

MINNETONKA PLANNING COMMISSION
November 16, 2017

| | |
|--------------------------|---|
| Brief Description | Concept plan review for Dominion at 11001 Bren Road East. |
| Action Requested | Discuss concept plan with the applicant. No formal action required. |

Background

Dominion is proposing to redevelop the existing commercial properties at 11001 Bren Road East. The concept plan contemplates redevelopment of the existing office building to construct 475 units of rental housing within 3 buildings on the 9.4 acre site. The proposed housing will provide a mix of unit types from 1 to 3 bedroom units. The units are intended to serve senior and workforce housing markets and would be priced for those earning 60 percent of the area's median income. (See attached plans)

The existing site includes an office building and associated surface parking lot. Green space exists adjacent to the buildings and at the periphery of the parking lots. The site has steep grade changes along the west and northwestern edges of the property then sloping gradually from west to east. A wetland exists within the wooded area along the northern portion of the property. Site access is from Bren Road East located at the southeastern portion of the property. An existing trail extends along the southern portion of the site connecting to the broader Opus trail system.

Surrounding land uses are primarily office or business warehouse oriented. The site is zoned I-1 Industrial District and guided mixed use in the 2030 comprehensive plan.

Adjacent to the site is the future Green Line light rail transit extension and Opus Station. The station platform is immediately across Bren Road East from the proposed housing. The existing trail connection would be maintained and possibly in an improved condition. Construction on the rail line is anticipated to begin in 2018 with operations commencing in 2021. The Opus Station area plan identifies the site and other adjacent properties in close proximity to the station as candidates for redevelopment as new housing and employment. In planning for the Green Line extension, a housing analysis was performed for each of the 15 stations to project market demand for housing within ½ mile of the stations within the next 15 years. The analysis projected the market would likely demand over 11,000 housing units for the entire line from Eden Prairie to Minneapolis, of which, 600 housing units were projected for the Opus Station. (See [SWLRT Housing Gaps Analysis](#))

Key Issues

City staff has identified the following considerations for any development of the subject properties:

- **Change of land use:** The Opus business park was originally designed as a large mixed use development providing the opportunity for people to live, work and play. Despite the land use change from an employment use to housing, it is consistent with the vision for Opus. The housing gaps analysis also shows the need for additional housing in close proximity to the Opus Station.
- **Housing Type -** The plan identifies units that would be accessible to those earning 60 percent of the area's median income or a unit rent range from \$800 to \$1200 per month. The city is losing affordable housing at an alarming rate. During the period from 2010 to 2015, the number of housing units affordable to households earning less than 80 percent of the area median income decreased by more than 2,200 housing units.
- **Site Plan:** The proposed site plan shows three buildings, two 4 stories in height and one 5 stories in height. All would have underground garage parking with additional shared surface parking. Access to the site is located in the existing location and at a new access point on the north property line just west of the connection to Bren Road West.

The site plan shows a number of amenity areas located throughout the site. Additional internal trails and walkways connect to the Opus trail system. Comments about the size, location and level of amenity of these areas are appropriate discussion items.

- **Building Character:** Building elevations have not been provided. Input on building massing and desired character is important. This project could be the first redevelopment project near the Opus Station and will establish a design character for other projects to follow.

Review Process

Staff has outlined the following review process for the proposal. At this time, a formal application has not been submitted.

- **Neighborhood Meeting.** The developer held a neighborhood meeting on October 16, 2017. Approximately 30 people attended the meeting raising concerns about building height and scale, grading and retaining walls, effect on property values, traffic, occupancy, affordable housing and crime.

- **Planning Commission Concept Plan Review.** The planning commission Concept Plan Review is intended as a follow-up to the neighborhood meeting. The objective of this meeting is to identify major issues and challenges in order to inform the subsequent review and discussion. The meeting will include a presentation by the developer of conceptual sketches and ideas, but not detailed engineering or architectural drawings. No staff recommendations are provided, the public is invited to offer comments, and planning commissioners are afforded the opportunity to ask questions and provide feedback without any formal motions or votes.
- **City Council Concept Plan Review.** The city council Concept Plan Review is intended as a follow-up to the planning commission meeting and would follow the same format as the planning commission Concept Plan Review. No staff recommendations are provided, the public is invited to offer comments, and council members are afforded the opportunity to ask questions and provide feedback without any formal motions or votes.

Staff Recommendation

Staff recommends the planning commission provide comment and feedback on the identified key issues and others the planning commission deems appropriate. The discussion is intended to assist the applicant with future direction that may lead to the preparation of more detailed development plans.

Originator: Loren Gordon, AICP, City Planner

ADDITIONAL INFORMATION

Next Steps

- **Formal Application.** If the developer chooses to file a formal application, notification of the application would be mailed to area property owners. Property owners are encouraged to view plans and provide feedback via the city's website. Through recent website updates: (1) staff can provide residents with ongoing project updates, (2) residents can "follow" projects they are particularly interested in by signing up for automatic notification of project updates; (3) residents may provide project feedback on project; and (4) and staff can review resident comments.
- **Neighborhood Meeting.** Prior to the planning commission meeting and official public hearing, an additional public meeting would be held with neighbors to discuss specific engineering, architectural and other details of the project, and to solicit feedback. This extends the timing that has historically been provided in advance of the planning commission review to allow more public consideration of the project specifics.
- **Council Introduction.** The proposal would be introduced at a city council meeting. At that time, the council would be provided another opportunity to review the issues identified during the initial concept plan review meeting, and to provide direction about any refinements or additional issues they wish to be researched, and for which staff recommendations should be prepared.
- **Planning Commission Review.** The planning commission would hold an official public hearing for the development review and would subsequently recommend action to the city council.
- **City Council Action.** Based on input from the planning commission, professional staff and general public, the city council would take final action.

Roles and Responsibilities

- **Applicants.** Applicants are responsible for providing clear, complete and timely information throughout the review process. They are expected to be accessible to both the city and to the public, and to respect the integrity of the public process.
- **Public.** Neighbors and the general public will be encouraged and enabled to participate in the review process to the extent they are interested. However, effective public participation involves shared responsibilities. While the city has an obligation to provide information and feedback opportunities, interested residents are expected to accept the responsibility to educate themselves about the project

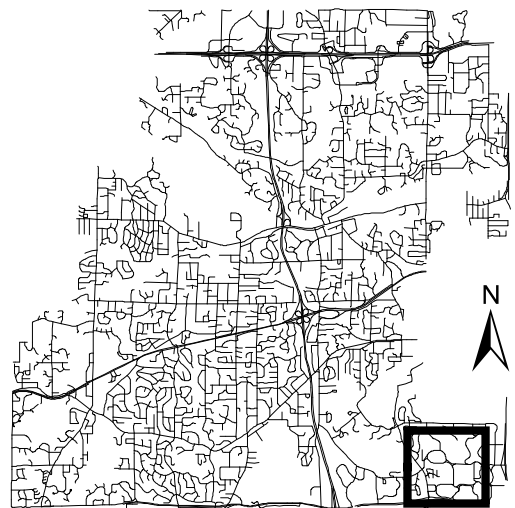
and review process, to provide constructive, timely and germane feedback, and to stay informed and involved throughout the entire process.

- **Planning Commission.** The planning commission hosts the primary forum for public input and provides clear and definitive recommendations to the city council. To serve in that role, the commission identifies and attempts to resolve development issues and concerns prior to the council's consideration by carefully balancing the interests of applicants, neighbors, and the general public.
- **City Council.** As the ultimate decision maker, the city council must be in a position to equitably and consistently weigh all input from their staff, the general public, planning commissioners, applicants and other advisors. Accordingly, council members traditionally keep an open mind until all the facts are received. The council ensures that residents have an opportunity to effectively participate in the process.
- **City Staff.** City staff is neither an advocate for the public nor the applicant. Rather, staff provides professional advice and recommendations to all interested parties, including the city council, planning commission, applicant and residents. Staff advocates for its professional position, not a project. Staff recommendations consider neighborhood concerns, but necessarily reflect professional standards, legal requirements and broader community interests.



Location Map

Dominium
Address: 11001 Bren Rd E



This map is for illustrative purposes only.

TITLE COMMITMENT EXCEPTIONS
(Per Schedule B, Part II of the herein referenced Title Commitment)

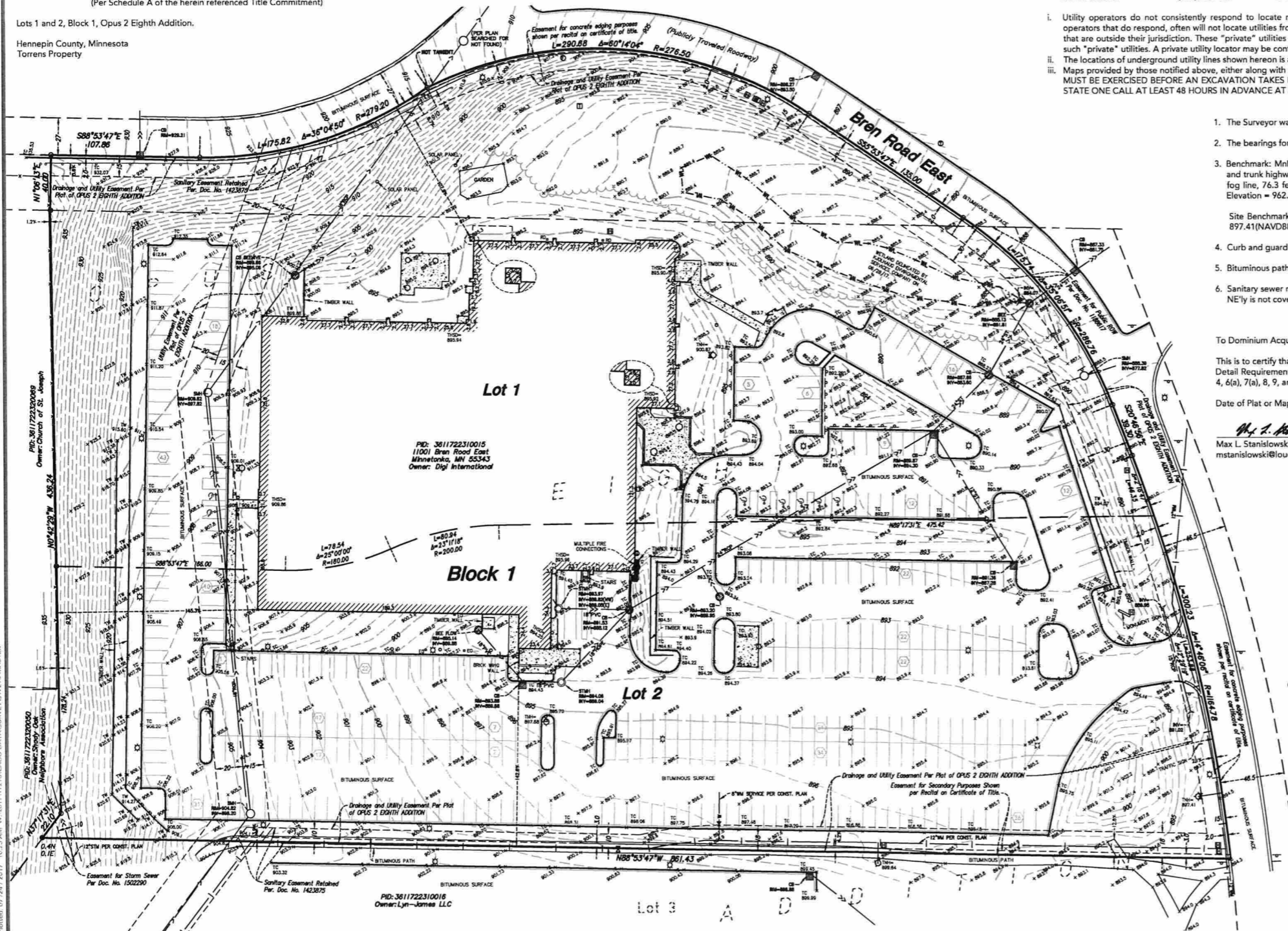
The property depicted on this survey and the easements of record shown hereon are the same as the property and the easements described in the Commitment for Title Insurance issued by Commercial Partners Title, LLC, as agent for Old Republic National Title Insurance Company, File No. 53041, effective date May 19, 2017. The numbers below correspond to those in the title commitment.

