: TOM J. SZAFRANSKI, P.E.
EMAIL: TOM.SZAFRANSKI@KIMLEY-HORN.COM

LANDSCAPE ARCHITECT
KATHRYN TALTY LANDSCAPE ARCHITECTURE, INC.
1926 WAUKEGAN ROAD
GLENVIEW, IL 60025
TEL: (847) 612-5154
CONTACT: KATHRYN MAXWELL TALTY, PLA, ASLA
EMAIL: KATHRYN@KTLANDARCH.COM

SURVEYOR
KIMLEY-HORN AND ASSOCIATES, INC.
4201 WINFIELD RD, SUITE 600
WARRENVILLE, IL 60555
TEL: (630) 487-5550
CONTACT: BRADLEY A. STROHL, PLS
EMAIL: BRAD.STROHL@KIMLEY-HORN.COM

LOCATION MAP

(NOT TO SCALE)



BENCHMARKS

REFER TO V0.0 AND V0.1 FOR BENCHMARKS LISTED BY LICENSED LAND SURVEYOR

LEGAL DESCRIPTION

REFER TO V0.0 AND V0.1 FOR ALTA LAND TITLE AND TOPOGRAPHIC SURVEY LEGAL DESCRIPTION.

Sheet List Table

Sheet Number	Sheet Title
C0.0	COVER SHEET
V0.0	ALTA SURVEY
V0.1	ALTA SURVEY
C4.0	OVERALL SITE PLAN
C4.1	SITE PLAN (NORTH)
C4.2	SITE PLAN (SOUTH)
C5.0	PRELIMINARY ENGINEERING PLAN (NORTH)
C5.1	PRELIMINARY ENGINEERING PLAN (SOUTH)
E1.0	OVERALL PHOTOMETRIC SITE PLAN
E1.1	PHOTOMETRIC PLAN (NORTH)
E1.2	PHOTOMETRIC PLAN (SOUTH)
E1.3	PHOTOMETRIC DETAILS

PROFESSIONAL ENGINEER'S CERTIFICATION

I, TOM J. SZAFRANSKI, A LICENSED PROFESSIONAL ENGINEER OF ILLINOIS, HEREBY CERTIFY THAT THIS SUBMISSION, PERTAINING ONLY TO THE "C" SERIES CIVIL SHEETS LISTED ABOVE BUT EXCLUDING DETAILS PREPARED BY OTHERS, WAS PREPARED ON BEHALF OF BRIDGE INDUSTRIAL BY KIMLEY-HORN AND ASSOCIATES, INC. UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.

DATED THIS 27TH DAY OF JUNE , A.D., 2025.

ILLINOIS LICENSED PROFESSIONAL ENGINEER 062-070698
MY LICENSE EXPIRES ON NOVEMBER 30TH, 2025
DESIGN FIRM REGISTRATION NUMBER: 184002012-0006

ILLINOIS PROFESSIONAL ENGINEER
Thomas J. Szafranski
062.070698
STATE OF ILLINOIS
Date of Expiration: 11-30-25

NO.	REVISIONS	DATE	BY
1	STORM WATER UPDATE	06/28/25	JRS

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
4201 WINFIELD ROAD, SUITE 600
WARRENVILLE, IL 60555
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: HLM
DRAWN BY: HLM
CHECKED BY: TJS

BRIDGE

BRIDGE INDUSTRIAL MORTON GROVE

SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR. MORTON GROVE, ILLINOIS 60053

COVER SHEET

ORIGINAL ISSUE: 06/27/2025
KHA PROJECT NO. 268915000
SHEET NUMBER
C0.0

Drawing name: K:\CHS_IDEV\268915000_Bridge - Morton Grove\2 Design\CAD\PlanSheets\PRELIM ENGINEERING\C0.0 - COVER SHEET.dwg C0.0 Jun 27, 2025 12:17pm by Juliette.Stroesser
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

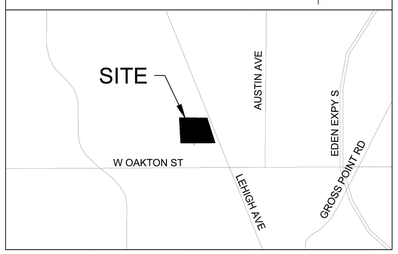
PIN: 10-20-303-001
10-20-303-002

ALTA/NSPS LAND TITLE SURVEY

OF 8130 LEIGH AVENUE AND 8145 RIVER DRIVE
MORTON GROVE, ILLINOIS

VICINITY MAP

N.T.S.



HATCH LEGEND

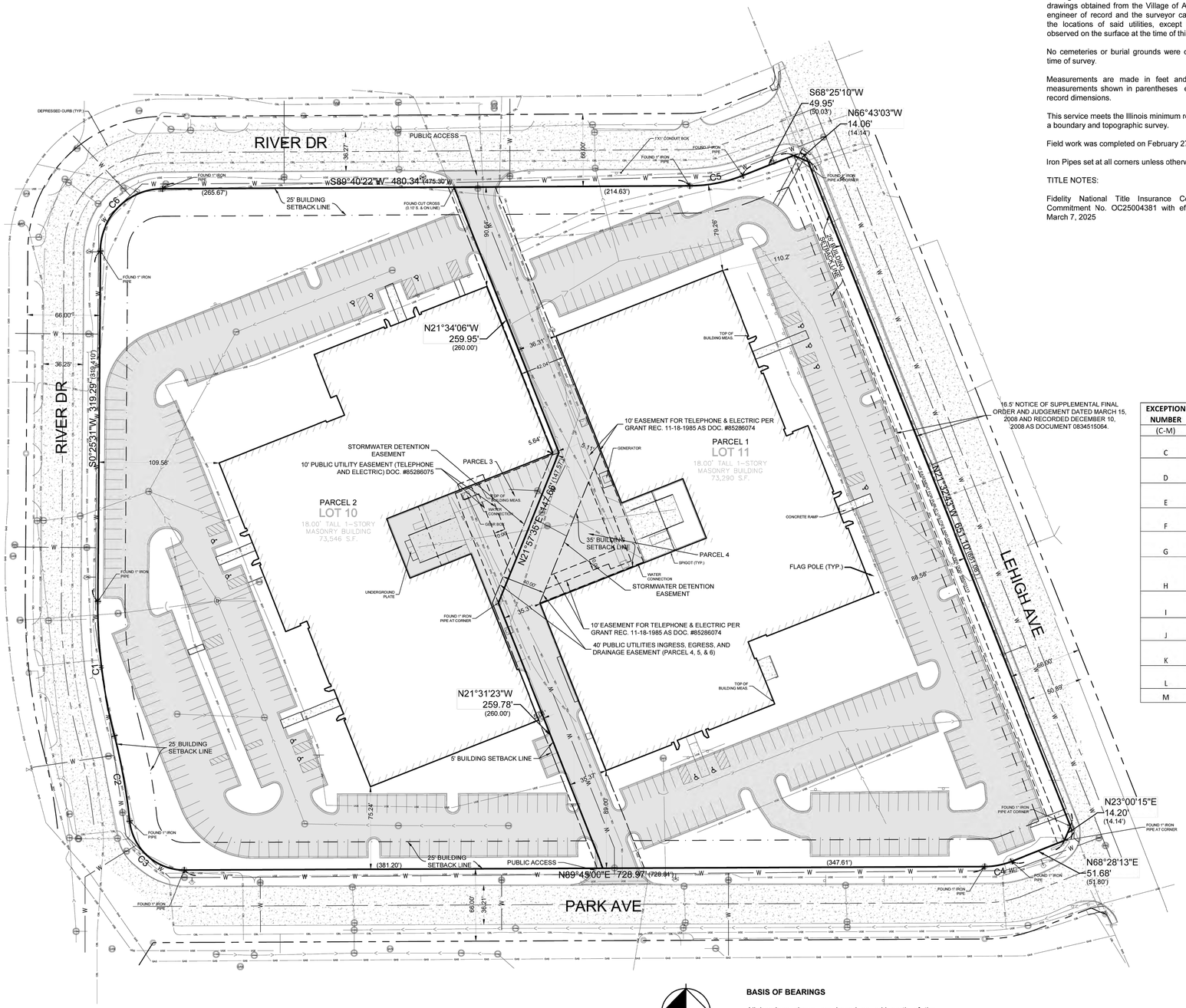
	BUILDING OUTLINE AREA
	CONCRETE AREA
	ASPHALT PAVEMENT AREA

LINE TYPE LEGEND

	SANITARY SEWER LINE
	STORM SEWER LINE
	OVERHEAD UTILITY LINE
	UNDERGROUND ELECTRIC LINE
	WATER LINE
	GAS LINE
	COMM. LINE

LEGEND

	UTILITY POLE W/ LIGHT		FIBER OPTIC HAND HOLE
	WATER VALVE		TELECOM. PEDESTAL
	STORM CULVERT		GAS UTILITY MARKER
	FOUND IRON ROD		LIGHT POLE
	GUY WIRE ANCHOR		FIRE HYDRANT
	SIGN POST		CABLE TV PEDESTAL
	WATER UTILITY MARKER		FOUND RAIL ROAD SPIKE
	SURVEY BENCHMARK		FOUND IRON PIPE
	UTILITY POLE		TREE (DECIDUOUS)
	TELECOM MANHOLE		



SURVEY NOTES:

The surveyed property does not appear to be in use as a dump, sump or sanitary landfill.

No visible evidence of current earth moving work, building construction or building additions were observed at the time of survey.

There are no known proposed changes in street right-of-way lines.

Underground utilities shown hereon are from record drawings obtained from the Village of Addison and the engineer of record and the surveyor cannot guarantee the locations of said utilities, except those that are observed on the surface at the time of this survey.

No cemeteries or burial grounds were observed at the time of survey.

Measurements are made in feet and decimal feet, measurements shown in parentheses ex.(100.00') are record dimensions.

This service meets the Illinois minimum requirements for a boundary and topographic survey.

Field work was completed on February 27, 2025.

Iron Pipes set at all corners unless otherwise denoted.

TITLE NOTES:

Fidelity National Title Insurance Company, LLC/ Commitment No. OC25004381 with effective date of March 7, 2025

PARCEL 1:
LOT 11 IN NORTH GROVE CORPORATE PARK, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 20, TOWNSHIP 41 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 7, 1985 AS DOCUMENT 85223113, IN COOK COUNTY, ILLINOIS.

PARCEL 2:
LOT 10 IN NORTH GROVE CORPORATE PARK, BEING A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF SECTION 20, TOWNSHIP 41 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 7, 1985 AS DOCUMENT 85223113, IN COOK COUNTY, ILLINOIS.

PARCEL 3:
EASEMENT FOR STORM WATER DETENTION CREATED BY NORTH GROVE CORPORATE PARK SUBDIVISION RECORDED OCTOBER 7, 1985 AS DOCUMENT 85223113 ON AND OVER A PORTION OF LOT 10 IN NORTH GROVE CORPORATE PARK, AFORESAID.

PARCEL 4:
EASEMENT FOR PUBLIC UTILITIES, DRAINAGE AND STORM WATER DETENTION CREATED BY NORTH GROVE CORPORATE PARK SUBDIVISION RECORDED OCTOBER 7, 1985 AS DOCUMENT 85223113 ON AND OVER A PORTION OF LOT 11 IN NORTH GROVE CORPORATE PARK, AFORESAID.

PARCEL 5:
PERPETUAL, NON-EXCLUSIVE EASEMENT FOR THE BENEFIT OF PARCEL 1 OVER THE EAST 5 FEET OF LOT 10 IN NORTH GROVE CORPORATE PARK SUBDIVISION, AFORESAID, FOR VEHICULAR AND PEDESTRIAN INGRESS AND EGRESS TO AND FROM THE PUBLIC ROADWAY COMMONLY KNOWN AS PARK AVENUE AND RIVER DRIVE AS CREATED IN THE PROTECTIVE COVENANTS APPENDED TO THE PLAT OF NORTH GROVE CORPORATE PARK SUBDIVISION RECORDED OCTOBER 7, 1985 AS DOCUMENT 85223113 IN COOK COUNTY, ILLINOIS.

PARCEL 6:
PERPETUAL, NON-EXCLUSIVE EASEMENT FOR THE BENEFIT OF PARCEL 2 OVER THE WEST 35 FEET OF LOT 11 IN NORTH GROVE CORPORATE PARK SUBDIVISION, AFORESAID, FOR VEHICULAR AND PEDESTRIAN INGRESS AND EGRESS TO AND FROM THE PUBLIC ROADWAY COMMONLY KNOWN AS PARK AVENUE AND RIVER DRIVE AS CREATED IN THE PROTECTIVE COVENANTS APPENDED TO THE PLAT OF NORTH GROVE CORPORATE PARK SUBDIVISION RECORDED OCTOBER 7, 1985 AS DOCUMENT 85223113 IN COOK COUNTY, ILLINOIS.

16.5' NOTICE OF SUPPLEMENTAL FINAL ORDER AND JUDGEMENT DATED MARCH 15, 2008 AND RECORDED DECEMBER 10, 2008 AS DOCUMENT 0834515064.

EXCEPTION NUMBER	DOCUMENT NUMBER	DESCRIPTION	PLOTTABLE	NOTATION
(C-M)	N/A	General Exceptions, Taxes, etc.	No	No Comment
C	N/A	Subject to Dempster Drainage District Case No. 39404	No	Blanket in Nature
D	85223113	Subject to building lines per North Grove Corp. Park Plat	Yes	As Shown
E	85223113	Subject to Stormwater Detention Easement per North Grove Corp. Park Plat	Yes	As Shown
F	85223113	Subject to Utility and Drainage Easement per North Grove Corp. Park Plat	Yes	As Shown
G	85223113	Subject to Drainage Easement per North Grove Corp. Park Plat	Yes	As Shown
H	85223113	Subject to Utility and Drainage Easement and Ingress and Egress Easement per North Grove Corp. Park Plat	Yes	As Shown
I	85223113	Subject to Easement Provisions per North Grove Corp. Park Plat	Yes	As Shown
J	85223113	Subject to Protective Covenants per North Grove Corp. Park Plat	No	Blanket in Nature
K	85286075	Subject to CommonWealth Edison and I.B.T. Utility Easement	Yes	As Shown
L	85286074	Subject to CommonWealth Edison and I.B.T. Utility Easement	Yes	As Shown
M	834515064	Subject to Notice of Supplemental Order	Yes	As Shown

CURVE TABLE					
NO.	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD
C1	15°11'44"	467.00'	123.85'	S07°10'21"E	123.49'
C2	8°28'25"	533.00'	78.83'	S10°04'33"E	78.75'
C3	84°09'03"	50.00'	73.44'	S48°10'28"E	67.01'
C4	21°16'47"	67.00'	24.88'	N79°06'37"E	24.74'
C5	21°15'12"	133.00'	49.33'	S79°02'46"W	49.05'
C6	89°14'51"	57.00'	88.79'	S45°02'57"W	80.08'

SURVEY PREPARED FOR:

BRIDGE INDUSTRIAL
444 W. LAKE STREET SUITE 3125, CHICAGO IL, 60606

SITE AREA:

ACREAGE: 10.97 AC.
SF.: 477,960 SF.

PARKING SPACES: 440 SPACES (15 HANDICAP)

FLOOD STATEMENT:

According to Federal Emergency Management Agency's Flood Insurance Rate Map No. 17031C0243J, for Cook County, Illinois and incorporated areas, dated August 19, 2008 this property is located within

Zone X (unshaded) defined as "Areas determined to be outside the 0.2% annual chance floodplain"

If this site is not within an identified special flood hazard area, this flood statement does not imply that the property and/or the structures thereon will be free from flooding or flood damage. On rare occasions, greater floods can and will occur and flood heights may be increased by man-made or natural causes. This flood statement shall not create liability on the part of the surveyor.

REFERENCE DATUM

NORTH AMERICAN VERTICAL DATUM 1988

BENCHMARK #1 ELEVATION = 626.70'

NORTHWEST BOLT ON FIRE HYDRANT ON NORTHEAST SIDE OF INTERSECTION OF RIVER DRIVE AND PARK AVENUE.

BENCHMARK #4 ELEVATION = 627.23'

SOUTHWEST TAG BOLT OF FIRE HYDRANT ON SOUTHWEST SIDE OF RIVER DRIVE AND LEHIGH AVENUE INTERSECTION.

NORTH

BASIS OF BEARINGS

All bearings shown are based on grid north of the Illinois Coordinate System of 1983, East Zone (1201), North American Datum of 1983.

GRAPHIC SCALE IN FEET
50 0 25 50 100
1" =50' @ 24X36

SURVEYORS CERTIFICATION:

To: Fidelity National Title Insuance 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(b),7(a)(b1)(c),8,9,11(b),16,17, and 19 of Table A thereof. The field work was completed on February 27, 2025.

FOR REVIEW ONLY

Bradley A. Strohl Dated: March 14, 202
Professional Land Surveyor No. 3686
My License Expires 11/30/26
Kimley-Horn and Associates, Inc.
4201 Winfield Road, Suite 600
Warrenville, IL 60555
Ph. 331-209-0476
brad.strohl@kimley-horn.com

No.	DATE	REVISION DESCRIPTION
1		.

Kimley»Horn
4201 Winfield Road Suite 600
Warrenville, Illinois 60555
DESIGN FIRM # 184002012-0006
Tel. No. (630) 487-5550
Fax No. (630) 335-3779

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 50'	JI	MGJ	03/26/25	268915000	V0.0

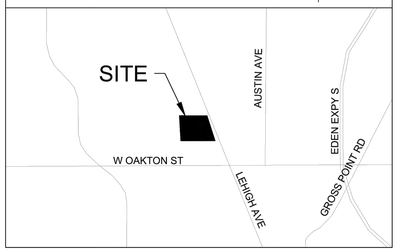
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TOPOGRAPHIC SURVEY

OF 8130 LEIGH AVENUE AND 8145 RIVER DRIVE
MORTON GROVE, ILLINOIS

VICINITY MAP

N.T.S.



HATCH LEGEND

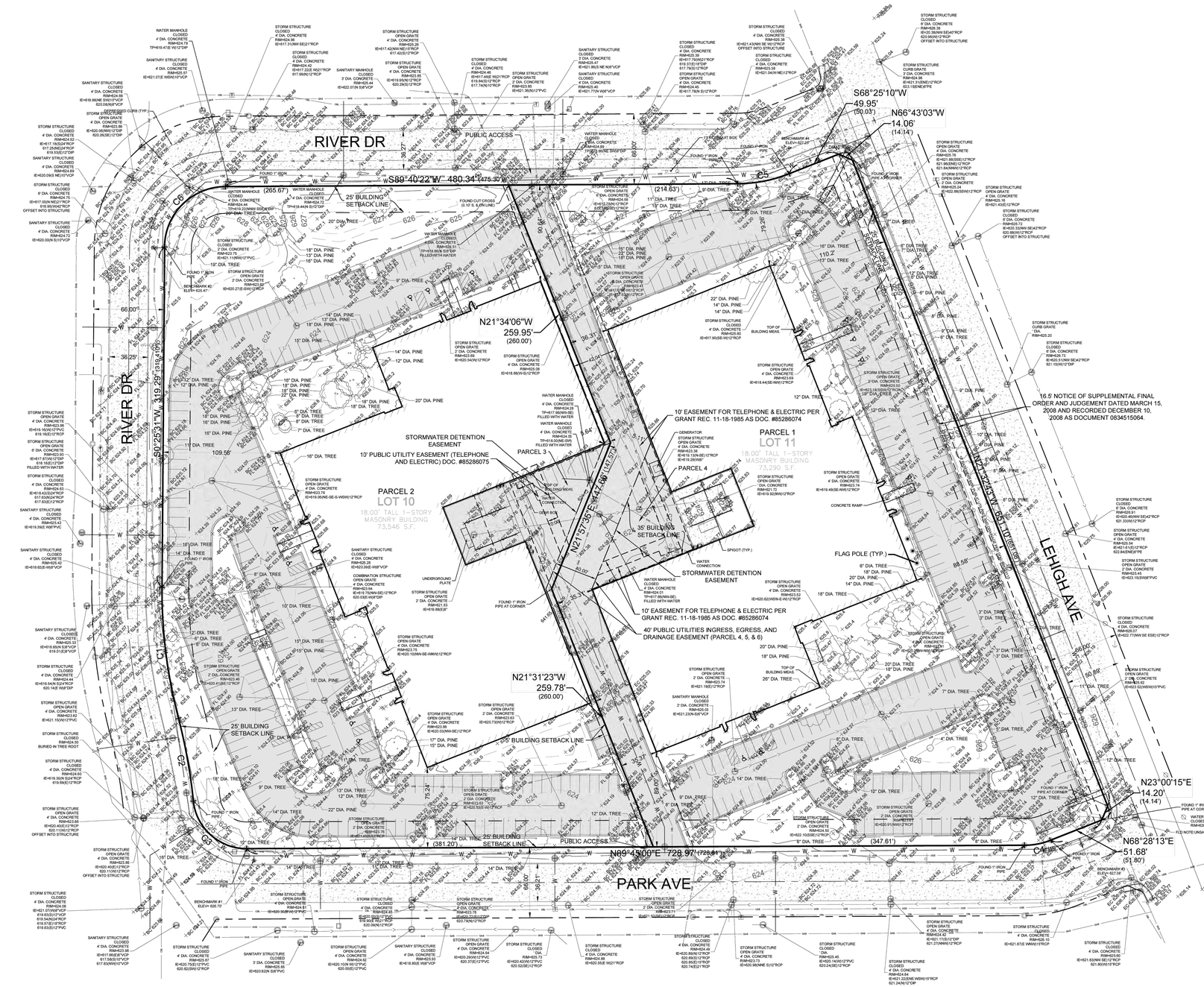
- BUILDING OUTLINE AREA
- CONCRETE AREA
- ASPHALT PAVEMENT AREA

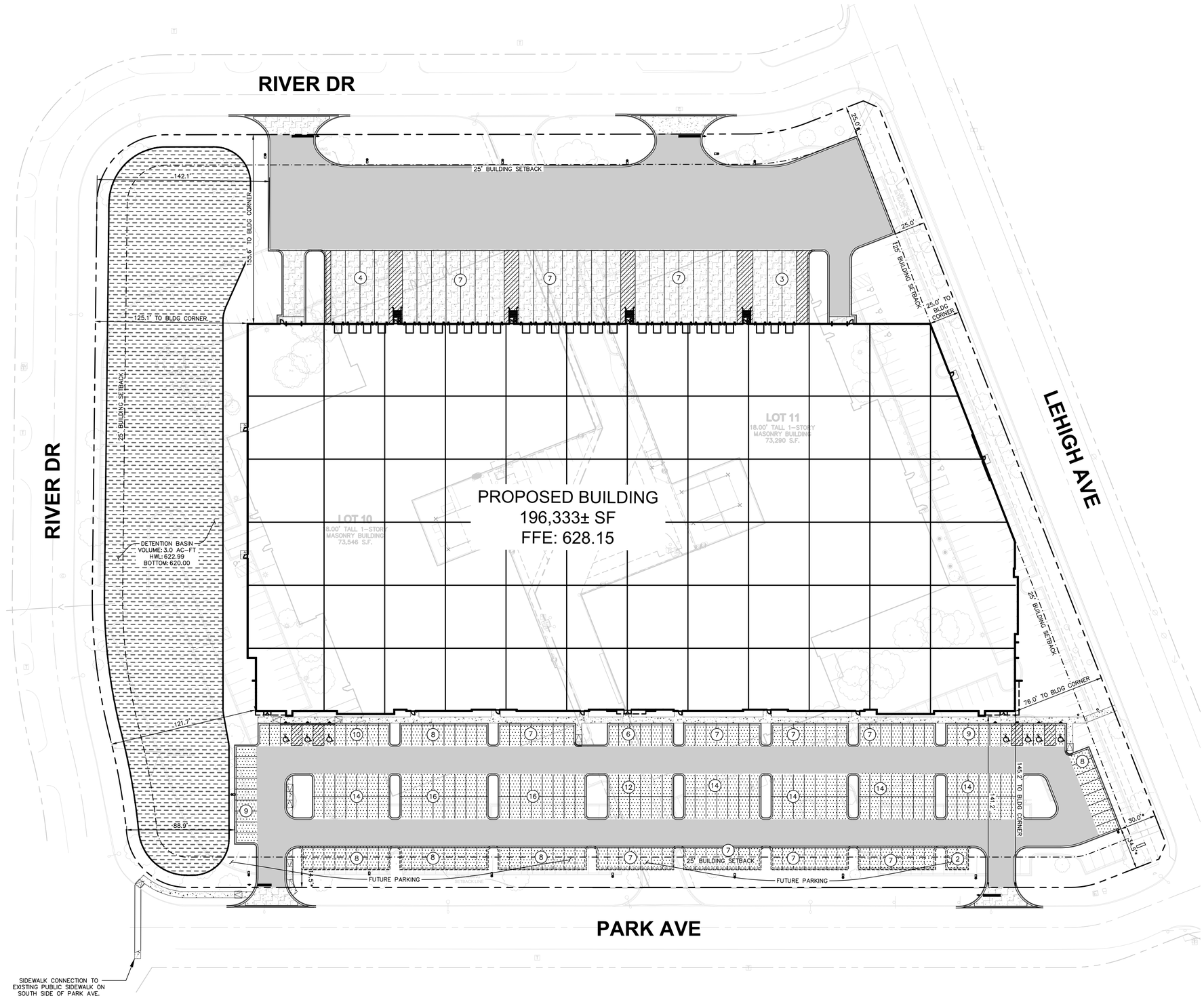
LINE TYPE LEGEND

- SANITARY SEWER LINE
- STORM SEWER LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND ELECTRIC LINE
- WATER LINE
- GAS LINE
- COMM. LINE

LEGEND

	UTILITY POLE W/ LIGHT		FIBER OPTIC HAND HOLE
	WATER VALVE		TELECOM. PEDESTAL
	STORM CULVERT		GAS UTILITY MARKER
	FOUND IRON ROD		LIGHT POLE
	GUY WIRE ANCHOR		FIRE HYDRANT
	SIGN POST		CABLE TV PEDESTAL
	WATER UTILITY MARKER		FOUND RAIL ROAD SPIKE
	SURVEY BENCHMARK		FOUND IRON PIPE
	UTILITY POLE		TREE (DECIDUOUS)
	TELECOM MANHOLE		


RIVER DR
PUBLIC ACCESS
S89°40'22"W 480.34' (475.30')
25' BUILDING SETBACK LINE
(265.67')
(214.83')
S68°25'10"W
49.95'
(50.03')
N66°43'03"W
14.06'
(14.14')
N21°34'06"W
259.95'
(260.00')
N21°31'23"W
259.78'
(260.00')
N21°35'58"E 447.69'
(447.50')
N0°25'53"W 315.29' (315.40')
109.56'
PARCEL 1
LOT 11
18.00' TALL 1-STORY MASONRY BUILDING
73,290 S.F.
PARCEL 2
LOT 10
18.00' TALL 1-STORY MASONRY BUILDING
73,546 S.F.
PARCEL 3
PARCEL 4
10' EASEMENT FOR TELEPHONE & ELECTRIC PER GRANT REC. 11-18-1985 AS DOC. #85286074
10' PUBLIC UTILITY EASEMENT (TELEPHONE AND ELECTRIC) DOC: #85286075
STORMWATER DETENTION EASEMENT
STORMWATER DETENTION EASEMENT
35' BUILDING SETBACK LINE
40' PUBLIC UTILITIES INGRESS, EGRESS, AND DRAINAGE EASEMENT (PARCEL 4, 5, & 6)
16.5' NOTICE OF SUPPLEMENTAL FINAL ORDER AND JUDGEMENT DATED MARCH 15, 2008 AND RECORDED DECEMBER 10, 2008 AS DOCUMENT 0834515064.
FLAG POLE (TYP.)
BENCHMARK #4 ELEV= 627.23'
BENCHMARK #3 ELEV= 626.47'
BENCHMARK #2 ELEV= 626.47'
BENCHMARK #1 ELEV= 626.70'
FOUND 1" IRON PIPE
FOUND 1" IRON PIPE AT CORNER
FOUND CUT CROSS (S 10' E & 40'N LINE)
FOUND 1" IRON PIPE AT CORNER
FOUND 1" IRON PIPE AT CORNER
FOUND 1" IRON PIPE AT CORNER
FOUND 1" IRON PIPE
FOUND 1" IRON PIPE
FOUND 1" IRON PIPE





GRAPHIC SCALE IN FEET
0 20 40 80

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JULIE
1-800-892-0123

GENERAL NOTES

1. ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
3. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
4. RADII ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 3-FEET, TYPICAL.
5. ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.

PAVING AND CURB LEGEND

- STANDARD DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- CONCRETE SIDEWALK
- HEAVY DUTY CONCRETE PAVEMENT
- STANDARD PITCH CONCRETE CURB AND GUTTER
- CONCRETE DEPRESSED CURB AND GUTTER
- PROPERTY LINE
- BUILDING SETBACK

SITE SUMMARY

LOT AREA	477,960 SF 10.97 ACRES	
PERVIOUS AREA	131,291 SF 1.71 ACRES	27.5%
IMPERVIOUS AREA	346,669 SF 7.95 ACRES	72.5%

	REQUIRED	PROVIDED
NORTH BUILDING SETBACK	25 FT	155.6 FT
SOUTH BUILDING SETBACK	25 FT	141.2 FT
WEST BUILDING SETBACK	25 FT	121.7 FT
EAST BUILDING SETBACK	25 FT	25 FT
NORTH PARKING SETBACK	25 FT	25 FT*
SOUTH PARKING SETBACK	25 FT	14.5 FT*
WEST PARKING SETBACK	25 FT	88.9 FT*
EAST PARKING SETBACK	25 FT	25 FT*
FLOOR AREA RATIO (MAXIMUM)	1.8	0.41
LANDSCAPED OPEN SPACE (MINIMUM)	15%	27.5%
STANDARD AUTO PARKING SPACES	–	185
FUTURE STANDARD AUTO PARKING SPACES	–	54
ACCESSIBLE PARKING SPACES	7	7
FUTURE ACCESSIBLE PARKING SPACES	0	0
TOTAL AUTO PARKING SPACES	197**	192
FUTURE TOTAL AUTO PARKING SPACES	197**	246

* DIMENSIONS REFER TO BACK OF CURB

** ±196,333 SF / 1000 = 197 (ROUNDING UP TO NEAREST WHOLE NUMBER)

NO.	REVISIONS	DATE	BY
1	STORM WATER UPDATE	06/28/25	JRS

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PHONE: 630-487-9900
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: HLM
DRAWN BY: HLM
CHECKED BY: TJS

BRIDGE

OVERALL SITE PLAN

BRIDGE INDUSTRIAL
MORTON GROVE

SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR.
MORTON GROVE, ILLINOIS 60053

ORIGINAL ISSUE:
06/27/2025

KHA PROJECT NO.
268915000

SHEET NUMBER
C4.0

Drawing name: K:\CHS_IDEV\268915000_Bridge - Morton Grove\2 Design\CAD\PlanSheets\PRELIM ENGINEERING\C4.0 - OVERALL SITE DIMENSION PLAN.dwg C4.0 Jun 27, 2025 12:18pm by: Juliette.Stroesser
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KEY NOTES

1. B6.12 CONCRETE CURB AND GUTTER, TYP.
2. DEPRESSED CURB AND GUTTER
3. CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
4. CONCRETE SIDEWALK, TYP.
5. ACCESSIBLE RAMP
6. ACCESSIBLE PAVEMENT MARKINGS, TYP.
7. ACCESSIBLE PARKING SIGN, TYP.
8. 4" WIDE PAINTED SOLID LINE, TYP.
9. 24" WIDE STOP BAR, TYP.
10. 4" SOLID WHITE PAINT STRIPING AT 45° 2' O.C.
11. STOP SIGN, TYP.
12. ELEVATED PLATFORM WITH STAIRS (SEE ARCHITECTURAL PLANS FOR DETAILS)
13. BOLLARD, TYP.
14. LIGHT POLE (SEE SHEETS E1.0–E1.3 FOR DETAILS)
15. LIGHT BOLLARD

PAVING AND CURB LEGEND

- CONCRETE SIDEWALK
- STANDARD PITCH CONCRETE CURB AND GUTTER
- CONCRETE DEPRESSED CURB AND GUTTER
- PROPERTY LINE
- BUILDING SETBACK

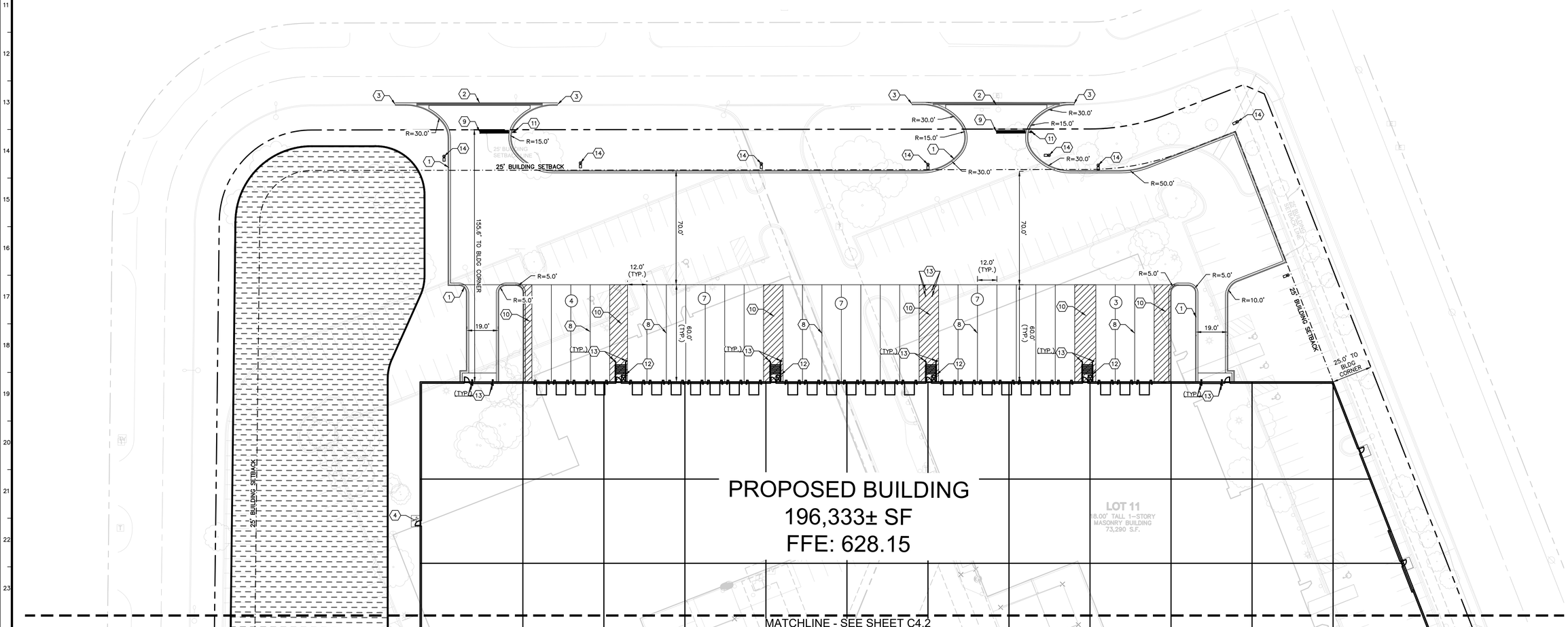
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2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
3. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
4. RADII ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 3–FEET, TYPICAL.
5. ALL PROPOSED ON–SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

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1-800-892-0123



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SCALE: AS NOTED
DESIGNED BY: HLM
DRAWN BY: HLM
CHECKED BY: TJS

BRIDGE

SITE PLAN (NORTH)

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MORTON GROVE
SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR.
MORTON GROVE, ILLINOIS 60053

ORIGINAL ISSUE: 06/27/2025
KHA PROJECT NO. 268915000
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C4.1

Drawing name: K:\CHS_LIDEV\268915000_Bridge _ Morton Grove\2 Design\CAD\PlanSheets\PRELIM ENGINEERING\C4.0 - SITE DIMENSION PLAN.dwg C4.1 Jun 27, 2025 12:18pm by: Juliette.Strasser
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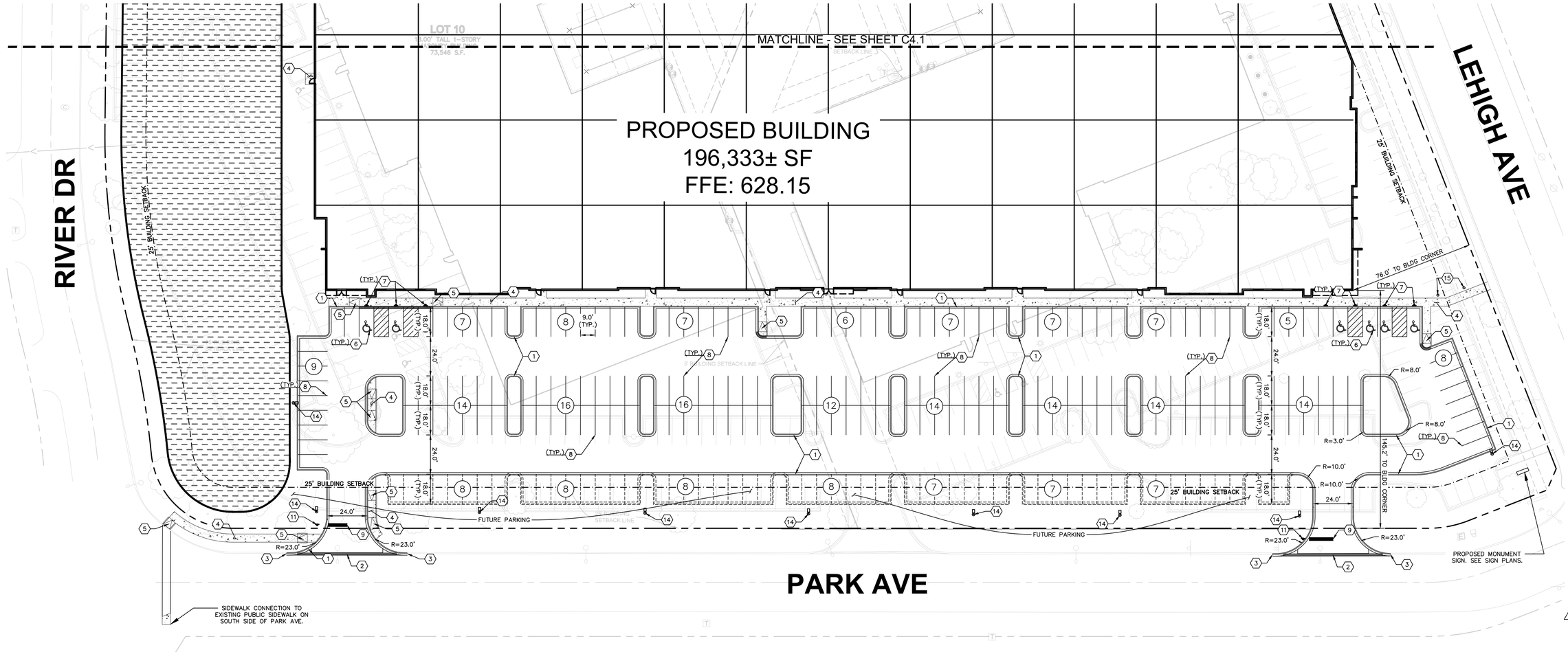
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NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

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SCALE: AS NOTED
DESIGNED BY: HLM
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BRIDGE

SITE PLAN (SOUTH)

BRIDGE INDUSTRIAL
MORTON GROVE

SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR.
MORTON GROVE, ILLINOIS 60053

ORIGINAL ISSUE: 06/27/2025
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SHEET NUMBER 1
C4.2

Drawing name: K:\CHS_LDEV\268915000_Bridge – Morton Grove\2 Design\CAD\PlanSheets\PRELIM ENGINEERING\C4.0 – SITE DIMENSION PLAN.dwg C4.2 Jun 27, 2025 12:18pm by: JulietteStroesser
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(CONTRACTOR TO VERIFY ALL MATCH EXISTING SPOT GRADE ELEVATIONS AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.)

