

# WOODDALE STATION

## CITY OF ST. LOUIS PARK

SOUTHWEST CORRIDOR INVESTMENT FRAMEWORK  
TRANSITIONAL STATION AREA ACTION PLAN



Hoisington Koepler Group Inc.



**SOUTHWEST LRT**  
community works  
[www.swlrtccommunityworks.org](http://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.

*Two location alternatives are under consideration for the Wooddale Station, noted in this chapter as "Wooddale West" and "Wooddale East". A complete set of recommendations has been developed for each alternative and is included in the "Where are We Going?" section of this report (see description below).*

Plan Components:

### INTRODUCTION 8-2

A brief overview of the station location and its surroundings

### WHERE ARE WE TODAY? 8-4

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

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

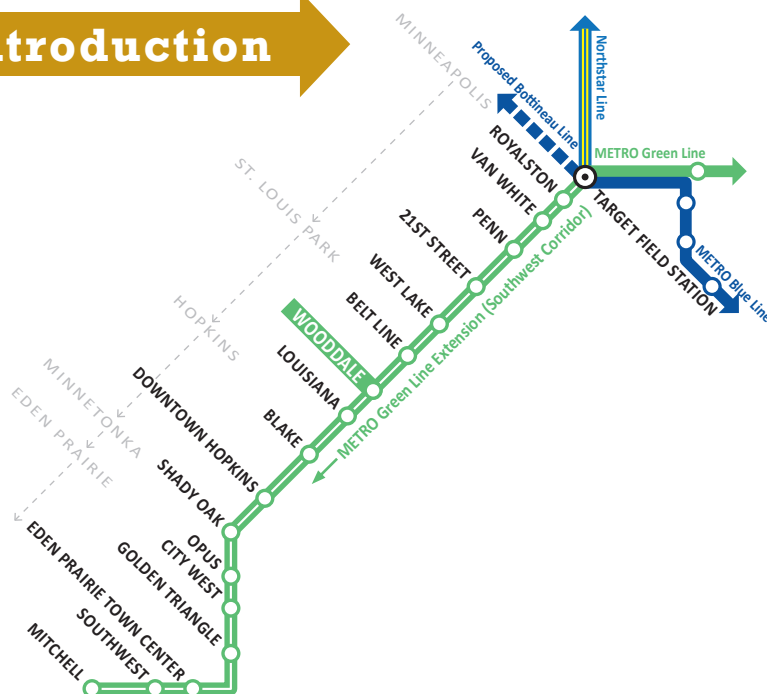
### WHERE ARE WE GOING? 8-8

- Wooddale West 8-8
- Wooddale East 8-22

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

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

## Introduction



## WOODDALE STATION WITHIN THE CORRIDOR:

A transit-oriented neighborhood providing access to a mix of housing types and local schools.

**NEIGHBORHOODS** The Wooddale station area is already developing into a more transit-supportive Urban Village (see Place Types discussion beginning on p. 1-19) with medium- to high-density residential development, a walkable street and block pattern, and active uses lining West 36th Street. This pattern of development, supported by the LRT is expected to continue over time to create a higher density residential neighborhood immediately adjacent to the station. To the south and north of the station area are the Elmwood and Sorenson neighborhoods respectively. While these are much lower density, they are structured around a strong street and block pattern that, with additional sidewalks, could be supportive of people walking to and from the station.

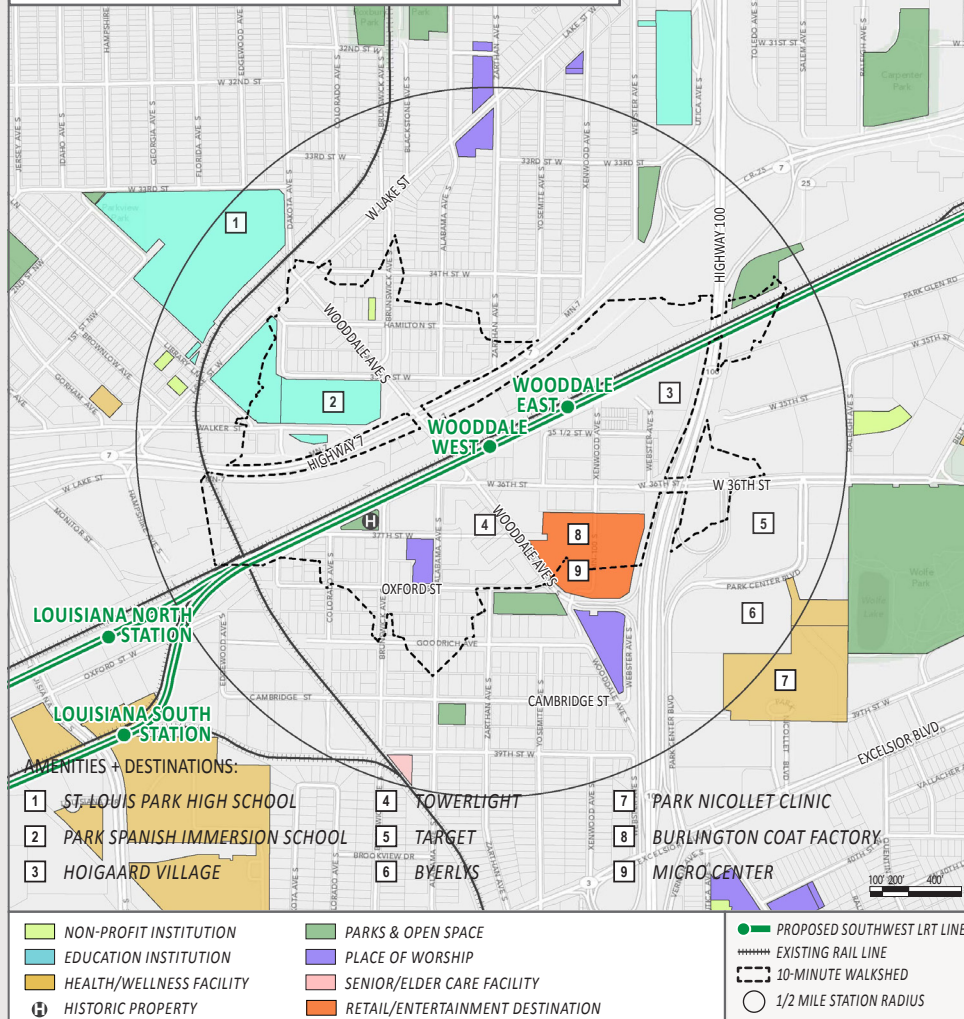
**EDUCATIONAL DESTINATION** The station will be the primary point of access for students traveling to St. Louis Park High School and the Park Spanish Immersion School/Community Center, which are located to the north of the station along Wooddale Avenue. Both schools draw students from outside of the station area that may take the LRT.

**TRAIL CONNECTIONS** The Cedar Lake LRT Regional Trail, a popular biking and walking trail that connects downtown Minneapolis to the western suburbs, passes through the station area, running alongside the LRT line.

**HERITAGE, ARTS & CULTURE** National Register listed/eligible historic properties in this station area include the Chicago, Milwaukee, and St. Paul Railroad Depot in Jorvic Park.



FIGURE 8-1. WOODDALE STATION AREA - LOCATOR MAP



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.

## Station Location

Only one of the Wooddale station locations shown here (Wooddale West) is in the SW LRT anticipated base project scope. Wooddale East is an alternate concept location and is not in the anticipated base project scope. In both location alternatives, the station platform is located south of the existing freight rail corridor, between Wooddale and Xenwood Avenues. Both locations are in the Elmwood neighborhood between Highway 7 to the north and W. 36th Street to the south.

The station area features a mix of land uses, including residential, office, industrial, retail, and civic/institutional uses. Major destinations in the area include St. Louis Park High School, Park Spanish Immersion School, Target, Park Nicollet Clinic, Burlington Coat Factory, Micro Center, and Byerlys. The Cedar Lake LRT Regional Trail runs adjacent to the proposed LRT corridor within the station area.

The area has seen a great deal of redevelopment activity in recent years, with new mixed-use and medium- to high-density residential buildings being developed near the proposed station locations, including Hoigaard Village and TowerLight, a senior rental community. Over 1,000 housing units have been developed in the station area in recent years. The station is anticipated to serve primarily the residents of the Sorenson and Elmwood neighborhoods.

### WOODDALE STATION AREA TODAY:



Existing condominiums/apartments



Existing rail and trail corridor



Adjacent highway access

Park Spanish Immersion School/  
Community Center

St. Louis Park High School

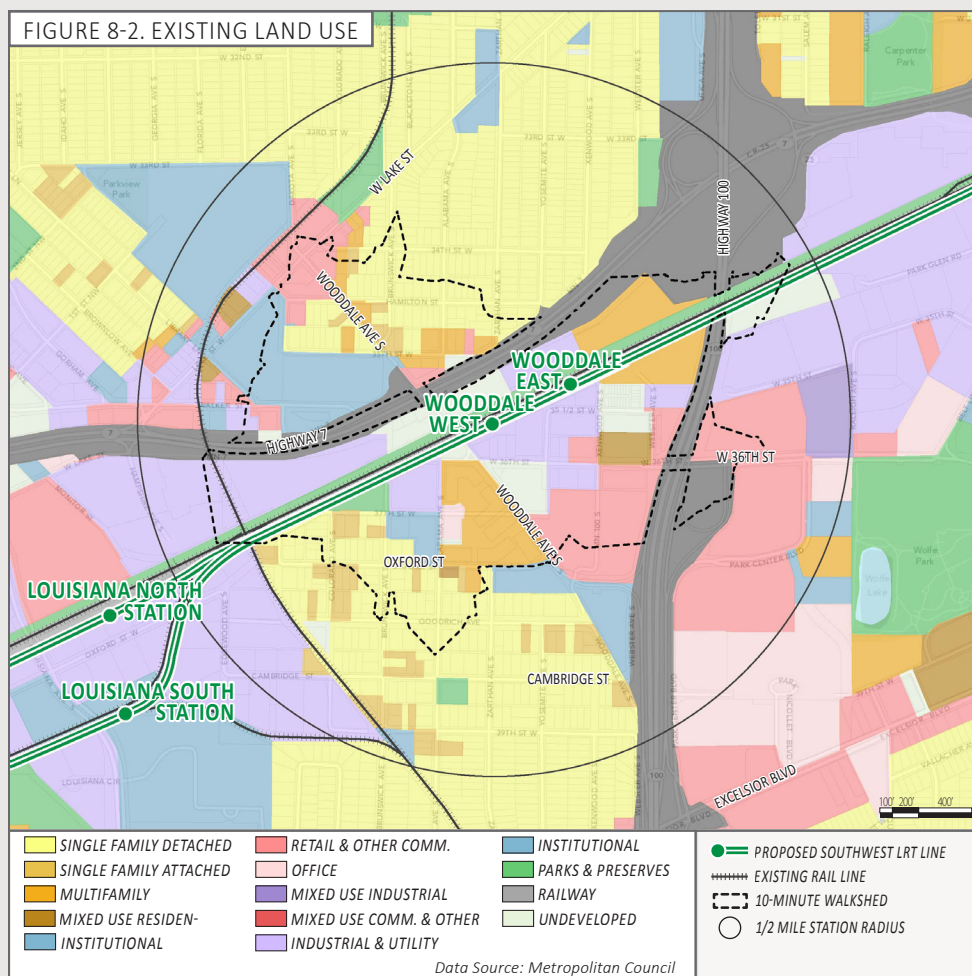
## Where Are We Today?

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

Existing land uses near the Wooddale station include a mix of residential, retail, office, civic/institutional, and light industrial uses. In recent years the area has seen redevelopment activity near the proposed station. Much of this redevelopment is medium- to high-density residential, located near the proposed station platform. Further from the platform, single-family detached housing is a predominant land use. The Elmwood Land Use, Transit and Transportation Study identifies redevelopment potential and future land use recommendations in the Wooddale Station area. The plan calls for a continued mix of uses, including office, civic, retail, and medium- to high-density residential uses near the station area. W. 36th Street is identified as a mixed-use corridor with neighborhood retail and services. St. Louis Park High School is located approximately a half-mile to the northwest of the station platform, north of Highway 7. Just to the east of State Highway 100, land uses include a regional shopping center and light industrial uses.





## Roadway Network

The roadway network located near the Wooddale Station is a grid system is bifurcated along a diagonal by the existing railroad and state highway. The future LRT will perpetuate this divide. Wooddale Avenue is the only local access route between the neighborhoods north and south of the rail within the station area. As a result, there are traffic conflicts immediately adjacent to the proposed station area where Wooddale Avenue, W. 36th Street, and State Highway 7 come together. Intersection spacing in this area leaves little room for stacking automobiles. Added to this, the freight rail line further complicates traffic movement when trains are running through the area. Wooddale Avenue provides north-south connections to the neighborhoods and passes over State Highway 7 on the recently completed Wooddale Avenue Bridge. This is an important connector for residents living in the Sorenson and Elmwood neighborhoods. W. 36th Street passes over State Highway 100 east of the station area and provides a connection to neighborhoods east of the station. W. 36th Street is an important mixed-use street and the public art initiatives on this street contribute to community identity. State Highway 7 runs parallel to the LRT line, immediately to the north. State Highway 100 runs perpendicular to the LRT line just to the east.

## Transit

The Wooddale Station is well served by bus routes along W. 36th Street and Wooddale Avenue. Routes #17 and #615 serve the area. Bus stops for these routes are located on W. 36th Street near the proposed station platform.

