



September 2022



Sheridan Boulevard Multimodal Corridor Plan

ACKNOWLEDGMENTS

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City of Lakewood

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ACKNOWLEDGMENTS

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Bob Caldwell, Star Mesa Properties
Mackenzie Hardt, Hardt Family Cyclery
Pamela Hemker, Aspire Medical Spa
Joel Newton, Edgewater Collective
Max Swomley, LCP Development
Levi Teal, Yawp Cyclery

Residents

Thank you to all the residents that were engaged and provided feedback throughout each stage of the planning process.

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Executive Summary



Project Overview

The City of Edgewater *Traffic Calming Mobility Plan* identified six priority projects to accomplish the plan goals, one of these projects being Sheridan Boulevard. The priorities for the Mobility Plan are safety, non-vehicular transportation, pedestrian infrastructure, and connectivity. More specifically, the priorities for Sheridan Boulevard were “to right-size the corridor making it a true boulevard with landscaped medians, better access management, intersection crossings, and wider sidewalks with street trees and more welcoming and sheltered transit stops.”

Project Purpose

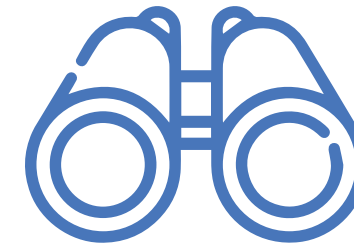
The purpose of the Sheridan Boulevard Multimodal Corridor Plan is to evaluate opportunities for enhanced multimodal infrastructure that will deliver increased safety and comfort for people walking, biking, riding transit, and driving along, to, and from Sheridan Boulevard between W 26th and 17th Avenues. The project will also identify opportunities to enrich public spaces and make Sheridan Boulevard into a gateway for Edgewater that is more inviting for residents and visitors alike.

Project Study Area



Vision and Goals

The vision for Sheridan Boulevard is a safe and accessible corridor that serves as an attractive gateway to the City of Edgewater with multimodal connections to and from Edgewater neighborhoods, businesses, schools, and Sloan’s Lake Park.



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The goals of the Sheridan Boulevard Multimodal Corridor Plan are to:

- Improve safety for all ages, abilities, and modes traveling along and across Sheridan Boulevard;
- Establish corridor branding and identity to enhance the urban environment and vitality of local Edgewater businesses;
- Repair and beautify infrastructure with resilient and sustainable solutions.

The vision and goals of this plan guided the development of the final alternative and recommendations. The final alternative and recommendations will push Sheridan Boulevard to be a safe, vibrant, and beautiful corridor for all.

GOALS



Improve safety for all ages, abilities, and modes traveling along and across Sheridan Boulevard.



Establish corridor branding and identity to enhance the urban environment and vitality of local Edgewater businesses.



Repair and beautify infrastructure with resilient and **sustainable solutions.**

Planning Process

The Sheridan Boulevard Multimodal Corridor Plan was developed using the following planning process.



Existing Conditions Analysis and Needs Assessment

The existing conditions analysis began with a review of previous planning documents and collection of existing data. A mobility and operations analysis for people walking, biking, riding transit, and driving, which included analysis of current traffic and safety data was completed to gain an understanding of how people travel to, from, and through the Sheridan Boulevard corridor. Additionally, the land use, zoning and urban design elements were investigated to develop a framework of physical character of the corridor and its businesses. Using previous plans, geospatial information systems (GIS) data, and field visits, existing land use and infrastructure conditions were mapped and analyzed.

The needs assessment was based on the findings from the existing conditions analysis, field visits, community input received through an online input map and survey, a stakeholder workshop, business focus group meeting, and at a community popup event. In addition, the vision and goals of the plan were identified by the stakeholders and community. All of this information was summarized into Appendix A: Existing Conditions & Needs Assessment.



Innovative Design Solutions

The project team researched innovative design solutions and beautification and amenity elements to address the concerns brought up in the existing conditions and needs assessment. Strategies for traffic calming, pedestrian crossings, driveways, curb radii, and side paths were explored, as well as landscaping, placemaking, art, seating, and lighting elements. The tools were then brought to the stakeholders and public, where they were able to express their preferences. These preferences were then integrated into the alternatives that were developed in the next phase of the process.



Alternatives Analysis

The project team utilized information gleaned from the existing conditions and needs assessment paired with preferred innovative design solutions to create two alternatives that could accomplish the project's vision and goals. The two alternatives developed were a Main Street Alternative and a Boulevard Alternative. The Main Street Alternative provided more sidewalk space and crossings for pedestrians, included a median to reduce potential conflict points, provided better bike connections, and added native vegetation. The Boulevard Alternative provided a wider median with more vegetation, maintained access for vehicles turning onto side streets, and less crossing opportunities for pedestrians and bicyclists.



These alternatives were brought to the community, stakeholders, and businesses to gather input on what they liked and disliked about each alternative. Using an evaluation matrix based on the project vision and goals of the project, the stakeholders reviewed the technical details of both alternatives. The Main Street Alternative was generally preferred by the public and stakeholders, largely in part because of its focus on enhancing pedestrian safety and comfort along the corridor. The business and property owners generally liked the pedestrian improvements since they had the potential to bring more visitors to their locations, but also expressed concerns about business access being limited with a median.



Preferred Alternative and Final Plan

Based upon feedback from stakeholders and the community, the project team blended elements of both alternatives to develop the preferred alternative. Potential funding sources from the City of Edgewater, City and County of Denver, and CDOT were identified to implement this vision for Sheridan Boulevard. The public was provided a final opportunity to comment on the preferred alternative and draft Sheridan Boulevard Multimodal Corridor Plan.

Project Timeline



Public Engagement

Project Management Team

The Project Management Team (PMT) consisted of representatives from the City of Edgewater, City and County of Denver, CDOT, and the consultant project team. The PMT provided technical, policy, and strategic advice and guidance throughout the process. They also provided guidance on final recommendations and next steps.

Stakeholder Working Group

The Stakeholder Working Group (SWG) consisted of City of Edgewater staff, City and County of Denver staff, CDOT, RTD, multimodal advocacy organizations, local business owners, representatives from Edgewater City Council, and the City’s Boards and Commission. Stakeholders participated in three workshops to set the plan vision and goals, provide technical expertise on urban design elements, and develop a preferred alternative.

Business Focus Group

The Business Focus Group consisted of business and property owners along the Sheridan Boulevard corridor. Like the stakeholder working group, the business focus group was asked to provide feedback on existing conditions and the preferred alternative.

Engagement Activities

Community members, stakeholders, and business owners were asked to provide feedback about Sheridan Boulevard at every step in the planning process. The following list summarizes the touch points during each of the four stages of the project. Most public engagement materials were provided in both English and Spanish. Feedback received is summarized throughout the rest of this plan.

Existing Conditions Analysis and Needs Assessment

August 2021: Stakeholder Working Group #1

- Field tour of Sheridan Boulevard
- Wall Graphic Exercise
 - Existing Assets and Challenges
 - Project Visions and Goals
- **16 stakeholders present**

September 2021: Pop-up at Edgewater Block Party

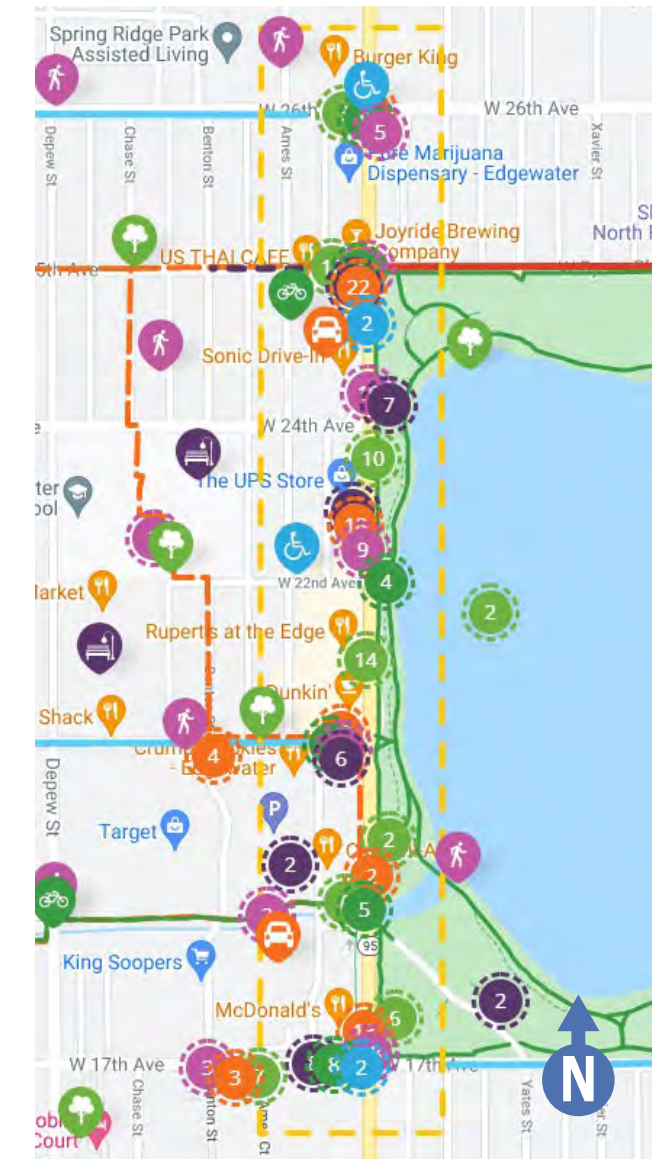
- Members of the public stopped by the project table to learn about the project and provide feedback on existing conditions
- Team-led walking tour of the corridor with members of the public, city boards, and city council members
- **Interacted with approximately 50 members of the public**

August - September 2021: Online Interactive Map

- Provided a platform for members of the public to comment specifically on locations where they have concerns or suggestions related to walking, biking, driving, accessibility, amenities, or beautification along the corridor
- **440 users offered 355 comments**

October 2021: Business Focus Group Meeting

- Discussed existing conditions with business owners along Sheridan Boulevard
- **4 business owners attended and 1 management company, representing over 40 businesses**



