



Adopted May 2018  
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# HELMO AVENUE STATION BRTOD PLAN

City of Oakdale

**GOLD LINE**  
PARTNERS



# Acknowledgements

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# INTRODUCTION

The Gold Line Partners (the Partners) brings together local elected officials from the five cities and two counties along the corridor, including business and community leaders, to support the METRO Gold Line Bus Rapid Transit (Gold Line BRT) project. As part of the support for the Gold Line, the Partners commissioned the Metro Gold Line BRTOD Plan project (BRTOD Planning Project) on behalf of the Metropolitan Council and is funded by a grant from the Federal Transit Administration's Pilot Program for Transit-Oriented Development Planning with match from Ramsey and Washington Counties. Washington County Regional Railroad Authority (WCRRA) is the fiscal agent and administrative coordinator for the BRTOD Planning Project, and collaborates directly with the cities along the corridor.

## HELMO AVENUE STATION BRTOD PLAN

This BRTOD Plan, which will serve as a policy guide for the City of Oakdale, is based on:

- Consideration of the City's adopted policies.
- Market studies of the station area and the corridor.
- Best practices and fundamentals for bus rapid transit-oriented development.

The plan identifies projects that will help realize the vision for the station area. Funding sources for projects will need to be determined.



**The Gold Line will connect people across the region to job centers, neighborhoods, shopping, recreation, and other key destinations in the Interstate 94 corridor.**

**The METRO Gold Line Bus Rapid Transit (Gold Line BRT) project is a separate project dedicated to design and engineering of the Gold Line BRT alignment, guideway, stations, and some access improvements.**

**The Metro Gold Line BRTOD Plan project (BRTOD Planning Project) plans for transit-oriented development around the Gold Line stations.**

**BRTOOD combines BRT with traditional TOD strategies to create walkable and bikeable communities with housing, shopping, and employment uses concentrated within a half mile of a BRT station.**

**The Gold Line Corridor includes eleven stations in five cities and two counties.**

## THE GOLD LINE CORRIDOR

The Gold Line corridor is the mile-wide transit-shed centered along the Gold Line BRT route, generally following Interstate 94 (I-94). The existing potential for creating BRTOD varies in each station area. Planning for a successful Gold Line corridor requires increasing the potential ridership base of the entire corridor while enabling each station area to achieve its transit-oriented, market-driven development potential.

Along the corridor, older areas are concentrated to the west—toward Saint Paul, Maplewood, Landfall and portions of Oakdale—where early 20<sup>th</sup> century development patterns include a fine-grain street grid with predominantly single-family residences mixed with multi-family housing and commercial uses. These areas are largely fully built-out with few opportunities for new development. Residents come from highly diverse ethnicities, are typically less affluent, and are more transit dependent than in other areas of the corridor.

To the east, in Oakdale and Woodbury, the corridor transitions into newer communities characterized by auto-oriented commercial centers and undeveloped land. These areas present both greater opportunity and greater need for transit-oriented development and walking and biking infrastructure improvements. Residents in these areas tend to be less ethnically diverse, more affluent, and less familiar with transit use.

## STATION AREA PLANNING

When planned together, the eleven Gold Line stations assemble into a unified, diverse, and complementary corridor in which transit ridership is maximized, desirable development infrastructure and improvements are built, and vibrant and active station areas are realized.

Together, the BRTOD Plans describe a corridor-wide vision that:

- **Establishes a multi-modal transportation corridor** by linking stations with a continuous biking and walking trail parallel to the BRT guideway.
- **Increases potential ridership** by providing direct access to transit-oriented uses along the corridor with strategic biking and walking improvements along existing, planned, or newly identified routes.
- **Enables station areas to achieve their development potential** by identifying substantial new infill or redevelopment opportunities for people to live and businesses to thrive near transit.

Each Gold Line station is located within a distinct and unique context that presents both opportunities and constraints for achieving BRTOD.

Figure 1. Gold Line Corridor Stations







# HELMO AVENUE STATION AREA

Within the half-mile Helmo BRT station planning area, the land uses consist of office, warehouse, and light manufacturing uses located on the partially built out Oaks Business Park east of Helmo Avenue and south of 4<sup>th</sup> Street and similar uses within the Crossroads Properties along Hudson Boulevard and west of Helmo Avenue. North of 4<sup>th</sup> Street, consists of townhomes, a City-owned golf course, Powerline Park, and a significant amount of public open space. The station area is bounded by I-694 to the west and by I-94 along the southern boundary. No access to I-94 or freeway crossing south of I-94 exists today. A two-lane 4<sup>th</sup> Street bridge provides east/west access over I-694.

Preliminary engineering for the Gold Line BRT buses includes a bus-only guideway (dedicated lanes in the roadway) that approaches the Helmo Station area from the west across the 4<sup>th</sup> Street bridge (crossing over I-694); continues along the center of the roadway on 4<sup>th</sup> Street and turning south along the west side of Helmo Avenue, continuing across I-94 within a new Helmo Avenue/Bielenberg Bridge into the City of Woodbury. The BRT station and a planned park-and-ride parking lot are located southwest of the Helmo Avenue cul-de-sac.

Figure 2. Helmo Avenue Station Area



## DEVELOPMENT MORATORIUM AND COMPREHENSIVE PLAN AMENDMENT

In June 2017, the Oakdale City Council adopted a moratorium on all development within the Crossroads Properties and the Oaks Business Park and authorized the Helmo Avenue Station area planning project to study land use and zoning regulations near the proposed Helmo Avenue Station to ensure that future development is consistent with the City's vision and goals for that area.

As an outcome of station area planning for the Helmo Avenue Station, the City amended the 2030 Comprehensive Plan to facilitate transit-oriented development around the station area. The Helmo Avenue Station BRTOD Planning project was directed by City staff to:

- Create a framework for improved BRT station access and transit-supportive development of the moratorium properties.
- Suggest refinements for the Helmo Avenue BRT station location, guideway, and planned park-and-ride for consideration by Metro Transit.
- Provide necessary market and traffic analysis and environmental review documentation in the form of an Environmental Assessment Worksheet (EAW)—part of the Minnesota Pollution Control Agency's required environmental review process designed to disclose information about the potential negative environmental effects of a proposed development and ways to avoid or minimize them before the project is permitted and built.

Figure 3. Helmo Avenue Station Planning Area

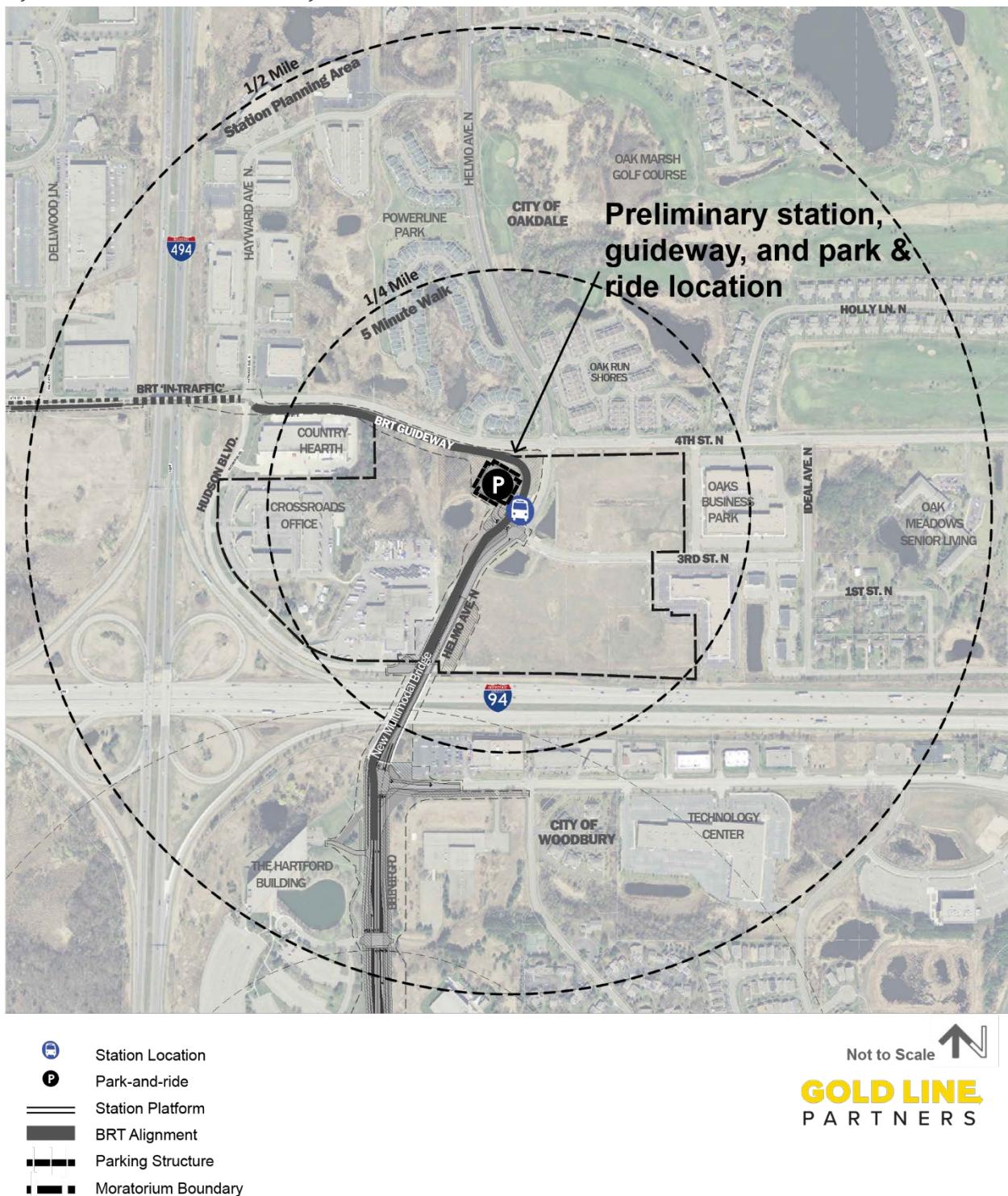
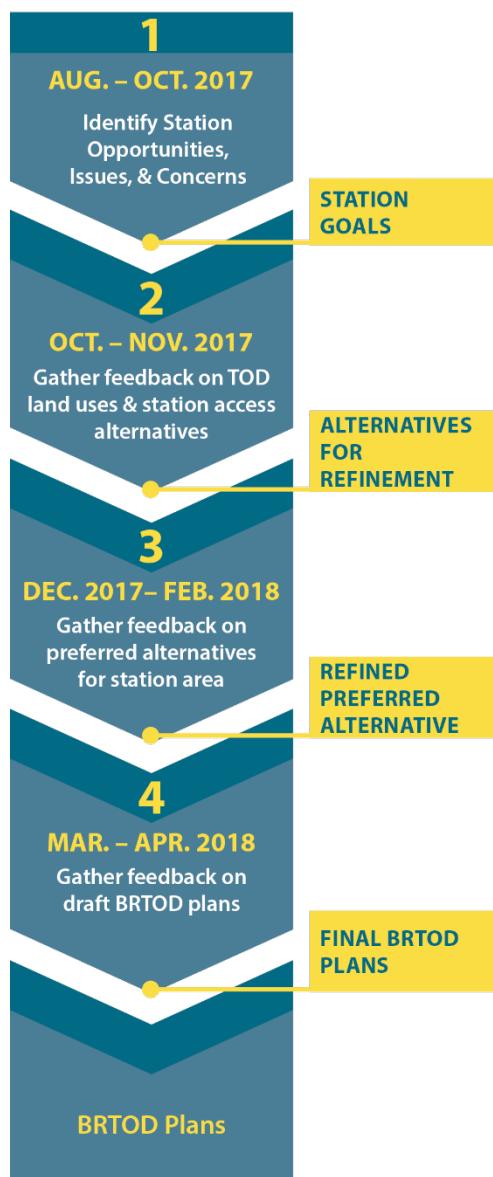


Figure 4. Stakeholder Involvement Process



## BRTOD PLANNING PROCESS

The planning process for the Helmo Avenue Station BRTOD Plan occurred over eleven months, beginning in May 2017 and ending in April 2018.

Helmo Avenue Station BRTOD planning consisted of four phases:

1. **Identification of station area opportunities, issues and concerns to establish station area goals.** Stakeholders reviewed project information, provided feedback on station specific issues, and discussed opportunities and constraints.
2. **Development and review of preliminary BRTOD concepts for transit-oriented development and station access.** Stakeholders reviewed and provided feedback on draft alternatives.
3. **Refinement and review of preferred development plan and circulation plan.** Stakeholders provided feedback on refined development scenarios and development and circulation plans.
4. **Review of the BRTOD Plan document.** Stakeholders provided feedback on the draft BRTOD Plan, including implementation strategies.

## STAKEHOLDER INVOLVEMENT

Stakeholder involvement in the Helmo Avenue Station BRTOD Plan built upon extensive engagement conducted prior to the initiation of the BRTOD Planning project and focused on issues related to transit-oriented development. Stakeholder involvement was conducted in close coordination with WCCRA and the staff of the City of Oakdale.

### Stakeholder Involvement Plan

The stakeholder involvement plan established engagement objectives; identified stakeholders, level of engagement, and outreach methods; and ensured that core values, goals, and objectives of the overall Gold Line project were addressed. The plan ensured that those affected by planning decisions had the opportunity to be involved in the decision-making process, that their contributions influenced decisions, and their needs were communicated to decision-makers. At the end of each project phase, the influence of stakeholder input was communicated back to stakeholders.

Engagement included in-person events and online engagement:

- **Four Oakdale city council work sessions** held at the City Hall in Oakdale.
- **Four community meetings with residents and property owners** of Oakdale at the Oakdale City Hall.
- **Five stakeholder meetings** with the moratorium property owners.
- **Online engagement** through the Gold Line Partners website included a survey, a summary describing the survey intent, a description of survey elements, and presentation slides. Online surveys were typically collected over a one-month period, beginning on the date of the community meeting, and a summary posted to the Project website.

All key stakeholders were respectfully and inclusively engaged in developing the Helmo Avenue Station BRTOD Plan.

Figure 5. Community Meetings



## STATION, GUIDEWAY & PARK AND RIDE LOCATION REFINEMENT

The station location, and its environment, are key determinates in attracting transit-oriented development and ensuring safe and direct station access that will maximize transit ridership. Evaluation of the preliminary engineering plans for the Helmo Station identified the following issues.

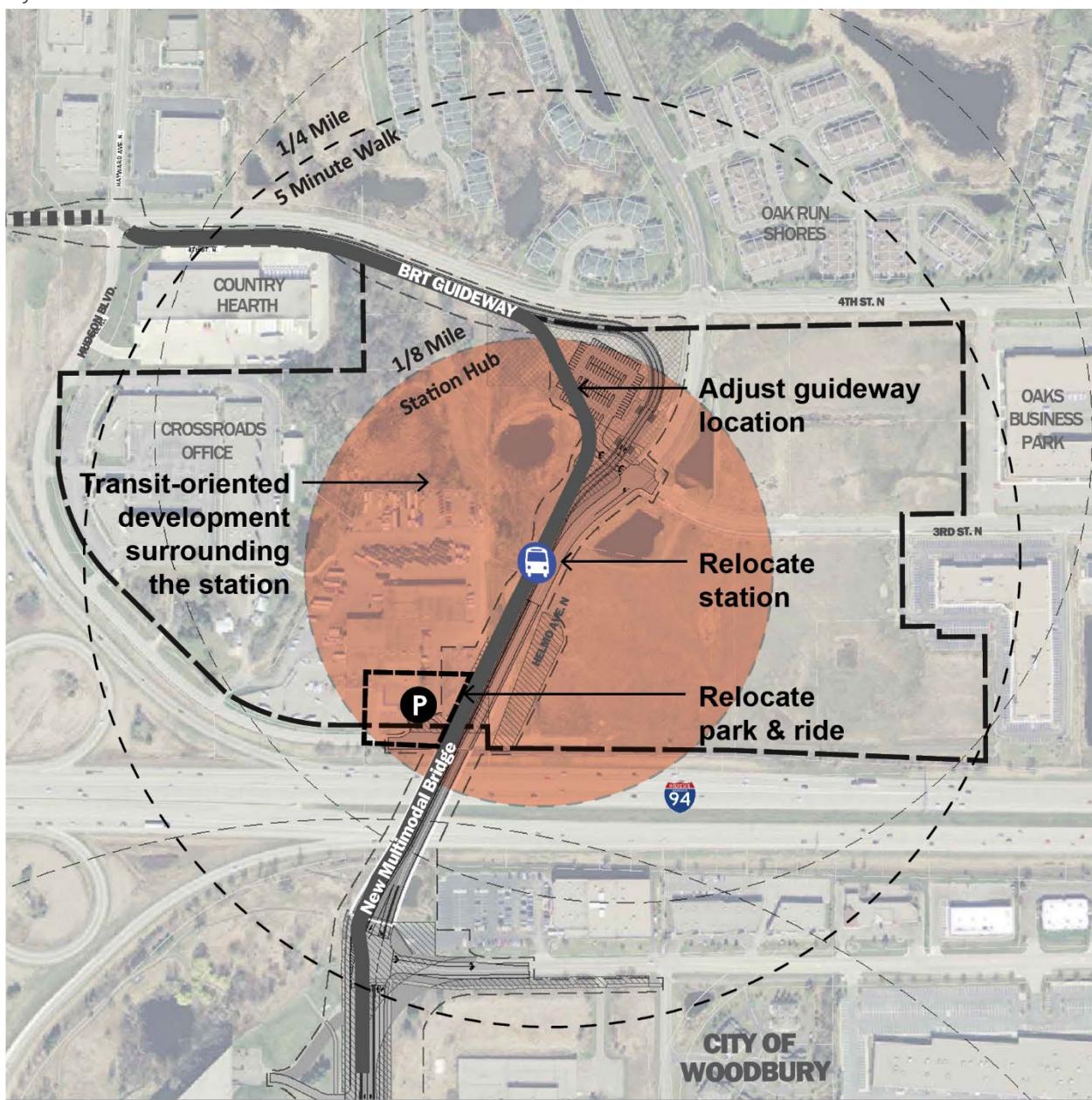
- The location of the park-and-ride, guideway, and station at the southwest corner of 4th Street and Helmo Avenue precludes transit-oriented development adjacent to the station.
- The majority of vacant and underutilized land with potential for new transit-supportive development is located south of the 3<sup>rd</sup> Street and Helmo Avenue intersection.
- Proximity of the park-and-ride and station to existing residents poses potential issues with auto traffic congestion.
- The park-and-ride requires vehicles to cross the guideway, creating potential traffic impacts on Helmo Avenue.
- Station access limited to a narrow walkway separated from adjacent streets by the BRT guideway.

In response to these issues, a refinement to the station location, guideway and park-and-ride included:

- Relocating the station and park-and-ride approximately 400 feet to the south, adjacent to vacant and potentially redevelopable properties, allowing for transit-oriented development surrounding the Helmo Avenue Station.
- Adjusting the alignment of the guideway approximately 150 feet to the west, away from Helmo Avenue, to allow transit-oriented development to occur on both sides of Helmo Avenue at 4<sup>th</sup> Street.
- Replacing the walkway with a mixed-use trail. The mixed-use trail would be located between the guideway and the west side of Helmo Avenue and extend from the planned BRT bridge to 4<sup>th</sup> Street, then along the north side of 4<sup>th</sup> Street to the 4<sup>th</sup> Street bridge.

These recommendations were generally supported by City staff, City Council, moratorium stakeholders, and adjacent residents and were carried forward into the refinement of BRTOD concepts and the preparation of the BRTOD Plan.

Figure 6. Station Location Refinement



Not to Scale



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PARTNERS





# VISION

The Helmo Avenue Station BRTOD concept provides a snap-shot of the key ideas informing the land use and circulation elements of the plan. The concept responds to specific Helmo Avenue Station Area objectives identified during the plan's initial engagement with stakeholders. Objectives included:

- Maintaining and enhancing open space and trails
- Preserving existing neighborhoods and quality of life
- Managing traffic and congestion
- Creating a safe station environment
- Ensuring safe walking and biking
- Promoting compatible development

## **BRTOV VISION**

A new neighborhood park, street grid, and enhanced open space corridor provide the catalyst for transit-supportive redevelopment that includes the following elements.

### **STATION HUB**

Street-oriented retail within or adjacent to high-density multi-family buildings at the intersection of the planned Helmo Avenue bridge, relocated Helmo BRT station, and a realigned Hudson Boulevard. Uses will create an animated 18-hour environment of activity surrounding the station platform. As result of this activity and eyes-on-the-station, the transit platform will be safer at all times of the day.

### **MIXED USE NEIGHBORHOOD**

Multi-family housing surrounding a new neighborhood park and employment (professional and flex office) uses adjacent to the existing Oaks Business Park and oriented to the I-94 freeway.

### **OPEN SPACE CORRIDOR**

Open space enhancements and new trail connections create a green setting for urban transit-oriented development with links to existing and new parks.