FIGURE 8-3. EXISTING ROADWAY NETWORK

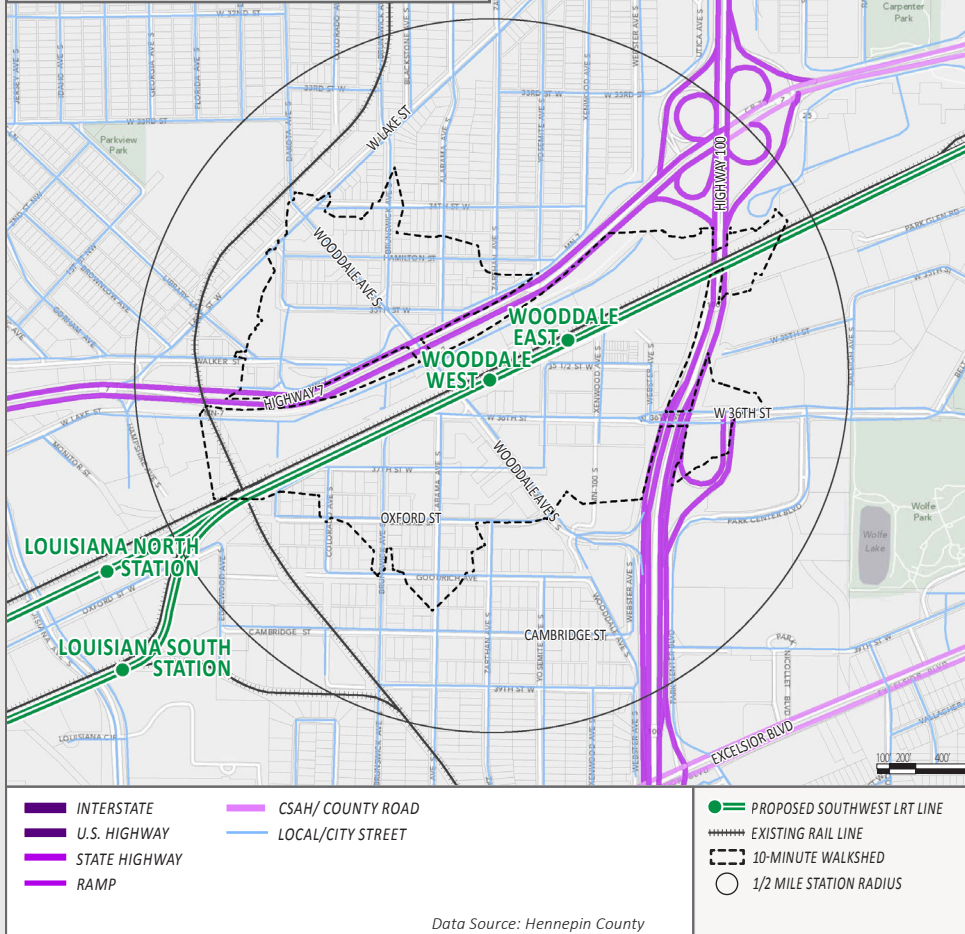
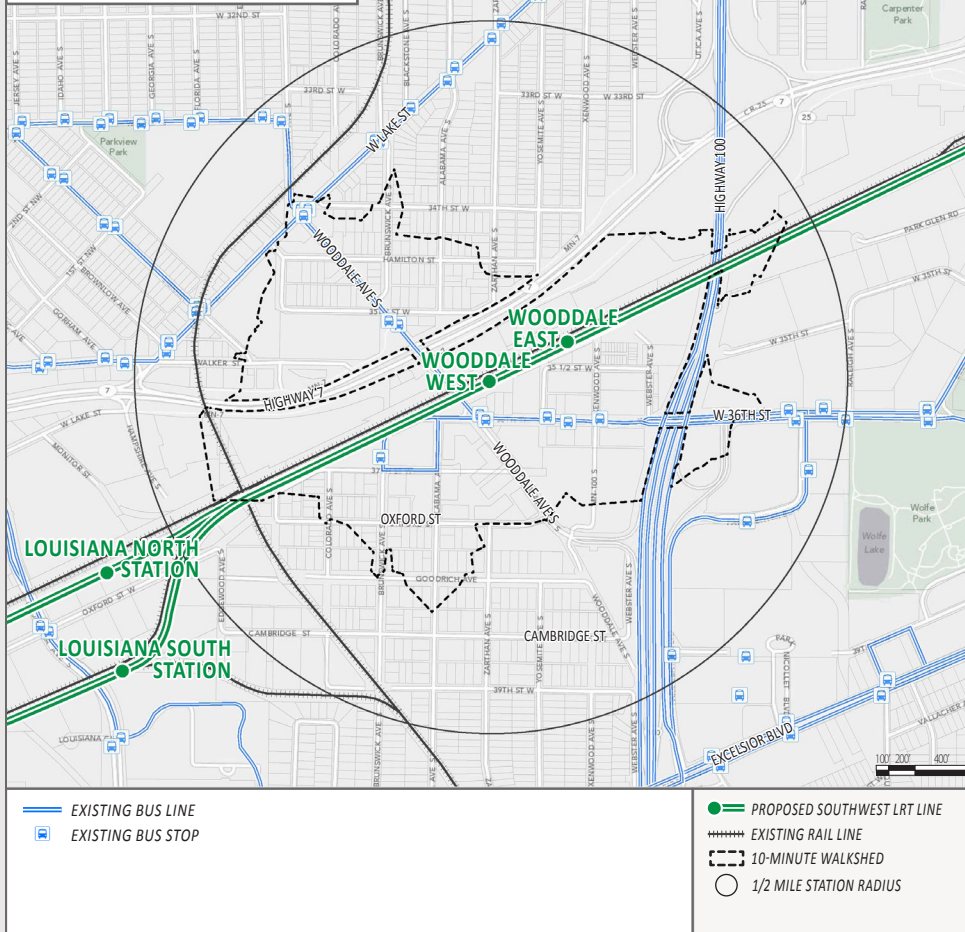


FIGURE 8-4. EXISTING TRANSIT

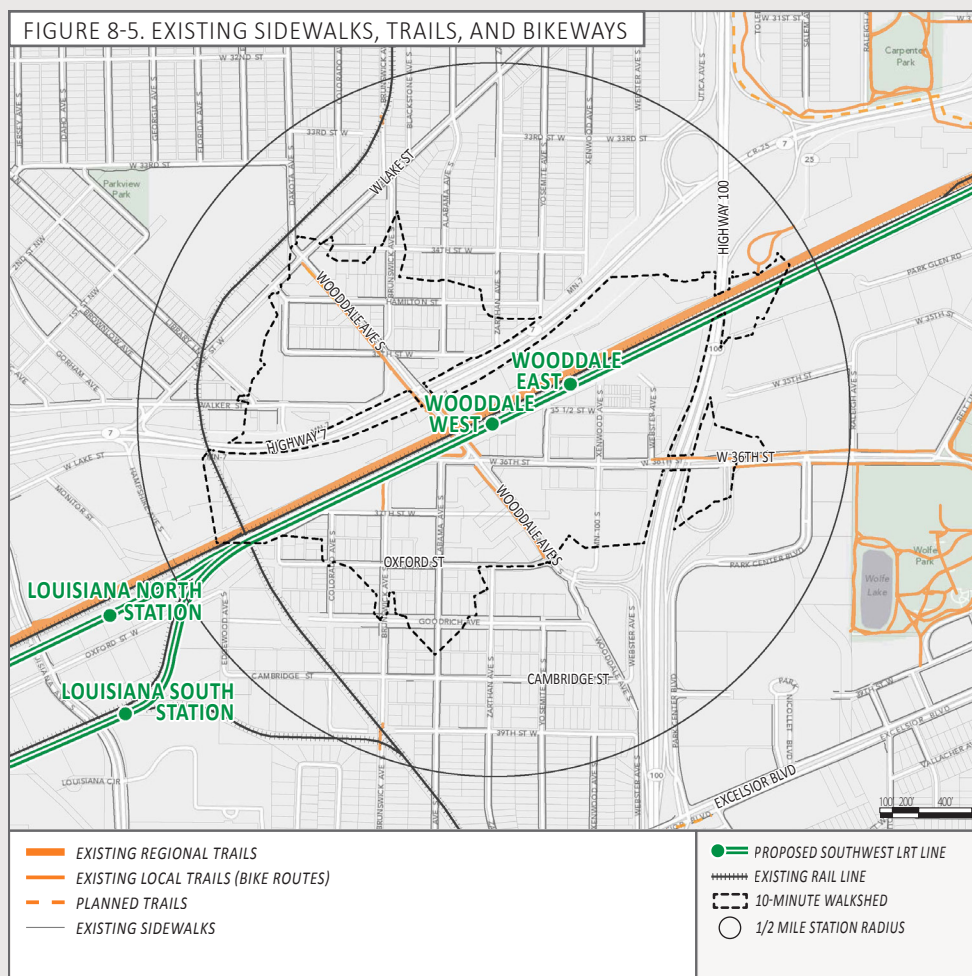




## Sidewalk, Trails and Bikeways

There is a good system of sidewalks along roadways in the Wooddale station area. Some gaps exist depending on land uses and block sizes, particularly to the southeast of the station near the Burlington Coat Factory site and to the east around the Hoigaard Village site. The pedestrian facilities on the Wooddale Avenue Bridge are incomplete where the free right turns occur to State Highway 7.

The Cedar Lake LRT Regional Trail runs parallel and next to the LRT line through the station area, providing access for transit users to the regional trail system. There are existing concerns and conflicts with the regional trail crossing, which involves a four-lane roadway (Wooddale) at-grade. The trail/bikeway system breaks down going north and south into the neighborhoods, just running a few blocks in either direction of the proposed station platform. A gap exists in the W. 36th Street trail/bikeway system from Wooddale Avenue to Webster Avenue.



## 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 St. Louis Park 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 Metro WWTP located in St. Paul.

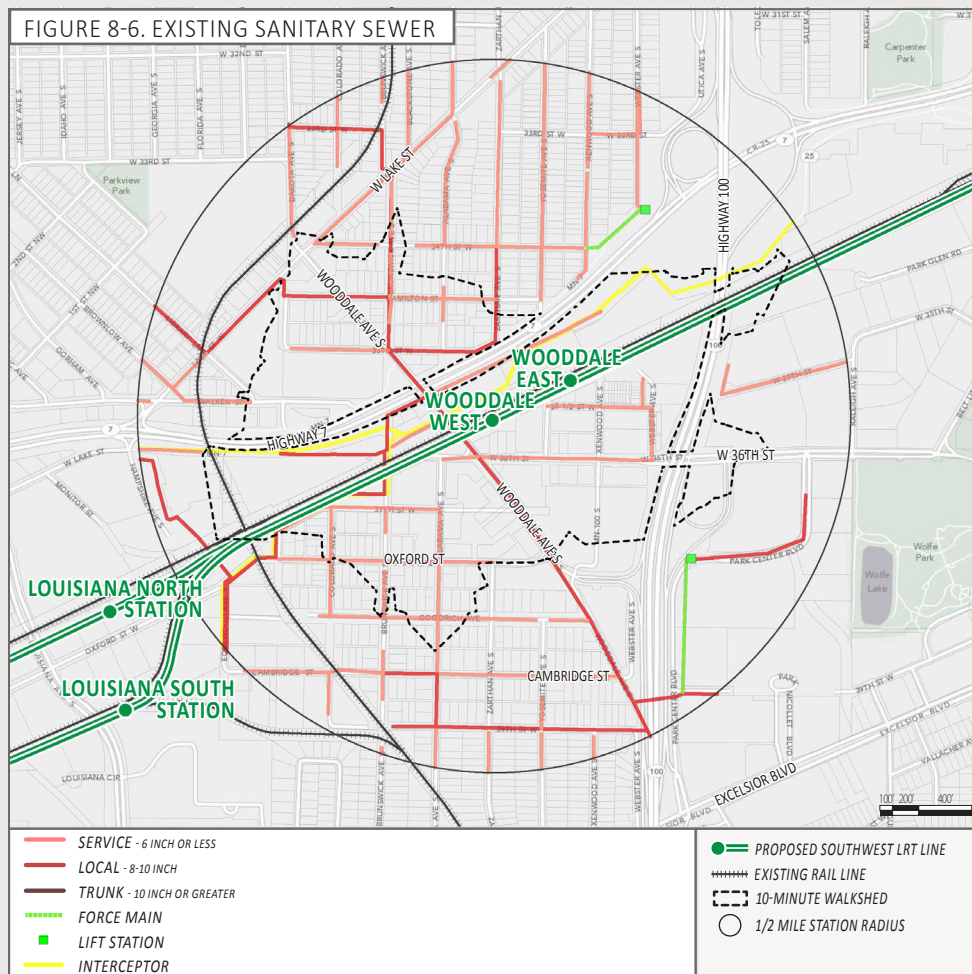
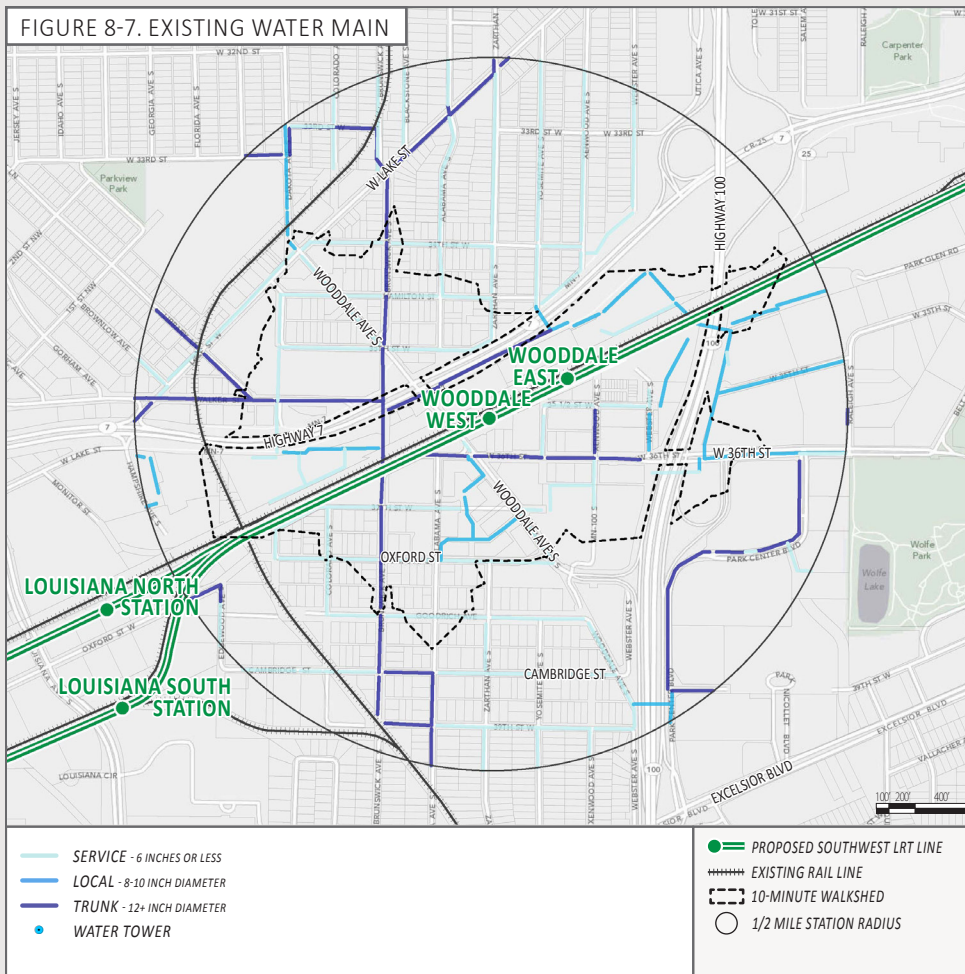