Online interactive map (Social Pinpoint) with public feedback



A pop-up event at the Edgewater Block Party to gather public input on existing conditions



Discussing alternatives with the Denver Rolling Nuggets

Engagement Activities (continued)

Innovative Design Solutions

October 2021: Stakeholder Working Group #2

- Finalized vision and goals of project and discussed traffic calming and safety treatment options that may be incorporated into corridor alternatives
- Determined preferences for urban design and amenity elements to be considered in the study area
- **12 stakeholders present**

October 2021: Pop-up at Trick-or-Treat on Pierce Street

- Members of the public stopped by the project table to learn about and provide feedback on existing conditions, ideas for alternatives, and their preferences on safety treatments and amenities
- **Interacted with approximately 150 parents and children**



Stakeholder Working Group #2 innovative solutions presentation



Concept evaluation from Stakeholder Working Group #3



Pop-up at Edgewater Trick-or-Treat on Pierce Street to discuss the alternatives with the public

Alternatives Analysis

March 2022: Stakeholder Working Group #3

- Utilizing a sticky note exercise, the meeting attendees reviewed and commented on the two proposed alternatives, Main Street and Boulevard
- Project team members organized the comments into themes that emerged and reported out to the group on each alternative
- Using a dot exercise, stakeholders were asked to score the alternatives against the existing condition using the evaluation matrix, which was developed based on the project vision and goals
- **14 stakeholders + Denver Rolling Nuggets**

March 2022: Pop-up at Edgewater Civic Center

- Public/residents of Edgewater, library visitors, and basketball youth league attendees stopped by the popup event to learn about and provide feedback on the proposed alternatives
- The alternatives were left up for an additional week, allowing for passive review and commenting from Civic Center visitors
- **Interacted with approximately 50 members of the public**

March 2022: Coffee and Conversations Meeting

- Members of the public discussed the two alternatives with City staff
- **Approximately 15 attendees**

March 2022: Online Interactive Map

- Provided a platform for members of the public to comment specifically on elements of the proposed alternatives that they liked and disliked
- **300+ visitors offered 190 comments**

April 2022: Popup event at Edgewater Public Market - City of Edgewater Business Engagement Meeting

- Discussed proposed alternatives with business owners along Sheridan Boulevard
- **10-15 property owners, businesses owners, and property managers attended**



Discussing alternatives with Edgewater residents at the Civic Center

Preferred Alternative

August 2022: Final Plan Review

- The final plan was sent out to the public, stakeholders, and business owners for the final opportunity to comment

Existing Conditions & Needs Assessment

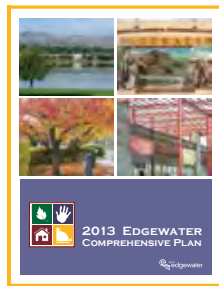


Existing Plans Summary

The project team reviewed existing Edgewater plans in order to inform the Existing Conditions analysis. Two objectives guided the review process: 1) Understand Edgewater’s vision and guiding principles for transportation planning, and 2) Search for prior recommendations relevant to the Sheridan Boulevard study area. Appendix A: Existing Conditions & Needs Assessment contains a full summary of these reviews.

Review of these plans revealed the following key takeaways:

1. Edgewater envisions Sheridan Boulevard as its primary “front door” where future development presents opportunities to improve urban design.
2. Promoting multimodal travel along and across Sheridan Boulevard is a priority for Edgewater, as well as integrating the corridor with existing and planned trails.



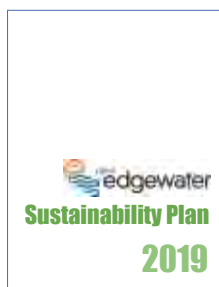
Edgewater Comprehensive Plan (2013)

- Identifies Sheridan Boulevard as Edgewater’s “Front Door” — the primary commercial corridor and an opportunity area to improve the pedestrian environment and urban design.
- Labels intersections along Sheridan Boulevard as “City Gateways”.
- Recommends eliminating redundant curb cuts, upgrading sidewalks, and establishing safe multimodal connections.



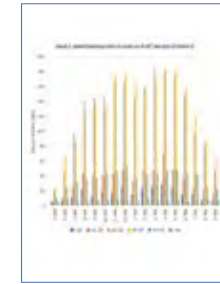
Traffic Calming Mobility Plan (2019)

- Sheridan is identified as a priority with recommendations for wider sidewalks, mid-block crossings, and intersection improvements.
- The plan suggests making Sheridan a “true boulevard”.



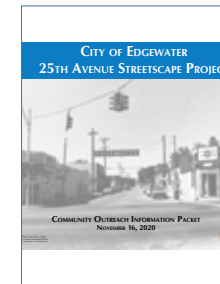
Sustainability Plan (2019)

- The plan aims to reduce vehicular trips by promoting walkability.
- Additionally, the plan mentions that enhancing non-motorized modes will improve social vibrancy within Edgewater.



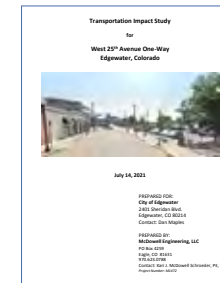
26th Avenue Speed Study (2019)

- Safety improvements at the intersection of 26th Avenue and Sheridan Boulevard should be evaluated to enhance comfort and safety for all users.



25th Avenue Streetscape Concepts (2020-2021)

- The intersection of 25th Ave and Sheridan Boulevard is included in the concept plans.
- The plans lay out other techniques to calm streets in the area.
- Concepts developed for Sheridan Boulevard need to be closely coordinated with this design to ensure seamless integration.



25th Avenue Transportation Impact Study (2021)

- Concluded that the intersections of 24th and 25th Avenues along Sheridan will operate at acceptable levels of service through 2040.
- However, delays at 26th Avenue and Sheridan Boulevard may develop, regardless of the 25th Avenue conversion.



Parks & Recreation Master Plan (2021)

- The plan proposes a recreational loop trail for Edgewater that will run along Sheridan Boulevard between 20th and 17th Avenues.
- Sloan’s Lake Park is a significant park near Edgewater and is bordered on the west by Sheridan Boulevard. This park also includes many important non-vehicular connections.



Community Survey (2021)

- Only 64% of respondents are satisfied with the quality of local streets and sidewalks in Edgewater.
- Respondents reported that 91% feel safe in commercial areas of Edgewater during the day, however only 63% say they feel safe in commercial areas of Edgewater after dark.
- 39% said the top priority for the city should be improved walkability.

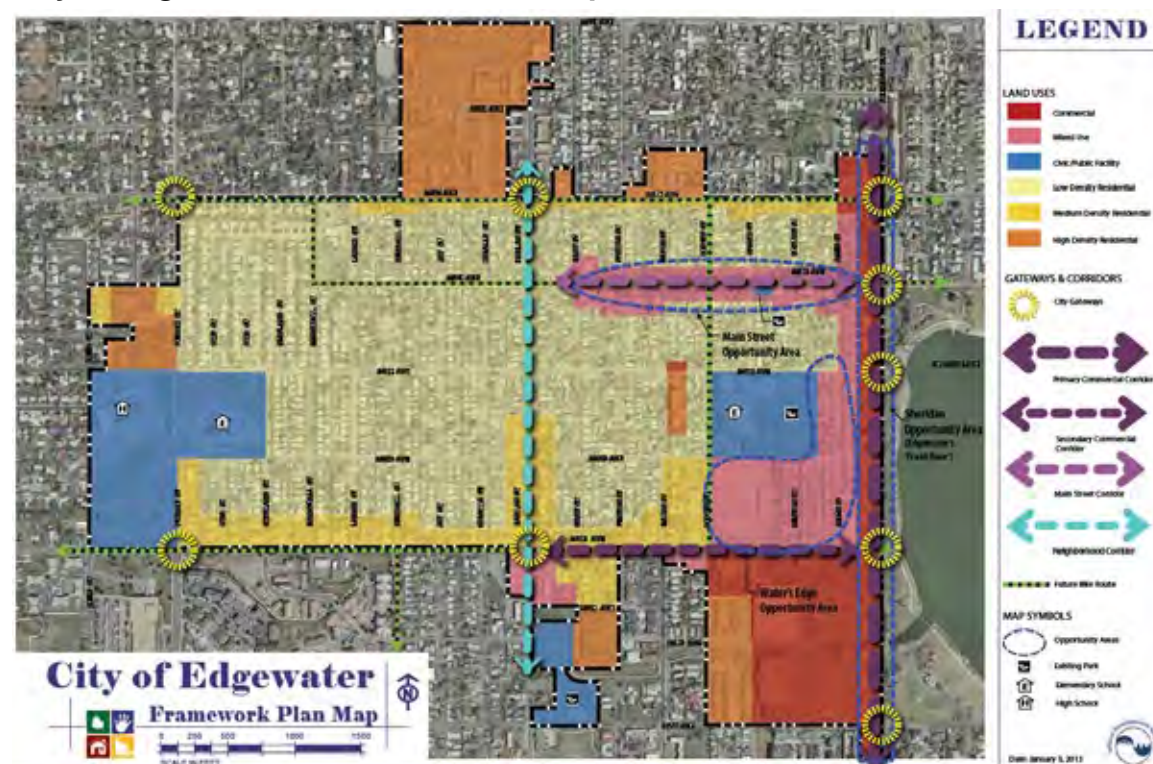
Physical Assessment

Land Use and Zoning

The Edgewater Comprehensive Plan from 2013 laid out existing land use and opportunities for future change in a Framework Plan Map. The area along Sheridan Boulevard is identified as a "Transformation Area" with a focus on commercial uses, supported by various Planned Unit Developments. Sheridan Boulevard itself is labeled as a unique Transformation Area called "Edgewater's Front Door." The plan explains that Sheridan Boulevard may experience dramatic changes in land use and density and therefore the city should focus improvements along Sheridan Boulevard that define Edgewater gateways, enhance the city image, and capitalize on views of Downtown Denver and Sloan's Lake.

The commercial focus along the corridor may accommodate redevelopment of key sites through either adequate underlying zoning or viable zone district alternatives. Any redevelopment must take into consideration the adjacent public realm, roadway crossings, and internal neighborhood connectivity to other amenities such as the Edgewater Public Marketplace and the W 25th Avenue commercial district. Higher-density development will need to maintain an appropriate set-back or stepback to ease the transition to the west.