- 1-8 do not require comment.
- 9. Subject to an easement for sanitary sewer purposes in favor of the City of Minnetonka as contained in CR Book 73, Page 3995823. Partially vacated by Resolution No. 81-6541 adopted April 20, 1981, filed May 6, 1981, as Document No. 1423875. [Partially vacated easements. Shown hereon as drainage and utility easements per the plat of OPUS 2 EIGHTH ADDITION.]
- 10. Together with the right of the owner of that part of Lots 1 and 2, Block 1, Opus 2 Eighth Addition embraced within Outlots D, G and F, The Townhouses of Shady Oak to an easement for road purposes over Ferndale Drive as provided in Document No. 1086026 (See Order Document No. 1293383), as shown by recital on the Certificate of Title. [Undefined area on property, Ferndale Drive is shown on available maps, west of the property, Not Shown hereon.]
- 11. Subject to a 30 foot sanitary sewer easement in favor of the City of Minnetonka as described in Parcel No. 25 in instrument filed January 12, 1973, as CR Document No. 3995823 (Now as to part of Lot 1), as shown by recital on the Certificate of Title. Partially vacated by Resolution No. 81-6541 adopted April 20, 1981, filed May 6, 1981, as Document No. 1423875. [Partially vacated easements. Shown hereon as drainage and utility easements per the plat of OPUS 2 EIGHTH ADDITION.]
- 12. Subject to a reservation unto Clover Drive, Inc., and its successors and assigns, of an easement for secondary road purposes. [Located along the south property line in the Southeast corner of the site, Shown hereon.]
- 13. Subject to a reservation unto Clover Drive, Inc., its successors and assigns, of an easement 2.00 feet in width for concrete edging purposes over, under and across that portion of said Lots 1 and 2 lying adjacent to the public right-of-way designated as Bren Road West and Bren Road on the recorded plat of Opus 2 Eighth Addition, as shown by recital on the Certificate of Title. [Along the easterly and northerly property lines Shown hereon.]
- 14. Easements for utilities and drainage as shown on the recorded plat of Opus 2 Eighth Addition. [Located along the south, easterly and northerly property lines, Shown hereon.]
- 15. Easement for public right-of-way purposes, in favor of the City of Minnetonka, a municipal corporation, as created in document dated May 27, 1976, filed August 30, 1976, as Document No. 1188617. [Located in the Northeast side of the property, Shown hereon.]
- 16. Permanent easement reserved in Declaration of Industrial Standards and Protective Covenants dated April 7, 1981, filed April 8, 1981, as Document No. 1420987. Assigned as shown by Assignment dated September 6, 1983, filed April 3, 1984, as Document No. 1570465. [Easements defined per plat]
- 17. Easement for storm sewer purposes, in favor of the City of Minnetonka, a Minnesota municipal corporation, as created in document dated October 12, 1982, filed February 23, 1983, as Document No. 1502290. [Located at the southwest corner of the property, Shown hereon.]

DESCRIPTION OF PROPERTY SURVEYED
(Per Schedule A of the herein referenced Title Commitment)

Lots 1 and 2, Block 1, Opus 2 Eighth Addition.

Hennepin County, Minnesota
Torrens Property



ALTA/NSPS OPTIONAL TABLE A NOTES
(The following items refer to Table A optional survey responsibilities and specifications)

- 1. Monuments placed (or a reference monument or witness to the corner) at all major corners of the boundary of the property, unless already marked or referenced by existing monuments or witnesses to the corner are shown hereon.
- 2. The address, if disclosed in documents provided to or obtained by the surveyor, or observed while conducting the fieldwork is 11001 Bren Road East, Minnetonka, MN 55343.
- 3. This property is contained in Zone X (areas determined to be outside the 0.2% annual chance floodplain) per Flood Insurance Rate Map No. 27053C0343F, Community Panel No. 0343F, effective date of November 4, 2016.
- 4. The Gross land area is 409,223 +/- square feet or 9.39 +/- acres.
- 6. (a) Any current zoning classification, setback requirements, height and floor space area restrictions, and parking requirements, shown hereon, are per a report or letter provided to the surveyor by the City of Minnetonka dated 7/13/2017, for the subject property are as follows:
Zone I-1, Industrial;
Setback requirements were not provided in the letter by the client.
- 7. (a) Exterior dimensions of all buildings are shown at ground level.
- 8. Substantial features observed in the process of conducting fieldwork, are shown hereon.
- 9. Striping of clearly identifiable parking spaces on surface parking areas and lots are shown hereon. The number and type of clearly identifiable parking stalls on this site are as follows: 427 Regular + 9 Disabled = 436 Total Parking Stalls.
- 11. We have shown underground utilities on and/or serving the surveyed property per Gopher State One-Call Ticket Nos. 171592945, 171592952 and 171841569. The following utilities and municipalities were notified:
CITY OF MINNETONKA (952)988-8400 COMCAST (800)762-0592 CENTURYLINK (855)742-6062
CENTER POINT ENERGY (406)541-9571 SPRINT/LONG DISTANCE (800)521-0579 LEVEL3COMMUNICATIONS (877)366-8344
XCEL ENERGY (800)848-7558 ZAYO BANDWIDTH (888)267-1063

- i. Utility operators do not consistently respond to locate requests through the Gopher State One Call service for surveying purposes such as this. Those utility operators that do respond, often will not locate utilities from their main line to the customer's structure or facility. They consider those utilities "private" installations that are outside their jurisdiction. These "private" utilities on the surveyed property or adjoining properties, may not be located since most operators will not mark such "private" utilities. A private utility locator may be contacted to investigate these utilities further, if requested by the client.
- ii. The locations of underground utility lines shown hereon is an approximation based on available maps, unless otherwise noted on the survey.
- iii. Maps provided by those notified above, either along with a field location or in lieu of such a location, are very often inaccurate or inconclusive. EXTREME CAUTION MUST BE EXERCISED BEFORE AN EXCAVATION TAKES PLACE ON OR NEAR THIS SITE. BEFORE DIGGING, YOU ARE REQUIRED BY LAW TO NOTIFY GOPHER STATE ONE CALL AT LEAST 48 HOURS IN ADVANCE AT 811 or (651) 454-0002.

SURVEY REPORT

- 1. The Surveyor was not provided utility easement documents for the subject property except for those shown on the Survey.
- 2. The bearings for this survey are based on the Hennepin County Coordinate System NAD 83 (1986 Adjust).
- 3. Benchmark: MnDOT name HEART, in Minnetonka, 1.0 mile west along trunk highway 62 from the junction of trunk highway 62 and trunk highway 169 in Eden Prairie, at trunk highway 62 mile point 104.75, 45.0 feet north of the westbound trunk highway 62 fog line, 76.3 feet south of the ramp from shady oak road to westbound trunk highway 62, 1.5 feet south of the witness post. Elevation = 962.095 (NAVD88)
Site Benchmark: Top nut of fire hydrant located south of the entrance to the site on the west side of Bren Road. Elevation = 897.41(NAVD88)
- 4. Curb and guard rail falls on the property along Bren Road E.
- 5. Bituminous path falls on the property along the south line.
- 6. Sanitary sewer runs through the west side of the property. The sewer running S'y is covered by an easement. The sewer running NE'y is not covered by an easement.

CERTIFICATION

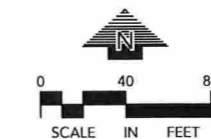
To Dominion Acquisition, LLC; Digi International Inc. Commercial Partners Title, LLC; and Old Republic Title Insurance Company:
This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1 - 4, 6(a), 7(a), 8, 9, and 11 of Table A thereof. The field work was completed on July 06, 2017.
Date of Plat or Map: July 24, 2017

Max L. Stanislawski
Max L. Stanislawski, PLS Minnesota License No. 48988
mstanislawski@loucksinc.com



SURVEY LEGEND

| | | |
|--------------------|------------------------|------------------------------|
| AS ASH | ◇ HYDRANT | — S— STORM SEWER |
| BA BASSWOOD | ⊗ GATE VALVE | — S— SANITARY SEWER |
| BO BOXELDER | ⊗ POWER POLE | — I— WATERMAIN |
| CO COTTONWOOD | ⊗ LIGHT POLE | — C— CULVERT |
| EL ELM | ⊗ YARD LIGHT | — U— UNDERGROUND CABLE TV |
| FR MISC FRUIT | ⊗ GUY WIRE | — E— UNDERGROUND ELECTRIC |
| LO LOCUST | ⊗ SIGN | — F— UNDERGROUND FIBER OPTIC |
| PI PINE | ⊗ SPOT ELEVATION | — G— UNDERGROUND GAS |
| SP SPRUCE | ⊗ ELECTRIC TRANSFORMER | — T— UNDERGROUND TELEPHONE |
| TR TREE (GEN) | ⊗ TELEPHONE PEDESTAL | — U— UNDERGROUND UTILITY |
| ⊗ CATCH BASIN | ⊗ ELECTRIC MANHOLE | — O— OVERHEAD UTILITY |
| ⊗ STORM MANHOLE | ⊗ GAS VALVE | — FM— FORCE MAIN |
| ⊗ SANITARY MANHOLE | ⊗ TELEPHONE MANHOLE | — X— CHAIN LINK FENCE |
| ⊗ FIBER MANHOLE | ⊗ ELECTRIC METER | — C— CONCRETE CURB |
| ⊗ GUARDPOST | ⊗ GAS METER | — C— CONCRETE |
| ⊗ ROOF DRAIN | ⊗ HAND HOLE | — 672— CONTOUR |
| ⊗ FIRE CONNECTION | ⊗ POST INDICATOR VALVE | — G— GUARDRAIL |
| ⊗ ELECTRIC OUTLET | | |



- ⊗ DENOTES 1/2 INCH X 14 INCH IRON MONUMENT SET, MARKED "LS 48988"
- DENOTES IRON MONUMENT FOUND
- △ DENOTES NAIL MONUMENT FOUND

11001 BREN ROAD EAST

MINNETONKA, MN 55343

DOMINIUM DEVELOPMENT AND ACQUISITIONS, LLC.

2905 NORTHWEST BOULEVARD, SUITE 150
PLYMOUTH, MN 55441

LOUCKS

PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL

7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksinc.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are the property of the Consultant and shall not be used for any other project. For additional information or for verification of this project by others without written approval by the Consultant, please contact the Consultant. All information is provided for information and reference only. All structural or dimensional requirements, additions, or deletions to these CADD files shall be made in the field by the party making the revisions, additions or deletions and that party shall bear the burden and liability of the Consultant's liability & of any mistakes, omissions, errors, and omissions.

SUBMITTAL/REVISIONS

| | |
|----------|----------------------|
| 07-14-17 | SURVEY ISSUED |
| 07-24-17 | REVISED UTILITY ESMT |

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.

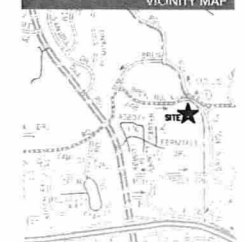
Max L. Stanislawski
Max L. Stanislawski, PLS

License No. 48988
Date 07-14-17

QUALITY CONTROL

| | |
|-------------------|---------|
| Locks Project No. | 17298 |
| Project Lead | MLS |
| Drawn By | NRS |
| Checked By | MLS |
| Field Crew | DJP/BEP |

VICINITY MAP



ALTA/NSPS LAND TITLE SURVEY

1 OF 1



MINNETONKA DEVELOPMENT

SITE CONTEXT
10-09-17



| PARKING DATA | | | | |
|-----------------|------------|------------|------------|------------|
| | BUILDING A | BUILDING B | BUILDING C | TOTAL |
| GARAGE PARKING | 75 STALLS | 210 STALLS | 103 STALLS | 388 STALLS |
| SURFACE PARKING | 53 STALLS | 16 STALLS | 59 STALLS | 128 STALLS |
| TOTAL PARKING | 128 STALLS | 226 STALLS | 162 STALLS | 516 STALLS |
| RATIO PER UNIT | 1 : 1.42 | 1 : .86 | 1 : 1.30 | 1 : 1.08 |
| RATIO PER BED | 1 : .76 | 1 : .46 | 1 : .69 | 1 : .57 |

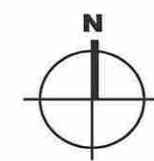
| BUILDING DATA | | | | |
|---------------|------------------|-----------------|----------------|-----------------|
| | BUILDING A | BUILDING B | BUILDING C | TOTAL |
| 1 BEDROOM | 31 UNITS = 34.5% | 83 UNITS = 32% | 40 UNITS = 32% | 154 UNITS = 32% |
| 2 BEDROOM | 39 UNITS = 43.5% | 126 UNITS = 48% | 60 UNITS = 48% | 225 UNITS = 47% |
| 3 BEDROOM | 20 UNITS = 22% | 53 UNITS = 20% | 25 UNITS = 20% | 98 UNITS = 21% |
| TOTAL UNITS | 90 UNITS | 262 UNITS | 125 UNITS | 477 UNITS |
| TOTAL BEDS | 169 BEDS | 494 BEDS | 235 BEDS | 898 BEDS |



BREN ROAD DEVELOPMENT - PRELIMINARY MASTER PLAN

SCALE: 1" = 80'-0"