FIGURE 8-7. EXISTING WATER MAIN

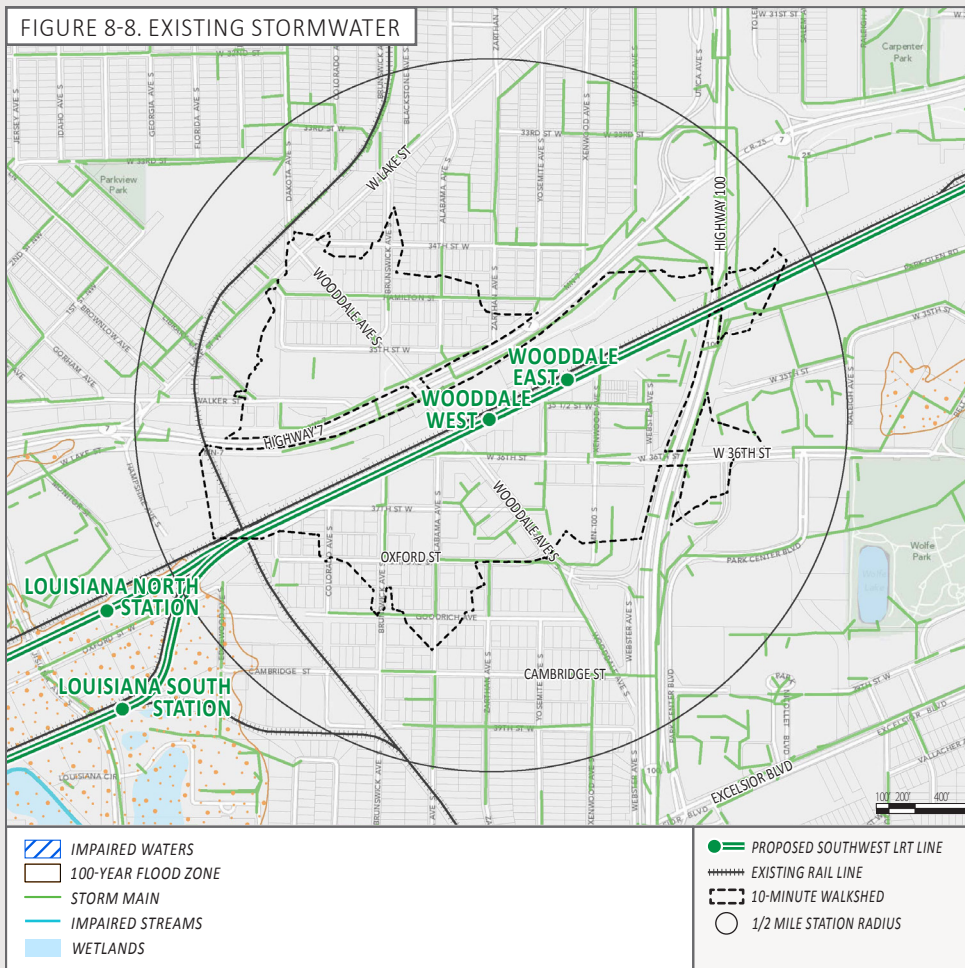


## Existing Water Main

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.

FIGURE 8-8. EXISTING STORMWATER



## Stormwater

Wooddale station is in the Minnehaha Creek Watershed District (MCWD). A majority of the drainage is directed east to Bass Lake which is impaired by nutrients. A small portion of the drainage is directed south to Minnehaha Creek. Minnehaha Creek is impaired by dissolved oxygen depletion, chloride, fecal coliform, and fish biology. A small portion of the 100-year floodplain extending from Minnehaha Creek is within the southwestern portion of the walk zone.

Discharging within one mile of impaired water may trigger additional National Pollution Discharge Elimination System requirements which require additional stormwater management. For impaired waters where a Total Maximum Daily Load has been approved, these 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 conditions as a result of enforcing City and watershed requirements.

## Where Are We Going? (WOODDALE WEST)

The plans and diagrams on the following pages illustrate a range of recommendations for infrastructure improvements, station amenities, and potential redevelopment opportunities for the **WOODDALE WEST** station location alternative.

*The ACCESS AND CIRCULATION PLAN shown in Figure 8-9 provides a high level view of how future transit, automobile, bike, and pedestrian systems will connect to the station area and its surroundings.*

*Figure 8-10 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 8-11 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:

- » Realign the Highway 7 Southeast Service Road east of Wooddale Avenue to hug the highway until it gets closer to the intersection with Wooddale Avenue, then intersect with Wooddale Avenue where the current intersection is today.
- » Install a new traffic signal at Xenwood Ave and W. 36th St.

#### PEDESTRIAN CONNECTIONS

##### Opening Day Improvements:

- » Focus sidewalk and streetscape enhancements along Wooddale Avenue, from Cambridge Street north to St. Louis Park High School, West 36th Street, West 35th Street, Yosemite Ave, Xenwood Ave, and Highway 7 Service Road.
- » Improve pedestrian crossings along West 36th Street and Wooddale Avenue.
- » Work with MNDOT to improve pedestrian crossings on the Wooddale Avenue Bridge. Pedestrian crossing markings don't exist today at free right turns onto Hwy 7.
- » Install a new traffic signal at Xenwood, Highway 7 Service Road, and W. 36th Street.

##### Long-Term Improvements:

- » Explore the longer term potential for a pedestrian bridge connection over Hwy 100 connecting to the Park Nicollet medical complex, east of Hwy 100.

#### TRANSIT CONNECTIONS

##### Opening Day Improvements:

- » Provide bus stops and shelters along West 36th Street as near to the LRT station platform as possible
- » Consider having buses stop in the drive lane along West 36th Street to slow traffic and prevent buses from getting caught in the layover.

#### BIKE CONNECTIONS

##### Opening Day Improvements:

- » Provide bike parking, lockers, bike sharing, and bike pumping facilities in a highly visible area near the station platform.
- » Provide for a new grade-separated trail crossing with Wooddale Avenue (tunnel under Wooddale).



Enhanced pedestrian crossings





*Bike parking and repair station*



*Public art integration in transit station design*

#### **Long-Term Improvements:**

- » Provide on-street bike facilities (lanes, routes, signage, etc.) on local streets to better connect the station to nearby neighborhoods, businesses, amenities, and destinations.

#### **KISS AND RIDE**

##### **Opening Day Improvements:**

- » Provide space for a kiss and ride pullouts near the station platform on Yosemite Avenue and Highway 7 Service Road.

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

##### **Opening Day Improvements:**

- » Roadways- realign the Highway 7 Service Road east of Wooddale Avenue.
- » Transit Facilities- provide facilities for bus transfers and kiss and ride drop-offs near the LRT station platform.
- » Wayfinding- define and install a cohesive and contextual wayfinding system near the LRT station platform, major gateways (Wooddale/Hwy 7, Cedar Lake LRT Regional Trail), and major destinations such as the St. Louis Park High School.
- » Seating – provide comfortable and durable seating near the station platform.
- » Lighting – provide adequate lighting for the safety of pedestrians, bicyclists, and motorists near the station platform.
- » Bicycle Facilities- provide bike parking, lockers, pumping station, and bike sharing facilities near the LRT station platform.
- » Plaza – provide a public plaza area near the station platform to provide transit users with a paved queue area to wait for

LRT trains and move about the station area.

- » Public Art- incorporate public art in the station area to create an attractive and identifiable place.

#### **DEVELOPMENT POTENTIAL**

##### **Opening Day Improvements:**

- » The properties located between Highway 7 Service Road and the LRT line represent opening day development potential.
- » Realigning the existing frontage road to the north will enhance redevelopment opportunities.
- » The adjacent sites at Wooddale Avenue and West 36th Street owned by the City of St. Louis Park and Hennepin County are viewed as having opening day redevelopment potential.

##### **Long-Term Improvements:**

- » See the “Development Potential” discussion on page 8-16 for more on long-term redevelopment opportunities.

#### **UTILITIES**

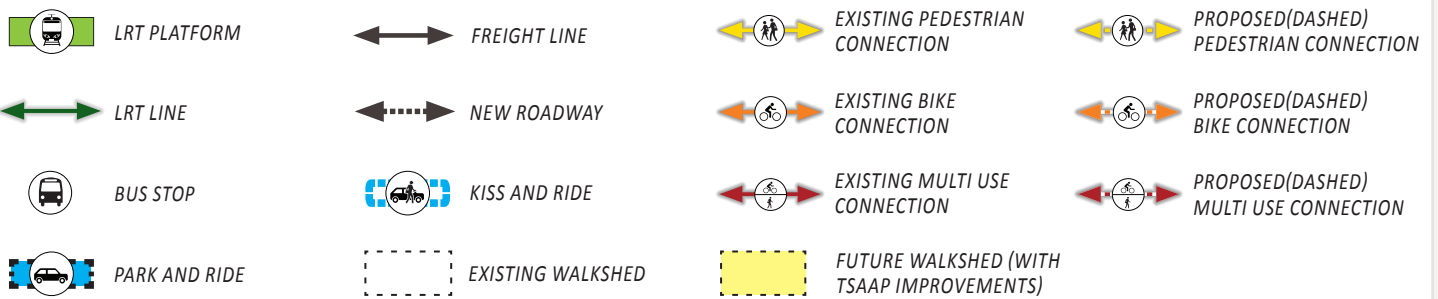
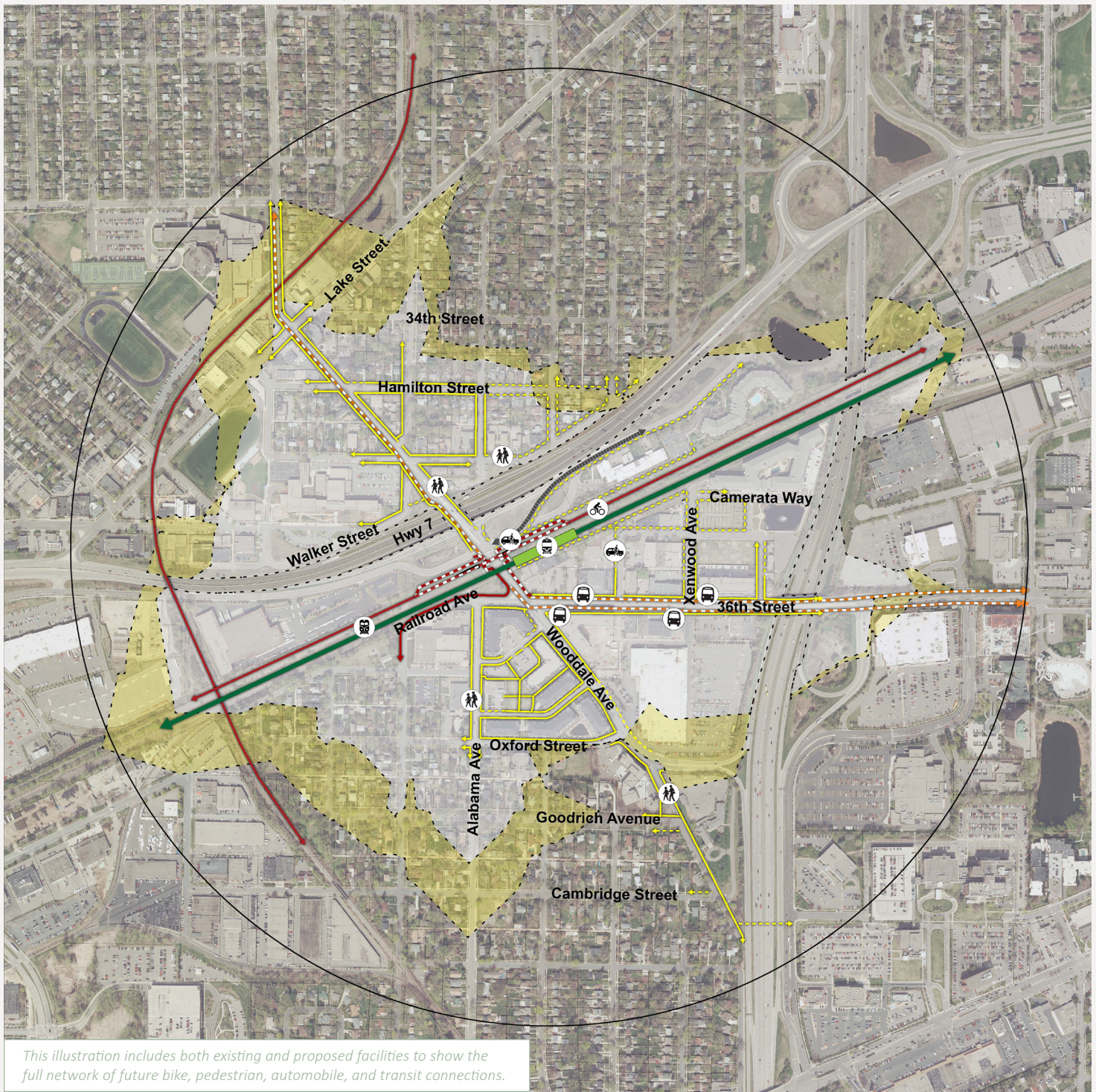
- » See the “Station Area Utility Plan” beginning on page 8-18 for all utility recommendations.



FIGURE 8-9. ACCESS + CIRCULATION PLAN (WOODDALE WEST)

WHERE ARE WE GOING?