600	PROPOSED CONTOUR
600	EXISTING CONTOUR
RIDGE	RIDGE LINE
X.XX%	SLOPE AND FLOW DIRECTION
	PROPOSED SWALE

UTILITY LEGEND

	PROPOSED STORM SEWER LINE
	PROPOSED STORM STRUCTURES
	PROPOSED SANITARY SEWER LINE
	PROPOSED SANITARY MANHOLE
W W	PROPOSED WATER LINE
	PROPOSED VALVE VAULT
	PROPOSED FIRE HYDRANT
	PROPOSED LIGHT POLE

STORMWATER SUMMARY

TOTAL DEVELOPMENT AREA	10.69 AC
DETENTION REQUIRED SUMMARY	
DETENTION REQUIRED	3.0 AC-FT
DETENTION PROVIDED SUMMARY	
DETENTION PROVIDED	3.0 AC-FT

NOTE:

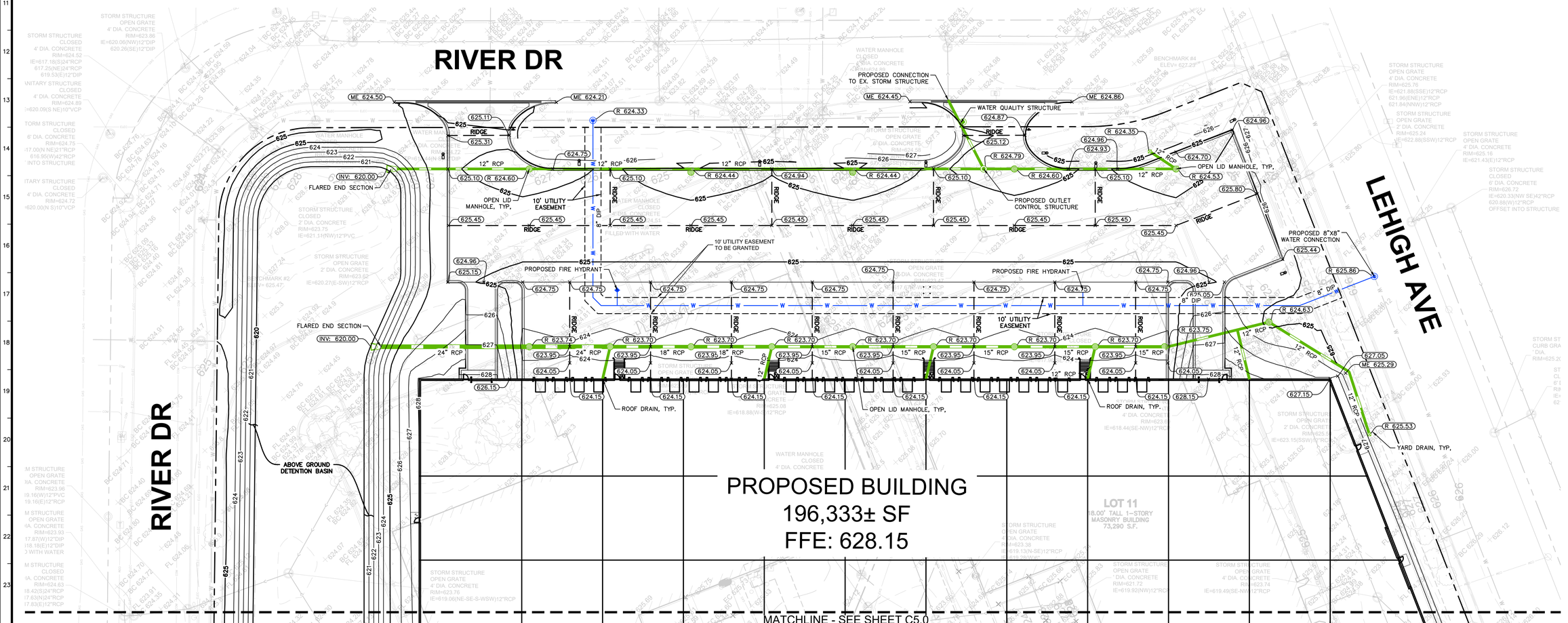
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NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

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SCALE: AS NOTED
DESIGNED BY: HLM
DRAWN BY: HLM
CHECKED BY: TJS

BRIDGE

PRELIMINARY ENGINEERING PLAN (NORTH)

BRIDGE INDUSTRIAL
MORTON GROVE

SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR.
MORTON GROVE, ILLINOIS 60053

ORIGINAL ISSUE: 06/27/2025
KHA PROJECT NO. 268915000
SHEET NUMBER
C5.0

Drawing name: K:\CHS_LDEV\268915000_Bridge - Morton Grove\2 Design\CAD\PlanSheets\PRELIM ENGINEERING\C5.0 - ENGINEERING PLAN.dwg C5.0 Jun 27, 2025 12:18pm by Juliette.Strosser
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PROPOSED FIRE HYDRANT
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DETENTION REQUIRED	3.0 AC-FT
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NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

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MATCHLINE - SEE SHEET C5.0

PROPOSED BUILDING
196,333± SF
FFE: 628.15

RIVER DR

LEHIGH AVE

PARK AVE

LOT 10
3.00' TALL 1-STORY
MASONRY BUILDING
73,546 S.F.

ABOVE GROUND DETENTION BASIN

PROPOSED 8" SANITARY SEWER SERVICE BUILDING CONNECTION (2 TOTAL)

10' UTILITY EASEMENT TO BE GRANTED

PROPOSED 8" WATER SERVICE BUILDING CONNECTION

ROOF DRAIN, TYP.

PROPOSED FIRE HYDRANT

SANITARY MANHOLE, TYP.

OPEN LID MANHOLE, TYP.

YARD DRAIN, TYP.

FLARED END SECTION
INV: 620.00

FLARED END SECTION
INV: 624.50

24" RCP

12" RCP

18" RCP

15" RCP

8" DIP

12"X8" WATER CONNECTION

PROPOSED CONNECTION TO EX. SANITARY SEWER

BENCHMARK #1
ELEV= 626.70'

BENCHMARK #3
ELEV= 627.08

NO.	REVISIONS	DATE	BY
	STORM WATER UPDATE	06/28/25	JRS

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BRIDGE

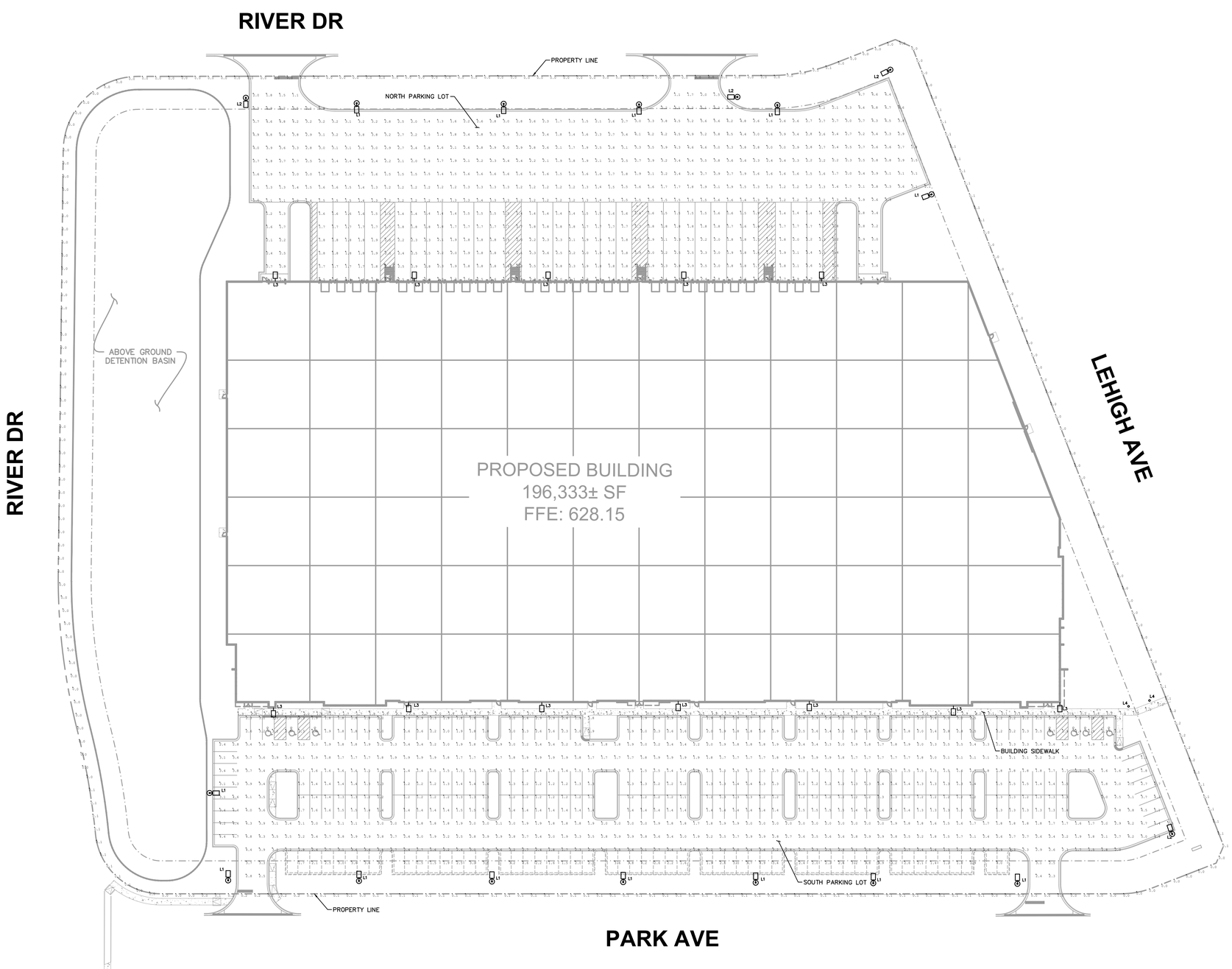
PRELIMINARY ENGINEERING PLAN (SOUTH)

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MORTON GROVE

SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR.
MORTON GROVE, ILLINOIS 60053

ORIGINAL ISSUE: 06/27/2025
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SHEET NUMBER C5.1

Drawing name: K:\CHS_LIDEV\268915000_Bridge - Morton Grove\2 Design\C4D\PlanSheets\PRELIM ENGINEERING\C5.0 - ENGINEERING PLAN.dwg C5.1 Jun 27, 2025 12:19pm by JulietteStroesser
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NORTH

GRAPHIC SCALE IN FEET
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1	STORM WATER UPDATE	06/28/25	JRS

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SCALE: AS NOTED
DESIGNED BY: BJB
DRAWN BY: BJB
CHECKED BY: SK

STATE OF ILLINOIS
SARA KHAN
6206256880
LICENSED PROFESSIONAL ENGINEER
06/27/2025
EXP: 11/30/2025

BRIDGE

OVERALL PHOTOMETRIC SITE PLAN

BRIDGE INDUSTRIAL MORTON GROVE

SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR.
MORTON GROVE, ILLINOIS 60053

ORIGINAL ISSUE: 06/27/2025
KHA PROJECT NO. 268915000
SHEET NUMBER
E1.0

Drawing name: K:\CHS_LDEV\268915000_Bridge - Morton Grove\2 Design\CAD\PlanSheets\PRELIM ENGINEERING\E4.0 - OVERALL SITE PHOTOMETRIC PLAN.dwg E1.0 Jun 27, 2025 12:19pm by: Juliette.Strosser
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Drawing name: K:\CHS_LDEV\268915000_Bridge - Morton Grove\2 Design\CAD\PlanSheets\PRELIM ENGINEERING\E4.0 - SITE PHOTOMETRIC PLAN.dwg E1.1 Jun 27, 2025 - 12:19pm by: Juliette.Stroesser
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PHOTOMETRICS LEGEND

- PROPOSED SINGLE LUMINAIRE - POLE MOUNTED
- PROPOSED SINGLE LUMINAIRE - BUILDING MOUNTED
- PROPOSED LUMINAIRE - LED BOLLARD
- X.X CALCULATION POINT

TARGET ILLUMINATION LEVELS

CALC TYPE	AVG	MAX	MIN	AVG/MIN	MAX/MIN
PARKING LOTS AND LOADING AREAS	-	-	1.0	-	20:1
BUILDING SIDEWALK	-	-	1.0	-	-

CALCULATED ILLUMINATION LEVELS

CALC TYPE	AVG	MAX	MIN	AVG/MIN	MAX/MIN
NORTH PARKING LOT	2.24	6.5	1.0	2.24	6.50
SOUTH PARKING LOT	2.11	5.1	1.1	1.92	4.64
BUILDING SIDEWALK	2.07	3.2	1.0	2.07	3.20
PROPERTY LINE	0.04	0.2	0.0	-	-

PHOTOMETRICS NOTES

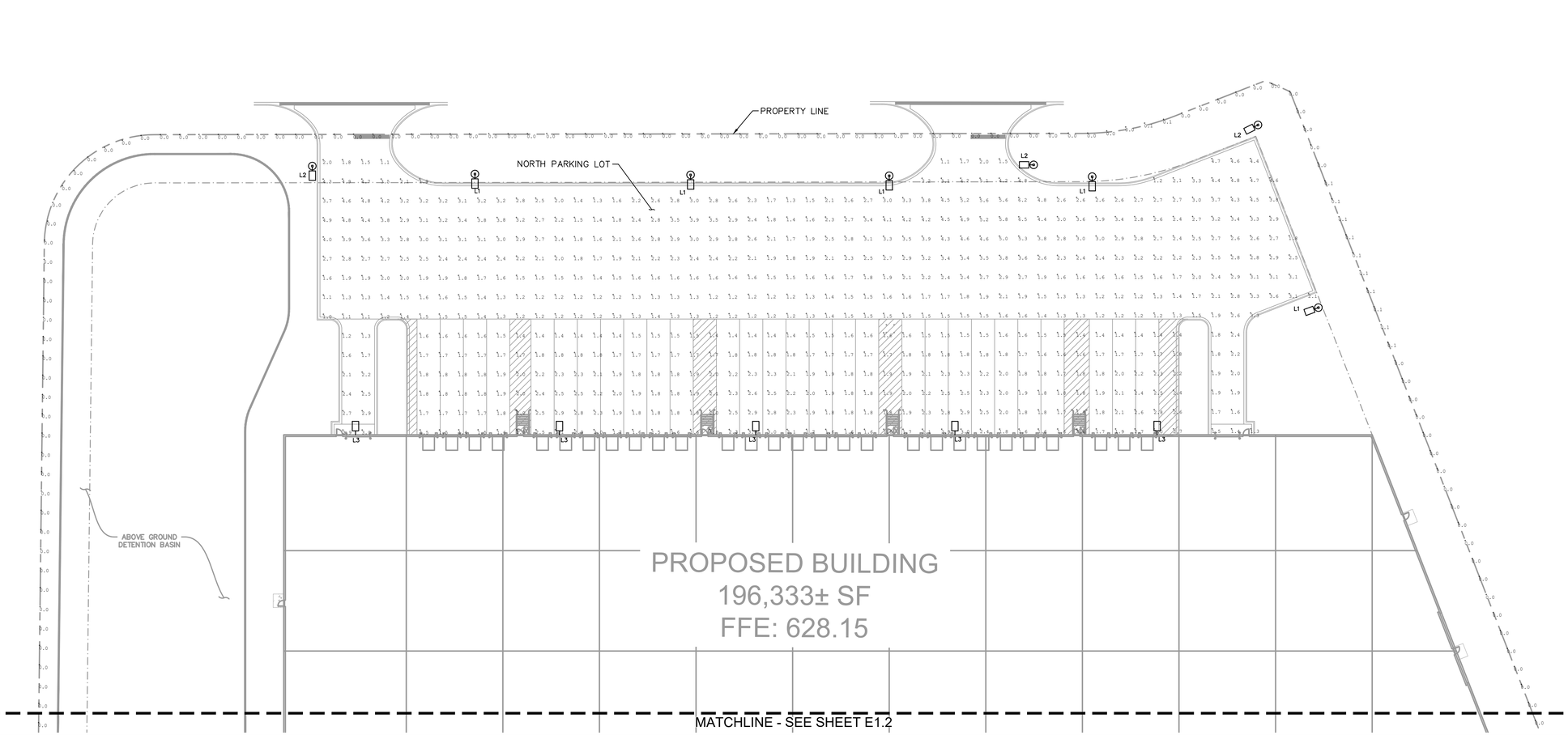
1. THE TARGET ILLUMINANCE VALUES AND MOUNTING HEIGHTS ARE BASED ON SECTION 12-12-3 OF THE MORTON GROVE CODES AND ORDINANCES OR THE IES RP-8-22 AND ALL APPLICABLE ADDENDUMS (THE MORE STRINGENT OF THE TWO SHALL BE OBSERVED). ALL CONSTRUCTION AND LIGHTING DESIGN SHALL BE IN ACCORDANCE WITH SECTION 12-12-3 AND ALL APPLICABLE CODES AND STANDARDS.
2. ALL PHOTOMETRIC ILLUMINANCE VALUES SHOWN ON SITE PLAN IN TABLES ARE IN FOOTCANDLES (FC). 1 FC = 10.76 LUX.
3. CALCULATED VALUES ARE DERIVED THROUGH A COMPUTER BASED MODEL WITH LIGHT FIXTURE DATA AS SUPPLIED BY MANUFACTURERS THROUGH IES FILES.
4. ANY DEVIATION FROM SPECIFIED FIXTURE MODELS AND MOUNTING HEIGHTS IN THIS EXHIBIT WILL DISCOUNT THE VALIDITY OF THE CALCULATIONS.
5. THE PHOTOMETRIC ANALYSIS EXCLUDES ALL EXISTING ADJACENT LOT AND ARCHITECTURAL LIGHTING.
6. CONTRACTOR SHALL CONFIRM ALL POLE AND FIXTURE FINISHES WITH OWNER. CONTRACTOR SHALL CONFIRM FOUNDATION AND ALL MOUNTING REQUIREMENTS WITH MANUFACTURER PRIOR TO CONSTRUCTION.
7. FINAL FOUNDATION DESIGN, ELECTRICAL DESIGN AND LIGHTING CONTROLS BY OTHERS. CONTRACTOR SHALL INCLUDE ALL MOUNTING, CONTROL AND ELECTRICAL ACCESSORIES WITH MODEL NUMBER WHEN ORDERING LUMINAIRES TO MEET THE INTENT OF THE STRUCTURAL AND ELECTRICAL DESIGN.
8. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION AND SETBACK OF LIGHT POLES.
9. FIXTURE SYMBOLS ARE DIAGRAMMATIC ONLY AND SHOULD BE USED AS REFERENCE.

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

LIGHT FIXTURE SCHEDULE

SYMBOL	TAG	DESCRIPTION	MODEL NUMBER	MANUFACTURER	LAMP	LLF	WATTS	LUMENS PER FIXTURE	COLOR TEMPERATURE	MOUNTING HEIGHT	NOTES
	L1	SINGLE POLE MOUNTED LED OUTDOOR LUMINAIRE (TYPE III BACKLIGHT CONTROL DISTRIBUTION)	DSX2 LED P1 40K 70CRI BLC3 MVOLT SPA	LITHONIA	LED	0.9	135	13,595	4000K	25FT	MOUNT ON 22' POLE ATOP 3' CONCRETE BASE. EFFECTIVE MOUNTING HEIGHT = 25'-0". POLE MODEL: LITHONIA #SSS-22-5G-DM19AS. COORDINATE LUMINAIRE FINISH AND POLE FINISH WITH OWNER AND ARCHITECT PRIOR TO PURCHASE. REFER TO ELECTRICAL PLANS FOR LIGHTING CONTROLS. CONTRACTOR SHALL ORDER ACCESSORIES TO MEET THE INTENT OF THE DESIGN. REFER TO SHEET E1.3 FOR FIXTURE AND POLE DETAILS.
	L2	SINGLE POLE MOUNTED LED OUTDOOR LUMINAIRE (RIGHT CORNER CUTOFF DISTRIBUTION)	DSX2 LED P1 40K 70CRI RCCO MVOLT SPA	LITHONIA	LED	0.9	135	13,718	4000K	25FT	MOUNT ON 22' POLE ATOP 3' CONCRETE BASE. EFFECTIVE MOUNTING HEIGHT = 25'-0". POLE MODEL: LITHONIA #SSS-22-5G-DM19AS. COORDINATE LUMINAIRE FINISH AND POLE FINISH WITH OWNER AND ARCHITECT PRIOR TO PURCHASE. REFER TO ELECTRICAL PLANS FOR LIGHTING CONTROLS. CONTRACTOR SHALL ORDER ACCESSORIES TO MEET THE INTENT OF THE DESIGN. REFER TO SHEET E1.3 FOR FIXTURE AND POLE DETAILS.
	L3	SINGLE BUILDING MOUNTED LED OUTDOOR LUMINAIRE (TYPE IV DISTRIBUTION)	DSX2 LED P1 40K 70CRI T4M MVOLT WBA	LITHONIA	LED	0.9	135	18,970	4000K	25FT	MOUNT ON EXTERIOR OF BUILDING AT 25' AFG. COORDINATE LUMINAIRE FINISH WITH OWNER AND ARCHITECT PRIOR TO PURCHASE. REFER TO ELECTRICAL PLANS FOR LIGHTING CONTROLS. CONTRACTOR SHALL ORDER ACCESSORIES TO MEET THE INTENT OF THE DESIGN. REFER TO SHEET E1.3 FOR FIXTURE DETAILS.
	L4	SINGLE LED BOLLARD OUTDOOR LUMINAIRE	KBR8 LED 16C 530 40K SYM MVOLT	LITHONIA	LED	0.9	28	1,254	4000K	3FT 4IN	COORDINATE LUMINAIRE FINISH WITH OWNER AND ARCHITECT PRIOR TO PURCHASE. REFER TO ELECTRICAL PLANS FOR LIGHTING CONTROLS. CONTRACTOR SHALL ORDER ACCESSORIES TO MEET THE INTENT OF THE DESIGN. REFER TO SHEET E1.3 FOR FIXTURE DETAILS.



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SCALE: AS NOTED | DESIGNED BY: BJB | DRAWN BY: BJB | CHECKED BY: SK

STATE OF ILLINOIS
SARA KHAN
62065680
LICENSED PROFESSIONAL ENGINEER
06/27/2025
EXP: 11/30/2025

BRIDGE

PHOTOMETRIC PLAN (NORTH)

BRIDGE INDUSTRIAL
MORTON GROVE
SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR.
MORTON GROVE, ILLINOIS 60053

ORIGINAL ISSUE: 06/27/2025
KHA PROJECT NO. 268915000
SHEET NUMBER E1.1

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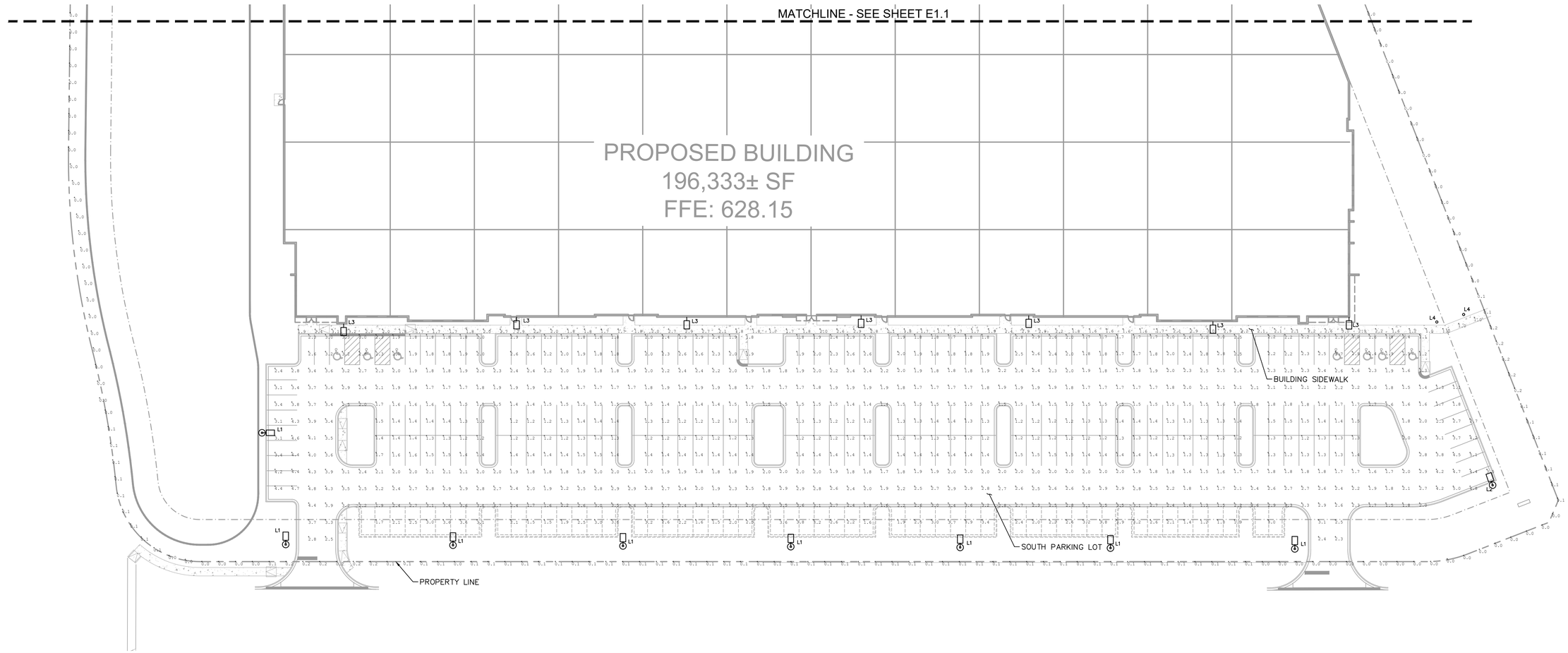
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STATE OF ILLINOIS
SARA KHAN
62065680
LICENSED PROFESSIONAL ENGINEER
06/27/2025
EXP: 11/30/2025

BRIDGE

PHOTOMETRIC PLAN (SOUTH)

BRIDGE INDUSTRIAL
MORTON GROVE
SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR.
MORTON GROVE, ILLINOIS 60053

ORIGINAL ISSUE: 06/27/2025
KHA PROJECT NO. 268915000
SHEET NUMBER
E1.2

Drawing name: K:\CHS_LIDEV\268915000_Bridge - Morton Grove\2 Design\2-CAD\PlanSheets\PRELIM ENGINEERING\E4.0 - SITE PHOTOMETRIC PLAN.dwg E1.2 Jun 27, 2025 12:19pm by: JulietteStrosser
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Drawing name: K:\CHS_LOE\268915000_Bridge - Morton Grove\2 Design\CAD\PlanSheets\PRELIM ENGINEERING\E1.4 - SITE PHOTOMETRIC PLAN.dwg Jun 27, 2025 - 12:19pm by Juliette.Stroesser

D-Series Size 2

LED Area Luminaire

d-series

Catalog Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA: 1.06 ft² (0.10 m²)

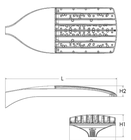
Length: 40.59" (103.1 cm)

Width: 16.76" (42.6 cm)

Height H1: 8.11" (20.6 cm)

Height H2: 3.96" (10.1 cm)

Weight: 46 lbs (20.9 kg)



Design Select options indicated by a filled color background.

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect. *See ordering tree for details

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of up to 80% vs. 1000W HID and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX2 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX2 LED

Series	LEDs	Color temperature	Color Rendering Index	Distribution	Voltage	Mounting
DSX2 LED	**Forward optics** P1 P5 P2 P6 P3 P7 P4 P8 **Rotated optics** P10[1] P13[1] P11[1] P14[1] P12[1]	(this section 70CRI only) 30K 3000K 40K 4000K 50K 5000K	70CRI 70CRI 70CRI	AFR Automotive front row T1S Type I short T2M Type II medium T3M Type III medium T3LG Type III low glare[2] T4M Type IV medium T4LG Type IV low glare[2] TFTM Forward throw medium TSM Type V medium T5LG Type V low glare T5W Type V wide BLC3 Type III bi-laterial control[3] LCCO Left corner cutoff[3] RCCO Right corner cutoff[3]	MVOLT (120V-277V)[4] HVOLT (347V-480V)[4,5] VOLT (277V - 480V)[4,5] 120 [6,7] 208 [6,7] 240 [6,7] 277 [6,7] 347 [6,7] 480 [6,7]	**Shipped included** SPA Square pole mounting (#8 drilling) RPA Round pole mounting (#8 drilling) SPAS Square pole mounting #5 drilling[8] RPA5 Round pole mounting #5 drilling[8] SPARN Square narrow pole mounting #8 drilling WBA Wall bracket[9] MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)

Control options	Other options	Finish (required)
Shipped included NLTAIR2 PIRHN High/Low, ambient sensor, 8-40' mounting height, ambient sensor enabled at dusk, dim to 70% at midnight[10,11,12] PIR High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at dusk, dim to 70% at midnight[10,11,12] PER NEMA twist-lock receptacle only (controls ordered separate)[10] PER5 Five-pin receptacle only (controls ordered separate)[10,13]	PER7 Seven-pin receptacle only (controls ordered separate)[10,13] FAO Field adjustable output[14,15] BL30 Bi-level switched dimming, 30%[14,15] BL50 Bi-level switched dimming, 50%[14,15] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) DS Dual switching[14,15,21]	**Shipped separately** EGSR External Glare Shield (reversible, field install required, matches housing finish) BSDB Bird Spikes (field install required)

DDBXD Dark Bronze
DBLXD Black
DNAXD Natural Aluminum
DWHXD White
DDBTXD Textured dark bronze
DBLBXD Textured black
DNATXD Textured natural aluminum
DWHGXD Textured white

LITHONIA LIGHTING
COMMERCIAL OUTDOOR

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com
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DSX2-LED
Rev. 04/29/25
Page 1 of 10

Ordering Information

Accessories

Ordered and shipped separately.

BLL12YF 1.5 AI	Photocell - SSL twist-lock (120-277V) [16]
BLL347F 1.5 CIR JU	Photocell - SSL twist-lock (347V) [16]
BLL480F 1.5 CIR JU	Photocell - SSL twist-lock (480V) [16]
DSHS8T SBK	Shorting cap [16]
DSX2HS PH	House-side shield (center package number 1-13 to indicate PH)
DSXRH (FINISH)	Round pole adapter (#8 drilling, specify finish)
DSXSPA5 (FINISH)	Square pole adapter #5 drilling (specify finish)
DSXRPA5 (FINISH)	Round pole adapter #5 drilling (specify finish)
DSXEGSR (FINISH)	External glare shield (specify finish)
DSXBSDB (FINISH)	Bird spike deterrent bracket (specify finish)

NOTES

1. Rotated optics available with packages P10, P11, P12, P13 and P14. Must be combined with option L90 or R90.
2. 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 25K only available with 80CRI. Contact Technical Support for other possible combinations.
3. T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
4. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
5. HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
6. HVOLT not available with package P10 when combined with option NLTAIR2 PIRHN or option PIR.
7. 3VOLT operates with any voltage between 277V and 480V (50/60 Hz).
8. 3VOLT not available in package P10. XVOLT not available with fusing (SF or DF).
9. SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
10. WBA not available with P1, P2, P3, P4, P10, P11, P12, P13, P14 (2 drivers).
11. NLTAIR2 and PIRHN must be ordered together. For more information on nLight AIR2 visit this link.
12. NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50, DMG and DS. NLTAIR2 PIRHN not available with P10 using MVOLT. NLTAIR2 PIRHN not available with P10 using HVOLT.
13. PIR not available with NLTAIR2 PIRHN. PER, PER5, PER7, FAO BL30, BL50, DMG and DS. PIR not available with P10 using MVOLT. PIR not available with P10 using XVOLT.
14. FAO PER5,PER7,PERT not available with NLTAIR2 PIRHN, PIR, BL30, BL50, FAO, DMG and DS. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
15. FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PERS, PER7, BL30, BL50, DMG and DS.
16. BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO, DMG and DS. BL30 or BL50 must specify 120 or 277V.
17. DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DS.
18. DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DMG.
19. DS requires (2) separately switched circuits. DS provides 50/50 fixture operation via (2) different sets of leads on P1, P2, P3, P4, P5 (2 drivers). Note: Provides 60/40 operation using (2) different sets of leads on P6, P7, P8, P9, P10, P11, P12, P13, P14 (3 drivers).
20. Reference Motion Sensor Default Settings table on page 4 to see functionality.
21. Reference Controls Options table on page 4.
22. HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
23. CCE option not available with option BS and BSSP. Contact Technical Support for availability.
24. Option HA not available with performance packages P5, P6, P7, P8, P13 and P14.
25. Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
26. Single fuse (SF) requires 120V, 277V, or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).
27. Option 3G for use with (MA) mast arm mount only when 3G vibration is required.

Shield Accessories



External Glare Shield (EGSR)



House Side Shield (HS)

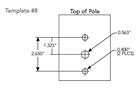
Drilling

HANDHOLE ORIENTATION



Handhole

Template #8



Tenon Mounting Slipfitter

Arms @ 0	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
2-3/8"	#8	AS3-5-190	AS3-5-280	AS3-5-290	AS3-5-390	AS3-5-320	AS3-5-490
2-7/8"	#8	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	#8	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
		Maximum Acceptable Outside Pole Dimension					
SPA	#8	3.5"	3.5"	3.5"	3.5"		3.5"
RPA	#8	3"	3"	3"	3"	3"	3"
SPA5	#5	3"	3"	3"	3"	3"	3"
RPA5	#5	3"	3"	3"	3"	3"	3"
SPARN	#8	3"	3"	3"	3"		3"

DSX2 Area Luminaire - EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX2 with SPA	1.06	2.12	1.84	2.32	---	2.33
DSX2 with SPA5, SPARN	1.07	2.14	1.90	2.43	---	2.44
DSX2 with RPA, RPA5	1.07	2.14	1.90	2.43	2.11	2.44
DSX2 with WA	1.20	2.40	2.12	3.00	2.92	3.00

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COMMERCIAL OUTDOOR

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DSX2-LED
Rev. 04/29/25
Page 2 of 10

LUMINAIRE - DSX2 LED SERIES (FIXTURE L1,L2,L3)

KBR8 LED

LED Specification Bollard

BAA BABA

Catalog Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

8" Round (20.3 cm)

Height: 40" (101.6 cm)

Weight (max): 27 lbs (12.25 kg)



Introduction

The KBR8 Bollard is a stylish, fully integrated LED solution for walkways. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.

With an expected service life of over 20 years of nighttime use and up to 70% in energy savings over comparable 100W metal halide luminaires, the KBR8 Bollard is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

Ordering Information

EXAMPLE: KBR8 LED 16C 700 40K SYM MVOLT DDBXD

KBR8 LED

Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Control options	Other options	Finish (required)
KBR8 LED	**Asymmetric** 12C 12 LEDs[1] **Symmetric** 16C 16 LEDs[1]	350 350 mA 450 450 mA[1,4] 530 530 mA 700 700 mA	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted AMBLW Amber limited wavelength[1,4]	ASY Asymmetric[1] SYM Symmetric[1]	MVOLT[1,2] 120[1] 208[1] 240[1] 277[1] 347[1,4]	**Shipped installed** PE Photoelectric cell, button type DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) ELCW Emergency battery backup, CA Title 20 Noncompliant[3]	**Shipped installed** SF Single fuse (120, 277, 347V)[4,5] DF Double fuse (208, 240V)[4,5] H24 24" overall height H30 30" overall height H36 36" overall height FG Ground-fault finish-on outlet U/AB Without anchor bolts (1 full nut) U/AB4 4 bolt retrofit base without anchor bolts[6]	DWHXD White DNAXD Natural aluminum DDBXD Dark bronze DBLXD Black DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

Accessories

Ordered and shipped separately.

MRAB U Anchor bolts for KBR8 LED*

NOTES

1. Only available in the 12C, 40Y version.
2. Only available in the 16C, SYM version.
3. Only available with 40C AMBLW version.
4. Not available with ELCW.
5. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options), or photocontrol (PE option).
6. Not available with 347V. Not available with fusing. Not available with 40C AMBLW.
7. Single fuse (SF) requires 120, 277, or 347 voltage option. Double fuse (DF) requires 208 or 240 voltage option.
8. MRAB U not available with U/AB4 option.

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KBR8-LED
Rev. 03/26/24

Performance Data

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Actual wattage may differ by +/- 8% when operating between 120-480V +/- 10%.

Light Engine	Drive Current	System Watts	3000K				4000K				5000K				Standard Wavelength Amber			
			Lumens	LPW	B	U	Lumens	LPW	B	U	Lumens	LPW	B	U	Lumens	LPW	B	U
Asymmetric 3 Engines (12 LEDs)	350	16	641	40	1	1	809	51	1	1	870	54	1	1				
	530	22	947	43	1	1	1,191	54	1	1	1,282	58	1	1				
	700	31	1,214	40	1	1	1,537	51	1	1	1,646	55	1	1				
	Amber 450	16													324	20	0	1
Symmetric 4 Engines (16 LEDs)	350	20	888	44	1	0	1,116	56	1	0	1,203	60	1	0				
	530	28	1,254	45	1	0	1,598	57	1	0	1,719	61	1	0				
	700	39	1,608	41	1	0	2,022	52	1	0	2,160	56	2	0				
	Amber 450	20													374	19	0	0

Note: Available with 2700K, 3500K and 4000K correlated color temperatures (CCT) and minimum CRI of 70. Custom CCT can be calculated by applying a 0.7 factor to 4000 K lumen values and photometric files.