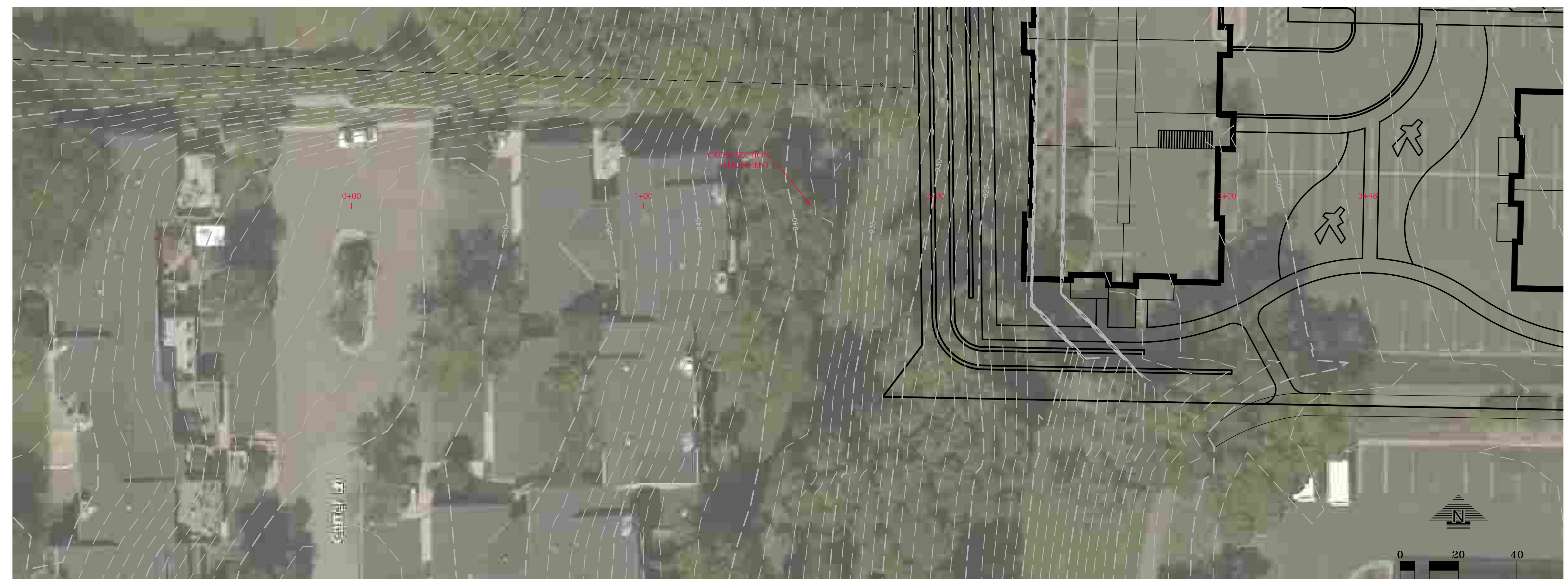
DATE: 10/13/2017



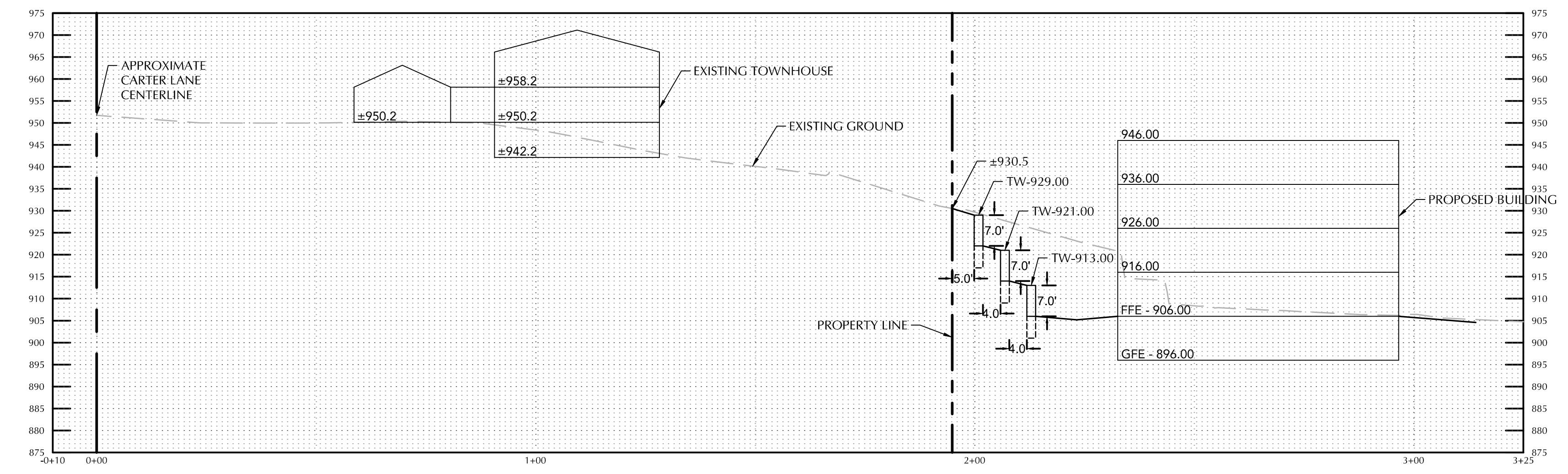
CADD QUALIFICATION

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



11001 BREN ROAD E - CROSS SECTION

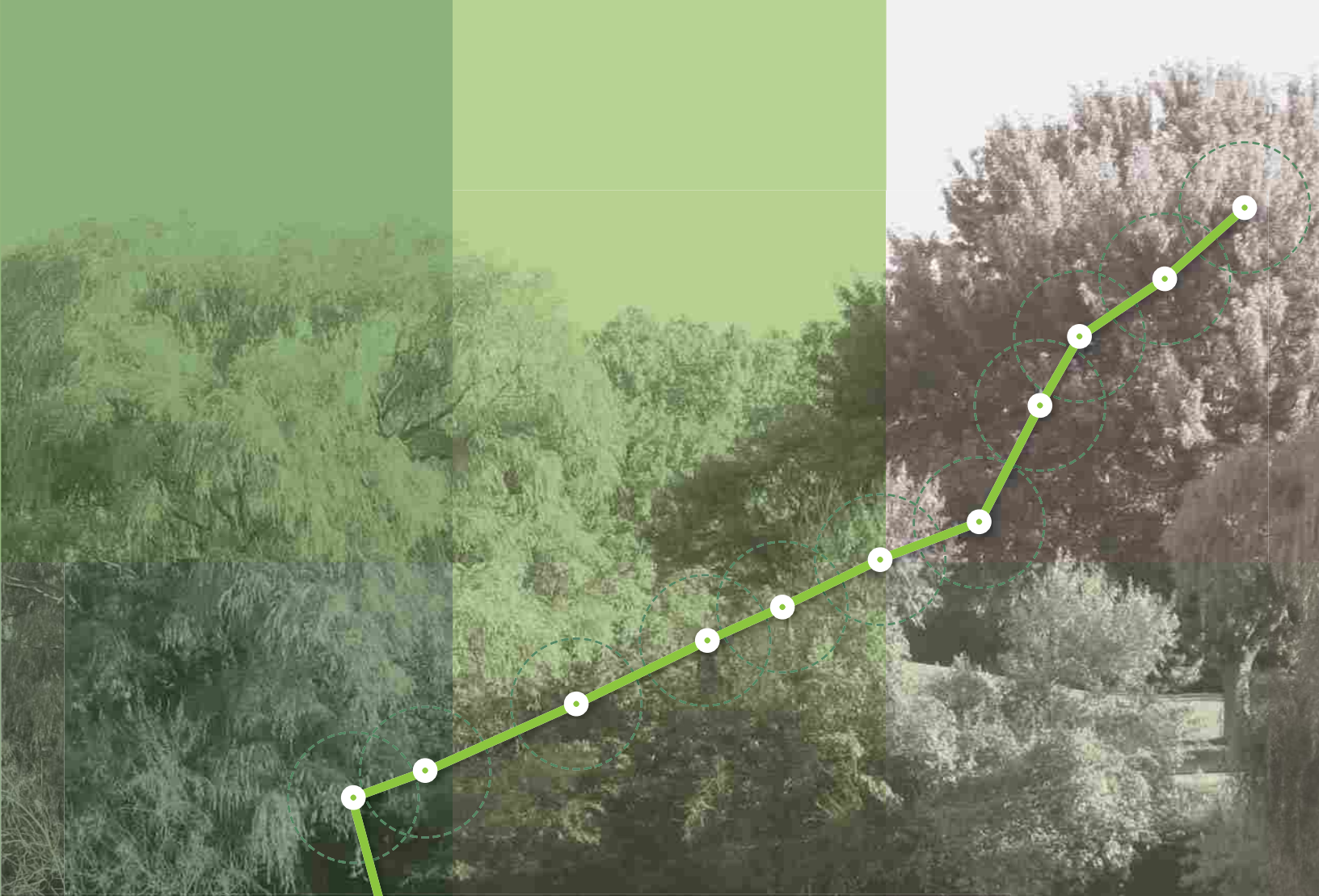


PROFESSIONAL SIGNATURE

QUALITY CONTROL

CROSS SECTION

10/12/17



OPUS STATION

CITY OF MINNETONKA

SOUTHWEST CORRIDOR INVESTMENT FRAMEWORK
TRANSITIONAL STATION AREA ACTION PLAN



Hoisington Koegler Group Inc.



SOUTHWEST LRT
community works
www.swlrtccommunityworks.org



ABOUT THIS CHAPTER:

The Transitional Station Area Action Plans are the product of a Hennepin County led effort to help communities along the Southwest LRT corridor prepare for SW LRT's opening day in 2018 and beyond.

An individualized plan has been created for each of the 17 stations in the Southwest corridor, each plan comprising a chapter in the larger Southwest Corridor Investment Framework. The station area action plans suggest ways to build on local assets, enhance mobility, identify infrastructure needs, and capitalize on promising opportunities for development and redevelopment near each station.

Plan Components:

INTRODUCTION 13-2

A brief overview of the station location and its surroundings

WHERE ARE WE TODAY? 13-4

A description of existing conditions in the station area, including:

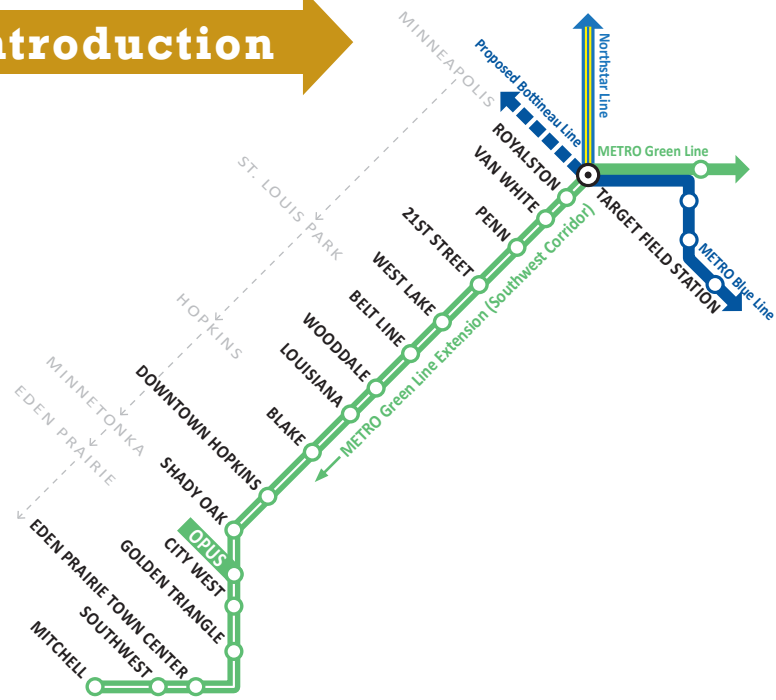
- » Land Use
- » Transit Connections
- » Access + Circulation Issues (Bike, Ped, and Auto)
- » Infrastructure Needs

WHERE ARE WE GOING? 13-8

This section presents a number of recommendations for the station area in anticipation of opening day needs and the long-term TOD environment. This includes:

- » Access + Circulation Plan
- » Station Area Site Plan
- » Infrastructure Plan
- » Development Potential
- » Summary of Key Initiatives

Introduction



OPUS STATION WITHIN THE CORRIDOR:

A prestigious employment area connected to the station via an extensive network of trails and centered upon a walkable mixed-use core.

EMPLOYMENT The Opus station is a major employment center located near Highway 169, Highway 62, and Shady Oak Road (see Place Types discussion beginning on p. 1-19). It is the largest employment center in Minnetonka and home to many high-profile businesses including United Health Group, Comcast, and American Family Insurance. The station will be an important stop for the thousands of employees that commute to the Opus Business Park from surrounding areas.

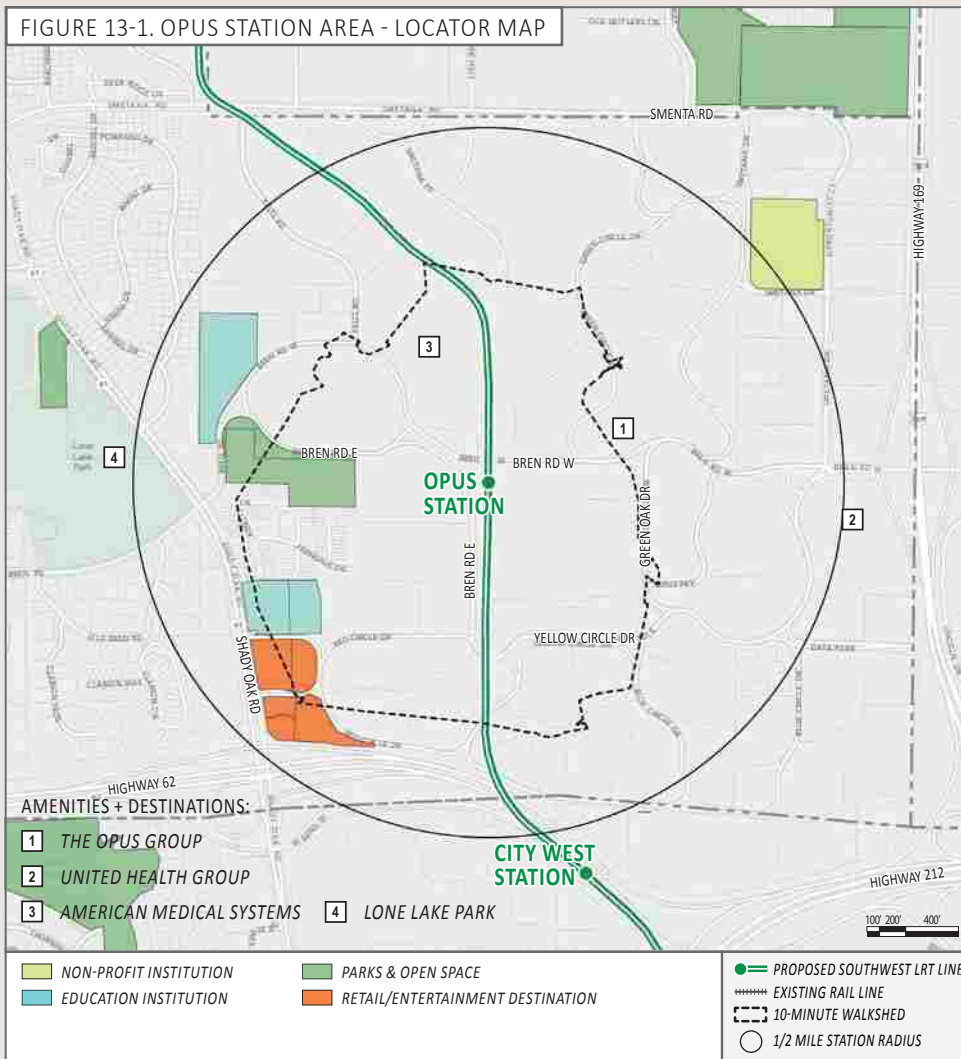
TRAIL CONNECTIONS The area is characterized by a 6-mile trail network which gives the area a park-like feel, and a distinctive looped roadway network that links employment buildings with hotels, retail establishments, and local residential neighborhoods in the surrounding area. The trail system can be accessed off Smetana Road and Shady Oak Road at Red Circle Drive. Along with providing area employees with a space for passive recreation and exercise, the trails provide important connections to areas throughout the business park and beyond, however, it rarely connects to the front doors of the businesses.

