HOPKINS PLANNING & ZONING COMMISSION
AGENDA
Tuesday, July 27, 2021
6:30 pm

THIS AGENDA IS SUBJECT TO CHANGE
UNTIL THE START OF THE PLANNING & ZONING COMMISSION MEETING

I. CALL TO ORDER

II. ADOPT AGENDA

III. COMMUNITY COMMENT

IV. CONSENT AGENDA

1. Minutes of the May 25, 2021 Planning & Zoning Commission
2. 325 Blake Road Environmental Assessment Worksheet (EAW) Notification

V. PUBLIC HEARINGS

1. 2021-09 1409 & 1413 Mainstreet Site Plan Review (Atelier Academy of Beauty)
2. 2021-10 Hennepin County Regional Railroad Authority Preliminary and Final Plat Review
3. 2021-11 101 Interlachen Road Front Yard Setback Variance
4. 2021-12 819 Cambridge Street CUP and Site Plan Review (Take 5 Oil Change)
5. 2021-07 Blake Road Station PUD, Rezoning & Site Plan Review

VI. OLD BUSINESS

VII. NEW BUSINESS

VIII. ANNOUNCEMENTS

IX. ADJOURN

PLANNING & ZONING COMMISSION MINUTES
May 25, 2021

A regular meeting of the Hopkins Planning & Zoning Commission was held on May 25, 2021, at 6:30 p.m. in the Council Chambers at City Hall, 1010 1st Street South and by video conference call through Zoom in response to the COVID-19 emergency. Present were Commission Members Gerard Balan, Sam Stiele, Nathan White, Douglas Dyrland and Maggie Sedoff. Commissioner Emily Fiamova was absent. Also present was City Planner Jason Lindahl.

CALL TO ORDER
Chairperson Balan called the meeting to order at 6:30 p.m.

ADOPT AGENDA
Commissioner White moved, Commissioner Dyrland seconded, to adopt the agenda.

Ayes: Sedoff, Stiele, White, Dyrland, Balan
Absent: Fiamova
Nays: None. Motion carried.

City Planner Jason Lindahl stated that Election of Officers for 2021/2022 had been added to the agenda under New Business. Commissioner Dyrland moved and Commissioner White seconded to adopt the agenda with the addition of the Election of Officers item.

Ayes: Sedoff, Stiele, White, Dyrland, Balan
Absent: Fiamova
Nays: None. Motion carried.

OPEN AGENDA – PUBLIC COMMENTS/CONCERNS

CONSENT AGENDA
Commissioner White moved, Commissioner Stiele seconded, to approve the minutes of the April 27, 2021 Planning & Zoning Commission regular meeting.

Ayes: Sedoff, Stiele, White, Dyrland, Balan
Absent: Fiamova
Nays: None. Motion carried.

PUBLIC HEARING –

1. Planning Application 2021-08 Massage Therapy Text Amendment

This item was initiated by a request from the City Council to amend the City Code related to Massage Therapy uses. City Planner Lindahl presented background on the item and summarized the proposed changes in the draft ordinance, which include changes to both the zoning and licensing

regulations. The City Council has sole authority over the licensing regulations. The Planning & Zoning Commission's responsibility is to make a recommendation to the City Council on the zoning standards.

Prior to the meeting, the City received three written comments from Keri Fullerton, Susan Fullerton and Erin Fullerton Kelly. All three comments expressed general support for the changes to the ordinance. Discussion from the Commission prior to the public hearing included the hours of operation, inspections and licensing requirements, the maximum number of licenses allowed, signage, and compatibility with the 2040 comprehensive plan.

Chairperson Balan opened the public hearing. Coming forward to address the Commission was Susan Fullerton (306 13th Avenue North). Ms. Fullerton, representing Keri Fullerton, owner of Thrive Therapeutic Massage, read a prepared statement in support of the proposed ordinance changes. Ms. Fullerton suggested the hours of operation be extended to allow for two mornings a week to open at 7:00 a.m., which would provide clients the opportunity to schedule an appointment prior to their workday. Ms. Fullerton responded to questions from the Commission concerning the types of massage that would be offered at Thrive and the current licensing and certification process. Mr. Lindahl questioned Ms. Fullerton on the request for extended morning hours and which days of the week it would be more appropriate to open early. Mr. Lindahl suggested Ms. Fullerton provide staff additional written comment ahead of the City Council meeting with more detail.

With no additional comments from the public, Commissioner Sedoff moved and Commissioner Dyrland seconded to close the public hearing.

Ayes: Sedoff, Stiele, White, Dyrland, Balan
Absent: Fiamova
Nays: None. Motion carried.

Additional discussion by the Commission was generally supportive of the proposed changes and focused on the hours of operation and the limit of four massage therapy business licenses that would be allowed in the City. Chairperson Balan spoke in favor of increasing that number to allow four more massage related businesses and extending the hours of operation.

With no further discussion, Commissioner White moved and Commissioner Stiele seconded to adopt Resolution 2021-10, recommending the City Council approve Ordinance 2021-1170 Amending Chapters 10 and 102 and Appendix A of the Hopkins City Code regarding Massage Therapy.

Ayes: White, Dyrland, Sedoff, Stiele, Balan
Absent: Fiamova
Nays: None. Motion carried.

Mr. Lindahl stated this item will be presented to the City Council for the first of two readings at the June 1, 2021 meeting with the Planning Commission's recommendation of approval and comments on the number of businesses and hours of operation.

OLD BUSINESS – None.

NEW BUSINESS

1. Election of Planning & Zoning Commission Officers for 2021/2022

According to its Bylaws, the Planning & Zoning Commission must elect a new Chairperson and Vice-Chairperson annually. The term of office for both Chairperson and Vice-Chairperson is one year beginning July 1 and ending June 30. The newly elected officers will take their positions at the July 27, 2021 Planning & Zoning Commission meeting. No member can serve as Chairperson or Vice-Chairperson for more than two consecutive years, therefore Chairperson Balan and Vice-Chairperson Stiele are not eligible to serve in their same positions for 2021/2022.

Chairperson Balan asked for nominations for the position of Chairperson. Commissioner Dyrland nominated Commissioner Stiele. With no additional nominations for Chairperson, Commissioner Dyrland moved and Commissioner Sedoff seconded to close the nominations.

Ayes: Sedoff, Stiele, White, Dyrland, Balan
Absent: Fiamova
Nays: None. Motion carried.

Commissioner Dyrland moved and Commissioner White seconded to elect Sam Stiele by unanimous consent to the position of Chairperson.

Ayes: Sedoff, Stiele, White, Dyrland, Balan
Absent: Fiamova
Nays: None. Motion carried.

Chairperson Balan asked for nominations for the position of Vice-Chairperson. Commissioner Dyrland nominated Nathan White. With no additional nominations for Vice-Chairperson, Chairperson Balan conducted a roll call vote to close the nominations.

Ayes: Sedoff, Stiele, White, Dyrland, Balan
Absent: Fiamova
Nays: None. Motion carried.

Commissioner Stiele moved and Commissioner Dyrland seconded to elect Nathan White by unanimous consent to the position of Vice-Chairperson.

Ayes: Stiele, White, Dyrland, Sedoff, Balan

Absent: Fiamova
Nays: None. Motion carried.

ANNOUNCEMENTS –

City Planner Lindahl updated the Commission on the following items.

- The City did not receive any applications for the June Planning & Zoning Commission meeting agenda so staff has decided to cancel the meeting. As a replacement, staff is anticipating scheduling the second meeting of the Zoning Regulations Update Committee to review the first draft of the zoning update on June 22. More information will follow.
- Planning & Zoning Commission Vacancy Update: The City Council is in the process of interviewing candidates for Planning & Zoning, Park Board and Charter Commissions. The Council has stated that they would like to add two new youth members to both the Planning & Zoning Commission and Park Board. The appointed youth members begin at the July meeting and will be non-voting members, but will participate in discussions.
- The Blake Road Station development project was originally scheduled to be on the May Planning & Zoning Commission agenda; however, the applicant stated that they wished to pause the application process again while they consider further revisions and the financial viability of their proposal.
- Vista 44 Update: Beacon continues to work on finalizing their financing for the project. Beacon has been in contact with staff and are working towards securing all necessary building permits by spring 2022.

ADJOURN
Commissioner White moved, Commissioner Sedoff seconded, to adjourn the meeting.

Ayes: Sedoff, Stiele, White, Dyrland, Balan
Absent: Fiamova
Nays: None. Motion carried.

The meeting was adjourned at 7:37 p.m.

Respectfully submitted,

Courtney Pearsall
Administrative Assistant

DRAFT

CITY OF HOPKINS

Memorandum

To: Planning & Zoning Commission

From: Mike Mornson, City Manager
Jason Lindahl, City Planner

Date: July 27, 2021

Subject: 325 Blake Road - Notification of Environmental Assessment Worksheet (EAW)

Proposed Action

None – the purpose of this item is to meet the notification requirements of City Code Part III, Chapter 100, Article II – Environmental Review Program. This section requires the City Manager to inform the Planning & Zoning Commission and City Council whenever an environmental review is required.

Background

The City Manager, in consultation with other City staff, has determined that an Environmental Assessment Worksheet (EAW) is required under Minnesota Statute 4410 for the proposed 325 Blake Road redevelopment.

The EAW is scheduled to be completed later this year. Once complete, it will be brought to the Planning & Zoning Commission and City Council for review and approval. Staff will continue to update the Planning & Zoning Commission and City Council on the EAW process as it moves forward.

July 27, 2021 Planning Application 2021-09

Site Plan Review for 1409/1413 Mainstreet
Atelier Academy of Beauty

Proposed Action: Staff recommends the following motion:

- Move to adopt Planning & Zoning Commission Resolution 2021-14, recommending the City Council Approve the Site Plan application and setback exception requests from Atelier Academy of Beauty to allow an addition to their existing building located at 1409/1413 Mainstreet (PIDs 24-117-22-32-0099 and 24-117-22-32-0100), subject to conditions.

Overview

The applicant, William Anderson, owner of Atelier Academy of Beauty, requests site plan approval and an exception to the setback standards of the West Mainstreet Overlay District to allow an addition to their existing building located at 1409/1413 Mainstreet. According to the applicant, the addition will contain two meeting spaces and additional storage for Atelier Academy and the exception to the setback standards is necessary to maintain the historic character of the existing building. Based on the findings in this report, staff recommends approval of these requests subject to the conditions detailed in the attached resolution.

Primary Issues to Consider

- Background
- Community Comments
- Site Plan Review
- Engineer Review
- Alternatives

Supporting Documents

- Planning & Zoning Resolution 2021-14
- Site Location Map
- Applicant's Narrative
- Plans & Elevations

_____
Jason Lindahl, AICP
City Planner

Financial Impact: $ N/A Budgeted: ____ Y/N ____ Source: _____
Related Documents (CIP, ERP, etc.): _____
Notes:

BACKGROUND

According to the applicant's narrative (see attached), they are proposing an approximately 2,100 square foot single-story addition to their existing building. The exterior will be designed to match the outside of the existing building with masonry construction and stone veneer on the street facing (south) side and southeast corner of the proposed addition. The balance of the east elevation and the north side of the addition are planned to be painted concreate masonry unit (CMU). The addition will allow Atelier to expand its salon services and education programs already housed on the site. The proposed addition will contain two meeting spaces and additional storage for Atelier Academy.

The proposed addition will bisect the existing surface parking along the east half of the site extending the "L" shape of the building. Five bicycle parking racks will be added to the site and 5 off-street parking stalls will be striped in the existing front parking lot in front of the former auto service bays. The plan also calls for 4 additional off-street parking stalls along the north side of the site that will have access from the alley and be screened from Mainstreet by the proposed addition.

It should be noted that the existing site includes two separate parcels that must be combined to allow the proposed addition. The existing building is contained within one parcel while the associated existing surface parking lot sits on the second parcel. The proposed addition will extend east from the existing building across the surface parking lot. Hopkins City Code does not allow buildings to cross property lines resulting in the need for the applicant to receive separate administrative subdivision (or lot combination) approval. This administrative subdivision will be a condition of the site plan approval.

COMMUNITY COMMENT

Under state law, site plan review applications require a public hearing. Accordingly, the City published notice of this request and public hearing in the Sun Sailor and mailed notice directly to all property owners within 350' of the subject property. That notice directed all interest parties to send questions or comments to City Planner Jason Lindahl by mail, phone or email or to attend the public hearing where they could learn about the request, ask questions and provide feedback. As of the writing of this report, the City had received no comments or questions regarding this request. During the public hearing, staff will provide an update on all public comments received prior to the Planning & Zoning Commission meeting.

SITE PLAN REVIEW

Standards for reviewing site plan applications are detailed in Article IV of the City Code. This section establishes site plan review procedures and provides regulations pertaining to the enforcement of site design standards. These procedures are established to promote high quality development, to ensure the long-term stability of residential neighborhoods, and enhance the built and natural environments within the City as new development and redevelopment activities occur. Section 102-126(3) call for site plan review of any developments that "expand or change the use of a building or parcel of land or modify a building, accessory structure or land feature in any manner which results in a greater intensity of use, including the construction of additional parking." In this case, the proposed addition will result in a more intense use of the property resulting in the requirement for site plan review.

Site plan review applications are considered quasi-judicial actions. In such cases, the City is

acting as a judge to determine if the regulations within the Comprehensive Plan, Zoning Ordinance or Subdivision regulations are being followed. Generally, if this application meets the City's established requirements, it should be approved. Standards to consider for site plan review of this proposal include those in Article VII - the B-3, General Business District, Article XVIII - the West Mainstreet Overlay District and Article IV - Site Plan Review Standards. Staff's review of these standards and how they apply to this application is provided below.

Land Use and Zoning Standards. The proposed hair salon and cosmetology academy are consistent with the subject property's future land use and zoning designation.

The 2040 Comprehensive Plan – Cultivate Hopkins guides this property as Neighborhood Center. Neighborhood Centers are aimed at creating walkable nodes that support the surrounding neighborhood with retail and service uses and provide opportunities for mixed use infill development. They are intended to accommodate forecasted population and employment growth while also serving as a defining place for basic retail, service and entertainment needs. Neighborhood Centers should contain a mix of uses (horizontal or vertical) and be pedestrian oriented. They are characterized by high quality design, pedestrian and bicycle facilities and thoughtful use of open space that enhances the connection with the surrounding neighborhoods they serve. Densities in these areas typically range from 20-50 units per acre with an estimated 25% commercial and 75% residential land use breakdown.

The subject property is zoned B-3, General Business and also lies within the West Mainstreet Overlay District, which serves to preserve the small-town, unique character of Mainstreet Hopkins; enhance the pedestrian orientation of Mainstreet; encourage streetscape design that is inviting and on a human scale; and communicate the community's vision for the Mainstreet area. Each of the zoning standards from the B-3 zone or the West Mainstreet Overlay District are reviewed below.

Signage. Signage standards in the West Mainstreet Overlay District require signs be compatible with the style, composition, materials, colors and details of the building and with signs on other nearby buildings. Internally illuminated or pylon signs are prohibited but monument signs no more than 9 square feet are permitted. Projecting signs are also allowed provided they do not exceed 12 square feet nor 3 feet in width. The maximum area of a single sign in the B-3 Central Business zoning district is 80 square feet. The applicant renovated and occupied the subject property in 2020. That project added wall signage along Mainstreet. The current plans show no additional signage. Should the applicant wish to revise or add to their existing signage they should do so through a separate administrative sign.

Building Height. New buildings, buildings and additions and redeveloped or remodeled buildings will complement the existing pattern of building heights. Buildings in the Overlay District may not exceed four stories or 45 feet in height. The applicant's plans call for the addition to be one story in height consistent with this zoning standard.

Setbacks. The West Mainstreet Overlay District requires new construction and infill buildings to abut the Mainstreet right-of-way. As designed, the applicant's proposal does not meet this requirement. Rather than constructing the addition abutting the Mainstreet right-of-way, the applicant's plan requests an exception to this standard allowing the addition to be located 65' back from the front property line. According to the applicant, this design is necessary to

maintain the historic character of the existing building. Staff is agreeable to this exception request based on the following findings:

- The overall design seeks to comply with the spirit and intent of the setback requirement by maintaining the building's original entrance abutting Mainstreet.
- The previous renovation and design of the proposed addition exceeds the West Mainstreet Overlay District's Windows and Doors standard (see below) adding to the active storefront appearance and pedestrian experience along Mainstreet.
- The applicant's previous building renovation and design of the proposed addition appear to enhance the building while seeking to maintain the defining characters of a mid-century modern building.
- While the proposed addition will strip new off-street parking stalls along Mainstreet, these spaces will be added in front of the former vehicle services bays. No new parking surface will be created in front of the building. New parking area will only be added behind the proposed addition with access from the alley.

Parking lots. In instances where there are parking areas abutting the street, the sidewalk edge must be delineated with a treatment such as a wrought iron fence, hedge, or a one to three-foot-high wall following the right-of-way line. In this case, staff recommends a condition of approval require the applicant to install a 3' high wrought iron fence the entire width of the parking along Mainstreet.

Roofs and Parapets. Rooflines will mimic the separate yet complementary character and design of historic Main Street buildings. The proposed addition will have a metal parapet cap to match the existing building. The topography of the site will result in the proposed addition having a slightly higher roofline helping to mimic the varying rooflines along Mainstreet.

Utility Areas, Mechanical Equipment and Screening. As proposed, the applicant's plans do not conform to this standard. Utility areas, mechanical equipment, and screening will be designed so that they do not detract from the aesthetic appeal of the district. The screening of exterior trash, storage areas, service yards, loading areas, transformers, heating, and air conditioning units must use the same materials, color and/or style as the primary building in order to be architecturally compatible with the primary building and the building it is adjacent to. If the utility area is separate from the building it serves, it should be consistent with the city streetscape theme. All roof equipment will be screened from public view so as not to be visible from the street. All exterior trash and storage areas, service yards, loading, areas, heating, and air conditioning units must be screened from view. Camouflaging heating and air conditioning units is an acceptable screening method.

The applicant's plans show a proposed trash container in the northwest corner of the site behind the building and adjacent to the alley. According to the applicant's narrative, this area is shielded by an existing fence. The zoning standards above require trash containers to be screened using the same materials as the principal building. Staff recommends a condition of approval require the applicant to either construct a trash enclosure made of the same materials as the principal building or store the trash containers inside the building.

Facades. The proposed addition conforms to the West Mainstreet Overlay District façade articulation standards. To break up the monotonous appearance of long facades, the exterior of

buildings will be designed with visual breaks. A building more than 45 feet in width will be divided into increments of no more than 45 feet through articulation of the facade. This can be achieved through combinations of the following techniques: divisions or breaks in materials; window bays, separate entrances and entry treatments; variation in roof lines; or building setbacks. The proposed addition will be 56' wide. This elevation will be broken up by changes in materials, windows and accent column features.

Windows and Doors. As designed, the entire ground floor street facing façade of the site exceeds the transparency requirements of the West Mainstreet Overlay District. The West Mainstreet Overlay District requires that a minimum of 30 percent of the ground level façade and side of buildings adjacent to public streets consist of transparent materials. Windows are required on upper levels, and should provide privacy while aesthetically and functionally serving the building. Reflective glass or glass tinted more than 40 percent is not allowed. While the proposed addition is only 28% transparent, the southern elevation of both the existing building and proposed addition will be 34% transparent adjacent to Mainstreet.

Materials and Detailing. The proposed addition conforms to the West Mainstreet Overlay District materials and detailing standards. The West Mainstreet Overlay District requires building renovations be constructed to be long lasting and use materials that maintain the distinct character and harmony of the downtown. In this case, the applicant has designed the proposed addition to use the same materials as the existing building. The addition will be one story, masonry construction with stone veneer on the street elevation and south east corner of the east elevation. The north elevation and a portion of the east elevation will be painted concrete masonry units to match the existing building.

Franchise Architecture. As designed, the site will conform to the West Mainstreet Overlay District franchise architecture standard. To maintain the unique character of the city, downtown buildings will not be constructed or renovated using franchise architecture. The term "franchise architecture" means building design that is trademarked or identified with a particular franchise, chain or corporation and is generic or standard in nature. This standard does not apply to this property.

Streetscape. The streetscape will be uniform so that it acts to provide continuity throughout the downtown. When a redevelopment project disturbs existing streetscape elements, those items must be replaced with approved city streetscape elements compatible with the character of downtown Hopkins. According to the applicant's plans, no changes are proposed to the existing streetscape along Mainstreet. Should changes be necessary, they shall meet this standard.

Exterior Lighting. The applicant's plans do not include an exterior lighting or photometric plan. Lighting in the Overlay District should serve to illuminate facades, entrances, and signage to provide an adequate level of personal safety while enhancing the aesthetic appeal of the buildings. Building and signage lighting must be indirect, with the light sources hidden from direct pedestrian and motorist view. The district standards encourage shaded gooseneck lamps for sign illumination.

Staff recommends a condition of approval require the applicant to submit and receive approval

of an exterior lighting and photometric plan for the entire site prior to issuance of a building permit. These plans shall demonstrate downward directed light fixtures, poles no higher than twenty (20) feet and light levels equal to or less than 1.0 lumens at any non-residential property line or 0.5 lumens at any residential property line.

Vehicle Parking. Parking standards are detailed in both Article XV – Off-Street Parking and Section 102-600 of the West Mainstreet Overlay district. These standards require a total of 19 spaces. The site plan illustrates the site will have a total of 19 spaces with 9 behind the building with access from the alley and 10 in front of the building with access from Mainstreet. The parking standards are detailed in the table below.

Off-Street Parking Analysis for 1409/1413 Mainstreet		
Type	**Standard**	**Number of Spaces**
Retail Area	3,630 Sq. Ft./200	18
Office	1,796 Sq. Ft./250	7
Bicycle Parking Credit	5% of Required	-1
Adjacent to Transit Credit	10% of Required	-2
On-Street Parking Credit	Same as Spaces Along Street	-3
Total Required Off-Street Parking	N/A	19

ENGINEERING REVIEW

The Engineering Department has review this project and offers the following comments:

- Watershed approval will be required.
- A parking lot permit will be required.
- It appears the garbage truck will have adequate room to negotiate the turn in the alley.

ALTERNATIVES

1. **Recommend approval of the site plan application and setback exception request**. By recommending approval of these applications, the City Council will consider a recommendation of approval.

2. **Recommend denial of the site plan application and setback exception request**. By recommending denial of these applications, the City Council will consider a recommendation of denial. Should the Planning & Zoning Commission consider this option, it must also identify specific findings that support this alternative.

3. **Continue for further information**. If the Planning Commission indicates that further information is needed, the items should be continued.

CITY OF HOPKINS
Hennepin County, Minnesota

PLANNING & ZONING COMMISSION RESOLUTION 2021-14

A RESOLUTION RECOMMENDING THE CITY COUNCIL APPROVE THE SITE PLAN APPLICATION AND SETBACK EXCEPTION REQUESTS FROM ATELIER ACADEMY OF BEAUTY TO ALLOW AN ADDITION TO THEIR EXISTING BUILDING LOCATED AT 1409/1413 MAINSTREET (PIDS 24-117-22-32-0099 AND 24-117-22-32-0100), SUBJECT TO CONDITIONS

WHEREAS, the applicant, William Anderson, owner of Atelier Academy of Beauty, initiated an application for site plan approval and an exception to the setback standards of the West Mainstreet Overlay District to allow an addition to the existing building located at 1409/1413 Mainstreet (PIDs 24-117-22-32-0099 and 24-117-22-32-0100), and;

WHEREAS, the subject property is legally described as Lots 12, 13 and the East ½ of 14, West Minneapolis Second Addition, Hennepin County, Minnesota; and

WHEREAS, the procedural history of the application is as follows:

1. That the above stated application was initiated by the applicant on June 23, 2021;

2. That the Hopkins Planning and Zoning Commission, pursuant to published and mailed notice, held a public hearing on the application and reviewed such application on July 27, 2021: all persons present were given an opportunity to be heard; and,

3. That written comments and analysis of City staff were considered; and,

WHEREAS, staff recommended approval of the above stated application based on the findings outlined in the staff report dated July 27, 2021.

NOW, THEREFORE, BE IT RESOLVED that the Planning & Zoning Commission of the City of Hopkins hereby recommends the City Council approve the Site Plan and an exception to the setback standards of the West Mainstreet Overlay District to allow an addition to the existing building located at 1409/1413 Mainstreet (PIDs 24-117-22-32-0099 and 24-117-22-32-0100), subject to the conditions listed below.

1. Conformance with all applicable standards of the City Code Article VII - the B-3, General Business District, Article XVIII - the West Mainstreet Overlay District and Article IV - Site Plan Review Standards.

2. Approval of all necessary permits from the Building, Engineering and Fire Departments.

3. Approval of the associated administrative lot combination prior to action on this item by the City Council.

4. Revision of the site plan to include a wrought iron fence along the entire width of the parking lot along Mainstreet prior to action on this item by the City Council.

5. Revision of the site plan to include a trash enclosure constructed of the same materials as the

principal build or revision of the applicant's narrative to indicate all trash containers will be stored inside the principal building until pickup prior to action on this item by the City Council.

6. The applicant shall prepare and receive staff approval of a detailed exterior lighting and photometric plan prior to issuance of a building permit.

7. Approval of the development by the Nine Mile Creek Watershed District and conforms with all related conditions.

8. Payment of all applicable development fees including, but not limited to SAC and City Attorney fees.

Adopted this 27th day of July, 2021.

_____

Samuel Stiele, Chair

Site Location Map for 1409 & 1413 Mainstreet



Adsit – Architecture and Planning
807 Broadway Street NE Suite 245
Minneapolis, MN 55413
Phone: (612) 343-8013

June 7, 2021 Revised July 15, 2021

City of Hopkins
Jason Lindahl – City Planner
1010 1st Street South
Hopkins, MN 55343

Site Plan Review Narrative
Atelier Academy of Beauty Expansion
1413 Main Street
Hopkins, MN 55343

The Atelier Academy of Beauty in Hopkins
The Atelier Academy was founded in Hopkins in 2014. We provide an educational experience for those wishing to become licensed in the field of cosmetology. We also provide beauty services to customers who enjoy those services with students while being supervised by licensed instructors. We believe that we have been afforded the opportunity to serve the residents of Hopkins and beyond. We believe we provide a healthy, sound environment to learn a very profitable craft while serving those customers who wish to receive services at a very affordable rate. Our student body is vibrant and skilled. We help bring great people to Hopkins and wish to add space so we can grow and provide even more of the same. Education is the foundation for so many individuals personal success. Let's help grow it together by making this project make sense *and* be affordable to add to it. Our design makes sense

Building:
The Atelier Academy of Beauty is located in a B3 zoning district within the West Main Street Overlay district. A 2,105 SF one story addition is proposed for the existing building on the site. The addition permits the Atelier to expand their salon services and educational program already housed on the site. The addition contains two meeting spaces and additional storage for the Atelier. The addition will be one story, masonry construction with stone veneer on the street elevation and south east corner of the east elevation. The north elevation and a portion of the east elevation will be painted concrete masonry units to match the existing building.

Site:
The site is comprised of two lots. The existing structure occupies most of the west lot. The east lot is an asphalt parking area with a landscaped berm along the city sidewalk to the south. The addition reduces the extent of asphalt paving and shields half of the parking from the street. The existing asphalt paving is to remain where not removed by construction. Some patching of the existing asphalt will be required at the perimeter of the construction area. Parking spaces are to be restriped.

The turning radius for the largest city refuse truck is shown on the drawings at the north side of the site. The revised parking layout does not interfere with truck access to the north/south alley serving the adjoining houses.

Drainage:
The extent of hard surface is not increased by the new construction. The existing surface drainage for the south side of the site will not be altered by new construction. The addition roof will be drained to a swale lined with stone on the north east corner of the site.

Utilities:
No changes to existing utilities are required for the expansion.

Trash Containers:
The trash pickup area is at the northwest corner of the site. The area is shielded by an existing fence.

Variance requests:

An exception is required to locate the addition to the east with a 65'set back from the Main Street Property line.

ARTICLE XVIII. WEST MAIN STREET OVERLAY DISTRICT
As per Hopkins Sec. 102-591. – Setbacks

(a)New construction and infill buildings will abut Main Street right-of-way except for the following:

Sec. 102-601. Exceptions.

(a) It is recognized that there may be projects that require a departure from the requirements in this chapter in order to be feasible. Possible grounds to be considered in determining possible reasons for granting exceptions to the ordinance are as follows:

(1) Safety.
(2) Unique site or building characteristics.
(3) Standards would have a detrimental effect on the use of the property.
(4) Public benefit

The building has unique site and building characteristics as described in the attached historic significance narrative. The historic character of the building would be affected if the addition was to abut the Main Street Right of Way.

Lot combination:
An administrative subdivision approval is required to combine the parcels into a single property prior to construction.

Please contact me with any questions at madsit@adsitap.com or 612 343 8013.

Sincerely,
Mina Adsit, AIA

Adsit – Architecture and Planning
807 Broadway Street NE Suite 245
Minneapolis, MN 55413
Phone: (612) 343-8013

July 15, 2021

Exception Request - *Sec. 102-601. Exceptions. (2) Unique site or building characteristics.*

Atelier Academy of Beauty Expansion Historic Significance
1413 Main Street
Hopkins, MN 55343

1431 Main Street West in Hopkins is an intact example of a mid century modern commercial building. Constructed in 1968, the building is over 50 years in age. As per city planner, Jason Lindahl, the city of Hopkins has not designated a specific time period for historically significant structures within the city. The 50 year threshold is the minimum age that the National Register of Historic Places will consider a building for historic status. As an example of an automotive commercial building within a mixed commercial district, the Atelier can be evaluated for its potential to interpret the history of Hopkins.

The City of Hopkins has a history of mixed commercial development along Main Street (formerly Excelsior Avenue). In the 20th century, the area west of 10th Street included car sales, car repair shops and auto supply retailers. As an example, the three blocks between 10th Avenue and 13th Avenue contained eight automobile related businesses in 1945. (Figures 1 and 2)

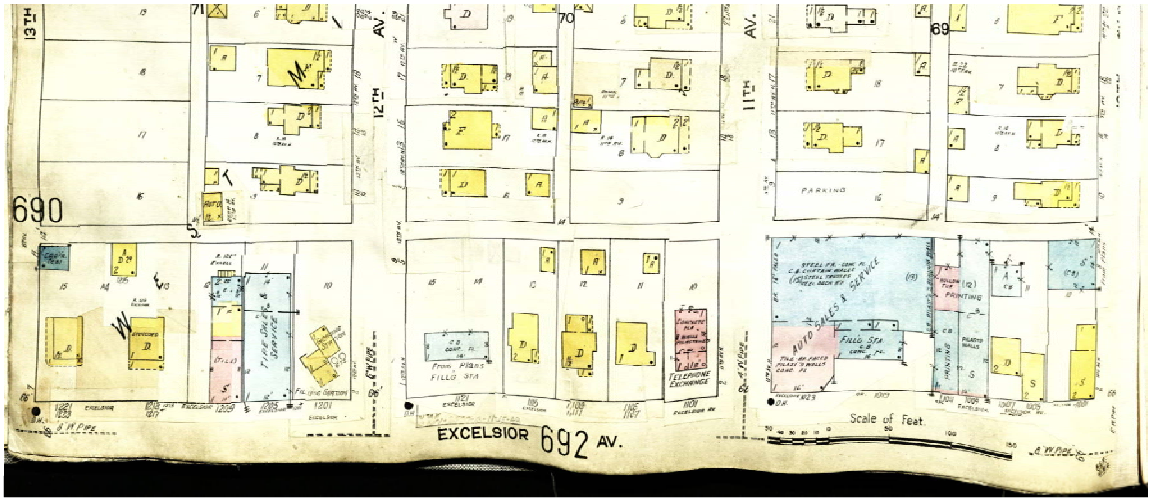


Figure 1 – 1945 Sanborn Insurance Map, North side of Excelsior between 10th and 13th Avenues.

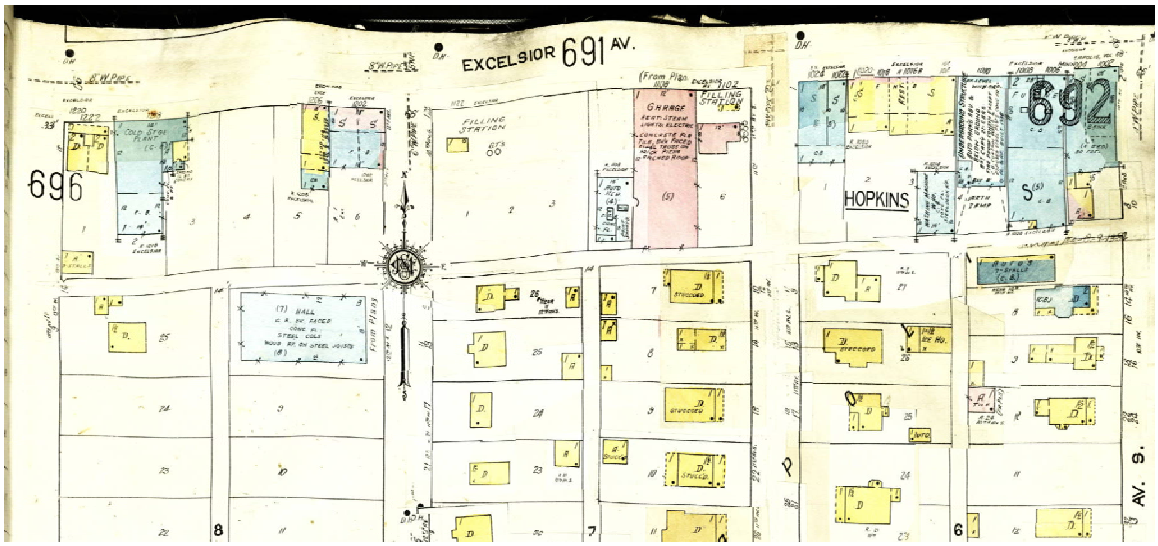


Figure 2 – 1945 Sanborn Insurance Map, South side of Excelsior between 10th and 13th Avenues

Auto related businesses remain along Main Street. 1431 Main Street West was until recently a repair garage. (Figure 3) The current owner purchased the vacant building in 2020 and adapted it to a new use, as a beauty salon and training center. The renovation included replacement of the overhead doors with glass doors, exterior painting, new signage and new interior construction. (Figure 4)



Figure 3 – Building prior to renovation in 2020



Figure 4 – Building after renovation 2021

The building retains image defining characteristics of a mid century modern automotive building. The structure is L shaped with six overhead doors on the east and south elevations. The street elevation and a portion on the east elevation are finished with web wall cut limestone while the main structure is painted concrete block. The flat roof is emphasized with a horizontal band the wraps the street facades. Parking is located within the L defined by the building and along the north side of the building, typical of an automobile oriented building of the period.

The seven aspects of historic integrity as determined by the National Register of Historic Places are; location, design, setting, materials, workmanship, feeling and association. The Atelier retains all seven aspects.

- Location –The building is located in an area with a history of automobile related uses.
- Design – The form and detailing of the building is consistent with the utilitarian use the structure.
- Setting – The site retains the original relationship to a busy commercial street.
- Materials – The building materials used are typical of the period.
- Workmanship – The workmanship of the building reflects the change to the use of more industrial, mass produced building materials in the 20th century.
- Feeling - The building expresses the aesthetic sense of the mid 20th century time period.
- Association – The Atelier conveys the historic character of an automobile repair shop.

The West Main Street Overlay rules require that new construction abut the Main Street property line. The requirement to abut West Main Street would substantially damage the building's character. If the proposed new construction abutted Main Street, the overhead doors that are characteristic of automobile repair shop would be covered. The building would no longer convey the historic character of one of the primary historic uses along Main Street. The opportunity for the Atelier to contribute to the local story of historic commercial development would be lost. .

ATELIER ACADEMY OF BEAUTY- ADDITION

1413 MAIN STREET
HOPKINS, MN 55343

SITE PLAN REVIEW
JUNE 02, 2021

SHEET INDEX	
SHEET NUMBER	SHEET NAME
T1.0	TITLE SHEET
-	SURVEY
AS1.0	SITE DEMOLITION PLAN & EROSION CONTROL
AS1.1	PROPOSED SITE PLAN
AS1.2	DRAINAGE PLAN
A1.0	DEMO PLAN/ FLOOR PLAN
A2.0	EXTERIOR ELEVATIONS

PROJECT TEAM

OWNER: ATELIER ACADEMY OF BEAUTY

WILLIAM ANDERSON
PHONE: 952- 224- 3300
WILLIAMANDERSON404@GMAIL.COM

ARCHITECT: ADSIT ARCHITECTURE & PLANNING
807 BROADWAY ST. NE
STE. 245
MINNEAPOLIS, MN 55413
PHONE: 612- 343- 8013

MINA ADSIT, AIA
MOBILE: 612 750 8300
MADSIT@ADSITAP.COM

CONTRACTOR: EMERALD BUILDERS
PAT KEENAN
2268 UNIVERSITY AVE. W
SUITE 202
ST. PAUL, MN 55114

PHONE: 612- 363- 4639
PAT@EMERALDBUILDERS.NET

SCOPE OF WORK

1. ADDITION TO A ONE STORY BUILDING FOR BEAUTY SCHOOL OCCUPANCY. WORK INCLUDES SELECTIVE DEMOLITION, NEW WALLS, DOORS, FINISHES AND LIGHTING.

2. HEATING, AIR CONDITIONING, PLUMBING AND VENTILATION WORK IS TO BE DESIGN BUILD BY THE RESPECTIVE CONTRACTORS. PROVIDE CONNECTIONS REQUIRED FOR OWNER SUPPLIED EQUIPMENT. SUBMIT CUTSHEETS FOR PLUMBING FIXTURES AND FITTINGS FOR OWNER REVIEW AND APPROVAL.

3. ELECTRICAL WORK IS DESIGN BUILD BY THE ELECTRICAL CONTRACTOR. SUBMIT LIGHT FIXTURE CUT SHEETS FOR REVIEW AND APPROVAL BY THE OWNER. PROVIDE CONNECTIONS FOR OWNER SUPPLIED EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS.

CODE SUMMARY

APPLICABLE CODES

2020 INTERNATIONAL BUILDING CODE
2020 MINNESOTA STATE BUILDING CODE
2020 MINNESOTA ACCESSIBILITY CODE
2020 MINNESOTA CONSERVATION CODE FOR EXISTING BUILDINGS
2020 MN PLUMBING CODE
2020 MINNESOTA ELECTRICAL CODE
2020 MECHANICAL AND FUEL GAS CODE

EXISTING CONSTRUCTION

MASONRY BEARING WALL
ONE STORY SLAB ON GRADE
WITH CONC. PLANK ROOF

NEW CONSTRUCTION

-MASONRY BEARING WALL
-ONE STORY SLAB ON GRADE WITH CONC. PLANK ROOF

OCCUPANCY -

B BUSINESS CLASSES FOR ADULTS

CONSTRUCTION TYPE

VB - NON SPRINKLERED

MNBC TABLE 504.3 BUILDING HEIGHTS AND 506.2 ALLOWABLE AREA

HEIGHT PERMITTED	40'	ACTUAL	14'- 0"
AREA PERMITTED	9,000 SF	ACTUAL	6,099 SF

IBC601 FIRE RESISTANCE RATINGS

ELEMENT	HOURS
STRUCTURAL FRAME	0
BEARING WALLS	0
NONBEARING WALLS	0
FLOOR CONSTRUCTION	0
ROOF CONSTRUCTION	0

IBC 602 B OCCUPANCY
EXTERIOR WALLS 1 - LESS THAN 5' SEPARATION @ PROPERTY LINES
0- @ OTHER LOCATIONS

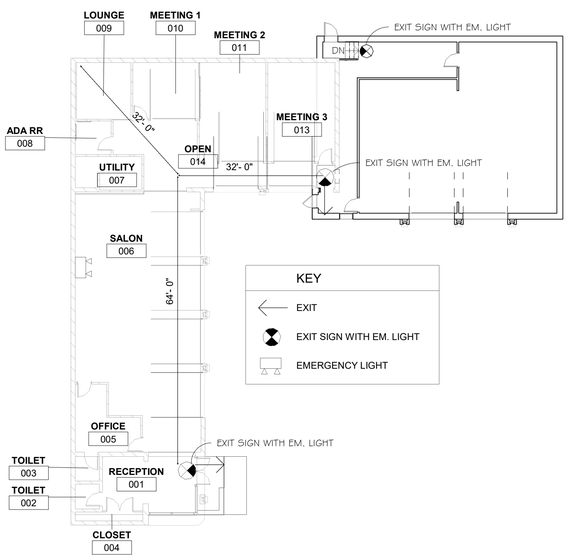
OCCUPANCY SUMMARY

Occupant Loads

Room Type	SF	OCC	OCC Factor	Total
First Floor	6,099	B	100	61
Total Occupants				61
Exiting				
Number of exits required				2
Number of exits provided				2

Plumbing Fixture Requirements

Business Occupancy	WC 1 /25	Lav 1 /40	Urinal	Jan
Existing	3	3		
Required IBC 2902.1	3	3	0	1



N

1 T1.0 CODE PLAN
1/16" = 1'-0"

ADSIT Architecture & Planning

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Minneapolis, MN 55413

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Print Name: Mina M. Adsit

Signed: Mina M. Adsit

Date: 06-02-2021

License No: 18710

Project No: 2032

REVISIONS:

ATELIER ACADEMY OF BEAUTY
1413 MAINSTREET
HOPKINS, MN 55343

DATE

JUNE 02, 2021

Sheet Title

TITLE SHEET

Sheet Number

T1.0

Northstar Surveying

(320)693-3710
310 East Depot Street
Litchfield, MN 55355
ns_doug@qwestoffice.net
ns_chuck@qwestoffice.net

SITE NAME: Hopkins

Felix Properties, LLC, a Minnesota limited liability company

PROJECT ADDRESS

1413 MAINSTREET
HOPKINS, MN 55343

ALTA/NSPS Land Title Survey

BASED UPON TITLE COMMITMENT NO. NCS-1021998-MPLS
OF FIRST AMERICANTITLE INSURANCE COMPANY
BEARING AN EFFECTIVE DATE OF JULY 13, 2020 @ 8:00 A.M.

To TRC Glass One, LLC, a Minnesota limited liability company; Felix Properties, LLC, a Minnesota limited liability company and First American Title Insurance Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 7(a), 7(b)(1), 7(c), 8, 9, 13, 16, 17, 18, 19 and 20 of Table A thereof.

The fieldwork was completed on August 7, 2020 .

_____
Doug Huhn
Registration No. 43808 - In the State of Minnesota
Registration No. 7131 - In the State of North Dakota

DATE OF FIELD WORK: August 7, 2020
DATE OF MAP: August 12, 2020
REVISION: _____ DATE _____, 20___
REVISION: _____ DATE _____, 20___

JOB NO: 2020191
DRAFTED BY: CRM
CHECKED BY: DSH

HORIZONTAL DATUM:
NAD83 2011adj
Hennepin County

VERTICAL DATUM:
N/A

Commitment Legal Description

Real property in the City of Hopkins, County of Hennepin, State of Minnesota, described as follows:

Lot 12, Block 73, West Minneapolis Second Division; and
Lot 13 and East 1/2 of Lot 14, Block 73, West Minneapolis Second Division.

(Abstract Property)

THE ABOVE DESCRIPTION DESCRIBES THE SAME PROPERTY AS IN TITLE COMMITMENT FILE NO. NCS-1021998-MPLS OF FIRST AMERICAN TITLE INSURANCE COMPANY DATED JULY 13, 2020.

Containing 0.33 Acres, more or less.
Containing 14,588 Sq. Ft., more or less

Notes Corresponding to Schedule B

NO SURVEY RELATED ITEMS IN THE TITLE COMMITMENT.

Surveyor's Notes

1. At the time of this survey, there was no observable surface evidence of earth moving work, building construction or building additions within recent months.

2. At the time of this survey, there was no observed evidence of substantial areas of refuse.

3. At the time of this survey, there was no observable evidence of any recent changes in street right-of-way lines either completed or proposed, and available from the controlling jurisdiction.

4. At the time of this survey, there was no observable evidence of any recent street or sidewalk construction or repairs.

5. Property has direct physical access to a public Alley and Main Street both being a publicly dedicated and maintained Right-of-Way.

6. Based on observed evidence only the site does not contain any cemeteries or burial grounds.

7. Orientation of this bearing system is based on the Hennepin County Coordinate System NAD83 2011 adjustment.

8. Subsurface buildings, improvements and/or Environmental issues may exist on site that we were not made aware of and therefore were not examined or considered during the process of this survey.

9. Adjoining ownership information shown hereon was obtained from the Hennepin County Parcel Information website. Ownership information is subject to revision upon receipt of a title search by a title insurance company.

10. All statements within the certification, and other references located elsewhere here on, related to: utilities, improvements, structures, buildings, party walls, parking, easements, servitude's, and encroachments; are based solely on above ground, visible evidence, unless another source of information is specifically referenced hereon.

11. This survey meets or exceeds the survey standards/standards of care as set forth in section 3 of the 2016 ALTA/NSPS survey requirements.

12. Building areas shown hereon are to the footprint of the building only.

Standard Legend

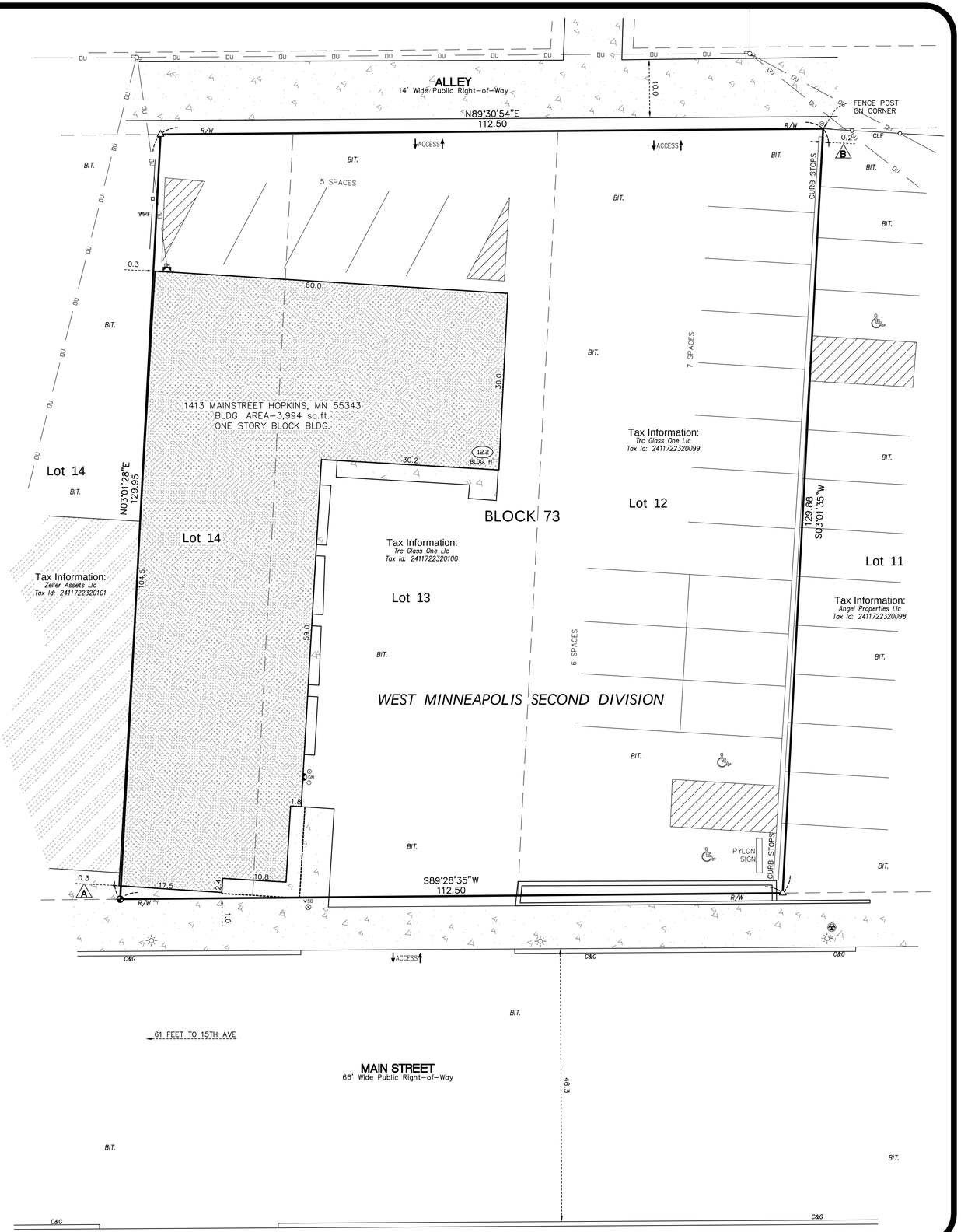
- Utility Pole
- Wall Mount Electric Meter
- Wall Mount Gas Meter
- Light Pole
- Electric Manhole
- Wood Panel Fence
- Chain Link Fence
- Overhead Line
- Set P.K. Nail
- Found Drill Hole
- Bollard Post
- Water Shut-Off / Curb Stop
- Building Foot Print
- Adjoining Building Foot Print
- Concrete Surface
- CLF Chain Link Fence
- WPF Wood Panel Fence
- BIT. Bituminous Surface
- C&G Curb & Gutter

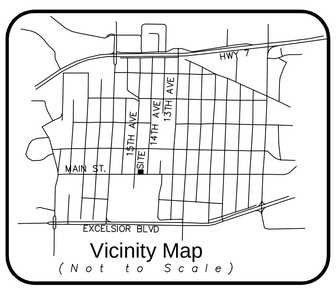
Significant Observations

THIS IS A LISTING OF OBSERVED IMPROVEMENTS THAT CROSS DEED LINES. THIS IS NOT A STATEMENT OF OWNERSHIP OR POSSESSION.

A — SUBJECT PROPERTY BUILDING FALLS 0.3 FEET OVER PROPERTY LINE. THERE IS DECORATIVE STONE ON BUILDING FACE.

B — PARKING CURB STOPS FALL UPTO 0.2 FEET OVER PROPERTY LINE ALONG EAST LINE AT THE NE CORNER.

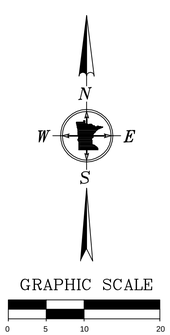


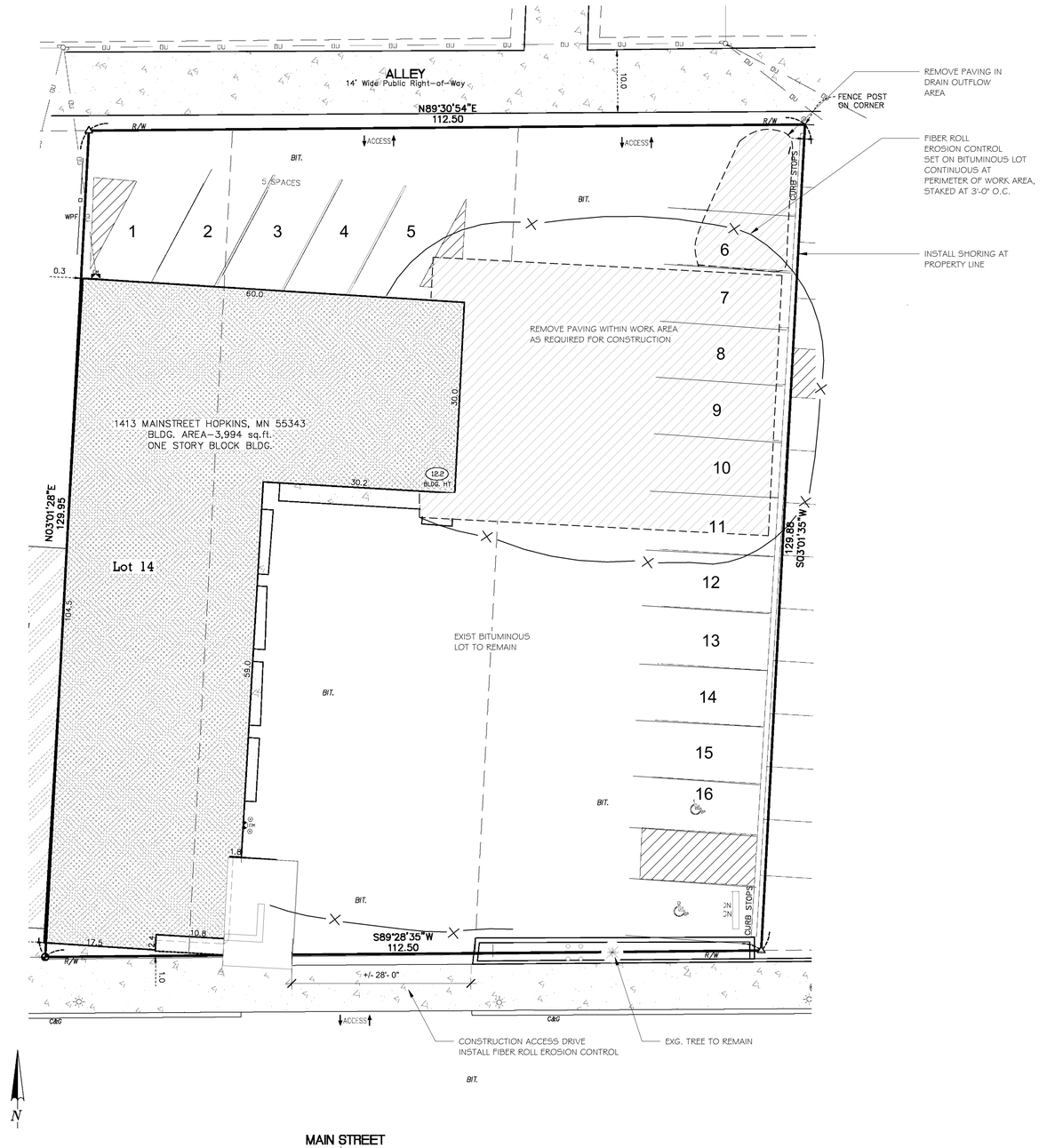


Vicinity Map
(Not to Scale)

FLOOD NOTE: By graphic plotting only, this property was found to be located within Flood Zone(s) X of the Flood Insurance Rate Map, Community Panel No. 27053C0341F which bears an effective date of 11/4/2016 and is not in a Special Flood Hazard Area. No field surveying was performed to determine this zone and an elevation certificate may be needed to verify this determination or an application for a variance from the Federal Emergency Management Agency.







1 AS1.0 SITE PLAN
1" = 10'-0"

ADSIT
Architecture & Planning

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Minneapolis, MN 55413

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Architect under the laws of the state of Minnesota

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Signed: Mina M. Adsit

Date: 06-02-2021

License No: 18710

Project No: 2032

REVISIONS:

ATELIER ACADEMY OF BEAUTY
1413 MAINSTREET
HOPKINS, MN 55343

DATE

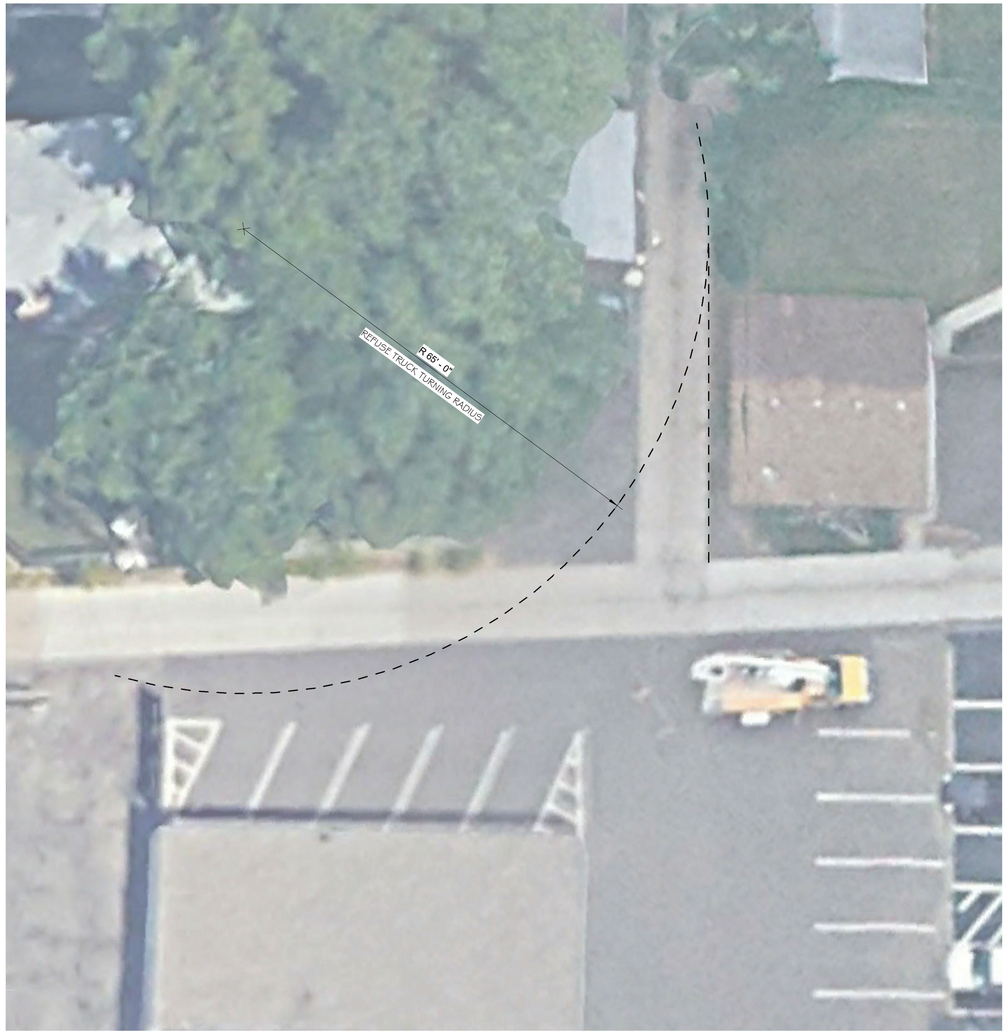
JUNE 02, 2021

Sheet Title

SITE DEMOLITION PLAN & EROSION CONTROL

Sheet Number

AS1.0



2 / AS1.1 TURNING RADIUS DIAGRAM

SITE INFORMATION

ADDRESS: 1413 MAIN STREET, HOPKINS MN 55343
PID: 2411722320099 LOT 12
2411722320100 LOT 13
SITE AREA: .33 ACRES/ 14,588 SF
ZONING: B3/ WEST MAIN ST. OVERLAY

AREA AND YARD LIMITATIONS:

	REQUIRED	PROVIDED
LOT AREA:	3,000 SF	14,588 SF
LOT WIDTH:	25 LF	112.5 LF
FLOOR AREA RATIO:	1.5	.4
FRONT YARD SETBACK:	1'- 0"	1'- 0"
SIDE YARD SETBACK:	0'	0' WEST/ 2' EAST
REAR YARD AT ALLEY:	15'- 0"	22- 0"
BUILDING HEIGHT:	45'-0"	12'-0"

EXISTING BUILDING AREA: 3,994 SF
ADDITION AREA: 2,105 SF
TOTAL BUILDING AREA: 6,099 SF

PARKING SUMMARY

SECTION 102- 484 REQUIRED OFF STREET PARKING

BUILDING USE:	SALON	
RETAIL:	3,630 SF/ 200 =	18 SPACES
OFFICE:	1,796 SF/ 250 =	7 SPACES
SPACES REQUIRED:		25
5% CREDIT FOR BICYCLE		(1)
10% CREDIT FOR LIGHT RAIL		(2)
ON STREET PARKING CREDIT		(3)
SPACES REQUIRED		19
SPACES PROVIDED		19

HANDICAPPED PARKING SPACES

REQUIRED BY MN ACCESSIBILITY CODE:	1
SPACES PROVIDED:	1

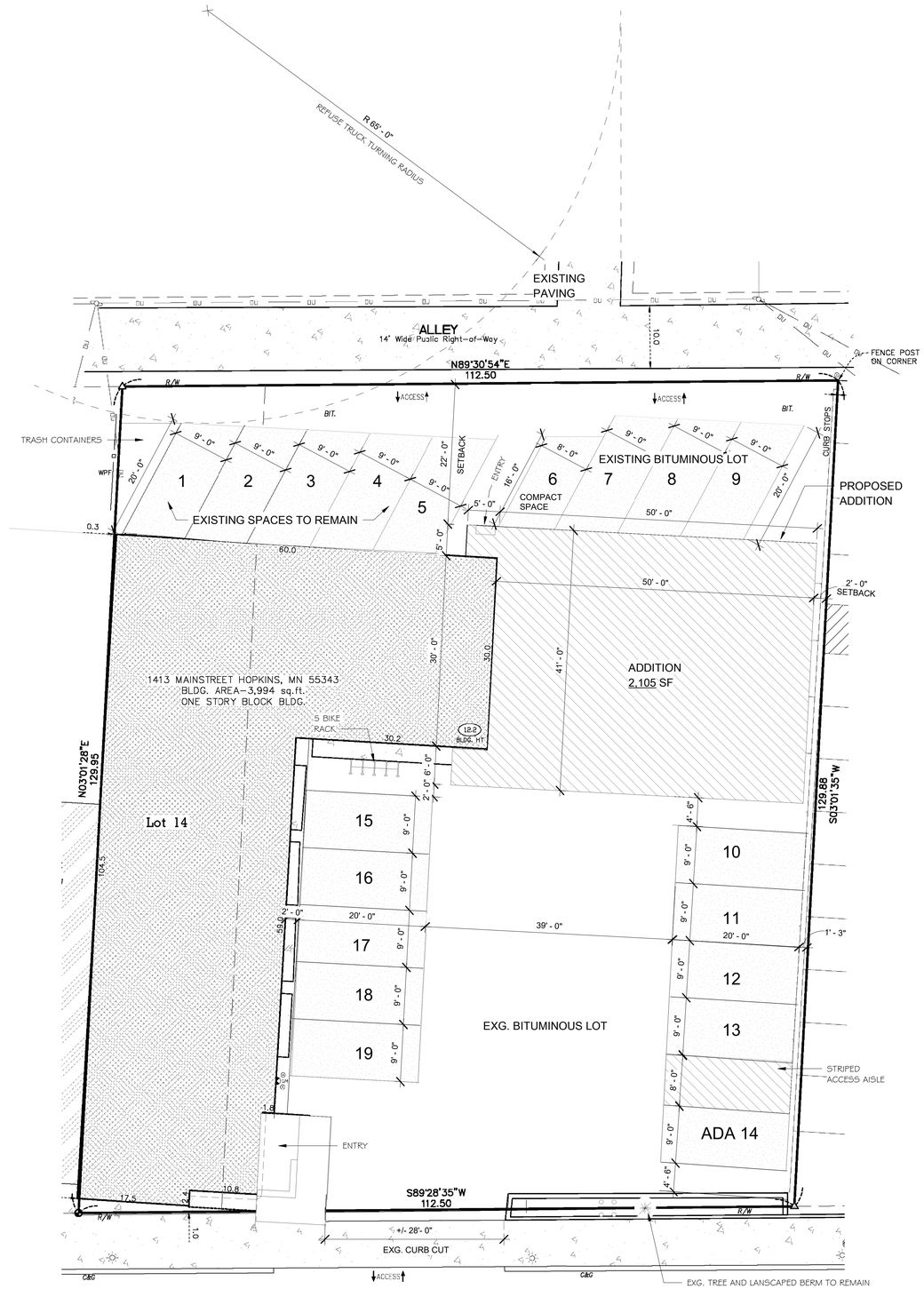
BICYCLE PARKING SPACE

REQUIRED BY HOPKINS RULES FOR AUTO SPACE (1:5)	5

PARKING SETBACKS:

1'- 0" MIN. TO LOT LINE

2'- 0" MIN. TO BUILDING



1 / AS1.1 PROPOSED SITE PLAN
1" = 10'-0"

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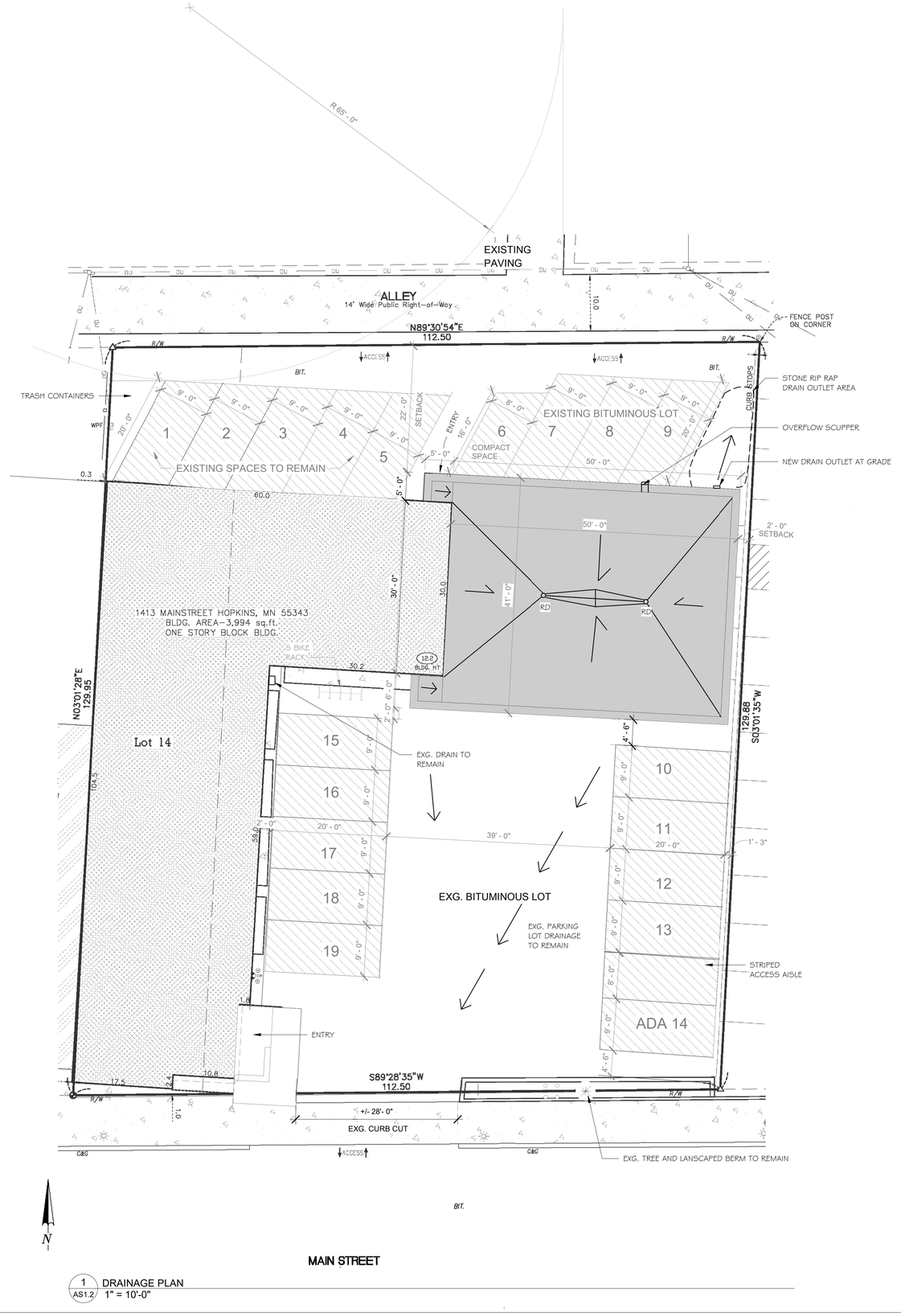
JUNE 02, 2021

Sheet Title

PROPOSED SITE PLAN

Sheet Number

AS1.1



1 AS1.2 DRAINAGE PLAN
1" = 10'-0"

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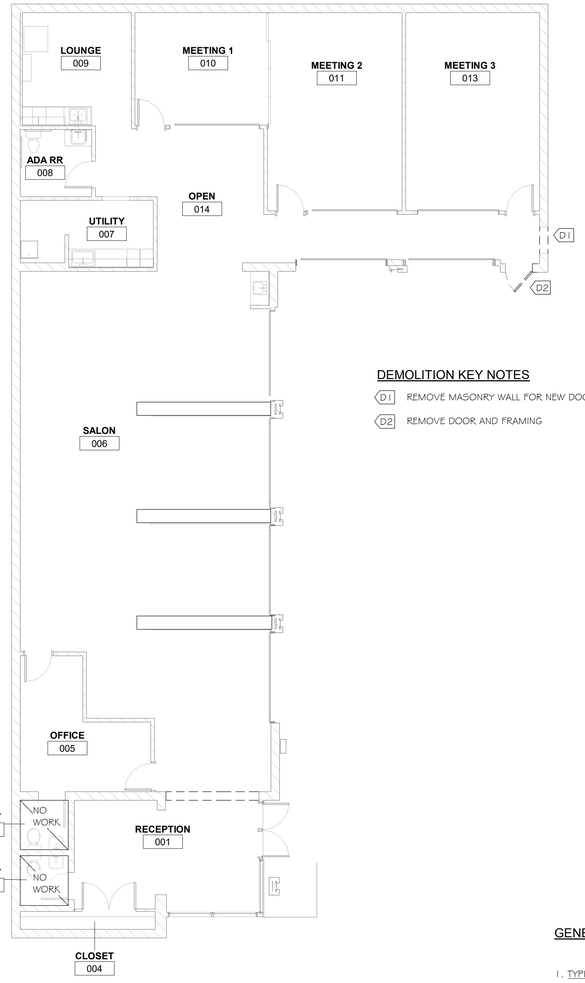
JUNE 02, 2021

Sheet Title

DRAINAGE PLAN

Sheet Number

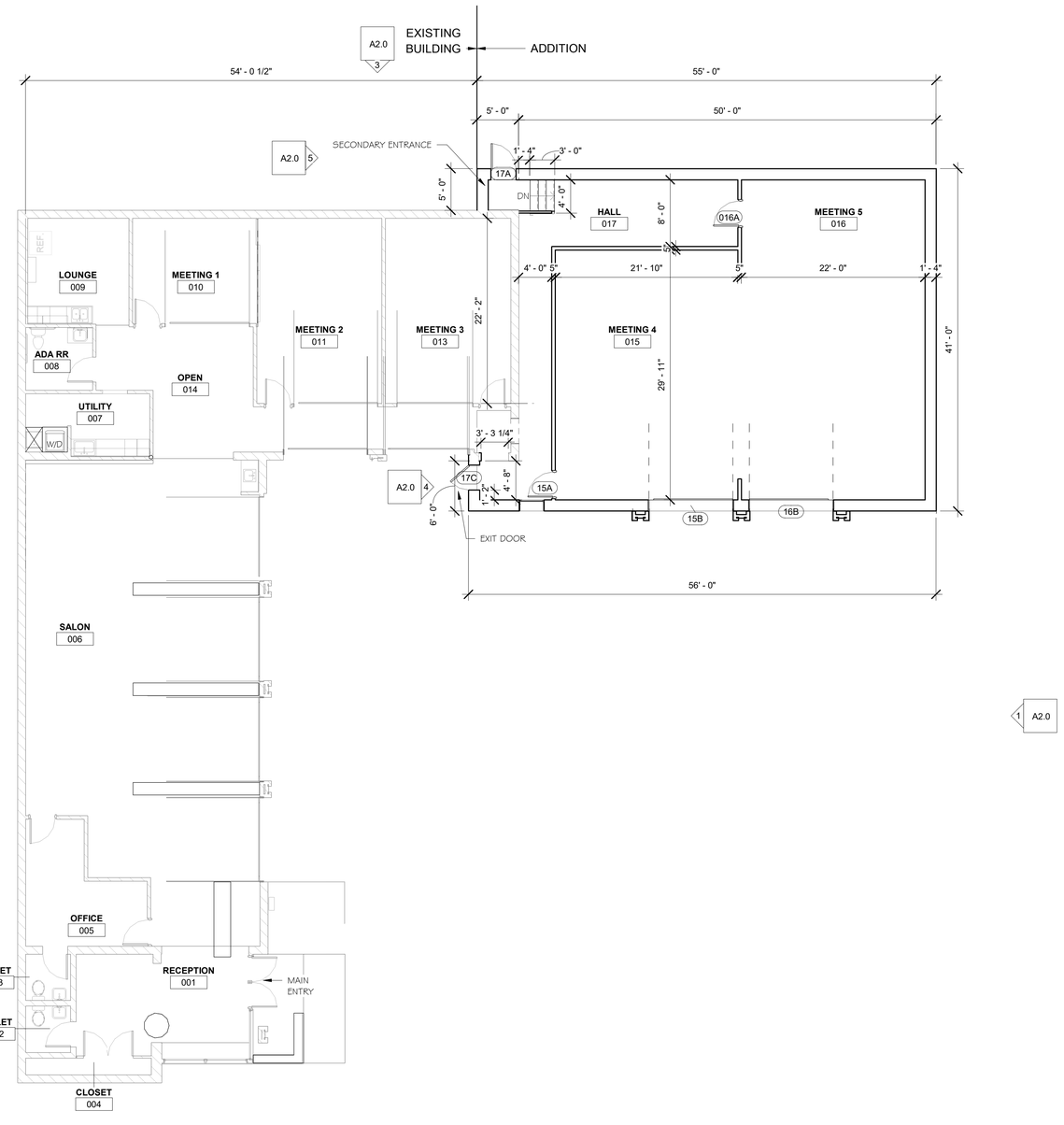
AS1.2



DEMOLITION KEY NOTES

D1 REMOVE MASONRY WALL FOR NEW DOOR OPENING

D2 REMOVE DOOR AND FRAMING



GENERAL PLAN NOTES

1. TYPICAL NEW PARTITION:

3 5/8" METAL STUD W/
5/8" GYP. BD. EACH SIDE
PROVIDE WATER RESISTANT GYP. BD. @
PLUMBING WALLS & WALLS W/ TILE
EXTEND TO STRUCTURE ABOVE
PROVIDE FULL HEIGHT ACOUSTICAL
INSULATION IN PARTITIONS

N 1 A1.0 DEMOLITION PLAN
1/8" = 1'-0"

N 2 A1.0 FLOOR PLAN
1/8" = 1'-0"

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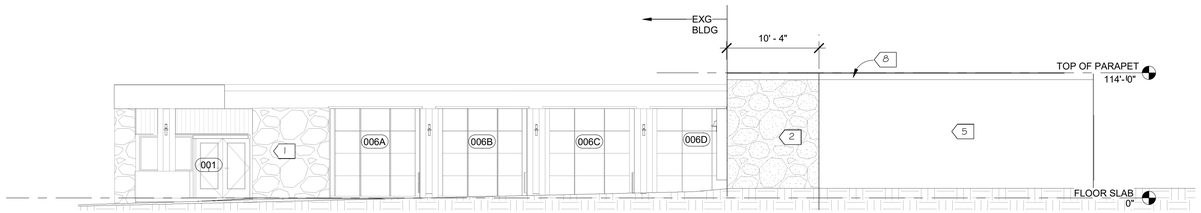
JUNE 02, 2021

Sheet Title

DEMO PLAN/
FLOOR PLAN

Sheet Number

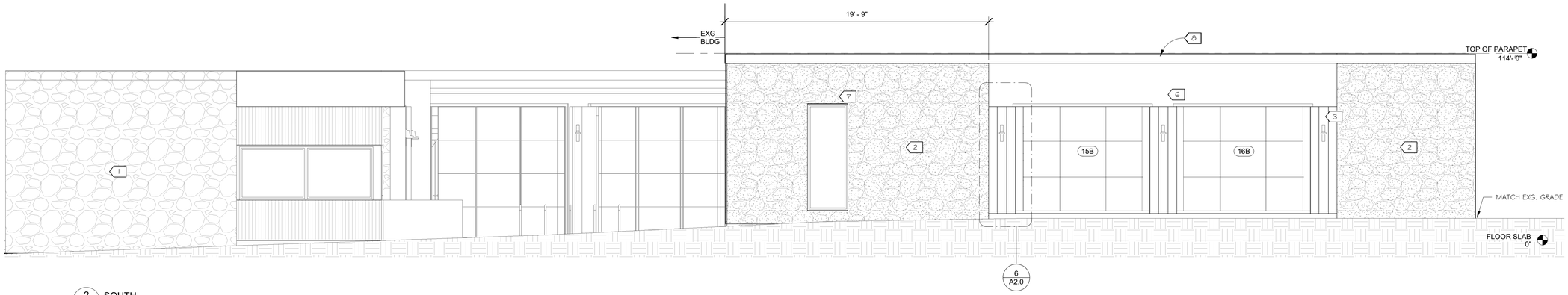
A1.0



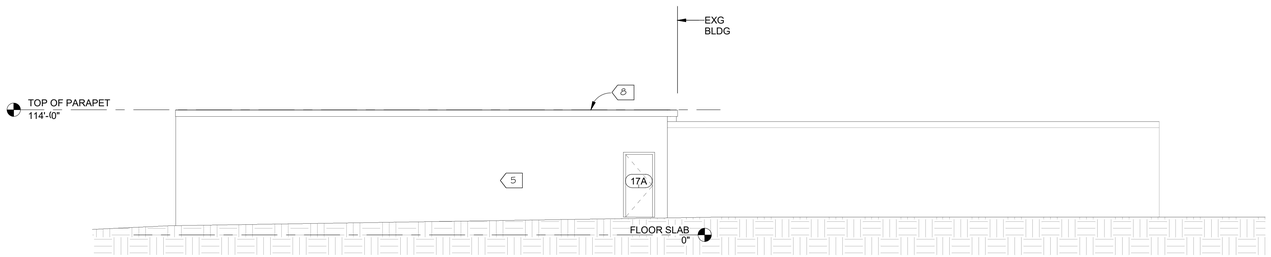
1 A2.0 EAST
1/8" = 1'-0"

ELEVATION KEYNOTES

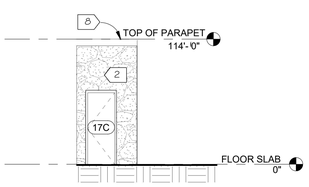
1	EXG. STONE VENEER TO REMAIN
2	NEW STONE VENEER
3	UP/ DOWN LIGHT TYPICAL @ PILASTERS
4	NEW DOOR AND WINDOW
5	PAINT 1 OVER CMU
6	PAINT 1 OVER FIBER CEMENT BD PANELS W/ GROOVE DETAIL
7	FIXED STOREFRONT GLAZING
8	METAL PARAPET CAP



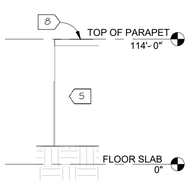
2 A2.0 SOUTH
1/4" = 1'-0"



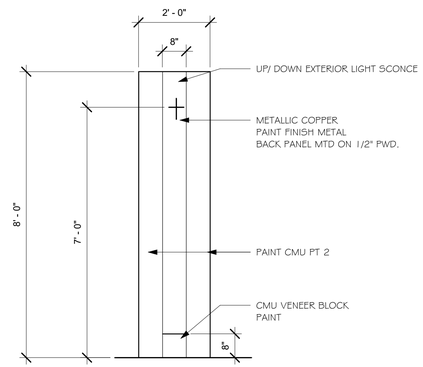
3 A2.0 NORTH ELEVATION
1/8" = 1'-0"



4 A2.0 EXIT 17C
1/8" = 1'-0"



5 A2.0 EAST WALL
1/8" = 1'-0"



6 A2.0 PILASTER DETAIL
1/2" = 1'-0"

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JUNE 02, 2021

Sheet Title

EXTERIOR ELEVATIONS

Sheet Number

A2.0



2 AS1.1 TURNING RADIUS DIAGRAM

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2411722320100 LOT 13
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FLOOR AREA RATIO:	1.5	.4
FRONT YARD SETBACK:	1'- 0"	1'- 0"
SIDE YARD SETBACK:	0'	0' WEST/ 2' EAST
REAR YARD AT ALLEY:	15'- 0"	22- 0"
BUILDING HEIGHT:	45'-0"	12'-0"

EXISTING BUILDING AREA: 3,994 SF
ADDITION AREA: 2,105 SF
TOTAL BUILDING AREA: 6,099 SF

PARKING SUMMARY

SECTION 102- 484 REQUIRED OFF STREET PARKING

BUILDING USE:	SALON	
RETAIL:	3,630 SF/ 200 =	18 SPACES
OFFICE:	1,796 SF/ 250 =	7 SPACES
SPACES REQUIRED:		25
5% CREDIT FOR BICYCLE		(1)
10% CREDIT FOR LIGHT RAIL		(2)
ON STREET PARKING CREDIT		(3)
SPACES REQUIRED		19
SPACES PROVIDED		19

HANDICAPPED PARKING SPACES

REQUIRED BY MN ACCESSIBILITY CODE:	1
SPACES PROVIDED:	1

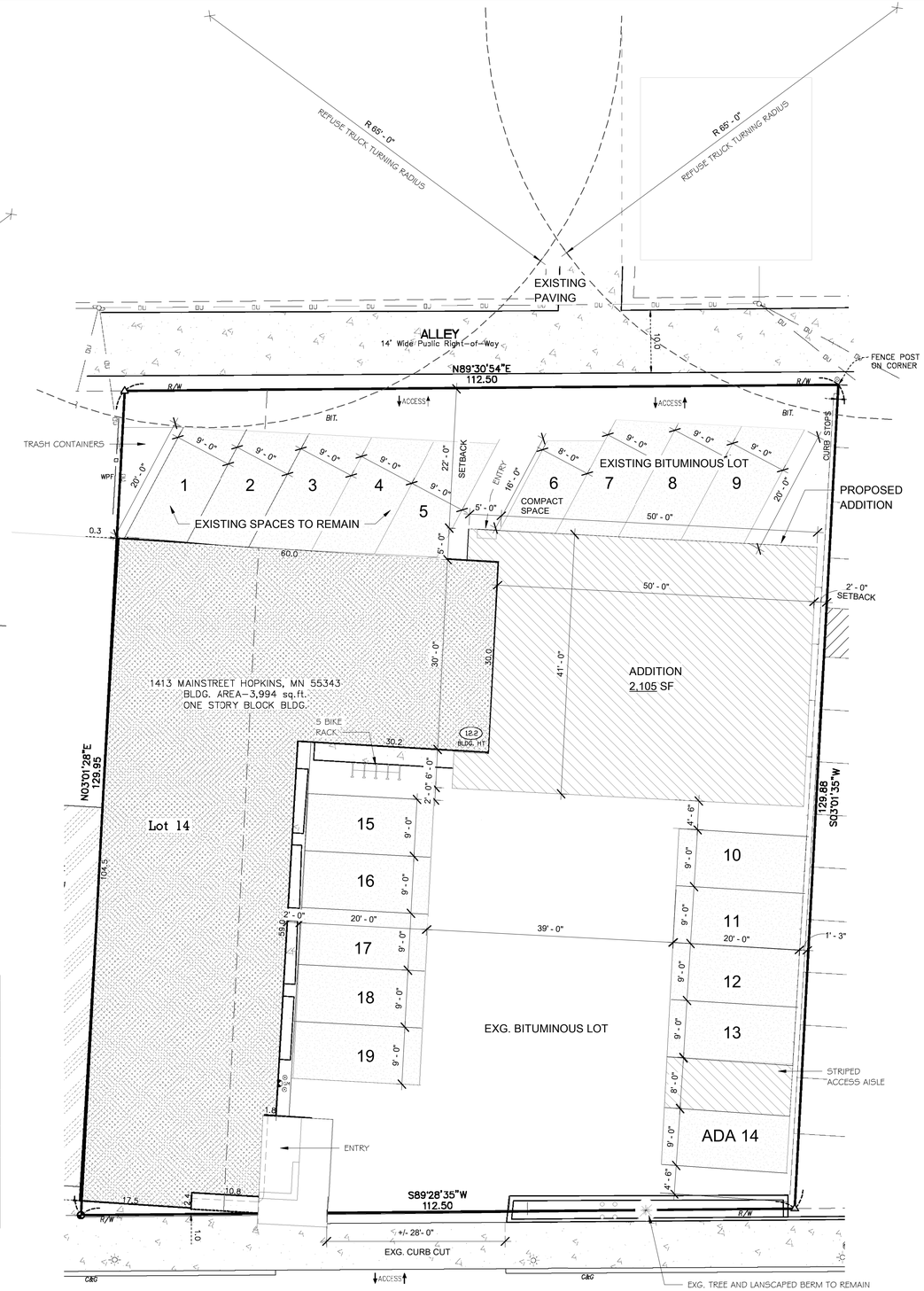
BICYCLE PARKING SPACE

REQUIRED BY HOPKINS RULES FOR AUTO SPACE (1:5)	5

PARKING SETBACKS:

1'- 0" MIN. TO LOT LINE

2'- 0" MIN. TO BUILDING



1 AS1.1 PROPOSED SITE PLAN
1" = 10'-0"

ADSIT Architecture & Planning
807 Broadway St. NE, Suite 245
Minneapolis, MN 55413

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Architect under the laws of the state of Minnesota

Print Name: Mina M. Adsit

Signed:

Date: XX-XX-XXXX

License No: 18710

Project No: 2032

REVISIONS:

1	7-15-21 SITE PLAN REVIEW

ATELIER ACADEMY OF BEAUTY
1413 MAINSTREET
HOPKINS, MN 55343

DATE

JUNE 07, 2021

Sheet Title

PROPOSED SITE PLAN

Sheet Number

AS1.1

July 27, 2021 Planning Application 2021-10

Preliminary and Final Plat Review
Hennepin County Regional Rail Authority (HCRRA) Downtown Hopkins Plat

Proposed Action: Staff recommends the following motion:

- Move to adopt Resolution 2021-15, recommending the City Council approve the preliminary and final plats for HCRRA Downtown Addition.

Overview

The applicant, Hennepin County Regional Rail Authority (HCRRA) requests preliminary and final plat approvals to dispose of excess right-of-way (ROW). The subject properties run from Excelsior Boulevard (CASH 3) to 9th Avenue North in Downtown Hopkins. The applicant proposes to plat the properties as outlots and retain some parcels while conveying most to Hennepin County Transportation, the City of Hopkins or adjacent private property owners. HCRRA proposes to plat and dispose of this excess ROW at this time because this corridor segment is no longer needed for future transit or transportation. Based on the findings contained in this report, staff recommends approval of the HCRRA Downtown preliminary and final plats.

Primary Issues to Consider

- Background
- Community Comment
- Subdivision Review
- Alternatives

Supporting Documents

- Site Location Map
- Applicant's Narrative
- Preliminary Plat
- Final Plat
- Planning and Zoning Commission Resolution 2021-15

_____
Jason Lindahl, AICP
City Planner

Financial Impact: $ N/A Budgeted: _____ Y/N ____ Source: _____
Related Documents (CIP, ERP, etc.): _____
Notes:

BACKGROUND

Hennepin County Regional Rail Authority (HCRRA) requests preliminary and final plat approvals to dispose of excess right-of-way (ROW). The subject properties run from Excelsior Boulevard (CASH 3) to 9th Avenue North in Downtown Hopkins. The properties are part of an abandoned railroad corridor from Hopkins to Victoria that HCRRA purchased from the Chicago North Western Transportation Company in 1981.

Three Rivers Park District operates the Lake Minnetonka Regional Trail within this corridor. In 2018, the City completed reconstruction of 8th Avenue South into the 8th Avenue Artery which includes a new cycle track trail segment connecting the Lake Minnetonka Regional Trail, Dowtown Hopkins, the Minnesota River Bluffs Regional Trail and the future Downtown Hopkins Light Rail Transit Station. With the Artery complete and the Southwest Light Rail Transit project well underway, the remaining portion of this corridor is no longer needed for future transit or transportation purposes.

COMMUNITY COMMENT

Under state law, this subdivision application requires a public hearing. Accordingly, the City published notice of this request and public hearing in the Sun Sailor and mailed notice directly to all property owners within 350' of the subject property. That notice directed all interest parties to send questions or comments to City Planner Jason Lindahl by mail, phone or email or to attend the public hearing where they could learn about the request, ask questions and provide feedback. As of the writing of this report, the City had received no comments or questions regarding this request. During the public hearing, staff will provide an update on all public comments received prior to the Planning & Zoning Commission meeting.

SUBDIVISION REVIEW

Subdivision approvals are considered quasi-judicial actions. As such, the City is acting as a judge to determine if the regulations within the Comprehensive Plan, Zoning Ordinance and Subdivision Ordinance are being followed. Generally, if the application meets these requirements, the subdivision application should be approved. The City also has the authority to add conditions to an approval that are directly related to the application.

Standards for reviewing subdivision requests are outlined in Chapter 100 of the City Code. This section of the Code details a two-step preliminary and final plats process for land subdivision. In this case the applicant requests the City review preliminary and final plats concurrently.

Preliminary and Final Plat Design. Hennepin County Regional Rail Authority owns several parcels along the abandon Chicago North Western Transportation Company railroad corridor that runs from Excelsior Boulevard (CSAH 3) to 9th Avenue North in downtown Hopkins. The applicant proposes to plat the properties as outlots and retain some parcels while conveying others to Hennepin County Transportation, the City of Hopkins or adjacent private property owners.

According to the City's Subdivision Regulations, Outlots are a parcel of land, included in a plat, which are:

- Smaller than the minimum size permitted for lots and which is thereby declared

unbuildable until combined through platting with additional land;

- A parcel of land which is included in a plat and which is at least double the minimum size and which is thereby subject to future platting prior to development;
- A parcel of land which is included in a plat and which is designated for public or private open space, right-of-way, utilities or other similar purposes.

An outlot is unbuildable and no permits to construct upon or improve an outlot may be issued. Platting the properties as outlots will allow them to be conveyed to the adjacent property owners; however, the adjacent property owner will be required to re-plat and combine the outlot with their existing property prior to any future development. The table below lists each outlot and who it will be conveyed to.

HCRRA DOWNTOWN HOPKINS		
Outlot	**Size**	**Resulting Owner**
A	6,660 Sq. Ft.	City of Hopkins
B	210 Sq. Ft.	Kathleen Klugman
C	4,470 Sq. Ft.	HCRRA
D	970 Sq. Ft.	City of Hopkins
E	9,250 Sq. Ft.	HCRRA
F	4,590 Sq. Ft.	City of Hopkins
G	14,390 Sq. Ft.	City of Hopkins
H	4,580 Sq. Ft.	City of Hopkins
I	3,560 Sq. Ft.	A, E & M Prperties
J	10,410 Sq. Ft.	City of Hopkins
K	8,120 Sq. Ft.	City of Hopkins
L	340 Sq. Ft.	City of Hopkins
M	15,120 Sq. Ft.	Sixth Avenue Properties (Gene Maxwell)
N	6,520 Sq. Ft.	City of Hopkins
O	31,100 Sq. Ft.	Walser Real Estate, LLC (Walser Chrysler Dodge)
P	12,220 Sq. Ft.	Chrisprop-TTTT, LLC (Town Terrace Apartments)
Q	24,940 Sq. Ft.	Hennepin County Transportation
R	1,120 Sq. Ft.	Hennepin County Transportation

Streets and Access Standards. Outlots A, F, H, K, L, and N will be conveyed to the City and remain part of the right-of-way for the corresponding streets. Outlots D and G will also be conveyed to the City and continue to be used as alleys. No access changes will result from any of the property transfers.

Park and Open Space Standards. Given the subject properties will be platted as outlots and many will continue to be used as public right-of-way, the City of Hopkins may not collect park dedication fees as part of this plat. However, the outlots that will be conveyed to private property owners may be subject to future park dedication should those owners choose to re-plat and combine their property for future development.

ALTERNATIVES

1. **Recommend approval of the Preliminary/Final Plats**. By recommending approval of

the preliminary/final plats, the City Council will consider a recommendation of approval.

2. **Recommend denial of the Preliminary/Final Plats**. By recommending denial of the preliminary/final plats, the City Council will consider a recommendation of denial. Should the Planning & Zoning Commission consider this option, it must also identify specific findings that support this alternative.

3. **Continue for further information**. If the Planning & Zoning Commission finds that further information is needed, the items should be continued.

Site Location Map for HCRRA Downtown Hopkins Addition



Preliminary and Final Plat Application of *HCRRA DOWNTOWN HOPKINS*

The Hennepin County Regional Railroad Authority (HCRRA) submits a preliminary and final plat application for the plat titled "HCRRA DOWNTOWN HOPKINS" for property that runs from Excelsior Boulevard (CSAH 3) to Ninth Avenue North in downtown Hopkins. This property is part of an abandoned railroad corridor from Hopkins to Victoria that HCRRA purchased from the Chicago North Western Transportation Company in 1981. With the Southwest Light Rail Transit project currently under construction, it is known that this corridor segment is not needed for future transit or transportation purposes. Three Rivers Park District operates a trail on this corridor that begins at 8th Avenue North. The trail will not be impacted by the proposed plat or disposition of property by HCRRA. Accordingly, HCRRA board resolution no. 20-HCRRA-0022 declared the property surplus in April 2020. The plat will be used to sell portions of the corridor to adjacent property owners and the City of Hopkins.

PRELIMINARY PLAT FOR: HCRRA DOWNTOWN HOPKINS

LEGAL DESCRIPTION

(Per First American Title Insurance Company, Commitment No. NCS-1037544-MPLS, Commitment Date May 4, 2021)

That part of the Northwest Quarter of the Southeast Quarter and the Southwest Quarter of the Southeast Quarter of Section 24, Township 117, Range 22 lying within Hennepin County Regional Railroad Authority Property Map No. 1, on file and of record in the office of the County Recorder in and for Hennepin County, Minnesota as Doc. No. 5404251 and in the office of the Registrar of Titles in and for Hennepin County, Minnesota as Doc. No. 4685955.

AND

That part of the Southeast Quarter of the Southeast Quarter of Section 24, Township 117, Range 22, also being part of Lot 26, Auditor's Subdivision No. 242, Hennepin County, Minnesota, lying within Hennepin County Regional Railroad Authority Property Map No. 1, on file and of record in the office of the County Recorder in and for Hennepin County, Minnesota as Doc. No. 5404251 and in the office of the Registrar of Titles in and for Hennepin County, Minnesota as Doc. No. 4685955.

AND

That part of the Southwest Quarter of the Southeast Quarter of Section 24, Township 117, Range 22 lying northeasterly of the northeasterly line of Hennepin County Regional Railroad Authority Property Map No. 1, on file and of record in the office of the County Recorder in and for Hennepin County, Minnesota as Doc. No. 5404251 and in the office of the Registrar of Titles in and for Hennepin County, Minnesota as Doc. No. 4685955, and southwesterly of a line 22.58 feet northeasterly of and parallel with the center line of the main track of the Chicago and North Western Railway Company as referenced in Doc. No. 3838198.

AND

That part of the Northwest Quarter of the Southeast Quarter of Section 24, Township 117, Range 22 lying northeasterly of the northeasterly line of Hennepin County Regional Railroad Authority Property Map No. 1, on file and of record in the office of the County Recorder in and for Hennepin County, Minnesota as Doc. No. 5404251 and in the office of the Registrar of Titles in and for Hennepin County, Minnesota as Doc. No. 4685955, southerly of the south line of Excelsior Avenue (now known as Mainstreet), as depicted in said Hennepin County Regional Railroad Authority Property Map No. 1 and southwesterly of a line 22.58 feet northeasterly of and parallel with the center line of the main track of the Chicago and North Western Railway Company as referenced in Doc. No. 3838198.

AND

That part of the Southeast Quarter of the Southeast Quarter of Section 24, Township 117, Range 22, also being part of Lot 26, Auditor's Subdivision No. 242, Hennepin County, Minnesota, lying within Hennepin County Regional Railroad Authority Property Map No. 12, on file and of record in the office of the County Recorder in and for Hennepin County, Minnesota as Doc. No. 5518920 and in the office of the Registrar of Titles in and for Hennepin County, Minnesota as Doc. No. 4688062, lying northwesterly of a line drawn parallel with and distant 25.00 feet southeasterly of the following described line:

Commencing at the southeast corner of said Section 24; thence northerly along the east line of said Section 24 a distance of 953.32 feet to the point of beginning of the line being described; thence westerly deflecting to the left 112 degrees 38 minutes 17 seconds for a distance of 780.00 feet and said line there terminating. (Said line referenced in Tract 15, Parcel 1 of Doc. No. A10621894)

Commencing at the southeast corner of said Section 24; thence northerly along the east line of said Section 24 a distance of 953.32 feet to the point of beginning of the line being described; thence westerly deflecting to the left 112 degrees 38 minutes 17 seconds for a distance of 780.00 feet and said line there terminating. (Said line referenced in Tract 15, Parcel 1 of Doc. No. A10621894)

OUTLOT AREAS

Outlot	Square Feet	Acres
A	6,660	0.153
B	210	0.005
C	4,470	0.103
D	970	0.022
E	9,250	0.212
F	4,590	0.105
G	14,390	0.330
H	4,580	0.105
I	3,560	0.082
J	10,410	0.239
K	8,120	0.186
L	340	0.008
M	15,120	0.347
N	6,520	0.151
O	31,100	0.714
P	12,220	0.280
Q	24,940	0.573
R	1,210	0.028

TOTAL AREA: 158,660 sq. ft.
OR 3.642 acres

Project Name:

Preliminary Plat for HCRRA

Project No.:

CSP-1017

Professional Services:

HENNEPIN COUNTY
Resident and Real Estate Services
Survey Division

HENNEPIN COUNTY SURVEYOR
A-703 300 South 6th Street
Minneapolis, MN 55487

Professional Signature:

I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota. The field work was completed on February 21, 2021.

Scott J. Soukup — 06/17/2021
Scott J. Soukup — Date
License. No. 17256

Quality Control:

JS, SS, DD — Field Crew
BJK — Drawn By
BB, SS — Checked By
Review Date

Revisions:

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Disclaimer/Notes:

Owner and Applicant:
Hennepin County Regional Railroad Authority
701 Fourth Avenue South, Suite 400
Minneapolis, MN 55415

Owner's Agent - Jessica Galatz

Existing Zoning Classification - R-1-A - Single and Two Family High Density

This survey does not purport to portary any physical features

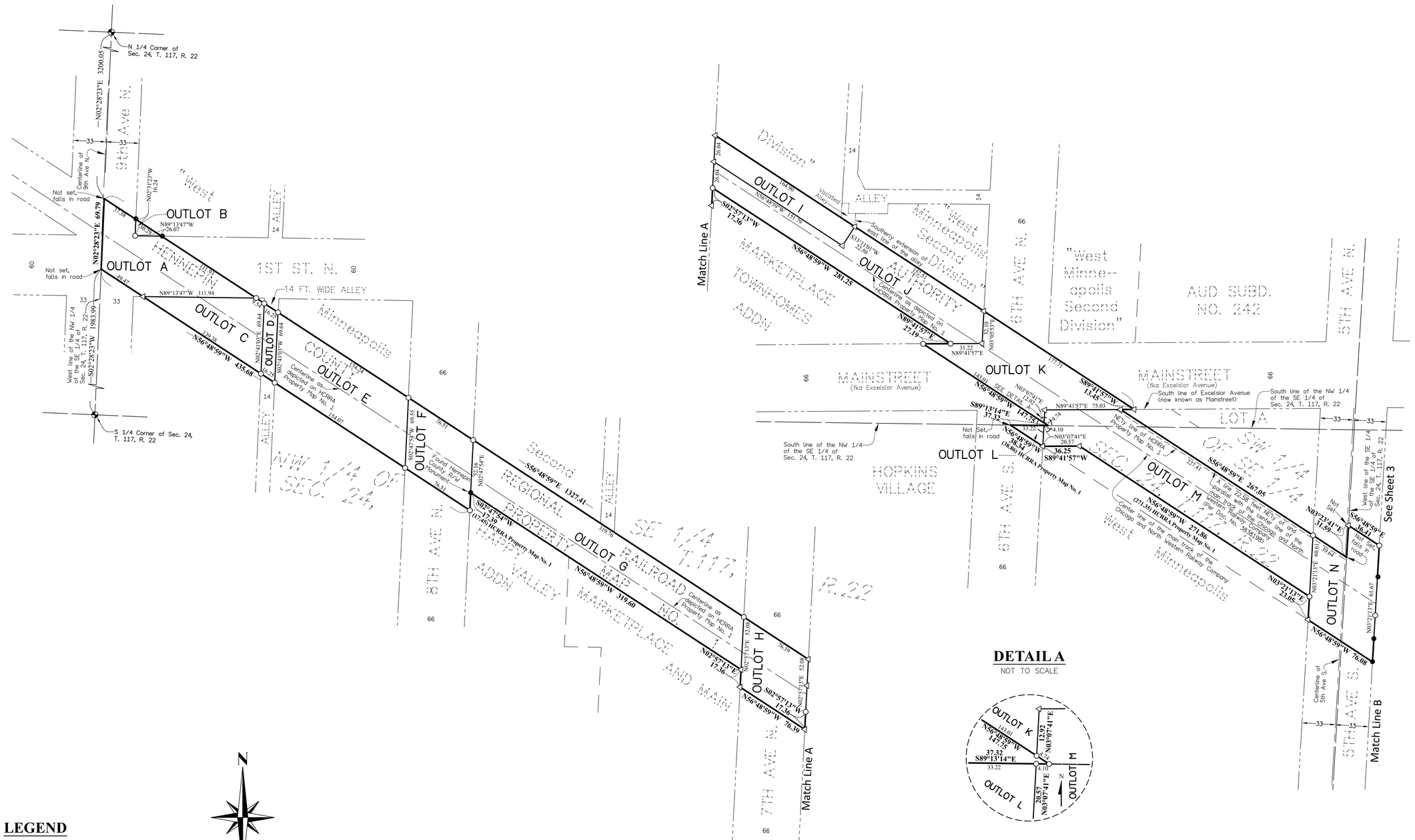
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PRELIMINARY PLAT FOR: HCRRA DOWNTOWN HOPKINS

Hennepin County
Resident and Real Estate Services
Survey Division

HCRRA DOWNTOWN HOPKINS

C.R. DOC. NO. _____



DETAIL A

NOT TO SCALE

LEGEND

- ○ Set 1/2 inch by 14 inch iron pipe with a plastic cap engraved with Minnesota license number 17256 unless otherwise noted
- ● Found 1/2 inch Open Iron Pipe unless otherwise noted
- ⊕ Denotes found Hennepin County Cast Iron Monument
- △ Set PK Nail

N

0 50 100
Scale in Feet

Bearings shown on this plat are based on the west line of the Southeast Quarter of Section 24, Township 117, Range 22 having an assumed bearing of S02°28'23"W

HCRRA DOWNTOWN HOPKINS

C.R. DOC. NO. _____

See Sheet 2

Match Line B

S03°21'13"W 30.55

Found 1/2 in. Iron Pipe 0.55 feet East

Centerline as depicted on HCRRA Property Map No. 1

Found 5/8 in. Iron Pin

S03°21'13"W 23.05

Found Hennepin County Cast Iron Monument

LUTHER WALSER HOPKINS ADDN

HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY PROPERTY

SE 1/4 OF SEC. 24, T.117, R.22

AUD SUBD NO. 242 LOT 26

TOWN TERRACE

S56°48'59"E 315.27

N03°21'13"E 30.55

Found 1/2 in. Iron Pipe capped with RLS 23677

S56°48'59"E 276.83

OUTLOT O

OUTLOT P

S56°48'59"E 557.70

N56°48'59"W 546.23

AUD SUBD NO. 242 LOT 26

HCRRA PROPERTY MAP NO. 1

Centerline as depicted on HCRRA Property Map No. 1

Δ=10°32'26" R=586.62 C=106.07 CB=S62°00'12"E

Δ=09°30'40" L=108.70

Δ=03°14'06" R=340.07 L=19.20

Δ=02°25'02" R=474.77 L=20.00

Δ=40°41'43" R=46.62 L=33.11

Δ=48°48'07" R=46.62 L=39.70

Δ=44°26'41" R=46.62 L=36.17

Δ=00°17'21" R=666.02 L=3.37

Δ=44°43'08" R=666.02 L=519.70

N63°16'35"E 24.50

N62°30'22"W 119.91

SEE DETAIL C

SEE DETAIL B

Δ=00°13'36" R=666.02 L=2.64

Not tangent

S68°18'06"E 120.60

Width Varies

Δ=18°54'28" R=587.27 L=193.80 CB=S85°44'47"E C=192.92

Not tangent

Not tangent

Δ=38°03'19" R=587.27 L=390.06 C.Brg=N84°40'48"E C=382.93

N71°40'54"E 780.00

Δ=07°15'19" R=5406.81 L=118.98 C.Brg=N65°01'18"E C=118.98

See Detail D

Not Tangent

Not Tangent

Δ=08°41'45" R=691.91 L=105.01

Not Tangent

Not Tangent

Δ=06°01'00" R=340.15 L=77.72 C.Brg=N70°17'21"E C=77.69

S77°18'03"W 227.95

S71°40'54"W 247.80

Δ=06°53'57" R=687.22 L=78.76 CB=N71°21'34"W C=78.72

Δ=12°54'50" R=687.22 L=154.90 C.Brg=N74°52'00"W C=154.58

Not tangent

Not tangent

HOSAH 3 EXCELSIOR

HORRA PROPERTY MAP NO. 12

AUD SUBD NO. 242 LOT 26

Width Varies

PLAT 16

BLVD (CO. RD. 3)

Width Varies

NWly line of HCRRA Property Map No. 12 also the SEly line of HCRRA Property Map No. 1

25

25

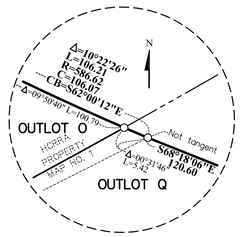
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S63°27'09"E 824.41

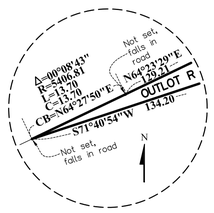
DETAIL C

NOT TO SCALE



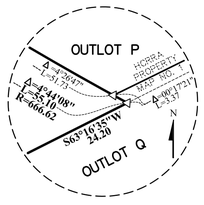
DETAIL D

NOT TO SCALE



DETAIL B

NOT TO SCALE



E 1/4 corner of Sec. 24, T. 117, R. 22

S04°19'11"W 1693.73

112°36'17"

Point of Beginning

S04°19'11"W 19.63

OUTLOT R

Δ=00°08'43" R=5406.81 L=13.70 CB=N64°27'50"E C=13.70

N64°23'29"E 129.21

S71°40'54"W 134.20

S04°19'11"W 56.61

S04°19'11"W 953.32

S04°19'11"W 2639.59

East line of the SE 1/4 of Sec. 24, T. 117, R. 22

N04°19'11"E 2639.59

S04°19'11"W 450.23

SE corner of Sec. 24, T. 117, R. 22

S64°36'06"W 167.68

(55.60) HCRRA Property Map No. 12

LEGEND

- ○ Set 1/2 inch by 14 inch iron pipe with a plastic cap engraved with Minnesota license number 17256 unless otherwise noted
- ● Found 1/2 inch Open Iron Pipe unless otherwise noted
- ⊕ Denotes found Hennepin County Cast Iron Monument
- △ Set PK Nail

N

0 50 100

Scale in Feet

Bearings shown on this plat are based on the west line of the Southeast Quarter of Section 24, Township 117, Range 22 having an assumed bearing of S02°28'23"W

HCRRA DOWNTOWN HOPKINS

C.R. DOC. NO. _____

KNOW ALL PERSONS BY THESE PRESENTS: That Hennepin County Regional Railroad Authority, a political subdivision and local government unit of the State of Minnesota, owner of the following described property situated in the County of Hennepin, State of Minnesota to wit:

That part of the Northwest Quarter of the Southeast Quarter and the Southwest Quarter of the Southeast Quarter of Section 24, Township 117, Range 22 lying within Hennepin County Regional Railroad Authority Property Map No. 1, on file and of record in the office of the County Recorder in and for Hennepin County, Minnesota as Doc. No. 5404251 and in the office of the Registrar of Titles in and for Hennepin County, Minnesota as Doc. No. 4685955.