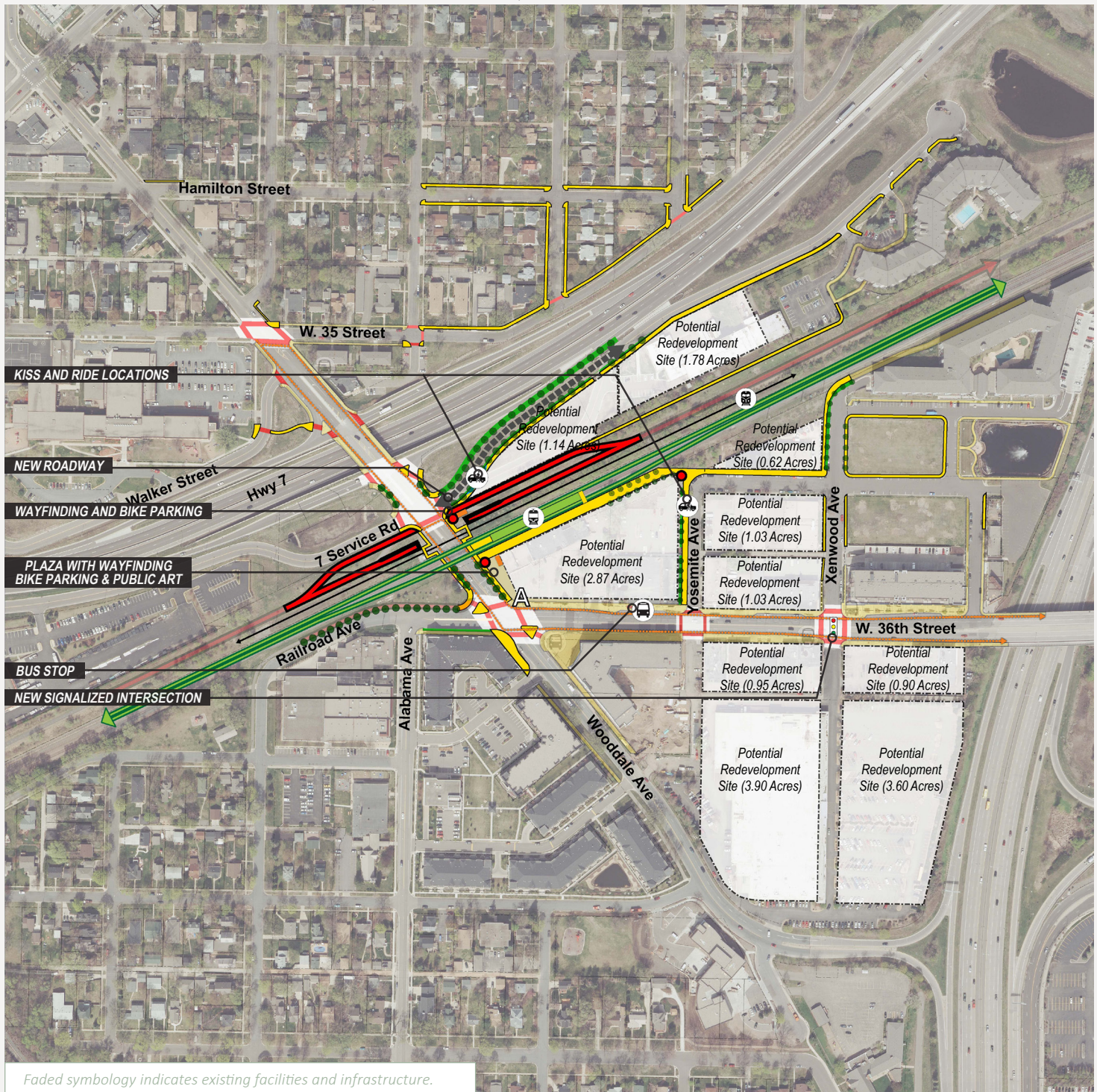
WOODDALE (WEST)



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 8-10. STATION AREA IMPROVEMENTS (WOODDALE WEST)



Faded symbology indicates existing facilities and infrastructure.

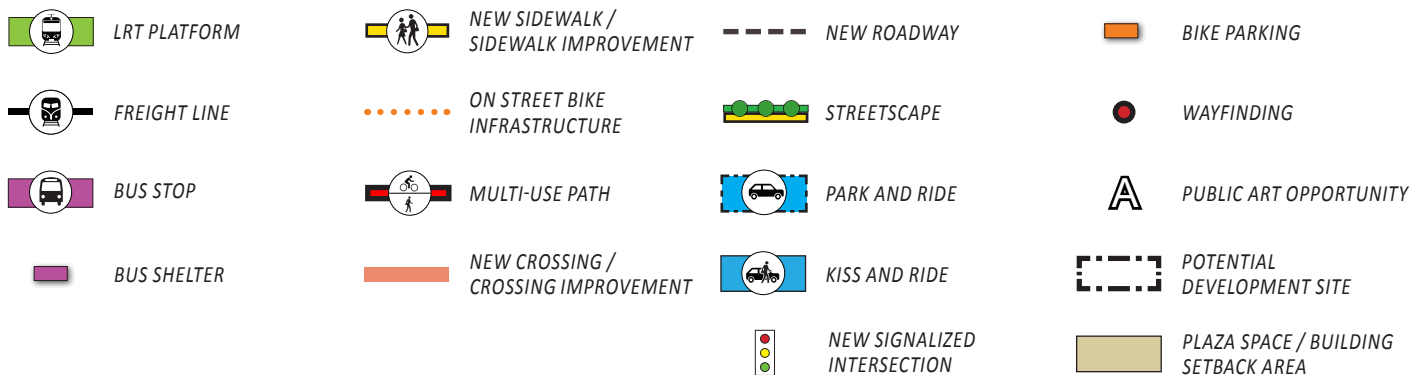
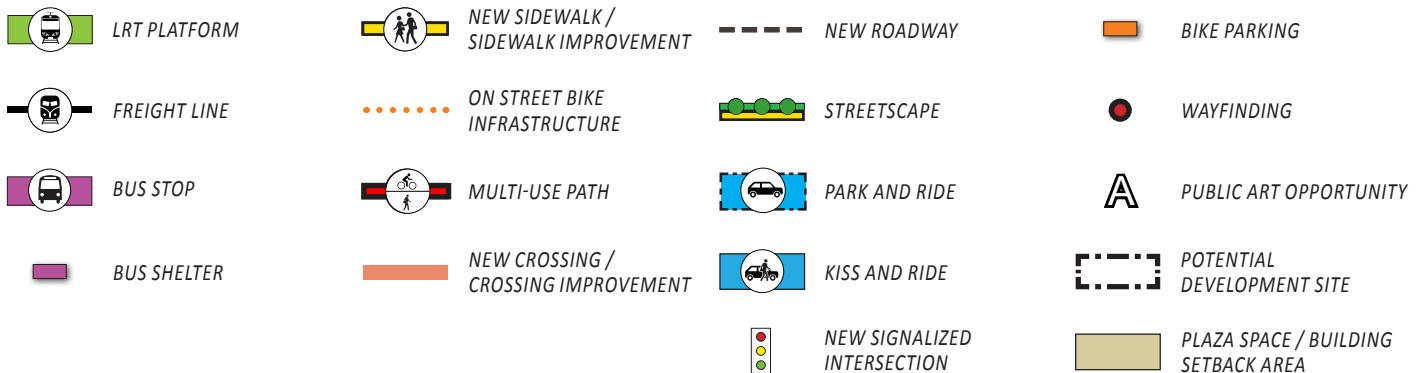
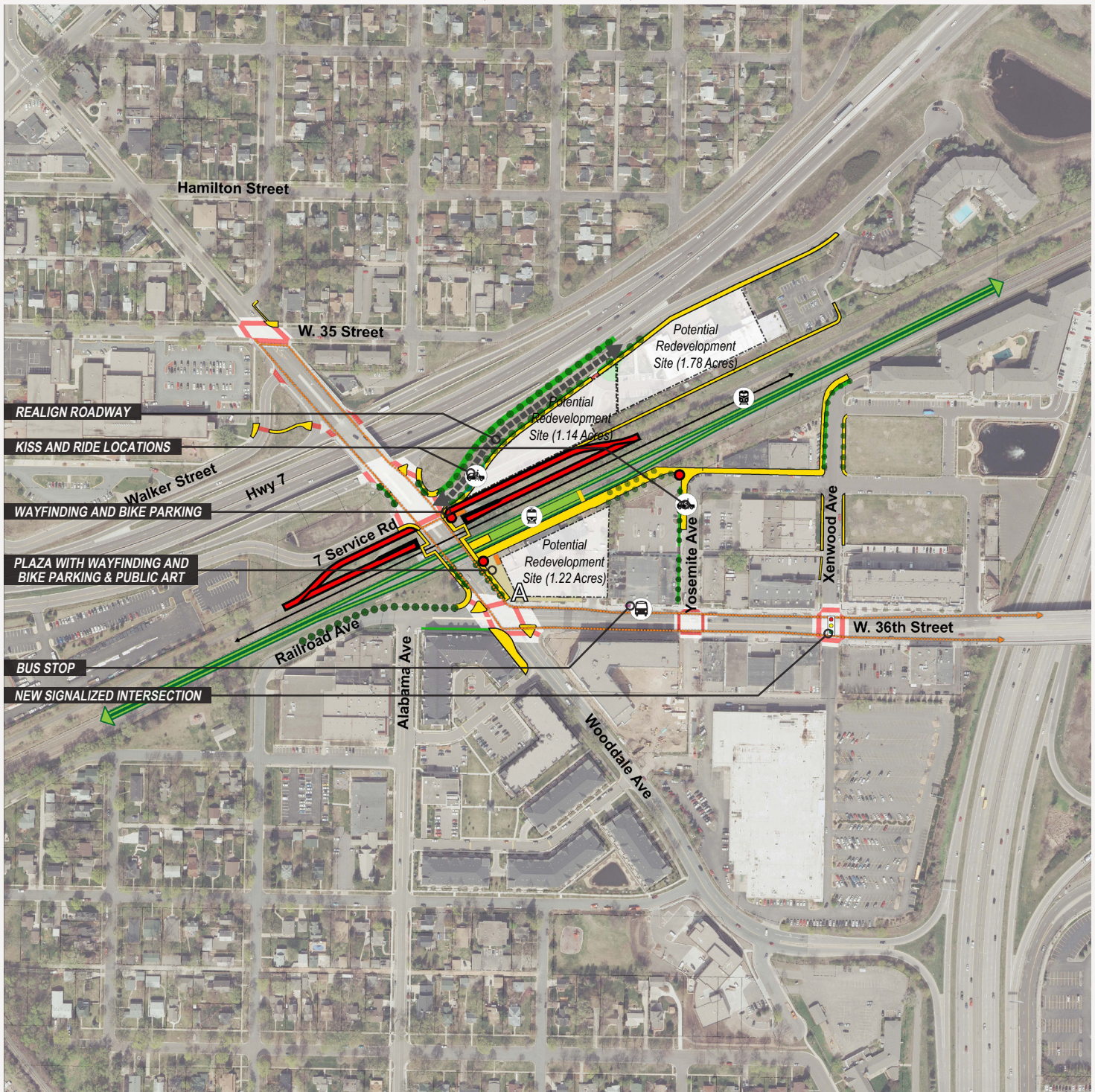




FIGURE 8-11. OPENING DAY STATION AREA IMPROVEMENTS (WOODDALE WEST)

WHERE ARE WE GOING?

WOODDALE (WEST)





THIS PAGE INTENTIONALLY LEFT BLANK

## 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 8-1 and Figure 8-12 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 8-2 and Figure 8-12 include opening day improvements that are recommended as part of the Southwest Corridor Investment Framework and are beyond the SW LRT anticipated base project scope. Table 8-3 (also shown in Figure 8-13) includes locally requested "betterments" - or improvements that cities have requested to be included in the base project scope pending funding availability.

TABLE 8-1. SW LRT ANTICIPATED BASE PROJECT SCOPE - OPENING DAY STATION AREA IMPROVEMENTS (WOODDALE WEST)

PLAN KEY	IMPROVEMENT	PROJECT LOCATION	PROJECT NOTES
A	LRT Platform	Adjacent to and east of Wooddale Ave	Includes related LRT infrastructure
B	Kiss and Ride	Minnesota 7 Service Road and Yosemite Ave	On-street dropoff areas
C	Sidewalk/Trail	Minnesota 7 Service Rd to station platform	New sidewalk from kiss and ride on Minnesota 7 Service Rd to station platform
D	Sidewalk/Trail	Yosemite Ave to station platform	New sidewalk from kiss and ride on Yosemite Ave to station platform
E	Sidewalk/Trail	Wooddale Ave and regional trail crossing	Reconstruction of regional trail crossing at Wooddale Ave (at-grade)
F	Bike Facilities	Near station platform	Allowance for bike storage
G	Wayfinding	Near station platform	Allowance
H	Landscaping	Near station platform	Allowance
I	Water*	Near station platform	New water service and fire hydrant to station
J	Utilities*	Project limit area	Adjustment of existing utilities
K	Stormwater management*	Near station platform	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 8-2. SW LRT LOCALLY REQUESTED BETTERMENTS - OPENING DAY STATION AREA IMPROVEMENTS (WOODDALE WEST)

PLAN KEY	IMPROVEMENT	PROJECT LOCATION	PROJECT NOTES
<b>B</b>	Sidewalk/Trail	Wooddale Ave and regional trail crossing	Construction of grade separated regional trail crossing at Wooddale Ave

TABLE 8-3. SW CORRIDOR INVESTMENT FRAMEWORK (TSAAP) - OPENING DAY STATION AREA IMPROVEMENTS (WOODDALE WEST)

PLAN KEY	IMPROVEMENT	PROJECT LOCATION	PROJECT NOTES	PRIORITY
1	Roadways	Minnesota 7 Service Road	Realignment of Minnesota 7 Service Road	Secondary
2	Streetscape	Minnesota 7 Service Road	Includes sidewalk, streetscape plantings, lighting and signage	Secondary
3	Streetscape	Xenwood Ave, north of W. 35th Street	Includes sidewalks, streetscape plantings, lighting and signage	Secondary
4	Streetscape	Yosemite Ave, W. 36th Street to W. 35th Street	Includes sidewalk, streetscape plantings, lighting and signage	Secondary
5	Sidewalk/Trail	Wooddale Ave, W. 36th Street to W. 35th Street (north of Hwy 7)	Complete gaps in sidewalk system	Secondary
6	Sidewalk/Trail	W. 35th Street, Yosemite Ave to Xenwood Ave	Complete gaps in sidewalk system	Secondary
7	Sidewalk/Trail	Sidewalk along the north side of multi-use trail paralleling the tracks	Improve pedestrian connections between station area and residential housing to the east	Secondary
8	Sidewalk/Trail	South frontage road sidewalk	Improve pedestrian connections east of realigned roadway segment	Secondary
9	Intersection Enhancements	Wooddale Ave, W. 36th Street to W. 35th Street (north of Hwy 7)	Enhanced crosswalks	Secondary
10	Intersection Enhancements	W. 36th Street, Wooddale Ave to Xenwood	Enhanced crosswalks and new traffic signal (at Xenwood)	Secondary
11	Intersection Enhancements	Walker Street: midblock crossing to school	Crosswalk striping and one ped ramp	Primary
12	Bike Facilities	Near station platform	Bike parking, lockers, pump station and bike share facilities (beyond SPO improvements)	Primary
13	Bike Facilities	W. 36th Street and Wooddale Ave	On-street bike lanes	Secondary
14	Public Plaza	Along east side of Wooddale Ave, south of LRT line	Includes paving, seating, plantings, public art and lighting (beyond SPO improvements)	Primary
15	Public Art	Station Area	Incorporate public art (beyond SPO improvements)	Secondary
16	Sanitary Sewer	Station area	Coordinate with MCES to relocate existing interceptor	Primary