NEIGHBORHOODS Residential areas are located within the business park in the north and east areas, including a mix of apartments, condominiums, and townhomes. Additional residential density will occur in the area over time and will generate transit ridership. While these areas are not transit-supportive in nature, they are all linked to the station via the extensive trail network.

Station Location

The Opus station is located in the center of the Opus Business Park, a major employment center with a mix of light industrial, office, housing, hotel accommodations, retail, and restaurants in the station area.

The area is characterized by its campus-like setting, circuitous one-way road network, and off-street trail system. The Opus station is anticipated to serve local businesses and residents in the area. This station has strong potential to be a transit stop for reverse commuters.



NOTE: 10-minute walkshed approximates the area accessible within a 10-minute walk from the station platform using only the existing sidewalk/trail network. See Glossary for walkshed assumptions and methodology.

OPUS STATION AREA TODAY:



West entrance on Shady Oak Road



Existing office



Local wetland



Existing trail underpass

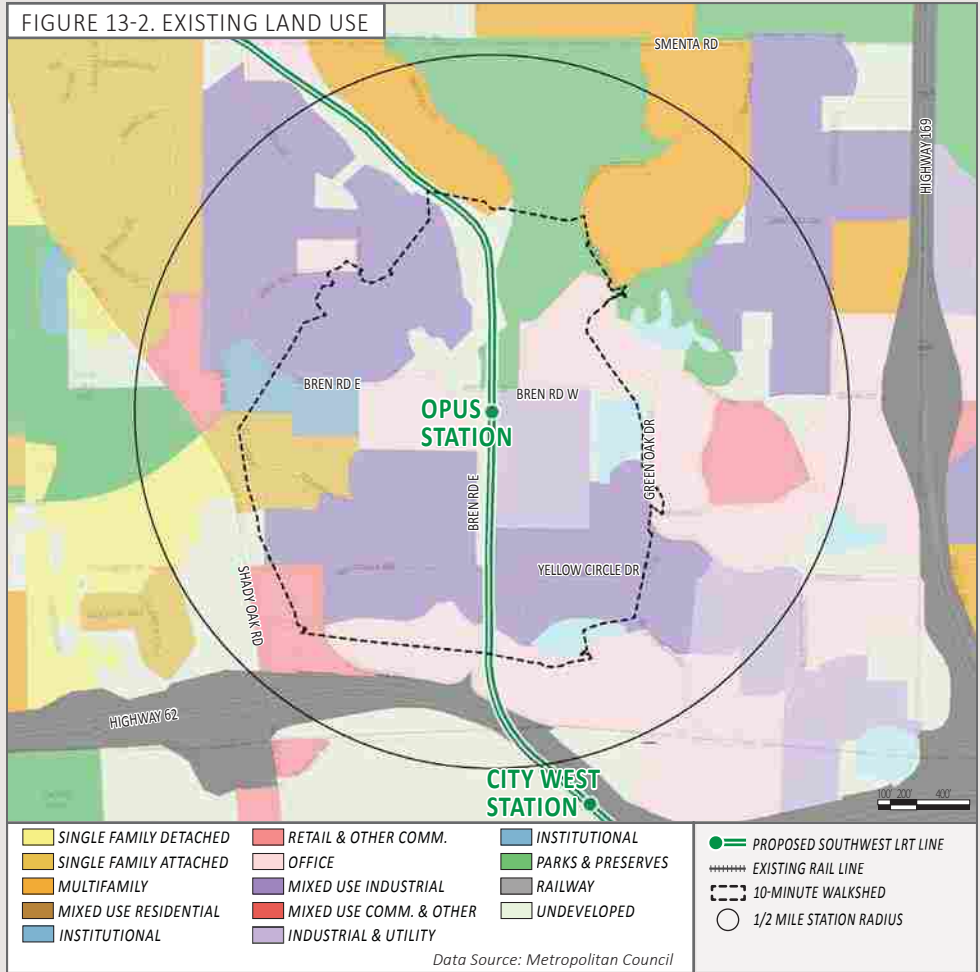
Where Are We Today?

The following section describes the station area's **EXISTING CONDITIONS**, including the local context, land uses, transit and transportation systems, pedestrian and bicycle facilities, assets, destinations, and barriers to accessing the station. This analysis of current conditions presents key issues and opportunities in the station area and informs the recommendations for future station area improvements.

NOTE: Existing conditions maps are based on data provided by Hennepin County and local municipalities. The data used to create each map is collected to varying degrees of accuracy and represents infrastructure and conditions at varying points in time. Actual conditions may vary slightly from what is shown.

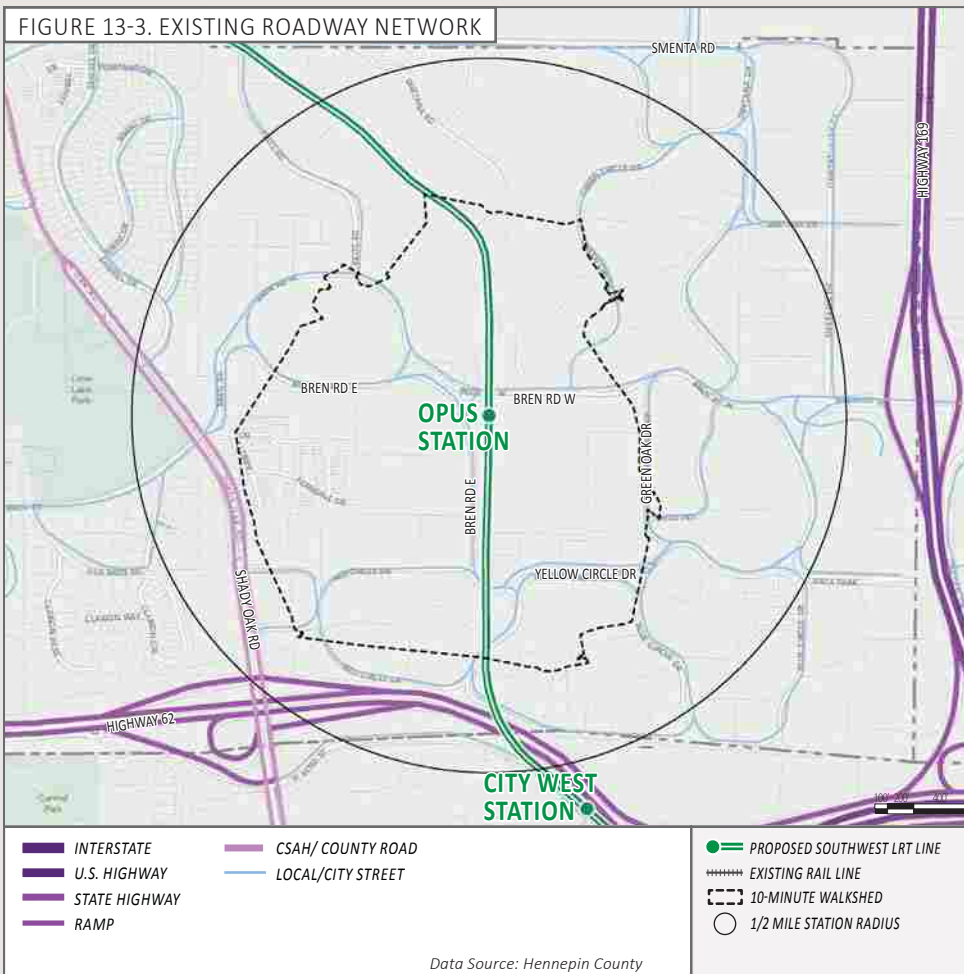
Land Use

The Opus station area is an important employment center with a mix of industrial, light industrial, and office uses. These are the predominant uses in the area, however, there are other uses that will potentially benefit from LRT transit, including nearby residential, hotel, and retail/commercial uses located near Shady Oak Road and Highways 62 and 169. There is also a fair amount of park and open space located to the north of the Opus station.



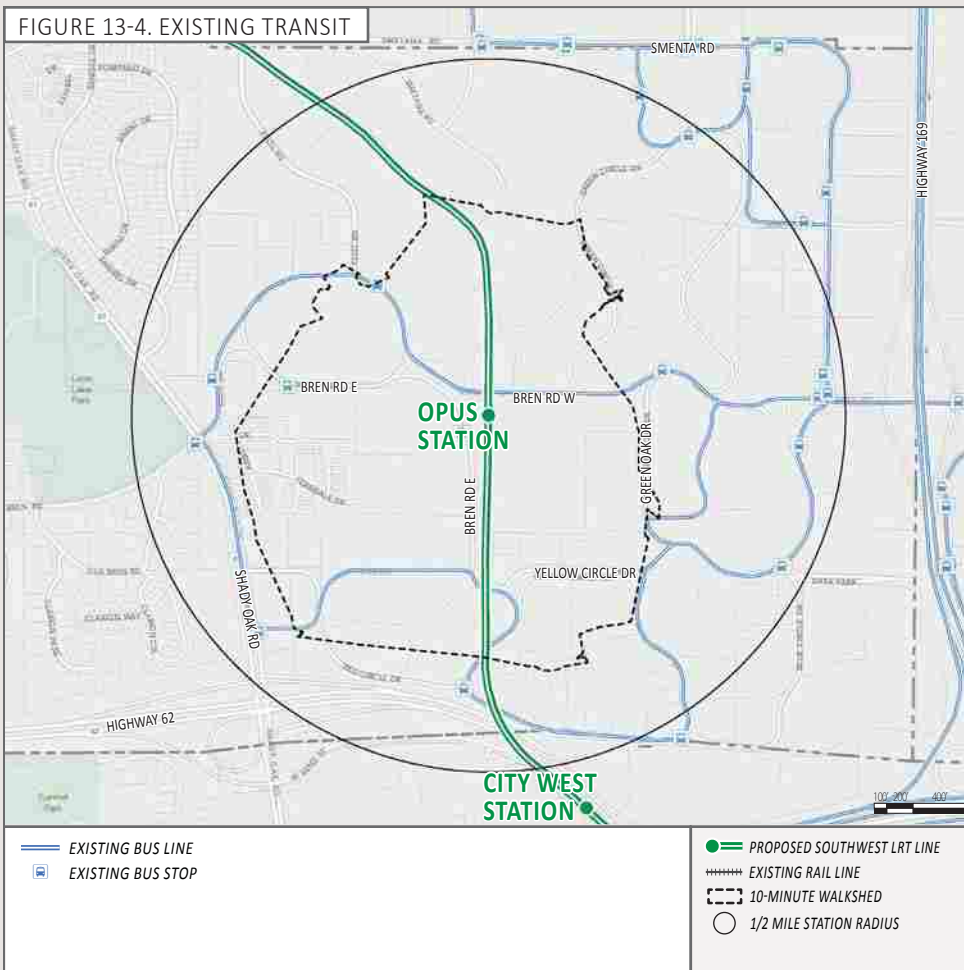
Roadway Network

The roadway network near the Opus station is a circuitous, one-way road network. It presents challenges to uninitiated motorists, pedestrians, and bicyclists. Roadways are limited and block sizes are large. Major roadways in the area include Shady Oak Road, located about a half-mile to the west of the station, Highway 62, located about a half-mile to the south of the station, and Highway 169, located about a half-mile to the east of the station.