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate L27, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.00	0.98	0.97	0.95

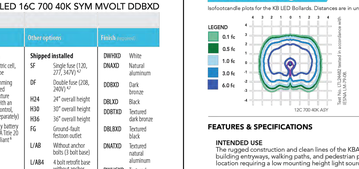
Electrical Load

Light Engine	Drive Current (mA)	System Watts	Current (A) 120	208	240	277	347
12C	350	16W	0.138	0.118	0.114	0.109	0.105
	530	22W	0.217	0.186	0.176	0.158	0.178
	700	31W	0.296	0.185	0.168	0.153	0.139
	Amber 450	16W	0.161	0.120	0.115	0.110	0.106
16C	350	20W	0.197	0.157	0.138	0.123	0.114
	530	28W	0.282	0.178	0.162	0.148	0.135
	700	39W	0.385	0.211	0.207	0.185	0.163
	Amber 450	20W	0.199	0.139	0.130	0.123	0.116

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's KBR8 Bollard homepage.

Isofootcandle plots for the KBR LED Bollards. Distances are in units of mounting height (3').



FEATURES & SPECIFICATIONS

INTENDED USE

The rugged construction and clean lines of the KBA bollard is ideal for illuminating building entryways, walking paths, and pedestrian plazas, as well as any other location requiring a low mounting height light source with fully cutoff illumination.

CONSTRUCTION

One-piece 8-inch round extruded aluminum shaft with thick side walls for extreme durability, a high-impact clear acrylic lens and welded top cap. Die-cast aluminum mounting ring allows for easy leveling even in sloped locations and a full 360-degree rotation for precise alignment during installation. Three ½" x 11" anchor bolts with double nuts and washers and 3 ¾" bolt circle template ensure stability. Overall height is 42" standard.

FINISH

Exterior parts are protected by a zinc-infused super durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering for maximum retention of gloss and luster. A tightly controlled multi-stage process ensures a minimum 3-mil thickness for a finish that can withstand the elements without cracking or peeling. Available in both textured and non-textured finishes.

OPTICS

Two fully cutoff optical distributions available: symmetrical and asymmetrical. IP66 sealed LED light engine provides smoothly graduated illumination without any uplight. Light engines are available in standard 4000 K (>70 CRI) or optional 3000 K (>80 CRI) or 5000 K (67 CRI). Limited-wavelength amber LEDs are also available.

ELECTRICAL

Light engines consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (L70/100,000 hours at 700mA at 25°C). Class 2 electronic drivers are designed for an expected life of 100,000 hours with < 1% failure rate. Electrical components are mounted on a removable power tray.

LISTINGS

CSA certified to U.S. and Canadian standards. Light engines are IP66 rated. Rated for -40°C minimum ambient. Cold-weather emergency battery backup rated for -20°C minimum ambient.

GOVERNMENT PROCUREMENT

BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under the definitions of the Build America, Buy America Act. Please refer to www.acuitybrands.com/buy-american for additional information.

BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act. Please refer to www.acuitybrands.com/Buy-american for additional information.

WARRANTY

Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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KBR8-LED
Rev. 03/26/24

LUMINAIRE - KBR8 LED SERIES (FIXTURE L4)

LITHONIA LIGHTING

Catalog Number

Notes

Type

Anchor Base Poles

SSS

SQUARE STRAIGHT STEEL

BAA BABA

FEATURES & SPECIFICATIONS

INTENDED USE — These specifications are for USA standards only. Square Straight Steel is a general purpose light pole for up to 39-foot mounting heights. This pole provides a robust yet cost effective option for mounting area lights and floodlights.

CONSTRUCTION —

Pole Shaft: The pole shaft is of uniform dimension and wall thickness and is made of a weldable-grade, hot-rolled, commercial-quality steel tubing with a minimum yield of 55 KSI (11-gauge, 0.120"), or 50 KSI (7-gauge, 0.179"). Shaft is one-piece with a full-length longitudinal high-frequency electric resistance weld. Uniformity square in cross-section with flat sides, small corner radii and excellent torsional qualities. Available shaft widths are 4", 5" and 6".

Pole Top: Options include 4" tenon top, drilled for side mount fixture, tenon with drilling (includes extra handhole) and open top. Side drilled and open top poles include a removable top cap.

Handhole: A reinforced handhole with grounding provision is provided at 18" from the base on side A. Positioning the handhole lower may not be possible and requires engineering review; consult Tech Support-Outdoor for further information. Every handhole includes a cover and cover attachment hardware. The handhole has a nominal dimension of 2.5" x 5".

Base Cover: A durable ABS plastic two-piece full base cover, finished to match the pole, is provided with each pole assembly. Additional base cover options are available upon request.

Anchor Base/Bolts: Anchor base is fabricated from steel that meets ASTM A36 standards and can be altered to match existing foundations; consult factory for modifications. Anchor bolts are manufactured to ASTM F1554 Standards grade 55, (55 KSI minimum yield strength and tensile strength of 75-95 KSI). Top threaded portion (nominal 12") is hot-dipped galvanized per ASTM A-153.

HARDWARE — All structural fasteners are high-strength galvanized carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.

FINISH — Extra durable painted finish is coated with TGIC (Triglycidyl Isocyanurate) Polyester powder that meets SAA and SB classifications of ASTM D3359. Powder-coat finishes include Dark Bronze, White, Black, and Natural Aluminum colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes.

GOVERNEMENT PROCUREMENT —

BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to www.acuitybrands.com/buy-american for additional information.

INSTALLATION — Do not erect poles without having fixtures installed. Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates. If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage. Lithonia Lighting is not responsible for the foundation design.

WARRANTY — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

NOTE: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.



SSS Square Straight Steel Poles

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative. **Example:** SSS 20 5C DM19 DDBXD

SSS Series	Nominal fixture mounting height	Nominal shaft base size/wall thickness[1]	Mounting[2]	Options	Finish
SSS	10'-39' (for 1/2 ft increments, add -4 to the pole height. **Ex:** 20-4 equals 20ft 6in.) (See technical information table for complete ordering information.)	4C 4" 11g (0.120") 4G 4" 7g (0.179") 5C 5" 11g (0.120") 5G 5" 7g (0.179") 6G 6" 7g (0.179") (See technical information table for complete ordering information.)	Tenon mounting PT Open-top (includes top cap) T20 2-3/8" O.D. (2" NPS) T25 2-7/8" O.D. (2-1/2" NPS) T30 3-1/2" O.D. (3" NPS) T35 4" O.D. (3-1/2" NPS) KAC/KAD/KSE/KSS/KWB/KYE Drill mounting[3] DM19 1 at 90° DM28 2 at 180° DM28 PL 2 at 180° with one side plugged DM29 2 at 90° DM39 3 at 90° DM49 4 at 90° CSX/DSX/RSX/AERC™/OMERO™/KAX Drill mounting[3] DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM39AS 3 at 90° DM49AS 4 at 90° RAD drill mounting[3] DM19RAD 1 at 90° DM28RAD 2 at 180° DM29RAD 2 at 90° DM39RAD 3 at 90° DM49RAD 4 at 90° ESX Drill mounting[3] DM19ESX 1 at 90° DM28ESX 2 at 180° DM29ESX 2 at 90° DM39ESX 3 at 90° DM49ESX 4 at 90°	Shipped installed VD Vibration damper[4] HAxy Horizontal arm bracket (1 fixture)[5,6] FDLxy Festoon outlet less electrical[7,8] CPL12/xy 1/2" coupling[8] CPL34/xy 3/4" coupling[8] CPL1/xy 1" coupling[8] NPL12/xy 1/2" threaded nipple[8] NPL34/xy 3/4" threaded nipple[8] NPL1/xy 1" threaded nipple[8] EHIxy Extra handhole[2,8] STLHHC Steel handhole cover (standard is plastic, finish is smooth)[8] FBCSTL2PC 2 Piece steel base cover (standard is plastic)[8] IC Interior coating[10] L/AB Less anchor bolts (Include when anchor bolts are not needed) TP Tamper-resistant handhole cover fasteners NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled) UL UL listed with label (includes NEC compliant cover) BAA BAA(original order) Buy America(n) Act Compliant[11] Match pole to prior order or project[12]	Super durable paint colors DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DGCXD Charcoal gray DTGXD Tennis green DBRXD Bright red DSBXD Steel blue DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white Other finishes GALV Galvanized finish Architectural colors and special finishes[13] (PAINT)-GALV Paint over galvanizing YP30 3 year warranty extension YP53 5 year warranty extension RAL#### Use designated Lithonia Lighting nomenclature in brochure Custom color Nomenclature assigned through Customer Care "Custom Color Process"

NOTES:

1. Wall thickness will be signified with a "C" (11 Gauge) or a "G" (7-Gauge) in nomenclature. "C" - 0.120" | "G" - 0.179".
2. PT open-top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, specify as drilling option/tenon option. The combination includes a single entry and a required extra handhole. *Example:* DM28/T20.
3. Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.
4. On 4" and 5" poles, VD cannot be installed if provisions (EHH, FDL, NPL, CPL) are located higher than 2/3 of the pole's total height. *Example: Pole height is 25ft, A provision cannot be placed above 16ft.*
5. Specify location and orientation when ordering option. **For "x":** Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-". *Example: 09 = 9 and 20ft 3in = 20-3*
   For "y": Specify orientation from handhole (A, B, C, D). Refer to the Handhole Orientation diagram below. *Example: 12" couplings at 9'-3", orientation C = CPL129-4C*
6. Horizontal arm is 18" x 2-3/8" O.D. tenon standard, with radius curve providing 12" rise and 2-3/8" O.D. If ordering two horizontal arms at the same height, specify with HAxyy. *Example: HA208D.*
7. FDL does not come with GFCI outlet or handhole cover. These must be supplied by contractor or electrician.
8. Combination of tenon-top and drill mount includes extra handhole. EHH includes cover.
9. Plastic hand hole cover and base covers come standard with all poles. Items ship separately. Additional parts can be ordered as replacements.
10. Provides enhanced corrosion resistance. N/A with GALV.
11. Use when mill certifications are required.
12. Must add original order number. Not for replacement parts or post sales issues, contact tech support or post sales teams. VM is used to ensure poles match in appearance exactly from order to order, on a single project site. A common use case would be a multi-phase project with multiple orders. *Example: 090130-36784*
13. Must be quoted through AQD. Finishes do not require RFA. RAL colors available are shown in "Architectural Colors brochure". Lead times may be extended up to 2 weeks due to paint procurement.

Accessories: *Order as separate catalog number.*

PL DT20	Plugs for ESX drillings
PL DT8	Plugs for DMxxAS drillings
FVDxxF1	Field installed vibration damper (snake style)

LITHONIA LIGHTING

POLE-SSS

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Rev. 03/27/24

POLE - LITHONIA SSS

No.	REVISIONS	DATE	BY
			JRS
	STORM WATER UPDATE	06/28/25	

Kimley»Horn

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(630) 487-9900
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: BJB
DRAWN BY: BJB
CHECKED BY: SK

STATE OF ILLINOIS
SARA KHAN
62056580
LICENSED PROFESSIONAL ENGINEER
06/27/2025
EXP: 11/30/2025

BRIDGE

BRIDGE INDUSTRIAL
MORTON GROVE

SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR
MORTON GROVE, ILLINOIS 60053

PHOTOMETRIC DETAILS

ORIGINAL ISSUE: 06/27/2025

KHA PROJECT NO. 268915000

SHEET NUMBER

E1.3

MEMORANDUM

To: Village of Morton Grove

From: Tom Szafranski, P.E.
Kimley-Horn and Associates, Inc.

Date: May 5, 2025
Revised: June 27, 2025

Re: ***Bridge Industrial - Morton Grove***
Southwest Corner of Lehigh Avenue & River Drive
Morton Grove, IL 60053

Introduction

Kimley-Horn and Associates, Inc., serves as the engineering consultant for Bridge Industrial. They are proposing to construct an industrial warehouse. The sitework includes demolition, grading, storm sewer, water, sanitary sewer, and paving installation.

The site stormwater management practices will be designed to meet the requirements of the Village of Morton Grove and the Metropolitan Water Reclamation District (MWRD).

Existing Conditions

In existing conditions, the site contains two offices buildings with associated parking and utilities. The site is bound by Lehigh Avenue to the east, Park Avenue to the south, and River Drive to the west and north. The sitework includes demolition, grading, storm sewer, watermain, sanitary sewer, and paving installations across the site.

Runoff drains via on-site storm inlets and sewers with outfalls along both the northern and western portions of River Drive. There is currently no detention provided on this site. As shown in the Existing Impervious Area Exhibit, the existing site contains 7.74-acres of impervious area and 3.23-acres of pervious area.

Proposed Conditions

The proposed development will consist of a ±196,333 SF building with trailer parking and docks to the north and passenger car parking on the south. As shown in the Proposed Impervious Area Exhibit, the proposed site contains 7.96 acres of impervious area and 3.01 acres of pervious area (1.29 of which is the detention basin footprint).

Storm inlets and sewers throughout the site will convey runoff to an aboveground detention basin on the west side of the site. The proposed storm sewers will be sized to convey runoff flows for the 10-year event.

Due to shallow groundwater on site, retention-based practices will not be feasible. In lieu of retention-based practices, a flow-through BMP will be proposed directly upstream of the storm sewer outfall on the north, to meet the MWRD volume control requirements.

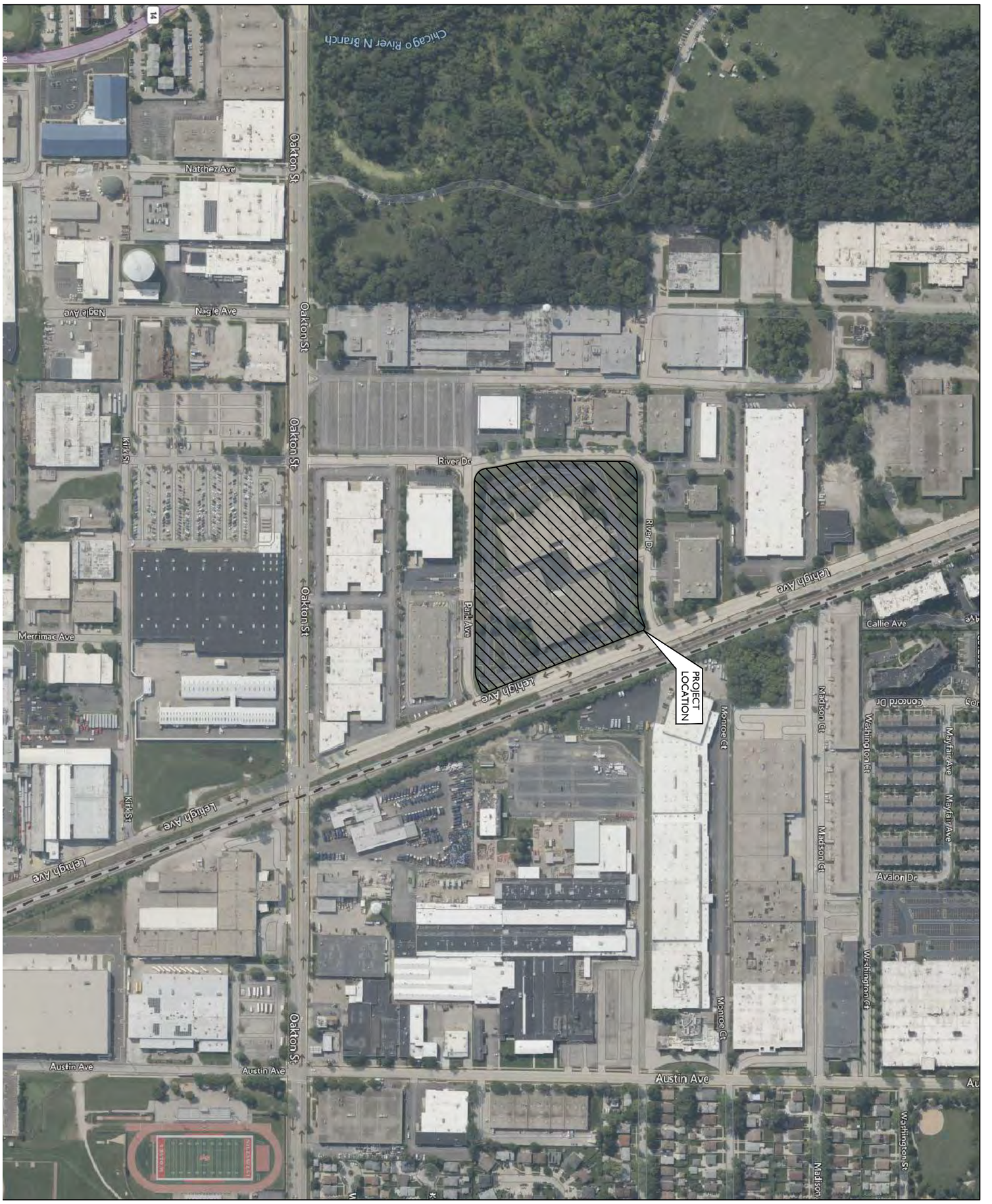
A stormwater model was created using HydroCAD 10.00 to determine the required detention. The aboveground detention basin is designed to store and release runoff from the 100-year event per MWRD requirements. The North Branch Chicago River has a 100-yr base flood elevation (BFE) of 618.00' approximately 1,250' west of the subject site. For the preliminary phase of this design, a tailwater elevation of 618.30' is assumed at the site and has been applied to the detention model. The gross allowable watershed release rate for the subject site is 3.29-cfs (0.3-cfs/ac). Since the unrestricted area of the subject site is less than 5% of the total site area, it is negligible; therefore, the net allowable release rate remains 3.29 cfs. A 7.5" orifice will be utilized to restrict flows to 3.25 cfs during the 100-year, 24-hour storm event. 3.0 ac-ft of detention is provided at a high-water level (HWL) of 622.99.

Attachments

- Exhibit 1 - Site Location Map
- Exhibit 2 - USGS Topography Map
- Exhibit 3 - NRCS Soils Map
- Exhibit 4 - FEMA FIRMette Map
- Exhibit 5 - Existing Impervious Area Exhibit
- Exhibit 6 - Proposed Impervious Area Exhibit
- Exhibit 7 - Preliminary HydroCAD Model

Exhibit 1 – Site Location Map

Plotted By:----- March 18, 2025 12:14:20 PM K:\CHS_LDEV\288815000_Bridge – Morton Grove\6 Permits & Apps\SHPO\SHPO LOCATION MAP.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NORTH

SHEET NUMBER
1 OF 1.

LOCATION MAP (N.T.S)

8120 LEHIGH AVENUE
MORTON GROVE, IL 60053

Kimley»Horn

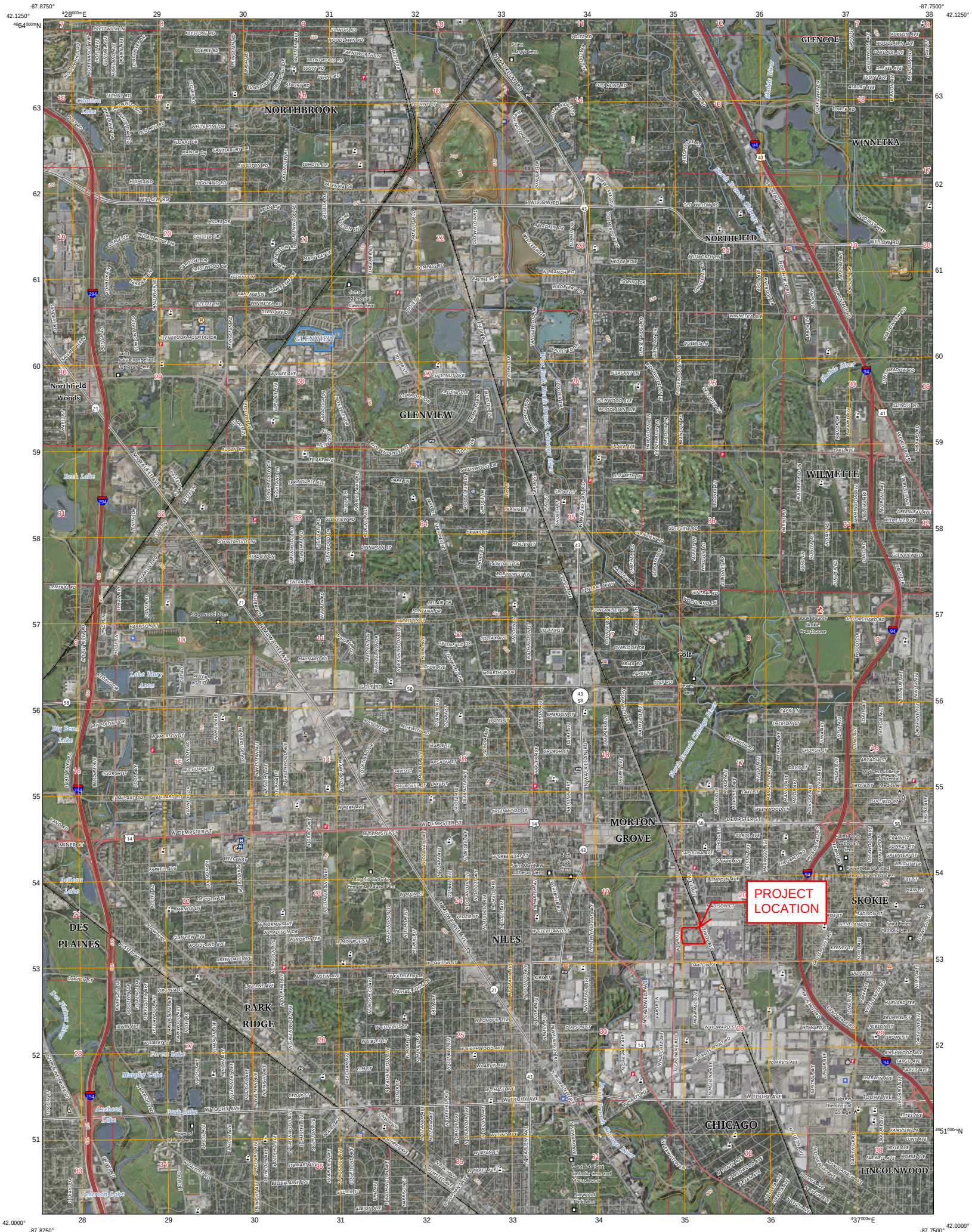
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Exhibit 2 – USGS Topography Map

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

PARK RIDGE QUADRANGLE
ILLINOIS - COOK COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 16T
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery.....NAIP, August 2019 - September 2019
Roads.....U.S. Census Bureau, 2017
Names.....GNIS, 1995 - 2023
Hydrography.....National Hydrography Dataset, 2002 - 2022
Contours.....National Elevation Dataset, 2003
Boundaries.....Multiple sources; see metadata file 2020 - 2022
Public Land Survey System.....BLM, 2020
Wetlands.....FWS National Wetlands Inventory Not Available

MN
GN
3°59'
71 MILS
0°13'
10 MILS
UTM GRID AND 2023 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000-m Square ID
DM
Grid Zone Designation
16T

SCALE 1:24 000
1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the
National Geospatial Program US Topo Product Standard.

ILLINOIS
QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

ADJOINING QUADRANGLES
1 Wheeling
2 Highland Park
3 Highland Park OE E
4 Arlington Heights
5 Evanston
6 Elmhurst
7 River Forest
8 Chicago Loop

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

PARK RIDGE, IL
2024

NSN 7643016365641
NGA REF NO. USGSX24K342301

Exhibit 3 – NRCS Soils Map



Map Scale: 1:1,640 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 20 40 80 120

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cook County, Illinois
Survey Area Data: Version 18, Aug 21, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2023—Sep 1, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

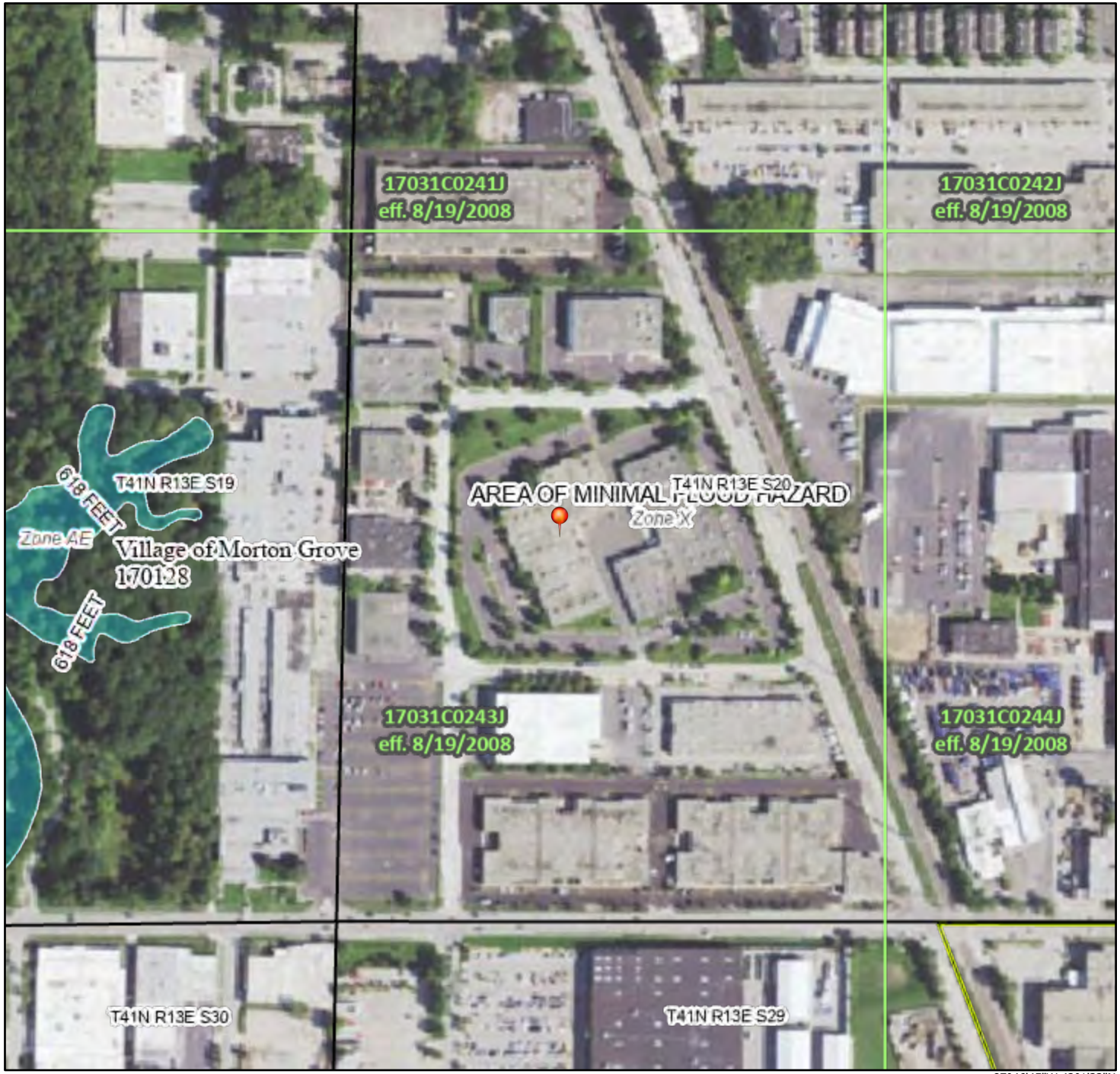
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
533	Urban land	10.8	100.0%
Totals for Area of Interest		**10.8**	**100.0%**

Exhibit 4 – FEMA FIRMette Map

National Flood Hazard Layer FIRMette

FEMA

87°47'22"W 42°1'58"N



87°46'45"W 42°1'32"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

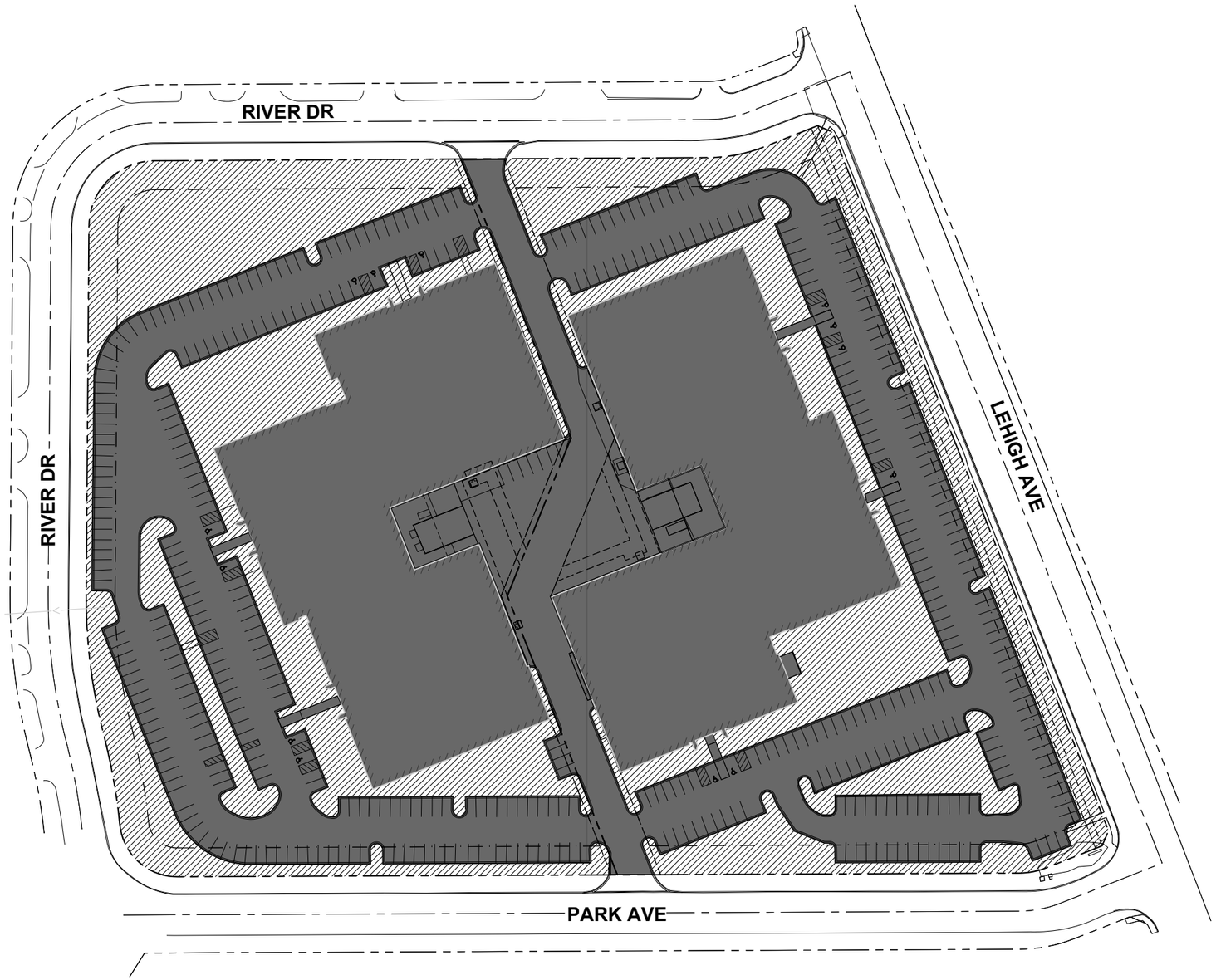
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/11/2025 at 7:14 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Exhibit 5 – Existing Impervious Area Exhibit

Drawing name: K:\DHS_LDEV\268915000_Bridge - Morton Grove\2 Design\CAD\Exhibits\Ex-Impervious Area Exhibit.dwg EXH Apr 30, 2025, 3:12pm by richard.gonzal
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NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

Call Before You Dig
JULIE
1-800-892-0123

UTILITY NOTES

IMPERVIOUS AREA
337,498 SF (7.74 AC)

PERVIOUS AREA
140,462 SF (3.23 AC)

TOTAL AREA: 477,960 SF (10.97 AC)

No.	REVISIONS	DATE	BY

Kimley»Horn

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4201 WINFIELD ROAD, SUITE 600
WARRENVILLE, IL 60555
PHONE: 630-487-5550
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: HLM
DRAWN BY: HLM
CHECKED BY: TJS

BRIDGE

EXISTING IMPERVIOUS AREA EXIHBIT

BRIDGE INDUSTRIAL
MORTON GROVE

SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR
MORTON GROVE, ILLINOIS 60053

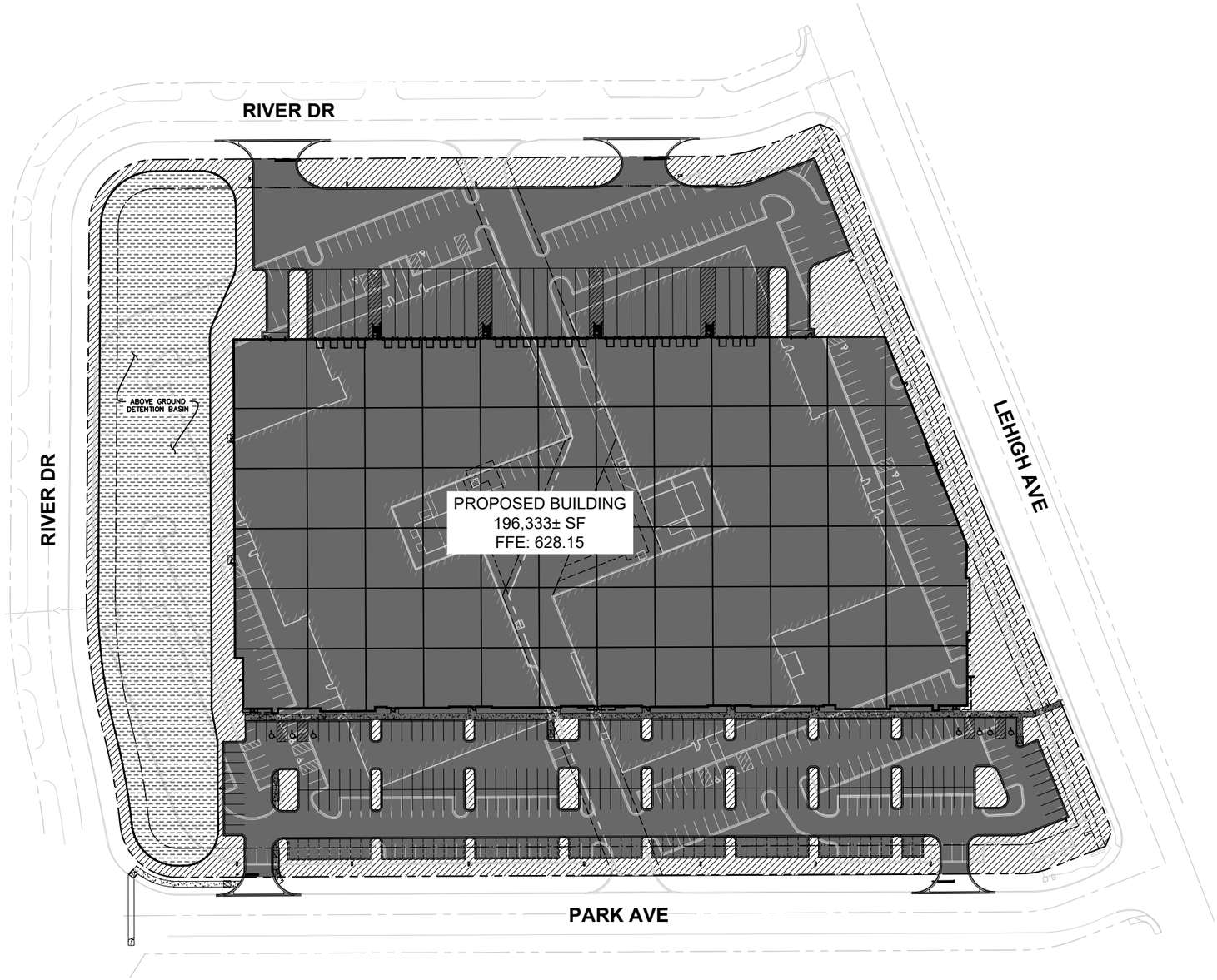
ORIGINAL ISSUE:
05/05/2025

KHA PROJECT NO.
268915000

SHEET NUMBER

1 OF 1

Exhibit 6 – Proposed Impervious Area Exhibit



NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

Call Before You Dig
JULIE
1-800-892-0123

UTILITY NOTES

IMPERVIOUS AREA
346,669 SF (7.96 AC)

PERVIOUS AREA
74,777 SF (1.72 AC)

POND AREA
56,514 SF (1.29 AC)

TOTAL AREA: 477,960 SF (10.97 AC)

No.	REVISIONS	DATE	BY
1	STORM WATER UPDATE	06/28/25	JRS

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4201 WINFIELD ROAD, SUITE 600
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PHONE: 630-487-5550
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: HLM
DRAWN BY: HLM
CHECKED BY: TJS

BRIDGE

PROPOSED IMPERVIOUS AREA EXHIBIT

BRIDGE INDUSTRIAL MORTON GROVE

SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR
MORTON GROVE, ILLINOIS 60053

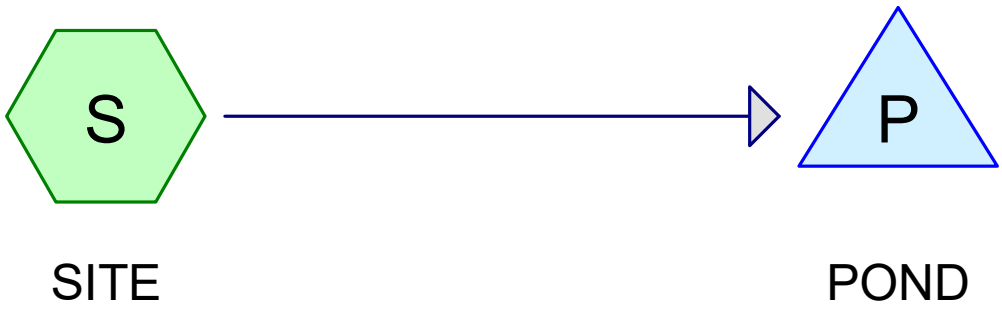
ORIGINAL ISSUE:
06/27/2025

KHA PROJECT NO.
268915000

SHEET NUMBER
1 OF 1

Drawing name: K:\CHS_LIDEV\268915000_Bridge - Morton Grove\2 Design\CAD\Exhibits\Pr-Impervious Area Exhibit.dwg, FXH, Jun 27, 2025 11:53am by Juliette Strosser
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Exhibit 7 – Preliminary HydroCAD Model