City of Edgewater Framework Plan Map



Urban Design

Adjacent land uses currently influence urban design elements and physical features along Sheridan Boulevard. User experience and pedestrian comfort are also negatively impacted by the roadway, as Sheridan Boulevard is a high-speed, high-volume urban arterial that is noisy and uncomfortable for people walking or biking.

Amenity Zones

While there are some examples of successful amenities (pedestrian street lights), they are limited. This is, in part, due to the auto-oriented nature of all uses south of W 25th Avenue. The intersection of W 25th provides a few amenities such as themed bike-racks and monument signage that align with the main street environment which extends westward, but other examples are harder to find outside of a few private businesses and their attached patios. The successful elements, however, are few and far between and lack an overall cohesive character of the corridor.

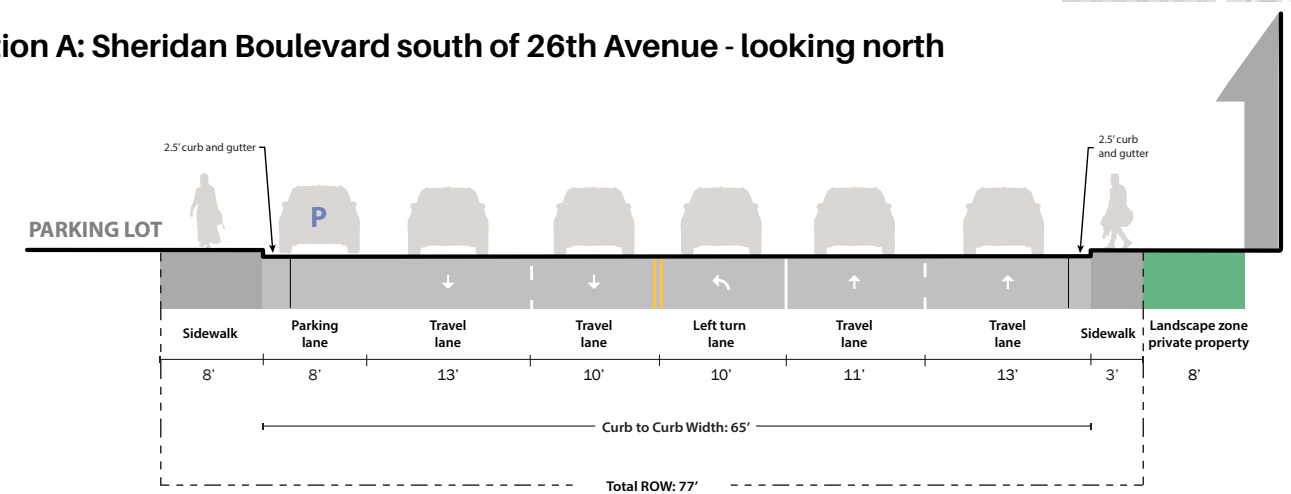
Cross Sections

Throughout the study area, Sheridan Boulevard contains two travel lanes in each direction, sidewalks, and varying configurations of turn lanes. From W 25th Avenue to 17th Avenue, a two-way left turn lane runs along the center of the roadway in between signalized intersections. As described, the conditions of the amenity zones or lack thereof between the sidewalks and the roadway vary. The following cross sections show typical exhibits of the roadway at various locations along the corridor.