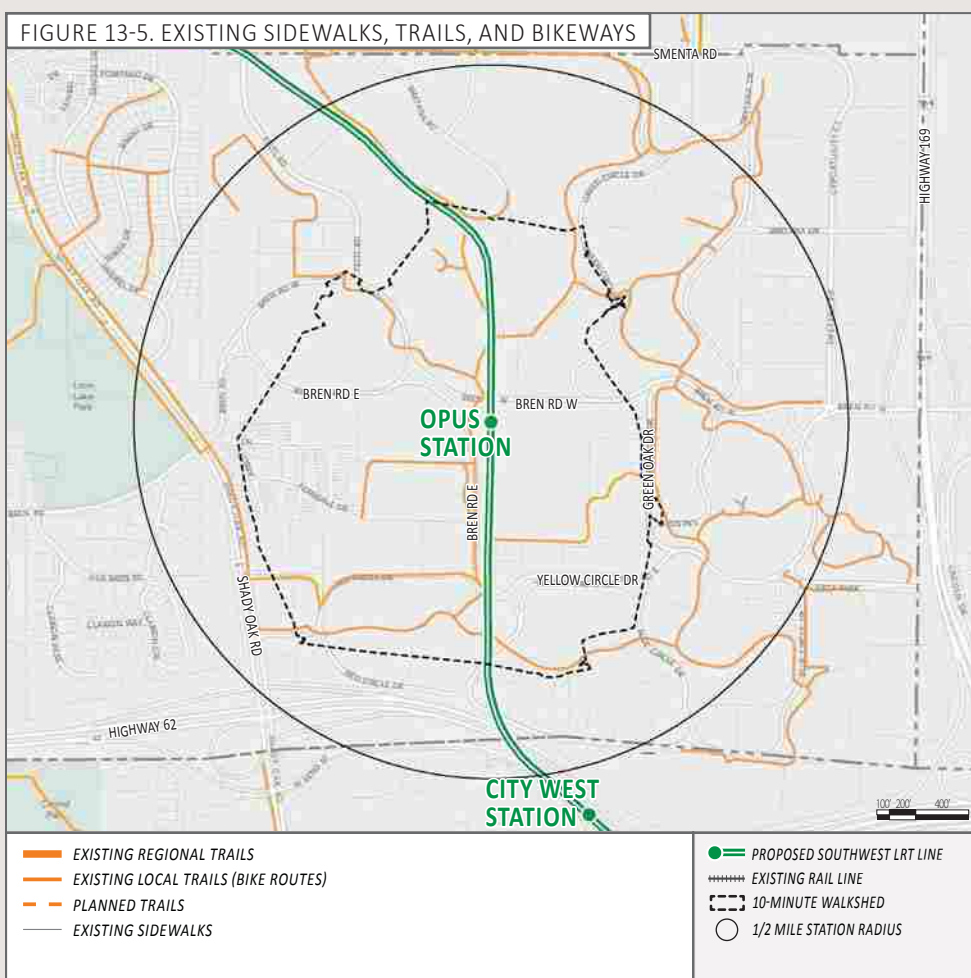
Transit

Existing bus service near the Opus station includes bus route #12, which runs along Bren Road West, with bus stops on Bren Road West and Bren Road East near the proposed station platform. In addition to public bus transit, some local businesses offer a circulator bus shuttle service.



Sidewalk, Trails and Bikeways

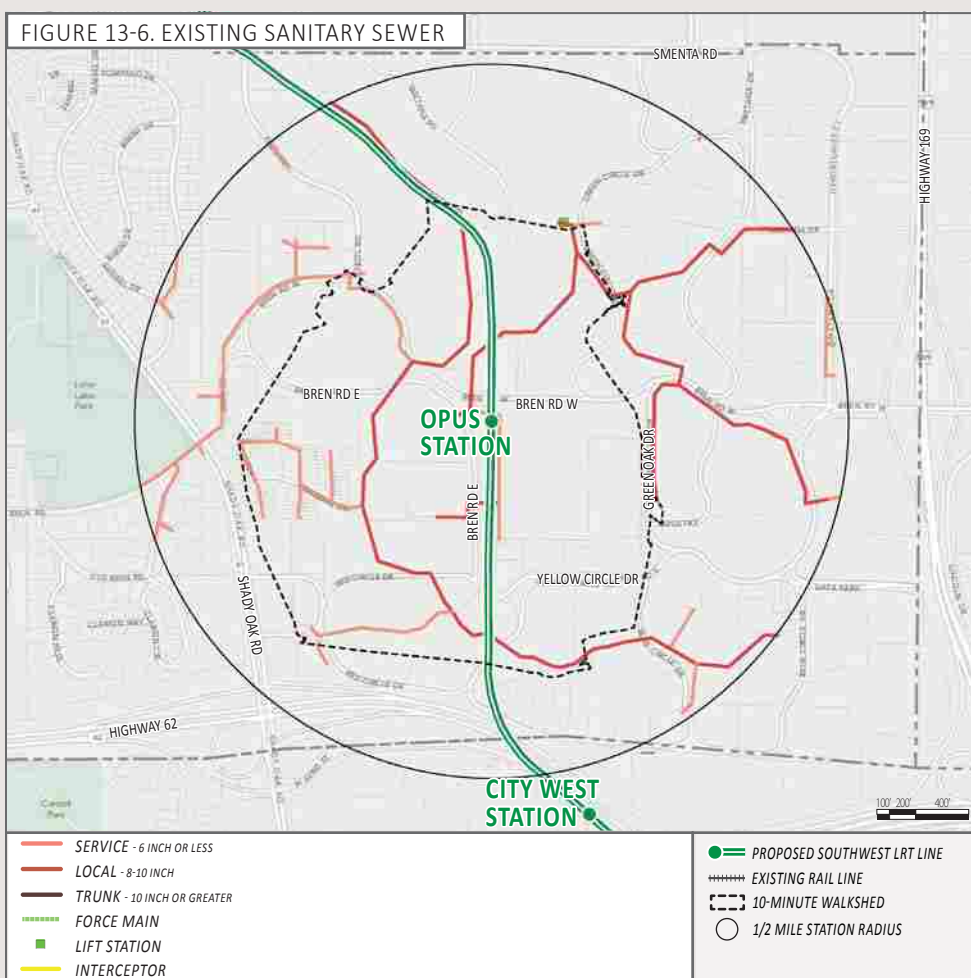
The sidewalk system in the Opus station area is extremely limited. The off-street multi-use trail system that runs throughout the Opus campus offers connections to most areas and businesses. While trail access is generally good, many businesses lack trail connections to building entries. The existing trail network in the area offers grade separation from roadways, reducing conflicts between trail users and motorists.



Existing Sanitary Sewer

Sanitary sewer infrastructure consists of a collection of gravity flow sewer mains, lift stations, and pressurized forcemains that transport sewage to a wastewater treatment plant (WWTP). An efficient collection system has the capacity to accommodate all of the existing land uses within its particular sewershed. Beyond capacity, the material and age of pipes within a system can also impact a system's effectiveness.

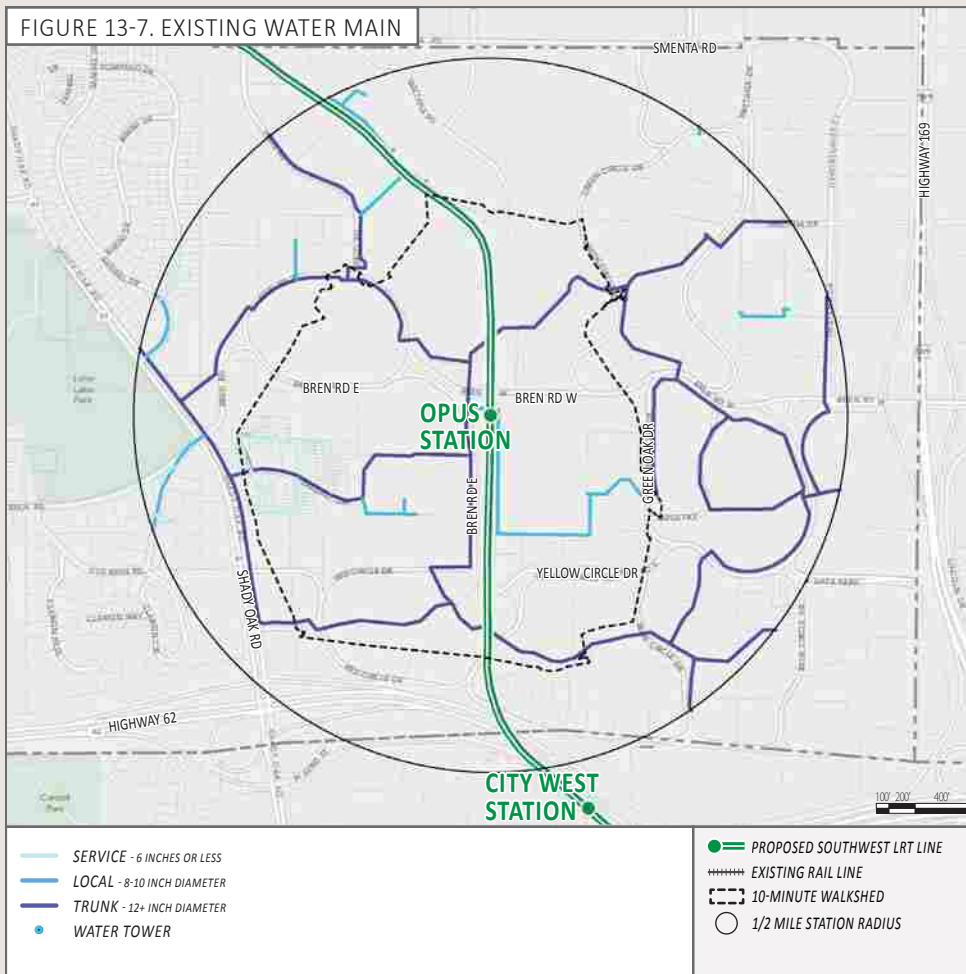
Sanitary sewer infrastructure within the project area is typically maintained by either the City of Minnetonka or by the Metropolitan Council Environmental Services (MCES) Division. MCES maintains a series of interceptor trunk sewers which collect sewage at key locations and convey sewage across community boundaries to regional WWTPs. Wastewater from the station area is treated by the MCES Blue Lake WWTP located in Shakopee.



Existing Water Main

Water main distribution systems serve to supply potable water to individual properties and to support fire suppression throughout the community. A well-designed system can maintain adequate pressure to support demand of individual properties and provide high flow rates to fire hydrants/fire suppression systems in emergency situations. Because of the complexity of water distribution networks and the importance of pressure, flow, and water quality, City water system models are used to evaluate a system's adequacy. The material and age of the system's water mains can also be factors in system breaks, leaks, and pressure and flow degradations.

Water pressure and flow rates can be influenced by: the size of water main serving an area, proximity and elevation relative to a water tower, proximity to a trunk water main with high flow capacity, if the main creates a loop, the demand of adjacent land uses, and the condition of the main.

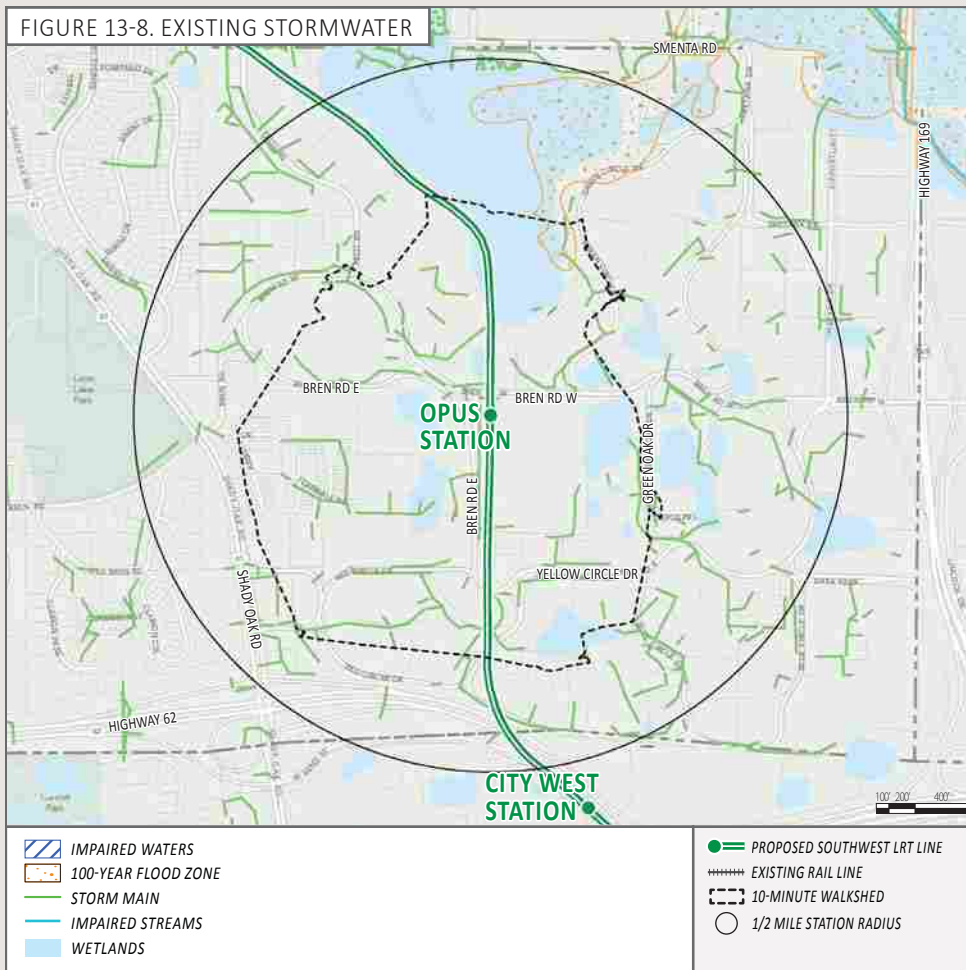


Stormwater

Opus station is located in Nine Mile Creek Watershed District. A significant portion of the drainage is directed north into wetlands and then into Nine Mile Creek. The creek is impaired by chloride and fish biology. In addition, there are numerous wetlands throughout the area, many of which receive piped stormwater. The 100-year floodplain from the creek extends into the north portion of the walk zone.