AND

That part of the Southeast Quarter of the Southeast Quarter of Section 24, Township 117, Range 22, also being part of Lot 26, Auditor's Subdivision No. 242, Hennepin County, Minnesota, lying within Hennepin County Regional Railroad Authority Property Map No. 1, on file and of record in the office of the County Recorder in and for Hennepin County, Minnesota as Doc. No. 5404251 and in the office of the Registrar of Titles in and for Hennepin County, Minnesota as Doc. No. 4685955.

AND

That part of the Southwest Quarter of the Southeast Quarter of Section 24, Township 117, Range 22 lying northeasterly of the northeasterly line of Hennepin County Regional Railroad Authority Property Map No. 1, on file and of record in the office of the County Recorder in and for Hennepin County, Minnesota as Doc. No. 5404251 and in the office of the Registrar of Titles in and for Hennepin County, Minnesota as Doc. No. 4685955, and southwesterly of a line 22.58 feet northeasterly of and parallel with the center line of the main track of the Chicago and North Western Railway Company as referenced in Doc. No. 3838198.

AND

That part of the Northwest Quarter of the Southeast Quarter of Section 24, Township 117, Range 22 lying northeasterly of the northeasterly line of Hennepin County Regional Railroad Authority Property Map No. 1, on file and of record in the office of the County Recorder in and for Hennepin County, Minnesota as Doc. No. 5404251 and in the office of the Registrar of Titles in and for Hennepin County, Minnesota as Doc. No. 4685955, southerly of the south line of Excelsior Avenue (now known as Mainstreet), as depicted in said Hennepin County Regional Railroad Authority Property Map No. 1 and southwesterly of a line 22.58 feet northeasterly of and parallel with the center line of the main track of the Chicago and North Western Railway Company as referenced in Doc. No. 3838198.

AND

That part of the Southeast Quarter of the Southeast Quarter of Section 24, Township 117, Range 22, also being part of Lot 26, Auditor's Subdivision No. 242, Hennepin County, Minnesota, lying within Hennepin County Regional Railroad Authority Property Map No. 12, on file and of record in the office of the County Recorder in and for Hennepin County, Minnesota as Doc. No. 5518920 and in the office of the Registrar of Titles in and for Hennepin County, Minnesota as Doc. No. 4688062, lying northwesterly of a line drawn parallel with and distant 25.00 feet southeasterly of the following described line:

Commencing at the southeast corner of said Section 24; thence northerly along the east line of said Section 24 a distance of 953.32 feet to the point of beginning of the line being described; thence westerly deflecting to the left 112 degrees 38 minutes 17 seconds for a distance of 780.00 feet and said line there terminating. (Said line referenced in Tract 15, Parcel 1 of Doc. No. A10621894)

Has caused the same to be surveyed and platted as HCRRA DOWNTOWN HOPKINS.

In witness whereof said Hennepin County Regional Railroad Authority, a political subdivision and local government unit of the State of Minnesota, has caused these presents to be signed by its proper officers this ____ day of _____, 2021.

Hennepin County Regional Railroad Authority

_____ _____
Irene Fernando, Chair of its Board David Hough, Executive Director

STATE OF MINNESOTA
COUNTY OF HENNEPIN

This instrument was acknowleged before me this ____ day of _____, 2021, by Irene Fernando, Chair of its Board and by David Hough, Executive Director of Hennepin County Regional Railroad Authority, a political subdivision and local government unit of the State of Minnesota, on behalf of the Authority.

_____ _____
(Signature) (Printed Name)

Notary Public Hennepin County, Minnesota
My Commission Expires_____

I, Scott J. Soukup, do hereby certify that this plat was prepared by me or under my direct supervision; that I am a duly Licensed Land Surveyor in the State of Minnesota; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on this plat; that all monuments depicted on this plat have been, or will be correctly set within one year; that all water boundaries and wet lands, as defined in Minnesota Statutes, Section 505.01 Subd. 3, as of the date of this certificate are shown and labeled on this plat; and all public ways are shown and labeled on this plat.

Dated this ____ day of _____, 2021.

_____
Scott J. Soukup, Licensed Land Surveyor
Minnesota License No. 17256

STATE OF MINNESOTA
COUNTY OF HENNEPIN

This instrument was acknowledged before me this ____ day of _____, 2021, by Scott J. Soukup.

_____
(Signature)

_____
(Printed Name)
Notary Public Hennepin County, Minnesota
My Commission Expires_____

CITY COUNCIL, CITY OF HOPKINS, MINNESOTA

This plat of HCRRA DOWNTOWN HOPKINS was approved and accepted by the City Council of the City of Hopkins, Minnesota, at a regular meeting thereof held this___day of _____, 20___, and said plat is in compliance with the provisions of Minnesota Statutes, Section 505.03 Subdivision 2.

CITY COUNCIL, CITY OF HOPKINS, MINNESOTA

By: _____ , Mayor By: _____, Clerk

RESIDENT AND REAL ESTATE SERVICES, Hennepin County, Minnesota

I hereby certify that taxes payable in 20___and prior years have been paid for land described on this plat, dated this ___day of _____ , 20___.

Mark V. Chapin, County Auditor By:_____, Deputy

SURVEY DIVISION, Hennepin County, Minnesota

Pursuant to MN. STAT. Section 383B.565 (1969), this plat has been approved this____day of _____, 20___.

Chris F. Mavis, County Surveyor By: _____

COUNTY RECORDER, Hennepin County, Minnesota

I hereby certify that this plat of HCRRA DOWNTOWN HOPKINS was recorded in this office this____day of _____, 20___ , at ___o'clock __.M.

Amber Bougie, Acting County Recorder By: _____, Deputy

Hennepin County
Resident and Real Estate Services
Survey Division

HCRRA DOWNTOWN HOPKINS

C.R. DOC. NO. _____

N 1/4 Corner of Sec. 24, T. 117, R. 22

N02°28'23"E 3200.05

9th Ave N.

33

Centerline of 9th Ave N.

Not set, falls in road

37.88

69.76

S02°28'23"E

OUTLOT B

N89°13'47"W 26.07

N02°31'23"W 10.24

"West Minneapolis Second Division"

ALLEY

14

1ST ST. N.

60

OUTLOT A

HENNEPIN

Not set, falls in road

49.47

N89°13'47"W 111.94

14 FT. WIDE ALLEY

West line of the NW 1/4 of the SE 1/4 of Sec. 24, T. 117, R. 22

S02°28'23"W 1983.99

S 1/4 Corner of Sec. 24, T. 117, R. 22

OUTLOT C

OUTLOT D

OUTLOT E

OUTLOT F

OUTLOT G

OUTLOT H

130.38

N56°48'59"W 435.08

N02°41'03"E 69.64

S02°41'03"W 69.64

Minneapolis COUNTY

Centerline as depicted on HCRRA Property Map No. 1

164.07

S02°47'54"W 69.55

76.51

N02°25'13"E 76.39

S02°47'54"W 17.45

(17.35) HCRRA Property Map No. 1

N56°48'59"W 319.60

Second REGIONAL RAILROAD PROPERTY MAP NO. 1

N56°48'59"E 1327.41

SE 1/4 OF SEC. 24, T. 117, R. 22

NW 1/4 OF SEC. 24, T. 117, R. 22

Found Hennepin County R/W Monument

52.08

S02°57'13"E 52.08

N02°57'13"E 17.36

S02°57'13"W 17.36

N56°48'59"W 76.39

66

14

ALLEY

8TH AVE N.

7TH AVE N.

HAPPY VALLEY MARKETPLACE ADDN

AND MAIN

Match Line A

Division"

Vacated Alley

Southerly extension of east line of the alley

S33°11'01"W 22.50

Match Line A

OUTLOT I

26.04

26.04

N56°48'59"W 131.78

S02°57'13"W 17.36

N56°48'59"W 281.25

OUTLOT J

AUTHORITY

Centerline as depicted on HCRRA Property Map No. 1

N89°41'57"E 27.19

31.22

N89°41'57"E

33.10

S33°50'49"W

OUTLOT K

143.01

SEE DETAIL A

N03°07'41"E 12.92

S89°41'57"W 13.45

N89°41'57"E 75.03

S89°13'14"E 147.78

N89°13'14"E 37.32

33.22

4.10

N03°07'41"E 20.57

36.25

S89°41'57"W

OUTLOT L

(36.30) HCRRA Property Map No. 1

38.34

N56°48'59"W

MAINSTREET

(fka Excelsior Avenue)

South line of Excelsior Avenue (now known as Mainstreet)

South line of the NW 1/4 of the SE 1/4 of Sec. 24, T. 117, R. 22

LOT A

HOPKINS VILLAGE

South line of the NW 1/4 of the SE 1/4 of Sec. 24, T. 117, R. 22

"West Minneapolis Second Division"

AUD SUBD. NO. 242

5TH AVE N.

66

14

33

NE'ly line of HCRRA Property Map No. 1

227.41

S56°48'59"E 267.05

Line 22.58 feet NE'ly of and parallel with the center line of the Chicago and North Western Railway Company (Per Doc. No. 2931588)

OUTLOT M

N56°48'59"W 271.86

(271.35) HCRRA Property Map No. 1

Center line of the main track of the Chicago and North Western Railway Company

West Minneapolis

N03°23'41"E 31.59

N03°21'13"E 23.02

N56°48'59"W 76.08

OUTLOT N

N03°21'13"E 61.67

Not Set, falls in road

S56°48'59"E 36.41

See Sheet 3

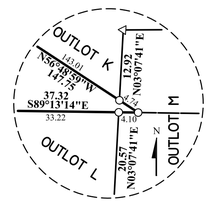
Centerline of 5th Ave S.

5TH AVE S.

Match Line B

DETAIL A

NOT TO SCALE



LEGEND

- ○ Set 1/2 inch by 14 inch iron pipe with a plastic cap engraved with Minnesota license number 17256 unless otherwise noted
- ● Found 1/2 inch Open Iron Pipe unless otherwise noted
- ⊕ Denotes found Hennepin County Cast Iron Monument
- △ Set PK Nail

N

0 50 100
Scale in Feet

Bearings shown on this plat are based on the west line of the Southeast Quarter of Section 24, Township 117, Range 22 having an assumed bearing of S02°28'23"W

HCRRA DOWNTOWN HOPKINS

C.R. DOC. NO. _____

See Sheet 2

Match Line B

S03°21'13"W 30.55

Found 1/2 in. Iron Pipe 0.55 feet East

Centerline as depicted on HCRRA Property Map No. 1

Found 5/8 in. Iron Pin

S03°21'13"W 23.05

Found Hennepin County Cast Iron Monument

LUTHER WALSER HOPKINS ADDN

HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY PROPERTY

SE 1/4 OF SEC. 24, T.117, R.22

AUD SUBD NO. 242 LOT 26

TOWN TERRACE

S56°48'59"E 315.27

N03°21'13"E 30.55

Found 1/2 in. Iron Pipe capped with RLS 23677

S56°48'59"E 276.83

OUTLOT O

OUTLOT P

S56°48'59"E 557.70

N56°48'59"W 546.23

AUD SUBD NO. 242 LOT 26

HCRRA PROPERTY MAP NO. 1

Centerline as depicted on HCRRA Property Map No. 1

Δ=10°32'26" R=586.62 C=106.07 CB=S62°00'12"E

Δ=09°30'40" L=108.70

Δ=03°14'06" R=340.07 L=19.20

Δ=02°25'02" R=474.77 L=20.00

Δ=40°41'43" R=46.62 L=33.11

Δ=48°48'07" R=46.62 L=39.70

Δ=44°26'41" R=46.62 L=36.17

Δ=00°17'21" R=666.02 L=3.37

Δ=44°43'08" R=666.02 L=519.70

N63°16'35"E 24.50

N62°30'22"W 119.91

SEE DETAIL C

SEE DETAIL B

Δ=00°13'36" R=666.02 L=2.64

Not tangent

S68°18'06"E 120.60

Width Varies

Δ=18°54'28" R=587.27 L=193.80 CB=S85°44'47"E C=192.92

Not tangent

Not tangent

Δ=38°03'19" R=587.27 L=390.06 C.Brg=N84°40'48"E C=382.93

N71°40'54"E 780.00

Δ=07°15'19" R=5406.81 L=118.98 C.Brg=N65°01'18"E C=118.98

See Detail D

Not Tangent

Not Tangent

Δ=08°41'45" R=691.91 L=105.01

Not Tangent

Not Tangent

Δ=06°01'00" R=340.15 L=77.72 C.Brg=N70°17'21"E C=77.69

S77°18'03"W 227.95

S71°40'54"W 247.80

Δ=06°53'57" R=687.22 L=78.76 CB=N71°21'34"W C=78.72

Δ=12°54'50" R=687.22 L=154.90 C.Brg=N74°52'00"W C=154.58

Not tangent

Not tangent

HOSAH 3 EXCELSIOR

HORRA PROPERTY MAP NO. 12

AUD SUBD NO. 242 LOT 26

Width Varies

PLAT 16

BLVD (CO. RD. 3)

Width Varies

NWly line of HCRRA Property Map No. 12 also the SEly line of HCRRA Property Map No. 1

25

25

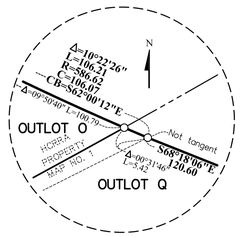
25

25

S63°27'09"E 824.41

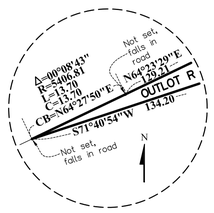
DETAIL C

NOT TO SCALE



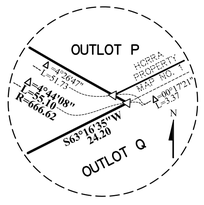
DETAIL D

NOT TO SCALE



DETAIL B

NOT TO SCALE



E 1/4 corner of Sec. 24, T. 117, R. 22

S04°19'11"W 1693.73

112°36'17"

Point of Beginning

S04°19'11"W 19.63

OUTLOT R

Δ=00°08'43" R=5406.81 L=13.70 CB=N64°27'50"E C=13.70

N64°23'29"E 129.21

S71°40'54"W 134.20

S04°19'11"W 56.61

S04°19'11"W 953.32

S04°19'11"W 2639.59

East line of the SE 1/4 of Sec. 24, T. 117, R. 22

N04°19'11"E 2639.59

S04°19'11"W 450.23

SE corner of Sec. 24, T. 117, R. 22

S64°36'06"W 167.68

(55.60) HCRRA Property Map No. 12

LEGEND

- ○ Set 1/2 inch by 14 inch iron pipe with a plastic cap engraved with Minnesota license number 17256 unless otherwise noted
- ● Found 1/2 inch Open Iron Pipe unless otherwise noted
- ⊕ Denotes found Hennepin County Cast Iron Monument
- △ Set PK Nail

N

0 50 100

Scale in Feet

Bearings shown on this plat are based on the west line of the Southeast Quarter of Section 24, Township 117, Range 22 having an assumed bearing of S02°28'23"W

CITY OF HOPKINS
Hennepin County, Minnesota

PLANNING & ZONING COMMISSION RESOLUTION 2021-15

RESOLUTION RECOMMENDING APPROVAL OF THE PRELIMINARY AND FINAL PLATS FOR THE HCRRA DOWNTOWN HOPKINS ADDITION

WHEREAS, an application for both preliminary and final plats were submitted by the Hennepin County Regional Rail Authority (HCRRA); and

WHEREAS, the procedural history of the application is as follows:

1. That applications for both preliminary and final plats were submitted by the HCRRA on June 23**,** 2021;

2. That the Hopkins Zoning & Planning Commission, pursuant to mailed and published notice, held a public hearing to review such applications on July 27, 2021: all persons present were given an opportunity to be heard;

3. That the written comments and analysis of City staff were considered; and,

4. The legal descriptions of the parcels are attached to this resolution as Exhibit A

NOW, THEREFORE, BE IT RESOLVED that the Planning & Zoning Commission of the City of Hopkins hereby recommends the City Council of the City of Hopkins approve the preliminary and final plats for the HCRRA Downtown Hopkins Addition based on the findings of fact detailed in the staff report dated July 27, 2021, subject to the following conditions:

1. Conformance with all requirements of the City's Comprehensive Plan, zoning regulations, and subdivision standards.

2. Conformance with all requirements of the City Engineer.

Adopted this 27th day of July 2021.

_____
Samuel Stiele, Chair

Exhibit A – Legal Description

That part of the Northwest Quarter of the Southeast Quarter and the Southwest Quarter of the Southeast Quarter of Section 24, Township 117, Range 22 lying within Hennepin County Regional Railroad Authority Property Map No. 1, on file and of record in the office of the County Recorder in and for Hennepin County, Minnesota as Doc. No. 5404251 and in the office of the Registrar of Titles in and for Hennepin County, Minnesota as Doc. No. 4685955.

AND

That part of the Southeast Quarter of the Southeast Quarter of Section 24, Township 117, Range 22, also being part of Lot 26, Auditor's Subdivision No. 242, Hennepin County, Minnesota, lying within Hennepin County Regional Railroad Authority Property Map No. 1, on file and of record in the office of the County Recorder in and for Hennepin County, Minnesota as Doc. No. 5404251 and in the office of the Registrar of Titles in and for Hennepin County, Minnesota as Doc. No. 4685955.

AND

That part of the Southwest Quarter of the Southeast Quarter of Section 24, Township 117, Range 22 lying northeasterly of the northeasterly line of Hennepin County Regional Railroad Authority Property Map No. 1, on file and of record In the office of the County Recorder in and for Hennepin County, Minnesota as Doc. No. 5404251 and in the office of the Registrar of Titles in and for Hennepin County, Minnesota as Doc. No. 4685955, and southwesterly of a line 22.58 feet northeasterly of and parallel with the center line of the main track of the Chicago and North Western Railway Company as referenced in Doc. No. 3838198.

AND

That part of the Northwest Quarter of the Southeast Quarter of Section 24, Township 117, Range 22 lying northeasterly of the northeasterly line af Hennepin County Regional Railroad Authority Property Map No. 1, on file and of record in the office of the County Recorder in and for Hennepin County, Minnesota as Doc. No. 5404251 and In the office of the Registrar of Titles In and for Hennepin County, Minnesota as Doc. No. 4685955, southerly of the south line of Excelsior Avenue (now known as Mainstreet), as depicted in said Hennepin County Regional Railroad Authority Property Map No. 1 and southwesterly of a line 22.58 feet northeasterly of and parallel with the center line of the main track of the Chicago and North Western Railway Company as referenced in Doc. No. 3838198.

AND

That part of the Southeast Quarter of the Southeast Quarter of Section 24, Township 117, Range 22, also being part of Lot 26, Auditor's Subdivision Na. 242, Hennepin County, Minnesota, lying within Hennepin County Regional Railroad Authority Property Map No. 12, an file and af record in the office of the County Recorder in and for Hennepin County, Minnesota as Doc. No. 5518920 and in the office of the Registrar af Titles in and for Hennepin County, Minnesota as Doc. No. 4688062, lying northwesterly of a line drawn parallel with and distant 25.00 feet southeasterly af the following described line:
Commencing at the southeast corner of said Section 24; thence northerly along the east line of said Section 24 a distance of 953.32 feet to the point of beginning of the line being described; thence westerly deflecting to the left 112 degrees 38 minutes 17 seconds for a distance of 780.00 feet and said

line there terminating. (Said line referenced in Tract 15, Parcel 1 of Doc. No. A10621894)

July 27, 2021 Planning Application 2021-11

101 Interlachen Road Side Front Yard Setback Variance (PID 20-117-21-33-0001)

Proposed Action: Staff recommends the the following motion:

- Move to adopt Planning & Zoning Commission Resolution 2021-16, recommending the City Council approve a 3.5' front porch setback variance for the property located at 101 Interlachen Road (PID 20-117-21-33-0001).

Overview

The applicant, Richard & Shannon Rosati, request a 3.5' front (west) yard setback variance to allow expansion of their front existing porch which currently covers only a portion of the front elevation of their 1-unit dwelling located at 101 Interlachen Road. The subject property is zoned R-1-C which requires a twenty (20) foot front yard setback for front porches. In this case, the applicants request this setback variance to allow expansion of their existing front porch along the entire front side of the house consistent with a previous variance granted in 2002. Based on the findings detailed below, staff finds the applicant has demonstrated a practical difficulty with meeting the City zoning standards as required by Minnesota State Statute 462.357, Subdivision 6 and recommends approval of this request.

Primary Issues to Consider

- Background
- Community Comments
- Variance Review
- Engineering Comments
- Alternatives

Supporting Documents

- Site Location Map
- Applicant's Narrative
- Survey Map and Plans
- F.A. Savages Interlachen Park Addition Plat
- Planning & Zoning Commission Resolution 2021-16
- Resolution 2002-48 Approving a 4.5' Font Yard Setback Variance for the Property at 101 Interlachen Road.

_____

Jason Lindahl, AICP
City Planner

Financial Impact: $ N/A Budgeted: ____ Y/N ____ Source: _____
Related Documents (CIP, ERP, etc.): _____
Notes:

BACKGROUND

The subject property was originally platted in 1911 as Lots 1 & 2 and the north half of Lot 3, Block 5 of F.A. Savages Interlachen Park Addition (see attached plat). This plat created a 16-block subdivision with each block having dimensions of 600 feet wide by 264 feet deep. With this design, each block contained 30 lots with dimensions of 40 feet wide by 132 feet deep (with some minor deviations). The two and one-half original lots of the subject property are now considered one parcel with overall dimensions of 100' wide by 132' deep and totaling 13,197 square feet.

According to the applicants' narrative, the existing house was built in 1936 but has been remodeled over the years. The most recent renovation occurred in 2002 which expanded the main level, added an enclosed rear porch and an open front porch along a portion of the front elevation. The 2002 open front porch required a 4.5' variance resulting in a 15.5' front yard setback instead of the required 20 feet. By comparison, the proposed front porch addition will extend 5' from the front of the house require a 3.5' variance resulting in a 16.5' front yard setback. While this design still requires a variance, its configuration results in a design that is 1' closer to compliance with the 20' front porch setback standard.

According to the applicant, they would like to expand the upper level to provide more bedroom and living space. While redesigning the upper level, they discovered roof slope, structural and aesthetic challenges with maintaining the existing front porch as designed. Expanding the front porch along the entire front side of the house will hide an unsightly cantilever tying the front elevations together, making the home appear wider and fit better with the neighborhood and allow for a more functional sized front porch.

COMMUNITY COMMENT

Under state law, this variance application requires a public hearing. Accordingly, the City published notice of this request and public hearing in the Sun Sailor and mailed notice directly to all property owners within 350' of the subject property. That notice directed all interest parties to send questions or comments to City Planner Jason Lindahl by mail, phone or email or to attend the public hearing where they could learn about the request, ask questions and provide feedback. As of the writing of this report, the City had received no comments or questions regarding this request. During the public hearing, staff will provide an update on all public comments received prior to the Planning & Zoning Commission meeting.

VARIANCE REVIEW

City review of variance applications is a Quasi-Judicial action. Generally, if the application meets the review standards, the variance should be approved. The standards for reviewing variances are detailed in Minnesota State Statute 462.357, Subdivision 6. In Summary, variances may be granted when the applicant establishes there are "practical difficulties" in complying with the zoning regulations. A practical difficulty is defined by the five questions listed below. Economic considerations alone do not constitute a practical difficulty. In addition, under the statute the City may choose to add conditions of approval that are directly related to and bear a rough proportionality on the impact created by the variance.

Staff has reviewed the variance request against the standards detailed in Minnesota State Statute 462.357, Subdivision 6 and finds the applicant has demonstrated a practical difficulty. The standards for reviewing a variance application and staff's findings for each are provided below.

1. Is variance in harmony with purposes and intent of the ordinance?

Finding: The applicant seeks a 3.5' front yard setback variance from 20' to 16.5 feet. The purpose and intent of zoning setback standards is to maintain separation between properties for density, safety and esthetic reasons. The development standards in the R-1-C district are detailed in the table below.

Lot & Building Standards for the R-1-C Single Family Medium Density District	
Standard	**Requirement**
Lot Area	12,000 square feet
Lot Width	80 feet
Front Setback (House)	30 foot
Front Setback (Porch)	20'
Side Setback	1-Story = 10', 2-Stories = 12' and 3-Story = 14'
Rear Setback	40 feet
Maximum Principal Building Height	35 feet (maximum)
Maximum Building Coverage	35 percent

Staff finds the proposed 3.5' setback variance is in harmony with the purpose and intent of the ordinance. The purpose and intent of the 20' front porch setback is to encourage 1-unit dwellings to add front porches which are viewed as consistent with the pedestrian friendly and hometown character of Hopkins. Granting this variance request will allow the applicant to expand their existing front porch in such a way as to be closer to compliance with the 20' front porch setback standard while also being less impactful than the 4.5' front porch variance granted by the City in 2002.

2. Is the variance consistent with the comprehensive plan?

Finding: The proposed 3.5' front porch setback variance is consistent with the 2040 Comprehensive Plan – Cultivate Hopkins. The 2040 Comprehensive Plan – Cultivate Hopkins Future Land Use Map guides the subject property as Suburban Neighborhood. This land use category is characterized by low density (1-unit) dwellings and golf courses. Neighborhoods in this category are designed around a modified grid street network with good access to the surrounding transportation network. Properties in this category are relatively large for Hopkins, with most having ample private yards and attached garages. The 2040 plan calls for continuation of the low density single family land use pattern along with accessory uses such as parks and neighborhood scaled public and institutional uses. Granting the requested variance will allow for improvement of the existing 1-unit dwelling consistent with the character of the Suburban Neighborhood future land use category.

3. Does the proposal put property to use in a reasonable manner?

Finding: The proposal would put the subject property to use in a reasonable manner. The proposed 3.5' variance would allow expansion of the existing front porch along the entire front side of the house in such a way as to hide an unsightly cantilever while also allowing for a more functional sized front porch.

4. Are there unique circumstances to the property not created by the landowner?

Finding: There are unique circumstances to the property that were not created by the landowner. In this case, the subject property consists of 2 and a half of the original 40' wide lots in the F.A. Savages Interlachen Park Addition plat. This results in a property that is 100' wide while the majority of the lots in the neighborhood are 80' wide. The additional 20' in width allows for the visual impact of the reduced front porch setback granted by the variance to be more evenly distributed across a wider distance and lessen its impact on the surrounding neighborhood.

5. Will the variance, if granted, alter the essential character of the locality?

Finding: Granting the requested variance will not alter the essential character of the surrounding neighborhood. Granting the requested variance will allow expansion of the existing front porch resulting in a front elevation appearance that is more compatible with the neighborhood and overall pedestrian friendly and hometown character of the community.

ENGINEERING COMMENTS

The Engineering Department has review this application and find it avoids public utilities and remains outside of the public right-of-way for Interlachen Road.

ALTERNATIVES

1. **Recommend approval of a 3.5' front porch setback variance**. By recommending approval of the application, the City Council will consider a recommendation of approval.

2. **Recommend denial of a 3.5' front porch setback variance**. By recommending denial of the variance application, the City Council will consider a recommendation of denial. Should the Planning & Zoning Commission consider this option, it must also identify specific findings that support this alternative.

3. **Continue for further information**. This item should be continued if the Planning & Zoning Commission finds that further information is needed.

Site Location Map for 101 Interlachen Road



City Planners Office

June 22, 2021

The home at 101 Interlachen Road was built in 1939. It appears to have had a few remodel projects since then. The most recent remodel was in 2001 in which they remodeled and expanded the main level, added the enclosed porch to the rear of the home, and added the front porch in the front corner of the home.

Unfortunately, the front porch they built has a roof pitch that is less than 4/12 which is not a steep enough pitch to put shingles on. Also, the beams that they used are deeper than they should have been and partially obstruct the front windows.

The Rosati's purchased the home in 2020 and have enjoyed the home but have been pinched for bedroom and living space on the second level.

They are hoping to expand the upper level according to the drawings that we have completed to fix the problem of too little bedroom and living space.

While designing the upper-level space and trying to design the home so it looks like it was originally built that way, we discovered the issues with the porch.

At that point we incorporated an extension of the existing porch across the front of the home to the front right corner of the home. This accomplishes at least two things: It hides the unsightly front cantilever and ties the whole home together to make it look longer and more graceful. It also creates a better front entry and allows for more seating on the front porch which currently is just a walkway to the two front doors.

The existing front porch foundation projects 6' out from the front of the home and the porch extension foundation we are considering projects only 5' from the front of the home. The porch extension is 24' 6" in length.

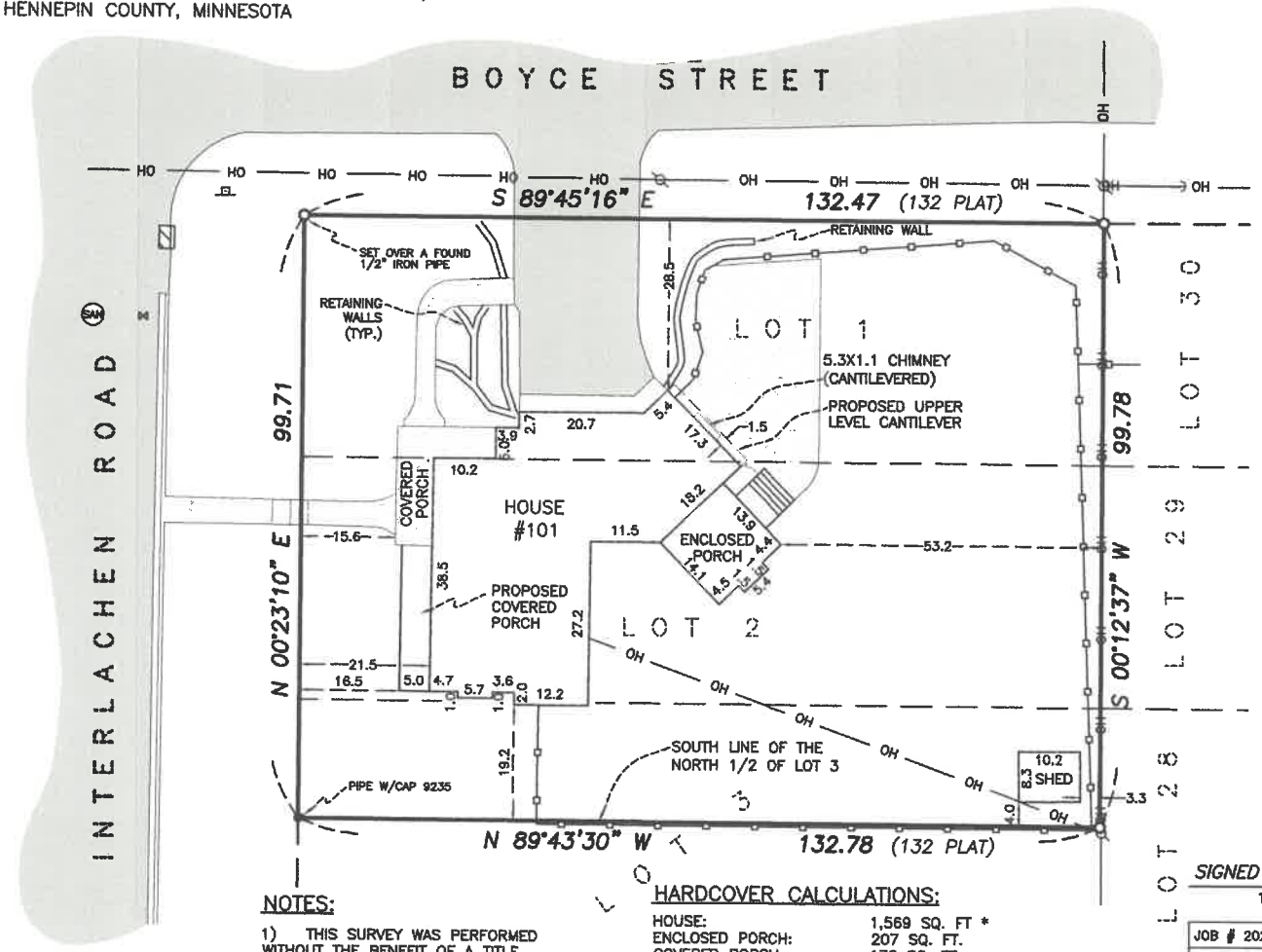
Applicant,

Shannon & Richard Rosati

CERTIFICATE OF SURVEY

LEGAL DESCRIPTION:

LOTS 1 AND 2 AND THE NORTH 1/2 OF LOT 3,
BLOCK 5, F.A. SAVAGE'S INTERLACHEN PARK,
HENNEPIN COUNTY, MINNESOTA



Scale, In Feet
0 20

LEGEND:

- FOUND IRON PIPE (AS NOTED)
- SET 1/2" REBAR W/CAP #44109
- POWER POLE (WITH GUY ANCHOR)
- GATE VALVE
- SIGN
- CATCH BASIN
- SANITARY SEWER MANHOLE
- OVERHEAD UTILITY LINE
- SANITARY SEWER LINE
- WOOD FENCE
- CONCRETE SURFACE
- BITUMINOUS SURFACE

PREPARED FOR:

RICHARD L ROSATI
SHANNON L ROSATI
101 INTERLACHEN RD
HOPKINS MN 55343

NOTES:

1) THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE INSURANCE COMMITMENT.
2) P.I.D.:20-117-21-33-0001
3) PARCEL AREA: 13,228 SQ. FT.
4) BEARING BASIS IS ASSUMED.
5) DATE OF FIELDWORK: 6-22-2021

HARDCOVER CALCULATIONS:

HOUSE:	1,569 SQ. FT *
ENCLOSED PORCH:	207 SQ. FT.
COVERED PORCH:	170 SQ. FT
SHED:	84 SQ. FT.
CONCRETE PATIO:	693 SQ. FT
BITUMINOUS DRIVEWAY:	604 SQ. FT
CONCRETE GARAGE APRON:	73 SQ. FT
CONCRETE WALKWAYS:	205 SQ. FT.
TOTAL EXISTING:	3,605 SQ. FT. OR 27.2%
*DOES NOT INCLUDE CANTILEVERED PORTIONS	
PROPOSED COVERED PORCH:	121 SQ. FT.
TOTAL PROPOSED:	3,726 SQ. FT. OR 28.2%

CERTIFICATION :

I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the state of Minnesota.

SIGNED : TRAVIS W VAN NESTE

Travis W. Van Neste, Minnesota Professional Surveyor #44109
Michigan Professional Surveyor #45695

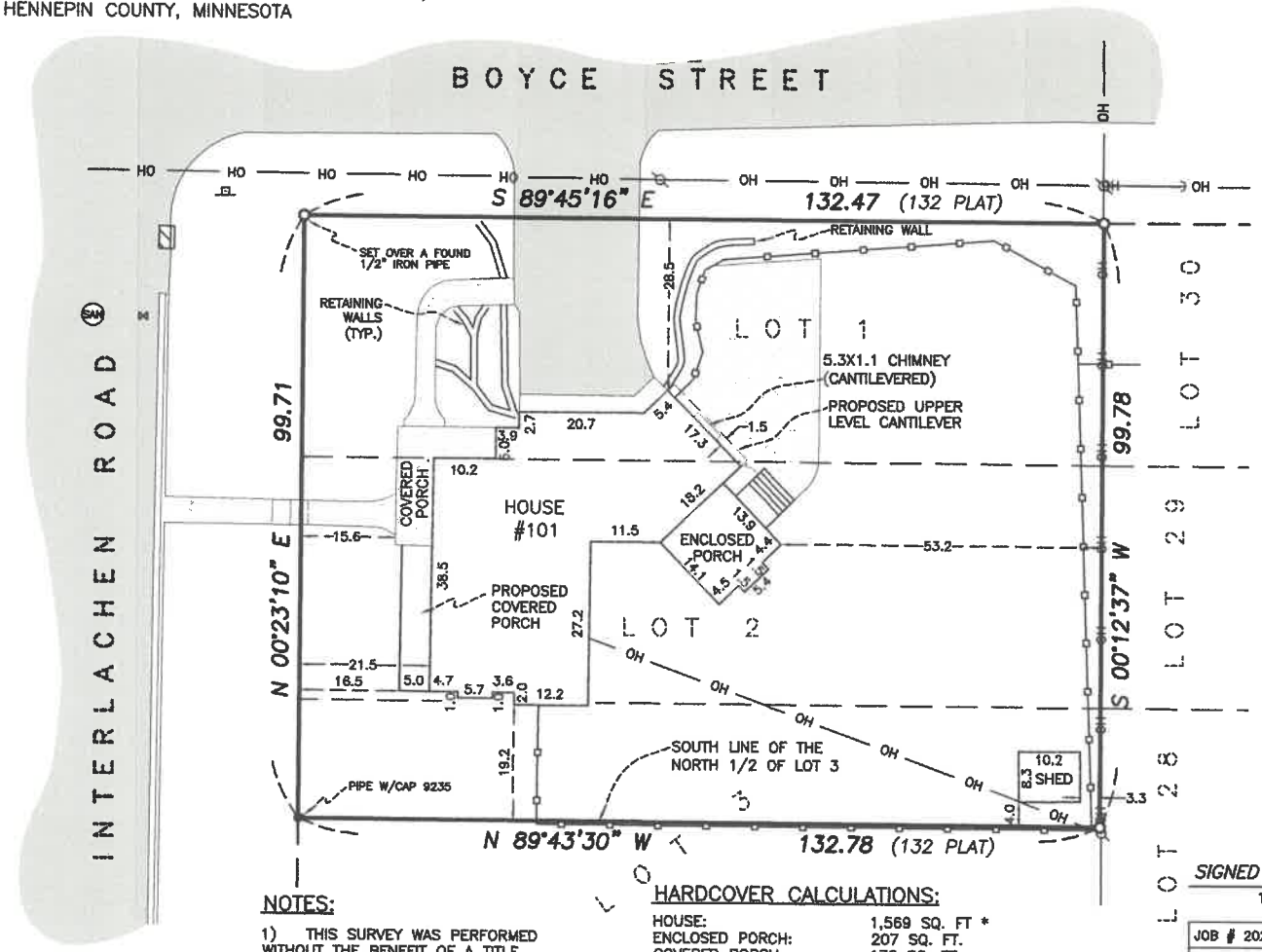
JOB # 2021038	ISSUED: 6-24-2021	
DRAWN BY: TWVN	REV:	
SCALE: 1"=20 FEET		

VAN NESTE SURVEYING
PROFESSIONAL SURVEYING SERVICES
4612 HAMPSHIRE AVE. NORTH, MINNEAPOLIS MN 55428
(952) 686-3055 VANNESTESURVEYING.COM

CERTIFICATE OF SURVEY

LEGAL DESCRIPTION:

LOTS 1 AND 2 AND THE NORTH 1/2 OF LOT 3,
BLOCK 5, F.A. SAVAGE'S INTERLACHEN PARK,
HENNEPIN COUNTY, MINNESOTA



Scale, In Feet
0 20

LEGEND:

- FOUND IRON PIPE (AS NOTED)
- SET 1/2" REBAR W/CAP #44109
- POWER POLE (WITH GUY ANCHOR)
- GATE VALVE
- SIGN
- CATCH BASIN
- SANITARY SEWER MANHOLE
- OVERHEAD UTILITY LINE
- SANITARY SEWER LINE
- WOOD FENCE
- CONCRETE SURFACE
- BITUMINOUS SURFACE

PREPARED FOR:

RICHARD L ROSATI
SHANNON L ROSATI
101 INTERLACHEN RD
HOPKINS MN 55343

NOTES:

1) THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE INSURANCE COMMITMENT.
2) P.I.D.:20-117-21-33-0001
3) PARCEL AREA: 13,228 SQ. FT.
4) BEARING BASIS IS ASSUMED.
5) DATE OF FIELDWORK: 6-22-2021

HARDCOVER CALCULATIONS:

HOUSE:	1,569 SQ. FT *
ENCLOSED PORCH:	207 SQ. FT.
COVERED PORCH:	170 SQ. FT
SHED:	84 SQ. FT.
CONCRETE PATIO:	693 SQ. FT
BITUMINOUS DRIVEWAY:	604 SQ. FT
CONCRETE GARAGE APRON:	73 SQ. FT
CONCRETE WALKWAYS:	205 SQ. FT.
TOTAL EXISTING:	3,605 SQ. FT. OR 27.2%
*DOES NOT INCLUDE CANTILEVERED PORTIONS	
PROPOSED COVERED PORCH:	121 SQ. FT.
TOTAL PROPOSED:	3,726 SQ. FT. OR 28.2%

CERTIFICATION :

I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the state of Minnesota.

SIGNED : TRAVIS W VAN NESTE

Travis W. Van Neste, Minnesota Professional Surveyor #44109
Michigan Professional Surveyor #45695

JOB # 2021038	ISSUED: 6-24-2021	
DRAWN BY: TWVN	REV:	
SCALE: 1"=20 FEET		

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ROSATI RESIDENCE:

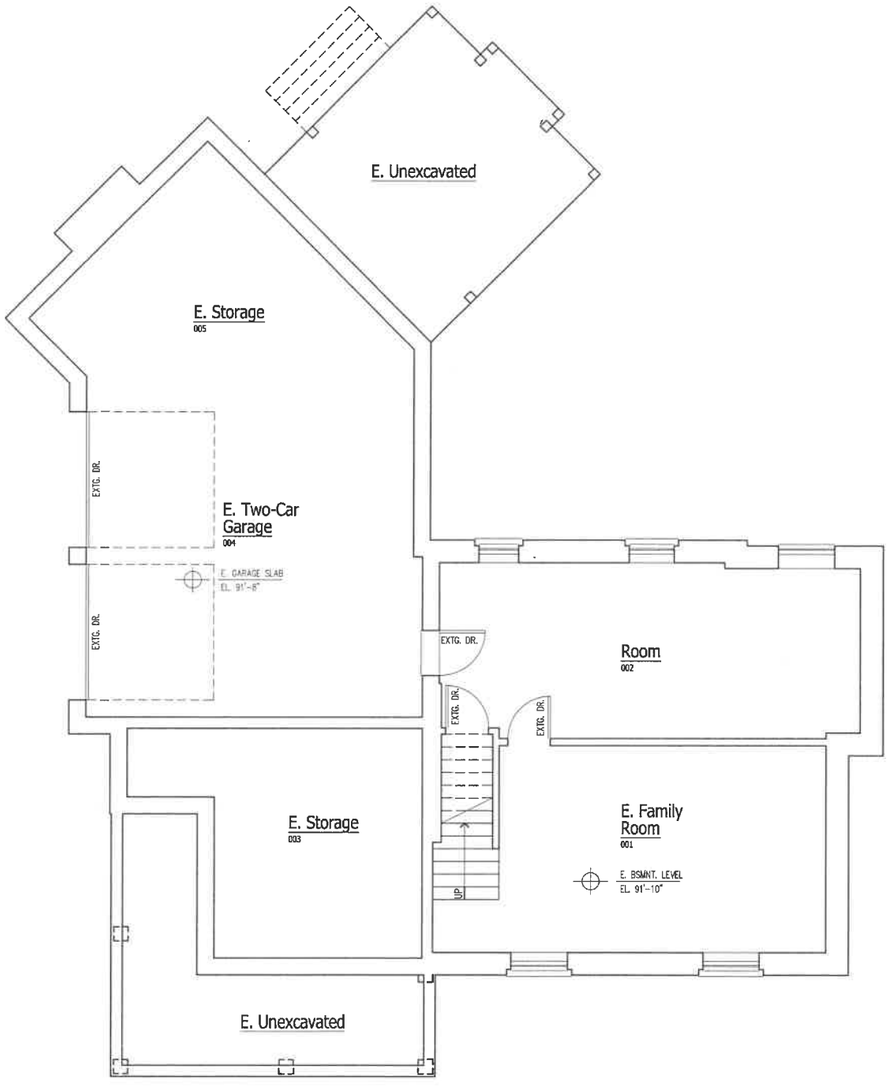
CUSTOM HOME ADDITION/ REMODEL

R.L & S.L. ROSATI
101 INTERLACHEN ROAD
HOPKINS, MN 55343

PRELIMINARY PRICING/ PROGRESS
CONSTRUCTION DOCUMENTS
06 - 16 - 2021

Drawing Index

A1.0. Title Sheet/ Existing Basement Plan
A1.1. Basement/ Foundation Plan
A2.0. Existing First Floor Plan
A2.1. First Floor Plan
A3.0. Existing Second Floor Plan
A3.1. Second Floor Plan
A4.1. Roof Plan
A5.1. Exterior Elevations
A5.2. Exterior Elevations



1 Basement Plan: Existing
1/4" = 1' - 0"

North

RECEIVED
JUN 25 2021
BY:

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CELL 651.245.8401
ECKARDTMIKE360@GMAIL.COM
1039 NEBRASKA AVENUE WEST
ST. PAUL, MINNESOTA 55117
DESIGNED BY:
Michael J. Eckardt, Architect
2021

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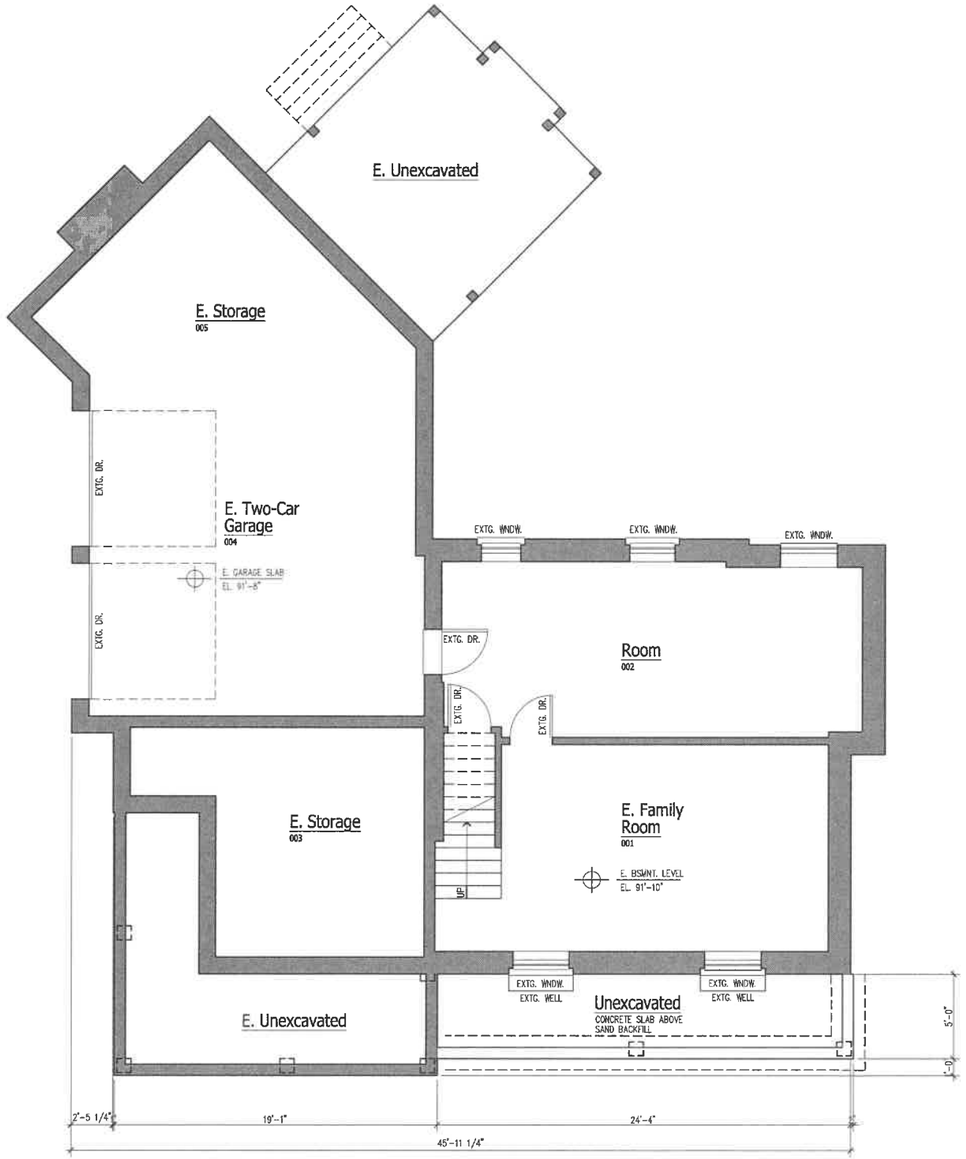
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GARY ST. JOHN/ BUILDER
7 MEARS AVENUE
MENDOTA HEIGHTS, MINNESOTA 55118

ROSATI RESIDENCE
CUSTOM HOME REMODEL
SHANON & RICHARD ROSATI
101 INTERLACHEN ROAD
HOPKINS, MN 55343

PRELIMINARY/ PROGRESS CONSTRUCTION SET:
06 - 15 - 2021

Sheet:
A1.0



1 Basement/ Foundation Plan: Proposed

1/4" = 1' - 0"

North

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ROSATI RESIDENCE

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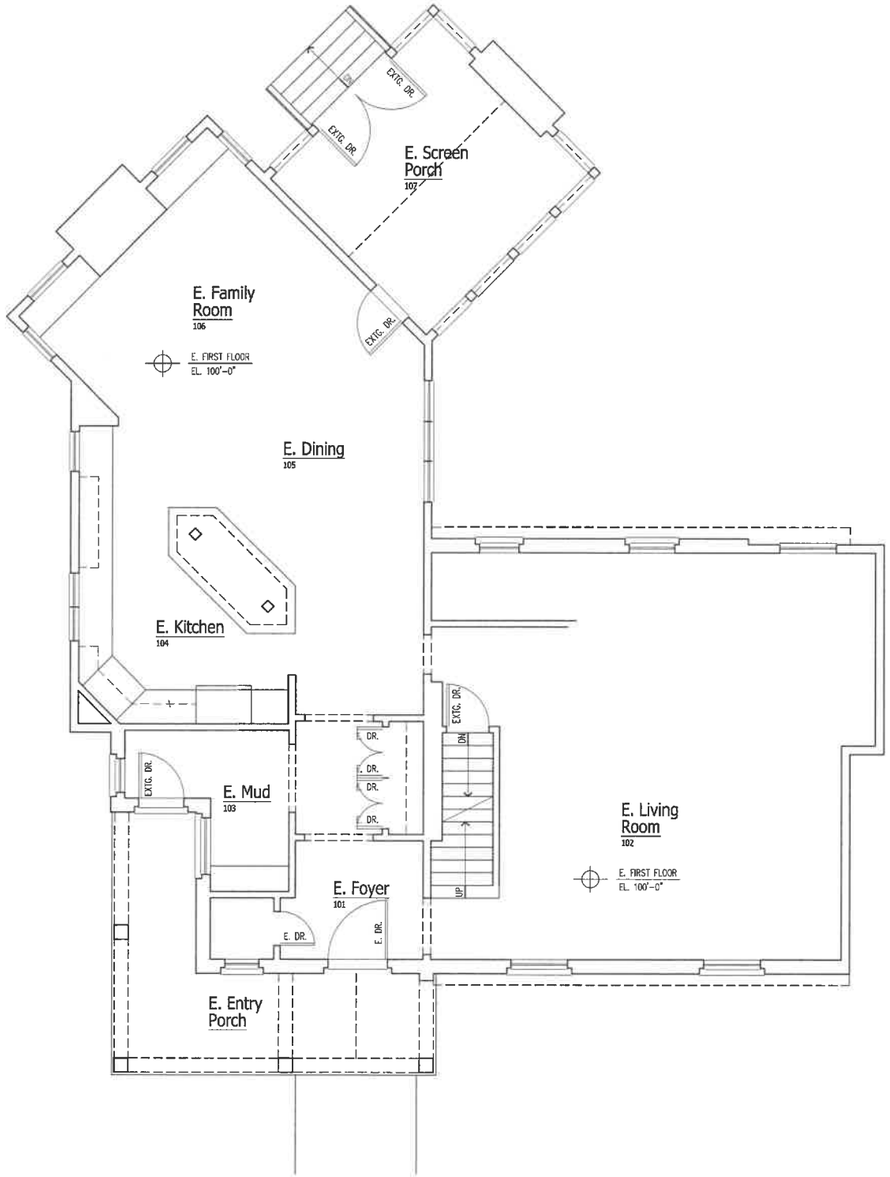
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Sheet:
A1.1

STRUCTURAL NOTES:
ALL BEAMS TO BE WITHIN THE FLOOR STRUCTURE DEPTH UNLESS NOTED AS "DROPPED" OR "HEADER". LUMBER SUPPLIER TO VERIFY ALL FRAMING MEMBERS, TRUSSES, BEAMS & HEADERS. PROVIDE ARCHITECTS FINAL REVIEW.

GENERAL NOTES:
PROVIDE FALL PROTECTION (FP) AND TEMPERED SAFTEY GLASS (TEMP) @ WINDOWS, AS REQUIRED BY CODE. WINDOW/ LUMBER SUPPLIER TO VERIFY & IDENTIFY WINDOW SHOPS.
ELECTRICAL CONTRACTOR TO VERIFY CARBON MONOXIDE/ SMOKE (CO. SMOKE) ALARM LOCATIONS, AS REQUIRED BY CODE.



1 First Floor Plan: Existing

1/4" = 1' - 0"

North

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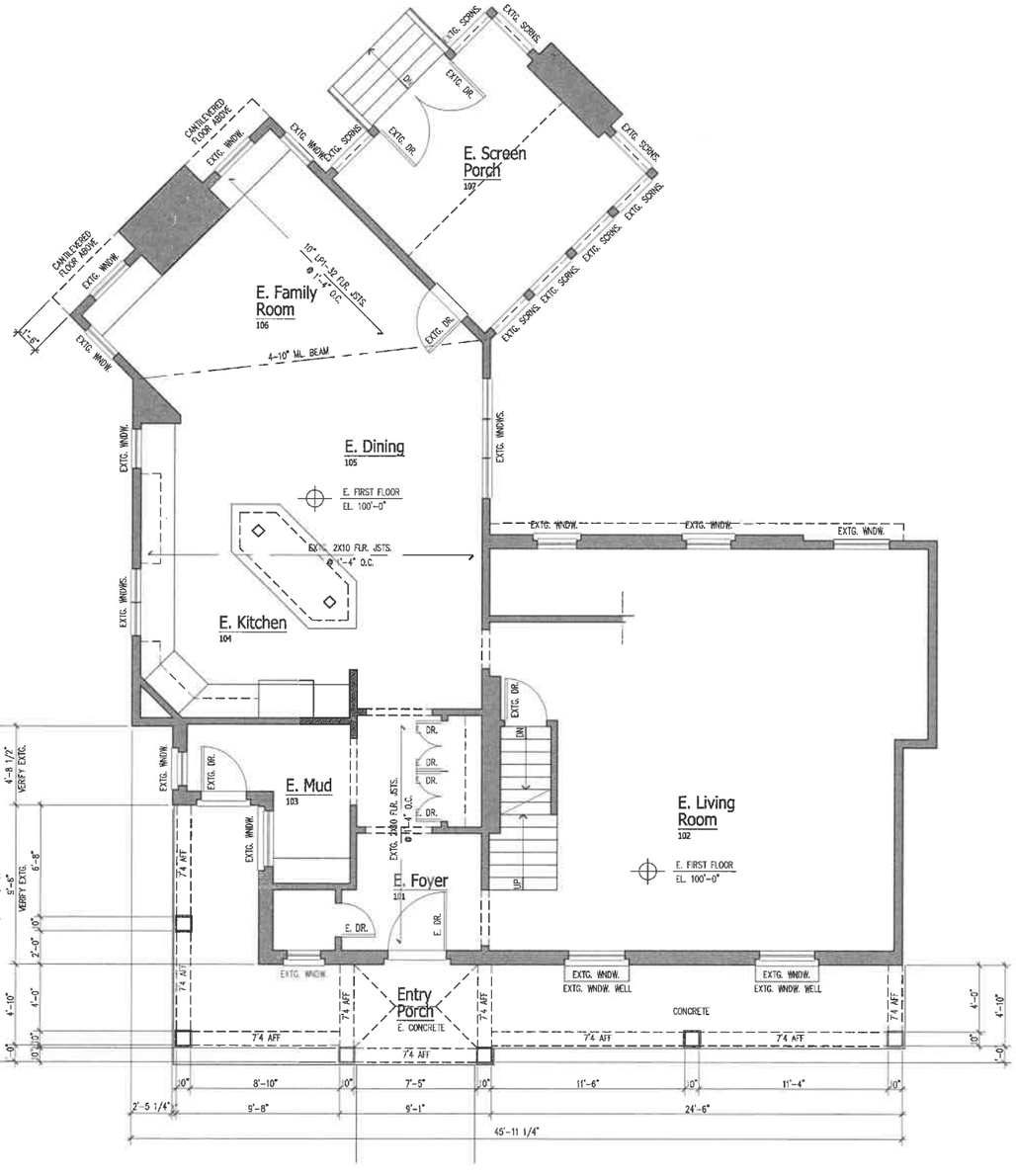
ROSATI RESIDENCE

CUSTOM HOME REMODEL

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101 INTERLACHEN ROAD
HOPKINS, MN 55343

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A2.0



1 First Floor Plan: Proposed

1/4" = 1' - 0"

North

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ROSATI RESIDENCE
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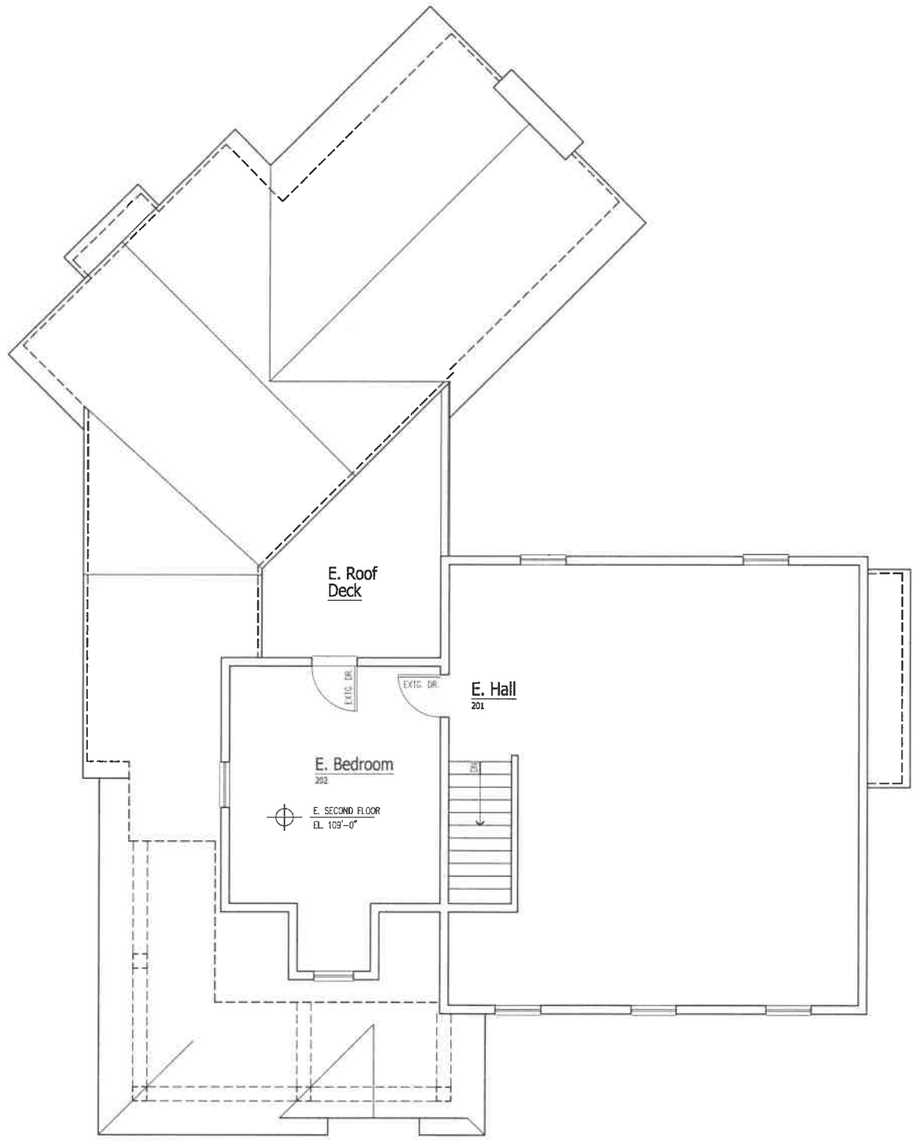
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101 INTERLACHEN ROAD
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PRELIMINARY/ PROGRESS CONSTRUCTION SET:
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ELECTRICAL CONTRACTOR TO VERIFY CARBON MONOXIDE/ SMOKE (CO. SMOKE) ALARM LOCATIONS, AS REQUIRED BY CODE.

Sheet:
A2.1



1 Second Floor Plan: Existing

1/4" = 1' - 0"

North

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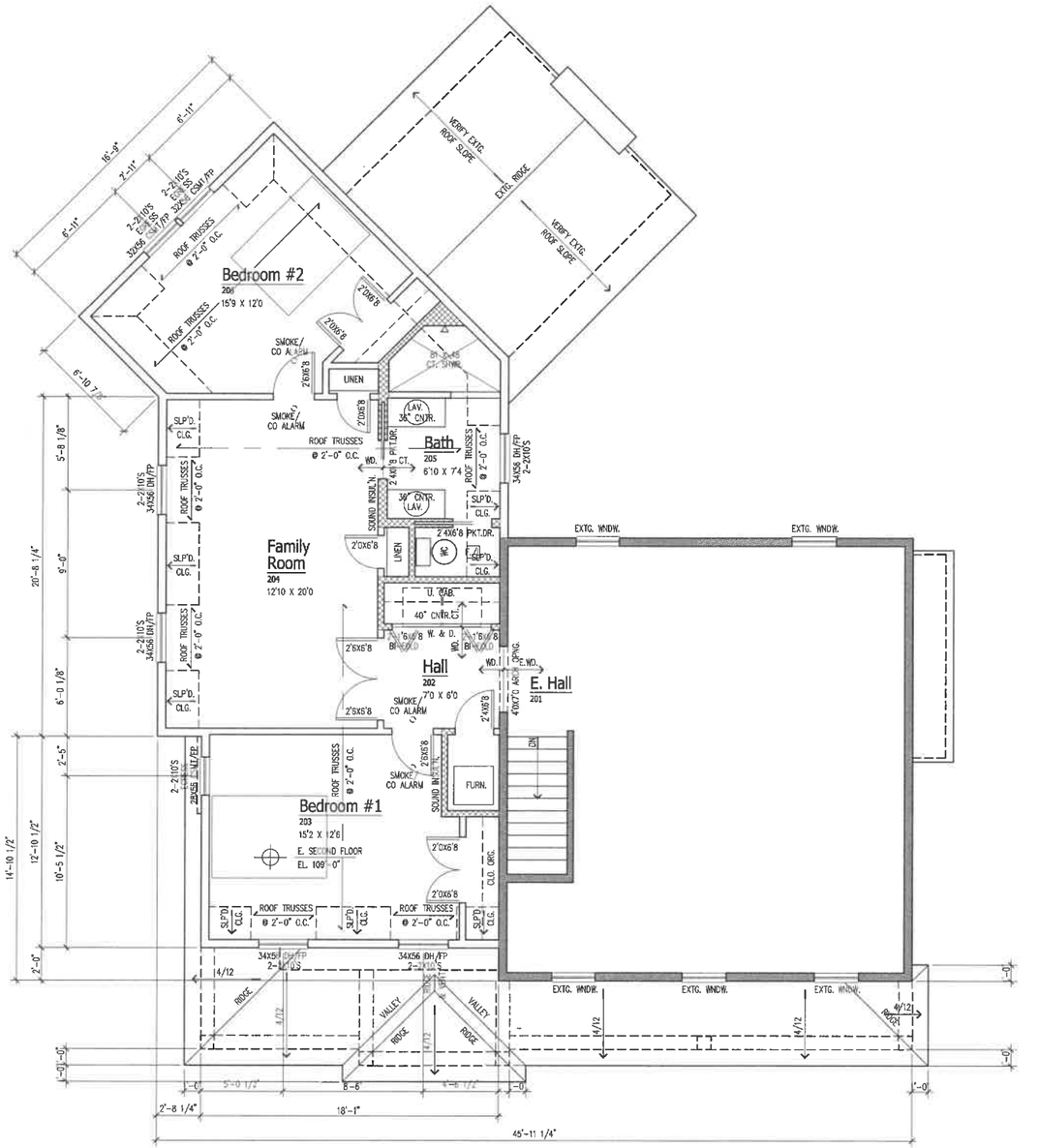
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ROSATI RESIDENCE
CUSTOM HOME REMODEL

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HOPKINS, MN 55343

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Sheet:
A3.0



1 Second Floor Plan: Proposed

1/4" = 1' - 0"

North

STRUCTURAL NOTES:
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2021

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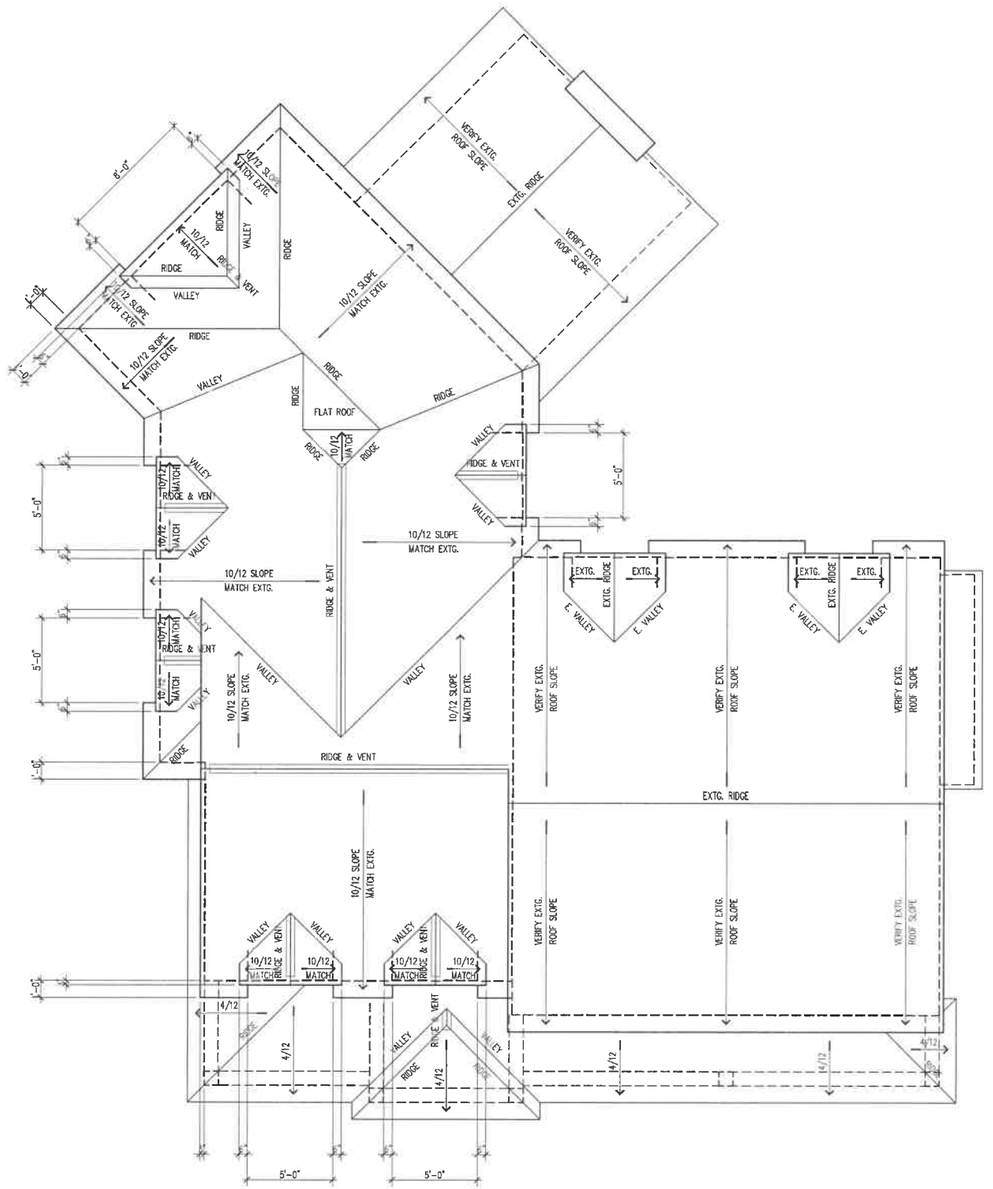
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CUSTOM HOME REMODEL

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Sheet:
A3.1



1 Roof Plan: Proposed

1/4" = 1' - 0"

North

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SHANON & RICHARD ROSATI
101 INTERLACHEN ROAD
HOPKINS, MN 55343

PRELIMINARY/ PROGRESS CONSTRUCTION SET:
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Sheet:
A4.1



1 **West Elevation**

1/4" = 1' - 0"



2 **North Elevation**

1/4" = 1' - 0"

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ECKARDTMIKE360@GMAIL.COM

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HOPKINS, MN 55343

PRELIMINARY/ PROGRESS CONSTRUCTION SET:
06 - 15 - 2021

Sheet:
A5.1



1 East Elevation

1/4" = 1' - 0"



2 South Elevation

1/4" = 1' - 0"

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ROSATI RESIDENCE

CUSTOM HOME REMODEL

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HOPKINS, MN 55343

PRELIMINARY/ PROGRESS CONSTRUCTION SET:
06 - 15 - 2021

Sheet:
A5.2

5909 5909

1-17

Original.

Registered Dec 1st Page 1 Nov 5 1911

Registrar Titles

OFFICE OF REGISTER OF DEEDS,
HENNEPIN COUNTY, MINNESOTA.

I Hereby Certify, That the within Plat of F. A. Savage's Interlachen Park was filed in the office for record this 1st day of July A. D. 1911, at 10 o'clock A.M., and was duly Recorded in Book ..... of Plats, Page .....

August W. Ahrens
Registrar of Titles

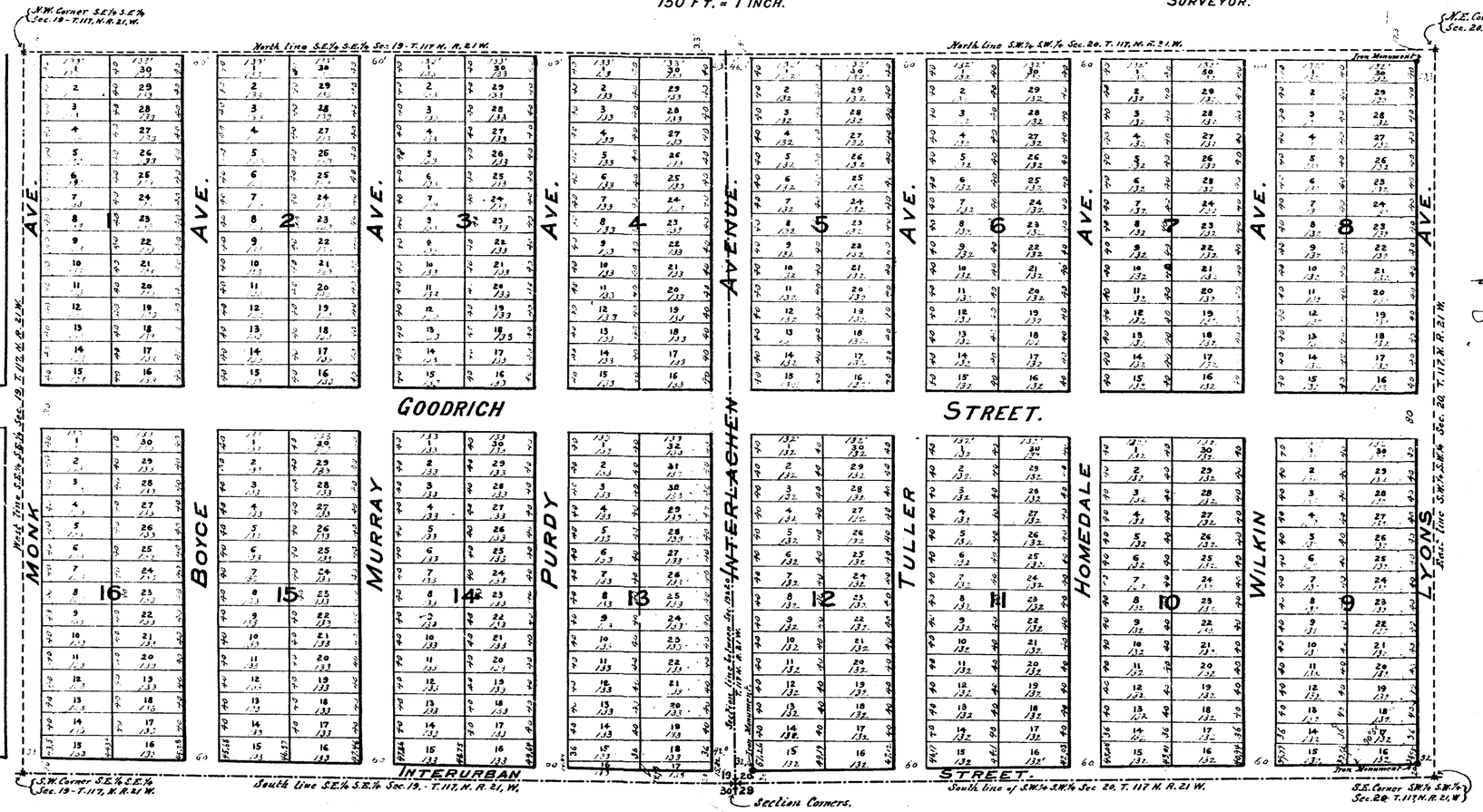
By D. G. Graham Deputy.

F. A. SAVAGE'S INTERLACHEN PARK.

SCALE: 150 FT. = 1 INCH.

HENNEPIN CO. MINN.

C. O. BURLESON, SURVEYOR.


N.W. Corner S.E¼ S.E¼ Sec. 19 - T. 117, N. R. 21 W.
North Line S.E¼ S.E¼ Sec. 19 - T. 117 N. R. 21 W.
N.E. Corner S.W¼ S.W¼ Sec. 20. T. 117 N. R. 21 W.
North Line S.W¼ S.W¼ Sec. 20. T. 117 N. R. 21 W.
Iron Monument
Iron Monument
Iron Monument

CITY OF HOPKINS
HENNEPIN COUNTY, MINNESOTA

PLANNING & ZONING COMMISSION RESOLUTION 2021-16

RESOLUTION RECOMMENDING THE CITY COUNCIL APPROVE A 3.5' FRONT PORCH SETBACK VARIANCE FOR THE PROPERTY LOCATED AT 101 INTERLACHEN ROAD (PID 20-117-21-33-0001).

WHEREAS, the City of Hopkins (the "City") is a municipal corporation, organized and existing under the laws of the State of Minnesota; and

WHEREAS, Richard & Shannon Rosati (the "Applicants") are the fee owner of 101 Interlachen Road legally described below:

Lots 1 And 2 And The N 1/2 Of Lot 3, Block 5 of F.A. Savages Interlachen Park Addition, Hennepin County, Minnesota.

(the "Property"); and

WHEREAS, the Property is zoned R-1-C, R-1-C) Single Family Medium Density; and

WHEREAS, the City has adopted a zoning ordinance and other official controls for reasons that include, but are not limited to, protecting the character of properties and areas within the community, promoting the proper use of land and structures, fixing reasonable standards to which buildings, structures and land must conform for the benefit of all, and prohibiting the use of buildings, structures and lands in a manner which is incompatible with the intended use or development of lands within the specified zones; and

WHEREAS, Article V, Section 102-160(4), of the City Code allows front porches to be constructed in the front yard setback with a minimum setback of 20 feet in all R-1 Districts; and

WHEREAS, pursuant to the aforementioned code provisions, the Applicants have made a request to the City for a front porch variance from twenty (20) feet to sixteen and one-half feet in order expand their existing front porch attached to their existing detached 1-unit dwelling; and

WHEREAS, pursuant to Minnesota Statutes, section 462.357, subd. 6(2), "[v]ariances shall only be permitted when they are in harmony with the general purposes and intent of the ordinance and when the variances are consistent with the comprehensive plan. Variances may be granted when the applicant for the variance establishes that there are practical difficulties in complying with the zoning ordinance. "Practical difficulties," as used in connection with the granting of a variance, means that the property owner proposes to use the property in a reasonable manner not permitted by the zoning ordinance; the plight of the landowner is due to circumstances unique to the property not created by the landowner; and the variance, if granted, will not alter the essential character of the locality. Economic considerations alone do not constitute practical difficulties."; and

WHEREAS, on July 27, 2021, pursuant to the procedural requirements contained in Article III, Section 102-91 of the City Code, the Hopkins Planning and Zoning Commission (the "Commission")

held a public hearing on the Applicant's requested variances and all persons present were given an opportunity to be heard. The Commission also took into consideration the written comments and analysis of City staff; and

WHEREAS, based on a review of the Applicant's request and their submissions, the written staff report, and after careful consideration of all other written and oral comments concerning the requested variances, the Commission makes the following findings of fact with respect to the aforementioned criteria provided in Minnesota Statutes, section 462.357, subd. 6(2):

1. Is variance in harmony with purposes and intent of the ordinance?

   Finding: Staff finds the proposed 3.5' setback variance is harmony with the purpose and intend of the ordinance. The purpose and intent of the 20' front porch setback is to encourage 1-unit dwellings to add front porches which are viewed as consistent with the pedestrian friendly and hometown character of Hopkins. Granting this variance request will allow the applicant to expand their existing front porch in such a way as to be closer to compliance with the 20' front porch setback standard while also being less impactful than the 4.5' front porch variance granted by the City in 2002.

2. Is the variance consistent with the comprehensive plan?

   Finding: The proposed 3.5' front porch setback variance is consistent with the 2040 Comprehensive Plan – Cultivate Hopkins. The 2040 Comprehensive Plan – Cultivate Hopkins Future Land Use Map guides the subject property as Suburban Neighborhood. This land use category is characterized by low density (1-unit) dwellings and golf courses. Neighborhoods in this category are designed around a modified grid street network with good access to the surrounding transportation network. Properties in this category are relatively large for Hopkins, with most having ample private yards and attached garages. The 2040 plan calls for continuation of the low density single family land use pattern along with accessory uses such as parks and neighborhood scaled public and institutional uses. Granting the requested variance will allow for improvement of the existing 1-unit dwelling consistent with the character of the Suburban Neighborhood future land use category.

3. Does the proposal put property to use in a reasonable manner?

   Finding: The proposal would put the subject property to use in a reasonable manner. The proposed 3.5' variance would allow expansion of the existing front porch along the entire front side of the house in such a way as to hide an unsightly cantilever while also allowing for a more functional sized front porch.

4. Are there unique circumstances to the property not created by the landowner?

   Finding: There are unique circumstances to the property that were not created by the landowner. In this case, the subject property consists of 2 and a half of the original 40' wide lots in the F.A. Savages Interlachen Park Addition plat. This results in a property that is 100' wide while the majority of the lots in the neighborhood are 80' wide. The additional 20' in width allows for the visual impact of the reduced front porch setback granted by the variance to be more evenly distributed across a wider distance and lessen its impact on the surrounding neighborhood.

5. Will the variance, if granted, alter the essential character of the locality?

Finding: Granting the requested variance will not alter the essential character of the surrounding neighborhood. Granting the requested variance will allow expansion of the existing front porch resulting in a front elevation appearance that is more compatible with the neighborhood and overall pedestrian friendly and hometown character of the community.

NOW, THEREFORE, BE IT RESOLVED by the Planning and Zoning Commission of the City of Hopkins that the recitals set forth in this Resolution are incorporated into and made part of this Resolution, and more specifically, constitute the express findings of the Commission.

NOW, THEREFORE, BE IT FURTHER RESOLVED by the Planning and Zoning Commission of the City of Hopkins that based on the findings of fact contained herein, the Commission hereby recommends that the City Council of the City of Hopkins approve the Applicant's requested variance.

Adopted this 27th day of July, 2021.

_____

Samuel Stiele, Chair

CITY OF HOPKINS
Hennepin County, Minnesota

RESOLUTION NO: 02-48

RESOLUTION MAKING FINDINGS OF FACT AND
APPROVING A FOUR AND ONE-HALF FOOT FRONT YARD VARIANCE

WHEREAS, an application for Variance VN01-4 has been made by Jerome and Kimberly Fons;

WHEREAS, the procedural history of the application is as follows:

1. That an application for a variance was made by Jerome and Kimberly Fons on October 1, 2001;

2. That the Hopkins Zoning and Planning Commission, pursuant to mailed notice, held a meeting on the application and reviewed such application on October 30, 2001 and May 28, 2002: all persons present were given an opportunity to be heard;

3. That the written comments and analysis of City staff were considered; and

4. The legal description of the property is as follows:

   Lots 1 and 2 and the north ½ of Lot 3, Block 5 F.A. Savage's Interlachen Park.

NOW, THEREFORE, BE IT RESOLVED that the application for Variance VN01-4 is hereby approved based on the following Findings of Fact:

1. That a permissible extension of structural open-air eaves over the minimum front yard setback is not an intrusion upon the front yard setback and a denial of such intrusion constitutes a hardship under the ordinance.

Adopted this 4th day of June 2002.

Eugene J. Maxwell

Eugene J. Maxwell, Mayor

ATTEST:

Terry Obermaier

Terry Obermaier, City Clerk

STATE OF MINNESOTA
COUNTY OF HENNEPIN } SS.
CITY OF HOPKINS

I, THE UNDERSIGNED Terry Obermaier CLERK OF THE CITY OF HOPKINS, HENNEPIN COUNTY, MINNESOTA, AND CUSTODIAN OF THE SEAL AND RECORDS OF SAID CITY, DO HEREBY CERTIFY THAT THE ABOVE OR FOREGOING IS A TRUE AND CORRECT TRANSCRIPT AND COPY OF THE WHOLE ORIGINAL RECORD THEREOF PRESERVED AND ON FILE IN THE OFFICE OF SAID CITY CLERK.

Terry Obermaier

CITY CLERK OF THE CITY OF HOPKINS

July 27, 2021 Application 2021-12

Site Plan and Conditional Use Permit Applications for
Take 5 Oil Change at 819 Cambridge Street

Proposed Action: Staff recommends the Planning & Zoning Commission approve the following motions:

- Move to adopt Planning & Zoning Commission Resolution 2021-17, recommending the City Council approve the site plan for the property at 819 Cambridge Street, subject to the conditions.
- Move to adopt Planning & Zoning Commission Resolution 2021-18, recommending the City Council approve a conditional use permit allowing a Service Station for the property located at 819 Cambridge, subject to the conditions.

Overview

The applicant, Jeffery Orosz on Behalf of Pocket Change, LLC, requests site plan and conditional use permit (CUP) approvals to redevelop the property at 819 Cambridge Street. The subject property is currently vacant but was most recently a Taco Bell fast food restaurant with a drive-thru. The building and site were cleared in 2015 after a new Taco Bell was built on the property directly to the east (919 Cambridge Street). The applicant plans to redevelop the site into a 3-bay 1,600 square foot Take 5 quick-service oil change business. As such, this application will require both site plan review and a conditional use permit (CUP) for a service station. A detailed review of each application is provided in this report. Based on the findings detailed below, staff recommends approval of these requests.

Primary Issues to Consider

- Background
- Site Plan
- Conditional Use Permit
- Engineering Review
- Alternatives

Supporting Documents

- Site Location Map
- Applicant's Narrative
- Plans and Building Elevations
- Planning & Zoning Commission Resolution 2021-17 Site Plan
- Planning & Zoning Commission Resolution 2021-18 CUP

Financial Impact: $ N/A Budgeted: _____ Y/N ____ Source: _____
Related Documents (CIP, ERP, etc.): _____
Notes:

BACKGROUND

The subject property was originally platted in 1968 as Tracts A and C, Registered Land Survey No. 1250. According to City records, the site has been various restaurants since that time. Most recently it was a Taco Bell fast food restaurant with a drive-thru. That original Taco Bell was demolished in 2015 after a new Taco Bell was built on the property directly to the east (919 Cambridge Street).

In 2020, the City vacated a sanitary sewer easement at the request of the property owner. Prior to vacation of the easement, a small lift station and force main were necessary to provide sanitary sewer service to the site. As part of the reconstruction of Cambridge Street in 2019, gravity sanitary sewer service was provided to 819 Cambridge Street, and the lift station and force main within the easement were rendered obsolete.

The applicant's narrative detailing their development proposal is attached for your reference. Their narrative notes "Take 5 is a more sustainable oil change facility than other similar businesses. Unlike most gas and oil service stations, Take 5 does not make use of pressurized systems, basements, or underground oil storage tanks, thereby eliminating the risk of major spills and impacts to the surrounding. 100% of Take 5's used oil and filters are reclaimed and recycled by OSHA certified used oil recycling companies."

Neighborhood Meeting. The City's public engagement process for this development goes above and beyond the typical statutory requirements for a public hearing and review by the Planning & Zoning Commission and approval by the City Council. It also requires the applicant to host a neighborhood meeting before the public hearing to explain the project, answer questions and take any comments. This meeting took place on July 19, 2021 at 1002 – 2nd Street Northeast (43 Hoops). The comments from this meeting were not available prior to finalizing this report and the agenda packet. As a result, the applicant will brief the Planning & Zoning Commission on the results of the neighborhood meeting during the public hearing.

Legal Authority. This proposal includes two land use applications. Both site plan review and conditional use permit applications are considered quasi-judicial actions. For this type of application, the City is acting as a judge to determine if the regulations within the Comprehensive Plan, Zoning Ordinance and Subdivision Ordinance are being followed. Generally, if the applications meet these requirements they should be approved.

SITE PLAN REVIEW

Standards for reviewing site plan applications are detailed in Article IV of the City Code. This section establishes the site plan review procedure and provides regulations pertaining to the enforcement of site design standards. These procedures are established to promote high quality development that ensures long-term stability of residential neighborhoods and enhance the built and natural environments within the City as new development and redevelopment activities occur. In this case, site plan review is required to review construction of a new building.

Land Use and Zoning Standards. The proposed service station use is consistent with the land use and zoning classification assigned to the subject property. The subject property is currently guided as Activity Center by the 2040 Comprehensive Plan Future Land Use Map. By comparison, the site is zoned B-3, General Business. Service stations are a conditional use in the B-3 District. The conditional use permit standards for services stations are detailed in the

Conditional Use Permit Review section below.

Exterior Building Materials. The exterior building materials for the proposed development do not meet the site plan review requirements. These standards require new developments to have exterior building materials that are compatible in detail, texture and color to adjacent and neighboring structures. These standards would require the building to be predominately brick or stone. Only the accent band at the top of the building may be another material like EIFS or stucco. Staff recommends a condition of approval require these exterior materials change.

Vehicle Parking. As designed, this project exceeds the City's off-street parking requirement. These requirements are detailed in City Code Section 550 (Off-Street Parking). These standards require service stations provide at least four off-street parking spaces per business plus two off-street parking spaces for each service stall. In this case, the 3 service bays require 6 stalls plus the minimum 4 stalls for a total of 10 off-street parking stalls. With the site plan showing 11 parking stalls, the site has 1 more stall than required.

Vehicle Access. The site plan details the parking, driveway and vehicle circulation pattern for the subject property. This plan includes a horse-shoe shaped driveway with access to the 3 service bays, 11 off-street parking stalls, around the proposed building and through the site. The applicant will be required to construct the site as detailed on this plan.

Pedestrian and Bicycle Access. As a quick-service oil change facility, customers are intended to drive to the site and remain in their vehicles while the oil change service is performed. However, employees or others may walk, bike or use transit access the site. As a result, there are no pedestrian or bicycle facilities planned for the site. However, there is new sidewalk along the south side of Cambridge Street that was installed as part of the road reconstruction in 2019 which could indirectly connect the site to transit through the City's sidewalk and trail network.

Landscaping. The applicant's plans meet the City's minimum landscaping requirements. According to the applicant's narrative, the landscape design incorporates overstory trees, coniferous trees, and ornamental trees along with native plantings and grasses. The new building will also have foundation plantings and plantings that extend throughout the site that will help screen both the vehicle stacking area and trash enclosure from Cambridge Street.

According to the applicant integration of a native vegetation restoration area near the Minnehaha Creek site will also improve the scrub-brush and volunteer trees that have grown in this area and will provide an enhanced native setting along the creek. The addition of a large raingarden between the site parking and Highway 7 helps to create both a transition from the project to the highway traffic while also providing a designated area for the handling of onsite stormwater.

Signage. Building signage is approved through a separate administrative permit. The City's sign regulations are detailed in City Code Article XXI. Properties in the B-3 district are allowed up to 3 square feet of sign for every foot of frontage along a public right-of-way, provided no individual sign exceeds 80 square feet. The applicant shall submit a detailed sign plan for separate administrative approval.

Trash Enclosure. The applicant's plans show a trash enclosure in the southeast corner of the

site but provide no other specific material details. Staff recommends a condition of approval require the applicant to submit specific plans for the trash enclosure that demonstrate it will have exterior materials that matches the principal building.

CONDITIONAL USE PERMIT REVIEW

The applicant's plans call for this site to host a quick-serve oil change business. City Code Article VII, Section 102-216(15) allows this type of facility through a conditional use permit as service station. This type of use is subject to both the general conditional use permit standards and those specific to service stations. The general conditional use permit standards are similar to the site plan review standards and were reviewed above and addressed by the applicant in their narrative. The conditional use permit standards specific to service stations and staff's finding for each are detailed below. Based on these findings, staff recommends approval of this request, subject to conditions.

a. The site shall be constructed for drainage according to a plan submitted and approved by the city engineer and fire marshal;

   Finding: In this case, the City Engineer and Fire Marshal have deferred to the Minnehaha Creek Watershed District for review and approval of the grading and draining plan.

b. The entire site not covered with building or landscaping shall be hard surfaced;

   Finding: The site and landscaping plans shows that the entire site will be covered by buildings, landscaping or hard surfaces.

c. The lighting shall be accomplished in such a way as to have no direct source visible from the public right-of-way or adjacent land in the R District;

   Finding: The applicant's submittal did not include a lighting plan. Staff recommends a condition of approval require the applicant to submit and receive approval of an exterior lighting and photometric plan for the entire site prior to issuance of a building permit. These plans shall demonstrate downward directed light fixtures, poles no higher than twenty (20) feet and light levels equal to or less than 1.0 lumens at any non-residential property line or 0.5 lumens at any residential property line.

d. No driveway access is less than 40 feet from a street intersection;

   Finding: There are no street intersections within 40 feet of the proposed driveway access points to the subject property.

e. Any other business operated on the site shall conform to this code;

   Finding: There are no other businesses planned for this site other than the Take 5 quick-service oil change facility.

f. The site shall be constructed for parking and traffic according to a plan submitted and approved;

Finding: The site plan details the parking, driveway and vehicle circulation pattern for the subject property. This plan includes a horse-shoe shaped driveway with access to the 3 service bays, 11 off-street parking stalls, around the proposed building and through the site. The applicant will be required to construct the site as detailed on this plan.

g. Stacking for gas pumps shall be provided for at least one car beyond the pump island in each direction in which access can be gained to the pump. The required stacking shall not interfere with internal circulation patterns or with designated parking areas and shall not be permitted on any public right-of-way, private access easement or within the required parking setback;

Finding: As designed, the site plan demonstrates that the site will have stacking for up to 2 customer vehicles for each of the 3 service bays. This stacking area should not interfere with internal circulation patterns or with designated parking areas and is not located within any public right-of-way, private access easement or within the required parking setback. This design will position vehicles awaiting service with their headlights towards the east and the neighboring commercial buildings and away from the neighboring residential to the west.

h. The front yard shall be landscaped and ten feet in depth, if station is non-conforming a curb shall be constructed to separate the drive from public walk;

Finding: While the landscape plan calls for substantial plantings in front of the building and vehicle stacking area, there is only 9.3' of setback. Staff recommends a condition of approval require the applicant to increase the front setback to meet the required 10' landscaped setback requirement.

i. No vehicles which are unlicensed and inoperable shall be stored on premises except in appropriately designed and screened storage areas;

Finding: No vehicles which are unlicensed and inoperable shall be stored on premises.

j. All repair, assembly, disassembly and maintenance of vehicles shall occur within closed buildings except minor maintenance, including tire inflation, addition of oil and wiper replacement.

Finding: All services provided by this site shall occur within an enclosed building.

ENGINEERING REVIEW

The Engineering Department review the applicant's plans and offers the following comments:

- Watershed approval will be required.

- Right-of-way (ROW) and parking lot permit will be required.
- Water and sewer service stubs have been provided.
- The applicant will be required to receive a SAC determination from Metropolitan Council Environmental Services.

ALTERNATIVES

1. **Recommend approval of the site plan and conditional use permit applications**. By recommending approval of these applications, the City Council will consider a recommendation of approval.

2. **Recommend denial of the site plan and conditional use permit applications**. By recommending denial of these applications, the City Council will consider a recommendation of denial. Should the Planning & Zoning Commission consider this option, it must also identify specific findings that support this alternative.

3. **Continue for further information**. If the Planning Commission indicates that further information is needed, the items should be continued.

Site Location Map for 819 Cambridge Street



819 Cambridge Street
Project Information

1. **Specify the section of the ordinance which applied to this project.**

Section 102-214/216 Service Station Business Districts and Conditional Use Requirements

Through conversations with city staff and review of the city code definitions, we found the most applicable business use to be that of a Service Station:

Any premises where gasoline and other petroleum products are sold and/or light maintenance activities such as engine tune-ups, lubrication, minor repairs, and carburetor cleaning are conducted. Service Stations shall not include premises where heavy automobile maintenance activities such as engine overhauls, automobile painting, and body fender repair are conducted.

Take 5 is a quick lube oil change service, where petroleum products are sold, and motor lubrication maintenance service is performed. Take 5 only performs maintenance and does not do any light or heavy auto repairs.

819 Cambridge Street is a B-3 district, which requires a Conditional Use Permit for a Service Station Use.

2. **Project narrative.**

The existing project site is a vacant lot of a unique shape, making an operable site plan challenging. The lot is also owned by the neighboring business, Taco Bell, which limits the types of businesses that are allowable to non-food operators. We have approached our site plan and building design with these key factors in mind:

Safety: Based on the required time to perform an oil change, the site plan provides for adequate queueing of up to (2) vehicles at each service bay, while still allowing for internal circulation around the site without interfering with the parking, set back, or right of way.

Environment: Most importantly, Take 5 is a more sustainable oil change facility than other similar businesses. Unlike most gas and oil service stations, Take 5 does not make use of pressurized systems, basements, or underground oil storage tanks, thereby eliminating the risk of major spills and impacts to the surrounding. 100% of Take 5's used oil and filters are reclaimed and recycled by OSHA certified used oil recycling companies.

Natural Resource Protection: The landscape design has incorporated overstory trees, coniferous trees, and ornamental trees along with native plantings and grasses to create a cohesive feel to the new site. The integration of a native vegetation restoration area near the Minnehaha Creek site will improve the scrub-brush and volunteer trees that have grown in this area and will provide an enhanced native setting along the creek. The addition of a large raingarden between the site parking and Highway 7 helps to create both a transition from the project to the highway traffic while also providing a designated area for the handling of onsite stormwater. The new building will have foundation plantings to soften the façade and a nice front yard appeal to residents driving past. The project will provide additional trees and understory shrub and grass planting above city code requirements to help improve the site and blend with the natural surroundings.

Attractive building materials: Take 5 prides itself on providing an attractive and clean building that is inviting for anyone. We are also taking steps to further increase the attractiveness of the Take 5 prototype building by increasing the use of brick and alternating materials and colors to provide an enhanced façade. The tower element provides further roofline articulation and building identity.

Operations: This Take 5 business will create as many as (10-15) new full-time jobs in the city of Hopkins. Though difficult to fit on site, we have provided (11) total parking stalls. With employees coming and going for daily shifts, these stalls allow adequate employee parking without creating excess impervious surfaces. Additionally, Take 5 is a stay-in-you-car service, so there is no need for customer parking. Take 5 is a friendly, fast, and simple service model.

3. Justification for request, including how any potential conflicts with nearby land uses will be minimized.

819 Cambridge Street is a B-3 district. It abuts R-1-C Single Family Medium Density to the Southwest, Highway 7 to the North, and Taco Bell directly to the East. Despite abutting a residential lot, the lots are separated by Cambridge Street, Minnehaha Creek, and significant natural tree screening. Automobiles will queue facing east, away from residential homes, and will not create light pollution or headlight glare for residents. As a relatively quiet service, these oil changes will also take place inside the building. We do not anticipate adding any noticeable noise to nearby residents.

Taco Bell to the East, as landlord to the Take 5 site, has reviewed the site plan and is supportive of the business.

Having visibility from Highway 7 also creates another destination for local residents and other metro passerby's to pull off the highway and support the businesses in Hopkins. Take 5 is a complementary business to the surrounding food and retail businesses and will help to drive commerce in this business district.

4. **Conditional Use Permit Standards: Applicant Responses in Green**

Standards. In evaluating a conditional use permit application and granting a conditional use permit, the planning commission and city council shall consider and require compliance with the following standards, conditions, and requirements:

(1) The consistency with the elements and objectives of the city's development plan, including the comprehensive plan and any other relevant plans at the time of the request;
   a. Goal #2 of Economic Competitiveness in the City of Hopkins' 2040 Comprehensive Plan is to "support a healthy, diverse mix of businesses", which includes attracting businesses with living wage jobs. We're taking a very challenging vacant site, and creating 10-15 new full time jobs. Real Estate data also shows that this area is under-served, and that there is a demand for an oil change facility in Hopkins.

(2) Consistency with this article;

(3) Creation of a harmonious relationship of buildings and open spaces with natural site features and with existing and future buildings having a visual relationship to the development;
   a. This lot is a difficult triangular site. We have made use of the open space for the structure of the building, while dedicating all of the unusable corners to natural vegetation, storm water treatment, and new trees.

(4) Creation of a functional and harmonious design for structures and site features, with special attention to the following:
   a. An internal sense of order for the buildings and uses on the site and provision of a desirable environment for occupants, visitors and the general community;
      i. While this is a single-building lot, we have provided an attractive building, intuitive traffic flow, and plenty of landscaping for a desirable visit.
   b. The amount and location of open space and landscaping;
      i. This project goes well beyond the requirement for landscaping by providing native plantings, canopy trees, ornamental trees, and natural resource protection through the restoration of the creek bed and storm water treatment via ran garden.
   c. Materials, textures, colors and details of construction as an expression of the design concept and the compatibility of the same with the adjacent and neighboring structures and uses; and

i. The building will be constructed mostly of brick, with an EIFS signage band at the top of the building. It will also feature a tower element and 2-tone brick for visual interest.

d. Vehicular and pedestrian circulation, including walkways, interior drives and parking in terms of location and number of access points to the public streets, width of interior drives and access points, general interior circulation, separation of pedestrian and vehicular traffic and arrangements and amount of parking.

i. Site circulation is simple, with 2 single curb cuts providing one-way in and one-way out. We have provided enough space for the queueing of 2 vehicles per service bay, while still allowing adequate room for a pass-by lane to circle the building. Pedestrian circulation is limited, as patrons remain in their vehicle while being serviced, maintaining a high level of safety. We kept parking to a minimum. We have provided 11 parking stalls, which will accommodate the employees.

(5) Promotion of energy conservation through design, location, orientation and elevation or structures, the use and location of glass in structures and the use of landscape materials and site grading;

a. As a small structure, Take 5 does not require high levels of electrical or water utilities. During the course of business for much of the year, the building is naturally ventilated through the opening and closing of garage doors to allow entry and exit. Additionally, the full-glass doors and other windows provide for massive amounts of natural daylighting. The site itself will be graded to direct storm water to a rain garden to help treat water and protect the nearby creek.