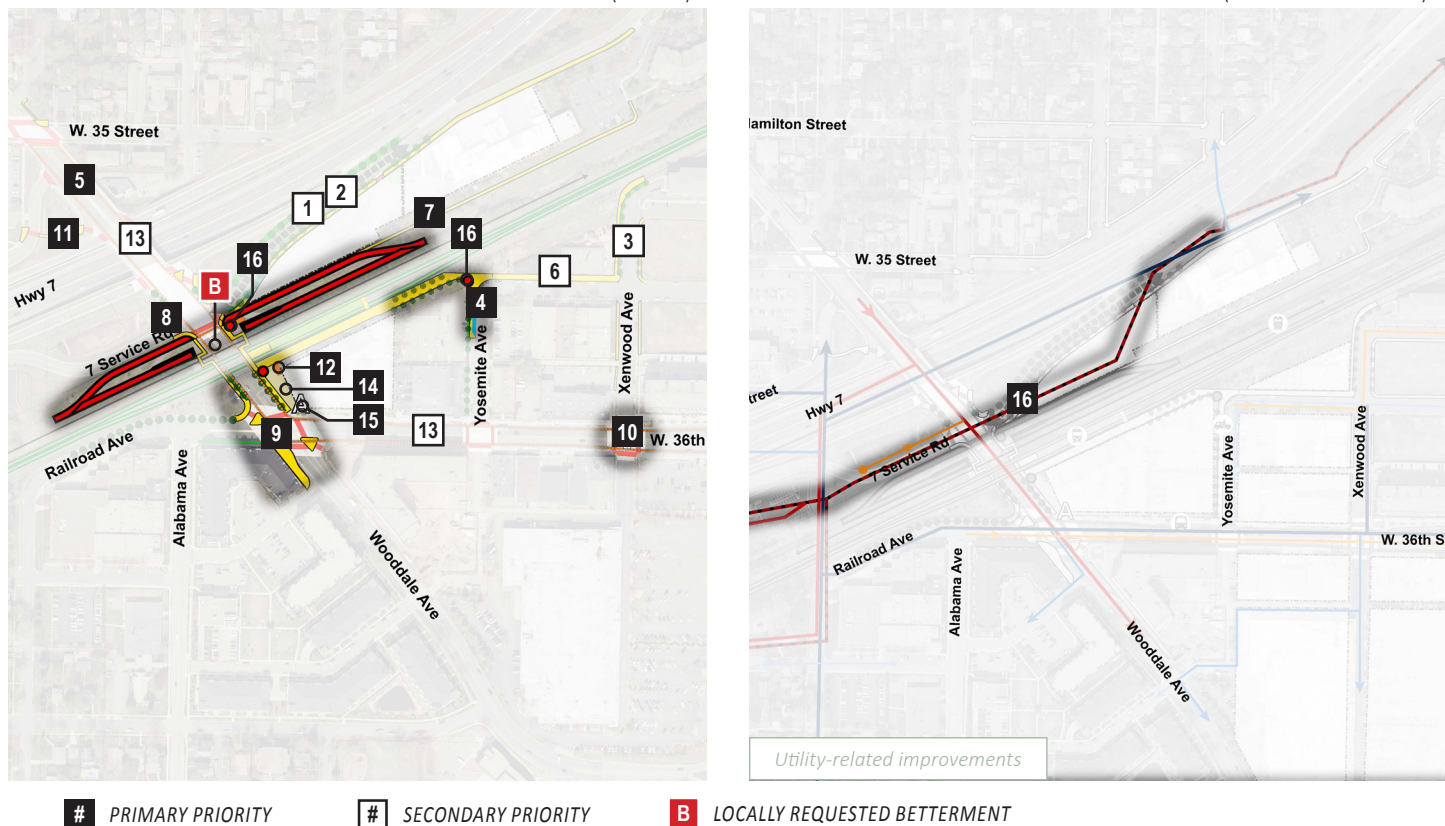
FIGURE 8-12. SOUTHWEST LRT ANTICIPATED BASE PROJECT SCOPE - OPENING DAY IMPROVEMENTS (WOODDALE WEST)



WHERE ARE WE GOING?

WOODDALE (WEST)

FIGURE 8-13. SW CORRIDOR INVESTMENT FRAMEWORK (TSAAP) - OPENING DAY IMPROVEMENTS + BETTERMENTS (WOODDALE WEST)





# Development Potential

## OVERVIEW

The Wooddale station area has strong redevelopment potential. Recent development activity in the area has transformed the Wooddale station area into a compact and walkable neighborhood with a mix of higher density residential with street level retail uses. Convenient access to Highways 7 and 100, and available sites for redevelopment have driven some of the recent growth. Additional sites near the station should be available for future redevelopment in the short term.

Adjacent to the proposed station platform are sites owned by Hennepin County and the City that present a short-term redevelopment opportunity for transit supportive uses. Other underutilized sites near the station area are expected to spur development interest.

Key challenges that should be addressed to facilitate development potential include station connectivity and traffic congestion near the station platform, along Wooddale Ave.

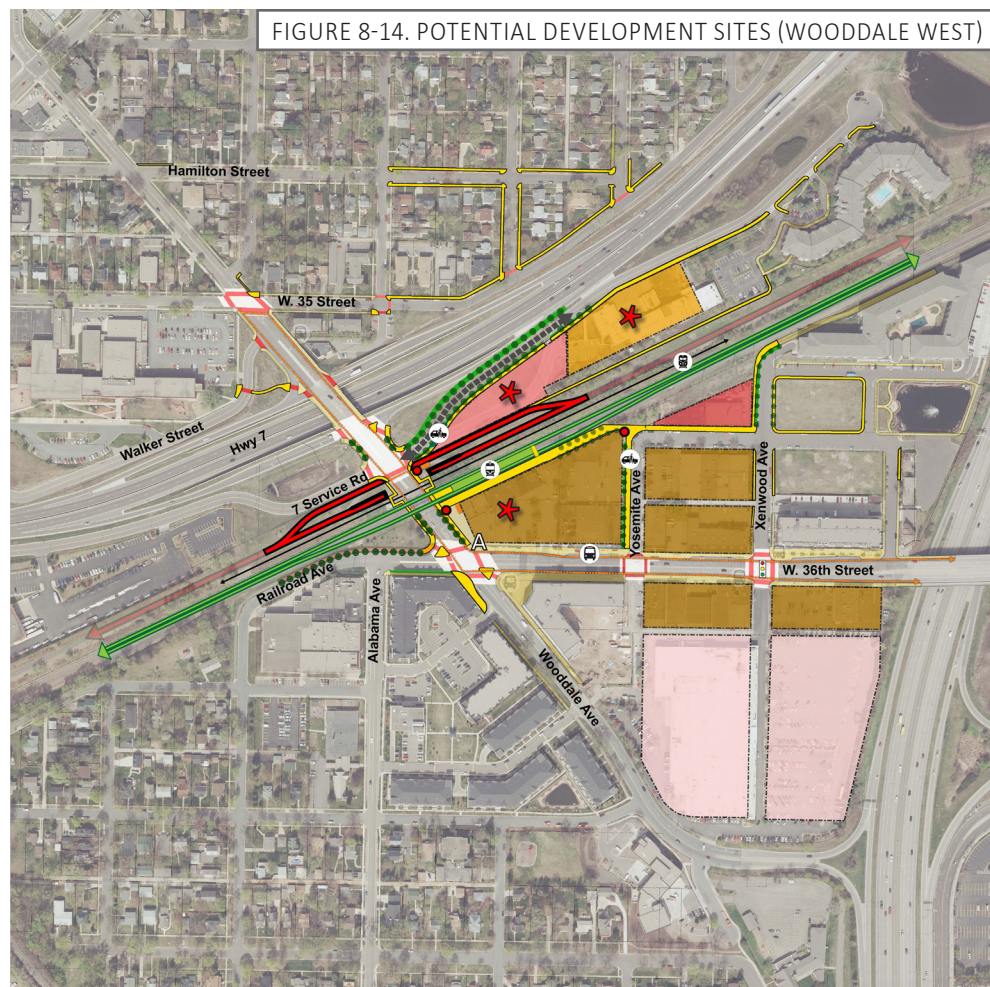
## LAND USES

High-density, mixed-use, transit-oriented development is likely to occur near the Wooddale Station, consistent with recent redevelopment activity in the area. Future land uses in the Wooddale station area should consist of high-density residential, office, and retail uses.

## PLANNING STRATEGIES

Strategies that should be considered to facilitate future development in the station area include streetscape improvements and pedestrian crossings along roadways connecting the station with potential development sites, local destinations, and neighborhoods, particularly on Wooddale Ave, W. 36th Street, Yosemite Ave, and Xenwood Ave.

FIGURE 8-14. POTENTIAL DEVELOPMENT SITES (WOODDALE WEST)



### FUTURE LAND USE:

- MULTIFAMILY
- RETAIL & OTHER COMMERCIAL
- MIXED-USE RESIDENTIAL
- MIXED-USE COMM. & OTHER
- OFFICE

★ OPENING DAY  
DEVELOPMENT POTENTIAL



# Key Considerations for Change and Development Over Time

The station area should continue to develop into a predominantly residential transit-oriented neighborhood with new buildings that reinforce the existing grid of streets and street level uses to activate the station area. Key considerations should include:

## BUILT FORM AND LAND USE

- » Continue to build a mix of medium to high density residential uses along West 36th Street with retail or commercial uses next to the highway.
- » Design new buildings to enhance pedestrian access by orienting them towards streets, the LRT platform, and open spaces and locating them as close to the street line as possible.
- » Incorporate active ground level uses on buildings adjacent to the station and facing onto West 36th Street and Wooddale Avenue.
- » Provide additional setbacks on buildings at the intersection of Wooddale Avenue and West 36th Street to provide additional room for passengers transferring between the bus and LRT
- » Explore opportunities for a mid-block connection between West 36th Street and the eastern end of the station platform to improve connections between bus and LRT service.

## PUBLIC REALM

- » Introduce a public plaza adjacent to the station along Wooddale Avenue to provide spill out space for active uses facing the station and to act as a receiving point for passengers walking to the station or transferring to the LRT by bike.
- » Improve connections between the station and schools to the north along Wooddale Avenue through improved crossings on the Wooddale Avenue Bridge and introduction of pedestrian-oriented lighting.

## MOBILITY

- » Minimize the impact of parking and circulation on pedestrians by locating parking below grade or to the rear of new buildings in structures, and consolidating access and service drives.
- » Accommodate retail and short-term parking on-street or in shared parking facilities to minimize the construction of single use parking areas.
- » Support pedestrians through the introduction of sidewalks on all streets within the station area, new crossings, and curb cuts for people in wheel chairs or other mobility devices.
- » Limit vehicular access points along Wooddale Avenue and W. 36th Street.
- » Provide a new path along the southern edge of the rail

corridor to connect the station platform with existing residential uses to the east.

- » Integrate Kiss and Ride facilities discretely into the existing street and block pattern north of West 36th Street.



*Office development that fronts the street*



*Potential mid-block connection to the station platform*



*High density residential*



## 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 8-10). St. Louis Park 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.

St. Louis Park should also consider reviewing the condition of the existing utilities in the station development area. The station construction would provide St. Louis Park an opportunity to address any utilities needing repairs. Once the larger system has been reviewed for system constraints, St. Louis Park 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 costs associated with encasing these facilities is assumed to be a project cost and is not included in potential improvements identified for the St. Louis Park 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, St. Louis Park should weigh the benefits of completing these improvements as land becomes available for future development. St. Louis Park 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. St. Louis Park 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 St. Louis Park to improve the existing sanitary sewer network, without necessarily replacing existing sanitary sewers. When recommendations for “improving” existing sanitary sewer are noted, St. Louis Park shall 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 St. Louis Park 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 St. Louis Park 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 model 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, St. Louis Park 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 cities 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. St. Louis Park 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.

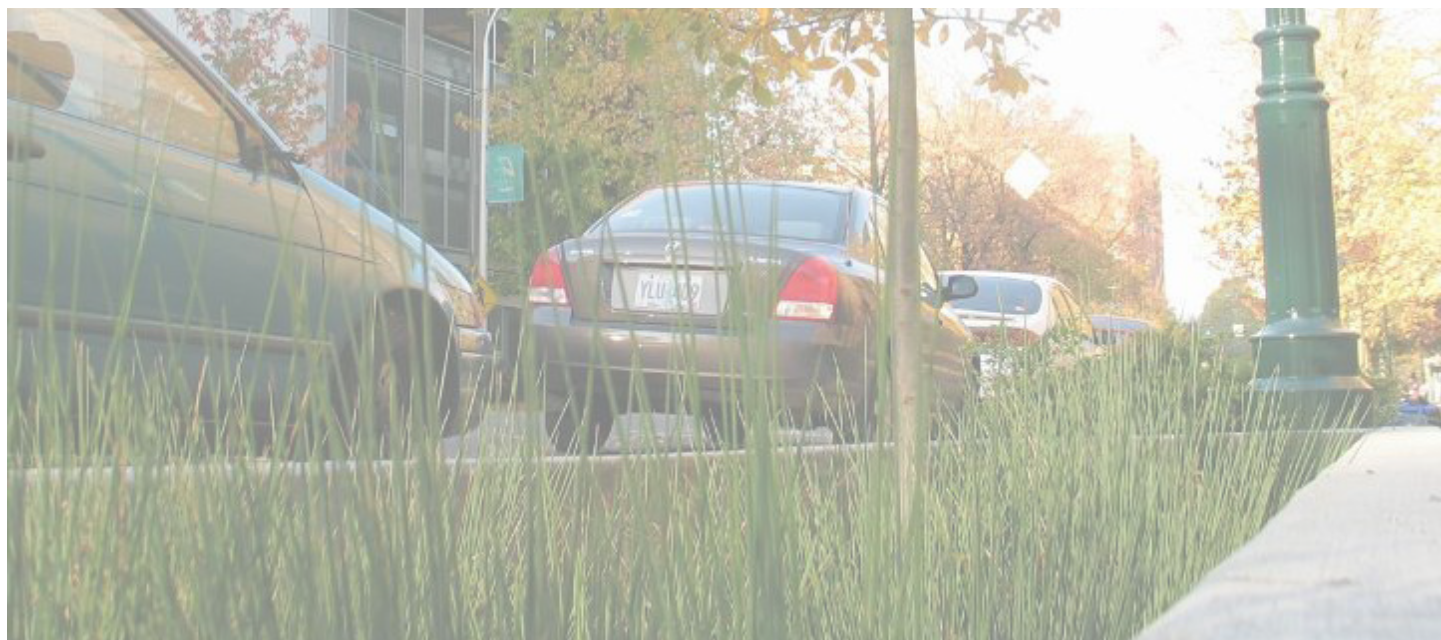
## STORMWATER BEST MANAGEMENT PRACTICES

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 Blake station (see p. 10-28). St. Louis Park should consider implementing applicable best management practices similar to those in the Blake station BMP guide. Stormwater management recommendations should be constructed in conjunction with public and private improvements and future development/redevelopment in the station area.