Discharging within one mile of impaired water may trigger additional National Pollution Discharge Elimination System measures which require additional stormwater management. For impaired waters with a Total Maximum Daily Load, the requirements may increase further. Zoning requirements for areas within the 100-year floodplain may limit development/redevelopment potential.

Any development/redevelopment is anticipated to improve existing drainage as a result of enforcing City and Watershed requirements.



Where Are We Going?

The plans and diagrams on the following pages illustrate a range of recommendations for infrastructure improvements, station amenities, and potential redevelopment opportunities within the station area.

The ACCESS AND CIRCULATION PLAN shown in Figure 13-9 provides a high level view of how future transit, automobile, bike, and pedestrian systems will connect to the station area and its surroundings.

Figure 13-10 illustrates the STATION AREA IMPROVEMENTS that will facilitate access to and from the station and catalyze redevelopment in the station area. This includes opening day and long-term station area improvements

Figure 13-11 focuses on OPENING DAY STATION AREA IMPROVEMENTS only. These recommendations represent the improvements necessary to enhance the efficient function of the transit station, roadways, pedestrian and bicycle connections, and transit connections on opening day in 2018.

Station Area Improvements

The discussion below outlines a range of future station area improvements. While some of the identified improvements may be constructed as part of the LRT project itself, other improvements must be funded, designed and constructed by other entities and will require coordination between the City, County, and Metro Transit as well as local stakeholder and community groups.

ROADWAYS

Opening Day Improvements:

- » Rely primarily on the existing street and block network to support pedestrians and cyclists. No new roadways are anticipated for opening day.
- » Select roadway changes near the LRT station (noted below as long-term improvements) could be constructed by opening day to provide better traffic flow into and out of the area. Such improvements include the reversal of traffic flow on Red Circle Drive and/or Green Oak Drive. As of December 2013, these improvements are not part of the SW LRT anticipated base project scope and are not slated for opening day implementation (subject to change).

Long-Term Improvements:

- » Over time, introduce new roads near the station platform. These new roads should be organized to create smaller blocks for future development and intensification near the transit station as well as enhance connections to the stations. Consider two-way movement near the station on these new roads to calm traffic near the station.
- » Other future roadway changes near the LRT station include minor realignment and routing changes to Opus Parkway, Yellow Circle Drive, Blue Circle Drive, Green Oak Drive, Red Circle Drive, Bren Road East and Bren Road West, based upon a recent Opus Area Traffic Study prepared for the City of Minnetonka by WSB & Associates.

PEDESTRIAN CONNECTIONS

Opening Day Improvements:

- » Extend the path connections from bus stops, Park and Ride, and Kiss and Ride locations to the proposed LRT station platform.
- » Develop a new grade-separated crossing of Bren Road East leading to and from the north end of the station platform.
- » Locate wayfinding signage at the station and key decision making points along the path network away from the station to direct people to area businesses, homes, and other destinations.
- » Initiate path improvements throughout the network (as shown in Figure 13-9) including pedestrian-oriented lighting and underpass improvements.



Multi-use path connections



Pedestrian-oriented lighting and streetscape enhancements



Example of public plaza

TRANSIT CONNECTIONS

Opening Day Improvements:

- » Provide new bus facilities near the station platform for connecting bus routes.
- » Develop a place for an employer-operated shuttle pick-up and drop-off.

BIKE CONNECTIONS

Opening Day Improvements:

- » Provide bike parking to the east of the northern entrance to the platform where it is easily accessible to trail users and is highly visible.
- » Explore the potential for bike share facilities at the station and key destinations away from the station to support riding to work from the station.

KISS AND RIDE

Opening Day Improvements:

- » Develop a Kiss and Ride / Shuttle loop near the station platform.

PARK AND RIDE

Opening Day Improvements:

- » Develop a small temporary Park and Ride facility to the northeast of the station with the intent of redeveloping the site over time.

STATION AMENITIES (*Beyond SW LRT Base Project Scope*)

Opening Day Improvements:

- » Wayfinding – include signage and wayfinding near the station area platform, the Park and Ride/Kiss and Ride facility, and along trails near the station.
- » Seating – provide comfortable and durable seating near the station platform and at the Park and Ride facility.

- » Lighting – provide adequate lighting for the safety of pedestrians, bicyclists, and motorists near the station platform, at the Park and Ride facility, and near the Kiss and Ride/shuttle drop-off.
- » Plaza – provide a public plaza area near the station platform to provide transit users with a paved queue area to wait for LRT trains, gather, and move about the station area.
- » Bike Facilities – provide bicycle parking, lockers, and bike share facilities in a highly visible area near the station platform.
- » Public Art – provide public art in the station area.

POTENTIAL DEVELOPMENT

Long-Term Improvements:

- » See the “Development Potential” discussion on page 13-16 for more on long-term development opportunities.

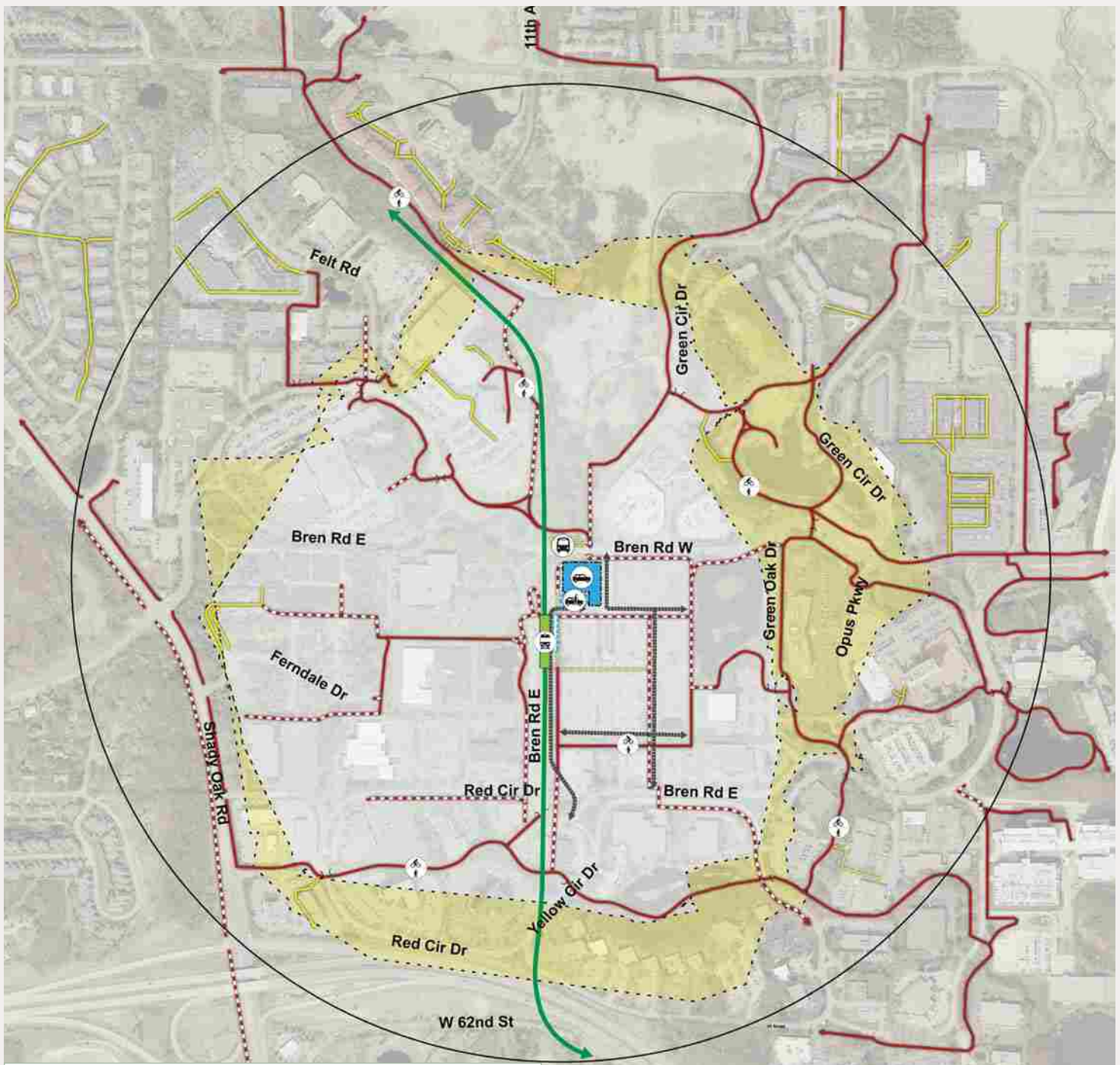
UTILITIES

- » See the “Station Area Utility Plan” beginning on page 13-18 for all utility recommendations.

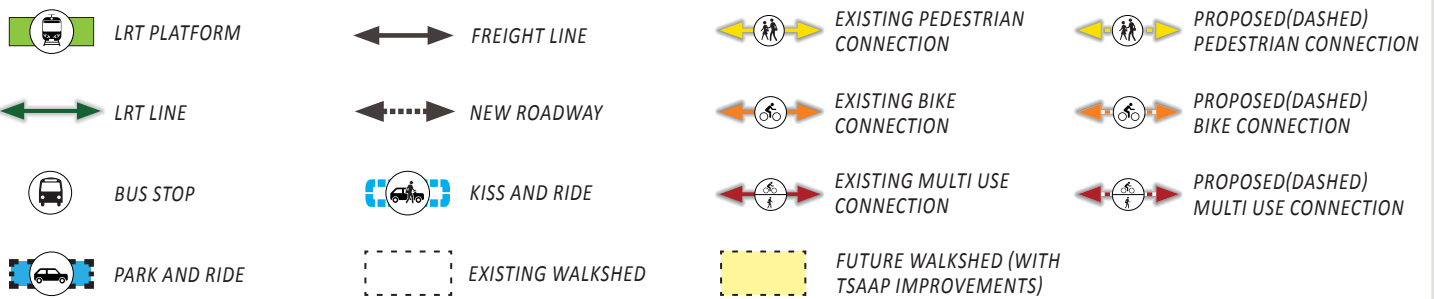
FIGURE 13-9. ACCESS + CIRCULATION PLAN

WHERE ARE WE GOING?

OPUS



This illustration includes both existing and proposed facilities to show the full network of future bike, pedestrian, automobile, and transit connections.



NOTE: Existing walkshed approximates the area accessible within a 10-minute walk from the station platform using only the existing sidewalk/trail network. Future walkshed incorporates all proposed improvements to the sidewalk/trail network. Walksheds are based on GIS modeling and available sidewalk/trail information- and may not reflect exact on-the-ground conditions. See Glossary for detailed explanation of walkshed assumptions and methodology.

FIGURE 13-10. STATION AREA IMPROVEMENTS



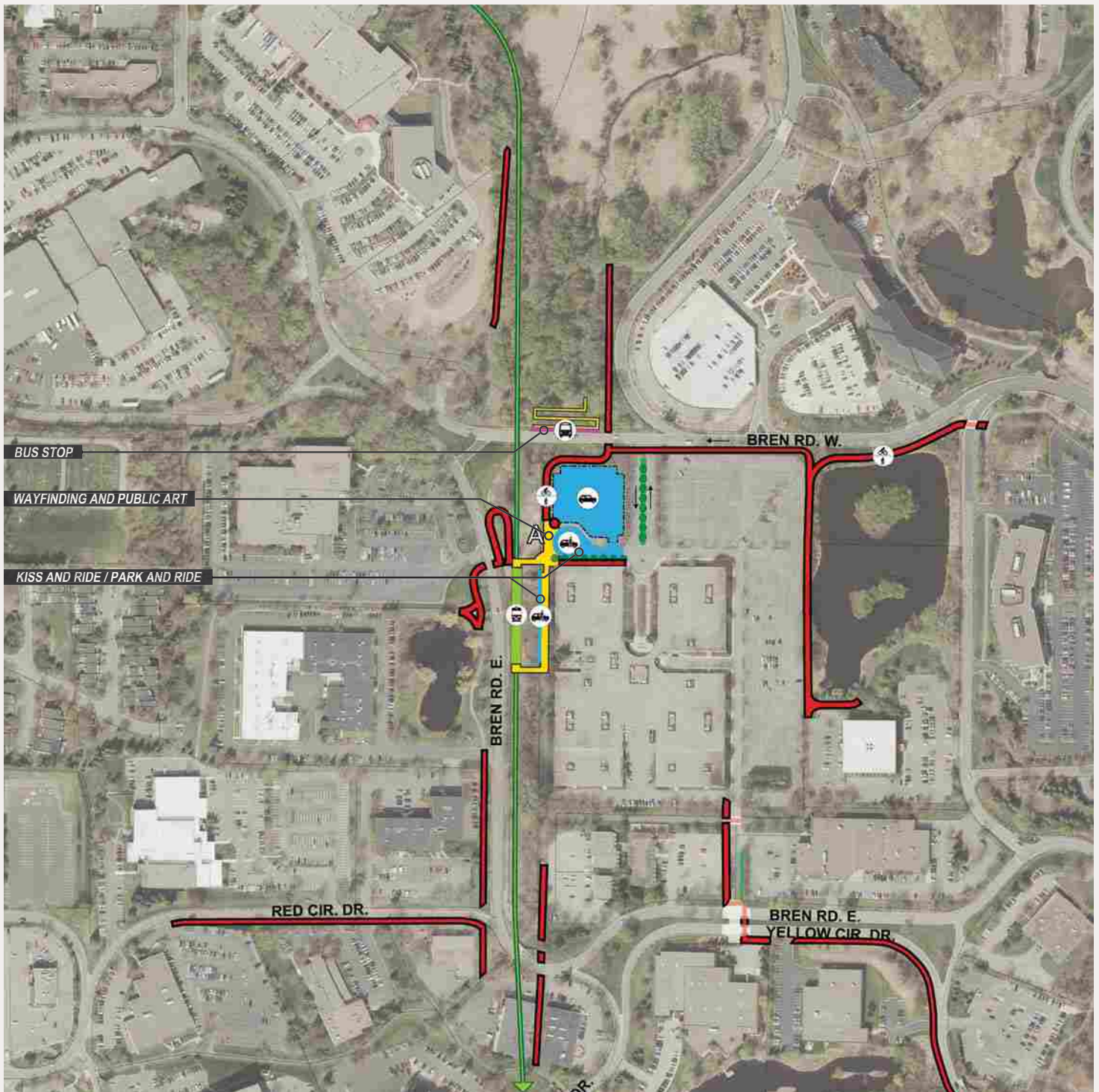
Faded symbology indicates existing facilities and infrastructure.