Subcat Reach Pond Link

Routing Diagram for Above-Ground Scheme
Prepared by Kimley-Horn & Associates, Printed 6/26/2025
HydroCAD® 10.20-5c s/n 02344 © 2023 HydroCAD Software Solutions LLC

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.720	80	>75% Grass cover, Good, HSG D (S)
7.960	98	Paved parking, HSG D (S)
1.290	100	Pond (S)
10.970	**95**	**TOTAL AREA**

Time span=0.00-80.00 hrs, dt=0.10 hrs, 801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment S: SITE Runoff Area=10.970 ac 84.32% Impervious Runoff Depth=7.97"
Tc=10.0 min CN=95 Runoff=10.28 cfs 7.285 af

Pond P: POND Peak Elev=622.99' Storage=3.014 af Inflow=10.28 cfs 7.285 af
Outflow=3.25 cfs 7.285 af

Total Runoff Area = 10.970 ac Runoff Volume = 7.285 af Average Runoff Depth = 7.97"
15.68% Pervious = 1.720 ac 84.32% Impervious = 9.250 ac

Summary for Subcatchment S: SITE

[49] Hint: Tc<2dt may require smaller dt

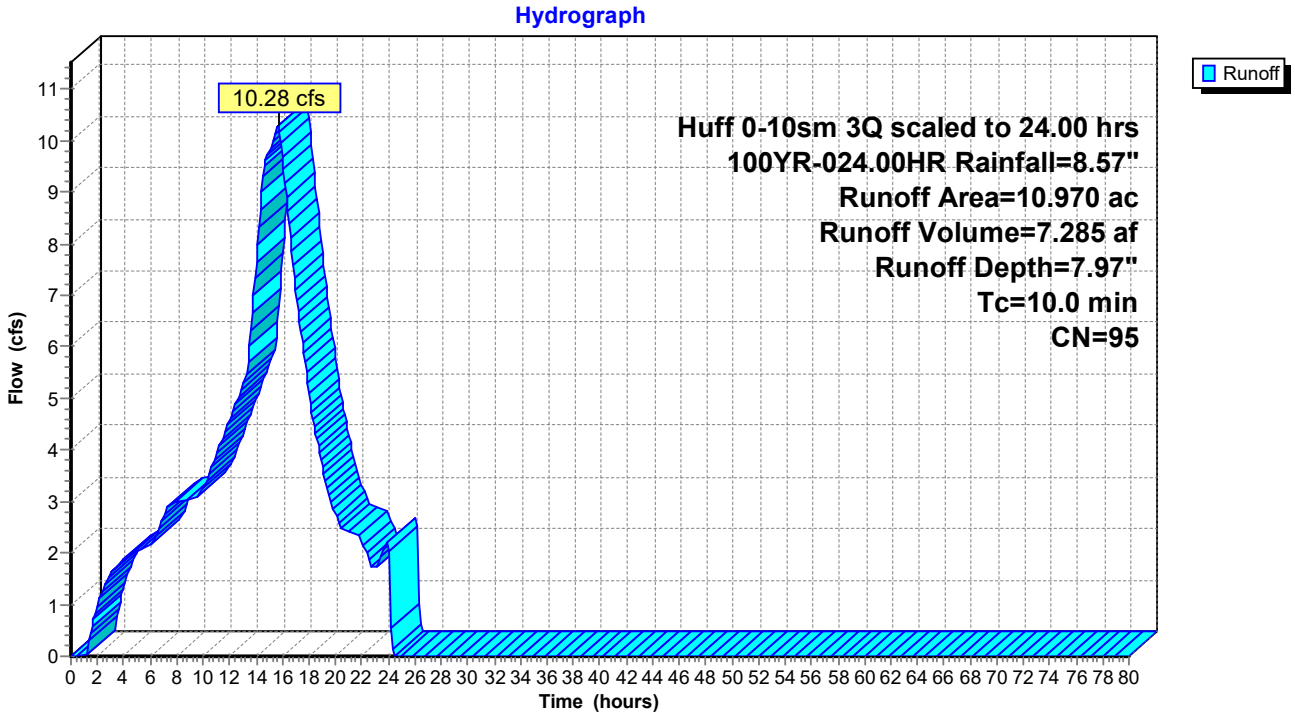
Runoff = 10.28 cfs @ 15.68 hrs, Volume= 7.285 af, Depth= 7.97"
Routed to Pond P : POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.10 hrs
Huff 0-10sm 3Q scaled to 24.00 hrs 100YR-024.00HR Rainfall=8.57"

	Area (ac)	CN	Description
	7.960	98	Paved parking, HSG D
	1.720	80	>75% Grass cover, Good, HSG D
*	1.290	100	Pond
	10.970	95	Weighted Average
	1.720		15.68% Pervious Area
	9.250		84.32% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment S: SITE



Summary for Pond P: POND

[44] Hint: Outlet device #1 is below defined storage

Inflow Area = 10.970 ac, 84.32% Impervious, Inflow Depth = 7.97" for 100YR-024.00HR event
Inflow = 10.28 cfs @ 15.68 hrs, Volume= 7.285 af
Outflow = 3.25 cfs @ 19.33 hrs, Volume= 7.285 af, Atten= 68%, Lag= 219.0 min
Primary = 3.25 cfs @ 19.33 hrs, Volume= 7.285 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.10 hrs
Peak Elev= 622.99' @ 19.33 hrs Surf.Area= 1.141 ac Storage= 3.014 af

Plug-Flow detention time= 371.6 min calculated for 7.285 af (100% of inflow)
Center-of-Mass det. time= 371.4 min (1,207.7 - 836.2)

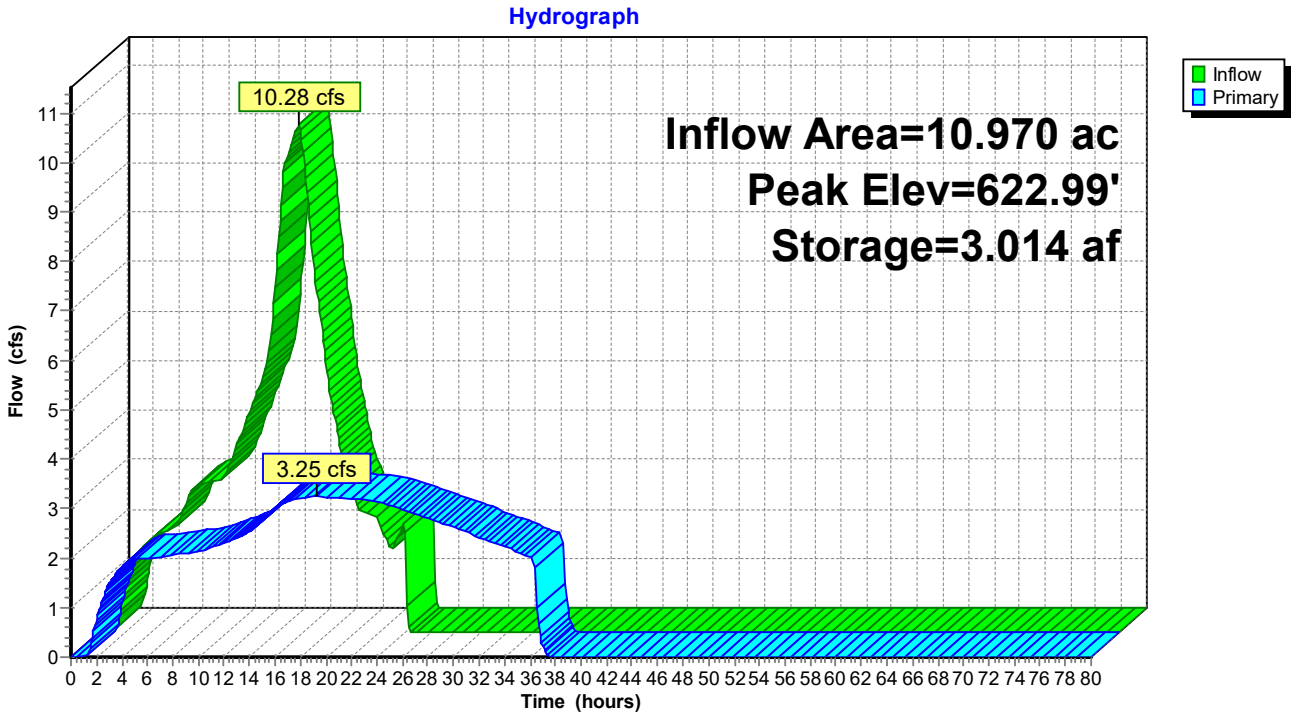
Volume	Invert	Avail.Storage	Storage Description
#1	620.00'	5.102 af	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
620.00	0.879	0.000	0.000
621.00	0.965	0.922	0.922
622.00	1.053	1.009	1.931
623.00	1.142	1.097	3.028
624.00	1.233	1.187	4.216
624.70	1.298	0.886	5.102

Device	Routing	Invert	Outlet Devices
#1	Primary	618.00'	**7.5" Vert. Orifice/Grate** C= 0.610 Limited to weir flow at low heads

Primary OutFlow Max=3.25 cfs @ 19.33 hrs HW=622.99' TW=618.30' (Fixed TW Elev= 618.30')
↑—**1=Orifice/Grate** (Orifice Controls 3.25 cfs @ 10.58 fps)

Pond P: POND


Hydrograph
10.28 cfs
3.25 cfs
Inflow Area=10.970 ac
Peak Elev=622.99'
Storage=3.014 af
Inflow
Primary
Flow (cfs)
Time (hours)

Traffic Impact Study
Proposed Industrial Building
Morton Grove, Illinois



Prepared For:

Midwest RE Acquisitions, LLC.

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

July 1, 2025

1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a proposed industrial building to be located in Morton Grove, Illinois. The site, which currently contains two office buildings, is located within the North Grove Corporate Center in the northwest corner of the intersection of Oakton Street with Lehigh Avenue. As proposed, the site will be redeveloped with an approximately 196,333 square-foot industrial building. Access to the development will be provided via four full movement access drives on River Drive and Park Avenue. These roadways operate as the access system for the North Grove Corporate Center and provide connection to Oakton Street and Lehigh Avenue.

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

Figure 1 shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site.

The sections of this report present the following:

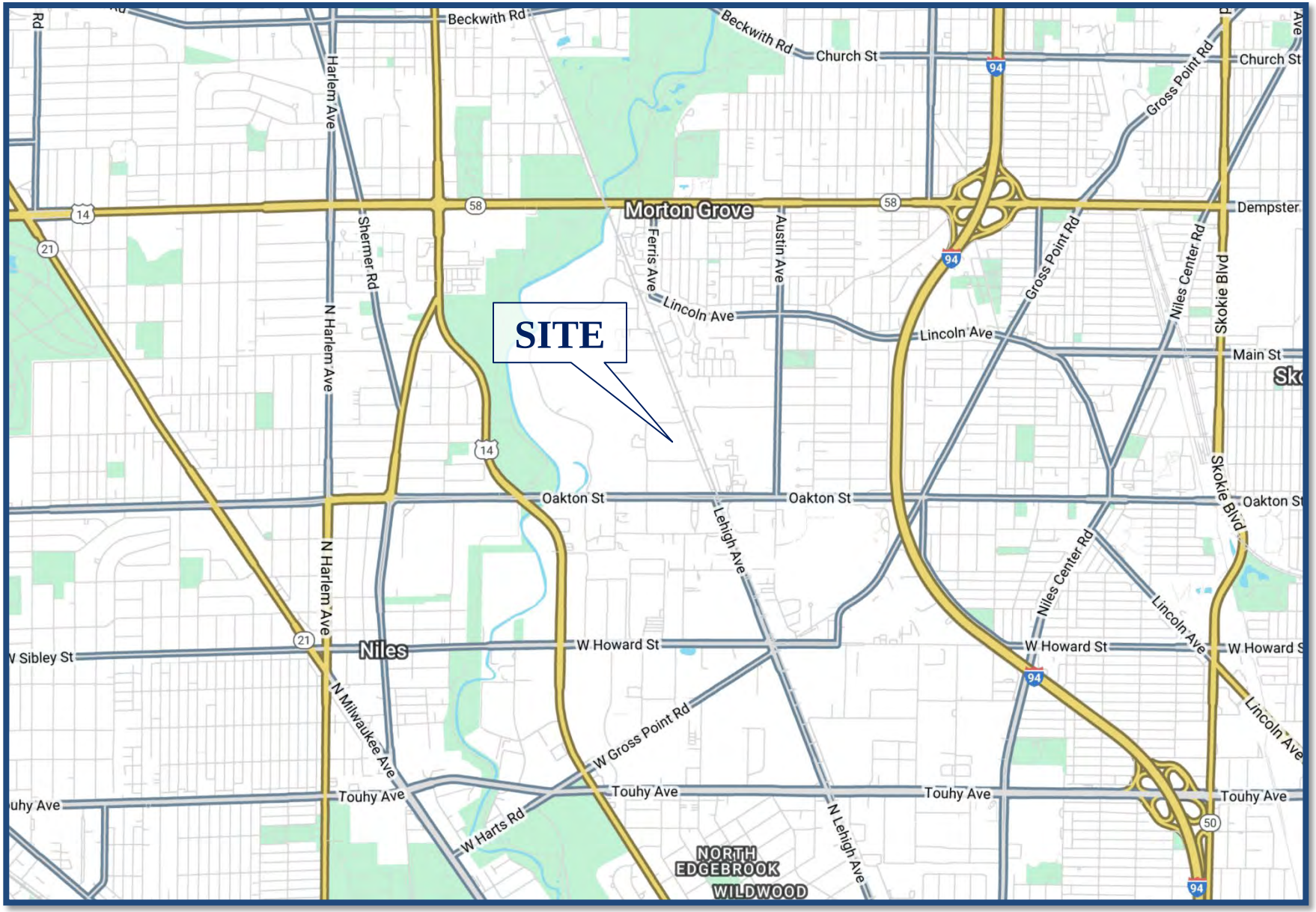
- Existing roadway conditions
- A description of the proposed development
- Directional distribution of the development traffic
- Vehicle trip generation for the development
- Future traffic conditions including access to the development
- Traffic analyses for the weekday morning and evening peak hours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

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

1. Existing Conditions – Analyzes the capacity of the existing roadway system using peak hour traffic volumes from traffic counts conducted in 2025.

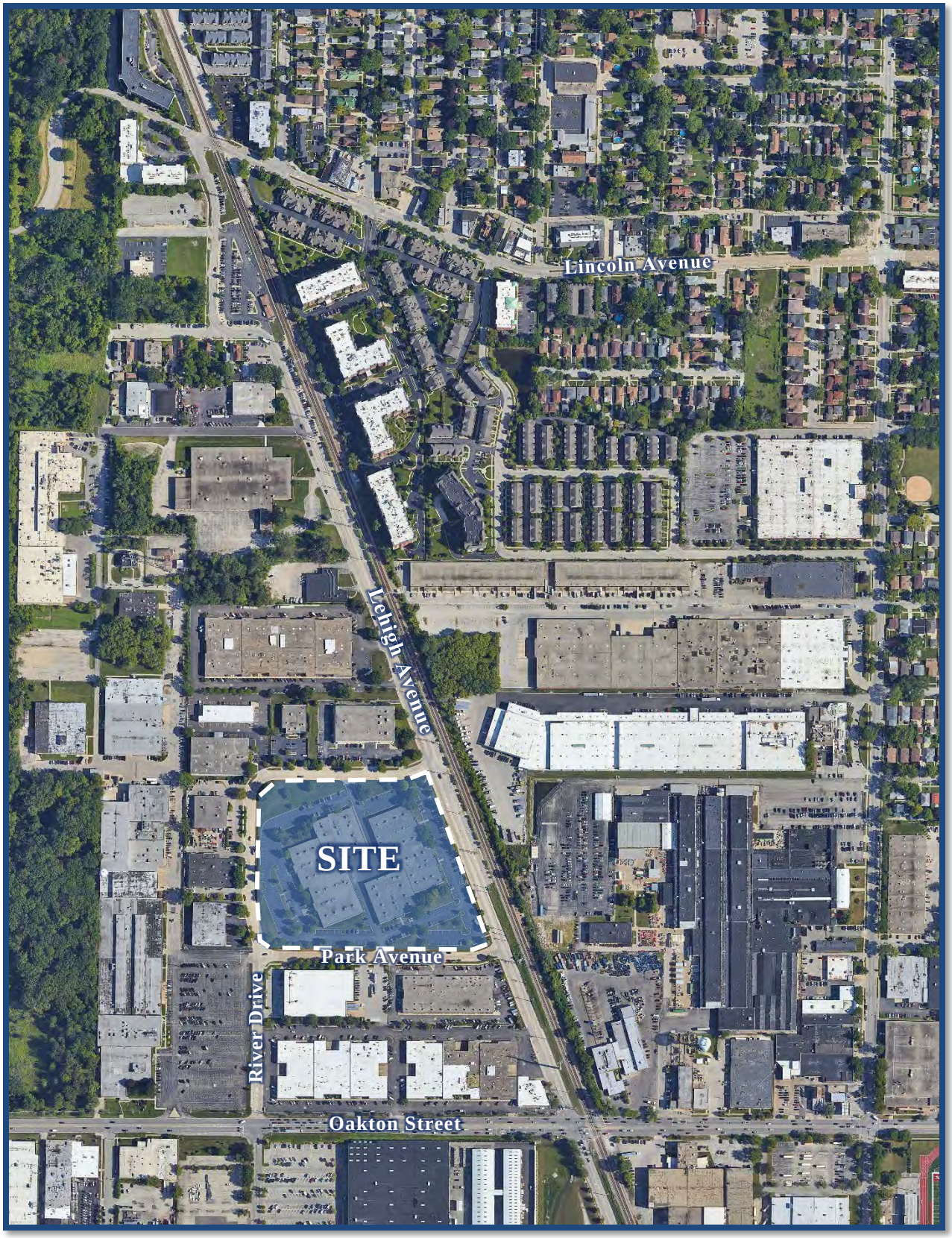
2. Year 2031 No-Build Conditions – Analyzes the capacity of the future roadway system using existing traffic volumes increased by an ambient area growth factor as well as the traffic expected to be generated by multiple area developments.

3. Year 2031 Total Projected Conditions – Analyzes the capacity of the future roadway system using Year 2031 no-build traffic volumes increased by the traffic estimated to be generated by the proposed development.



Site Location
Industrial Building
Morton Grove, Illinois

Figure 1



Aerial View of Site **Figure 2**

2. Existing Conditions

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

Site Location

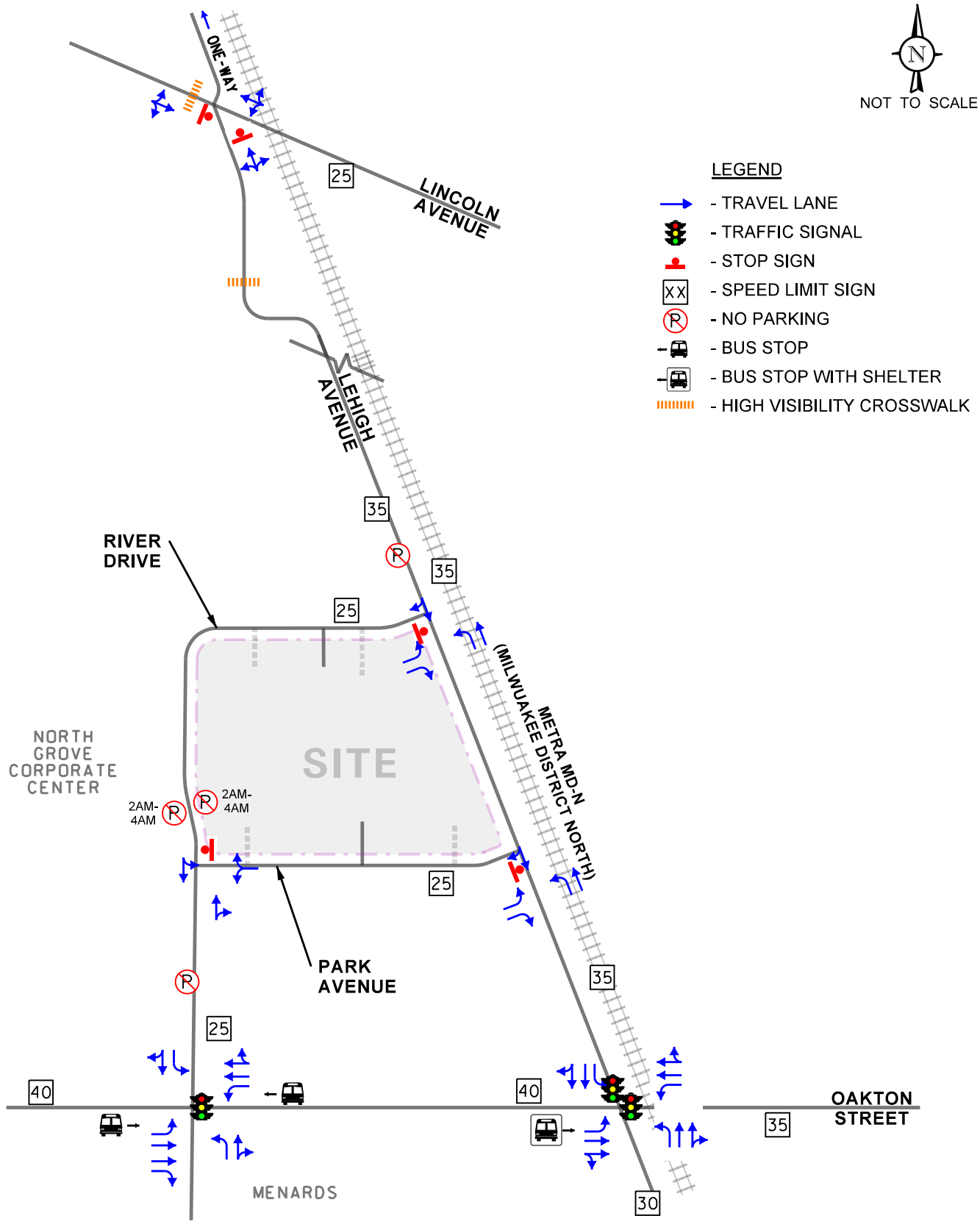
The development site, which currently contains two office buildings, is located within the North Grove Corporate Center. The site is bounded by River Drive to the north and west, Lehigh Avenue to the east, and Park Avenue to the south. Land uses in the vicinity of the site are primarily industrial, warehouse, and distribution with some commercial uses along Oakton Street.

Existing Roadway System Characteristics

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

Oakton Street is an east-west, minor arterial roadway that provides two lanes in each direction. At its signalized intersection with Lehigh Avenue, Oakton Street provides an exclusive left-turn lane, a through lane and a shared through/right-turn lane on both approaches. Immediately east of this intersection, Oakton Street has an at-grade crossing with the Milwaukee District North (MD-N) Metra railroad. At its signalized intersection with River Drive, Oakton Street provides an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane on the eastbound approach and an exclusive left turn lane, a through lane, and a shared through/right-turn lane on the westbound approach. Oakton Street is under the jurisdiction of Illinois Department of Transportation (IDOT), is not designated as a Strategic Regional Arterial (SRA), and carries an Annual Average Daily Traffic (AADT) volume of 27,300 vehicles (IDOT 2022). Oakton Street has a posted speed limit of 35 miles per hour east of Lehigh Avenue and 40 miles per hour west of Lehigh Avenue.

Lehigh Avenue is a north-south, major collector roadway that extends south from Lincoln Avenue and provides one lane in each direction widening to two lanes in each direction through its intersection with Oakton Street. At its signalized intersection with Oakton Street, Lehigh Avenue provides an exclusive left-turn lane, a through lane and a shared through/right-turn lane on both approaches. At its unsignalized intersections with Park Avenue and River Drive, Lehigh Avenue provides one lane in each direction and northbound left-turn lanes. At its unsignalized intersection with Lincoln Avenue, Lehigh Avenue is aligned opposite and inbound only access drive, provides a shared left-turn/through/right-turn lane on the northbound approach, and is under stop sign control. North of Oakton Street, Lehigh Avenue is under the jurisdiction of the Village of Morton Grove, carries an AADT of 2,950 vehicles (IDOT 2023), and has a posted speed limit of 35 miles per hour. South of Oakton Street, Lehigh Avenue is under the jurisdiction of IDOT, carries an AADT of 4,700 vehicles (IDOT 2023), and has a posted speed limit of 30 miles per hour.



Industrial Building
Morton Grove, Illinois

Existing Roadway Characteristics

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

Job No: 25-073 Figure: 3

River Drive is a local roadway that extends north from Oakton Street before turning east and terminating at Lehigh Avenue. River Drive provides one lane in each direction and serves the North Grove Corporate Center. At its signalized intersection with Oakton Street, Lehigh Avenue is aligned opposite an access drive and both approaches provide an exclusive left-turn lane and shared through/right-turn lane. At its unsignalized intersection with Lehigh Avenue, River Drive provides an exclusive left-turn lane and an exclusive right-turn lane on the eastbound approach and is under stop sign control. River Drive is under the jurisdiction of the Village of Morton Grove and has a posted speed limit of 25 miles per hour.

Park Avenue is a local roadway that extends between River Drive and Lehigh Avenue. Park Avenue provides one lane in each direction and serves the North Grove Corporate Center. At its unsignalized intersection with Lehigh Avenue, Park Avenue provides an exclusive left-turn lane and an exclusive right-turn lane on the eastbound approach and is under stop sign control. Park Avenue is under the jurisdiction of the Village of Morton Grove and has a posted speed limit of 25 miles per hour.

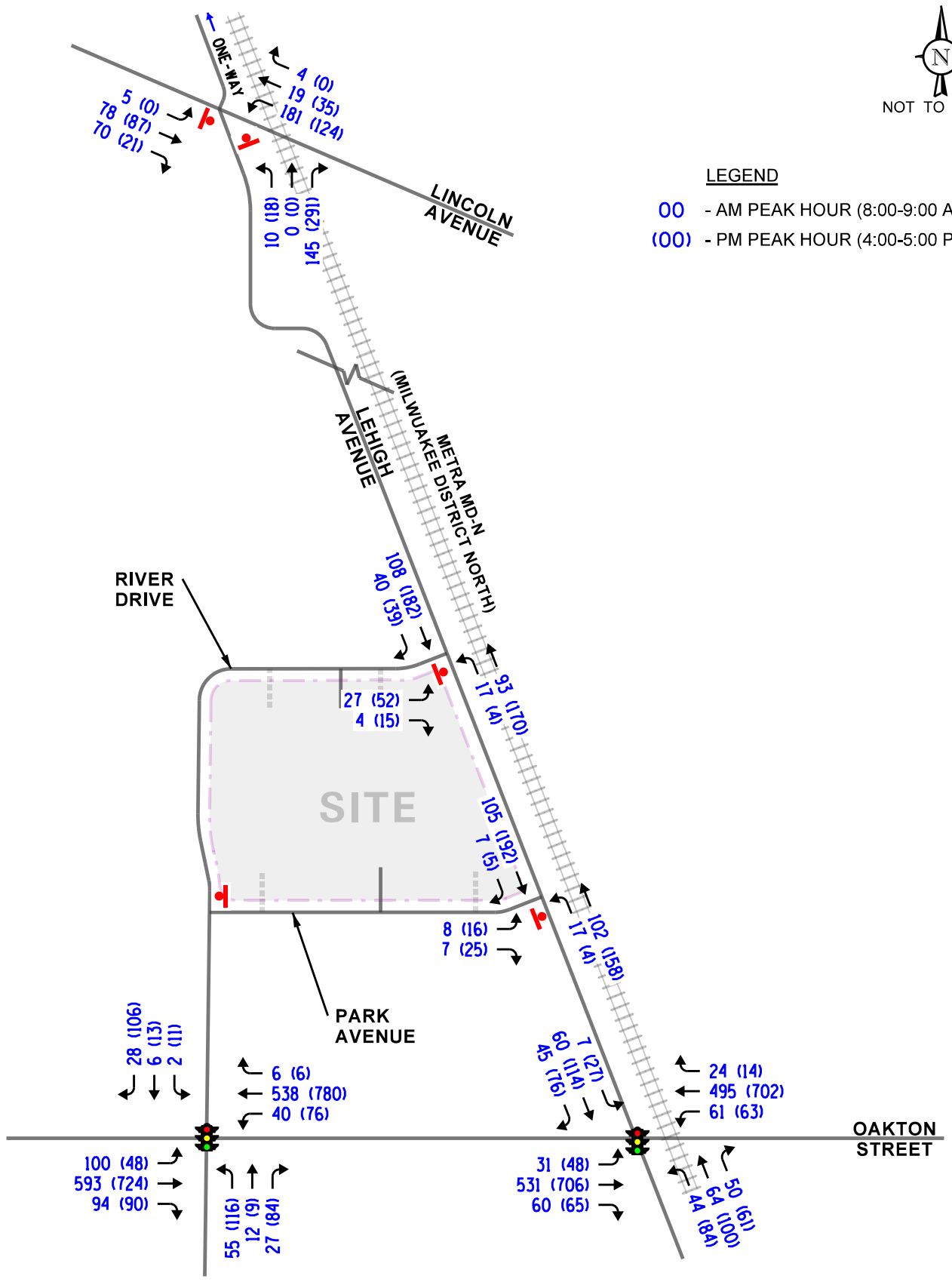
Lincoln Avenue is an east-west, major collector roadway that extends that provides one lane in each direction. At its unsignalized intersection with Lehigh Avenue, Lincoln Avenue provides a shared left-turn/through/right-turn lane on both approaches and the west leg is under stop sign control. This traffic configuration is due to the at-grade crossing with the MD-N railroad on Lincoln Avenue immediately east of this intersection. Lincoln Avenue is under the jurisdiction of the Village of Morton Grove and has posted speed limit of 25 miles per hour. Lincoln Avenue carries an AADT of 1,325 vehicles west of Lehigh Avenue and 3,500 vehicles east of Lehigh Avenue (IDOT 2022).

Existing Traffic Volumes

In order to determine current traffic conditions within the study area, peak period traffic classification counts were conducted at the following intersections:

- Oakton Street with Lehigh Avenue
- Oakton Street with River Drive
- Lehigh Avenue with River Drive
- Lehigh Avenue with Park Avenue
- Lehigh Avenue with Lincoln Avenue

The traffic counts were conducted on Tuesday March 25, 2025 during the weekday morning (6:00 A.M. to 9:00 A.M.) and weekday evening (4:00 P.M. to 7:00 P.M.) peak periods. The results of the traffic counts show that the peak hours of traffic generally occur from 8:00 to 9:00 A.M. during the weekday morning peak period and from 4:00 to 5:00 P.M. during the weekday evening peak period. The existing traffic volumes, inclusive of heavy vehicles, are illustrated in **Figure 4.** The existing heavy vehicle traffic volumes are illustrated in **Figure 5**.

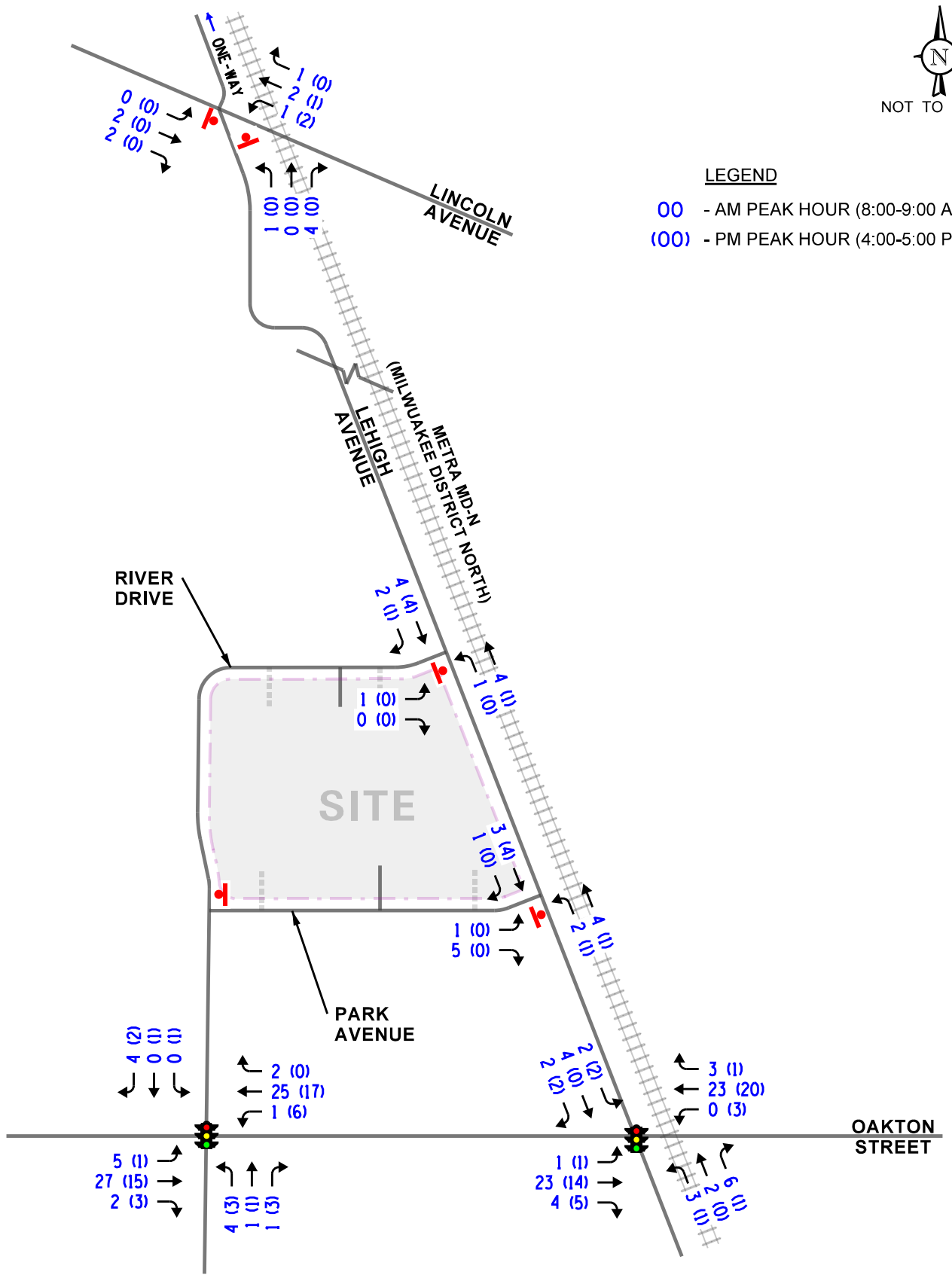


Industrial Building
Morton Grove, Illinois

Existing Traffic Volumes

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

Job No: 25-073 Figure: 4



Industrial Building
Morton Grove, Illinois

Existing Traffic Volumes
Trucks

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

Job No: 25-073 Figure: 5

Crash Analysis

KLOA, Inc. obtained crash data[1] from IDOT for the most recent available five years (2019 to 2023) for the study area signalized intersections. A review of the crash data indicated that only one crash was reported at the intersection of Lehigh Avenue with River Drive, no crashes were reported at the intersection of Lehigh Avenue with Park Avenue, and only two crashes were reported at the intersection of Lehigh Avenue with Lincoln Avenue. Further, no fatalities were reported at any intersection during the review period. **Tables 1** and **2** summarize the crash data for the remaining intersections.

Table 1
OAKTON STREET WITH LEHIGH AVENUE– CRASH SUMMARY

Year	Type of Crash Frequency							
	Angle	Head On	Object	Rear End	Sideswipe	Turning	Other	Total
2019	0	0	0	3	1	0	0	4
2020	0	0	0	1	0	2	0	3
2021	0	0	0	1	0	2	0	3
2022	1	0	0	0	0	6	0	7
2023	1	0	0	1	0	2	1	5
Total	**2**	**0**	**0**	**6**	**1**	**12**	**1**	**22**
Average	**<1.0**	**--**	**--**	**1.2**	**<1.0**	**2.4**	**<1.0**	**4.4**

Table 2
OAKTON STREET WITH RIVER DRIVE – CRASH SUMMARY

Year	Type of Crash Frequency							
	Angle	Head On	Object	Rear End	Sideswipe	Turning	Other	Total
2019	1	0	0	4	0	1	0	6
2020	0	0	0	0	0	1	0	1
2021	0	0	0	0	0	0	0	0
2022	0	0	0	0	1	2	0	3
2023	0	0	0	2	0	5	0	7
Total	**1**	**0**	**0**	**6**	**1**	**9**	**0**	**17**
Average	**<1.0**	**--**	**--**	**1.2**	**<1.0**	**1.8**	**--**	**3.4**

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

3. Traffic Characteristics of the Proposed Development

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

Proposed Site and Development Plan

As proposed, the site will be redeveloped with an approximately 196,333 square foot industrial building with 28 truck docks. The site will provide 194 employee parking spaces with additional space for 52 more spaces in the future if needed. A copy of the preliminary site plan is included in the Appendix. Access to the development will be provided via the following four access drives:

- A full movement access drive on River Drive located approximately 185 feet west of Lehigh Avenue that will serve truck traffic only. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control.

- A full movement access drive on River Drive located approximately 500 feet west of Lehigh Avenue that will serve truck traffic only. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control.

- A full movement access drive on Park Avenue located approximately 185 feet west of Lehigh Avenue that will serve passenger vehicles only. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control.

- A full movement access drive on Park Avenue located approximately 785 feet west of Lehigh Avenue that will serve passenger vehicles only. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control.

The proposed access system will replace the existing full movement access drives serving the site on Park Avenue and Lehigh Avenue. It should be noted that all truck traffic and passenger vehicles traffic will be separated on site with separate access points. This separation will help improve access efficiency, on-site circulation, and safety.

Truck Routes

Truck approaching and departing the development will be able to utilize the following routes:

- ***Via Lehigh Avenue and Touhy Avenue:*** Approximately one mile south of the site, Lehigh Avenue has a signalized intersection with Touhy Avenue. East of Lehigh Avenue, Touhy Avenue has a free-flow interchange with Interstate 94. West of Lehigh Avenue, Touhy Avenue has a signalized intersection with U.S Route 14 (Caldwell Avenue)

- ***Via Oakton Street to the West:*** West of the site, Oakton Street has signalized intersections with U.S. Route 14, Illinois Route 43 (Harlem Avenue), and Illinois Route 21 (Milwaukee Avenue). U.S. Route 14 can be utilized to travel north to Illinois Route 58 (Dempster Street) which has a free-flow interchange with I-94.

- Truck traffic will be prohibited from travelling to and from the north on Lehigh Avenue as truck traffic is restricted on Lincoln Avenue.

- Truck traffic destined to and from the expressway system should be prohibited from approaching from/departing to the east on Oakton Street with the exception of those that have local and/or nearby destinations.

Directional Distribution

The directions from which employees and trucks will approach and depart the development were estimated based on existing travel patterns, as determined from the traffic counts. **Figure 6** illustrates the directional distribution of the development-generated traffic. Figure 6 also shows the distance, in feet, between the existing and proposed access drives.