Cross Section Map

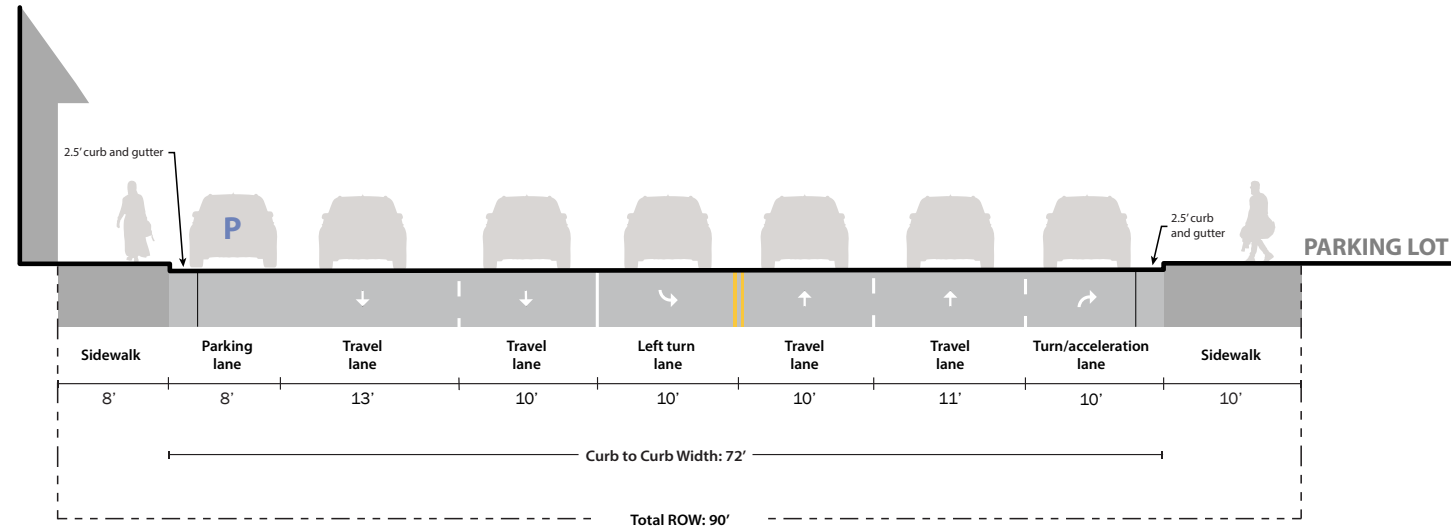


Section A: Sheridan Boulevard south of 26th Avenue - looking north



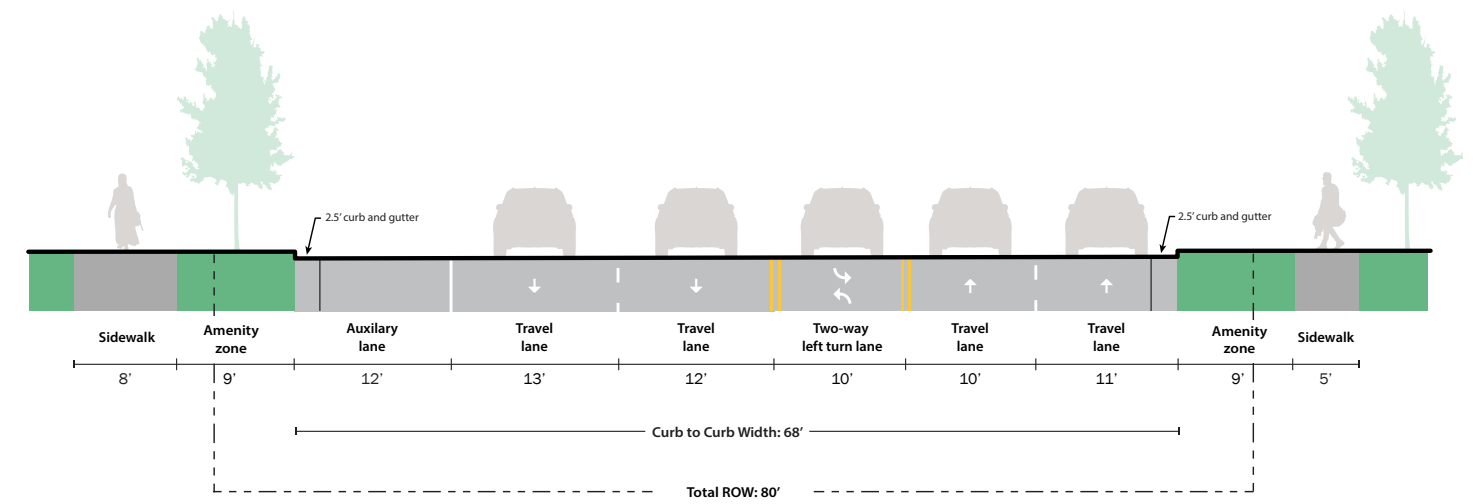
EXISTING CONDITIONS

Section B: Sheridan Boulevard north of 25th Avenue - looking north

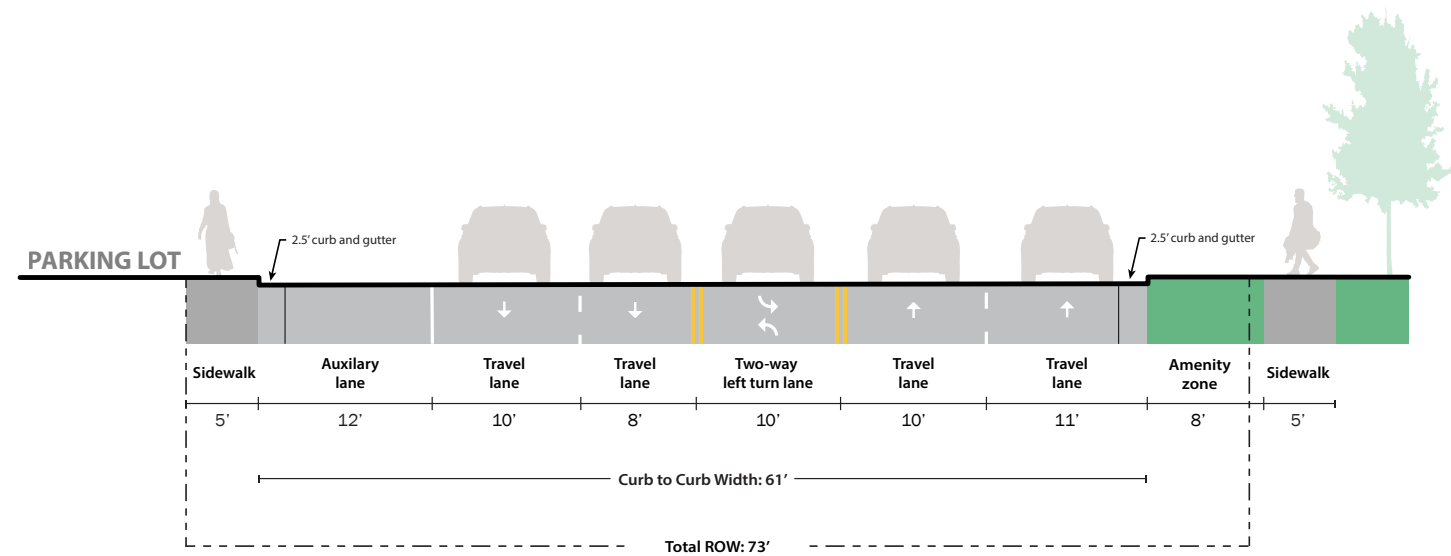


EXISTING CONDITIONS

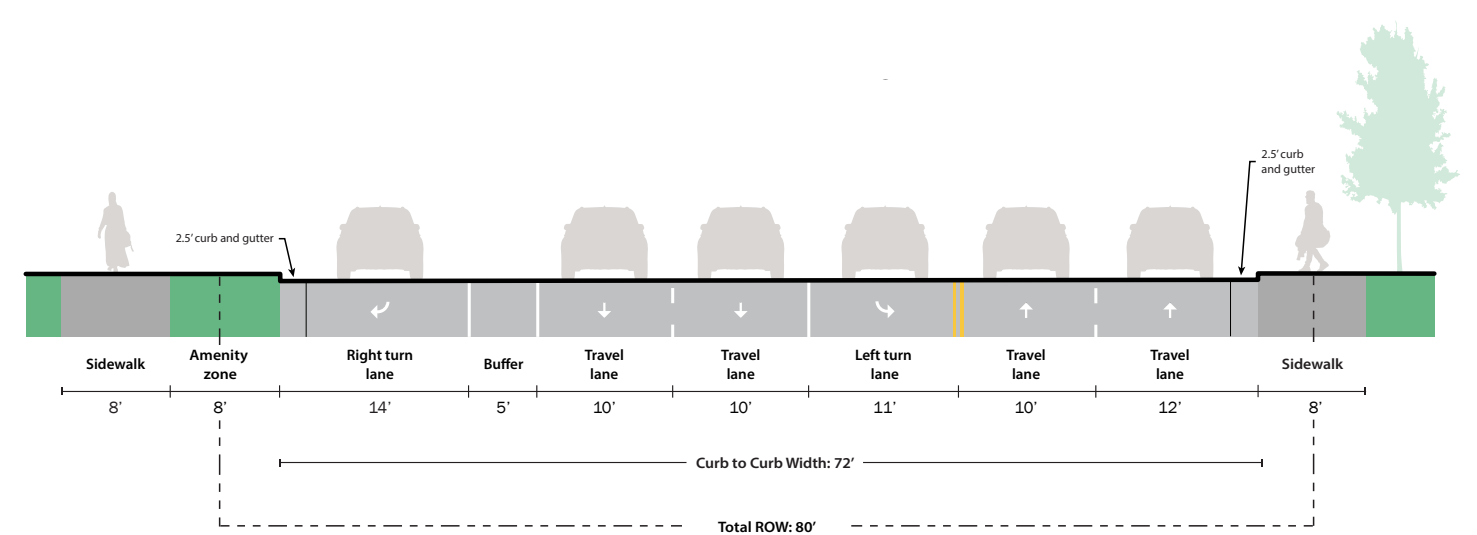
Section D: Sheridan Boulevard south of 20th Avenue - looking north



Section C: Sheridan Boulevard north of 22nd Avenue - looking north



Section E: Sheridan Boulevard north of 17th Avenue - looking north



EXISTING CONDITIONS

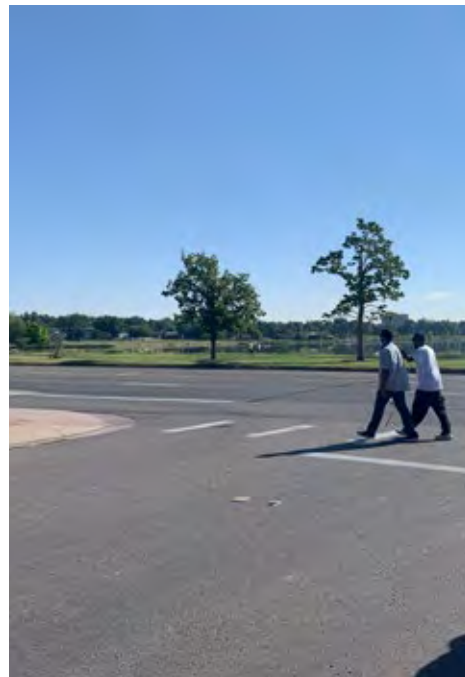
Mobility Assessment

As part of the Existing Conditions analysis, the project team conducted an assessment of mobility conditions and networks for various modes along the Sheridan Boulevard study corridor. Appendix A: Existing Conditions & Needs Assessment contains a full report of the results.

People Walking

Sheridan Boulevard hosts a combination of attached and detached sidewalks that range from three to eight feet wide. The attached sidewalks on the west side of Sheridan Boulevard between W 20th and 26th Avenues, as well as the east side between W 25th and 26th Avenues, are most in need of improvement. These sidewalks are often interrupted with driveways and accessibility obstructions such as non-compliant curb ramps and light posts.

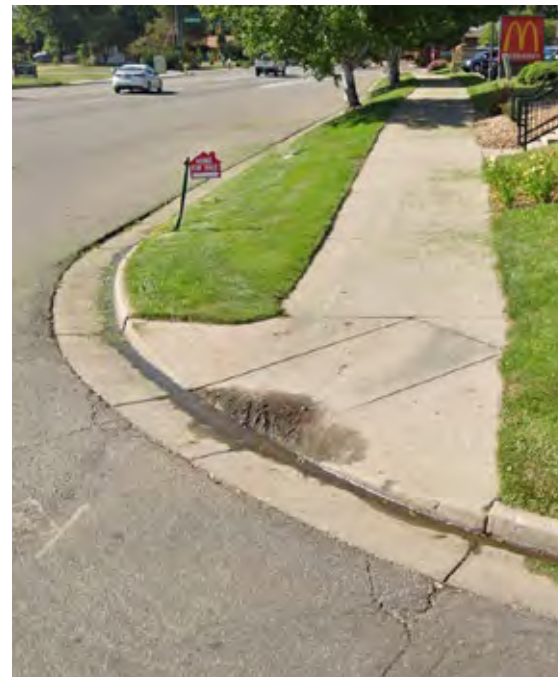
The intersections of Sheridan Boulevard and W 17th, 20th, 25th, and 26th Avenues are signalized and offer marked crosswalks; however, the W 22nd and 24th Avenues intersections are uncontrolled and there are no pedestrian crossings between W 17th and 20th Avenues. This condition creates two crossing gaps that are over a quarter mile in length. These gaps can encourage pedestrians to dart across Sheridan Boulevard to avoid significant travel to a marked crossing and back.



People walking along Sheridan at 22nd Ave



Narrow sidewalk at 25th Ave









Non-compliant curb ramp at King Soopers driveway

EXISTING CONDITIONS

Pedestrian Facilities Map



Pedestrian Facility Types

-  **Attached Sidewalk**
A sidewalk that is adjacent to the roadway curb with no amenity zone in between
-  **Detached Sidewalk**
A sidewalk that is separated from the roadway curb by an amenity zone
-  **Trail**
A multi-use path for both people walking and biking often located in parks or along greenways not necessarily adjacent to a roadway
-  **Marked Crosswalk**
Marked crosswalks indicate optimal or preferred locations for pedestrians to cross and help designate right-of-way for motorists to yield to pedestrians
-  **Non-Compliant Curb Ramp**
A ramp leading from the sidewalk down to the roadway at a crossing that is not accessible for people of all ages or abilities
-  **Driveway**
A driveway is a type of private road for local access to one or a small group of structures, and is owned and maintained by an individual or group

Mobility Assessment

People Biking

Existing or planned bike facilities exist on every cross street in the Sheridan Boulevard study area. Additionally, the Sloans Creek Trail intersects Sheridan Boulevard between W 17th and 20th Avenues. There are no bike facilities on Sheridan Boulevard; however, people biking generally utilize the trail in Sloans Lake Park.

Most of the existing bike facilities, particularly the bike lanes on W 20th and W 26th Avenues disappear on the approach to the intersections at Sheridan Boulevard. These locations are in need of continuity and safety improvements. Additionally, Denver’s planned protected bike lanes on W 17th Avenue and existing neighborhood bikeway on Byron Street to the east pose opportunities to establish connections among Edgewater’s and Denver’s bike networks.



Bicyclist using sidewalk at 20th Avenue



Bike facility on 25th Avenue

Edgewater Trails

Edgewater’s Parks and Recreation Master Plan (2021) identified two future trails: the Edgewater Trail and the Historic Edgewater Trail. The Edgewater Trail aims to capitalize on the existing Sloan’s Creek Trail that runs from the Edgewater Civic Center through Walker Branch Park to Sheridan Boulevard. The proposed route forms somewhat of a loop around Edgewater connecting various neighborhoods and amenities. The Historic Edgewater Trail is a proposed one-mile loop connecting Edgewater’s historical areas. Both recommended trails touch the Sheridan Boulevard Study area.

Existing & Planned Bike Facilities Map



Bike Facility Types

- Existing**
- Planned**
- Neighborhood Bikeway**
A street with low traffic volumes and speeds designed to prioritize bike travel (also known as a neighborway)
- Conventional Bike Lane**
A portion of the roadway that has been designated by striping, signage, and pavement markings for exclusive use by people biking
- Buffered Bike Lane**
A bike lane with a designated buffer space separating it from adjacent traffic or parked cars
- Protected Bike Lane**
A bike lane at street level with any type of physical protection from adjacent traffic
- Trail**
A multi-use path for both people walking and biking often located in parks or along greenways not necessarily adjacent to a roadway

Mobility Assessment

Transit Operations and Amenities

Regional Transportation District (RTD) route 51 runs along Sheridan Boulevard. RTD's System Optimization Plan has proposed to increase weekday headways to 15 minutes in order to improve service frequency. Additionally, Sheridan Station, serviced by the W-line light rail, is just south of the Sheridan Boulevard study area. Thus, it is important to ensure that improvements to Sheridan Boulevard support consistent transit travel times and reliability for both route 51 and buses that connect across Sheridan Boulevard including routes 20 and 28.