(6) Protection of adjacent and neighboring properties through reasonable provision for surface water drainage sound and sight buffers, preservation of views, light and air and those aspects of design not adequately covered by other regulations which may have substantial effects on neighboring land uses;

a. Surface water drainage will be directed to a large on-site storm water rain garden.

b. Sight buffers in the form of ornamental and canopy trees have been provided on site, as well as foundation plantings around the building and trash enclosure.

c. We are adding canopy trees that will increase shade and air quality.

(7) The use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor tend to or actually diminish and impair property values within the neighborhood;

a. As a vacant site, the only direct neighbor is that of the landlord, Taco Bell. This use is not competitive, but rather complementary to those businesses in the vicinity.

(8) In institutional zoning districts, the conditional use permit application shall comply with the standards, conditions and requirements stated in section 102-307;

a. This is not an institutional zoning district

(9) Traffic impacts such as increases in vehicular traffic, changes in traffic movements, traffic congestion, interference with other transportation systems or pedestrian traffic, and traffic hazards shall be considered by the planning commission and city council in evaluating an application for a conditional use permit. The applicant shall demonstrate the proposed conditional use shall not cause unacceptable increases in vehicular traffic, traffic congestion or interference with other transportation systems or pedestrian traffic, and will not crate traffic hazards or excessive traffic through residential areas or otherwise cause adverse effects on residential areas or dwellings. The city may require the applicant to submit a traffic study prepared by a traffic consultant approved by the city to demonstrate the applicant's compliance with the requirements of this section. As a condition of the issuance of a conditional use permit, the city may require the applicant to incorporate in the applicant's proposal and construct such traffic control measures and improvements as the city may deem necessary, including, but not limited to, directional signalization, channelization, stand-by turn lanes, sidewalks, removal of access points to public streets and moving of access points to public streets; and

a. The proposed one-way in and one-way out curb cuts are not close to any major intersections. The nearest residential “T” intersection is 400 feet to the west. We have provided enough queueing on site for 6 vehicles, and do not believe there will be any negative impact to traffic movements, systems, or congestion.

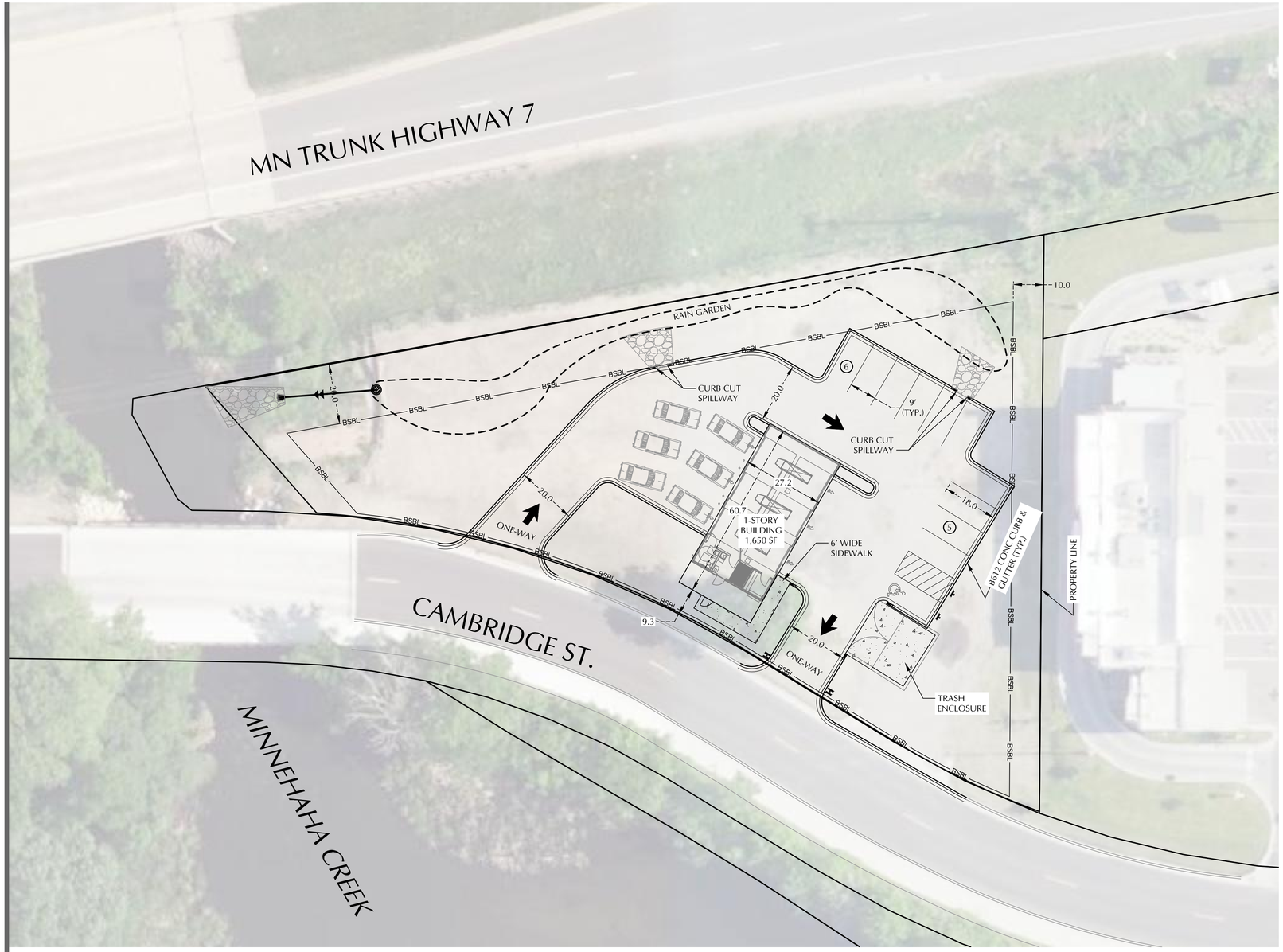
(10) A development in the B-2 Zoning District may require a parking study. If it is determined that a project requiring a conditional use permit will have a parking shortage, the city may require that the applicant provide on-site parking, enter into an agreement to pay the costs of off-site parking, or a combination of both

a. This is not a B-2 Zoning District

5. **Service Station Standards:**

Service station, provided:

b. The site shall be constructed for drainage according to a plan submitted and approved by the city engineer and fire marshal;
    i. We welcome any comments from the city engineer and fire marshal.
c. The entire site not covered with building or landscaping shall be hard surfaced;
    i. We understand the purpose of this standard is to reduce the possibility for petroleum-based products to enter the ground soil. Most gas stations and oil change facilities utilize pressurized gas lines, which have the potential for bigger spills. Take 5 doesn't use pressurized lines, which is a safeguard against large spills. Additionally, we have kept the building and paving as far away from Minnehaha Creek as possible, and buffered with plantings and the rain garden as an additional measure to protect the natural resource. If the city would like to see more paved surface, we'd be happy to explore plan that will satisfy the requirements.
d. The lighting shall be accomplished in such a way as to have no direct source visible from the public right-of-way or adjacent land in the R District;
    i. Our lighting plan will keep building and parking lights screened from direct view.
e. No driveway access is less than 40 feet from a street intersection;
    i. The nearest intersection to our site access is approximately 400 feet away.
f. Any other business operated on the site shall conform to this code;
    i. Take 5 is the only business proposed.
g. The site shall be constructed for parking and traffic according to a plan submitted and approved;
    i. We are currently showing 11 parking spots for employees, but would be happy to work with the city if more parking is requested.
h. Stacking for gas pumps shall be provided for at least one car beyond the pump island in each direction in which access can be gained to the pump. The required stacking shall not interfere with internal circulation patterns or with designated parking areas and shall not be permitted on any public right-of-way, private access easement or within the required parking setback;
    i. We have provided enough space for 2 vehicles to queue behind each service bay. This still allows enough space for site circulation and does not interfere with the right-of-way / building set back line.
i. The front yard shall be landscaped and ten feet in depth, if station is non-conforming a curb shall be constructed to separate the drive from public walk;
    i. The front yard will be landscaped with trees and planting beds. Due to the triangular nature of the site, to keep 20' drive aisles, queueing, and parking intact, our front yard is nearly 10 feet in depth (9.3' from the building set back line).
j. No vehicles which are unlicensed and inoperable shall be stored on premises except in appropriately designed and screened storage areas;
    i. There will be no vehicle storage on site.
k. All repair, assembly, disassembly and maintenance of vehicles shall occur within closed buildings except minor maintenance, including tire inflation, addition of oil and wiper replacement.
    i. This facility will not perform any repairs. Only maintenance items such as oil changes and filter and wiper replacement will be done, and all will be performed inside the building.



SITE NOTES

1. ALL PAVING, CONCRETE CURB, GUTTER AND SIDEWALK SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN PER THE DETAIL SHEET(S) AND STATE/LOCAL JURISDICTION REQUIREMENTS.
2. ACCESSIBLE PARKING AND ACCESSIBLE ROUTES SHALL BE PROVIDED PER CURRENT ADA STANDARDS AND LOCAL/STATE REQUIREMENTS.
3. ALL CURB DIMENSIONS SHOWN ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
4. ALL BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF WALL UNLESS OTHERWISE NOTED.
5. TYPICAL FULL SIZED PARKING STALL IS 9' X 18' UNLESS OTHERWISE NOTED.
6. ALL CURB RADII SHALL BE 5.0' UNLESS OTHERWISE NOTED.
7. SEE SITE ELECTRICAL PLAN FOR SITE LIGHTING.
8. REFER TO ARCHITECTURAL SITE PLAN FOR BUILDING SETBACKS.

SITE DATA

CURRENT ZONING: B-3 GENERAL BUSINESS

PROPERTY AREA:	29,027 SF 0.63 +/- AC (NORTH OF CAMBRIDGE ST)
DISTURBED AREA:	0.42 AC
EXISTING IMPERVIOUS AREA:	0.0 AC (0%)
PARKING AREA	9,490 SF
BUILDING AREA	1,650 SF
SIDEWALKS	664 SF
PROPOSED IMPERVIOUS AREA:	11,804 SF OR 0.27 AC (36.6%)

TOTAL PARKING: 11 STALLS (10 STANDARD + 1 ADA ACCESSIBLE)

GENERAL NOTES

1. MINNESOTA STATE STATUTE REQUIRES NOTIFICATION PER "GOPHER STATE ONE CALL" PRIOR TO COMMENCING ANY GRADING, EXCAVATION OR UNDERGROUND WORK.
2. THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR VARIATIONS FROM THE PLANS.
3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASE OF THIS PROJECT. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGES TO ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASE OF THIS PROJECT.
4. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGMEN AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE APPROPRIATE MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARDS.
5. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
6. THE DUTY OF THE ENGINEER OR THE DEVELOPER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTORS PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTORS SAFETY MEASURES IN, OR NEAR THE CONSTRUCTION SITE.
7. BEFORE BEGINNING CONSTRUCTION THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH PERMIT REQUIREMENTS, BEST MANAGEMENT PRACTICES, STATE AND LOCAL REQUIREMENTS AND THE DETAILS SHOWN ON THE DETAIL SHEET(S) OF THE PROJECT PLANS.
8. ALL CONSTRUCTION PERMITS, APPLICATIONS AND FEES ARE THE RESPONSIBILITY OF THE CONTRACTOR.
9. ALL ENTRANCES AND CONNECTIONS TO CITY STREETS SHALL BE CONSTRUCTED PER THE REQUIREMENTS OF THE STATE AND LOCAL JURISDICTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND NOTIFICATIONS AS REQUIRED.
10. ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE CITY. THIS SHALL INCLUDE ALL SIGNAGE, BARRICADES, FLASHERS AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES.
11. ADJUST ALL EXISTING STRUCTURES, BOTH PUBLIC AND PRIVATE TO THE PROPOSED GRADES WHERE DISTURBED AND COMPLY WITH ALL REQUIREMENTS OF THE UTILITY OWNERS. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC LOADING.
12. SUBGRADE PREPARATION SHALL BE PERFORMED IN ACCORDANCE WITH MNDOT 2112. THE TOP 3 FEET SHALL BE COMPACTED TO 100% OF THE STANDARD PROCTOR DENSITY.
13. AGGREGATE BASE SHALL BE MNDOT 2211 CLASS 5. COMPACTION SHALL BE BY THE QUALITY COMPACTION METHOD.
14. PLANT MIXED BITUMINOUS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH MNDOT 2360 WITH MIX DESIGN AS SHOWN ON THE DETAILS. COMPACTION SHALL BE BY THE ORDINARY COMPACTION METHOD.
15. CONCRETE CURB & GUTTER SHALL BE PERFORMED IN ACCORDANCE WITH MNDOT 2531. CURING SHALL BE BY THE MEMBRANE CURING METHOD. EXPANSION JOINTS EVERY 200 FEET AT ALL FIXED OBJECTS. CONTRACTIONS JOINTS EVERY 10 FEET.
16. CONCRETE WALK SHALL BE PERFORMED IN ACCORDANCE WITH MNDOT 2521. CURING SHALL BE BY THE MEMBRANE CURING METHOD. EXPANSION JOINTS AT ALL FIVES OBJECTS. CONTRACTION JLINTS EVERY 5 FEET.
17. A CITY RIGHT-OF-WAY PERMIT IS REQUIRED TO WORKING WITHIN CITY ROW.

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SUBMITTAL/REVISIONS

06/25/21 CITY SUBMITTAL

PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

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Vicki J. Van Dell - PE
License No. 41352
Date N/A

QUALITY CONTROL

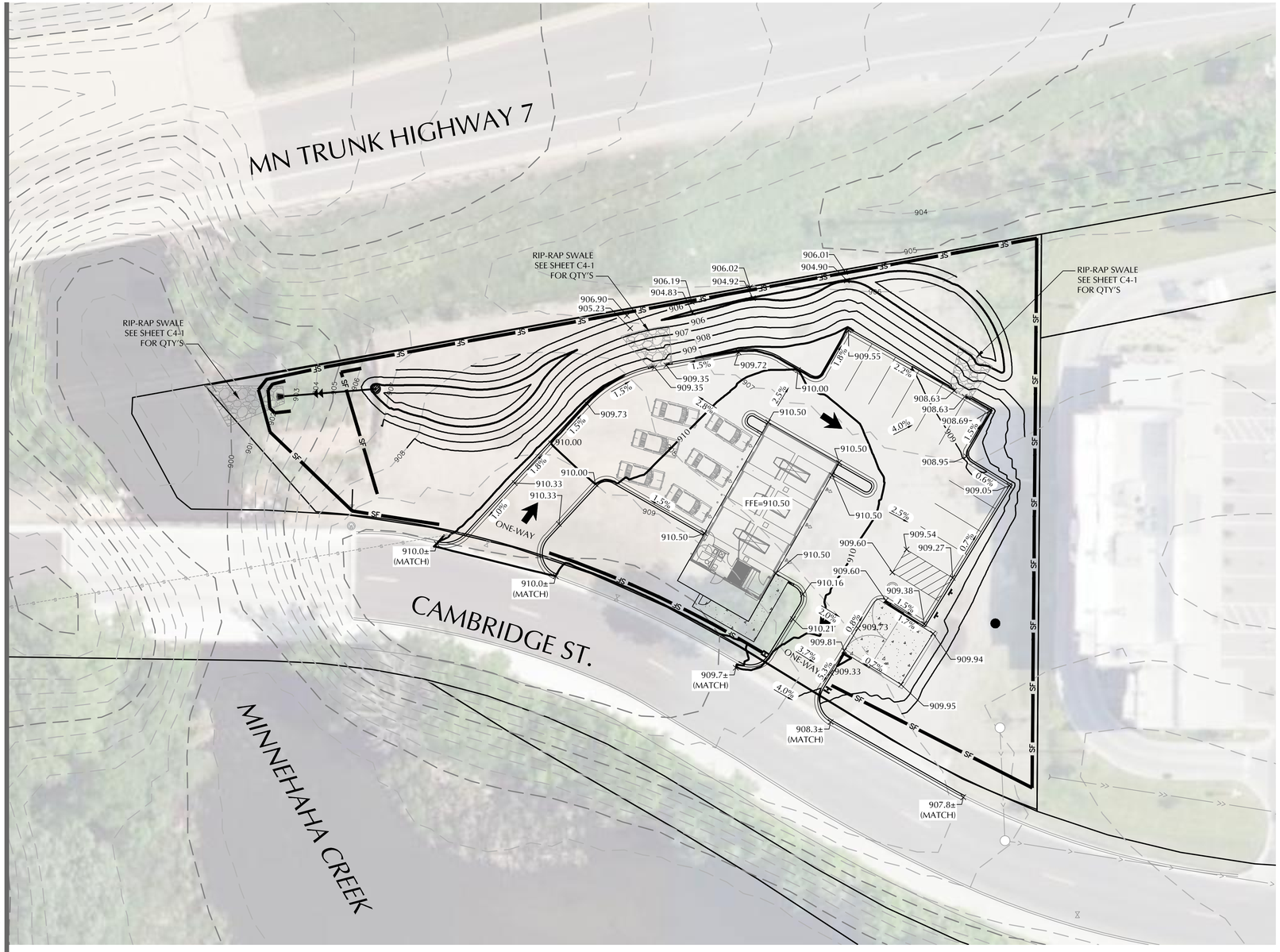
Loucks Project No.	21282.00
Project Lead	VJV
Drawn By	CDL
Checked By	VJV
Review Date	06/24/21

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SITE PLAN C2-1

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GRADING, DRAINAGE & EROSION CONTROL SPECIFICATIONS

1. SPOT ELEVATIONS REPRESENT FINISHED SURFACE GRADES, GUTTER/FLOW LINE, FACE OF BUILDING, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
2. ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE MINIMUM OF 4 INCHES OF PREMIUM TOP SOIL AND SEED/MULCH OR SOD. THESE AREAS SHALL BE WATERED/MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION IS ESTABLISHED. VERIFY WITH LANDSCAPE PLAN.
3. REFER TO THE REPORT OF GEOTECHNICAL EXPLORATION AND REVIEW (REPORT NO.XXXXX), DATED XX/XX/XX AS PREPARED BY _____ FOR AN EXISTING SUBSURFACE SITE CONDITION ANALYSIS AND CONSTRUCTION RECOMMENDATIONS.
4. STREETS MUST BE CLEANED AND SWEPT WHENEVER TRACKING OF SEDIMENTS OCCURS AND BEFORE SITES ARE LEFT IDLE FOR WEEKENDS AND HOLIDAYS, OR AS DIRECTED BY CITY. A REGULAR SWEEPING SCHEDULE MUST BE ESTABLISHED.
5. DUST MUST BE ADEQUATELY CONTROLLED.
6. SEE UTILITY PLAN FOR WATER, STORM AND SANITARY SEWER INFORMATION.
7. SEE SITE PLAN FOR CURB AND BITUMINOUS TAPER LOCATIONS.
8. A STREET SWEEPER MUST BE AVAILABLE WITHIN 3 HOURS UPON NOTICE FROM THE CITY THAT THE STREETS NEED TO BE SWEPT.
9. THE CONTRACTOR ALONG WITH THE OWNER SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM GOVERNING AUTHORITIES, INCLUDING ANY CITY PERMITS AND THE NPDES PERMIT FROM THE MPCA.
10. INSTALL EROSION CONTROL AND TREE PROTECTION MEASURES BEFORE BEGINNING SITE GRADING ACTIVITIES. SOME EROSION CONTROLS SUCH AS BALE CHECKS AND TEMPORARY SILT PONDS MAY BE INSTALLED AS GRADING OCCURS IN SPECIFIC AREAS. MAINTAIN EROSION CONTROLS THROUGHOUT THE GRADING PROCESS AND REMOVE WHEN TURF HAS BEEN ESTABLISHED.
11. GRADES SHOWN ARE FINISHED GRADES.
12. FINAL GRADING TOLERANCES ARE +/-0.1 FEET TO FINISH GRADES.
13. UNDER PAVEMENTS COMPACT THE UPPER 3 FEET OF SUBGRADE TO 100% STANDARD PROCTOR DENSITY AT OPTIMUM MOISTURE CONTENT AND 95% STANDARD PROCTOR DENSITY BLOW THE UPPER 3 FEET OF SUBGRADE. OUTSIDE PAVEMENT AREAS COMPACT EMBANKMENTS TO 95% STANDARD PROCTOR DENSITY.
14. A CITY RIGHT-OF-WAY PERMIT IS REQUIRED PRIOR TO WORKING WITHIN CITY ROW.
15. TURF REINFORCEMENT MAT (TRM) SHALL BE LANDLOK 450, AS MANUFACTURED BY PROPEX GEOSOLUTIONS, OR APPROVED EQUAL. THE CONTRACTOR SHALL FOLLOW ALL OF THE MANUFACTURERS INSTRUCTIONS FOR INSTALLATION.
16. STRUCTURAL RETAINING WALL, FENCING AND HANDRAIL DESIGN BY OTHERS. REFER TO ARCHITECTURAL PLANS.

EROSION CONTROL BMP LEGEND

- SF — SILT FENCE
- INLET PROTECTION
- EXISTING DRAINAGE PATTERN
- PROPOSED DRAINAGE PATTERN

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Vicki J. Van Dell - PE

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Date	N/A

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Project Lead	VJV
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Review Date	06/24/21

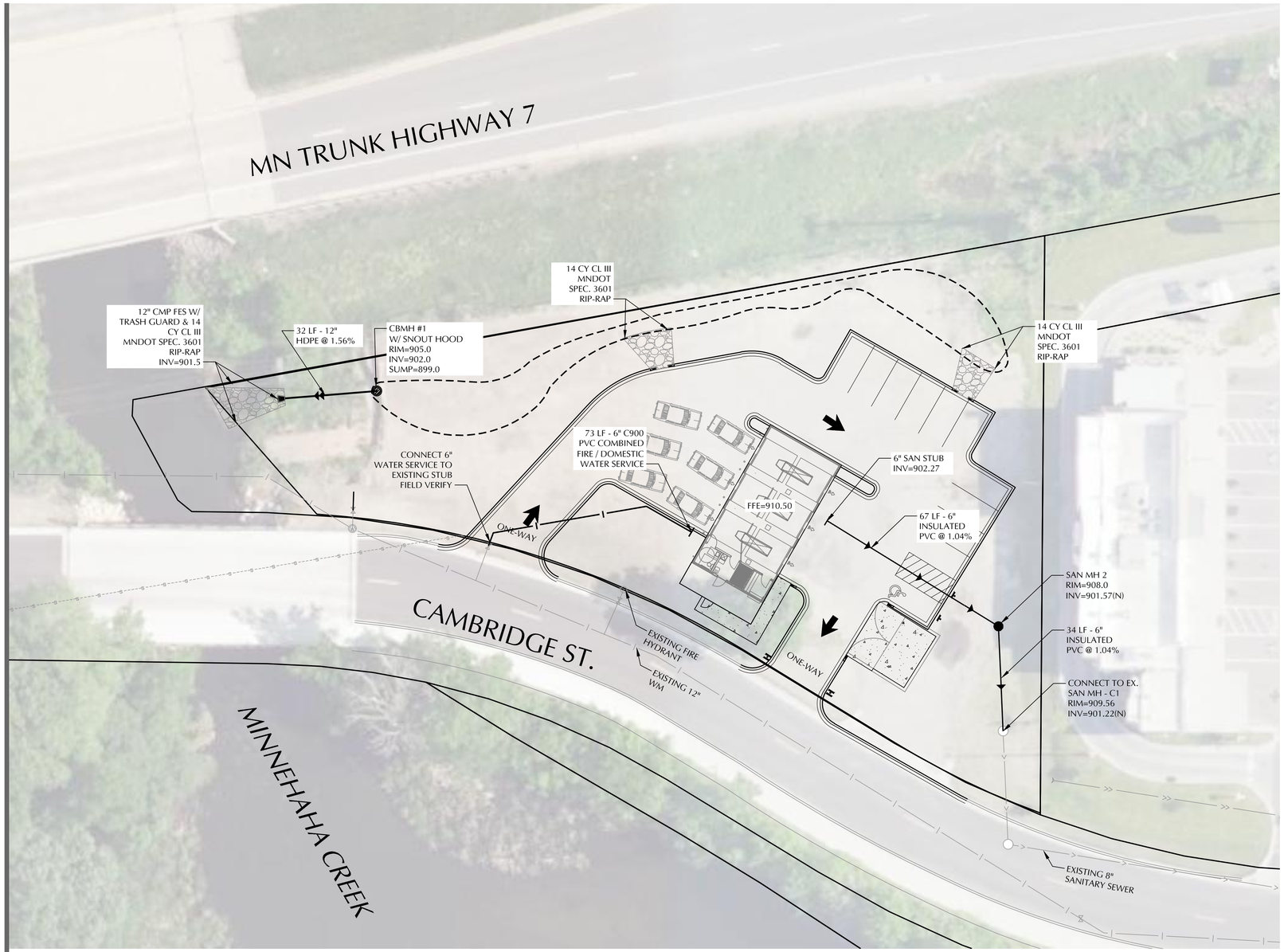
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GRADING & EROSION CONTROL PLAN

C3-1

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UTILITY NOTES

1. ALL SANITARY SEWER, STORM SEWER AND WATERMAIN UTILITIES SHALL BE FURNISHED AND INSTALLED PER THE REQUIREMENTS OF THE SPECIFICATIONS,THE MINNESOTA PLUMBING CODE, THE LOCAL GOVERNING UNIT , AND THE STANDARD UTILITIES SPECIFICATION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM), 2018 EDITION.

2. ALL UTILITY PIPE BEDDING SHALL BE COMPACTED SAND OR FINE GRANULAR MATERIAL. ALL COMPACTION SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CEAM SPECIFICATION AND THE GEOTECHNICAL REPORT.

3. ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE PERFORMED PER THE REQUIREMENTS OF THE STATE AND LOCAL JURISDICTIONS. THE CITY DEPARTMENT OF ENGINEERING AND BUILDING INSPECTIONS DEPARTMENT AND THE CONSTRUCTION ENGINEER MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY WORK WITHIN THE PUBLIC RIGHT OF WAY, OR WORK IMPACTING PUBLIC UTILITIES.

4. ALL STORM SEWER , SANITARY SEWER AND WATER SERVICES SHALL TERMINATE 5' FROM THE BUILDING FACE UNLESS OTHERWISE NOTED.

5. A MINIMUM OF 18 INCHES OF VERTICAL SEPARATION AND 10 FEET OF HORIZONTAL SEPARATION IS REQUIRED FOR ALL UTILITES UNLESS OTHERWISE NOTED.

6. ALL NEW WATERMAIN AND SERVICES MUST HAVE A MINIMUM OF 8.0 FEET OF COVER. EXTRA DEPTH MAY BE REQUIRED TO MAINTAIN A MINIMUM 18" VERTICAL SEPARATION TO SANITARY OR STORM SEWER LINES. THE CONTRACTOR SHALL FIELD ADJUST WATERMAIN TO AVOID CONFLICTS WITH SANITARY SEWER, STORM SEWER, AND SERVICES AS REQUIRED. INSULATION OF WATER AND SANITARY SEWER LINES SHALL BE PROVIDED WHERE 8.0 FEET MINIMUM DEPTH CAN NOT BE ATTAINED.

7. ALL FIRE HYDRANTS SHALL BE LOCATED 5 FEET BEHIND BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED ON DETAILS.

8. PROPOSED PIPE MATERIALS:

WATERMAIN	PVC C900 W/ TRACER WIRE	6" DIAMETER
SANITARY SEWER	PVC SDR 35 & SCH 40	6" DIAMETER
STORM SEWER	DUAL WALL HDPE	12" TO 15" DIAMETER

9. ALL PORTIONS OF THE STORM SEWER SYSTEM, INCLUDING CATCH BASINS, LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED ACCORDANCE WITH MINNESOTA RULES, PART 4715.2820

10. ALL JOINTS AND CONNECTIONS IN THE STORM SEWER SYSTEM SHALL BE GASTIGHT OR WATERTIGHT (SEE MINNESOTA RULES, PART 4715.0700). APPROVED RESILIENT RUBBER JOINTS MUST BE USED TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES, CATCHBASINS, AND OTHER STRUCTURES.

11. HIGH-DENSITY POLYETHYLENE (HDPE) STORM DRAINS MUST COMPLY WITH MINNESOTA RULES, PART 4715.0540:
    a. PIPES 4-INCH TO 10-INCH IN SIZE MUST COMPLY WITH AASHTO M252.
    b. PIPES 12-INCH TO 60-INCH IN SIZE MUST COMPLY WITH ASTM F2306.
    c. ALL FITTINGS MUST COMPLY WITH ASTM D3212.
    d. WATER-TIGHT JOINTS MUST BE USED AT ALL CONNECTIONS INCLUDING STRUCTURES.

12. CONTRACTOR AND MANHOLE FABRICATOR SHALL SUMP (LOWER) ALL STORM SEWER CATCH BASIN CASTINGS WITHIN PAVED AREAS 0.16 FEET OR 2-INCHES BELOW THE RIM ELEVATION DEPICTED ON THE UTILITY PLAN.

13. ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE ALL SIGNAGE, BARRICADES, FLASHERS AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT THE EXPRESSED AUTHORITY OF OF THE CITY.

14. THE CITY SHALL OPERATE ALL GATE VALVES.

15. CONNECTIONS TO EXISTING MANHOLES SHALL BE MADE BY CORE DRILLING THE MANHOLE AT THE PROPOSED INVERT ELEVATIONS AND INSTALLING A RUBBER BOOT. GROUT IN THE BOOT AND AN INVERT FOR THE NEW SEWER LINE.

16. PIPE LENGTHS SHOWN ON THE PLAN INCLUDE THE APRON SECTION.

17. WATERMAIN PIPE SHALL BE DIP CLASS 52, INSTALLED WITH 8.0 FEET OF COVER TO TOP PIPE. FITTINGS SHALL BE COMPACT TYPE. PIPE AND FITTINGS SHALL HAVE A CEMENT MORTAR LINING. CONDUCTIVITY SHALL BE PROVIDED BY WELDED STRAPS ACROSS EACH JOIN.T

18. TRENCH COMPACTION SHALL BE 95% STANDARD PROCTOR DENSITY IN THE AREA FROM THE PIPE ZONE TO WITHIN 3 FEET OF FINISHED GRADE AND 100% IN FINAL 3 FEET OF THE BACKFILL TO FINISH GRADE.

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Vicki J. Van Dell - PE

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Project Lead	VJV
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Review Date	06/24/21

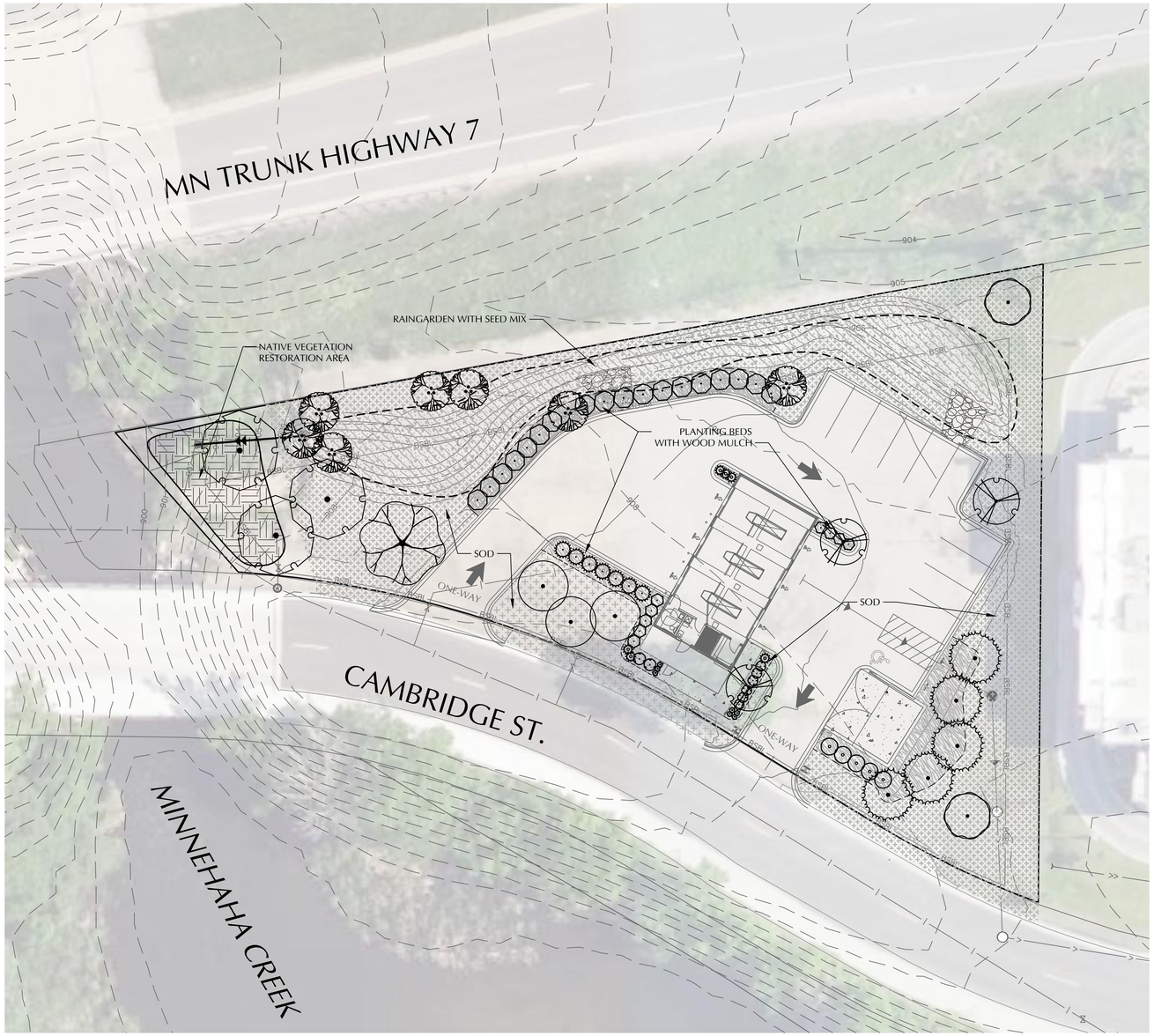
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UTILITY PLAN

C4-1

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PLANT SCHEDULE

DECIDUOUS TREES	CODE	QTY	COMMON NAME	BOTANICAL NAME	CONT	SIZE	
	AM	3	ARMSTRONG MAPLE	Acer freemanii `Armstrong`	B & B	2.5"Cal	
	SGM	1	SIENNA GLEN MAPLE	Acer freemanii `Sienna Glen`	B & B	2.5"Cal	
	QB	3	SWAMP WHITE OAK	Quercus bicolor	B & B	2.5"Cal	
EVERGREEN TREES	CODE	QTY	COMMON NAME	BOTANICAL NAME	CONT	SIZE	
	BS	5	BLACK HILLS SPRUCE FULL FORM	Picea glauca `Densata`	B & B	8` HGT	
ORNAMENTAL TREES	CODE	QTY	COMMON NAME	BOTANICAL NAME	CONT	SIZE	
	FVB	7	FOX VALLEY CLUMP RIVER BIRCH	Betula nigra 'Little King' TM	B & B	2.5"Cal	
	JTL	2	JAPANESE TREE LILAC	Syringa reticulata	B & B	2.5"Cal	
	SSC	3	SPRING SNOW CRABAPPLE	Malus x `Spring Snow`	B & B	2.5"Cal	
SHRUBS	CODE	QTY	COMMON NAME	BOTANICAL NAME	MIN CONT	MIN SIZE	SPACING
	AH	5	ANNABELLE HYDRANGEA	Hydrangea arborescens `Annabelle`	5 gal	24" HGT	48" o.c.
	CV	5	COMPACT AMERICAN VIBURNUM	Viburnum trilobum `Bailey Compact`	5 gal	36" HGT	60" o.c.
	FD	2	FIREDANCE DOGWOOD	Cornus sericea `Bailadeline`	5 gal	24" HGT	42" o.c.
	GC	18	GLOSSY BLACK CHOKEBERRY	Aronia melanocarpa elata	5 gal	24" HGT	72" o.c.
	GF	4	GRO-LOW FRAGRANT SUMAC	Rhus aromatica `Gro-Low`	5 gal	24" SPRD	42" o.c.
	NFS	6	NEON FLASH SPIREA	Spirea japonica `Neon Flash`	5 gal	24" HGT	36" o.c.
GRASSES	CODE	QTY	COMMON NAME	BOTANICAL NAME	MIN CONT	MIN SIZE	SPACING
	SSG	6	SHENANDOAH SWITCH GRASS	Panicum virgatum `Shenendoah`	1 gal		36" o.c.
CONIFEROUS SHRUBS	CODE	QTY	COMMON NAME	BOTANICAL NAME	MIN CONT	MIN SIZE	SPACING
	MAJ	7	MANEY JUNIPER	Juniperus chinensis `Maneyi`	5 gal	18" SPRD	60" o.c.
PERENNIALS	CODE	QTY	COMMON NAME	BOTANICAL NAME	MIN CONT	MIN SIZE	SPACING
	ASD	7	APRICOT SPARKLES DAYLILY	Hemerocallis x 'Apricot Sparkles'	5 gal		18" o.c.
GROUND COVERS	CODE	QTY	COMMON NAME	BOTANICAL NAME			
	SEED 3	3,549 sf	DRY SWALE / POND SEED MIX MNDOT DRY SWALE / POND SEED MIX 33-262				
	SOD	9,631 sf	TURF SOD				
	WM 1	2,021 sf	WOOD MULCH SHREDDED HARDWOOD MULCH 3" DEPTH				

GENERAL NOTES: [redacted]

CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID. HE SHALL INSPECT SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS RELATING TO THE NATURE AND SCOPE OF WORK.

VERIFY LAYOUT AND ANY DIMENSIONS SHOWN AND BRING TO THE ATTENTION OF THE LANDSCAPE ARCHITECT ANY DISCREPANCIES WHICH MAY COMPROMISE THE DESIGN AND / OR INTENT OF THE PROJECT'S LAYOUT.

ASSURE COMPLIANCE WITH ALL APPLICABLE CODES AND REGULATIONS GOVERNING THE WORK OR MATERIALS SUPPLIED.

CONTRACTOR SHALL PROTECT ALL EXISTING ROADS, CURBS / GUTTERS, TRAILS, TREES, LAWNS AND SITE ELEMENTS DURING PLANTING OPERATIONS. ANY DAMAGE TO SAME SHALL BE REPAIRED AT NO COST TO THE OWNER.

CONTRACTOR SHALL VERIFY ALIGNMENT AND LOCATION OF ALL UNDERGROUND AND ABOVE GRADE UTILITIES. CONTRACTOR TO PROVIDE THE NECESSARY PROTECTION FOR THE UTILITIES BEFORE CONSTRUCTION / MATERIAL INSTALLATION BEGINS. CONTRACTOR TO NOTIFY GENERAL CONTRACTOR OF ANY CONCERNS PRIOR TO INSTALLATION OF PLANTINGS.

EXISTING CONTOURS, TRAILS, VEGETATION, CURB / GUTTER AND OTHER EXISTING ELEMENTS BASED UPON INFORMATION SUPPLIED TO LANDSCAPE ARCHITECT BY OTHERS. CONTRACTOR SHALL VERIFY ANY AND ALL DISCREPANCIES PRIOR TO CONSTRUCTION AND NOTIFY LANDSCAPE ARCHITECT OF SAME.

THE ALIGNMENT AND GRADES OF THE PROPOSED WALKS, TRAILS AND / OR ROADWAYS ARE SUBJECT TO FIELD ADJUSTMENT REQUIRED TO CONFORM TO LOCALIZED TOPOGRAPHIC CONDITIONS AND TO MINIMIZE TREE REMOVAL AND GRADING. ANY CHANGE IN ALIGNMENT MUST BE APPROVED BY LANDSCAPE ARCHITECT.

IRRIGATION NOTES: [redacted]

VERIFY EXISTING / PROPOSED IRRIGATION SYSTEM LAYOUT AND CONFIRM COMPLETE LIMITS OF IRRIGATION PRIOR TO SUPPLYING SHOP DRAWINGS.

LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN IRRIGATION LAYOUT PLAN AND SPECIFICATION AS A PART OF THE SCOPE OF WORK WHEN BIDDING. THESE SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ORDER AND / OR INSTALLATION. IT SHALL BE THE LANDSCAPE CONTRACTORS RESPONSIBILITY TO INSURE THAT ALL SODDED / SEEDED AND PLANTED AREAS ARE IRRIGATED PROPERLY, INCLUDING THOSE AREAS DIRECTLY AROUND AND ABUTTING BUILDING FOUNDATION.

THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER WITH AN IRRIGATION SCHEDULE APPROPRIATE TO THE PROJECT SITE CONDITIONS AND TO PLANT MATERIAL GROWTH REQUIREMENTS.

IRRIGATION SYSTEM IS NOT TO SPRINKLE ACROSS PAVEMENT NOR SHALL THE SYSTEM SPRINKLE THE BUILDING.

THE SYSTEM SHALL INCORPORATE A RAIN SENSOR INTO IRRIGATION SYSTEM.

PLANTINGS OUTSIDE THE LIMITS OF IRRIGATION ARE TO BE WATERED REGULARLY UNTIL PLANTING / SOD / SEED HAS BEEN ESTABLISHED.

LANDSCAPE DATA: [redacted]

CITY REQUIREMENTS -
1 TREE PER 1,000 SF. OF GROSS BUILDING AREA
(1,650 SF. / 1,000 SF. = 2 TREES)
OR
1 TREE PER 50 LINEAL FEET OF SITE PERIMETER
(792 L.F. / 50 = 16 TREES)

TREES REQUIRED -	16 TREES
TREES PROVIDED -	24 TREES
OVERSTORY DECIDUOUS TREES -	7 TREES
CONIFEROUS TREES -	5 TREES
ORNAMENTAL/UNDERSTORY TREES -	12 TREES
SHRUBS & ORNAMENTAL GRASSES PROVIDED -	52

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Plotted: 06 /24 / 2021 9:11 PM W:\2021\21282\CADD DATA\LANDSCAPE_dwg Sheet Files\L1-1 LANDSCAPE PLAN

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Maple Grove, MN 55369
763.424.5505
www.loucksinc.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

06/25/21 CITY SUBMITTAL

PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota.

Chad E. Feigum - LA

License No. 46508
Date N/A

QUALITY CONTROL

Loucks Project No.	21282.0
Project Lead	VJV
Drawn By	CEF
Checked By	CEF/VJV
Review Date	06/24/21

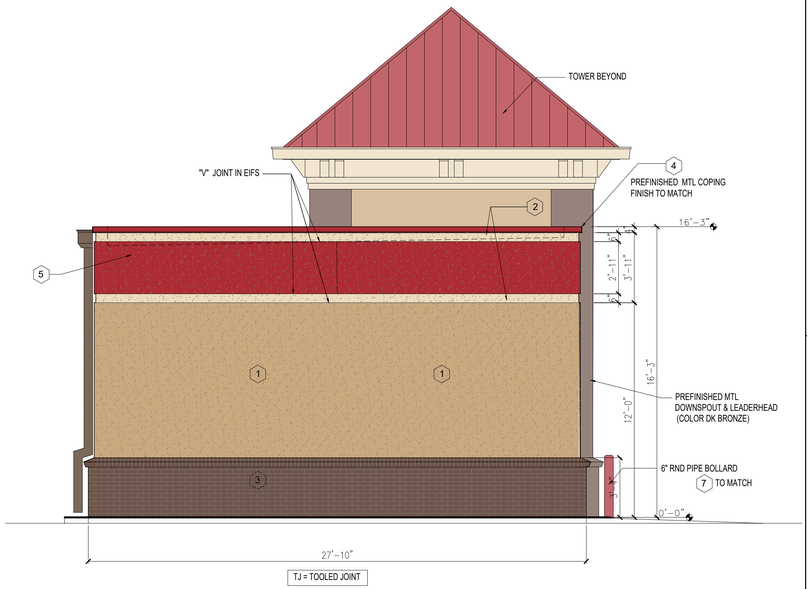
SHEET INDEX

C0-1 COVER SHEET
C1-2 EX. CONDITIONS PLAN
C2-1 SITE PLAN
C3-1 GRADING & EROSION CTRL
C4-1 UTILITY PLAN
C8-1 CIVIL DESTAILS
L1-1 LANDSCAPE PLAN
L2-1 LANDSCAPE DETAILS

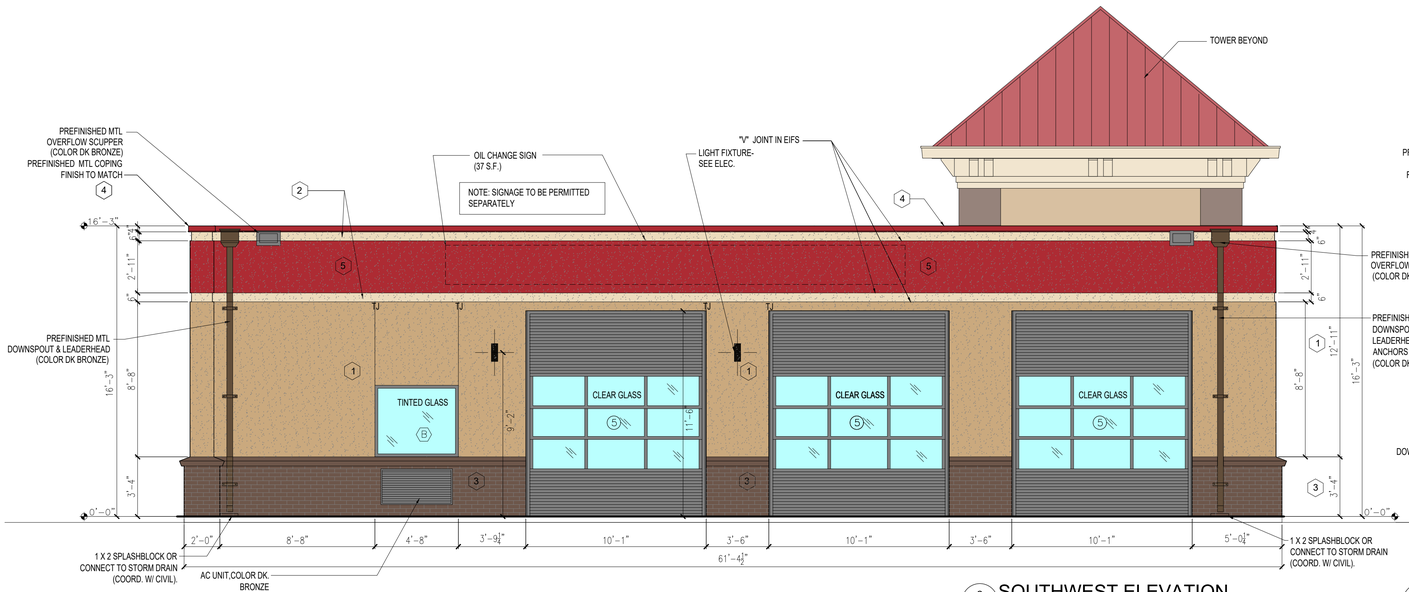
LANDSCAPE PLAN
L1-1



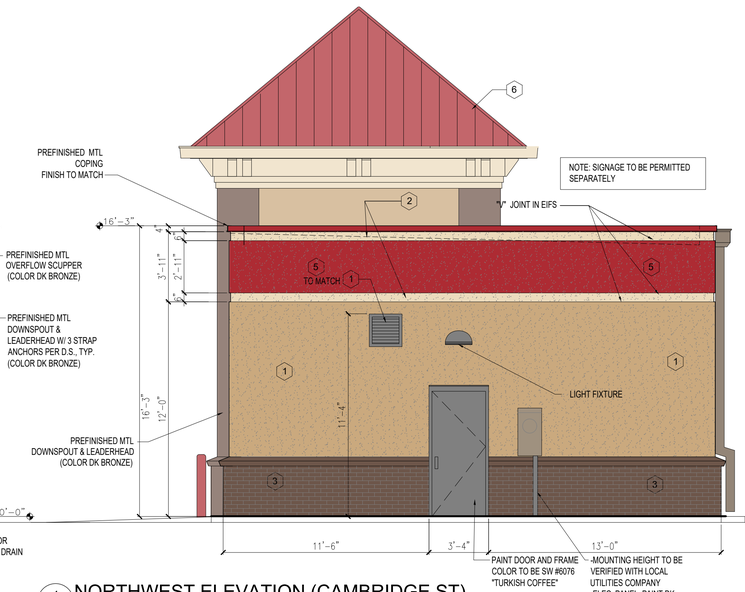
1 A-200 NORTHEAST ELEVATION
1/4"=1'-0"



3 A-200 SOUTHEAST ELEVATION (HIGHWAY 7)
1/4"=1'-0"



2 A-200 SOUTHWEST ELEVATION
1/4"=1'-0"



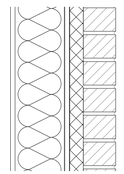
4 A-200 NORTHWEST ELEVATION (CAMBRIDGE ST)
1/4"=1'-0"

EXTERIOR FINISH SCHEDULE

NO.	AREA	COATS	COLOR	FINISH
1	EIFS OR STUCCO MAIN COLOR	SEE SPECIFICATION AND MANUFACTURER'S REQ'MENTS	MATCH SW COLOR #7693, STONEBRIAR	FINISH TO MATCH STO "MEDIUM SAND" OR DRYVIT "SANDPEBBLE FINE"
2	EIFS OR STUCCO ACCENT BAND AND FACE EIFS OR STUCCO CORNICE	SEE SPECIFICATION AND MANUFACTURER'S REQ'MENTS	MATCH SW COLOR #7678, COTTAGE CREAM	FINISH TO MATCH STO "FINE SAND" OR DRYVIT "SANDBLAST"
3	BRICK WAINSCOT	SEE SPECIFICATION AND MANUFACTURER'S REQ'MENTS	ACME BRICK 'BROOKSHIRE'	MODULAR SIZE, STANDARD MORTAR, CONCAVE JOINT
4	COPING	SEE SPECIFICATION AND MANUFACTURER'S REQ'MENTS	MATCH SW COLOR #6871, POSITIVE RED	FINISH TO BE KYNAR 500 PREFINISHED
5	EIFS OR STUCCO SECONDARY COLOR	SEE SPECIFICATION AND MANUFACTURER'S REQ'MENTS	MATCH SW COLOR #6871, POSITIVE RED	FINISH TO MATCH STO "MEDIUM SAND" OR DRYVIT "SANDPEBBLE FINE"
6	TOWER PREFINISHED STANDING SEAM ROOF	SEE SPECIFICATION AND MANUFACTURER'S REQ'MENTS	MATCH SW COLOR #6871, POSITIVE RED	FINISH TO BE KYNAR 500 PREFINISHED
7	BOLLARDS	SEE SPECIFICATION AND MANUFACTURER'S REQ'MENTS	MATCH SW COLOR #6871, POSITIVE RED	-----

EXTERIOR FINISH NOTES:

1. EIFS TO BE STO THERM CI CLASSIC, DRYVIT OUTSULATION PLUS MD OR APPROVED EQUAL.
2. EIFS TO HAVE ULTRA-HIGH IMPACT MESH TO 4'-0" AFF .
3. EIFS TO HAVE HIGH IMPACT MESH FROM 4'-0" AFF TO 8'-0" AFF
4. EIFS TO HAVE STANDRARD IMPACT MESH ABOVE 8'-0" AFF.
5. METAL ROOF TO BE ATAS DUTCH SEAM OR BERRIDGE MANUF. WITH DEEP VEE PANELS AND 2" BATTEN CAPS.
6. METAL ROOF PANELS TO BE 24 GA. GALVALUME WITH KYNAR 500, 2.0 MILS THICK FLOUROCARBON FINISH..
7. METAL COPING TO BE PREFINISHED, 24 GA. GALVALUME WITH KYNAR 500, 2.0 MILS THICK FLOUROCARBON FINISH..



5 A-200 BRICK WALL DETAIL
1 1/2"=1'-0"

TAKE 5
HOPKINS
819 CAMBRIDGE STREET
HOPKINS, MN 55343

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ARCHITECT OF RECORD

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the state of Minnesota.

PATRICK G. BLEES, AIA
MINNESOTA
LICENSE No. 18079

ISSUE	DATE	DESCRIPTION
	06.24.2021	ISSUE TO PLANNING

PROJECT INFORMATION

PROJECT NO:	TKF.0000
DATE:	06.24.2021
SCALE:	AS NOTED
DRAWN BY:	A.NICASIO
CHECKED BY:	P.JONES

SHEET TITLE

CONSTRUCTION FLOOR PLAN

SHEET NUMBER

A-100

P:\Take 5_Program Info\Prototypes\21-06-09_Prototype Information\CAD Drawings\proto base 3 tower 06\A200.dwg
Wednesday, June 23, 2021 11:36:24 AM

CITY OF HOPKINS
Hennepin County, Minnesota

PLANNING & ZONING COMMISSION RESOLUTION 2021-17

A RESOLUTION RECOMMENDING THE CITY COUNCIL APPROVE THE SITE PLAN FOR 819 CAMBRIDGE STREET (PID 19-117-21-12-0028), SUBJECT TO CONDITIONS

WHEREAS, the applicant, Jeffery Orosz on Behalf of Pocket Change, LLC, initiated an application for site plan approval to allow redevelopment of the property located at 819 Cambridge Street (PID 19-117-21-12-0028), and;

WHEREAS, this property is legally described as Tracts A and C, Registered Land Survey No. 1250, Hennepin County, Minnesota; and

WHEREAS, the procedural history of the application is as follows:

1. That the above stated application was initiated by the applicant on June 25, 2021; and

2. That the Planning & Zoning Commission of the City of Hopkins, pursuant to published and mailed notice, held a public hearing on the application and reviewed such application on July 27, 2021: all persons present were given an opportunity to be heard; and,

3. That written comments and analysis of City staff were considered; and,

WHEREAS, staff recommended approval of the above stated application based on the findings outlined in the staff report dated July 27, 2021.

NOW, THEREFORE, BE IT RESOLVED that the Planning & Zoning Commission of the City of Hopkins hereby recommends the City Council approve a site plan for 819 Cambridge Street (PID 19-117-21-12-0028), subject to the conditions listed below.

1. Approval of the associated conditional use permit for a service station.

2. Conformance with all applicable standards of the B-3, General Business District and conditional use permit standards for a services station.

3. Submission and approval of revised building plans and elevations demonstrating the exterior building materials will be predominately brick or stone prior to action on this item by the City Council. Only the accent band at the top of the building may be another material like EIFS or stucco.

4. Provision of a landscape letter of credit in a form acceptable to the City Attorney equal to 1.5 times the cost of all plantings. The City shall hold this security until all plantings have survived at least one full growing season.

5. Submission and approval of exterior lighting and photometric plans prior to issuance of a building permit. These plans shall demonstrate downward directed light fixtures, poles no higher than twenty (20) feet and light levels equal to or less than 1.0 lumens at any non-residential property line or 0.5 lumens at any residential property line.

6. Submission and approval of trash enclosure plans demonstrating the enclosure will be made of materials that match the principal building prior to action on this item by the City Council.

7. Approval of all necessary permits from the Building, Engineering and Fire Departments.

8. Approval of the development by the Minnehaha Creek Watershed District and conforms with all related conditions.

9. Payment of all applicable development fees including, but not limited to SAC and City Attorney fees.

Adopted this 27th day of July 2021.

_____

Samuel Stiele, Chair

CITY OF HOPKINS
Hennepin County, Minnesota

PLANNING & ZONING COMMISSION RESOLUTION 2021-18

A RESOLUTION RECOMMENDING THE CITY COUNCIL APPROVE A CONDITIONAL USE PERMIT FOR 819 CAMBRIDGE STREET (PID 19-117-21-12-0028), SUBJECT TO CONDITIONS

WHEREAS, the applicant, Jeffery Orosz on Behalf of Pocket Change, LLC, initiated an application for, a conditional use permit allowing a service station at the property located at 819 Cambridge Street (PID 19-117-21-12-0028); and

WHEREAS, this property is legally described as Tracts A and C, Registered Land Survey No. 1250, Hennepin County, Minnesota; and

WHEREAS, the procedural history of the application is as follows:

1. That the above stated application was initiated by the applicant on June 25, 2021; and

2. That the Planning & Zoning Commission of the City of Hopkins, pursuant to published and mailed notice, held a public hearing on the application and reviewed such application on July 27, 2021: all persons present were given an opportunity to be heard; and,

3. That written comments and analysis of City staff were considered; and,

WHEREAS, staff recommended approval of the above stated application based on the findings outlined in the staff report dated July 27, 2021; and

NOW, THEREFORE, BE IT RESOLVED that the Planning & Zoning Commission of the City of Hopkins hereby recommends the City Council approve a conditional use permit allowing a service station at the property located at 819 Cambridge Street (PID 19-117-21-12-0028); subject to the conditions listed below.

1. Approval of the associated site plan application and conformance with all related conditions.

Adopted this 27th day of July 2021.

_____
Samuel Stiele, Chair

July 27, 2021 Planning Application 2021-07

Blake Road Station
Rezoning, Planned Unit Development & Site Plan Review for Site A

Proposed Action: Staff recommends the Planning & Zoning Commission adopt the following motions:

- Move to adopt Planning & Zoning Commission Resolution 2021-12 recommending the City Council approve an ordinance rezoning the subject properties (PID 19-117-21-42-0044, 19-117-21-42-0045 & 19-117-21-42-0046)24-117-22-43-0240) to Mixed Use with a Planned Unit Development (PUD), subject to conditions.
- Move to adopt Planning & Zoning Commission Resolution 2021-13 recommending the City Council approve the site plan for the Blake Road Station Site A (PID 24-117-22-43-0240), subject to conditions.

Overview

The applicant, Bryan Farquhar of Trilogy Real Estate Group, requests rezoning and planned unit development (PUD) approvals for Blake Road Station, a 3 phase mixed use residential and commercial development proposed for the northwest quadrant of Excelsior Boulevard and Blake Road just south of the future Blake Road light rail transit station. This project will redevelop the existing Hopkins Commerce Center strip commercial development into 3 separate 7-story buildings totaling 770 residential units and approximately 11,000 square feet of commercial space.

The applicant also requests site plan approval for Site A, the first of the 3 phase redevelopment, which includes a 7-story building with 220 apartment units and approximately 2,100 square feet of commercial space. This report summarizes the concept proposal, reviews the proposal against the Mixed Use district development standards and outlines a likely formal review process. Based on the findings in this report, staff recommends approval of these requests subject to the conditions detailed in the attached resolutions.

Primary Issues to Consider

- Background
- Rezoning & PUD Review
- Site Plan Review
- Engineering Review
- Alternatives

Supporting Documents

- Site Location Map
- Applicant's Narrative
- Neighborhood Meeting Comments
- Plans and Building Elevations
- Resolution 2021-12 & 2021-13
- Traffic Impact Analysis

_____

Jason Lindahl, AICP
City Planner

Financial Impact: $ N/A Budgeted: ____ Y/N ____ Source: _____
Related Documents (CIP, ERP, etc.): _____
Notes:

BACKGROUND

This Background section provides a history of existing site, project summary, and a brief summary of the review process for this development to date. More information about the project, it's phasing, design, streetscape and public realm and retail components can be found in the applicant's narrative which is attached for your reference.

Existing Site. The 6.4-acre subject property was re-platted as Lots 1, 2 & 3, Hopkins Commerce Addition in July of 1992. However, the buildings on each of these lots were built much earlier. Lot 1 contains a 44,000 square foot building constructed in 1954 (Goodwill and vacant space). Lot 2 contains a 25,000 square multitenant strip commercial building constructed in 1957. And Lot 3 contains a 26,000 square foot multitenant strip commercial building constructed in 1959. In total, the 3 multitenant strip commercial buildings total approximately 95,000 square feet of neighborhood serving retail and service uses.

Project Summary. According to the applicant, the Blake Road Station project will redevelop 6.4 acres of land located at the intersection of Excelsior Boulevard and Blake Road South. Trilogy Real Estate Group is working with the City of Hopkins to develop the site in a three phase, multi-modal transit-oriented development adjacent to the Southwest Light Rail Transit (LRT) Blake Road Station. Each phase will build upon the improvements of the previous phase and will ultimately result in an increasingly connected, pedestrian friendly, and transit focused community. The project will add to the mix of housing choices for area residents, providing a new opportunity to live immediately adjacent to the light rail transit station. As detailed in the table below, overall the site will include 770 residential units and over 11,000 square feet of retail space.

Blake Road Station Development Summary				
Site	**Start**	**Units**	**Parcel Size**	**Density**
A	Late Summer 2021	220	1.55 Acres	142 Units/Acre
B	2022-2027	250	2.1 Acres	119 Units/Acre
C	2026-2031	300	2.76 Acres	109 Units/Acre
Total	N/A	770	6.4 Acres	120 Units/Acre

Review Process to Date. The review process for this project to date included both a concept plan review with a neighborhood meeting and Environmental Assessment Worksheet (EAW). The City Council and Planning & Zoning Commission reviewed the concept plan for this development in June 2020 and generally supported the concept plan, rezoning to mixed use and use of a Planned Unit Development (PUD). The City Council offered the following comments during the concept plan review:

- In exchange for the PUD, the applicant must detail how they intend to provide a higher quality development or meet other City goals. Items the applicant could focus on include enhanced architecture, pedestrian and bicycle, sustainability, energy conservation, renewable energy, and public art elements.
- The applicant should add additional commercial space to offset the loss of the existing commercial space. This space should focus on neighborhood serving uses.

- The applicant should explore incorporation of affordable residential and commercial space into the project including larger apartment units with 3-4 bedrooms.
- The applicant should revise their plans to meet the City's exterior building materials, façade and building orientation standards.
- All 3 buildings should provide "360-degree architecture" with active street fronts on the ground level and pedestrian scaled architecture for at least the first 2 levels.
- Given the site's location adjacent to the Blake Road light rail transit station, pedestrian and bicycle access to and through this site will be essential. The applicant shall revise their plans to meet or exceed the City's landscaping, streetscape, bicycle, sidewalk and trail standards.
- The applicant shall conduct a Travel Demand Management study as required by the Mixed Use District and Hennepin County.

As a concept plan review, no public hearing was required. However, the City did require the applicant to hold a virtual neighborhood meeting. The applicant mailed invitations to property and business owners within 350' of the subject property (the same notification distance as a public hearing). A summary of the community comments from the concept plan neighborhood meeting focused on the following topics:

- Business displacement and a need to incorporate affordable neighborhood serving commercial uses
- Need for affordable and larger apartment units with 3-4 bedrooms
- The importance of pedestrian scaled architecture
- The importance of pedestrian and bicycle access to and through the site

The City Council reviewed the Environmental Assessment Worksheet in October of 2020 and made a negative declaration of need regarding the EAW. Based on the review of the project, reasonably expected environmental impacts, and the findings of fact and conclusions in the EAW, the City found that the project does not have the potential for significant environmental effects and that where there may be environmental impacts, they can be addressed through the permitting process.

Neighborhood Meeting. The City's public engagement process for this development goes above and beyond the typical statutory requirements for a public hearing and review by the Planning & Zoning Commission and approval by the City Council. It also requires the applicant to host a neighborhood meeting before the public hearing to explain the project, answer questions and take any comments. This meeting took place on July 14, 2021 at 1002 – 2nd Street Northeast (43 Hoops).

The comments from this meeting are attached for your reference. The meeting included Trilogy staff and 8 community participants. During the meeting, Trilogy staff presented their proposal and took questions on the following topics:

- Development site selection process & project timeline
- Types of units and potential rents
- Displacement of existing businesses
- Public financial participation in the project
- Environmental issues

- Potential use of solar panels

Community Comment. Under state law, these applications require a public hearing. Accordingly, the City published notice of this request and public hearing in the Sun Sailor and mailed notice directly to all property owners within 350' of the subject property. That notice directed all interested parties to send questions or comments to City Planner Jason Lindahl by mail, phone or email or to attend the public hearing where they could learn about the request, ask questions and provide feedback. As of the writing of this report, the City had received no comments or questions regarding this request. During the public hearing, staff will provide an update on all public comments received prior to the Planning & Zoning Commission meeting.

REZONING & PLANNED UNIT DEVELOPMENT REVIEW

The applicant is proposing to rezone the subject property from B-4, Neighborhood Business and I-1, Industrial to Mixed Use with a planned unit development (PUD) consistent with the Activity Center Future Land Use guiding in the 2040 Comprehensive Plan. The PUD establishes the Mixed Use district and its development regulations as the base zone and standards for review. Overall, the PUD entitles lot configuration, access and private road configuration, and building height for all 3 sites as well as the setback standards for Site A. These standards will be used for the site plan review for Site A below. Sites B and C will be required to receive separate site plan review and approval based on the entitlements established in the PUD Master Plan detailed above and the specific zoning standards of the Mixed Use district. Deviations from the Mixed Use standards for Sites B or C other than those noted above will require either a minor or major amendment to the planned unit development.

It should be noted that applicant's narrative notes their intent to subdivide the property as part of future development for Sites B and C. Because this project is along a county road, both the City of Hopkins and Hennepin County will have plat review authority. With any subdivision, the City has the ability to collect park dedication in the form of land or a fee-in-lieu. The current park dedication fee for multiple family residential subdivisions is $3,000 per unit while the commercial fee is an amount equal to five (5) percent of the fair market value of the commercial land as estimated by the county assessor. The applicant has requested and the City has agreed to apply the current park dedication fees to their future subdivision and that fee will apply to the development on all 3 sites.

Rezoning applications are considered a legislative action. When considering legislative actions, the City is advancing health, safety, and welfare by making rules that apply throughout the entire community. By including the PUD in this case, the zoning standards are only specific to the subject properties. There are three key criteria for the City to weigh when considering a rezoning request – consistency with the comprehensive plan, compatibility with present and future land uses and how the proposed development conforms with the new zoning standards. These criteria and staff's findings for each are detailed below.

Consistency with the Comprehensive Plan. Rezoning the subject properties from B-4, Neighborhood Business and I-1, Industrial to Mixed Use with a planned unit development (PUD) is consistent with the Activity Center Future Land Use guiding in the 2040 Comprehensive Plan. Activity Centers surrounds and supports the planned Blake Road and Shady Oak light rail stations along the Southwest LRT Green Line Extension. These areas are planned to include moderate to high density mixed use development designed to complement

and enhance the existing development pattern in these areas and support the public investment in transit.

The Activity Center areas are expected to experience significant reinvestment and redevelopment to absorb a substantial portion of the city's anticipated future growth. Development in the Activity Center areas is expected to be medium to larger scale neighborhood and regional uses with an approximate mix of 75% residential and 25% commercial. Densities in these areas will typically range from 20-60 units per acre, with 75-150 units per acre within ¼ mile of an LRT station platform. The applicant's plan illustrates an overall residential density of 120 units per acre, which is consistent with the Activity Center category standards; however, it falls short of the commercial space percentage guideline. The following goals from the comprehensive plan support the proposed development:

- Encourage transit-oriented development (development that emphasizes pedestrian and bicycle connectivity and a broader mix of uses at densities that support transit) in areas with high quality transit service, especially within a quarter mile of light rail stations or high-frequency bus routes.
- Plan for appropriate amenities, high-quality design, pedestrian and bicycle facilities, and open space in high growth areas, particularly in the Neighborhood Center, Activity Center, and Downtown Center future land use categories or other areas in close proximity to transit.
- Encourage the transition of selected auto-oriented areas into Activity Centers, as defined and designated in the comprehensive plan.
- Improve pedestrian and bicycle access throughout the community, particularly in the Centers future land use categories as defined and designated in the comprehensive plan or other areas in close proximity to transit.
- Engage the community to explore how to increase the mix of housing types near transit corridors, parks, and the Centers future land use categories as defined and designated in the comprehensive plan.
- Encourage all new projects to have a positive relationship to the street by orienting main entrances to the front of the property, connecting the front door to the sidewalk, and reducing parking between the building and the street as much as possible.

Compatibility with Present and Future Land Uses. Rezoning the subject properties from B-4, Neighborhood Business and I-1, Industrial to Mixed Use with a planned unit development (PUD) is consistent with surrounding present and future land uses. These uses are detailed in the table below.

Surrounding Existing and Future Land Uses Analysis		
Direction	**Existing**	**2040 Future Land Use**
North	Future Southwest LRT Station and Rail Corridor	Activity Center
South	Blake School Campus	Activity Center
East	Multiple Family Residential	Activity Center
West	Commercial/Industrial	Activity Center

Conformance with New Zoning Standards. Generally, the overall development site meets the development standards for the Mixed Uses district with the exception of building height,

signage for Goodwill, floor to area ratio (FAR), setbacks, parking stall dimensions, building façade articulation, and exterior building materials. These deviations are acceptable based on the overall planned unit development proposal from the applicant which includes transit supportive densities, ground floor walk-up units, enhanced landscaping, pet exercise area, extra bicycle facilities and energy efficiency measures.

The zoning regulations for the Mixed Use district include both development and dimensional regulations and are reviewed in detail for Site A in the Site Plan Review section below. Sites B and C will require separate future site plan review to insure conformance with the PUD Master Development plan and zoning standards of the mixed use district.

SITE PLAN REVIEW FOR SITE A

Standards for reviewing site plan applications are detailed in Article IV of the City Code. This section establishes the site plan review procedure and provides regulations pertaining to the enforcement of site design standards. These procedures are established to promote high quality development that ensures long-term stability of residential neighborhoods and enhance the built and natural environments within the City as new development and redevelopment activities occur. In this case, site plan review is required to review construction of a new building. Staff has reviewed the proposed development against the zoning regulations for the Mixed Use district. Staff's review and findings for each of these regulations are detailed below.

Height. The applicant's plans call for the height of all three buildings to exceed the Mixed Use district standard which is acceptable under the overall planned unit development. The Mixed Use district height standards for the Blake Road Station Area allows 3-4 stories for residential structures and 5-6 stories for mixed use buildings. The 7-story buildings on Sites B and C are acceptable under the planned unit development but will require separate site plan review prior to construction.

This site plan application specifically reviews Site A which includes a 7-story mixed use building with 220 residential units and 2,106 square feet of commercial space. As a mixed use building, the Mixed Use district would allow building to be up to 6 stories in height. The proposed 7-story building is acceptable in this case under the overall planned unit development.

Floor to Area Ratio (FAR). As designed, the Floor to Area Ratio (FAR) for site A meets the standard of the Mixed Use district. Floor to Area Ratio (FAR) is a measurement of density calculated by dividing the floor area of a building by the lot area of the parcel on which the building is located. In the Blake Road Station Area, the FAR standard is a minimum of 2 and a maximum of 3 for residential buildings and a minimum of 3 and a maximum of 5 for mixed use buildings. The building on Site A is considered a mixed use building because it includes commercial space. With a proposed FAR of 3.46, the building on Site A conforms to the 3 to 5 FAR Mixed Use district standard for mixed use buildings.

Setbacks. As designed, the building on Site A does not meet the setback standards for the Mixed Use district. The table below compares the required and proposed setbacks for Site A. This design results in a pedestrian and transit focused site layout and is acceptable under the overall planned unit development.

Setback Review for Blake Road Station – Site A			
Setback	**Standard**	**Proposed**	**Status**
Front (South)	15' – 25'	8'	-7 Non-Conforming
Side (East)	10'	28'	+18 Non-Conforming
Side (west)	10'	6'	-4 Non-Conforming
Rear (North)	10'	0'	-10 Non-Conforming

Off-Street Parking & Travel Demand Management. The applicant's Traffic Impact Analysis is attached as a reference. Overall, this study confirmed the City's off-street parking requirements were adequate for all 3 buildings. A specific review of Site A finds the proposed off-street parking meets the requirements of the Mixed Use district. These standards require residential uses provide a minimum of 1 and a maximum of 1.5 enclosed parking stalls per unit and 1 guest stall per 15 units. Using these standards, the 220 unit building proposed for Site A is required to provide at least 235 off-street parking stalls and 256 are proposed. This results in 21 more stalls than required under the Mixed Use district standards and a parking ratio of 1.16 stalls/unit.

It should be noted that the building on Site A also includes 2,106 square feet of commercial space. The Traffic Impact Study found the development provided adequate off-street parking for up to 11,000 square feet of commercial space with this space and its associated 32 parking stalls in Site B. The applicant will be required to demonstrate how they intend to manage off-street parking for the commercial space on Site A until completion of Site B and its 32 commercial off-street parking spaces.

Bicycle Parking. Site A exceeds the short-term and long-term bicycle parking standards for the Mixed Use district. For multifamily residential, the Mixed Use district requires 1 long-term space per 2 units and 1 short-term space per 20 units or a total of 121 bicycle parking spaces. The applicant proposes over 200 bicycle parking spaces in either a centralized bicycle parking room located at the southwest corner of Building A or at the ends of many of the vehicle parking stalls within the building. The bicycle parking room will include a fix-it station and there will also be a bike wash area in the P1 parking level.

For the retail space, the Mixed Use district bicycle parking requirements are 0.5 long-term spaces per employee and 0.5 spaces per 1,000 square feet of net building area. Based on these standards the applicant estimates 3 required spaces but is planning for 8 spaces directly along Excelsior Boulevard next to the planned retail space. At least 1 of these spaces must be long-term and located inside the building.

Shadow Study. The Mixed Use district requires a shadow study for all buildings four stories or higher and the applicant has included this study with their plans. According to the Mixed Use district standards, the shadow study must indicate the shadows cast at the shortest and longest days of the year. Impacts of a shadow on the surrounding property may be a reason to lower and/or adjust the location or height of buildings. Staff review of the shadow study finds little to no impact on adjacent properties even with the additional height to 7-stories allowed through the PUD.

Exterior. The Mixed Use district requires the primary exterior treatment (80%) of walls facing a public right-of–way or parking lot on a structure shall be brick, cast concrete, stone, marble or other material similar in appearance and durability. Regular or decorative concrete block, float

finish stucco, EIFS-type stucco, cementitious fiberboard, or wood clapboard may be used on the front façade as a secondary treatment or trim (up to 20%) but shall not be a primary exterior treatment of a wall facing a public right-of-way. The proposed exterior materials for the building on Site A are summarized in the table below.

Site A Exterior Materials					
Material		**North**	**South**	**East**	**West**
Glass		29%	32%	30%	27%
Metal Panel	Tile Siding	33%	42%	40%	18%
	Smooth Tile	5%	9%	7%	7%
Brick Veneer		21%	13%	14%	19%
Fiber Cement Lap Siding		12%	4%	8%	29%
Total		100%	100%	100%	100%

Of the proposed exterior materials detailed above, only the brick qualifies as a primary material and it covers 21% of the north, 13% of the south, 14% of the east and 19% of the west sides of the building on Site A. While these are significantly less than the requirement, the applicant notes that the brick material is concentrated on the first two levels of all sides of the building to enhance the ground level pedestrian experience. This design and mix of materials for the building on Site A is acceptable under the overall planned unit development.

The Mixed Use district zoning standards do not specifically call out exterior building material standards for interior "courtyard" facing elevations. For your reference, the applicants plan also provides this information which is summarized in the table below.

Site A Courtyard Exterior Materials					
Material		**North**	**South**	**East**	**West**
Glass		39%	25%	34%	25%
Metal Panel	Tile Siding	0%	71%	15%	51%
	Smooth Tile	2%	2%	2%	1%
Fiber Cement Lap Siding		59%	0%	49%	22%
Wood Accent Siding		0%	0%	0%	1%
Total		100%	100%	100%	100%

Building Orientation. The building on Site A conforms to the building orientation standards of the Mixed Use district. Buildings within the Mixed Use district must be oriented toward the pedestrian by providing a direct link between each building and the pedestrian walking system, with emphasis on directing people to a transit station. The applicant's plans for Site A show the building will have pedestrian connections to the existing sidewalk along Blake Road and will eventually connect with the sidewalks and streets planned for Sites B and C and the City's sidewalk and trail system. Staff recommends a condition of approval require the applicant to create a plan to allow residents, visitors and patrons of Site A to access both the City's sidewalk and trail system and the Blake Road LRT station until Sites B and C are complete.

Façade. The building on Site A does not meet the façade articulation standards of the Mixed

Use district. These standards require the primary street side façade of a building shall not consist of an unarticulated blank wall, flat front facades or an unbroken series of garage doors. The front of a building shall be broken up into individual bays of a minimum of 25 feet and maximum of 40 feet wide.

The applicant's plans show two sections of Levels 1 and 2 on all four sides of the building on Site A with bays larger than 40 feet (see attached plans and narrative). According to the applicant, this design is a result of the parking design on Level 2. While this design does not technically meet the Mixed Use district standard, all four sides of the building are articulated with other architectural elements that help break up these elevations. As a result, this design is acceptable under the overall planned unit development.

Sidewalks. Site A meets the sidewalk standards of the Mixed Use district. The Mixed Use district requires a minimum 5-foot wide sidewalk along the frontage of all public streets and within and along the frontage of all new development or redevelopment. The applicant's plans illustrate sidewalks of at least 5 feet along all four sides of Site A.

Pedestrian/Streetscapes. The Mixed Use district requires pedestrian streetscape improvements along all sidewalks. Pedestrian improvements of at least 25 percent of the landscaping budget shall be included in the development. These improvements shall create a high quality pedestrian experience through the provision of benches, planters, drinking fountains, waste containers, median landscaping and the like. Pedestrian-scale light fixtures that shine downward on the sidewalks and walkways shall be no greater than 12 feet in height and must be provided along all sidewalks and walkways to provide ample lighting during nighttime hours for employees, residents, and customers. The applicant's plans appear to meet these standards. Staff recommends a condition of approval require the applicant to provide more detailed streetscape information for street furniture and light (see also landscaping and exterior lighting sections below).

Landscaping. The applicant's landscape plan for Site A exceeds the landscaping standards for the Mixed Use district. According to the applicant's estimates, this project is required to provide $90,000 in landscape improvements with at least 25% allocated to pedestrian/streetscape improvements (see section above). In this case, the applicant's plans include $226,000 of total landscaping improvements with $163,000 of plantings, fencing and irrigation and $63,000 (or 28%) in pedestrian/streetscape improvements. Staff recommends a condition of approval require the applicant to provide a landscape and pedestrian/streetscape letter of credit in a form acceptable to the City Attorney for 125% of the value of all improvements. The City will hold the letter of credit until the plantings have survived at least one growing season and the applicant has installed the pedestrian/streetscape improvements.

Signs, Canopies and Awnings. The site plan for Site A does not include a sign plan. All signs must be approved through a separate administrative permit subject to conformance with the standards of the Mixed Use district and sign regulations contained in Article XXI - Signs. It should be noted that the PUD includes a specific approval for a specific sign to be installed on Site B. This item is addressed in the PUD section above and not part of the site plan review for Site A.

Trash Enclosure. The applicant plans to store trash containers within the underground parking

garage. The applicant shall designate an on-site location for trash pickup. Trash pick-up shall not occur within the public right-of-way.

Exterior Lighting. The applicant's plans for Site A do not include exterior lighting or photometric plans. Pedestrian-scale light fixtures that shine downward on the sidewalks and walkways shall be no greater than 12 feet in height and must be provided along all sidewalks and walkways to provide ample lighting during nighttime hours for employees, residents, and customers. Staff recommends a condition of approval require the applicant submit and receive approval of a detailed lighting and photometric plan for Site A prior to action on this item by the City Council. This plan shall include both pedestrian-scale street lights (no greater than 12' in height) as well as all building exterior lighting, light fixture spec sheets and photometric data.

Stormwater Treatment. The applicant's narrative includes stormwater treatment information that indicates it exceeds both the City's and Minnehaha Creek Watershed District's (MCWD) standards. For Site A, the majority of the stormwater treatment and attenuation will occur underground given existing site constraints. In summary, the new landscaping will help with stormwater abstraction and the underground treatment system will retain and treat stormwater in excess of MCWD and City standards. The proposed on-site stormwater management system exceeds MCWD/City standards by providing filtration treatment above the required 2" rainfall event. The detention system has the volume capacity to treat up to a 2.59" rainfall event. The proposed Jellyfish Filter system has the capacity to treat a flow rate of 2.92 CFS and the modelled flow rate is 2.62 CFS, allowing for an additional contributing flow rate of 0.3 CFS.

ENGINEERING REVIEW

The Engineering Department offers the following comments.

- Conformance with all requirements of the Traffic Impact Study.
- The plan will be subject to Hennepin County review in addition to the City, whereby the County will have authority regarding access along County Roads, review of traffic impacts, and potential necessary improvements to maintain safe and acceptable traffic operations.
- The plan will be subject to Minnehaha Creek Watershed District (MCWD) review in addition to the City, as the MCWD is the permitting authority for storm water.
- West of the site there is a localized low area that is currently not served by gravity storm sewer, and does take significant runoff from the site. The drainage plan must address this issue to mitigate the flooding that occurs at 8660 and 8700 Excelsior Boulevard.
- Construction of Pierce Avenue and the SWLRT Park and Ride by the Metropolitan Council includes extension of new water main from Blake Road. The proposed water main extension to serve the Blake Road Station site from Excelsior Boulevard must connect to the new main in Pierce Avenue.
- The City has a sanitary lift station along Excelsior Boulevard, which must remain operational and accessible.
- Water and sewer infrastructure shall meet City Standards.
- All drive aisles through the site must meet the standards for fire access per the State Fire Code.

ALTERNATIVES

1. **Recommend approval of the rezoning, planned unit development & site plan for Site A applications**. By recommending approval of these applications, the City Council will

consider a recommendation of approval.

2. **Recommend denial of the rezoning, planned unit development & site plan for Site A applications**. By recommending denial of these applications, the City Council will consider a recommendation of denial. Should the Planning & Zoning Commission consider this option, it must also identify specific findings that support this alternative.

3. **Continue for further information**. If the Planning Commission indicates that further information is needed, the items should be continued.

Site Location Map for Blake Road Station



Blake Road Station
Project Narrative – Formal Review
2021-06-25 Submission

PROJECT OVERVIEW

The Blake Road Station project is the redevelopment of 7.4 acres of land located at the intersection of Excelsior Boulevard and Blake Road South in Hopkins, MN. Trilogy Real Estate Group is working with the City of Hopkins to develop the site in a three-phase, multi-modal transit-oriented development adjacent to the Blake Road Southwest LRT Station. The project will serve as a welcoming gateway and anchor for the new transit station and will advance long-standing City goals outlined in numerous area planning documents, including the *East Hopkins Land Use & Market Study* (2003), *Blake Road Corridor Small Area Plan* (2009), *Blake Road Corridor Study* (2015) and the *Blake Road LRT Station Area Development Guidelines* (2015), as discussed in more detail in the latter part of this narrative.

As early as 2003, the *East Hopkins Land Use & Market Study* confirmed that redevelopment within the City's east end along Excelsior Boulevard and Blake Road would require a significant catalyst to help overcome certain existing barriers and obstacles to market delivery of such redevelopment. The applicant believes that the high-quality redevelopment of the project site and creation of a new transit-oriented node with significant residential density will provide such a catalyst. Each phase will build upon the improvements of the previous phase and will ultimately result in an increasingly connected, pedestrian friendly, and transit-focused community. The project will add to the mix of housing choices for area residents, providing a new opportunity to live immediately adjacent to the light rail transit station.

STREETSCAPE AND PUBLIC REALM

The development team has approached this site as a unique opportunity to complement the transformative power of the Southwest LRT line. Each phase of the Blake Road Station project defines and beautifies the streetscape while complementing the crucial transit functions in and around the site. Currently, most of the site is comprised of older, stressed pavement with ill-defined access and a plethora of surface parking stalls. In contrast, the development team is proposing a transformed site that emphasizes a neighborhood scale of connected streets, with traffic calming measures and pedestrian features that will significantly improve the aesthetic of the gateway to the City of Hopkins.

The project vision includes extensive pedestrian improvements for the area including sidewalk connections through the site that do not exist today. Ample boulevards and a rhythm of deciduous street trees will provide a human-scale canopy year-round. The trees' summer shade reduces the heat island effect, creating a comfortable microclimate when needed most. Both the trees and parallel parking zones will help to create visible friction that will successfully reduce driving speeds to provide a safer environment for people, bikers, and drivers. The pedestrian zone along Excelsior Boulevard and Blake Road expands to a width suitable for public street amenities including benches, bike racks, street lighting and planting beds.

A new North-South street that divides the site in two and connects to the SWLRT station becomes the crucial spine from which stems entries, active uses, and a linear pocket park. The future use parcel that sits immediately adjacent to the project and south of the park-n-ride lot will have a unique opportunity to respond to this North-South street and linear park in addition to the many other benefits in and around the site.

BUILDING DESIGN

Blake Road Station will provide creative, mid-rise residential buildings that maximize density while emphasizing green space and public realm at the street level. The proposed style of construction for Buildings A, B, and C is five levels of wood framing over two levels of pre-cast concrete podium. Each building will also incorporate a below-grade level of concrete structure for parking. Trilogy envisions a community that values leisure and comfort with the ease of urban connection. The exterior building design draws on these qualities of being a transition from an urban to naturalistic landscape. The architecture offers a refined exterior material palette that reinforces this site's potential as a catalyst for beautiful design and smart growth in the Blake Station area of Hopkins. The palette, forms, colors, textures, and details create a coherent whole that is energizing and enduring.

Exterior materials are modern interpretations of the familiar including brick veneer, metal panel and tile siding, fiber cement siding, and glass. The brick veneer is a medium-toned, warm brick that draws influence from the nearby Blake School and local red brick. A warm gray metal panel and tile adds an attractive sheen and smooth contrast to the primarily masonry base. A light, linen hue fiber cement siding is used strategically to define the building mass both vertically and horizontally, emphasizing the concept of the metal tile being a wrapped skin that folds in and around the building. The shingled look of the metal tile with contrasting window frames hints to the lakeside homes of bucolic Minnesota landscapes, whereas the brick correlates to the urban character of downtown Hopkins. This pairing of materials adds an interesting and tactile palette fitting of a prominent and active site. Wood accents are used at prominent entries and walkup units, adding further refined details to the human experience. The architectural exterior elevations further define the proposed materials.

Amenity courtyards, balconies, and walk-up terraces extend living spaces to the outdoors while improved sidewalks and connections encourage active lifestyles for residents. With close proximity to the Cedar Lake Trail, each building will supply ample storage and access to bicycle repair facilities to encourage bicycle use for recreation as well as daily commuting.

The new, state-of-the-art dwelling units will support the residents' sustainable living experience by providing urban housing that incorporates energy-efficient appliances, low-flow water fixtures, low-VOC paints, building-wide recycling practices and encouraging car-free living. The buildings will be designed to incorporate assemblies that ensure high-quality acoustical performance between units (wall and floor assemblies).

DEVELOPMENT PHASING

Commencement of construction of the various phases is dependent upon market conditions and existing lease agreements. Subject to those conditions, the development team currently anticipates the following construction start dates for the various phases:

Building A: Late Summer 2021
Building B: Spring 2022 – 2027 (pending existing lease agreements)
Building C: Spring 2026 – 2031 (pending existing lease agreements)

CITY APPLICATIONS/APPROVALS

- Zoning Application: Requesting rezoning from B-4 (Neighborhood Commercial) and I-1 (Industrial) to Mixed Use District
- Planned Unit Development (PUD) Submittal (for the Overall Site)
- Site Plan Approval for Site A (Site Plan Review Application)
- The development plan will necessitate re-platting of the land in a future phase.

- Travel Demand Management Study approval by the City of Hopkins and Hennepin County
- Approvals from the Minnehaha Creek Watershed District
- Execution of a Planned Unit Development Agreement (to be finalized and submitted at a later date)

PROPOSED DEVIATIONS FROM MIXED USE DISTRICT STANDARDS

Strict adherence to the Mixed Use District standards and requirements is not required in this case to satisfy the intent of the City's planned unit development provisions and the proposed deviations from those standards will not prejudice the health, safety or welfare of the residents of the development, the surrounding area or the city as a whole. The proposed deviations from Mixed Use District standards for the Blake Road Station project are as follows:

1) Proposed height of 7 stories proposed for Sites A and B rather than the allowed 5-6 stories for Mixed Use buildings per zoning code
2) Proposed height of 7 stories for Site C building rather than the allowed 3-4 stories for Residential use buildings per zoning code
3) Proposed monument sign for Goodwill that is:
    a. the advertisement of a tenant off-premises from where the tenant is located;
    b. setback 10 FT of a property line rather than 20 FT minimum required by zoning code
    c. sign size: 3 ft wide x 6 ft tall
4) Floor Area Ratio:
    - Rather than 3.0 minimum FAR required by zoning code for Mixed-Use, Site B is proposing an FAR of 2.72
        - *Future Phase submittal (to allow for the relocation of a lot line to the centerline of the east-west private drive):*
            - Rather than 3.0 minimum FAR required by zoning code for Mixed-Use, Site A would propose an FAR of 2.95
5) Rather than a front yard setback of 15-25 FT per Mixed Use zoning:
    - Site A is proposing front yards that do not meet zoning code as follows:
        - Side 1 (Excelsior): 8 FT rather than required 15 FT min.
        - Side 2 (Pierce, incl. corner): 6 FT at corner and 9 FT 8 IN along Pierce rather than required 15 FT min.
        - Side 5 (North): 5 FT to structure and 0 FT to walk-up patios rather than 15 FT min. required by code
            - *Future Phase submittal (to allow for the relocation of a lot line to the centerline of the east-west private drive):*
                - Side 5 (North): the min. setback would be met *(the deviation requested in Site Plan Review for Site A would be eliminated)*
                - Side 5 (North): 42 FT front yard setback to structure rather than 25 FT max. allowed by code.
        - Side 6 (East): 28 FT for upper levels and 31 FT on level 1 rather than 25 FT max. allowed per code
    - Site B is proposing front yards that do not meet zoning code as follows:
        - Side 1 (Excelsior): 10 FT 8 IN rather than 15 FT min. required by code
        - Side 2 (West 1): 33 FT 6 IN rather than 25 FT max. allowed by code
        - Side 3 (West 2): 49 FT rather than 25 FT max. allowed by code
        - Side 5 (Blake): 14 FT rather than 15 FT min. required by code
    - Site C is proposing front yards that do not meet zoning code as follows:
        - Side 1 (south): 83 FT 8 IN rather than 25 FT max. allowed by code

- *Future Phase submittal (to allow for the relocation of a lot line to the centerline of the east-west private drive):*
    - Side 1 (south): the max. front yard setback request would be a lesser amount (48 FT) and not to exceed the 83 FT 8 IN amount requested in the deviation under the Site Plan Review for Site A
  - Side 2 (Pierce, incl. corner): 12 FT 10 IN rather than 15 FT min. required by code at corner condition
  - Side 4 (east): 51 FT 10 IN rather than 25 FT max. allowed by code

6) Rather than a rear yard setback of 10 FT minimum per Mixed Use zoning:
   - Site B is proposing a rear yard that does not meet zoning code as follows:
     - Side 1 (north): 5 FT rather than 10 FT min. required by code
7) Rather than a parking stall dimension of 9 ft x 20 ft, 9 ft x 18 ft parking spaces are proposed in Sites A, B and C. 9 ft x 18 ft parking spaces make up the majority of stalls with compact stalls comprising not more than 25% of stalls. Site A parking metrics are defined on title sheet T1.1.
8) Building façade articulation – Site A:
   - South elevation – There are two sections of Levels 1 and 2 with bays larger than 40 ft in length (see elevations for dimensions). The depth of these two sections are driven by the parking requirements at Level 2. The exterior wall is articulated by a rhythm of glazing, metal panel, and brick. Levels 3-7 above are divided into bays of less than 40 ft.
   - West elevation – There is one section of Levels 1 and 2 with a bay larger than 40 ft in length (see elevations for dimensions). The depth of this section is driven by the parking requirements at these levels. The exterior wall is articulated consistently with the other elevations by a rhythm of glazing, metal panel, and brick. Levels 3-7 are divided into bays of less than 40 ft. by changes in plane, material, and balconies.
   - North elevation – There are two sections of Levels 1 and 2 with bays larger than 40 ft in length (see elevations for dimensions). These exterior walls are articulated with walk-up patios and a rhythm of glazing, metal panel and brick. Levels 3-7 are divided into bays of less than 40 ft. by changes in plane, material, and balconies.
   - East elevation – There is one section of Levels 1-2 with a bay larger than 40 ft in length (see elevations for dimensions). This exterior wall is articulated with walkup patios and a rhythm of glazing, metal panel, and brick. Levels 3-7 are divided into bays of less than 40 ft. by changes in plane, material, and balconies.

9) Exterior building material percentages

High-quality, primary materials of brick and glazing are proposed at Levels 1 and 2. Slight deviations in allowable percentages of secondary materials are strategically placed above the street level zone and in concert with the overall architectural concept. The zoning material guideline does not identify the metal panel tile as primary or secondary, though the applicant proposes this material as an equally durable and attractive option to other primary materials. The metal panel tile is both modern and traditional and creates a dynamic aesthetic within a uniform system.

Requested deviations:

- West elevation (Site A) – Fiber cement siding, a secondary material, covers 29% of the West elevation, exceeding the 20% limit for secondary materials on primary facades. For the first two levels of the west elevation, at least 97% of the façade is comprised of primary materials (brick, metal and glass). Requested deviation to allow up to 30% for secondary materials on the West elevation for Site A.

SUPPORT FOR PROPOSED DEVIATIONS

The applicant believes the development, as proposed with deviations from zoning code ordinances, is a high-quality proposal for the City of Hopkins and better aligns with overall Comprehensive Plan goals. To ensure a high-quality development, the applicant is proposing the following site enhancements in support of the proposed deviations:

Enhanced Pedestrian Scale Architecture

The deviations for façade articulation are required only at Level 1 and Level 2 which is necessitated by parking structure. These five sections across all four Site A building elevations have been broken up with patterns of glazing, metal panel and brick. Furthermore, walk-up apartment units with wood slat privacy railings create added depth, provides additional opportunity for landscape, and permits for apartment privacy while bolstering the pedestrian experience. Amenities and retail uses at ground level will further activate and enhance the street level experience.

Site Access Improvements

The master plan for the new development aligns directly with goals from Station Area Planning documents. A new network of publicly accessible streets divides the site into pedestrian-scaled, walkable quadrants and connect the surrounding context to the SWLRT station. The new North-South street becomes the crucial spine from which stems primary building entries, active uses, and a public linear park. The East-West street further breaks down an otherwise super block, improving circulation and creating a tree-lined street with parallel parking and walk-up townhome units.

As described under the 'Streetscape and Public Realm' section, the project vision includes extensive pedestrian improvements for the area, including sidewalk connections through the site that do not exist today. Both the trees and parallel parking zones will help to create visible friction that will successfully reduce driving speeds to provide a safer environment for people, bikers, and drivers. The pedestrian zone along Excelsior Boulevard (ranges from 15'-4" to 34 ft) and Blake Road (ranges from 17'-6" to 34 ft) expands to a width that supports public street amenities including benches, bike racks, street lighting and planting beds.

Building setbacks provide comfortable buffer zones between street right-of-way and the building edges. The proposed setbacks offer a balance of enough distance to create green zones without compromising the more urban goals of transit-oriented development. This balance of ample though not excessive setbacks prioritizes pedestrians and human activity in and around the site.

Exceeding Stormwater Standards

The applicant is exceeding the Minnehaha Creek Watershed District and City of Hopkins' minimum standards for stormwater treatment. Runoff from this Site will be conveyed to the future 325 Blake Road regional stormwater treatment facilities via the Powell Road diversion. However, the new landscape areas, underground pipe retention system and Jellyfish treatment structure proposed on-site will not only provide rate control but will treat the first 2-inches of rainfall from the impervious area. This is a substantial improvement from the site condition today as the site is primarily impervious surface and stormwater runs off without any treatment or attenuation. Similarly, there is an existing run-off problem from the existing Goodwill site contributing to the Edco parcel directly west. The proposed Site A and Goodwill parking lot improvements will capture majority of this off-site run-off before leaving the applicant's site.

In summary, the new landscaping will help with stormwater abstraction and the underground treatment system will retain and treat stormwater in excess of MCWD and City standards. The proposed on-site

stormwater management system exceeds MCWD/City standards by providing filtration treatment above the required 2" rainfall event. The detention system (BMP 1A) has the volume capacity to treat up to a 2.59" rainfall event. The proposed Jellyfish Filter system (BMP 1B) has the capacity to treat a flow rate of 2.92 CFS and the modelled flow rate is 2.62 CFS, allowing for an additional contributing flow rate of 0.3 CFS. MCWD also requires 70% TSS removal, whereas BMP 1B has an 80% removal efficiency.

MCWD requires proposed runoff rates to be equal to or less than the existing condition. Total proposed site runoff rates are reduced by approximately 35% in all rainfall events from the existing condition. The system also takes on offsite drainage from the north that would otherwise go untreated.

The majority of the new/reconstructed site area will be dedicated to roof drainage, which is assumed cleaner than pavement runoff. This will further reduce pollutant loadings discharged from the site. The landscaped area within the study area is almost doubled from the existing conditions as well. Due to contaminated groundwater conditions, this additional landscape area has not been included in the model for viable infiltration to be conservative, but the new landscape areas will certainly provide additional volume reduction in reality.

Enhanced Landscaping

The deviations in setbacks offer yards that are both deep enough for landscaping and green space and reasonable for creating a "street wall" for the pedestrian experience. The deviations also help to implement a comprehensive plan goal of creating a 'positive relationship to the street' by proposing appropriate setbacks for the residential density guided by the 2040 Comprehensive Plan (75-150 units per acre within ¼ mile of an LRT station platform).

As previously mentioned under 'Streetscape and Public Realm,' the master plan includes generous planted zones (3 ft to 10 ft wide) and a rhythm of deciduous street trees that will provide a human-scale canopy year-round. The trees' summer shade reduces the heat island effect, creating a comfortable microclimate when needed most. A linear park is proposed at the west side of the Site B building and is further discussed under 'Site Access Improvements.'

Curbed planting beds enhance the streetscape along Excelsior Blvd and incorporate details from the recent streetscape upgrades along Blake Road to create a cohesive site plan. The internal boulevard along Pierce will include a durable strip of turf between the street curb and sidewalks. Building edges are enhanced by green and planted yards with an array of site-appropriate species. This variety adds a visually interesting green environment and is a significant improvement from existing conditions today.

Calculating the minimum landscape value based on the current project budget for Site A and per the City's landscape code requirements (sections 543.12 Pedestrian/Streetscapes and 543.13 Landscaping), the minimum landscape value is approximately $90,000, with at least 25 percent allocated to pedestrian improvements. The estimated Landscape and Pedestrian/Streetscapes value for Site A will exceed the minimum landscape value requirement.

We estimate that Site A will provide the following:

- Trees: $28,000
- Shrubs: $22,000
- Grasses: $5,000
- Sod: $13,000
- Planting Soil: $15,000

- Tree Grates: $5,000
- Structural Soil: $7,000
- Edger/Mulch: $15,000
- Irrigation: $35,000
- Fencing/screening: $18,000

Excelsior Boulevard
- Curb islands: $25,000
- Color Concrete: $10,000
- Pavers: $18,000
- Site Furniture: $10,000

TOTAL ESTIMATED LANDSCAPE VALUE PROVIDED $226,000

Specifics for Site A's landscaping plan and plant species can be found within the application materials.

Proposed Pet Exercise Area (Dog Park)
The importance of providing a formal exercise area for pets, specifically dogs, has been acknowledged by including a dog park along the west side of the Site C building. The dog park, measuring 15 ft x 55 ft, will be fenced and includes small-scale lighting, seating and receptacles for proper disposal of animal waste.

Active Uses and Building Transparency
With effectively four "front yards" on Site A, the programming and pedestrian scale design ensures articulation and interest on all sides, rounding out the 360-degree architecture of the building design. Since the Concept Design review phase, the development team has revised the distribution of ground floor uses and has subsequently added walk-up style units with direct sidewalk access to articulate the east and north facades, adding vibrancy to the streetscape.

The Building A elevation along Excelsior Blvd meets city ordinance requirements for a minimum of 60% glazing for front street-facing façades (between 2 ft and 10 ft). Active uses line the street frontages with a retail space anchoring the southeast building corner along with the main residential lobby. Shared building amenities spaces for residents will front Excelsior Boulevard with a secondary resident entrance at the intersection of Pierce and Excelsior.

Bike Amenities
With immediate access to the Cedar Lake Trail, ample bike amenities will promote the use of multiple modes of transportation for residents and patrons to the site. The city standard for bike parking is one long term stall per 2 units and one short term per 20 units, or 121 total bike racks. Building A will accommodate over 200 bike racks for resident storage within the building. The Retail requirements are 1.50 spaces per employee and 0.5 spaces per 1,000 square feet or 3 spaces; public bike racks (8 capacity) are located within the right-of-way adjacent to the primary Building A entrance, and a workshop amenity along Excelsior Blvd will include a bike room and fix-it stations. A bike wash area with automatic shut off timer will be available in the P1 parking level.

Sustainable Design
The project is enrolled in Xcel's Energy Efficient Buildings (EEB) program to evaluate and prioritize strategies in order to maximize energy efficiency. See separate attachment for a comprehensive

summary of the energy saving and sustainable design features of the project.

Support of Comprehensive Plan Goals

The project supports and further advances a number of goals outlined in the City's 2030 Comprehensive Plan and draft 2040 Cultivate Hopkins Plan. See summary of these goals below within the PUD statement section.

PLANNED UNIT DEVELOPMENT STATEMENT

Per Hopkins, Minnesota, Code of Ordinances, Part III – Land Development, Chapter 102 – Planning and Zoning, Article XX. – Planned Unit Development, Sec. 102-680, (e), (6), the applicant is responding to the following:

- A written statement generally describing the proposed PUD and the market which it is intended to serve and its demand showing its relationship to the city's comprehensive plan and how the proposed PUD is to be designed, arranged and operated in order to permit the development and use of neighboring property in accordance with the applicable regulations of the city.

Market

The proposed Planned Unit Development is intended to serve the growing population of Hopkins and provide dwelling units within one quarter of a mile of the future Blake Road Southwest LRT Station. It is anticipated with the proposed future LRT station that this site will be a regional draw for apartment-dwellers.

Trilogy will deliver an incredibly important development node along Blake Road, as envisioned in numerous planning documents, including the East Hopkins Land Use & Market Study, Blake Road Corridor Study and the Blake Road LRT Station Area Development Guidelines. This project will be an anchor for the LRT station and act as a catalyst for future development in the area. Many of the development recommendations outlined in the station area development guidelines are being realized within the proposed project. Here are just a few of the stated goals that will be supported by the project's site and building design:

Site Design:

- Create a connected, walkable, mixed-use, sustainable neighborhood, with a pedestrian-oriented and human-scale streetscape
- Improve safety and security with strategies such as greater security presence, improved lighting, and other practices such as CPTED (Community Policing Through Environmental Design)
- Pursue transit-oriented design that enhances multi-modal access, and provide for bicycle accommodations (racks, lockers, etc.) for businesses and residents.
- Add green space to soften the built environment that would allow for outdoor use year-round.
- Utilize landscaping and streetscape amenities to create stronger pedestrian district.
- Limit surface parking with new development encourage underground or structured parking

Neighborhood Diversity:

- Provide for a range of housing types and price points to meet the needs of people in all stages of life, with the design flexibility to accommodate changing lifestyle needs
- Utilize universal design principles that can respond to changing demographic needs and anticipate in innovative ways to address the dynamic and changing needs of residents
- Strengthen the vitality of the area through increased density and mixed commercial and

residential uses
- Promote high-quality design
- Enhance a sustainable neighborhood by promotingenergy efficiency and renewable energy
- Create opportunities to live, work, learn, play – the spectrum of elements for a healthy community

Sustainable Design:
- Improve water and environmental quality
- Incorporate sustainable development practices into new construction projects

Neighborhood vitality and livability:
- Multi-family housing amenities such as guest suites, work-from-home opportunities, and shared space for larger gatherings
- Medium to high density residential, to preserve green space and enhance street-level amenities
- Locally owned businesses and increased opportunities for residents of all ages to live and work in the area
- The potential for commercial uses that enhance rather than compete with downtown Hopkins Mainstreet vitality
- Creative ways to support small cultural businesses that serve the community
- Convenience services (e.g. pet maintenance areas, bike repair, etc.), especially near the transit station
- Flexible space that can adapt as needs change
- Welcome developers and businesses that operate with equity principles ofhiring and wages

Comprehensive Plan

The 2040 Comprehensive Plan Update – Cultivate Hopkins – guides this property as Activity Center. Activity Centers surround and support the planned Blake Road and Shady Oak light rail stations along the Southwest LRT Green Line Extension. These areas will include moderate density to high-density mixed-use development designed to complement and enhance the existing development pattern in these areas and support the public investment in transit. The Activity Center areas are expected to experience significant reinvestment and redevelopment to absorb a substantial portion of the city's anticipated future growth.