- | | | | | | | | |
|--|--------------|--|-------------------------------------|--|-------------------------------------|--|----------------------------|
| | LRT PLATFORM | | NEW SIDEWALK / SIDEWALK IMPROVEMENT | | NEW ROADWAY | | BIKE PARKING |
| | FREIGHT LINE | | ON STREET BIKE INFRASTRUCTURE | | STREETSCAPE | | WAYFINDING |
| | BUS STOP | | MULTI-USE PATH | | PARK AND RIDE | | PUBLIC ART OPPORTUNITY |
| | BUS SHELTER | | NEW CROSSING / CROSSING IMPROVEMENT | | KISS AND RIDE | | POTENTIAL DEVELOPMENT SITE |
| | | | NEW SIGNALIZED INTERSECTION | | PLAZA SPACE / BUILDING SETBACK AREA | | |

FIGURE 13-11. OPENING DAY STATION AREA IMPROVEMENTS

WHERE ARE WE GOING?

OPUS



- | | | | | | | | |
|--|--------------|--|-------------------------------------|--|-------------------------------------|--|----------------------------|
| | LRT PLATFORM | | NEW SIDEWALK / SIDEWALK IMPROVEMENT | | NEW ROADWAY | | BIKE PARKING |
| | FREIGHT LINE | | ON STREET BIKE INFRASTRUCTURE | | STREETSCAPE | | WAYFINDING |
| | BUS STOP | | MULTI-USE PATH | | PARK AND RIDE | | PUBLIC ART OPPORTUNITY |
| | BUS SHELTER | | NEW CROSSING / CROSSING IMPROVEMENT | | KISS AND RIDE | | POTENTIAL DEVELOPMENT SITE |
| | | | NEW SIGNALIZED INTERSECTION | | PLAZA SPACE / BUILDING SETBACK AREA | | |

Opening Day Improvements

The following tables and diagrams outline the proposed improvements to be implemented in advance of SW LRT's opening day in 2018. Table 13-1 and Figure 13-12 show opening day improvements that are part of the SW LRT anticipated base project scope; these improvements will be part of the overall project cost for construction of the LRT line. Table 13-2 and Figure 13-13 include opening day improvements that are recommended as part of the Southwest Corridor Investment Framework and are beyond SW LRT's anticipated base project scope.

TABLE 13-1. SOUTHWEST LRT ANTICIPATED BASE PROJECT SCOPE - OPENING DAY STATION AREA IMPROVEMENTS

| PLAN KEY | IMPROVEMENT | PROJECT LOCATION | PROJECT NOTES |
|----------|------------------------|--|---|
| A | LRT Platform | Along the east side of Bren Rd. E. | Includes related LRT infrastructure |
| B | Park and Ride | Northeast of station platform | Approx. 90 stall surface lot, leased (includes private shuttle stop/turnaround) |
| C | Kiss and Ride | Northeast of station platform | Dropoff area and turnaround within Park and Ride lot |
| D | Bus Facilities | Bren Rd. W., north of park and ride | New bus bay on Bren Rd W. for 2 bus routes |
| E | Roadways | Intersection of Bren Rd. E and Bren Rd. W. | Realigned left turn lane from Bren Rd. W. to Bren Rd. E. |
| F | Sidewalk/Trail | Bren Rd. E., west of LRT station platform | Grade separated trail crossing |
| G | Sidewalk/Trail | Bren Rd. W., north of park and ride | ADA access ramp to existing grade separated trail crossing of Bren Rd. W. |
| H | Bike Facilities | Near station platform | Allowance for bike storage |
| I | Wayfinding | Near station platform | Allowance |
| J | Landscaping | Near station platform | Allowance |
| K | Water* | Varies | New water service and fire hydrant to station |
| L | Utilities* | Varies | Adjustment of existing utilities w/in project area |
| M | Stormwater management* | Varies | Allowance |

Note: Anticipated Southwest LRT Base Project Scope as of December 2013 (subject to change)

* Improvement not symbolized on opening day figures (exact location to be determined as part of the base project scope)

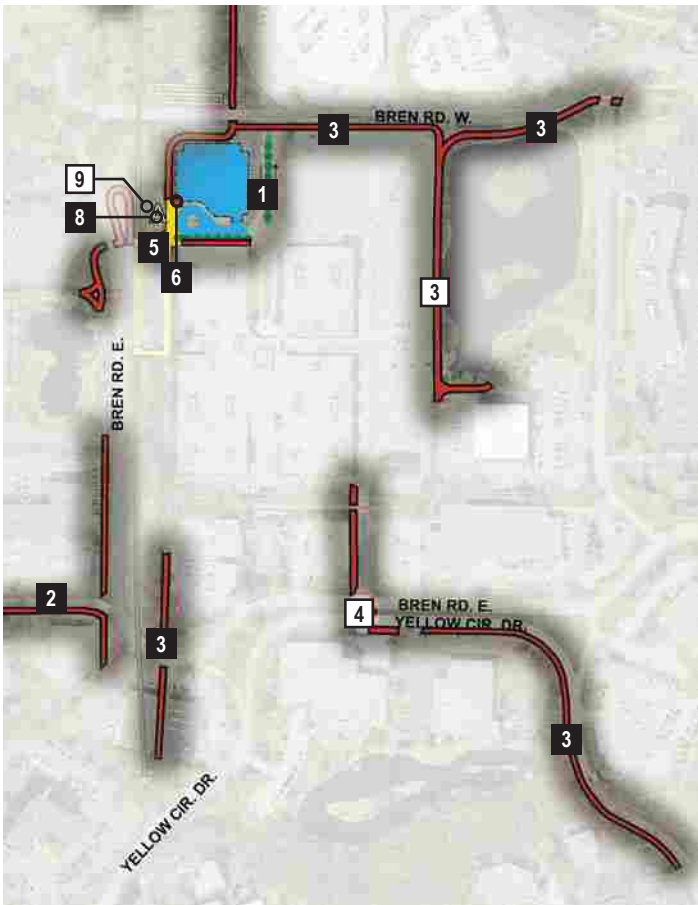
TABLE 13-2. SOUTHWEST CORRIDOR INVESTMENT FRAMEWORK (TSAAP) - OPENING DAY STATION AREA IMPROVEMENTS

| PLAN KEY | IMPROVEMENT | PROJECT LOCATION | PROJECT NOTES | PRIORITY |
|----------|--------------------------|--|--|-----------|
| 1 | Park and Ride | Northeast of station platform | Enhanced planting areas/trees | Secondary |
| 2 | Roadways | Red Circle Drive Reversal | New connections associated with reversing the traffic flow. | Primary |
| 3 | Sidewalk/Trail | Varies | Multi-use trails to complete gaps in trail system w/in 10 min walkshed | Secondary |
| 4 | Intersection Enhancement | Bren Rd. E. and Yellow Circle Dr., southeast of station platform | Grade separated crossings | Secondary |
| 5 | Bike Facilities | Near station platform | Bike parking, lockers, pump station and bike share facilities (beyond SPO improvements) | Primary |
| 6 | Wayfinding | Near station platform and park and ride | Signage and wayfinding (beyond SPO improvements) | Primary |
| 7 | Stormwater management | Near station platform and park and ride | Green infrastructure (beyond SPO improvements) | Primary |
| 8 | Public Art | Near station platform and park and ride | Public art (beyond SPO improvements) | Secondary |
| 9 | Public Plaza | Near station platform | Public plaza with paving, seating, plantings, lighting, and signage (beyond SPO improvements) | Secondary |
| 10 | Sanitary Sewer | Near station platform | Upsize existing 8-inch sanitary sewer to 10-inch minimum in conjunction with LRT rail construction | Primary |

FIGURE 13-12. SOUTHWEST LRT ANTICIPATED BASE PROJECT SCOPE - OPENING DAY STATION AREA IMPROVEMENTS



FIGURE 13-13. SOUTHWEST CORRIDOR INVESTMENT FRAMEWORK (TSAAP) - OPENING DAY STATION AREA IMPROVEMENTS



PRIMARY PRIORITY # SECONDARY PRIORITY

Development Potential

OVERVIEW

Key factors at the Opus station that present opportunities for future redevelopment include the presence of older, low-rise, light industrial buildings near the proposed station platform that may be ripe for redevelopment into more intense, mixed-use.

The land uses in the Opus station area include a mix of office, light industrial, commercial/retail, residential, hotel, and park/open space uses. Several underutilized industrial sites present opportunities for future redevelopment in the area. The property directly east of and adjacent to the proposed station platform presents an opportunity for higher density and mixed land uses.

Key challenges that should be addressed to facilitate development potential include land uses, additional roadways and existing roadway improvements, smaller block sizes near the station, trail connectivity in the station area, and wayfinding.

LAND USES

Development potential for the Opus station area could include a mix of office, light industrial, residential, hotel, and retail uses.

PLANNING STRATEGIES

Strategies that should be considered to facilitate future development in the station area include the introduction of a finer grain of streets and block sizes to enhance station mobility and set up a framework for higher density development near the station. Streetscape and trail improvements connecting the station area with potential development sites, local destinations, neighborhoods, and bus transit facilities will enhance development potential in the area.

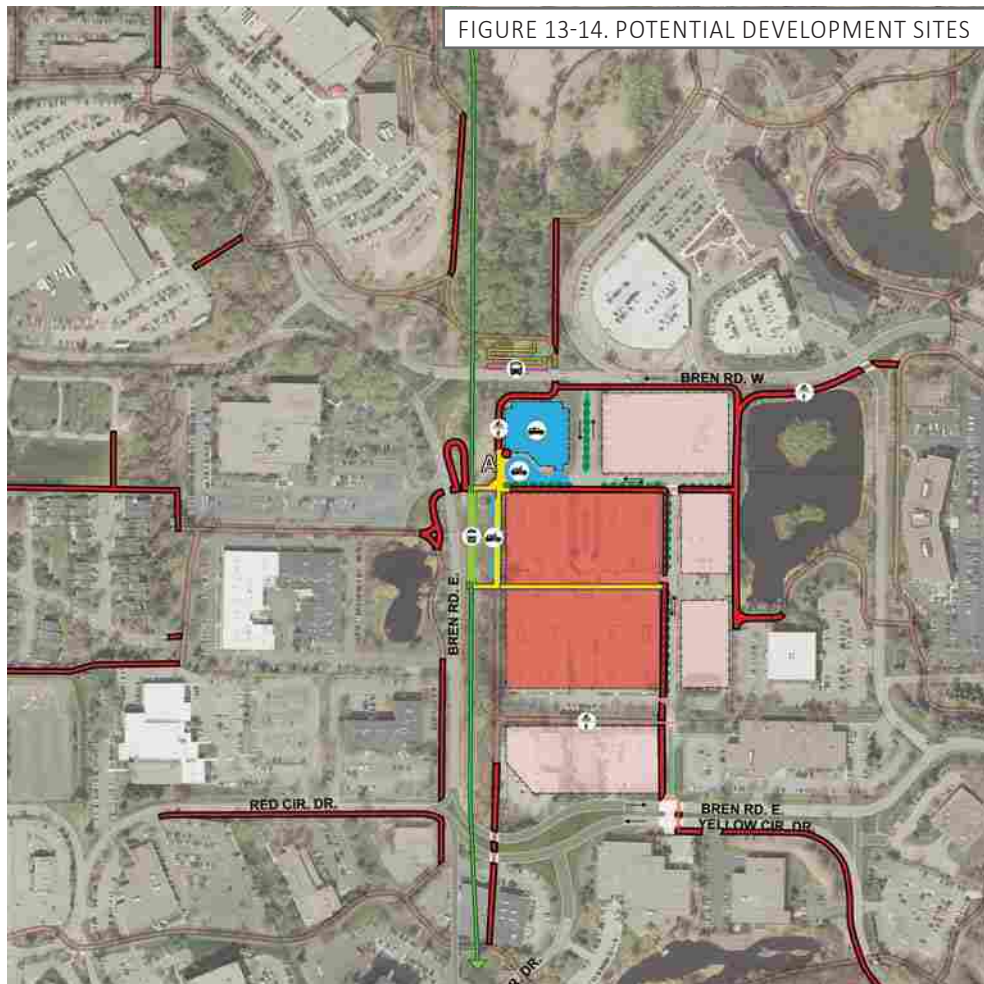


FIGURE 13-14. POTENTIAL DEVELOPMENT SITES

FUTURE LAND USE:

- RETAIL & OTHER COMMERCIAL
- OFFICE

Key Considerations for Change and Development Over Time

Development within the station area should focus on increasing density and mix of uses and creating a walkable street and block network within the Bren Road loop that can connect pedestrians via paths to more remote offices throughout station area. Key considerations should include:

BUILT FORM AND LAND USE

- » Introduce higher density office, hotel, and commercial development with active street level uses facing the station and key pedestrian routes leading to and from the station.
- » Design new buildings in the Bren Road loop to enhance pedestrian access by orienting them towards the street and locating them as close to the street line as possible.
- » In employment buildings with manufacturing uses, locate the office components adjacent to pedestrian paths, streets and/or open spaces where they can contribute to street life and promote more “eyes on the street”.
- » Should the Merchandise Mart site be redeveloped, ensure new development establishes a new east-west pedestrian connection linking the southern end of the station platform with areas to the east.
- » Design and size the Park and Ride facility so that it has the potential to be redeveloped with higher density uses over time.
- » Design parking structures to reflect the characteristics of more active building types by screening diagonal ramps, screening parked cars from view, and when next to a street incorporating active uses at street level.