The existing subregional stormwater pond at Hoigaard Village was built to reduce the land area and development costs for development in the station area. Developments are allowed to buy-in to the initial investment the city of St. Louis Park made in the regional pond, rather than provide storage and treatment on site. Best management practices are still encouraged on development sites.





## Station Area Utility Plan (Continued)

### STATION AREA UTILITY RECOMMENDATIONS

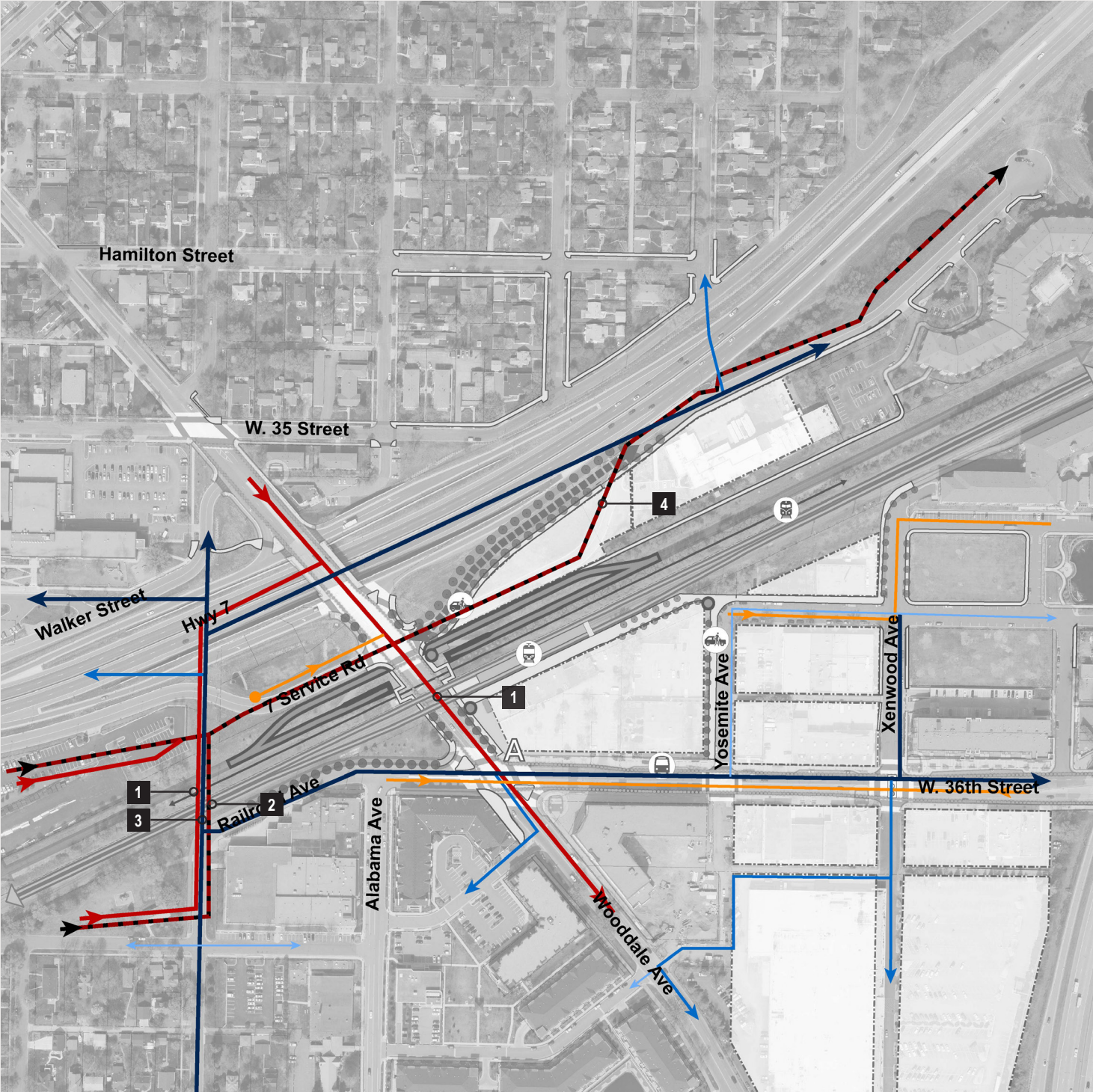
Utility recommendations (illustrated in Figure 8-15) are based on a localized analysis of proposed development. It is recommended that the City of St. Louis Park take this analysis a step further and review system constraints to the existing and future sanitary sewer and water main systems using existing sewer CAD or water CAD models, or other methods of modeling these systems.

#### *Opening Day Recommendations:*

1. Encase existing sanitary sewer crossing LRT rail construction.
2. Encase existing MCES interceptor crossing LRT rail construction.
3. Encase existing water main crossing LRT rail construction.
4. Relocate existing MCES interceptor to promote TOD along Highway 7 in conjunction with service roadway realignment.



FIGURE 8-15. STATION AREA UTILITY PLAN (WOODDALE WEST)



# OPENING DAY RECOMMENDATION

# LONG-TERM RECOMMENDATION

— EXISTING UTILITIES

- - - PROPOSED UTILITIES

SERVICE SANITARY

LOCAL SANITARY

TRUNK SANITARY

MCES SANITARY INTERCEPTOR

SANITARY SEWER FORCEMAIN

LIFT STATION

SERVICE WATER MAIN

LOCAL WATER MAIN

TRUNK WATER MAIN

WATER TOWER

WHERE ARE WE GOING?

WOODDALE (WEST)

## Where Are We Going? (WOODDALE EAST)

The plans and diagrams on the following pages illustrate a range of recommendations for infrastructure improvements, station amenities, and potential redevelopment opportunities for the **WOODDALE EAST** station location alternative (recommendations for this station location are not in the SW LRT base project scope).

*The ACCESS AND CIRCULATION PLAN shown in Figure 8-16 provides a high level view of how future transit, automobile, bike, and pedestrian systems will connect to the station area and its surroundings.*

*Figure 8-17 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 8-18 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:

- » Realign Highway 7 Service Road east of Wooddale Avenue to hug the highway until it gets closer to the intersection with Wooddale Avenue, then intersect with Wooddale Avenue where the current intersection is today.
- » Extend Xenwood Avenue northwest, from W. 35th Street to Highway 7 Service Road, tunnelling under the freight rail line.
- » Install a new traffic signal at Xenwood Avenue and W. 36th Street.

#### PEDESTRIAN CONNECTIONS

##### Opening Day Improvements:

- » Focus sidewalk and streetscape enhancements along Wooddale Avenue, from Cambridge Street north to St. Louis Park High School, West 36th Street, West 35th Street, Yosemite Ave, Xenwood Ave, and Highway 7 Service Road.
- » Improve pedestrian crossings along West 36th Street, Wooddale Avenue, and Xenwood Avenue.
- » Improve pedestrian crossings on the Wooddale Avenue Bridge. Complete crossing markings where they don't exist today at free right turns onto Highway 7.
- » Install a new traffic signal at Xenwood Avenue and W. 36th Street.

##### Long-Term Improvements:

- » Explore the longer term potential for a pedestrian bridge connection over Hwy 100 connecting to the Park Nicollet medical complex, east of Hwy 100.

#### TRANSIT CONNECTIONS

##### Opening Day Improvements:

- » Provide bus stops and shelters along West 36th Street as near to the LRT station platform as possible.
- » Consider having buses stop in the drive lane along West 36th Street to slow traffic and prevent buses from getting caught in the layover.



Enhanced pedestrian crossings





*Bike parking and repair station*



*Public art integration in transit station design*

## BIKE CONNECTIONS

### *Opening Day Improvements:*

- » Provide bike parking, lockers, bike sharing, and bike pumping facilities in a highly visible area near the station platform.
- » Provide a new grade-separated trail crossing with Wooddale Avenue (tunnel under Wooddale).

### *Long-Term Improvements:*

- » Provide on-street bike facilities (lanes, routes, signage, etc.) on local streets to better connect the station to nearby neighborhoods, businesses, amenities, and destinations.

## KISS AND RIDE

### *Opening Day Improvements:*

- » Provide space for a kiss and ride pullout near the station platform on W. 35 Street.

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

### *Opening Day Improvements:*

- » Roadways- realign the Highway 7 Service Road east of Wooddale Avenue and extend Xenwood Avenue from W. 35th Street to the Highway 7 Service Road.
- » Transit Facilities- provide facilities for bus transfers and kiss and ride drop-offs near the LRT station platform.
- » Wayfinding- define and install a cohesive and contextual wayfinding system near the LRT station platform, major gateways (Wooddale/Hwy 7, Cedar Lake LRT Regional Trail), and major destinations such as the St. Louis Park High School.
- » Seating – provide comfortable and durable seating near the station platform.

- » Lighting – provide adequate lighting for the safety of pedestrians, bicyclists, and motorists near the station platform.
- » Bicycle Facilities- provide bike parking, lockers, pumping station, and bike sharing facilities near the LRT station platform.
- » Plaza – provide a public plaza area near the station platform to provide transit users with a paved queue area to wait for LRT trains and move about the station area.
- » Public Art- incorporate public art in the station area to create an attractive and identifiable place.

## DEVELOPMENT POTENTIAL

### *Opening Day Improvements:*

- » The properties located between Highway 7 and the LRT line represent opening day development potential.
- » Realigning the existing service road to the north will enhance redevelopment opportunities.
- » The adjacent sites at Wooddale Avenue and West 36th Street owned by the City of St. Louis Park and Hennepin County are viewed as having opening day redevelopment potential.

### *Long-Term Improvements:*

- » See the “Development Potential” discussion on page 8-30 for more on long-term redevelopment opportunities.

## UTILITIES

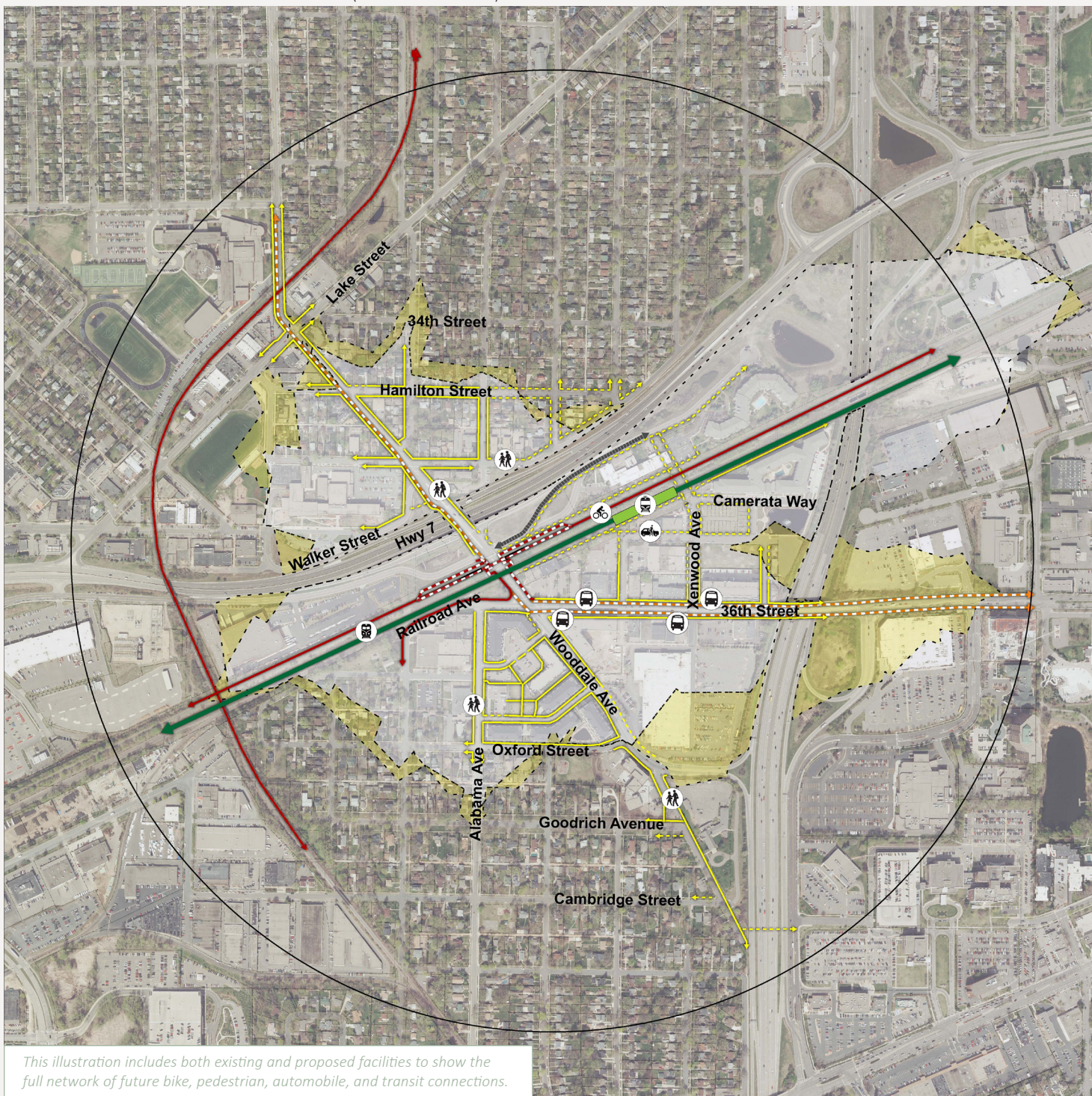
- » See the “Station Area Utility Plan” beginning on page 8-18 for general utility recommendations. See page 8-32 for station-specific recommendations.