Development in the Activity Center areas is expected to be medium to larger scale neighborhood and regional uses with an approximate mix of 75% residential and 25% commercial. Densities in these areas will typically range from 20-60 units per acre, with 75-150 units per acre within ¼ mile of an LRT station platform.

The proposed project illustrates a residential density that is consistent with the Activity Center guidance, but it falls short of the 2040 guidance for commercial space percentage. Site A will provide 2,000 sq ft of retail space along Excelsior Boulevard and Site B will provide 9,000 sq ft of retail space fronting Blake Road. Trilogy is responding to current market conditions that are more immediate than a comprehensive plan's land use guidance. The Retail Component Evaluation performed concluded that retail in this development is high-risk. The applicant is attempting to work with the City of Hopkins to address the retail desire, but also needs to be vigilant and not over supply the site. There are negative ramifications to continually vacant retail space. The applicant believes strongly that multi-family residential is highest and best use for this location. The constraints of the site are prohibitive to adding traditional retail space to the development.

The Applicant is responding to the 2040 comprehensive plan with an overall development project that supports the following stated goals:

- Encourage transit-oriented development (development that emphasizes pedestrian and bicycle connectivity and a broader mix of uses at densities that support transit) in areas with high quality transit service, especially within a quarter mile of light rail stations or high-frequency bus routes.
- Plan for appropriate amenities, high-quality design, pedestrian and bicycle facilities, and open space in high growth areas, particularly in the Neighborhood Center, Activity Center, and Downtown Center future land use categories or other areas in close proximity to transit.
- Encourage the transition of selected auto-oriented areas into Activity Centers, as defined and designated in the comprehensive plan.
- Improve pedestrian and bicycle access throughout the community, particularly in the Centers future land use categories as defined and designated in the comprehensive plan or other areas in close proximity to transit.
- Engage the community to explore how to increase the mix of housing types near transit corridors, parks, and the Centers future land use categories as defined and designated in the comprehensive plan.
- Encourage all new projects to have a positive relationship to the street by orienting main entrances to the front of the property, connecting the front door to the sidewalk, and reducing parking between the building and the street as much as possible.

Designed, Arranged, Operated

This project will not impede improvement of surrounding properties, and the PUD is designed and arranged to permit the orderly development and use of neighboring property in accordance with the applicable regulations of the City. The organization of the parcels within this development is specifically intended to create a walkable, transit-oriented community. The height and associated density of the project will provide housing to help meet City goals for increasing housing options in Hopkins along transit corridors. The proposed residential and retail uses are compatible with and will enhance the existing character of the area. High-density, mixed-use redevelopment of this site is consistent with City goals and, by being responsive to the land use policies for this area, the project will promote the orderly development of the Blake Road Corridor.

The contemporary, high-quality building design will be an attractive addition to the built environment along Excelsior Boulevard and the mix of uses will improve and activate the pedestrian realm. The proposed development will not be detrimental to or endanger the public health, safety, comfort or general welfare, and approving the PUD will allow a transit-oriented, mixed-use development that is consistent with the goals of City's comprehensive plan. Infill development on the underutilized site will have a positive effect on the health, safety and vitality of the area. The new construction will comply with all building and site development codes.

Project: Blake Road Station Development
RE: Neighborhood Meeting (July 14, 2021, 6:30-7:30 pm)

Attendees: (see attached Sign-In Sheet for attendees that signed in; approximately 15 people attended)

Development Team Attendees: Josh Peters, Tim Biere, Nicole Midtdahl – Trilogy Real Estate Group; Gretchen Camp, Heather Whalen, Alyssa Jagdfeld and Teresa Forsberg – ESG

Introductions were made from the development and design team. The general public approvals process and next steps for this project at the City were discussed. General master plan clarification questions were asked as well as the location of the future LRT station.

Questions from the group and discussion:

1. What type of apartments and any proposed for ownership? **Market-rate; none for ownership.**

2. Are you proposing any affordable units? **No. The study performed for Hopkins indicated there is a surplus of affordable units that already exist.** Perhaps discuss with surrounding sites about proposing some affordable housing.

3. What is the general construction timeframe for each phase? **It is approximate – Fall 2021 start construction for Site A; Fall 2022 start construction for Site B; 10 years after approval granted for Site C**

4. Do you own this/these property/properties? **Not yet. Due diligence is occurring, and a closing date would come after approval is granted (approximately Aug. 18).**

5. How did you select this property? **It is located near the future LRT station. Hopkins has a certain amount of vacancy, so there is an adequate need for proposing a project like this.**

6. Most of us here tonight are business owners:
    a. What types of retail are you proposing? **We are open to various types but cannot discuss the specifics of leases without the landlord(s) present. Any questions we've already received have been forwarded onto the landlord(s).**
    b. What types of retail are in your other projects? **We do not have retail in other projects due to those projects' locations and market.**

7. What about any environmental issues? **We have an environmental report that indicates environmental issues. Any contaminated water that will be properly dealt with in the new construction efforts, proper vapor mitigation will occur, and, for any existing asbestos, proper asbestos remediation will occur. We can share a list of sustainable items that are proposed in the project and site [we shared with an interested attendee via email].**

8. What about solar? **We have been exploring being solar-ready.** Perhaps investigate the solar payback and electric models. **We are enrolled with Xcel Energy for an efficient building analysis.**

9. What is the unit rental range? **The rental model is based on the neighborhood analysis. We do not have the rental cost ready to release as that will be concluded further into construction.**

10. How much TIF are you asking for? **None.**

11. How much notice-to-vacate will we receive? **We don't have the lease terms nor can discuss with you without the landlord(s) being present.** None of us have leases. Mac's Liquor owner expressed he is most concerned with where he goes when Site A breaks ground (his existing location).

12. I'd like to see a townhome style proposed for this site.

13. Can you sit down with existing retailers now and work on the top identified needs for retail you're proposing? **We encourage you to discuss this strategy with the City so that we can work together, especially on the subsidy part of the financial ask for tenants.**

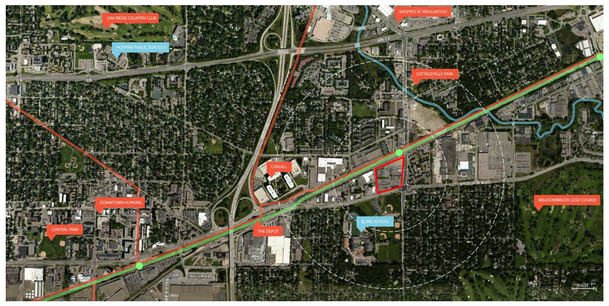
14. Have you expressed interest in the Arby's site? **We have, and we have not received returned correspondence.** Has the City notified you of other possible sites to develop? **Yes, and we've investigated as well.**

BLAKE STATION, MASTER PLAN & SITE A

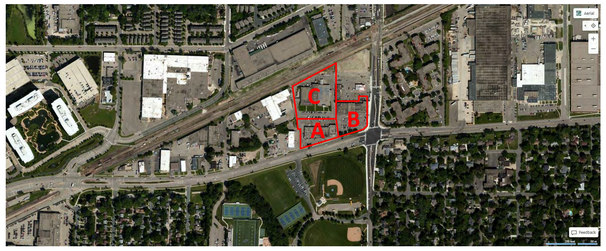


325 BLAKE ROAD, HOPKINS, MN 55343

PROJECT LOCATION



Neighborhood Context Map



Site Location

PROJECT TEAM

OWNER/DEVELOPER:
Trilogy Real Estate Group, LLC
520 West Erie Street Suite 100
Chicago, IL 60654
Ph: (312) 750-0900 Ext. 125

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ESG Architecture & Design
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Minneapolis, MN 55415
Ph: 612-339-5508

LANDSCAPE ARCHITECT:
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CIVIL ENGINEER:
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Minneapolis, MN 55402
Ph: 612-338-0713

MEP:
Emanuelson-Podas
7705 Bush Lake Road
Edina, MN 55439
Ph: 952-930-0050

BUILDING METRICS

SITE A	Lot area (SF):	65,026	Lot area (acres):	1.49
	Project SF:	330,103	FAR (excludes parking):	3.46
	Dwelling units:	220	DUA:	148
	Parking stalls:	256	Parking ratio:	1.16
SITE B	Lot area (SF):	94,317	Lot area (acres):	2.17
	Project SF:	405,413	FAR (excludes parking):	2.72
	Retail SF:	9,013		
	Dwelling units:	250	DUA:	115
	Parking stalls (Retail + Res):	340	Parking ratio:	1.23
	*32 parking stalls dedicated to Retail use			*1.26 including Retail stalls
SITE C	Lot area (SF):	122,309	Lot area (acres):	2.81
	Project SF:	443,548	FAR (excludes parking):	2.45
	Dwelling units:	300	DUA:	107
	Parking stalls:	390	Parking ratio:	1.30
SITES A,B,C	Total lot area (SF):	281,652	Total lot area (acres):	6.47
	Total project SF:	1,179,064	Average FAR (excludes parking):	2.88
	Total dwelling units:	770	Average DUA:	123
	Total parking stalls:	986	Average parking ratio:	1.23
SITE PARKING	Parallel parking	38		
RETAIL AREA		11,067 SF		

** LOT AREA SHOWN HERE IS AMOUNT OF OVERALL PARCEL AREA LESS THE TRAVELLED WAY (EXCELSIOR BLVD AND PIERCE AVE) AND PEDESTRAIN EASEMENT AREA (ALONG EXCELSIOR BLVD).

		RETAIL	LOBBY/AMENITY	PARKING	SERVICE	COMMON/ CIRCULATION	RESIDENTIAL	GSF	PARKING STALLS
SITE A	LEVEL 7				461	4,514	31,961	**36,936**	
	LEVEL 6				461	4,514	32,276	**37,251**	
	LEVEL 5				461	4,514	32,239	**37,214**	
	LEVEL 4				461	4,514	32,239	**37,214**	
	LEVEL 3		2,204		486	4,559	29,984	**37,233**	
	LEVEL 2			39,473	983	2,484	9,606	**52,546**	99
	LEVEL 1	2,054	9,573	30,223	1,627	2,800	6,526	**52,803**	62
	LEVEL P1			35,679	2,303	924		**38,906**	95
		2,054	**11,777**	**105,375**	**7,243**	**28,823**	**174,831**	**330,103**	**256**
								GSF Total	
		units	220	NRSF avg	795				
		SF/parking stall	412	GSF/unit	1500				
		stalls/unit	1.16	Efficiency	86%	Bike Parking			130

SITE A - Unit Mix		STUDIO	JR 1 BR	1 BR	1 BR DEN	2 BR	3 BR	2-STORY TOWNHOME 1 BR - LL	2-STORY TOWNHOME 1 - BR - UL	2-STORY TOWNHOME 2 BR - LL	2-STORY TOWNHOME 2 BR - UL	
	LEVEL 7	2	7	17		12	2					
	LEVEL 6	2	7	17		13	2					
	LEVEL 5	2	7	17		13	2					
	LEVEL 4	2	7	17		13	2					
	LEVEL 3	3	6	15		12	2					
	LEVEL 2			4	1	3			5			3
	LEVEL 1			2		1		5		3		
	LEVEL P1											
*unit mix is anticipated as proposed but subject to changes		**11**	**34**	**89**	**1**	**67**	**10**	**5**		**3**		**220**
		5.0%	15.5%	40.5%	0.5%	30.5%	4.5%	2.3%		1.4%		

SITE A - Parking Mix		9'-0" x 18'-0" Standard	9'-0" x 18'-0" ADA	8'-6" x 18'-0" Standard	8'-0" x 18'-0" Compact	9'-0" x 16'-0" Compact	8'-6" x 16'-0" Compact	8'-0" x 16'-0" Compact	9'-0" x 18'-0" Tandem	Bike Parking	
	LEVEL 2	64	2	12	4	4	32	1		60	
	LEVEL 1	42	4	5	4	4	1	2		100	
	LEVEL P1	57	2	12	3	8	10	0	3	40	
		163	**8**	**29**	**11**	**16**	**23**	**3**	**253**	3	200
		64.4%	3.2%	11.5%	4.3%	6.3%	9.1%	1.2%			

		RETAIL	LOBBY/AMENITY	PARKING	SERVICE	COMMON/ CIRCULATION	RESIDENTIAL	GSF	PARKING STALLS
SITE B	LEVEL 7				146	4,605	36,873	**41,624**	
	LEVEL 6				146	4,605	36,873	**41,624**	
	LEVEL 5				146	4,605	36,873	**41,624**	
	LEVEL 4				146	4,605	36,873	**41,624**	
	LEVEL 3		2,886		146	4,718	34,233	**41,983**	
	LEVEL 2		645	43,150	1,725	3,456	16,847	**65,823**	101
	LEVEL 1	9,013	10,330	40,761	2,572	1,941		**64,617**	88
	LEVEL P1			65,014	696	784		**66,494**	151
		9,013	**13,861**	**148,925**	**5,723**	**29,319**	**198,572**	**405,413**	**340**
								GSF Total	
		units	250	NRSF avg	794	*Parking Includes 32 Retail Stalls			
		SF/parking stall	438	GSF/unit	1,622				
		stalls/unit	1.25	Efficiency	87%	Bike Parking			150

		RETAIL	LOBBY/AMENITY	PARKING	SERVICE	COMMON/ CIRCULATION	RESIDENTIAL	GSF	PARKING STALLS
SITE C	LEVEL 7				507	6,339	45,950	**52,796**	
	LEVEL 6				507	6,339	45,950	**52,796**	
	LEVEL 5				507	6,339	45,950	**52,796**	
	LEVEL 4				507	6,339	45,950	**52,796**	
	LEVEL 3		2,005		834	6,826	43,480	**53,145**	
	LEVEL 2			54,260	1,233	2,742	6,562	**64,797**	147
	LEVEL 1		10,323	45,010	2,735	3,937	4,355	**66,360**	118
	LEVEL P1			44,764	1,881	1,417		**48,062**	125
		0	**12,328**	**144,034**	**8,711**	**40,278**	**238,197**	**443,548**	**390**
								GSF Total	
		units	300	NRSF avg	794	*Parking Includes 32 Tandem Stalls			
		SF/parking stall	369	GSF/unit	1,478				
		stalls/unit	1.30	Efficiency	83%	Bike Parking			165

DRAWING INDEX

Sheet Number	Sheet Name	LUA SUBMITTAL 04/23/2021	LUA SUBMITTAL 06/25/2021
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A1-1	MASTER PLAN	●	●
A1-2	DESIGN PERSPECTIVES	●	
A1-3	LEVEL P1 PLAN	●	
A1-3b	INTERIM PARKING PLAN	●	●
A1-4	LEVEL 1 PLAN	●	
A1-5	LEVEL 2 PLAN	●	
A1-6	LEVEL 3 PLAN	●	
A1-7	LEVEL 4-6 PLANS	●	
A1-8	LEVEL 7 PLAN	●	
A1-9	ROOF PLAN	●	
A3-1	NORTH & SOUTH ELEVATIONS	●	
A3-2	WEST & EAST ELEVATIONS	●	
A3-3	COURTYARD ELEVATIONS	●	
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A3-5	SHADOW STUDIES	●	
GENERAL INFORMATION			
T1-1	TITLE SHEET	●	●
CIVIL			
C300	EROSION AND SEDIMENT CONTROL PLAN - PHASE 1	●	
C400	OVERALL SITE PLAN	●	
C401	SITE PLAN - SITE A	●	
C500	OVERALL GRADING PLAN	●	
C501	GRADING PLAN - SITE A	●	
C502	OVERALL STORM SEWER PLAN	●	
C503	STORM SEWER PLAN - SITE A	●	
C600	OVERALL UTILITY EXHIBIT	●	
C601	UTILITY PLAN - SITE A	●	
LANDSCAPE			
L010	GENERAL NOTES	●	
L011	REFERENCE NOTES & PLANTING SCHEDULES	●	
L100	MASTER PLAN OVERALL SITE PLAN	●	
L111	SITE PLAN - BUILDING A	●	
L140	LANDSCAPE PLAN - BUILDING A	●	
L500	LANDSCAPE DETAILS	●	
L501	LANDSCAPE DETAILS	●	

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6/25/2021

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REVISIONS:
No. Description Date

220503
PROJECT NUMBER

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KEY PLAN

BLAKE STATION, MASTER PLAN

TITLE SHEET

T1-1

6/25/2021 11:35:12 AM



MULTIFAMILY RESIDENTIAL | COMMERCIAL | INDUSTRIAL/WAREHOUSE | EDUCATION/RECREATION

4/23/2021 3:03:30 PM



1. FROM WEST OF EXCELSIOR BLVD, LOOKING NORTHEAST



2. EXCELSIOR BLVD, LOOKING NORTHWEST



3. FROM EXCELSIOR BLVD & BLAKE RD, LOOKING NORTHWEST

BLAKE STATION, MASTER PLAN

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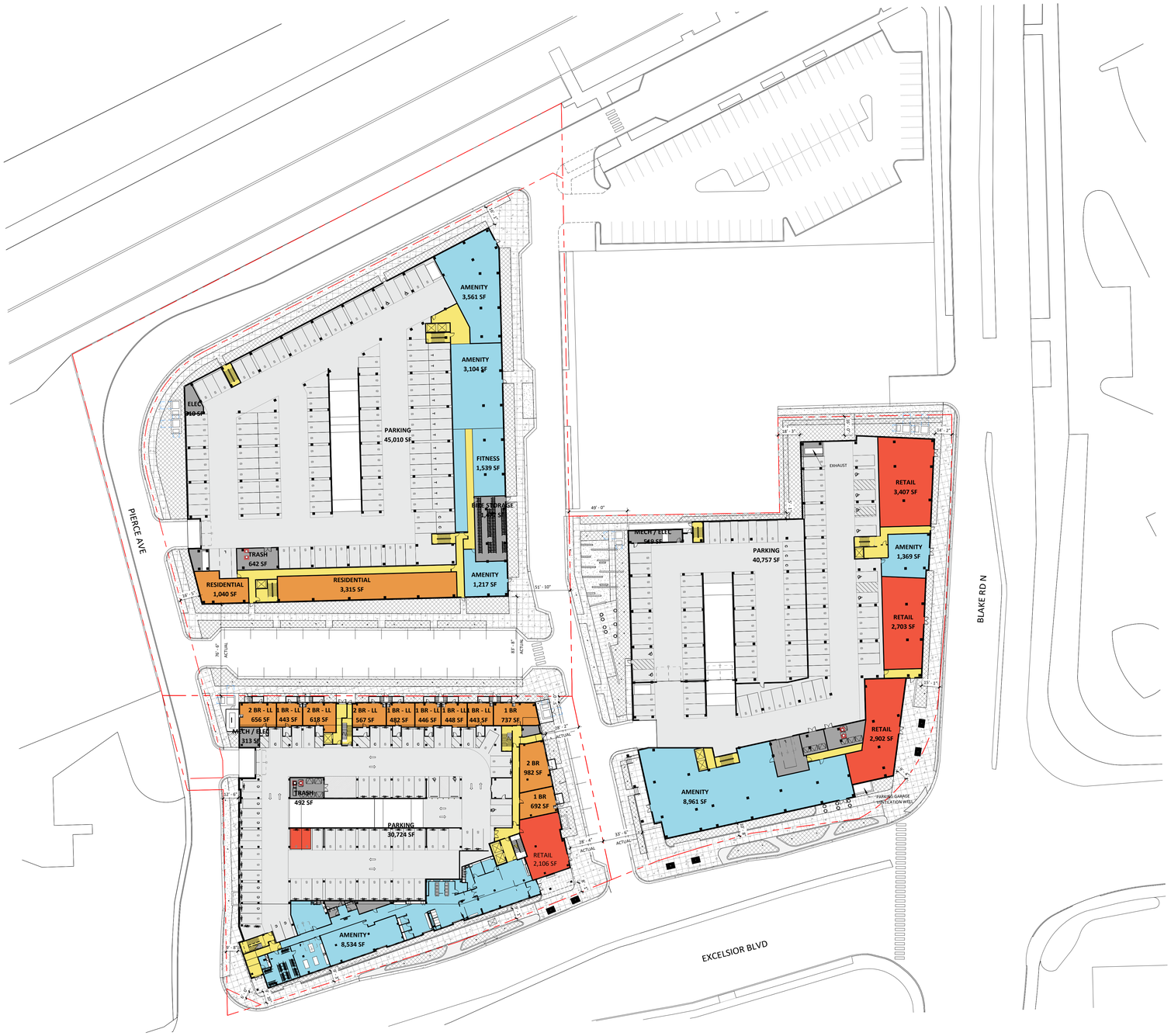
BLAKE STATION, MASTER PLAN

CONTEXT MAP & IMAGES

A1-0

BLAKE STATION, MASTER PLAN

Hopkins, Minnesota



1 A1-1 **MASTER PLAN**
1" = 40'-0"

MARKETING COLOR LEGEND

- AMENITY
- COMMON / CIRCULATION
- PARKING
- RESIDENTIAL
- RETAIL
- SERVICE

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BLAKE STATION, MASTER PLAN

MASTER PLAN

A1-1

6/29/2021 1:55:46 PM



VIEW WEST ON EXCELSIOR BOULEVARD



VIEW OF LINEAR PARK



WALK UP UNITS OF SITE A



VIEW NORTHEAST ON EXCELSIOR BOULEVARD AT PIERCE AVENUE

4/22/2021 10:32:39 PM

BLAKE STATION, MASTER PLAN

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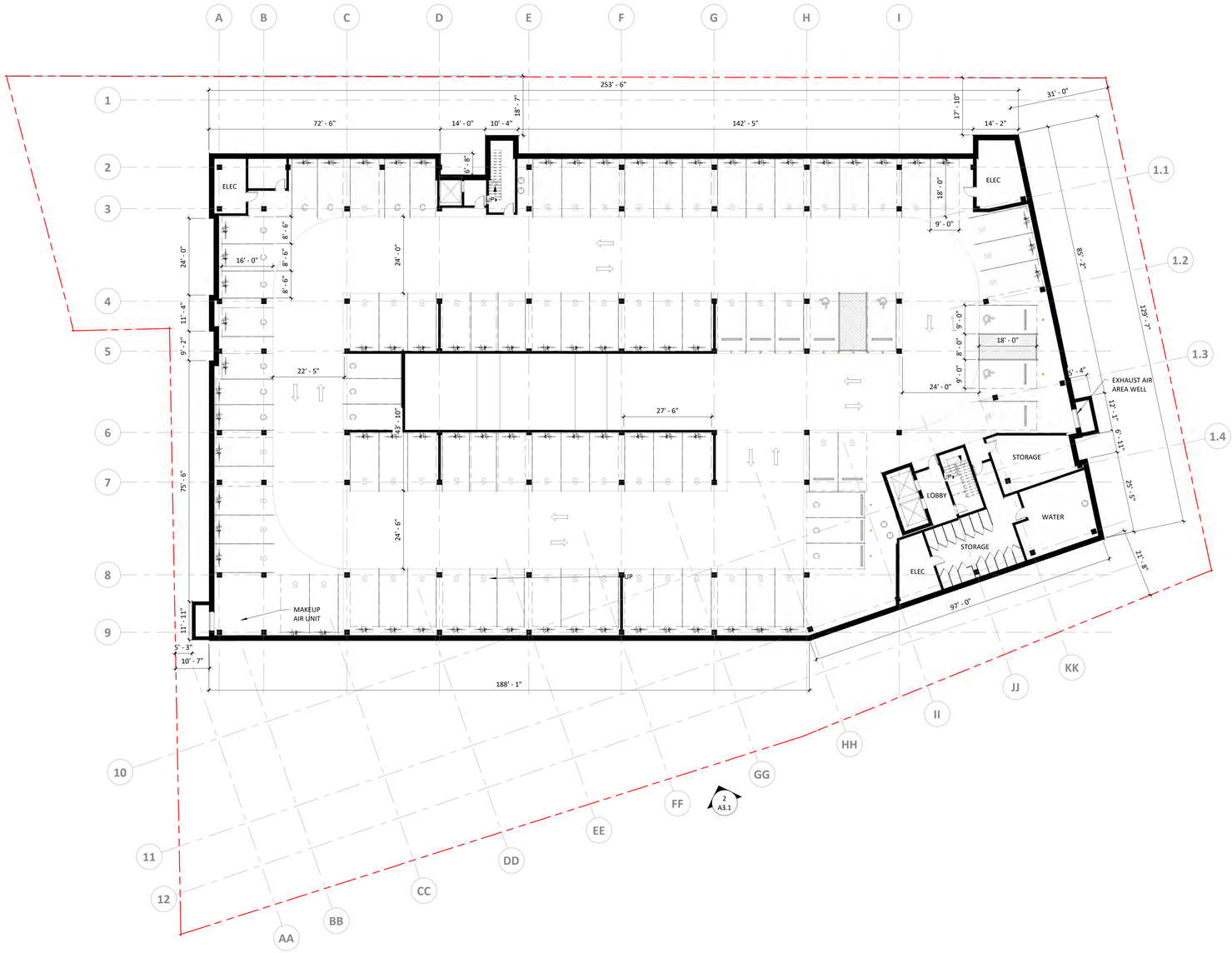
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KEY PLAN

BLAKE STATION, MASTER PLAN

DESIGN PERSPECTIVES

A1-2



1 A1-3 **SITE A - LOWER LEVEL**

1/16" = 1'-0"

7/8/2021 3:18:49 PM

BLAKE STATION, MASTER PLAN

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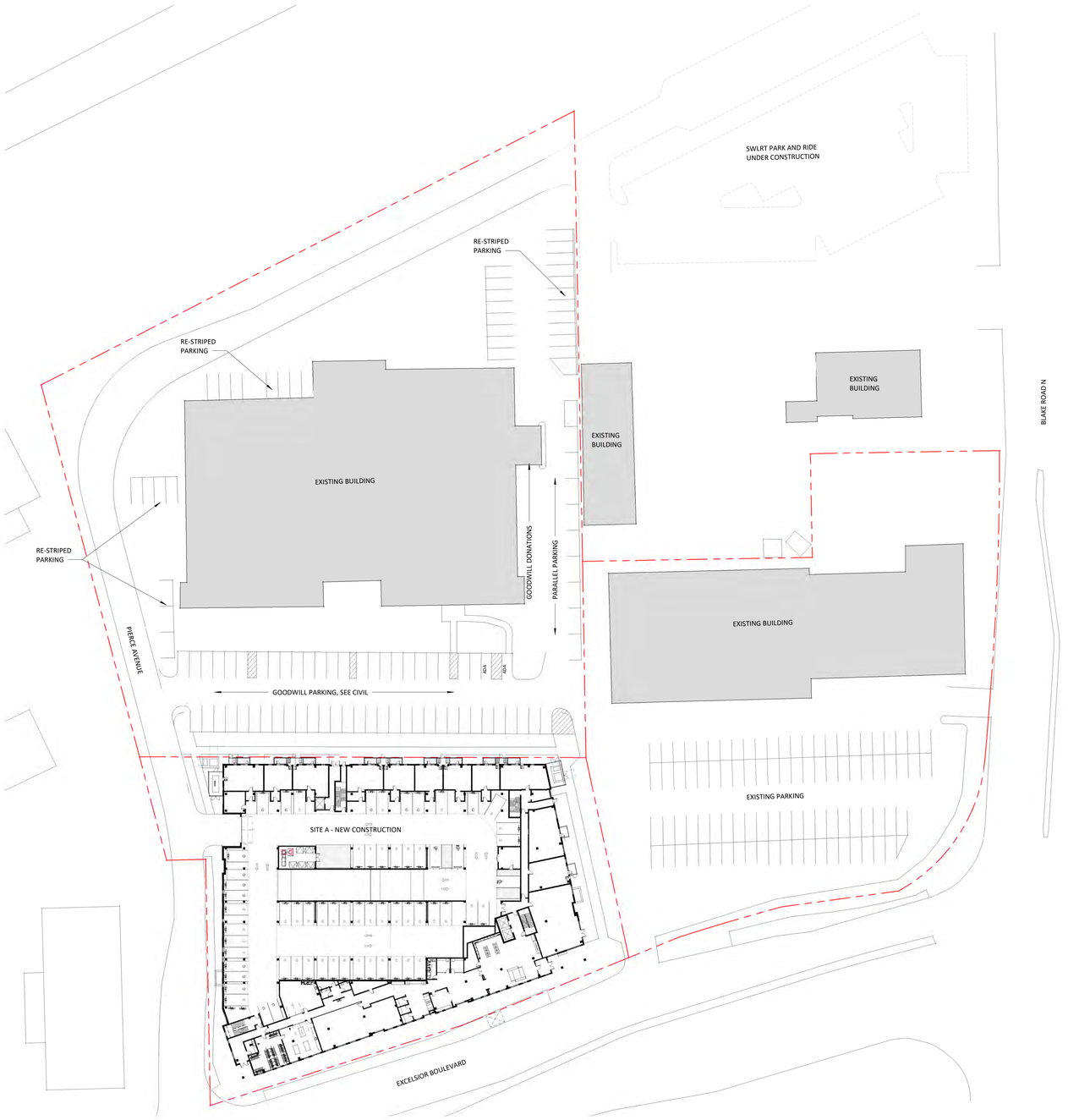
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KEY PLAN

BLAKE STATION, MASTER PLAN

LEVEL P1 PLAN

A1-3



1 A1-3a **SITE A INTERIM PARKING PLAN**
1" = 40'-0"

6/24/2021 4:34:36 PM

BLAKE STATION, MASTER PLAN

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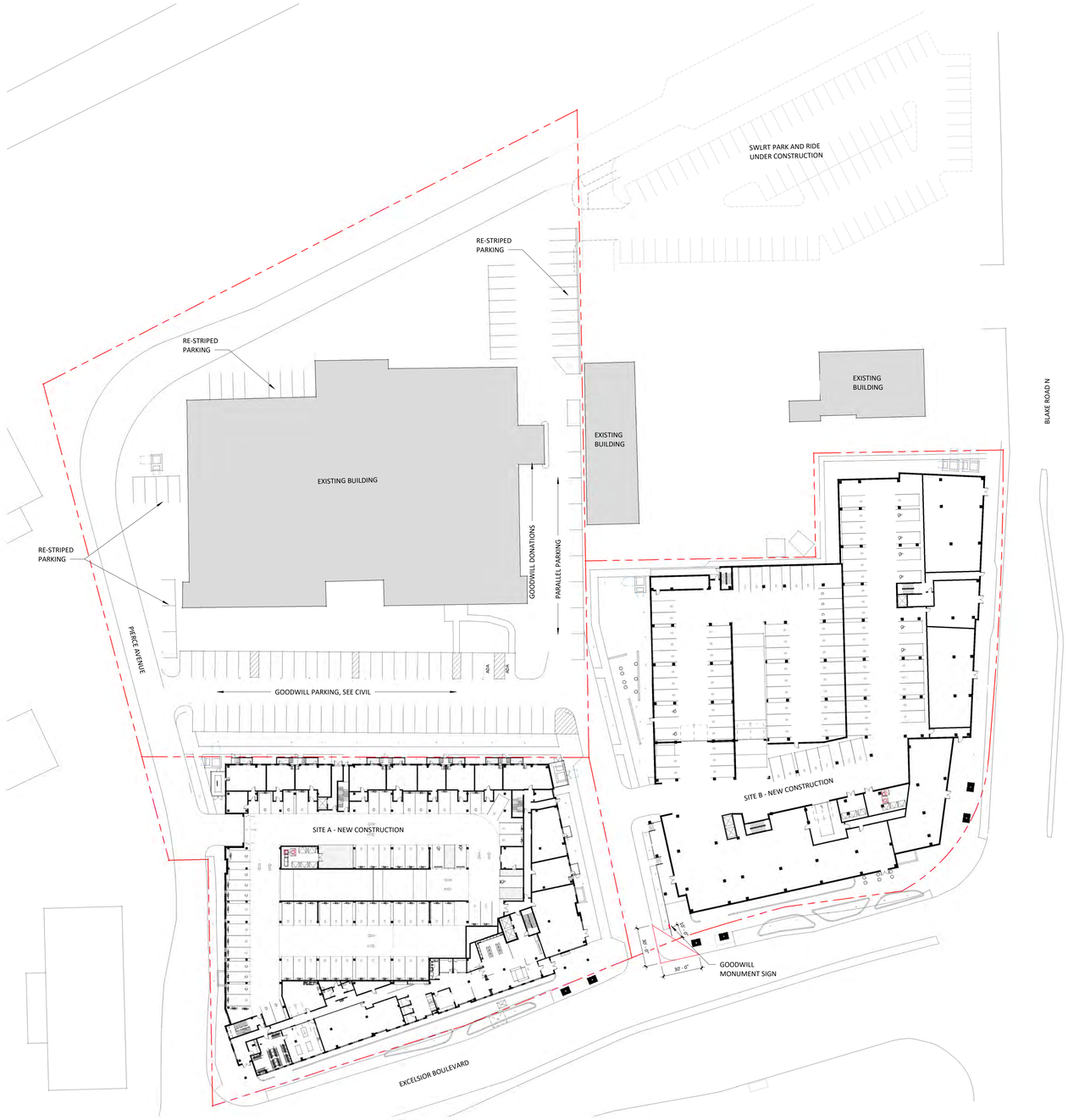
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KEY PLAN

BLAKE STATION, MASTER PLAN

INTERIM PARKING PLAN

A1-3a



1 A1-3b **SITE A & B INTERIM PARKING PLAN**
1" = 40'-0"

7/8/2021 3:18:55 PM

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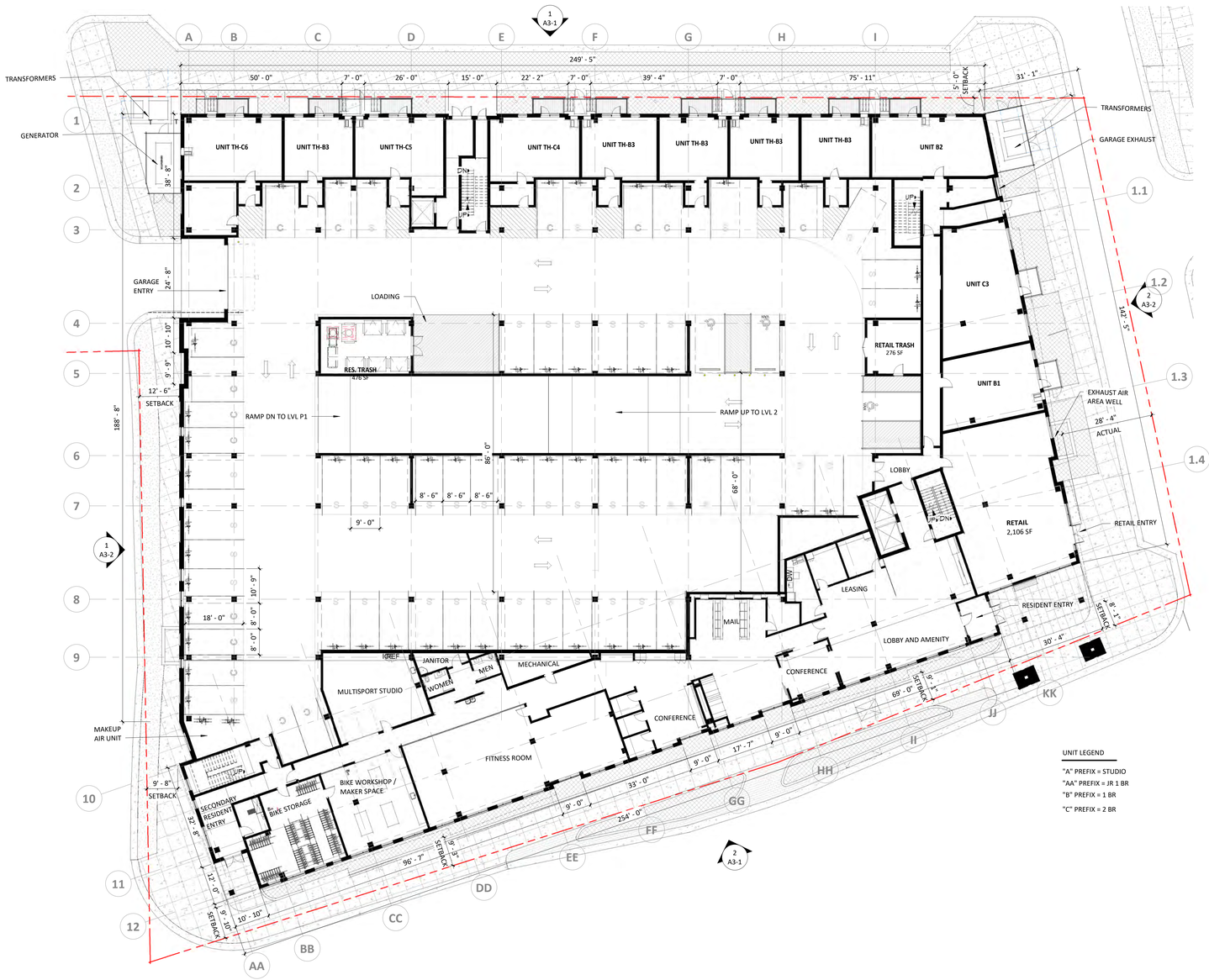
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KEY PLAN

BLAKE STATION, MASTER PLAN

INTERIM PARKING PLAN

A1-3b



1 A1-4 **SITE A - LEVEL 1**
1/16" = 1'-0"

7/8/2021 3:19:35 PM

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BLAKE STATION, MASTER PLAN

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KEY PLAN

BLAKE STATION, MASTER PLAN

LEVEL 1 PLAN

A1-4



1 A1-5 **SITE A - LEVEL 2**
1/16" = 1'-0"

7/8/2021 3:19:40 PM

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BLAKE STATION, MASTER PLAN

LEVEL 2 PLAN

A1-5



UNIT LEGEND

"A" PREFIX = STUDIO
"AA" PREFIX = JR 1 BR
"B" PREFIX = 1 BR
"C" PREFIX = 2 BR

1 A1-6 **SITE A - LEVEL 3**
1/16" = 1'-0"

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BLAKE STATION, MASTER PLAN

LEVEL 3 PLAN

A1-6



UNIT LEGEND

"A" PREFIX = STUDIO
"AA" PREFIX = JR 1 BR
"B" PREFIX = 1 BR
"C" PREFIX = 2 BR

1 A1-7 **SITE A - LEVELS 4-6**
1/16" = 1'-0"

4/23/2021 4:45:16 PM

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KEY PLAN

BLAKE STATION, MASTER PLAN

LEVEL 4-6 PLANS

A1-7



1 A1-8 **SITE A - LEVEL 7**
1/16" = 1'-0"

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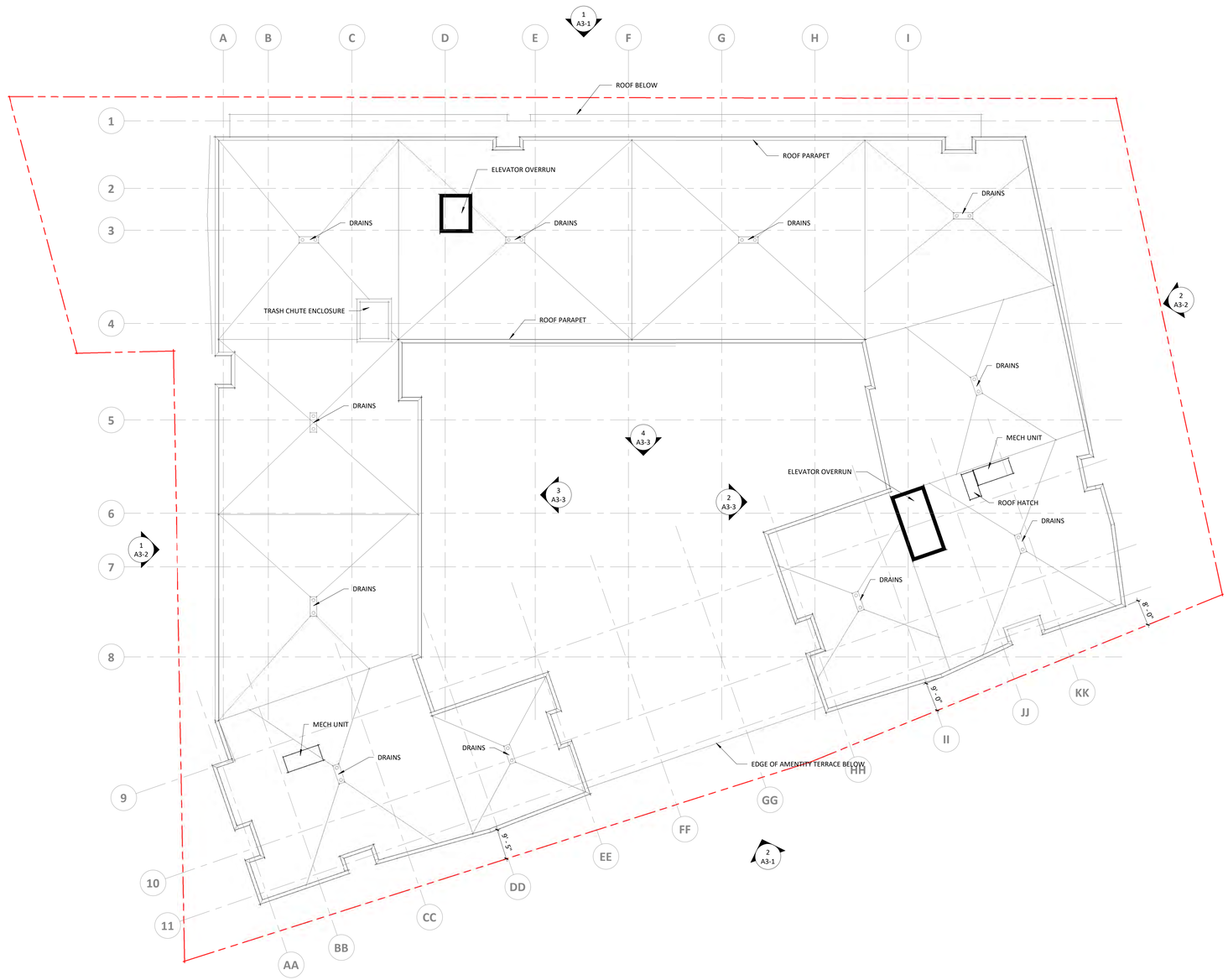
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KEY PLAN

BLAKE STATION, MASTER PLAN

LEVEL 7 PLAN

A1-8



1 A1-9 **SITE A - ROOF PLAN**
1/16" = 1'-0"

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KEY PLAN

BLAKE STATION, MASTER PLAN

ROOF PLAN

A1-9

SITE A: MATERIAL CALCULATIONS					
		NORTH	SOUTH	EAST	WEST
GLASS		29%	32%	30%	27%
METAL PANEL	TILE SIDING	33%	42%	40%	18%
	SMOOTH TILE	5%	9%	7%	7%
BRICK VENEER		21%	13%	14%	19%
FIBER CEMENT LAP SIDING		12%	4%	8%	29%



1 A3-1 **NORTH ELEVATION - LUA**
3/32" = 1'-0"

SITE A: MATERIAL CALCULATIONS					
		NORTH	SOUTH	EAST	WEST
GLASS		29%	32%	30%	27%
METAL PANEL	TILE SIDING	33%	42%	40%	18%
	SMOOTH TILE	5%	9%	7%	7%
BRICK VENEER		21%	13%	14%	19%
FIBER CEMENT LAP SIDING		12%	4%	8%	29%



2 A3-1 **SOUTH ELEVATION - LUA**
3/32" = 1'-0"

5/14/2021 3:36:58 PM

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KEY PLAN

BLAKE STATION, MASTER PLAN

NORTH & SOUTH ELEVATIONS

A3-1

SITE A: MATERIAL CALCULATIONS					
		NORTH	SOUTH	EAST	WEST
GLASS		29%	32%	30%	27%
METAL PANEL	TILE SIDING	33%	42%	40%	18%
	SMOOTH TILE	5%	9%	7%	7%
BRICK VENEER		21%	13%	14%	19%
FIBER CEMENT LAP SIDING		12%	4%	8%	29%



1 A3-2 **WEST ELEVATION - LUA**

3/32" = 1'-0"

SITE A: MATERIAL CALCULATIONS					
		NORTH	SOUTH	EAST	WEST
GLASS		29%	32%	30%	27%
METAL PANEL	TILE SIDING	33%	42%	40%	18%
	SMOOTH TILE	5%	9%	7%	7%
BRICK VENEER		21%	13%	14%	19%
FIBER CEMENT LAP SIDING		12%	4%	8%	29%



2 A3-2 **EAST ELEVATION - LUA**

3/32" = 1'-0"

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KEY PLAN

BLAKE STATION, MASTER PLAN

WEST & EAST ELEVATIONS

A3-2

SITE A: MATERIAL CALCULATIONS - COURTYARD ELEVATIONS					
		NORTH	SOUTH	EAST	WEST
GLASS		39%	25%	34%	25%
METAL PANEL	TILE SIDING	0%	71%	15%	51%
	SMOOTH TILE	2%	2%	2%	1%
FIBER CEMENT LAP SIDING		59%	0%	49%	22%
WOOD ACCENT SIDING		0%	2%	0%	1%



1 A3-3 **NORTH COURTYARD ELEVATION**
3/32" = 1'-0"



4 A3-3 **SOUTH COURTYARD ELEVATION**
3/32" = 1'-0"



3 A3-3 **EAST COURTYARD ELEVATION**
3/32" = 1'-0"



2 A3-3 **WEST COURTYARD ELEVATIONS**
3/32" = 1'-0"

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KEY PLAN

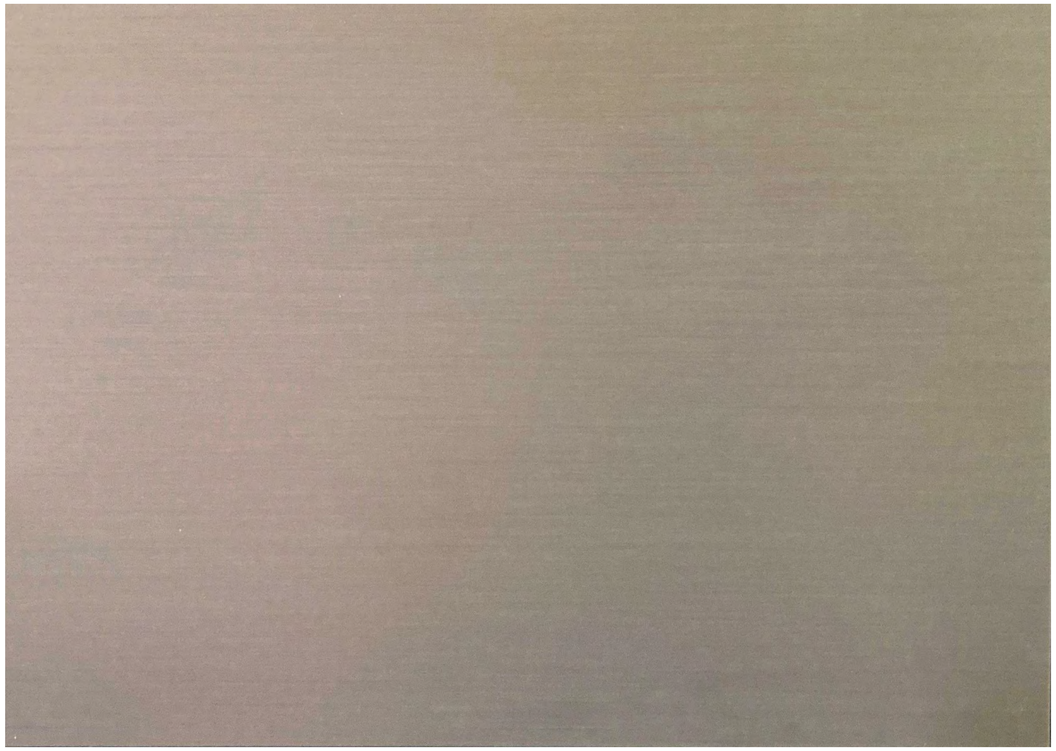
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COURTYARD ELEVATIONS

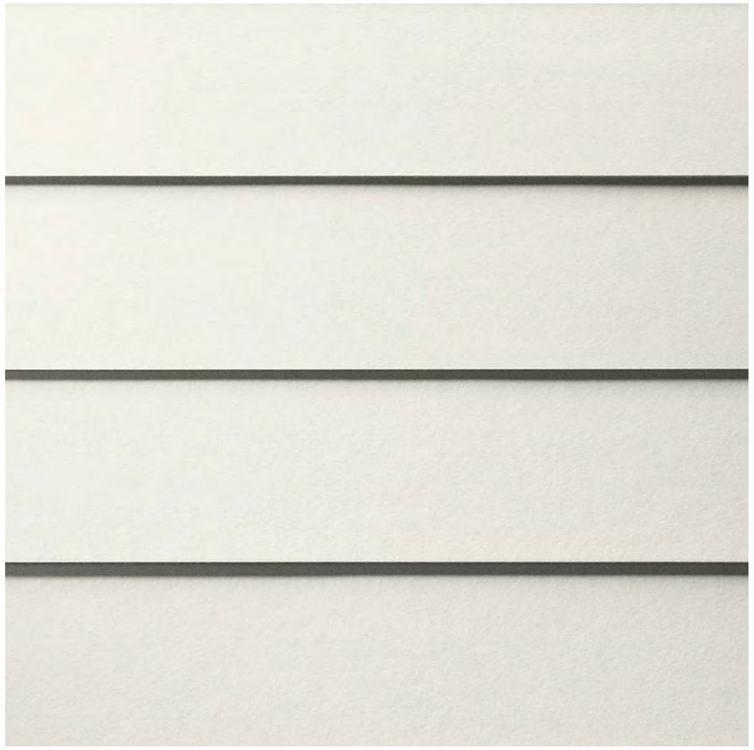
A3-3



WOOD ACCENTS - WALNUT



METAL TILE - WARM GRAY



FIBER CEMENT LAP SIDING - LINEN



BRICK VENEER - MEDIUM IRONSPOT

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KEY PLAN

BLAKE STATION, MASTER PLAN

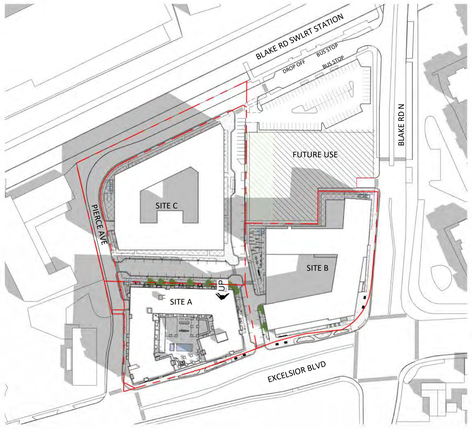
EXTERIOR MATERIALS

A3-4

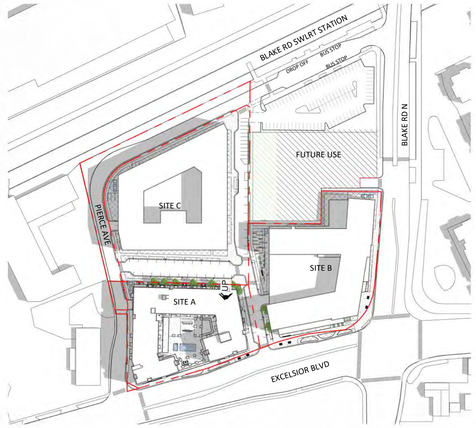
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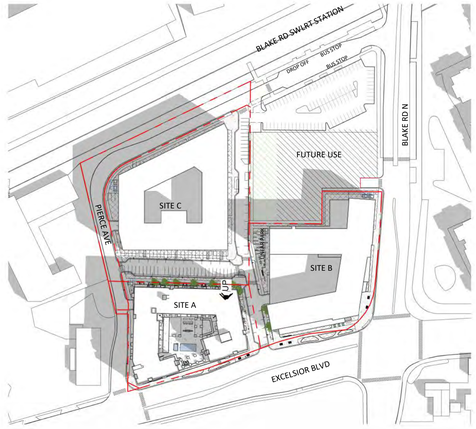
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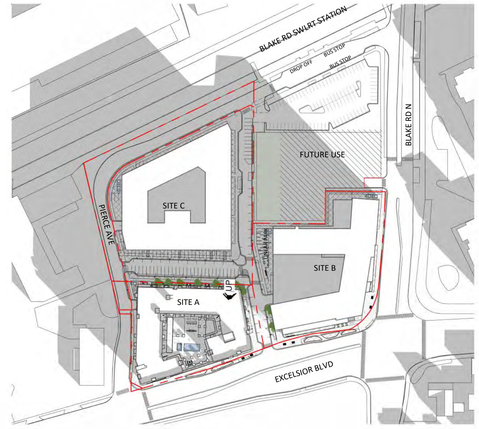
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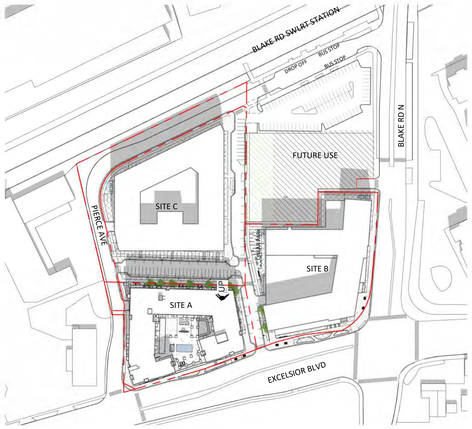
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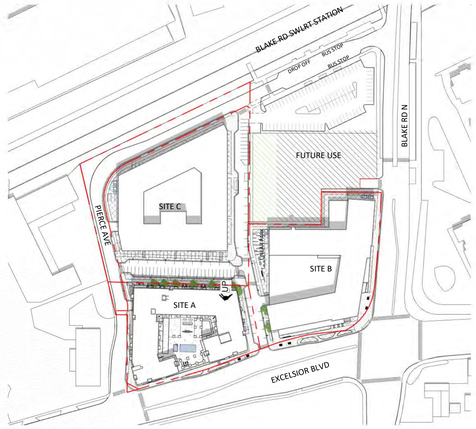
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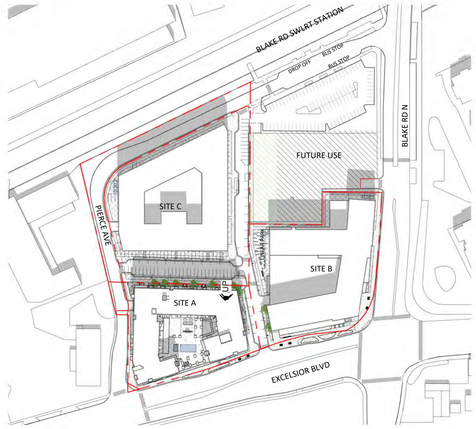
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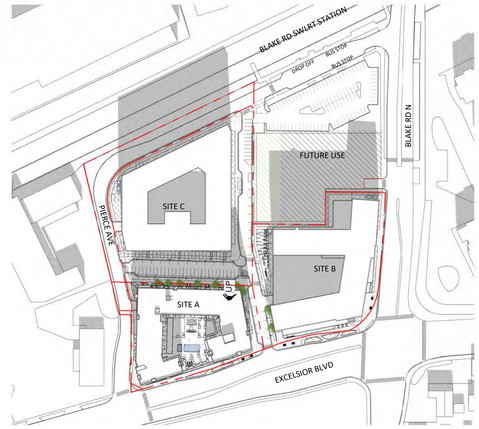
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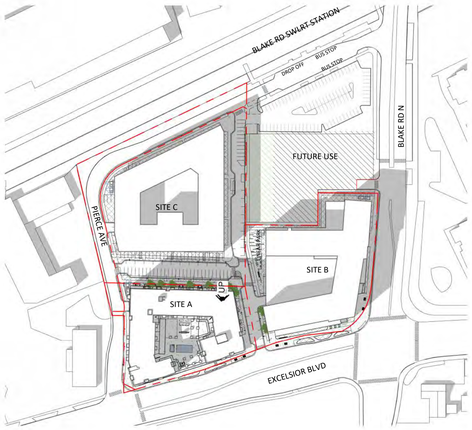
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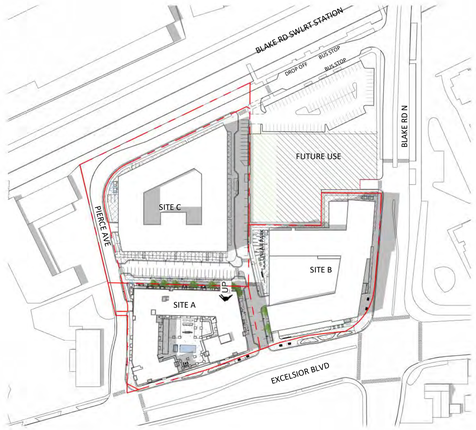
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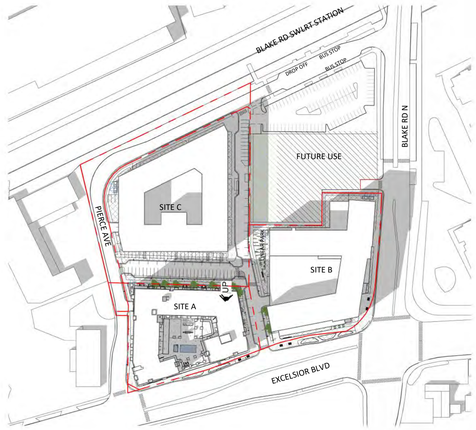
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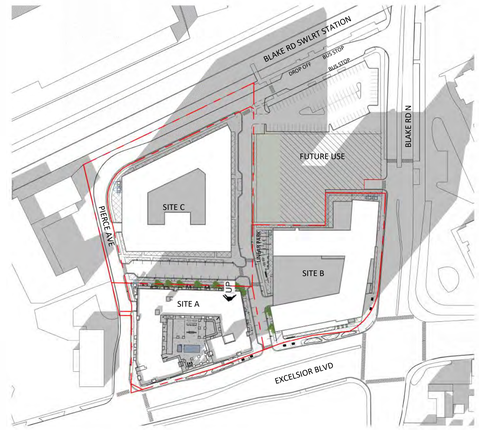
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SHADOW STUDY - JUNE 3 PM



SHADOW STUDY - SEPTEMBER 3PM



SHADOW STUDY - DECEMBER 3 PM

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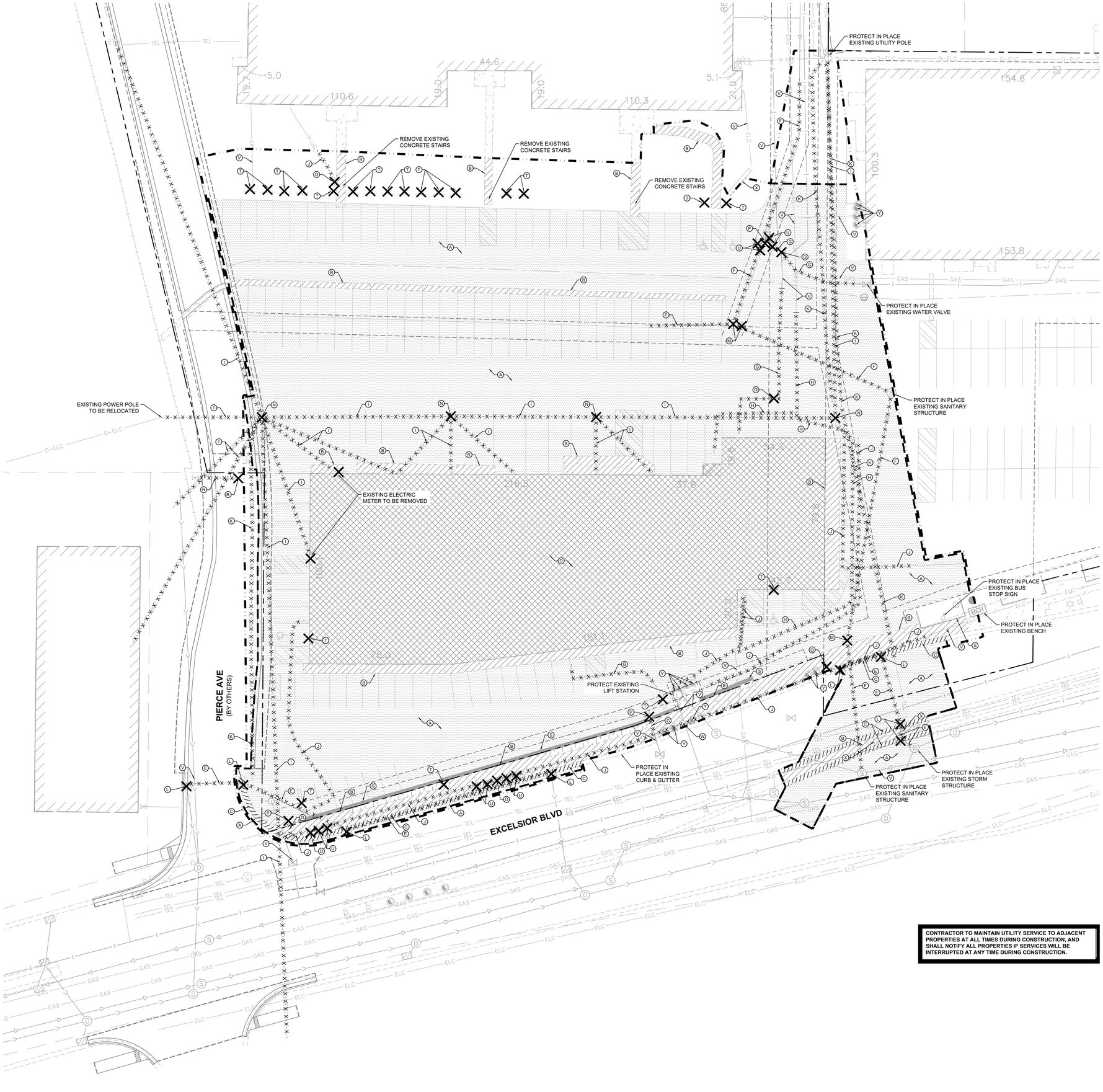
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KEY PLAN

BLAKE STATION, MASTER PLAN

SHADOW STUDIES

A3-5



LEGEND

- PROPERTY LINE
- REMOVE BITUMINOUS SURFACE
- REMOVE CONCRETE SURFACE
- REMOVE BUILDING
- CLEARING & GRUBBING
- FULL DEPTH SAWCUT
- REMOVE ITEM
- REMOVE CONCRETE CURB & GUTTER
- REMOVE UTILITY LINES
- LIMITS OF CONSTRUCTION
- O–ELC — EXISTING OVERHEAD POWER LINE
- EXISTING CHAINLINK FENCE
- EXISTING RETAINING WALL
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING WATERMAIN
- GAS — EXISTING GAS MAIN
- TEL — EXISTING UNDERGROUND TELEPHONE
- CTV — EXISTING UNDERGROUND CABLE
- 928 — EXISTING CONTOUR
- EXISTING CURB & GUTTER
- EXISTING SIGN
- EXISTING FLARED END SECTION
- EXISTING STORM MANHOLE
- EXISTING STORM CATCHBASIN
- EXISTING GAS METER
- EXISTING POST INDICATOR VALVE
- EXISTING WELL
- EXISTING AUTOMATIC SPRINKLER
- EXISTING ROOF DRAIN
- EXISTING GATE VALVE
- EXISTING HYDRANT
- EXISTING METAL COVER
- EXISTING ELECTRICAL METER
- EXISTING AIR CONDITIONER
- EXISTING TELEPHONE MANHOLE
- EXISTING CABLE BOX
- EXISTING GUY WIRE
- EXISTING POWER POLE
- EXISTING LIGHT POLE

DEMOLITION PLAN NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC. SUCH THAT THE IMPROVEMENTS ON THE PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE PROJECT DOCUMENTS.
2. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL. CONTRACTOR SHALL PROVIDE COPIES OF THE PERMIT AND RECEIPTS OF DISPOSAL OF MATERIALS TO THE OWNER AND OWNERS REPRESENTATIVE.
3. THE CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO ADJACENT PROPERTIES AT ALL TIMES. UTILITY SERVICES SHALL NOT BE INTERRUPTED WITHOUT APPROVAL FROM THE CONSTRUCTION MANAGER AND COORDINATION WITH THE ADJACENT PROPERTIES AND/OR THE CITY.
4. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
5. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR LOCATIONS OF EXISTING UTILITIES WITHIN ALL AREAS OF PROPOSED WORK.
6. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS ANY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PRECEDING WITH THE WORK.
7. ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC, AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN ANY ROAD RIGHT-OF-WAY DURING CONSTRUCTION.
8. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC. (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES) AS APPROVED BY THE CONSTRUCTION MANAGER. MAINTENANCE OF TRAFFIC CONTROL SHALL BE COORDINATED IN ACCORDANCE WITH HOPKINS, HENNEPIN COUNTY AND MINNESOTA DOT.
9. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES DURING CONSTRUCTION, AND SHALL NOTIFY ALL PROPERTIES IF ACCESS WILL BE INTERRUPTED OR ALTERED AT ANY TIME DURING CONSTRUCTION.
10. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
11. CONTRACTOR MAY LIMIT SAW-CUT AND PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR.
12. THE CONTRACTOR SHALL COORDINATE WATER MAIN WORK WITH THE FIRE DEPT. AND THE CITY WATER DEPARTMENT TO PLAN PROPOSED IMPROVEMENTS AND TO ENSURE ADEQUATE FIRE PROTECTION IS CONSTANTLY AVAILABLE TO THE SITE THROUGHOUT THIS SPECIFIC WORK AND THROUGH ALL PHASES OF CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING/PROVIDING ANY REQUIRED WATER MAIN SHUT OFFS WITH THE CITY OF HOPKINS DURING CONSTRUCTION. ANY COSTS ASSOCIATED WITH WATER MAIN SHUT OFFS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION WILL BE PROVIDED.
13. REFER TO SURVEY FOR ALL EXISTING INVERT AND RIM ELEVATIONS.
14. ALL UTILITIES SHOWN ARE EXISTING UTILITIES.
15. IN THE EVENT A WELL IS FOUND, THE CONTRACTOR SHALL CONTACT THE ENGINEER AND OWNER IMMEDIATELY. ALL WELLS SHALL BE SEALED BY A LICENSED WELL CONTRACTOR IN ACCORDANCE WITH ALL STATE OF MINNESOTA REQUIREMENTS.
16. IN THE EVENT THAT UNKNOWN CONTAINERS OR TANKS ARE ENCOUNTERED, THE CONTRACTOR SHALL CONTACT THE OWNER AND/OR OWNERS REPRESENTATIVE IMMEDIATELY. ALL CONTAINERS SHALL BE DISPOSED OF AT A PERMITTED LANDFILL PER THE PROJECT DOCUMENTS.
17. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY EXISTING DRAINTILE IS ENCOUNTERED ON SITE. NO ACTIVE DRAINTILE SHALL BE REMOVED WITHOUT APPROVAL FROM THE ENGINEER.

KEYNOTE LEGEND

- (A) REMOVE EXISTING BITUMINOUS PAVEMENT
- (B) REMOVE EXISTING CONCRETE PAVEMENT
- (C) REMOVE EXISTING CURB & GUTTER
- (D) REMOVE EXISTING BUILDING AND ASSOCIATED FOUNDATIONS/FEATURES
- (E) REMOVE EXISTING STORM SEWER
- (F) REMOVE EXISTING SANITARY SEWER
- (G) REMOVE EXISTING WATER MAIN
- (H) REMOVE EXISTING GAS MAIN
- (I) REMOVE EXISTING OVERHEAD ELECTRIC
- (J) REMOVE EXISTING UNDERGROUND POWER
- (K) REMOVE EXISTING TELEPHONE LINE
- (L) REMOVE EXISTING STORM STRUCTURE
- (M) REMOVE EXISTING SANITARY STRUCTURE
- (N) REMOVE EXISTING UTILITY POLE
- (O) REMOVE EXISTING LIGHT POLE
- (P) REMOVE EXISTING HYDRANT
- (Q) REMOVE EXISTING WATER VALVE
- (R) REMOVE EXISTING GAS VALVE
- (S) REMOVE EXISTING RETAINING WALL
- (T) REMOVE EXISTING SIGNAGE
- (U) REMOVE EXISTING BOLLARDS
- (V) PROTECT IN PLACE EXISTING UTILITIES
- (W) PROTECT IN PLACE EXISTING LIGHT POLE
- (X) PROTECT IN PLACE EXISTING SIGNAGE OR SALVAGE AND REINSTALL
- (Y) PROTECT IN PLACE EXISTING BOLLARDS

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

7/17/2020

Blake Road Station

Hopkins, MN 55343

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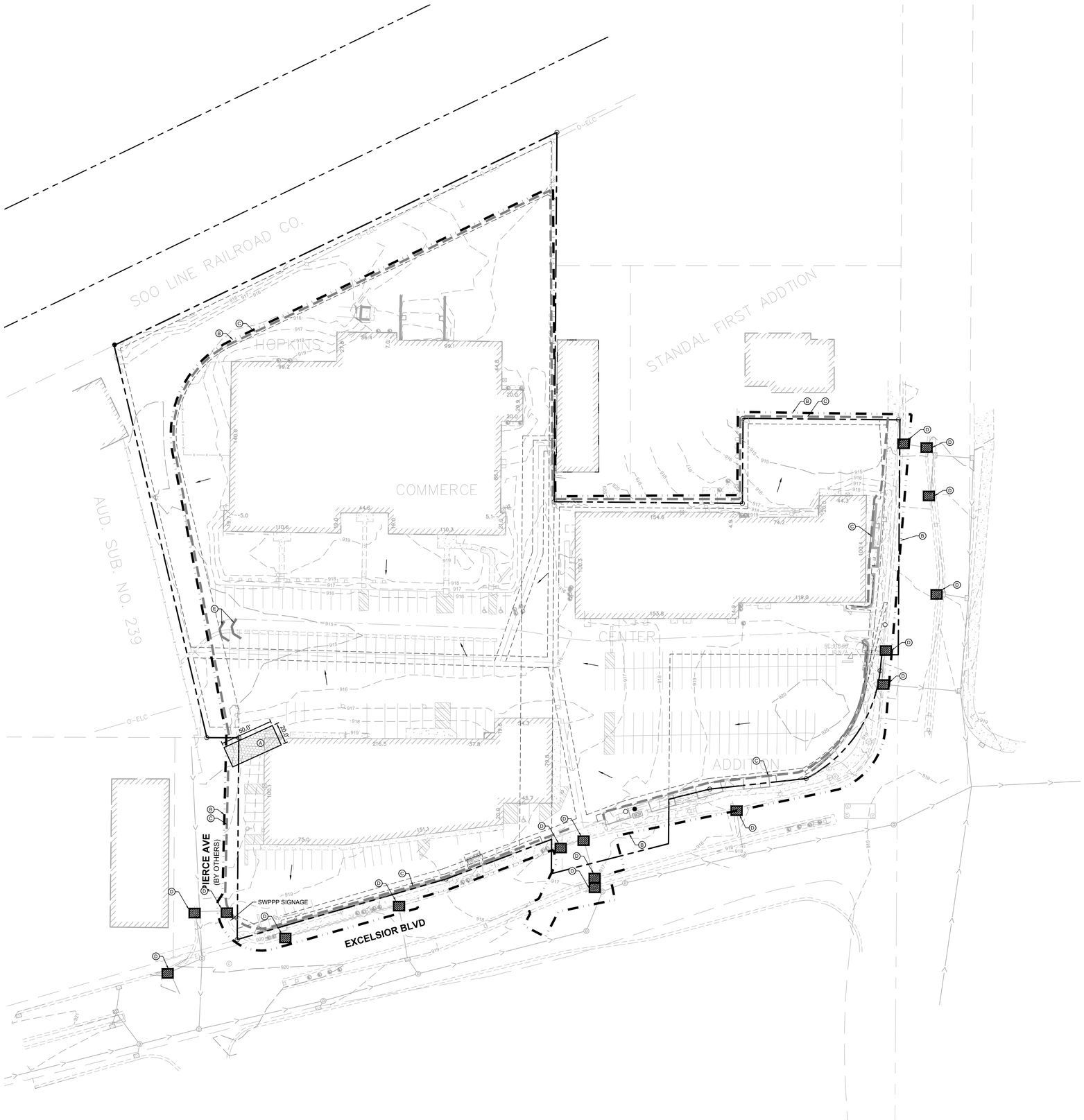
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KEY PLAN

Blake Road Station

DEMO PLAN - SITE A

C200



LEGEND

- PROPERTY LINE
- ROCK ENTRANCE
- INLET PROTECTION
- LIMITS OF DISTURBANCE
- BIOROLL
- BIOLOG
- SURFACE DRAINAGE DIRECTION

EROSION CONTROL PLAN NOTES

1. ALL PERIMETER SILT FENCE AND ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR SHALL CONSTRUCT DRAINAGE BASINS PRIOR TO SITE GRADING.
3. THE CONTRACTOR SHALL INSTALL CATCH BASIN EROSION CONTROL MEASURES.
4. WITHIN TWO WEEKS (14 DAYS) OF SITE GRADING, ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEED, SOD, OR ROCK BASE. REFER TO LANDSCAPE PLANS FOR MATERIALS.
5. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY, STATE, AND WATERSHED DISTRICT PERMITS.
6. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES, INCLUDING THE REMOVAL OF SILT IN FRONT OF SILT FENCES DURING THE DURATION OF THE CONSTRUCTION.
7. ANY EXCESS SEDIMENT IN PROPOSED BASINS SHALL BE REMOVED BY THE CONTRACTOR.
8. REMOVAL ALL EROSION CONTROL MEASURES AFTER VEGETATION IS ESTABLISHED.
9. THE CONTRACTOR SHALL REMOVE ALL SOILS AND SEDIMENT TRACKED ONTO EXISTING STREETS AND PAVED AREAS AND SHALL SWEEP ADJACENT STREETS AS NECESSARY IN ACCORDANCE WITH CITY REQUIREMENTS.
10. IF BLOWING DUST BECOMES A NUISANCE, THE CONTRACTOR SHALL APPLY WATER FROM A TANK TRUCK TO ALL CONSTRUCTION AREAS.

SEQUENCE OF CONSTRUCTION:

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS:

1. INSTALL INLET PROTECTION AT EXISTING STORMWATER CULVERTS.
2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE (1), CONCRETE WASHOUT PIT (1) AND INSTALL SILT FENCE.
3. PREPARE TEMPORARY PARKING AND STORAGE AREA.
4. CONSTRUCT AND STABILIZE DIVERSIONS AND TEMPORARY SEDIMENT TRAPS.
5. PERFORM CLEARING AND GRUBBING OF THE SITE. PERFORM MASS GRADING. ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
6. START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES.
7. TEMPORARILY SEED WITH PURE LIVE SEED, THROUGHOUT CONSTRUCTION, DISTURBED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE OR AS REQUIRED BY NPDES AND/OR CITY OF HOPKINS GRADING PERMIT.

KEYNOTE LEGEND

- (A) CONSTRUCTION ENTRANCE
- (B) LIMITS OF DISTURBANCE, OFFSET FOR CLARITY
- (C) BIROLL
- (D) INLET PROTECTION
- (E) BIOLOG

BMP QUANTITIES

BMP	UNIT	QUANTITY
CONSTRUCTION ENTRANCE	EA.	1
BIROLL	LF	2,405
INLET PROTECTION	EA.	16

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

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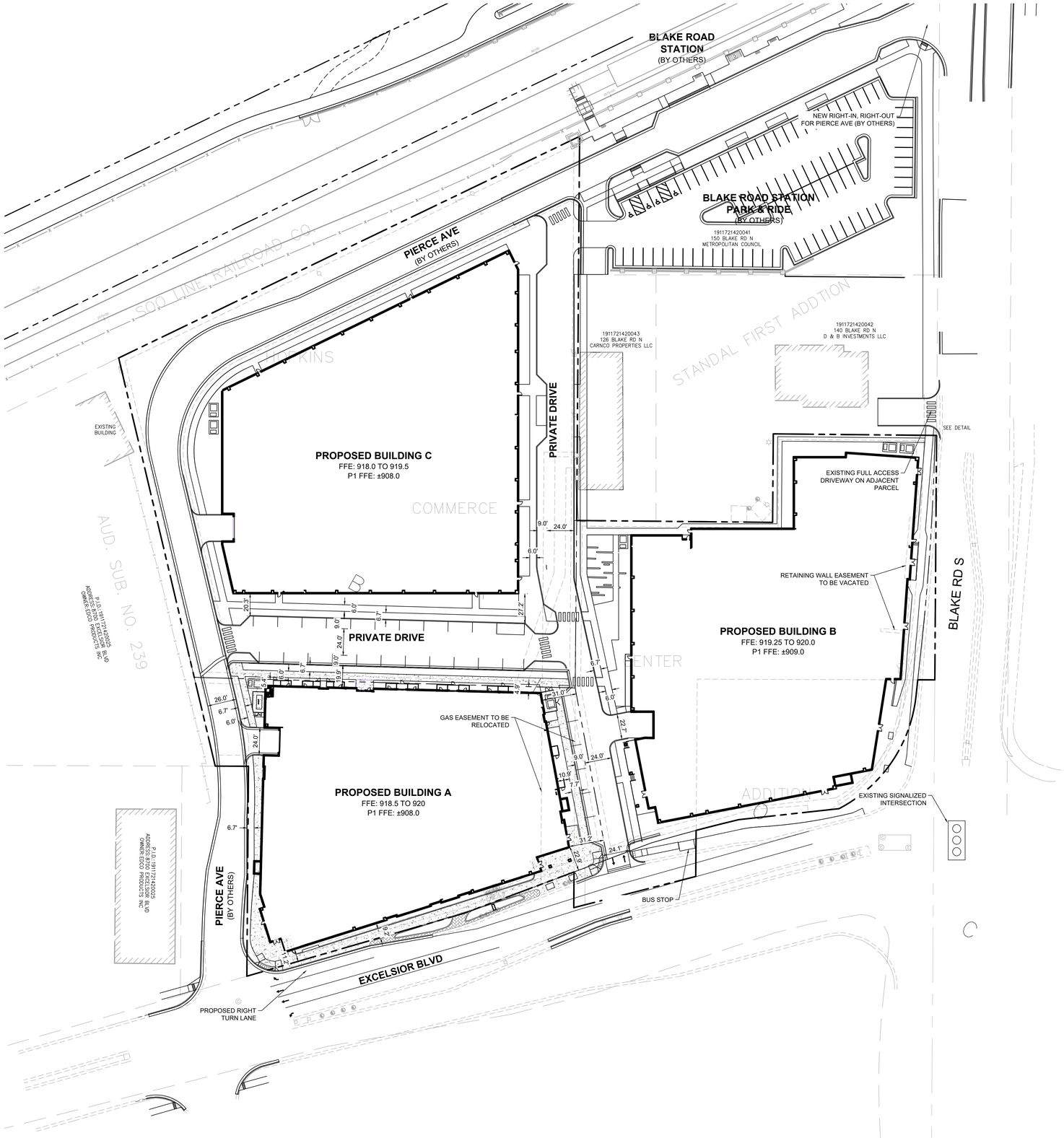
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KEY PLAN

Blake Road Station

OVERALL EROSION AND SEDIMENT CONTROL PLAN

C300



LEGEND

- PROPERTY LINE
- RETAINING WALL
- PROPOSED CURB AND GUTTER

PROPERTY SUMMARY	
BLAKE & EXCELSIOR	
TOTAL PROPERTY AREA	7.39 AC
RIGHT OF WAY DEDICATION	0.00 AC
BUILDING A PARCEL	1.62 AC
BUILDING B PARCEL (FUTURE)	2.27 AC
BUILDING C PARCEL (FUTURE)	3.50 AC
PROPOSED IMPERVIOUS AREA (BUILDING A PARCEL)	66,023 SF (1.52 AC)
PROPOSED PERVIOUS AREA (BUILDING A PARCEL)	4,588 SF (0.10 AC)
TOTAL DISTURBED AREA (INCLUDES OFFSITE IMPROVEMENTS)	115,597 SF (2.65AC)
ZONING SUMMARY	
EXISTING ZONING	I-1 INDUSTRIAL DISTRICT B-4 BUSINESS DISTRICT
PROPOSED ZONING	PUD

SITE PLAN NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
2. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOOKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
3. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
4. EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR RELOCATED AS NECESSARY. ALL COST SHALL BE INCLUDED IN BASE BID.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
6. SITE BOUNDARY, TOPOGRAPHY, UTILITY AND ROAD INFORMATION TAKEN FROM A SURVEY BY SAMBATEK, DATED 02/12/2020.

   KIMLEY-HORN ASSUMES NO LIABILITY FOR ANY ERRORS, INACCURACIES, OR OMISSIONS CONTAINED THEREIN.
7. CONTRACTOR SHALL REFERENCE ARCH / MEP PLANS FOR SITE LIGHTING AND ELECTRICAL PLAN.
8. NO PROPOSED LANDSCAPING SUCH AS TREES OR SHRUBS, ABOVE AND UNDERGROUND STRUCTURES, OR OTHER OBSTRUCTIONS SHALL BE LOCATED WITHIN EXISTING OR PROPOSED UTILITY EASEMENTS AND RIGHTS OF WAY UNLESS SPECIFICALLY NOTED ON PLANS OTHERWISE.
9. REFER TO FINAL PLAT OR ALTA SURVEY FOR EXACT LOT AND PROPERTY BOUNDARY DIMENSIONS.
10. ALL AREAS ARE ROUNDED TO THE NEAREST SQUARE FOOT.
11. ALL DIMENSIONS ARE ROUNDED TO THE NEAREST TENTH FOOT.

NORTH

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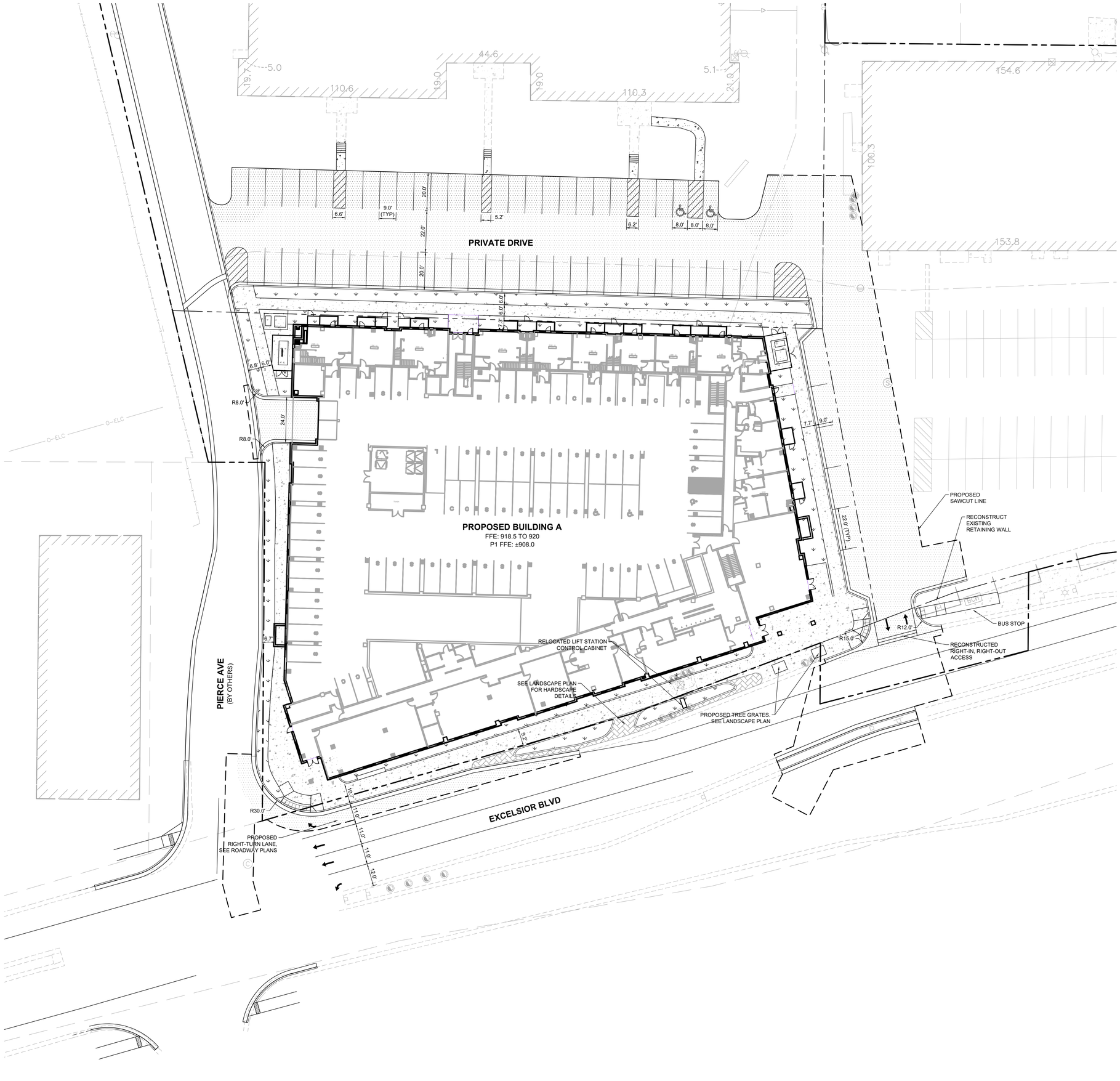
BPG DRAWN BY TDS CHECKED BY

KEY PLAN

Blake Road Station

OVERALL SITE PLAN

C400



LEGEND

- PROPERTY LINE
- RETAINING WALL
- PROPOSED CURB AND GUTTER
- PROPOSED GREENSPACE
- PROPOSED STANDARD DUTY ASPHALT
- PROPOSED CONCRETE PAVEMENT

PROPERTY SUMMARY	
BLAKE & EXCELSIOR	
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RIGHT OF WAY DEDICATION	0.00 AC
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3. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
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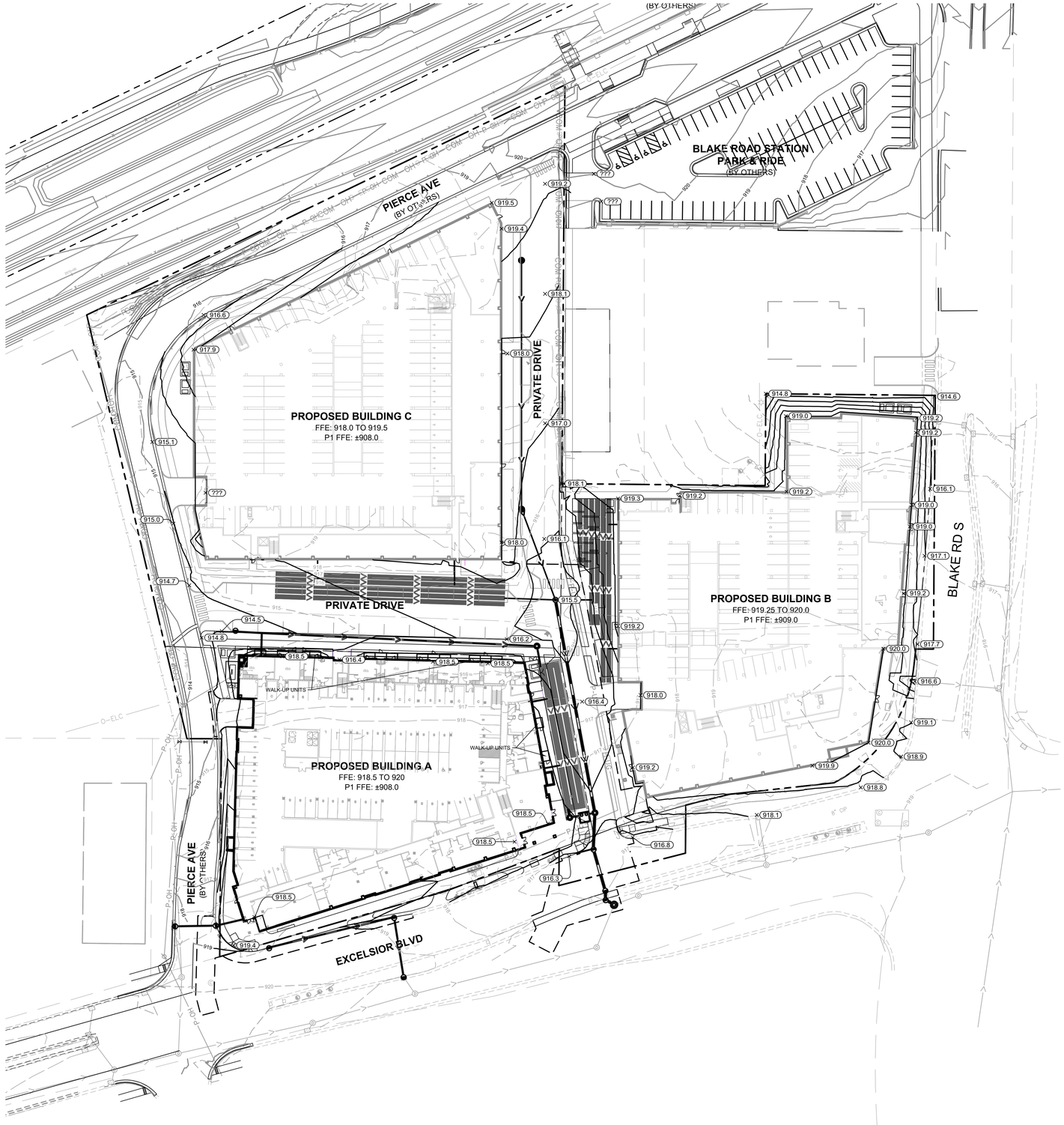
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KEY PLAN

Blake Road Station

SITE PLAN - SITE A

C401



LEGEND

- PROPERTY LINE
- 925 EXISTING CONTOUR
- 925 PROPOSED CONTOUR
- PROPOSED STORM MANHOLE (SOLID CASTING)
- PROPOSED STORM MANHOLE (ROUND INLET CASTING)
- PROPOSED STORM MANHOLE/ CATCH BASIN (CURB INLET CASTING)
- PROPOSED STORM SEWER CLENOUT
- PROPOSED FLARED END SECTION
- PROPOSED RIPRAP
- PROPOSED STORM SEWER
- PROPOSED STORM SEWER
- 100.00 PROPOSED SPOT ELEVATION
- HP 0.0 PROPOSED HIGH POINT ELEVATION
- LP 0.0 PROPOSED LOW POINT ELEVATION
- G 0.00 PROPOSED GUTTER ELEVATION
- T 0.00 PROPOSED TOP OF CURB ELEVATION
- TG 0.0 PROPOSED FLUSH PAVEMENT ELEVATION
- ME 0.0 MATCH EXISTING ELEVATION
- EOF 0.0 PROPOSED EMERGENCY OVERFLOW
- 0.0% PROPOSED DRAINAGE DIRECTION
- 0.00% PROPOSED ADA SLOPE

GRADING PLAN NOTES

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2. CONTRACTOR TO CALL GOPHER STATE CALL ONE @ <1-800-252-1166> AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION/CONSTRUCTION FOR UTILITY LOCATIONS.
3. STORM SEWER PIPE SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76
   HDPE: 0" - 10" PER AASHTO M-252
   HDPE: 12" OR GREATER PER ASTM F-2306
   PVC SCH. 40 PER ASTM D-3034
   STORM SEWER FITTINGS SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76, JOINTS PER ASTM C-361, C-990, AND C-443
   HDPE PER ASTM 3212
   PVC PER ASTM D-3034, JOINTS PER ASTM D-3212
4. CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OR EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS.
5. SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFSET ANY STABILITY PROBLEMS DUE TO WATER SEEPAGE OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING OF EXISTING PAVEMENT.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
7. CONTRACTOR SHALL EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS.
8. GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL ROUGH GRADE TO SUBGRADE ELEVATION AND LEAVE STREET READY FOR SUBBASE.
9. ALL EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ANY ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
10. REFER TO THE UTILITY PLAN FOR SANITARY SEWER MAIN, WATER MAIN SERVICE LAYOUT AND ELEVATIONS AND CASTING / STRUCTURE NOTATION.
11. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF PAVEMENTS AND CURB AND GUTTER WITH SMOOTH UNIFORM SLOPES TO PROVIDE POSITIVE DRAINAGE.
12. INSTALL A MINIMUM OF <4" CLASS 5> AGGREGATE BASE UNDER CURB AND GUTTER AND CONCRETE SIDEWALKS.
13. UPON COMPLETION OF EXCAVATION AND FILLING, CONTRACTOR SHALL RESTORE ALL STREETS AND DISTURBED AREAS ON SITE. ALL DISTURBED AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF <4" OF TOPSOIL>.
14. ALL SPOT ELEVATIONS/CONTOURS ARE TO GUTTER / FLOW LINE UNLESS OTHERWISE NOTED.
15. GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2%. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5%. IN NO CASE SHALL ACCESSIBLE PARKING STALLS OR AISLES EXCEED 2% (1.5% TARGET) IN ALL DIRECTIONS. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVING. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.
16. MAINTAIN A MINIMUM OF 0.5% GUTTER SLOPE TOWARDS LOW POINTS.
17. CONTRACTOR TO PROVIDE 3" INSULATION BY 5' WIDE CENTERED ON STORM PIPE IF LESS THAN 4' OF COVER IN PAVEMENT AREAS AND LESS THAN 3' OF COVER IN LANDSCAPE AREAS.
18. ROOF DRAIN INVERT CONNECTIONS AT THE BUILDING SHALL BE AT ELEVATION <XXX.XX> OR LOWER UNLESS NOTED OTHERWISE. REFERENCE MEP PLANS FOR ROOF DRAIN CONNECTION.
19. ALL STORM SEWER CONNECTIONS SHALL BE GASKETED AND WATER TIGHT INCLUDING MANHOLE CONNECTIONS.
20. ALL STORM SEWER PIPE SHALL BE AIR TESTED IN ACCORDANCE WITH THE CURRENT PLUMBING CODE.
21. MAINTAIN A MINIMUM OF 1.25% SLOPE IN BITUMINOUS PAVEMENT AREAS, 0.5% SLOPE IN CONCRETE PAVEMENT AREAS.
22. CONTRACTOR SHALL REVIEW PAVEMENT GRADIENT AND CONSTRUCT "INFALL CURB" WHERE PAVEMENT DRAINS TOWARD GUTTER, AND "OUTFALL" CURB WHERE PAVEMENT DRAINS AWAY FROM GUTTER.

NORTH

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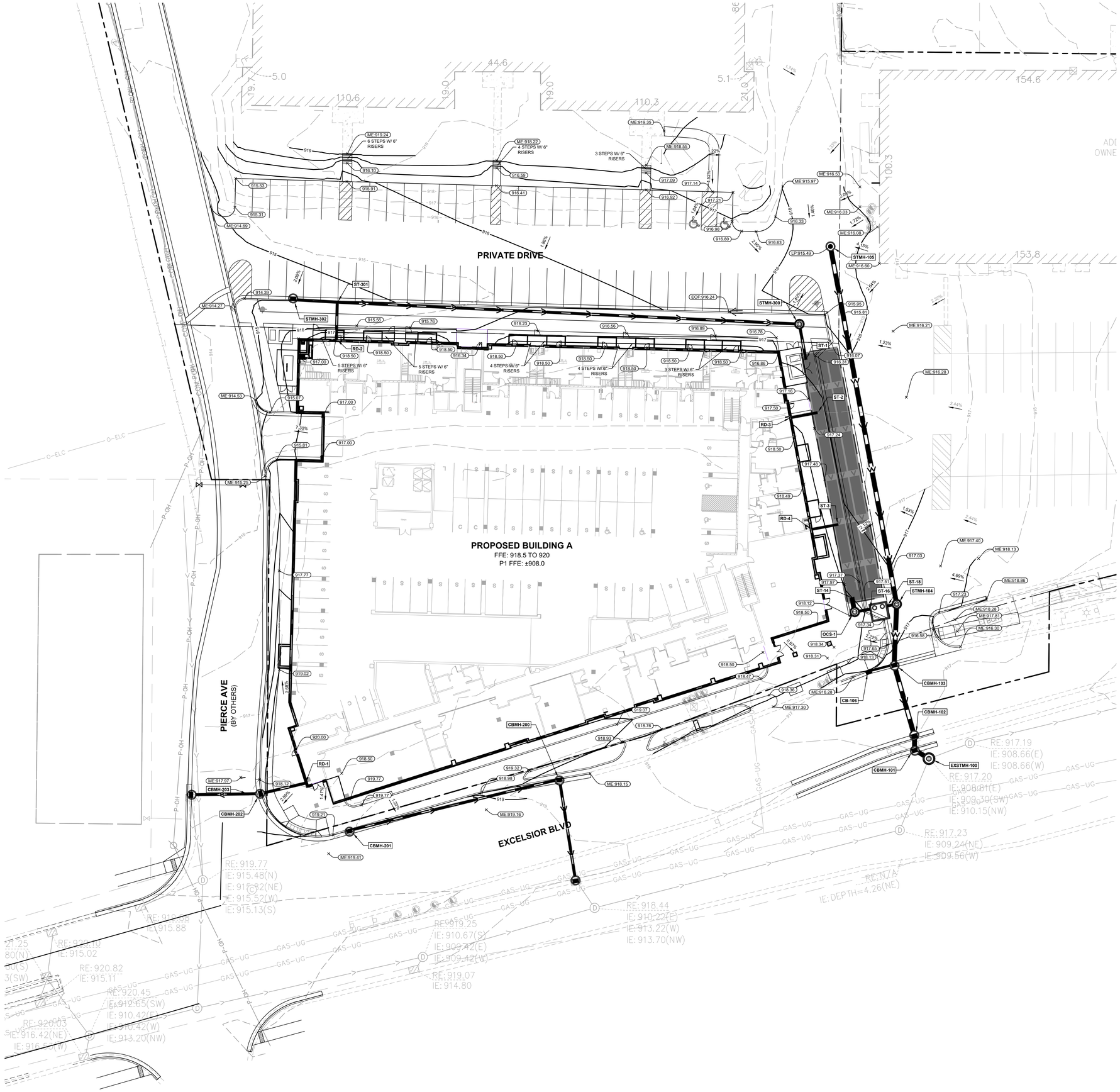
BPG DRAWN BY TDS CHECKED BY

KEY PLAN

Blake Road Station

OVERALL GRADING PLAN

C500



LEGEND

- PROPERTY LINE
- 928 EXISTING CONTOUR
- 925 PROPOSED CONTOUR
- PROPOSED LIMITS OF DISTRUBANCE
- PROPOSED STORM MANHOLE (SOLID CASTING)
- PROPOSED STORM MANHOLE (ROUND INLET CASTING)
- PROPOSED STORM MANHOLE/ CATCH BASIN (CURB INLET CASTING)
- PROPOSED STORM SEWER CLENOUT
- PROPOSED FLARED END SECTION
- PROPOSED RIPRAP
- PROPOSED STORM SEWER
- PROPOSED STORM SEWER
- (100.00) PROPOSED SPOT ELEVATION
- (HP 0.0) PROPOSED HIGH POINT ELEVATION
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- (G 0.00) PROPOSED GUTTER ELEVATION
- (T 0.00) PROPOSED TOP OF CURB ELEVATION
- (TG 0.0) PROPOSED FLUSH PAVEMENT ELEVATION
- (ME 0.0) MATCH EXISTING ELEVATION
- (EOF 0.0) PROPOSED EMERGENCY OVERFLOW
- 0.0% PROPOSED DRAINAGE DIRECTION
- 0.00% PROPOSED ADA SLOPE

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8. GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL ROUGH GRADE TO SUBGRADE ELEVATION AND LEAVE STREET READY FOR SUBBASE.
9. ALL EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ANY ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
10. REFER TO THE UTILITY PLAN FOR SANITARY SEWER MAIN, WATER MAIN SERVICE LAYOUT AND ELEVATIONS AND CASTING / STRUCTURE NOTATION.
11. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF PAVEMENTS AND CURB AND GUTTER WITH SMOOTH UNIFORM SLOPES TO PROVIDE POSITIVE DRAINAGE.
12. INSTALL A MINIMUM OF <4" CLASS 5> AGGREGATE BASE UNDER CURB AND GUTTER AND CONCRETE SIDEWALKS.
13. UPON COMPLETION OF EXCAVATION AND FILLING, CONTRACTOR SHALL RESTORE ALL STREETS AND DISTURBED AREAS ON SITE. ALL DISTURBED AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF <4" OF TOPSOIL>.
14. ALL SPOT ELEVATIONS/CONTOURS ARE TO GUTTER / FLOW LINE UNLESS OTHERWISE NOTED.
15. GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2%. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5%. IN NO CASE SHALL ACCESSIBLE PARKING STALLS OR AISLES EXCEED 2% (1.5% TARGET) IN ALL DIRECTIONS. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVING. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.
16. MAINTAIN A MINIMUM OF 0.5% GUTTER SLOPE TOWARDS LOW POINTS.
17. CONTRACTOR TO PROVIDE 3" INSULATION BY 5' WIDE CENTERED ON STORM PIPE IF LESS THAN 4' OF COVER IN PAVEMENT AREAS AND LESS THAN 3' OF COVER IN LANDSCAPE AREAS.
18. ROOF DRAIN INVERT CONNECTIONS AT THE BUILDING SHALL BE AT ELEVATION <XXX.XX> OR LOWER UNLESS NOTED OTHERWISE. REFERENCE MEP PLANS FOR ROOF DRAIN CONNECTION.
19. ALL STORM SEWER CONNECTIONS SHALL BE GASKETED AND WATER TIGHT INCLUDING MANHOLE CONNECTIONS.
20. ALL STORM SEWER PIPE SHALL BE AIR TESTED IN ACCORDANCE WITH THE CURRENT PLUMBING CODE.
21. MAINTAIN A MINIMUM OF 1.25% SLOPE IN BITUMINOUS PAVEMENT AREAS, 0.5% SLOPE IN CONCRETE PAVEMENT AREAS.
22. CONTRACTOR SHALL REVIEW PAVEMENT GRADIENT AND CONSTRUCT "INFALL CURB" WHERE PAVEMENT DRAINS TOWARD GUTTER, AND "OUTFALL" CURB WHERE PAVEMENT DRAINS AWAY FROM GUTTER.