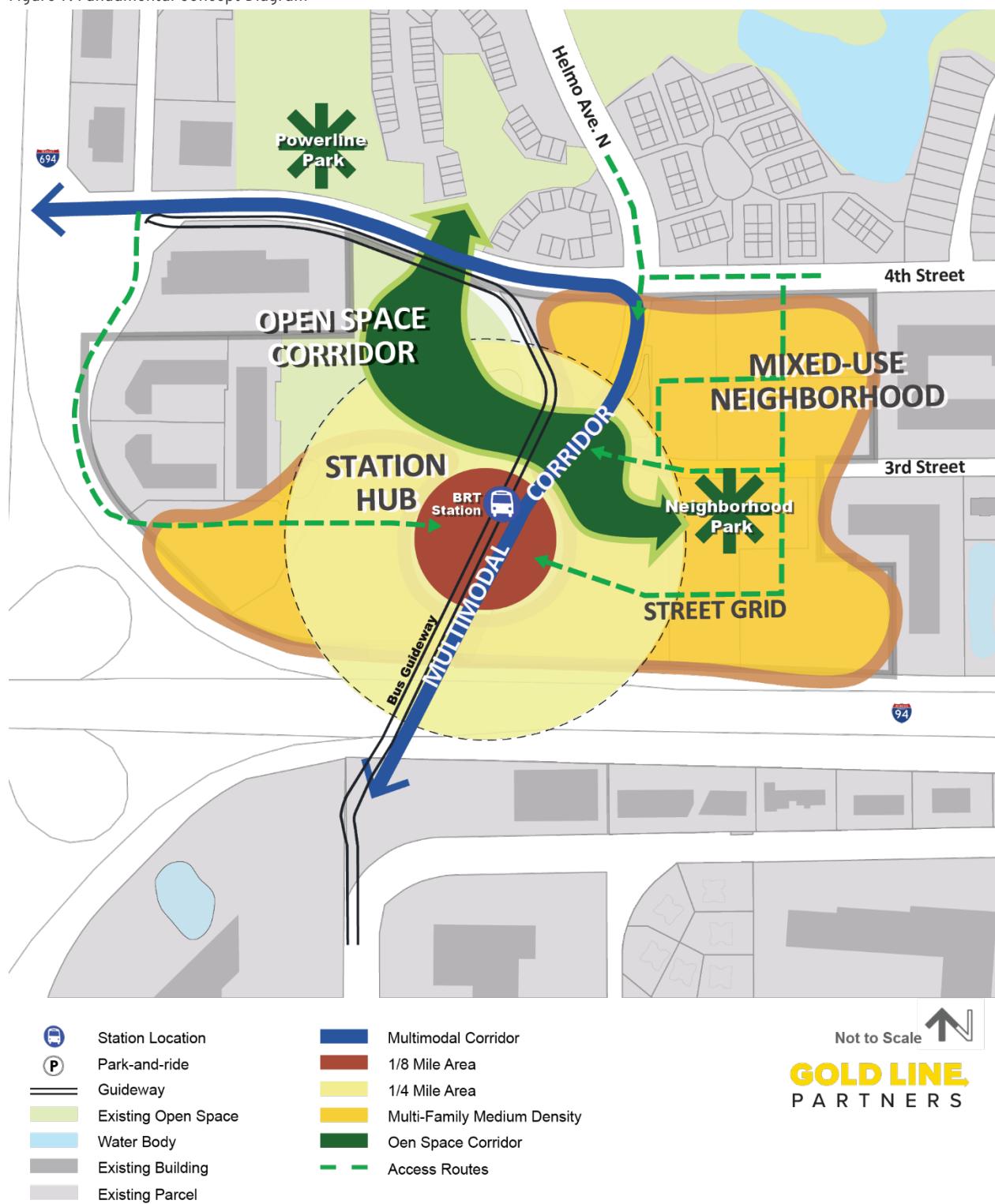
### **STREET GRID**

A proposed Hudson Boulevard realignment west of Helmo Avenue and a new street grid east of Helmo Avenue improve access to the station and development parcels within the Helmo Station area.

### **MULTIMODAL CORRIDOR**

A walking and biking trail adjacent to the BRT line links station to station along the entire corridor. A new I-94 bridge crossing will provide improved access for transit, walking, biking, and auto traffic between Oakdale and Woodbury to the south.

Figure 7. Fundamental Concept Diagram







# DEVELOPMENT PLAN

## BUILD-OUT CONCEPT

The build-out concept represents a five- to ten-year development plan and informs policy and regulatory updates that define the types of uses, permitted density, parking and building heights in the station area.

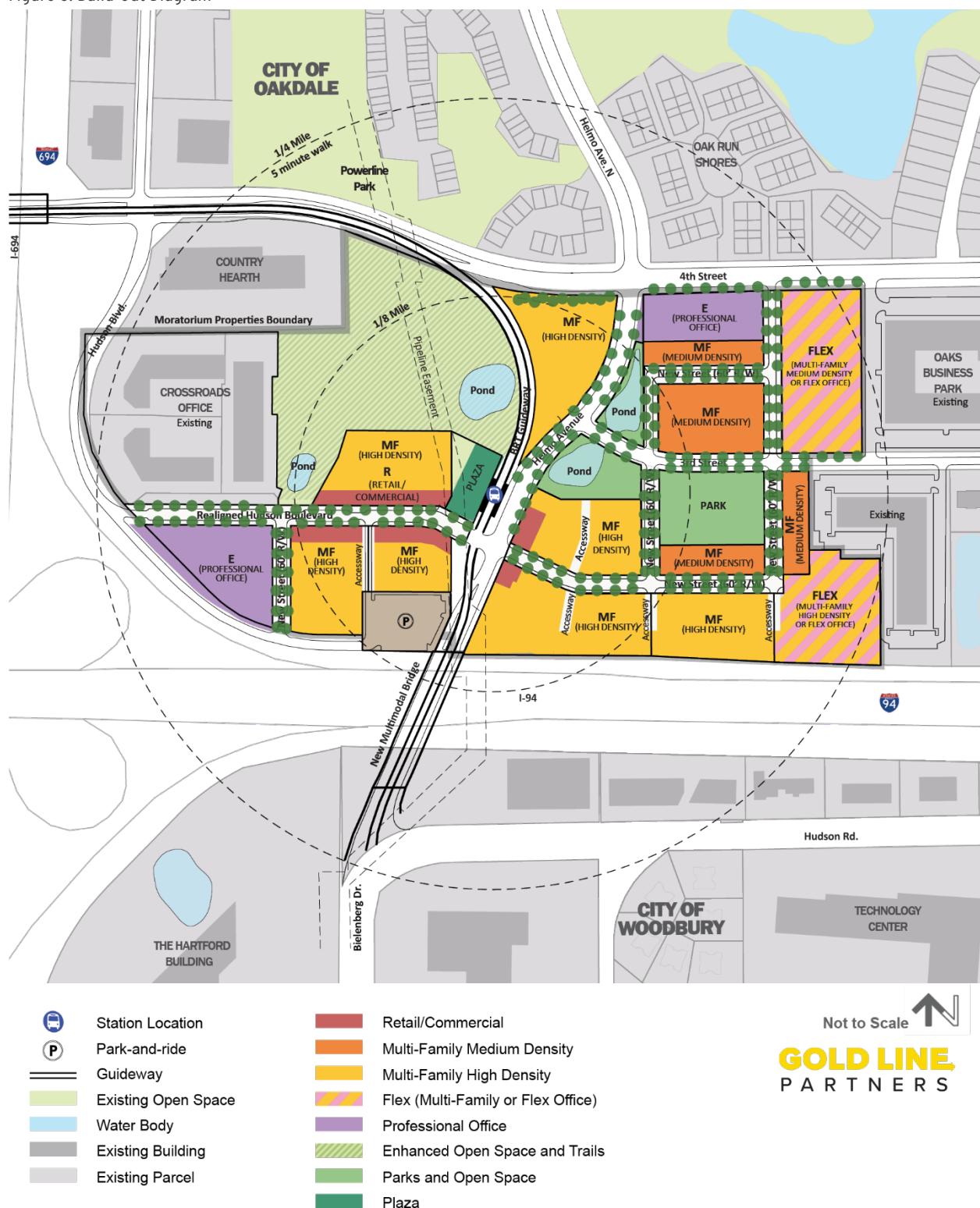
The development plan for the station area identifies the location of transit-supportive multi-family (745 to 905 units) employment (office at 118,000 and office with flex up to 310,000 square feet) and limited retail and services (30,000 square feet), parks, station plaza, open space and natural areas (14.32 acres) and a 100-space park and ride. The combination of these land uses provides for a safe and active BRT station environment that capitalizes on the station area's existing open space and trail amenities, and access to BRT.

Table 1. Build-Out Summary

USE	LAND AREA SQUARE FEET (SF)	DENSITY FAR   DU/AC (MIN)	HEIGHT STORIES (MAX)	DEV. TOTAL # OF UNITS BLDG (SF) ROAD (LF)	PARKING SPACES/UNIT SPACES/1000 SF	PARKING TOTAL SPACES
<b>EAST OF BRT GUIDEWAY</b>						
Multi-Family (HD)	419,964– 538,839	30–50 du/ac	3-6	404–514 units	1.5/unit (max)	606–771
Multi-Family (MD)	184,250– 330,000	15–24 du/ac	3	70–120 units	2/unit (max)	140–240
Employment	63,193– 328,388	0.5–1.0 FAR	3-6	32,000– 224,000 sf	2/1000 sf (max)	64–448
Retail	--	Bldg. Ground Floor	--	5,000	2.5/1000 sf (max)	19
Open Space	81,075	--	--	--	--	--
Park	84,000	--	--	--	--	--
New Roads	163,200	--	--	2,720 lf	--	--
<b>WEST OF BRT GUIDEWAY</b>						
Multi-Family (HD)	250,600	30-50 du/ac	4-6	271	1.5/unit (max)	407
Employment	86,000	1.0 FAR	6	86,000 sf	2/1000 sf (max)	172
Retail	--	Bldg. Ground Floor	--	25,000 sf	2.5/1000 sf (max)	56
Park & Ride	55,517	--	--	--	--	100
Station Plaza	32,750	--	--	--	--	--
Natural Area (Existing)	426,074	--	--	--	--	--
New Roads	101,650	--	--	1,385 lf	--	--
Crossroads Prop. (Existing)	335,300	--	--	--	--	--

\*Totals represent an approximation of area, units and spaces.

Figure 8. Build-Out Diagram



**The land use framework diagram illustrates the new development patterns and identifies the types of station area uses.**

## LAND USE FRAMEWORK

The land use framework identifies the predominant uses for station area parcels. Where parcels contain a vertical mix of uses, the most likely predominant land use is indicated. The uses shown:

- Maximize development potential based upon existing adjacent uses and site attributes.
- Maximize utilization of existing and planned improvements such as planned BRT within street rights-of-way, stormwater, and other utilities
- Respond to a conceptual short-term and long-term development strategy.
- Provide flexibility to respond to potential changes in market conditions.

### MULTI-FAMILY RESIDENTIAL

A range of multi-family housing types, including apartments and townhomes, provides development flexibility and is arranged with the highest intensity at the station and lower intensity adjacent to existing neighborhoods.

### PARKS AND OPEN SPACE

New parks and open space enhancements are centrally located within the station area to serve as an amenity for multi-family housing development and existing neighborhoods.

### RETAIL/COMMERCIAL

A limited amount of retail is concentrated at the Helmo Avenue Station to provide daily activity and is supported by existing area residents, new multi-family and employment uses, and direct, convenient auto access from Helmo Avenue.

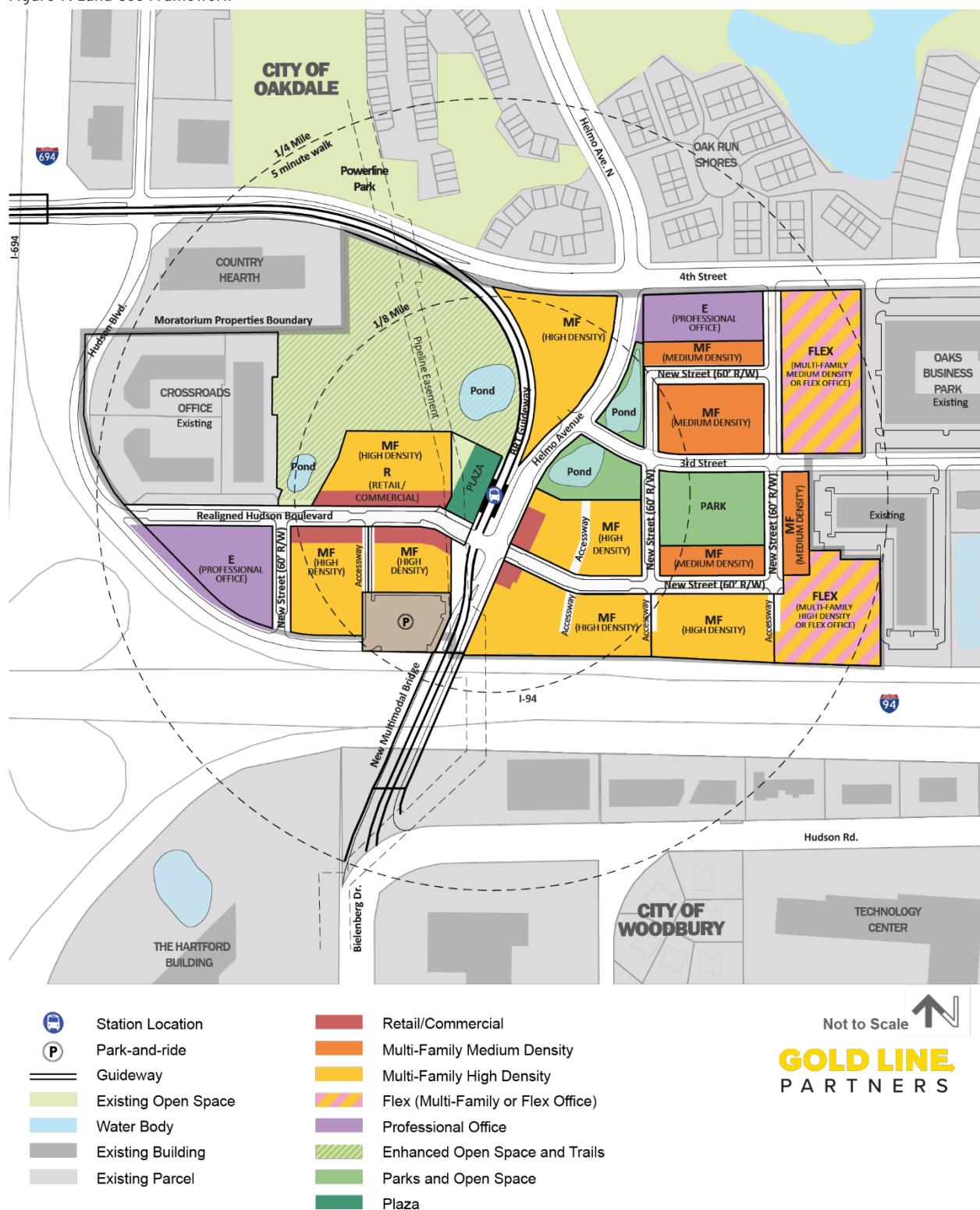
### EMPLOYMENT

Employment uses consist of traditional professional office and flex office, such as office/research and development/ light manufacturing, on sites visible from 1-94, adjacent to existing office uses, and directly accessible from 4th Street.

### PARK-AND-RIDE

Approximately one hundred commuter parking spaces are needed to serve the Helmo Avenue Station and are anticipated to be located south of the station, adjacent to the Helmo Avenue/BRT bridge.

Figure 9. Land Use Framework



**The housing blocks provide for a range of multi-family housing opportunities, from affordable apartments, townhomes, and senior housing, to market rate apartment blocks.**

## MULTI-FAMILY RESIDENTIAL

Residential development within the station area meets the following essential real estate criteria for successful housing development:

- **Proximity.** Housing development surrounding the BRT station provide ready transit access for those commuting to destinations such as the Woodbury Village Shopping Center, Battle Creek and Mounds parks, as well as, downtown St Paul.
- **Amenity.** The sites are located adjacent to a neighborhood park, and large open spaces with access to area multi-use trails, parks and the golf course. Additional housing blocks will front the relocated BRT station with access to daily needs goods and services.
- **Jobs-Housing Balance.** With BRT, the station area becomes an attractive location and opportunity to live close to jobs such as 3M, and close-by office development across I-94 in Woodbury, thereby enabling them to save time and money commuting.

### Development Detail

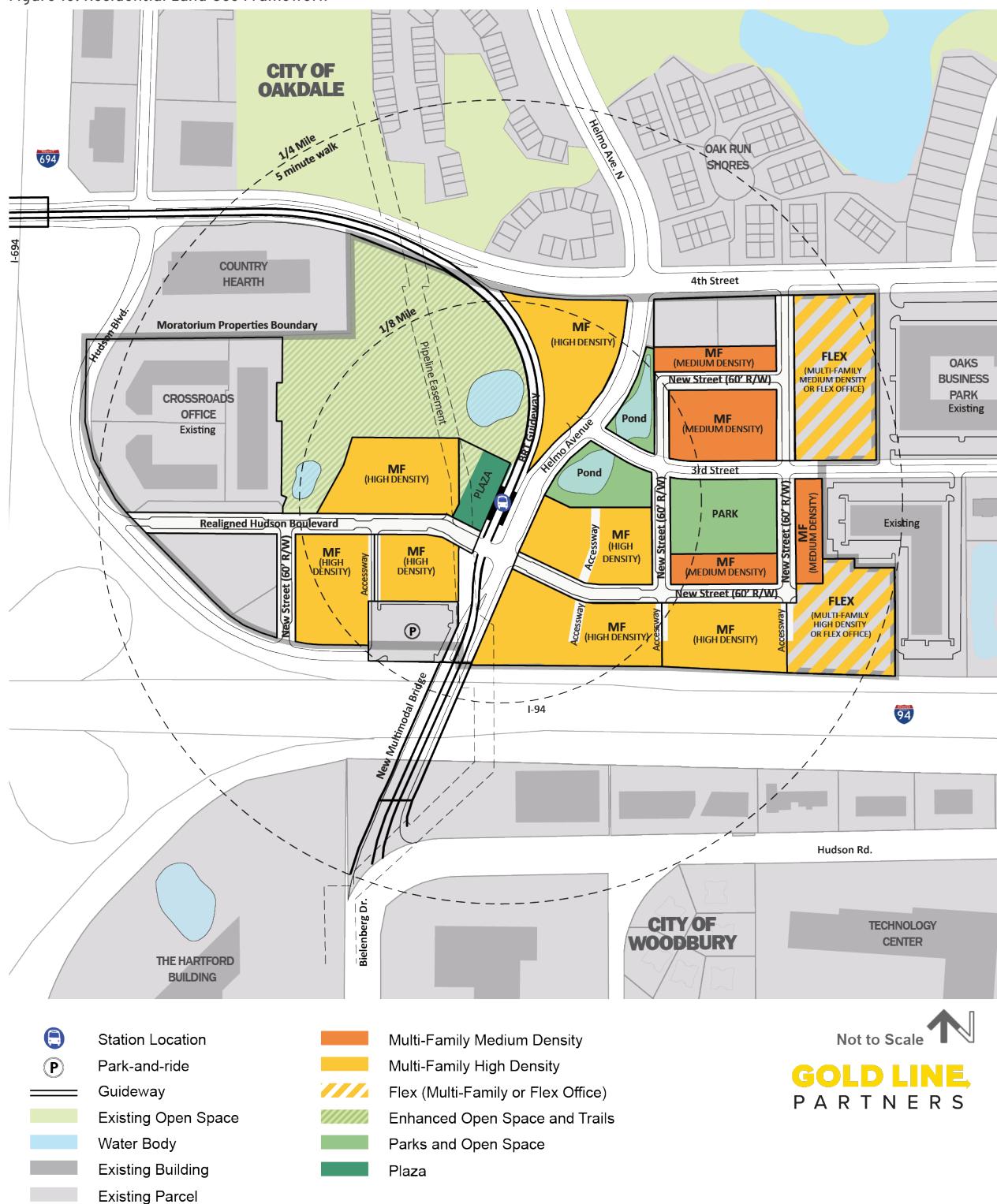
The following table indicates the recommended density, height, parking requirements for medium and high-density housing. Additional requirements are identified in the Implementation chapter of the plan.

Table 2. Multi-Family Development Summary

USE	LAND AREA SQUARE FEET (SF)	DENSITY FAR   DU/AC (MIN)	HEIGHT STORIES (MAX)	DEV. TOTAL # OF UNITS BLDG (SF) ROAD (LF)	PARKING SPACES/UNIT SPACES/1000 SF	PARKING TOTAL SPACES
<b>EAST OF BRT GUIDEWAY</b>						
Multi-Family (HD)	419,964– 538,839	30–50 du/ac	3–6	404–514 units	1.5/unit (max)	606–771
Multi-Family (MD)	184,250– 330,000	15–24 du/ac	3	70–120 units	2/unit (max)	140–240
<b>WEST OF BRT GUIDEWAY</b>						
Multi-Family (HD)	250,600	30–50 du/ac	4–6	271	1.5/unit (max)	407

\*Totals represent an approximation of area, units and spaces.

Figure 10. Residential Land Use Framework



## General Development Character

Development should avoid an institutional, repetitive, 'apartment complex' character. Multiple developers and design teams should be fostered to ensure variety and interest.

Development should front the BRT station or the neighborhood park to create a more urban street edge that defines and creates a vibrant pedestrian friendly public realm. Primary building access/lobbies should be from the street, green spaces, or pedestrian corridors rather than directly from internal parking lots or structures.

Parking should be located behind, within buildings, or in structures where feasible. Design techniques that minimize parked car visual impacts from streets and the disruption of the pedestrian environment should be fostered.

Along Helmo Avenue and the realigned Hudson Boulevard, buildings should be oriented with windows, doors and lobby entries facing toward the street and BRT station.

## PARKS AND OPEN SPACE

### Neighborhood Park

A new neighborhood park and enhanced stormwater ponds act as a focal point for new development and provide both active/passive recreational opportunities for new residents and adjacent neighborhoods. Elements of the park and enhanced ponds include:

- A 1.93-acre park located south of 3rd Street and east of the existing Oaks Business Park stormwater pond is envisioned to include passive areas with a large open lawn and walkway with perimeter landscaping; small plaza/seating area; and some active areas with children's play equipment and possible half basketball court.
- 1.86 acres of existing stormwater ponds (3rd Street and Helmo Avenue) are envisioned as a passive setting with increased tree cover, benches, perimeter landscaping and pathways.

### Open Space Enhancements

Much of the site adjacent to the planned BRT bus guideway is natural area (9.78 acres), with a stream, wildlife and open space. Two stormwater ponds are located on the south and eastern edges of the site. Preservation of the natural area is desirable, as is inclusion of a walking and biking trail connecting with the Powerline Line Park trail on the north and the Helmo Avenue Station platform. Elements of the open enhancements include:

- A 10-foot wide (minimum) asphalt or compacted crushed gravel trail (approximately 1,550 linear feet) connecting the Helmo Avenue Station BRT platform to the existing Powerline Park trail entrance on 4th Street located approximately 675 feet west of the Helmo Avenue and 4th Street intersection.
- A small overlook or viewing area located between the large pond and 4th Street. This area currently includes a mature stand of trees on a flat high point adjacent to 4<sup>th</sup> Street.