There are seven bus stops along Sheridan Boulevard within the study area and several more in the immediate vicinity. These stops typically have little to no amenities. None of the stops have shelters and two stops contain only signs. Some have trash cans and benches, including the southbound stop at Sheridan Boulevard and Sloans Creek, which experiences the highest stop ridership in the study area.

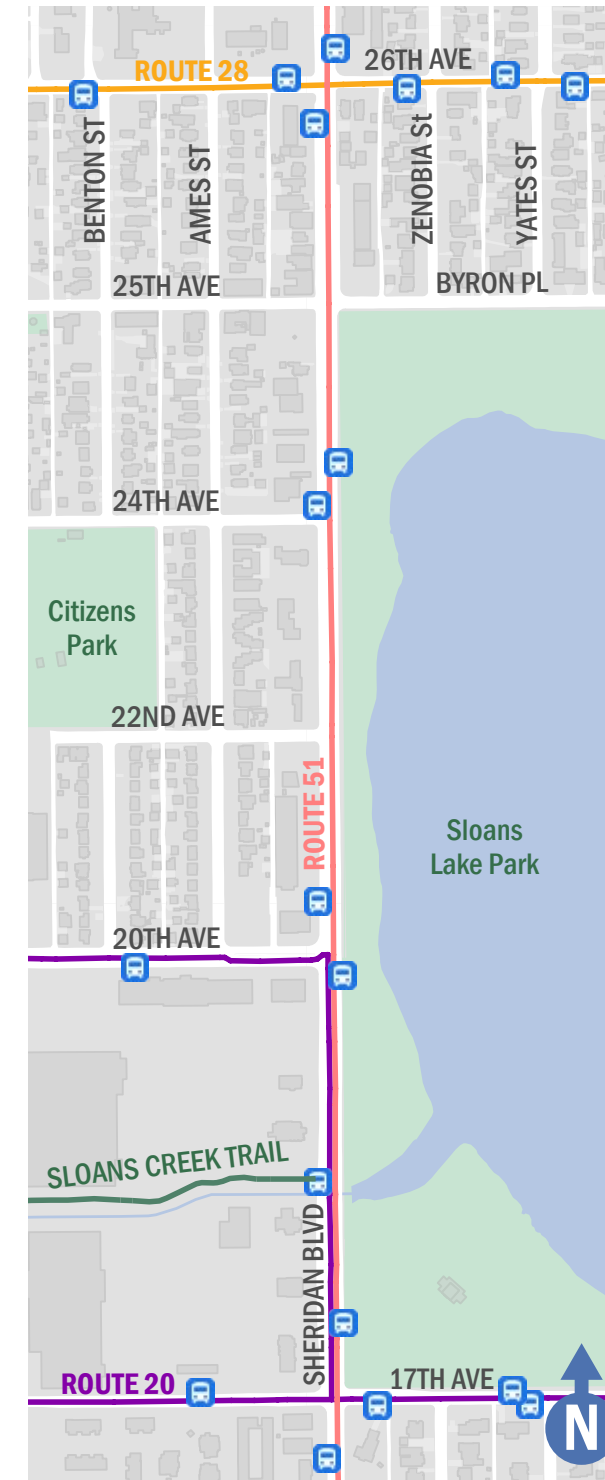


Bus Stop at 20th Avenue



Bus Stop at Sloan's Creek Trail

Existing Transit Network Map



Transit Network

-  Bus Stop
-  Route 28
-  Route 51
-  Route 20

EXISTING CONDITIONS

Mobility Assessment

People Driving

Sheridan Boulevard is owned and managed by the Colorado Department of Transportation (CDOT) as CO-95; however, all of the traffic signals are operated by the City and County of Denver. Traffic volumes on Sheridan Boulevard within the study area are between 33,000 and 40,000 vehicles per day. The existing speed limit is 35 MPH and 85th percentile recorded speeds are between 33 and 35 MPH, which means that approximately 5,000 vehicles exceed the speed limit every day. These conditions present a high risk of crashes resulting in injury or fatality to people walking or biking.

Traffic Analysis

As part of the existing conditions report, the project team conducted a traffic analysis at key intersections, focused on the morning and evening peak hours. Four of these intersections, Sheridan Boulevard and W 17th Avenue, 20th Avenue, 25th Avenue, and 26th Avenue, are signalized. Sheridan Boulevard and W 22nd Avenue and 24th Avenue are stop-controlled. About 1,000 vehicles travel along the corridor in the morning peak hour (7:45-8:45), with closer to 1,500 vehicles in the afternoon (12:00-1:00) and evening (4:45-5:45) peak hours. All intersections operate in overall stable traffic flow conditions (Level of Service D or better), despite some turning movements causing delays. Length of turning lanes is an issue on side streets, as Sheridan Boulevard is given more of the signalized intersections' cycle time and there is less space for vehicle waiting to turn. This is less of an issue on Sheridan Boulevard itself, which exhibits lower delays and shorter queues than the intersecting streets. Traffic model report sheets and intersection operations summaries can be found in Appendix B: Synchro Report.



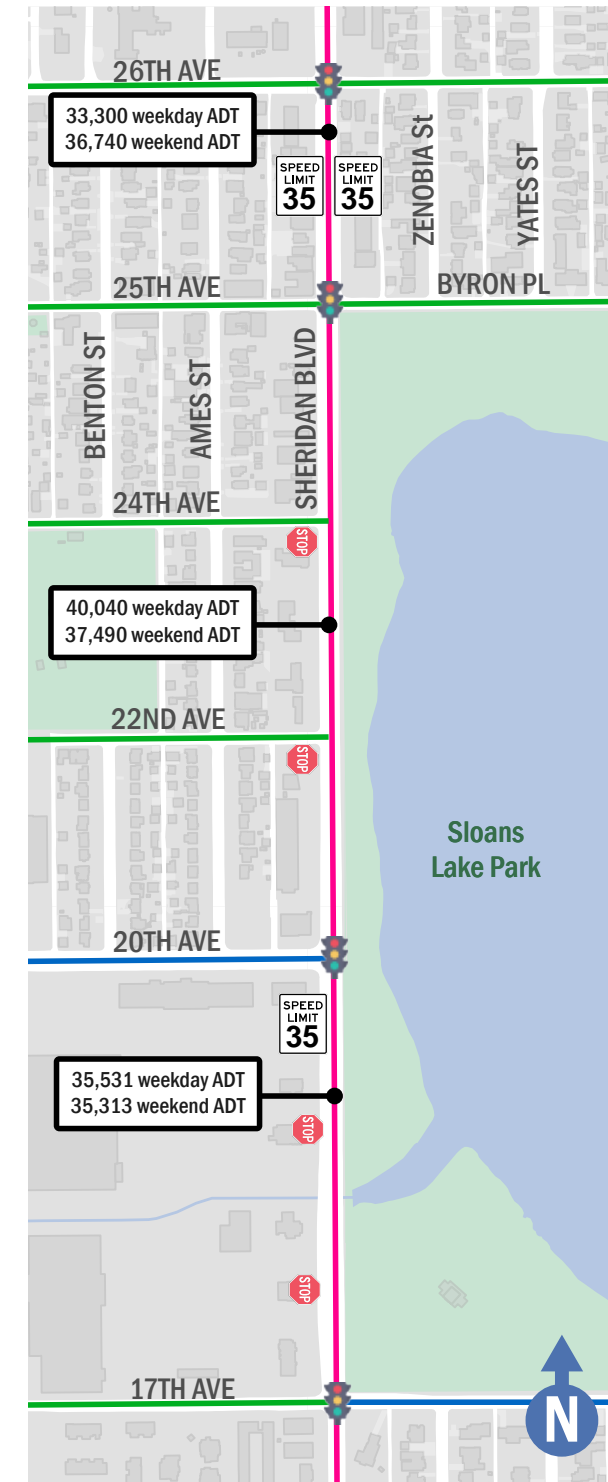
Bus Stop at 20th Avenue










Bus Stop at Sloan's Creek Trail

EXISTING CONDITIONS

Existing Driving Conditions Map



Map Legend

-  Traffic Signal
-  Stop Sign
-  Speed Limit Sign
-  Speed Limit 35 mph
-  Speed Limit 30 mph
-  Speed Limit 25 mph
-  Driveway

Safety Assessment

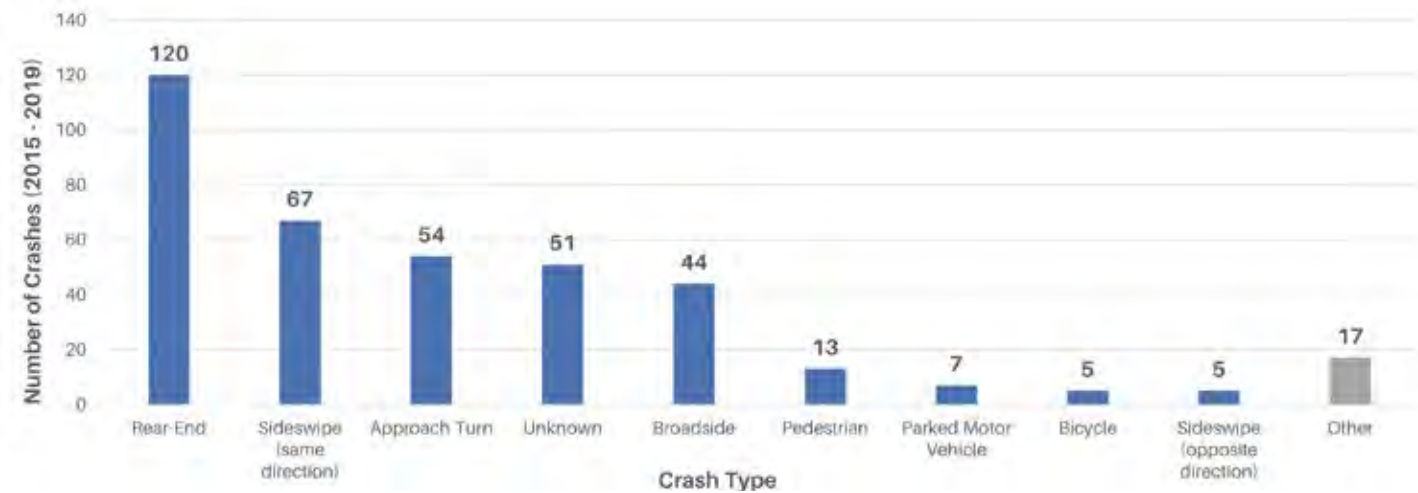
In the five-year period of 2015 through 2019, a total of 383 crashes were reported on Sheridan Boulevard between the W 17th Avenue and W 26th Avenue intersections. Of the 383 total crashes, 189 occurred at an intersection or were categorized as intersection-related. Rear-end crashes make up the plurality of all reported crashes in the corridor. However, at intersections, these account for less of the total crashes, with approach turn and broadside crash types making up a larger part of the crash profile.