NORTH

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7/17/2020

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Signature

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Typed or Printed Name

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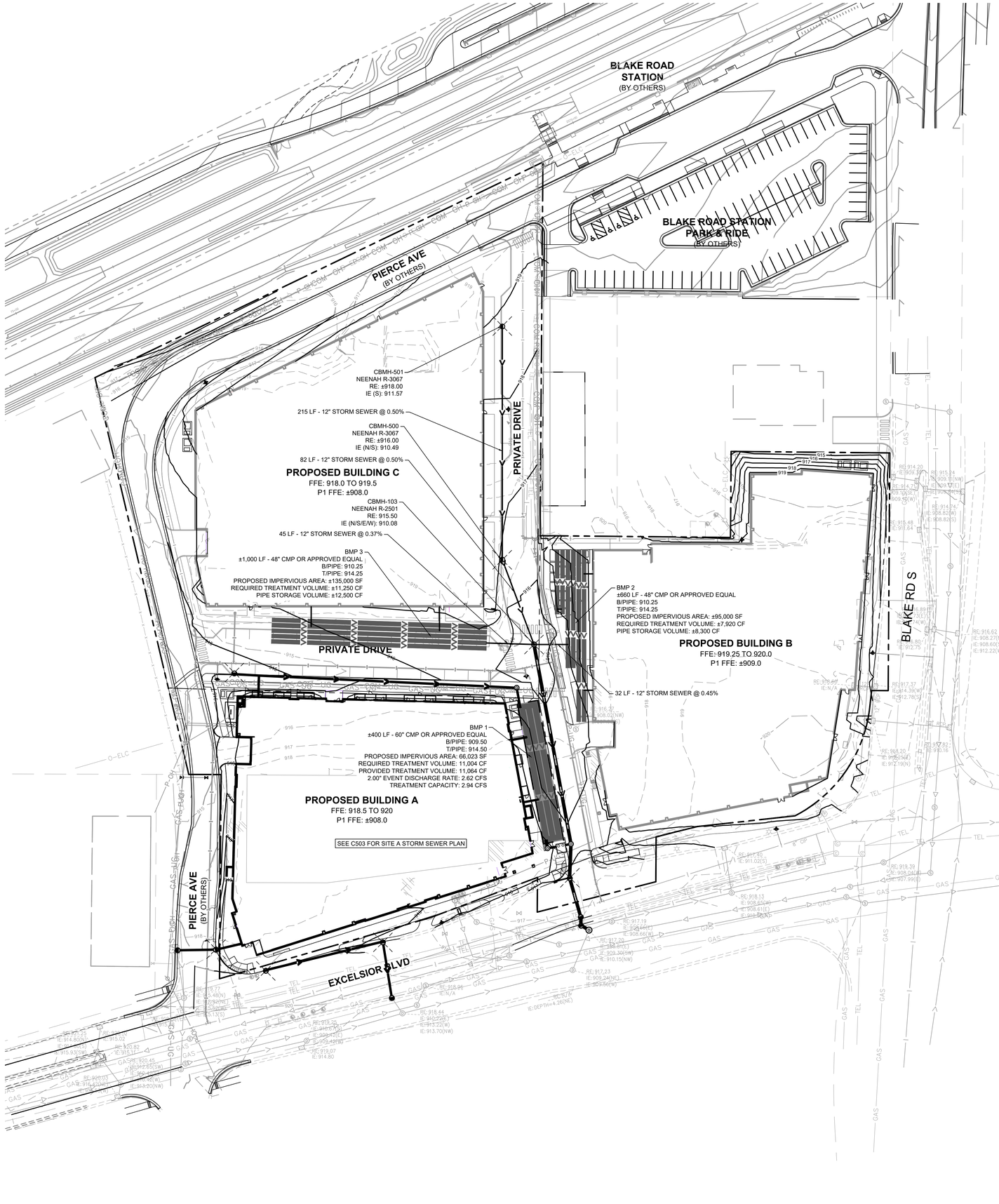
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KEY PLAN

Blake Road Station

GRADING PLAN - SITE A

C501



LEGEND

- PROPERTY LINE
- PROPOSED STORM MANHOLE (SOLID CASTING)
- PROPOSED STORM MANHOLE (ROUND INLET CASTING)
- PROPOSED STORM MANHOLE/ CATCH BASIN (CURB INLET CASTING)
- PROPOSED STORM SEWER CLENOUT
- PROPOSED FLARED END SECTION
- PROPOSED RIPRAP
- PROPOSED STORM SEWER
- PROPOSED STORM SEWER
- PROPOSED FINGER DRAIN - INSTALL AROUND CATCH BASINS, 4 DRAINS, SPACED AT 90°, EXTENDING 10' FROM CATCH BASIN
- PROPOSED WATERMAIN
- PROPOSED SANITARY SEWER
- PROPOSED UNDERGROUND STORMWATER PIPE DETENTION

GRADING PLAN NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF HOPKINS, SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
2. CONTRACTOR TO CALL GOPHER STATE CALL ONE @ 1-800-252-1166 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION/CONSTRUCTION FOR UTILITY LOCATIONS.
3. STORM SEWER PIPE SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76
   HDPE: 0" - 10" PER AASHTO M-252
   HDPE: 12" OR GREATER PER ASTM F-2306
   PVC SCH. 40 PER ASTM D-3034
   STORM SEWER FITTINGS SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76, JOINTS PER ASTM C-361, C-990, AND C-443
   HDPE PER ASTM 3212
   PVC PER ASTM D-3034, JOINTS PER ASTM D-3212
4. CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OR EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS.
5. SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFSET ANY STABILITY PROBLEMS DUE TO WATER SEEPAGE OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING OF EXISTING PAVEMENT.
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12. INSTALL A MINIMUM OF 4" CLASS 5 AGGREGATE BASE UNDER CURB AND GUTTER AND CONCRETE SIDEWALKS.
13. UPON COMPLETION OF EXCAVATION AND FILLING, CONTRACTOR SHALL RESTORE ALL STREETS AND DISTURBED AREAS ON SITE. ALL DISTURBED AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF 4" OF TOPSOIL.
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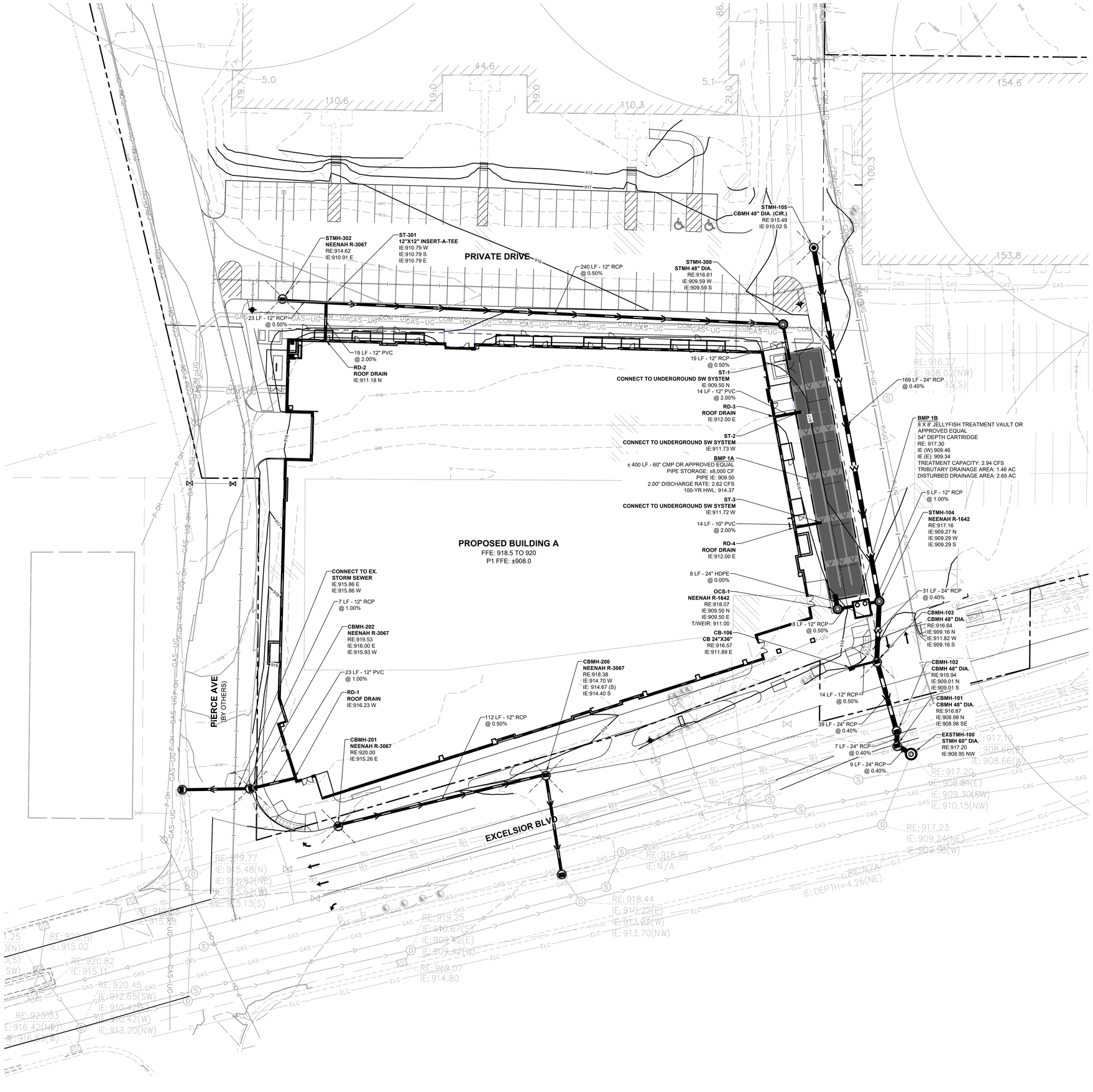
KEY PLAN

Blake Road Station

OVERALL STORM SEWER PLAN PLAN

C502

7/17/2020



LEGEND

- PROPERTY LINE
- PROPOSED STORM MANHOLE (SOLID CASTING)
- PROPOSED STORM MANHOLE (ROUND INLET CASTING)
- PROPOSED STORM MANHOLE/ CATCH BASIN (CURB INLET CASTING)
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STORMWATER SUMMARY - BUILDING A PARCEL

BLAKE & EXCELSIOR	
PROPERTY AREA	70,611 SF (1.62 AC)
PROPOSED IMPERVIOUS AREA	66,023 SF (1.52 AC)
TRIBUTARY AREA TO BMP 1	63,709 SF (1.26 AC)
DISTURBED AREA	115,597 SF (2.65 AC)

RATE ATTENUATION SUMMARY		1-YEAR (CFS)	10-YEAR (CFS)	100-YEAR (CFS)
PIERCE AVENUE	EXISTING	6.65	12.07	21.55
	PROPOSED	0.32	0.75	1.55
EXCELSIOR BOULEVARD	EXISTING	1.68	2.91	5.10
	PROPOSED	5.49	9.50	15.58
TOTAL	EXISTING	8.32	14.99	26.65
	PROPOSED	5.80	10.25	17.12

RUNOFF VOLUME SUMMARY	
REQUIRED TREATMENT VOLUME: MCWD REQUIRES A VOLUME ABSTRACTION OF 1" OVER THE IMPERVIOUS AREA (5,502 CF) OR TREATMENT OF THE FLOW RATE RESULTING FROM THE 2" EVENT OVER THE IMPERVIOUS AREA FOR FILTRATION PRACTICES.	11,004 CF
PROVIDED TREATMENT VOLUME: TO DEMONSTRATE THE UNDERGROUND DETENTION AND TREATMENT VAULT HAVE SUFFICIENT CAPACITY, THE 2" EVENT IS MODELED WITH A 2.59" RAINFALL DEPTH THAT RESULTS IN THE PROVIDED TREATMENT VOLUME.	11,064 CF

WATER QUALITY SUMMARY	
REQUIRED TSS REMOVAL	70%
SITE CAPTURE	90.2%
BMP 1B TSS REMOVAL RATE	80%
BMP 1B TREATMENT CAPACITY	2.94 CFS
BMP 1A DISCHARGE RATE (2" EVENT)	2.62 CFS
PROVIDED TSS REMOVAL	72.16% (90.2% SITE CAPTURE * 80% REMOVAL)

NORTH

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7/17/2020

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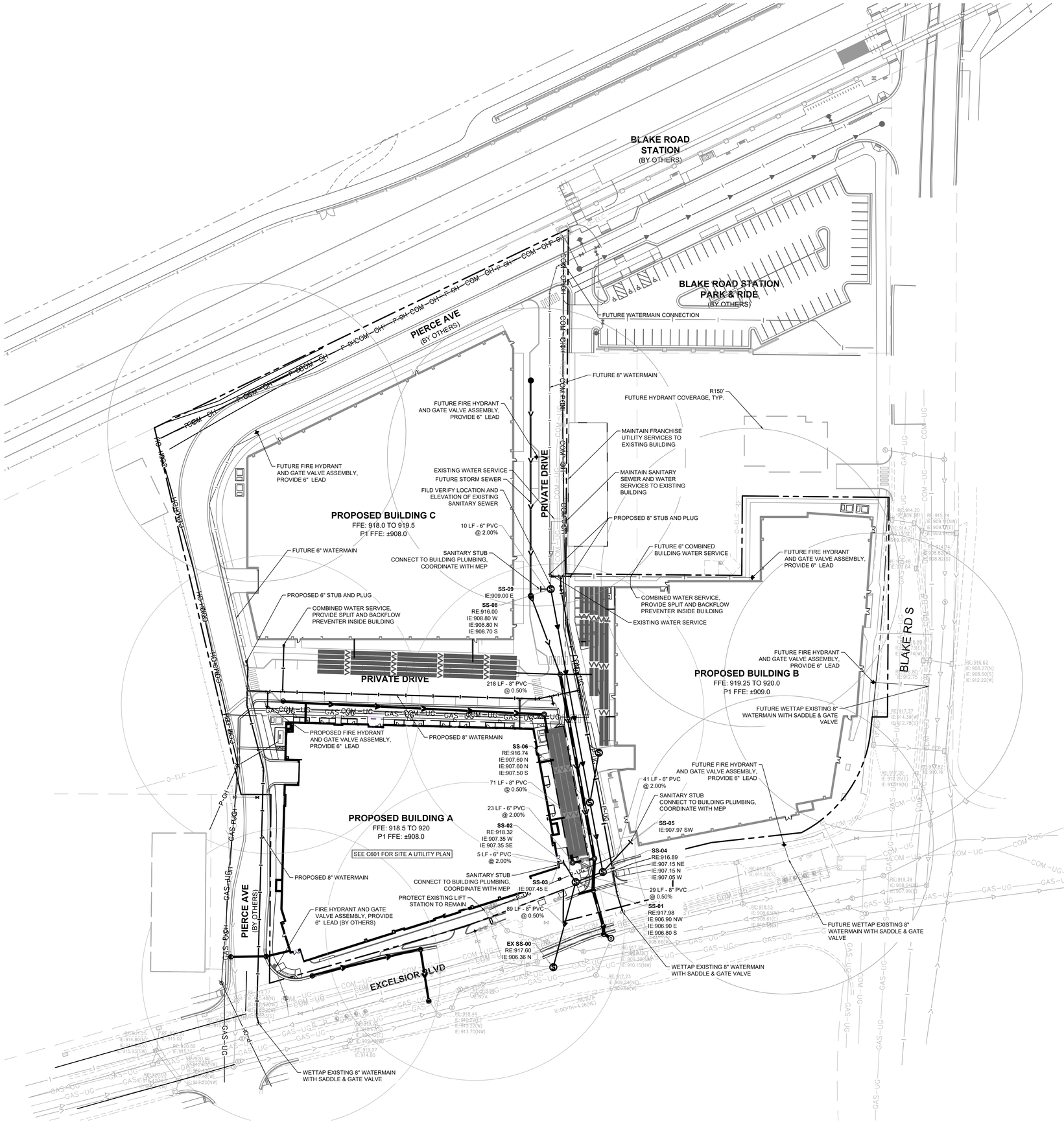
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KEY PLAN

Blake Road Station

STORM SEWER PLAN - SITE A

C503



LEGEND

EXISTING	PROPOSED	
		GATE VALVE
		HYDRANT
		REDUCER
		TEE
		SANITARY SEWER MANHOLE
		SANITARY CLEANOUT
		WATERMAIN
		SANITARY SEWER
		STORM SEWER
		STORM SEWER
ELC	ELC	UNDERGROUND ELECTRIC
COM	COM	TELEPHONE
GAS	GAS	GAS MAIN
		PROPOSED UNDERGROUND STORMWATER PIPE DETENTION

UTILITY PLAN NOTES

1. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
2. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
   8" PVC SDR35 PER ASTM D-3034, FOR PIPES LESS THAN 12' DEEP
   8" PVC SDR26 PER ASTM D-3034, FOR PIPES MORE THAN 12' DEEP
   6" PVC SCHEDULE 40 PER ASTM D-3034
   DUCTILE IRON PIPE PER AWWA C150
3. WATER LINES SHALL BE AS FOLLOWS:
   6" AND LARGER, PVC C-900 PER ASTM D 2241
   CLASS 200 UNDER COUNTY ROADS, OTHERWISE CLASS 150
   4" AND LARGER DUCTILE IRON PIPE PER AWWA C150
   SMALLER THAN 3" PIPING SHALL BE COPPER TUBE TYPE "K" PER ANSI 816.22 OR PVC, 200 P.S.I., PER ASTM D1784 AND D2241.
4. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
5. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH RESTRAINTS SUCH AS THRUST BLOCKING, WITH STAINLESS STEEL OR COBALT BLUE BOLTS, OR AS INDICATED IN THE CITY SPECIFICATIONS AND PROJECT DOCUMENTS.
6. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE OR STRUCTURE).
7. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 7'-5" COVER ON ALL WATERLINES.
8. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES, OR ANY OBSTRUCTION (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE SCH. 40 OR C900 WITH MECHANICAL JOINTS AT LEAST 10 FEET ON EITHER SIDE OF THE CENTER LINE OF THE CROSSING. THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE FASTENERS AS REQUIRED TO PROVIDE A MINIMUM OF 18" VERTICAL SEPARATION. MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
9. LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
10. TOPS OF MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATIONS, IN GREEN AREAS, WITH WATERTIGHT LIDS.
11. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
12. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
13. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
14. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE CITY OF HOPKINS AND/OR STATE OF MINNESOTA WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
15. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
16. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES.
17. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
18. CONTRACTOR SHALL REFERENCE ARCH / MEP PLANS FOR SITE LIGHTING AND ELECTRICAL PLAN.
19. BACKFLOW DEVICES (DDCV AND PRZ ASSEMBLIES) AND METERS ARE LOCATED IN THE INTERIOR OF THE BUILDING. REF. ARCH / MEP PLANS.
20. ALL ONSITE WATERMAINS AND SANITARY SEWERS SHALL BE PRIVATELY OWNED AND MAINTAINED.
21. ALL WATERMAIN STUBOUTS SHALL BE MECHANICALLY RESTRAINED WITH REACTION BLOCKING.

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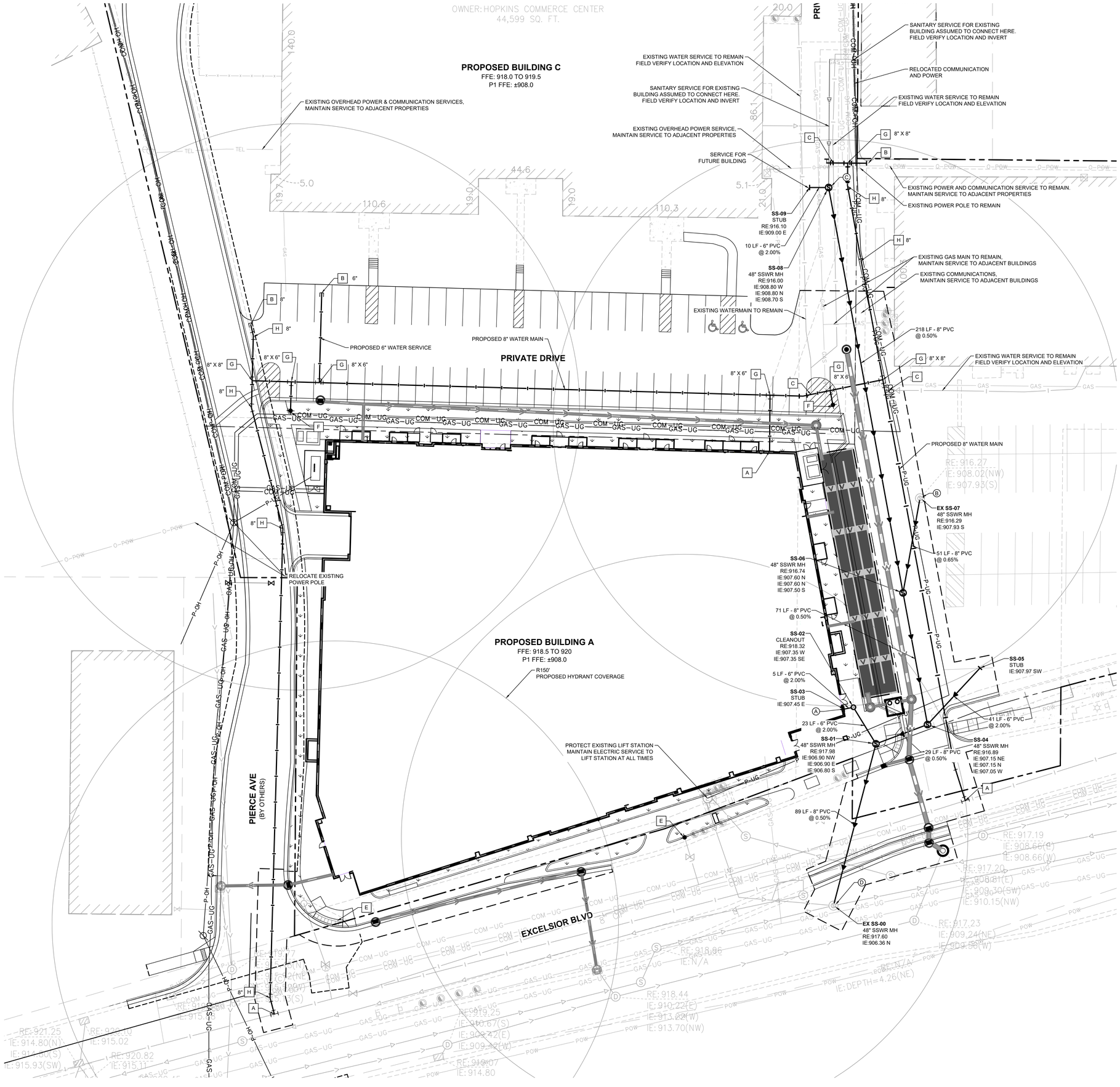
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TDS CHECKED BY

KEY PLAN

Blake Road Station

OVERALL UTILITY PLAN

C600


OWNER: HOPKINS COMMERCE CENTER
44,599 SQ. FT.
PROPOSED BUILDING C
FFE: 918.0 TO 919.5
P1 FFE: ±908.0
PROPOSED BUILDING A
FFE: 918.5 TO 920
P1 FFE: ±908.0
PRIVATE DRIVE
PIERCE AVE
(BY OTHERS)
EXCELSIOR BLVD
EXISTING OVERHEAD POWER & COMMUNICATION SERVICES, MAINTAIN SERVICE TO ADJACENT PROPERTIES
EXISTING WATER SERVICE TO REMAIN FIELD VERIFY LOCATION AND ELEVATION
SANITARY SERVICE FOR EXISTING BUILDING ASSUMED TO CONNECT HERE. FIELD VERIFY LOCATION AND INVERT
EXISTING OVERHEAD POWER SERVICE, MAINTAIN SERVICE TO ADJACENT PROPERTIES
SERVICE FOR FUTURE BUILDING
SANITARY SERVICE FOR EXISTING BUILDING ASSUMED TO CONNECT HERE. FIELD VERIFY LOCATION AND INVERT
RELOCATED COMMUNICATION AND POWER
EXISTING WATER SERVICE TO REMAIN FIELD VERIFY LOCATION AND ELEVATION
EXISTING POWER AND COMMUNICATION SERVICE TO REMAIN. MAINTAIN SERVICE TO ADJACENT PROPERTIES
EXISTING POWER POLE TO REMAIN
EXISTING GAS MAIN TO REMAIN, MAINTAIN SERVICE TO ADJACENT BUILDINGS
EXISTING COMMUNICATIONS, MAINTAIN SERVICE TO ADJACENT BUILDINGS
EXISTING WATERMAIN TO REMAIN
PROPOSED 6" WATER SERVICE
PROPOSED 8" WATER MAIN
RELOCATE EXISTING POWER POLE
PROTECT EXISTING LIFT STATION MAINTAIN ELECTRIC SERVICE TO LIFT STATION AT ALL TIMES
R150' PROPOSED HYDRANT COVERAGE
SS-09 STUB RE:916.10 IE:909.00 E
10 LF - 6" PVC @ 2.00%
SS-08 48" SSWR MH RE:916.00 IE:908.80 W IE:908.80 N IE:908.70 S
218 LF - 8" PVC @ 0.50%
EX SS-07 48" SSWR MH RE:916.29 IE:907.93 S
51 LF - 8" PVC @ 0.65%
SS-06 48" SSWR MH RE:916.74 IE:907.60 N IE:907.60 N IE:907.50 S
71 LF - 8" PVC @ 0.50%
SS-02 CLEANOUT RE:918.32 IE:907.35 W IE:907.35 SE
5 LF - 6" PVC @ 2.00%
SS-03 STUB IE:907.45 E
23 LF - 6" PVC @ 2.00%
SS-01 48" SSWR MH RE:917.98 IE:906.90 NW IE:906.90 E IE:906.80 S
89 LF - 8" PVC @ 0.50%
29 LF - 8" PVC @ 0.50%
SS-04 48" SSWR MH RE:916.89 IE:907.15 NE IE:907.15 N IE:907.05 W
41 LF - 6" PVC @ 2.00%
SS-05 STUB IE:907.97 SW
EX SS-00 48" SSWR MH RE:917.60 IE:906.36 N
8" X 8"
8" X 6"
6"
8"
RE:916.27
IE:908.02(NW)
IE:907.93(S)
RE:917.19
IE:908.66(E)
IE:908.66(W)
RE:917.20
IE:908.81(E)
IE:909.30(SW)
IE:910.15(NW)
RE:917.23
IE:909.24(NE)
IE:909.96(W)
RE:918.06
IE:N/A
RE:918.44
IE:910.22(E)
IE:913.20(W)
IE:913.70(NW)
RE:919.25
IE:910.67(S)
IE:909.42(E)
IE:909.42(W)
RE:N/A
IE:DEPTH=4.26(NE)
RE:921.25
IE:914.80(N)
IE:914.80(S)
IE:915.93(SW)
RE:920.82
IE:915.11
RE:920.07
IE:914.80
RE:919.77
IE:915.02
RE:919.77
IE:915.02
RE:919.77
IE:915.02

SITE AND LANDSCAPE NOTES

SITE PREPARATION NOTES

1. CONTRACTOR SHALL INSPECT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS RELATING TO THE NATURE AND SCOPE OF WORK.
2. CONTRACTOR SHALL VERIFY PLAN LAYOUT AND BRING TO THE ATTENTION OF THE LANDSCAPE ARCHITECT DISCREPANCIES WHICH MAY COMPROMISE THE DESIGN OR INTENT OF THE LAYOUT.
3. CONTRACTOR SHALL ASSURE COMPLIANCE WITH APPLICABLE CODES AND REGULATIONS GOVERNING THE WORK AND MATERIALS SUPPLIED.
4. CONTRACTOR SHALL PROTECT EXISTING ROADS, CURBS/GUTTERS, TRAILS, TREES, LAWNS AND SITE ELEMENTS DURING CONSTRUCTION OPERATIONS. DAMAGE TO SAME SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
5. CONTRACTOR SHALL VERIFY ALIGNMENT AND LOCATION OF UNDERGROUND AND ABOVE GRADE UTILITIES AND PROVIDE THE NECESSARY PROTECTION FOR SAME BEFORE CONSTRUCTION BEGINS (MINIMUM 10' CLEARANCE).
6. CONTRACTOR SHALL COORDINATE THE PHASES OF CONSTRUCTION AND PLANTING INSTALLATION WITH OTHER CONTRACTORS WORKING ON SITE.
7. UNDERGROUND UTILITIES SHALL BE INSTALLED SO THAT TRENCHES DO NOT CUT THROUGH ROOT SYSTEMS OF EXISTING TREES TO REMAIN.
8. EXISTING CONTOURS, TRAILS, VEGETATION, CURB/GUTTER AND OTHER ELEMENTS ARE BASED UPON INFORMATION SUPPLIED TO THE LANDSCAPE ARCHITECT BY OTHERS. CONTRACTOR SHALL VERIFY DISCREPANCIES PRIOR TO CONSTRUCTION AND NOTIFY LANDSCAPE ARCHITECT OF SAME.
9. HORIZONTAL AND VERTICAL ALIGNMENT OF PROPOSED WALKS, TRAILS OR ROADWAYS ARE SUBJECT TO FIELD ADJUSTMENT REQUIRED TO CONFORM TO LOCALIZED TOPOGRAPHIC CONDITIONS AND TO MINIMIZE TREE REMOVAL AND GRADING. CHANGES IN ALIGNMENT AND GRADES MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO IMPLEMENTATION.
10. CONTRACTOR SHALL REVIEW THE SITE FOR DEFICIENCIES IN SITE CONDITIONS WHICH MIGHT NEGATIVELY AFFECT PLANT ESTABLISHMENT, SURVIVAL OR WARRANTY. UNDESIRABLE SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
11. CONTRACTOR IS RESPONSIBLE FOR ONGOING MAINTENANCE OF NEWLY INSTALLED MATERIALS UNTIL TIME OF SUBSTANTIAL COMPLETION. REPAIR OF ACTS OF VANDALISM OR DAMAGE WHICH MAY OCCUR PRIOR TO SUBSTANTIAL COMPLETION SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
12. EXISTING TREES OR SIGNIFICANT SHRUB MASSINGS FOUND ON SITE SHALL BE PROTECTED AND SAVED UNLESS NOTED TO BE REMOVED OR ARE LOCATED IN AN AREA TO BE GRADED. QUESTIONS REGARDING EXISTING PLANT MATERIAL SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO REMOVAL.
13. EXISTING TREES TO REMAIN, UPON DIRECTION OF LANDSCAPE ARCHITECT, SHALL BE FERTILIZED AND PRUNED TO REMOVE DEAD WOOD, DAMAGED AND RUBBING BRANCHES.
14. CONTRACTOR SHALL PREPARE AND SUBMIT A WRITTEN REQUEST FOR THE SUBSTANTIAL COMPLETION INSPECTION OF LANDSCAPE AND SITE IMPROVEMENTS PRIOR TO SUBMITTING FINAL PAY REQUEST.
15. CONTRACTOR SHALL PREPARE AND SUBMIT REPRODUCIBLE AS-BUILT DRAWING(S) OF LANDSCAPE INSTALLATION, IRRIGATION AND SITE IMPROVEMENTS UPON COMPLETION OF CONSTRUCTION INSTALLATION AND PRIOR TO SUBSTANTIAL COMPLETION.
16. SYMBOLS ON PLAN DRAWING TAKE PRECEDENCE OVER SCHEDULES IF DISCREPANCIES IN QUANTITIES EXIST. SPECIFICATIONS AND DETAILS TAKE PRECEDENCE OVER NOTES.

GRADING

1. ROUGH GRADING AND FINISHED GRADING TO BE DONE BY OTHERS EXCEPT WHERE NOTED.
2. GRADING LIMITS ARE DEFINED AS THE JUNCTURE OF PROPOSED GRADE WITH EXISTING GRADE UNLESS NOTED OTHERWISE.
3. GRADING LIMITS AND LIMITS OF WORK SHOWN ON PLAN ARE ONLY APPROXIMATE AND MAY BE ADJUSTED IN FIELD BY LANDSCAPE ARCHITECT. WORK OUTSIDE OF THESE LIMITS WILL BE DONE AT LANDSCAPE CONTRACTORS EXPENSE UNLESS DIRECTED BY LANDSCAPE ARCHITECT OR OWNER IN WRITING.
4. FILL/CUT AS NECESSARY TO PROVIDE A 1% MINIMUM GRADE AWAY FROM BUILDINGS WITHIN LIMITS OF CONSTRUCTION.
5. SALVAGE TOPSOIL FROM THE EARTHWORK AREAS AS APPROPRIATE OR AS INDICATED ON PLANS AND STOCKPILE FOR REUSE.
6. OBTAIN SOIL SAMPLE FROM SALVAGED TOPSOIL STOCKPILE AND SUBMIT TO INDEPENDENT TESTING AGENCY FOR ANALYSIS.
7. MAINTAIN A UNIFORM GRADE BETWEEN CONTOURS IN AREAS TO BE GRADED UNLESS NOTED OTHERWISE.
8. ELEVATIONS, IF SHOWN ARE FINISHED ELEVATIONS. SPOT ELEVATIONS TAKE PRECEDENCE OVER CONTOURS.
9. ADD EROSION CONTROL MEASURES IF GRADES GREATER THAN 3:1 OR IF CONDITIONS WARRANT. REFER TO MNDOT SPECIFICATIONS FOR EROSION CONTROL.
10. CONTRACTOR SHALL CONTACT PUBLIC UTILITIES FOR LOCATION OF UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. LANDSCAPE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE IF DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
11. CONTRACTOR SHALL PROVIDE PROPER EROSION CONTROL MEASURES AS REQUIRED TO ENSURE THAT EROSION IS KEPT TO AN ABSOLUTE MINIMUM.
12. PROVIDE TEMPORARY COVERING FOR CATCH BASINS AND MAN HOLES UNTIL FINISHED GRADING IS COMPLETE.
13. CONTRACTOR SHALL CONSTRUCT DRAINAGE BASINS AS NEEDED.
14. PERIMETER SILT FENCE AND ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. REFER TO STATE SPECIFICATIONS FOR AGGREGATE BASE AND SILT FENCE.
15. CONTRACTOR SHALL INSTALL CATCH BASIN EROSION CONTROL MEASURES PER LOCAL POLLUTION CONTROL AGENCY AND SPECIFICATIONS.
16. WITHIN TWO WEEKS OF FINISHED SITE GRADING, DISTURBED AREAS SHALL BE STABILIZED WITH SEED, SOD, MULCH OR ROCK BASE.
17. CONTRACTOR SHALL MAINTAIN EROSION CONTROL MEASURES, INCLUDING THE REMOVAL OF ACCUMULATED SILT IN FRONT OF SILT FENCES AND EXCESS SEDIMENT IN PROPOSED CATCH BASINS, FOR THE DURATION OF CONSTRUCTION.
18. CONTRACTOR SHALL REMOVE EROSION CONTROL MEASURES AFTER VEGETATION IS ESTABLISHED AND DISPOSE OF OFF SITE.
19. CONTRACTOR SHALL ENSURE THAT SOIL CONDITIONS AND COMPACTION ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AROUND THE CONSTRUCTION SITE. UNDESIRABLE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF WORK. IT SHALL BE THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO ENSURE PROPER SURFACE AND SUBSURFACE DRAINAGE IN PLANTING AREAS.

PLANTING

1. SPRING PLANT MATERIAL INSTALLATION IS FROM APRIL 15 TO JUNE 15.
2. FALL CONIFEROUS PLANTING IS ACCEPTABLE FROM AUGUST 21 TO SEPTEMBER 30.
3. FALL DECIDUOUS PLANTING IS ACCEPTABLE FROM AUGUST 15 UNTIL NOVEMBER 15.
4. ADJUSTMENTS TO PLANTING DATES MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.
5. STAKE PROPOSED PLANTING LOCATIONS PER PLAN FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALL.
6. PLANT MATERIAL SHALL COMPLY WITH THE CURRENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1. UNLESS NOTED OTHERWISE, DECIDUOUS SHRUBS SHALL HAVE AT LEAST 5 CANES AT THE SPECIFIED HEIGHT. ORNAMENTAL TREES SHALL HAVE NO 'V' CROTCHES AND SHALL BEGIN BRANCHING NO LOWER THAN 3' FEET ABOVE THE ROOT BALL. STREET AND BOULEVARD TREES SHALL BEGIN BRANCHING NO LOWER THAN 6' ABOVE PAVED SURFACE.
7. INSTALL PLANT MATERIAL AFTER FINAL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
8. INSTALL PLANT MATERIALS PER PLANTING DETAILS.
9. SUBSTITUTION REQUESTS FOR PLANT MATERIAL TYPE & SIZE SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR CONSIDERATION PRIOR TO BIDDING. SUBSTITUTIONS AFTER BIDDING MUST BE APPROVED BY LANDSCAPE ARCHITECT AND ARE SUBJECT TO CONTRACT ADJUSTMENTS.
10. ADJUSTMENTS IN LOCATION OF PROPOSED PLANT MATERIALS MAY BE NEEDED IN FIELD. LANDSCAPE ARCHITECT MUST BE NOTIFIED PRIOR TO ADJUSTMENT OF PLANTS.
11. FERTILIZE PLANT MATERIAL UPON INSTALLATION WITH DRIED BONE MEAL AND OTHER APPROVED FERTILIZER MIXED IN WITH THE PLANTING SOIL (PER THE MANUFACTURER'S INSTRUCTIONS) OR TREAT FOR SUMMER AND FALL INSTALLATION WITH AN APPLICATION OF GRANULAR 10-0-5 OF 12 OZ. PER 2.5" CALIPER TREE AND 6 OZ. PER SHRUB WITH AN ADDITIONAL APPLICATION OF 10-0-10 THE FOLLOWING SPRING IN THE TREE SAUCER.
12. INSTALL 18" DEPTH OF PLANTING SOIL IN AREAS RECEIVING GROUND COVER, PERENNIALS, AND ANNUALS. PLANTING SOIL SHALL CONSIST OF MnDOT 3877-B MODIFIED TO CONTAIN A MAXIMUM OF 30% SAND, A PH OF 7.1 MAX, OR AS OTHERWISE SPECIFIED IN THE PROJECT SPECIFICATIONS MANUAL.
13. TREE WRAPPING MATERIAL SHALL BE TWO-WALLED PLASTIC SHEETING APPLIED FROM TRUNK FLARE TO FIRST BRANCH. WRAP SMOOTH-BARKED DECIDUOUS TREES PLANTED IN THE FALL PRIOR TO DECEMBER 1 AND REMOVE WRAPPING AFTER MAY 1.
14. APPLY PRE-EMERGENT HERBICIDE (PREEN OR APPROVED EQUAL) IN ANNUAL, PERENNIAL, AND SHRUB BEDS FOLLOWED BY SHREDDED HARDWOOD MULCH. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING USE OF HERBICIDES.

MULCHING

1. INSTALL 4" DEEP SHREDDED HARDWOOD MULCH RINGS AT CONIFEROUS & DECIDUOUS TREES WITH NO MULCH IN DIRECT CONTACT WITH TREE TRUNK.
2. INSTALL 3" DEEP SHREDDED HARDWOOD MULCH RINGS AT SHRUB PLANTING AREAS WITH NO MULCH IN DIRECT CONTACT WITH SHRUB STEMS.
3. INSTALL 3" DEEP FINELY SHREDDED MULCH IN PERENNIAL PLANTING BEDS. REMOVE ALL MULCH FROM STEMS OF PERENNIALS - PLANT STEMS SHOULD NOT BE IN DIRECT CONTACT WITH MULCH.

WATERING

1. PLANTED MATERIALS SHALL BE WATERED BY TEMPORARY MEANS UNTIL PLANTS ARE ESTABLISHED.
2. TEMPORARY WATERING MEANS, METHODS, AND SCHEDULING SHALL BE THE CONTRACTOR'S RESPONSIBILITY. REMOVE TEMPORARY WATERING EQUIPMENT UPON PLANT ESTABLISHMENT.

WARRANTY

1. WARRANTY NEW PLANT MATERIAL THROUGH ONE CALENDAR YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION. NO PARTIAL ACCEPTANCE WILL BE CONSIDERED.

TURF NOTES

1. SOD AREAS DISTURBED DUE TO GRADING UNLESS NOTED OTHERWISE.
2. WHERE SOD ABUTS PAVED SURFACES, FINISHED GRADE OF SOD/SEED SHALL BE HELD 1" BELOW SURFACE ELEVATION OF TRAIL, SLAB, CURB, ETC.
3. SOD SHALL BE LAID PARALLEL TO THE CONTOURS AND SHALL HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES, SOD SHALL BE STAKED SECURELY.
4. UNLESS NOTED OTHERWISE, THE APPROPRIATE DATES FOR SPRING SEED & SOD PLACEMENT IS FROM THE TIME GROUND HAS THAWED TO JUNE 15.
5. FALL SODDING IS ACCEPTABLE FROM AUGUST 15 TO NOVEMBER 1. FALL SEEDING IS ACCEPTABLE FROM AUGUST 15 TO SEPTEMBER 15. ADJUSTMENTS TO SOD/SEED PLANTING DATES MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.

IRRIGATION NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN IRRIGATION LAYOUT PLAN AND SPECIFICATION THAT MEETS THE REQUIREMENTS OF THE PROVIDED PERFORMANCE SPECIFICATION AS PART OF THE SCOPE OF WORK. SUBMIT LAYOUT PLAN AND SPECIFICATIONS FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO ORDER AND/OR CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT SODDED/SEEDED AND PLANTED AREAS ARE IRRIGATED PROPERLY, INCLUDING THOSE AREAS DIRECTLY AROUND AND ABUTTING BUILDING FOUNDATION.
2. CONTRACTOR SHALL FIELD VERIFY WATER SUPPLY, VOLUME, PRESSURE AND LOCATION FOR SYSTEM TAP PRIOR TO SYSTEM DESIGN.
3. CONTRACTOR SHALL CONFIRM COMPLETE LIMITS OF IRRIGATION WITH LANDSCAPE ARCHITECT PRIOR TO SUPPLYING SHOP DRAWINGS.
4. CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT FOR INSPECTION AND APPROVAL OF AREAS RECEIVING DRIP IRRIGATION PRIOR TO INSTALLATION OF MULCH.
5. CONTRACTOR SHALL PROVIDE THE OWNER AND LANDSCAPE ARCHITECT WITH AS-BUILT DRAWINGS, DETAILED SYSTEM OPERATION INSTRUCTIONS AND AN IRRIGATION SCHEDULE APPROPRIATE TO THE PROJECT SITE CONDITIONS AND PLANTED MATERIAL GROWTH REQUIREMENTS.

0 16' 32' 48'
SCALE: 1"=16'

NORTH

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HOPKINS, MN 55343

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed landscape architect under the laws of the State of Minnesota

Signature

Typed or Printed Name

License # Date

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LUA SUBMITTAL
04/23/2021

ORIGINAL ISSUE:

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No.	Description	Date

20-172
PROJECT NUMBER

BD DRAWN BY JS CHECKED BY

KEY PLAN

BLAKE ROAD STATION

GENERAL NOTES

L010

OVERALL REFERENCE NOTES SCHEDULE

	CURB						
SYMBOL	DESCRIPTION	QTY	DETAIL	MANUFACTURER	PRODUCT/MODEL	COLOR/FINISH	COMMENTS
CB-01	CONCRETE PLANTER CURB	468 LF	7/L500	CUSTOM	CONCRETE CURBING	STANDARD CONCRETE	8" HEIGHT FROM FINISHED GRADE, REFER TO CIVIL FOR ELEVATIONS
	EDGING						
SYMBOL	DESCRIPTION	QTY	DETAIL	MANUFACTURER	PRODUCT/MODEL	COLOR/FINISH	COMMENTS
ED-01	STEEL EDGING	70 LF	5/L500	RYERSON	3/16" GALV. STEEL	BLACK	4"X 3/16" WITH 12" STAKES - RYERSON OR APPROVED EQUAL
	LIGHTING						
SYMBOL	DESCRIPTION	QTY	DETAIL	MANUFACTURER	PRODUCT/MODEL	COLOR/FINISH	COMMENTS
LT-01	STREET LIGHT	5	N/A	TBD	MATCH TO CITY STANDARD	MATCH TO CITY STANDARD	OWNER PURCHASED, CITY INSTALLED
LT-02	PEDESTIAN LIGHT	10	N/A	FORMS AND SURFACES	LIGHT COLUMN PEDESTRIAN LIGHT	ARGENTO TEXTURE	12` HEIGHT
	MINERAL MULCH						
SYMBOL	DESCRIPTION	QTY	DETAIL	MANUFACTURER	PRODUCT/MODEL	COLOR/FINISH	COMMENTS
MM-02	CRUSHED STONE	100 SF	2/L501	HEDBERG AGGREGATES	DRESSER GRAY TRAP ROCK	GREY	3" DEPTH - 3/16" MINUS OVER 6" CLASS V BASE
	PAVING						
SYMBOL	DESCRIPTION	QTY	DETAIL	MANUFACTURER	PRODUCT/MODEL	COLOR/FINISH	COMMENTS
P-01	CONCRETE PAVING	9,732 SF	SEE CIVIL	N/A	STANDARD CONCRETE	STANDARD / BROOM FINISH	SEE CIVIL FOR PAVING PROFILE
P-02	CONCRETE UNIT PAVER	579 SF	1/L501	BORGERT	BULOVAR PAVER	GRAPHITE	RUNNING BOND PATTERN
P-03	SPECIALTY / PEDESTRIAN PAVING	715 SF	SEE CIVIL	N/A	INTEGRAL COLOR CONCRETE WITH JOINTING PATTERN	CHARCOAL / TOPCAST 100	SEE CIVIL FOR PAVING PROFILE
	SITE FURNITURE						
SYMBOL	DESCRIPTION	QTY	DETAIL	MANUFACTURER	PRODUCT/MODEL	COLOR/FINISH	COMMENTS
SF-01	BIKE RACK	4	3/L501	FORMS+SURFACES	TRIO BIKE RACK	SLATE	SURFACE MOUNT PER MANUFACTURER`S DIRECTION
SF-02	TREE GRATE	2	4/L501	URBAN ACCESSORIES	JAMISON TREE GRATE	GREY IRON / NATURAL FINISH	5`-0" X 7`-0" RECTANGLE
SF-03	SITE BENCH	2	6/L501	LANSCAPE FORMS	BANCAL BENCH	STORMCLOUD / IPE	168" LENGTH WITH 88" OFFSET BACKREST, SURFACE MOUNT PER MANUFACTURER`S DIRECTION

OVERALL PLANT SCHEDULE

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONT.	NOTES
	AC-M	5	ACER MIYABEI `MORTON` TM / STATE STREET MIYABEI MAPLE	2.5" CAL.	B&B	TRUNK FREE OF BRANCHES 6`-7` FROM BASE
	AC-P	4	ACER PLATANOIDES `POND` TM / EMERALD LUSTRE MAPLE	3" CAL.	B&B	NATURAL FORM, SINGLE LEADER
	AC-R	1	ACER RUBRUM `ARMSTRONG` / ARMSTRONG RED MAPLE	2.5" CAL.	B&B	TRUNK FREE OF BRANCHES 6`-7` FROM BASE
	AM-G	6	AMELANCHIER X GRANDIFLORA `AUTUMN BRILLIANCE` / `AUTUMN BRILLIANCE` SERVICEBERRY	10` HT. CLUMP	B&B	CLUMP FORM
	GL-I	6	GLEDITSIA TRIACANTHOS INERMIS `SKYCOLE` TM / SKYLINE THORNLESS HONEY LOCUST	2.5" CAL.	B&B	TRUNK FREE OF BRANCHES 6`-7` FROM BASE
	QU-L	5	QUERCUS X WAREI `LONG` TM / REGAL PRINCE OAK	3" CAL.	B&B	TRUNK FREE OF BRANCHES 6`-7` FROM BASE
	TI-A	2	TILIA AMERICANA `MCKSENTRY` / AMERICAN SENTRY LINDEN	2.5" CAL.	B&B	TRUNK FREE OF BRANCHES 6`-7` FROM BASE
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONT.	NOTES
	AR-M	55	ARONIA MELANOCARPA `UCONNAM165` / LOW SCAPE MOUND CHOKEBERRY	#2	CONT.	SPACE 2`-0" O.C.
	DI-L	80	DIERVILLA LONICERA / DWARF BUSH HONEYSUCKLE	#5	CONT.	SPACE 3`-0" O.C.
	HY-J	19	HYDRANGEA PANICULATA `JANE` / LITTLE LIME HYDRANGEA	#3	CONT.	SPACE 4`-0" O.C.
	PH-O	16	PHYSOCARPUS OPULIFOLIUS `DONNA MAY` / DONNA MAY NINEBARK	#5	CONT.	SPACE 3`-6" O.C.
	SO-S	82	SORBARIA SORBIFOLIA `SEM` / SEM ASH LEAF SPIREA	#2	CONT.	SPACE 3`-0" O.C.
	SP-E	46	SPIRAEA BETULIFOLIA `TOR` / BIRCHLEAF SPIREA	#5	CONT.	SPACE 3`-0" O.C.
EVERGREEN SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONT.	NOTES
	TA-M	21	TAXUS X MEDIA `TAUNTONII` / TAUTON YEW	#3	CONT.	SPACE 3`-0" O.C.
GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONT.	NOTES
	CA-A	192	CALAMAGROSTIS X ACUTIFLORA `KARL FOERSTER` / FEATHER REED GRASS	#3	CONT.	SPACE 2`-6" O.C.
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONT.	NOTES
	SOD	2,120 SF	SOD	SOD	ROLL	SEE SPECIFICATION SECTION 329200

0 16' 32' 48'
SCALE: 1"=16'

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed landscape architect under the laws of the State of Minnesota

Signature

Typed or Printed Name

License # Date

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KEY PLAN

BLAKE ROAD STATION

REFERENCE NOTES & PLANTING SCHEDULES

L011



MASTER PLAN LEGEND

- CONCRETE PAVING
- SPECIALTY PAVING
- CONCRETE UNIT PAVER
- LANDSCAPE PLANTING BED
- TURF GRASS

MASTER PLAN SITE INFORMATION

BUILDING A:

LOT AREA:	69,515 sf
BUILDING FOOTPRINT:	52,490 sf
HARDSCAPE / IMPERVIOUS AREA:	12,689 sf
LANDSCAPE / PERVIOUS AREA:	4,336 sf
TREES:	*25 TREES*
SHRUBS:	*301 SHRUBS*
TURF:	*1,234 SF*

BUILDING B:

LOT AREA:	92,864 sf
BUILDING FOOTPRINT:	64,470 sf
HARDSCAPE / IMPERVIOUS AREA:	19,209 sf
LANDSCAPE / PERVIOUS AREA:	9,185 sf
TREES:	*36 TREES*
SHRUBS:	*600 SHRUBS*
TURF:	*1,1998 SF*

BUILDING C:

LOT AREA:	152,769 sf
BUILDING FOOTPRINT:	66,456 sf
HARDSCAPE / IMPERVIOUS AREA:	61,482 sf
LANDSCAPE / PERVIOUS AREA:	24,831 sf
TREES:	*58 TREES*
SHRUBS:	*750 SHRUBS*
TURF:	*3,260 SF*

NOTES:

1. REFER TO SHEET "L140: LANDSCAPE PLAN - BUILDING A" FOR A DETAILED INFORMATION ON PLANT QUANTITIES, SPECIES, AND SIZES.
2. LANDSCAPE COUNTS FOR BUILDING B AND BUILDING C ARE APPROXIMATIONS ONLY AND BASED ON OPEN SPACE AREA SQUARE FOOTAGES.

4/23/2021 10:13:53 AM

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Signature

Typed or Printed Name

License # Date

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310 South 4th Avenue, Suite 7050
Minneapolis, MN 55415
p: 612.332.7522

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LUA SUBMITTAL
04/232020

ORIGINAL ISSUE:
07/20/20

REVISIONS:

No.	Description	Date

20-172
PROJECT NUMBER

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KEY PLAN

BLAKE ROAD STATION

MASTER PLAN OVERALL SITE PLAN

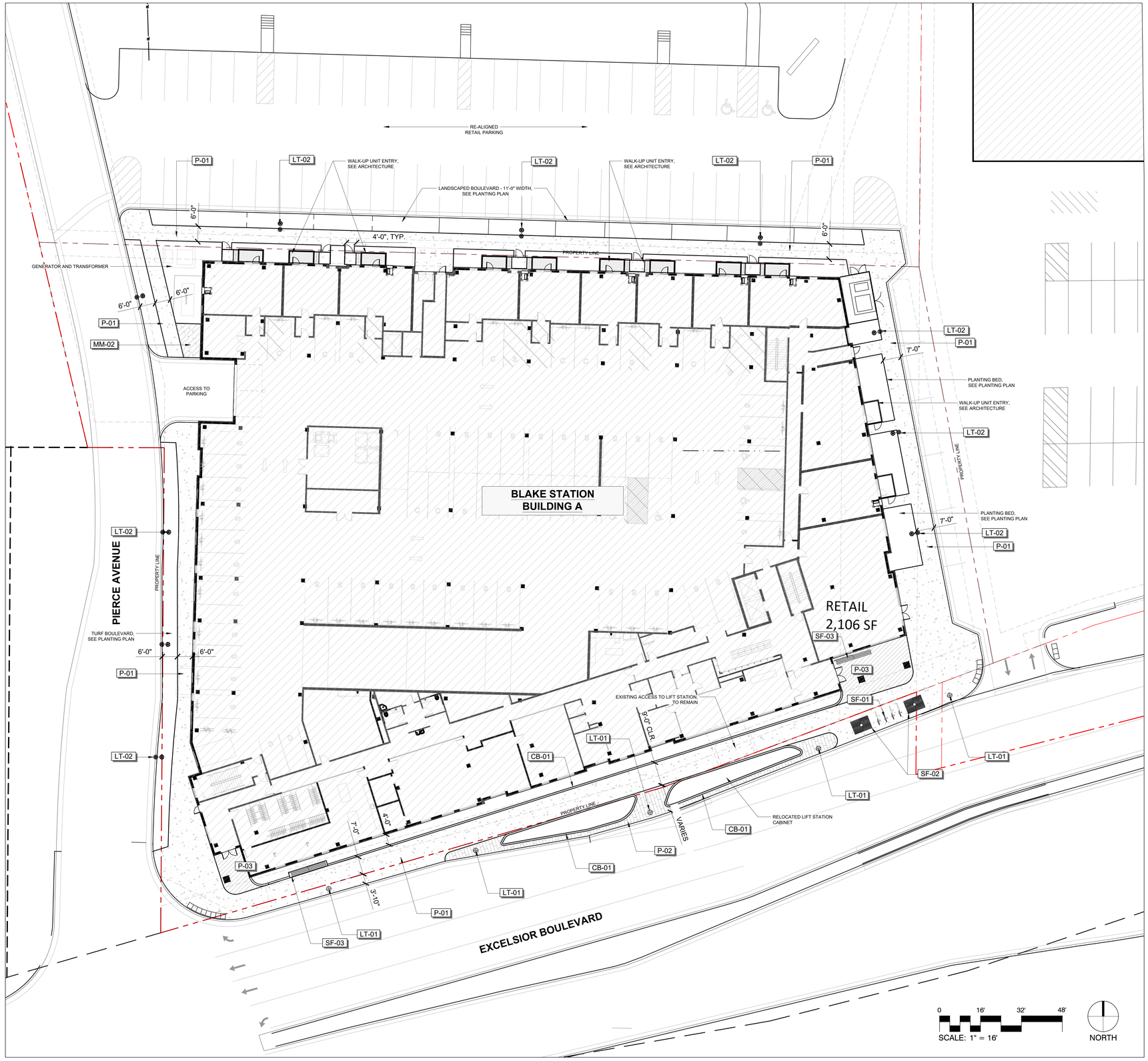
L100

REFERENCE NOTES SCHEDULE

	CURB		
SYMBOL	DESCRIPTION	QTY	DETAIL
CB-01	CONCRETE PLANTER CURB	468 LF	7/L500
	EDGING		
SYMBOL	DESCRIPTION	QTY	DETAIL
ED-01	STEEL EDGING	70 LF	5/L500
	LIGHTING		
SYMBOL	DESCRIPTION	QTY	DETAIL
LT-01	STREET LIGHT	5	N/A
LT-02	PEDESTIAN LIGHT	10	N/A
	MINERAL MULCH		
SYMBOL	DESCRIPTION	QTY	DETAIL
MM-02	CRUSHED STONE	100 SF	2/L501
	PAVING		
SYMBOL	DESCRIPTION	QTY	DETAIL
P-01	CONCRETE PAVING	9,732 SF	SEE CIVIL
P-02	CONCRETE UNIT PAVER	579 SF	1/L501
P-03	SPECIALTY / PEDESTRIAN PAVING	715 SF	SEE CIVIL
	SITE FURNITURE		
SYMBOL	DESCRIPTION	QTY	DETAIL
SF-01	BIKE RACK	4	3/L501
SF-02	TREE GRATE	2	4/L501
SF-03	SITE BENCH	2	6/L501

SITE INFORMATION

SITE AREA:	69,515 SF
BUILDING FOOTPRINT:	52,490 SF (76%)
LANDSCAPE / PERVIOUS AREA:	4,770 SF (7%)
HARDSCAPE / IMPERVIOUS AREA:	12,255 SF (17%)



BLAKE ROAD STATION

HOPKINS, MN 55343

esg ARCHITECTURE & DESIGN

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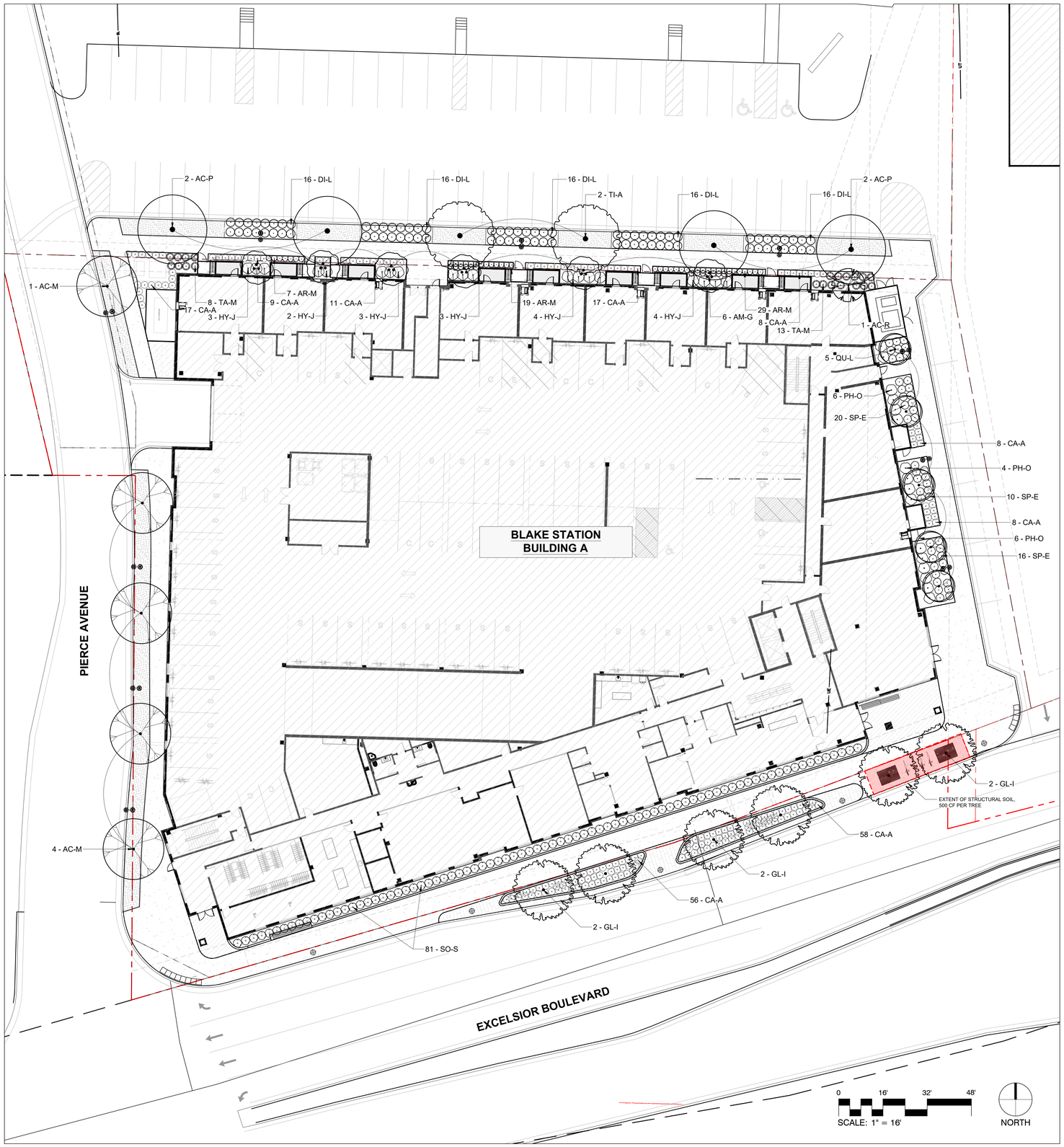
BLAKE ROAD STATION

SITE PLAN - BUILDING A

L111

PLANT SCHEDULE

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME
	AC-M	5	ACER MIYABEI `MORTON` TM / STATE STREET MIYABEI MAPLE
	AC-P	4	ACER PLATANOIDES `POND` TM / EMERALD LUSTRE MAPLE
	AC-R	1	ACER RUBRUM `ARMSTRONG` / ARMSTRONG RED MAPLE
	AM-G	6	AMELANCHIER X GRANDIFLORA `AUTUMN BRILLIANCE` / `AUTUMN BRILLIANCE` SERVICEBERRY
	GL-I	6	GLEDITSIA TRIACANTHOS INERMIS `SKYCOLE` TM / SKYLINE THORNLESS HONEY LOCUST
	QU-L	5	QUERCUS X WAREI `LONG` TM / REGAL PRINCE OAK
	TI-A	2	TILIA AMERICANA `MCKSENTRY` / AMERICAN SENTRY LINDEN
SHRUBS	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**
	AR-M	55	ARONIA MELANOCARPA `UCONNAM165` / LOW SCAPE MOUND CHOKEBERRY
	DI-L	80	DIERVILLA LONICERA / DWARF BUSH HONEYSUCKLE
	HY-J	19	HYDRANGEA PANICULATA `JANE` / LITTLE LIME HYDRANGEA
	PH-O	16	PHYSOCARPUS OPULIFOLIUS `DONNA MAY` / DONNA MAY NINEBARK
	SO-S	82	SORBARIA SORBIFOLIA `SEM` / SEM ASH LEAF SPIREA
	SP-E	46	SPIRAEA BETULIFOLIA `TOR` / BIRCHLEAF SPIREA
EVERGREEN SHRUBS	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**
	TA-M	21	TAXUS X MEDIA `TAUNTONII` / TAUTON YEW
GRASSES	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**
	CA-A	192	CALAMAGROSTIS X ACUTIFLORA `KARL FOERSTER` / FEATHER REED GRASS
GROUND COVERS	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**
	SOD	2,120 SF	SOD



0 16' 32' 48'
SCALE: 1"=16'
NORTH

BLAKE ROAD STATION

HOPKINS, MN 55343

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KEY PLAN

BLAKE ROAD STATION

LANDSCAPE PLAN - BUILDING A

L140

BLAKE ROAD
STATION
HOPKINS, MN 55343

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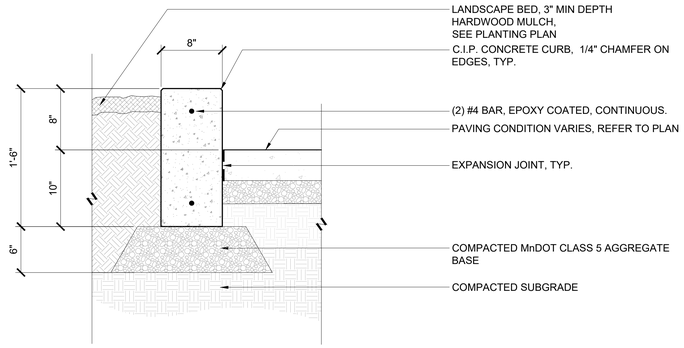
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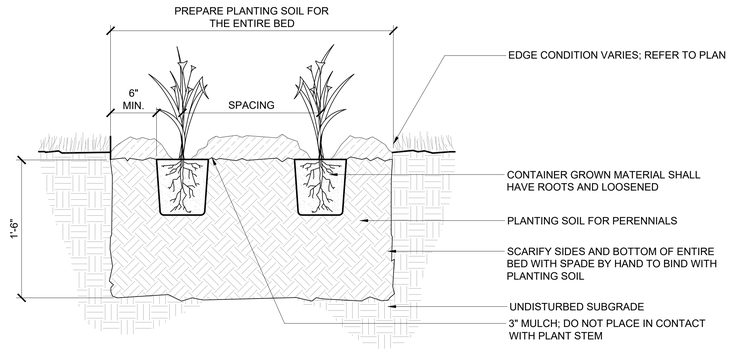
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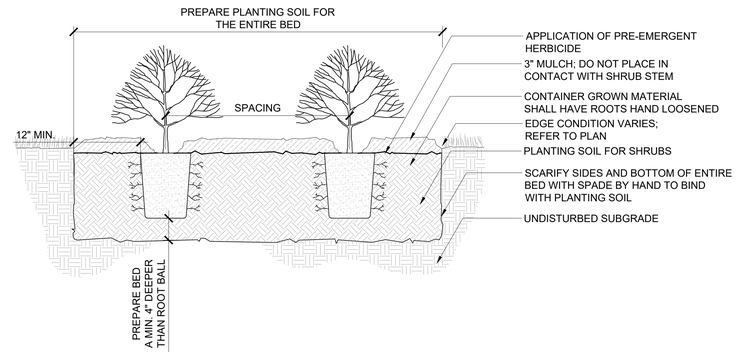
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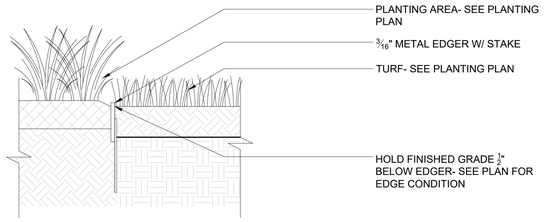
7 CONCRETE PLANTER CURB
1 1/2" = 1'-0" P-20 172-10



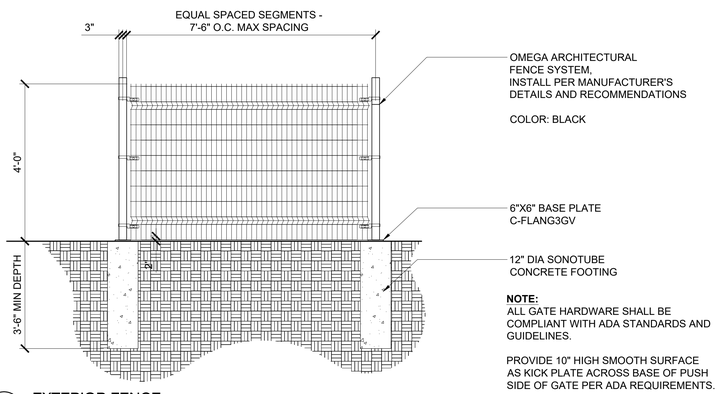
4 DETAIL - PERENNIAL PLANTING
1 1/2" = 1'-0" P-20 172-04



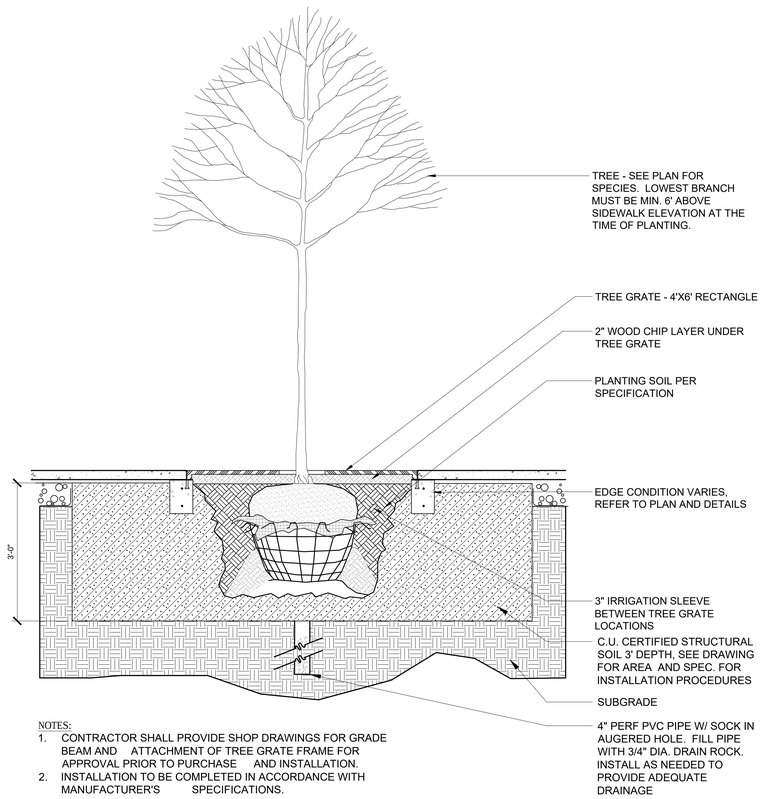
2 DETAIL - SHRUB PLANTING
1" = 1'-0" P-20 172-02



6 STEEL EDGING
1 1/2" = 1'-0" P-20 172-65

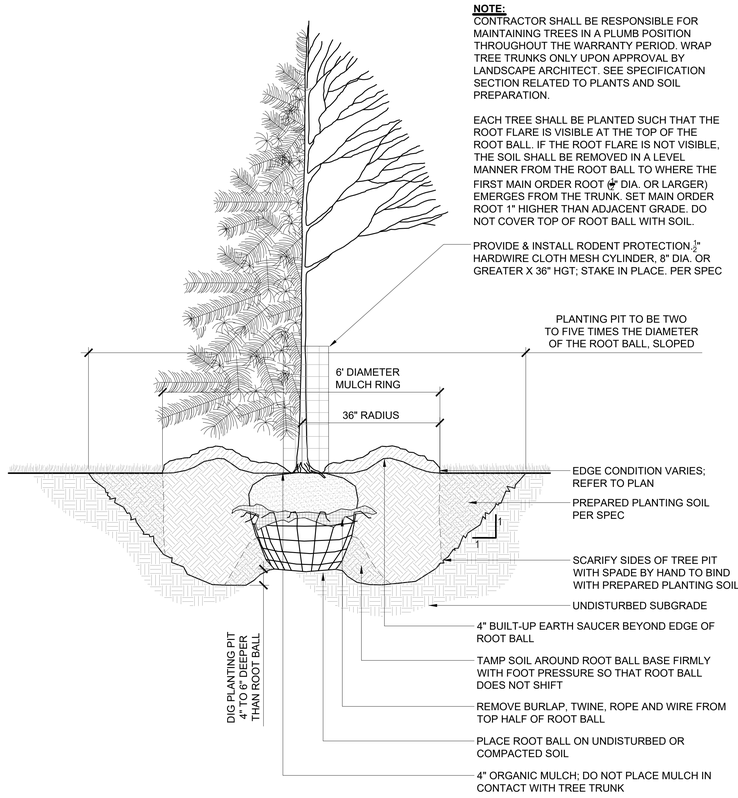


5 EXTERIOR FENCE
1/2" = 1'-0" P-20 156-65 P-20 156-65



NOTES:
1. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR GRADE BEAM AND ATTACHMENT OF TREE GRATE FRAME FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION.
2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

3 TREE GRATE OVER STRUCTURAL SOIL
3/4" = 1'-0" P-20 172-64



1 DETAIL - TREE PLANTING
3/4" = 1'-0" P-20 172-01

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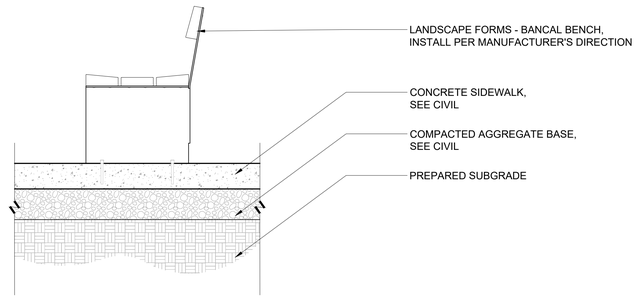
BD DRAWN BY JS CHECKED BY

KEY PLAN

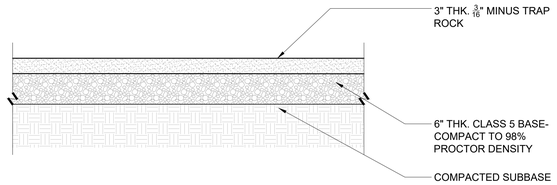
BLAKE ROAD STATION

LANDSCAPE DETAILS

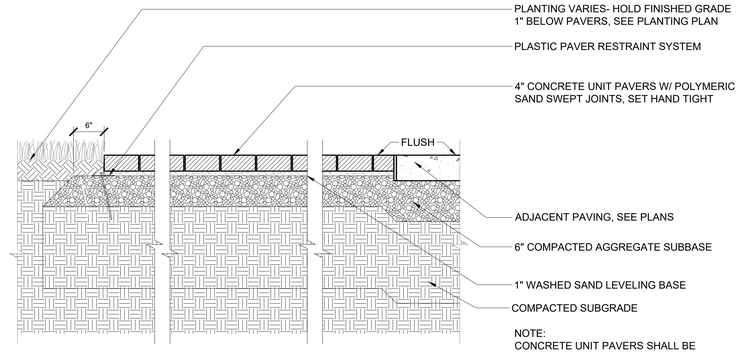
L500



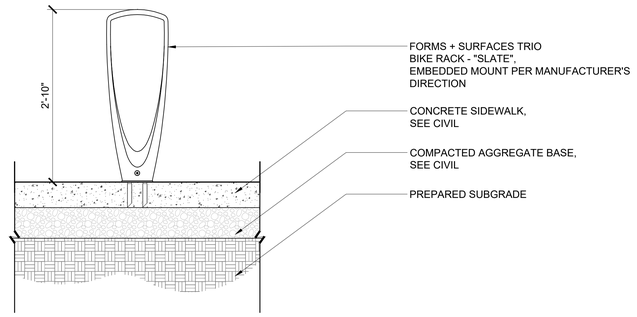
6 SITE BENCH - INGROUND MOUNT
1" = 1'-0" P-20 172-75



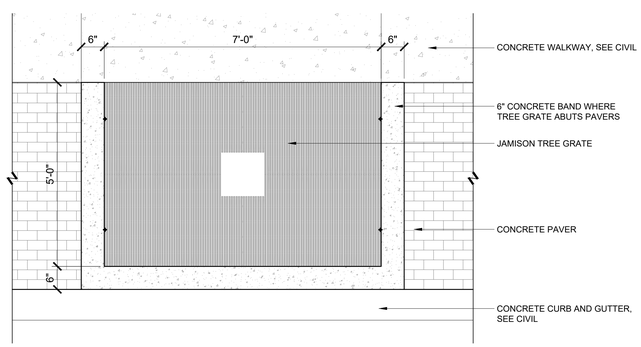
3 CRUSHED STONE PAVING
1" = 1'-0" P-20 172-67



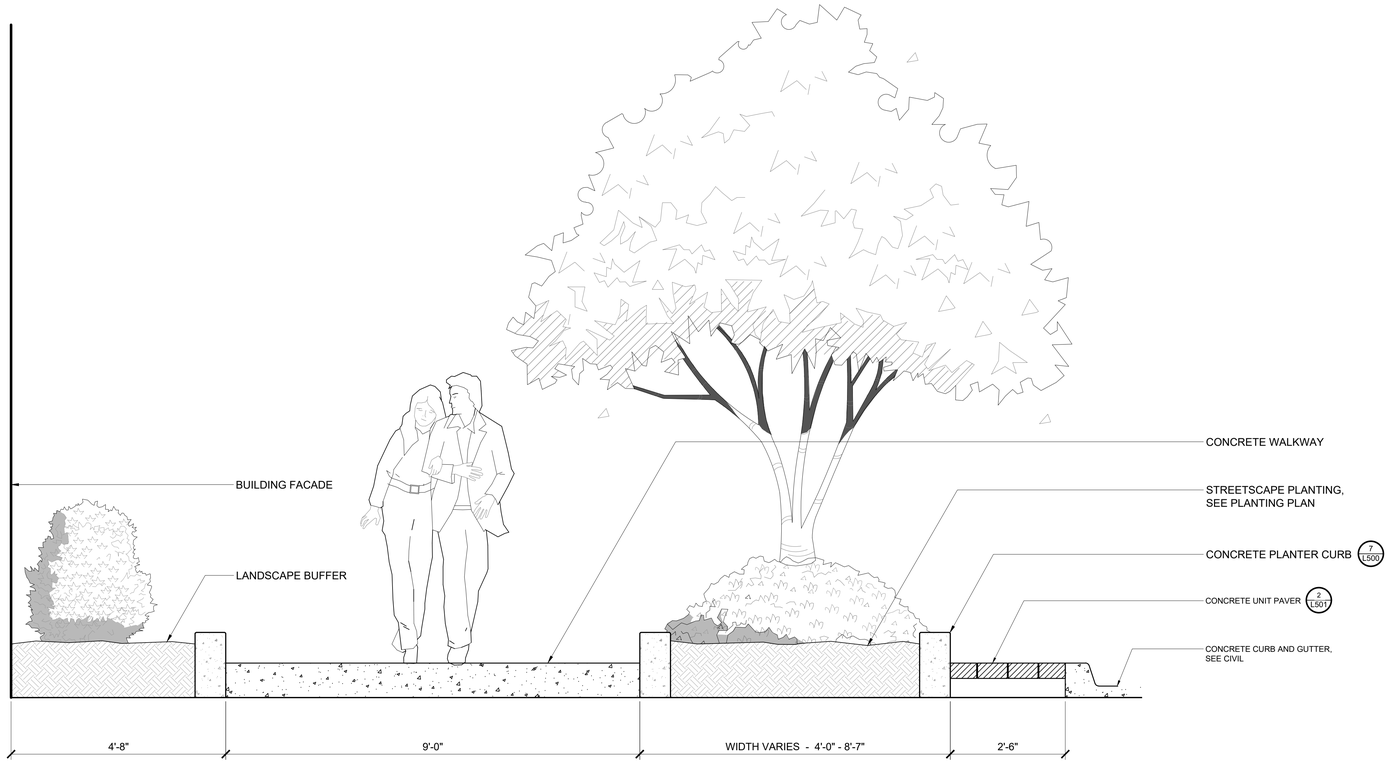
2 CONCRETE UNIT PAVER
1" = 1'-0" P-20 172-66



5 BIKE RACK, SURFACE MOUNT
1" = 1'-0" P-20 172-68



4 TREE GRATE ENLARGE PLAN
3/4" = 1'-0" P-20 172-69



1 STREET SECTION
3/4" = 1'-0" P-20 172-78

P-20 172-78

BLAKE ROAD STATION

HOPKINS, MN 55343

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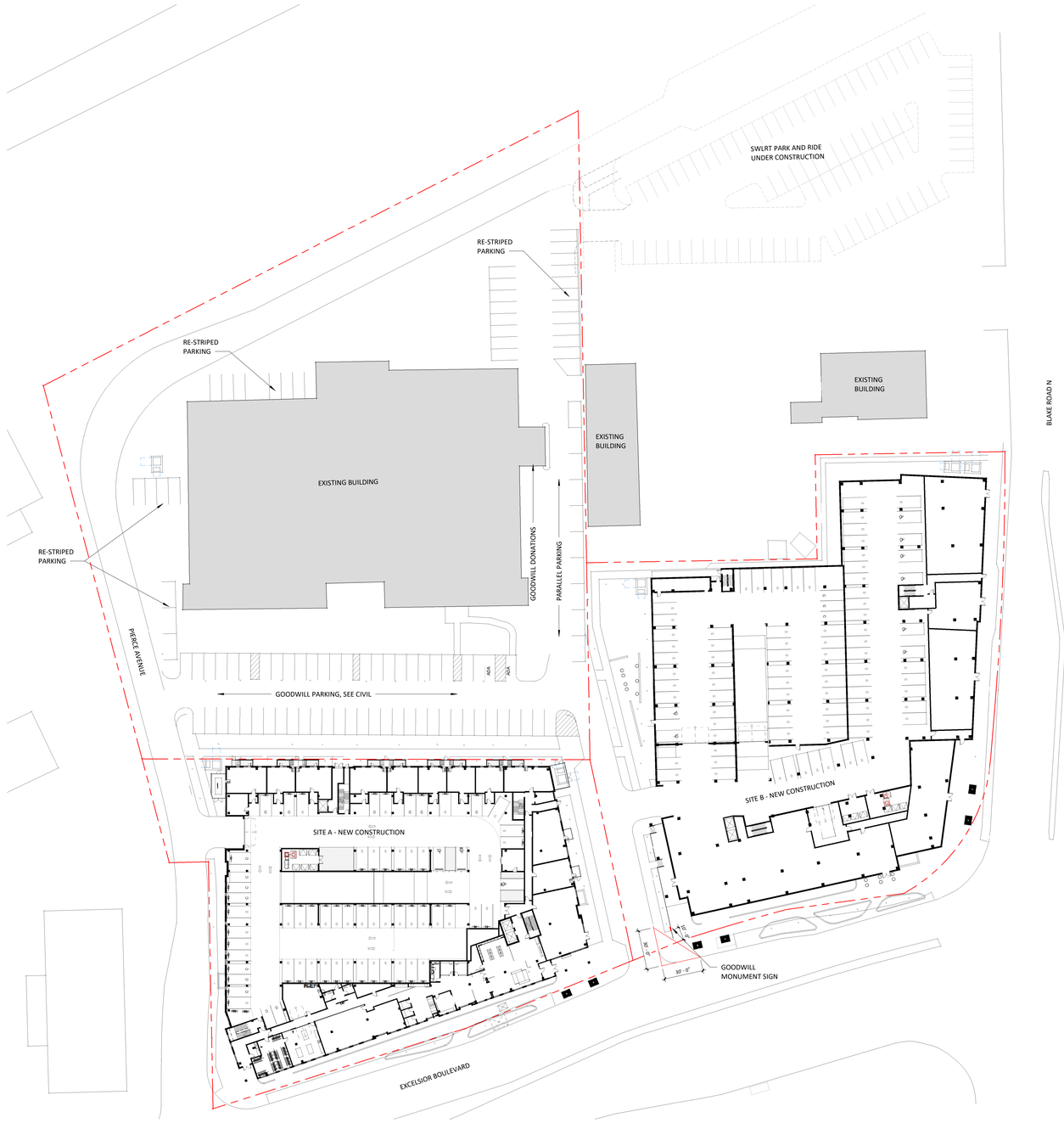
BD DRAWN BY JS CHECKED BY

KEY PLAN

BLAKE ROAD STATION

LANDSCAPE DETAILS

L501



1 A1-3b **SITE A & B INTERIM PARKING PLAN**
1" = 40'-0"

7/8/2021 3:18:55 PM

BLAKE STATION, MASTER PLAN

Hopkins, Minnesota

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6/25/2021

ORIGINAL ISSUE:
09/11/20

REVISIONS:

No.	Description	Date

220503
PROJECT NUMBER

AJ
DRAWN BY

Checker
CHECKED BY

KEY PLAN

BLAKE STATION, MASTER PLAN

INTERIM PARKING PLAN

A1-3b

SUSTAINABLE DESIGN — SITE AND LANDSCAPE DESIGN

- **Transit-oriented development** location adjacent to LRT station
- **Native and adaptive plant species** selected for their ability to provide enhanced streetscapes, additional habitat and stormwater management strategies
- **Removal of more than 45,890 sq ft of existing surface parking areas** and replaced with new buildings and **38,352 sq ft area of landscape area** consisting of native and adaptive tree and plant species
- **Smart irrigation systems** (rain/soil moistures, drip irrigation, highly efficient controllers/sprayheads)
- Connecting to existing **bike trails** and providing internal bike storage rooms
- **Porous pavement** integrated into streetscape improvements









SUSTAINABLE DESIGN — STORM WATER MANAGEMENT

- **Dramatic improvements over current site conditions** - currently 100% impervious surfaces that sheet drain to streets untreated; future pervious area equal to 12% of the total site area (38,352 sq ft)
- Future water **run-off collected** in catch basins
- **Sub-surface system** in StormTech isolator rows
- **Treat 2" of run-off** from the site's impervious surfaces via a treatment train of above-ground features, pipe storage system, and JellyFish type treatment structure.
- Storage capacity designed to **hold back storm events** and discharge run-off at rates that are below those of the existing conditions







ENERGY EFFICIENCY & SAVINGS

- **High R-Value** building envelope — roof & walls
- High **solar reflectance index** (SRI) for the roof
- Low-E insulated **glazing**
- **Tightly sealed building envelope** to reduce leakage and inefficiencies
- **High-Efficiency** HVAC system with individual controls for residents
- Project is enrolled in the **Xcel Energy Efficient Building Program** to evaluate and select efficient mechanical systems and optimize the building enclosure
- **Water Sense** plumbing fixtures
- **Energy Star** rated appliances
- LED fixtures with **occupancy sensors**
- Programmable or SMART **thermostats**
- **Electrical vehicle** charging stations (Building A will be constructed with capacity for 20 stations)
- Building structure and electrical system are designed to be **Solar-Ready** for future photovoltaic panels





ENERGY STAR



HEALTH & WELLNESS

- Designed to encourage **physical activity** - primary and secondary pedestrian-oriented entrance, each with a convenient stairwell to encourage physical activity; bike racks and storage available with site improvements that include trail along Excelsior Blvd
- **Clean air** with at least MERV 8 air filters. MERV 13 air filters in common spaces. Apartments will be supplied with outside air from individual packaged heating and cooling units dedicated to each space.
- Access to **daylight** in units and amenity spaces - Vertically oriented windows allow daylight to reach deep into dwellings and common areas
- **Low VOC** materials and paints
- Convenient common area **hand sanitizers and hand washing** locations
- Cleaning procedures, including **daily cleaning** of entrances, common areas, corridors, restrooms and offices
- **Operable windows and balcony doors** ensure access to natural ventilation and connection to the outdoors
- **Ceiling Fans** in bedrooms = reduced cooling needs









CITY OF HOPKINS
Hennepin County, Minnesota

PLANNING & ZONING COMMISSION RESOLUTION 2021-12

A RESOLUTION RECOMMENDING THE CITY COUNCIL APPROVE AN ORDINANCE REZONING THE SUBJECT PROPERTIES WITH PIDS 19-117-21-42-0044, 19-117-21-42-0045 & 19-117-21-42-0046) TO MIXED USE WITH A PLANNED UNIT DEVELOPMENT (PUD), SUBJECT TO CONDITIONS

WHEREAS, the applicant, Bryan Farquhar of Trilogy Real Estate Group, initiated an application requesting to rezone the properties at the northwest corner of Excelsior Boulevard and Blake Road with PIDs 19-117-21-42-0044, 19-117-21-42-0045 & 19-117-21-42-0046 to Mixed Use with a Planned Unit Development (PUD), subject to conditions., and

WHEREAS, these properties are legally described as Lots 1, 2 & 3, Hopkins Commerce Addition; and

WHEREAS, the procedural history of the application is as follows:

1. That the above stated application was initiated by the applicant on June 25, 2021; and,

2. That the Hopkins Planning & Zoning Commission, pursuant to published and mailed notice, held a public hearing on the application and reviewed such application on July 27, 2021: all persons present were given an opportunity to be heard; and,

3. That written comments and analysis of City staff were considered; and,

WHEREAS, staff recommended approval of the above stated application based on the findings outlined in the staff report dated July 27, 2021; and

NOW, THEREFORE, BE IT RESOLVED that the Planning & Zoning Commission of the City of Hopkins hereby recommends the City Council of the City of Hopkins approve an ordinance rezoning the properties at the northwest corner of Excelsior Boulevard and Blake Road with PIDs 19-117-21-42-0044, 19-117-21-42-0045 & 19-117-21-42-0046 to Mixed Use with a Planned Unit Development (PUD), subject to the conditions listed below.

1. Execution of a Planned Unit Development Agreement in a form acceptable to the City Attorney.

2. Approval of the associated site plan application for Blake Road Station Site A and conformance with all related conditions.

3. Approval of the development by the Minnehaha Creek Watershed District and conformance with all related conditions.

Adopted this 27th day of July 2021.

_____

Samuel Stiele, Chair

CITY OF HOPKINS
Hennepin County, Minnesota

PLANNING & ZONING COMMISSION RESOLUTION 2021-13

A RESOLUTION RECOMMENDING THE CITY COUNCIL APPROVE THE SITE PLAN FOR BLAKE ROAD STATION SITE A WITH PID 19-117-21-42-0045, SUBJECT TO CONDITIONS

WHEREAS, the applicant, Bryan Farquhar of Trilogy Real Estate Group, initiated an application for site plan approval for Blake Road Station Site A to allow construction of a 7-story mixed-use building with 220 residential units and approximately 2,100 square feet of commercial space on the property located at the northwest corner of Excelsior Boulevard and Blake Road with PID 19-117-21-42-0045; and

WHEREAS, these properties are legally described as Lots 1, 2 & 3, Hopkins Commerce Addition; and

WHEREAS, the procedural history of the application is as follows:

1. That the above stated application was initiated by the applicant on June 25, 2021; and,

2. That the Hopkins Planning & Zoning Commission, pursuant to published and mailed notice, held a public hearing on the application and reviewed such application on July 27, 2021: all persons present were given an opportunity to be heard; and,

3. That written comments and analysis of City staff were considered; and,

WHEREAS, staff recommended approval of the above stated application based on the findings outlined in the staff report dated July 27, 2021; and

NOW, THEREFORE, BE IT RESOLVED that the Planning & Zoning Commission of the City of Hopkins hereby recommends the City Council of the City of Hopkins approve the site plan for Blake Road Station Site A to allow construction of a 7-story mixed-use building with 220 residential units and approximately 2,100 square feet of commercial space on the property located at the northwest corner of Excelsior Boulevard and Blake Road with PID 19-117-21-42-0045, subject to the conditions listed below.

1. Conformance with all applicable standards of the Mixed Use District.

2. Approval of the associated rezoning application and execution of a Planned Unit Development (PUD) Agreement in a form acceptable to the City Attorney.

3. The applicant will be required to demonstrate how they intend to manage off-street parking for the commercial space on Site A until completion of Site B and its 32 commercial off-street parking spaces.

4. At least 1 of the bicycle parking spaces required for the commercial space in Site A shall be a long-term space located inside the building.

5. The applicant shall create a plan to allow residents, visitors and patrons of Site A to access both the City's sidewalk and trail system and the Blake Road LRT station until Sites B and C are completed prior to action on this item by the City Council.

6. The applicant shall provide a streetscape plan detailing the specific improvements planned for Site A prior to action on this item by the City Council.

7. The applicant shall provide more detail as to how and where the trash will be placed for pickup. This placement must be located on the applicant's property and shall not interfere with normal vehicle or pedestrian movement through the site.

8. Submission and approval of exterior lighting and photometric plans prior to issuance of a building permit. These plans shall cover the entire site and demonstrate downward directed light fixtures, poles no higher than twenty (20) feet and light levels equal to or less than 1.0 lumens at any non-residential property line or 0.5 lumens at any residential property line.

9. Provision a landscape letter of credit equal to 1.5 times the cost of all plantings and streetscape improvements in a form acceptable to the City Attorney prior to issuance of a building permit. The City shall hold this security until all streetscape improvements have been installed and all plantings have survived at least one full growing season.

10. The applicant shall demonstrate all equipment will be screened in conformance with all zoning requirements.

11. Conformance with all requirements of Hennepin County and the Metropolitan Council.

12. Conformance with all requirements of the City Engineer.

13. Approval of all necessary permits from the Building, Engineering and Fire Departments.

14. Approval of the development by the Minnehaha Creek Watershed District and conforms with all related conditions.

15. Payment of all applicable development fees including, but not limited to SAC, park dedication and City Attorney fees.

16. The applicant has indicated their intent to subdivide the properties as part of the future development of Sites B or C. The applicant has requested and the City has agreed to lock in the current park dedication fees ($3,000/unit and 5% of the fair market value of the commercial land as estimated by the county assessor) and apply them to the development on all 3 sites as part of any future subdivision of any of the 3 parcels.

Adopted this 27th day of July, 2021.

_____

Samuel Stiele, Chair

Kimley»Horn

MEMORANDUM

To:	Hennepin County CC: City of Hopkins, Trilogy Real Estate Group
From:	Trish Sieh, P.E. Jacob Rojer, P.E. Kimley-Horn and Associates, Inc.
Date:	August 14, 2020
Subject:	Blake & Excelsior Redevelopment – Right-In/Right-Out Access on Excelsior Boulevard Hopkins, MN

Importance of Access

The existing sites (Site A, B, & C) have three accesses, one at Blake Road & Hill Street and two on Excelsior Boulevard. The final proposed sites will have two accesses upon full build out of the site by 2030. The site accesses will remain the same as the existing site through the first phase to keep service to the remaining retail. With the development of Site B, the Hill Street right-in/right-out (RIRO) on Blake Road will be closed. The existing site accesses on Excelsior Boulevard are paramount to redevelopment viability of the site. The RIRO on Excelsior Boulevard provides access to existing businesses, provides connectivity throughout the Site, and it helps maintain a grid like roadway network on site splitting the site into urban blocks, allows for retail/commercial on the corner of Excelsior Boulevard & Blake Road. Providing successful retail for a mixed-use TOD area has been a key component of the City of Hopkins and regional vison for the site as outlined in the letter from the from the City to Hennepin County. The letter is attached.

Trip Comparison at the Right-In/Right-Out Access

Traffic counts were collected at all site access points in February 2020 to determine the existing trip generation of the site. While, the trip-generating potential of the proposed development was calculated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, Tenth Edition*. Standard ITE trip rates were used to develop the total trips generated by the site. **Table 1** provides a comparison of the existing site trips at the RIRO and the proposed full build out of sites A, B, C, and the out lot trips at the RIRO. The full build out of the development is anticipated to increase the trips at the RIRO in the AM peak hour by 27 trips. In the PM peak hour, it is anticipated that there will be more entering trips but less exiting trips resulting in no change in trips at the RIRO.

Table 1 – Trip Comparison at the Right-In/Right-Out on Excelsior Boulevard

Land Use Description	AM Peak Hour			PM Peak Hour		
	Right In	Right Out	Total	Right In	Right Out	Total
Existing Site	5	4	9	26	31	57
Proposed Redevelopment (Sites A, B, C, & Out lot)	15	21	36	44	13	57
NET CHANGE	**+10**	**+17**	**+27**	**+18**	**-18**	**0**

The proposed redevelopment is anticipated to generate 4,012 daily trips and 15% of the site traffic would utilize the RIRO, this results in approximately 600 daily trips. The proposed redevelopment is not anticipated to generate significantly more daily trips than the existing condition at the RIRO.

Crash History

A review of the crash data from the Minnesota Crash Mapping Analysis Tool (MnCMAT2) showed that there were no crashes attributed to the RIRO on Excelsior Boulevard in the last 10 years. While it is understood that Excelsior Boulevard as a whole has a higher than average crash rate along the corridor, there is not a history of crashes at the RIRO access point. With the redevelopment of the site, the RIRO will no longer feed directly into parking lots, it will be an urban roadway connecting the site. Signage and pavement marking will also be improved. These changes will improve the flow of vehicles entering and exiting the site access compared to the existing condition.

Conditions for Change in Access

Although operationally a westbound right-turn lane on Excelsior Boulevard at Pierce Avenue is not shown to be necessary, the developer agrees to install the desired westbound right-turn lane with the redevelopment of Site A.

In the short term, which includes Site A of the redevelopment, the RIRO on Excelsior Boulevard will remain in place as it will provide access for the existing retail uses.

When Sites B and C are redeveloped, it is imperative for the site to maintain access along Excelsior Boulevard. When a signal is warranted at Excelsior Boulevard & Pierce Avenue a reduction in access at the RIRO to right-in only may be necessary if either of the following scenarios occur.

- Based on the preliminary design and anticipated volumes it is not anticipated that there will be crash issue at the access. However, if a crash issue does arise, access may be limited.
- It is anticipated that the RIRO will not see a significant increase in daily traffic. As previously mentioned, approximately 600 vehicles would use the access in full build out. If the RIRO access becomes more desirable and sees a significant increase in traffic, access may be reduced to right in only. Kimley-Horn is proposing that the daily volume threshold for the access be 1,000 vehicles.

City of Hopkins
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Web address: www.hopkinsmn.com

August 5, 2020

Jason Gottfried
Transportation Planner
Hennepin County

Dear Jason:

Thank you for an opportunity to provide context on the proposed development at the NW corner of Blake Road and Excelsior Boulevard by Trilogy Real Estate Group. But first, thank you for being such a valuable partner with the City of Hopkins and specifically for making SW LRT a reality. Without Hennepin County's investment in LRT, redevelopment such as proposed by Trilogy would not be possible.

Hopkins has been planning for redevelopment of the northwest corner of Blake Road and Excelsior Boulevard for about 20 years. Various planning studies done by the City, Hennepin County, and its partners have identified this site for mixed use development, including the East Hopkins Land Use and Market Study as well as Hennepin County's Southwest Community Works Transitional Station Area Action Plan (TSAAP).

While concept designs did not get into specific site details such as access, the TSAAP states the following:

- Future land uses in the Blake station area should consist of high-density residential, office, and retail uses.
- Incorporate active ground level uses on buildings adjacent to the station and facing onto Blake Road and Excelsior Boulevard
- Strategies that should be considered to facilitate future development in the station area include new roadways, streetscape improvements, Minnehaha Creek and Cottageville Park improvements, and pedestrian crossings along roadways connecting the station with potential development sites, local destinations, and neighborhoods, particularly on Blake Road.

It is a key gateway to the city for people traveling west from St. Louis Park, north from Edina, and south from the Blake Road LRT Station. With the visibility at this intersection, retail as part of the mixed use plan needs to be located on Site B in order to be successful. Closing the existing right in/right out access off Excelsior Boulevard will have significant detrimental impacts on the ability to include retail as part of the development plan and achieve the vision that Hopkins has had for the site for decades. It is also important to preserve this access for the existing businesses in Site B.

The loss of retail opportunities is especially problematic given that the site is located in an Area of Concentrate Poverty with a high transit-dependent population. Residents of the neighborhood rely on

access to food, jobs and services currently available on the proposed development site. Without adequate, direct access to the NW corner of Blake and Excelsior, retail viability at this key intersection will not be possible. The Hopkins City Council is supportive of the Trilogy redevelopment concept but advocated for more retail than the 11,000 sf proposed, based largely on feedback from the community. Neither the proposed retail or additional retail will be feasible if it relies on access from Pierce Avenue only.

Finally, while the intersection of Blake and Excelsior has a moderate accident history, data does not appear to support the assertion that this is an unsafe access point.

I welcome continued discussion about the balance of development opportunity and traffic management at this key redevelopment site. Please let me know how we can come to resolution in a timely manner.

Sincerely,

Kersten Elverum
Director of Planning & Development

Copy: Nate Stanley, Hopkins City Engineer
Mike Mornson, City Manager

TRAFFIC IMPACT ANALYSIS

BLAKE & EXCELSIOR REDEVELOPMENT

HOPKINS, MINNESOTA

Prepared for:

ESG Architecture & Design and Trilogy Real Estate Group

Prepared By:

Kimley-Horn and Associates, Inc.
767 N Eustis Street, Suite 100
St. Paul, MN 55114

AUGUST 2020

Kimley»Horn

TRAFFIC IMPACT ANALYSIS

BLAKE & EXCELSIOR REDEVELOPMENT

HOPKINS, MINNESOTA

REPORT CERTIFICATION

I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.



Date: 8/24/2020

Jacob A. Rojer, P.E.

License No. 56767

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INTRODUCTION

ESG Architecture & Design and Trilogy Real Estate Group are proposing a multiphase development that includes, a 215-unit multifamily housing building, a 250-unit multifamily housing building, a 298-unit multifamily housing building, and the potential for an additional outlot development. It is anticipated that there will be a total of 19,000 sq. ft. of retail between the three buildings, however, the exact amount in each building is not known at this time and will be evaluated as each building is developed. The total development will include around 763 units of multifamily and 19,000 square feet of retail on the northwest corner of Excelsior Boulevard (CSAH 3) & Blake Road (CSAH 20) in Hopkins, MN. The exact unit count may vary slightly since the 250-unit apartment building and the 298-unit apartment building would not be built until 2026 and 2030, respectively. The site is currently occupied by various retail developments with five accesses onto Excelsior Boulevard and Blake Road. **Exhibit 1** in **Appendix A** shows the proposed project location. The proposed site plan is included in **Appendix B**.

EXISTING ROADWAY CONDITIONS

The proposed development is located in the northwest corner of Excelsior Boulevard & Blake Road in Hopkins, MN. The following study intersections are included in the traffic analysis.

- Excelsior Boulevard (CSAH 3) & Milwaukee Street/Jackson Avenue
- Excelsior Boulevard (CSAH 3) & Pierce Avenue (site access)
- Excelsior Boulevard (CSAH 3) & Right-In/Right-Out (RIRO) (site access)
- Excelsior Boulevard (CSAH 3) & Blake Road (CSAH 20)
- Blake Road (CSAH 20) & Full Site Access (site access)
- Blake Road (CSAH 20) & Pierce Avenue RIRO (site access)
- Blake Road (CSAH 20) & 2nd Street

The study intersections listed above are shown in **Exhibit 1** in **Appendix A**. The Hill Street RIRO site access on Blake Road was also counted to determine the existing trip generation of the site, but the access was not included in the analysis as this access will be closed with the redevelopment of the site.

EXISTING ROADWAYS

The redevelopment will have site accesses on Blake Road and Excelsior Boulevard. These are the two major roadways in the study area and the following provides a detailed description.

Excelsior Boulevard (CSAH 3) is a four lane east-west roadway with left turn lanes at accesses. Excelsior Boulevard is classified as an A-Minor Reliever according to the City of Hopkins 2040 Comprehensive Plan. The MnDOT Traffic Mapping Application reports the AADT Excelsior Boulevard as 19,100 vehicles per day (vpd). The current posted speed limit on Excelsior Boulevard is 35 miles per hour west of Blake Road and 40 miles per hour east of Blake Road.

Blake Road (CSAH 20) is a four lane north-south roadway with left turn lanes at accesses. Blake Road was reconstructed in 2018 and 2019 and there is ongoing construction at the Cedar Lake Trail crossing and future Southwest Light Rail crossing. Blake Road is classified as a Major Collector according to the City of Hopkins 2040 Comprehensive Plan. The MnDOT Traffic Mapping

Application reports the AADT Blake Road as 12,200 vpd. The current posted speed limit on Blake Road is 30 miles per hour.

EXISTING TRAFFIC VOLUMES

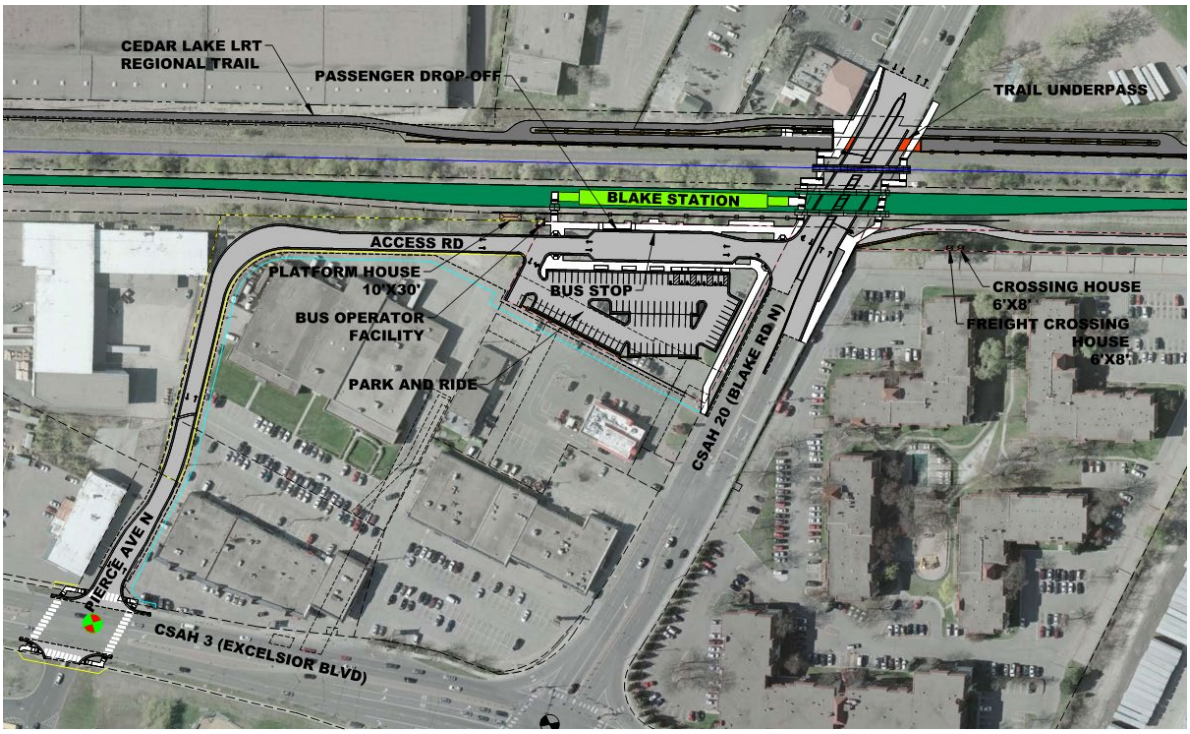
To analyze the traffic operations at the study intersections, weekday peak period turning movement counts were collected on Wednesday February 26, 2020 and Tuesday March 10, 2020. With the ongoing construction along Blake Road the counts were compared to 2017 counts provided by Hennepin County and historical AADT data along Excelsior Boulevard and Blake Road. It was determined that the traffic counts collected were significantly lower than the historic counts, so the volumes were increased by 40-50 percent to better represent a typical weekday.