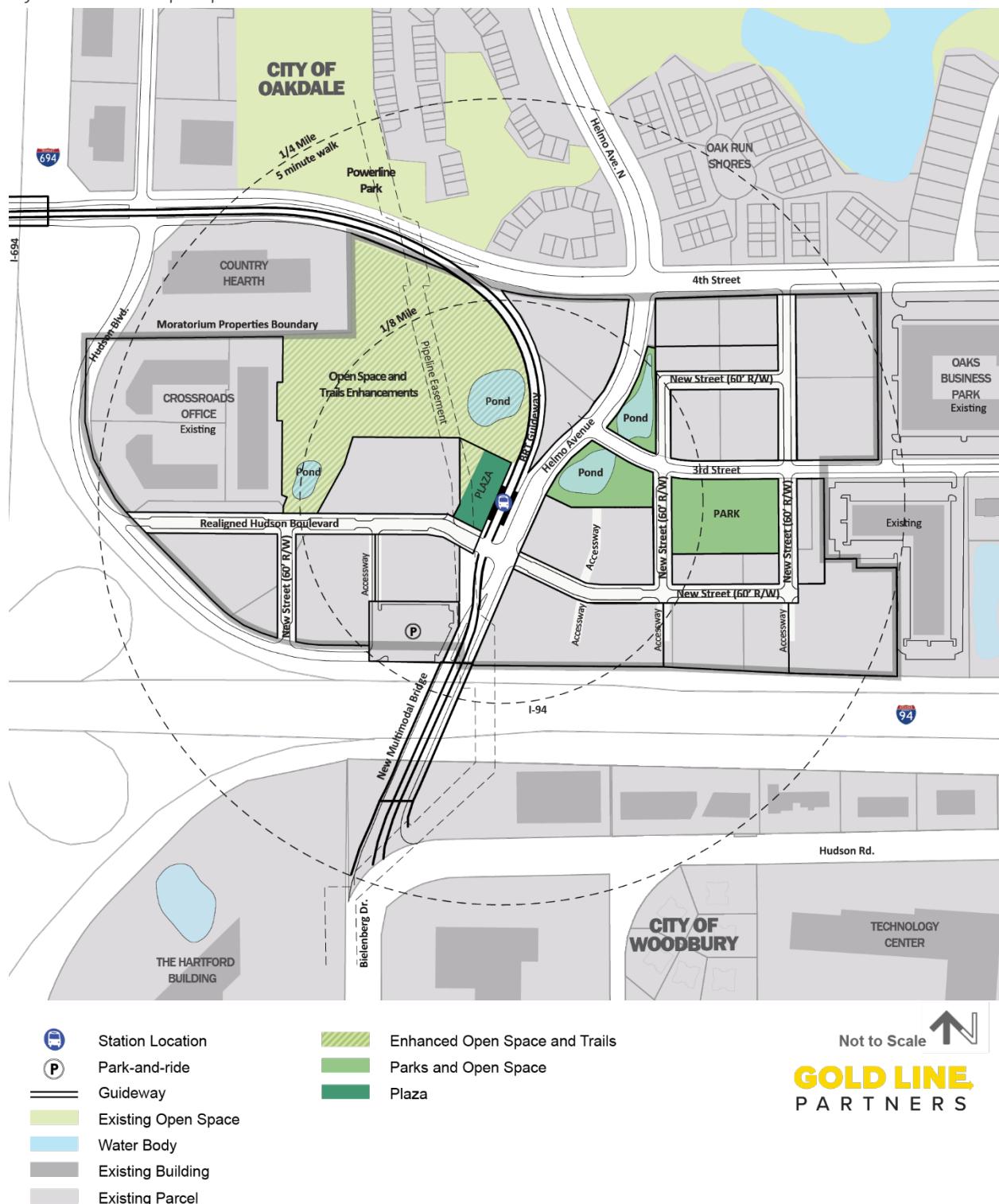
**New parks and open spaces are centrally located to serve station area development. These parks and open spaces are intended to be accessible to the immediate development and the community, enhancing the quality of life and promoting community health.**

## Station Plaza

At the Helmo Avenue Station, a plaza is intended to serve as an attractive pass-through area for BRT passengers and as a public gathering space between the station and new storefront retail and commercial uses on the edges. The plaza design and its function will need to be coordinated between the City and Metro Transit for final determination of the design and use. Elements of the plaza could include:

- A primarily paved area to allow for pass through and flexibility for assembly of staged events/activities and daily use gathering and social interaction.
- Amenities such as fixed or moveable seating, tables, and lighting; canopy trees to provide shade and tree cover and possible perimeter plantings or planters to increase visual interest and quality of the public space.
- Public art integrated with the BRT station and shelter design.
- Consolidated bicycle parking and/or a bike station (covered or enclosed building) with secure bike parking, possibly showers/restrooms, lockers and ancillary uses such as repair services or a café. A private or public vendor may operate the facility. Daily fees or monthly/annual membership fees may be required to access part or all of the facility.

Figure 11. Parks and Open Space Framework



**Ground-floor retail and commercial uses are envisioned within single-use and mixed-use buildings oriented to the Helmo Station.**

## RETAIL/COMMERCIAL

A limited amount of retail and commercial development anticipated at the Helmo Station meets the following essential real estate criteria:

- **Proximity.** The sites are located within mixed-use housing development, and adjacent to commuters entering and existing the Helmo BRT station to the adjacent park-and-ride.
- **Good visibility.** With construction of the Helmo Avenue multi-modal bridge (car, bike, bus and pedestrian) the sites are located adjacent to a significant increase in drive-by exposure from Helmo Avenue
- **Access.** Located at the intersection of the planned Helmo Avenue bridgehead and the BRT Station ground-floor retail and commercial uses will benefit from activity both in terms of walk and biking as well as drive-by traffic along Helmo Avenue

## Development Detail

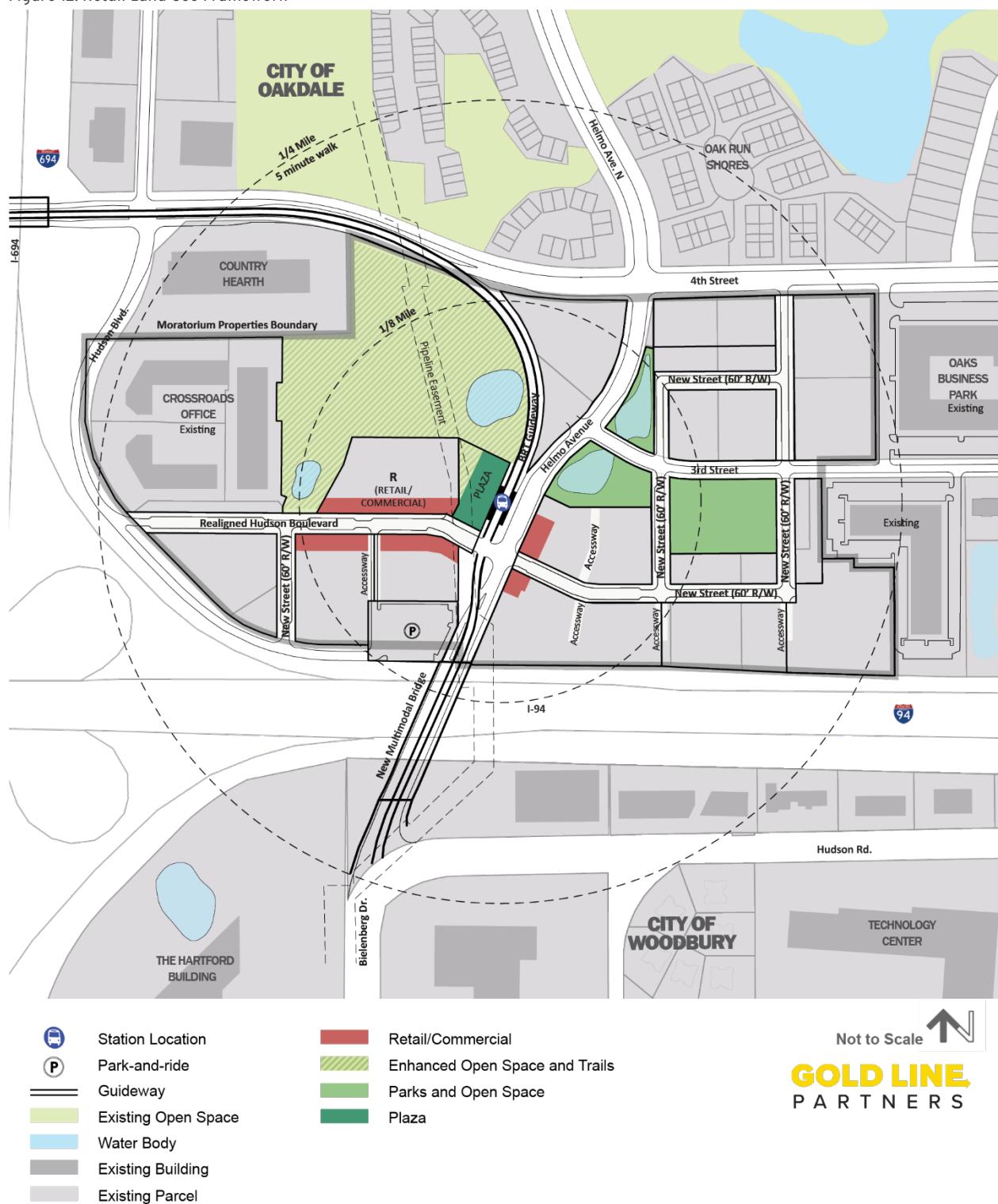
The following table indicates the recommended density, height, parking requirements for retail and commercial development. Additional design standards for development are identified in the Implementation Chapter.

Table 3. Retail Development Summary

USE	LAND AREA	DENSITY	HEIGHT	DEV. TOTAL # OF UNITS BLDG (SF) ROAD (LF)	PARKING SPACES/UNIT SPACES/1000 SF	PARKING TOTAL SPACES
	SQUARE FEET (SF)	FAR   DU/AC (MIN)	STORIES (MAX)			
<b>EAST OF BRT GUIDEWAY</b>						
Retail	--	Bldg. Ground Floor	--	5,000 sf	2.5/1000 sf (max)	19
<b>WEST OF BRT GUIDEWAY</b>						
Retail	--	Bldg. Ground Floor	--	25,000 sf	2.5/1000 sf (max)	56

\*Totals represent an approximation of area, units and spaces.

Figure 12. Retail Land Use Framework



## General Development Character

Buildings should front primary streets, such as the realigned Hudson Boulevard and Helmo Avenue, to create an urban street edge that defines a pedestrian friendly public realm. Primary building access should be oriented to the street, green spaces, or pedestrian corridors rather than to internal parking lots or structures.

Parking should be located behind or within buildings, or in structures where feasible. Design techniques that minimize parked-car visual impacts from streets and the disruption of the pedestrian environment should be fostered.

Retail should be pedestrian-oriented. Curbside parking will be required along the realigned Hudson Boulevard and portions of Helmo Avenue where ground-floor retail uses occur. This will require careful consideration of 'right-sized' travel lane widths (11' maximum) and the elimination of dedicated right-turn lanes. If constructed, dedicated right-turn lanes will negatively impact retail, commercial, and transit access for pedestrian and bicycles and will likely preclude the ability to provide the curbside parking that is vital for the success of commercial and retail development.

## EMPLOYMENT

Office sites meet the following essential real estate criteria:

- **Proximity.** Sites are located adjacent to the existing Crossroads Properties and the Oaks Business Park within a ¼ mile (five-minute) walk to/from the station.
- **Good Visibility.** Sites are provided with good visibility from the I-94 corridor and the primary east/west auto route along 4th Street.
- **Access.** Sites are easily accessible from primary access routes along 4th Street, a realigned Hudson Boulevard, and Helmo Avenue.

Traditional professional offices, multi-story office buildings, and flex office/light manufacturing sites allow for a range of potential future employment uses and complement the existing Oaks Business Park.

### Development Detail

The following table indicates the recommended density, height, parking requirements for retail and commercial development. Additional design standards for development are identified in the Implementation Chapter of the plan.

Table 4. Employment Development Summary

USE	LAND AREA SQUARE FEET (SF)	DENSITY FAR   DU/AC (MIN)	HEIGHT STORIES (MAX)	DEV. TOTAL # OF UNITS BLDG (SF) ROAD (LF)	PARKING SPACES/UNIT SPACES/1000 SF	PARKING TOTAL SPACES
<b>EAST OF BRT GUIDEWAY</b>						
Employment	63,193– 328,013	0.5–1.0 FAR	3–6	32,000– 224,000 sf	2/1000 sf (max)	64–448
<b>WEST OF BRT GUIDEWAY</b>						
Employment	86,000	1.0 FAR	6	86,000 sf	2/1000 sf (max)	172

\*Totals represent an approximation of area, units and spaces.

## General Development Character

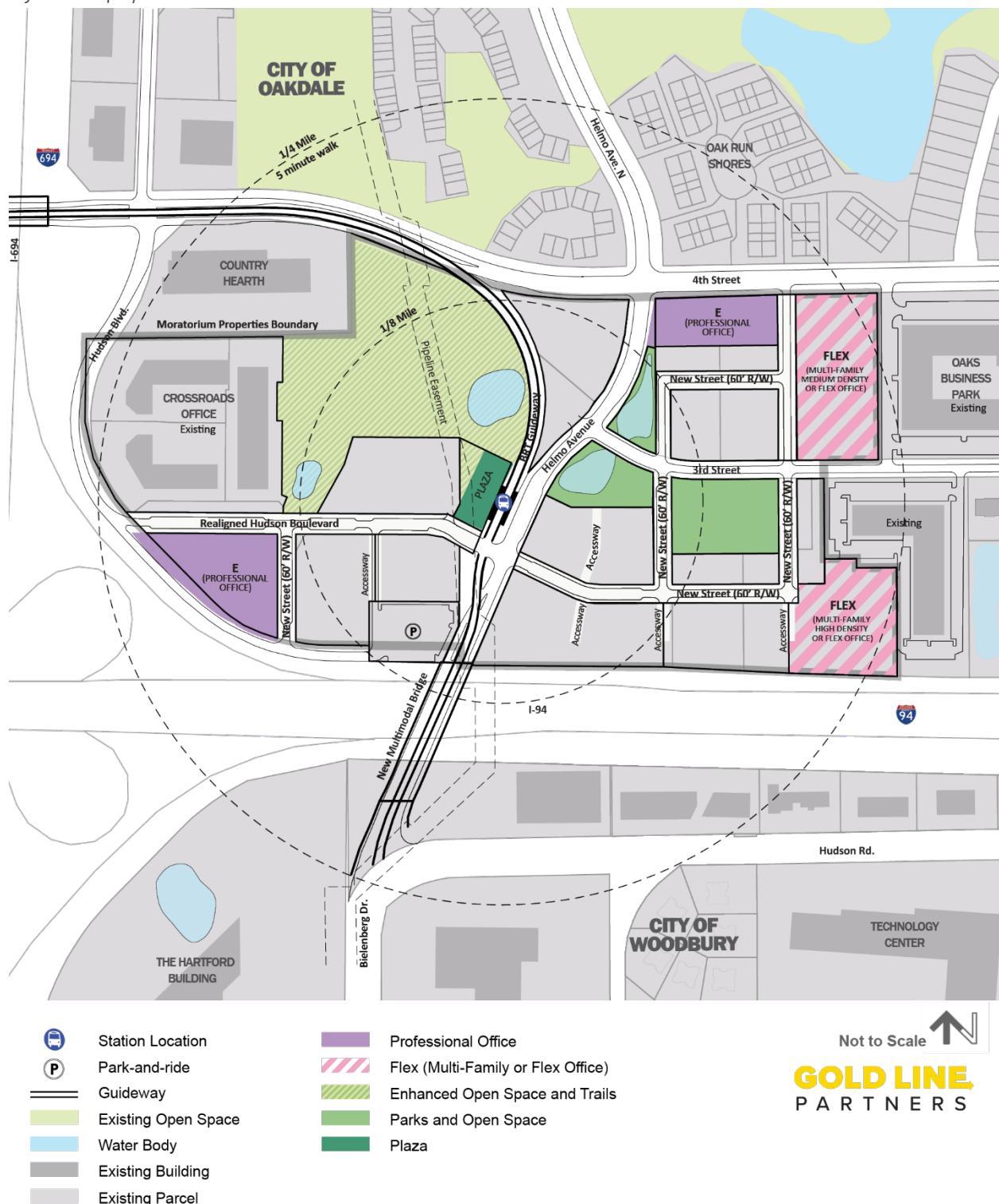
Buildings should front primary streets such as 4th Street and the realigned Hudson Boulevard to create an urban street edge that defines a pedestrian friendly public realm. Primary building access/lobbies should be oriented to the street, green spaces, or pedestrian corridors rather than internal parking lots or structures.

Parking should be located behind, within buildings, or in structures. Design techniques that minimize parked car visual impacts from streets and the disruption of the pedestrian environment should be fostered.

Parking structures should be wrapped by office buildings or screened by landscaping or other means.

Buildings are set back along 4th Street to allow for a perimeter landscape zone that complements existing development on the north side of the roadway.

Figure 13. Employment Land Use Framework



## BRT PARK-AND-RIDE

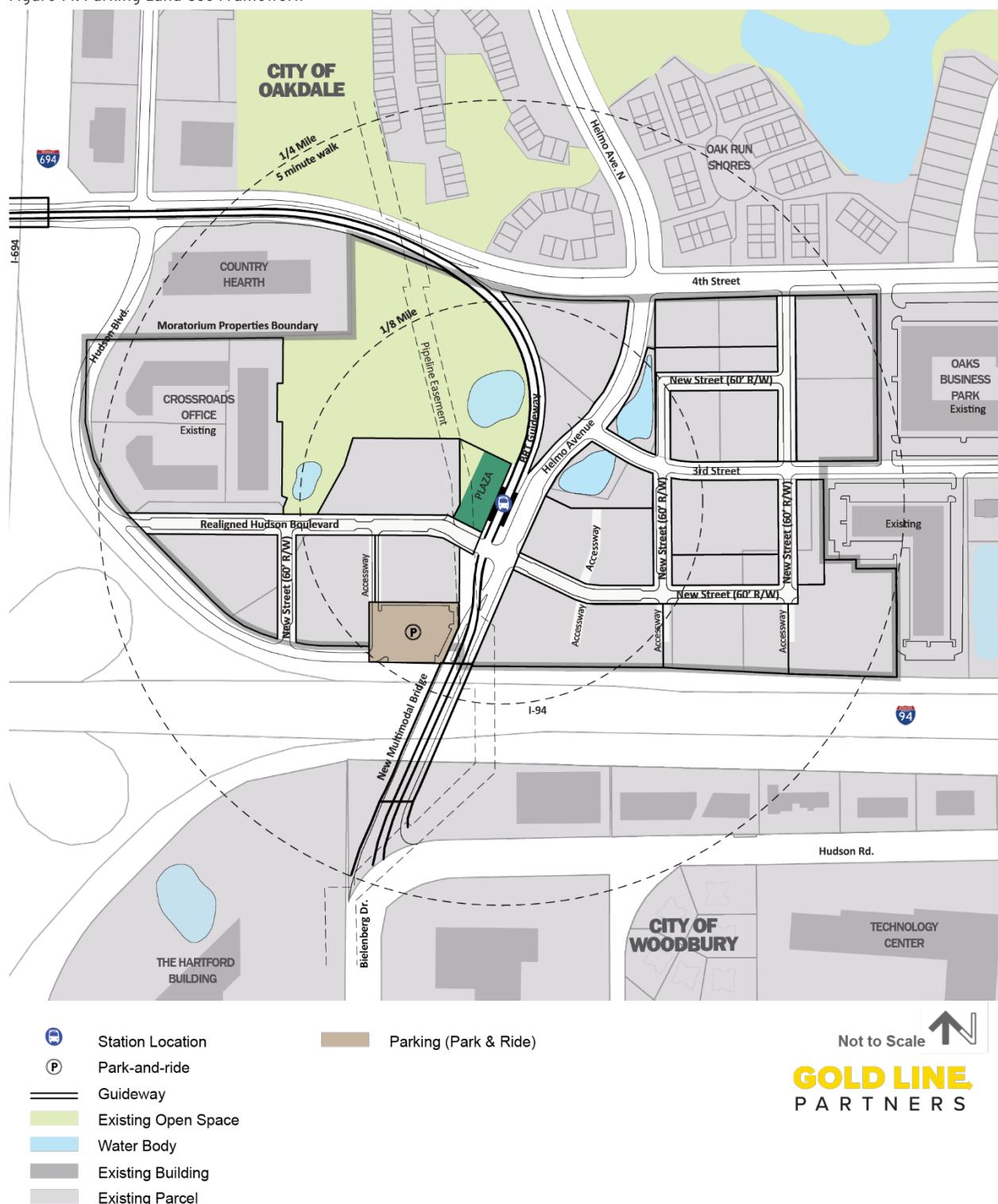
Adequate parking for transit patrons will help to discourage overflow parking in adjacent neighborhoods. The recommended location for the park-and-ride accommodates the approximately one hundred spaces identified for commuter use. The park-and-ride location and site configuration meet the following essential real estate criteria:

- **Configuration.** The site is large enough to support an efficient parking configuration. While a surface parking lot is to be built in the near term, future consideration of a shared-use parking structure would allow for increased development intensity on adjacent sites and ensure the long-term vitality of professional office, retail/commercial, and residential uses.
- **Access.** The site has access from the realigned Hudson Boulevard to Helmo Avenue on the north and the existing Hudson Boulevard with connections to 4<sup>th</sup> Street on the south. Multiple access points into and out of the park-and-ride, ensure that traffic can be dispersed rather than concentrated at the Helmo Avenue intersection.
- **Proximity.** The site is within two-hundred and fifty feet from the Helmo Avenue station platform.

## General Development Character

Primary park-and-ride access should be located on the rear of the site along the existing Hudson Boulevard.

Figure 14. Parking Land Use Framework



## MARKET SUMMARY

The findings of the Maxfield Research market analysis indicate that the station can support transit-oriented development anchored by housing and active green space as envisioned in the plan. There is strong demand for housing in the station area, and for additional commercial opportunities.

The Helmo Avenue Station area is semi-developed, with townhomes to the north of 4th Street, most dating to the 1990s, and office and warehouse development south of 4th Street that dates to the 1990s and 2000s. Several acres of land remain undeveloped in the immediate station area, offering a very good opportunity to create transit-oriented development.