A total of thirty-six crashes resulted in injury or fatality. Most crashes that resulted in injury or fatality were rear-end crashes, however pedestrian and bicycle-related crash events had the highest injury rate of any type. Five pedestrian mid-block crashes occurred from 2015 through 2019 that resulted in injury or fatality.

Figure 1 shows the number of all reported crashes in the corridor, separated by crash type, per CDOT data. Rear-end crashes make up the plurality of crashes in the corridor, followed by a grouping of same-direction sideswipe, approach turn, and broadside crashes. Within the study period, 383 crashes were reported within the corridor.

Appendix B: Synchro Report contains a full crash report and summary graphics.

Figure 1: All crashes by crash type



Crash Heat Map (2015-2019)



26th Avenue Intersection - crash hotspot



25th Avenue Intersection - crash hotspot



17th Avenue Intersection - crash hotspot

Needs Assessment

Online Interactive Map

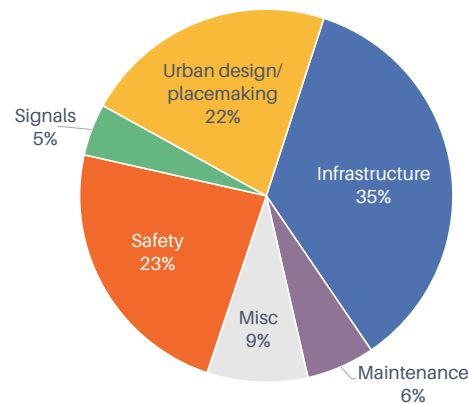
Community members were asked to provide feedback about Sheridan Boulevard through an online interactive map program called Social Pinpoint from August 27, 2021 to September 29, 2021. Over this time period, the site had 1,305 total visits, 440 unique users, and collected 355 comments on the map. In addition to the map feedback, 212 users responded to the survey, which was offered in English and Spanish, and asked questions to learn about respondents.

355 comments
1,305 site visits

212 survey respondents

Community members provided feedback by selecting a topic (walking, biking, driving, accessibility, amenities, or beautification) and placing their pin on the map to make a comment or suggestion. Comments were provided on many of the topics, with driving, walking, and beautification being the top three.

Figure 2: Comment Categories



26th Avenue

- Lack of safe bike infrastructure
 - Desire for bike facilities in all directions
- Lack of safe walking infrastructure
 - Sidewalks are too narrow
 - Cars rush by too fast to be comfortable
 - Not ADA compliant
- Perception of many crashes at this intersection

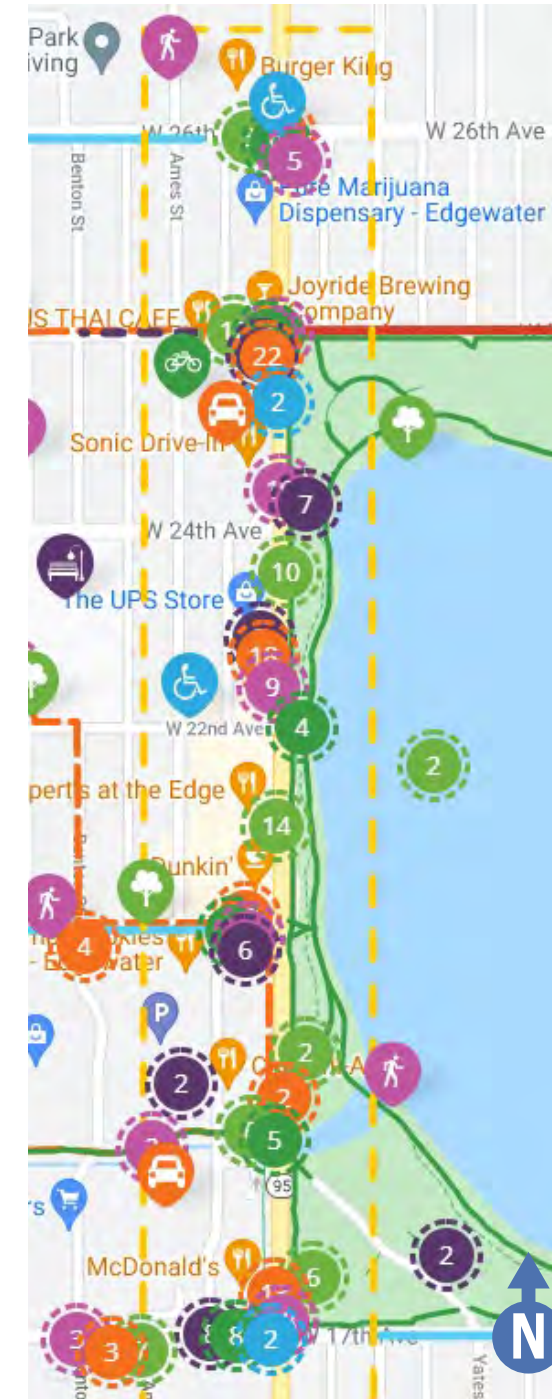
25th Avenue

- Excitement and support of the 25th Ave placemaking project
- Support for bike infrastructure
 - Desire to build upon existing bike facilities
 - 25th/Byron is a major bike connection
- Desire to prioritize people walking and biking
 - Traffic calming measures and increased visibility needed to prevent more crashes

24th Avenue

- Lack of pedestrian crossing locations and amenities
 - Desire for better lighting
 - Desire for pedestrian crossing or safe walkways
 - Too many driveways and curb cuts on west side of corridor making walking unpleasant
- Safety concerns due to speeding cars
 - Traffic calming desired
- Desire for more placemaking
 - Utilize businesses on west side of corridor

Social Pinpoint Map



22nd Avenue

- Lack of pedestrian crossing locations and amenities
 - Desire for better lighting
 - Desire for pedestrian crossing or safe walkways
- Safety concerns due to speeding cars
 - Traffic calming desired
- Desire for more placemaking
 - Edgewater does not feel like it is “close to the water” due to Sheridan
 - Desire for more landscaping and beautification

20th Avenue

- Lack of pedestrian crossing locations and amenities
 - Desire for pedestrian bridges or safe walkways
 - More incorporation of Edgewater Loop Trail
- Safety concerns due to cars speeding and running red lights
 - Traffic calming and buffer trees desired
 - Many near-misses of people walking and biking perceived
- Desire for more placemaking
 - Edgewater Public Market provides an opportunity to be an enjoyable destination to get to

17th Avenue

- Lack of pedestrian and bike facilities
 - Desire for pedestrian enhanced crossing (tunnel or bridge)
 - Desire for more connected bike lanes
- Safety concerns
 - Traffic calming and signal timing adjustments desired
 - Maintenance needed in many spots
- Desire for more placemaking
 - Opportunities for beautification and activity near Sloan’s Lake Park

Areas of Opportunity

West 26th - 24th Avenues

Through community input, feedback from the Project Management Team and Stakeholder Working Group, physical and mobility assessments, and review of previous plans, the following opportunities and gaps were identified along the corridor.

Despite the parallel parking between W 26th Avenue and 25th Avenue on the west side of the street, the constrained nature of the northern section has restricted the addition of many public realm amenities or corridor beautification, except the consistent pedestrian streetlights, which are located on the street edge.

Opportunities to consider:

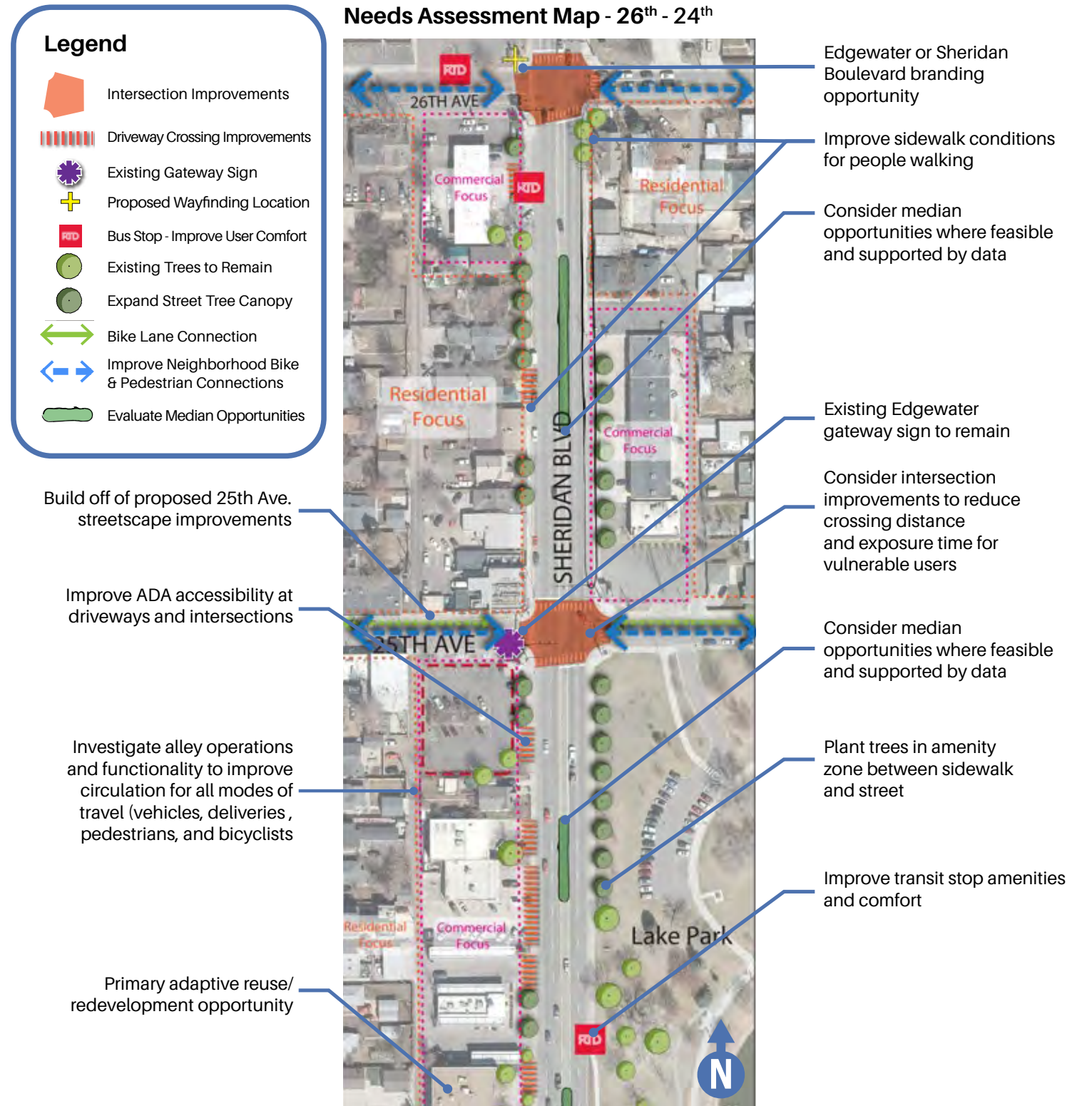
- Edgewater or Sheridan Boulevard branding opportunity
- Improve sidewalk conditions
- Existing Edgewater gateway sign to remain
- Build off proposed W 25th Avenue streetscape improvements
- Long-term redevelopment opportunity (if parking needs are met elsewhere on W 25th Avenue)
- Primary adaptive reuse/redevelopment opportunity



W 25th Ave during shared street pilot



Narrow sidewalk and parking on Sheridan north of W 25th Ave



EXISTING CONDITIONS

Areas of Opportunity

West 24th - 20th Avenues

The central section of the corridor contains an excessive number of driveways and as a result, it is fragmented in nature. While there are many vegetation buffers throughout, they separate the pedestrian from the existing businesses rather than the continuous right turn lane. On the Sloan's Lake Park side of the roadway a tree lawn exists, but street trees are inconsistently planted.

Opportunities to consider:

- Neighborhood focused gateway opportunity
- Explore parking reconfiguration to allow for outdoor gathering /dining
- Long-term redevelopment opportunity, pending existing use viability
- Explore enhanced paving & amenities at existing gathering spaces



Potential plaza area across from W 20th Ave



Narrow sidewalk next to travel lanes

EXISTING CONDITIONS



EXISTING CONDITIONS

Areas of Opportunity

West 20th - 17th Avenues

The southern section of the corridor contains a detached sidewalk and partial vertical separation with consistent streetlights and street trees, providing a few uniform elements throughout.

Opportunities to consider:

- Gateway plaza opportunity
- New community entry signage with neighborhood focused wayfinding opportunity
- Recommend sidewalk improvements at attached walk
- Add guardrail at top of drainage structure
- Explore large commercial wayfinding opportunity and attached gathering space
- Sloan's lake corridor segment/neighborhood branding opportunity

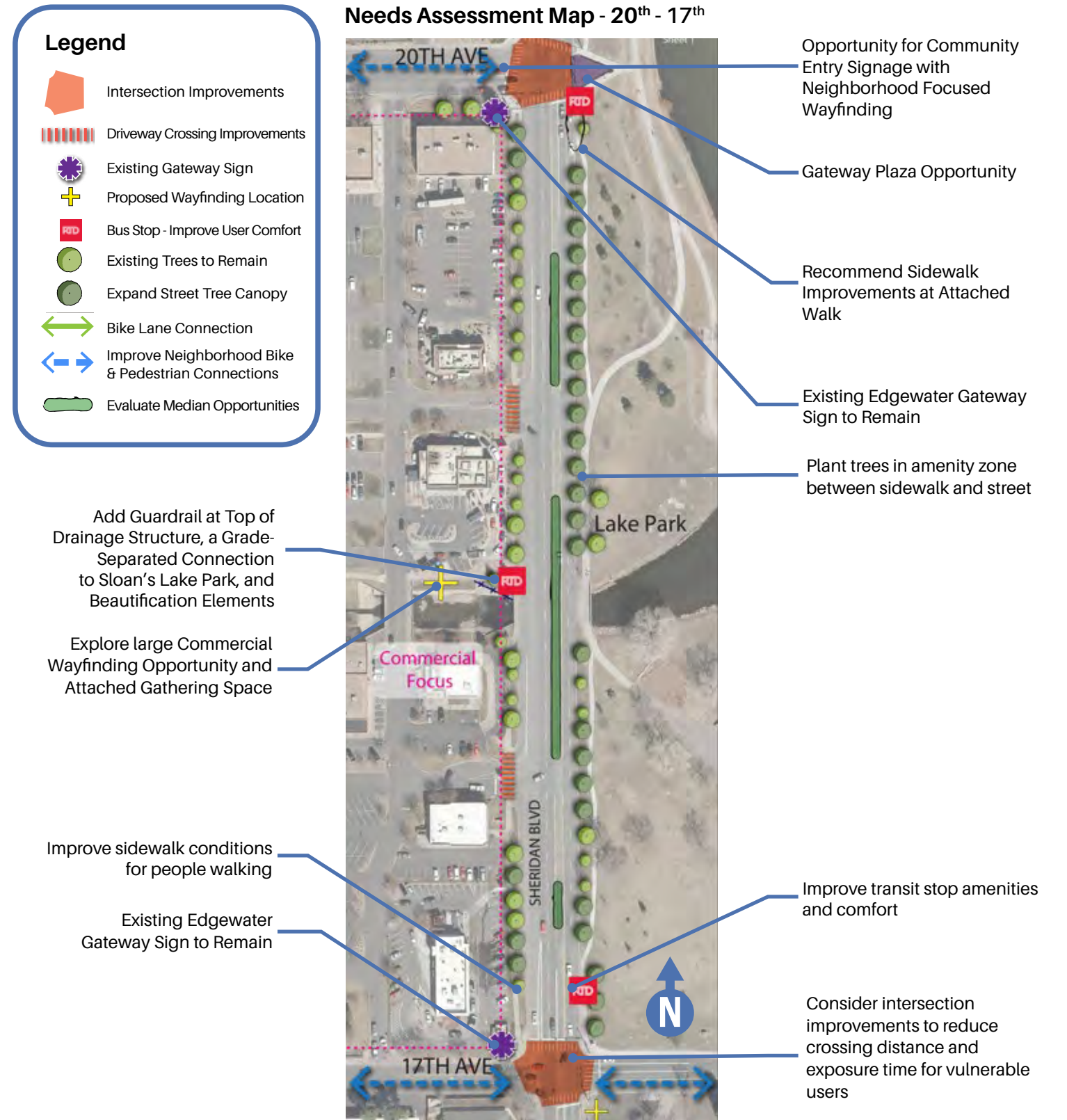


Opportunity area for gathering space near drainage structure



Example of Edgewater gateway signage

EXISTING CONDITIONS



Innovative Design Solutions



There are a variety of proven multimodal safety elements, compatible with a multi-lane CDOT roadway that can be employed along Sheridan Boulevard. Such treatments would seek to enhance safety and comfort for people walking or bicycling and create a street where experienced speeds match posted speeds. Strategies in this section are all included in the preferred concept and are listed in Table 1 in order from lower to higher levels of complexity.

Table 1: Innovative Design Solutions

Treatment	Speed Management	Safety	Enhances Comfort or Reduces Traffic Stress	Feasibility/ Ease of Implementation	Placemaking Beautification Greening	Cost
TRAFFIC CALMING MEASURES						
Increase Frequency and Visibility of Speed Limit Signage	●	◐	○	●	○	\$
Radar Speed Signs	●	◐	○	●	○	\$
Trees in Sidewalk Furnishing Zone	◐	○	●	●	●	\$
Remove Excess Road Space	◐	◐	●	○	◐	\$\$\$
CROSSING TREATMENTS						
Leading Pedestrian Intervals (LPIs)	○	●	◐	●	○	\$
Raised Medians with Refuges	◐	●	◐	○	●	\$\$\$
Corner Extensions/ Bulb-Outs	◐	●	◐	◐	◐	\$
Protected Corners	◐	●	●	○	◐	\$\$\$
Pedestrian Hybrid Beacon	○	●	●	◐	○	\$\$
DRIVEWAY TREATMENTS						
Consolidate or relocate Driveway Access	○	◐	◐	○	◐	\$\$
Right-in right-out (RIRO) Configuration	○	●	◐	◐	○	\$
ADDITIONAL						
Adjust Corner Radius	●	◐	◐	●	○	\$\$
Sidepaths	○	●	●	○	●	\$\$\$

Traffic Calming Measures

Traffic calming measures are physical interventions that manage motor vehicle speeds, alter driver behavior, and improve conditions for non-motorized street users. They reduce crash rates and the severity of crashes, increase the feeling of safety for all roadway users, and enhance the street environment.