Exhibit 2 in **Appendix A** provides a summary of the adjusted weekday AM and PM peak hour turning traffic volumes used in the analysis. The raw turning movement count data is provided in **Appendix C**. The network AM peak hour was determined to be 7:30 AM to 8:30 AM and the network PM peak hour was determined to be 4:30 PM to 5:30 PM.

ROADWAY IMPROVEMENTS

The Cedar Lake Trail crossing at Blake Road will be converted to an underpass and the Blake Station will be constructed as part of the Southwest LRT project. Pierce Avenue on the west side of the site will be reconstructed and connect to Blake Road near the new transit station and the park and ride lot. Originally, Excelsior Boulevard & Pierce Avenue was intended to be signalized but was not included in the Southwest LRT project because the intersection did not meet traffic signal warrants. Figure 1 below shows the Metro Transit plan for the improvements to be completed in conjunction with the Southwest light rail project (SWLRT). These improvements were included in the opening year and horizon year analysis.

Figure 1 – Metro Transit Blake Station SWLRT Improvements



BACKGROUND GROWTH

The first phase of the proposed development is anticipated to be completed and open by 2022 with the complete buildout of the site completed by 2030. The City of Hopkins Comprehensive plan was reviewed to identify a background growth rate to develop forecast peak hour volumes at the study intersections for Opening Year (2022) and Horizon Year (2030). The Horizon year analyzed 2030 and not 2040 because the proposed development is not anticipated to add significantly more trips to the study area than the existing site.

Table 1 provides a summary of the AADT information and the resultant growth rate. To provide a more conservative analysis, the 0.6% growth rate was applied to both the Excelsior Boulevard and the Blake Road corridors for the Existing (2020) traffic volumes to develop the Opening Year No-Build (2022) and Horizon Year No-Build (2030) turning movement volumes.

Table 1 – Annual Growth Rate Calculation

Street Segment	Most Recent AADT		Projected 2040 AADT		Annual Growth Rate
	Year	Volume	Year	Volume	
Excelsior Boulevard	2018	19,100	2040	22,000	0.6%
Blake Road	2018	12,200	2040	13,400	0.4%

In addition to the background growth rate, the 89-stall park and ride lot at the LRT station was added to the 2022 background growth. The trip-generation was calculated using the Institute of Transportation Engineers

(ITE) *Trip Generation Manual, Tenth Edition*. Standard ITE trip rates were used to develop the total trips generated.

For the 2030 background growth a 0.6% annual growth rate was applied, traffic associated with the 89-stall park and ride lot was added, and it was assumed that the 17-acre site east of Blake Road & 2nd Street (325 Blake Road) would be developed. Based on concept plans from the City of Hopkins, it was assumed that the 325 Blake Road site would include 643 multifamily housing units, 22,000 square feet of office, and 12,100 square feet of retail. **Table 2** shows the trip generation for the 2022 background condition and the 2030 background condition. The trip generation was calculated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, Tenth Edition*. Standard ITE trip rates were used to develop the total trips generated. The background trips were distributed to adjacent roadways based on the current traffic patterns in the area and a general assessment of the major regional roadways surrounding the study area.

Table 2 – Background Trip Generation

Land Use Description	Size	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
2022 Background Trips							
Park & Ride (ITE 90)	89 stalls	29	8	37	10	28	38
Total Generated Trips		**29**	**8**	**37**	**10**	**28**	**38**
2030 Background Trips							
Park & Ride (ITE 90)	89 stalls	29	8	37	10	28	38
Multifamily Housing (Mid-Rise) (ITE 221)	643 units	59	170	229	167	108	275
General Office Building (ITE 710)	22,000 sq. ft.	22	4	26	4	21	25
Shopping Center (ITE 820)	12,100 sq. ft.	6	3	9	13	12	25
Total Generated Trips		**116**	**185**	**301**	**194**	**169**	**363**

Exhibit 3 and 4 in **Appendix A** shows the Opening Year No-Build (2022) & Horizon Year No-Build (2030) turning movement volumes, respectively.

PROPOSED DEVELOPMENT

SITE TRIP GENERATION

Traffic counts were collected at all the site accesses to determine the existing trip generation of the site. **Table 3** provides the AM and PM peak hour trip generation for the existing site.

Table 3 – Existing Site Trip Generation

Land Use Description	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Existing Site	53	32	85	145	171	316

The trip-generating potential of the proposed development was calculated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, Tenth Edition*. Standard ITE trip rates were used to develop the total trips generated by the site. The average rate for ITE land uses were used to calculate the trip generation potential of the site. Sites A, B, and C are part of the proposed development but the outlot, that currently is a vacated Arbys, is not part of the development plan. Based on conversations with the City of Hopkins and Hennepin County, this analysis assumed that the 0.7 acres of developable land in the outlot could be built out at the same density as the rest of the proposed development, which is 110 units per acre. The exact amount of retail in each building is not known at this time and will be evaluated as each building is developed it was assumed that the retail would be concentrated in Site B as it is on the corner of Excelsior Boulevard & Blake Road. With The proposed new land uses for the site are listed below.

- Site A: a 215-unit multifamily housing building
- Site B: a 250-unit multifamily housing building with retail
- Site C: a 298-unit multifamily housing building
- Outlot: a 77-unit multifamily housing building

The studies completed by the Metropolitan Council for the SWLRT project forecasts that Blake Station, adjacent to the proposed site, will serve 1,300 riders per day in 2040 and that the majority of riders are expected to walk to the station. Based on its proximity and density, this development will likely create a significant portion of the projected ridership. However, this analysis did not assume a transit reduction to provide a worst-case traffic analysis scenario.

Table 4 provides a summary of the number of trips anticipated to be generated during the weekday AM and PM peak hours for the three analysis scenarios. These scenarios are:

- Site A Buildout with the existing site traffic
- Sites A, B, and C Buildout with the existing site traffic removed
- Sites A, B, C, and Outlot Buildout with the existing site traffic removed

Table 4 – Site Trip Generation

Land Use Description	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
2022 Opening Year (Only Site A + Existing Site Traffic)								
Site A: Multifamily Housing (Mid-Rise) (ITE 221)	215 Units	1,170	20	57	77	58	37	95
Total New Site Generated Trips		**1,117**	**20**	**57**	**77**	**58**	**37**	**95**
Existing Site Trips		--	53	32	85	145	171	316
Total Analysis Site Trips		**--**	**73**	**89**	**162**	**203**	**208**	**411**
2030 Build Year (Sites A, B, & C)								
Site A: Multifamily Housing (Mid-Rise) (ITE 221)	215 Units	1,170	20	57	77	58	37	95
Site B: Mid-Rise Residential with 1st Floor Commercial (ITE 231)	250 Units	860	21	54	75	63	27	90
Site C: Multifamily Housing (Mid-Rise) (ITE 221)	298 Units	1,622	28	79	107	80	51	131
Total Site Generated Trips		**3,652**	**69**	**190**	**259**	**201**	**115**	**316**
2030 Build Year + Additional Out Lot Assumption								
Multifamily Housing (Mid-Rise) (ITE 221)	77 Units	420	7	21	28	21	13	34
Total Site Generated Trips (2030 Build Year + Out Lot)		**4,072**	**76**	**211**	**287**	**222**	**128**	**350**

Comparing the Existing Site trip generation in **Table 3** to the proposed site trip generation in **Table 4**, the AM peak hour trip generation is anticipated to be significantly higher for the 2030 scenarios than the existing site. The existing site generates 85 AM peak hour trips and the Horizon Year (2030) scenarios are anticipated to generate 259 or 287 trips in the AM peak hour. This difference is expected when switching from a retail focused land use to a residential focused land use. In the PM peak hour, the trip generation is similar with the existing site generating 316 trips and the 2030 scenarios generating 316 or 350 trips.

SITE TRIP DISTRIBUTION AND ACCESS

The site trips were distributed to adjacent roadways based on the current traffic patterns in the area and a general assessment of the major regional roadways surrounding the study area. In general, the following global trip distribution was assumed for the development:

- 30% north on Blake Road
- 35% east on Excelsior Boulevard

- 25% west on Excelsior Boulevard
- 10% south on Blake Road

The trip distribution for the site-generated traffic used the same overall distribution pattern for the 2022 Site A scenario and the 2030 scenarios, however, the distribution at the site accesses varied between the scenarios. **Exhibits 5 & 6** show the distributions for the two Build years and **Exhibits 7, 8, & 9** show the trip assignment for the three build scenarios. The exhibits can be found in **Appendix A**.

The existing site area has five site accesses, which are listed below:

- Excelsior Boulevard & Pierce Avenue
- Excelsior Boulevard & RIRO
- Blake Road & Hill Street RIRO
- Blake Road & Full Site Access
- Blake Road & Pierce Avenue RIRO

The proposed site area has four site accesses. The site accesses will remain the same as the existing site except the Hill Street RIRO will be closed and the Blake Road RIRO will move approximately 175 feet north of its existing location which will provide better access spacing. The proposed site plan is included in **Appendix B**.

The existing site accesses on Excelsior Boulevard are pivotal to the site. The RIRO on Excelsior Boulevard provides connectivity, it helps maintain a grid like roadway network on site, and increases the viability of retail on the corner of Excelsior Boulevard & Blake Road. With the redevelopment of the site, the remaining site accesses will no longer feed directly into parking lots, they will be urban roadways connecting throughout the site. This change will improve the flow of vehicles entering and exiting the site accesses.

PARKING

Per the City of Hopkins code of ordinances sec. 102-365, “A minimum of one and maximum of 1.5 parking spaces per multifamily unit is permitted; one guest space per 15 units is permitted.” The proposed parking ratios for the three multifamily buildings are shown in **Table 5**. The proposed development fits within the city parking guidelines.

Table 5 – Parking Ratios

Building	Units	Parking Stalls	Parking Ratio
Site A	215	246	1.15
Site B	250	316	1.26
Site C	298	331	1.11
Total	**763**	**893**	**1.17**

PEDESTRIAN, BICYCLE, AND TRANSIT INFRASTRUCTURE

The site is located in a predominately industrial and residential area in the east part of Hopkins. There are primarily industrial businesses on the north side of Excelsior Boulevard and residential on the south side of Excelsior Boulevard. The site is bordered by the Cedar Lake Trail and Canadian Pacific (CP) Railroad on the north side of the site. Excelsior Boulevard provides sidewalks on both sides of the roadway west of Blake Road and has pedestrian crossings at the signals. Blake Road provides trails on both sides of the roadway and provides access to the Cedar Lake Trail which will be a grade separated crossing under Blake Road. Blake Road also has a pedestrian crossing with flashing beacons at the full site access. The proposed site will have sidewalks along all the interior roadways and provide connections to the future SWLRT station and bus stops.

The site is well connected to promote bicycling as a viable mode of transportation as there is access to the regional trail system along the north side of the site and there are on-street bike lanes on Blake Road south of Excelsior Boulevard and trails on Blake Road north of Excelsior Boulevard.

This is a transit-oriented development as it will be located immediately adjacent to a SWLRT station. As previously stated, the adjacent Blake Station is projected to serve 1,300 riders per day in 2040 and the majority of riders are expected to walk to the station. Based on its proximity and density, this development will likely create a significant portion of the projected ridership. With the addition of a bus stop near the SWLRT station it will provide more options to utilize transit.

CAPACITY ANALYSIS

A capacity analysis was performed to quantify the delay and level of service at the study intersections during the weekday AM and PM peak hours. The capacity analysis was performed using Synchro/SimTraffic.

The capacity of an intersection quantifies its ability to accommodate traffic volumes and is measured in average delay per vehicle. It is expressed in terms of level of service (LOS) which ranges from A to F, with LOS A as the highest (best traffic flow and least delay), LOS E as saturated or at-capacity conditions, and LOS F as the lowest (oversaturated conditions). The LOS grades shown below, which are provided in the Transportation Research Board's Highway Capacity Manual (HCM), quantify and categorize the driver's discomfort, frustration, fuel consumption, and travel times experienced as a result of intersection control and the resulting traffic queuing. A detailed description of each LOS rating can be found in **Table 6**. The range of control delay for each rating (as detailed in the HCM) is also shown in **Table 6**. Because signalized intersections are expected to carry a larger volume of vehicles and stopping is required during red time, higher delays are tolerated for the corresponding LOS ratings. For side street stop intersections, the intersection LOS is reported as the worst side street movement.

Table 6 – Level of Service Information

Level of Service	Average Control Delay (seconds/vehicle)	Description
A	0-10 (Unsignalized); 0-10 (Signalized)	Minimal control delay; traffic operates at primarily free-flow conditions; unimpeded movement within traffic stream.
B	>10-15 (Unsignalized); >10-20 (Signalized)	Minor control delay at signalized intersections; traffic operates at a fairly unimpeded level with slightly restricted movement within traffic stream.
C	>15-25 (Unsignalized); >20-35 (Signalized)	Moderate control delay; movement within traffic stream more restricted than at LOS B; formation of queues contributes to lower average travel speeds.
D	>25-35 (Unsignalized); >35-55 (Signalized)	Considerable control delay that may be substantially increased by small increases in flow; average travel speeds continue to decrease.
E	>35-50 (Unsignalized); >55-80 (Signalized)	High control delay; average travel speed no more than 33 percent of free flow speed.
F	>50 (Unsignalized); >80 (Signalized)	Extremely high control delay; extensive queuing and high volumes create exceedingly restricted traffic flow.

Traffic models for each scenario were developed using Synchro/SimTraffic, and the delay and queueing were evaluated for each scenario. The scenarios that were analyzed are as follows:

- Existing (2020)
- Opening Year No-Build (2022)
- Opening Year Build (2022)
- Horizon Year No-Build (2030)
- Horizon Year Build (2030)
- Horizon Year Build + Outlot (2030)

EXISTING YEAR (2020) CONDITIONS

The traffic volumes shown in **Exhibit 2** in **Appendix A** were used in the Existing Year (2020) analysis. As previously discussed, these volumes were adjusted based on historic growth rates and traffic counts provided by Hennepin County. **Table 7 & 8** show the LOS and delay for the study intersections under Existing Year (2020) conditions during the AM and PM peak hour, respectively.

Based on the analysis, the study intersections are currently operating at a LOS D or better during the AM peak hour. In the PM peak hour, Excelsior Boulevard & Pierce Avenue experiences excessive delays for the northbound turning movements from the school access onto Excelsior Boulevard. With the amount of east/west traffic on Excelsior Boulevard and the side street stop control, this is not unexpected. While the delays are long, the queues are not excessive. There are minor movements during the AM & PM peak hours at the signalized intersections that operate at LOS E. All turn lane queues are within their storage capacity. The SimTraffic reports are provided in **Appendix D**.

Table 7 – Existing (2020) AM Peak Hour Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Excelsior Boulevard & Milwaukee Street/ Jackson Avenue	Signal	EB	38.9	D	7.7	A	5.1	A	19.3	B
		WB	53.8	D	18.0	B	15.6	B		
		NB	48.8	D	53.6	D	2.2	A		
		SB	51.5	D	63.9	E	1.9	A		
Excelsior Boulevard & Pierce Avenue	Side Street Stop	EB	9.0	A	3.7	A	3.4	A	29.7	D
		WB	8.1	A	0.4	A	0.2	A		
		NB	20.1	C	29.7	D	4.8	A		
		SB	13.7	B	-	-	6.6	A		
Excelsior Boulevard & RIRO	Side Street Stop	EB	-	-	1.0	A	-	-	9.3	A
		WB	-	-	1.8	A	1.4	A		
		NB	-	-	-	-	-	-		
		SB	-	-	-	-	9.3	A		
Excelsior Boulevard & Blake Road	Signal	EB	38.7	D	13.3	B	3.2	A	23.1	C
		WB	46.2	D	20.0	B	3.7	A		
		NB	41.6	D	33.7	C	12.5	B		
		SB	40.4	D	34.5	C	23.6	C		
Blake Road & Full Site Access	Side Street Stop	EB	7.4	A	-	-	3.1	A	7.7	A
		WB	7.7	A	5.3	A	3.6	A		
		NB	3.9	A	1.2	A	1.1	A		
		SB	2.7	A	0.4	A	0.2	A		
Blake Road & RIRO	Side Street Stop	EB	-	-	-	-	-	-	1.4	A
		WB	-	-	-	-	-	-		
		NB	-	-	0.2	A	-	-		
		SB	-	-	1.6	A	1.4	A		
Blake Road & 2nd Street	Signal	EB	18.0	B	-	-	10.7	B	12.5	B
		WB	-	-	-	-	-	-		
		NB	23.1	C	6.8	A	-	-		
		SB	-	-	13.4	B	5.1	A		

Table 8 – Existing (2020) PM Peak Hour Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Excelsior Boulevard & Milwaukee Street/ Jackson Avenue	Signal	EB	58.8	E	12.2	B	9.7	A	19.6	B
		WB	69.0	E	27.2	C	26.1	C		
		NB	49.4	D	58.4	E	2.5	A		
		SB	51.1	D	56.7	E	2.8	A		
Excelsior Boulevard & Pierce Avenue	Side Street Stop	EB	14.7	B	7.0	A	7.2	A	69.9	F
		WB	29.1	D	0.7	A	0.6	A		
		NB	69.9	F	28.6	D	54.3	F		
		SB	14.4	B	-	-	5.8	A		
Excelsior Boulevard & RIRO	Side Street Stop	EB	-	-	3.5	A	-	-	6.8	A
		WB	-	-	2.1	A	1.6	A		
		NB	-	-	-	-	-	-		
		SB	-	-	-	-	6.8	A		
Excelsior Boulevard & Blake Road	Signal	EB	53.3	D	24.3	C	8.6	A	29.1	C
		WB	53.1	D	20.2	C	6.8	A		
		NB	54.7	D	46.6	D	24.5	C		
		SB	56.6	E	48.1	D	35.7	D		
Blake Road & Full Site Access	Side Street Stop	EB	11.6	B	16.2	C	6.1	A	18.8	C
		WB	18.0	C	18.8	C	8.1	A		
		NB	5.1	A	1.4	A	1.0	A		
		SB	5.6	A	0.6	A	0.2	A		
Blake Road & RIRO	Side Street Stop	EB	-	-	-	-	4.2	A	4.2	A
		WB	-	-	-	-	-	-		
		NB	-	-	0.3	A	-	-		
		SB	-	-	1.7	A	1.4	A		
Blake Road & 2nd Street	Signal	EB	21.8	C	-	-	15.5	B	14.4	B
		WB	-	-	-	-	-	-		
		NB	28.3	C	9.5	A	-	-		
		SB	-	-	16.6	B	8.2	A		

OPENING YEAR NO-BUILD (2022) CONDITIONS

A capacity analysis was performed for Opening Year No-Build (2022) conditions in order to develop baseline operating conditions for the opening year. The analysis was performed using the existing intersection geometry except for the southbound Pierce Avenue approach at Excelsior Boulevard which is currently a single lane approach but with the addition of the Park & Ride and upgrading Pierce Avenue a southbound right turn lane will be added. The existing signal timing information was used for the study intersections. The traffic volumes are shown in **Exhibit 3** in **Appendix A**.

The results of the analysis are provided in **Tables 9 & 10** for the weekday AM and PM peak hours. Based on the Opening Year No-Build (2022) capacity analysis, the study intersections are expected to operate at

a LOS C or better during the AM peak hour. During the PM peak hour, Excelsior Boulevard & Blake Road has excessive side street delays, similar to the existing conditions. Again, the queues are not excessive, and it is not uncommon for a side street stop intersection to have longer delays. All turn lane queues are within their storage capacity. The side street stop delay at Excelsior Boulevard & Pierce Avenue is slightly better than the existing condition in the AM peak hour. This is due to the low volumes (less than 5 peak hour trips) for the side street movement and the variability in the simulations. in the In the PM peak hour, eastbound queues on Excelsior Boulevard may extend from Blake Road to Pierce Avenue, The SimTraffic reports are provided in **Appendix D**.

Table 9 – Opening Year No-Build (2022) AM Peak Hour Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Excelsior Boulevard & Milwaukee Street/ Jackson Avenue	Signal	EB	39.0	D	7.3	A	4.2	A	19.6	B
		WB	56.1	E	19.2	B	19.1	B		
		NB	43.9	D	59.4	E	2.1	A		
		SB	40.9	D	65.6	E	2.0	A		
Excelsior Boulevard & Pierce Avenue	Side Street Stop	EB	10.9	B	3.5	A	4.0	A	23.0	C
		WB	7.9	A	0.4	A	0.2	A		
		NB	18.5	C	23.0	C	6.3	A		
		SB	19.2	C	-	-	6.4	A		
Excelsior Boulevard & RIRO	Side Street Stop	EB	-	-	0.9	A	-	-	3.5	A
		WB	-	-	1.8	A	1.5	A		
		NB	-	-	-	-	-	-		
		SB	-	-	-	-	3.5	A		
Excelsior Boulevard & Blake Road	Signal	EB	41.8	D	14.0	B	3.2	A	23.8	C
		WB	49.9	D	21.0	C	4.2	A		
		NB	40.8	D	33.3	C	11.5	B		
		SB	41.5	D	35.7	D	24.0	C		
Blake Road & Full Site Access	Side Street Stop	EB	9.2	A	-	-	4.0	A	9.5	A
		WB	9.5	A	7.9	A	3.8	A		
		NB	3.6	A	1.3	A	1.2	A		
		SB	3.4	A	0.4	A	0.2	A		
Blake Road & RIRO	Side Street Stop	EB	-	-	-	-	3.5	A	3.5	A
		WB	-	-	-	-	-	-		
		NB	-	-	0.2	A	-	-		
		SB	-	-	1.6	A	1.5	A		
Blake Road & 2nd Street	Signal	EB	18.4	B	-	-	11.7	B	13.2	B
		WB	-	-	-	-	-	-		
		NB	24.7	C	6.9	A	-	-		
		SB	-	-	14.5	B	6.2	A		

Table 10 – Opening Year No-Build (2022) PM Peak Hour Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Excelsior Boulevard & Milwaukee Street/ Jackson Avenue	Signal	EB	53.2	D	14.9	B	8.3	A	20.5	C
		WB	64.2	E	27.5	C	27.3	C		
		NB	48.2	D	56.6	E	2.7	A		
		SB	53.3	D	59.1	E	2.9	A		
Excelsior Boulevard & Pierce Avenue	Side Street Stop	EB	16.4	C	8.3	A	11.1	B	100+	F
		WB	31.3	D	0.7	A	0.5	A		
		NB	100+	F	-	-	49.4	E		
		SB	91.5	F	-	-	8.9	A		
Excelsior Boulevard & RIRO	Side Street Stop	EB	-	-	4.8	A	-	-	7.0	A
		WB	-	-	2.1	A	1.4	A		
		NB	-	-	-	-	-	-		
		SB	-	-	-	-	7.0	A		
Excelsior Boulevard & Blake Road	Signal	EB	54.8	D	25.7	C	9.4	A	30.1	C
		WB	57.0	E	21.4	C	6.9	A		
		NB	56.6	E	42.8	D	26.1	C		
		SB	57.8	E	48.1	D	35.5	D		
Blake Road & Full Site Access	Side Street Stop	EB	14.3	B	22.7	C	6.4	A	22.7	C
		WB	18.2	C	18.1	C	7.4	A		
		NB	4.1	A	1.4	A	1.2	A		
		SB	5.8	A	0.6	A	0.3	A		
Blake Road & RIRO	Side Street Stop	EB	-	-	-	-	3.7	A	3.7	A
		WB	-	-	-	-	-	-		
		NB	-	-	0.3	A	-	-		
		SB	-	-	1.7	A	1.4	A		
Blake Road & 2nd Street	Signal	EB	19.5	B	-	-	13.5	B	14.6	B
		WB	-	-	-	-	-	-		
		NB	31.3	C	10.6	B	-	-		
		SB	-	-	16.7	B	9.0	A		

OPENING YEAR BUILD (2022) CONDITIONS

Opening Year Build (2022) conditions were analyzed to determine any traffic impacts from the addition of the site traffic. Opening Year Build (2022) turning movement volumes were developed by adding the site trips to the Opening Year No-Build (2022) turning movement volumes in **Exhibit 3** in **Appendix A**. The Opening Year Build (2022) turning movement volumes are shown in **Exhibit 10** in **Appendix A**. It should be noted that in the Opening Year Build (2022) conditions the Site A traffic was added to the existing site trips at the accesses, no trips were removed for the analysis.

It was assumed that site access would remain the same as the Opening Year No-Build condition and that a westbound right turn lane at Excelsior Boulevard & Pierce Avenue would be installed with Site A.

The results of the analysis are provided in **Tables 11 &12** for the weekday AM and PM peak hours. Based on the Opening Year Build (2022) capacity analysis, the study intersections are anticipated to operate at LOS C or better in the AM & PM peak hours except for Excelsior Boulevard & Pierce Avenue which is anticipated to operate at LOS E in the AM peak hour and LOS F in the PM peak hour. With the excessive southbound delays at Excelsior Boulevard & Peirce Avenue, vehicles exiting the site may utilize different site accesses during the peak hours to minimize delay. This intersection should continue to be monitored as it may require mitigation. All turn lane queues are within their storage capacity. In the PM peak hour, eastbound queues on Excelsior Boulevard may extend from Blake Road to Pierce Avenue. There are no additional geometric changes required in the study area as a result of the development. The SimTraffic reports are provided in **Appendix D**.

Table 11 – Opening Year Build (2022) AM Peak Hour Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Excelsior Boulevard & Milwaukee Street/ Jackson Avenue	Signal	EB	40.7	D	7.7	A	4.5	A	20.1	C
		WB	50.9	D	19.3	B	16.4	B		
		NB	47.3	D	55.5	E	2.3	A		
		SB	44.2	D	54.7	D	1.9	A		
Excelsior Boulevard & Pierce Avenue	Side Street Stop	EB	13.7	B	3.7	A	4.4	A	41.3	E
		WB	10.1	B	0.5	A	0.3	A		
		NB	32.1	D	41.3	E	9.6	A		
		SB	30.3	D	-	-	6.4	A		
Excelsior Boulevard & RIRO	Side Street Stop	EB	-	-	1.0	A	-	-	4.8	A
		WB	-	-	1.8	A	1.4	A		
		NB	-	-	-	-	-	-		
		SB	-	-	-	-	4.8	A		
Excelsior Boulevard & Blake Road	Signal	EB	37.9	D	15.0	B	3.6	A	23.8	C
		WB	43.9	D	20.9	C	4.3	A		
		NB	39.8	D	33.9	C	13.4	B		
		SB	39.6	D	35.8	D	22.2	C		
Blake Road & Full Site Access	Side Street Stop	EB	8.1	A	-	-	4.4	A	12.6	B
		WB	10.4	B	12.6	B	4.1	A		
		NB	4.4	A	1.3	A	1.1	A		
		SB	3.2	A	0.4	A	0.3	A		
Blake Road & RIRO	Side Street Stop	EB	-	-	-	-	3.5	A	3.5	A
		WB	-	-	-	-	-	-		
		NB	-	-	0.2	A	-	-		
		SB	-	-	1.6	A	1.3	A		
Blake Road & 2nd Street	Signal	EB	17.8	B	-	-	11.5	B	12.5	B
		WB	-	-	-	-	-	-		
		NB	24.9	C	6.8	A	-	-		
		SB	-	-	13.2	B	5.7	A		

Table 12 – Opening Year Build (2022) PM Peak Hour Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Excelsior Boulevard & Milwaukee Street/ Jackson Avenue	Signal	EB	55.3	E	15.3	B	10.5	B	20.9	C
		WB	62.6	E	27.9	C	26.7	C		
		NB	50.1	D	61.0	E	2.8	A		
		SB	49.6	D	65.9	E	2.9	A		
Excelsior Boulevard & Pierce Avenue	Side Street Stop	EB	18.3	C	8.1	A	7.0	A	100+	F
		WB	32.9	D	0.8	A	0.7	A		
		NB	100+	F	-	-	100+	F		
		SB	100+	F	-	-	46.0	E		
Excelsior Boulevard & RIRO	Side Street Stop	EB	-	-	5.1	A	-	-	4.0	A
		WB	-	-	2.1	A	1.4	A		
		NB	-	-	-	-	-	-		
		SB	-	-	-	-	6.3	A		
Excelsior Boulevard & Blake Road	Signal	EB	54.9	D	26.3	C	9.5	A	30.2	C
		WB	56.4	E	21.1	C	7.5	A		
		NB	56.3	E	45.8	D	25.9	C		
		SB	55.3	E	47.2	D	35.7	D		
Blake Road & Full Site Access	Side Street Stop	EB	16.3	C	22.6	C	7.1	A	21.9	C
		WB	21.5	C	21.9	C	7.6	A		
		NB	4.6	A	1.5	A	1.3	A		
		SB	5.2	A	0.6	A	0.3	A		
Blake Road & RIRO	Side Street Stop	EB	-	-	-	-	3.0	A	3.0	A
		WB	-	-	-	-	-	-		
		NB	-	-	0.3	A	-	-		
		SB	-	-	1.8	A	1.8	A		
Blake Road & 2nd Street	Signal	EB	20.1	C	-	-	15.2	B	14.3	B
		WB	-	-	-	-	-	-		
		NB	31.3	C	9.5	A	-	-		
		SB	-	-	16.9	B	8.8	A		

Note: delays in excess of 100 seconds per vehicle are reported as "100+"

HORIZON YEAR NO-BUILD (2030) CONDITIONS

A capacity analysis was performed for Horizon Year No-Build (2030) conditions in order to develop baseline operating conditions for the Horizon year. The analysis was performed using the same geometry assumed in the 2022 scenarios. In the Horizon year it was assumed that the 17-acre, 325 Blake Road site would be developed so that development is included in the background traffic as previously discussed. Excelsior Boulevard is a coordinated signal system so individual intersections could not be optimized without taking into account downstream intersections outside of the study area, therefore, the cycle lengths were not changed, but the splits at the signals were optimized. The traffic volumes are shown in **Exhibit 4** in **Appendix A**.

The results of the analysis are provided in **Tables 13 & 14** for the weekday AM and PM peak hours. Based on the Horizon Year No-Build (2030) capacity analysis, the study intersections are expected to operate at a LOS D or better during the AM & PM peak hours except for Excelsior Boulevard & Pierce Avenue which has excessive side street delays, similar to the Opening Year Build conditions. Queues for the southbound approach at Excelsior Boulevard & Pierce Avenue are acceptable but the delays for the vehicles attempting to make southbound left turns would likely cause vehicles to use a different access. Mitigation at this access will be required by the Horizon Year (2030), with or without the development. All turn lane queues are within their storage capacity. In the PM peak hour, eastbound queues on Excelsior Boulevard may extend from Blake Road to Pierce Avenue. The SimTraffic reports are provided in **Appendix D**.

Table 13 – Horizon Year No Build (2030) AM Peak Hour Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Excelsior Boulevard & Milwaukee Street/ Jackson Avenue	Signal	EB	41.7	D	8.4	A	4.6	A	20.8	C
		WB	55.7	E	20.3	C	19.5	B		
		NB	49.1	D	50.5	D	2.2	A		
		SB	48.3	D	45.8	D	2.1	A		
Excelsior Boulevard & Pierce Avenue	Side Street Stop	EB	13.7	B	4.1	A	4.2	A	31.7	D
		WB	8.0	A	0.5	A	0.3	A		
		NB	22.5	C	31.7	D	6.0	A		
		SB	20.1	C	-	-	5.5	A		
Excelsior Boulevard & RIRO	Side Street Stop	EB	-	-	1.1	A	-	-	5.3	A
		WB	-	-	1.9	A	1.5	A		
		NB	-	-	-	-	-	-		
		SB	-	-	-	-	5.3	A		
Excelsior Boulevard & Blake Road	Signal	EB	35.8	D	15.3	B	3.6	A	25.2	C
		WB	46.6	D	22.7	C	4.3	A		
		NB	40.9	D	36.2	D	16.7	B		
		SB	38.8	D	37.8	D	25.3	C		
Blake Road & Full Site Access	Side Street Stop	EB	9.4	A	-	-	4.5	A	10.6	B
		WB	10.2	B	10.6	B	4.2	A		
		NB	5.1	A	1.4	A	1.1	A		
		SB	3.1	A	0.4	A	0.3	A		
Blake Road & RIRO	Side Street Stop	EB	-	-	-	-	3.7	A	3.7	A
		WB	-	-	-	-	-	-		
		NB	-	-	0.2	A	-	-		
		SB	-	-	1.6	A	1.3	A		
Blake Road & 2nd Street	Signal	EB	20.7	C	20.4	C	14.7	B	16.4	B
		WB	20.4	C	22.3	C	5.1	A		
		NB	30.3	C	11.4	B	6.1	A		
		SB	37.4	D	17.1	B	8.5	A		

Table 14 – Horizon Year No Build (2030) PM Peak Hour Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Excelsior Boulevard & Milwaukee Street/ Jackson Avenue	Signal	EB	59.7	E	15.8	B	16.0	B	22.1	C
		WB	70.1	E	29.6	C	30.9	C		
		NB	52.4	D	61.6	E	2.9	A		
		SB	51.6	D	61.3	E	3.1	A		
Excelsior Boulevard & Pierce Avenue	Side Street Stop	EB	18.3	C	8.7	A	9.0	A	100+	F
		WB	34.9	D	0.8	A	0.3	A		
		NB	100+	F	100+	F	78.9	F		
		SB	9.0	A	-	-	7.6	A		
Excelsior Boulevard & RIRO	Side Street Stop	EB	-	-	5.8	A	-	-	7.4	A
		WB	-	-	2.1	A	1.5	A		
		NB	-	-	-	-	-	-		
		SB	-	-	-	-	7.4	A		
Excelsior Boulevard & Blake Road	Signal	EB	59.2	E	27.0	C	10.4	B	31.7	C
		WB	56.0	E	20.8	C	8.7	A		
		NB	56.9	E	46.2	D	29.3	C		
		SB	59.2	E	51.0	D	40.8	D		
Blake Road & Full Site Access	Side Street Stop	EB	17.2	C	22.2	C	8.5	A	26.8	D
		WB	26.8	D	23.9	C	12.5	B		
		NB	4.9	A	1.6	A	1.4	A		
		SB	6.9	A	0.7	A	0.2	A		
Blake Road & RIRO	Side Street Stop	EB	-	-	-	-	4.0	A	0.9	A
		WB	-	-	-	-	-	-		
		NB	-	-	0.4	A	-	-		
		SB	-	-	1.6	A	1.4	A		
Blake Road & 2nd Street	Signal	EB	24.3	C	25.1	C	20.4	C	20.4	C
		WB	26.3	C	28.1	C	7.5	A		
		NB	41.4	D	17.7	B	14.4	B		
		SB	42.1	D	19.8	B	10.7	B		

HORIZON YEAR BUILD (2030) CONDITIONS

Horizon Year Build (2030) conditions were analyzed to determine any traffic impacts from the addition of the site traffic. Horizon Year Build (2030) turning movement volumes were developed by adding the site trips to the Horizon Year No-Build (2030) turning movement volumes in **Exhibit 4** in **Appendix A**. The Horizon Year Build (2030) turning movement volumes are shown in **Exhibit 11** in **Appendix A**. It should be noted that in the Horizon Build (2030) conditions the existing site traffic was removed from the site accesses.

The results of the analysis are provided in **Tables 15 & 16** for the weekday AM and PM peak hours. Based on the Horizon Year Build (2030) capacity analysis, the study intersections are anticipated to operate at LOS D or better in the AM peak hour. In the PM peak hour, the study intersections are expected to operate at LOS C or better, except for Excelsior Boulevard & Pierce Avenue. Queues for the southbound approach at Excelsior Boulevard & Pierce Avenue are acceptable but the delays for the vehicles attempting to make southbound left turns would likely cause vehicles to use a different access. Traffic control changes at this access will likely be required by the 2030 analysis year, with or without the development. All turn lane queues are within their storage capacity. In the PM peak hour, eastbound queues on Excelsior Boulevard may extend from Blake Road to Pierce Avenue. There are no geometric changes required in the study area as a result of the development. The SimTraffic reports are provided in **Appendix D**.

Table 15 – Horizon Year Build (2030) AM Peak Hour Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Excelsior Boulevard & Milwaukee Street/ Jackson Avenue	Signal	EB	40.6	D	8.6	A	4.6	A	21.1	C
		WB	55.2	E	22.7	C	23.1	C		
		NB	42.5	D	50.2	D	2.3	A		
		SB	42.9	D	57.0	E	2.1	A		
Excelsior Boulevard & Pierce Avenue	Side Street Stop	EB	12.2	B	4.1	A	3.6	A	31.5	D
		WB	8.8	A	0.5	A	0.3	A		
		NB	23.4	C	21.0	C	7.2	A		
		SB	31.5	D	-	-	7.6	A		
Excelsior Boulevard & RIRO	Side Street Stop	EB	-	-	1.2	A	-	-	5.6	A
		WB	-	-	1.9	A	1.4	A		
		NB	-	-	-	-	-	-		
		SB	-	-	-	-	5.6	A		
Excelsior Boulevard & Blake Road	Signal	EB	35.6	D	15.4	B	3.9	A	24.7	C
		WB	46.0	D	23.2	C	4.6	A		
		NB	40.4	D	32.2	C	14.6	B		
		SB	38.2	D	34.5	C	27.3	C		
Blake Road & Full Site Access	Side Street Stop	EB	12.3	B	-	-	6.2	A	11.1	B
		WB	11.1	B	4.0	A	5.2	A		
		NB	1.3	A	0.8	A	4.0	A		
		SB	0.5	A	0.3	A	1.8	A		
Blake Road & RIRO	Side Street Stop	EB	-	-	-	-	4.5	A	4.5	A
		WB	-	-	-	-	-	-		
		NB	-	-	0.3	A	-	-		
		SB	-	-	1.8	A	1.4	A		
Blake Road & 2nd Street	Signal	EB	20.4	C	20.3	C	15.1	B	16.0	B
		WB	19.8	B	18.6	B	4.9	A		
		NB	28.4	C	11.0	B	5.9	A		
		SB	32.2	C	17.1	B	8.7	A		

Table 16 – Horizon Year Build (2030) PM Peak Hour Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Excelsior Boulevard & Milwaukee Street/ Jackson Avenue	Signal	EB	56.6	E	16.3	B	12.0	B	21.6	C
		WB	59.6	E	28.4	C	26.4	C		
		NB	52.8	D	56.1	E	2.5	A		
		SB	53.0	D	66.1	E	3.0	A		
Excelsior Boulevard & Pierce Avenue	Side Street Stop	EB	19.7	C	8.7	A	10.3	B	100+	F
		WB	28.5	D	0.8	A	0.7	A		
		NB	100+	F	-	-	73.6	F		
		SB	100+	F	-	-	45.2	E		
Excelsior Boulevard & RIRO	Side Street Stop	EB	-	-	6.0	A	-	-	6.8	A
		WB	-	-	2.1	A	1.8	A		
		NB	-	-	-	-	-	-		
		SB	-	-	-	-	6.8	A		
Excelsior Boulevard & Blake Road	Signal	EB	58.8	E	26.7	C	10.8	B	31.8	C
		WB	56.7	E	21.5	C	9.4	A		
		NB	56.4	E	46.0	D	27.5	C		
		SB	57.5	E	53.5	D	42.5	D		
Blake Road & Full Site Access	Side Street Stop	EB	22.7	C	-	-	9.8	A	30.6	D
		WB	30.6	D	-	-	11.1	B		
		NB	6.4	A	1.5	A	1.3	A		
		SB	6.9	A	0.7	A	0.4	A		
Blake Road & RIRO	Side Street Stop	EB	-	-	-	-	4.3	A	4.3	A
		WB	-	-	-	-	-	-		
		NB	-	-	0.4	A	-	-		
		SB	-	-	1.8	A	1.7	A		
Blake Road & 2nd Street	Signal	EB	26.3	C	25.0	C	20.6	C	20.7	C
		WB	26.7	C	25.1	C	6.9	A		
		NB	42.0	D	16.9	B	12.2	B		
		SB	48.3	D	20.9	C	12.8	B		

Note: delays in excess of 100 seconds per vehicle are reported as "100+"

HORIZON YEAR BUILD + OUTLOT (2030) CONDITIONS

Horizon Year Build + Outlot (2030) conditions were analyzed to determine any traffic impacts from the addition of the final Outlot. Horizon Year Build + Outlot (2030) turning movement volumes were developed by adding the outlot trips to the Horizon Year Build (2030) turning movement volumes in **Exhibit 11** in **Appendix A**. The Horizon Year Build + Outlot (2030) turning movement volumes are shown in **Exhibit 12** in **Appendix A**. It should be noted that in the Horizon Build (2030) conditions the existing site traffic was removed from the site accesses.

The results of the analysis are provided in **Tables 17 & 18** for the weekday AM and PM peak hours. Based on the Horizon Year Build + Outlot (2030) capacity analysis, the study intersections are anticipated to operate at LOS D or better in the AM & PM peak hours, except for Excelsior Boulevard & Pierce Avenue. In the PM peak hour, Excelsior Boulevard & Pierce Avenue will continue to have operational delays similar to the Horizon Year Build (2030) scenarios. There will be no additional mitigation required as a result of the outlot being developed. The SimTraffic reports are provided in **Appendix D**.

Table 17 – Horizon Year Build + Outlot (2030) AM Peak Hour Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Excelsior Boulevard & Milwaukee Street/ Jackson Avenue	Signal	EB	40.4	D	8.1	A	4.4	A	21.0	C
		WB	56.7	E	22.8	C	23.3	C		
		NB	43.8	D	52.4	D	2.3	A		
		SB	48.3	D	49.3	D	2.1	A		
Excelsior Boulevard & Pierce Avenue	Side Street Stop	EB	14.9	B	4.0	A	3.3	A	43.3	E
		WB	7.3	A	0.5	A	0.4	A		
		NB	25.5	D	43.3	E	8.1	A		
		SB	30.1	D	-	-	8.4	A		
Excelsior Boulevard & RIRO	Side Street Stop	EB	-	-	1.3	A	-	-	6.2	A
		WB	-	-	2.0	A	1.3	A		
		NB	-	-	-	-	-	-		
		SB	-	-	-	-	6.2	A		
Excelsior Boulevard & Blake Road	Signal	EB	36.2	D	15.8	B	4.0	A	25.7	C
		WB	47.8	D	24.6	C	4.7	A		
		NB	40.7	D	34.5	C	14.5	B		
		SB	39.2	D	37.0	D	29.0	C		
Blake Road & Full Site Access	Side Street Stop	EB	13.4	B	-	-	6.6	A	10.1	B
		WB	10.1	B	-	-	4.2	A		
		NB	6.9	A	1.3	A	1.4	A		
		SB	3.6	A	0.6	A	0.2	A		
Blake Road & RIRO	Side Street Stop	EB	-	-	-	-	4.9	A	4.9	A
		WB	-	-	-	-	-	-		
		NB	-	-	0.3	A	-	-		
		SB	-	-	1.7	A	1.5	A		
Blake Road & 2nd Street	Signal	EB	20.6	C	19.9	B	15.5	B	16.5	B
		WB	22.0	C	22.4	C	4.8	A		
		NB	30.2	C	11.5	B	5.8	A		
		SB	40.5	D	17.0	B	8.1	A		

Table 18 – Horizon Year Build + Outlot (2030) PM Peak Hour Intersection Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Excelsior Boulevard & Milwaukee Street/ Jackson Avenue	Signal	EB	59.5	E	17.5	B	10.3	B	22.9	C
		WB	71.9	E	29.5	C	29.4	C		
		NB	53.7	D	53.1	D	2.7	A		
		SB	51.1	D	56.0	E	3.0	A		
Excelsior Boulevard & Pierce Avenue	Side Street Stop	EB	17.6	C	8.9	A	8.1	A	100+	F
		WB	29.7	D	0.8	A	0.6	A		
		NB	100+	F	-	-	85.8	F		
		SB	100+	F	-	-	23.1	C		
Excelsior Boulevard & RIRO	Side Street Stop	EB	-	-	6.2	A	-	-	9.5	A
		WB	-	-	2.2	A	1.7	A		
		NB	-	-	-	-	-	-		
		SB	-	-	-	-	9.5	A		
Excelsior Boulevard & Blake Road	Signal	EB	57.1	E	26.7	C	10.2	B	32.4	C
		WB	55.4	E	21.7	C	9.2	A		
		NB	51.8	D	47.0	D	29.3	C		
		SB	62.3	E	53.3	D	46.0	D		
Blake Road & Full Site Access	Side Street Stop	EB	18.8	C	-	-	8.6	A	29.5	D
		WB	29.5	D	-	-	11.4	B		
		NB	5.8	A	1.5	A	1.4	A		
		SB	6.4	A	0.9	A	0.3	A		
Blake Road & RIRO	Side Street Stop	EB	-	-	-	-	5.2	A	5.2	A
		WB	-	-	-	-	-	-		
		NB	-	-	0.4	A	-	-		
		SB	-	-	2.0	A	1.7	A		
Blake Road & 2nd Street	Signal	EB	25.9	C	26.4	C	20.5	C	20.3	C
		WB	25.4	C	28.8	C	8.1	A		
		NB	39.8	D	17.2	B	16.3	B		
		SB	47.4	D	19.3	B	11.3	B		

Note: delays in excess of 100 seconds per vehicle are reported as "100+"

MITIGATION ANALYSIS

Based on the capacity analysis results, the side street stop-controlled movements at Excelsior Boulevard & Pierce Avenue are expected to operate at LOS F in every PM analysis scenario. While queuing is not an issue for the side street movements, vehicles may choose to accept smaller gaps due to the increased delay. This could potentially become a safety concern. In order to mitigate the side street delays, this intersection was also analyzed as a signal for the Horizon Year (2030) Build conditions. While the intersection may or may not meet warrants by 2030, the intersection should be monitored and reevaluated as the development occurs and background traffic increases in the area.

The intersection geometry would include dedicated southbound left turn lane, and a dedicated westbound right turn lane. It was assumed that the eastbound and westbound left turns would operate as protected in the peak hours but would be flashing yellow arrows off peak, and the northbound and southbound movements would be permissive.

Table 19 shows the SimTraffic results for the mitigated Excelsior Boulevard & Pierce Avenue intersection in the AM & PM peak hours. Based on the capacity analysis results, the mitigated intersection is anticipated to operate at LOS C in both the AM & PM peak hours. All turn lane queues are anticipated to be within their storage capacity at the intersection. In the PM peak hour, eastbound queues on Excelsior Boulevard may extend from Blake Road to Pierce Avenue. With proper signal coordination this is not anticipated to be a major issue. Installing a signal could provide benefits to the development traffic as well as the transit lines that will use Pierce Avenue to access the bus stops near the Blake LRT station.

Table 19 – Horizon Year Build (2030) Signal Mitigation Analysis

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
Excelsior Boulevard & Pierce Avenue	Signal	EB	60.1	E	25.8	C	20.6	C	25.8	C
		WB	48.4	D	25.8	C	16.1	B		
		NB	10.9	B	17.5	B	8.3	A		
		SB	16.5	B	-	-	8.9	A		
PM Peak Hour										
Excelsior Boulevard & Pierce Avenue	Signal	EB	72.4	E	37.0	D	41.9	D	31.3	C
		WB	51.9	D	19.8	B	12.8	B		
		NB	34.8	C	-	-	29.5	C		
		SB	30.1	C	-	-	9.9	A		

CONCLUSIONS AND RECOMMENDATIONS

ESG Architecture & Design and Trilogy Real Estate Group are proposing a multiphase development that includes, a 215-unit multifamily housing building, a 250-unit multifamily housing building, a 298-unit multifamily housing building, and the potential for an additional outlot development. It is anticipated that there will be a total of 19,000 sq. ft. of retail between the three buildings, however, the exact amount in each building is not known at this time and will be evaluated as each building is developed. The total development will include around 763 units of multifamily and 19,000 square feet of retail on the northwest corner of Excelsior Boulevard (CSAH 3) & Blake Road (CSAH 20) in Hopkins, MN. The exact unit count may vary slightly since the 250-unit apartment building and the 298-unit apartment building would not be built until 2026 and 2030, respectively.

In the Opening Year, Site A is anticipated to generate an additional 73 new trips during the AM peak hour (19 entering, 54 exiting) and 90 new trips during the PM peak hour (55 entering, 35 exiting). In the Horizon Year, Sites A, B, and C are anticipated to generate an additional 256 new trips during the AM peak hour (68 entering, 188 exiting) and 311 new trips during the PM peak hour (198 entering, 113 exiting). The existing site generates 85 AM peak hour trips and 316 PM peak hour trips. The proposed development will generate significantly more trips in the AM peak hour than the existing site, but the PM peak hour trips will be approximately the same.

There are currently five site accesses, and the proposed development would close the Hill Street RIRO access on Blake Road. The northern RIRO on Blake Road will be relocated approximately 175 feet north of the existing access as part of the SWLRT station and Park & Ride construction. The other site access will remain the same as the existing site. The existing site accesses on Excelsior Boulevard are pivotal to the site. The RIRO on Excelsior Boulevard provides connectivity, it helps maintain a grid like roadway network on site, and increases the viability of retail on the corner of Excelsior Boulevard & Blake Road. With the redevelopment of the site, the remaining site accesses will no longer feed directly into parking lots, they will be urban roadways connecting throughout the site. This change will improve the flow of vehicles entering and exiting the site accesses.

A capacity analysis was performed for Existing (2020), Opening Year No-Build (2022), Opening Year Build (2022), Horizon Year (2030) No-Build, Horizon Year (2030) Build, and the Horizon Year (2030) Build + Outlot.

The operations at the study intersections in the Existing (2020) and Opening Year No-Build (2022) operate at LOS D or better in both the AM and PM peak hours except for Excelsior Boulevard & Pierce Avenue, which has significant delays on the side streets during the PM peak hour scenarios. However, there are not excessive side street queues.

In the Opening Year Build (2022) scenarios, the study intersections are anticipated to operate at LOS C or better in the AM & PM peak hours except for Excelsior Boulevard & Pierce Avenue which is anticipated to operate at LOS E in the AM peak hour and LOS F in the PM peak hour. With the excessive southbound delays at Excelsior Boulevard & Pierce Avenue, vehicles exiting the site may utilize different site accesses during the peak hours to minimize delay. The intersection should continue to be monitored as it may require mitigation. All other site accesses, including the RIRO site access on Excelsior Boulevard are anticipated to operate acceptably in the Opening Year Build (2022) scenarios. **It is assumed that a westbound right turn lane at Excelsior Boulevard & Pierce Avenue will be installed as part of Site As development.**

In the Horizon Year No-Build (2030) scenarios, the study intersections operate at LOS D or better in both the AM and PM peak hours except for Excelsior Boulevard & Pierce Avenue, which has significant delays on the side streets during the PM peak hour scenarios. **Excelsior Boulevard & Pierce Avenue will require mitigation as the delays are unacceptable without the proposed redevelopment**.

In the Horizon Year Build (2030) scenarios, the study intersections were analyzed without any mitigation as the projected trip generation for the site is similar to the existing site trip generation but with a different distribution pattern. The study intersections operate at LOS D or better in both the AM and PM peak hours except for Excelsior Boulevard & Pierce Avenue, which is projected to have significant delays on the side streets during the PM peak hour scenarios similar to the Horizon Year No-Build (2030) scenarios. All other site accesses, including the RIRO on Excelsior Boulevard are anticipated to operate acceptably in the Horizon Year Build (2030) scenarios. No change in access is required as a result of the full development build out.

Excelsior Boulevard & Pierce Avenue was then analyzed as a signalized intersection in the Horizon Year Build (2030) scenarios. The mitigated intersection is anticipated to operate at LOS C in both the AM & PM peak hours. All turn lane queues are anticipated to be within their storage capacity at the intersection. **It is recommended that a signal be installed at Excelsior Boulevard & Pierce Avenue by 2030**. Installing a signal could provide benefits to the development traffic as well as the transit lines that will use Pierce Avenue to access the bus stops near the Blake LRT station. However, the intersection should be monitored to determine if/when a signal is warranted.

The development of the outlot on the site is not anticipated to have a significant impact on traffic operations in the study area.

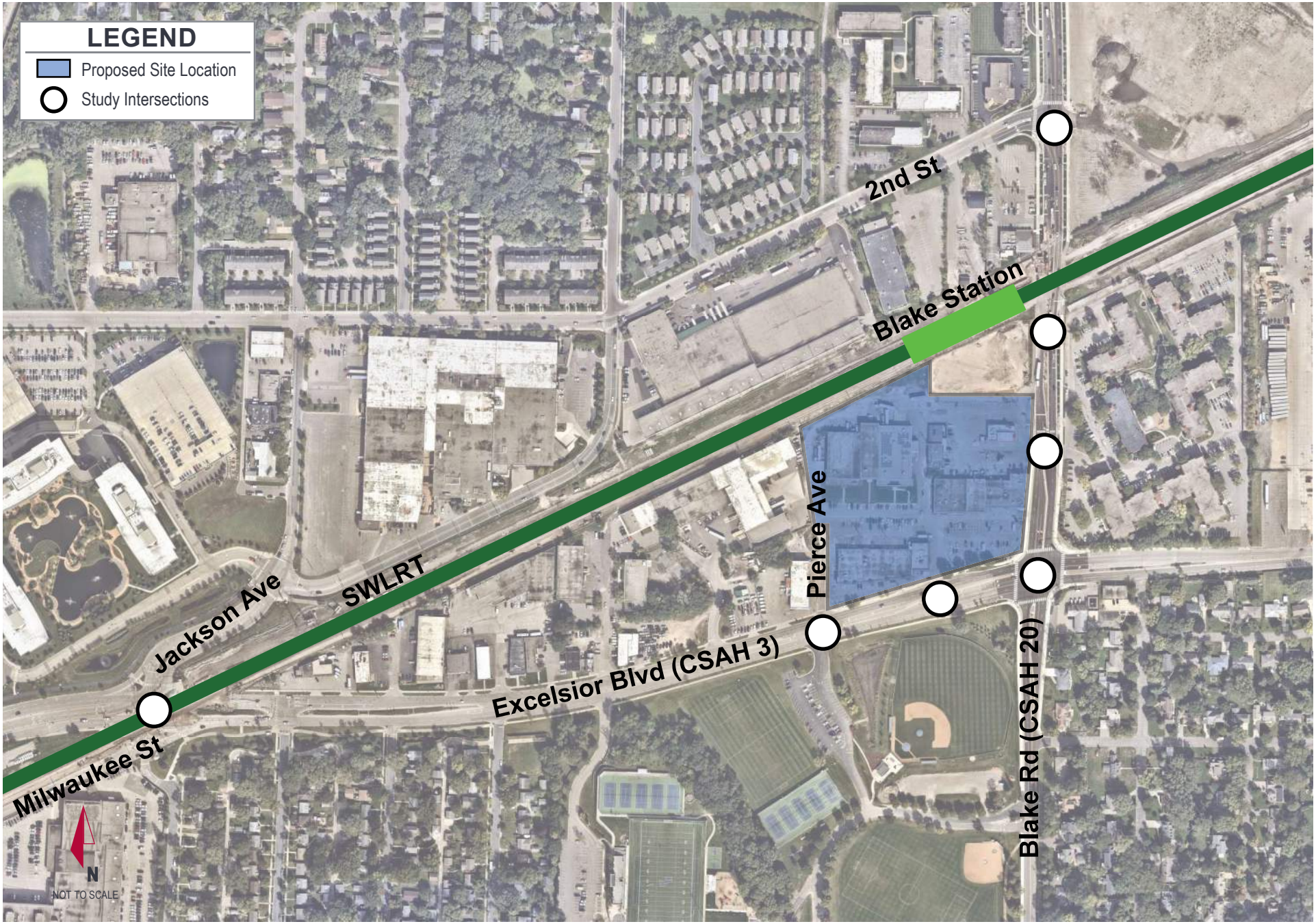
APPENDIX

A. Exhibits

B. Site Plan

C. Raw Turning Movement Counts

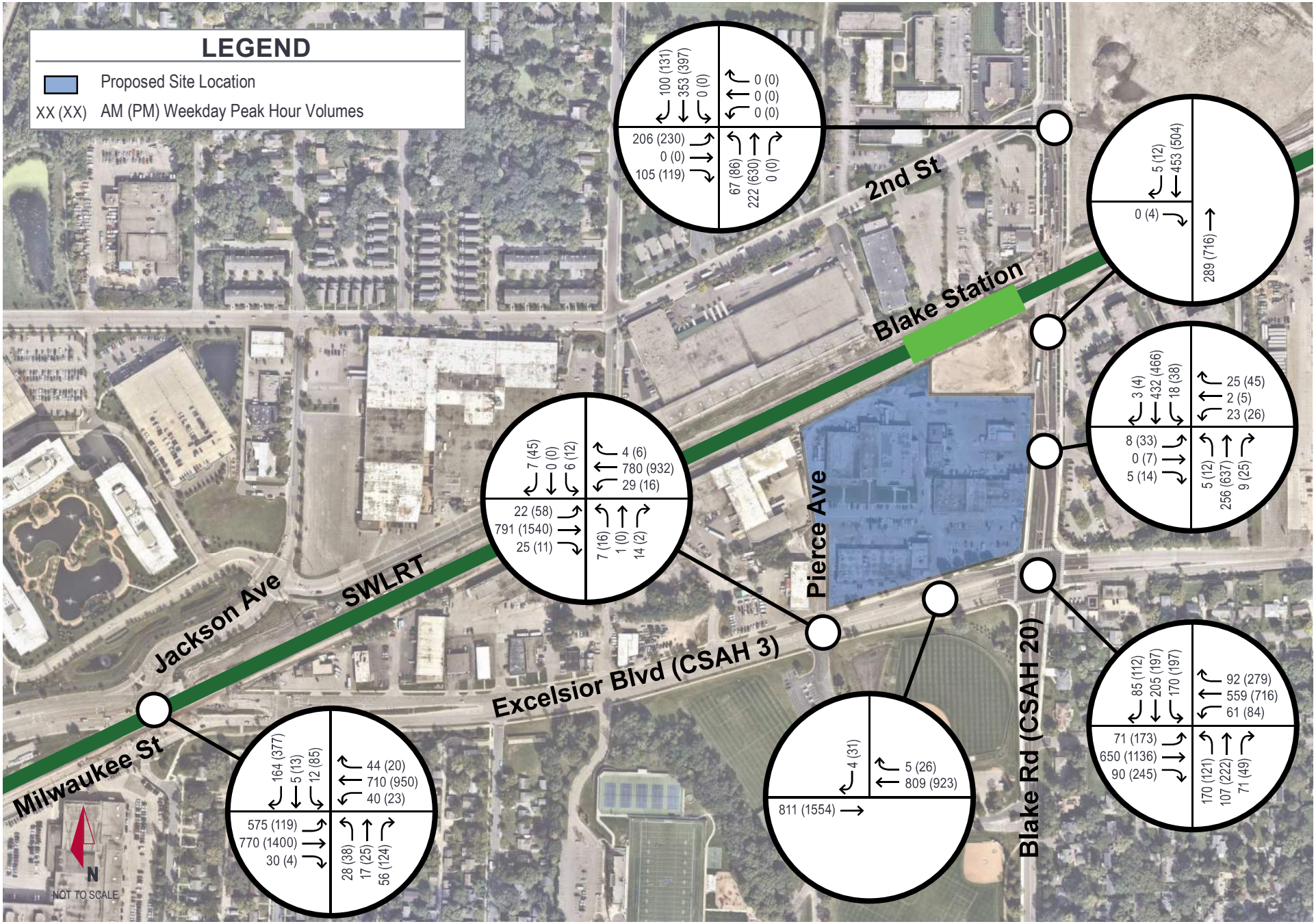
D. SimTraffic Analysis Results



Kimley»Horn

EXHIBIT 1

PROJECT SITE LOCATION AND STUDY AREA
BLAKE & EXCELSIOR REDEVELOPMENT



Kimley»Horn

EXHIBIT 2

EXISTING (2020) PEAK HOUR TRAFFIC VOLUMES
BLAKE & EXCELSIOR REDEVELOPMENT

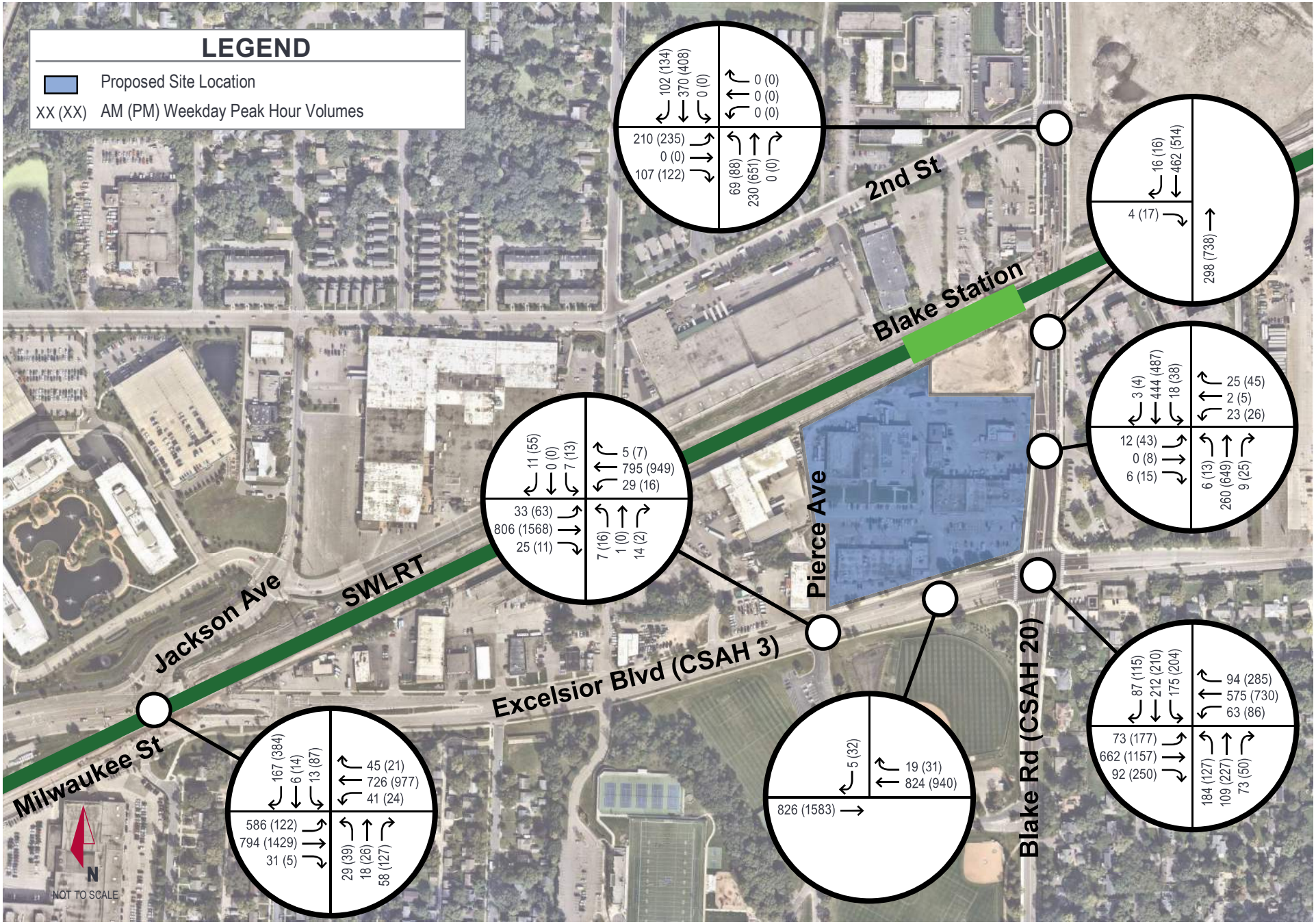


EXHIBIT 3

Kimley»Horn

OPENING YEAR NO-BUILD (2022) PEAK HOUR TRAFFIC VOLUMES
BLAKE & EXCELSIOR REDEVELOPMENT

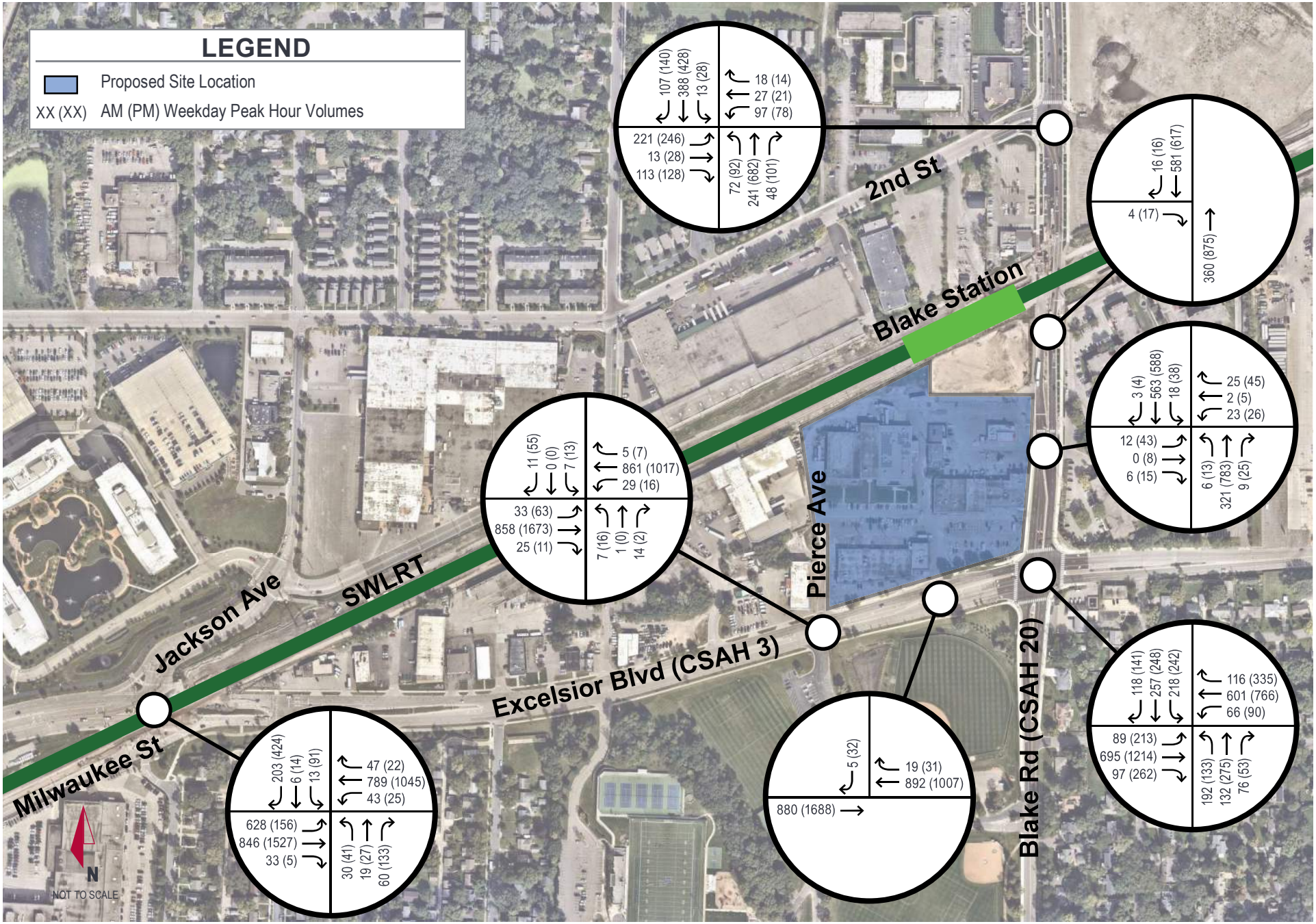
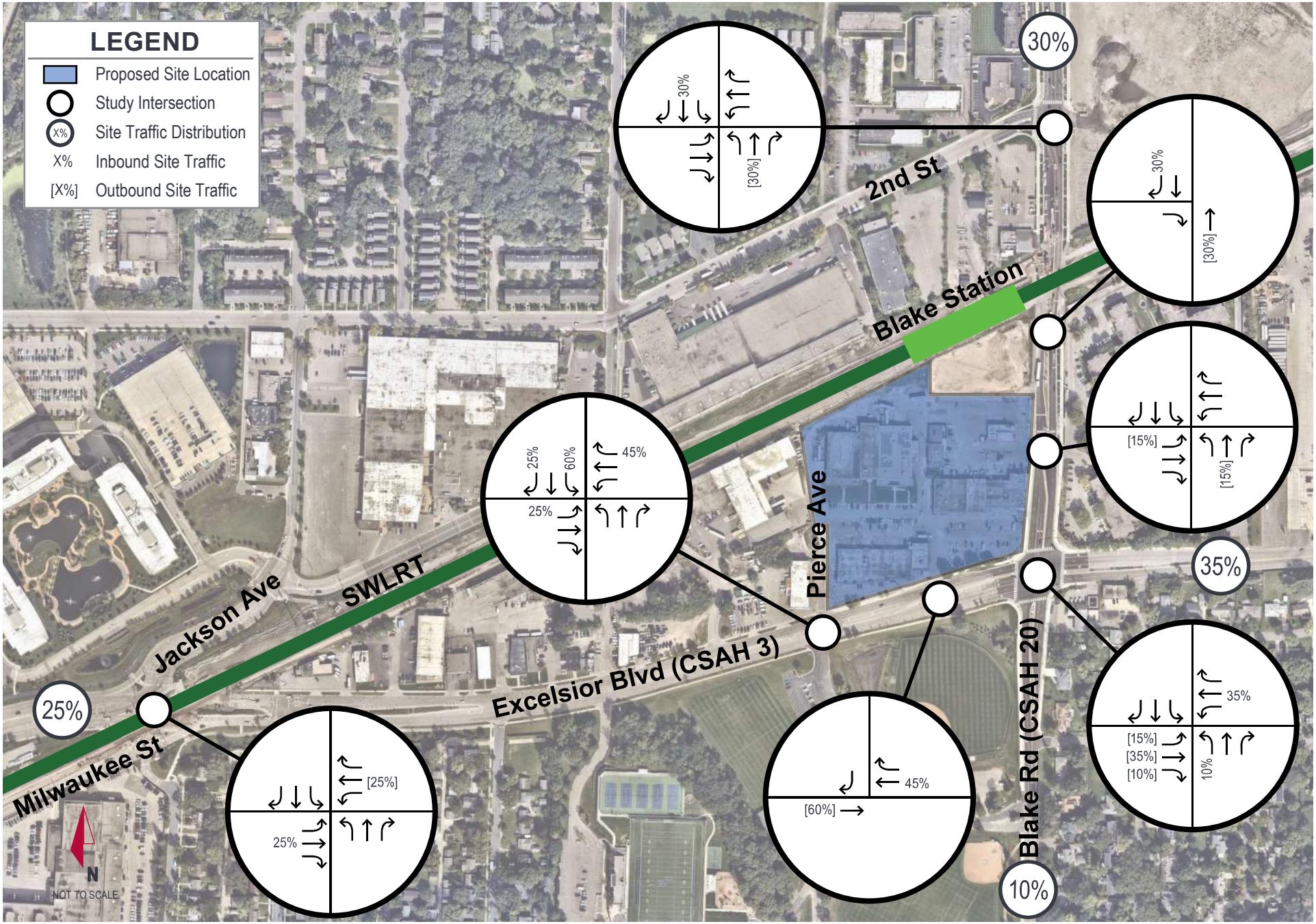


EXHIBIT 4

Kimley»Horn

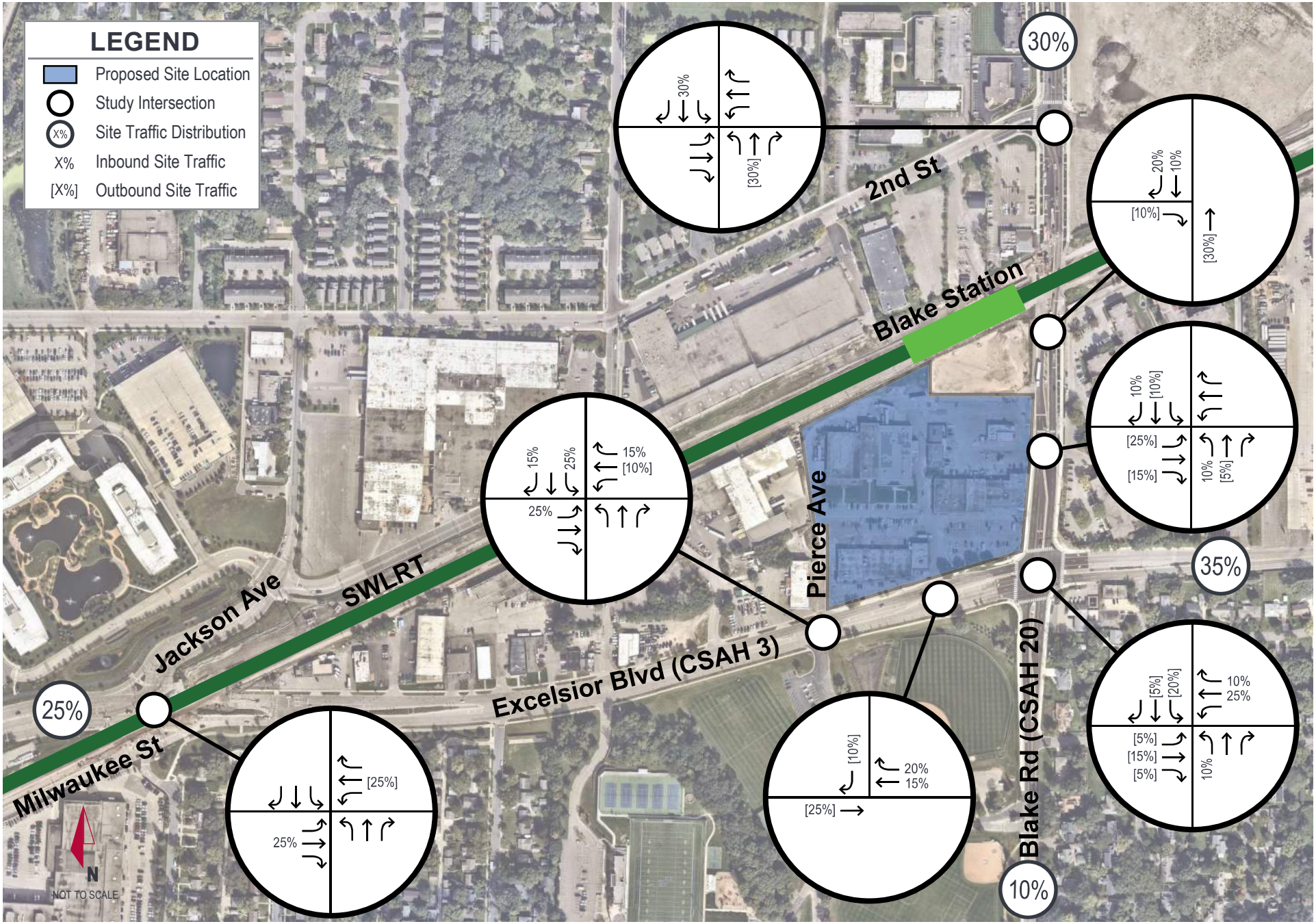
HORIZON YEAR NO-BUILD (2030) PEAK HOUR TRAFFIC VOLUMES
BLAKE & EXCELSIOR REDEVELOPMENT



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EXHIBIT 5

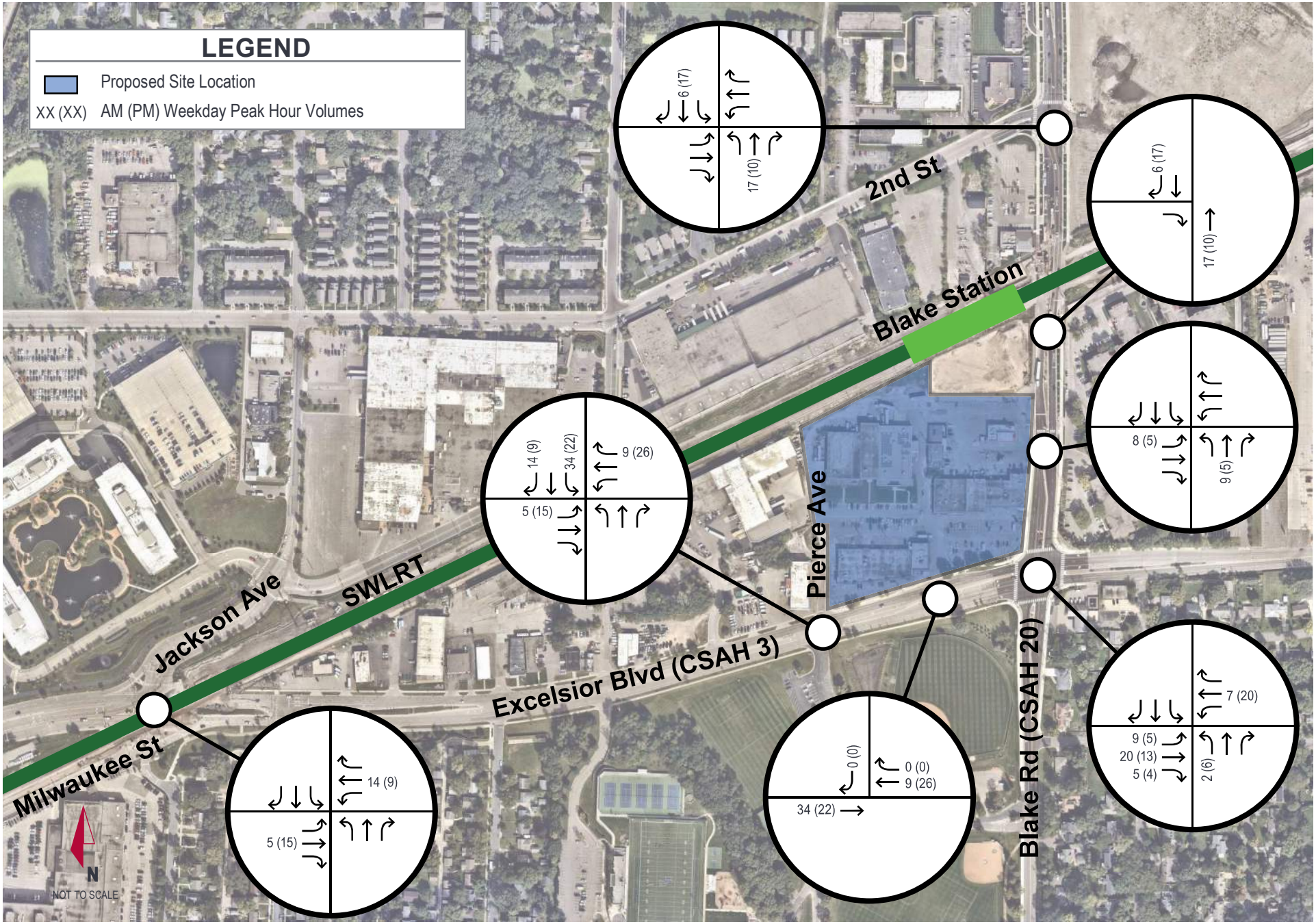
OPENING YEAR (2022) SITE TRIP DISTRIBUTION
BLAKE & EXCELSIOR REDEVELOPMENT



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EXHIBIT 6

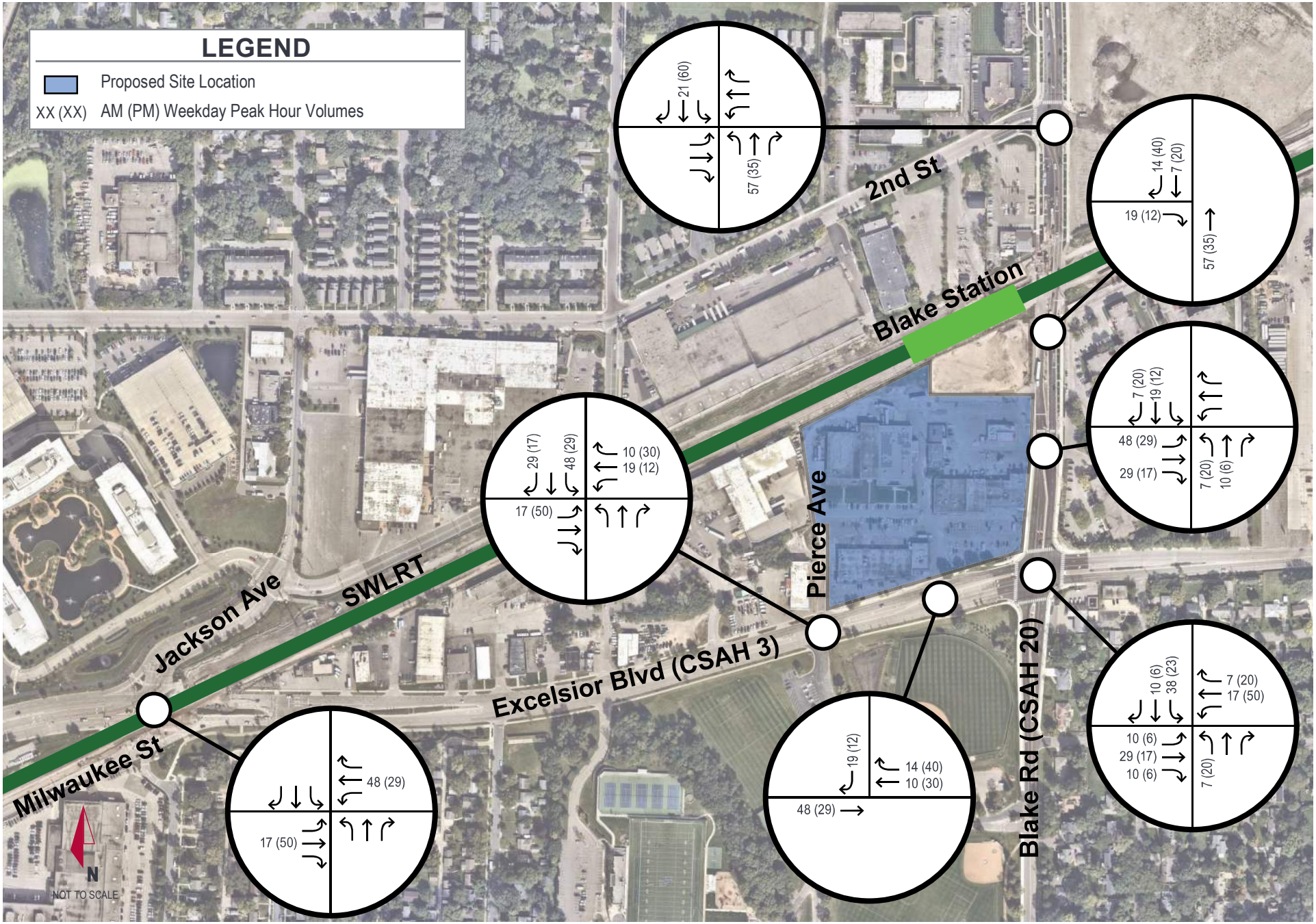
HORIZON YEAR (2030) SITE TRIP DISTRIBUTION
BLAKE & EXCELSIOR REDEVELOPMENT



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EXHIBIT 7

OPENING YEAR (2022) TRIP ASSIGNMENT
BLAKE & EXCELSIOR REDEVELOPMENT



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EXHIBIT 8

HORIZON YEAR BUILD (2030) TRIP ASSIGNMENT
BLAKE & EXCELSIOR REDEVELOPMENT

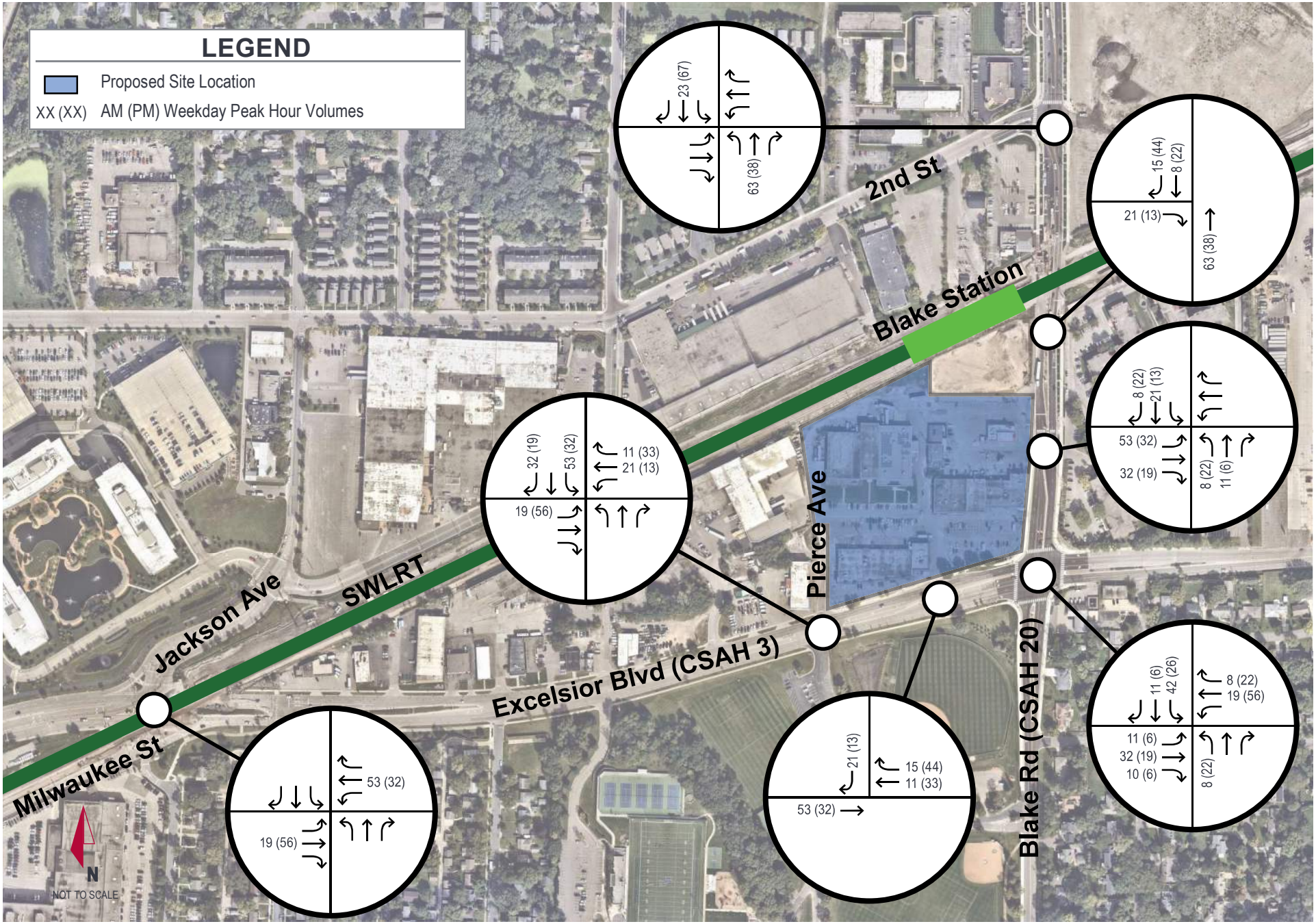


EXHIBIT 9

HORIZON YEAR BUILD + OUTLOT (2030) TRIP ASSIGNMENT
BLAKE & EXCELSIOR REDEVELOPMENT

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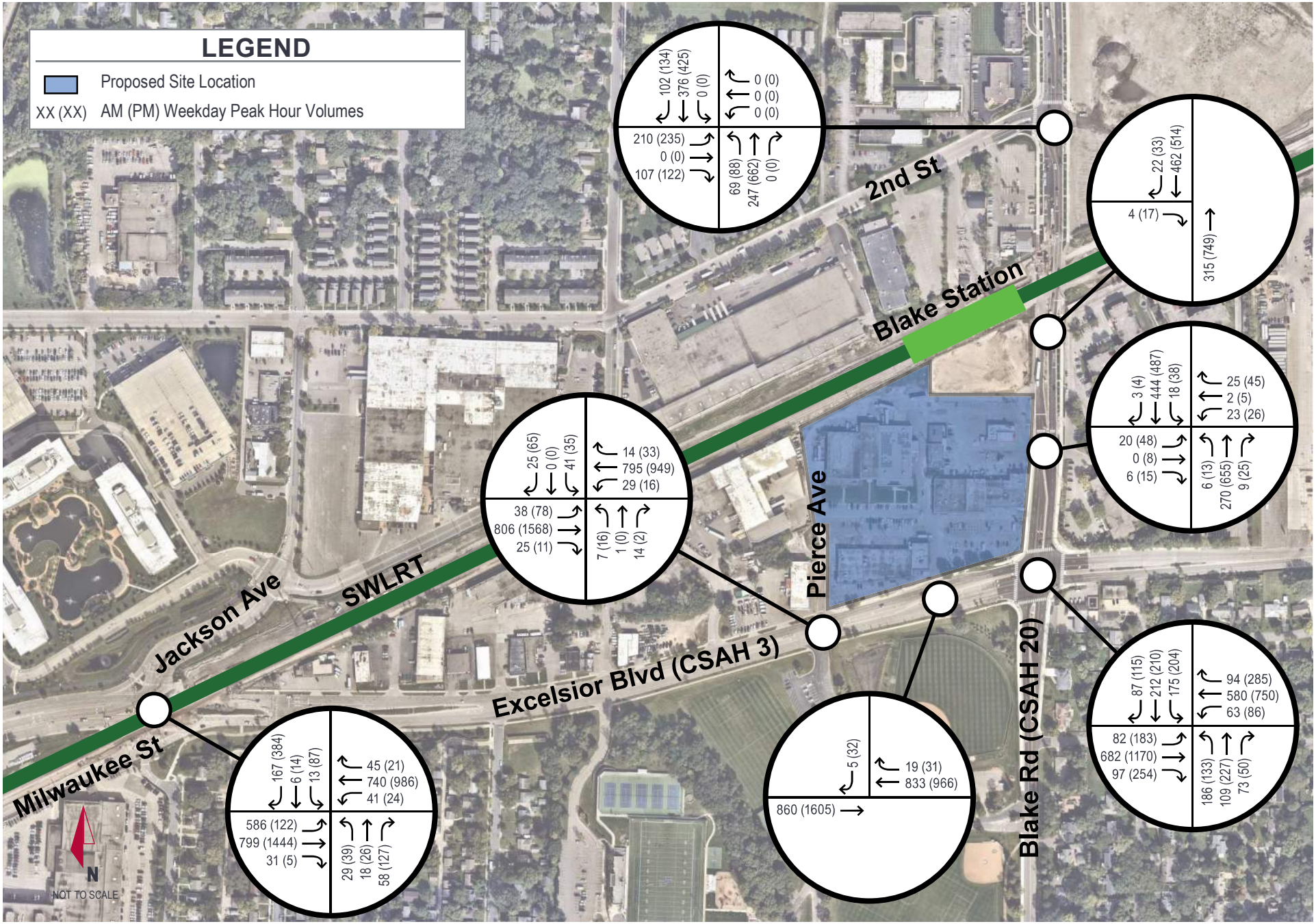


EXHIBIT 10

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OPENING YEAR BUILD (2022) PEAK HOUR TRAFFIC VOLUMES
BLAKE & EXCELSIOR REDEVELOPMENT

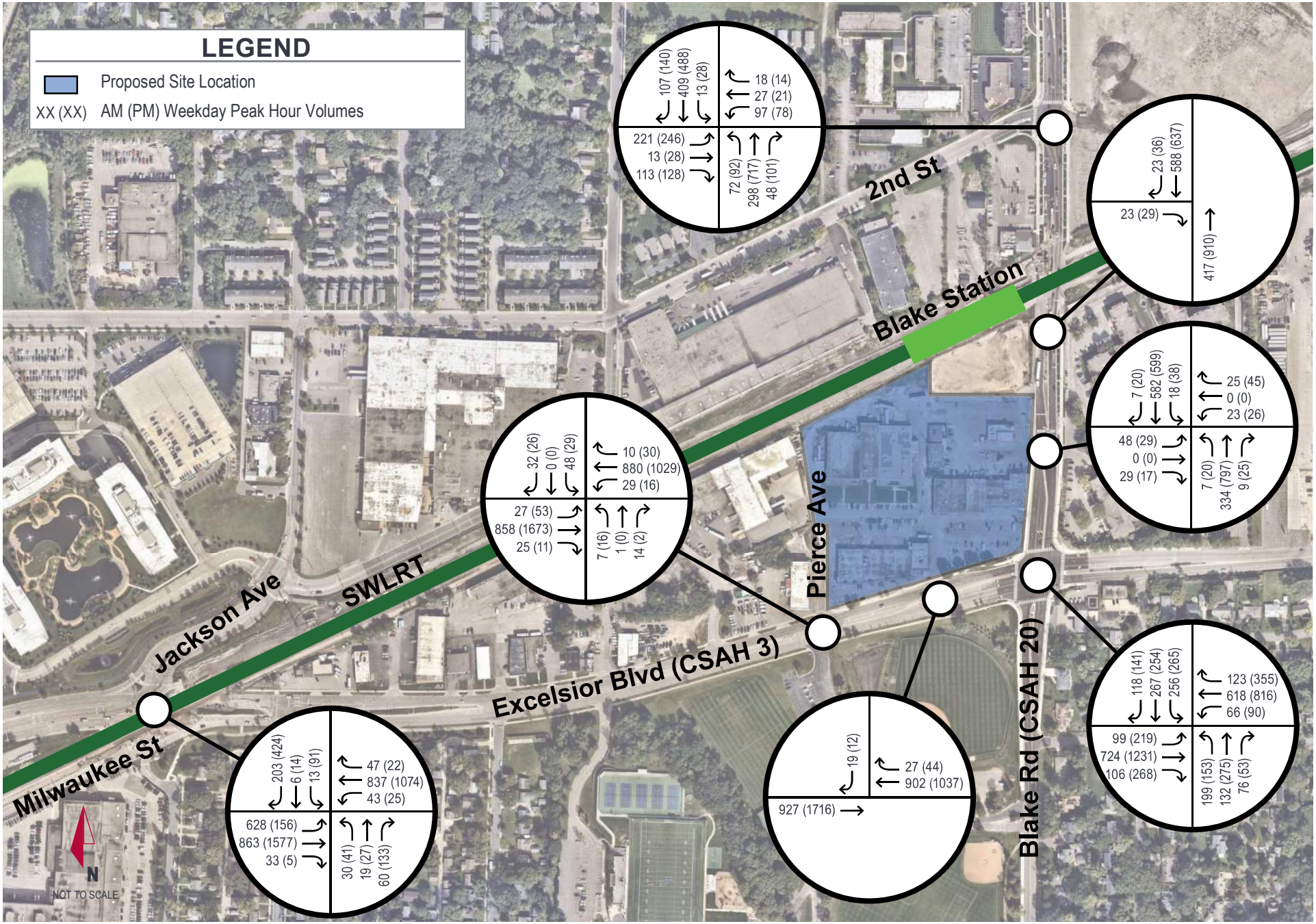


EXHIBIT 11

Kimley»Horn

HORIZON YEAR BUILD (2030) PEAK HOUR TRAFFIC VOLUMES
BLAKE & EXCELSIOR REDEVELOPMENT

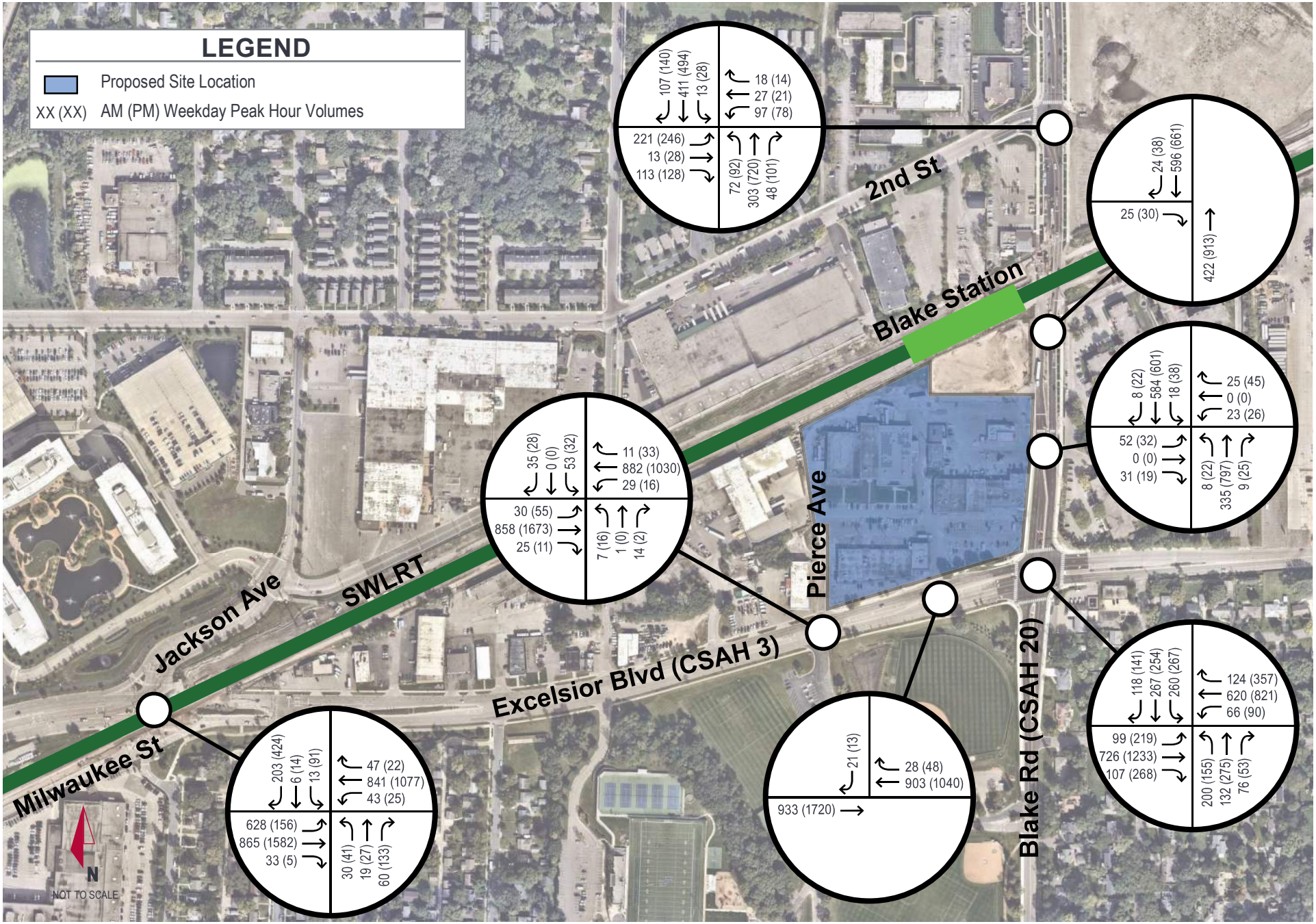
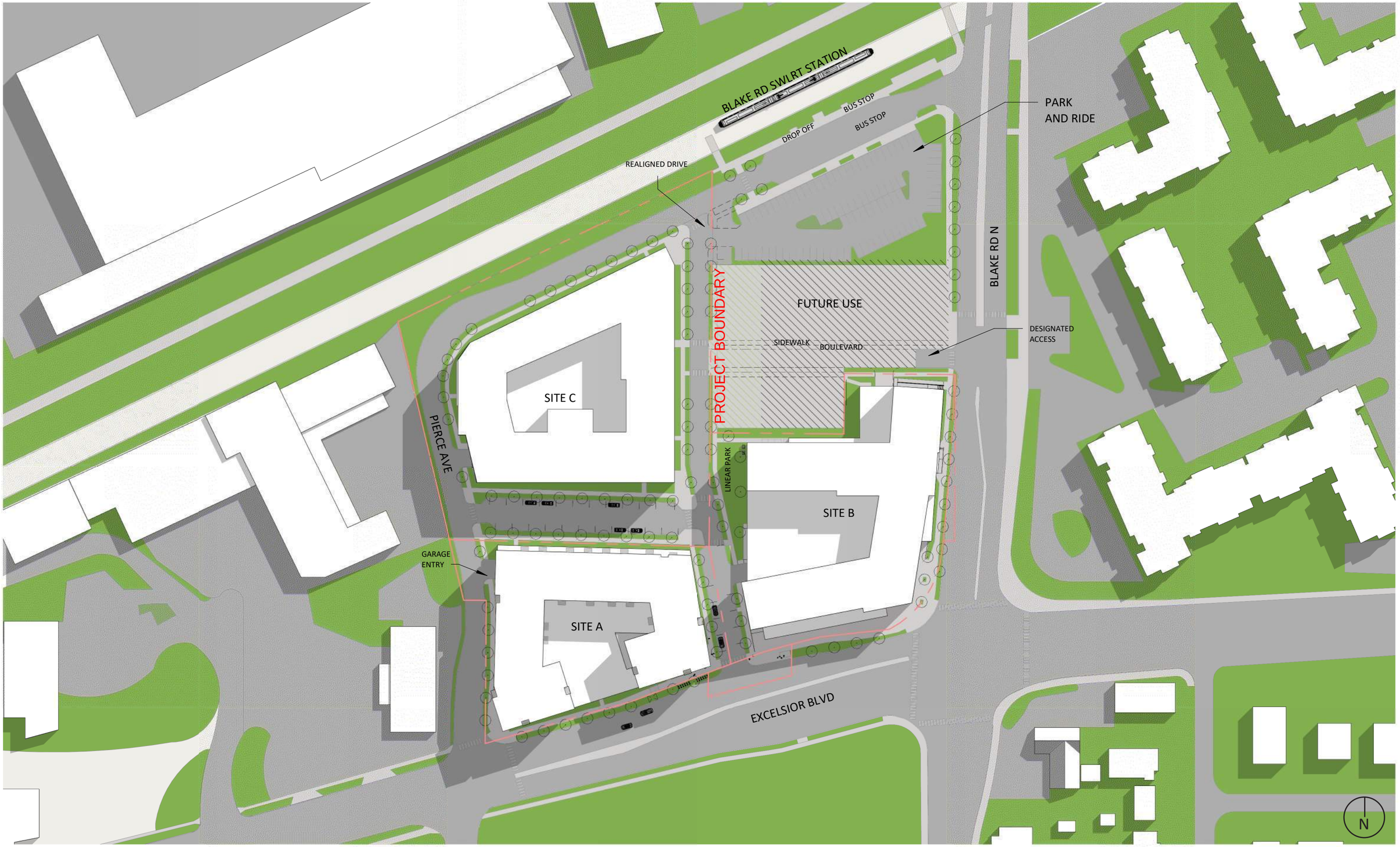


EXHIBIT 12

Kimley»Horn

HORIZON YEAR BUILD + OUTLOT (2030) PEAK HOUR TRAFFIC VOLUMES
BLAKE & EXCELSIOR REDEVELOPMENT



March 27, 2020

Scale 1 : 1400

esg TRILOGY REAL ESTATE GROUP

BLAKE ROAD STATION
Hopkins, MN

Master Plan

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 jack.olsson@kimley-horn.com