### Multi-Family Housing

Up to 1,100 rental housing units can be divided into demand for 500 market rate apartments, 200 affordable apartments, 200 market rate senior apartments, 100 affordable senior apartments, and 100 for-sale townhomes

There is likely demand for 150 market rate apartments immediately, as shown in Table 5. In addition to proposed transit connections as part of the Gateway Corridor project, the station area has good freeway connections to Metro Area employment opportunities and good access to nearby retail amenities and parks and open space. Rents for market rate apartments would range from \$1,000 per month for a studio to \$2,500 for a three-bedroom unit.

Affordable rental apartment demand is relatively strong in much of the Twin Cities, and affordable apartments would perform well in the Helmo Avenue Station area, provided financing can be acquired through the tax credit program. Access to transit service adds to the potential for securing financing for affordable housing in the station area. Demand for 200 units is likely a conservative estimate. Rents for affordable apartments would vary by qualifying income level by AMI.

Senior housing is an attractive option for the site, which could support up to 200 market rate units and 100 affordable units. Market rate senior projects covering the continuum of care have performed well in Oakdale and Woodbury, including the nearby Oak Meadows. Monthly rents for independent senior living could range from \$1,200 for a one-bedroom to \$2,500 for a two-bedroom plus den. Assisted living rents would range from \$3,500 for a studio to \$5,000 for a two-bedroom. There is an undersupply of affordable senior housing in the area, and that which exists is performing well. Rents would vary by income.

For-sale housing has rebounded and several developments in Oakdale, Woodbury, and Lake Elmo are selling townhomes, villas,

and detached townhomes. There is likely demand for at least 100+ units in the Helmo Avenue Station area to round out the mix of housing. Side-by-side row townhomes could range from \$300,000 to \$425,000 plus buyer upgrades.

## Commercial

Commercial space has demand for up to 150,000 square feet, including 30,000 square feet of retail, possibly 45,000 square feet of office and as much as 75,000 square feet of medical office space.

Station area development as shown in Table 5 will likely support the addition of as much as 30,000 square feet of retail space starting in 2020. Retail demand is likely limited to demand created by housing and office in the immediate area. Potential rents for retail space range from \$22 to \$30 per square foot and will primarily include national tenants who can afford these lease rates.

New office development anywhere in the Twin Cities is mostly limited to build-to-suit users, and speculative office is rare. As a result, the potential for office development at the Helmo Avenue Station area is likely limited to companies that choose the location for its transit access and likely won't exceed 45,000 square feet. Overall, the office market remains the weakest product type in the Twin Cities Metro Area.

Medical office development is a likelihood in the Helmo Avenue Station area. Several recent or proposed medical office developments in Woodbury and Lake Elmo are part of a broader trend of medical office development across the Twin Cities. Up to 75,000 square feet of development are possible on site. Achievable rents range from \$22 to \$28 per square foot.

Table 5. Pricing/Rents By Property Type

Property Type	Total Supported Units/Sq. Ft.	Initial Pricing/Rents (2017 Dollars)
Apartments - Market Rate	600	\$1,000 for studio to \$2,500 for 3BR/per month
Apartments - Affordable	200	Rent based on household income qualification
Senior - Market Rate	200	\$1,200 independent living to \$5,000 assisted living
Senior - Affordable	100	Rent based on household income qualification
Townhomes - For Sale	100	\$300,000 to \$425,000
Retail	30,000	National tenants; \$22 to \$30 PSF
Office	45,000	* - little multi tenant demand; demand from owner/user, build-to-suit
Medical Office	75,000	\$22 to \$28 PSF

## POTENTIAL PHASING

Table 6 shows development potential in phases for the Helmo Station area. The table is broken down by development type, including market rate apartments, affordable apartments, senior apartments, affordable senior apartments, for-sale townhomes, retail space, office (multi-tenant) and medical office. Development potential for each property type is broken down in to four timeframes, including

- Current/immediate potential (years 2018-2019)
- Pre-/during construction (2020-21)
- Post-construction/early operating (2022-2024)
- Mature/long-term (2025 and beyond)

Table 6. Development Potential by Phase

Property Type	Total Supported Units/Sq. Ft.	Immediate 2018-19	2020-2022 (construction)	2023-2025 (post-construction)	2025+ (mature)
<b>Helmo Station Recommendations</b>					
Apartments - Market Rate	500	150	150	150	50
Apartments - Affordable	200	50	50	50	50
Senior - Market Rate	200	0	50	50	100
Senior - Affordable	100	50	0	0	50
Townhomes - For Sale	100	0	25	25	50
Retail	30,000	0	5,000	15,000	10,000
Office (Multi-tenant)	45,000	0	0	20,000	25,000
Medical Office	75,000	0	25,000	25,000	25,000







# CIRCULATION

The circulation framework identifies a complete network of circulation improvements for safe and convenient access to the Helmo Avenue Station. The proposed street network establishes an interconnected street grid that disperses traffic within the station area; improves access to development parcels; and provides the opportunity to moderate the increase in travel lanes on Helmo Avenue and 4<sup>th</sup> Street. The intent is to provide for adequate auto traffic capacity serving existing and future development while maintaining Helmo Avenue as a three-lane roadway and 4<sup>th</sup> Street as a two-lane roadway, allowing for turn lanes where necessary at key intersections.

A hierarchy of streets has been established to address both mobility and adjacent land use needs and development context including block scale and massing to support future land uses and a setting for placemaking. These street improvements will contribute to the creation of a distinct and attractive mixed-use transit-supportive district.

The circulation framework guides the repurposing of existing streets and incorporation of new streets, including:

- Modification of Helmo Avenue to include a BRT guideway and multi-use trail on the west side of the street and on the I-94 bridge crossing to Bielenberg Drive.
- A realignment of Hudson Boulevard south of the Crossroads Properties building to provide a direct east/west connection to the Helmo Avenue Station/Helmo Avenue bridgehead and to the street grid east of Helmo Avenue.
- New street grid east of Helmo Avenue and south of 4th Street providing direct access to development parcels and existing Oaks Business Park.
- Additional trail segments added or expanded within existing rights-of-way along 4th Street N., 3rd Street, and Helmo Avenue N.

**The circulation framework reinforces the Helmo Station as a hub for transit-oriented development through the creation of complete streets where facilities for all modes—auto, truck, transit, pedestrian, and bicycle—are adequately provided.**

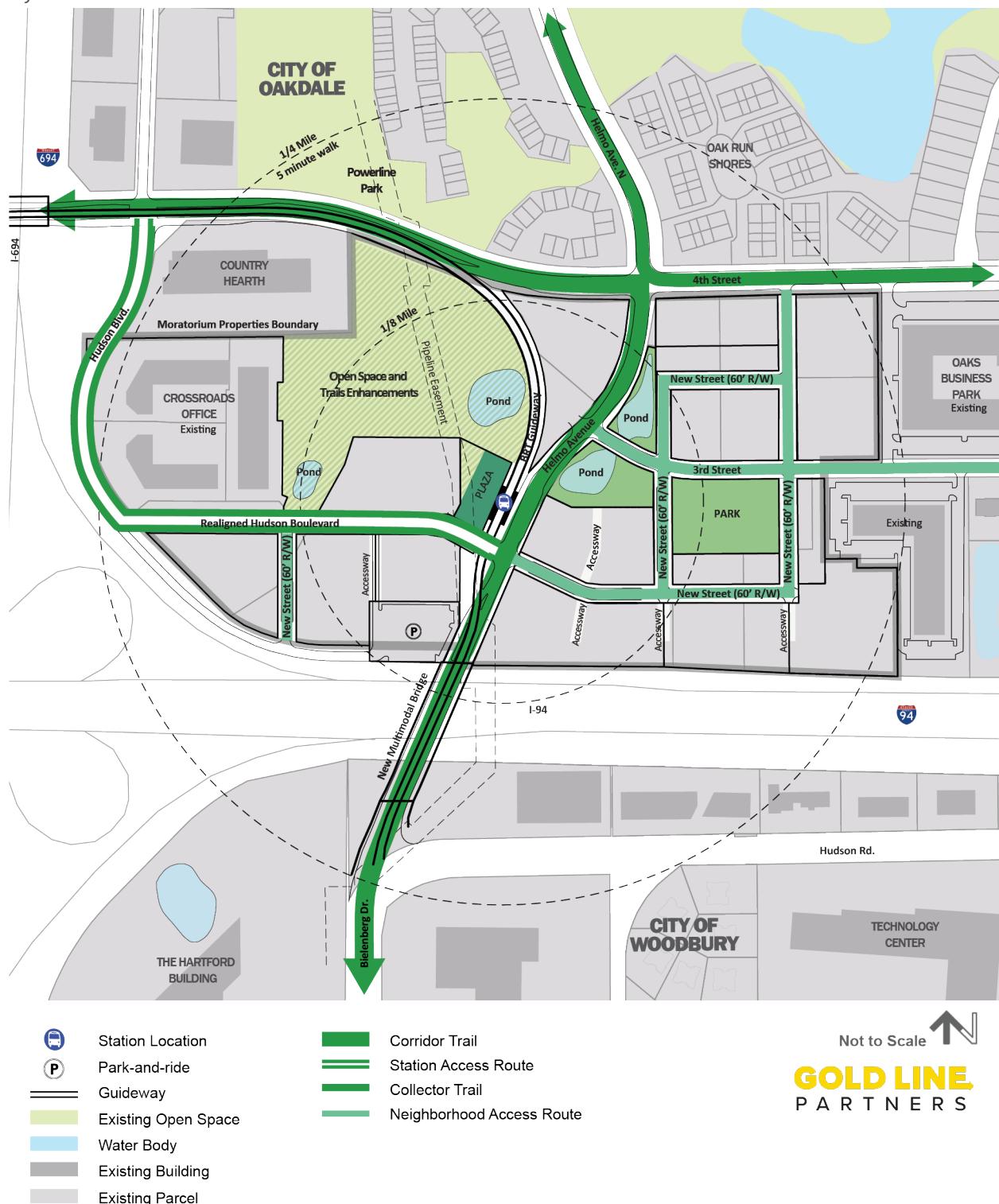
**These complete streets include essential auto and service access and ‘right-sized’ roadway travel lanes to preserve necessary mobility for existing collector and minor reliever roadways, while the new street grid provides access to development parcels on local streets that fosters pedestrian and bicycle friendly mixed-use development.**

## KEY CIRCULATION PLAN ELEMENTS

The circulation framework consists of four primary circulation elements. Safe and direct access to the station, connections to and from destinations outside the half-mile study area, and connections along the Gold Line BRT alignment are provided. The framework includes:

- **Corridor Trail.** A shared walking and biking trail adjacent to the bus rapid transit route links the Greenway Avenue Station east of I-694 to the Tamarack Station south of I-94 in Woodbury.
- **Collector Trail.** Collector Trails provide important walking and biking connections between the Corridor Trail, neighborhoods, jobs and shopping destinations
- **Station Access Routes.** A realigned Hudson Boulevard provides direct station access and a destination for street-oriented commercial uses that support an active station environment.
- **Neighborhood Access Routes.** A fine-grained street grid supports pedestrian, bike, and auto access between the station, transit-oriented development sites, and destinations within a half mile.

Figure 15. Circulation Framework



## CORRIDOR TRAIL

A primary objective of the overall corridor-wide BRTOD Plans project is to integrate walking and biking adjacent to the BRT alignment, connecting BRT stations along the entire corridor.

Within the Helmo Avenue Station planning area, a multi-use trail is incorporated into the rights-of-way along Helmo Avenue (north to south from 4<sup>th</sup> Street to the Helmo Avenue bridge and crossing I-94 to Bielenberg Drive) and 4<sup>th</sup> Street (east to west from Helmo Avenue to the bridge crossing I-694 to Hadley Avenue N.). Paralleling the BRT route, this multi-use trail will connect to the station at Greenway Avenue to the east and to the Tamarack Station to the south in Woodbury.

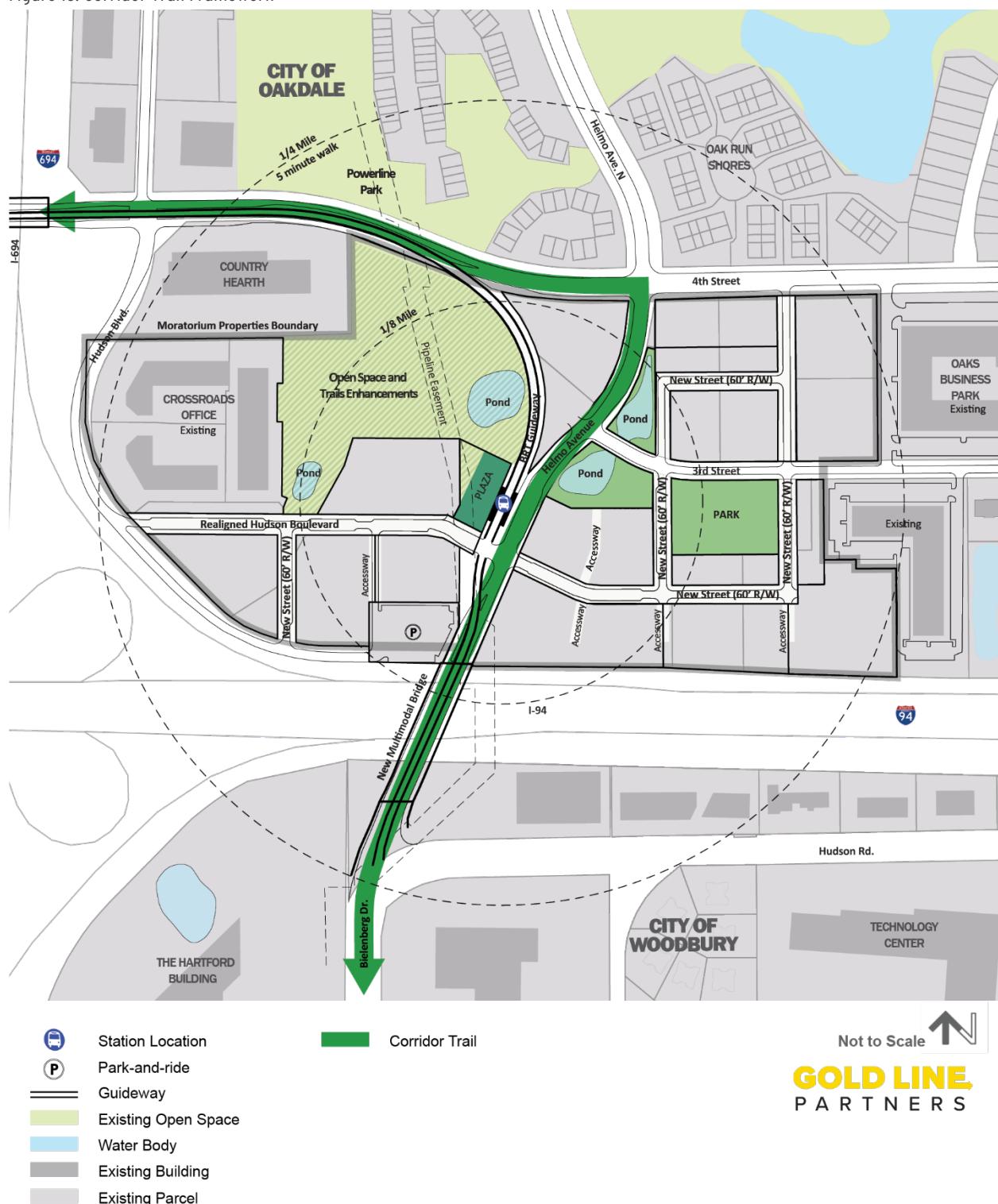
## REFINEMENT OF PRELIMINARY ENGINEERING DESIGN

The preliminary design of the 4<sup>th</sup> Street BRT route included a six-foot sidewalk along the south side of the BRT guideway to the BRT station that transitioned further south to a wider mixed-use trail along the west side of Helmo Avenue and across I-94 into Woodbury. Refinement of the preliminary engineering provides a continuous multi-use trail segment through the station area and ensures direct access to existing trails and sidewalks along Helmo Avenue and 4<sup>th</sup> Street. The refinement includes the following:

- 12-foot wide multi-use trail along the west side of Helmo Avenue connecting the planned Helmo Avenue bridge multi-use trail to an existing multi-use trail on the north side of 4th Street.
- Expansion of the existing 8-foot wide trail to a 12-foot wide multi-use trail along the north side of 4th Street from Helmo Avenue to the 4th Street bridge.

Due to budget constraints, it will be necessary for the City of Oakdale to continue to work with Metro Transit and other BRT partners to determine which of the identified trail improvements can be included in their entirety, in part, or not included in the BRT project. Detailed description and section drawings of the multi-use trail along Helmo Avenue N. and 4<sup>th</sup> Street are shown on the subsequent pages.

Figure 16. Corridor Trail Framework



## HELMO AVENUE N.

Helmo Avenue N. design modifications improve walking and biking access to the station and future development while maintaining auto circulation and vehicular access.

The existing Helmo Avenue right-of-way is 78 feet wide and includes:

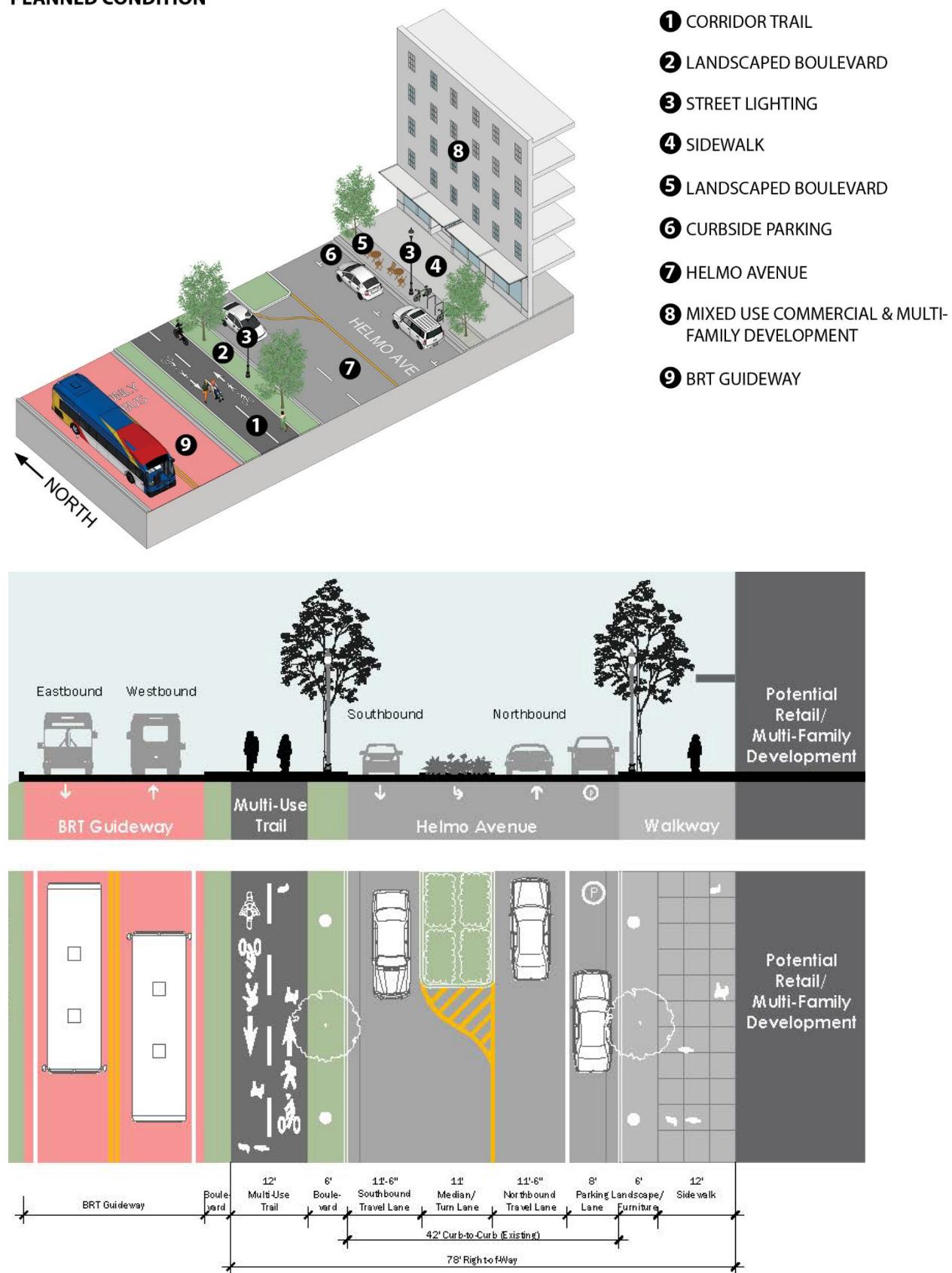
- A three-lane roadway (two travel lanes and a continuous turn lane) with curbs.
- A lawn and landscaped boulevard on the west side of the roadway.
- A lawn and landscaped boulevard with a sidewalk on the east side of the roadway.

In anticipation of the BRT guideway and station and future transit-oriented development, the design for Helmo Avenue includes the following roadway modifications and design elements:

- A landscaped boulevard and paved asphalt multi-use trail on the west side of the roadway.
- Pedestrian-scaled street lighting and street trees located between the curb and the trail or sidewalk.
- Restriping of the existing three-lane roadway to include a curbside parking lane on the east side of the roadway. Existing curb-to-curb dimensions allow for addition of the parking lane while maintaining adequate travel lanes.
- A wide sidewalk with landscaping and outdoor seating area adjacent to the curb and parking, supporting future planned retail/commercial storefronts.

Figure 17. Helmo Avenue N. (looking North)

**PLANNED CONDITION**



## 4<sup>TH</sup> STREET N.

Design modifications to 4th Street improve walking and biking access to the station by extending the existing trail on the north side of the roadway east to the 4th Street bridge and to employment uses east of I-694.

The current 4<sup>th</sup> Street right-of-way is 100 feet wide and includes:

- A two-lane roadway (east/west auto travel) with shoulders.
- A curb, lawn in boulevard, and a portion of an 8-foot paved asphalt multi-use trail on the north side of the roadway. The trail extends approximately 650 feet west of Helmo Avenue and connects to a northbound trail into Powerline Park.