Peak Hour Traffic Volumes

The estimates of traffic to be generated by the development was based upon the proposed land use type and size, The following trip generation rates were used:

- Trip generation rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 11th Edition were used to determine the amount of daily and hourly **passenger vehicle** site traffic generated. Land Use Code 110 (General Light Industrial) rates were used.

- The volume of daily **truck** traffic generated was based on surveys conducted by KLOA, Inc, at a similar facility. These surveys indicated a truck trip generation rate of 1.8 trucks per 1,000 square-feet. The hourly truck traffic was based on the estimated daily truck trips and ITE's Hourly Distribution of Entering and Exiting Truck Trips table for LUC 110.

The projected peak hour and daily trips estimated to be generated by the development are shown in **Table 3** and the hourly truck trips estimated to be generated by the development are shown in **Table 4.**

Table 3
ESTIMATED PEAK HOUR AND DAILY TRIP GENERATION – 196,333 s.f. BUILDING

ITE Land-Use Code	Traffic Type	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Trips		
		In	Out	Total	In	Out	Total	In	Out	Total
	Truck Trips	16	17	33	5	7	12	177	177	354
110	Passenger Vehicle Trips[1]	119	13	132	17	109	126	370	370	740
Total Trips		**135**	**30**	**165**	**22**	**116**	**138**	**547**	**547**	**1094**

1 – Equal to Total Site Trips less Truck Trips

Table 4
ESTIMATED 24-HOUR TRUCK TRIP GENERATION

Hour	Proposed Industrial Building –196,333 s.f.					
	Weekday Morning			Weekday Evening		
	In	Out	Total	In	Out	Total
12:00	0	0	0	16	15	31
1:00	0	0	0	23	23	46
2:00	0	1	1	19	19	38
3:00	0	0	0	17	15	32
4:00	0	0	0	5	7	12
5:00	0	0	0	1	4	5
6:00	0	0	0	0	0	0
7:00	18	9	27	0	0	0
8:00	16	17	33	0	0	0
9:00	27	28	55	0	0	0
10:00	22	31	53	0	0	0
11:00	13	8	21	0	0	0

Based on daily truck trips (Table 3) and ITE's Hourly Distribution of Entering and Exiting Truck Trips table for LUC 110.

Trip Generation Comparison

The site currently contains two office buildings totaling approximately 144,116 square feet. The volume of traffic that could have been generated by these buildings when they were fully occupied was estimated based on ITE trip generation rates for Land Use Code 710 (General Office Building). **Table 5** provides a comparison of the traffic estimated to be generated by the proposed development to the traffic that would be generated by the office buildings. As can be seen, the proposed development is projected to generate fewer total trips than office buildings and as such will have lower impact on area roadways.

Table 5
TRIP GENERATION COMPARISON

Traffic Type	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Trips		
	In	Out	Total	In	Out	Total	In	Out	Total
Proposed Development - 196,333 s.f. Industrial Building (ITE Land Use Code 110/Survey)									
Total Trips	**155**	**36**	**191**	**26**	**134**	**160**	**629**	**629**	**1,258**
Truck Trips	16	17	33	5	7	12	177	177	354
Passenger Vehicle Trips	119	13	132	17	109	126	370	370	740
Existing Office Buildings - 144,116 s.f. of Office Space (ITE Land Use Code 710)									
Total Trips	**202**	**27**	**229**	**38**	**187**	**225**	**798**	**798**	**1,596**
Truck Trips	1	0	1	0	1	1	7	7	14
Passenger Vehicle Trips	201	27	228	38	186	224	792	792	1,582
Difference									
Total Trips	**-47**	**+9**	**-38**	**-12**	**-53**	**-65**	**-169**	**-169**	**-338**
Truck Trips	+15	+17	+32	+5	+6	+11	+170	+170	+340
Passenger Vehicle Trips	-82	-14	-96	-21	-77	-98	-422	-422	-842

4. Projected Traffic Conditions

The total projected traffic volumes take into consideration the existing traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed subject development.

Development Traffic Assignment

The estimated weekday morning and weekday evening traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution (Figure 6). **Figure 7** illustrates the traffic assignment of the new passenger vehicle trips and **Figure 8** illustrates the traffic assignment of the new truck traffic.

Background (No-Build) Traffic Conditions

The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any planned development). Based on AADT projections provided by the Chicago Metropolitan Agency for Planning (CMAP), the base traffic volumes were increased by an annually compounded growth rate of 0.6 percent per year for six years (buildout year plus five years) for a total of 3.7 percent. A copy of the CMAP letter is included in the Appendix.

In addition, the following proposed or planned developments were included in the no-build traffic volumes:

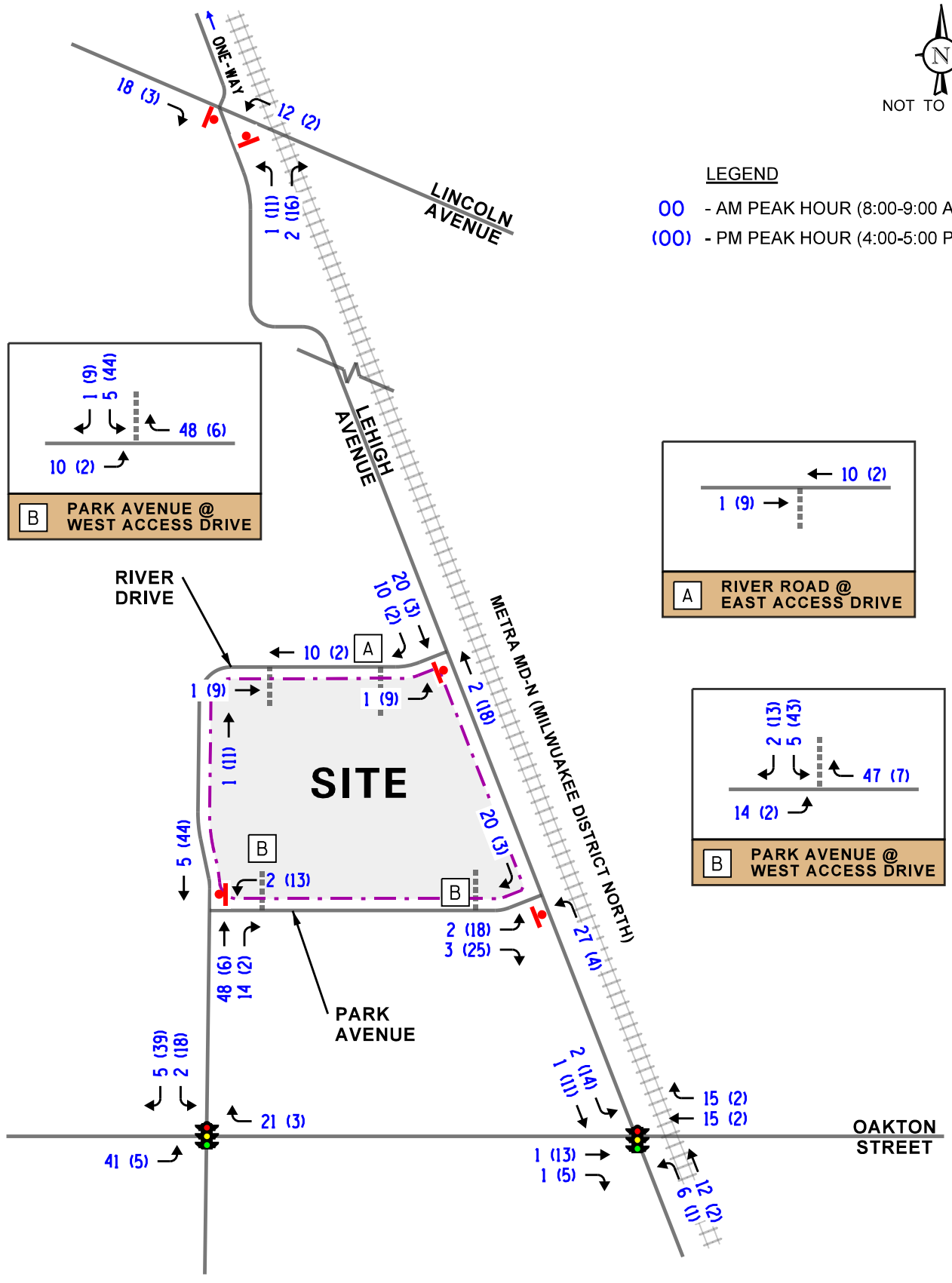
- The Metro at Main townhome development to be located in the southwest corner of the intersection of Lehigh Avenue and Main Street intersection. As proposed the development will contain 89 townhome units. The volume of traffic to be generated by this development was based on the Traffic Planning Study prepared by Kimley-Horn and Associates, Inc. dated October 2022

- A mixed-use transit-oriented development to be located at 8500-8550 Lehigh Avenue. The building will contain a mixture of residential, retail, and restaurant uses. The volume of traffic to be generated by this development was based on the Traffic Planning Study prepared by Kimley-Horn and Associates, Inc. dated January 2022

The Year 2031 no-build traffic volumes, which include the existing traffic volume increased by the ambient growth factor are illustrated in **Figure 9**.

Total Projected Traffic Volumes

The development-generated traffic (Figures 7 and 8) was added to the Year 2031 no-build traffic volumes (Figure 9) to determine the Year 2031 total projected traffic volumes, as shown in **Figure 10.** It should be noted that the total projected volumes do not include the removal of any traffic currently generated by the office buildings that occupy the site despite the buildings being partially occupied.

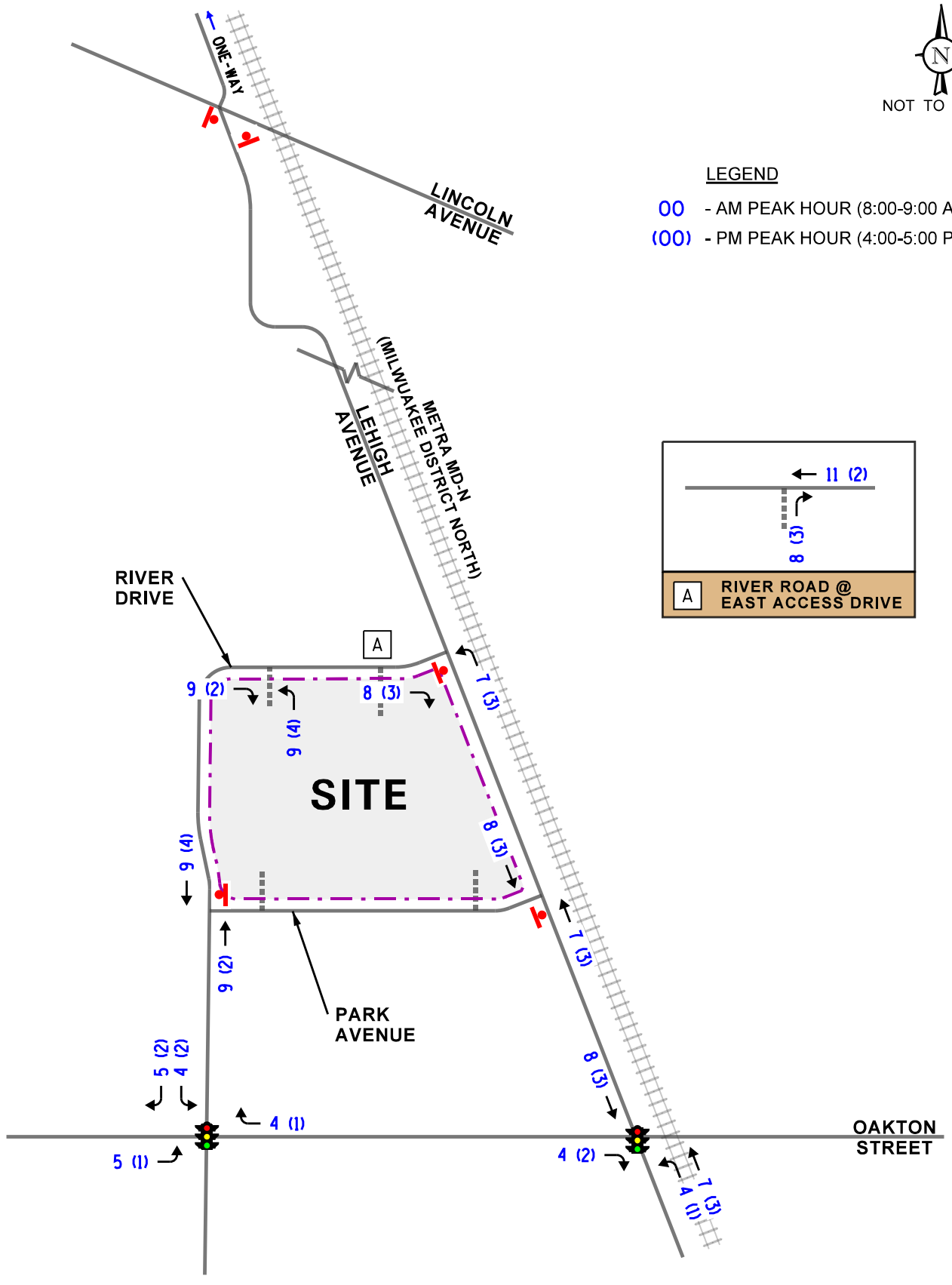


Industrial Building
Morton Grove, Illinois

Site-Generated Traffic Volumes
Passenger Vehicles

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

Job No: 25-073 Figure: 7

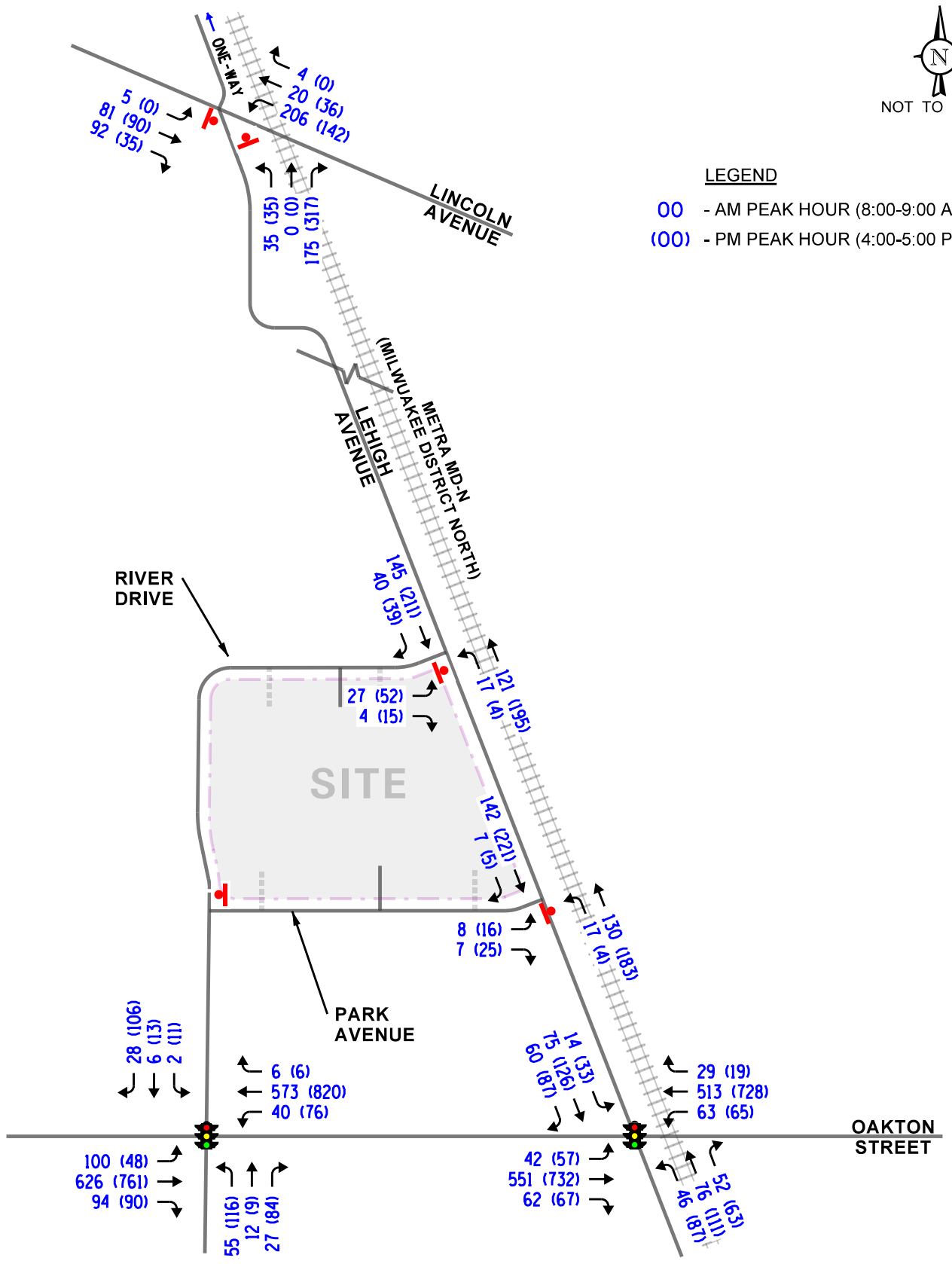


Industrial Building
Morton Grove, Illinois

Site-Generated Traffic Volumes
Trucks

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

Job No: 25-073 Figure: 8

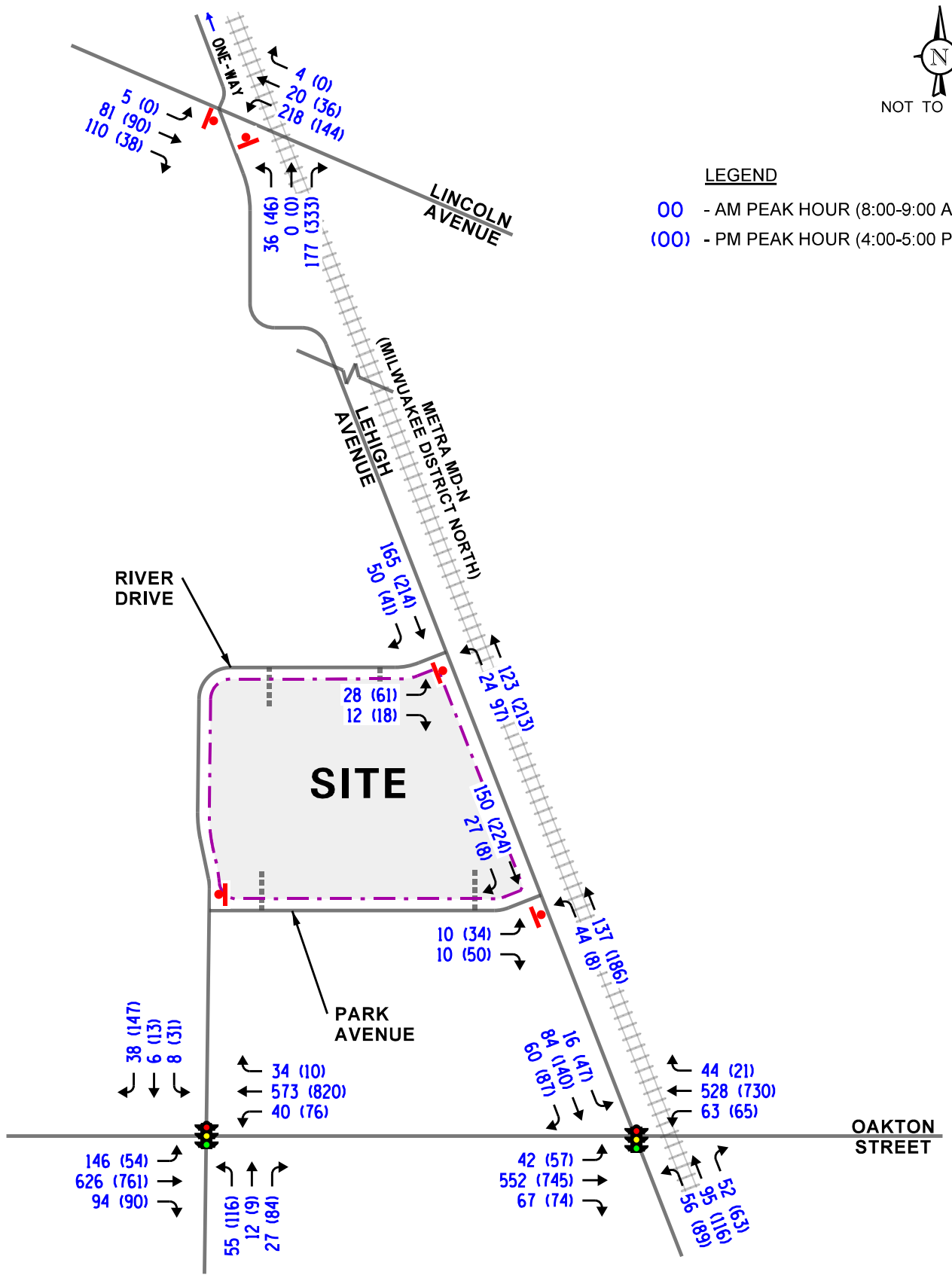


Industrial Building
Morton Grove, Illinois

Year 2031 No-Build Traffic Volumes

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

Job No: 25-073 Figure: 9



Industrial Building
Morton Grove, Illinois

Year 2031 Total Traffic Volumes

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

Job No: 25-073 Figure: 9

5. Traffic Analysis and Recommendations

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

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning and evening peak hours for the existing, Year 2031 no-build, and Year 2031 total projected traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM),* 6th Edition and analyzed using Synchro/SimTraffic 11 software.

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

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

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing, Year 2031 no-build, and Year 2031 total projected conditions are presented in **Tables 6** through **10.** A discussion of each intersection follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 6
CAPACITY ANALYSIS RESULTS – OAKTON STREET WITH LEHIGH AVENUE – SIGNALIZED

	Peak Hour	Eastbound		Westbound		Northbound		Southbound		Overall
		L	T/R	L	T/R	L	T/R	L	T/R	
Existing Conditions	Weekday Morning	A 4.3	A 7.2	A 5.7	A 9.8	C 31.7	D 37.6	C 28.0	D 44.7	B 13.9
		A - 7.1		A - 9.4		D - 36		D - 43.7		
	Weekday Evening	A 5.4	A 9.3	A 7	B 12.8	C 35	D 43.9	C 31.1	D 50.1	B 18.2
		A - 9.1		B - 12.4		D - 40.8		D - 47.7		
No-Build Conditions	Weekday Morning	A 4.8	A 8.1	A 6.5	B 11.2	C 29.7	D 38.2	C 27.9	D 44.9	B 15.4
		A - 7.9		B - 10.7		C – 36.0		D - 43.3		
	Weekday Evening	A 5.7	A 9.7	A 7.4	B 13.6	D 34.6	D 43.6	C 30.8	D 50.0	B 18.9
		A - 9.4		B – 13.1		D - 40.6		D - 47.4		
Total Projected Conditions	Weekday Morning	A 5.0	A 8.5	A 6.8	B 11.8	C 30.0	D 38.0	C 27.1	D 45.1	B 16.2
		A – 8.3		B – 11.3		C – 35.8		D – 43.3		
	Weekday Evening	A 5.8	A 9.7	A 7.6	B 14.0	C 34.2	D 45.9	C 31.0	D 49.9	B 19.4
		A - 9.4		B – 13.5		D - 42.0		D - 46.7		

Letter denotes Level of Service
Delay is measured in seconds.

L – Left Turns
R – Right Turns
T – Through

Table 7
CAPACITY ANALYSIS RESULTS – OAKTON STREET WITH RIVER DRIVE – SIGNALIZED

	Peak Hour	Eastbound			Westbound		Northbound		Southbound		Overall
		L	T	R	L	T/R	L	T/R	L	T/R	
Existing Conditions	Weekday Morning	A 5.5	A 9.4	A 9.7	A 4.2	A 7.3	C 33.2	D 37.0	C 27.5	D 46.3	B 10.7
		A - 8.9			A - 7.1		C - 34.8		D - 45.3		
	Weekday Evening	A 8.9	B 16.2	B 15	A 6.7	B 10.5	C 31.9	D 35.5	C 26.5	E 59.0	B 17.7
		B - 15.7			B - 10.2		C - 33.5		E - 56.3		
No-Build Conditions	Weekday Morning	A 5.5	A 9.5	A 9.7	A 4.3	A 7.3	C 33.2	D 37.0	C 27.5	D 46.3	B 10.6
		A – 9.0			A - 7.1		C - 34.8		D - 45.3		
	Weekday Evening	A 8.9	B 16.4	B 15.0	A 6.7	B 10.6	C 31.9	D 35.5	C 26.5	E 59.0	B 17.7
		B - 15.9			B - 10.3		C - 33.5		E - 56.3		
Total Projected Conditions	Weekday Morning	A 6.4	B 10.0	B 10.3	A 4.6	A 8.3	C 32.1	D 36.3	C 27.8	D 47.7	B 11.4
		A - 9.4			A – 8.1		C – 33.9		D - 44.7		
	Weekday Evening	A 9.8	B 17.9	B 15.9	A 7.3	B 11.7	C 30.7	D 39.1	C 26.7	E 61.7	B 19.8
		B - 17.2			B - 11.3		C - 34.4		E – 56.1		

Letter denotes Level of Service
Delay is measured in seconds.

L – Left Turns
R – Right Turns
T – Through

Table 8
CAPACITY ANALYSIS RESULTS – EXISTING CONDITIONS– UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Lehigh Avenue with River Drive				
• Eastbound Left Turn	B	10.4	B	11.5
• Eastbound Right Turn	A	9.0	A	9.4
• Northbound Left Turn	A	7.6	A	7.7
Lehigh Avenue with Park Avenue				
• Eastbound Left Turn	B	10.4	B	11.0
• Eastbound Right Turn	A	9.7	A	9.4
• Northbound Left Turn	A	7.6	A	7.9
Lehigh Avenue with Lincoln Avenue				
• ICU Level of Service	A	39.4%	A	41.0%

LOS = Level of Service
Delay is measured in seconds.
1 - The operation of this intersection is based on a critical volume to saturation flow (v/s) evaluation also known as the Intersection Capacity Utilization (ICU) method.

Table 9
CAPACITY ANALYSIS RESULTS – NO BUILD CONDITIONS– UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Lehigh Avenue with River Drive				
• Eastbound Left Turn	B	11.0	B	12.0
• Eastbound Right Turn	A	9.2	A	9.6
• Northbound Left Turn	A	7.7	A	7.7
Lehigh Avenue with Park Avenue				
• Eastbound Left Turn	B	10.9	B	11.4
• Eastbound Right Turn	B	10.0	A	9.6
• Northbound Left Turn	A	7.7	A	8.0
Lehigh Avenue with Lincoln Avenue				
• ICU Level of Service	A	45.6%	A	48.2%

LOS = Level of Service
Delay is measured in seconds.
1 - The operation of this intersection is based on a critical volume to saturation flow (v/s) evaluation also known as the Intersection Capacity Utilization (ICU) method.

Table 10
CAPACITY ANALYSIS RESULTS – TOTAL PROJECTED CONDITIONS– UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Lehigh Avenue with River Drive				
• Eastbound Left Turn	B	11.4	B	12.5
• Eastbound Right Turn	B	10.3	A	9.9
• Northbound Left Turn	A	8.2	A	8.3
Lehigh Avenue with Park Avenue				
• Eastbound Left Turn	B	11.8	B	11.9
• Eastbound Right Turn	A	9.9	A	9.8
• Northbound Left Turn	A	7.88	A	7.9
Lehigh Avenue with Lincoln Avenue				
• ICU Level of Service	A	55.2%	A	50.0%

LOS = Level of Service
Delay is measured in seconds.
1 - The operation of this intersection is based on a critical volume to saturation flow (v/s) evaluation also known as the Intersection Capacity Utilization (ICU) method.

Discussion and Recommendations

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

Oakton Street with Lehigh Avenue

The results of the capacity analysis indicate that this intersection currently operates at an overall Level of Service (LOS) B during the weekday morning peak and weekday evening peak hour. Furthermore, all movements currently operate at LOS D or better during both peak hours and through movements on Oakton Street operate at LOS B or better. It should be noted this intersection is adjacent to an at-grade railroad crossing and westbound movements stop on the far side (east side) of the railroad. Oakton Street movements do experience additional delay during train events. However, trains were not observed to stop in the crossing and a majority of train events were less than one minute in length. The traffic signal is programmed with a westbound clearance phase to accommodate these train events.

Under Year 2031 no-build and total projected conditions, this intersection is projected to continue to operate at LOS B during both peak hours with increases in delay of one second or less. Overall, the proposed development is projected to increase the volume of traffic traversing this intersection by less than six percent during the peak hours. As such, the proposed development is projected to have a limited impact on the operation of this intersection and no roadway improvements or traffic control modifications are recommended or required.

Oakton Street with River Drive

The results of the capacity analysis indicate that this intersection currently operates at an overall LOS B during the weekday morning peak and weekday evening peak hour. Furthermore, all movements currently operate at LOS E or better during both peak hours and through movements on Oakton Street operate at LOS B or better. Under Year 2031 no-build conditions this intersection is projected to operate at the same LOS during both peak hours.

Under Year 2031 total projected conditions, this intersection is projected to continue to operate at LOS B during both peak hours with increases in delay of approximately two seconds or less over no-build conditions. The following should be noted:

- Eastbound left turn 95th percentile queues, which include site traffic entering North Grove Corporate Center, will continue to be accommodated within the existing turn lane.

- Southbound 95th percentile queues, which include site traffic existing North Grove Corporate Center, will continue to be accommodated within the existing turn lanes.

- All movements will continue to operate at LOS E or better during both peak hours and through movements on Oakton Street will continue to operate at LOS B or better.

As such, this intersection can adequately accommodate development-generated traffic and no roadway improvements or traffic control modifications are recommended or required.

Lehigh Avenue with River Drive and Park Avenue

The results of the capacity analysis indicate all critical movements at these intersections currently operates at LOS B or better during the weekday morning and weekday evening peak hours. Under Year 2031 no-build and total projected conditions, all movements are projected to continue to operate at LOS B or better during both peak hours with increases in delay of less than one second. The following should be noted:

- These access drives will carry development generated traffic entering and exiting the North Grove Corporate Center.

- Eastbound 95th percentile right-turn queues and northbound 95th percentile left-turn queues at both intersections can be accommodated within the existing turn lanes.

- When the projected traffic volumes are compared to the turn lane warrant guidelines published in Chapter 36 of the IDOT *Bureau of Design and Environment* (BDE) Manual, southbound right-turn lanes are not warranted at either intersection during either peak hour.

As such, this intersection can adequately accommodate development-generated traffic and no roadway improvements or traffic control modifications are recommended or required.

Lehigh Avenue with Lincoln Avenue

Because of the traffic control configuration of this intersection, the intersection could not be analyzed using HCM procedures. Given this traffic control configuration and the limitations of the HCM procedures, the intersection was analyzed using the Intersection Capacity Utilization (ICU) level of service. The ICU indicates how much reserve capacity is available or how much an intersection is over capacity. Based on the ICU analysis, the intersection currently utilizes approximately 39 to 41 percent of the capacity of the intersection. Under total projected conditions, it is projected that the intersection will utilize approximately 43 to 44 percent of the capacity of the intersection. As a result, the intersection will continue to operate efficiently and with minimal delays.

It should be noted this intersection is immediately adjacent to an at-grade railroad crossing and westbound movements stop on the far side (east side) of the railroad. However, trains were not observed to stop in the crossing and a majority of train events were less than one minute in length.

It is important to note that the proposed development will not add any truck traffic to this intersection. The proposed development is projected to have a limited impact on the operation of this intersection and no roadway improvements or traffic control modifications are recommended or required.

Proposed Site Access System

As proposed access to the site will be provided via the following four access drives.

- A full movement access drive on River Drive located approximately 190 feet west of Lehigh Avenue that will serve truck traffic only. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control.

- A full movement access drive on River Drive located approximately 510 feet west of Lehigh Avenue that will serve truck traffic only. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control.

- A full movement access drive on Park Avenue located approximately 185 feet west of Lehigh Avenue that will serve passenger vehicles only. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control.

- A full movement access drive on Park Avenue located approximately 790 feet west of Lehigh Avenue that will serve passenger vehicles only. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control.

The proposed access system is projected to operate acceptably given the following:

- The access drives will be on River Drive and Park Avenue which are local roads that carry a limited volume of traffic.

- Passenger vehicles and truck traffic will be separated with separate access points.

- All vehicles will be able to utilize any access point to the North Grove Corporate Center.

As such, the proposed access system will adequately accommodate site-generated traffic.

Parking Evaluation

As proposed, employee parking for the development will be accommodated via a surface lot with 194 parking spaces. In addition, space will be reserved for 52 more spaces in the future if needed.

The peak parking demand of the proposed development was estimated based on the rates published in the Institute of Transportation Engineers' (ITE) *Parking Generation Manual*, 6th Edition and was compared to the Village of Morton Grove Municipal Code.

ITE Parking Generation Manual

In reviewing the survey data published in the Institute of Transportation Engineers' (ITE) 6th Edition of the *Parking Generation Manual*, the following average peak parking demands were determined for multiple industrial land use types:

- General Light Industrial (Land-Use Code 110)
  - Ratio of 0.67 spaces per 1,000 s.f.
  - 132 Spaces Required

- Manufacturing (Land-Use Code 140)
  - Ratio of 0.92 spaces per 1,000 s.f.
  - 181 Spaces Required

- Warehousing (Land-Use Code 150)
  - Ratio of 0.37 spaces per 1,000 s.f.
  - 73 Spaces Required

It should be noted that the ITE rates used include office components within each land use category. As such, based on ITE *Parking Generation Manual* rates, the proposed parking supply will be adequate in accommodating the parking demand of the different types of tenants without use of the reserved space.

Village of Morton Grove Requirements

The Morton Grove Municipal Code requires a parking ratio of one parking spaces per 1,000 square-feet of gross floor area for warehouse uses. As such, the proposed development should provide a total of 196 parking spaces, which is two more than the number of spaces provided. However, additional space for more parking will be reserved on site that if implemented will exceed the parking requirements by 50 spaces.

Evaluation

The proposed parking supply is greater than the projected peak parking demand of the development based on ITE data. In addition, space for 52 additional spaces will be reserved on site which if implemented will exceed village code parking requirements. As such, the proposed 194-space parking lot is projected to adequately accommodate the parking demand of the proposed development and the future reserved spaces can be implemented in the future if demand for them is realized.

6. Conclusion

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

- As proposed, the site will be redeveloped with an approximately 196,333 square-foot industrial building.
- The proposed development will generate less total traffic than the office buildings that currently occupy the site could have generated when they were fully occupied.
- The study accounted for the traffic that will be generated by the proposed Metro at Main Townhomes and the 8500-8550 Lehigh Avenue Mixed Use Transit Oriented Development.
- The signalized intersections of Oakton Street with Lehigh Avenue and River Drive have sufficient reserve capacity to accommodate site-generated traffic.
- The development will be located within the North Grove Corporate Center and will utilize the existing access system serving the center of River Drive and Park Avenue.
    - This access system will adequately accommodate site-generated traffic.
    - Southbound right-turn lanes will not be warranted on Lehigh Avenue at River Drive or Park Avenue
- Within the center, access to the development will be provided via four full movement access drives on River Drive and Park Avenue.
    - Passenger vehicles and truck traffic will be separated on-site with separate access points.
    - All vehicles will be able to utilize any access point to the North Grove Corporate Center.
- The proposed 194 space parking lot can adequately accommodate the projected parking demand for multiple types of potential tenants. Further, space for 52 additional spaces will be reserved on site which if implemented would exceed village parking requirements.