Count Name: 1_Excelsior Boulevard & Pierce Avenue
Site Code:
Start Date: 02/26/2020

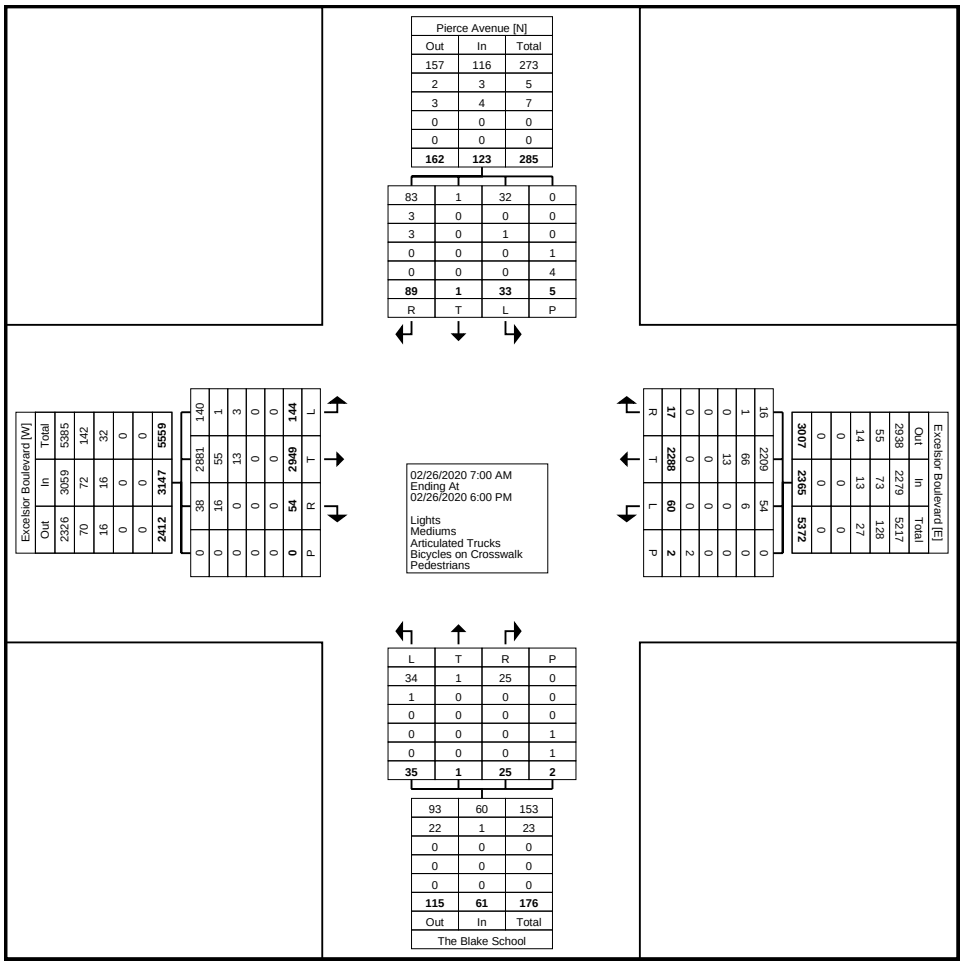
Turning Movement Data

Start Time	Excelsior Boulevard Westbound					Excelsior Boulevard Eastbound					Pierce Avenue Southbound					The Blake School Driveway Northbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	65	0	0	65	4	108	4	0	116	2	0	1	1	3	2	0	1	0	3	187
7:15 AM	2	108	0	0	110	3	131	3	0	137	0	0	3	0	3	1	0	0	1	1	251
7:30 AM	6	144	0	0	150	3	152	5	0	160	1	0	2	2	3	0	0	0	0	0	313
7:45 AM	10	185	2	0	197	5	159	3	0	167	1	0	0	0	1	0	0	1	0	1	366
Hourly Total	18	502	2	0	522	15	550	15	0	580	4	0	6	3	10	3	0	2	1	5	1117
8:00 AM	8	163	0	1	171	7	171	9	0	187	1	0	3	0	4	2	1	8	0	11	373
8:15 AM	5	164	2	0	171	7	172	8	0	187	3	0	2	0	5	5	0	5	0	10	373
8:30 AM	0	125	1	0	126	8	148	4	0	160	1	0	3	0	4	2	0	2	0	4	294
8:45 AM	0	116	0	0	116	10	114	1	0	125	0	0	3	0	3	3	0	0	0	3	247
Hourly Total	13	568	3	1	584	32	605	22	0	659	5	0	11	0	16	12	1	15	0	28	1287
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	4	173	3	0	180	8	192	2	0	202	4	0	7	0	11	2	0	2	0	4	397
4:15 PM	2	167	1	0	170	13	196	3	0	212	4	0	9	1	13	1	0	1	0	2	397
4:30 PM	4	158	2	0	164	15	257	1	0	273	5	0	7	0	12	3	0	0	0	3	452
4:45 PM	3	150	2	0	155	11	237	4	0	252	5	0	14	0	19	2	0	1	0	3	429
Hourly Total	13	648	8	0	669	47	882	10	0	939	18	0	37	1	55	8	0	4	0	12	1675
5:00 PM	3	143	0	0	146	20	272	3	0	295	2	0	16	0	18	2	0	1	0	3	462
5:15 PM	6	178	2	1	186	12	235	3	0	250	0	0	8	0	8	9	0	0	1	9	453
5:30 PM	3	131	1	0	135	8	236	0	0	244	4	1	8	0	13	1	0	0	0	1	393
5:45 PM	4	118	1	0	123	10	169	1	0	180	0	0	3	1	3	0	0	3	0	3	309
Hourly Total	16	570	4	1	590	50	912	7	0	969	6	1	35	1	42	12	0	4	1	16	1617
Grand Total	60	2288	17	2	2365	144	2949	54	0	3147	33	1	89	5	123	35	1	25	2	61	5696
Approach %	2.5	96.7	0.7	-	-	4.6	93.7	1.7	-	-	26.8	0.8	72.4	-	-	57.4	1.6	41.0	-	-	-
Total %	1.1	40.2	0.3	-	41.5	2.5	51.8	0.9	-	55.2	0.6	0.0	1.6	-	2.2	0.6	0.0	0.4	-	1.1	-
Lights	54	2209	16	-	2279	140	2881	38	-	3059	32	1	83	-	116	34	1	25	-	60	5514
% Lights	90.0	96.5	94.1	-	96.4	97.2	97.7	70.4	-	97.2	97.0	100.0	93.3	-	94.3	97.1	100.0	100.0	-	98.4	96.8
Mediums	6	66	1	-	73	1	55	16	-	72	0	0	3	-	3	1	0	0	-	1	149
% Mediums	10.0	2.9	5.9	-	3.1	0.7	1.9	29.6	-	2.3	0.0	0.0	3.4	-	2.4	2.9	0.0	0.0	-	1.6	2.6
Articulated Trucks	0	13	0	-	13	3	13	0	-	16	1	0	3	-	4	0	0	0	-	0	33
% Articulated Trucks	0.0	0.6	0.0	-	0.5	2.1	0.4	0.0	-	0.5	3.0	0.0	3.4	-	3.3	0.0	0.0	0.0	-	0.0	0.6
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	-	-	-	-	-	20.0	-	-	-	-	50.0	-	-
Pedestrians	-	-	-	2	-	-	-	-	0	-	-	-	-	4	-	-	-	-	1	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	80.0	-	-	-	-	50.0	-	-

Kimley-Horn : Lisle (IL)
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Count Name: 1_Excelsior Boulevard & Pierce Avenue
Site Code:
Start Date: 02/26/2020



Turning Movement Data Plot

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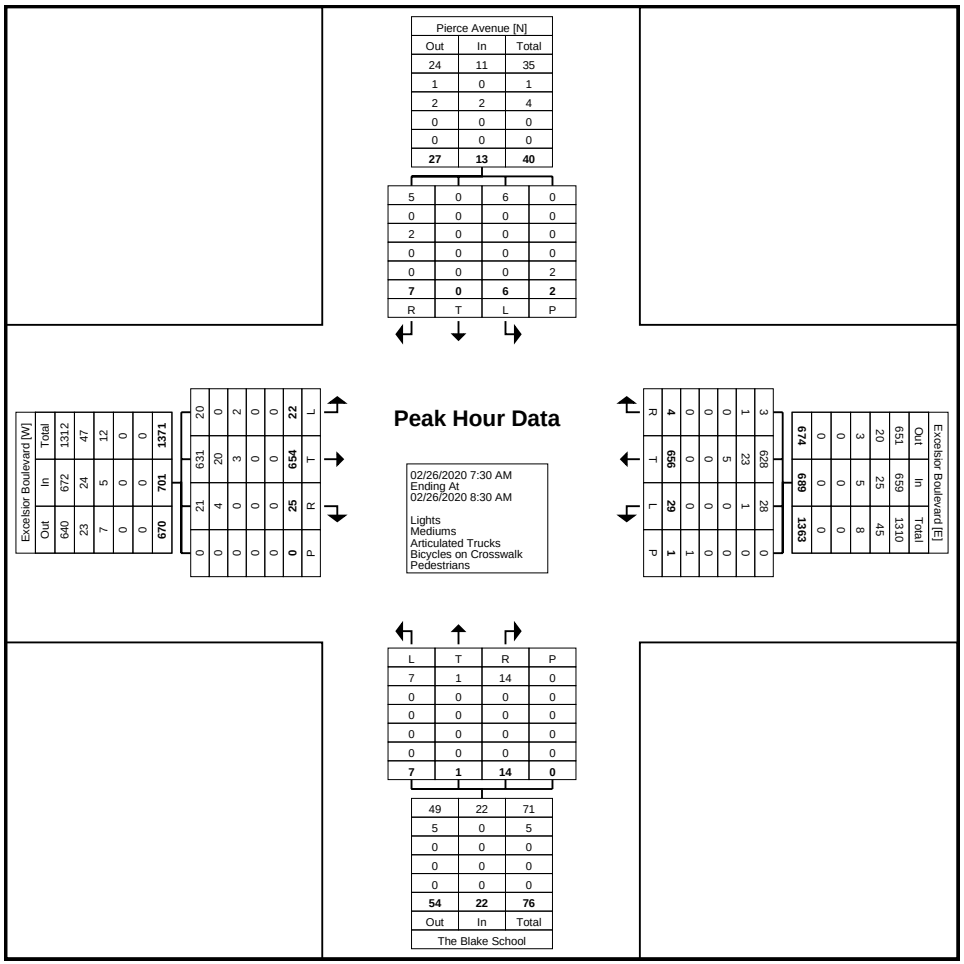
Turning Movement Peak Hour Data (7:30 AM)

Start Time	Excelsior Boulevard Westbound					Excelsior Boulevard Eastbound					Pierce Avenue Southbound					The Blake School Driveway Northbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
7:30 AM	6	144	0	0	150	3	152	5	0	160	1	0	2	2	3	0	0	0	0	0	313
7:45 AM	10	185	2	0	197	5	159	3	0	167	1	0	0	0	1	0	0	1	0	1	366
8:00 AM	8	163	0	1	171	7	171	9	0	187	1	0	3	0	4	2	1	8	0	11	373
8:15 AM	5	164	2	0	171	7	172	8	0	187	3	0	2	0	5	5	0	5	0	10	373
Total	29	656	4	1	689	22	654	25	0	701	6	0	7	2	13	7	1	14	0	22	1425
Approach %	4.2	95.2	0.6	-	-	3.1	93.3	3.6	-	-	46.2	0.0	53.8	-	-	31.8	4.5	63.6	-	-	-
Total %	2.0	46.0	0.3	-	48.4	1.5	45.9	1.8	-	49.2	0.4	0.0	0.5	-	0.9	0.5	0.1	1.0	-	1.5	-
PHF	0.725	0.886	0.500	-	0.874	0.786	0.951	0.694	-	0.937	0.500	0.000	0.583	-	0.650	0.350	0.250	0.438	-	0.500	0.955
Lights	28	628	3	-	659	20	631	21	-	672	6	0	5	-	11	7	1	14	-	22	1364
% Lights	96.6	95.7	75.0	-	95.6	90.9	96.5	84.0	-	95.9	100.0	-	71.4	-	84.6	100.0	100.0	100.0	-	100.0	95.7
Mediums	1	23	1	-	25	0	20	4	-	24	0	0	0	-	0	0	0	0	-	0	49
% Mediums	3.4	3.5	25.0	-	3.6	0.0	3.1	16.0	-	3.4	0.0	-	0.0	-	0.0	0.0	0.0	0.0	-	0.0	3.4
Articulated Trucks	0	5	0	-	5	2	3	0	-	5	0	0	2	-	2	0	0	0	-	0	12
% Articulated Trucks	0.0	0.8	0.0	-	0.7	9.1	0.5	0.0	-	0.7	0.0	-	28.6	-	15.4	0.0	0.0	0.0	-	0.0	0.8
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	2	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-

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Count Name: 1_Excelsior Boulevard & Pierce Avenue
Site Code:
Start Date: 02/26/2020



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

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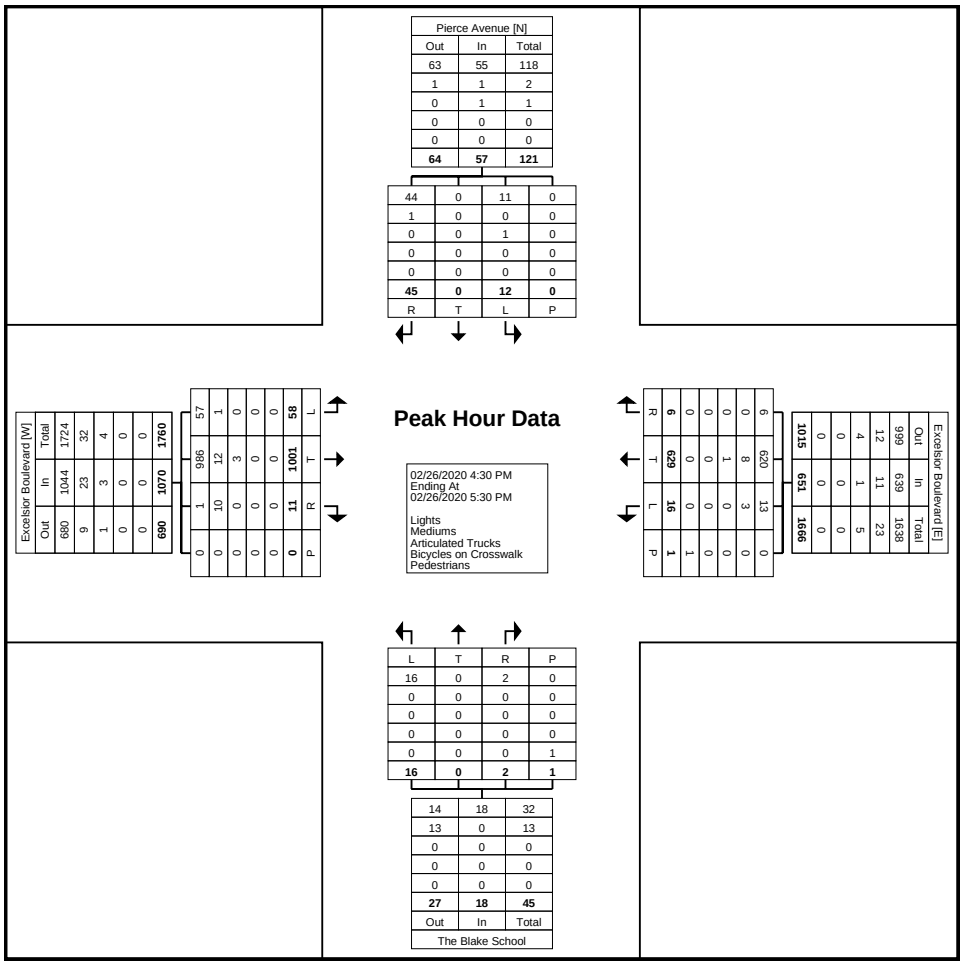
Turning Movement Peak Hour Data (4:30 PM)

Start Time	Excelsior Boulevard Westbound					Excelsior Boulevard Eastbound					Pierce Avenue Southbound					The Blake School Driveway Northbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
4:30 PM	4	158	2	0	164	15	257	1	0	273	5	0	7	0	12	3	0	0	0	3	452
4:45 PM	3	150	2	0	155	11	237	4	0	252	5	0	14	0	19	2	0	1	0	3	429
5:00 PM	3	143	0	0	146	20	272	3	0	295	2	0	16	0	18	2	0	1	0	3	462
5:15 PM	6	178	2	1	186	12	235	3	0	250	0	0	8	0	8	9	0	0	1	9	453
Total	16	629	6	1	651	58	1001	11	0	1070	12	0	45	0	57	16	0	2	1	18	1796
Approach %	2.5	96.6	0.9	-	-	5.4	93.6	1.0	-	-	21.1	0.0	78.9	-	-	88.9	0.0	11.1	-	-	-
Total %	0.9	35.0	0.3	-	36.2	3.2	55.7	0.6	-	59.6	0.7	0.0	2.5	-	3.2	0.9	0.0	0.1	-	1.0	-
PHF	0.667	0.883	0.750	-	0.875	0.725	0.920	0.688	-	0.907	0.600	0.000	0.703	-	0.750	0.444	0.000	0.500	-	0.500	0.972
Lights	13	620	6	-	639	57	986	1	-	1044	11	0	44	-	55	16	0	2	-	18	1756
% Lights	81.3	98.6	100.0	-	98.2	98.3	98.5	9.1	-	97.6	91.7	-	97.8	-	96.5	100.0	-	100.0	-	100.0	97.8
Mediums	3	8	0	-	11	1	12	10	-	23	0	0	1	-	1	0	0	0	-	0	35
% Mediums	18.8	1.3	0.0	-	1.7	1.7	1.2	90.9	-	2.1	0.0	-	2.2	-	1.8	0.0	-	0.0	-	0.0	1.9
Articulated Trucks	0	1	0	-	1	0	3	0	-	3	1	0	0	-	1	0	0	0	-	0	5
% Articulated Trucks	0.0	0.2	0.0	-	0.2	0.0	0.3	0.0	-	0.3	8.3	-	0.0	-	1.8	0.0	-	0.0	-	0.0	0.3
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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Count Name: 1_Excelsior Boulevard & Pierce Avenue
Site Code:
Start Date: 02/26/2020



Turning Movement Peak Hour Data Plot (4:30 PM)

Kimley-Horn : Lisle (IL)
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Count Name: 2_Excelsior Boulevard & RIRO Site Driveway
Site Code:
Start Date: 02/26/2020

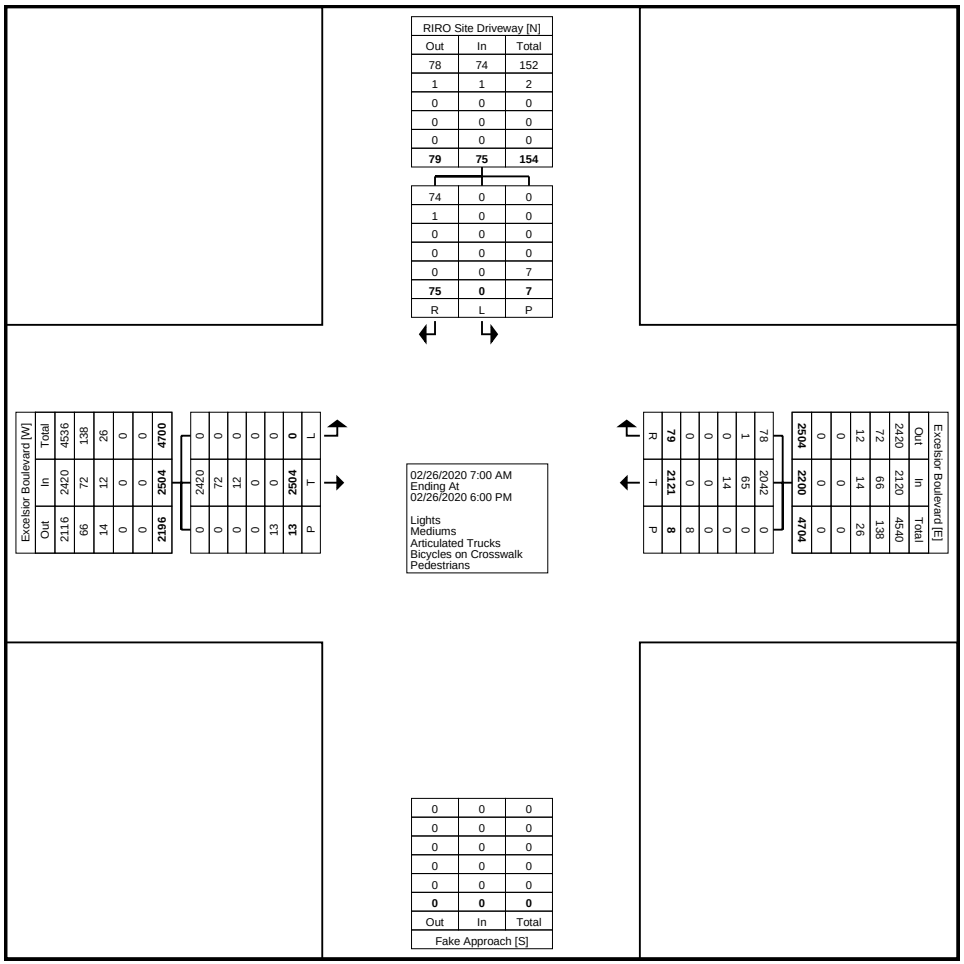
Turning Movement Data

Start Time	Excelsior Boulevard Westbound				Excelsior Boulevard Eastbound				RIRO Site Driveway Southbound				Int. Total
	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	
7:00 AM	39	2	0	41	0	42	0	42	0	2	1	2	85
7:15 AM	43	2	0	45	0	78	0	78	0	1	0	1	124
7:30 AM	43	1	0	44	0	83	1	83	0	2	1	2	129
7:45 AM	80	0	0	80	0	89	0	89	0	1	1	1	170
Hourly Total	205	5	0	210	0	292	1	292	0	6	3	6	508
8:00 AM	69	2	2	71	0	108	2	108	0	0	1	0	179
8:15 AM	108	2	0	110	0	134	0	134	0	1	0	1	245
8:30 AM	154	2	1	156	0	146	1	146	0	0	1	0	302
8:45 AM	195	0	0	195	0	163	0	163	0	1	0	1	359
Hourly Total	526	6	3	532	0	551	3	551	0	2	2	2	1085
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	186	5	1	191	0	124	4	124	0	9	0	9	324
4:15 PM	208	12	1	220	0	138	3	138	0	10	0	10	368
4:30 PM	183	5	1	188	0	270	1	270	0	9	0	9	467
4:45 PM	160	5	0	165	0	191	0	191	0	8	0	8	364
Hourly Total	737	27	3	764	0	723	8	723	0	36	0	36	1523
5:00 PM	179	10	0	189	0	198	0	198	0	8	0	8	395
5:15 PM	158	6	1	164	0	213	0	213	0	6	0	6	383
5:30 PM	160	16	1	176	0	266	1	266	0	12	0	12	454
5:45 PM	156	9	0	165	0	261	0	261	0	5	2	5	431
Hourly Total	653	41	2	694	0	938	1	938	0	31	2	31	1663
Grand Total	2121	79	8	2200	0	2504	13	2504	0	75	7	75	4779
Approach %	96.4	3.6	-	-	0.0	100.0	-	-	0.0	100.0	-	-	-
Total %	44.4	1.7	-	46.0	0.0	52.4	-	52.4	0.0	1.6	-	1.6	-
Lights	2042	78	-	2120	0	2420	-	2420	0	74	-	74	4614
% Lights	96.3	98.7	-	96.4	-	96.6	-	96.6	-	98.7	-	98.7	96.5
Mediums	65	1	-	66	0	72	-	72	0	1	-	1	139
% Mediums	3.1	1.3	-	3.0	-	2.9	-	2.9	-	1.3	-	1.3	2.9
Articulated Trucks	14	0	-	14	0	12	-	12	0	0	-	0	26
% Articulated Trucks	0.7	0.0	-	0.6	-	0.5	-	0.5	-	0.0	-	0.0	0.5
Bicycles on Crosswalk	-	-	0	-	-	-	0	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	0.0	-	-	-	0.0	-	-	-	0.0	-	-
Pedestrians	-	-	8	-	-	-	13	-	-	-	7	-	-
% Pedestrians	-	-	100.0	-	-	-	100.0	-	-	-	100.0	-	-

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Count Name: 2_Excelsior Boulevard & RIRO Site Driveway
Site Code:
Start Date: 02/26/2020
Page No: 2



Turning Movement Data Plot

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Count Name: 2_Excelsior Boulevard & RIRO Site Driveway
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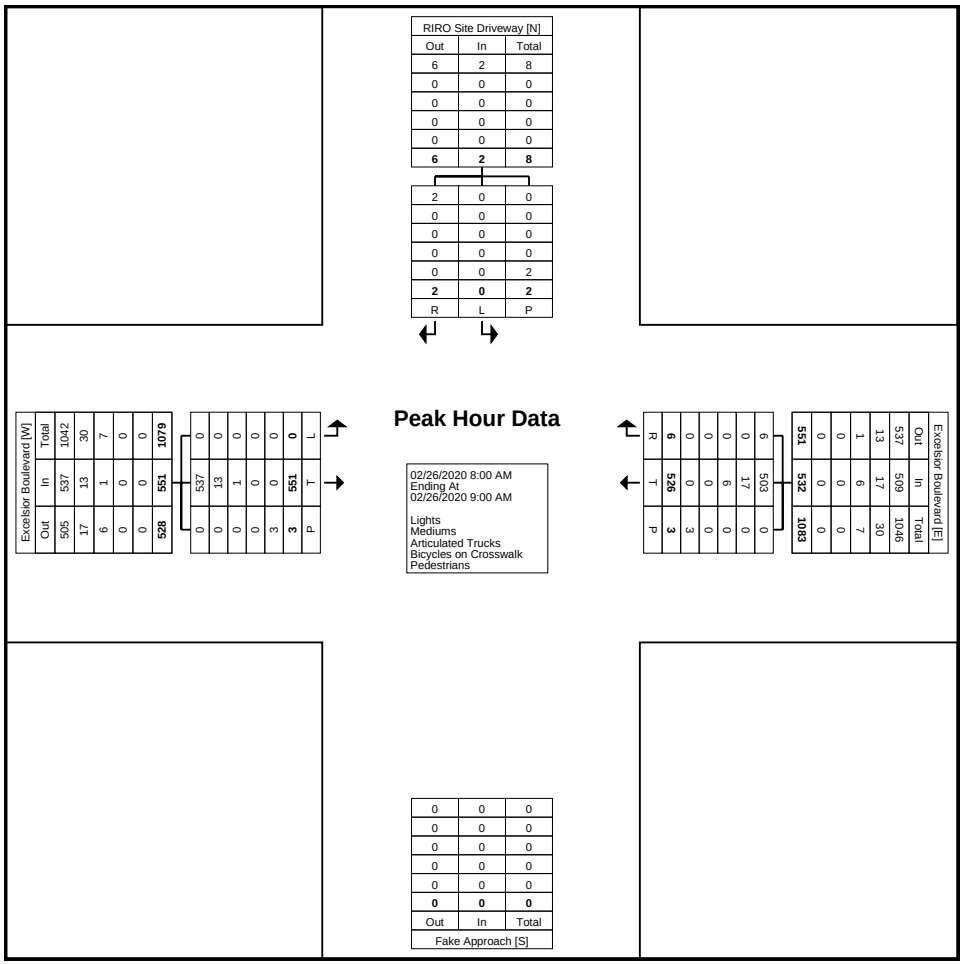
Turning Movement Peak Hour Data (8:00 AM)

Start Time	Excelsior Boulevard Westbound				Excelsior Boulevard Eastbound				RIRO Site Driveway Southbound				Int. Total
	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	
8:00 AM	69	2	2	71	0	108	2	108	0	0	1	0	179
8:15 AM	108	2	0	110	0	134	0	134	0	1	0	1	245
8:30 AM	154	2	1	156	0	146	1	146	0	0	1	0	302
8:45 AM	195	0	0	195	0	163	0	163	0	1	0	1	359
Total	526	6	3	532	0	551	3	551	0	2	2	2	1085
Approach %	98.9	1.1	-	-	0.0	100.0	-	-	0.0	100.0	-	-	-
Total %	48.5	0.6	-	49.0	0.0	50.8	-	50.8	0.0	0.2	-	0.2	-
PHF	0.674	0.750	-	0.682	0.000	0.845	-	0.845	0.000	0.500	-	0.500	0.756
Lights	503	6	-	509	0	537	-	537	0	2	-	2	1048
% Lights	95.6	100.0	-	95.7	-	97.5	-	97.5	-	100.0	-	100.0	96.6
Mediums	17	0	-	17	0	13	-	13	0	0	-	0	30
% Mediums	3.2	0.0	-	3.2	-	2.4	-	2.4	-	0.0	-	0.0	2.8
Articulated Trucks	6	0	-	6	0	1	-	1	0	0	-	0	7
% Articulated Trucks	1.1	0.0	-	1.1	-	0.2	-	0.2	-	0.0	-	0.0	0.6
Bicycles on Crosswalk	-	-	0	-	-	-	0	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	0.0	-	-	-	0.0	-	-	-	0.0	-	-
Pedestrians	-	-	3	-	-	-	3	-	-	-	2	-	-
% Pedestrians	-	-	100.0	-	-	-	100.0	-	-	-	100.0	-	-

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Count Name: 2_Excelsior Boulevard & RIRO
Site Driveway
Site Code:
Start Date: 02/26/2020



Turning Movement Peak Hour Data Plot (8:00 AM)

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Count Name: 2_Excelsior Boulevard & RIRO Site Driveway
Site Code:
Start Date: 02/26/2020

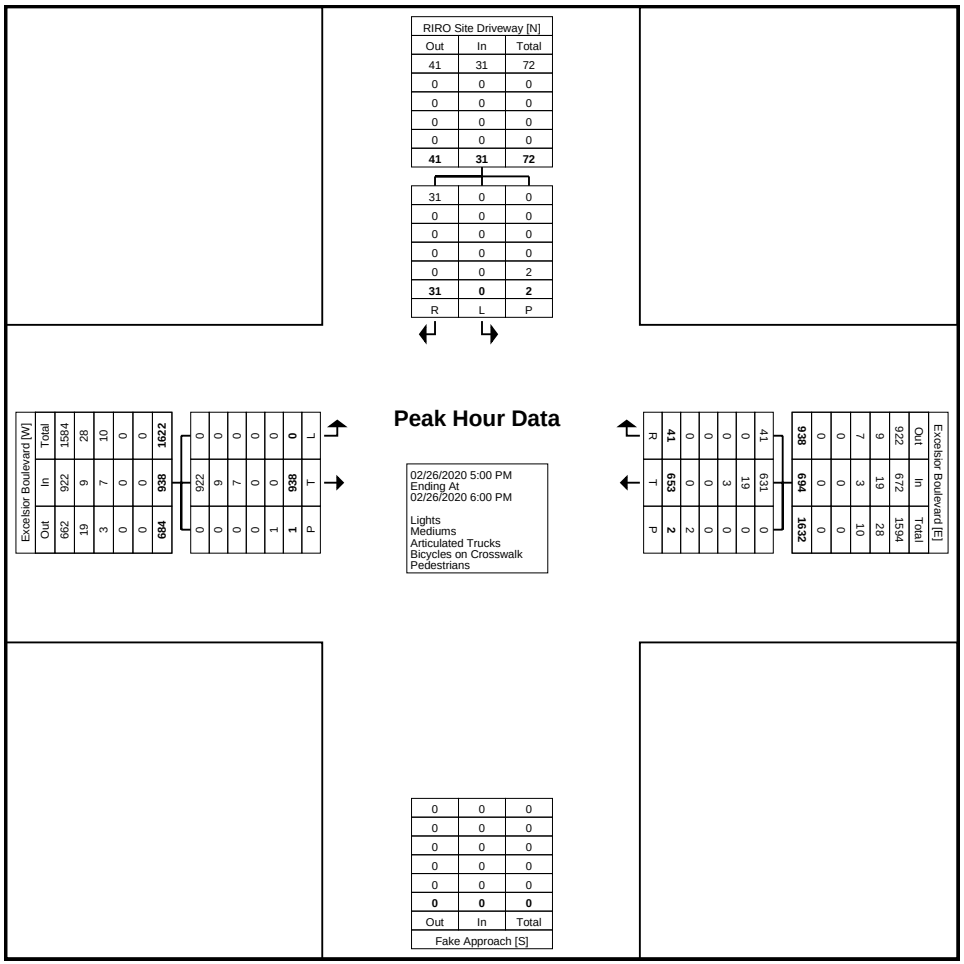
Turning Movement Peak Hour Data (5:00 PM)

Start Time	Excelsior Boulevard Westbound				Excelsior Boulevard Eastbound				RIRO Site Driveway Southbound				Int. Total
	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	
5:00 PM	179	10	0	189	0	198	0	198	0	8	0	8	395
5:15 PM	158	6	1	164	0	213	0	213	0	6	0	6	383
5:30 PM	160	16	1	176	0	266	1	266	0	12	0	12	454
5:45 PM	156	9	0	165	0	261	0	261	0	5	2	5	431
Total	653	41	2	694	0	938	1	938	0	31	2	31	1663
Approach %	94.1	5.9	-	-	0.0	100.0	-	-	0.0	100.0	-	-	-
Total %	39.3	2.5	-	41.7	0.0	56.4	-	56.4	0.0	1.9	-	1.9	-
PHF	0.912	0.641	-	0.918	0.000	0.882	-	0.882	0.000	0.646	-	0.646	0.916
Lights	631	41	-	672	0	922	-	922	0	31	-	31	1625
% Lights	96.6	100.0	-	96.8	-	98.3	-	98.3	-	100.0	-	100.0	97.7
Mediums	19	0	-	19	0	9	-	9	0	0	-	0	28
% Mediums	2.9	0.0	-	2.7	-	1.0	-	1.0	-	0.0	-	0.0	1.7
Articulated Trucks	3	0	-	3	0	7	-	7	0	0	-	0	10
% Articulated Trucks	0.5	0.0	-	0.4	-	0.7	-	0.7	-	0.0	-	0.0	0.6
Bicycles on Crosswalk	-	-	0	-	-	-	0	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	0.0	-	-	-	0.0	-	-	-	0.0	-	-
Pedestrians	-	-	2	-	-	-	1	-	-	-	2	-	-
% Pedestrians	-	-	100.0	-	-	-	100.0	-	-	-	100.0	-	-

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Count Name: 2_Excelsior Boulevard & RIRO Site Driveway
Site Code:
Start Date: 02/26/2020



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

Kimley-Horn : Lisle (IL)
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331.481.7332 jack.olsson@kimley-horn.com

Count Name: 3_Blake Road & Excelsior Boulevard
Site Code:
Start Date: 03/10/2020

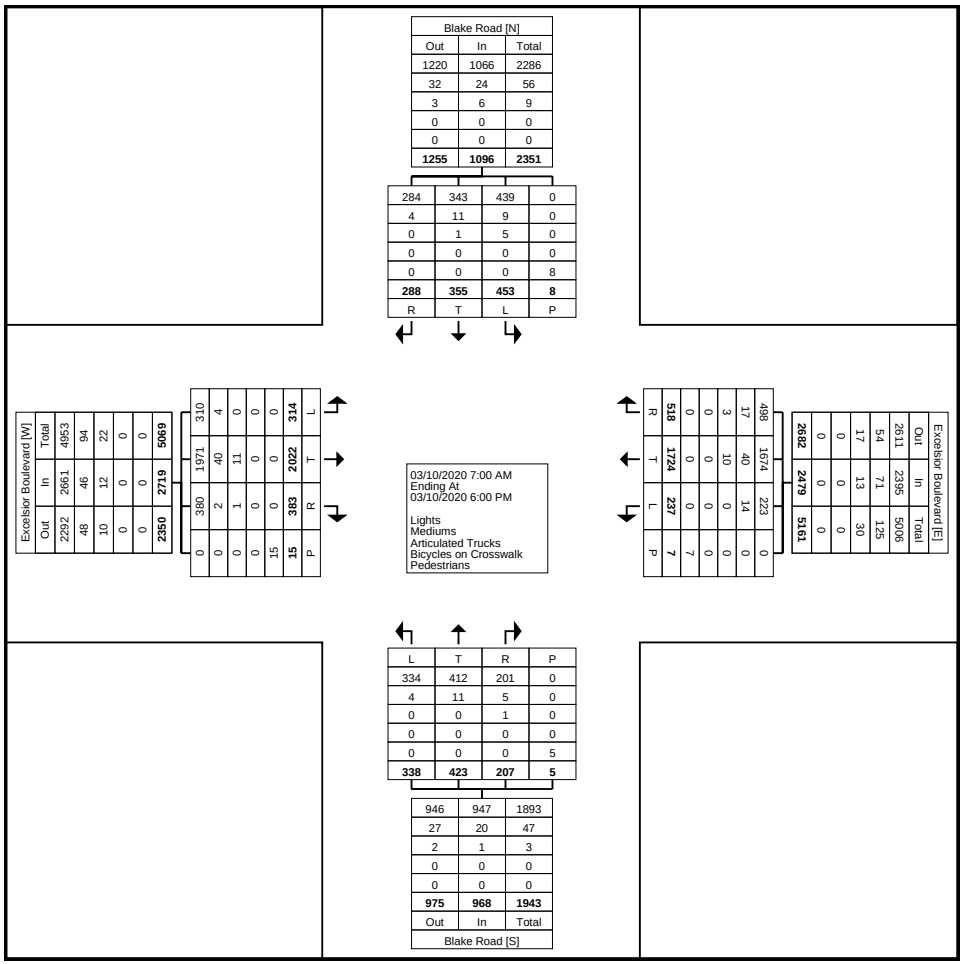
Turning Movement Data

Start Time	Excelsior Boulevard Westbound					Excelsior Boulevard Eastbound					Blake Road Southbound					Blake Road Northbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	4	44	11	0	59	12	67	8	0	87	14	10	7	0	31	13	11	13	0	37	214
7:15 AM	7	66	14	0	87	15	95	12	0	122	22	22	12	0	56	8	11	14	0	33	298
7:30 AM	11	98	20	0	129	15	104	15	1	134	29	13	17	0	59	14	24	18	1	56	378
7:45 AM	21	134	23	0	178	10	143	18	2	171	35	21	20	1	76	28	21	16	0	65	490
Hourly Total	43	342	68	0	453	52	409	53	3	514	100	66	56	1	222	63	67	61	1	191	1380
8:00 AM	17	131	38	0	186	20	147	24	0	191	24	17	29	0	70	40	28	21	0	89	536
8:15 AM	12	127	11	0	150	26	134	33	0	193	23	13	19	0	55	24	34	16	0	74	472
8:30 AM	12	67	28	0	107	12	113	24	0	149	24	12	11	0	47	17	30	15	0	62	365
8:45 AM	9	96	23	0	128	8	97	6	0	111	22	20	19	0	61	20	9	11	0	40	340
Hourly Total	50	421	100	0	571	66	491	87	0	644	93	62	78	0	233	101	101	63	0	265	1713
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	12	141	39	0	192	25	130	24	1	179	33	23	17	0	73	16	19	6	0	41	485
4:15 PM	18	132	44	3	194	21	149	38	0	208	39	23	18	1	80	29	28	5	4	62	544
4:30 PM	31	150	50	1	231	26	149	34	2	209	29	31	15	6	75	18	38	9	0	65	580
4:45 PM	22	121	54	0	197	22	158	31	5	211	32	17	21	0	70	21	35	10	0	66	544
Hourly Total	83	544	187	4	814	94	586	127	8	807	133	94	71	7	298	84	120	30	4	234	2153
5:00 PM	14	138	51	3	203	23	167	37	1	227	25	42	20	0	87	20	38	16	0	74	591
5:15 PM	17	99	40	0	156	26	164	36	0	226	38	34	23	0	95	28	43	14	0	85	562
5:30 PM	16	111	36	0	163	29	122	22	0	173	34	32	21	0	87	16	24	10	0	50	473
5:45 PM	14	69	36	0	119	24	83	21	3	128	30	25	19	0	74	26	30	13	0	69	390
Hourly Total	61	417	163	3	641	102	536	116	4	754	127	133	83	0	343	90	135	53	0	278	2016
Grand Total	237	1724	518	7	2479	314	2022	383	15	2719	453	355	288	8	1096	338	423	207	5	968	7262
Approach %	9.6	69.5	20.9	-	-	11.5	74.4	14.1	-	-	41.3	32.4	26.3	-	-	34.9	43.7	21.4	-	-	-
Total %	3.3	23.7	7.1	-	34.1	4.3	27.8	5.3	-	37.4	6.2	4.9	4.0	-	15.1	4.7	5.8	2.9	-	13.3	-
Lights	223	1674	498	-	2395	310	1971	380	-	2661	439	343	284	-	1066	334	412	201	-	947	7069
% Lights	94.1	97.1	96.1	-	96.6	98.7	97.5	99.2	-	97.9	96.9	96.6	98.6	-	97.3	98.8	97.4	97.1	-	97.8	97.3
Mediums	14	40	17	-	71	4	40	2	-	46	9	11	4	-	24	4	11	5	-	20	161
% Mediums	5.9	2.3	3.3	-	2.9	1.3	2.0	0.5	-	1.7	2.0	3.1	1.4	-	2.2	1.2	2.6	2.4	-	2.1	2.2
Articulated Trucks	0	10	3	-	13	0	11	1	-	12	5	1	0	-	6	0	0	1	-	1	32
% Articulated Trucks	0.0	0.6	0.6	-	0.5	0.0	0.5	0.3	-	0.4	1.1	0.3	0.0	-	0.5	0.0	0.0	0.5	-	0.1	0.4
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	7	-	-	-	-	15	-	-	-	-	8	-	-	-	-	5	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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Turning Movement Data Plot

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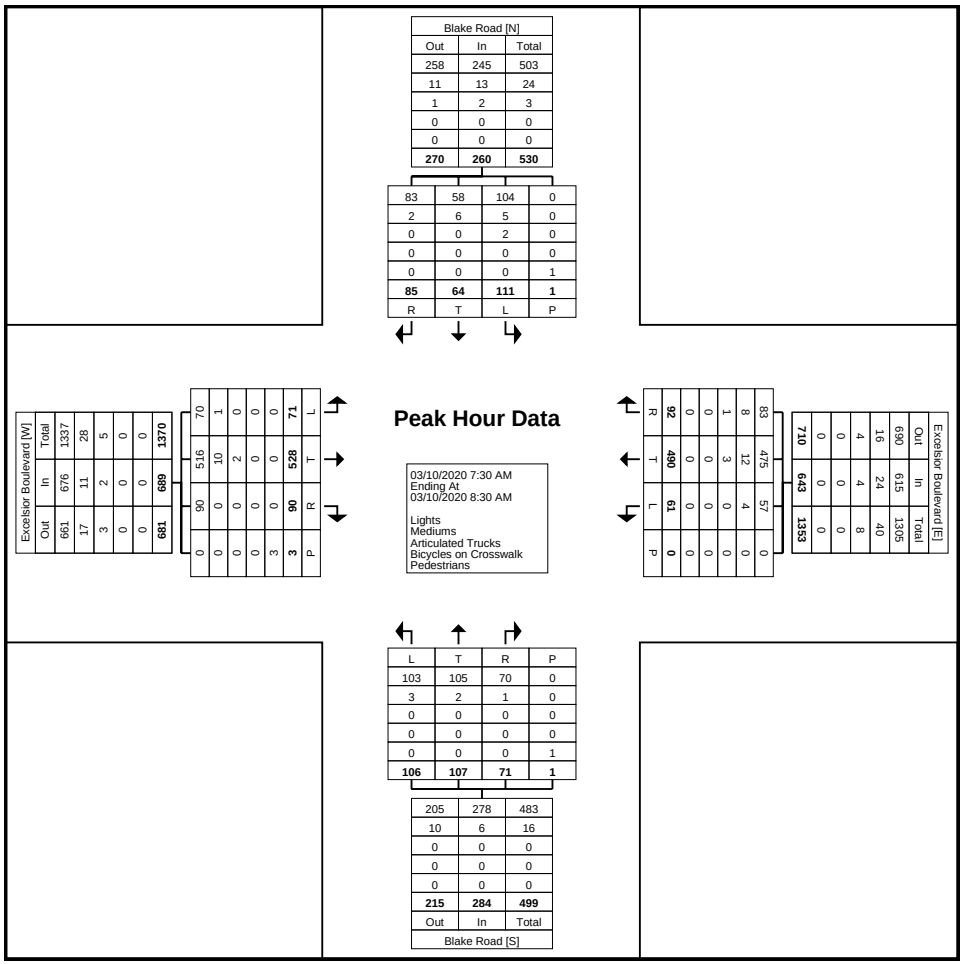
Turning Movement Peak Hour Data (7:30 AM)

Start Time	Excelsior Boulevard Westbound					Excelsior Boulevard Eastbound					Blake Road Southbound					Blake Road Northbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
7:30 AM	11	98	20	0	129	15	104	15	1	134	29	13	17	0	59	14	24	18	1	56	378
7:45 AM	21	134	23	0	178	10	143	18	2	171	35	21	20	1	76	28	21	16	0	65	490
8:00 AM	17	131	38	0	186	20	147	24	0	191	24	17	29	0	70	40	28	21	0	89	536
8:15 AM	12	127	11	0	150	26	134	33	0	193	23	13	19	0	55	24	34	16	0	74	472
Total	61	490	92	0	643	71	528	90	3	689	111	64	85	1	260	106	107	71	1	284	1876
Approach %	9.5	76.2	14.3	-	-	10.3	76.6	13.1	-	-	42.7	24.6	32.7	-	-	37.3	37.7	25.0	-	-	-
Total %	3.3	26.1	4.9	-	34.3	3.8	28.1	4.8	-	36.7	5.9	3.4	4.5	-	13.9	5.7	5.7	3.8	-	15.1	-
PHF	0.726	0.914	0.605	-	0.864	0.683	0.898	0.682	-	0.892	0.793	0.762	0.733	-	0.855	0.663	0.787	0.845	-	0.798	0.875
Lights	57	475	83	-	615	70	516	90	-	676	104	58	83	-	245	103	105	70	-	278	1814
% Lights	93.4	96.9	90.2	-	95.6	98.6	97.7	100.0	-	98.1	93.7	90.6	97.6	-	94.2	97.2	98.1	98.6	-	97.9	96.7
Mediums	4	12	8	-	24	1	10	0	-	11	5	6	2	-	13	3	2	1	-	6	54
% Mediums	6.6	2.4	8.7	-	3.7	1.4	1.9	0.0	-	1.6	4.5	9.4	2.4	-	5.0	2.8	1.9	1.4	-	2.1	2.9
Articulated Trucks	0	3	1	-	4	0	2	0	-	2	2	0	0	-	2	0	0	0	-	0	8
% Articulated Trucks	0.0	0.6	1.1	-	0.6	0.0	0.4	0.0	-	0.3	1.8	0.0	0.0	-	0.8	0.0	0.0	0.0	-	0.0	0.4
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	3	-	-	-	-	1	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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Site Code:
Start Date: 03/10/2020



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

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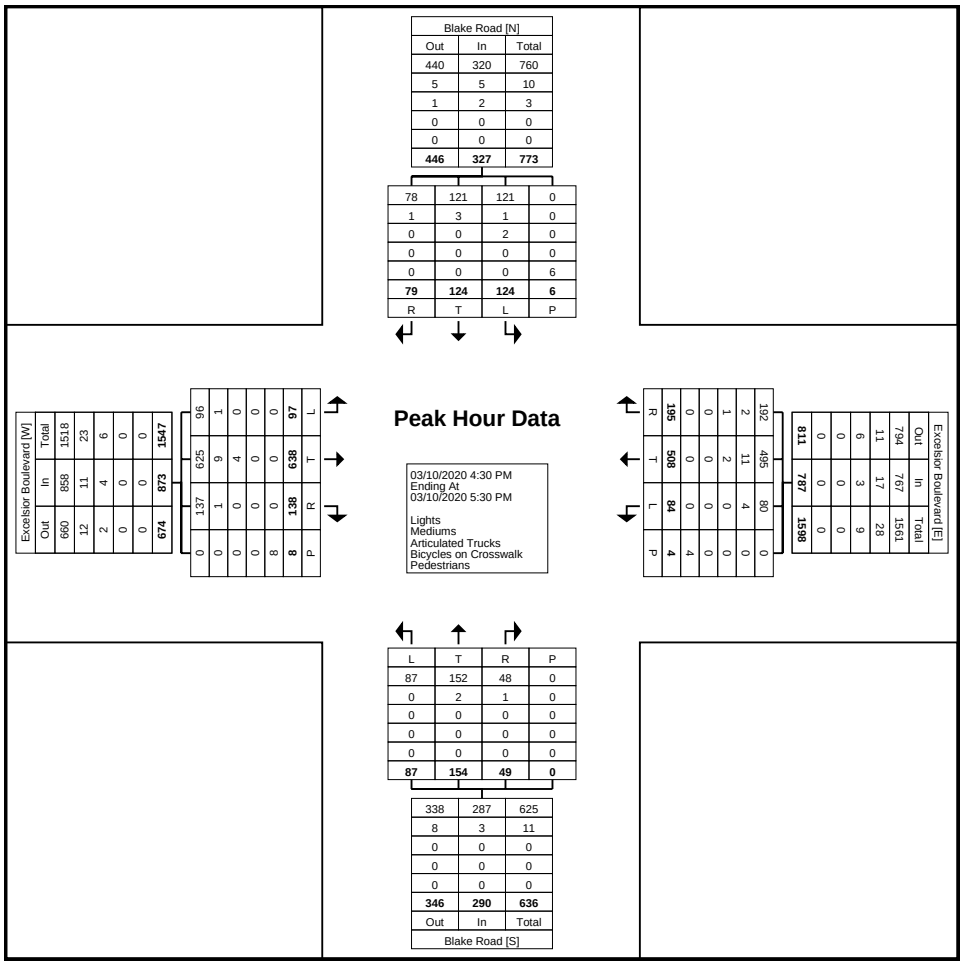
Turning Movement Peak Hour Data (4:30 PM)

Start Time	Excelsior Boulevard Westbound					Excelsior Boulevard Eastbound					Blake Road Southbound					Blake Road Northbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
4:30 PM	31	150	50	1	231	26	149	34	2	209	29	31	15	6	75	18	38	9	0	65	580
4:45 PM	22	121	54	0	197	22	158	31	5	211	32	17	21	0	70	21	35	10	0	66	544
5:00 PM	14	138	51	3	203	23	167	37	1	227	25	42	20	0	87	20	38	16	0	74	591
5:15 PM	17	99	40	0	156	26	164	36	0	226	38	34	23	0	95	28	43	14	0	85	562
Total	84	508	195	4	787	97	638	138	8	873	124	124	79	6	327	87	154	49	0	290	2277
Approach %	10.7	64.5	24.8	-	-	11.1	73.1	15.8	-	-	37.9	37.9	24.2	-	-	30.0	53.1	16.9	-	-	-
Total %	3.7	22.3	8.6	-	34.6	4.3	28.0	6.1	-	38.3	5.4	5.4	3.5	-	14.4	3.8	6.8	2.2	-	12.7	-
PHF	0.677	0.847	0.903	-	0.852	0.933	0.955	0.932	-	0.961	0.816	0.738	0.859	-	0.861	0.777	0.895	0.766	-	0.853	0.963
Lights	80	495	192	-	767	96	625	137	-	858	121	121	78	-	320	87	152	48	-	287	2232
% Lights	95.2	97.4	98.5	-	97.5	99.0	98.0	99.3	-	98.3	97.6	97.6	98.7	-	97.9	100.0	98.7	98.0	-	99.0	98.0
Mediums	4	11	2	-	17	1	9	1	-	11	1	3	1	-	5	0	2	1	-	3	36
% Mediums	4.8	2.2	1.0	-	2.2	1.0	1.4	0.7	-	1.3	0.8	2.4	1.3	-	1.5	0.0	1.3	2.0	-	1.0	1.6
Articulated Trucks	0	2	1	-	3	0	4	0	-	4	2	0	0	-	2	0	0	0	-	0	9
% Articulated Trucks	0.0	0.4	0.5	-	0.4	0.0	0.6	0.0	-	0.5	1.6	0.0	0.0	-	0.6	0.0	0.0	0.0	-	0.0	0.4
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	4	-	-	-	-	8	-	-	-	-	6	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-

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Site Code:
Start Date: 03/10/2020



Turning Movement Peak Hour Data Plot (4:30 PM)

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Count Name: 4_Blake Road & Hill Street
Site Code:
Start Date: 02/26/2020

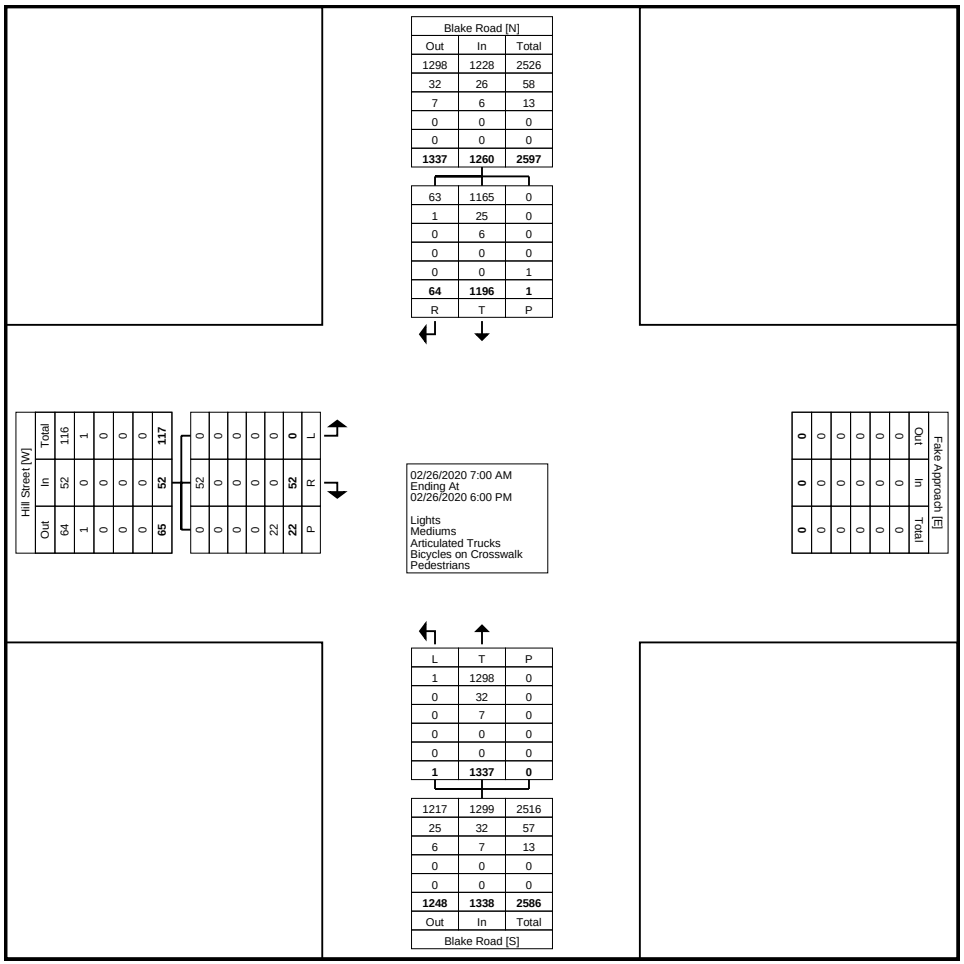
Turning Movement Data

Start Time	Hill Street Eastbound				Blake Road Southbound				Blake Road Northbound				
	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
7:00 AM	0	0	4	0	32	2	0	34	0	27	0	27	61
7:15 AM	0	0	1	0	64	2	0	66	0	45	0	45	111
7:30 AM	0	0	0	0	76	1	0	77	0	45	0	45	122
7:45 AM	0	0	1	0	66	0	0	66	0	80	0	80	146
Hourly Total	0	0	6	0	238	5	0	243	0	197	0	197	440
8:00 AM	0	1	0	1	86	2	0	88	1	63	0	64	153
8:15 AM	0	1	0	1	69	3	0	72	0	64	0	64	137
8:30 AM	0	2	0	2	61	5	0	66	0	56	0	56	124
8:45 AM	0	2	0	2	48	4	0	52	0	55	0	55	109
Hourly Total	0	6	0	6	264	14	0	278	1	238	0	239	523
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	6	1	6	73	3	0	76	0	115	0	115	197
4:15 PM	0	4	1	4	86	11	0	97	0	118	0	118	219
4:30 PM	0	7	5	7	93	7	0	100	0	120	0	120	227
4:45 PM	0	3	4	3	96	4	1	100	0	120	0	120	223
Hourly Total	0	20	11	20	348	25	1	373	0	473	0	473	866
5:00 PM	0	6	3	6	93	7	0	100	0	123	0	123	229
5:15 PM	0	9	2	9	84	4	0	88	0	125	0	125	222
5:30 PM	0	6	0	6	85	5	0	90	0	107	0	107	203
5:45 PM	0	5	0	5	84	4	0	88	0	74	0	74	167
Hourly Total	0	26	5	26	346	20	0	366	0	429	0	429	821
Grand Total	0	52	22	52	1196	64	1	1260	1	1337	0	1338	2650
Approach %	0.0	100.0	-	-	94.9	5.1	-	-	0.1	99.9	-	-	-
Total %	0.0	2.0	-	2.0	45.1	2.4	-	47.5	0.0	50.5	-	50.5	-
Lights	0	52	-	52	1165	63	-	1228	1	1298	-	1299	2579
% Lights	-	100.0	-	100.0	97.4	98.4	-	97.5	100.0	97.1	-	97.1	97.3
Mediums	0	0	-	0	25	1	-	26	0	32	-	32	58
% Mediums	-	0.0	-	0.0	2.1	1.6	-	2.1	0.0	2.4	-	2.4	2.2
Articulated Trucks	0	0	-	0	6	0	-	6	0	7	-	7	13
% Articulated Trucks	-	0.0	-	0.0	0.5	0.0	-	0.5	0.0	0.5	-	0.5	0.5
Bicycles on Crosswalk	-	-	0	-	-	-	0	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	0.0	-	-	-	0.0	-	-	-	-	-	-
Pedestrians	-	-	22	-	-	-	1	-	-	-	0	-	-
% Pedestrians	-	-	100.0	-	-	-	100.0	-	-	-	-	-	-

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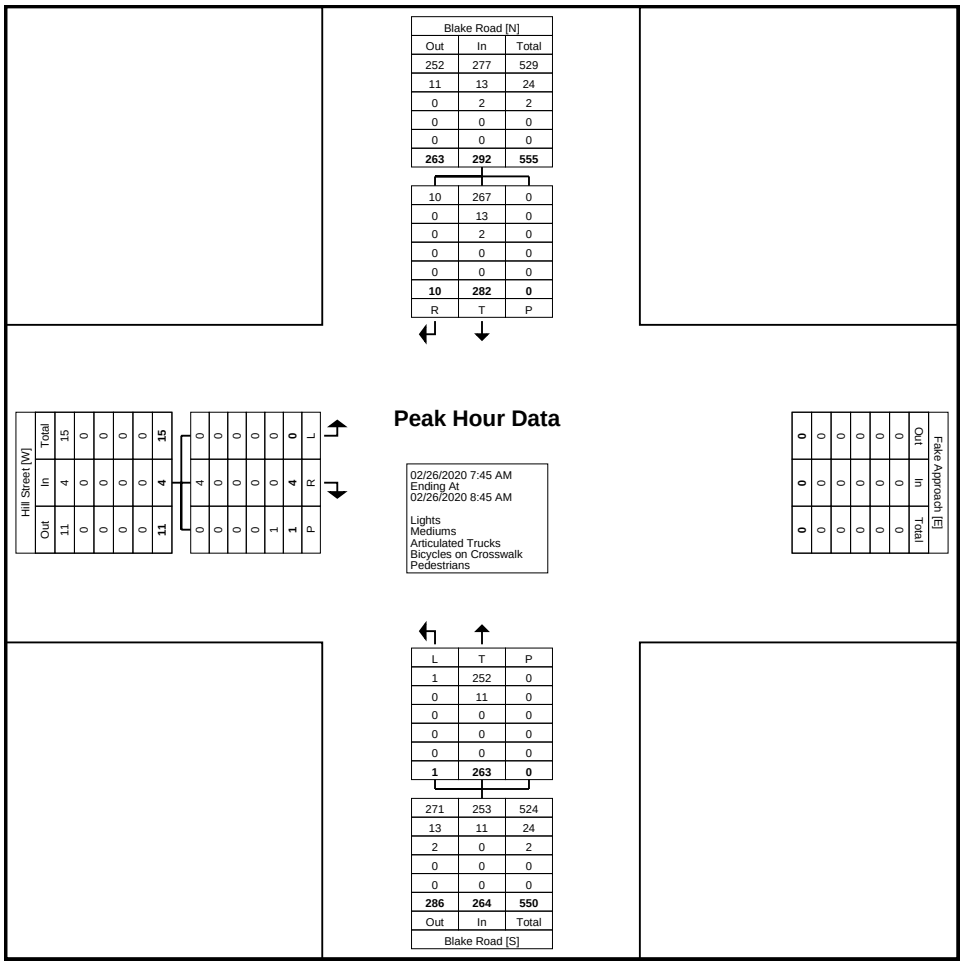
Turning Movement Peak Hour Data (7:45 AM)

Start Time	Hill Street Eastbound				Blake Road Southbound				Blake Road Northbound				
	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
7:45 AM	0	0	1	0	66	0	0	66	0	80	0	80	146
8:00 AM	0	1	0	1	86	2	0	88	1	63	0	64	153
8:15 AM	0	1	0	1	69	3	0	72	0	64	0	64	137
8:30 AM	0	2	0	2	61	5	0	66	0	56	0	56	124
Total	0	4	1	4	282	10	0	292	1	263	0	264	560
Approach %	0.0	100.0	-	-	96.6	3.4	-	-	0.4	99.6	-	-	-
Total %	0.0	0.7	-	0.7	50.4	1.8	-	52.1	0.2	47.0	-	47.1	-
PHF	0.000	0.500	-	0.500	0.820	0.500	-	0.830	0.250	0.822	-	0.825	0.915
Lights	0	4	-	4	267	10	-	277	1	252	-	253	534
% Lights	-	100.0	-	100.0	94.7	100.0	-	94.9	100.0	95.8	-	95.8	95.4
Mediums	0	0	-	0	13	0	-	13	0	11	-	11	24
% Mediums	-	0.0	-	0.0	4.6	0.0	-	4.5	0.0	4.2	-	4.2	4.3
Articulated Trucks	0	0	-	0	2	0	-	2	0	0	-	0	2
% Articulated Trucks	-	0.0	-	0.0	0.7	0.0	-	0.7	0.0	0.0	-	0.0	0.4
Bicycles on Crosswalk	-	-	0	-	-	-	0	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	0.0	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	1	-	-	-	0	-	-	-	0	-	-
% Pedestrians	-	-	100.0	-	-	-	-	-	-	-	-	-	-

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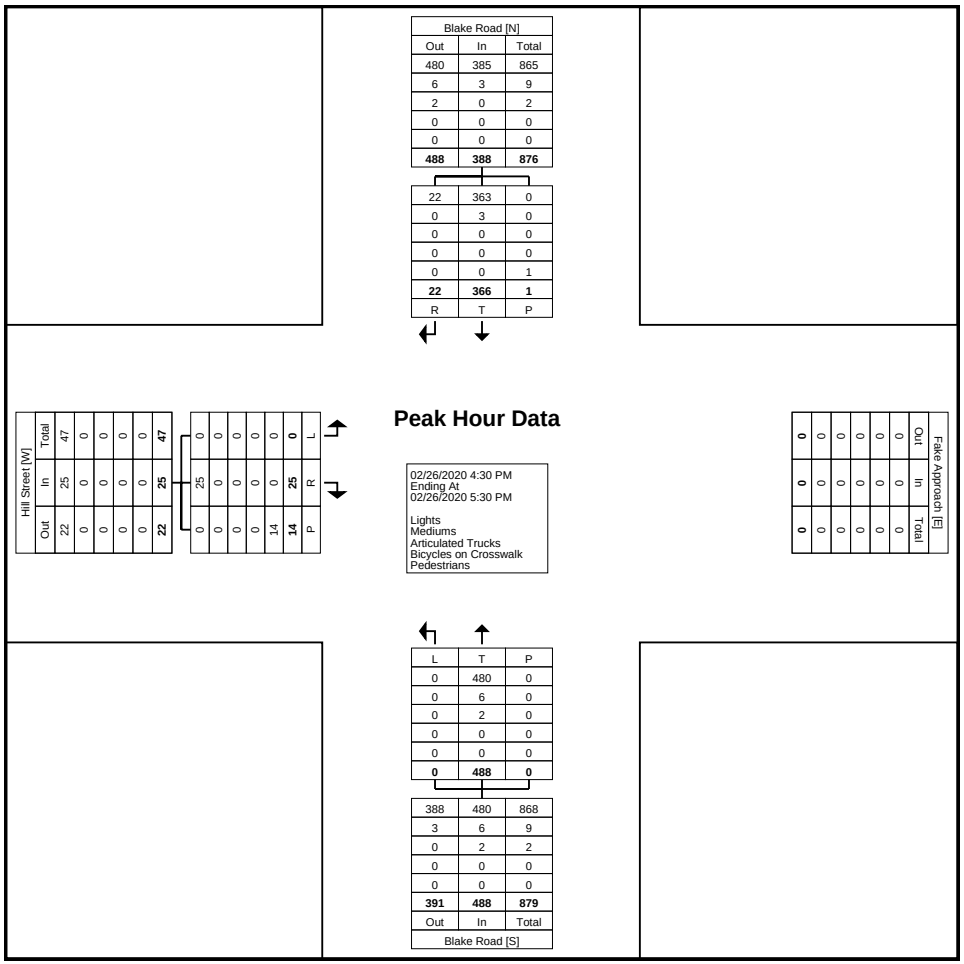
Turning Movement Peak Hour Data (4:30 PM)

Start Time	Hill Street Eastbound				Blake Road Southbound				Blake Road Northbound				
	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
4:30 PM	0	7	5	7	93	7	0	100	0	120	0	120	227
4:45 PM	0	3	4	3	96	4	1	100	0	120	0	120	223
5:00 PM	0	6	3	6	93	7	0	100	0	123	0	123	229
5:15 PM	0	9	2	9	84	4	0	88	0	125	0	125	222
Total	0	25	14	25	366	22	1	388	0	488	0	488	901
Approach %	0.0	100.0	-	-	94.3	5.7	-	-	0.0	100.0	-	-	-
Total %	0.0	2.8	-	2.8	40.6	2.4	-	43.1	0.0	54.2	-	54.2	-
PHF	0.000	0.694	-	0.694	0.953	0.786	-	0.970	0.000	0.976	-	0.976	0.984
Lights	0	25	-	25	363	22	-	385	0	480	-	480	890
% Lights	-	100.0	-	100.0	99.2	100.0	-	99.2	-	98.4	-	98.4	98.8
Mediums	0	0	-	0	3	0	-	3	0	6	-	6	9
% Mediums	-	0.0	-	0.0	0.8	0.0	-	0.8	-	1.2	-	1.2	1.0
Articulated Trucks	0	0	-	0	0	0	-	0	0	2	-	2	2
% Articulated Trucks	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.4	-	0.4	0.2
Bicycles on Crosswalk	-	-	0	-	-	-	0	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	0.0	-	-	-	0.0	-	-	-	-	-	-
Pedestrians	-	-	14	-	-	-	1	-	-	-	0	-	-
% Pedestrians	-	-	100.0	-	-	-	100.0	-	-	-	-	-	-

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 jack.olsson@kimley-horn.com

Count Name: 4_Blake Road & Hill Street
Site Code:
Start Date: 02/26/2020



Turning Movement Peak Hour Data Plot (4:30 PM)

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 jack.olsson@kimley-horn.com

Count Name: 5_Blake Road & Full Access Site Driveway
Site Code:
Start Date: 02/26/2020

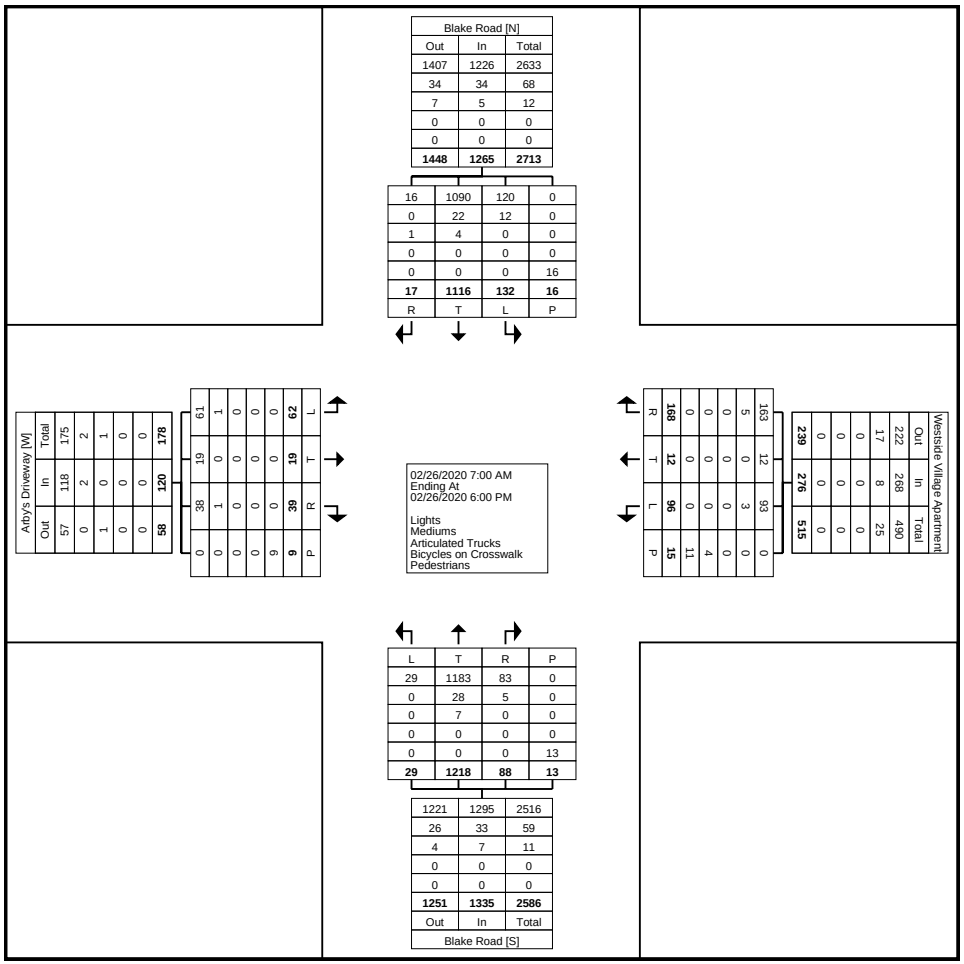
Turning Movement Data

Start Time	Westside Village Apartments Driveway Westbound					Arby's Driveway Eastbound					Blake Road Southbound					Blake Road Northbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	8	0	13	0	21	0	0	0	2	0	6	25	2	0	33	0	22	5	4	27	81
7:15 AM	8	0	8	2	16	0	0	0	0	0	10	59	0	0	69	0	36	9	1	45	130
7:30 AM	8	0	6	0	14	0	0	1	0	1	6	67	0	0	73	1	39	5	0	45	133
7:45 AM	6	0	6	0	12	0	0	0	0	0	2	60	0	0	62	1	74	1	1	76	150
Hourly Total	30	0	33	2	63	0	0	1	2	1	24	211	2	0	237	2	171	20	6	193	494
8:00 AM	5	1	5	0	11	4	0	0	0	4	4	82	0	0	86	1	67	0	0	68	169
8:15 AM	4	1	8	0	13	4	0	4	0	8	6	66	3	1	75	2	59	3	0	64	160
8:30 AM	8	0	3	2	11	1	1	1	0	3	9	60	0	0	69	1	50	5	0	56	139
8:45 AM	6	0	8	2	14	1	0	0	2	1	4	48	1	2	53	1	50	3	1	54	122
Hourly Total	23	2	24	4	49	10	1	5	2	16	23	256	4	3	283	5	226	11	1	242	590
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	4	1	13	0	18	7	6	8	1	21	8	65	4	1	77	3	100	7	1	110	226
4:15 PM	6	0	22	1	28	2	3	3	0	8	11	87	1	2	99	2	102	13	2	117	252
4:30 PM	5	3	10	2	18	9	2	3	0	14	9	85	0	2	94	2	119	5	0	126	252
4:45 PM	10	2	11	1	23	6	1	5	0	12	18	86	2	2	106	4	105	8	0	117	258
Hourly Total	25	6	56	4	87	24	12	19	1	55	46	323	7	7	376	11	426	33	3	470	988
5:00 PM	4	0	15	1	19	14	2	2	1	18	4	90	0	2	94	4	112	9	1	125	256
5:15 PM	7	0	10	3	17	4	2	4	2	10	7	75	2	1	84	2	119	3	1	124	235
5:30 PM	3	2	18	1	23	5	2	2	0	9	15	85	2	2	102	1	97	7	0	105	239
5:45 PM	4	2	12	0	18	5	0	6	1	11	13	76	0	1	89	4	67	5	1	76	194
Hourly Total	18	4	55	5	77	28	6	14	4	48	39	326	4	6	369	11	395	24	3	430	924
Grand Total	96	12	168	15	276	62	19	39	9	120	132	1116	17	16	1265	29	1218	88	13	1335	2996
Approach %	34.8	4.3	60.9	-	-	51.7	15.8	32.5	-	-	10.4	88.2	1.3	-	-	2.2	91.2	6.6	-	-	-
Total %	3.2	0.4	5.6	-	9.2	2.1	0.6	1.3	-	4.0	4.4	37.2	0.6	-	42.2	1.0	40.7	2.9	-	44.6	-
Lights	93	12	163	-	268	61	19	38	-	118	120	1090	16	-	1226	29	1183	83	-	1295	2907
% Lights	96.9	100.0	97.0	-	97.1	98.4	100.0	97.4	-	98.3	90.9	97.7	94.1	-	96.9	100.0	97.1	94.3	-	97.0	97.0
Mediums	3	0	5	-	8	1	0	1	-	2	12	22	0	-	34	0	28	5	-	33	77
% Mediums	3.1	0.0	3.0	-	2.9	1.6	0.0	2.6	-	1.7	9.1	2.0	0.0	-	2.7	0.0	2.3	5.7	-	2.5	2.6
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	4	1	-	5	0	7	0	-	7	12
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.4	5.9	-	0.4	0.0	0.6	0.0	-	0.5	0.4
Bicycles on Crosswalk	-	-	-	4	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	26.7	-	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	11	-	-	-	-	9	-	-	-	-	16	-	-	-	-	13	-	-
% Pedestrians	-	-	-	73.3	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 jack.olsson@kimley-horn.com

Count Name: 5_Blake Road & Full Access Site Driveway
Site Code:
Start Date: 02/26/2020



Turning Movement Data Plot

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

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331.481.7332 jack.olsson@kimley-horn.com

Count Name: 5_Blake Road & Full Access Site Driveway
Site Code:
Start Date: 02/26/2020

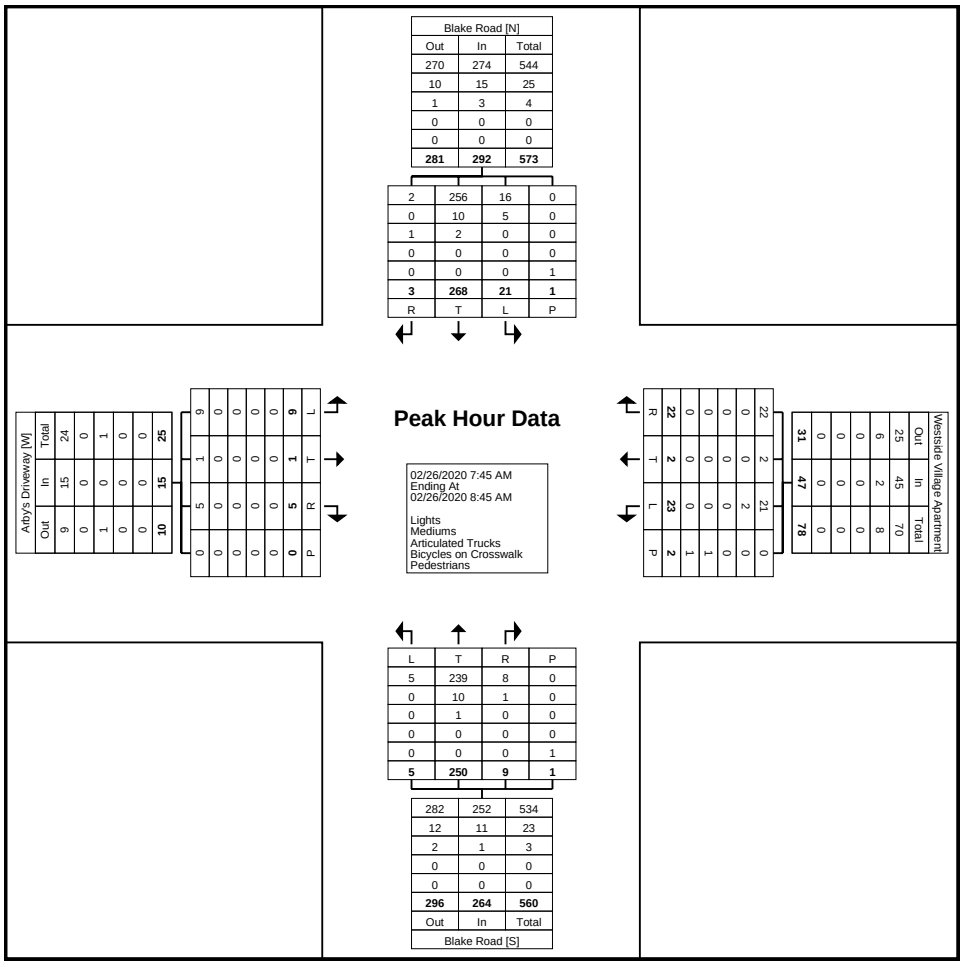
Turning Movement Peak Hour Data (7:45 AM)

Start Time	Westside Village Apartments Driveway Westbound					Arby's Driveway Eastbound					Blake Road Southbound					Blake Road Northbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
7:45 AM	6	0	6	0	12	0	0	0	0	0	2	60	0	0	62	1	74	1	1	76	150
8:00 AM	5	1	5	0	11	4	0	0	0	4	4	82	0	0	86	1	67	0	0	68	169
8:15 AM	4	1	8	0	13	4	0	4	0	8	6	66	3	1	75	2	59	3	0	64	160
8:30 AM	8	0	3	2	11	1	1	1	0	3	9	60	0	0	69	1	50	5	0	56	139
Total	23	2	22	2	47	9	1	5	0	15	21	268	3	1	292	5	250	9	1	264	618
Approach %	48.9	4.3	46.8	-	-	60.0	6.7	33.3	-	-	7.2	91.8	1.0	-	-	1.9	94.7	3.4	-	-	-
Total %	3.7	0.3	3.6	-	7.6	1.5	0.2	0.8	-	2.4	3.4	43.4	0.5	-	47.2	0.8	40.5	1.5	-	42.7	-
PHF	0.719	0.500	0.688	-	0.904	0.563	0.250	0.313	-	0.469	0.583	0.817	0.250	-	0.849	0.625	0.845	0.450	-	0.868	0.914
Lights	21	2	22	-	45	9	1	5	-	15	16	256	2	-	274	5	239	8	-	252	586
% Lights	91.3	100.0	100.0	-	95.7	100.0	100.0	100.0	-	100.0	76.2	95.5	66.7	-	93.8	100.0	95.6	88.9	-	95.5	94.8
Mediums	2	0	0	-	2	0	0	0	-	0	5	10	0	-	15	0	10	1	-	11	28
% Mediums	8.7	0.0	0.0	-	4.3	0.0	0.0	0.0	-	0.0	23.8	3.7	0.0	-	5.1	0.0	4.0	11.1	-	4.2	4.5
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	2	1	-	3	0	1	0	-	1	4
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.7	33.3	-	1.0	0.0	0.4	0.0	-	0.4	0.6
Bicycles on Crosswalk	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	50.0	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	1	-	-	-	-	1	-	-
% Pedestrians	-	-	-	50.0	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 jack.olsson@kimley-horn.com

Count Name: 5_Blake Road & Full Access Site Driveway
Site Code:
Start Date: 02/26/2020



Turning Movement Peak Hour Data Plot (7:45 AM)

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 jack.olsson@kimley-horn.com

Count Name: 5_Blake Road & Full Access Site Driveway
Site Code:
Start Date: 02/26/2020

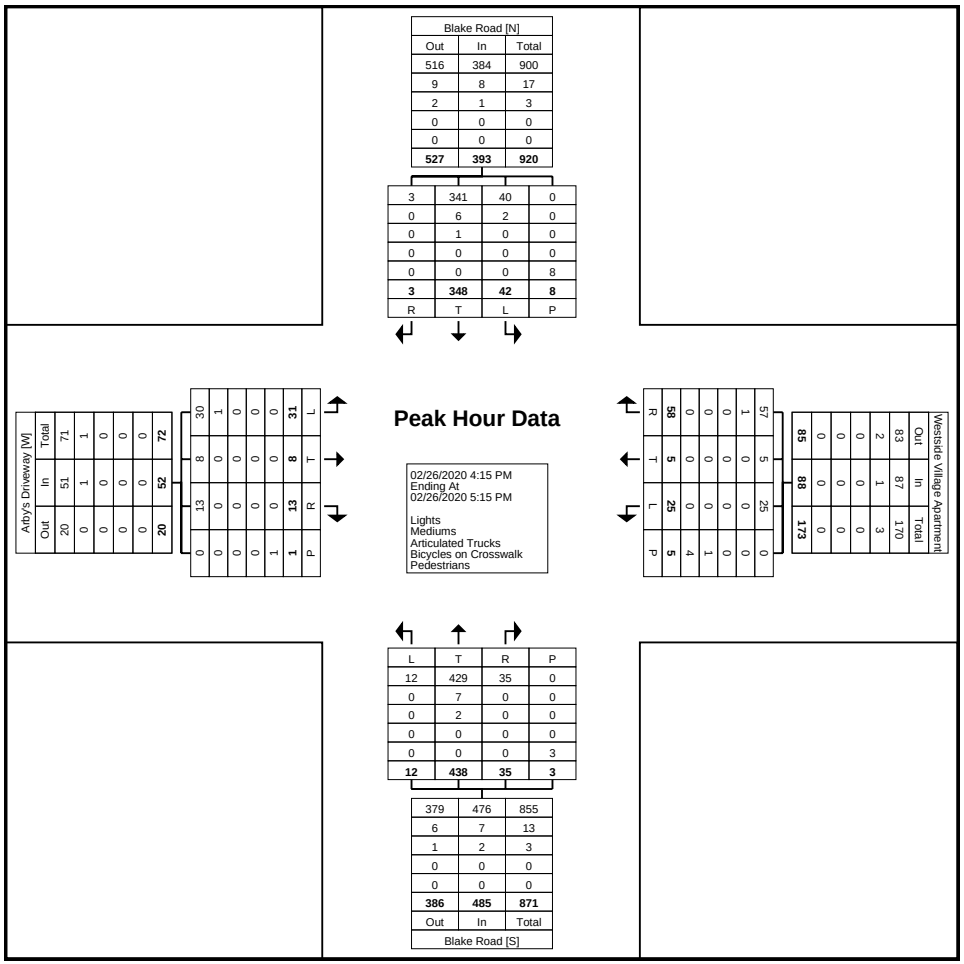
Turning Movement Peak Hour Data (4:15 PM)

Start Time	Westside Village Apartments Driveway Westbound					Arby's Driveway Eastbound					Blake Road Southbound					Blake Road Northbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
4:15 PM	6	0	22	1	28	2	3	3	0	8	11	87	1	2	99	2	102	13	2	117	252
4:30 PM	5	3	10	2	18	9	2	3	0	14	9	85	0	2	94	2	119	5	0	126	252
4:45 PM	10	2	11	1	23	6	1	5	0	12	18	86	2	2	106	4	105	8	0	117	258
5:00 PM	4	0	15	1	19	14	2	2	1	18	4	90	0	2	94	4	112	9	1	125	256
Total	25	5	58	5	88	31	8	13	1	52	42	348	3	8	393	12	438	35	3	485	1018
Approach %	28.4	5.7	65.9	-	-	59.6	15.4	25.0	-	-	10.7	88.5	0.8	-	-	2.5	90.3	7.2	-	-	-
Total %	2.5	0.5	5.7	-	8.6	3.0	0.8	1.3	-	5.1	4.1	34.2	0.3	-	38.6	1.2	43.0	3.4	-	47.6	-
PHF	0.625	0.417	0.659	-	0.786	0.554	0.667	0.650	-	0.722	0.583	0.967	0.375	-	0.927	0.750	0.920	0.673	-	0.962	0.986
Lights	25	5	57	-	87	30	8	13	-	51	40	341	3	-	384	12	429	35	-	476	998
% Lights	100.0	100.0	98.3	-	98.9	96.8	100.0	100.0	-	98.1	95.2	98.0	100.0	-	97.7	100.0	97.9	100.0	-	98.1	98.0
Mediums	0	0	1	-	1	1	0	0	-	1	2	6	0	-	8	0	7	0	-	7	17
% Mediums	0.0	0.0	1.7	-	1.1	3.2	0.0	0.0	-	1.9	4.8	1.7	0.0	-	2.0	0.0	1.6	0.0	-	1.4	1.7
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	1	0	-	1	0	2	0	-	2	3
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.3	0.0	-	0.3	0.0	0.5	0.0	-	0.4	0.3
Bicycles on Crosswalk	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	20.0	-	-	-	-	0.0	-	-	-	-	0.0	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	4	-	-	-	-	1	-	-	-	-	8	-	-	-	-	3	-	-
% Pedestrians	-	-	-	80.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 jack.olsson@kimley-horn.com

Count Name: 5_Blake Road & Full Access Site Driveway
Site Code:
Start Date: 02/26/2020



Turning Movement Peak Hour Data Plot (4:15 PM)

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 jack.olsson@kimley-horn.com

Count Name: 6_Blake Road & RIRO Site Driveway
Site Code:
Start Date: 02/26/2020

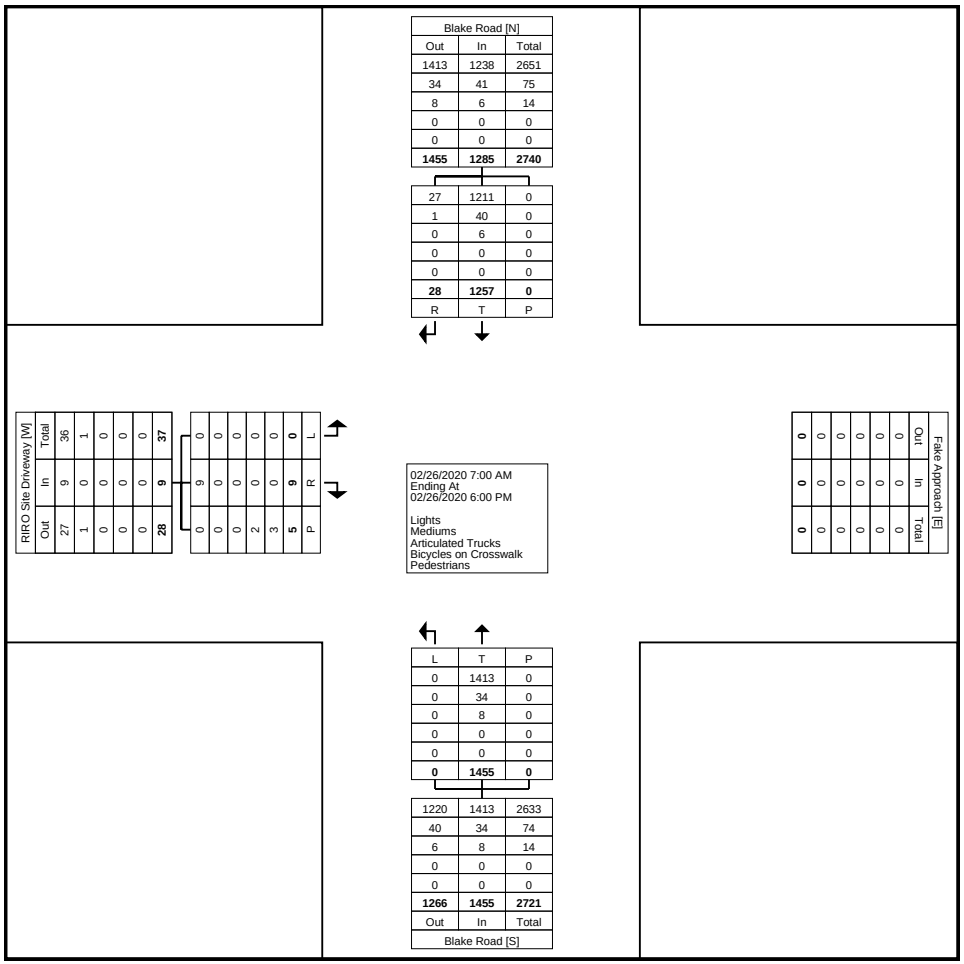
Turning Movement Data

Start Time	RIRO Site Driveway Eastbound				Blake Road Southbound				Blake Road Northbound				
	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
7:00 AM	0	0	2	0	35	1	0	36	0	36	0	36	72
7:15 AM	0	0	0	0	70	0	0	70	0	43	0	43	113
7:30 AM	0	0	0	0	76	0	0	76	0	45	0	45	121
7:45 AM	0	0	0	0	63	1	0	64	0	82	0	82	146
Hourly Total	0	0	2	0	244	2	0	246	0	206	0	206	452
8:00 AM	0	0	0	0	87	3	0	90	0	74	0	74	164
8:15 AM	0	0	1	0	70	1	0	71	0	72	0	72	143
8:30 AM	0	2	0	2	64	1	0	65	0	55	0	55	122
8:45 AM	0	0	0	0	52	0	0	52	0	59	0	59	111
Hourly Total	0	2	1	2	273	5	0	278	0	260	0	260	540
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	2	0	2	75	1	0	76	0	125	0	125	203
4:15 PM	0	0	2	0	101	4	0	105	0	125	0	125	230
4:30 PM	0	2	0	2	93	4	0	97	0	135	0	135	234
4:45 PM	0	1	0	1	101	5	0	106	0	125	0	125	232
Hourly Total	0	5	2	5	370	14	0	384	0	510	0	510	899
5:00 PM	0	0	0	0	97	3	0	100	0	140	0	140	240
5:15 PM	0	1	0	1	84	0	0	84	0	133	0	133	218
5:30 PM	0	0	0	0	101	2	0	103	0	123	0	123	226
5:45 PM	0	1	0	1	88	2	0	90	0	83	0	83	174
Hourly Total	0	2	0	2	370	7	0	377	0	479	0	479	858
Grand Total	0	9	5	9	1257	28	0	1285	0	1455	0	1455	2749
Approach %	0.0	100.0	-	-	97.8	2.2	-	-	0.0	100.0	-	-	-
Total %	0.0	0.3	-	0.3	45.7	1.0	-	46.7	0.0	52.9	-	52.9	-
Lights	0	9	-	9	1211	27	-	1238	0	1413	-	1413	2660
% Lights	-	100.0	-	100.0	96.3	96.4	-	96.3	-	97.1	-	97.1	96.8
Mediums	0	0	-	0	40	1	-	41	0	34	-	34	75
% Mediums	-	0.0	-	0.0	3.2	3.6	-	3.2	-	2.3	-	2.3	2.7
Articulated Trucks	0	0	-	0	6	0	-	6	0	8	-	8	14
% Articulated Trucks	-	0.0	-	0.0	0.5	0.0	-	0.5	-	0.5	-	0.5	0.5
Bicycles on Crosswalk	-	-	2	-	-	-	0	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	40.0	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	3	-	-	-	0	-	-	-	0	-	-
% Pedestrians	-	-	60.0	-	-	-	-	-	-	-	-	-	-

Kimley-Horn : Lisle (IL)
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Lisle, Illinois, United States 60532
331.481.7332 jack.olsson@kimley-horn.com

Count Name: 6_Blake Road & RIRO Site Driveway
Site Code:
Start Date: 02/26/2020



Turning Movement Data Plot

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 jack.olsson@kimley-horn.com

Count Name: 6_Blake Road & RIRO Site Driveway
Site Code:
Start Date: 02/26/2020

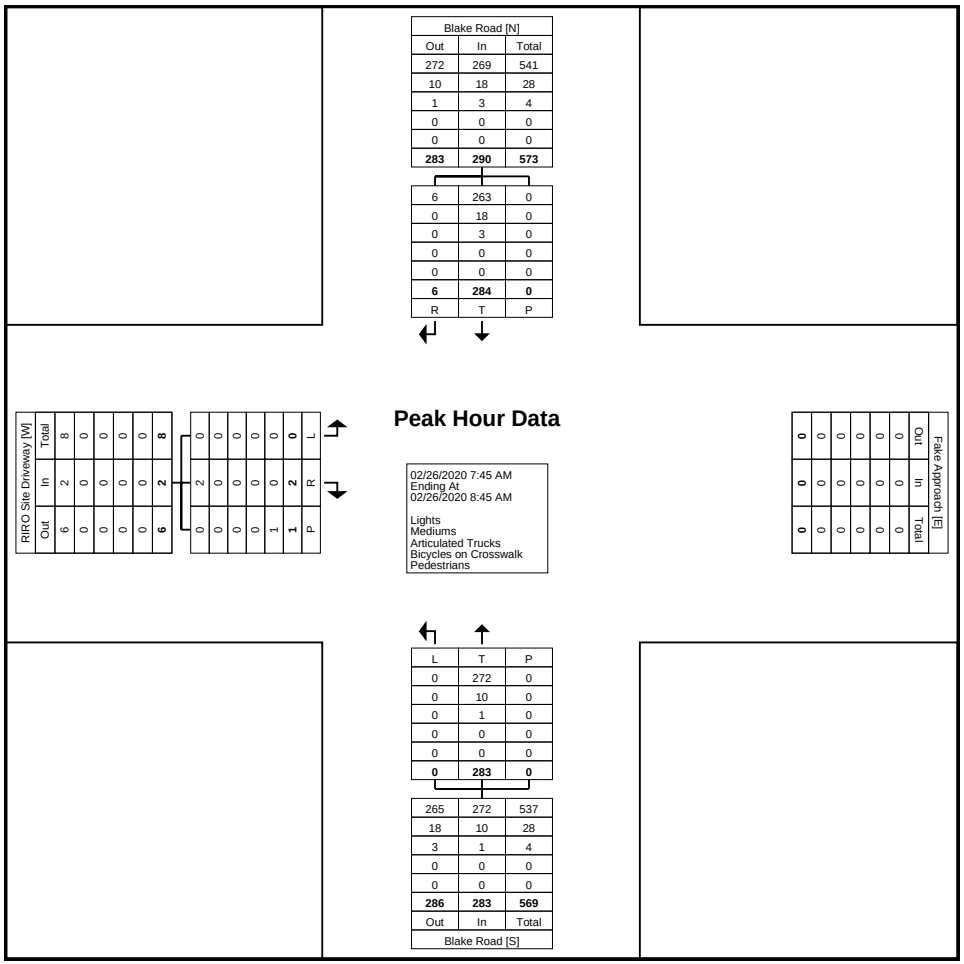
Turning Movement Peak Hour Data (7:45 AM)

Start Time	RIRO Site Driveway Eastbound				Blake Road Southbound				Blake Road Northbound				
	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
7:45 AM	0	0	0	0	63	1	0	64	0	82	0	82	146
8:00 AM	0	0	0	0	87	3	0	90	0	74	0	74	164
8:15 AM	0	0	1	0	70	1	0	71	0	72	0	72	143
8:30 AM	0	2	0	2	64	1	0	65	0	55	0	55	122
Total	0	2	1	2	284	6	0	290	0	283	0	283	575
Approach %	0.0	100.0	-	-	97.9	2.1	-	-	0.0	100.0	-	-	-
Total %	0.0	0.3	-	0.3	49.4	1.0	-	50.4	0.0	49.2	-	49.2	-
PHF	0.000	0.250	-	0.250	0.816	0.500	-	0.806	0.000	0.863	-	0.863	0.877
Lights	0	2	-	2	263	6	-	269	0	272	-	272	543
% Lights	-	100.0	-	100.0	92.6	100.0	-	92.8	-	96.1	-	96.1	94.4
Mediums	0	0	-	0	18	0	-	18	0	10	-	10	28
% Mediums	-	0.0	-	0.0	6.3	0.0	-	6.2	-	3.5	-	3.5	4.9
Articulated Trucks	0	0	-	0	3	0	-	3	0	1	-	1	4
% Articulated Trucks	-	0.0	-	0.0	1.1	0.0	-	1.0	-	0.4	-	0.4	0.7
Bicycles on Crosswalk	-	-	0	-	-	-	0	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	0.0	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	1	-	-	-	0	-	-	-	0	-	-
% Pedestrians	-	-	100.0	-	-	-	-	-	-	-	-	-	-

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 jack.olsson@kimley-horn.com

Count Name: 6_Blake Road & RIRO Site Driveway
Site Code:
Start Date: 02/26/2020



Turning Movement Peak Hour Data Plot (7:45 AM)

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 jack.olsson@kimley-horn.com

Count Name: 6_Blake Road & RIRO Site Driveway
Site Code:
Start Date: 02/26/2020

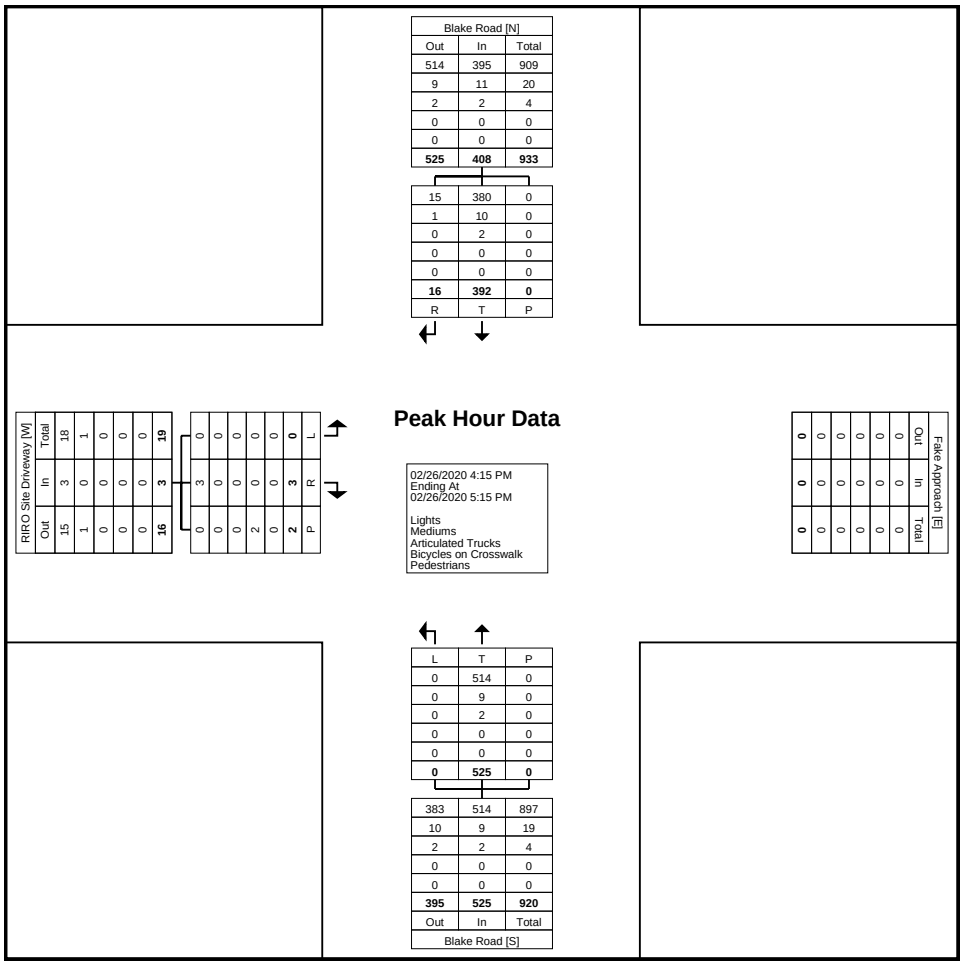
Turning Movement Peak Hour Data (4:15 PM)

Start Time	RIRO Site Driveway Eastbound				Blake Road Southbound				Blake Road Northbound				
	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
4:15 PM	0	0	2	0	101	4	0	105	0	125	0	125	230
4:30 PM	0	2	0	2	93	4	0	97	0	135	0	135	234
4:45 PM	0	1	0	1	101	5	0	106	0	125	0	125	232
5:00 PM	0	0	0	0	97	3	0	100	0	140	0	140	240
Total	0	3	2	3	392	16	0	408	0	525	0	525	936
Approach %	0.0	100.0	-	-	96.1	3.9	-	-	0.0	100.0	-	-	-
Total %	0.0	0.3	-	0.3	41.9	1.7	-	43.6	0.0	56.1	-	56.1	-
PHF	0.000	0.375	-	0.375	0.970	0.800	-	0.962	0.000	0.938	-	0.938	0.975
Lights	0	3	-	3	380	15	-	395	0	514	-	514	912
% Lights	-	100.0	-	100.0	96.9	93.8	-	96.8	-	97.9	-	97.9	97.4
Mediums	0	0	-	0	10	1	-	11	0	9	-	9	20
% Mediums	-	0.0	-	0.0	2.6	6.3	-	2.7	-	1.7	-	1.7	2.1
Articulated Trucks	0	0	-	0	2	0	-	2	0	2	-	2	4
% Articulated Trucks	-	0.0	-	0.0	0.5	0.0	-	0.5	-	0.4	-	0.4	0.4
Bicycles on Crosswalk	-	-	2	-	-	-	0	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	100.0	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	0	-	-	-	0	-	-	-	0	-	-
% Pedestrians	-	-	0.0	-	-	-	-	-	-	-	-	-	-

Kimley-Horn : Lisle (IL)
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Count Name: 6_Blake Road & RIRO Site Driveway
Site Code:
Start Date: 02/26/2020



Turning Movement Peak Hour Data Plot (4:15 PM)

Kimley-Horn : Lisle (IL)
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Lisle, Illinois, United States 60532
331.481.7332 jack.olsson@kimley-horn.com