Design for 4th Street N. includes the following roadway modifications and design elements:

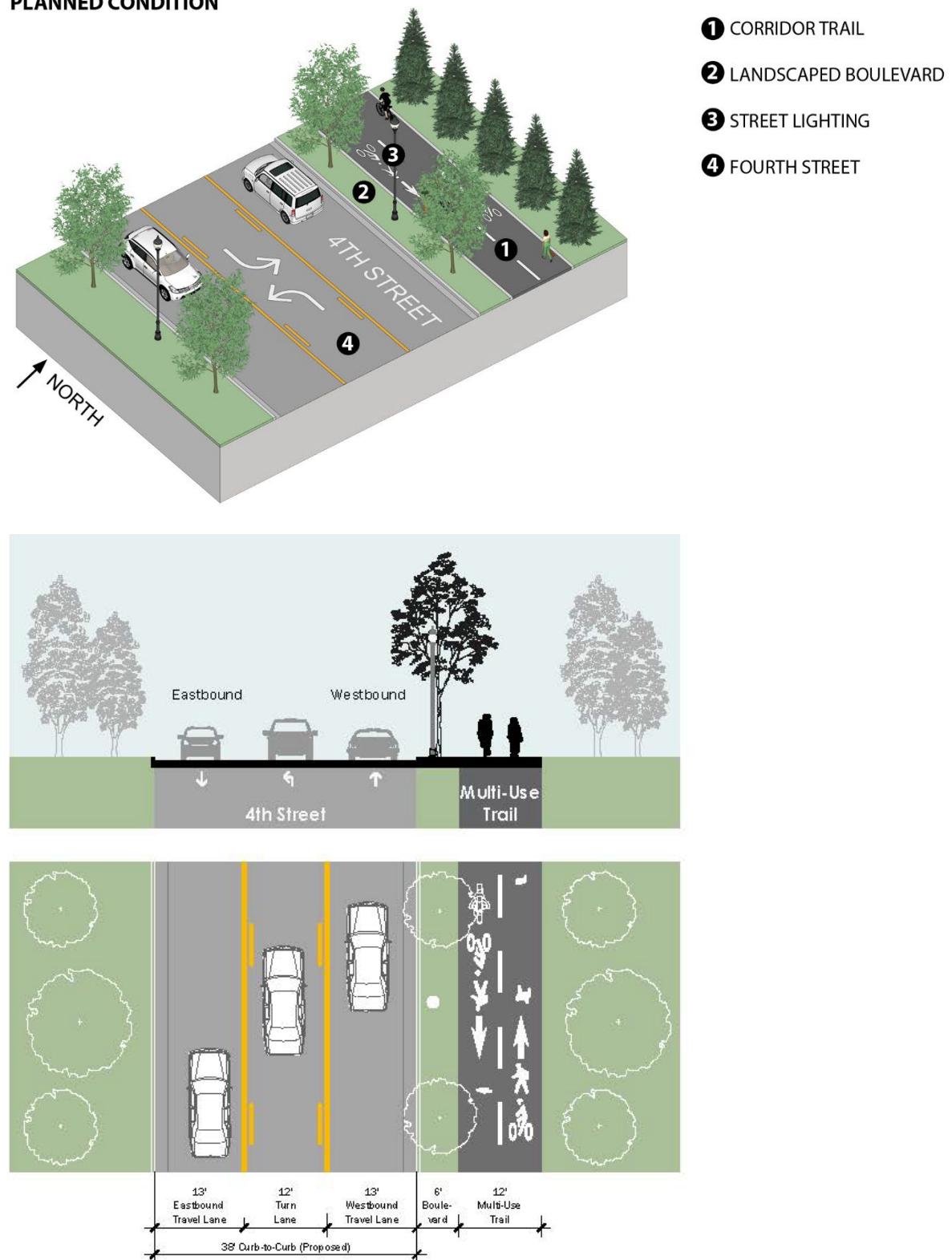
- Future widening of the roadway to include an additional turn lane. East/west travel lanes to remain.
- A landscaped boulevard and paved asphalt multi-use trail on the north side of the roadway from Helmo Avenue to the 4th Street bridge, widening the existing trail by 4 feet (12-foot trail) and extending the trail segment an additional 1,250 feet.
- Pedestrian-scaled street lighting and trees located between the curb and the trail on the north side of the roadway.
- A landscaped boulevard on the south side between the roadway and future BRT guideway.

All trails should include:

- Wayfinding signs at intersections with existing trails, BRT station and area destinations

Figure 18. 4<sup>th</sup> Street N. (Looking West)

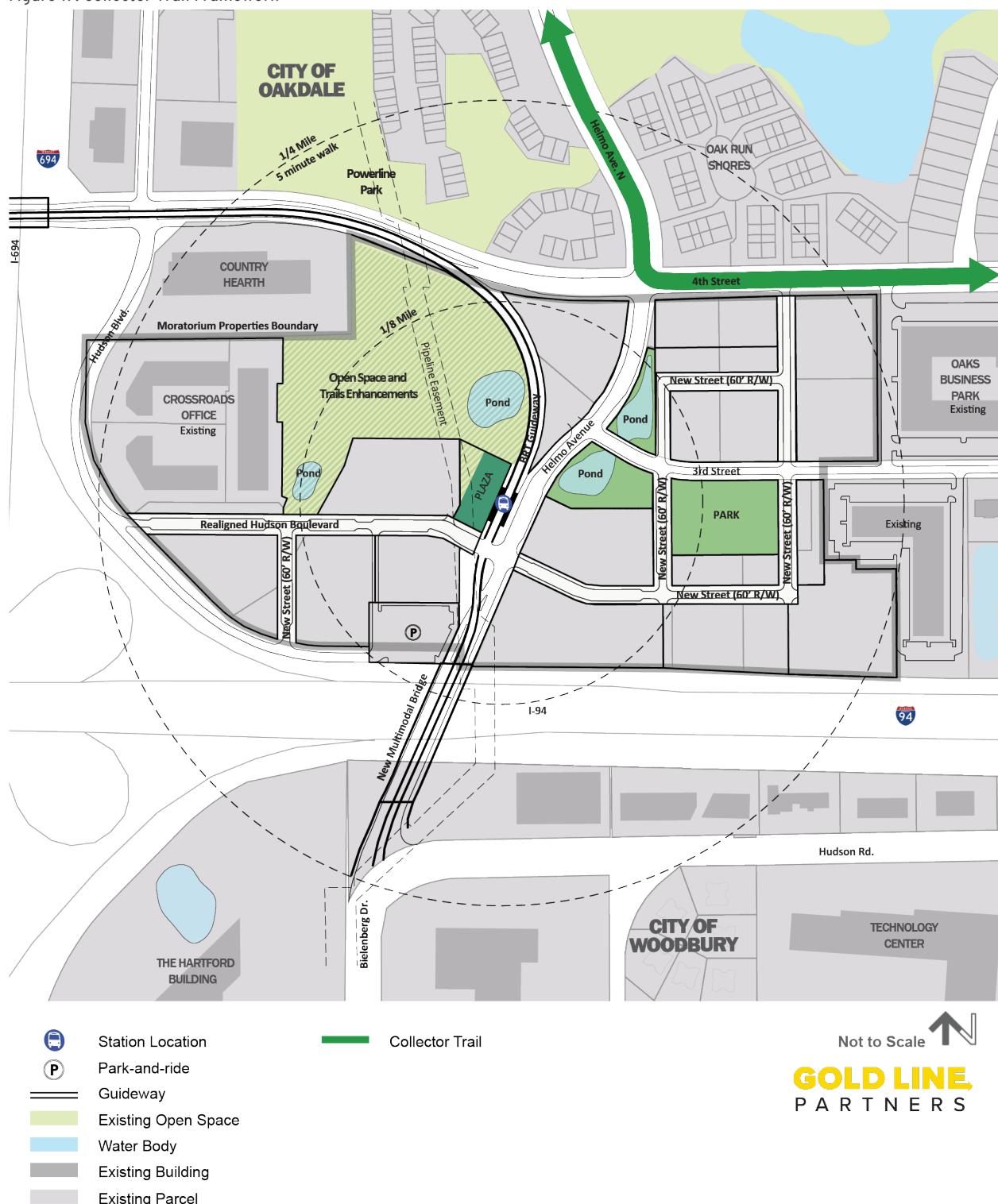
**PLANNED CONDITION**



## COLLECTOR TRAIL

Located outside the five-minute walking radius, Collector Trails provide important routes for bicyclists and walkers between the Corridor Trail, neighbor destinations and the regional bicycle network.

Figure 19. Collector Trail Framework



## 4<sup>TH</sup> STREET N.

4<sup>th</sup> Street Collector Trail improvements support walking and biking access to the station by widening the existing trail on the north side of the roadway from Helmo Avenue N. east to Radio Drive. Over time, curbside parking can be provided next to future office development along the south side of the street.

The current 4th Street right-of-way is 100 feet wide and includes:

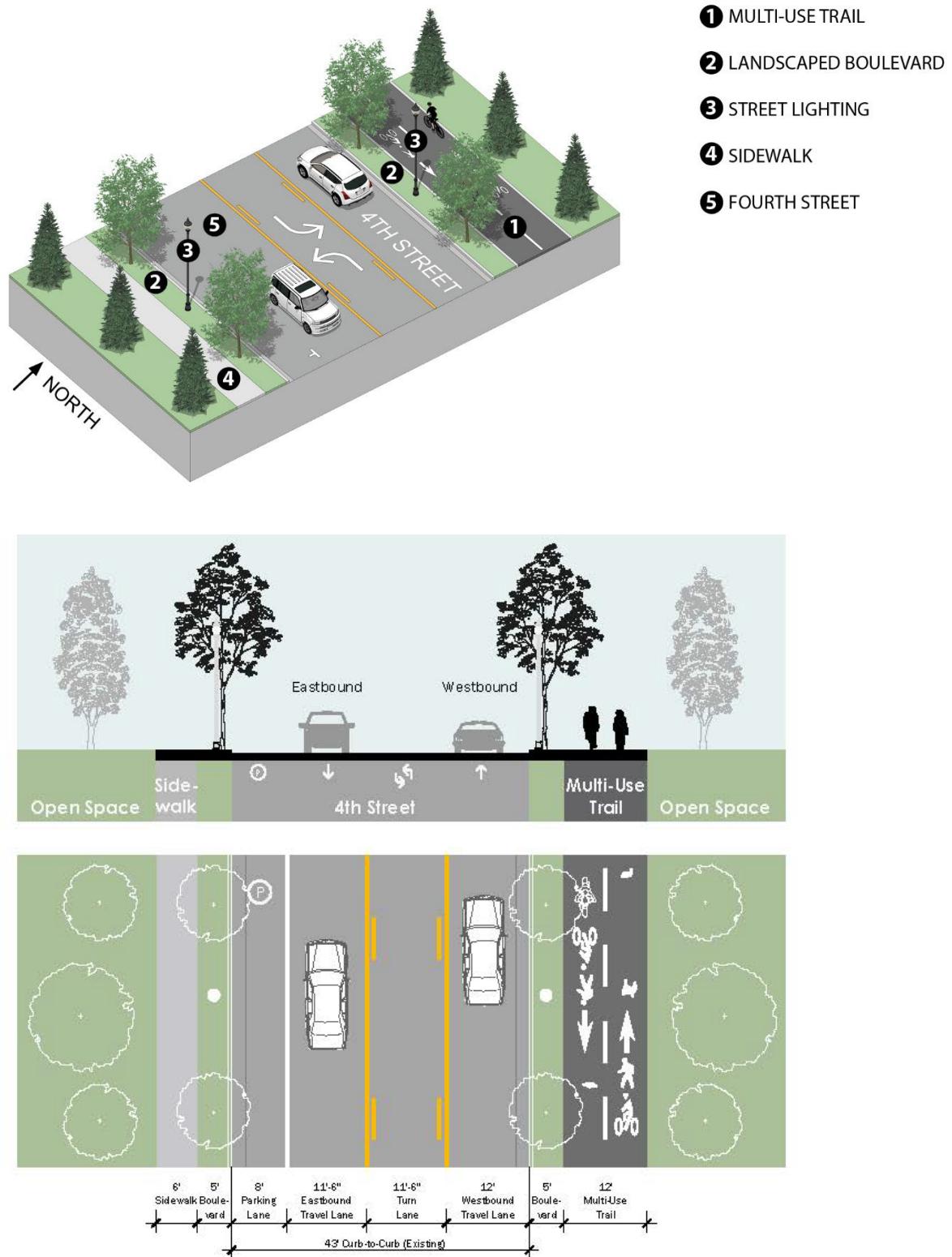
- Two travel lanes with curbs and a right-turn lane to existing residential development on the north side of the street.
- A shoulder on the south side of the roadway.
- A curb, lawn in boulevard, and 8-foot trail on the north side of the roadway.

Roadway modifications and design elements include:

- A landscaped boulevard and 4-foot widened asphalt paved multi-use trail on the north side of the roadway.
- Pedestrian-scaled street lighting and street trees located between the curb and the multi-use trail.
- Consideration for restriping the existing three-lane roadway to include a curbside parking lane on the south side of the roadway. Existing shoulder-to-curb dimensions allow for addition of the parking lane and adequate travel lanes for autos.
- A sidewalk with landscaped boulevard on the south side of the roadway could be constructed with future development.

Figure 20. 4th Street N. (Looking West)

**PLANNED CONDITION**

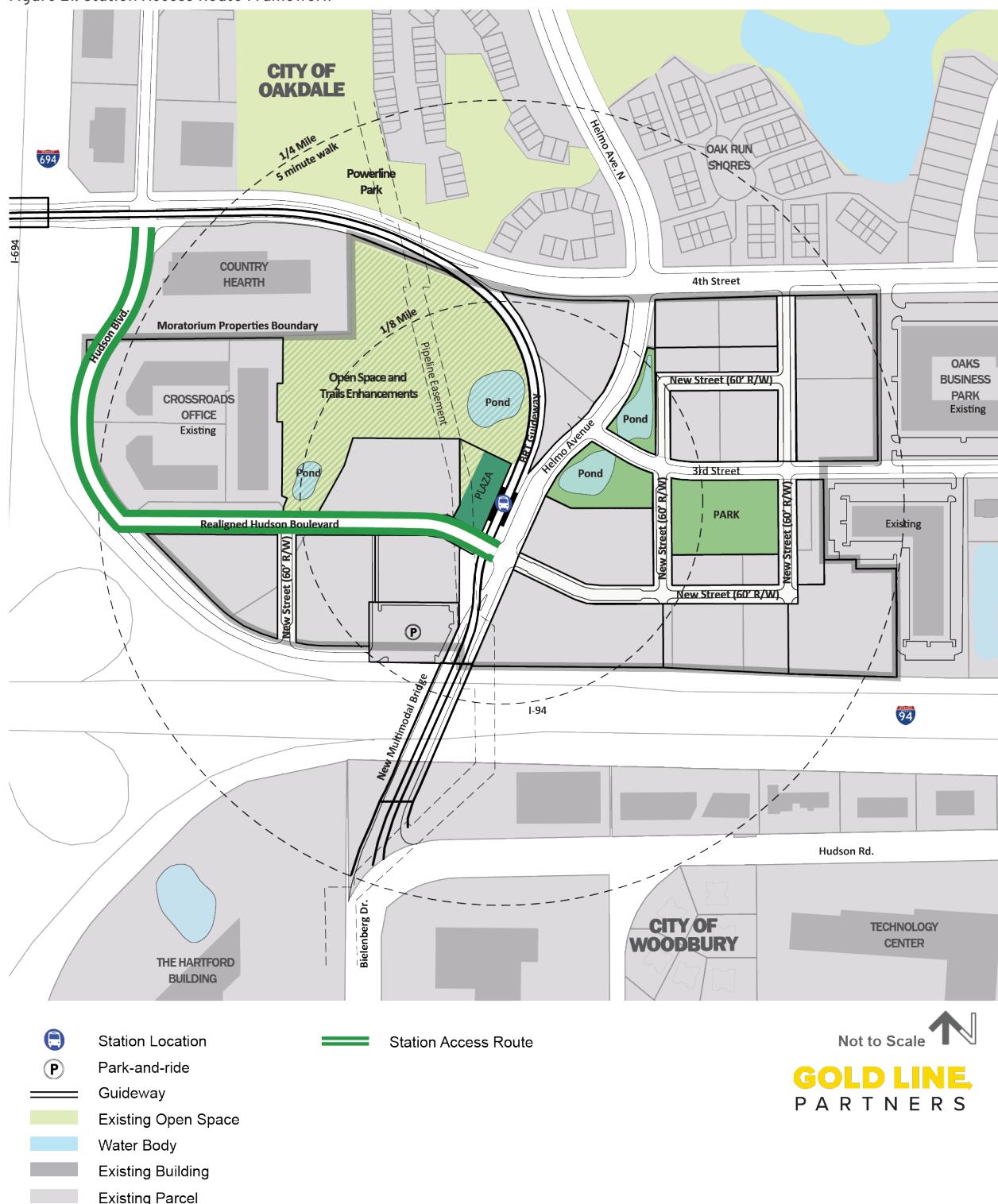


## STATION ACCESS ROUTES

The realignment of Hudson Boulevard improves access to redevelopment sites adjacent to the station and provides a setting for street-oriented development. The realigned roadway will:

- Serve as a primary pedestrian and bicycle access route to the station, linking the concentration of existing employment uses within a five-minute walk of the station with those further north and west of the station along I-694.
- Establish a destination for storefront commercial uses that support an active BRT station environment.
- Provide commuter access to park-and-ride.

Figure 21. Station Access Route Framework



## HUDSON BOULEVARD REALIGNMENT

Today, Hudson Boulevard serves a mix of office and light manufacturing uses and extends south from 4<sup>th</sup> Street to a dead-end between an existing multi-tenant industrial building and I-94.

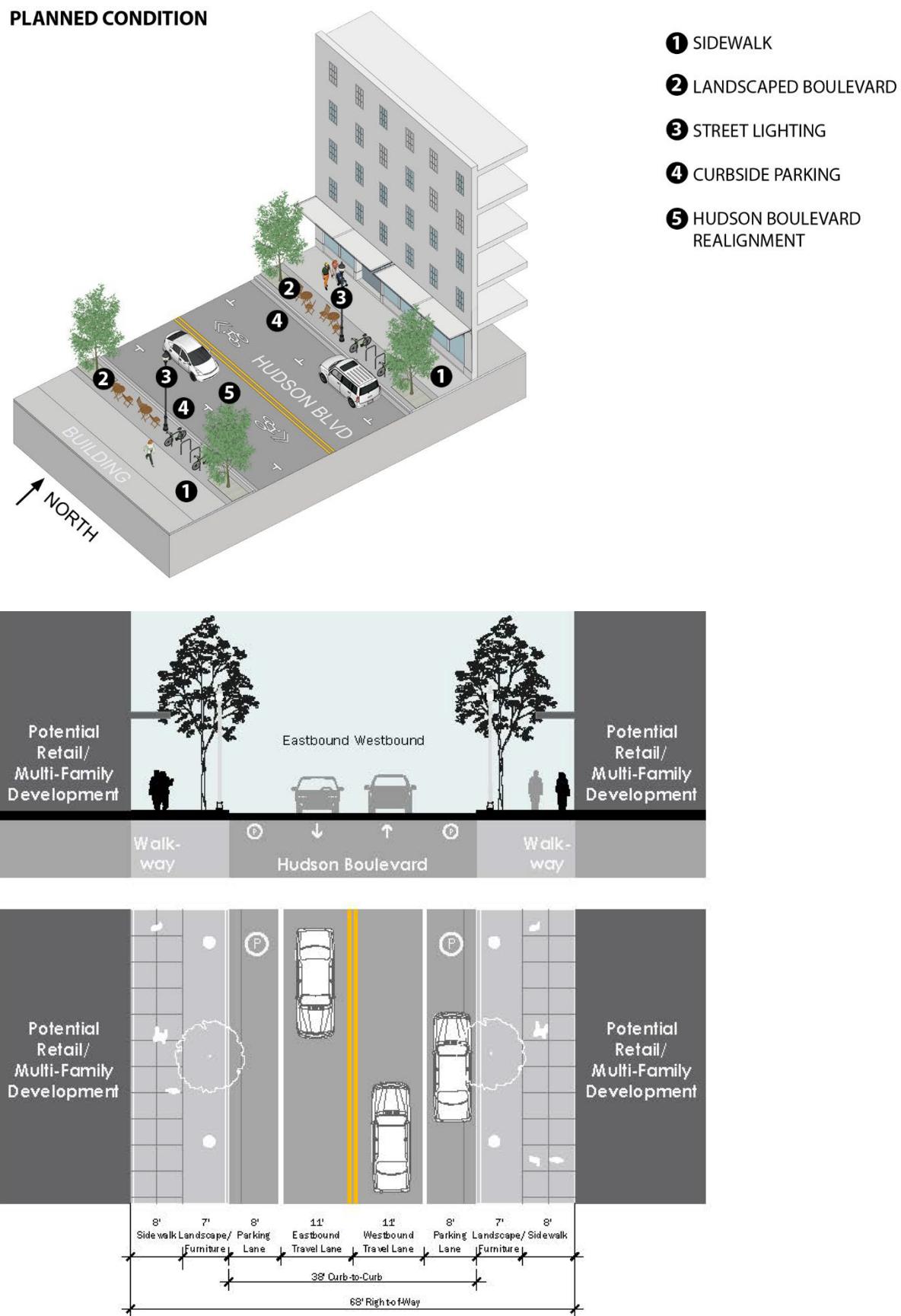
The realignment of Hudson Boulevard preserves the access and function of existing uses and encourages future transit-supportive development. The existing roadway would remain from 4<sup>th</sup> Street to the driveway access at the Crossroads of Oakdale office/warehouse building. The roadway would then extend east to Helmo Avenue N. and the location of the BRT station and future bridge crossing of I-94. The existing roadway further south would remain as a service road, providing access to existing uses and future planned park-and-ride and redevelopment.

The design for the new realigned Hudson Boulevard includes the following design elements:

- A shared auto and bicycle two-way roadway with curbside parking on both sides of the street.
- Pedestrian-scaled street lighting located between the curb and the sidewalk.
- A wide sidewalk with street trees, landscaping and outdoor seating area adjacent to the curb
- Design elements supportive of future planned retail/commercial storefronts.