Appendix

Traffic Count Summary Sheets
Preliminary Site Plan
CMAP Projections Letter
Level of Service Criteria
Capacity Analysis Summary Sheets

Traffic Count Summary Sheets

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

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

Count Name: Lehigh Avenue with Oakton Street
TMC
Site Code:
Start Date: 03/25/2025

Turning Movement Data

Start Time	Oakton Street Eastbound						Oakton Street Westbound						Lehigh Avenue Northbound						Lehigh Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
6:00 AM	0	5	57	5	0	67	0	15	63	8	0	86	0	7	9	1	0	17	0	1	5	4	0	10	180
6:15 AM	0	12	68	6	0	86	0	5	78	6	0	89	0	9	10	5	0	24	0	2	7	10	0	19	218
6:30 AM	0	10	119	7	0	136	0	6	96	3	0	105	0	7	10	7	0	24	0	0	8	4	0	12	277
6:45 AM	0	7	114	6	0	127	0	4	86	12	0	102	0	9	22	11	0	42	0	1	9	7	0	17	288
Hourly Total	0	34	358	24	0	416	0	30	323	29	0	382	0	32	51	24	0	107	0	4	29	25	0	58	963
7:00 AM	0	6	100	9	1	115	0	9	118	9	0	136	0	10	24	11	0	45	0	5	12	7	0	24	320
7:15 AM	0	6	109	18	0	133	0	15	105	13	0	133	0	6	14	12	1	32	0	5	18	4	0	27	325
7:30 AM	0	10	114	13	0	137	0	7	130	16	0	153	0	12	18	4	0	34	1	5	7	8	0	21	345
7:45 AM	0	10	126	14	0	150	0	26	95	7	1	128	0	9	15	8	2	32	0	3	19	8	0	30	340
Hourly Total	0	32	449	54	1	535	0	57	448	45	1	550	0	37	71	35	3	143	1	18	56	27	0	102	1330
8:00 AM	0	8	107	15	0	130	0	14	113	5	2	132	0	19	18	13	2	50	0	2	18	11	0	31	343
8:15 AM	0	10	151	15	0	176	0	11	125	6	0	142	0	9	18	14	1	41	0	2	9	13	0	24	383
8:30 AM	0	4	123	13	0	140	0	15	132	7	0	154	0	5	9	11	1	25	0	2	19	10	0	31	350
8:45 AM	0	9	150	17	0	176	0	21	125	6	0	152	0	11	19	12	0	42	0	1	8	11	0	20	390
Hourly Total	0	31	531	60	0	622	0	61	495	24	2	580	0	44	64	50	4	158	0	7	54	45	0	106	1466
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	10	166	16	0	192	0	19	181	4	1	204	0	30	18	12	0	60	0	8	31	19	0	58	514
4:15 PM	0	14	164	11	1	189	0	18	164	4	0	186	0	16	24	17	0	57	0	3	25	21	0	49	481
4:30 PM	0	11	167	18	0	196	0	10	172	3	0	185	0	22	30	20	0	72	0	9	32	18	0	59	512
4:45 PM	0	13	179	20	0	212	0	16	178	3	0	197	0	16	21	12	0	49	0	7	26	18	0	51	509
Hourly Total	0	48	676	65	1	789	0	63	695	14	1	772	0	84	93	61	0	238	0	27	114	76	0	217	2016
5:00 PM	1	9	158	16	0	184	0	16	162	1	0	179	0	20	14	23	0	57	0	3	35	12	0	50	470
5:15 PM	0	11	199	30	1	240	0	14	183	3	0	200	0	29	16	20	0	65	0	9	20	17	0	46	551
5:30 PM	0	5	205	17	1	227	0	17	156	0	0	173	0	18	15	11	0	44	0	1	22	10	0	33	477
5:45 PM	0	8	177	23	1	208	0	15	158	2	0	175	0	15	10	19	1	44	0	11	29	23	0	63	490
Hourly Total	1	33	739	86	3	859	0	62	659	6	0	727	0	82	55	73	1	210	0	24	106	62	0	192	1988
6:00 PM	0	9	128	16	0	153	0	9	124	0	0	133	0	25	17	9	0	51	0	7	20	12	0	39	376
6:15 PM	0	12	160	20	0	192	0	14	158	1	0	173	0	13	16	14	1	43	0	5	21	17	0	43	451
6:30 PM	0	6	127	19	0	152	0	9	135	4	0	148	0	13	17	10	0	40	0	5	13	11	0	29	369
6:45 PM	0	5	145	9	0	159	0	14	121	2	0	137	0	16	9	7	0	32	0	1	10	11	0	22	350
Hourly Total	0	32	560	64	0	656	0	46	538	7	0	591	0	67	59	40	1	166	0	18	64	51	0	133	1546
Grand Total	1	210	3313	353	5	3877	0	319	3158	125	4	3602	0	346	393	283	9	1022	1	98	423	286	0	808	9309
Approach %	0.0	5.4	85.5	9.1	-	-	0.0	8.9	87.7	3.5	-	-	0.0	33.9	38.5	27.7	-	-	0.1	12.1	52.4	35.4	-	-	-
Total %	0.0	2.3	35.6	3.8	-	41.6	0.0	3.4	33.9	1.3	-	38.7	0.0	3.7	4.2	3.0	-	11.0	0.0	1.1	4.5	3.1	-	8.7	-
Lights	1	204	3214	326	-	3745	0	301	3066	122	-	3489	0	327	386	268	-	981	1	94	416	281	-	792	9007

% Lights	100.0	97.1	97.0	92.4	-	96.6	-	94.4	97.1	97.6	-	96.9	-	94.5	98.2	94.7	-	96.0	100.0	95.9	98.3	98.3	-	98.0	96.8
Buses	0	0	19	4	-	23	0	1	17	0	-	18	0	10	0	1	-	11	0	0	0	0	-	0	52
% Buses	0.0	0.0	0.6	1.1	-	0.6	-	0.3	0.5	0.0	-	0.5	-	2.9	0.0	0.4	-	1.1	0.0	0.0	0.0	0.0	-	0.0	0.6
Single-Unit Trucks	0	3	61	13	-	77	0	14	58	3	-	75	0	4	5	9	-	18	0	3	4	4	-	11	181
% Single-Unit Trucks	0.0	1.4	1.8	3.7	-	2.0	-	4.4	1.8	2.4	-	2.1	-	1.2	1.3	3.2	-	1.8	0.0	3.1	0.9	1.4	-	1.4	1.9
Articulated Trucks	0	3	18	9	-	30	0	3	16	0	-	19	0	5	0	5	-	10	0	1	2	1	-	4	63
% Articulated Trucks	0.0	1.4	0.5	2.5	-	0.8	-	0.9	0.5	0.0	-	0.5	-	1.4	0.0	1.8	-	1.0	0.0	1.0	0.5	0.3	-	0.5	0.7
Bicycles on Road	0	0	1	1	-	2	0	0	1	0	-	1	0	0	2	0	-	2	0	0	1	0	-	1	6
% Bicycles on Road	0.0	0.0	0.0	0.3	-	0.1	-	0.0	0.0	0.0	-	0.0	-	0.0	0.5	0.0	-	0.2	0.0	0.0	0.2	0.0	-	0.1	0.1
Pedestrians	-	-	-	-	5	-	-	-	-	-	4	-	-	-	-	-	9	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

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9575 W. Higgins Rd., Suite 400

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

Count Name: Lehigh Avenue with Oakton Street
TMC
Site Code:
Start Date: 03/25/2025

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Oakton Street Eastbound						Oakton Street Westbound						Lehigh Avenue Northbound						Lehigh Avenue Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
8:00 AM	0	8	107	15	0	130	0	14	113	5	2	132	0	19	18	13	2	50	0	2	18	11	0	31	343
8:15 AM	0	10	151	15	0	176	0	11	125	6	0	142	0	9	18	14	1	41	0	2	9	13	0	24	383
8:30 AM	0	4	123	13	0	140	0	15	132	7	0	154	0	5	9	11	1	25	0	2	19	10	0	31	350
8:45 AM	0	9	150	17	0	176	0	21	125	6	0	152	0	11	19	12	0	42	0	1	8	11	0	20	390
Total	0	31	531	60	0	622	0	61	495	24	2	580	0	44	64	50	4	158	0	7	54	45	0	106	1466
Approach %	0.0	5.0	85.4	9.6	-	-	0.0	10.5	85.3	4.1	-	-	0.0	27.8	40.5	31.6	-	-	0.0	6.6	50.9	42.5	-	-	-
Total %	0.0	2.1	36.2	4.1	-	42.4	0.0	4.2	33.8	1.6	-	39.6	0.0	3.0	4.4	3.4	-	10.8	0.0	0.5	3.7	3.1	-	7.2	-
PHF	0.000	0.775	0.879	0.882	-	0.884	0.000	0.726	0.938	0.857	-	0.942	0.000	0.579	0.842	0.893	-	0.790	0.000	0.875	0.711	0.865	-	0.855	0.940
Lights	0	30	508	56	-	594	0	61	472	21	-	554	0	41	62	44	-	147	0	5	50	43	-	98	1393
% Lights	-	96.8	95.7	93.3	-	95.5	-	100.0	95.4	87.5	-	95.5	-	93.2	96.9	88.0	-	93.0	-	71.4	92.6	95.6	-	92.5	95.0
Buses	0	0	4	0	-	4	0	0	2	0	-	2	0	0	0	1	-	1	0	0	0	0	-	0	7
% Buses	-	0.0	0.8	0.0	-	0.6	-	0.0	0.4	0.0	-	0.3	-	0.0	0.0	2.0	-	0.6	-	0.0	0.0	0.0	-	0.0	0.5
Single-Unit Trucks	0	0	15	3	-	18	0	0	13	3	-	16	0	3	2	5	-	10	0	1	2	1	-	4	48
% Single-Unit Trucks	-	0.0	2.8	5.0	-	2.9	-	0.0	2.6	12.5	-	2.8	-	6.8	3.1	10.0	-	6.3	-	14.3	3.7	2.2	-	3.8	3.3
Articulated Trucks	0	1	4	1	-	6	0	0	8	0	-	8	0	0	0	0	-	0	0	1	1	1	-	3	17
% Articulated Trucks	-	3.2	0.8	1.7	-	1.0	-	0.0	1.6	0.0	-	1.4	-	0.0	0.0	0.0	-	0.0	-	14.3	1.9	2.2	-	2.8	1.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	1
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	1.9	0.0	-	0.9	0.1
Pedestrians	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	4	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

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9575 W. Higgins Rd., Suite 400

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

Count Name: Lehigh Avenue with Oakton Street
TMC
Site Code:
Start Date: 03/25/2025

Turning Movement Peak Hour Data (4:00 PM)

Start Time	Oakton Street Eastbound						Oakton Street Westbound						Lehigh Avenue Northbound						Lehigh Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:00 PM	0	10	166	16	0	192	0	19	181	4	1	204	0	30	18	12	0	60	0	8	31	19	0	58	514
4:15 PM	0	14	164	11	1	189	0	18	164	4	0	186	0	16	24	17	0	57	0	3	25	21	0	49	481
4:30 PM	0	11	167	18	0	196	0	10	172	3	0	185	0	22	30	20	0	72	0	9	32	18	0	59	512
4:45 PM	0	13	179	20	0	212	0	16	178	3	0	197	0	16	21	12	0	49	0	7	26	18	0	51	509
Total	0	48	676	65	1	789	0	63	695	14	1	772	0	84	93	61	0	238	0	27	114	76	0	217	2016
Approach %	0.0	6.1	85.7	8.2	-	-	0.0	8.2	90.0	1.8	-	-	0.0	35.3	39.1	25.6	-	-	0.0	12.4	52.5	35.0	-	-	-
Total %	0.0	2.4	33.5	3.2	-	39.1	0.0	3.1	34.5	0.7	-	38.3	0.0	4.2	4.6	3.0	-	11.8	0.0	1.3	5.7	3.8	-	10.8	-
PHF	0.000	0.857	0.944	0.813	-	0.930	0.000	0.829	0.960	0.875	-	0.946	0.000	0.700	0.775	0.763	-	0.826	0.000	0.750	0.891	0.905	-	0.919	0.981
Lights	0	47	661	60	-	768	0	60	681	14	-	755	0	83	93	60	-	236	0	26	114	74	-	214	1973
% Lights	-	97.9	97.8	92.3	-	97.3	-	95.2	98.0	100.0	-	97.8	-	98.8	100.0	98.4	-	99.2	-	96.3	100.0	97.4	-	98.6	97.9
Buses	0	0	2	2	-	4	0	1	3	0	-	4	0	0	0	0	-	0	0	0	0	0	-	0	8
% Buses	-	0.0	0.3	3.1	-	0.5	-	1.6	0.4	0.0	-	0.5	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.4
Single-Unit Trucks	0	0	11	0	-	11	0	2	8	0	-	10	0	1	0	1	-	2	0	1	0	2	-	3	26
% Single-Unit Trucks	-	0.0	1.6	0.0	-	1.4	-	3.2	1.2	0.0	-	1.3	-	1.2	0.0	1.6	-	0.8	-	3.7	0.0	2.6	-	1.4	1.3
Articulated Trucks	0	1	1	3	-	5	0	0	3	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	8
% Articulated Trucks	-	2.1	0.1	4.6	-	0.6	-	0.0	0.4	0.0	-	0.4	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.4
Bicycles on Road	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	-	0.0	0.1	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: Lehigh Avenue with Park Avenue
TMC
Site Code:
Start Date: 03/25/2025

Turning Movement Data

Start Time	Park Avenue Eastbound					Lehigh Avenue Northbound					Lehigh Avenue Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
6:00 AM	0	1	1	0	2	0	2	20	0	22	0	11	1	0	12	36
6:15 AM	0	0	1	0	1	0	7	21	0	28	0	19	2	0	21	50
6:30 AM	0	1	0	0	1	0	0	23	0	23	0	8	1	0	9	33
6:45 AM	0	1	3	0	4	0	15	23	0	38	0	17	3	0	20	62
Hourly Total	0	3	5	0	8	0	24	87	0	111	0	55	7	0	62	181
7:00 AM	1	3	2	0	6	0	6	35	0	41	0	20	2	0	22	69
7:15 AM	0	3	2	0	5	0	5	27	0	32	0	26	0	0	26	63
7:30 AM	0	3	2	1	5	0	7	35	0	42	0	21	0	0	21	68
7:45 AM	0	1	0	0	1	0	4	34	0	38	0	28	3	0	31	70
Hourly Total	1	10	6	1	17	0	22	131	0	153	0	95	5	0	100	270
8:00 AM	1	2	3	0	6	0	2	26	0	28	0	31	0	0	31	65
8:15 AM	0	2	2	0	4	0	8	24	0	32	0	21	2	0	23	59
8:30 AM	0	0	2	0	2	0	4	17	0	21	0	29	3	0	32	55
8:45 AM	0	3	0	0	3	0	3	24	0	27	0	17	2	0	19	49
Hourly Total	1	7	7	0	15	0	17	91	0	108	0	98	7	0	105	228
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	9	10	1	19	0	0	38	0	38	0	44	3	0	47	104
4:15 PM	0	4	6	0	10	0	0	40	0	40	0	46	0	0	46	96
4:30 PM	0	2	6	0	8	0	0	44	0	44	0	46	0	0	46	98
4:45 PM	0	1	3	0	4	0	4	33	0	37	0	51	2	0	53	94
Hourly Total	0	16	25	1	41	0	4	155	0	159	0	187	5	0	192	392
5:00 PM	0	6	7	0	13	0	2	26	0	28	0	45	2	0	47	88
5:15 PM	0	3	3	1	6	1	0	32	0	33	0	40	0	0	40	79
5:30 PM	0	2	3	1	5	0	0	21	0	21	0	40	2	0	42	68
5:45 PM	0	2	4	0	6	0	2	19	0	21	0	50	1	0	51	78
Hourly Total	0	13	17	2	30	1	4	98	0	103	0	175	5	0	180	313
6:00 PM	0	2	3	0	5	0	0	25	0	25	0	30	0	0	30	60
6:15 PM	0	3	2	0	5	0	0	29	0	29	0	40	2	0	42	76
6:30 PM	0	1	1	0	2	0	0	27	0	27	0	24	3	0	27	56
6:45 PM	0	1	2	0	3	0	1	15	0	16	0	23	0	0	23	42
Hourly Total	0	7	8	0	15	0	1	96	0	97	0	117	5	0	122	234
Grand Total	2	56	68	4	126	1	72	658	0	731	0	727	34	0	761	1618
Approach %	1.6	44.4	54.0	-	-	0.1	9.8	90.0	-	-	0.0	95.5	4.5	-	-	-
Total %	0.1	3.5	4.2	-	7.8	0.1	4.4	40.7	-	45.2	0.0	44.9	2.1	-	47.0	-
Lights	2	55	61	-	118	1	67	647	-	715	0	714	33	-	747	1580
% Lights	100.0	98.2	89.7	-	93.7	100.0	93.1	98.3	-	97.8	-	98.2	97.1	-	98.2	97.7

Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	4	-	4	0	3	10	-	13	0	11	1	-	12	29
% Single-Unit Trucks	0.0	0.0	5.9	-	3.2	0.0	4.2	1.5	-	1.8	-	1.5	2.9	-	1.6	1.8
Articulated Trucks	0	1	3	-	4	0	2	0	-	2	0	0	0	-	0	6
% Articulated Trucks	0.0	1.8	4.4	-	3.2	0.0	2.8	0.0	-	0.3	-	0.0	0.0	-	0.0	0.4
Bicycles on Road	0	0	0	-	0	0	0	1	-	1	0	2	0	-	2	3
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.2	-	0.1	-	0.3	0.0	-	0.3	0.2
Pedestrians	-	-	-	4	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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

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

Count Name: Lehigh Avenue with Park Avenue
TMC
Site Code:
Start Date: 03/25/2025

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Park Avenue Eastbound					Lehigh Avenue Northbound					Lehigh Avenue Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
8:00 AM	1	2	3	0	6	0	2	26	0	28	0	31	0	0	31	65
8:15 AM	0	2	2	0	4	0	8	24	0	32	0	21	2	0	23	59
8:30 AM	0	0	2	0	2	0	4	17	0	21	0	29	3	0	32	55
8:45 AM	0	3	0	0	3	0	3	24	0	27	0	17	2	0	19	49
Total	1	7	7	0	15	0	17	91	0	108	0	98	7	0	105	228
Approach %	6.7	46.7	46.7	-	-	0.0	15.7	84.3	-	-	0.0	93.3	6.7	-	-	-
Total %	0.4	3.1	3.1	-	6.6	0.0	7.5	39.9	-	47.4	0.0	43.0	3.1	-	46.1	-
PHF	0.250	0.583	0.583	-	0.625	0.000	0.531	0.875	-	0.844	0.000	0.790	0.583	-	0.820	0.877
Lights	1	6	2	-	9	0	15	89	-	104	0	94	6	-	100	213
% Lights	100.0	85.7	28.6	-	60.0	-	88.2	97.8	-	96.3	-	95.9	85.7	-	95.2	93.4
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	3	-	3	0	2	2	-	4	0	3	1	-	4	11
% Single-Unit Trucks	0.0	0.0	42.9	-	20.0	-	11.8	2.2	-	3.7	-	3.1	14.3	-	3.8	4.8
Articulated Trucks	0	1	2	-	3	0	0	0	-	0	0	0	0	-	0	3
% Articulated Trucks	0.0	14.3	28.6	-	20.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	1.3
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	1	0	-	1	1
% Bicycles on Road	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	1.0	0.0	-	1.0	0.4
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: Lehigh Avenue with Park Avenue
TMC
Site Code:
Start Date: 03/25/2025

Turning Movement Peak Hour Data (4:00 PM)

Start Time	Park Avenue Eastbound					Lehigh Avenue Northbound					Lehigh Avenue Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
4:00 PM	0	9	10	1	19	0	0	38	0	38	0	44	3	0	47	104
4:15 PM	0	4	6	0	10	0	0	40	0	40	0	46	0	0	46	96
4:30 PM	0	2	6	0	8	0	0	44	0	44	0	46	0	0	46	98
4:45 PM	0	1	3	0	4	0	4	33	0	37	0	51	2	0	53	94
Total	0	16	25	1	41	0	4	155	0	159	0	187	5	0	192	392
Approach %	0.0	39.0	61.0	-	-	0.0	2.5	97.5	-	-	0.0	97.4	2.6	-	-	-
Total %	0.0	4.1	6.4	-	10.5	0.0	1.0	39.5	-	40.6	0.0	47.7	1.3	-	49.0	-
PHF	0.000	0.444	0.625	-	0.539	0.000	0.250	0.881	-	0.903	0.000	0.917	0.417	-	0.906	0.942
Lights	0	16	25	-	41	0	3	154	-	157	0	183	5	-	188	386
% Lights	-	100.0	100.0	-	100.0	-	75.0	99.4	-	98.7	-	97.9	100.0	-	97.9	98.5
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	1	-	1	0	4	0	-	4	5
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	0.6	-	0.6	-	2.1	0.0	-	2.1	1.3
Articulated Trucks	0	0	0	-	0	0	1	0	-	1	0	0	0	-	0	1
% Articulated Trucks	-	0.0	0.0	-	0.0	-	25.0	0.0	-	0.6	-	0.0	0.0	-	0.0	0.3
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: Lehigh Avenue with River Drive
TMC
Site Code:
Start Date: 03/25/2025

Turning Movement Data

Start Time	River Drive Eastbound					Lehigh Avenue Northbound					Lehigh Avenue Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
6:00 AM	0	6	0	0	6	0	0	21	0	21	0	12	5	0	17	44
6:15 AM	0	3	0	0	3	0	0	20	0	20	0	21	5	0	26	49
6:30 AM	0	6	0	0	6	0	0	24	0	24	0	9	9	0	18	48
6:45 AM	0	2	1	0	3	0	2	24	0	26	0	19	10	0	29	58
Hourly Total	0	17	1	0	18	0	2	89	0	91	0	61	29	0	90	199
7:00 AM	0	3	1	0	4	0	2	33	0	35	0	21	6	0	27	66
7:15 AM	0	8	2	0	10	0	2	28	0	30	0	24	15	0	39	79
7:30 AM	0	6	0	0	6	0	2	37	0	39	0	21	9	0	30	75
7:45 AM	0	8	0	1	8	0	3	26	0	29	0	32	15	0	47	84
Hourly Total	0	25	3	1	28	0	9	124	0	133	0	98	45	0	143	304
8:00 AM	0	9	1	0	10	0	3	27	0	30	0	29	8	0	37	77
8:15 AM	0	7	1	0	8	0	4	22	0	26	0	30	10	0	40	74
8:30 AM	0	2	1	0	3	0	4	10	0	14	0	31	7	0	38	55
8:45 AM	0	9	1	0	10	0	6	24	0	30	0	18	15	0	33	73
Hourly Total	0	27	4	0	31	0	17	83	0	100	0	108	40	0	148	279
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	15	5	0	20	0	0	42	0	42	0	42	7	0	49	111
4:15 PM	0	11	0	0	11	0	2	47	1	49	0	45	14	0	59	119
4:30 PM	0	10	5	1	15	0	1	45	0	46	0	41	7	0	48	109
4:45 PM	0	16	5	0	21	0	1	36	0	37	0	48	11	0	59	117
Hourly Total	0	52	15	1	67	0	4	170	1	174	0	176	39	0	215	456
5:00 PM	0	14	10	0	24	0	2	31	0	33	0	38	6	0	44	101
5:15 PM	0	10	3	0	13	0	3	35	0	38	0	39	11	0	50	101
5:30 PM	0	8	1	0	9	0	1	21	0	22	0	43	7	0	50	81
5:45 PM	0	5	1	0	6	0	3	18	0	21	0	49	6	0	55	82
Hourly Total	0	37	15	0	52	0	9	105	0	114	0	169	30	0	199	365
6:00 PM	0	8	1	0	9	0	2	28	0	30	0	30	2	0	32	71
6:15 PM	0	6	0	0	6	0	0	32	0	32	0	42	4	1	46	84
6:30 PM	0	4	0	0	4	0	2	27	0	29	0	27	3	0	30	63
6:45 PM	0	2	1	0	3	0	3	13	0	16	0	22	2	0	24	43
Hourly Total	0	20	2	0	22	0	7	100	0	107	0	121	11	1	132	261
Grand Total	0	178	40	2	218	0	48	671	1	719	0	733	194	1	927	1864
Approach %	0.0	81.7	18.3	-	-	0.0	6.7	93.3	-	-	0.0	79.1	20.9	-	-	-
Total %	0.0	9.5	2.1	-	11.7	0.0	2.6	36.0	-	38.6	0.0	39.3	10.4	-	49.7	-
Lights	0	176	40	-	216	0	47	660	-	707	0	721	189	-	910	1833
% Lights	-	98.9	100.0	-	99.1	-	97.9	98.4	-	98.3	-	98.4	97.4	-	98.2	98.3

Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	2	0	-	2	0	0	9	-	9	0	11	4	-	15	26
% Single-Unit Trucks	-	1.1	0.0	-	0.9	-	0.0	1.3	-	1.3	-	1.5	2.1	-	1.6	1.4
Articulated Trucks	0	0	0	-	0	0	1	0	-	1	0	1	0	-	1	2
% Articulated Trucks	-	0.0	0.0	-	0.0	-	2.1	0.0	-	0.1	-	0.1	0.0	-	0.1	0.1
Bicycles on Road	0	0	0	-	0	0	0	2	-	2	0	0	1	-	1	3
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.3	-	0.3	-	0.0	0.5	-	0.1	0.2
Pedestrians	-	-	-	2	-	-	-	-	1	-	-	-	-	1	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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Count Name: Lehigh Avenue with River Drive
TMC
Site Code:
Start Date: 03/25/2025

Turning Movement Peak Hour Data (8:00 AM)

Start Time	River Drive Eastbound					Lehigh Avenue Northbound					Lehigh Avenue Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
8:00 AM	0	9	1	0	10	0	3	27	0	30	0	29	8	0	37	77
8:15 AM	0	7	1	0	8	0	4	22	0	26	0	30	10	0	40	74
8:30 AM	0	2	1	0	3	0	4	10	0	14	0	31	7	0	38	55
8:45 AM	0	9	1	0	10	0	6	24	0	30	0	18	15	0	33	73
Total	0	27	4	0	31	0	17	83	0	100	0	108	40	0	148	279
Approach %	0.0	87.1	12.9	-	-	0.0	17.0	83.0	-	-	0.0	73.0	27.0	-	-	-
Total %	0.0	9.7	1.4	-	11.1	0.0	6.1	29.7	-	35.8	0.0	38.7	14.3	-	53.0	-
PHF	0.000	0.750	1.000	-	0.775	0.000	0.708	0.769	-	0.833	0.000	0.871	0.667	-	0.925	0.906
Lights	0	26	4	-	30	0	16	83	-	99	0	104	38	-	142	271
% Lights	-	96.3	100.0	-	96.8	-	94.1	100.0	-	99.0	-	96.3	95.0	-	95.9	97.1
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	1	0	-	1	0	0	0	-	0	0	3	2	-	5	6
% Single-Unit Trucks	-	3.7	0.0	-	3.2	-	0.0	0.0	-	0.0	-	2.8	5.0	-	3.4	2.2
Articulated Trucks	0	0	0	-	0	0	1	0	-	1	0	1	0	-	1	2
% Articulated Trucks	-	0.0	0.0	-	0.0	-	5.9	0.0	-	1.0	-	0.9	0.0	-	0.7	0.7
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: Lehigh Avenue with River Drive
TMC
Site Code:
Start Date: 03/25/2025

Turning Movement Peak Hour Data (4:00 PM)

Start Time	River Drive Eastbound					Lehigh Avenue Northbound					Lehigh Avenue Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
4:00 PM	0	15	5	0	20	0	0	42	0	42	0	42	7	0	49	111
4:15 PM	0	11	0	0	11	0	2	47	1	49	0	45	14	0	59	119
4:30 PM	0	10	5	1	15	0	1	45	0	46	0	41	7	0	48	109
4:45 PM	0	16	5	0	21	0	1	36	0	37	0	48	11	0	59	117
Total	0	52	15	1	67	0	4	170	1	174	0	176	39	0	215	456
Approach %	0.0	77.6	22.4	-	-	0.0	2.3	97.7	-	-	0.0	81.9	18.1	-	-	-
Total %	0.0	11.4	3.3	-	14.7	0.0	0.9	37.3	-	38.2	0.0	38.6	8.6	-	47.1	-
PHF	0.000	0.813	0.750	-	0.798	0.000	0.500	0.904	-	0.888	0.000	0.917	0.696	-	0.911	0.958
Lights	0	52	15	-	67	0	4	169	-	173	0	172	38	-	210	450
% Lights	-	100.0	100.0	-	100.0	-	100.0	99.4	-	99.4	-	97.7	97.4	-	97.7	98.7
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	1	-	1	0	4	1	-	5	6
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	0.6	-	0.6	-	2.3	2.6	-	2.3	1.3
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	1	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-

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

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

Count Name: Lincoln Avenue with Lehigh Avenue TMC
Site Code:
Start Date: 03/25/2025

Turning Movement Data

Start Time	Lincoln Avenue Westbound					Lehigh Avenue Northbound					Access Drive Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
4:00 PM	0	21	13	0	34	0	7	76	1	83	0	23	7	0	30	147
4:15 PM	0	33	5	1	38	1	3	74	2	78	0	17	6	1	23	139
4:30 PM	0	35	10	0	45	0	4	54	1	58	0	16	1	1	17	120
4:45 PM	0	35	7	0	42	0	3	87	3	90	0	31	7	0	38	170
Hourly Total	0	124	35	1	159	1	17	291	7	309	0	87	21	2	108	576
5:00 PM	0	28	8	0	36	0	4	53	0	57	0	27	12	1	39	132
5:15 PM	0	29	12	0	41	0	3	79	0	82	0	28	12	0	40	163
5:30 PM	0	34	12	0	46	0	5	38	0	43	0	15	14	1	29	118
5:45 PM	0	32	12	0	44	0	3	64	0	67	0	29	9	2	38	149
Hourly Total	0	123	44	0	167	0	15	234	0	249	0	99	47	4	146	562
6:00 PM	0	18	9	0	27	0	7	49	0	56	0	16	8	3	24	107
6:15 PM	0	28	9	0	37	0	4	46	0	50	0	19	6	0	25	112
6:30 PM	0	13	6	0	19	0	2	36	0	38	0	26	11	0	37	94
6:45 PM	0	14	5	0	19	0	4	14	1	18	0	23	11	2	34	71
Hourly Total	0	73	29	0	102	0	17	145	1	162	0	84	36	5	120	384
Grand Total	0	320	108	1	428	1	49	670	8	720	0	270	104	11	374	1522
Approach %	0.0	74.8	25.2	-	-	0.1	6.8	93.1	-	-	0.0	72.2	27.8	-	-	-
Total %	0.0	21.0	7.1	-	28.1	0.1	3.2	44.0	-	47.3	0.0	17.7	6.8	-	24.6	-
Lights	0	316	106	-	422	1	48	669	-	718	0	267	103	-	370	1510
% Lights	-	98.8	98.1	-	98.6	100.0	98.0	99.9	-	99.7	-	98.9	99.0	-	98.9	99.2
Buses	0	0	0	-	0	0	0	1	-	1	0	0	0	-	0	1
% Buses	-	0.0	0.0	-	0.0	0.0	0.0	0.1	-	0.1	-	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	4	1	-	5	0	1	0	-	1	0	2	1	-	3	9
% Single-Unit Trucks	-	1.3	0.9	-	1.2	0.0	2.0	0.0	-	0.1	-	0.7	1.0	-	0.8	0.6
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	1	-	1	0	0	0	-	0	0	1	0	-	1	2
% Bicycles on Road	-	0.0	0.9	-	0.2	0.0	0.0	0.0	-	0.0	-	0.4	0.0	-	0.3	0.1
Pedestrians	-	-	-	1	-	-	-	-	8	-	-	-	-	11	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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9575 W. Higgins Rd., Suite 400

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

Count Name: Lincoln Avenue with Lehigh Avenue TMC
Site Code:
Start Date: 03/25/2025

Turning Movement Peak Hour Data (4:00 PM)

Start Time	Lincoln Avenue Westbound					Lehigh Avenue Northbound					Access Drive Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
4:00 PM	0	21	13	0	34	0	7	76	1	83	0	23	7	0	30	147
4:15 PM	0	33	5	1	38	1	3	74	2	78	0	17	6	1	23	139
4:30 PM	0	35	10	0	45	0	4	54	1	58	0	16	1	1	17	120
4:45 PM	0	35	7	0	42	0	3	87	3	90	0	31	7	0	38	170
Total	0	124	35	1	159	1	17	291	7	309	0	87	21	2	108	576
Approach %	0.0	78.0	22.0	-	-	0.3	5.5	94.2	-	-	0.0	80.6	19.4	-	-	-
Total %	0.0	21.5	6.1	-	27.6	0.2	3.0	50.5	-	53.6	0.0	15.1	3.6	-	18.8	-
PHF	0.000	0.886	0.673	-	0.883	0.250	0.607	0.836	-	0.858	0.000	0.702	0.750	-	0.711	0.847
Lights	0	122	34	-	156	1	17	291	-	309	0	87	21	-	108	573
% Lights	-	98.4	97.1	-	98.1	100.0	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	99.5
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	2	1	-	3	0	0	0	-	0	0	0	0	-	0	3
% Single-Unit Trucks	-	1.6	2.9	-	1.9	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.5
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	7	-	-	-	-	2	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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

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

Count Name: Oakton Street with River Drive
TMC
Site Code:
Start Date: 03/25/2025

Turning Movement Data

Start Time	Oakton Street Eastbound						Oakton Street Westbound						River Drive Northbound						River Drive Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
6:00 AM	0	17	65	7	0	89	0	4	65	0	0	69	0	1	0	1	0	2	0	0	0	4	0	4	164
6:15 AM	0	13	90	19	0	122	0	2	93	2	0	97	0	1	0	3	0	4	0	0	2	2	0	4	227
6:30 AM	0	15	128	16	0	159	0	6	100	0	0	106	0	6	0	4	0	10	0	0	1	3	0	4	279
6:45 AM	0	30	130	13	0	173	0	7	90	1	0	98	0	3	2	7	0	12	0	0	0	6	0	6	289
Hourly Total	0	75	413	55	0	543	0	19	348	3	0	370	0	11	2	15	0	28	0	0	3	15	0	18	959
7:00 AM	0	17	112	17	0	146	0	3	126	6	1	135	0	8	2	3	0	13	0	3	0	5	0	8	302
7:15 AM	0	28	124	22	0	174	0	8	98	3	0	109	0	11	2	5	1	18	0	1	1	8	0	10	311
7:30 AM	0	23	140	26	0	189	0	5	143	1	0	149	0	11	1	3	0	15	0	0	0	7	0	7	360
7:45 AM	0	34	138	27	0	199	0	2	103	0	0	105	0	8	4	8	0	20	0	0	1	10	0	11	335
Hourly Total	0	102	514	92	0	708	0	18	470	10	1	498	0	38	9	19	1	66	0	4	2	30	0	36	1308
8:00 AM	0	22	129	27	0	178	0	10	127	4	0	141	0	17	5	4	0	26	0	1	1	6	0	8	353
8:15 AM	0	30	154	19	0	203	0	7	140	1	0	148	0	14	2	6	0	22	0	1	2	6	0	9	382
8:30 AM	0	22	137	29	0	188	0	12	138	0	0	150	0	12	1	7	0	20	0	0	1	9	0	10	368
8:45 AM	0	26	139	19	0	184	0	11	129	1	0	141	0	12	4	10	0	26	0	0	2	7	0	9	360
Hourly Total	0	100	559	94	0	753	0	40	534	6	0	580	0	55	12	27	0	94	0	2	6	28	0	36	1463
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	17	182	22	0	221	0	25	208	2	0	235	0	27	3	21	0	51	0	5	3	25	0	33	540
4:15 PM	0	10	162	23	0	195	0	12	190	4	0	206	0	28	4	25	0	57	0	0	1	24	0	25	483
4:30 PM	0	9	199	21	0	229	0	23	186	0	0	209	0	36	2	18	0	56	0	5	4	25	0	34	528
4:45 PM	0	12	181	24	0	217	0	16	196	0	0	212	0	25	0	20	0	45	0	1	5	32	0	38	512
Hourly Total	0	48	724	90	0	862	0	76	780	6	0	862	0	116	9	84	0	209	0	11	13	106	0	130	2063
5:00 PM	0	9	184	9	0	202	0	17	189	2	0	208	0	40	5	12	0	57	0	1	1	23	0	25	492
5:15 PM	0	12	197	31	0	240	0	11	215	0	0	226	0	27	2	19	0	48	0	2	3	23	0	28	542
5:30 PM	0	8	211	21	0	240	0	8	175	0	0	183	0	22	1	20	0	43	0	1	1	19	0	21	487
5:45 PM	0	6	190	17	0	213	0	15	180	1	1	196	0	30	1	10	1	41	0	2	1	17	0	20	470
Hourly Total	0	35	782	78	0	895	0	51	759	3	1	813	0	119	9	61	1	189	0	6	6	82	0	94	1991
6:00 PM	0	11	146	28	1	185	0	11	151	1	1	163	0	15	0	15	0	30	0	3	2	14	0	19	397
6:15 PM	0	6	164	10	0	180	0	8	181	0	0	189	0	24	0	14	1	38	0	0	2	8	0	10	417
6:30 PM	0	4	160	17	0	181	0	12	147	0	0	159	0	28	2	9	0	39	0	0	2	10	0	12	391
6:45 PM	0	4	135	19	0	158	0	10	136	0	0	146	0	11	0	5	0	16	0	0	0	4	0	4	324
Hourly Total	0	25	605	74	1	704	0	41	615	1	1	657	0	78	2	43	1	123	0	3	6	36	0	45	1529
Grand Total	0	385	3597	483	1	4465	0	245	3506	29	3	3780	0	417	43	249	3	709	0	26	36	297	0	359	9313
Approach %	0.0	8.6	80.6	10.8	-	-	0.0	6.5	92.8	0.8	-	-	0.0	58.8	6.1	35.1	-	-	0.0	7.2	10.0	82.7	-	-	-
Total %	0.0	4.1	38.6	5.2	-	47.9	0.0	2.6	37.6	0.3	-	40.6	0.0	4.5	0.5	2.7	-	7.6	0.0	0.3	0.4	3.2	-	3.9	-
Lights	0	372	3480	471	-	4323	0	237	3399	25	-	3661	0	394	37	242	-	673	0	24	29	288	-	341	8998

% Lights	-	96.6	96.7	97.5	-	96.8	-	96.7	96.9	86.2	-	96.9	-	94.5	86.0	97.2	-	94.9	-	92.3	80.6	97.0	-	95.0	96.6
Buses	0	0	18	0	-	18	0	0	24	0	-	24	0	0	0	0	-	0	0	0	0	0	-	0	42
% Buses	-	0.0	0.5	0.0	-	0.4	-	0.0	0.7	0.0	-	0.6	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.5
Single-Unit Trucks	0	7	72	5	-	84	0	6	62	2	-	70	0	14	5	3	-	22	0	1	5	6	-	12	188
% Single-Unit Trucks	-	1.8	2.0	1.0	-	1.9	-	2.4	1.8	6.9	-	1.9	-	3.4	11.6	1.2	-	3.1	-	3.8	13.9	2.0	-	3.3	2.0
Articulated Trucks	0	6	27	6	-	39	0	2	20	2	-	24	0	9	1	3	-	13	0	1	1	3	-	5	81
% Articulated Trucks	-	1.6	0.8	1.2	-	0.9	-	0.8	0.6	6.9	-	0.6	-	2.2	2.3	1.2	-	1.8	-	3.8	2.8	1.0	-	1.4	0.9
Bicycles on Road	0	0	0	1	-	1	0	0	1	0	-	1	0	0	0	1	-	1	0	0	1	0	-	1	4
% Bicycles on Road	-	0.0	0.0	0.2	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.4	-	0.1	-	0.0	2.8	0.0	-	0.3	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	3	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

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

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

Count Name: Oakton Street with River Drive
TMC
Site Code:
Start Date: 03/25/2025

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Oakton Street Eastbound						Oakton Street Westbound						River Drive Northbound						River Drive Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
8:00 AM	0	22	129	27	0	178	0	10	127	4	0	141	0	17	5	4	0	26	0	1	1	6	0	8	353
8:15 AM	0	30	154	19	0	203	0	7	140	1	0	148	0	14	2	6	0	22	0	1	2	6	0	9	382
8:30 AM	0	22	137	29	0	188	0	12	138	0	0	150	0	12	1	7	0	20	0	0	1	9	0	10	368
8:45 AM	0	26	139	19	0	184	0	11	129	1	0	141	0	12	4	10	0	26	0	0	2	7	0	9	360
Total	0	100	559	94	0	753	0	40	534	6	0	580	0	55	12	27	0	94	0	2	6	28	0	36	1463
Approach %	0.0	13.3	74.2	12.5	-	-	0.0	6.9	92.1	1.0	-	-	0.0	58.5	12.8	28.7	-	-	0.0	5.6	16.7	77.8	-	-	-
Total %	0.0	6.8	38.2	6.4	-	51.5	0.0	2.7	36.5	0.4	-	39.6	0.0	3.8	0.8	1.8	-	6.4	0.0	0.1	0.4	1.9	-	2.5	-
PHF	0.000	0.833	0.907	0.810	-	0.927	0.000	0.833	0.954	0.375	-	0.967	0.000	0.809	0.600	0.675	-	0.904	0.000	0.500	0.750	0.778	-	0.900	0.957
Lights	0	95	535	92	-	722	0	39	509	4	-	552	0	51	11	26	-	88	0	2	6	24	-	32	1394
% Lights	-	95.0	95.7	97.9	-	95.9	-	97.5	95.3	66.7	-	95.2	-	92.7	91.7	96.3	-	93.6	-	100.0	100.0	85.7	-	88.9	95.3
Buses	0	0	4	0	-	4	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	6
% Buses	-	0.0	0.7	0.0	-	0.5	-	0.0	0.4	0.0	-	0.3	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.4
Single-Unit Trucks	0	3	13	0	-	16	0	1	15	0	-	16	0	2	1	1	-	4	0	0	0	3	-	3	39
% Single-Unit Trucks	-	3.0	2.3	0.0	-	2.1	-	2.5	2.8	0.0	-	2.8	-	3.6	8.3	3.7	-	4.3	-	0.0	0.0	10.7	-	8.3	2.7
Articulated Trucks	0	2	7	2	-	11	0	0	8	2	-	10	0	2	0	0	-	2	0	0	0	1	-	1	24
% Articulated Trucks	-	2.0	1.3	2.1	-	1.5	-	0.0	1.5	33.3	-	1.7	-	3.6	0.0	0.0	-	2.1	-	0.0	0.0	3.6	-	2.8	1.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

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

Count Name: Oakton Street with River Drive
TMC
Site Code:
Start Date: 03/25/2025

Turning Movement Peak Hour Data (4:00 PM)

Start Time	Oakton Street Eastbound						Oakton Street Westbound						River Drive Northbound						River Drive Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:00 PM	0	17	182	22	0	221	0	25	208	2	0	235	0	27	3	21	0	51	0	5	3	25	0	33	540
4:15 PM	0	10	162	23	0	195	0	12	190	4	0	206	0	28	4	25	0	57	0	0	1	24	0	25	483
4:30 PM	0	9	199	21	0	229	0	23	186	0	0	209	0	36	2	18	0	56	0	5	4	25	0	34	528
4:45 PM	0	12	181	24	0	217	0	16	196	0	0	212	0	25	0	20	0	45	0	1	5	32	0	38	512
Total	0	48	724	90	0	862	0	76	780	6	0	862	0	116	9	84	0	209	0	11	13	106	0	130	2063
Approach %	0.0	5.6	84.0	10.4	-	-	0.0	8.8	90.5	0.7	-	-	0.0	55.5	4.3	40.2	-	-	0.0	8.5	10.0	81.5	-	-	-
Total %	0.0	2.3	35.1	4.4	-	41.8	0.0	3.7	37.8	0.3	-	41.8	0.0	5.6	0.4	4.1	-	10.1	0.0	0.5	0.6	5.1	-	6.3	-
PHF	0.000	0.706	0.910	0.938	-	0.941	0.000	0.760	0.938	0.375	-	0.917	0.000	0.806	0.563	0.840	-	0.917	0.000	0.550	0.650	0.828	-	0.855	0.955
Lights	0	47	709	87	-	843	0	70	763	6	-	839	0	113	8	81	-	202	0	10	12	104	-	126	2010
% Lights	-	97.9	97.9	96.7	-	97.8	-	92.1	97.8	100.0	-	97.3	-	97.4	88.9	96.4	-	96.7	-	90.9	92.3	98.1	-	96.9	97.4
Buses	0	0	2	0	-	2	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	4
% Buses	-	0.0	0.3	0.0	-	0.2	-	0.0	0.3	0.0	-	0.2	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.2
Single-Unit Trucks	0	0	13	3	-	16	0	4	13	0	-	17	0	2	0	1	-	3	0	0	0	1	-	1	37
% Single-Unit Trucks	-	0.0	1.8	3.3	-	1.9	-	5.3	1.7	0.0	-	2.0	-	1.7	0.0	1.2	-	1.4	-	0.0	0.0	0.9	-	0.8	1.8
Articulated Trucks	0	1	0	0	-	1	0	2	2	0	-	4	0	1	1	2	-	4	0	1	1	1	-	3	12
% Articulated Trucks	-	2.1	0.0	0.0	-	0.1	-	2.6	0.3	0.0	-	0.5	-	0.9	11.1	2.4	-	1.9	-	9.1	7.7	0.9	-	2.3	0.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Preliminary Site Plan



1 ALTERNATE SITE PLAN
SCALE: 1" = 60'-0"

Cornerstone Architects Ltd.
A NELSON Worldwide Company
NELSONWW.com

CLIENT: BRIDGE INDUSTRIAL
9525 W BRYN MAWR AVE, SUITE 700
ROSEMONT, ILLINOIS

PROJECT: PROPOSED FACILITY
8120 LEHIGH AVE
MORTON GROVE, ILLINOIS

DATE: 06/27/2025
PROJECT: #25023

SHEET: SITE PLAN

SP-ALT
2 of 2

CMAP Projections Letter

Chicago Metropolitan Agency for Planning

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

March 21, 2025

Ryan May
Project Coordinator
Kenig, Lindgren, O'Hara and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

Subject: Lehigh Avenue - Lincoln Avenue - Oakton Street
IDOT

Dear Ms. May:

In response to a request made on your behalf and dated March 20, 2025, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
Lehigh Ave, at Lincoln Ave	2,950	3,650
Lincoln Ave west of Lehigh Ave	1,325	1,640
Lincoln Ave east of Lehigh Ave	3,500	4,330
Oakton Ave west of Lehigh Ave	27,300	29,500
Oakton Ave east of Lehigh Ave	21,400	23,400
Lehigh Ave south of Oakton Ave	4,700	5,500

Traffic projections are developed using existing ADT data provided in the request letter and the results from the December 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)
\2025_trafficForecasts\MortonGrove\ck-28-25\ck-28-25.docx

Level of Service Criteria

LEVEL OF SERVICE CRITERIA

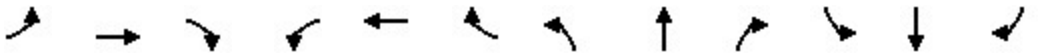
Signalized Intersections		
Level of Service	**Interpretation**	**Average Control Delay (seconds per vehicle)**
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level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

Unsignalized Intersections	
Level of Service	Average Total Delay (SEC/VEH)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: *Highway Capacity Manual*, 6th Edition.