FIGURE 8-16. ACCESS + CIRCULATION PLAN (WOODDALE EAST)

WHERE ARE WE GOING?

WOODDALE (EAST)



LRT PLATFORM



FREIGHT LINE



EXISTING PEDESTRIAN CONNECTION



PROPOSED(DASHED) PEDESTRIAN CONNECTION



LRT LINE



NEW ROADWAY



EXISTING BIKE CONNECTION



PROPOSED(DASHED) BIKE CONNECTION



BUS STOP



KISS AND RIDE



EXISTING MULTI USE CONNECTION



PROPOSED(DASHED) MULTI USE CONNECTION



PARK AND RIDE

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 8-17. STATION AREA IMPROVEMENTS (WOODDALE EAST)

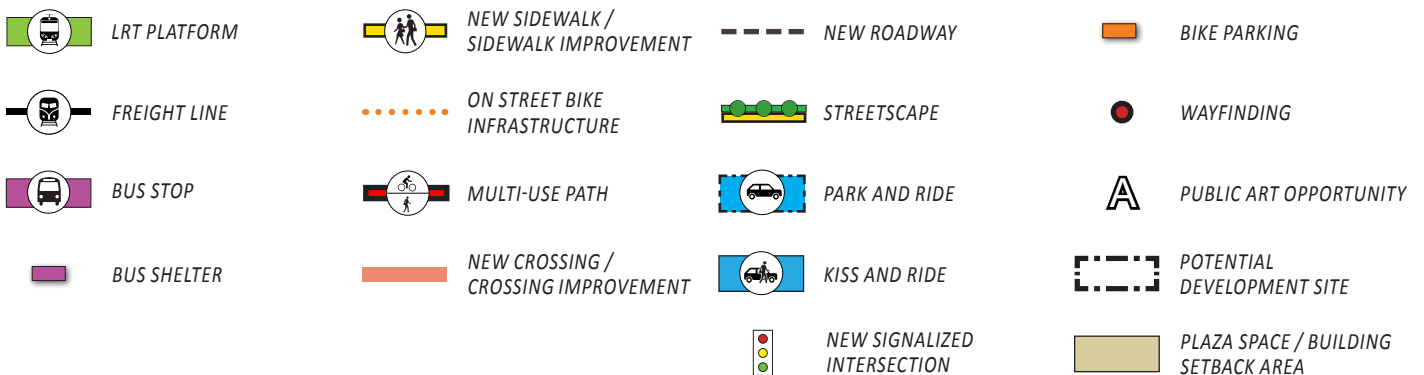
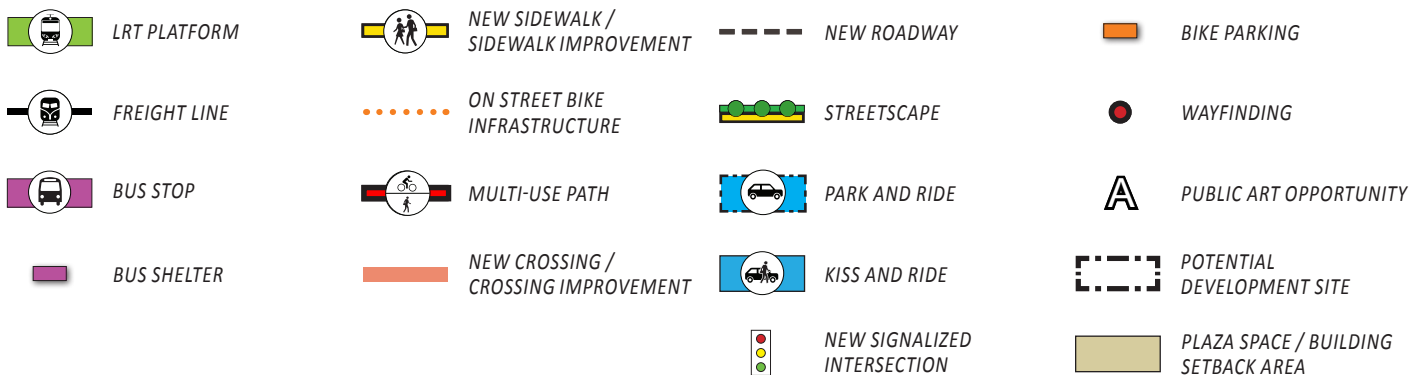
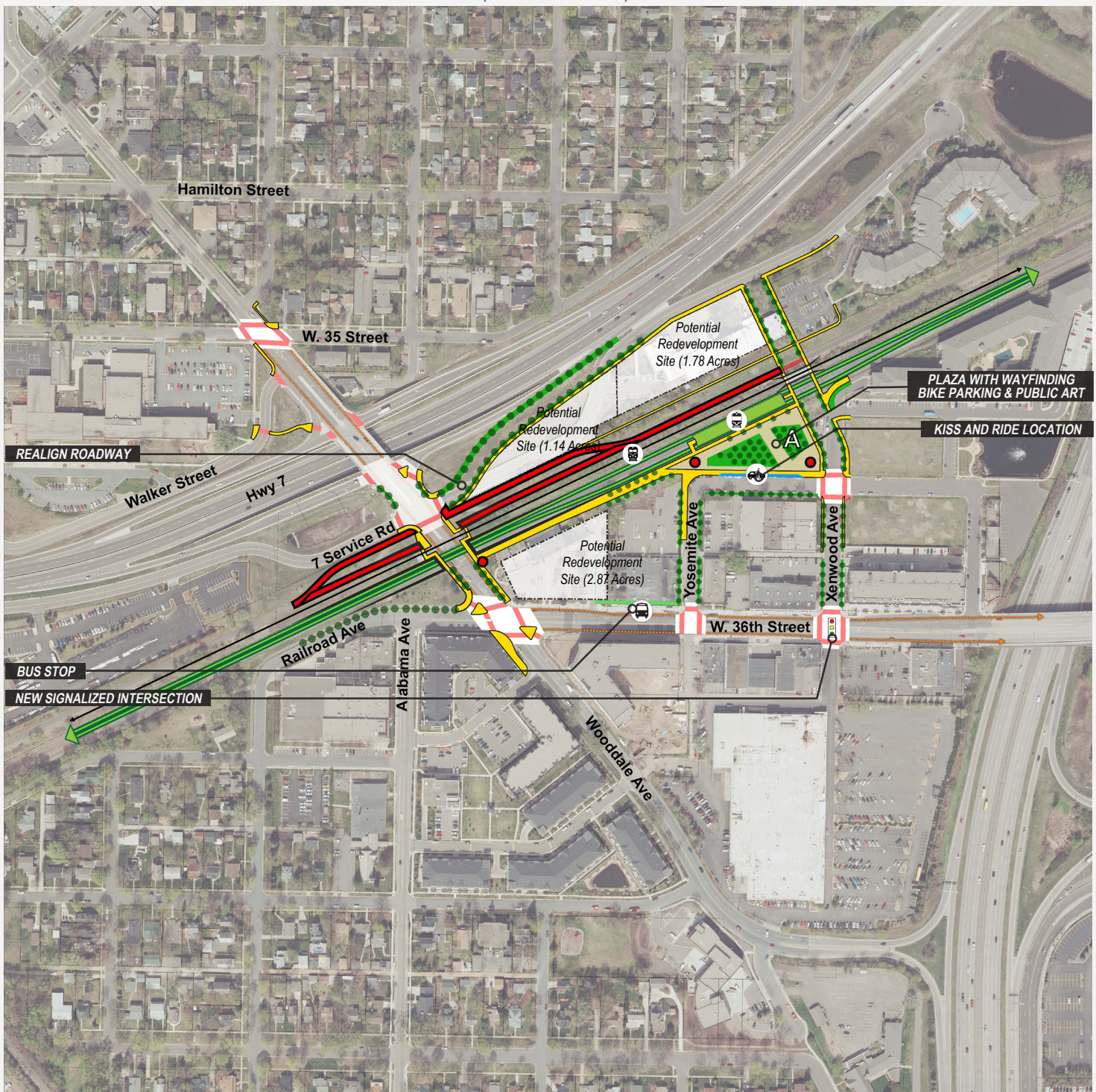




FIGURE 8-18. OPENING DAY STATION AREA IMPROVEMENTS (WOODDALE EAST)

WHERE ARE WE GOING?

WOODDALE (EAST)





THIS PAGE INTENTIONALLY LEFT BLANK

## 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. As of December 2013, the Wooddale East is an alternate station concept and is not in the SW LRT anticipated base project scope. Table 8-4 and Figure 8-19 show opening day improvements included in the alternate concept scope. Table 8-5 and Figure 8-20 include opening day improvements that are recommended as part of the Southwest Corridor Investment Framework and are beyond the alternate concept scope.

TABLE 8-4. ALTERNATE CONCEPT SCOPE (NOT IN SW LRT BASE PROJECT SCOPE) - OPENING DAY IMPROVEMENTS (WOODDALE EAST)

PLAN KEY	IMPROVEMENT	PROJECT LOCATION	PROJECT NOTES
A	LRT Platform	Between Yosemite Ave and Xenwood Ave	Includes related LRT infrastructure
B	Kiss and Ride	W. 35th Street	On-street dropoff area
C	Sidewalk/Trail	W. 35th Street to station platform	New sidewalks from kiss and ride on W. 35th Street to station platform
D	Sidewalk/Trail	Wooddale Ave and regional trail crossing	Reconstruction of regional trail crossing at Wooddale Ave
E	Bike Facilities	Near station platform	Allowance for bike storage
F	Wayfinding	Near station platform	Allowance
G	Landscaping	Near station platform	Allowance
H	Water*	Near station platform	New water service and fire hydrant to station
I	Utilities*	Project limit area	Adjustment of existing utilities
J	Stormwater management*	Near station platform	Allowance

Note: As of December 2013, Wooddale East is an alternate station concept and is not part of the SW LRT base project scope

\* Improvement not symbolized on opening day figures

TABLE 8-5. SW CORRIDOR INVESTMENT FRAMEWORK (TSAAP) - OPENING DAY STATION AREA IMPROVEMENTS (WOODDALE EAST)

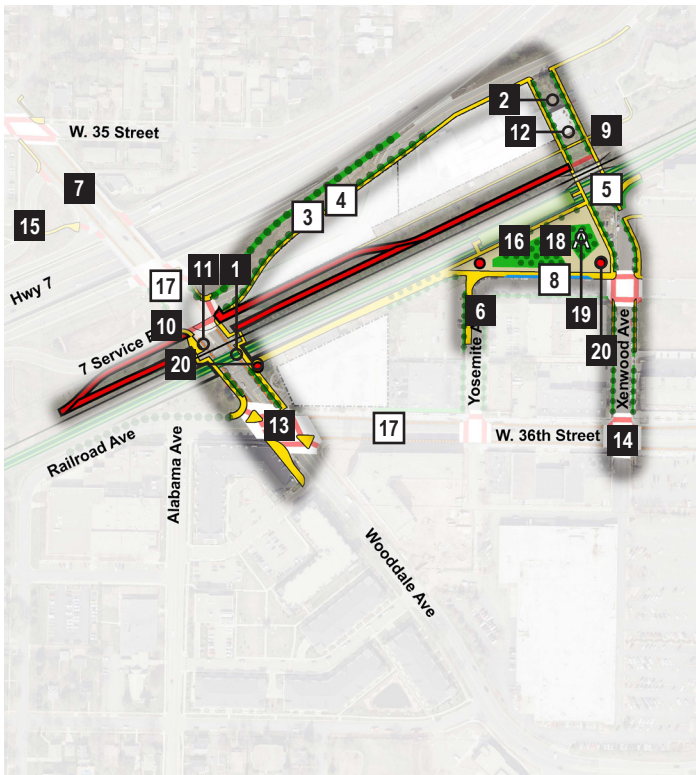
PLAN KEY	IMPROVEMENT	PROJECT LOCATION	PROJECT NOTES	PRIORITY
1	LRT Line	At crossing with Wooddale Ave	Construction of grade separated LRT line crossing at Wooddale Ave	Primary
2	Roadways	Xenwood Ave, W. 35th Street to Minnesota 7 Service Rd.	Extend Xenwood Ave from W. 35th Street to Minnesota 7 Service Rd., under the freight line	Primary
3	Roadways	Minnesota 7 Service Road	Realignment of Minnesota 7 Service Road	Secondary
4	Streetscape	Minnesota 7 Service Road	Includes sidewalk, streetscape plantings, lighting and signage	Secondary
5	Streetscape	Xenwood Ave, north of W. 35th Street	Includes sidewalks, streetscape plantings, lighting and signage	Secondary
6	Streetscape	Yosemite Ave, W. 36th Street to W. 35th Street	Includes sidewalk, streetscape plantings, lighting and signage	Primary
7	Sidewalk/Trail	Wooddale Ave, W. 36th Street to W. 35th Street (north of Hwy 7)	Complete gaps in sidewalk system	Primary
8	Sidewalk/Trail	W. 35th Street, Yosemite Ave to Xenwood Ave	Complete gaps in sidewalk system	Secondary
9	Sidewalk/Trail	Sidewalk along the north side of multi-use trail paralleling the tracks	Improve pedestrian connections between station area and residential housing to the east	Primary
10	Sidewalk/Trail	South frontage road sidewalk	Improve pedestrian connections east of realigned roadway segment	Primary
11	Sidewalk/Trail	Wooddale Ave and regional trail crossing	Construction of grade separated regional trail crossing at Wooddale Ave	Primary
12	Sidewalk/Trail	Xenwood Ave, W. 35th Street to Minnesota 7 Service Rd.	Construction of new sidewalks in conjunction with extension of Xenwood Ave.	Secondary
13	Intersection Enhancements	Wooddale Ave, W. 36th Street to W. 35th Street (north of Hwy 7)	Enhanced crosswalks	Primary
14	Intersection Enhancements	W. 36th Street, Wooddale Ave to Xenwood	Enhanced crosswalks and new traffic signal (at Xenwood)	Primary
15	Intersection Enhancements	Walker Street: midblock crossing to school	Crosswalk striping and one ped ramp	Primary
16	Bike Facilities	Near station platform	Bike parking, lockers, pump station and bike share facilities (beyond SPO improvements)	Primary
17	Bike Facilities	W. 36th Street and Wooddale Ave	On-street bike lanes	Secondary
18	Public Plaza	Between station platform and W. 35th Street	Acquisition and construction of plaza; includes ped access, plantings, public art, seating, lighting, etc. (beyond SPO improvements)	Secondary
19	Public Art	Station area	Incorporate public art (beyond SPO improvements)	Secondary
20	Wayfinding	Station platform area, Yosemite Ave and public plazas	Signage and wayfinding (beyond SPO improvements)	Primary
21	Sanitary Sewer	Station area	Coordinate with MCES to relocate existing interceptor	Primary



TABLE 8-6. ALTERNATE CONCEPT SCOPE (NOT IN SW LRT BASE PROJECT SCOPE) - OPENING DAY IMPROVEMENTS (WOODDALE EAST)



FIGURE 8-19. SW CORRIDOR INVESTMENT FRAMEWORK (TSAAP) - OPENING DAY STATION AREA IMPROVEMENTS (WOODDALE EAST)



WHERE ARE WE GOING?