Figure 22. Hudson Boulevard Extension (Looking West)

**PLANNED CONDITION**



## HUDSON BOULEVARD ENHANCEMENT

Design modifications to the existing Hudson Boulevard, from the realignment north to 4th Street, will improve walking and biking access to the station and future development while maintaining vehicular access.

The current Hudson Boulevard right-of-way includes:

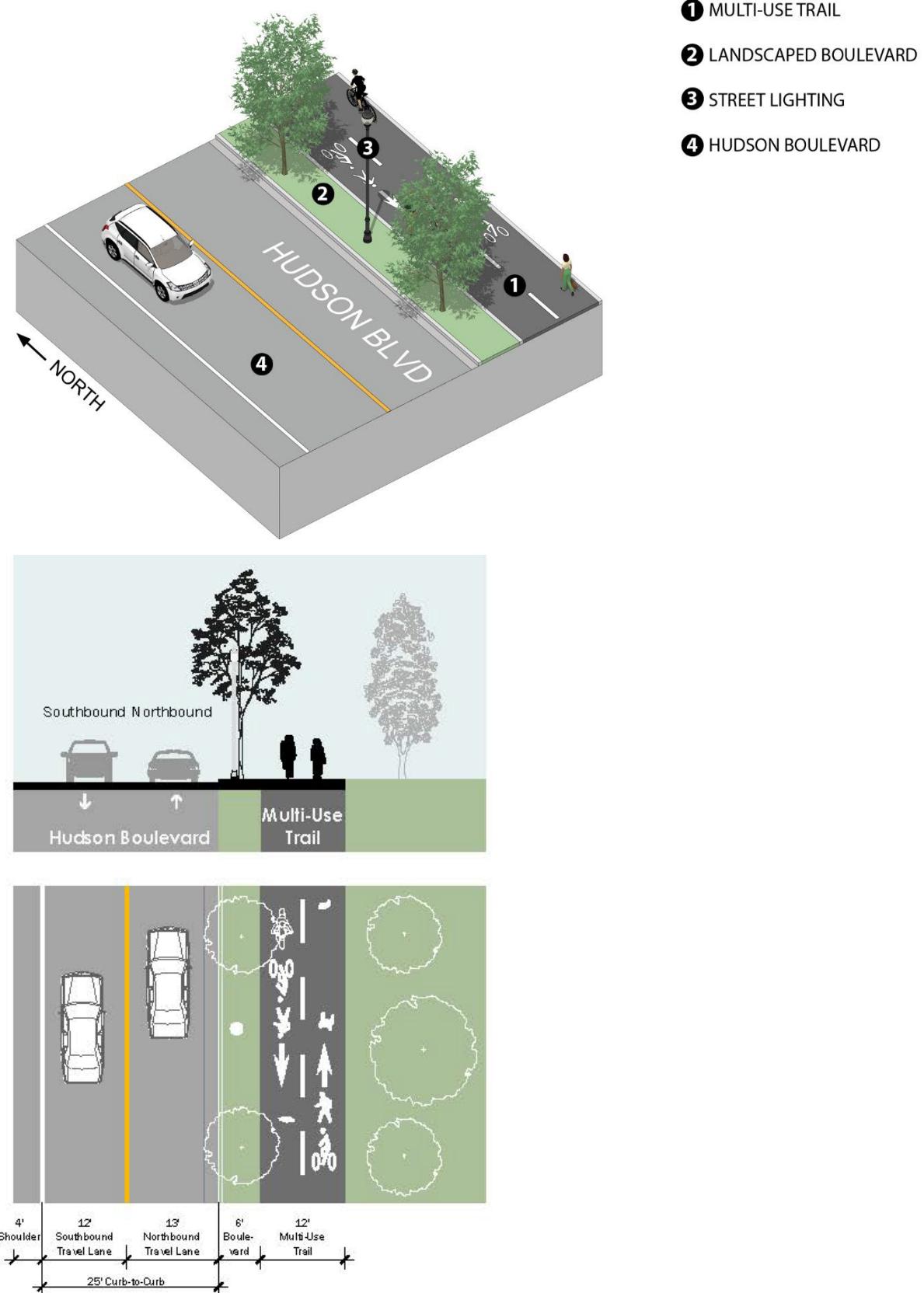
- A two-lane two-way roadway with shoulders.
- A lawn boulevard on each side of the roadway.
- No sidewalks or bicycle lanes.

Roadway modifications and design elements include:

- No change to the west side roadway shoulder or existing travel lanes.
- A new curb and 6-foot landscaped boulevard on the east side of the roadway with pedestrian-scaled street lighting and street trees located between the curb and a multi-use trail.
- A new 10-foot paved asphalt multi-use trail and landscaped boulevard on the east side of the roadway.

Figure 23. Hudson Boulevard Enhancement (Looking North)

**PLANNED CONDITION**

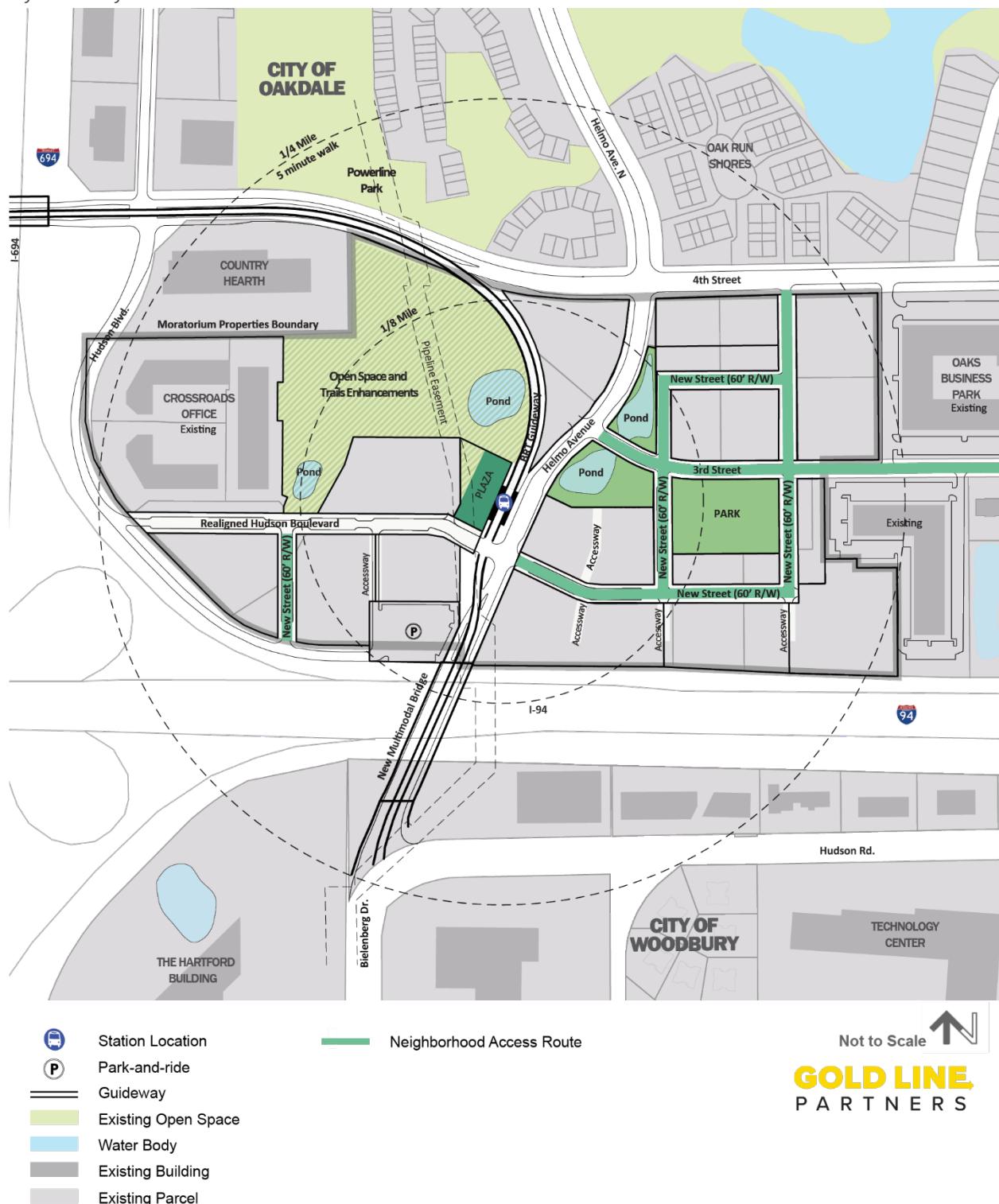


## NEIGHBORHOOD ACCESS ROUTES

Neighborhood access routes include new and enhanced existing streets to:

- Ensure that the mobility of existing arterial streets is not degraded.
- Provide alternate routes for automobiles in order to disperse traffic away from the intersection of 4th Street and Helmo Avenue N.
- Establish intimately-scaled blocks that support walking and biking to transit, parks/open space, and commercial uses located at the BRT station.
- Minimize impacts on existing neighborhoods with improved walking and biking access to station area destinations.
- Provide direct and convenient access to the future BRT station for all transportation modes.

Figure 24. Neighborhood Access Framework



## 3rd Street N.

Improvements to 3<sup>rd</sup> Street N. support walking and biking access to the station and access to neighborhood parks and open space while maintaining local vehicle access.

The current 3<sup>rd</sup> Street N. right-of-way is 60 feet wide and includes:

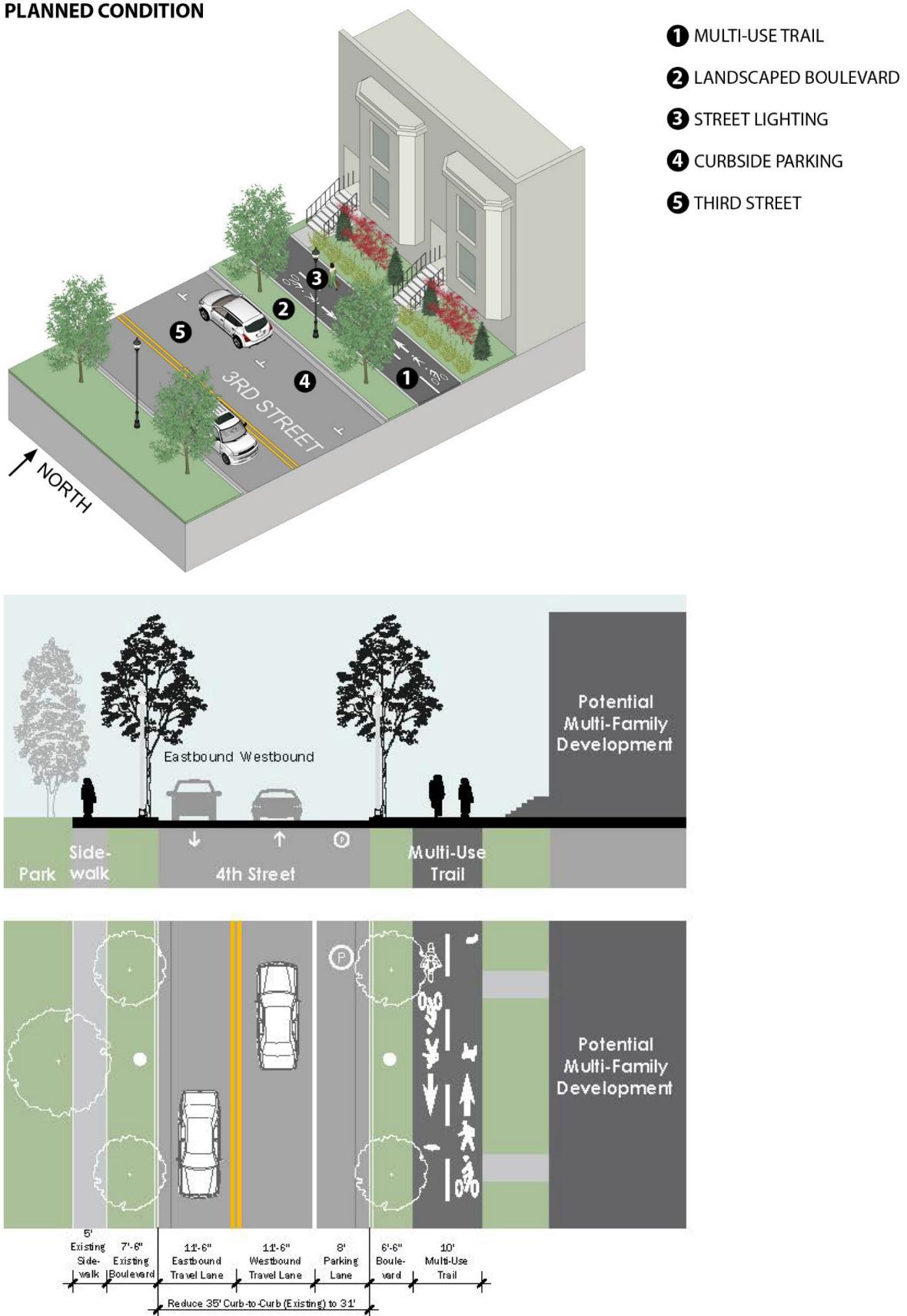
- A two-lane, two-way roadway with curbs.
- A boulevard with grass and street trees and a sidewalk on the south side of the street.
- A boulevard with grass and street trees only on the north side of the street.

Roadway modifications and design elements are to be located between Helmo Avenue N. and Ideal Street and include:

- Reducing existing travel lanes from 17'-6" to 11'-6" (6-foot reduction for each lane) and add an 8-foot parking lane along the north side of the street.
- Relocating and replacing the north side curb, thereby reducing the curb- to-curb distance from 35 feet to 31 feet.
- A new ten-foot multi-use trail located between the boulevard and future development on the north side of the street.
- Adding pedestrian-scaled street lighting on both sides of the street.

Figure 25. 3rd Street N. (Looking West)

**PLANNED CONDITION**



## NEW STREETS AND ACCESSWAYS

New streets and accessways define a fine-grain grid of local streets that foster a walking- and biking-friendly mixed-use neighborhood.

### New Streets

New streets are intended to be low volume and low speed (15 mph) streets serving multi-family housing and office uses. New street design elements include:

- A two-lane roadway with curbside parking on both sides of the street.
- Sidewalks and boulevards with street trees located adjacent to curbside parking on both sides of the street.
- Pedestrian-scaled street lighting located between the curb and sidewalk

### Accessways

Accessways are to be provided where long block frontages exist to ensure that monolithic buildings are not constructed and to provide for pedestrian, bicycle, and limited vehicle access within a narrower profile.

Accessways extend through a development parcel providing both physical and visual access through the parcel. Accessways provide attractive passive open spaces for adjacent housing and employment uses while accommodating limited vehicle access for vehicle loading, drop-off and deliveries, and on-site private parking facilities as needed for development sites. Building entries and individual unit doorways and windows are encouraged along accessways.

Accessway design elements include:

- A maximum overall width of 40 feet.
- A maximum 20-foot paved shared-use pathway for autos, pedestrians and bicycles, and fire vehicle access.
- 10-foot wide landscaped plantings beds located between the building and the shared-use pathway that may include paved seating areas for outdoor activity and gathering.

Figure 26. New Street (Typical)

**PLANNED CONDITION**

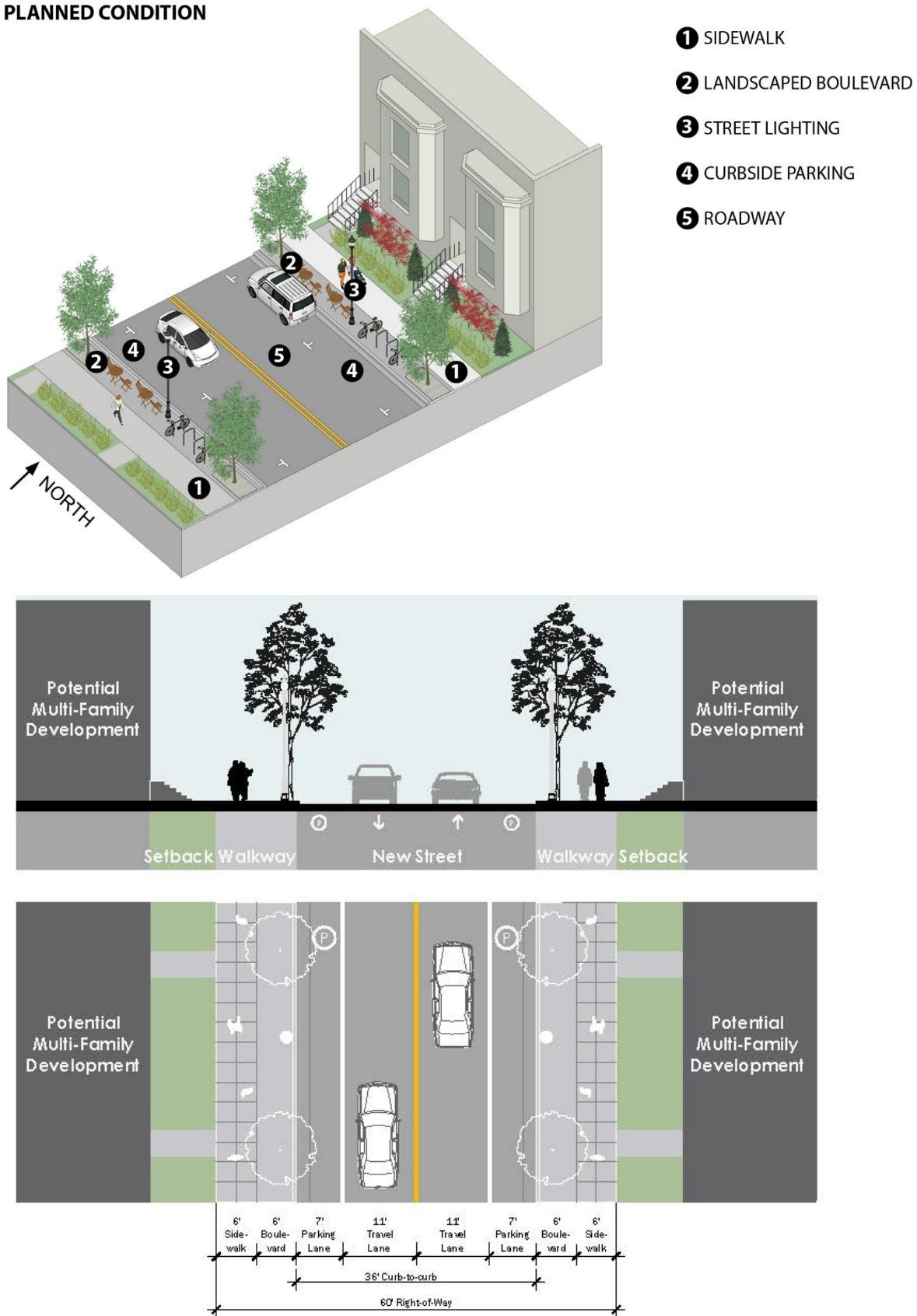
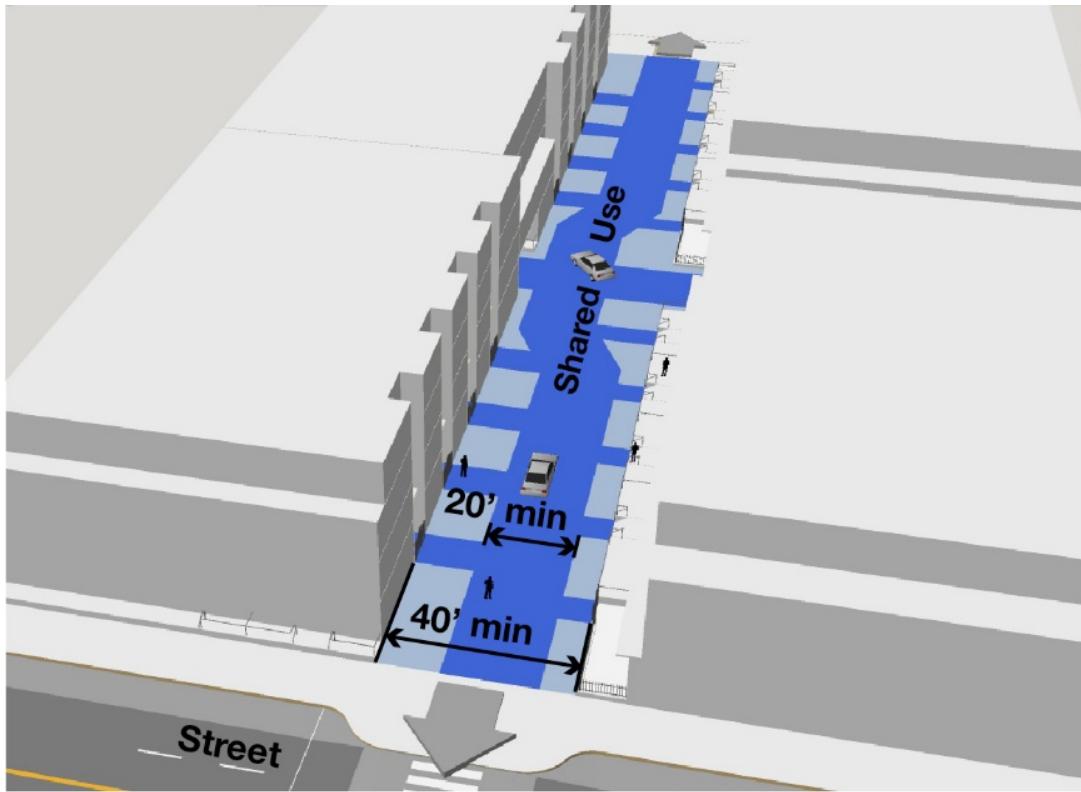


Figure 27. Accessway



## FUTURE TRAFFIC CONDITIONS

Analysis was prepared to identify expected traffic impacts of the proposed transit-oriented development on the local roadway network, specifically impacts to the following intersections:

- Hudson Boulevard and 4th Street N.
- Realigned Hudson Boulevard and Helmo Avenue
- Helmo Avenue and 4th Street N.
- Helmo Avenue and 3rd Street N.
- New roadway (east of Helmo Avenue) and 4th Street N.

The project site is bounded on the west by I-694, on the north by 4<sup>th</sup> Street N. and multi-family residential uses, on the east by The Oaks Tech Center and The Oaks Office Center, and on the south by I-94.