Capacity Analysis Summary Sheets

Existing Weekday Morning Peak Hour Conditions



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	531	60	61	495	24	44	64	50	7	60	45
Future Volume (vph)	31	531	60	61	495	24	44	64	50	7	60	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		0	215		0	185		0	175		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	140			130			120			110		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.985			0.993			0.934			0.936	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3409	0	1805	3402	0	1687	3153	0	1399	3196	0
Flt Permitted	0.445			0.380			0.521			0.675		
Satd. Flow (perm)	821	3409	0	722	3402	0	925	3153	0	994	3196	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			35			30			35	
Link Distance (ft)		1224			2871			815			722	
Travel Time (s)		20.9			55.9			18.5			14.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	4%	7%	0%	5%	13%	7%	3%	12%	29%	7%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	629	0	65	553	0	47	121	0	7	112	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	21.0		6.5	21.0		6.5	14.0		6.5	14.0	
Total Split (s)	13.0	48.0		13.0	48.0		13.0	26.0		13.0	26.0	
Total Split (%)	13.0%	48.0%		13.0%	48.0%		13.0%	26.0%		13.0%	26.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	69.9	62.4		71.7	64.8		19.5	15.1		16.3	10.0	
Actuated g/C Ratio	0.70	0.62		0.72	0.65		0.20	0.15		0.16	0.10	

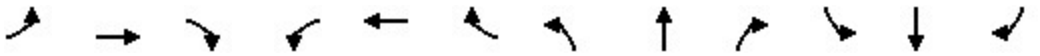
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.05	0.30		0.11	0.25		0.20	0.25		0.04	0.35	
Control Delay (s/veh)	4.3	7.2		5.7	9.8		31.7	37.6		28.0	44.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	4.3	7.2		5.7	9.8		31.7	37.6		28.0	44.7	
LOS	A	A		A	A		C	D		C	D	
Approach Delay (s/veh)		7.1			9.4			36.0			43.7	
Approach LOS		A			A			D			D	
Queue Length 50th (ft)	4	56		12	87		24	33		3	35	
Queue Length 95th (ft)	9	63		28	136		51	64		14	61	
Internal Link Dist (ft)		1144			2791			735			642	
Turn Bay Length (ft)	170			215			185			175		
Base Capacity (vph)	683	2128		629	2204		253	653		219	639	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.05	0.30		0.10	0.25		0.19	0.19		0.03	0.18	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.35
Intersection Signal Delay (s/veh): 13.9 Intersection LOS: B
Intersection Capacity Utilization 42.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 1: Lehigh Avenue & Oakton Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	593	94	40	538	6	55	12	27	2	6	28
Future Volume (vph)	100	593	94	40	538	6	55	12	27	2	6	28
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	120		180	285		0	250		0	95		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	100			145			50			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.998			0.898			0.876	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	3619	1583	1752	3422	0	1687	1621	0	1805	1491	0
Flt Permitted	0.410			0.418			0.487			0.730		
Satd. Flow (perm)	742	3619	1583	771	3422	0	865	1621	0	1387	1491	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		1323			1224			671			680	
Travel Time (s)		22.6			20.9			18.3			18.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	2%	3%	5%	33%	7%	8%	4%	0%	0%	14%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	618	98	42	566	0	57	41	0	2	35	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	24.0	24.0	6.5	24.0		6.5	24.0		6.5	24.0	
Total Split (s)	16.0	48.0	48.0	13.0	45.0		13.0	26.0		13.0	26.0	
Total Split (%)	16.0%	48.0%	48.0%	13.0%	45.0%		13.0%	26.0%		13.0%	26.0%	
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.5	0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	6.0	3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	
Act Effct Green (s)	75.5	69.2	69.2	72.7	66.2		18.2	14.8		13.2	9.3	
Actuated g/C Ratio	0.76	0.69	0.69	0.73	0.66		0.18	0.15		0.13	0.09	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.16	0.25	0.09	0.07	0.25		0.25	0.17		0.01	0.25	
Control Delay (s/veh)	5.5	9.4	9.7	4.2	7.3		33.2	37.0		27.5	46.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	5.5	9.4	9.7	4.2	7.3		33.2	37.0		27.5	46.3	
LOS	A	A	A	A	A		C	D		C	D	
Approach Delay (s/veh)		8.9			7.1			34.8			45.3	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)	18	98	26	5	66		29	22		1	21	
Queue Length 95th (ft)	41	150	57	14	91		59	55		7	51	
Internal Link Dist (ft)		1243			1144			591			600	
Turn Bay Length (ft)	120		180	285			250			95		
Base Capacity (vph)	690	2503	1095	672	2266		244	333		276	298	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.15	0.25	0.09	0.06	0.25		0.23	0.12		0.01	0.12	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.25			
Intersection Signal Delay (s/veh): 10.7		Intersection LOS: B	
Intersection Capacity Utilization 43.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: River Drive & Oakton Street



Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	27	4	17	93	108	40
Future Vol, veh/h	27	4	17	93	108	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	90	140	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	0	6	4	4	5
Mvmt Flow	30	4	19	102	119	44

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	280	141	163	0	-	0
Stage 1	141	-	-	-	-	-
Stage 2	140	-	-	-	-	-
Critical Hdwy	6.44	6.2	4.16	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.3	2.254	-	-	-
Pot Cap-1 Maneuver	705	913	1392	-	-	-
Stage 1	881	-	-	-	-	-
Stage 2	882	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	696	913	1392	-	-	-
Mov Cap-2 Maneuver	696	-	-	-	-	-
Stage 1	869	-	-	-	-	-
Stage 2	882	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.22	1.18	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1392	-	696	913	-	-
HCM Lane V/C Ratio	0.013	-	0.043	0.005	-	-
HCM Ctrl Dly (s/v)	7.6	-	10.4	9	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0	-	-

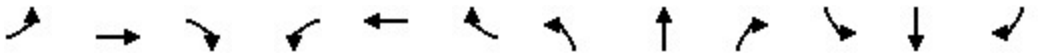
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	7	17	102	105	7
Future Vol, veh/h	8	7	17	102	105	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	95	140	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	13	71	12	4	3	14
Mvmt Flow	9	8	19	116	119	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	278	123	127	0	-	0
Stage 1	123	-	-	-	-	-
Stage 2	155	-	-	-	-	-
Critical Hdwy	6.53	6.91	4.22	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.939	2.308	-	-	-
Pot Cap-1 Maneuver	689	771	1399	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	680	771	1399	-	-	-
Mov Cap-2 Maneuver	680	-	-	-	-	-
Stage 1	864	-	-	-	-	-
Stage 2	847	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.06	1.09	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1399	-	680	771	-	-
HCM Lane V/C Ratio	0.014	-	0.013	0.01	-	-
HCM Ctrl Dly (s/v)	7.6	-	10.4	9.7	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣				
Volume (vph)	5	78	70	181	19	4	10	0	145	0	0	0
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	153	0	0	204	0	0	155	0	0	0	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.93	0.85	0.95	0.95	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1767	0	0	1810	0	0	1628	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			No			No	
Reference Time (s)			0.0			0.0			0.0			0.0
Adj Reference Time (s)			0.0			0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	0	1792		0	198		0	841		0	0	
Reference Time A (s)	0.0	10.2		0.0	123.7		0.0	22.1		0.0	0.0	
Adj Saturation B (vph	0	0		NA	NA		0	0		NA	NA	
Reference Time B (s)	8.3	18.4		NA	NA		8.7	19.4		NA	NA	
Reference Time (s)		10.2			123.7			19.4			0.0	
Adj Reference Time (s)		14.2			127.7			23.4			8.0	
Split Option												
Ref Time Combined (s)	0.0	10.4		0.0	13.5		0.0	11.4		0.0	0.0	
Ref Time Seperate (s)	0.3	5.3		12.0	1.2		0.7	0.0		0.0	0.0	
Reference Time (s)	10.4	10.4		13.5	13.5		11.4	11.4		0.0	0.0	
Adj Reference Time (s)	14.4	14.4		17.5	17.5		15.4	15.4		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	NA	
Permitted Option (s)	127.7	23.4	
Split Option (s)	31.9	15.4	
Minimum (s)	31.9	15.4	47.3

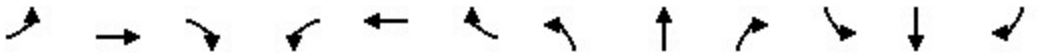
Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	39.4%	ICU Level of Service	A

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

Capacity Analysis Summary Sheets

Existing Weekday Evening Peak Hour Conditions

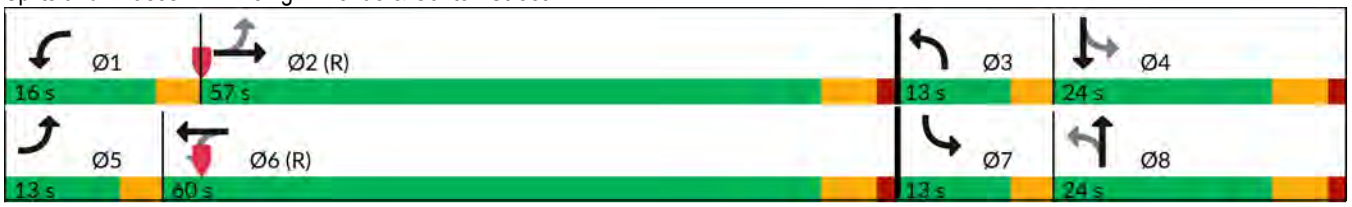


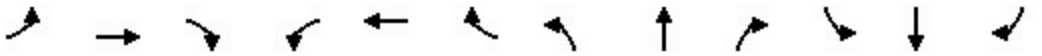
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	706	65	63	702	14	84	100	61	27	114	76
Future Volume (vph)	48	706	65	63	702	14	84	100	61	27	114	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		0	215		0	185		0	175		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	140			130			120			110		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.987			0.997			0.943			0.940	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3476	0	1719	3492	0	1787	3379	0	1687	3353	0
Flt Permitted	0.340			0.311			0.520			0.648		
Satd. Flow (perm)	633	3476	0	563	3492	0	978	3379	0	1151	3353	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			35			30			35	
Link Distance (ft)		1224			2871			815			722	
Travel Time (s)		20.9			55.9			18.5			14.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	8%	5%	3%	7%	1%	0%	2%	7%	0%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	786	0	64	730	0	86	164	0	28	194	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	21.0		6.5	21.0		6.5	14.0		6.5	14.0	
Total Split (s)	13.0	57.0		16.0	60.0		13.0	24.0		13.0	24.0	
Total Split (%)	11.8%	51.8%		14.5%	54.5%		11.8%	21.8%		11.8%	21.8%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	74.6	66.7		75.3	67.0		24.3	16.1		20.9	12.6	
Actuated g/C Ratio	0.68	0.61		0.68	0.61		0.22	0.15		0.19	0.11	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.10	0.37		0.14	0.34		0.31	0.33		0.11	0.51	
Control Delay (s/veh)	5.4	9.3		7.0	12.8		35.0	43.9		31.1	50.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	5.4	9.3		7.0	12.8		35.0	43.9		31.1	50.1	
LOS	A	A		A	B		C	D		C	D	
Approach Delay (s/veh)		9.1			12.4			40.8			47.7	
Approach LOS		A			B			D			D	
Queue Length 50th (ft)	8	105		13	140		48	55		15	68	
Queue Length 95th (ft)	15	116		30	199		86	88		37	103	
Internal Link Dist (ft)		1144			2791			735			642	
Turn Bay Length (ft)	170			215			185			175		
Base Capacity (vph)	539	2106		529	2127		286	583		283	548	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.09	0.37		0.12	0.34		0.30	0.28		0.10	0.35	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 106 (96%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 18.2		Intersection LOS: B	
Intersection Capacity Utilization 53.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Lehigh Avenue & Oakton Street



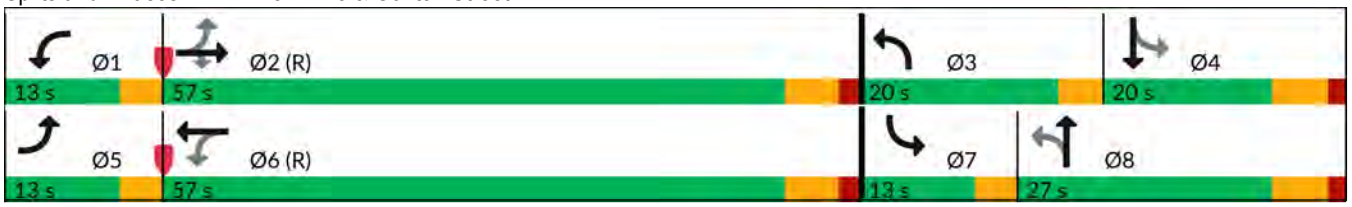


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	724	90	76	780	6	116	9	84	11	13	106
Future Volume (vph)	48	724	90	76	780	6	116	9	84	11	13	106
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	120		180	285		0	250		0	95		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	100			145			50			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.999			0.864			0.867	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3725	1568	1671	3536	0	1752	1569	0	1656	1604	0
Flt Permitted	0.285			0.303			0.529			0.694		
Satd. Flow (perm)	531	3725	1568	533	3536	0	976	1569	0	1210	1604	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		1323			1224			671			680	
Travel Time (s)		22.6			20.9			18.3			18.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	3%	8%	2%	0%	3%	11%	4%	9%	8%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	754	94	79	819	0	121	97	0	11	124	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	8.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	21.0	21.0	6.5	14.0		6.5	21.0		6.5	14.0	
Total Split (s)	13.0	57.0	57.0	13.0	57.0		20.0	27.0		13.0	20.0	
Total Split (%)	11.8%	51.8%	51.8%	11.8%	51.8%		18.2%	24.5%		11.8%	18.2%	
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.5	0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	6.0	3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	
Act Effct Green (s)	68.5	60.4	60.4	70.1	61.2		30.9	26.3		22.3	13.8	
Actuated g/C Ratio	0.62	0.55	0.55	0.64	0.56		0.28	0.24		0.20	0.13	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.12	0.37	0.11	0.19	0.42		0.34	0.26		0.04	0.62	
Control Delay (s/veh)	8.9	16.2	15.0	6.7	10.5		31.9	35.5		26.5	59.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	8.9	16.2	15.0	6.7	10.5		31.9	35.5		26.5	59.0	
LOS	A	B	B	A	B		C	D		C	E	
Approach Delay (s/veh)		15.7			10.2			33.5			56.3	
Approach LOS		B			B			C			E	
Queue Length 50th (ft)	12	159	32	14	95		65	54		6	83	
Queue Length 95th (ft)	29	233	69	29	124		108	107		18	145	
Internal Link Dist (ft)		1243			1144			591			600	
Turn Bay Length (ft)	120		180	285			250			95		
Base Capacity (vph)	447	2046	861	444	1967		390	377		322	218	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.11	0.37	0.11	0.18	0.42		0.31	0.26		0.03	0.57	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 17.7		Intersection LOS: B	
Intersection Capacity Utilization 51.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: River Drive & Oakton Street



Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	52	15	4	170	182	39
Future Vol, veh/h	52	15	4	170	182	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	90	140	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	1	2	3
Mvmt Flow	54	16	4	177	190	41

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	395	210	230	0	-	0
Stage 1	210	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	613	835	1350	-	-	-
Stage 1	830	-	-	-	-	-
Stage 2	851	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	612	835	1350	-	-	-
Mov Cap-2 Maneuver	612	-	-	-	-	-
Stage 1	827	-	-	-	-	-
Stage 2	851	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.99	0.18	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1350	-	612	835	-	-
HCM Lane V/C Ratio	0.003	-	0.089	0.019	-	-
HCM Ctrl Dly (s/v)	7.7	-	11.5	9.4	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	25	4	158	192	5
Future Vol, veh/h	16	25	4	158	192	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	95	140	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	25	1	2	0
Mvmt Flow	17	27	4	168	204	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	384	207	210	0	-	0
Stage 1	207	-	-	-	-	-
Stage 2	177	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.35	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.425	-	-	-
Pot Cap-1 Maneuver	623	839	1236	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	621	839	1236	-	-	-
Mov Cap-2 Maneuver	621	-	-	-	-	-
Stage 1	830	-	-	-	-	-
Stage 2	859	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.03	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1236	-	621	839	-	-
HCM Lane V/C Ratio	0.003	-	0.027	0.032	-	-
HCM Ctrl Dly (s/v)	7.9	-	11	9.4	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣				
Volume (vph)	0	87	21	124	35	0	18	0	291	0	0	0
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	108	0	0	159	0	0	309	0	0	0	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	0.96	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1845	0	0	1826	0	0	1627	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			No			No	
Reference Time (s)			0.0			0.0			0.0			0.0
Adj Reference Time (s)			0.0			0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	0	1845		0	145		0	883		0	0	
Reference Time A (s)	0.0	7.0		0.0	131.6		0.0	42.0		0.0	0.0	
Adj Saturation B (vph	0	1845		0	0		0	0		NA	NA	
Reference Time B (s)	0.0	7.0		16.2	18.4		9.2	30.8		NA	NA	
Reference Time (s)		7.0			18.4			30.8			0.0	
Adj Reference Time (s)		11.0			22.4			34.8			8.0	
Split Option												
Ref Time Combined (s)	0.0	7.0		0.0	10.4		0.0	22.8		0.0	0.0	
Ref Time Seperate (s)	0.0	5.7		8.2	2.2		1.2	0.0		0.0	0.0	
Reference Time (s)	7.0	7.0		10.4	10.4		22.8	22.8		0.0	0.0	
Adj Reference Time (s)	11.0	11.0		14.4	14.4		26.8	26.8		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	NA	
Permitted Option (s)	22.4	34.8	
Split Option (s)	25.5	26.8	
Minimum (s)	22.4	26.8	49.2

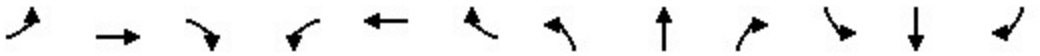
Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	41.0%	ICU Level of Service	A

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

Capacity Analysis Summary Sheets

No Build Weekday Morning Peak Hour Conditions



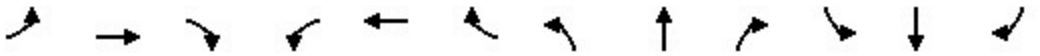
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	551	62	63	513	29	46	76	52	14	75	60
Future Volume (vph)	42	551	62	63	513	29	46	76	52	14	75	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		0	215		0	185		0	175		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	140			130			120			110		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.985			0.992			0.939			0.933	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1752	3409	0	1805	3397	0	1687	3179	0	1399	3188	0
Flt Permitted	0.428			0.364			0.513			0.666		
Satd. Flow (perm)	790	3409	0	692	3397	0	911	3179	0	981	3188	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			35			30			35	
Link Distance (ft)		1224			2871			815			722	
Travel Time (s)		20.9			55.9			18.5			14.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	4%	7%	0%	5%	13%	7%	3%	12%	29%	7%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	652	0	67	577	0	49	136	0	15	144	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	21.0		6.5	21.0		6.5	14.0		6.5	14.0	
Total Split (s)	13.0	48.0		13.0	48.0		13.0	26.0		13.0	26.0	
Total Split (%)	13.0%	48.0%		13.0%	48.0%		13.0%	26.0%		13.0%	26.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	67.2	59.4		68.6	61.6		21.9	15.8		18.6	10.8	
Actuated g/C Ratio	0.67	0.59		0.69	0.62		0.22	0.16		0.19	0.11	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.08	0.32		0.12	0.28		0.19	0.27		0.07	0.42	
Control Delay (s/veh)	4.8	8.1		6.5	11.2		29.7	38.2		27.9	44.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	4.8	8.1		6.5	11.2		29.7	38.2		27.9	44.9	
LOS	A	A		A	B		C	D		C	D	
Approach Delay (s/veh)		7.9			10.7			36.0			43.3	
Approach LOS		A			B			D			D	
Queue Length 50th (ft)	6	60		12	95		24	37		7	45	
Queue Length 95th (ft)	11	65		30	149		51	70		22	74	
Internal Link Dist (ft)		1144			2791			735			642	
Turn Bay Length (ft)	170			215			185			175		
Base Capacity (vph)	640	2024		588	2093		274	647		244	637	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.07	0.32		0.11	0.28		0.18	0.21		0.06	0.23	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay (s/veh): 15.4		Intersection LOS: B	
Intersection Capacity Utilization 47.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Lehigh Avenue & Oakton Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	626	94	40	573	6	55	12	27	2	6	28
Future Volume (vph)	100	626	94	40	573	6	55	12	27	2	6	28
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	120		180	285		0	250		0	95		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	100			145			50			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.999			0.898			0.876	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	3619	1583	1752	3426	0	1687	1621	0	1805	1491	0
Flt Permitted	0.391			0.401			0.487			0.730		
Satd. Flow (perm)	708	3619	1583	740	3426	0	865	1621	0	1387	1491	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		1323			1224			671			680	
Travel Time (s)		22.6			20.9			18.3			18.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	2%	3%	5%	33%	7%	8%	4%	0%	0%	14%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	652	98	42	603	0	57	41	0	2	35	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	24.0	24.0	6.5	24.0		6.5	24.0		6.5	24.0	
Total Split (s)	16.0	48.0	48.0	13.0	45.0		13.0	26.0		13.0	26.0	
Total Split (%)	16.0%	48.0%	48.0%	13.0%	45.0%		13.0%	26.0%		13.0%	26.0%	
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.5	0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	6.0	3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	
Act Effct Green (s)	75.5	69.2	69.2	72.7	66.2		18.2	14.8		13.2	9.3	
Actuated g/C Ratio	0.76	0.69	0.69	0.73	0.66		0.18	0.15		0.13	0.09	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.17	0.26	0.09	0.07	0.27		0.25	0.17		0.01	0.25	
Control Delay (s/veh)	5.5	9.5	9.7	4.3	7.3		33.2	37.0		27.5	46.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	5.5	9.5	9.7	4.3	7.3		33.2	37.0		27.5	46.3	
LOS	A	A	A	A	A		C	D		C	D	
Approach Delay (s/veh)		9.0			7.1			34.8			45.3	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)	18	104	26	5	72		29	22		1	21	
Queue Length 95th (ft)	41	159	57	13	100		59	55		7	51	
Internal Link Dist (ft)		1243			1144			591			600	
Turn Bay Length (ft)	120		180	285			250			95		
Base Capacity (vph)	668	2502	1094	652	2268		244	333		276	298	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.16	0.26	0.09	0.06	0.27		0.23	0.12		0.01	0.12	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay (s/veh): 10.6		Intersection LOS: B	
Intersection Capacity Utilization 44.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: River Drive & Oakton Street



Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	27	4	17	121	145	40
Future Vol, veh/h	27	4	17	121	145	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	90	140	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	0	6	4	4	5
Mvmt Flow	30	4	19	133	159	44

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	352	181	203	0	-	0
Stage 1	181	-	-	-	-	-
Stage 2	170	-	-	-	-	-
Critical Hdwy	6.44	6.2	4.16	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.3	2.254	-	-	-
Pot Cap-1 Maneuver	642	866	1345	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	855	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	633	866	1345	-	-	-
Mov Cap-2 Maneuver	633	-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	855	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.74	0.95	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1345	-	633	866	-	-
HCM Lane V/C Ratio	0.014	-	0.047	0.005	-	-
HCM Ctrl Dly (s/v)	7.7	-	11	9.2	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0	-	-

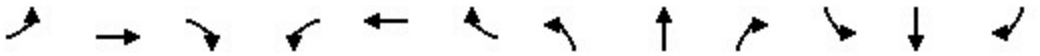
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	7	17	130	142	7
Future Vol, veh/h	8	7	17	130	142	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	95	140	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	13	71	12	4	3	14
Mvmt Flow	9	8	19	148	161	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	352	165	169	0	-	0
Stage 1	165	-	-	-	-	-
Stage 2	186	-	-	-	-	-
Critical Hdwy	6.53	6.91	4.22	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.939	2.308	-	-	-
Pot Cap-1 Maneuver	624	727	1350	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	820	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	615	727	1350	-	-	-
Mov Cap-2 Maneuver	615	-	-	-	-	-
Stage 1	826	-	-	-	-	-
Stage 2	820	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.5	0.89	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1350	-	615	727	-	-
HCM Lane V/C Ratio	0.014	-	0.015	0.011	-	-
HCM Ctrl Dly (s/v)	7.7	-	10.9	10	-	-
HCM Lane LOS	A	-	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣				
Volume (vph)	5	81	92	206	20	4	35	0	175	0	0	0
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	178	0	0	230	0	0	210	0	0	0	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.92	0.85	0.95	0.95	0.85	0.95	0.87	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1750	0	0	1810	0	0	1649	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			No			No	
Reference Time (s)			0.0			0.0			0.0			0.0
Adj Reference Time (s)			0.0			0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	0	1772		0	187		0	469		0	0	
Reference Time A (s)	0.0	12.1		0.0	147.6		0.0	53.7		0.0	0.0	
Adj Saturation B (vph	0	0		NA	NA		0	0		NA	NA	
Reference Time B (s)	8.3	20.2		NA	NA		10.3	23.3		NA	NA	
Reference Time (s)		12.1			147.6			23.3			0.0	
Adj Reference Time (s)		16.1			151.6			27.3			8.0	
Split Option												
Ref Time Combined (s)	0.0	12.2		0.0	15.2		0.0	15.3		0.0	0.0	
Ref Time Seperate (s)	0.3	5.6		13.7	1.3		2.3	0.0		0.0	0.0	
Reference Time (s)	12.2	12.2		15.2	15.2		15.3	15.3		0.0	0.0	
Adj Reference Time (s)	16.2	16.2		19.2	19.2		19.3	19.3		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	NA	
Permitted Option (s)	151.6	27.3	
Split Option (s)	35.5	19.3	
Minimum (s)	35.5	19.3	54.7

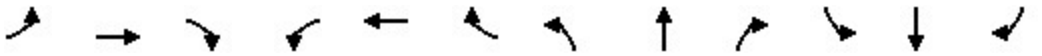
Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	45.6%	ICU Level of Service	A

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

Capacity Analysis Summary Sheets

No Build Weekday Evening Peak Hour Conditions

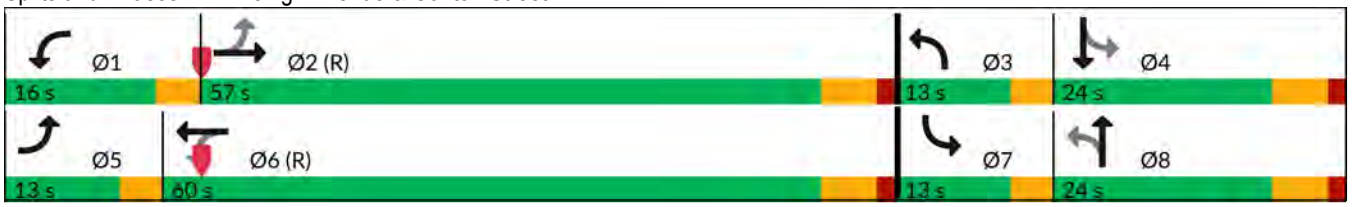


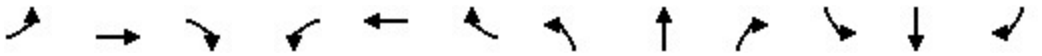
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	732	67	65	728	19	87	111	63	33	126	87
Future Volume (vph)	57	732	67	65	728	19	87	111	63	33	126	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		0	215		0	185		0	175		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	140			130			120			110		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.987			0.996			0.946			0.939	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3476	0	1719	3487	0	1787	3391	0	1687	3349	0
Flt Permitted	0.323			0.297			0.503			0.640		
Satd. Flow (perm)	602	3476	0	537	3487	0	946	3391	0	1136	3349	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			35			30			35	
Link Distance (ft)		1224			2871			815			722	
Travel Time (s)		20.9			55.9			18.5			14.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	8%	5%	3%	7%	1%	0%	2%	7%	0%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	58	815	0	66	762	0	89	177	0	34	218	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	21.0		6.5	21.0		6.5	14.0		6.5	14.0	
Total Split (s)	13.0	57.0		16.0	60.0		13.0	24.0		13.0	24.0	
Total Split (%)	11.8%	51.8%		14.5%	54.5%		11.8%	21.8%		11.8%	21.8%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	73.9	65.8		74.4	66.0		24.8	16.6		22.0	13.4	
Actuated g/C Ratio	0.67	0.60		0.68	0.60		0.23	0.15		0.20	0.12	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.12	0.39		0.15	0.36		0.32	0.35		0.13	0.54	
Control Delay (s/veh)	5.7	9.7		7.4	13.6		34.6	43.6		30.8	50.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	5.7	9.7		7.4	13.6		34.6	43.6		30.8	50.0	
LOS	A	A		A	B		C	D		C	D	
Approach Delay (s/veh)		9.4			13.1			40.6			47.4	
Approach LOS		A			B			D			D	
Queue Length 50th (ft)	10	111		14	152		49	60		18	77	
Queue Length 95th (ft)	17	119		32	216		88	94		42	113	
Internal Link Dist (ft)		1144			2791			735			642	
Turn Bay Length (ft)	170			215			185			175		
Base Capacity (vph)	515	2078		509	2092		286	590		290	548	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.11	0.39		0.13	0.36		0.31	0.30		0.12	0.40	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 106 (96%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay (s/veh): 18.9		Intersection LOS: B	
Intersection Capacity Utilization 54.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Lehigh Avenue & Oakton Street



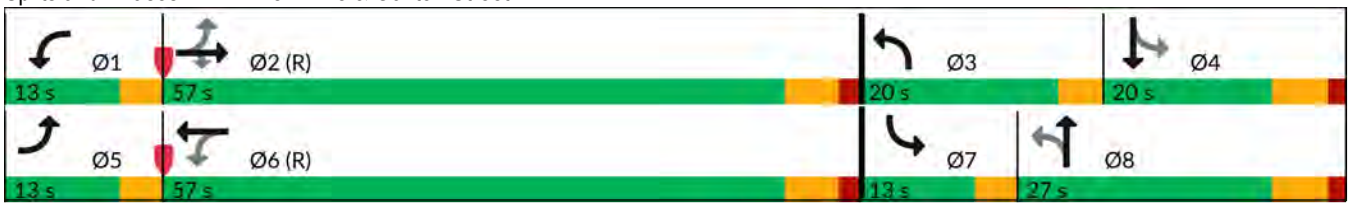


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	761	90	76	820	6	116	9	84	11	13	106
Future Volume (vph)	48	761	90	76	820	6	116	9	84	11	13	106
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	120		180	285		0	250		0	95		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	100			145			50			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.999			0.864			0.867	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3725	1568	1671	3536	0	1752	1569	0	1656	1604	0
Flt Permitted	0.267			0.286			0.528			0.694		
Satd. Flow (perm)	497	3725	1568	503	3536	0	974	1569	0	1210	1604	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		1323			1224			671			680	
Travel Time (s)		22.6			20.9			18.3			18.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	3%	8%	2%	0%	3%	11%	4%	9%	8%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	793	94	79	860	0	121	97	0	11	124	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	8.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	21.0	21.0	6.5	14.0		6.5	21.0		6.5	14.0	
Total Split (s)	13.0	57.0	57.0	13.0	57.0		20.0	27.0		13.0	20.0	
Total Split (%)	11.8%	51.8%	51.8%	11.8%	51.8%		18.2%	24.5%		11.8%	18.2%	
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.5	0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	6.0	3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	
Act Effct Green (s)	68.5	60.4	60.4	70.1	61.2		30.9	26.3		22.3	13.8	
Actuated g/C Ratio	0.62	0.55	0.55	0.64	0.56		0.28	0.24		0.20	0.13	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.13	0.39	0.11	0.20	0.44		0.34	0.26		0.04	0.62	
Control Delay (s/veh)	8.9	16.5	15.0	6.7	10.6		31.9	35.5		26.5	59.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	8.9	16.5	15.0	6.7	10.6		31.9	35.5		26.5	59.0	
LOS	A	B	B	A	B		C	D		C	E	
Approach Delay (s/veh)		15.9			10.3			33.5			56.3	
Approach LOS		B			B			C			E	
Queue Length 50th (ft)	12	170	32	14	98		65	54		6	83	
Queue Length 95th (ft)	29	247	69	28	132		108	107		18	145	
Internal Link Dist (ft)		1243			1144			591			600	
Turn Bay Length (ft)	120		180	285			250			95		
Base Capacity (vph)	428	2045	861	427	1967		390	377		322	218	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.12	0.39	0.11	0.19	0.44		0.31	0.26		0.03	0.57	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 17.7		Intersection LOS: B	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: River Drive & Oakton Street



Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	52	15	4	195	211	39
Future Vol, veh/h	52	15	4	195	211	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	90	140	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	1	2	3
Mvmt Flow	54	16	4	203	220	41

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	452	240	260	0	-	0
Stage 1	240	-	-	-	-	-
Stage 2	211	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	569	804	1316	-	-	-
Stage 1	804	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	568	804	1316	-	-	-
Mov Cap-2 Maneuver	568	-	-	-	-	-
Stage 1	802	-	-	-	-	-
Stage 2	829	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.46	0.16	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1316	-	568	804	-	-
HCM Lane V/C Ratio	0.003	-	0.095	0.019	-	-
HCM Ctrl Dly (s/v)	7.7	-	12	9.6	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0.1	-	-