PUBLIC REALM

- » Restrict outdoor storage within the station area so that it does not detract from the image of the area or discourage new higher density employment uses.
- » Initiate pathway improvements including pedestrian-oriented lighting, underpass enhancements, and wayfinding at key decision-making points along all paths leading to and from the station.

MOBILITY

- » Develop a new walkable street and block pattern on the lands within the Bren Road loop including a new two-way street system connecting Bren Road East with Bren Road West to create an address for new development.
- » Extend the existing multi-use path network into the Bren Road Circle from all sides and connect the path extensions to the LRT platform.
- » Minimize the impact of parking and circulation on pedestrians by locating parking in structures or to the rear or side of new buildings, and consolidating access and service drives.

- » Parking access, loading, and servicing elements should be shielded and located to the rear of the building.
- » Limit vehicular access points along Bren Road.



Office development that fronts the street



Shielded loaded bays to the rear of the building



Pedestrian path through development

Station Area Utility Plan

OVERVIEW

The station area utility plan and strategies recommended below were developed by considering future transit-oriented development within the station area, as depicted by the Station Area Improvements Plan (Figure 13-10). Minnetonka will need to apply these localized recommendations to the city wide system to ensure that the potential development/redevelopment will not be limited by larger system constraints. Existing models or other methods can be used to check for system constraints in the station areas.

Minnetonka should also consider reviewing the condition of their existing utilities in the station development area. The station construction would provide Minnetonka an opportunity to address any utilities needing repairs. Once the larger system has been reviewed for system constraints, Minnetonka will be able to accurately plan for necessary utility improvements in their city Capital Improvement Program (CIP). All utilities located beneath the proposed LRT rail or station platform should be encased prior to the construction of these facilities. The cost associated with encasing these facilities is assumed to be a project cost and is not included in potential improvements identified for the City of Minnetonka CIP.

APPROACH

Utility improvement strategies are outlined in this report for the ultimate station area development (2030), as well as improvements which should be considered prior to opening day anticipated in 2018. Although recommendations are categorized in one of these two timeframes, Minnetonka should weigh the benefits of completing more or less of these improvements as land becomes available for future development. Minnetonka should take the utility analysis a level further and model future utilities in their city utility system models.

The proposed development and redevelopment areas were evaluated based on Metropolitan Commission Sewer Availability Charge (SAC) usage rates and estimated flows. Estimated flows for one possible development scenario in this area indicate that internal to the station area, no more than eight inch pipe are necessary to serve the mix of proposed and existing development. Each utility system should still be reviewed to identify capacity and demand constraints to the larger system associated with increase in flows from the proposed developments and existing developments in the area. Minnetonka should anticipate the construction of new municipal utilities in conjunction with new or realigned roadways.

GENERAL RECOMMENDATIONS - SANITARY SEWER

Sanitary sewer recommendations for station area improvements include opportunities for Minnetonka to improve the existing sanitary sewer network, without necessarily replacing existing sanitary sewers. When recommendations for “improving” existing sanitary sewer are noted, Minnetonka should consider the level to which each specific sewer should be improved. Methods of improvement could include: lining the existing sewer, pipe joint repair, sewer manhole repair, relocation, and complete replacement.

The following items should be evaluated prior to opening day of the station, although action may not be required until necessary for development:

- » Televising existing sewer mains in the station area and proposed development area to determine the condition of the sewer mains, susceptibility for backups or other issues and evaluate for Infiltration and Inflow (I&I).
- » Locations of known I&I. If previous sewer televising records, city maintenance records, or an I&I study have shown problems, the city should consider taking measures to address the problem.
- » The age and material of existing gravity and/or forcemain sanitary sewer in the identified station area. If the lines are older than the material’s typical design life or materials which are susceptible to corrosion relative to soils in the area, the city should consider repairing, lining or replacing the mains.
- » Locations of known capacity constraints or areas where city sewer models indicate capacity issues. If there are known limitations, the city should further evaluate the benefit of increasing pipe sizes.
- » City sewer system models (existing and future). A review of these models with future development would assist Minnetonka in determining if sewers in the project area should be increased to meet existing or future city system needs.
- » Existing sewer pipes should be relocated or encased in areas where they cross or are immediately adjacent to the LRT line/station.

GENERAL RECOMMENDATIONS - WATER MAIN

Water main recommendations for station area improvements also include opportunities for Minnetonka to improve the existing water system network. Creating loops in the network can help prevent stagnant water from accumulating along water main stubs, and creating loops of similar sized water main provides the city a level of redundancy in their water network. Redundancy helps reduce the impacts to the community during system repairs, and also helps stabilize the pressure in the network.

The following items should be evaluated prior to opening day of the station, although action may not be required until necessary for development:

- » The age and material of the existing mains in the identified station area. If the mains are older than the materials typical design life or materials which are susceptible to corrosion relative to soils in the area, the city should consider replacing the main.
- » Locations of previous water main breaks. If water main breaks repeatedly occur in specific areas, the city should consider replacing or repairing the main.
- » Locations with known water pressure issues or areas where city models indicate low pressure. If there are known limitations (for either fire suppression or domestic uses), the city should further evaluate the benefit of increasing main sizes.
- » Locations with known or potential water quality issues. If there are mains known to be affecting the water quality (color, taste, odor, etc.) of their system, Minnetonka should consider taking measures to address the problem affecting water quality.
- » City water system models (existing and future). A review of these models with future development would assist Minnetonka in determining if mains in the project area should be improved to meet existing or future city system needs based on demand constraints.
- » Existing water main pipes should be relocated or encased in areas where they cross or are immediately adjacent to the LRT line/station.

GENERAL RECOMMENDATIONS – STORM SEWER

Local storm sewer improvements are recommended to be completed in conjunction with other improvements in the station area. Improvements which will likely require storm sewer modifications include: roadway realignments, roadway extensions, and pedestrian sidewalk/street scape improvements. Storm sewer improvements may consist of: storm sewer construction, manhole reconstruction, drain tile extensions, storm sewer relocation, and complete replacement. These local storm sewer improvements are included as part of the overall cost of roadway and streetscape improvements recommended in this plan. Where roadway/streetscape improvements are part of the SW LRT anticipated base project scope, associated storm sewer improvements are assumed to be a project cost. Minnetonka should also consider coordinating with the local watershed district and other agencies to review the condition of and capacity of existing trunk storm sewer systems serving more regional surface water needs.

STORMWATER BEST MANAGEMENT PRACTICES

There are numerous stormwater best management practices (BMPs) that can be used to address stormwater quality and quantity. As part of this project, BMP guides were developed for four stations (Royalston, Blake, Shady Oak, and Mitchell) which exemplify the range of development intensity and character in the urbanized environment along the Southwest LRT Corridor. The recommendations and practices identified in each of the four BMP guides are applicable to various stations along the corridor.

Potential stormwater management strategies for this station area may be similar to those shown in the BMP guide for the Shady Oak station (see p. 12-28). Minnetonka should consider implementing applicable best management practices similar to those in the Shady Oak Station BMP guide. Stormwater management recommendations should be constructed in conjunction with public and private improvements and future development/redevelopment in the station area.



Station Area Utility Plan (Continued)

STATION AREA UTILITY RECOMMENDATIONS

Utility recommendations (illustrated in Figure 13-15) are based on a localized analysis of proposed development. It is recommended that the City of Minnetonka take this analysis a step further and review system constraints to the existing and future sanitary sewer and water main systems using existing sewer CAD or water CAD models, or other methods of modeling these systems.

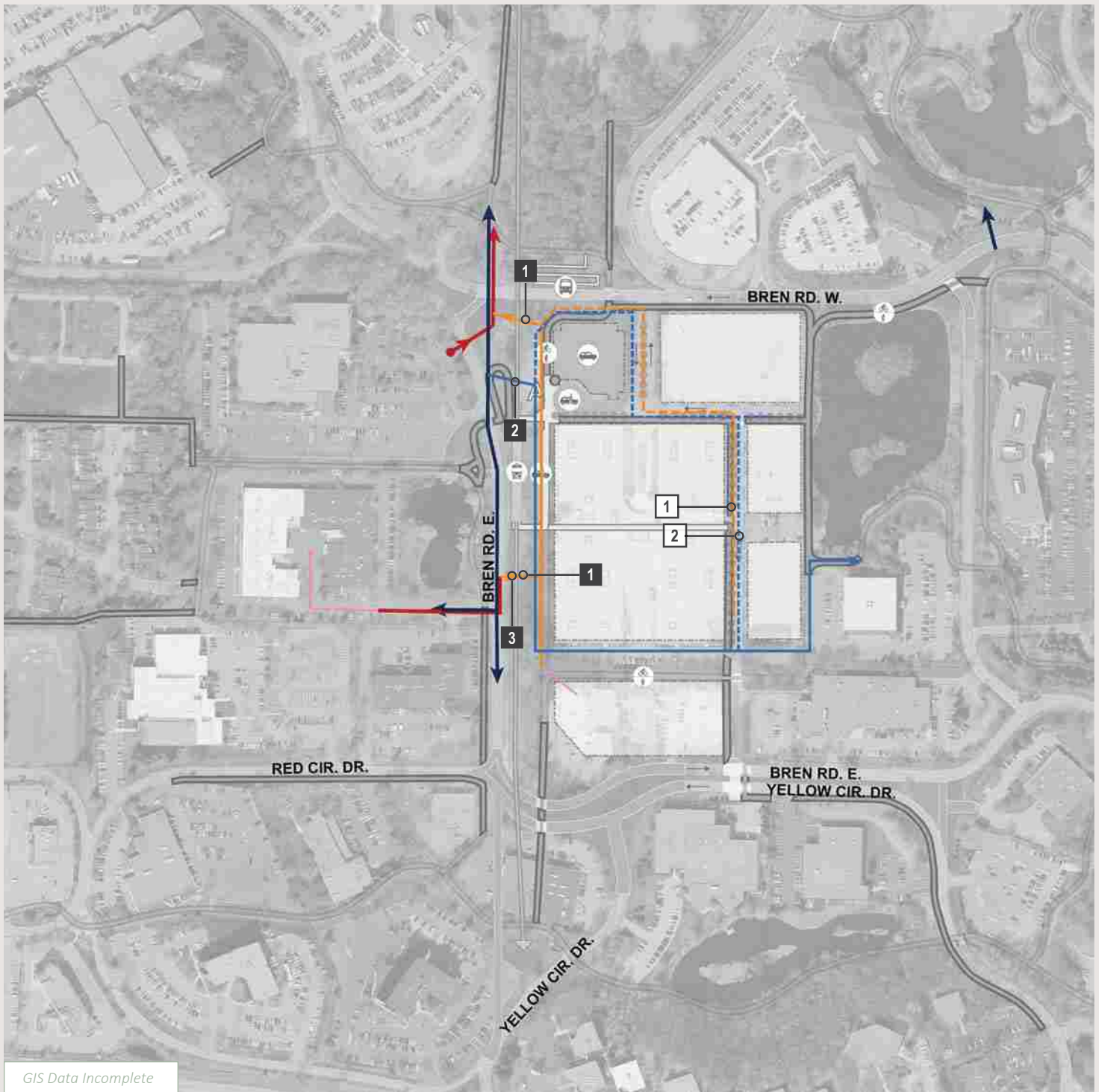
Opening Day Recommendations:

1. Encase existing sanitary sewer crossing the LRT rail construction.
2. Encase existing water main crossing the LRT rail construction.
3. Consider upsizing existing 8-inch sanitary sewer crossing Bren Road E. to 10-inch minimum in conjunction with LRT rail construction (confirm with City model).

Long-Term Recommendations:

1. Construct 8-inch minimum sanitary sewer in conjunction with roadway construction of new streets east of the station.
2. Construct 8-inch minimum water main in conjunction with roadway reconstruction/construction of new streets east of the station.

FIGURE 13-15. STATION AREA UTILITY PLAN



GIS Data Incomplete

OPENING DAY RECOMMENDATION

LONG-TERM RECOMMENDATION

- | | | |
|--------------------------|-----------------------------|----------------------|
| — EXISTING UTILITIES | — SERVICE SANITARY | — SERVICE WATER MAIN |
| - - - PROPOSED UTILITIES | — LOCAL SANITARY | — LOCAL WATER MAIN |
| | — TRUNK SANITARY | — TRUNK WATER MAIN |
| | — MCES SANITARY INTERCEPTOR | ● WATER TOWER |
| | — SANITARY SEWER FORCEMAIN | |
| | ■ LIFT STATION | |