Helmo Avenue is a A-minor reliever and 4th Street N. is classified as a major collector. An A-minor reliever (2-lane undivided) approaches capacity when the ADT reaches 10,000 vpd (vehicles per day), while a major collector (2-lane with turn lanes) approaches capacity when the ADT reaches 19,000 vpd. The speed limit for Helmo Avenue is 35 miles per hour (mph) and 4th Street N. has a speed limit of 45 mph. Both roadways are two-lane undivided roadways.

An off-street bicycle and pedestrian trail is located parallel to 4th Street and Helmo Avenue. Sidewalks are present on the south side of 3rd Street from Helmo Avenue to Ideal Avenue and along the west side of Ideal Avenue from 3rd Street to 4th Street.

There are currently no local or express transit routes that directly serve the project area. Four express routes and one local route travel through the station area along I-94.

## ANALYSIS

A new bridge connecting Helmo Avenue to Bielenberg Drive over I-94 will be constructed as part of the BRT project and new streets will establish a street network to access development. The analysis evaluated existing conditions and horizon years 2028 and 2040 and included:

- Traffic growth rates determined using the regional travel demand model.
- The impact of the proposed development on the local roadway network at the intersections of: Helmo Avenue and 4th Street; Hudson Boulevard and 4th Street; Hudson Boulevard and Helmo Avenue; 3rd Street and Helmo Avenue; New roadway and 4th Street.

## SUMMARY

Under the 2028 No-Build scenario, the level of service (LOS) at the intersection of Helmo Avenue and 4th Street becomes unacceptable with all-way stop control (stop sign). A signal is needed at this intersection to provide acceptable LOS.

Under the 2028 Build Scenario, intersections on Helmo Avenue perform at an unacceptable LOS. Additional improvements are needed to achieve acceptable LOS.

## RECOMMENDATIONS

To minimize the impacts of the new development through 2028, the following improvements are recommended:

- Longer turn lanes at Helmo Avenue and 4th Street signal.
- Signal at 3rd Street and Helmo Avenue with turn lanes.
- Signal at the realigned Hudson Boulevard and Helmo Avenue with turn lanes
- Turn lanes on all approaches at the new connection to 4th Street on the east

Removing some of the dedicated right turn lanes in the 2028 Build scenario will create delay and queuing issues in the PM peak hour at the 4th Street and Hudson Boulevard intersections with Helmo Avenue. However, pedestrian and bicycle access are greatly improved, supporting transit ridership. Eliminating dedicated right-turn lanes on the west side of the street at the Helmo Avenue N. and Hudson Boulevard intersection also improves the ability to provide curbside parking as needed to support storefront retail and commercial development at the station.

Figure 28. Intersection Lane Configuration and Control (2028 No-Build Scenario)

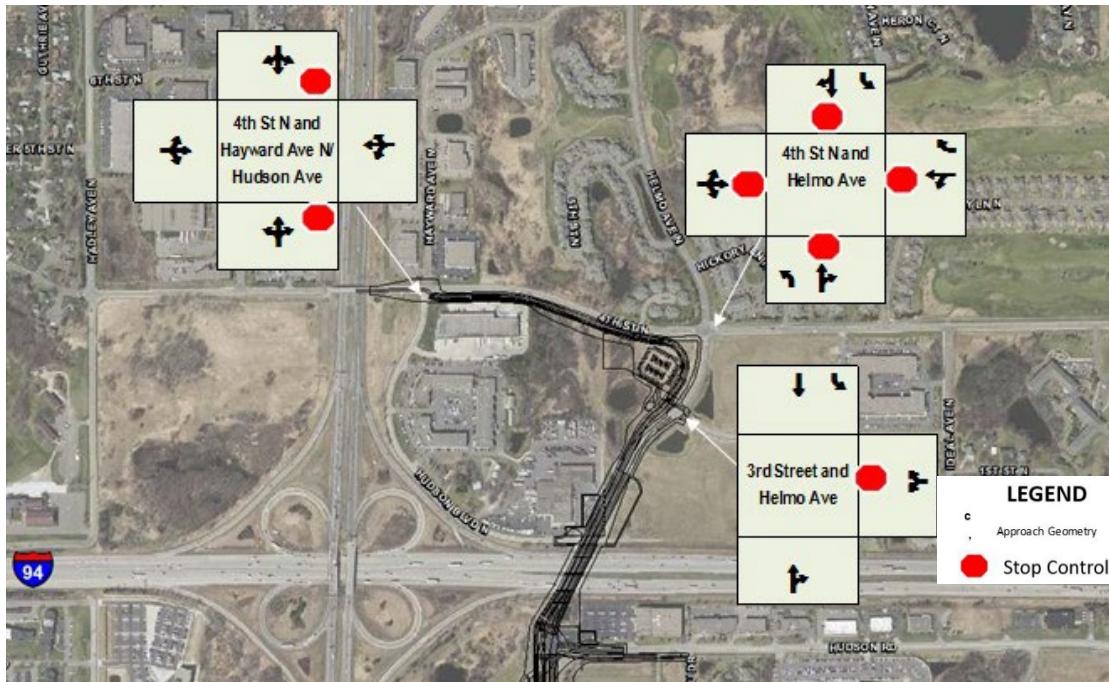
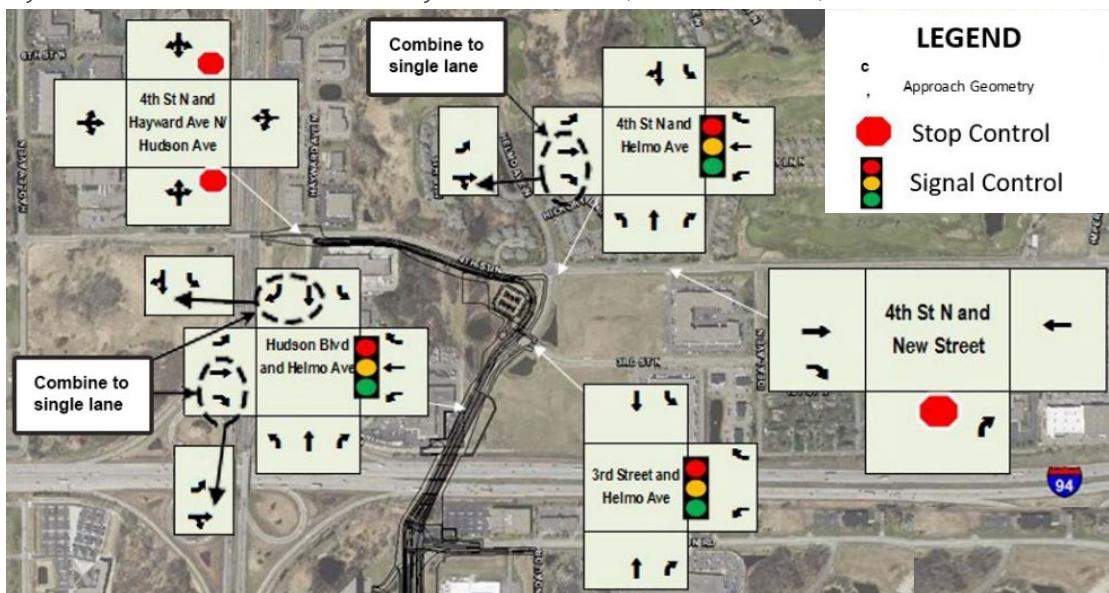


Figure 29. Recommended Intersection Configuration and Control (2028 Build Scenario)







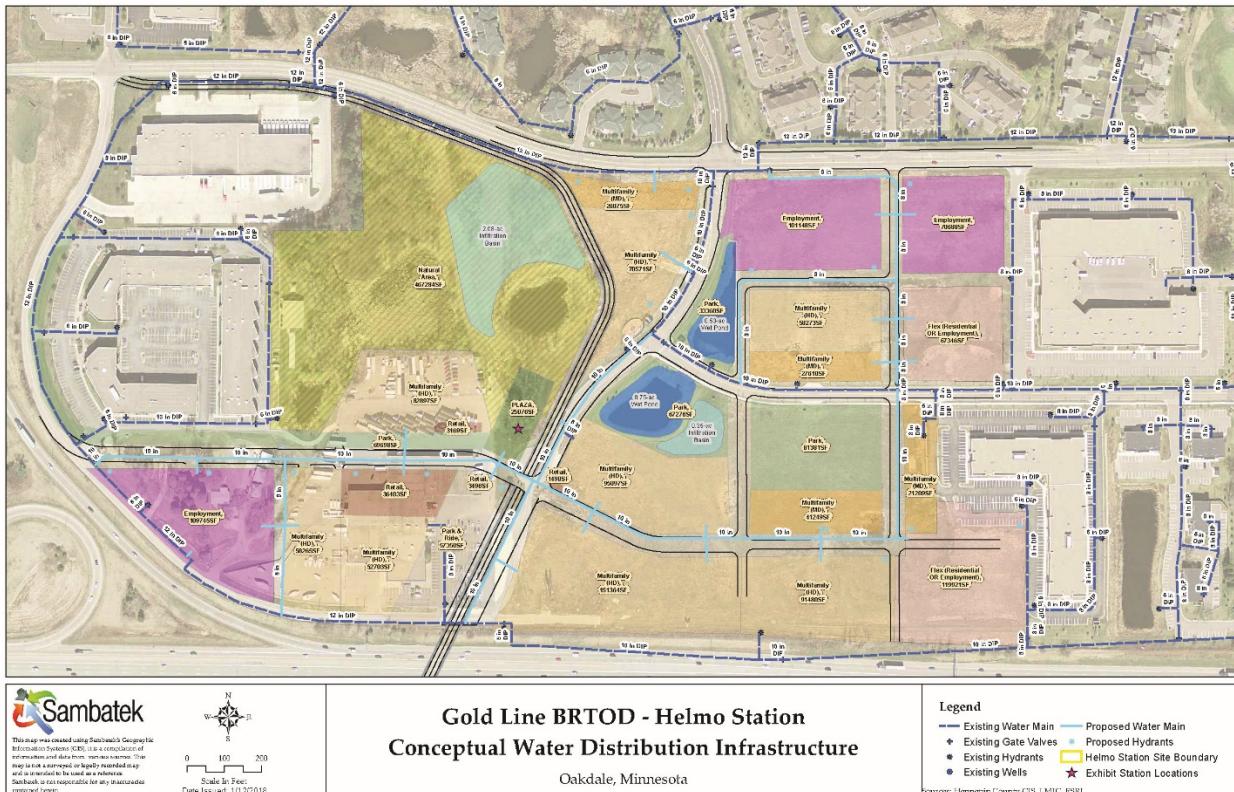
# INFRASTRUCTURE

## WATER

The existing water distribution system consists of a network of mainline pipes ranging from 8 inches in diameter to 12 inches in diameter. The site is supplied by a 1.5-million-gallon water tower located at 2347 Hallmark Avenue and another 1.5-million-gallon water tower located at 1265 Helmo Avenue. The City's water supply originates from eight groundwater wells.

The conceptual water distribution network includes water supply mains sized to accommodate the BRTOD conceptual land uses. The peak daily water demand (calculated for existing and future development) conservatively includes irrigation and other uses which may or may not be applicable to the Helmo Station BRTOD area but are representative of existing water usage by surrounding lands. The existing water supply of 1,445 gallons per minute (gpm) at 78 pounds per square inch (psi) via the existing 12-inch DIP water main will meet a peak daily demand of 665 gpm at 60 psi for the study area. Therefore, the existing water supply and water main has excess capacity and is able to adequately serve the Helmo Station conceptual land use framework.

Figure 30. Conceptual Water Infrastructure



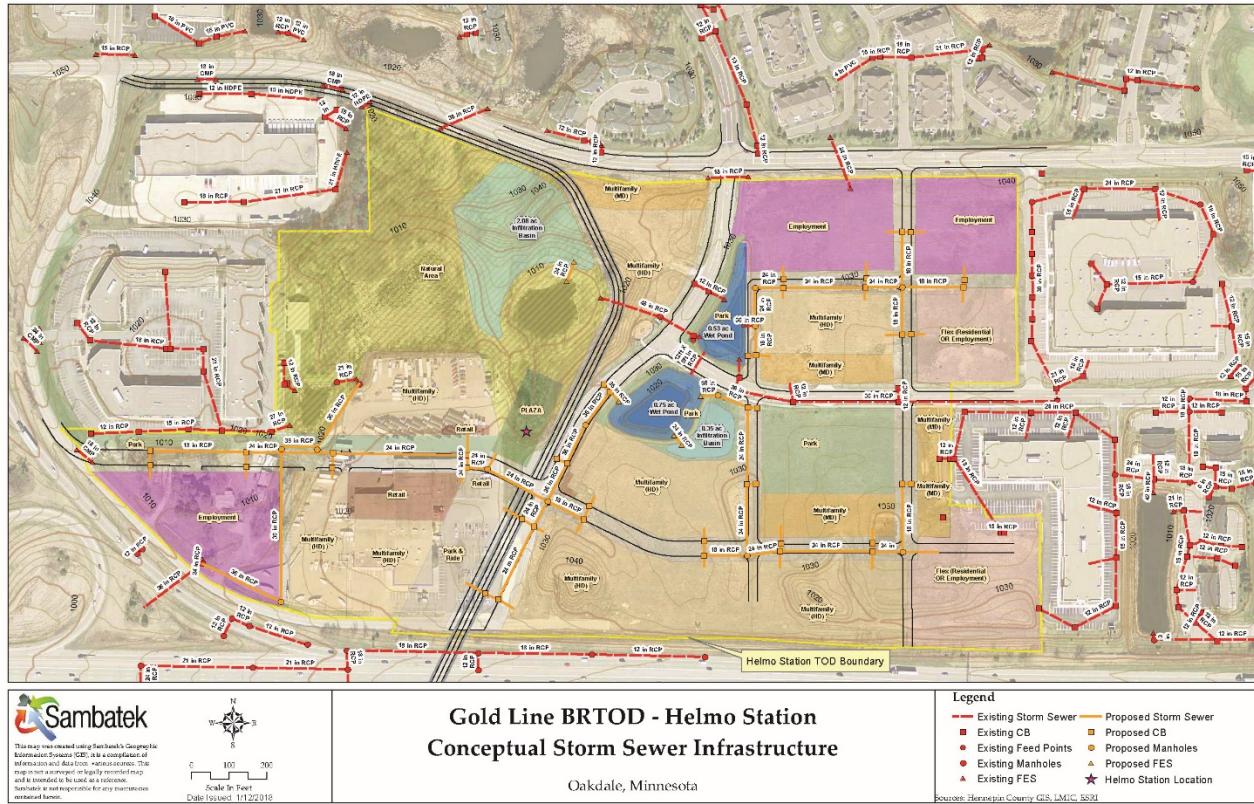
An infrastructure analysis and resulting plans indicate the ability to adequately provide the utilities necessary to serve existing and future development within the Helmo BRT station area.

# STORMWATER

Offsite stormwater run-off from surrounding development is conveyed via a combination of storm sewer and drainage ditches to the existing stormwater management basins and wetland system. The two (2) stormwater management basins drain to the existing central wetland system via a 48-inch storm sewer that crosses under Helmo Avenue. The wetland system then drains to the I-94 drainage system via a 36-inch piped outlet located at the southwest corner of the system.

The conceptual stormwater infrastructure includes a regional stormwater treatment system designed in accordance with the agency requirements for water quality, rate, and volume control and includes a combination of wet retention basins, infiltration basins, vegetated swales, and a subsurface stormwater sewer network; all sized to accommodate the Helmo Station conceptual land use framework.

Figure 31. Conceptual Stormwater Infrastructure



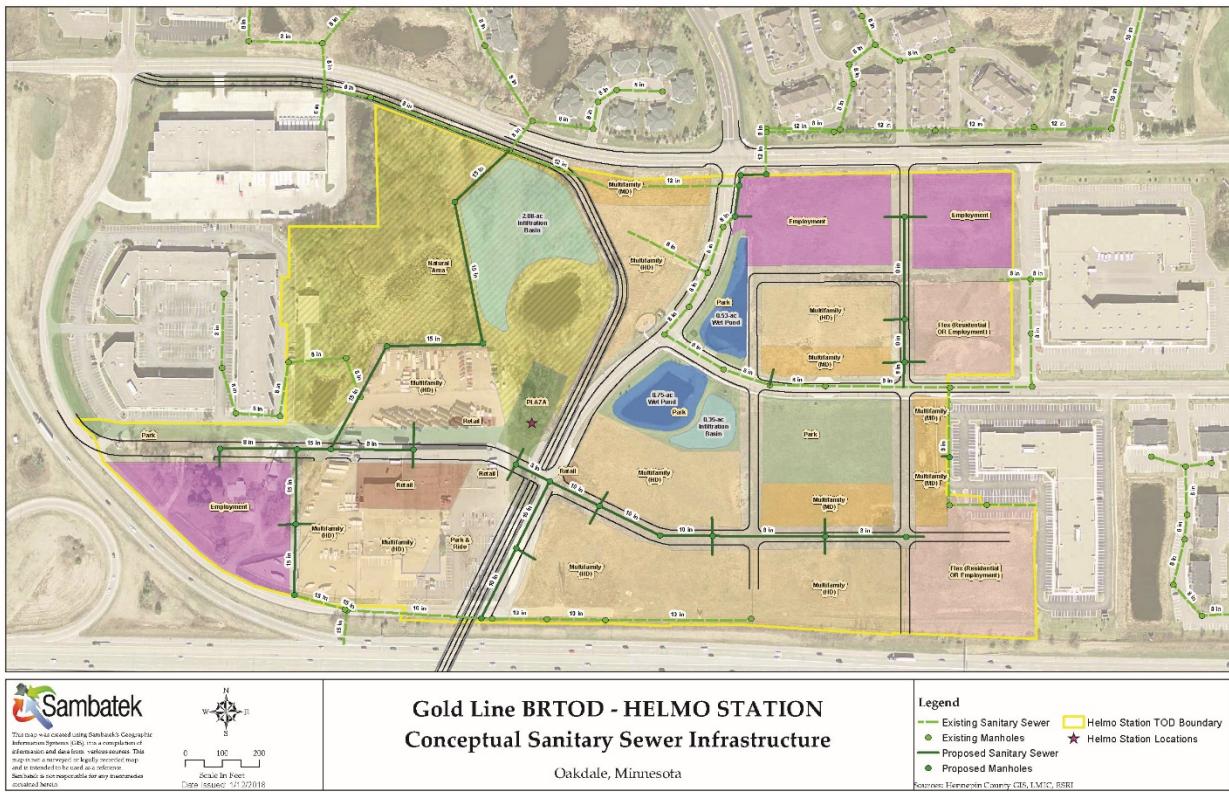
# WASTEWATER

Sanitary sewer service is provided via a network of existing pipes that drain to a 15-inch PVC pipe at the southwest corner of the site. This pipe provides service to existing businesses and residential developments within and adjacent to the BRTOD concept area.

Subtracting the wastewater flow discharged by the existing land use for the Helmo Station area of 18,300 gallons per day (GPD) from the total District 13 flows of 325,000 GPD leaves an existing total wastewater flow, including offsite flows through the Helmo Station area, of 306,700 GPD or approximately 213 gallons per minute (GPM).

Assuming the existing 15-inch PVC sewer pipe is sloped at a minimum of 0.15% in accordance with the City Engineer's Association of Minnesota standard, it currently has the capacity to convey approximately 1,123 gallons per minute (GPM) which exceeds the cumulative flow of 973 GPM including the existing 213 GPM and the projected flow of 760 GPM for the BRTOD Helmo Station conceptual land use framework.

Figure 32. Conceptual Wastewater Infrastructure







# IMPLEMENTATION

## REGULATORY AMENDMENTS

### COMPREHENSIVE PLAN

As an outcome of station area planning for the Helmo Station, the City of Oakdale amended the 2030 Comprehensive Plan to facilitate transit-oriented development around the station area. The amendment changed the future land use classification for ten parcels and incorporates the Bus Rapid Transit Oriented Development Plan as an implementation tool for the amended 2030 Comprehensive Plan. There are approximately 30 acres of vacant developable land and approximately 11 acres proposed for redevelopment in the subject area.

### POLICY GOALS

The proposed Comprehensive Plan amendment will meet a number of 2030 Comprehensive Plan goals including the following:

- **Community Goal 2.** Provide a diversity of land use opportunities within the city, to ensure a wide range of employment, consumer, and housing choices.
- **Land Use Goal 3.** Promote and encourage a diverse array of housing types, styles, and price points to serve a diverse population.
- **Transportation Goal 3.** Promote a multi-modal transportation plan that is fully integrated with land use planning.

## FUTURE LAND USE

The 2030 Future Land Use classification for the subject parcels did not anticipate the development of a bus rapid transit facility in this location. The area had been planned for office-industrial and flex office uses due to proximity to Interstates 94, 494, and 694.

The existing future land use classification is described in the 2030 Comprehensive Plan as the following:

- **Office/Limited Business.** Provide for offices, office buildings, and Class One restaurants.
- **Business Campus.** Provide for corporate development primarily in the form of offices and incidental storage and light manufacturing uses.
- **Open Space.** Publicly owned land that does not have any development on it. Typically, open space is land not subject to active use and includes wetlands, woodlands, or pasture/crop land that has been retired.

The future land use classification applying to all subject parcels is described as the following:

- **Bus Rapid Transit Oriented Development.** Where a mix of transit-supportive development (multi-family medium density residential; multi-family high density residential; office-industrial; professional office; and commercial/retail uses) along with park and open space amenities all come together in the form of one cohesive development. Residential densities shall be 15-24 dwelling units per acre (DU/Ac) for Medium Density Residential land uses and 30-50 DU/Ac for High Density Residential land uses. Non-residential land uses shall have a 0.5-1.0 FAR (floor area ratio). Densities may be adjusted by the City Council on a project specific basis and in accordance with detailed development plans.

## ANALYSIS

The Comprehensive Plan amendment allowed for housing in addition to employment in the subject area.