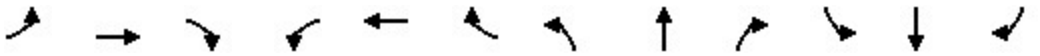
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	25	4	183	221	5
Future Vol, veh/h	16	25	4	183	221	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	95	140	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	25	1	2	0
Mvmt Flow	17	27	4	195	235	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	441	238	240	0	-	0
Stage 1	238	-	-	-	-	-
Stage 2	203	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.35	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.425	-	-	-
Pot Cap-1 Maneuver	578	806	1203	-	-	-
Stage 1	806	-	-	-	-	-
Stage 2	836	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	575	806	1203	-	-	-
Mov Cap-2 Maneuver	575	-	-	-	-	-
Stage 1	804	-	-	-	-	-
Stage 2	836	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.33	0.17	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1203	-	575	806	-	-
HCM Lane V/C Ratio	0.004	-	0.03	0.033	-	-
HCM Ctrl Dly (s/v)	8	-	11.4	9.6	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣				
Volume (vph)	0	90	35	142	36	0	35	0	317	0	0	0
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	125	0	0	178	0	0	352	0	0	0	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.96	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1820	0	0	1824	0	0	1635	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			No			No	
Reference Time (s)			0.0			0.0			0.0			0.0
Adj Reference Time (s)			0.0			0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	0	1820		0	142		0	663		0	0	
Reference Time A (s)	0.0	8.2		0.0	150.0		0.0	63.7		0.0	0.0	
Adj Saturation B (vph	0	1820		NA	NA		0	0		NA	NA	
Reference Time B (s)	0.0	8.2		NA	NA		10.3	33.8		NA	NA	
Reference Time (s)		8.2			150.0			33.8			0.0	
Adj Reference Time (s)		12.2			154.0			37.8			8.0	
Split Option												
Ref Time Combined (s)	0.0	8.2		0.0	11.7		0.0	25.8		0.0	0.0	
Ref Time Seperate (s)	0.0	5.9		9.4	2.3		2.3	0.0		0.0	0.0	
Reference Time (s)	8.2	8.2		11.7	11.7		25.8	25.8		0.0	0.0	
Adj Reference Time (s)	12.2	12.2		15.7	15.7		29.8	29.8		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	NA	
Permitted Option (s)	154.0	37.8	
Split Option (s)	28.0	29.8	
Minimum (s)	28.0	29.8	57.8

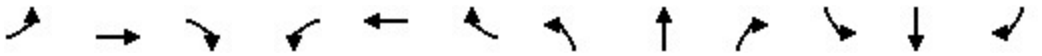
Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	48.2%	ICU Level of Service	A

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

Capacity Analysis Summary Sheets

Projected Weekday Morning Peak Hour Conditions



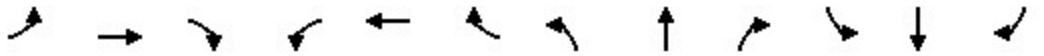
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	552	67	63	528	44	56	95	52	16	84	60
Future Volume (vph)	42	552	67	63	528	44	56	95	52	16	84	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		0	215		0	185		0	175		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	140			130			120			110		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.984			0.988			0.947			0.937	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3387	0	1805	3392	0	1597	3106	0	1597	3092	0
Flt Permitted	0.409			0.359			0.513			0.653		
Satd. Flow (perm)	762	3387	0	682	3392	0	863	3106	0	1098	3092	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			35			30			35	
Link Distance (ft)		1224			2871			815			722	
Travel Time (s)		20.9			55.9			18.5			14.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	4%	12%	0%	5%	7%	13%	9%	12%	13%	14%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	658	0	67	609	0	60	156	0	17	153	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	21.0		6.5	21.0		6.5	14.0		6.5	14.0	
Total Split (s)	13.0	48.0		13.0	48.0		13.0	26.0		13.0	26.0	
Total Split (%)	13.0%	48.0%		13.0%	48.0%		13.0%	26.0%		13.0%	26.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	66.4	58.6		67.8	60.9		22.8	16.6		19.0	11.2	
Actuated g/C Ratio	0.66	0.59		0.68	0.61		0.23	0.17		0.19	0.11	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.08	0.33		0.12	0.30		0.24	0.30		0.07	0.44	
Control Delay (s/veh)	5.0	8.5		6.8	11.8		30.0	38.0		27.1	45.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	5.0	8.5		6.8	11.8		30.0	38.0		27.1	45.1	
LOS	A	A		A	B		C	D		C	D	
Approach Delay (s/veh)		8.3			11.3			35.8			43.3	
Approach LOS		A			B			D			D	
Queue Length 50th (ft)	7	62		13	105		30	42		8	48	
Queue Length 95th (ft)	11	68		31	161		59	77		24	78	
Internal Link Dist (ft)		1144			2791			735			642	
Turn Bay Length (ft)	170			215			185			175		
Base Capacity (vph)	619	1985		577	2064		266	644		281	618	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.07	0.33		0.12	0.30		0.23	0.24		0.06	0.25	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay (s/veh): 16.2		Intersection LOS: B	
Intersection Capacity Utilization 47.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Lehigh Avenue & Oakton Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	146	626	94	40	573	31	55	12	27	8	6	38
Future Volume (vph)	146	626	94	40	573	31	55	12	27	8	6	38
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	120		180	285		0	250		0	95		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	100			145			50			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.992			0.898			0.870	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1687	3654	1583	1752	3388	0	1687	1621	0	1203	1368	0
Flt Permitted	0.365			0.404			0.502			0.730		
Satd. Flow (perm)	648	3654	1583	745	3388	0	891	1621	0	925	1368	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		1323			1224			671			680	
Travel Time (s)		22.6			20.9			18.3			18.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	4%	2%	3%	5%	19%	7%	8%	4%	50%	0%	24%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	152	652	98	42	629	0	57	41	0	8	46	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	24.0	24.0	6.5	24.0		6.5	24.0		6.5	24.0	
Total Split (s)	16.0	48.0	48.0	13.0	45.0		13.0	26.0		13.0	26.0	
Total Split (%)	16.0%	48.0%	48.0%	13.0%	45.0%		13.0%	26.0%		13.0%	26.0%	
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.5	0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	6.0	3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	
Act Effct Green (s)	75.5	68.3	68.3	70.2	61.4		18.7	15.3		14.5	10.1	
Actuated g/C Ratio	0.76	0.68	0.68	0.70	0.61		0.19	0.15		0.15	0.10	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.26	0.26	0.09	0.07	0.30		0.24	0.17		0.05	0.33	
Control Delay (s/veh)	6.4	10.0	10.3	4.6	8.3		32.1	36.3		27.8	47.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	6.4	10.0	10.3	4.6	8.3		32.1	36.3		27.8	47.7	
LOS	A	B	B	A	A		C	D		C	D	
Approach Delay (s/veh)		9.4			8.1			33.9			44.7	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)	29	107	27	5	78		29	21		4	28	
Queue Length 95th (ft)	60	165	60	15	107		58	54		15	62	
Internal Link Dist (ft)		1243			1144			591			600	
Turn Bay Length (ft)	120		180	285			250			95		
Base Capacity (vph)	621	2497	1081	641	2080		251	340		191	273	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.24	0.26	0.09	0.07	0.30		0.23	0.12		0.04	0.17	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay (s/veh): 11.4		Intersection LOS: B	
Intersection Capacity Utilization 48.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: River Drive & Oakton Street



Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	28	12	24	123	165	50
Future Vol, veh/h	28	12	24	123	165	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	90	140	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	67	33	3	2	4
Mvmt Flow	31	13	26	135	181	55

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	397	209	236	0	-	0
Stage 1	209	-	-	-	-	-
Stage 2	188	-	-	-	-	-
Critical Hdwy	6.44	6.87	4.43	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.903	2.497	-	-	-
Pot Cap-1 Maneuver	605	692	1169	-	-	-
Stage 1	821	-	-	-	-	-
Stage 2	839	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	591	692	1169	-	-	-
Mov Cap-2 Maneuver	591	-	-	-	-	-
Stage 1	803	-	-	-	-	-
Stage 2	839	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.09	1.33	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1169	-	591	692	-	-
HCM Lane V/C Ratio	0.023	-	0.052	0.019	-	-
HCM Ctrl Dly (s/v)	8.2	-	11.4	10.3	-	-
HCM Lane LOS	A	-	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	0.1	-	-

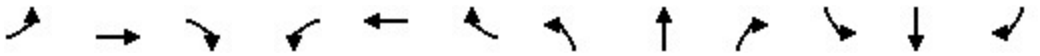
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	10	44	137	150	27
Future Vol, veh/h	10	10	44	137	150	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	95	140	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	50	5	8	7	4
Mvmt Flow	11	11	50	156	170	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	441	186	201	0	-	0
Stage 1	186	-	-	-	-	-
Stage 2	256	-	-	-	-	-
Critical Hdwy	6.5	6.7	4.15	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.75	2.245	-	-	-
Pot Cap-1 Maneuver	559	747	1353	-	-	-
Stage 1	827	-	-	-	-	-
Stage 2	769	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	538	747	1353	-	-	-
Mov Cap-2 Maneuver	538	-	-	-	-	-
Stage 1	797	-	-	-	-	-
Stage 2	769	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.86	1.89	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1353	-	538	747	-	-
HCM Lane V/C Ratio	0.037	-	0.021	0.015	-	-
HCM Ctrl Dly (s/v)	7.8	-	11.8	9.9	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Volume (vph)	5	81	110	218	20	4	36	177	152	0	0	0
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	196	0	0	242	0	0	365	0	0	0	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.91	0.85	0.95	0.95	0.85	0.95	0.93	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1738	0	0	1810	0	0	1773	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			No			No	
Reference Time (s)			0.0			0.0			0.0			0.0
Adj Reference Time (s)			0.0			0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	0	1758		0	181		0	723		0	0	
Reference Time A (s)	0.0	13.4		0.0	160.5		0.0	60.6		0.0	0.0	
Adj Saturation B (vph	0	0		NA	NA		0	0		NA	NA	
Reference Time B (s)	8.3	21.5		NA	NA		10.4	32.7		NA	NA	
Reference Time (s)		13.4			160.5			32.7			0.0	
Adj Reference Time (s)		17.4			164.5			36.7			8.0	
Split Option												
Ref Time Combined (s)	0.0	13.5		0.0	16.0		0.0	24.7		0.0	0.0	
Ref Time Seperate (s)	0.3	5.6		14.5	1.3		2.4	12.0		0.0	0.0	
Reference Time (s)	13.5	13.5		16.0	16.0		24.7	24.7		0.0	0.0	
Adj Reference Time (s)	17.5	17.5		20.0	20.0		28.7	28.7		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	NA	
Permitted Option (s)	164.5	36.7	
Split Option (s)	37.6	28.7	
Minimum (s)	37.6	28.7	66.3

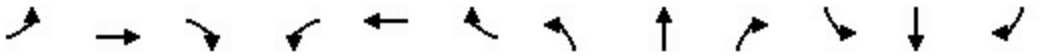
Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	55.2%	ICU Level of Service	B

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

Capacity Analysis Summary Sheets

Projected Weekday Evening Peak Hour Conditions



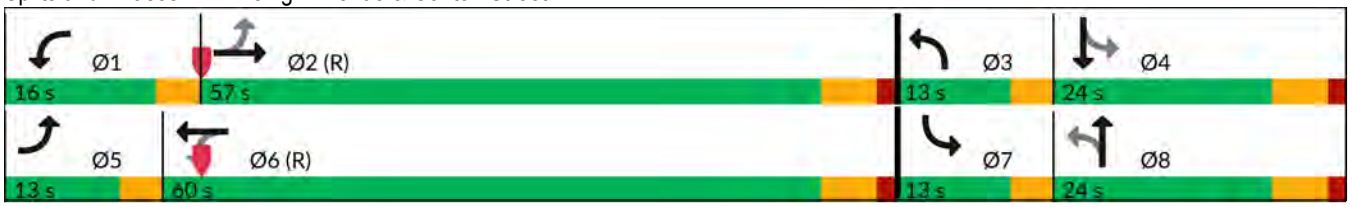
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	745	74	65	730	21	89	116	63	47	140	87
Future Volume (vph)	57	745	74	65	730	21	89	116	63	47	140	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	170		0	215		0	185		0	175		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	140			130			120			110		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.97											
Frt		0.986			0.996			0.947			0.942	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3468	0	1719	3489	0	1770	3330	0	1736	3334	0
Flt Permitted	0.321			0.289			0.530			0.637		
Satd. Flow (perm)	583	3468	0	523	3489	0	987	3330	0	1164	3334	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			35			30			35	
Link Distance (ft)		1224			2871			815			722	
Travel Time (s)		20.9			55.9			18.5			14.1	
Confl. Peds. (#/hr)	87											
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	9%	5%	3%	5%	2%	3%	2%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	58	836	0	66	766	0	91	182	0	48	232	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	21.0		6.5	21.0		6.5	14.0		6.5	14.0	
Total Split (s)	13.0	57.0		16.0	60.0		13.0	24.0		13.0	24.0	
Total Split (%)	11.8%	51.8%		14.5%	54.5%		11.8%	21.8%		11.8%	21.8%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	73.4	65.3		73.8	65.5		24.7	14.7		22.9	13.9	
Actuated g/C Ratio	0.67	0.59		0.67	0.60		0.22	0.13		0.21	0.13	

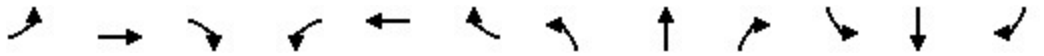
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.13	0.41		0.15	0.37		0.32	0.41		0.17	0.55	
Control Delay (s/veh)	5.8	9.7		7.6	14.0		34.2	45.9		31.0	49.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	5.8	9.7		7.6	14.0		34.2	45.9		31.0	49.9	
LOS	A	A		A	B		C	D		C	D	
Approach Delay (s/veh)		9.4			13.5			42.0			46.7	
Approach LOS		A			B			D			D	
Queue Length 50th (ft)	9	115		15	155		50	62		26	82	
Queue Length 95th (ft)	18	128		33	221		89	96		54	118	
Internal Link Dist (ft)		1144			2791			735			642	
Turn Bay Length (ft)	170			215			185			175		
Base Capacity (vph)	501	2057		499	2076		291	544		302	545	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.12	0.41		0.13	0.37		0.31	0.33		0.16	0.43	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 106 (96%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.55
Intersection Signal Delay (s/veh): 19.4 Intersection LOS: B
Intersection Capacity Utilization 54.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 1: Lehigh Avenue & Oakton Street





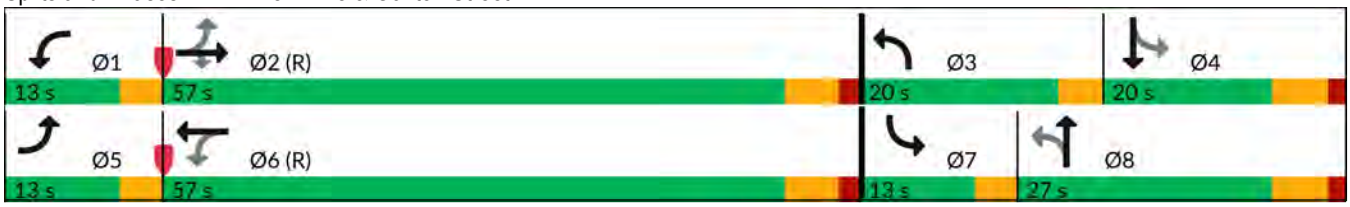
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	761	90	76	820	10	116	9	84	31	13	147
Future Volume (vph)	54	761	90	76	820	10	116	9	84	31	13	147
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	120		180	285		0	250		0	95		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	100			145			50			100		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850		0.998			0.864			0.863	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	3725	1568	1671	3529	0	1752	1569	0	1641	1585	0
Flt Permitted	0.260			0.283			0.440			0.694		
Satd. Flow (perm)	475	3725	1568	498	3529	0	812	1569	0	1199	1585	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		1323			1224			671			680	
Travel Time (s)		22.6			20.9			18.3			18.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	2%	3%	8%	2%	10%	3%	11%	4%	10%	8%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	56	793	94	79	864	0	121	97	0	32	167	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0	15.0	3.0	8.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	21.0	21.0	6.5	14.0		6.5	21.0		6.5	14.0	
Total Split (s)	13.0	57.0	57.0	13.0	57.0		20.0	27.0		13.0	20.0	
Total Split (%)	11.8%	51.8%	51.8%	11.8%	51.8%		18.2%	24.5%		11.8%	18.2%	
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5	1.5	0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0	6.0	3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	
Act Effct Green (s)	66.1	57.8	57.8	67.4	58.5		33.4	24.1		25.9	16.4	
Actuated g/C Ratio	0.60	0.53	0.53	0.61	0.53		0.30	0.22		0.24	0.15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.15	0.41	0.11	0.21	0.46		0.35	0.28		0.10	0.71	
Control Delay (s/veh)	9.8	17.9	15.9	7.3	11.7		30.7	39.1		26.7	61.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	9.8	17.9	15.9	7.3	11.7		30.7	39.1		26.7	61.7	
LOS	A	B	B	A	B		C	D		C	E	
Approach Delay (s/veh)		17.2			11.3			34.4			56.1	
Approach LOS		B			B			C			E	
Queue Length 50th (ft)	15	186	35	16	101		61	58		15	110	
Queue Length 95th (ft)	32	247	69	28	133		108	110		38	#218	
Internal Link Dist (ft)		1243			1144			591			600	
Turn Bay Length (ft)	120		180	285			250			95		
Base Capacity (vph)	402	1958	824	411	1876		387	344		347	239	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.14	0.41	0.11	0.19	0.46		0.31	0.28		0.09	0.70	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay (s/veh): 19.8 Intersection LOS: B
Intersection Capacity Utilization 59.2% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: River Drive & Oakton Street



Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	61	18	7	213	214	41
Future Vol, veh/h	61	18	7	213	214	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	90	140	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	17	43	1	2	2
Mvmt Flow	64	19	7	222	223	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	481	244	266	0	-	0
Stage 1	244	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Critical Hdwy	6.4	6.37	4.53	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.453	2.587	-	-	-
Pot Cap-1 Maneuver	548	759	1094	-	-	-
Stage 1	801	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	544	759	1094	-	-	-
Mov Cap-2 Maneuver	544	-	-	-	-	-
Stage 1	796	-	-	-	-	-
Stage 2	808	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.89	0.26	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1094	-	544	759	-	-
HCM Lane V/C Ratio	0.007	-	0.117	0.025	-	-
HCM Ctrl Dly (s/v)	8.3	-	12.5	9.9	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	0.1	-	-

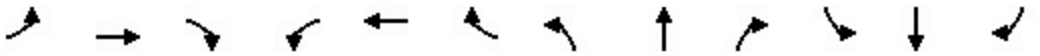
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	34	50	8	186	224	8
Future Vol, veh/h	34	50	8	186	224	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	95	140	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	13	2	3	0
Mvmt Flow	36	53	9	198	238	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	457	243	247	0	-	0
Stage 1	243	-	-	-	-	-
Stage 2	215	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.23	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.317	-	-	-
Pot Cap-1 Maneuver	565	801	1257	-	-	-
Stage 1	802	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	561	801	1257	-	-	-
Mov Cap-2 Maneuver	561	-	-	-	-	-
Stage 1	797	-	-	-	-	-
Stage 2	826	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.64	0.33	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1257	-	561	801	-	-
HCM Lane V/C Ratio	0.007	-	0.064	0.066	-	-
HCM Ctrl Dly (s/v)	7.9	-	11.9	9.8	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣				
Volume (vph)	0	90	38	144	36	0	46	0	333	0	0	0
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	128	0	0	180	0	0	379	0	0	0	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.96	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1815	0	0	1824	0	0	1640	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			No			No	
Reference Time (s)			0.0			0.0			0.0			0.0
Adj Reference Time (s)			0.0			0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	0	1815		0	142		0	585		0	0	
Reference Time A (s)	0.0	8.5		0.0	152.1		0.0	77.8		0.0	0.0	
Adj Saturation B (vph	0	1815		NA	NA		0	0		NA	NA	
Reference Time B (s)	0.0	8.5		NA	NA		11.1	35.7		NA	NA	
Reference Time (s)		8.5			152.1			35.7			0.0	
Adj Reference Time (s)		12.5			156.1			39.7			8.0	
Split Option												
Ref Time Combined (s)	0.0	8.5		0.0	11.8		0.0	27.7		0.0	0.0	
Ref Time Seperate (s)	0.0	5.9		9.6	2.3		3.1	0.0		0.0	0.0	
Reference Time (s)	8.5	8.5		11.8	11.8		27.7	27.7		0.0	0.0	
Adj Reference Time (s)	12.5	12.5		15.8	15.8		31.7	31.7		0.0	0.0	

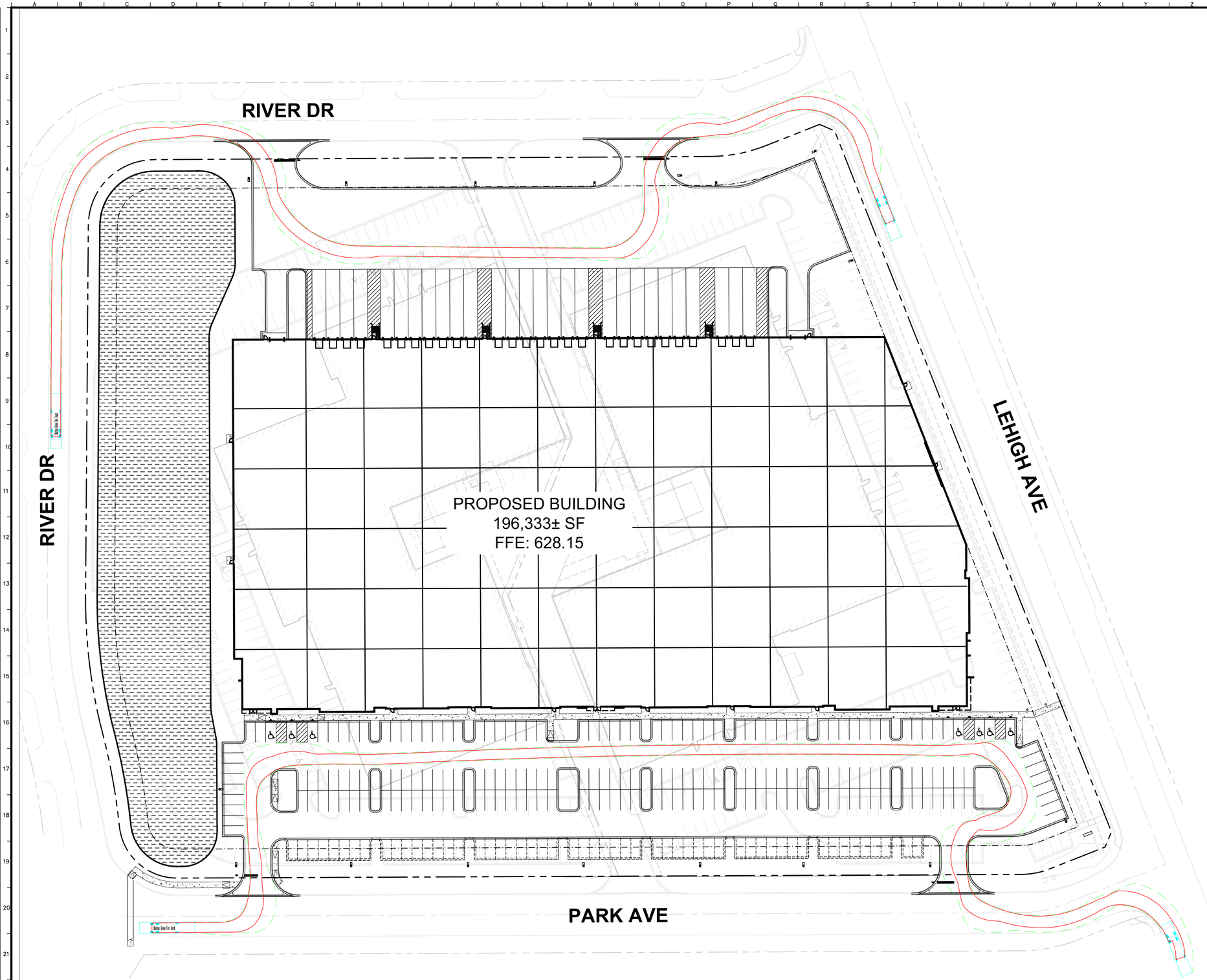
Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	NA	
Permitted Option (s)	156.1	39.7	
Split Option (s)	28.3	31.7	
Minimum (s)	28.3	31.7	60.0

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	50.0%	ICU Level of Service	A

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

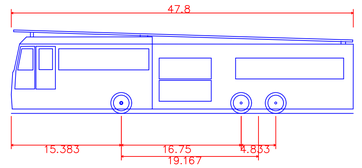
Drawing name: K:\CHS_LDEV\268915000_Bridge – Morton Grove\2 Design\CAD\Exhibits\Fire Truck Exhibit.dwg Layout1 Jul 11, 2025 1:12pm by JulietteStrosser
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NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

Call Before You Dig
JULIE
1-800-892-0123



Morton Grove Fire Truck	
Overall Length	47.800ft
Overall Width	9.500ft
Overall Body Height	11.666ft
Min Body Ground Clearance	0.625ft
Track Width	8.360ft
Lock-to-lock time	6.00s
Max Wheel Angle	45.00°

VEHICLE PATH LEGEND

VEHICLE WHEEL PATH

VEHICLE BODY OVERHANG

NO.	REVISIONS	DATE	BY
1	STORM WATER UPDATE	06/28/25	JRS

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4201 WINFIELD ROAD, SUITE 600
WARRENVILLE, IL 60555
PHONE: 630-487-9650
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: HLM
DRAWN BY: HLM
CHECKED BY: TJS

BRIDGE

FIRE TRUCK EXIHBIT

BRIDGE INDUSTRIAL
MORTON GROVE

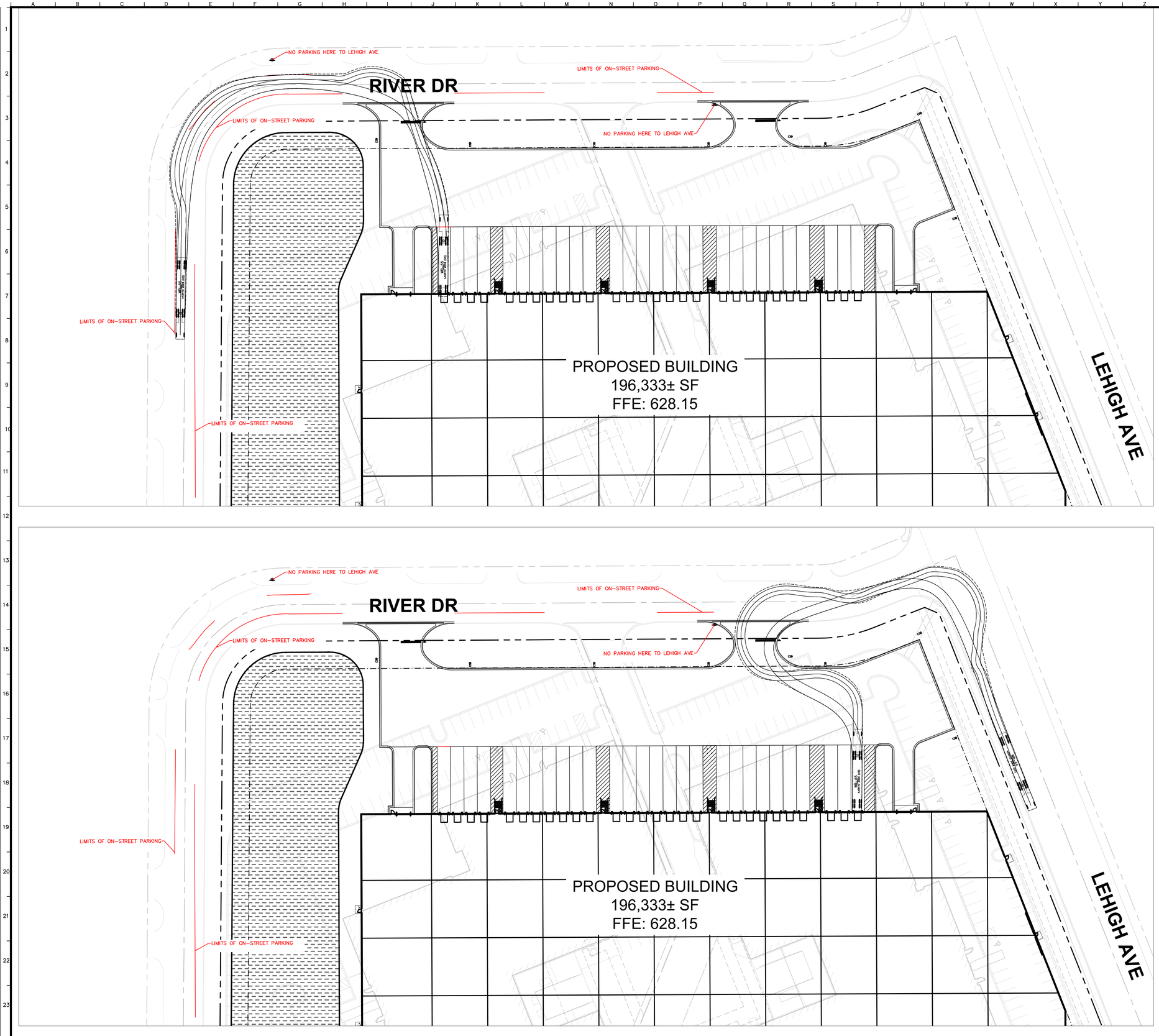
SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR.
MORTON GROVE, ILLINOIS 60053

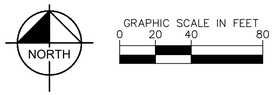
ORIGINAL ISSUE:
06/27/2025

KHA PROJECT NO.
268915000

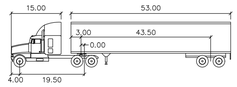
SHEET NUMBER

1 OF 1





Call Before You Dig
JULIE
1-800-892-0123



WB-65

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		

NO.	REVISIONS	DATE	BY
1	STORM WATER UPDATE	06/28/25	JRS

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SCALE: AS NOTED
DESIGNED BY: HLM
DRAWN BY: HLM
CHECKED BY: TJS

BRIDGE

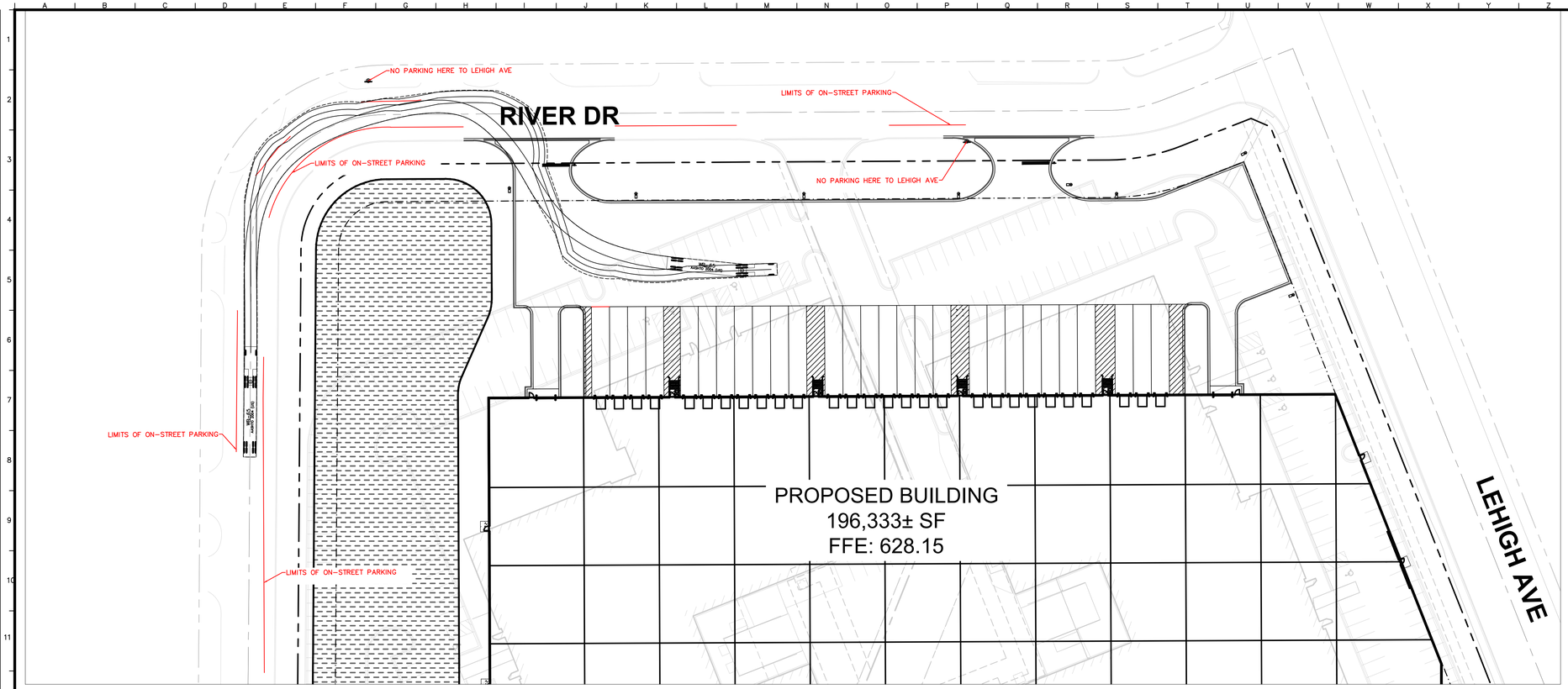
BRIDGE INDUSTRIAL MORTON GROVE

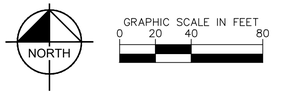
SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR
MORTON GROVE, ILLINOIS 60053

WB-65 TRUCK EXHIBIT

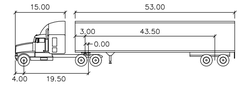
ORIGINAL ISSUE: 06/27/2025
KHA PROJECT NO. 268915000
SHEET NUMBER
1 OF 2

Drawing name: K:\CHS_LOEV\268915000_Bridge - Morton Grove\2 Design\CAD\Exhibits\Truck Turn Exhibit.dwg Layout1 Jun 27, 2025 10:39am by Jasmine.Newsom
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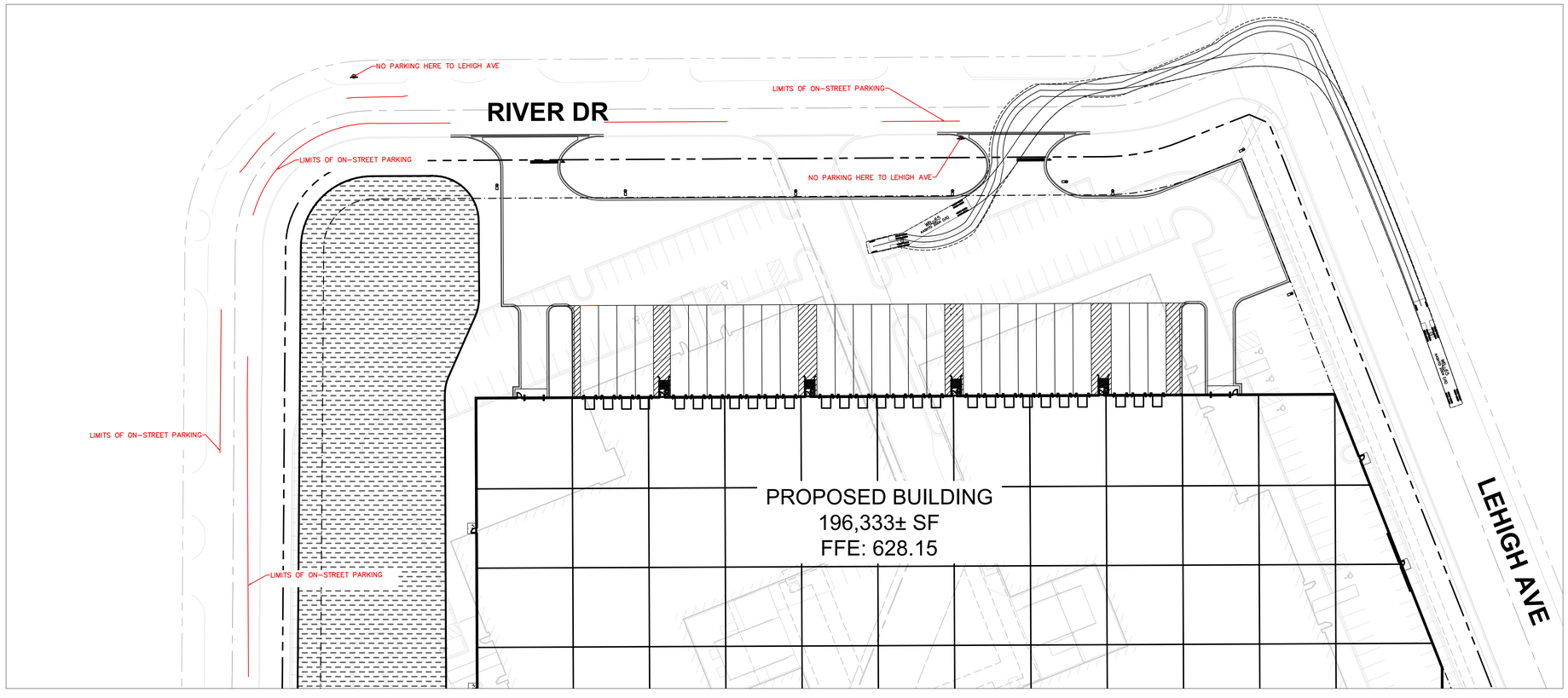
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WB-65

feet

Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		



NO.	REVISIONS	DATE	BY
1	STORM WATER UPDATE	06/28/25	JRS

Kimley»Horn

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4201 WINFIELD ROAD, SUITE 600
WARRENVILLE, IL 60555
PHONE: 847-849-4500
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: HLM
DRAWN BY: HLM
CHECKED BY: TJS

BRIDGE

WB-65 TRUCK EXHIBIT

BRIDGE INDUSTRIAL
MORTON GROVE

SOUTHWEST CORNER OF LEHIGH AVE & RIVER DR
MORTON GROVE, ILLINOIS 60053

ORIGINAL ISSUE:
06/27/2025

KHA PROJECT NO.
268915000

SHEET NUMBER

2 OF 2

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