Count Name: 7_Blake Road & 2nd Street
Site Code:
Start Date: 02/26/2020

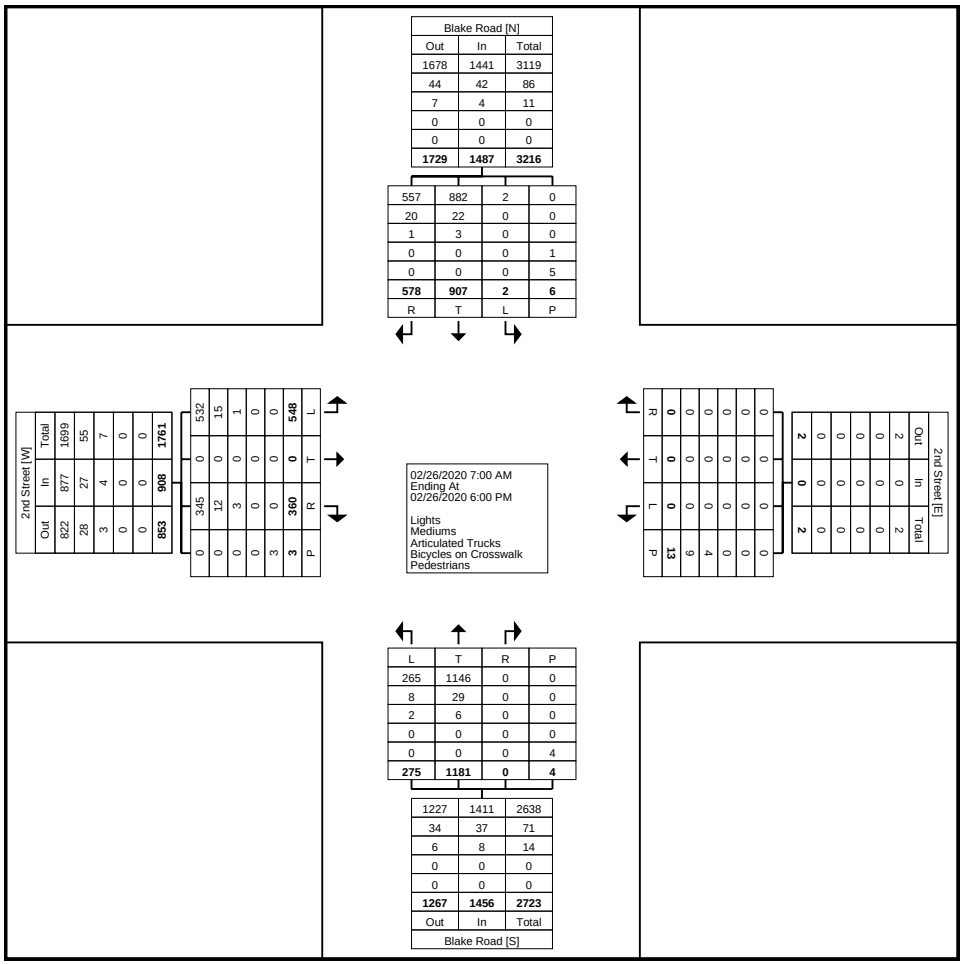
Turning Movement Data

Start Time	2nd Street Westbound					2nd Street Eastbound					Blake Road Southbound					Blake Road Northbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	0	0	1	0	12	0	13	0	25	0	20	31	0	51	7	28	0	0	35	111
7:15 AM	0	0	0	1	0	23	0	26	0	49	0	42	37	0	79	14	31	0	0	45	173
7:30 AM	0	0	0	0	0	28	0	21	0	49	0	53	55	0	108	15	31	0	0	46	203
7:45 AM	0	0	0	0	0	35	0	13	0	48	0	46	64	0	110	23	58	0	0	81	239
Hourly Total	0	0	0	2	0	98	0	73	0	171	0	161	187	0	348	59	148	0	0	207	726
8:00 AM	0	0	0	0	0	24	0	20	0	44	0	67	40	0	107	21	54	0	0	75	226
8:15 AM	0	0	0	0	0	19	0	11	0	30	0	61	41	0	102	8	65	0	1	73	205
8:30 AM	0	0	0	0	0	11	0	18	0	29	0	48	34	0	82	11	41	0	0	52	163
8:45 AM	0	0	0	0	0	10	0	14	0	24	0	41	36	0	77	20	41	0	1	61	162
Hourly Total	0	0	0	0	0	64	0	63	0	127	0	217	151	0	368	60	201	0	2	261	756
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	0	0	0	38	0	25	2	63	2	56	24	0	82	20	103	0	1	123	268
4:15 PM	0	0	0	3	0	44	0	32	0	76	0	62	28	1	90	17	108	0	0	125	291
4:30 PM	0	0	0	1	0	61	0	28	0	89	0	72	34	2	106	18	120	0	0	138	333
4:45 PM	0	0	0	1	0	50	0	30	1	80	0	73	29	1	102	24	99	0	0	123	305
Hourly Total	0	0	0	5	0	193	0	115	3	308	2	263	115	4	380	79	430	0	1	509	1197
5:00 PM	0	0	0	1	0	61	0	29	0	90	0	76	28	0	104	24	119	0	0	143	337
5:15 PM	0	0	0	3	0	58	0	32	0	90	0	49	40	2	89	20	103	0	0	123	302
5:30 PM	0	0	0	2	0	36	0	27	0	63	0	73	26	0	99	19	110	0	1	129	291
5:45 PM	0	0	0	0	0	38	0	21	0	59	0	68	31	0	99	14	70	0	0	84	242
Hourly Total	0	0	0	6	0	193	0	109	0	302	0	266	125	2	391	77	402	0	1	479	1172
Grand Total	0	0	0	13	0	548	0	360	3	908	2	907	578	6	1487	275	1181	0	4	1456	3851
Approach %	0.0	0.0	0.0	-	-	60.4	0.0	39.6	-	-	0.1	61.0	38.9	-	-	18.9	81.1	0.0	-	-	-
Total %	0.0	0.0	0.0	-	0.0	14.2	0.0	9.3	-	23.6	0.1	23.6	15.0	-	38.6	7.1	30.7	0.0	-	37.8	-
Lights	0	0	0	-	0	532	0	345	-	877	2	882	557	-	1441	265	1146	0	-	1411	3729
% Lights	-	-	-	-	-	97.1	-	95.8	-	96.6	100.0	97.2	96.4	-	96.9	96.4	97.0	-	-	96.9	96.8
Mediums	0	0	0	-	0	15	0	12	-	27	0	22	20	-	42	8	29	0	-	37	106
% Mediums	-	-	-	-	-	2.7	-	3.3	-	3.0	0.0	2.4	3.5	-	2.8	2.9	2.5	-	-	2.5	2.8
Articulated Trucks	0	0	0	-	0	1	0	3	-	4	0	3	1	-	4	2	6	0	-	8	16
% Articulated Trucks	-	-	-	-	-	0.2	-	0.8	-	0.4	0.0	0.3	0.2	-	0.3	0.7	0.5	-	-	0.5	0.4
Bicycles on Crosswalk	-	-	-	4	-	-	-	-	0	-	-	-	-	1	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	30.8	-	-	-	-	0.0	-	-	-	-	16.7	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	9	-	-	-	-	3	-	-	-	-	5	-	-	-	-	4	-	-
% Pedestrians	-	-	-	69.2	-	-	-	-	100.0	-	-	-	-	83.3	-	-	-	-	100.0	-	-

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
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Count Name: 7_Blake Road & 2nd Street
Site Code:
Start Date: 02/26/2020



Turning Movement Data Plot

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331.481.7332 jack.olsson@kimley-horn.com

Count Name: 7_Blake Road & 2nd Street
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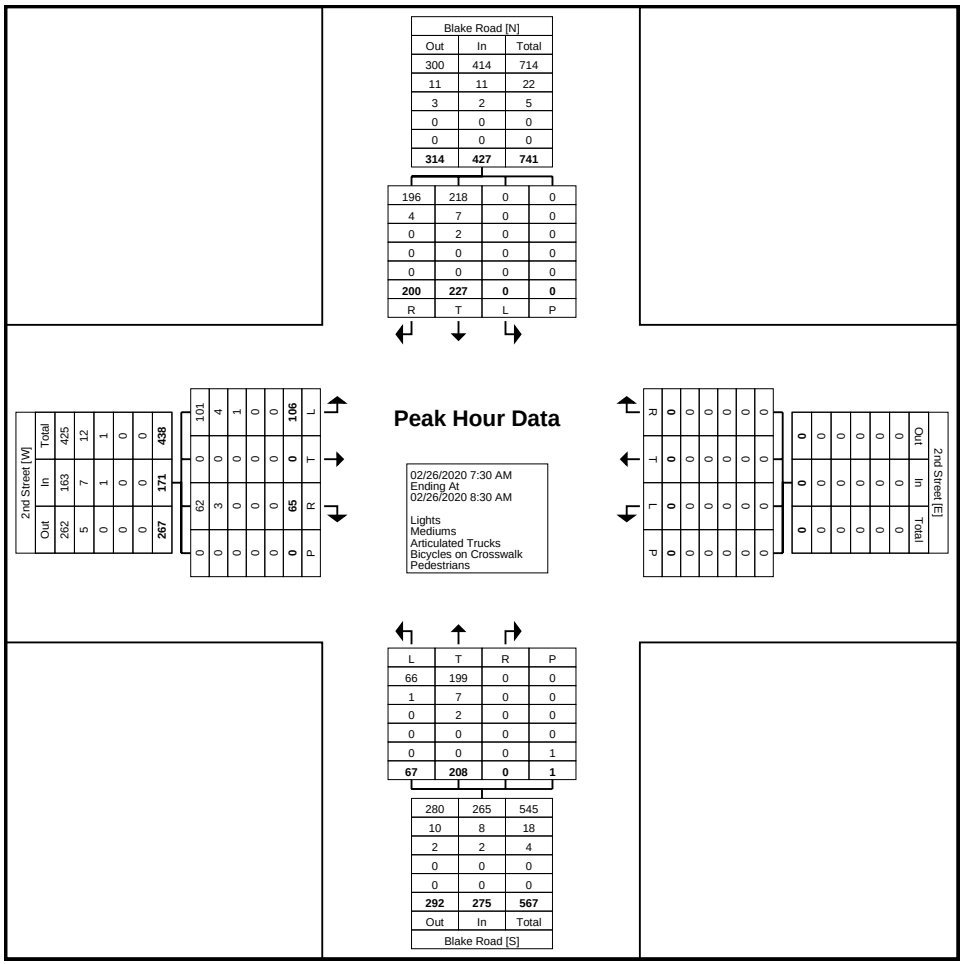
Turning Movement Peak Hour Data (7:30 AM)

Start Time	2nd Street Westbound					2nd Street Eastbound					Blake Road Southbound					Blake Road Northbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
7:30 AM	0	0	0	0	0	28	0	21	0	49	0	53	55	0	108	15	31	0	0	46	203
7:45 AM	0	0	0	0	0	35	0	13	0	48	0	46	64	0	110	23	58	0	0	81	239
8:00 AM	0	0	0	0	0	24	0	20	0	44	0	67	40	0	107	21	54	0	0	75	226
8:15 AM	0	0	0	0	0	19	0	11	0	30	0	61	41	0	102	8	65	0	1	73	205
Total	0	0	0	0	0	106	0	65	0	171	0	227	200	0	427	67	208	0	1	275	873
Approach %	0.0	0.0	0.0	-	-	62.0	0.0	38.0	-	-	0.0	53.2	46.8	-	-	24.4	75.6	0.0	-	-	-
Total %	0.0	0.0	0.0	-	0.0	12.1	0.0	7.4	-	19.6	0.0	26.0	22.9	-	48.9	7.7	23.8	0.0	-	31.5	-
PHF	0.000	0.000	0.000	-	0.000	0.757	0.000	0.774	-	0.872	0.000	0.847	0.781	-	0.970	0.728	0.800	0.000	-	0.849	0.913
Lights	0	0	0	-	0	101	0	62	-	163	0	218	196	-	414	66	199	0	-	265	842
% Lights	-	-	-	-	-	95.3	-	95.4	-	95.3	-	96.0	98.0	-	97.0	98.5	95.7	-	-	96.4	96.4
Mediums	0	0	0	-	0	4	0	3	-	7	0	7	4	-	11	1	7	0	-	8	26
% Mediums	-	-	-	-	-	3.8	-	4.6	-	4.1	-	3.1	2.0	-	2.6	1.5	3.4	-	-	2.9	3.0
Articulated Trucks	0	0	0	-	0	1	0	0	-	1	0	2	0	-	2	0	2	0	-	2	5
% Articulated Trucks	-	-	-	-	-	0.9	-	0.0	-	0.6	-	0.9	0.0	-	0.5	0.0	1.0	-	-	0.7	0.6
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kimley-Horn : Lisle (IL)
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Count Name: 7_Blake Road & 2nd Street
Site Code:
Start Date: 02/26/2020



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

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Count Name: 7_Blake Road & 2nd Street
Site Code:
Start Date: 02/26/2020

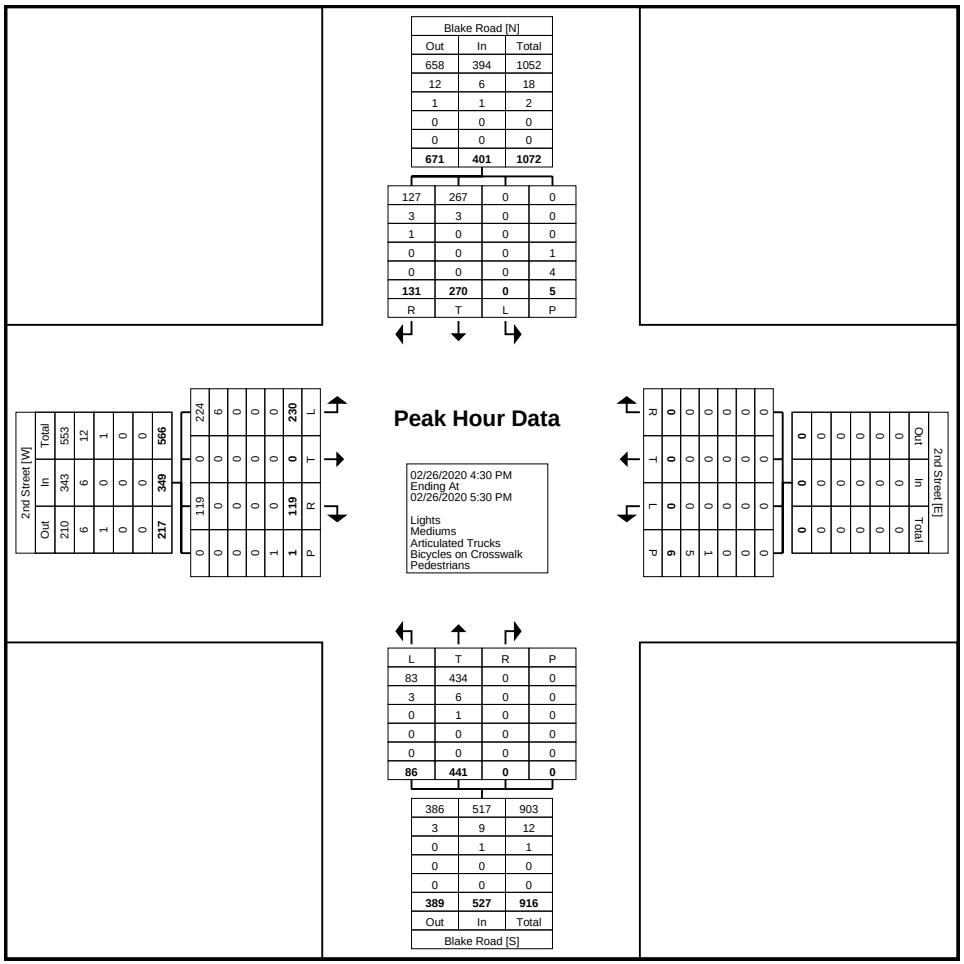
Turning Movement Peak Hour Data (4:30 PM)

Start Time	2nd Street Westbound					2nd Street Eastbound					Blake Road Southbound					Blake Road Northbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
4:30 PM	0	0	0	1	0	61	0	28	0	89	0	72	34	2	106	18	120	0	0	138	333
4:45 PM	0	0	0	1	0	50	0	30	1	80	0	73	29	1	102	24	99	0	0	123	305
5:00 PM	0	0	0	1	0	61	0	29	0	90	0	76	28	0	104	24	119	0	0	143	337
5:15 PM	0	0	0	3	0	58	0	32	0	90	0	49	40	2	89	20	103	0	0	123	302
Total	0	0	0	6	0	230	0	119	1	349	0	270	131	5	401	86	441	0	0	527	1277
Approach %	0.0	0.0	0.0	-	-	65.9	0.0	34.1	-	-	0.0	67.3	32.7	-	-	16.3	83.7	0.0	-	-	-
Total %	0.0	0.0	0.0	-	0.0	18.0	0.0	9.3	-	27.3	0.0	21.1	10.3	-	31.4	6.7	34.5	0.0	-	41.3	-
PHF	0.000	0.000	0.000	-	0.000	0.943	0.000	0.930	-	0.969	0.000	0.888	0.819	-	0.946	0.896	0.919	0.000	-	0.921	0.947
Lights	0	0	0	-	0	224	0	119	-	343	0	267	127	-	394	83	434	0	-	517	1254
% Lights	-	-	-	-	-	97.4	-	100.0	-	98.3	-	98.9	96.9	-	98.3	96.5	98.4	-	-	98.1	98.2
Mediums	0	0	0	-	0	6	0	0	-	6	0	3	3	-	6	3	6	0	-	9	21
% Mediums	-	-	-	-	-	2.6	-	0.0	-	1.7	-	1.1	2.3	-	1.5	3.5	1.4	-	-	1.7	1.6
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	1	-	1	0	1	0	-	1	2
% Articulated Trucks	-	-	-	-	-	0.0	-	0.0	-	0.0	-	0.0	0.8	-	0.2	0.0	0.2	-	-	0.2	0.2
Bicycles on Crosswalk	-	-	-	1	-	-	-	-	0	-	-	-	-	1	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	16.7	-	-	-	-	0.0	-	-	-	-	20.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	5	-	-	-	-	1	-	-	-	-	4	-	-	-	-	0	-	-
% Pedestrians	-	-	-	83.3	-	-	-	-	100.0	-	-	-	-	80.0	-	-	-	-	-	-	-

Kimley-Horn : Lisle (IL)
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Count Name: 7_Blake Road & 2nd Street
Site Code:
Start Date: 02/26/2020



Turning Movement Peak Hour Data Plot (4:30 PM)

Kimley-Horn : Lisle (IL)
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Count Name: 8_Excelsior Boulevard & Milwaukee Street/Jackson Avenue
Site Code:
Start Date: 02/26/2020

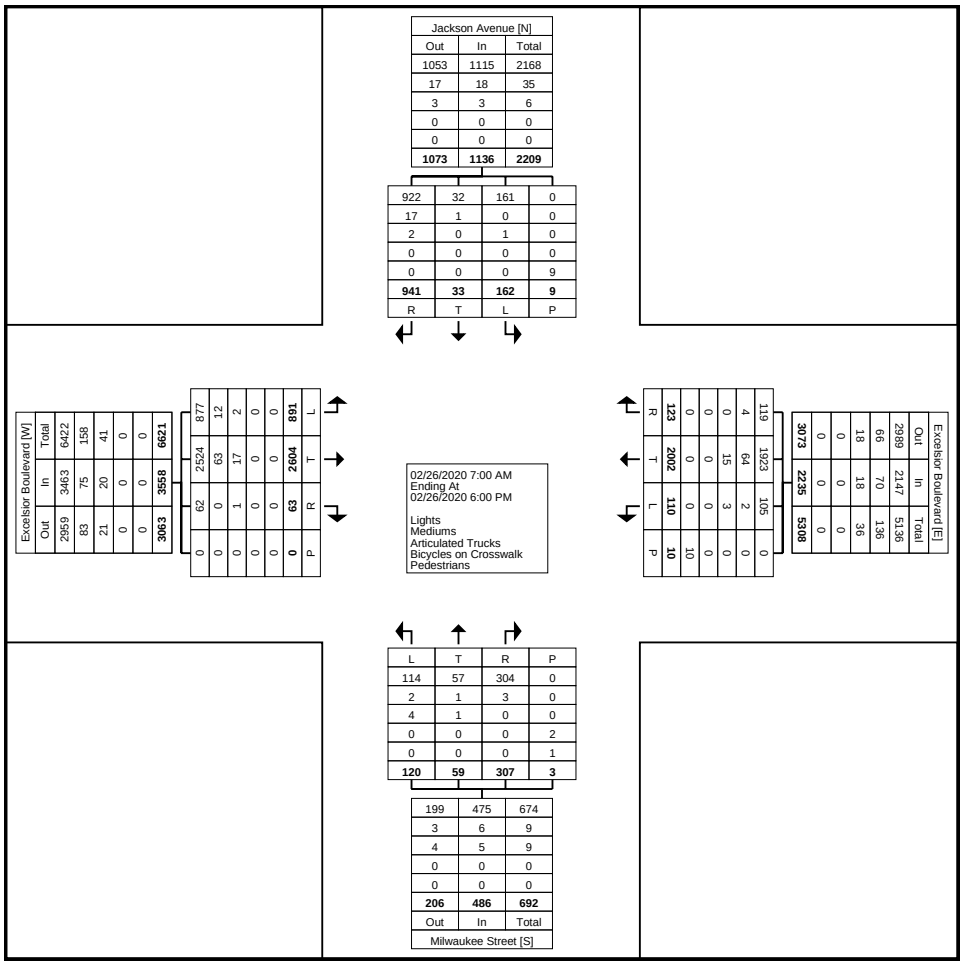
Turning Movement Data

Start Time	Excelsior Boulevard Westbound					Excelsior Boulevard Eastbound					Jackson Avenue Southbound					Milwaukee Street Northbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
7:00 AM	3	58	8	0	69	87	113	17	0	217	1	4	33	0	38	2	0	5	0	7	331
7:15 AM	10	93	9	1	112	80	124	3	0	207	2	1	29	0	32	1	1	9	0	11	362
7:30 AM	5	115	8	0	128	94	144	11	0	249	3	1	43	0	47	8	3	11	0	22	446
7:45 AM	17	140	21	0	178	82	140	5	0	227	3	3	46	0	52	5	4	23	0	32	489
Hourly Total	35	406	46	1	487	343	521	36	0	900	9	9	151	0	169	16	8	48	0	72	1628
8:00 AM	10	115	7	0	132	97	163	5	0	265	5	1	35	1	41	7	7	12	0	26	464
8:15 AM	8	110	8	0	126	66	153	9	0	228	1	0	40	3	41	8	3	10	0	21	416
8:30 AM	4	121	8	0	133	87	135	3	0	225	1	1	31	0	33	7	3	18	0	28	419
8:45 AM	9	95	9	0	113	73	123	2	0	198	3	2	22	2	27	7	2	10	0	19	357
Hourly Total	31	441	32	0	504	323	574	19	0	916	10	4	128	6	142	29	15	50	0	94	1656
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	2	157	6	1	165	18	158	1	0	177	21	1	81	0	103	17	2	22	1	41	486
4:15 PM	3	154	4	1	161	35	178	1	0	214	15	2	91	0	108	7	6	27	1	40	523
4:30 PM	8	139	3	2	150	20	204	1	0	225	34	1	93	1	128	10	8	34	0	52	555
4:45 PM	8	159	3	0	170	26	211	1	0	238	13	3	98	0	114	12	6	40	0	58	580
Hourly Total	21	609	16	4	646	99	751	4	0	854	83	7	363	1	453	46	22	123	2	191	2144
5:00 PM	2	135	8	3	145	37	219	1	0	257	24	4	106	1	134	6	4	28	0	38	574
5:15 PM	5	188	6	0	199	36	206	1	0	243	14	5	80	0	99	10	7	22	1	39	580
5:30 PM	10	107	7	1	124	33	185	1	0	219	13	2	63	0	78	6	3	21	0	30	451
5:45 PM	6	116	8	1	130	20	148	1	0	169	9	2	50	1	61	7	0	15	0	22	382
Hourly Total	23	546	29	5	598	126	758	4	0	888	60	13	299	2	372	29	14	86	1	129	1987
Grand Total	110	2002	123	10	2235	891	2604	63	0	3558	162	33	941	9	1136	120	59	307	3	486	7415
Approach %	4.9	89.6	5.5	-	-	25.0	73.2	1.8	-	-	14.3	2.9	82.8	-	-	24.7	12.1	63.2	-	-	-
Total %	1.5	27.0	1.7	-	30.1	12.0	35.1	0.8	-	48.0	2.2	0.4	12.7	-	15.3	1.6	0.8	4.1	-	6.6	-
Lights	105	1923	119	-	2147	877	2524	62	-	3463	161	32	922	-	1115	114	57	304	-	475	7200
% Lights	95.5	96.1	96.7	-	96.1	98.4	96.9	98.4	-	97.3	99.4	97.0	98.0	-	98.2	95.0	96.6	99.0	-	97.7	97.1
Mediums	2	64	4	-	70	12	63	0	-	75	0	1	17	-	18	2	1	3	-	6	169
% Mediums	1.8	3.2	3.3	-	3.1	1.3	2.4	0.0	-	2.1	0.0	3.0	1.8	-	1.6	1.7	1.7	1.0	-	1.2	2.3
Articulated Trucks	3	15	0	-	18	2	17	1	-	20	1	0	2	-	3	4	1	0	-	5	46
% Articulated Trucks	2.7	0.7	0.0	-	0.8	0.2	0.7	1.6	-	0.6	0.6	0.0	0.2	-	0.3	3.3	1.7	0.0	-	1.0	0.6
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	2	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	66.7	-	-
Pedestrians	-	-	-	10	-	-	-	-	0	-	-	-	-	9	-	-	-	-	1	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	33.3	-	-

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Count Name: 8_Excelsior Boulevard & Milwaukee Street/Jackson Avenue
Site Code:
Start Date: 02/26/2020



Turning Movement Data Plot

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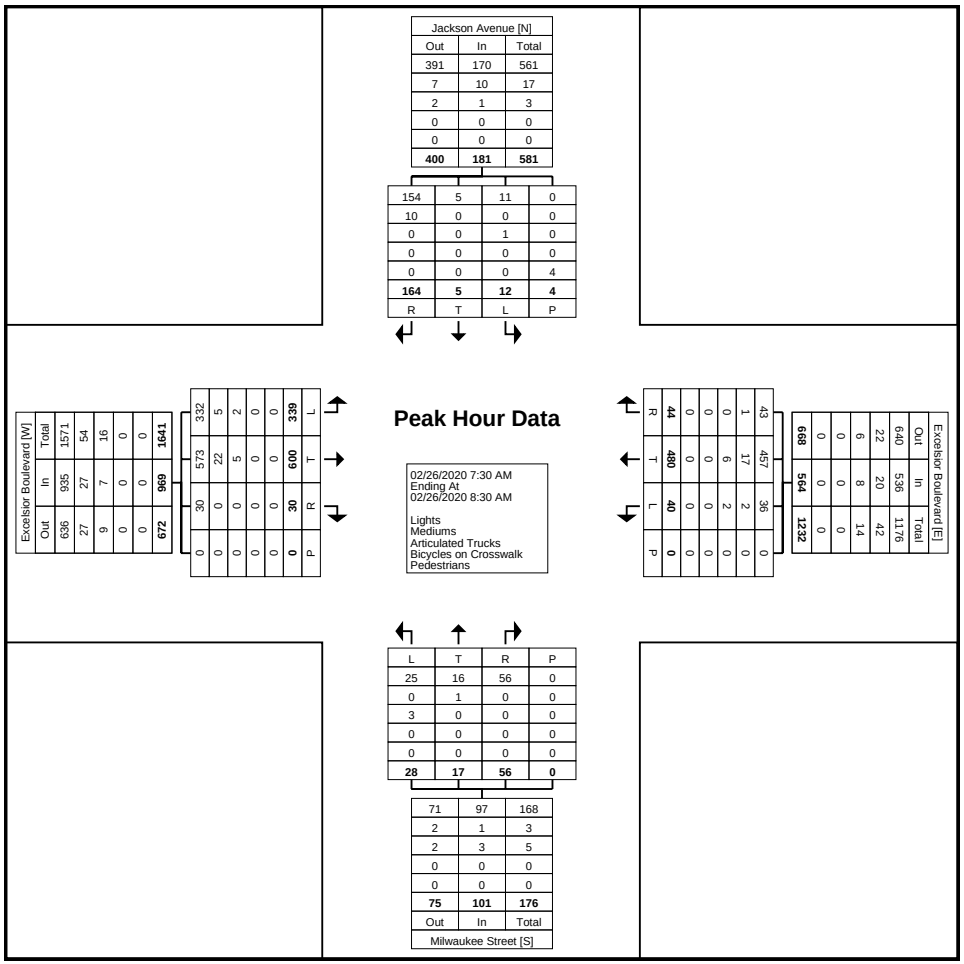
Turning Movement Peak Hour Data (7:30 AM)

Start Time	Excelsior Boulevard Westbound					Excelsior Boulevard Eastbound					Jackson Avenue Southbound					Milwaukee Street Northbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
7:30 AM	5	115	8	0	128	94	144	11	0	249	3	1	43	0	47	8	3	11	0	22	446
7:45 AM	17	140	21	0	178	82	140	5	0	227	3	3	46	0	52	5	4	23	0	32	489
8:00 AM	10	115	7	0	132	97	163	5	0	265	5	1	35	1	41	7	7	12	0	26	464
8:15 AM	8	110	8	0	126	66	153	9	0	228	1	0	40	3	41	8	3	10	0	21	416
Total	40	480	44	0	564	339	600	30	0	969	12	5	164	4	181	28	17	56	0	101	1815
Approach %	7.1	85.1	7.8	-	-	35.0	61.9	3.1	-	-	6.6	2.8	90.6	-	-	27.7	16.8	55.4	-	-	-
Total %	2.2	26.4	2.4	-	31.1	18.7	33.1	1.7	-	53.4	0.7	0.3	9.0	-	10.0	1.5	0.9	3.1	-	5.6	-
PHF	0.588	0.857	0.524	-	0.792	0.874	0.920	0.682	-	0.914	0.600	0.417	0.891	-	0.870	0.875	0.607	0.609	-	0.789	0.928
Lights	36	457	43	-	536	332	573	30	-	935	11	5	154	-	170	25	16	56	-	97	1738
% Lights	90.0	95.2	97.7	-	95.0	97.9	95.5	100.0	-	96.5	91.7	100.0	93.9	-	93.9	89.3	94.1	100.0	-	96.0	95.8
Mediums	2	17	1	-	20	5	22	0	-	27	0	0	10	-	10	0	1	0	-	1	58
% Mediums	5.0	3.5	2.3	-	3.5	1.5	3.7	0.0	-	2.8	0.0	0.0	6.1	-	5.5	0.0	5.9	0.0	-	1.0	3.2
Articulated Trucks	2	6	0	-	8	2	5	0	-	7	1	0	0	-	1	3	0	0	-	3	19
% Articulated Trucks	5.0	1.3	0.0	-	1.4	0.6	0.8	0.0	-	0.7	8.3	0.0	0.0	-	0.6	10.7	0.0	0.0	-	3.0	1.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	4	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-

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

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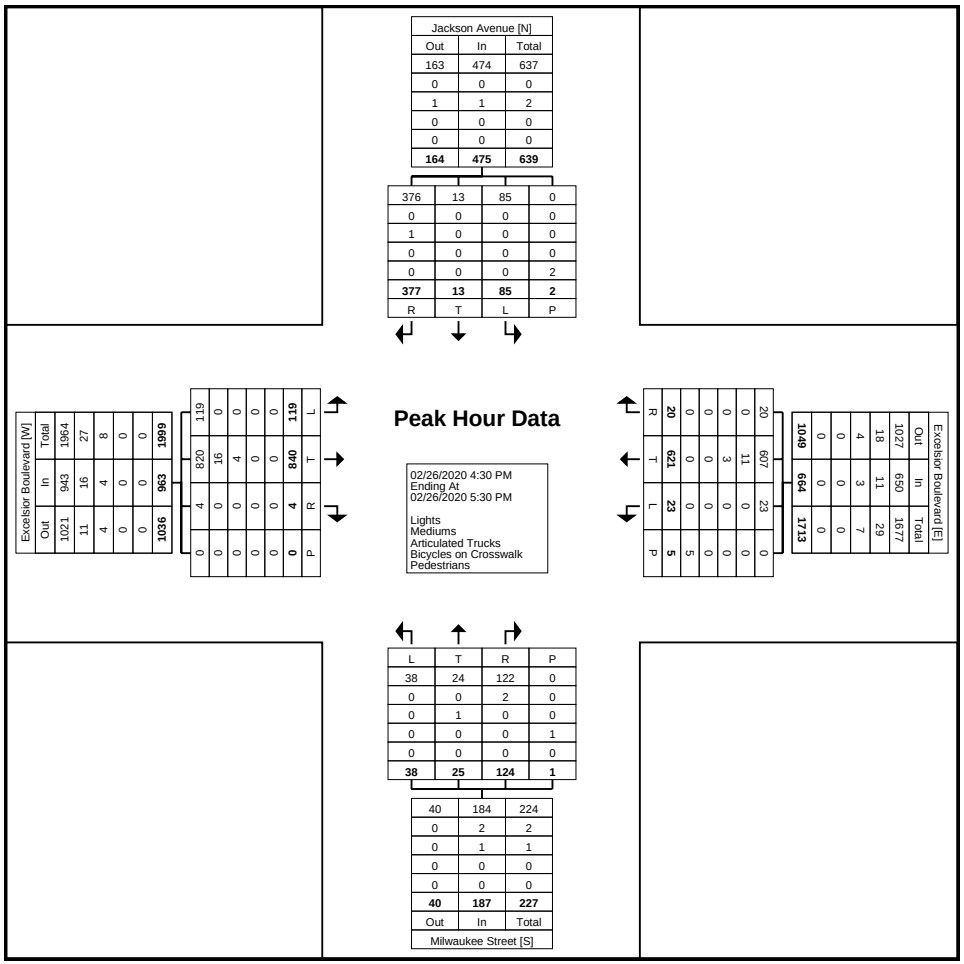
Turning Movement Peak Hour Data (4:30 PM)

Start Time	Excelsior Boulevard Westbound					Excelsior Boulevard Eastbound					Jackson Avenue Southbound					Milwaukee Street Northbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
4:30 PM	8	139	3	2	150	20	204	1	0	225	34	1	93	1	128	10	8	34	0	52	555
4:45 PM	8	159	3	0	170	26	211	1	0	238	13	3	98	0	114	12	6	40	0	58	580
5:00 PM	2	135	8	3	145	37	219	1	0	257	24	4	106	1	134	6	4	28	0	38	574
5:15 PM	5	188	6	0	199	36	206	1	0	243	14	5	80	0	99	10	7	22	1	39	580
Total	23	621	20	5	664	119	840	4	0	963	85	13	377	2	475	38	25	124	1	187	2289
Approach %	3.5	93.5	3.0	-	-	12.4	87.2	0.4	-	-	17.9	2.7	79.4	-	-	20.3	13.4	66.3	-	-	-
Total %	1.0	27.1	0.9	-	29.0	5.2	36.7	0.2	-	42.1	3.7	0.6	16.5	-	20.8	1.7	1.1	5.4	-	8.2	-
PHF	0.719	0.826	0.625	-	0.834	0.804	0.959	1.000	-	0.937	0.625	0.650	0.889	-	0.886	0.792	0.781	0.775	-	0.806	0.987
Lights	23	607	20	-	650	119	820	4	-	943	85	13	376	-	474	38	24	122	-	184	2251
% Lights	100.0	97.7	100.0	-	97.9	100.0	97.6	100.0	-	97.9	100.0	100.0	99.7	-	99.8	100.0	96.0	98.4	-	98.4	98.3
Mediums	0	11	0	-	11	0	16	0	-	16	0	0	0	-	0	0	0	2	-	2	29
% Mediums	0.0	1.8	0.0	-	1.7	0.0	1.9	0.0	-	1.7	0.0	0.0	0.0	-	0.0	0.0	0.0	1.6	-	1.1	1.3
Articulated Trucks	0	3	0	-	3	0	4	0	-	4	0	0	1	-	1	0	1	0	-	1	9
% Articulated Trucks	0.0	0.5	0.0	-	0.5	0.0	0.5	0.0	-	0.4	0.0	0.0	0.3	-	0.2	0.0	4.0	0.0	-	0.5	0.4
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	0.0	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	100.0	-	-
Pedestrians	-	-	-	5	-	-	-	-	0	-	-	-	-	2	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	0.0	-	-

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Start Date: 02/26/2020



Turning Movement Peak Hour Data Plot (4:30 PM)

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.4	0.2	0.2	0.0	0.0	0.0	4.0	0.3	4.0	0.1	0.3	3.9
Total Del/Veh (s)	38.9	7.7	5.1	53.8	18.0	15.6	48.8	53.6	2.2	51.5	63.9	1.9

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	19.3

2: Pierce Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	9.0	3.7	3.4	8.1	0.4	0.2	20.1	29.7	4.8	13.7	6.6	2.5

3: Excelsior Boulevard & RIRO Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.0	1.8	1.4	9.3	1.4

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.7	0.2	2.7	3.6	0.3	0.2	0.0	0.0	0.0
Total Del/Veh (s)	38.7	13.3	3.2	46.2	20.0	3.7	41.6	33.7	12.5	40.4	34.5	23.6

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	23.1

5: Blake Road & Full Access Driveway Performance by movement

Movement	EBL	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.4	3.1	7.7	5.3	3.6	3.9	1.2	1.1	2.7	0.4	0.2	1.2

6: Blake Road & RIRO Performance by movement

Movement	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.2	1.6	1.4	1.0

7: Blake Road & 2nd Street Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.3	0.3	0.0	0.0	0.2	0.2	0.2
Total Del/Veh (s)	18.0	10.7	23.1	6.8	13.4	5.1	12.5

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	35.5

Intersection: 1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	T	L	T
Maximum Queue (ft)	301	362	228	187	156	252	242	65	56	61	31
Average Queue (ft)	185	230	102	70	37	107	118	21	12	15	5
95th Queue (ft)	280	319	208	166	101	212	218	53	37	45	21
Link Distance (ft)		717	717	717		1943	1943		317	537	537
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500				150			150			
Storage Blk Time (%)					0	4					
Queuing Penalty (veh)					0	2					

Intersection: 2: Pierce Avenue & Excelsior Boulevard

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	34	4	40	4	29	31
Average Queue (ft)	6	0	10	0	11	8
95th Queue (ft)	22	3	29	3	29	25
Link Distance (ft)		1943		303	111	208
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	215		200			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: Excelsior Boulevard & RIRO

Movement	SB
Directions Served	R
Maximum Queue (ft)	23
Average Queue (ft)	3
95th Queue (ft)	15
Link Distance (ft)	116
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	42	63	180	206	117	105	224	197	62	194	224	93
Average Queue (ft)	11	27	86	96	25	45	129	98	27	97	42	26
95th Queue (ft)	32	57	162	178	71	88	203	185	55	175	112	66
Link Distance (ft)	204	204	204	204			1139	1139			608	608
Upstream Blk Time (%)			0	0	0							
Queuing Penalty (veh)			0	0	0							
Storage Bay Dist (ft)					185	280			350	175		
Storage Blk Time (%)				0	0					1		
Queuing Penalty (veh)				0	0					1		

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	SB	SB	SB	SB
Directions Served	L	L	T	TR
Maximum Queue (ft)	122	132	170	206
Average Queue (ft)	48	67	68	100
95th Queue (ft)	96	112	128	174
Link Distance (ft)			275	275
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	165	165		
Storage Blk Time (%)		0	0	
Queuing Penalty (veh)		0	0	

Intersection: 5: Blake Road & Full Access Driveway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	39	65	23	30
Average Queue (ft)	13	28	2	4
95th Queue (ft)	38	55	12	20
Link Distance (ft)	99	110		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			50	50
Storage Blk Time (%)				0
Queuing Penalty (veh)				0

Intersection: 6: Blake Road & RIRO

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 7: Blake Road & 2nd Street

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LTR	L	T	TR	T	TR
Maximum Queue (ft)	152	206	89	76	93	161	144
Average Queue (ft)	17	104	41	28	32	76	48
95th Queue (ft)	72	168	78	63	73	132	107
Link Distance (ft)		551		561	561	615	615
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	160		200				
Storage Blk Time (%)	0	1				1	
Queuing Penalty (veh)	0	1				0	

Network Summary

Network wide Queuing Penalty: 4

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.3	0.3	0.3	0.0	0.0	0.0	3.9	0.5	3.9	0.3	1.0	3.5
Total Del/Veh (s)	58.8	12.2	9.7	69.0	27.2	26.1	49.4	58.4	2.5	51.1	56.7	2.8

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.7
Total Del/Veh (s)	19.6

2: Pierce Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.0
Total Del/Veh (s)	14.7	7.0	7.2	29.1	0.7	0.6	69.9	28.6	54.3	14.4	5.8

3: Excelsior Boulevard & RIRO Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	3.5	2.1	1.6	6.8	3.0

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.6	0.3	2.5	3.5	0.2	0.2	0.0	0.0	0.0
Total Del/Veh (s)	53.3	24.3	8.6	53.1	20.2	6.8	54.7	46.6	24.5	56.6	48.1	35.7

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	29.1

5: Blake Road & Full Access Driveway Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	11.6	16.2	6.1	18.0	18.8	8.1	5.1	1.4	1.0	5.6	0.6	0.2

5: Blake Road & Full Access Driveway Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	2.3

6: Blake Road & RIRO Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.2	0.3	1.7	1.4	0.9

7: Blake Road & 2nd Street Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.4	0.4	0.0	0.0	0.2	0.2	0.2
Total Del/Veh (s)	21.8	15.5	28.3	9.5	16.6	8.2	14.4

Total Network Performance

Denied Del/Veh (s)	0.9
Total Del/Veh (s)	46.5

Intersection: 1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	T	L	T
Maximum Queue (ft)	128	168	389	355	174	379	383	81	66	130	48
Average Queue (ft)	26	94	205	176	24	249	264	29	20	72	13
95th Queue (ft)	96	156	345	313	88	363	369	68	53	119	42
Link Distance (ft)		717	717	717		1943	1943		317	537	537
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500				150			150			
Storage Blk Time (%)						20					
Queuing Penalty (veh)						5					

Intersection: 2: Pierce Avenue & Excelsior Boulevard

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	68	21	3	41	7	63	93
Average Queue (ft)	16	1	0	10	0	14	30
95th Queue (ft)	44	11	2	31	4	42	69
Link Distance (ft)		1943	1943		303	111	208
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	215			200			
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Excelsior Boulevard & RIRO

Movement	EB	EB	EB	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	60	211	215	54
Average Queue (ft)	5	30	42	18
95th Queue (ft)	35	122	142	43
Link Distance (ft)		303	303	116
Upstream Blk Time (%)		0	0	
Queuing Penalty (veh)		1	0	
Storage Bay Dist (ft)	50			
Storage Blk Time (%)		4		
Queuing Penalty (veh)		33		

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	134	149	302	299	204	135	268	236	142	165	195	153
Average Queue (ft)	47	64	235	247	140	63	172	143	65	86	94	62
95th Queue (ft)	100	118	323	330	263	113	245	220	115	149	163	130
Link Distance (ft)	204	204	204	204			1139	1139			608	608
Upstream Blk Time (%)	0	0	16	18	1							
Queuing Penalty (veh)	0	0	64	72	0							
Storage Bay Dist (ft)					185	280			350	175		
Storage Blk Time (%)				21	1		0			0	0	
Queuing Penalty (veh)				51	3		0			0	1	

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	SB	SB	SB	SB
Directions Served	L	L	T	TR
Maximum Queue (ft)	162	183	192	245
Average Queue (ft)	79	92	78	119
95th Queue (ft)	142	153	147	196
Link Distance (ft)			275	275
Upstream Blk Time (%)				0
Queuing Penalty (veh)				0
Storage Bay Dist (ft)	165	165		
Storage Blk Time (%)	0	0	0	
Queuing Penalty (veh)	0	0	1	

Intersection: 5: Blake Road & Full Access Driveway

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	L
Maximum Queue (ft)	69	98	29	15	52
Average Queue (ft)	33	40	3	0	16
95th Queue (ft)	60	74	17	5	44
Link Distance (ft)	99	110		275	
Upstream Blk Time (%)	0	0			
Queuing Penalty (veh)	0	0			
Storage Bay Dist (ft)			50		50
Storage Blk Time (%)					0
Queuing Penalty (veh)					1

Intersection: 6: Blake Road & RIRO

Movement	EB
Directions Served	R
Maximum Queue (ft)	29
Average Queue (ft)	4
95th Queue (ft)	20
Link Distance (ft)	87
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Blake Road & 2nd Street

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LTR	L	T	TR	T	TR
Maximum Queue (ft)	176	262	150	207	194	198	181
Average Queue (ft)	35	130	53	81	88	95	75
95th Queue (ft)	125	216	106	159	164	168	155
Link Distance (ft)		551		561	561	615	615
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	160		200				
Storage Blk Time (%)	0	4	0	0		2	
Queuing Penalty (veh)	0	4	0	0		0	

Network Summary

Network wide Queuing Penalty: 238

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.4	0.2	0.2	0.0	0.0	0.0	4.0	0.3	4.0	0.2	0.7	3.8
Total Del/Veh (s)	39.0	7.3	4.2	56.1	19.2	19.1	43.9	59.4	2.1	40.9	65.6	2.0

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	19.6

2: Pierce Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	4.1	0.0
Total Del/Veh (s)	10.9	3.5	4.0	7.9	0.4	0.2	18.5	23.0	6.3	19.2	6.4	2.5

3: Excelsior Boulevard & RIRO Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.9	1.8	1.5	3.5	1.4

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.8	0.2	2.7	3.5	0.3	0.2	0.0	0.0	0.0
Total Del/Veh (s)	41.8	14.0	3.2	49.9	21.0	4.2	40.8	33.3	11.5	41.5	35.7	24.0

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	23.8

5: Blake Road & Full Access Driveway Performance by movement

Movement	EBL	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	9.2	4.0	9.5	7.9	3.8	3.6	1.3	1.2	3.4	0.4	0.2	1.3

6: Blake Road & RIRO Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.5	0.2	1.6	1.5	1.0

7: Blake Road & 2nd Street Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.3	0.3	0.1	0.0	0.2	0.2	0.2
Total Del/Veh (s)	18.4	11.7	24.7	6.9	14.5	6.2	13.2

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	36.1

Intersection: 1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	T	L	T
Maximum Queue (ft)	344	377	219	194	160	229	238	71	49	52	31
Average Queue (ft)	183	234	99	67	39	121	138	27	13	14	7
95th Queue (ft)	303	339	196	157	99	210	223	63	41	44	27
Link Distance (ft)		717	717	717		1944	1944		317	537	537
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500				150			150			
Storage Blk Time (%)		0			0	5					
Queuing Penalty (veh)		0			0	2					

Intersection: 2: Pierce Avenue & Excelsior Boulevard

Movement	EB	WB	NB	SB	SB
Directions Served	L	L	LTR	LT	R
Maximum Queue (ft)	48	42	42	23	21
Average Queue (ft)	10	11	14	4	7
95th Queue (ft)	32	32	34	19	21
Link Distance (ft)			111	209	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	215	200			100
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Excelsior Boulevard & RIRO

Movement	SB
Directions Served	R
Maximum Queue (ft)	23
Average Queue (ft)	4
95th Queue (ft)	17
Link Distance (ft)	116
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	61	69	186	216	182	110	239	197	69	194	171	100
Average Queue (ft)	10	24	86	100	32	48	139	109	31	111	44	27
95th Queue (ft)	33	52	169	186	97	94	205	186	61	188	116	73
Link Distance (ft)	204	204	204	204			1139	1139			608	608
Upstream Blk Time (%)			0	0	0							
Queuing Penalty (veh)			0	1	0							
Storage Bay Dist (ft)					185	280			350	175		
Storage Blk Time (%)				1	0		0			2		
Queuing Penalty (veh)				1	0		0			1		

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	SB	SB	SB	SB
Directions Served	L	L	T	TR
Maximum Queue (ft)	114	119	133	181
Average Queue (ft)	49	68	63	98
95th Queue (ft)	95	111	114	168
Link Distance (ft)			275	275
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	165	165		
Storage Blk Time (%)		0	0	
Queuing Penalty (veh)		0	0	

Intersection: 5: Blake Road & Full Access Driveway

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	L
Maximum Queue (ft)	52	65	22	4	35
Average Queue (ft)	14	28	1	0	7
95th Queue (ft)	41	55	9	3	27
Link Distance (ft)	99	110		275	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			50		50
Storage Blk Time (%)					0
Queuing Penalty (veh)					0

Intersection: 6: Blake Road & RIRO

Movement	EB
Directions Served	R
Maximum Queue (ft)	29
Average Queue (ft)	4
95th Queue (ft)	22
Link Distance (ft)	87
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Blake Road & 2nd Street

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LTR	L	T	TR	T	TR
Maximum Queue (ft)	165	203	98	78	88	159	144
Average Queue (ft)	25	108	41	30	33	77	53
95th Queue (ft)	98	176	75	65	70	138	114
Link Distance (ft)		551		561	561	615	615
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	160		200				
Storage Blk Time (%)	0	1				1	
Queuing Penalty (veh)	0	1				0	

Network Summary

Network wide Queuing Penalty: 7

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.3	0.3	0.2	0.0	0.0	0.0	3.9	0.6	3.8	0.3	0.9	3.4
Total Del/Veh (s)	53.2	14.9	8.3	64.2	27.5	27.3	48.2	56.6	2.7	53.3	59.1	2.9

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.8
Total Del/Veh (s)	20.5

2: Pierce Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	4.1	0.1
Total Del/Veh (s)	16.4	8.3	11.1	31.3	0.7	0.5	121.1	49.4	91.5	8.9	7.0

3: Excelsior Boulevard & RIRO Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	4.8	2.1	1.4	7.0	3.8

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.6	0.4	2.6	3.4	0.2	0.2	0.0	0.0	0.0
Total Del/Veh (s)	54.8	25.7	9.4	57.0	21.4	6.9	56.6	42.8	26.1	57.8	48.1	35.5

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	30.1

5: Blake Road & Full Access Driveway Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.3	0.4	0.2	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	14.3	22.7	6.4	18.2	18.1	7.4	4.1	1.4	1.2	5.8	0.6	0.3

5: Blake Road & Full Access Driveway Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	2.5

6: Blake Road & RIRO Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.7	0.3	1.7	1.4	0.9

7: Blake Road & 2nd Street Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.3	0.3	0.0	0.0	0.2	0.2	0.1
Total Del/Veh (s)	19.5	13.5	31.3	10.6	16.7	9.0	14.6

Total Network Performance

Denied Del/Veh (s)	0.9
Total Del/Veh (s)	48.6

Intersection: 1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	T	R	L	T
Maximum Queue (ft)	144	166	457	416	174	390	401	100	87	24	153	49
Average Queue (ft)	22	85	238	202	36	257	273	34	23	1	69	15
95th Queue (ft)	80	142	380	358	117	369	385	73	58	18	125	43
Link Distance (ft)		717	717	717		1944	1944		317		537	537
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500				150			150		150		
Storage Blk Time (%)						21						
Queuing Penalty (veh)						5						

Intersection: 2: Pierce Avenue & Excelsior Boulevard

Movement	EB	WB	WB	NB	SB	SB
Directions Served	L	L	TR	LTR	LT	R
Maximum Queue (ft)	52	49	4	74	41	44
Average Queue (ft)	21	9	0	20	10	19
95th Queue (ft)	47	32	3	58	32	38
Link Distance (ft)			303	111	209	
Upstream Blk Time (%)				1		
Queuing Penalty (veh)				0		
Storage Bay Dist (ft)	215	200				100
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: Excelsior Boulevard & RIRO

Movement	EB	EB	EB	WB	SB
Directions Served	T	T	T	R	R
Maximum Queue (ft)	74	263	271	13	48
Average Queue (ft)	12	57	75	0	18
95th Queue (ft)	57	181	209	10	42
Link Distance (ft)		303	303		116
Upstream Blk Time (%)		0	0		
Queuing Penalty (veh)		0	0		
Storage Bay Dist (ft)	50			65	
Storage Blk Time (%)		7		0	
Queuing Penalty (veh)		60		0	

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	114	134	308	302	204	174	272	230	123	180	218	162
Average Queue (ft)	48	64	251	261	152	69	179	153	56	94	93	61
95th Queue (ft)	96	113	334	337	270	133	257	223	98	163	165	134
Link Distance (ft)	204	204	204	204			1139	1139			608	608
Upstream Blk Time (%)			20	22	1							
Queuing Penalty (veh)			79	86	0							
Storage Bay Dist (ft)					185	280			350	175		
Storage Blk Time (%)				24	1		0			1	0	
Queuing Penalty (veh)				61	4		0			2	1	

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	SB	SB	SB	SB
Directions Served	L	L	T	TR
Maximum Queue (ft)	149	178	224	223
Average Queue (ft)	79	97	93	124
95th Queue (ft)	142	156	177	199
Link Distance (ft)			275	275
Upstream Blk Time (%)			0	0
Queuing Penalty (veh)			0	0
Storage Bay Dist (ft)	165	165		
Storage Blk Time (%)	0	1	1	
Queuing Penalty (veh)	0	1	1	

Intersection: 5: Blake Road & Full Access Driveway

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	T
Maximum Queue (ft)	93	85	29	19	45	23
Average Queue (ft)	36	43	3	1	15	1
95th Queue (ft)	68	77	18	9	42	17
Link Distance (ft)	99	110		275		310
Upstream Blk Time (%)	1	0				
Queuing Penalty (veh)	0	0				
Storage Bay Dist (ft)			50		50	
Storage Blk Time (%)					0	
Queuing Penalty (veh)					1	

Intersection: 6: Blake Road & RIRO

Movement	EB
Directions Served	R
Maximum Queue (ft)	43
Average Queue (ft)	14
95th Queue (ft)	40
Link Distance (ft)	87
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Blake Road & 2nd Street

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LTR	L	T	TR	T	TR
Maximum Queue (ft)	171	226	125	186	206	183	215
Average Queue (ft)	26	124	52	86	97	94	76
95th Queue (ft)	101	203	99	156	171	164	154
Link Distance (ft)		551		561	561	615	615
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	160		200				
Storage Blk Time (%)	0	3		0		2	
Queuing Penalty (veh)	0	4		0		0	

Network Summary

Network wide Queuing Penalty: 305

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.4	0.2	0.2	0.0	0.0	0.0	3.9	0.3	4.0	0.2	0.6	3.8
Total Del/Veh (s)	41.7	8.4	4.6	55.7	20.3	19.5	49.1	50.5	2.2	48.3	45.8	2.1

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	20.8

2: Pierce Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	4.0	0.0
Total Del/Veh (s)	13.7	4.1	4.2	8.0	0.5	0.3	22.5	31.7	6.0	20.1	5.5	2.8

3: Excelsior Boulevard & RIRO Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.1	1.9	1.5	5.3	1.5

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.7	0.2	2.6	3.5	0.3	0.2	0.0	0.0	0.0
Total Del/Veh (s)	35.8	15.3	3.6	46.6	22.7	4.3	40.9	36.2	16.7	38.8	37.8	25.3

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	25.2

5: Blake Road & Full Access Driveway Performance by movement

Movement	EBL	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	9.4	4.5	10.2	10.6	4.2	5.1	1.4	1.1	3.1	0.4	0.3	1.4

6: Blake Road & RIRO Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.7	0.2	1.6	1.3	1.1

7: Blake Road & 2nd Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.3	0.3	0.3	0.3	0.2	4.0	0.0	0.0	0.0	3.5	0.2	0.2
Total Del/Veh (s)	20.7	20.4	14.7	20.4	22.3	5.1	30.3	11.4	6.1	37.4	17.1	8.5

7: Blake Road & 2nd Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.3
Total Del/Veh (s)	16.4

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	38.8

Intersection: 1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	T	L	T
Maximum Queue (ft)	332	366	260	208	138	241	250	82	53	44	39
Average Queue (ft)	198	248	110	76	35	130	143	25	17	13	6
95th Queue (ft)	303	348	216	168	88	219	229	62	46	40	26
Link Distance (ft)		717	717	717		1944	1944		317	537	537
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500				150			150			
Storage Blk Time (%)					0	6					
Queuing Penalty (veh)					0	2					

Intersection: 2: Pierce Avenue & Excelsior Boulevard

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	T	L	TR	LTR	LT	R
Maximum Queue (ft)	52	15	45	4	33	31	21
Average Queue (ft)	14	1	8	0	13	6	6
95th Queue (ft)	39	8	27	3	32	23	19
Link Distance (ft)		1944		303	111	209	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	215		200			100	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Excelsior Boulevard & RIRO

Movement	EB	SB
Directions Served	T	R
Maximum Queue (ft)	10	23
Average Queue (ft)	1	4
95th Queue (ft)	7	17
Link Distance (ft)	303	116
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	63	76	225	242	199	112	248	215	65	187	150	152
Average Queue (ft)	13	29	99	113	39	49	143	110	32	104	51	48
95th Queue (ft)	38	62	192	215	122	96	210	188	57	176	121	111
Link Distance (ft)	204	204	204	204			1139	1139			608	608
Upstream Blk Time (%)			0	1	0							
Queuing Penalty (veh)			1	2	0							
Storage Bay Dist (ft)					185	280			350	175		
Storage Blk Time (%)				1	0		0			1	0	
Queuing Penalty (veh)				1	0		0			1	0	

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	SB	SB	SB	SB
Directions Served	L	L	T	TR
Maximum Queue (ft)	128	133	164	203
Average Queue (ft)	62	80	90	118
95th Queue (ft)	114	124	144	180
Link Distance (ft)			275	275
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	165	165		
Storage Blk Time (%)		0	0	
Queuing Penalty (veh)		0	0	

Intersection: 5: Blake Road & Full Access Driveway

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	L	L	TR
Maximum Queue (ft)	44	66	29	31	4
Average Queue (ft)	13	30	3	5	0
95th Queue (ft)	38	54	18	23	3
Link Distance (ft)	99	110			310
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			50	50	
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 6: Blake Road & RIRO

Movement	EB
Directions Served	R
Maximum Queue (ft)	29
Average Queue (ft)	4
95th Queue (ft)	20
Link Distance (ft)	87
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Blake Road & 2nd Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LTR	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	173	227	162	67	92	132	144	65	187	160
Average Queue (ft)	34	122	63	13	45	45	55	11	93	66
95th Queue (ft)	122	199	117	45	81	97	109	41	157	129
Link Distance (ft)		551	185			561	561		615	615
Upstream Blk Time (%)			0							
Queuing Penalty (veh)			0							
Storage Bay Dist (ft)	160			100	200			140		
Storage Blk Time (%)	0	3	3	0					1	
Queuing Penalty (veh)	0	3	0	0					0	

Network Summary

Network wide Queuing Penalty: 12

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.3	0.3	0.3	0.0	0.0	0.0	3.8	0.7	3.9	0.4	0.9	3.4
Total Del/Veh (s)	59.7	15.8	16.0	70.1	29.6	30.9	52.4	61.6	2.9	51.6	61.3	3.1

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.8
Total Del/Veh (s)	22.1

2: Pierce Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1	0.3	4.1	0.1
Total Del/Veh (s)	18.3	8.7	9.0	34.9	0.8	0.3	139.5	105.8	78.9	9.0	7.6

3: Excelsior Boulevard & RIRO Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	5.8	2.1	1.5	7.4	4.4

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.5	0.4	2.5	3.3	0.2	0.2	0.0	0.0	0.0
Total Del/Veh (s)	59.2	27.0	10.4	56.0	20.8	8.7	56.9	46.2	29.3	59.2	51.0	40.8

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	31.7

5: Blake Road & Full Access Driveway Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.1	0.1	0.1	0.3	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	17.2	22.2	8.5	26.8	23.9	12.5	4.9	1.6	1.4	6.9	0.7	0.2

5: Blake Road & Full Access Driveway Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	2.9

6: Blake Road & RIRO Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.0	0.4	1.6	1.4	0.9

7: Blake Road & 2nd Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.4	0.4	0.4	0.2	0.1	3.8	0.0	0.0	0.0	3.0	0.3	0.3
Total Del/Veh (s)	24.3	25.1	20.4	26.3	28.1	7.5	41.4	17.7	14.4	42.1	19.8	10.7

7: Blake Road & 2nd Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	20.4

Total Network Performance

Denied Del/Veh (s)	1.0
Total Del/Veh (s)	53.2

Intersection: 1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	T	R	L	T
Maximum Queue (ft)	151	283	508	481	174	412	422	100	90	58	174	58
Average Queue (ft)	37	114	259	219	37	287	298	34	25	3	77	16
95th Queue (ft)	118	246	440	397	125	401	407	73	64	34	140	46
Link Distance (ft)		717	717	717		1944	1944		317		537	537
Upstream Blk Time (%)		0	0									
Queuing Penalty (veh)		0	0									
Storage Bay Dist (ft)	500				150			150		150		
Storage Blk Time (%)						24				0		
Queuing Penalty (veh)						6				0		

Intersection: 2: Pierce Avenue & Excelsior Boulevard

Movement	EB	EB	EB	WB	NB	SB	SB
Directions Served	L	T	TR	L	LTR	LT	R
Maximum Queue (ft)	75	17	40	37	96	53	51
Average Queue (ft)	24	1	1	9	27	11	19
95th Queue (ft)	54	12	18	29	74	36	39
Link Distance (ft)		1944	1944		111	209	
Upstream Blk Time (%)					2		
Queuing Penalty (veh)					0		
Storage Bay Dist (ft)	215			200			100
Storage Blk Time (%)						0	
Queuing Penalty (veh)						0	

Intersection: 3: Excelsior Boulevard & RIRO

Movement	EB	EB	EB	WB	SB
Directions Served	T	T	T	R	R
Maximum Queue (ft)	74	274	299	28	51
Average Queue (ft)	15	73	91	0	18
95th Queue (ft)	65	210	233	10	41
Link Distance (ft)		303	303		116
Upstream Blk Time (%)		0	0		
Queuing Penalty (veh)		0	2		
Storage Bay Dist (ft)	50			65	
Storage Blk Time (%)	0	10		0	
Queuing Penalty (veh)	0	84		0	

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	150	144	297	320	204	170	258	270	166	186	207	168
Average Queue (ft)	62	77	262	272	158	76	179	153	77	92	103	82
95th Queue (ft)	120	125	326	327	271	140	254	234	136	164	179	153
Link Distance (ft)	204	204	204	204			1139	1139			608	608
Upstream Blk Time (%)			24	25	1							
Queuing Penalty (veh)			102	108	0							
Storage Bay Dist (ft)					185	280			350	175		
Storage Blk Time (%)				28	1		0			2	0	
Queuing Penalty (veh)				73	5		0			2	0	

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	SB	SB	SB	SB
Directions Served	L	L	T	TR
Maximum Queue (ft)	165	189	242	268
Average Queue (ft)	91	108	101	141
95th Queue (ft)	149	167	187	231
Link Distance (ft)			275	275
Upstream Blk Time (%)			0	0
Queuing Penalty (veh)			1	1
Storage Bay Dist (ft)	165	165		
Storage Blk Time (%)	0	1	1	
Queuing Penalty (veh)	0	1	2	

Intersection: 5: Blake Road & Full Access Driveway

Movement	EB	WB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	TR	L	T	TR
Maximum Queue (ft)	74	121	33	19	63	41	23
Average Queue (ft)	37	46	6	2	18	1	1
95th Queue (ft)	65	93	25	12	48	22	10
Link Distance (ft)	99	110		275		310	310
Upstream Blk Time (%)		1					
Queuing Penalty (veh)		0					
Storage Bay Dist (ft)			50		50		
Storage Blk Time (%)			0		1	0	
Queuing Penalty (veh)			0		2	0	

Intersection: 6: Blake Road & RIRO

Movement	EB	SB
Directions Served	R	T
Maximum Queue (ft)	34	11
Average Queue (ft)	14	0
95th Queue (ft)	38	8
Link Distance (ft)	87	561
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Blake Road & 2nd Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LTR	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	185	290	144	35	177	278	290	98	205	197
Average Queue (ft)	55	162	57	10	66	129	147	23	111	84
95th Queue (ft)	169	256	106	34	138	229	246	62	186	163
Link Distance (ft)		551	185			561	561		615	615
Upstream Blk Time (%)			0							
Queuing Penalty (veh)			0							
Storage Bay Dist (ft)	160			100	200			140		
Storage Blk Time (%)	0	9	4			2			4	
Queuing Penalty (veh)	1	11	1			2			1	

Network Summary

Network wide Queuing Penalty: 404

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.4	0.2	0.3	0.0	0.0	0.0	4.0	0.4	3.9	0.1	0.1	3.8
Total Del/Veh (s)	40.7	7.7	4.5	50.9	19.3	16.4	47.3	55.5	2.3	44.2	54.7	1.9

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	20.1

2: Pierce Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.2	3.9	0.1
Total Del/Veh (s)	13.7	3.7	4.4	10.1	0.5	0.3	32.1	41.3	9.6	30.3	6.4	3.5

3: Excelsior Boulevard & RIRO Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.0	1.8	1.4	4.8	1.4

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.5	0.2	2.7	3.5	0.2	0.2	0.0	0.0	0.0
Total Del/Veh (s)	37.9	15.0	3.6	43.9	20.9	4.3	39.8	33.9	13.4	39.6	35.8	22.2

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	23.8

5: Blake Road & Full Access Driveway Performance by movement

Movement	EBL	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	8.1	4.4	10.4	12.6	4.1	4.4	1.3	1.1	3.2	0.4	0.3	1.4

6: Blake Road & RIRO Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.5	0.2	1.6	1.3	1.1

7: Blake Road & 2nd Street Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.3	0.3	0.0	0.0	0.2	0.2	0.2
Total Del/Veh (s)	17.8	11.5	24.9	6.8	13.2	5.7	12.5

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	36.6

Intersection: 1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	T	L	T
Maximum Queue (ft)	344	370	227	192	126	244	260	75	62	53	35
Average Queue (ft)	188	238	105	70	30	114	133	27	18	12	6
95th Queue (ft)	296	332	201	155	78	202	223	64	49	41	26
Link Distance (ft)		717	717	717		1944	1944		317	537	537
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500				150			150			
Storage Blk Time (%)						4					
Queuing Penalty (veh)						2					

Intersection: 2: Pierce Avenue & Excelsior Boulevard

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	R	LTR	LT	R
Maximum Queue (ft)	52	4	45	4	57	79	35
Average Queue (ft)	15	0	9	0	14	28	10
95th Queue (ft)	38	3	28	3	38	63	27
Link Distance (ft)		1944			111	196	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	215		200	60			100
Storage Blk Time (%)						0	
Queuing Penalty (veh)						0	

Intersection: 3: Excelsior Boulevard & RIRO

Movement	EB	SB
Directions Served	T	R
Maximum Queue (ft)	13	23
Average Queue (ft)	0	4
95th Queue (ft)	9	17
Link Distance (ft)	299	116
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	53	76	211	251	171	124	216	198	62	193	158	132
Average Queue (ft)	12	30	100	115	32	50	133	106	30	107	42	31
95th Queue (ft)	38	64	180	204	95	103	206	183	58	182	112	85
Link Distance (ft)	204	204	204	204			1139	1139			608	608
Upstream Blk Time (%)			0	1	0							
Queuing Penalty (veh)			1	1	0							
Storage Bay Dist (ft)					185	280			350	175		
Storage Blk Time (%)				1	0					2		
Queuing Penalty (veh)				1	0					1		

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	SB	SB	SB	SB
Directions Served	L	L	T	TR
Maximum Queue (ft)	120	157	171	193
Average Queue (ft)	53	72	70	99
95th Queue (ft)	102	124	135	170
Link Distance (ft)			275	275
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	165	165		
Storage Blk Time (%)		0	0	
Queuing Penalty (veh)		0	0	

Intersection: 5: Blake Road & Full Access Driveway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	54	75	28	39
Average Queue (ft)	18	28	2	4
95th Queue (ft)	45	58	14	24
Link Distance (ft)	99	110		
Upstream Blk Time (%)		0		
Queuing Penalty (veh)		0		
Storage Bay Dist (ft)			50	50
Storage Blk Time (%)				0
Queuing Penalty (veh)				0

Intersection: 6: Blake Road & RIRO

Movement	EB
Directions Served	R
Maximum Queue (ft)	29
Average Queue (ft)	3
95th Queue (ft)	18
Link Distance (ft)	87
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Blake Road & 2nd Street

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LTR	L	T	TR	T	TR
Maximum Queue (ft)	101	204	98	78	91	158	144
Average Queue (ft)	12	101	41	32	37	77	55
95th Queue (ft)	65	169	79	66	76	132	114
Link Distance (ft)		551		561	561	615	615
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	160		200				
Storage Blk Time (%)	0	1				0	
Queuing Penalty (veh)	0	1				0	

Network Summary

Network wide Queuing Penalty: 8

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.2	0.3	0.3	0.0	0.0	0.0	3.9	0.7	3.8	0.3	0.9	3.4
Total Del/Veh (s)	55.3	15.3	10.5	62.6	27.9	26.7	50.1	61.0	2.8	49.6	65.9	2.9

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.7
Total Del/Veh (s)	20.9

2: Pierce Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	51.1	72.8	2.5
Total Del/Veh (s)	18.3	8.1	7.0	32.9	0.8	0.7	118.1	105.6	248.7	46.0	11.1

3: Excelsior Boulevard & RIRO Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	5.1	2.1	1.4	6.3	4.0

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.5	0.4	2.5	3.5	0.2	0.2	0.0	0.0	0.0
Total Del/Veh (s)	54.9	26.3	9.5	56.4	21.1	7.5	56.3	45.8	25.9	55.3	47.2	35.7

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	30.2

5: Blake Road & Full Access Driveway Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.4	0.7	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	16.3	22.6	7.1	21.5	21.9	7.6	4.6	1.5	1.3	5.2	0.6	0.3

5: Blake Road & Full Access Driveway Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	2.7

6: Blake Road & RIRO Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.0	0.3	1.8	1.8	1.0

7: Blake Road & 2nd Street Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.3	0.3	0.0	0.0	0.2	0.2	0.1
Total Del/Veh (s)	20.1	15.2	31.3	9.5	16.9	8.8	14.3

Total Network Performance

Denied Del/Veh (s)	2.3
Total Del/Veh (s)	50.9

Intersection: 1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	T	R	L	T
Maximum Queue (ft)	132	276	536	471	174	381	390	104	83	53	153	70
Average Queue (ft)	17	91	249	210	36	257	274	38	23	2	74	19
95th Queue (ft)	71	197	443	404	123	373	384	79	63	28	134	54
Link Distance (ft)		717	717	717		1944	1944		317		537	537
Upstream Blk Time (%)		0										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	500				150			150		150		
Storage Blk Time (%)						21				0		
Queuing Penalty (veh)						5				0		

Intersection: 2: Pierce Avenue & Excelsior Boulevard

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	R	LTR	LT	R
Maximum Queue (ft)	87	18	26	41	4	4	74	228	125
Average Queue (ft)	28	1	1	7	0	0	23	90	36
95th Queue (ft)	63	13	12	26	3	5	60	215	109
Link Distance (ft)		1944	1944		299		111	196	
Upstream Blk Time (%)								20	
Queuing Penalty (veh)								0	
Storage Bay Dist (ft)	215			200		60			100
Storage Blk Time (%)								30	1
Queuing Penalty (veh)								20	0

Intersection: 3: Excelsior Boulevard & RIRO

Movement	EB	EB	EB	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	75	278	309	50
Average Queue (ft)	10	55	73	17
95th Queue (ft)	52	190	214	39
Link Distance (ft)		299	299	116
Upstream Blk Time (%)		0	0	
Queuing Penalty (veh)		1	4	
Storage Bay Dist (ft)	50			
Storage Blk Time (%)		7		
Queuing Penalty (veh)		60		

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	119	131	307	307	204	197	267	240	128	178	218	189
Average Queue (ft)	48	69	255	266	159	80	177	152	63	92	100	71
95th Queue (ft)	98	117	321	327	271	150	255	232	113	159	178	157
Link Distance (ft)	204	204	204	204			1139	1139			608	608
Upstream Blk Time (%)			21	23	1							
Queuing Penalty (veh)			84	92	0							
Storage Bay Dist (ft)					185	280			350	175		
Storage Blk Time (%)				26	1		0			1	1	
Queuing Penalty (veh)				66	5		0			1	1	

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	SB	SB	SB	SB
Directions Served	L	L	T	TR
Maximum Queue (ft)	160	169	158	209
Average Queue (ft)	77	91	81	118
95th Queue (ft)	138	146	145	191
Link Distance (ft)			275	275
Upstream Blk Time (%)				0
Queuing Penalty (veh)				0
Storage Bay Dist (ft)	165	165		
Storage Blk Time (%)	0	0	0	
Queuing Penalty (veh)	0	0	1	

Intersection: 5: Blake Road & Full Access Driveway

Movement	EB	WB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	TR	L	T	TR
Maximum Queue (ft)	101	95	37	16	60	6	4
Average Queue (ft)	40	43	6	1	15	0	0
95th Queue (ft)	76	77	26	8	44	5	3
Link Distance (ft)	99	110		275		310	310
Upstream Blk Time (%)	1	0					
Queuing Penalty (veh)	0	0					
Storage Bay Dist (ft)			50		50		
Storage Blk Time (%)			0		0		
Queuing Penalty (veh)			0		1		

Intersection: 6: Blake Road & RIRO

Movement	EB	SB
Directions Served	R	T
Maximum Queue (ft)	29	6
Average Queue (ft)	12	0
95th Queue (ft)	36	5
Link Distance (ft)	87	561
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Blake Road & 2nd Street

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LTR	L	T	TR	T	TR
Maximum Queue (ft)	184	245	144	194	194	230	201
Average Queue (ft)	41	126	59	82	93	98	85
95th Queue (ft)	142	209	115	154	165	175	165
Link Distance (ft)		551		561	561	615	615
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	160		200				
Storage Blk Time (%)	0	3	0	0		2	
Queuing Penalty (veh)	0	4	0	0		0	

Network Summary

Network wide Queuing Penalty: 345

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.4	0.2	0.3	0.0	0.0	0.0	4.0	0.4	4.0	0.1	0.5	3.8
Total Del/Veh (s)	40.6	8.6	4.6	55.2	22.7	23.1	42.5	50.2	2.3	42.9	57.0	2.1

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	21.1

2: Pierce Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	4.1	0.1
Total Del/Veh (s)	12.2	4.1	3.6	8.8	0.5	0.3	23.4	21.0	7.2	31.5	7.6	3.5

3: Excelsior Boulevard & RIRO Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.2	1.9	1.4	5.6	1.6

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.6	0.2	2.6	3.4	0.3	0.2	0.0	0.0	0.1
Total Del/Veh (s)	35.6	15.4	3.9	46.0	23.2	4.6	40.4	32.2	14.6	38.2	34.5	27.3

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	24.7

5: Blake Road & Full Access Driveway Performance by movement

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	12.3	6.2	11.1	4.0	5.2	1.3	0.8	4.0	0.5	0.3	1.8

6: Blake Road & RIRO Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.5	0.3	1.8	1.4	1.2

7: Blake Road & 2nd Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.3	0.4	0.3	0.2	0.3	3.9	0.0	0.0	0.0	3.1	0.2	0.2
Total Del/Veh (s)	20.4	20.3	15.1	19.8	18.6	4.9	28.4	11.0	5.9	32.2	17.1	8.7

7: Blake Road & 2nd Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.3
Total Del/Veh (s)	16.0

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	38.5

Intersection: 1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	T	L	T
Maximum Queue (ft)	318	356	240	223	152	275	304	62	71	53	36
Average Queue (ft)	195	241	121	87	38	143	162	25	18	15	8
95th Queue (ft)	291	326	220	189	100	243	265	57	52	44	31
Link Distance (ft)		717	717	717		1944	1944		317	537	537
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500				150			150			
Storage Blk Time (%)						9					
Queuing Penalty (veh)						4					

Intersection: 2: Pierce Avenue & Excelsior Boulevard

Movement	EB	EB	WB	NB	SB	SB
Directions Served	L	TR	L	LTR	LT	R
Maximum Queue (ft)	48	12	56	37	78	53
Average Queue (ft)	12	0	9	13	28	14
95th Queue (ft)	37	5	31	31	58	38
Link Distance (ft)		1944		111	196	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	215		200			100
Storage Blk Time (%)					0	0
Queuing Penalty (veh)					0	0

Intersection: 3: Excelsior Boulevard & RIRO

Movement	EB	SB
Directions Served	T	R
Maximum Queue (ft)	12	32
Average Queue (ft)	0	11
95th Queue (ft)	4	31
Link Distance (ft)	299	116
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	66	79	223	245	167	135	220	204	76	197	223	110
Average Queue (ft)	15	31	107	117	39	46	148	117	33	110	50	41
95th Queue (ft)	43	64	193	206	112	96	216	198	64	185	135	95
Link Distance (ft)	204	204	204	204			1139	1139			608	608
Upstream Blk Time (%)			0	1	0							
Queuing Penalty (veh)			1	1	0							
Storage Bay Dist (ft)					185	280			350	175		
Storage Blk Time (%)				1	0					2		
Queuing Penalty (veh)				1	0					1		

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	SB	SB	SB	SB
Directions Served	L	L	T	TR
Maximum Queue (ft)	171	181	190	220
Average Queue (ft)	73	90	91	120
95th Queue (ft)	134	146	159	189
Link Distance (ft)			275	275
Upstream Blk Time (%)			0	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)	165	165		
Storage Blk Time (%)	0	1	0	
Queuing Penalty (veh)	0	1	1	

Intersection: 5: Blake Road & Full Access Driveway

Movement	EB	WB	NB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	TR
Maximum Queue (ft)	98	66	33	4	4	39	4
Average Queue (ft)	37	31	3	0	0	7	0
95th Queue (ft)	74	53	18	4	3	29	3
Link Distance (ft)	99	110		275	275		310
Upstream Blk Time (%)	0						
Queuing Penalty (veh)	0						
Storage Bay Dist (ft)			50			50	
Storage Blk Time (%)			0			0	
Queuing Penalty (veh)			0			0	

Intersection: 6: Blake Road & RIRO

Movement	EB
Directions Served	R
Maximum Queue (ft)	46
Average Queue (ft)	15
95th Queue (ft)	41
Link Distance (ft)	87
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Blake Road & 2nd Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LTR	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	184	244	142	35	117	111	134	46	195	182
Average Queue (ft)	29	125	59	12	48	50	62	11	98	74
95th Queue (ft)	114	207	112	37	95	89	108	34	166	146
Link Distance (ft)		551	185			561	561		615	615
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	160			100	200			140		
Storage Blk Time (%)	0	4	2						2	
Queuing Penalty (veh)	0	4	0						0	

Network Summary

Network wide Queuing Penalty: 16

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.3	0.3	0.3	0.2	0.0	0.0	3.9	0.5	3.9	0.3	1.1	3.4
Total Del/Veh (s)	56.6	16.3	12.0	59.6	28.4	26.4	52.8	56.1	2.5	53.0	66.1	3.0

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.8
Total Del/Veh (s)	21.6

2: Pierce Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	44.7	36.9	0.7
Total Del/Veh (s)	19.7	8.7	10.3	28.5	0.8	0.7	144.5	73.6	257.0	45.2	10.1

3: Excelsior Boulevard & RIRO Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	6.0	2.1	1.8	6.8	4.5

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.5	0.4	2.5	3.4	0.2	0.2	0.0	0.0	0.2
Total Del/Veh (s)	58.8	26.7	10.8	56.7	21.5	9.4	56.4	46.0	27.5	57.5	53.5	42.5

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	31.8

5: Blake Road & Full Access Driveway Performance by movement

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.4	0.2	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	22.7	9.8	30.6	11.1	6.4	1.5	1.3	6.9	0.7	0.4	2.6

6: Blake Road & RIRO Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.3	0.4	1.8	1.7	1.0

7: Blake Road & 2nd Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.4	0.3	0.5	0.2	0.2	4.1	0.0	0.0	0.0	2.9	0.3	0.3
Total Del/Veh (s)	26.3	25.0	20.6	26.7	25.1	6.9	42.0	16.9	12.2	48.3	20.9	12.8

7: Blake Road & 2nd Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	20.7

Total Network Performance

Denied Del/Veh (s)	1.3
Total Del/Veh (s)	53.1

Intersection: 1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	T	L	T
Maximum Queue (ft)	174	190	536	490	174	412	423	101	77	142	57
Average Queue (ft)	39	104	265	231	35	279	296	39	23	68	15
95th Queue (ft)	120	165	462	428	124	402	417	79	58	127	43
Link Distance (ft)		717	717	717		1944	1944		317	537	537
Upstream Blk Time (%)			0								
Queuing Penalty (veh)			0								
Storage Bay Dist (ft)	500				150			150			
Storage Blk Time (%)						22					
Queuing Penalty (veh)						6					

Intersection: 2: Pierce Avenue & Excelsior Boulevard

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	R	LTR	LT	R
Maximum Queue (ft)	77	5	32	37	3	35	88	140	95
Average Queue (ft)	22	0	1	6	0	2	29	62	16
95th Queue (ft)	58	5	14	22	2	19	68	178	63
Link Distance (ft)		1944	1944		299		111	196	
Upstream Blk Time (%)							1	15	
Queuing Penalty (veh)							0	0	
Storage Bay Dist (ft)	215			200		60			100
Storage Blk Time (%)						0		19	0
Queuing Penalty (veh)						0		5	0

Intersection: 3: Excelsior Boulevard & RIRO

Movement	EB	EB	EB	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	75	295	316	23
Average Queue (ft)	19	75	94	9
95th Queue (ft)	73	223	245	27
Link Distance (ft)		299	299	116
Upstream Blk Time (%)		0	1	
Queuing Penalty (veh)		2	6	
Storage Bay Dist (ft)	50			
Storage Blk Time (%)	0	9		
Queuing Penalty (veh)	0	80		

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	142	170	299	305	204	144	294	262	162	190	218	181
Average Queue (ft)	60	81	259	267	154	71	189	165	81	107	103	82
95th Queue (ft)	119	141	334	334	269	129	272	244	137	184	182	157
Link Distance (ft)	204	204	204	204			1139	1139			608	608
Upstream Blk Time (%)	0	0	23	24	1							
Queuing Penalty (veh)	0	0	101	104	0							
Storage Bay Dist (ft)					185	280			350	175		
Storage Blk Time (%)				26	1		0			2	0	
Queuing Penalty (veh)				70	5		0			3	1	

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	SB	SB	SB	SB
Directions Served	L	L	T	TR
Maximum Queue (ft)	171	189	236	267
Average Queue (ft)	96	117	114	152
95th Queue (ft)	160	178	197	238
Link Distance (ft)			275	275
Upstream Blk Time (%)			0	0
Queuing Penalty (veh)			0	1
Storage Bay Dist (ft)	165	165		
Storage Blk Time (%)	0	1	2	
Queuing Penalty (veh)	0	1	5	

Intersection: 5: Blake Road & Full Access Driveway

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	T
Maximum Queue (ft)	106	107	40	12	54	23
Average Queue (ft)	32	41	7	0	19	1
95th Queue (ft)	71	78	29	5	47	16
Link Distance (ft)	99	110		275		310
Upstream Blk Time (%)	1	1				
Queuing Penalty (veh)	0	0				
Storage Bay Dist (ft)			50		50	
Storage Blk Time (%)			0		1	0
Queuing Penalty (veh)			1		2	0

Intersection: 6: Blake Road & RIRO

Movement	EB	SB
Directions Served	R	TR
Maximum Queue (ft)	67	4
Average Queue (ft)	19	0
95th Queue (ft)	48	3
Link Distance (ft)	87	561
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Blake Road & 2nd Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LTR	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	185	304	124	66	173	284	302	126	253	250
Average Queue (ft)	63	160	58	10	66	132	154	26	120	115
95th Queue (ft)	183	265	106	37	128	230	259	74	209	214
Link Distance (ft)		551	185			561	561		615	615
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	160			100	200			140		
Storage Blk Time (%)	0	10	3	0		2			5	
Queuing Penalty (veh)	1	12	0	0		2			1	

Network Summary

Network wide Queuing Penalty: 410

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.4	0.2	0.2	0.0	0.0	0.0	4.0	0.3	4.0	0.2	0.5	3.8
Total Del/Veh (s)	40.4	8.1	4.4	56.7	22.8	23.3	43.8	52.4	2.3	48.3	49.3	2.1

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	21.0

2: Pierce Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.2	4.0	0.1
Total Del/Veh (s)	14.9	4.0	3.3	7.3	0.5	0.4	25.5	43.3	8.1	30.1	8.4	3.5

3: Excelsior Boulevard & RIRO Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.3	2.0	1.3	6.2	1.7

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.5	0.2	2.7	3.5	0.3	0.2	0.0	0.0	0.0
Total Del/Veh (s)	36.2	15.8	4.0	47.8	24.6	4.7	40.7	34.5	14.5	39.2	37.0	29.0

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	25.7

5: Blake Road & Full Access Driveway Performance by movement

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	13.4	6.6	10.1	4.2	6.9	1.3	1.4	3.6	0.6	0.2	1.9

6: Blake Road & RIRO Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.9	0.3	1.7	1.5	1.2

7: Blake Road & 2nd Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.4	0.2	0.4	0.2	0.2	4.0	0.0	0.0	0.0	2.9	0.2	0.2
Total Del/Veh (s)	20.6	19.9	15.5	22.0	22.4	4.8	30.2	11.5	5.8	40.5	17.0	8.1

7: Blake Road & 2nd Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.3
Total Del/Veh (s)	16.5

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	39.2

Intersection: 1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	T	L	T
Maximum Queue (ft)	337	397	266	210	174	279	305	73	49	44	36
Average Queue (ft)	203	252	112	83	40	149	165	23	14	10	8
95th Queue (ft)	300	349	213	176	108	248	260	61	40	36	29
Link Distance (ft)		717	717	717		1944	1944		317	537	537
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500				150			150			
Storage Blk Time (%)					0	10					
Queuing Penalty (veh)					0	4					

Intersection: 2: Pierce Avenue & Excelsior Boulevard

Movement	EB	EB	WB	NB	SB	SB
Directions Served	L	TR	L	LTR	LT	R
Maximum Queue (ft)	35	4	54	46	89	38
Average Queue (ft)	8	0	9	14	30	13
95th Queue (ft)	26	3	30	35	64	30
Link Distance (ft)		1944		111	196	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	215		200			100
Storage Blk Time (%)					0	
Queuing Penalty (veh)					0	

Intersection: 3: Excelsior Boulevard & RIRO

Movement	EB	WB	SB
Directions Served	T	R	R
Maximum Queue (ft)	11	13	28
Average Queue (ft)	0	0	12
95th Queue (ft)	8	9	32
Link Distance (ft)	299		116
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		65	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	74	80	224	254	203	122	243	208	73	197	235	153
Average Queue (ft)	16	31	104	120	48	48	148	125	36	114	54	40
95th Queue (ft)	48	63	189	211	143	97	215	198	64	189	142	106
Link Distance (ft)	204	204	204	204			1139	1139			608	608
Upstream Blk Time (%)			0	1	0							
Queuing Penalty (veh)			1	2	0							
Storage Bay Dist (ft)					185	280			350	175		
Storage Blk Time (%)				1	0		0			3		
Queuing Penalty (veh)				2	0		0			2		

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	SB	SB	SB	SB
Directions Served	L	L	T	TR
Maximum Queue (ft)	161	163	191	218
Average Queue (ft)	77	93	93	129
95th Queue (ft)	136	142	164	204
Link Distance (ft)			275	275
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	165	165		
Storage Blk Time (%)	0	0	1	
Queuing Penalty (veh)	0	0	1	

Intersection: 5: Blake Road & Full Access Driveway

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	86	53	29	4	37	6
Average Queue (ft)	38	27	4	0	5	0
95th Queue (ft)	66	53	21	3	23	5
Link Distance (ft)	99	110		275		310
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)			50		50	
Storage Blk Time (%)					0	
Queuing Penalty (veh)					0	

Intersection: 6: Blake Road & RIRO

Movement	EB
Directions Served	R
Maximum Queue (ft)	53
Average Queue (ft)	18
95th Queue (ft)	45
Link Distance (ft)	87
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Blake Road & 2nd Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LTR	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	180	249	143	48	111	109	132	46	205	192
Average Queue (ft)	37	128	66	11	48	46	59	12	104	74
95th Queue (ft)	136	214	118	38	93	90	111	34	177	147
Link Distance (ft)		551	185			561	561		615	615
Upstream Blk Time (%)			0							
Queuing Penalty (veh)			0							
Storage Bay Dist (ft)	160			100	200			140		
Storage Blk Time (%)	0	3	3	0					2	
Queuing Penalty (veh)	0	4	0	0					0	

Network Summary

Network wide Queuing Penalty: 18

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.3	0.3	0.3	0.1	0.0	0.0	3.9	0.5	3.8	0.3	1.2	3.4
Total Del/Veh (s)	59.5	17.5	10.3	71.9	29.5	29.4	53.7	53.1	2.7	51.1	56.0	3.0

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.7
Total Del/Veh (s)	22.9

2: Pierce Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	10.5	3.6	55.8	76.0	1.4
Total Del/Veh (s)	17.6	8.9	8.1	29.7	0.8	0.6	224.5	85.8	269.1	23.1	10.3

3: Excelsior Boulevard & RIRO Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	6.2	2.2	1.7	9.5	4.6

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.5	0.4	2.5	3.3	0.2	0.2	0.0	0.0	0.1
Total Del/Veh (s)	57.1	26.7	10.2	55.4	21.7	9.2	51.8	47.0	29.3	62.3	53.3	46.0

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	32.4

5: Blake Road & Full Access Driveway Performance by movement

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.2	0.2	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	18.8	8.6	29.5	11.4	5.8	1.5	1.4	6.4	0.9	0.3	2.6

6: Blake Road & RIRO Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.2	0.4	2.0	1.7	1.1

7: Blake Road & 2nd Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.4	0.4	0.4	0.2	0.2	4.1	0.0	0.0	0.0	3.1	0.3	0.3
Total Del/Veh (s)	25.9	26.4	20.5	25.4	28.8	8.1	39.8	17.2	16.3	47.4	19.3	11.3

7: Blake Road & 2nd Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	20.3

Total Network Performance

Denied Del/Veh (s)	1.6
Total Del/Veh (s)	54.4

Intersection: 1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	T	R	L	T
Maximum Queue (ft)	184	207	554	506	174	446	443	92	79	33	159	56
Average Queue (ft)	44	107	282	243	38	294	306	34	28	1	67	15
95th Queue (ft)	134	176	486	444	123	413	418	74	66	24	128	47
Link Distance (ft)		717	717	717		1944	1944		317		537	537
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500				150			150		150		
Storage Blk Time (%)						23				0		
Queuing Penalty (veh)						6				0		

Intersection: 2: Pierce Avenue & Excelsior Boulevard

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	R	LTR	LT	R
Maximum Queue (ft)	58	4	42	25	104	141	92
Average Queue (ft)	20	0	7	1	35	60	18
95th Queue (ft)	45	3	25	13	97	152	68
Link Distance (ft)		1944			111	196	
Upstream Blk Time (%)					11	8	
Queuing Penalty (veh)					0	0	
Storage Bay Dist (ft)	215		200	60			100
Storage Blk Time (%)				0		19	0
Queuing Penalty (veh)				0		5	0

Intersection: 3: Excelsior Boulevard & RIRO

Movement	EB	EB	EB	EB	SB
Directions Served	T	T	T	T	R
Maximum Queue (ft)	8	75	304	313	37
Average Queue (ft)	0	19	82	97	9
95th Queue (ft)	6	73	239	256	28
Link Distance (ft)			299	299	116
Upstream Blk Time (%)			0	1	
Queuing Penalty (veh)			4	5	
Storage Bay Dist (ft)	50	50			
Storage Blk Time (%)	0	0	10		
Queuing Penalty (veh)	0	0	89		

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	128	146	309	318	204	197	292	294	202	190	197	199
Average Queue (ft)	60	78	259	267	152	76	189	173	83	103	103	92
95th Queue (ft)	110	129	334	334	269	148	270	265	156	173	176	170
Link Distance (ft)	204	204	204	204			1139	1139			608	608
Upstream Blk Time (%)			23	25	1							
Queuing Penalty (veh)			99	110	0							
Storage Bay Dist (ft)					185	280			350	175		
Storage Blk Time (%)				28	1		0	0	0	1	1	
Queuing Penalty (veh)				74	5		0	0	0	2	1	

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	SB	SB	SB	SB
Directions Served	L	L	T	TR
Maximum Queue (ft)	175	189	268	271
Average Queue (ft)	109	125	124	153
95th Queue (ft)	177	191	219	244
Link Distance (ft)			275	275
Upstream Blk Time (%)			1	0
Queuing Penalty (veh)			3	1
Storage Bay Dist (ft)	165	165		
Storage Blk Time (%)	1	3	2	
Queuing Penalty (veh)	1	4	6	

Intersection: 5: Blake Road & Full Access Driveway

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	92	113	36	8	15	58	40	6
Average Queue (ft)	34	44	8	0	1	17	2	0
95th Queue (ft)	71	83	29	6	7	47	19	6
Link Distance (ft)	99	110		275	275		310	310
Upstream Blk Time (%)	1	1						
Queuing Penalty (veh)	0	0						
Storage Bay Dist (ft)			50			50		
Storage Blk Time (%)			0	0		1	0	
Queuing Penalty (veh)			0	0		2	0	

Intersection: 6: Blake Road & RIRO

Movement	EB	SB
Directions Served	R	TR
Maximum Queue (ft)	64	4
Average Queue (ft)	18	0
95th Queue (ft)	49	3
Link Distance (ft)	87	561
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Blake Road & 2nd Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LTR	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	182	304	140	76	167	270	287	139	235	220
Average Queue (ft)	58	158	60	13	67	138	159	25	123	102
95th Queue (ft)	175	266	118	50	134	251	266	76	200	183
Link Distance (ft)		551	185			561	561		615	615
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	160			100	200			140		
Storage Blk Time (%)	0	9	3	0	0	2		0	5	
Queuing Penalty (veh)	1	11	0	0	0	2		0	1	

Network Summary

Network wide Queuing Penalty: 432

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.5	0.2	0.3	0.0	0.0	0.0	4.0	0.4	4.0	0.1	0.6	3.8
Total Del/Veh (s)	41.6	7.9	4.4	66.5	18.5	19.1	45.9	55.3	2.3	49.1	52.6	2.0

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	20.1

2: Pierce Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	4.1	0.1
Total Del/Veh (s)	60.1	25.8	20.6	48.4	25.8	16.1	10.9	17.5	8.3	16.5	8.9	25.8

3: Excelsior Boulevard & RIRO Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	3.7	2.3	1.5	6.8	3.0

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.7	0.2	2.7	3.4	0.2	0.2	0.0	0.0	0.0
Total Del/Veh (s)	28.1	11.9	3.8	47.3	24.1	4.7	41.8	33.7	15.7	39.5	36.1	25.3

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	24.1

5: Blake Road & Full Access Driveway Performance by movement

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	12.9	6.0	12.6	4.1	5.3	1.3	1.4	3.6	0.5	0.2	1.9

6: Blake Road & RIRO Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.9	0.3	1.7	1.4	1.2

7: Blake Road & 2nd Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.3	0.4	0.4	0.2	0.2	4.0	0.0	0.0	0.0	3.2	0.2	0.2
Total Del/Veh (s)	21.0	19.1	15.0	22.4	22.0	4.5	32.8	11.0	5.8	30.6	16.5	8.5

7: Blake Road & 2nd Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.3
Total Del/Veh (s)	16.3

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	48.0

Intersection: 1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	T	L	T
Maximum Queue (ft)	348	410	259	235	94	348	362	84	68	60	36
Average Queue (ft)	204	258	106	83	33	103	113	26	19	15	5
95th Queue (ft)	317	363	220	187	79	262	270	65	52	45	24
Link Distance (ft)		717	717	717		1944	1944		317	537	537
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500				150			150			
Storage Blk Time (%)					0	6					
Queuing Penalty (veh)					1	3					

Intersection: 2: Pierce Avenue & Excelsior Boulevard

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	LTR	LT	R
Maximum Queue (ft)	169	389	411	222	345	361	51	28	63	48
Average Queue (ft)	24	164	186	31	185	197	3	9	16	11
95th Queue (ft)	84	317	337	124	326	340	22	26	46	33
Link Distance (ft)		1944	1944		299	299		111	196	
Upstream Blk Time (%)					2	2				
Queuing Penalty (veh)					9	11				
Storage Bay Dist (ft)	215			200			60			100
Storage Blk Time (%)		6			10	36			0	
Queuing Penalty (veh)		2			3	4			0	

Intersection: 3: Excelsior Boulevard & RIRO

Movement	EB	WB	WB	SB
Directions Served	T	T	R	R
Maximum Queue (ft)	23	17	15	32
Average Queue (ft)	1	1	1	11
95th Queue (ft)	14	8	11	31
Link Distance (ft)	299	204		116
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			65	
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	72	96	237	253	203	117	240	229	78	190	222	128
Average Queue (ft)	15	35	96	109	42	49	151	122	34	115	54	47
95th Queue (ft)	47	78	199	227	138	96	229	207	61	191	146	101
Link Distance (ft)	204	204	204	204			1139	1139			608	608
Upstream Blk Time (%)			1	1	0							
Queuing Penalty (veh)			1	2	0							
Storage Bay Dist (ft)					185	280			350	175		
Storage Blk Time (%)				1	0		0			2		
Queuing Penalty (veh)				1	0		0			1		

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	SB	SB	SB	SB
Directions Served	L	L	T	TR
Maximum Queue (ft)	148	168	208	225
Average Queue (ft)	71	92	88	124
95th Queue (ft)	132	146	157	193
Link Distance (ft)			275	275
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	165	165		
Storage Blk Time (%)	0	0	0	
Queuing Penalty (veh)	0	0	1	

Intersection: 5: Blake Road & Full Access Driveway

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	93	69	29	4	30	8
Average Queue (ft)	37	31	4	0	6	0
95th Queue (ft)	67	57	21	3	25	4
Link Distance (ft)	99	110		275		310
Upstream Blk Time (%)	0	0				
Queuing Penalty (veh)	0	0				
Storage Bay Dist (ft)			50		50	
Storage Blk Time (%)					0	
Queuing Penalty (veh)					0	

Intersection: 6: Blake Road & RIRO

Movement	EB
Directions Served	R
Maximum Queue (ft)	40
Average Queue (ft)	15
95th Queue (ft)	40
Link Distance (ft)	87
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Blake Road & 2nd Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LTR	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	178	225	154	68	107	115	121	42	179	163
Average Queue (ft)	33	123	62	12	47	47	59	9	92	72
95th Queue (ft)	121	201	120	48	90	94	108	33	157	142
Link Distance (ft)		551	185			561	561		615	615
Upstream Blk Time (%)			0							
Queuing Penalty (veh)			0							
Storage Bay Dist (ft)	160			100	200			140		
Storage Blk Time (%)	0	4	3						1	
Queuing Penalty (veh)	0	4	1						0	

Network Summary

Network wide Queuing Penalty: 44

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.3	0.3	0.6	0.3	0.0	0.0	3.8	0.6	3.9	0.3	1.0	3.4
Total Del/Veh (s)	56.5	15.9	11.5	74.7	17.9	17.6	57.8	58.1	3.7	52.9	64.2	3.0

1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.8
Total Del/Veh (s)	18.6

2: Pierce Avenue & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.3	0.3	0.1	0.1	0.2	4.2	0.2
Total Del/Veh (s)	72.4	37.0	41.9	51.9	19.8	12.8	34.8	29.5	30.1	9.9	31.3

3: Excelsior Boulevard & RIRO Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	8.0	3.1	2.0	12.0	6.1

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.5	0.5	2.5	3.4	0.3	0.2	0.0	0.0	0.2
Total Del/Veh (s)	40.6	18.4	7.5	56.8	24.6	10.0	53.4	45.2	35.4	52.6	48.0	36.5

4: Blake Road & Excelsior Boulevard Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	28.2

5: Blake Road & Full Access Driveway Performance by movement

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	19.1	8.0	25.7	9.9	5.8	1.5	1.5	6.3	0.7	0.3	2.3

6: Blake Road & RIRO Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.7	0.4	1.8	1.9	1.1

7: Blake Road & 2nd Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.4	0.5	0.4	0.2	0.2	4.0	0.0	0.0	0.0	3.1	0.3	0.3
Total Del/Veh (s)	27.6	32.6	19.4	27.2	30.5	7.4	42.3	18.4	15.1	43.5	20.2	12.8

7: Blake Road & 2nd Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	21.4

Total Network Performance

Denied Del/Veh (s)	1.0
Total Del/Veh (s)	60.4

Intersection: 1: Milwaukee Street/Jackson Avenue & Excelsior Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	T	R	L	T
Maximum Queue (ft)	158	202	546	461	153	448	808	94	79	98	150	52
Average Queue (ft)	42	111	270	228	27	148	180	35	26	4	76	15
95th Queue (ft)	123	178	434	390	81	344	511	75	61	44	132	44
Link Distance (ft)		717	717	717		1944	1944		317		537	537
Upstream Blk Time (%)			0									
Queuing Penalty (veh)			0									
Storage Bay Dist (ft)	500				150			150		150		
Storage Blk Time (%)						5				0		
Queuing Penalty (veh)						1				0		

Intersection: 2: Pierce Avenue & Excelsior Boulevard

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	LTR	LT	R
Maximum Queue (ft)	239	954	954	143	386	396	82	41	72	60
Average Queue (ft)	56	325	358	16	152	154	9	11	20	11
95th Queue (ft)	151	795	830	79	363	367	43	32	55	35
Link Distance (ft)		1944	1944		299	299		111	196	
Upstream Blk Time (%)					7	7				
Queuing Penalty (veh)					37	38				
Storage Bay Dist (ft)	215			200			60			100
Storage Blk Time (%)		17			12	25	0		0	
Queuing Penalty (veh)		9			2	8	0		0	

Intersection: 3: Excelsior Boulevard & RIRO

Movement	EB	EB	EB	WB	WB	WB	SB
Directions Served	T	T	T	T	T	R	R
Maximum Queue (ft)	74	322	336	105	136	36	23
Average Queue (ft)	12	52	64	8	9	2	7
95th Queue (ft)	57	218	244	53	63	21	25
Link Distance (ft)		299	299	204	204		116
Upstream Blk Time (%)		1	1		0		
Queuing Penalty (veh)		6	9		0		
Storage Bay Dist (ft)	50					65	
Storage Blk Time (%)		3			2	0	
Queuing Penalty (veh)		28			1	0	

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	143	157	294	289	204	164	341	315	230	192	203	181
Average Queue (ft)	63	80	204	216	118	72	198	181	84	101	96	81
95th Queue (ft)	124	141	335	341	253	139	293	277	163	178	166	153
Link Distance (ft)	204	204	204	204			1139	1139			608	608
Upstream Blk Time (%)			9	10	1							
Queuing Penalty (veh)			38	42	0							
Storage Bay Dist (ft)					185	280			350	175		
Storage Blk Time (%)				11	1		1	0		1	1	
Queuing Penalty (veh)				31	3		1	0		2	1	

Intersection: 4: Blake Road & Excelsior Boulevard

Movement	SB	SB	SB	SB
Directions Served	L	L	T	TR
Maximum Queue (ft)	165	186	222	234
Average Queue (ft)	95	114	108	145
95th Queue (ft)	160	176	179	214
Link Distance (ft)			275	275
Upstream Blk Time (%)			0	0
Queuing Penalty (veh)			0	0
Storage Bay Dist (ft)	165	165		
Storage Blk Time (%)	0	1	0	
Queuing Penalty (veh)	0	1	1	

Intersection: 5: Blake Road & Full Access Driveway

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	73	97	38	4	18	58	12	4
Average Queue (ft)	30	42	8	0	1	18	0	0
95th Queue (ft)	60	79	31	3	7	47	6	3
Link Distance (ft)	99	110		275	275		310	310
Upstream Blk Time (%)		0						
Queuing Penalty (veh)		0						
Storage Bay Dist (ft)			50			50		
Storage Blk Time (%)			0			0		
Queuing Penalty (veh)			0			1		

Intersection: 6: Blake Road & RIRO

Movement	EB
Directions Served	R
Maximum Queue (ft)	47
Average Queue (ft)	19
95th Queue (ft)	45
Link Distance (ft)	87
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Blake Road & 2nd Street

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LTR	LT	R	L	T	TR	L	T	TR
Maximum Queue (ft)	184	313	159	54	197	282	318	120	238	225
Average Queue (ft)	70	170	61	11	67	144	161	29	124	113
95th Queue (ft)	195	272	119	39	142	248	271	80	212	204
Link Distance (ft)		551	185			561	561		615	615
Upstream Blk Time (%)			0							
Queuing Penalty (veh)			0							
Storage Bay Dist (ft)	160			100	200			140		
Storage Blk Time (%)	0	10	4			3		0	5	
Queuing Penalty (veh)	1	13	1			3		0	2	

Network Summary

Network wide Queuing Penalty: 280