- **Forecasts.** The Comprehensive Plan amendment will result in a change in the adopted Metropolitan Council population, household, and employment forecasts for this specific area. However, the amendment and associated forecasts are in alignment with the community-level forecasts for the 2040 Comprehensive Plan update.
- **Transportation.** A traffic study has been completed for the subject area as part of the station area planning process. The study recommends signalization and roadway enhancements and concludes that there is sufficient roadway capacity to accommodate the proposed future land use changes.
- **Wastewater.** An analysis was completed of the wastewater needs for the subject area and concluded that there is sufficient capacity in the existing system to accommodate the proposed land use changes.
- **Regional Parks.** The subject area is not within 1/2-mile of an existing or planned regional park facility. The subject area is within ½ mile of the outer limits of a Regional Bike Trail Network identified in the 2040 Regional Parks Policy Plan. There is an existing City trail along Helmo Avenue North that can connect the subject area to a future regional trail.
- **Stormwater.** A stormwater analysis has been completed for the subject area and concluded that there is existing capacity in the stormwater ponding system and areas suitable for additional regional stormwater management to accommodate the change in land use. Development proposals will be subject to permitting standards and requirements of the South Washington Watershed District and the Ramsey Washington Metro Watershed District.
- **Water Use.** Review of the water supply to the subject area has concluded that there is sufficient capacity to accommodate the change in land use.

## CONCLUSION

The Comprehensive Plan map amendment changes the future land use of the subject parcels to implement the BRTOD plan and accommodate a greater range of uses to support transit-oriented development. The existing transportation, stormwater, waste water, and water distribution systems, with some enhancements, can support the development of the BRTOD plan.

The proposed future land use change will allow for additional housing units in the subject area at densities to support transit ridership while also accommodating additional employment. The proposed change in land use is consistent with the community-wide 2040 forecasts for population, households and employment for Oakdale.

The Helmo Station BRTOD Plan will serve as a traditional small area plan and policy guide for development of the area within approximately  $\frac{1}{2}$  mile radius of the planned bus rapid transit (BRT). The Helmo BRTOD Plan provides the land use, circulation, and park and open space framework for development of a new mixed-use neighborhood in the subject area.



## PLANNED UNIT DEVELOPMENT ORDINANCE

In addition to the Comprehensive Plan amendment and in advance of the lifting of the moratorium, the City prepared a new planned unit development (PUD) ordinance for the unbuilt portions of the Oaks Business Park and the Crossroads Properties as indicated on Figure 31.

The Helmo Station BRTOD Plan including the land use, circulation, development and infrastructure frameworks, establishes the directive for the new planned unit development (PUD) ordinance.

The PUD addresses the following development and public right-of-way design standards:

- Permitted uses within the mixed-use designation
- Requirements for building setbacks and heights
- Building materials and design standards
- Building design elements regarding placement, orientation and transparency of windows and doors
- Parking design and location
- Site amenities
- Screening of loading and utilities
- Signage
- Parks, and trails
- New Streets

Specific standards for transit-oriented development incorporated into the new PUD ordinance are identified on the following pages.

Figure 33. New Planned Unit Development Boundary



## BRTOD STANDARDS

BRTOD design standards regulate the pedestrian realm, create a sense of enclosure, foster an active environment and promote safety. Within ¼ mile of the Helmo Station, essential design standards ensure a safe and inviting station environment with activity and ‘eyes on the station’ and support the use and function of the neighborhood park and open spaces. The essential development standards for the station area are identified on the following pages.

## GROUND-FLOOR USES

Ground-floor commercial and retail uses are essential components of an active and vital station area. The ground-floor uses diagram identifies the viable locations for ground-floor retail and commercial uses ensuring that retail and commercial storefronts are provided for and strategically located to serve residents, employees, and visitors.

The ground-floor uses diagram identifies the locations critical for ground-floor retail and commercial uses. At a minimum, retail and commercial uses are required where indicated. Additional locations for retail and commercial uses are encouraged but not required.

### Retail

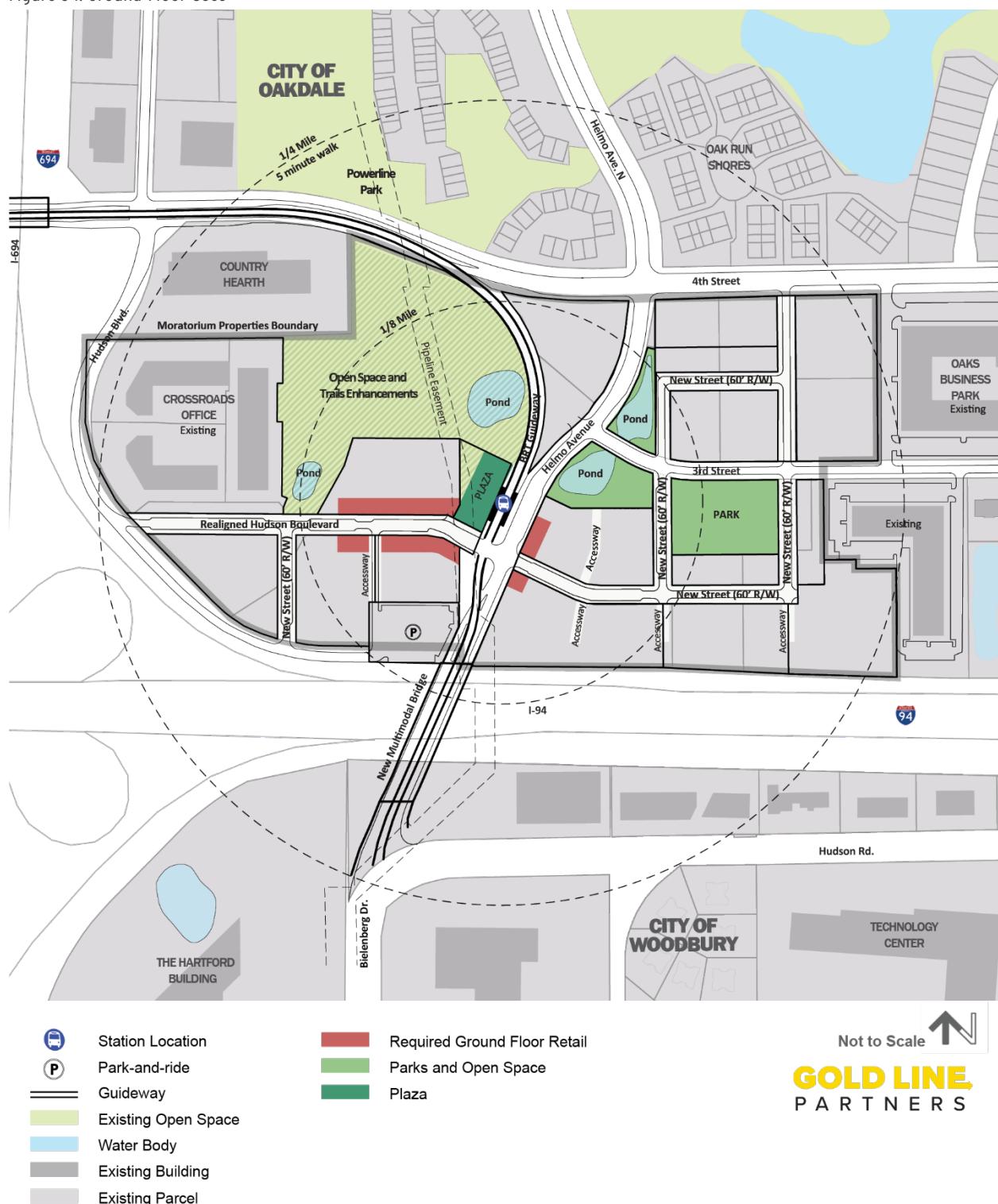
Retail uses include businesses that engage in the sale of merchandise, food, drink and entertainment. These uses have the potential to activate the station area by providing 18-hours of daily activity and to increase safety by improving passive surveillance or 'eyes on the station area.'

### Commercial

Commercial uses are primarily businesses that engage in the sale of services. Commercial uses are proposed to serve as additional neighborhood-serving amenities in the station area. These businesses may include:

- Offices
- Medical services
- Hotels/restaurants
- Convenience services such as hair salons, dry cleaners, and banks

Figure 34. Ground-Floor Uses



## GROUND FLOOR BUILD-TO LINES

### Zero-foot Building Setback

Where zero-foot building setbacks are required, ground-floor building facades must be built directly to the property line and abut the edge of the sidewalk, trail or public use area. Build-to lines are identified in the same locations where ground-floor retail and commercial uses are required or recommended.

Exceptions to the build-to lines criteria are:

- Ground-floor entrances to buildings may be recessed up to five feet behind the build-to line.
- Windows and walls may be recessed up to 18 inches from the build-to line to accommodate columns or other architectural elements that engage the build-to line.
- Interruptions to the build-to line created by passageways to courtyards, parking or other private spaces.

### Maximum 10-foot Building Setback

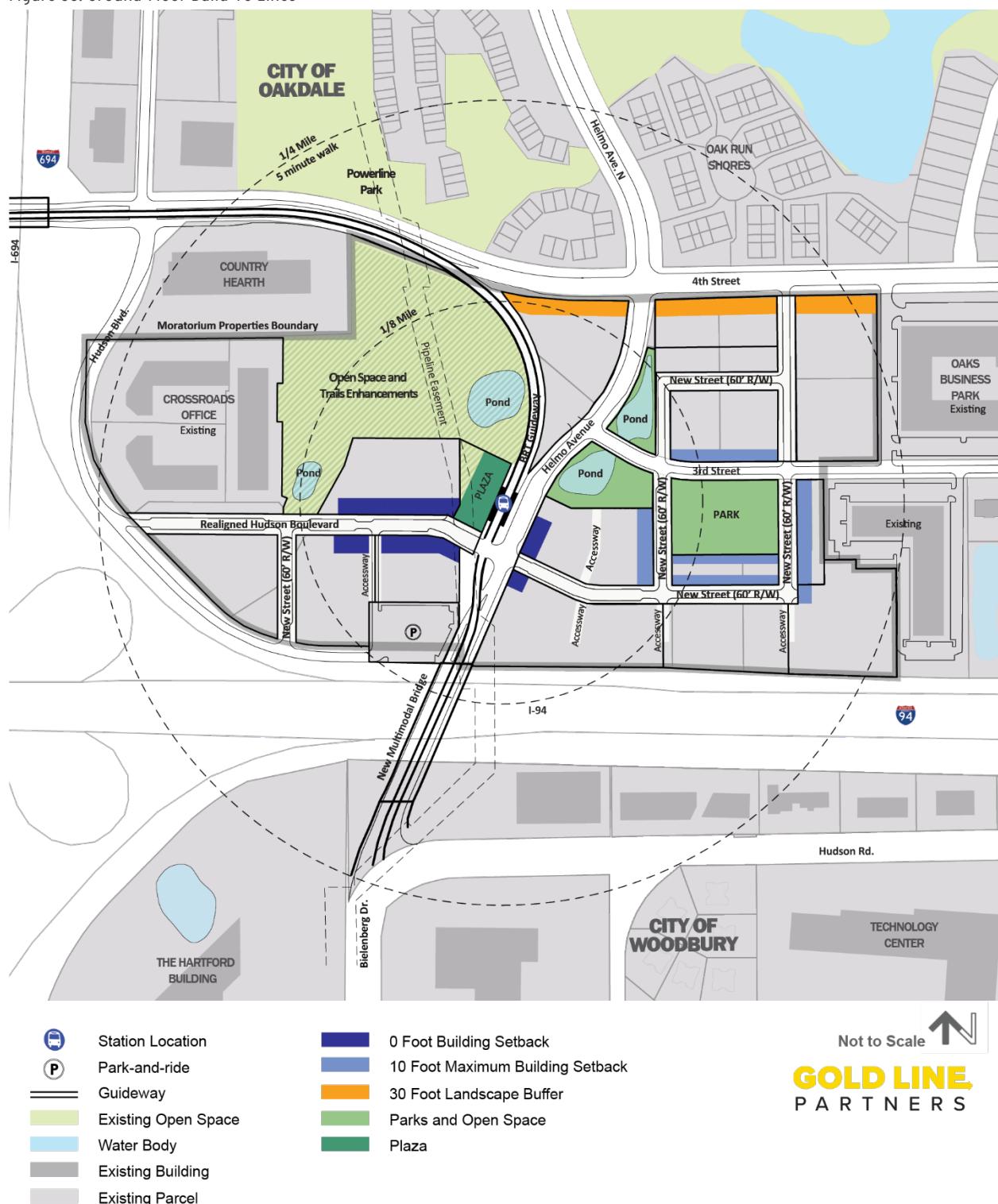
A maximum 10-foot ground-floor building setback is required where residential front doors and windows are oriented to the sidewalk, park, or public right-of-way as indicated. The limited setback from the sidewalk or public areas allows for landscaping, stoops, patios or other semi-public areas that support a safe and inviting public realm and a degree of separation.

### 30-foot Landscape Setback

A 30-foot landscape setback is required between the edge of the curb and building frontages along 4th Street to maintain and enhance the character of the landscaped roadway and compatibility with existing development. A layering of dense evergreen and deciduous plantings is required in the setback and should be of similar variety and characteristics to the existing roadway plantings.



Figure 35. Ground-Floor Build-To Lines



## ACTIVE EDGES



Active edges are characterized as building frontages with direct entries from the sidewalk and a high degree of transparency. Active edges increase visual and physical interaction between people inside and outside of the buildings, creating a safe and vibrant pedestrian environment. Access to service/loading bays and parking lot/garage entrances are prohibited along designated active edge frontages.

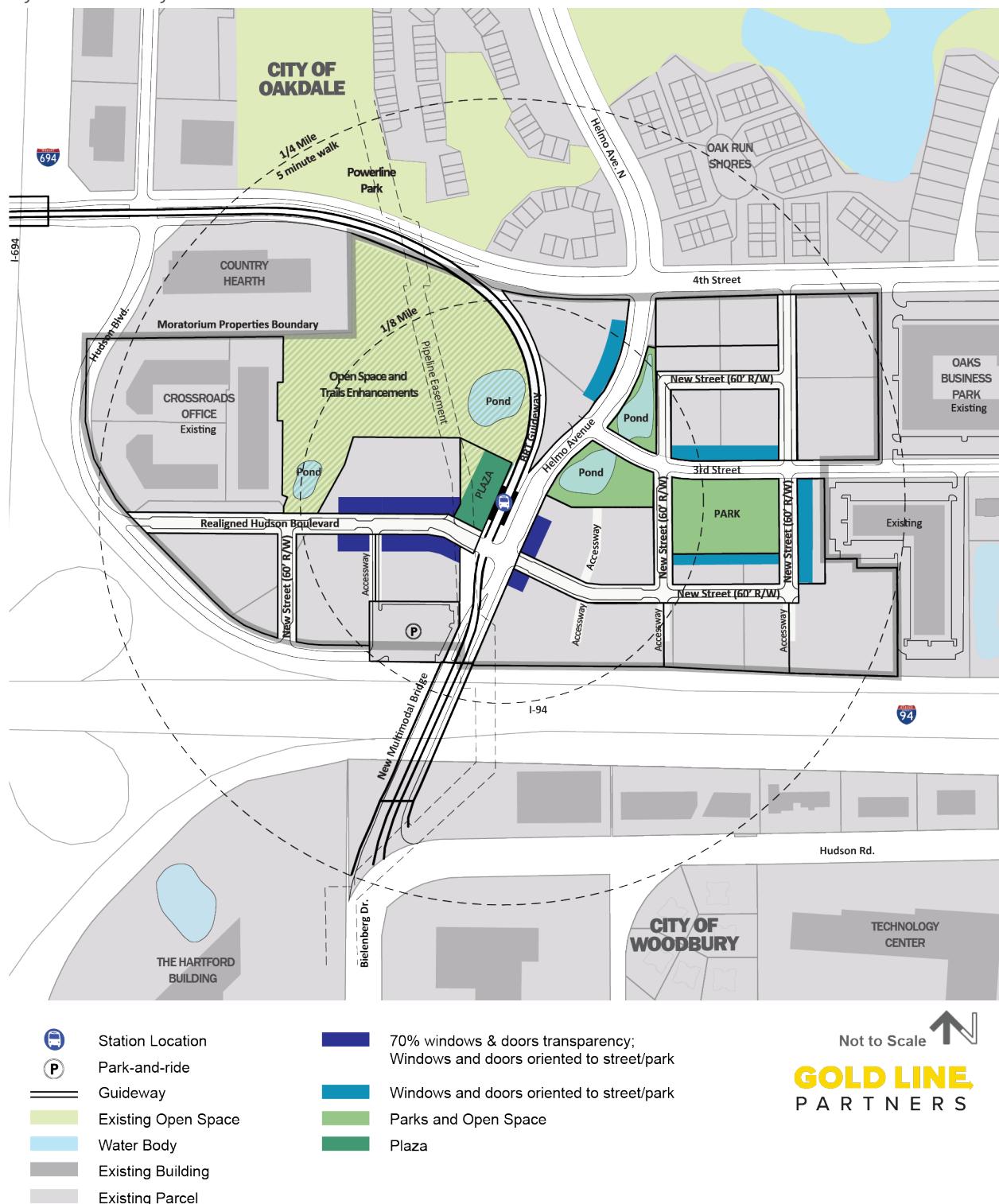
The following active edge criteria should be met for all ground floor-retail and commercial uses where indicated:

- A minimum of 70 percent transparent glass or screens along ground-floor facades, measured from datum line five feet from the ground extending from building edge to building edge; frosted, tinted, reflective glass or other types of glass that diminish transparency should be prohibited.
- Primary entrances to all ground-floor uses should be oriented to the public right-of-way.

The following active edge criteria should be met for all other uses where indicated:

- Primary entrances must be oriented toward the street. Quasi-public terraces, stoops or porches are appropriate, but not essential.
- Windows should be provided along facades, but no minimum percentage of transparency or minimum opening size should be required.

Figure 36. Active Edges



## BUILDING HEIGHTS

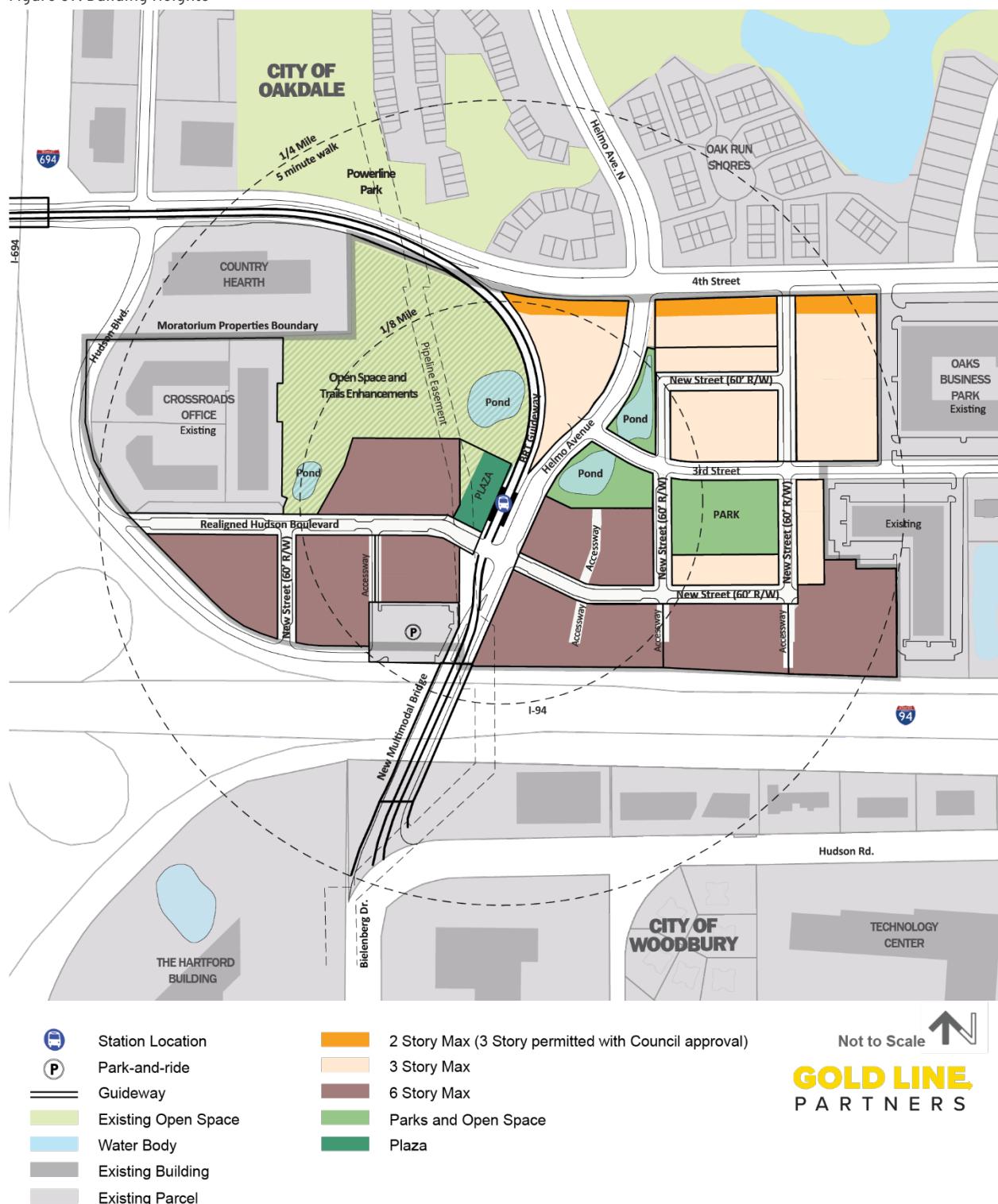
Building heights should maximize transit-oriented development opportunities while respecting the scale and massing of adjacent neighborhoods.

The building heights diagram illustrates the minimum and maximum building height recommendations for the block areas as indicated.

- Building heights should transition from adjacent small-scale neighborhoods.
- Building heights range from three to six floors throughout the station area.
- The tallest buildings, six floors, are located in proximity to the station platform.
- Three- floor (max) buildings are generally located in the transition zone near adjacent neighborhoods.
- Buildings are limited to two-floor (max) along the 4th Street frontage (three-floor (max) permitted with Council approval).



Figure 37. Building Heights







# APPENDICES

Physical copies of the following appendices are located at City Hall 1584 Hadley Ave N, Oakdale, MN 55128:

- Appendix A – Helmo Station Traffic Analysis
- Appendix B – Helmo Station Market and Demographic Analysis
- Appendix C – Helmo Station Utilities and Infrastructure
- Appendix D – Helmo Station Community Engagement