WOODDALE (EAST)

# PRIMARY PRIORITY

# SECONDARY PRIORITY



# Development Potential

## OVERVIEW

The Wooddale station area has strong redevelopment potential. Recent development activity in the area has transformed the Wooddale station area into a compact and walkable neighborhood with a mix of higher density residential with street level retail uses. Convenient access to Highways 7 and 100, and available sites for redevelopment have driven some of the recent growth. Additional sites near the station should be available for future redevelopment in the short term.

Adjacent to the proposed station platform are sites owned by Hennepin County and the City that present a short-term redevelopment opportunity for transit-supportive uses. Other underutilized sites near the station area are expected to spur development interest.

Key challenges that should be addressed to facilitate development potential include station connectivity and traffic congestion near the station platform, along Wooddale Ave.

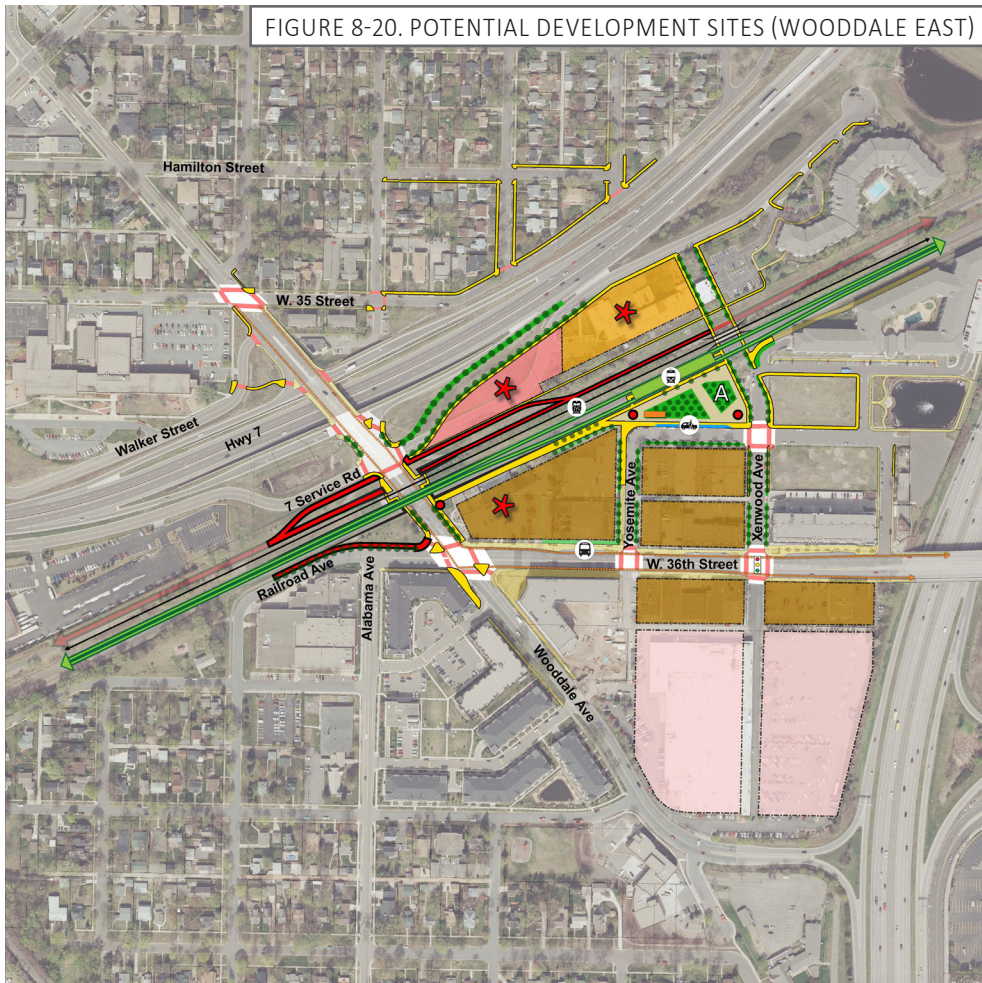
## LAND USES

High density, mixed-use, transit-oriented development is likely to occur near the Wooddale station, consistent with recent redevelopment activity in the area. Future land uses in the Wooddale station area should consist of high-density residential, office, and retail uses.

## PLANNING STRATEGIES

Strategies that should be considered to facilitate future development in the station area include streetscape improvements and pedestrian crossings along roadways connecting the station with potential development sites, local destinations, and neighborhoods, particularly on Wooddale Ave, W. 36th Street, Yosemite Ave, and Xenwood Ave.

FIGURE 8-20. POTENTIAL DEVELOPMENT SITES (WOODDALE EAST)



### FUTURE LAND USE:

- MULTIFAMILY
- RETAIL & OTHER COMMERCIAL
- MIXED-USE RESIDENTIAL
- MIXED-USE COMM. & OTHER
- OFFICE

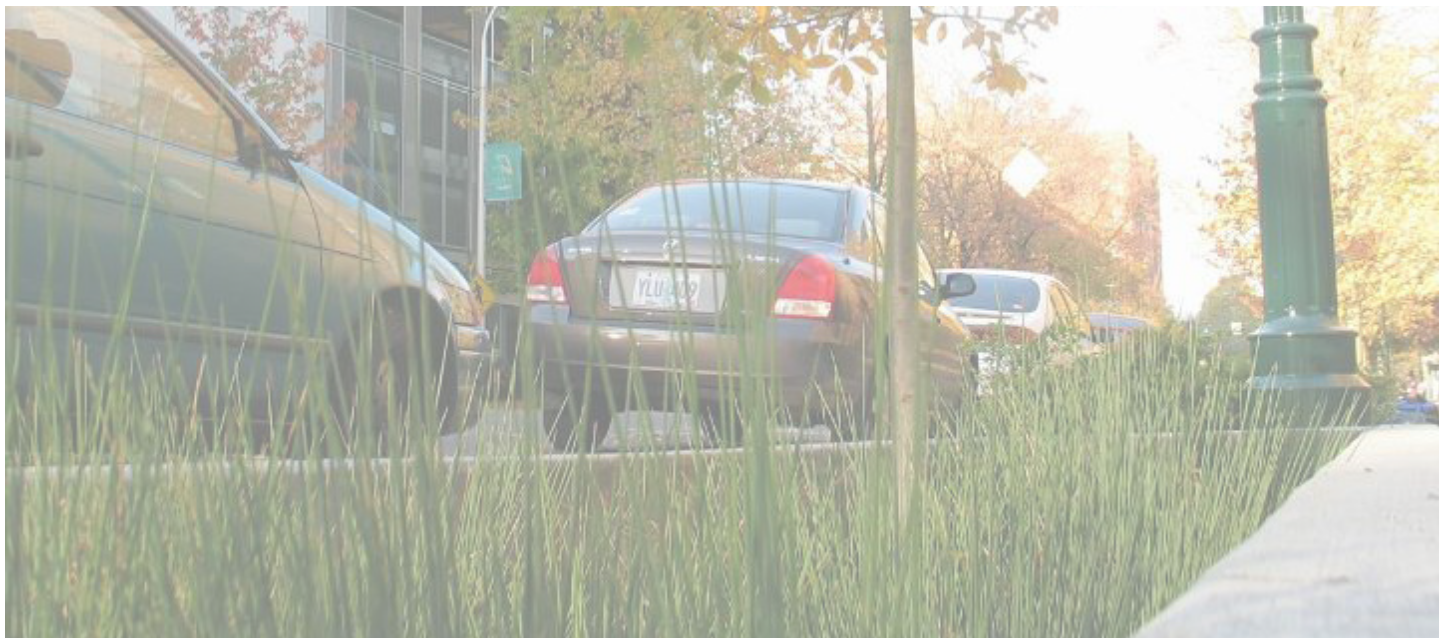
★ OPENING DAY  
DEVELOPMENT POTENTIAL



## Key Considerations for Change and Development Over Time

Key considerations for change and development over time for the Wooddale East location alternative are the same as those proposed for the Wooddale West alternative. Refer to the “Key Considerations” discussion on p. 8-17.

THIS SPACE INTENTIONALLY LEFT BLANK



## Station Area Utility Plan (Continued)

### GENERAL RECOMMENDATIONS

General utility recommendations for the Wooddale East location alternative are the same as those proposed for the West alternative. Refer to p. 8-18 for general water main, sanitary sewer, and stormwater recommendations. Detailed utility recommendations for the Wooddale East location are outlined below.

### STATION AREA UTILITY RECOMMENDATIONS

Utility recommendations (illustrated in Figure 8-22) are based on a localized analysis of proposed development. It is recommended that the City of St. Louis Park 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.

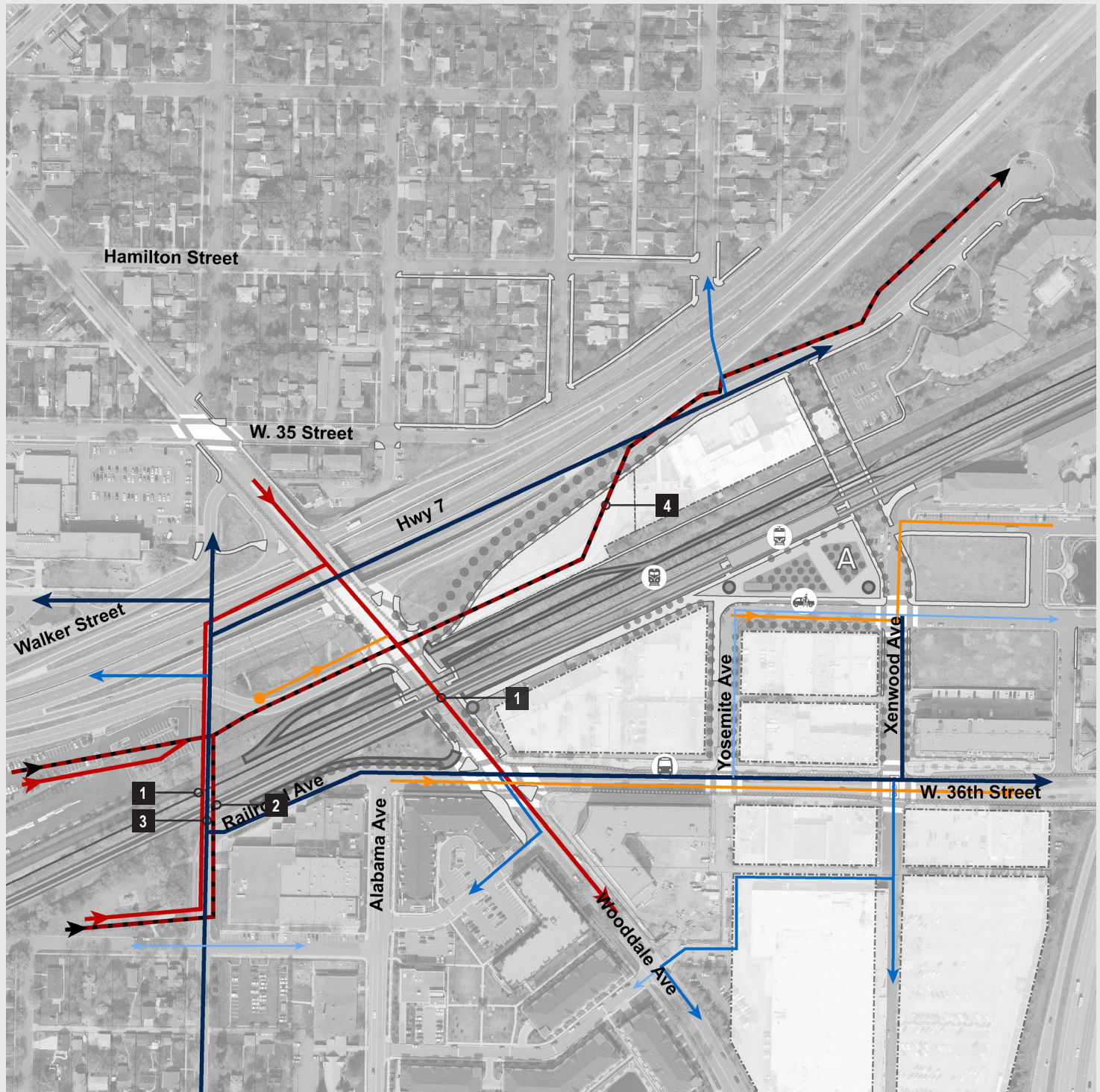
#### *Opening Day Recommendations:*

1. Encase existing sanitary sewer crossing LRT rail construction.
2. Encase existing MCES interceptor crossing LRT rail construction.
3. Encase existing water main crossing LRT rail construction.
4. Relocate existing MCES interceptor to promote TOD along Highway 7 in conjunction with service roadway realignment.

*NOTE: Utility recommendations on this page are identical to the Wooddale West scenario shown on p. 8-20*



FIGURE 8-21. STATION AREA UTILITY PLAN



WHERE ARE WE GOING?

WOODDALE (EAST)

# OPENING DAY RECOMMENDATION

# LONG-TERM RECOMMENDATION

— EXISTING UTILITIES  
- - - PROPOSED UTILITIES

SERVICE SANITARY  
LOCAL SANITARY  
TRUNK SANITARY  
MCES SANITARY INTERCEPTOR  
SANITARY SEWER FORCEMAIN  
LIFT STATION

SERVICE WATER MAIN  
LOCAL WATER MAIN  
TRUNK WATER MAIN  
WATER TOWER

THIS PAGE INTENTIONALLY LEFT BLANK