Increase Frequency and Visibility of Speed Limit Signage (and optionally reduced speed limit)

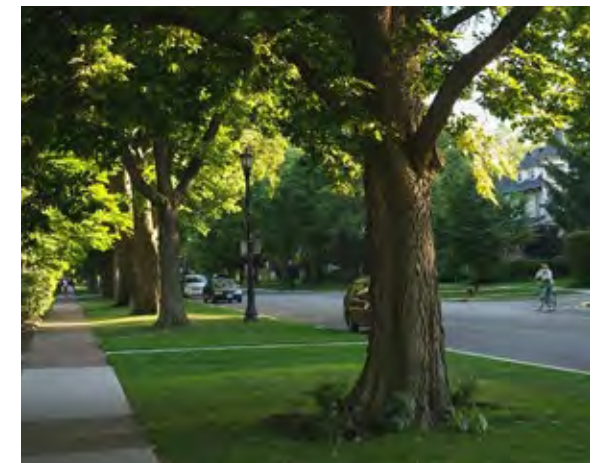
More frequent and visible speed limit signs provide necessary reminders to drivers to watch their speed. The City of Seattle recently lowered some arterial speed limits to 25 mph in conjunction with increasing speed limit sign frequency along those and other corridors to 1/4 mile spacing. Initial results showed an average of 22% reduction in crashes and a 54% reduction in high end speeders.

Radar Speed Signs

Radar speed signs broadcast a vehicle’s traveling speed below the posted speed limit placard. This provides instant feedback to drivers of the speed they are traveling, reminding them to slow down if they are speeding. These visual reminders are especially useful for applications in places where drivers need to take special care to reduce speeds, such as descending hills or in school zones.

Trees in Sidewalk Furnishing Zone

The furnishing zone is the section of the right-of-way between the curb and the pedestrian path of travel. This area can be paved or permeable landscape, and is reserved for streetscape elements, such as lights, benches, trash cans, planters, and trees. By planting trees in this zone, the pedestrian/bicyclist experience is enhanced through the provision of shade and a feeling of separation from vehicle traffic. Trees along the roadway also help to slow vehicle traffic by making the roadway space feel more enclosed. Maintenance of clear zones needs to be considered when selecting planting locations.



Trees in sidewalk furnishing zone

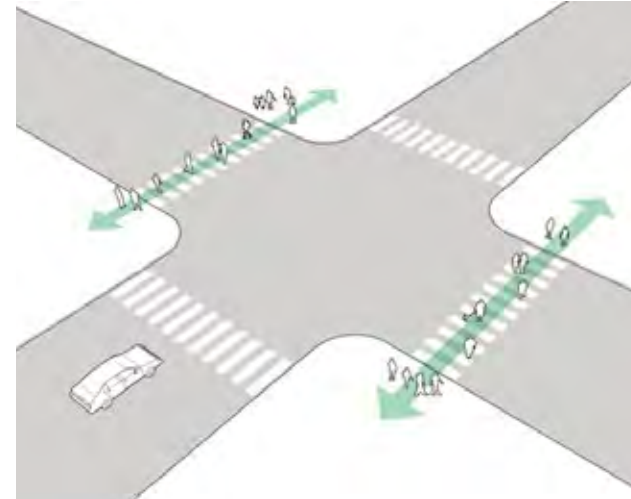
Repurposing Auxiliary Lanes & Parking Lane (Remove Excess Road Space)

There are lengthy sections of auxiliary lanes on Sheridan Boulevard between W 17th and 26th Avenues, as well as a parking lane on the west side of the road between W 26th and 25th Avenues. Removal of these elements, or portions of them, would free up space to widen sidewalks and provide greater separation from the roadway with a landscaping area, or to create space for a raised median. Repurposing this right-of-way width would also could also create opportunities for enhanced transit and pedestrian mid-block crossings.

Crossing Treatments

Leading Pedestrian Intervals (LPIs)

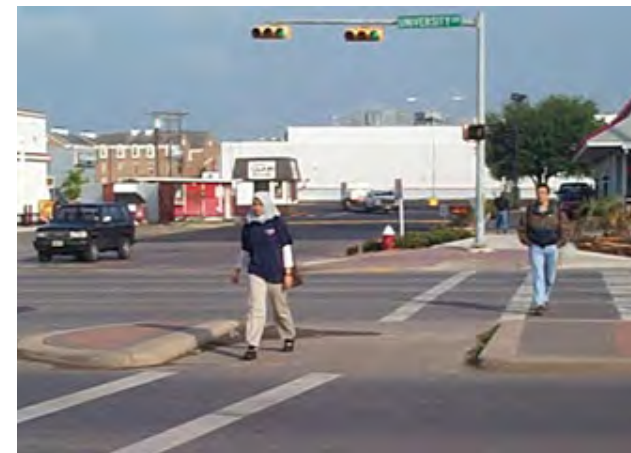
Leading Pedestrian Intervals (LPIs) are phase adjustments that give pedestrians a 3- to 7-second advanced walk phase to enter an intersection prior to the parallel green signal beginning. This head start establishes the pedestrian's right of way in the crosswalk and makes pedestrians more visible to turning vehicles. LPIs have been shown to reduce the chances of a vehicle colliding with a pedestrian by as much as 60 percent. Given recorded pedestrian volumes and turn movement counts for intersections within the project area, the inclusion of LPIs should be considered for all signalized intersections between W 17th and W 26th Avenues.



Source: NACTO

Continuous Raised Medians with Refuge Areas

Raised medians provide many benefits. They act as traffic calming measures along arterials, prevent vehicle swerving into opposing lanes, and, where wide enough, serve as a pedestrian/bicycle refuge along marked crossings. Median refuges shorten pedestrian crossing distances, reduce the time a pedestrian is exposed to traffic, and allow for two-stage crossings for those unable to clear the intersection within a single signal phase. Median islands also provide space for landscaping opportunities, enhancing the look of a corridor.



Raised median with pedestrian refuge area

Curb Extensions

Curb extensions narrow a roadway at intersections and midblock crossings. This shortens the crossing distance for pedestrians and bicyclists between two curbs. In addition, curb extensions help make pedestrians crossing more visible, as they start their movement from a point where motorists are more likely to see them. Curb extensions can also better manage the effective turning radius for vehicles at intersections, forcing them to make slower turn movements, which results in improved driver yielding to pedestrians. There are several application opportunities on connecting side streets on the west side of the corridor where they could be beneficial.



Curb extension

Pedestrian Hybrid Beacon (PHB)

Pedestrian Hybrid Beacons (PHB) are often used as the preferred pedestrian crossing treatment where there is higher-speed traffic and the need for a crossing between existing enhanced or, signalized crossings. When a PHB is activated by pedestrians either pushing a button or being passively detected, the signal heads activate with flashing yellow lights to warn vehicles to slow, then switches to solid yellow, and finally solid red to indicate the need for vehicles to stop. At this point, a walk signal appears, indicating that pedestrians may begin crossing.



Pedestrian Hybrid Beacon

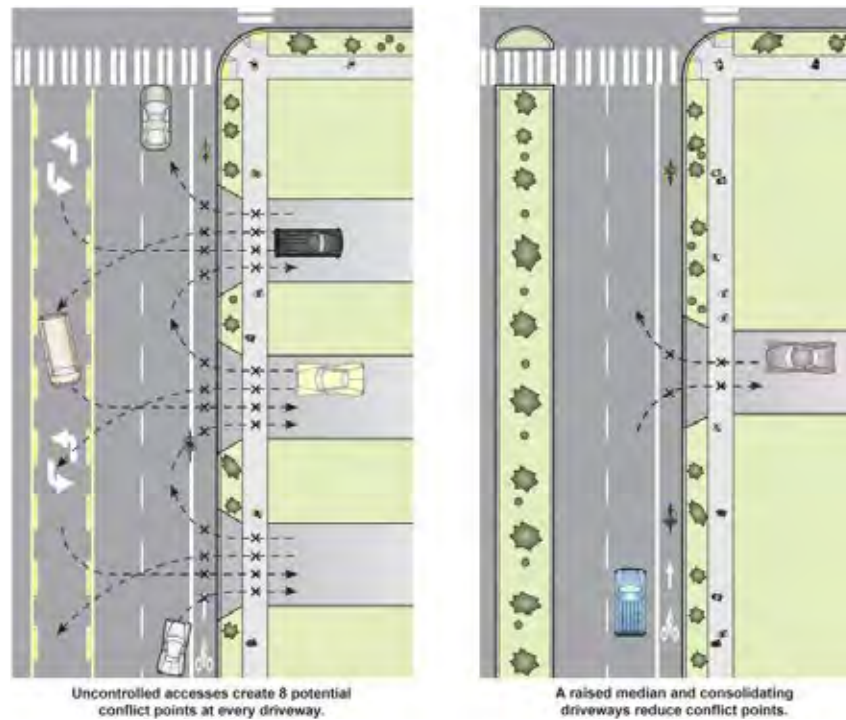
Driveway Treatments

Many of the commercial driveways along the Sheridan Boulevard corridor are designed with the features of intersections rather than driveways. This results in a termination in the sidewalk, larger corner radii, long crossing distances for pedestrians, and the potential for higher driver speed. A well-designed driveway slows turning traffic and reinforces that pedestrians on the sidewalk have the right of way. This is accomplished by maintaining the sidewalk at its elevated level and requiring cars to mount an apron, improving pedestrian safety by slowing turning movement. The use of high visibility crosswalks across a driveway also reinforces that pedestrians have the right of way.

Consolidate or Relocate Driveways

Currently, there are many driveway access points on the western side of Sheridan Boulevard between W 17th and W 26th Avenues. Each of these driveways creates a potential for conflict - between vehicles, or between vehicles and pedestrians. Consolidating the driveways along Sheridan Boulevard, and/or shifting some of the driveways to side streets can help to minimize this conflict. In addition, by removing driveways, auxiliary lanes on Sheridan Boulevard can be greatly shortened, or eliminated entirely, freeing up additional space for other modes.

Figure 3: Access Management Before and After



Source: Ohio DOT

Right-in right-out (RIRO) Configuration

Left turns into commercial driveways make up a disproportionate percentage of crashes along arterials, typically due to the many lanes of moving traffic to cross, and the need to exploit short gaps in traffic. Converting business access to right-in and right-out (RIRO) turns only eliminates the risk these left turns pose. Pedestrian crossings should be fundamentally integrated into the RIRO design. This may include pedestrian refuges, raised crossings, crosswalks and warning signage.



Right-in right-out configuration

Adjust Corner Radius

Tightening the radius of corners slows down turning traffic, shortens pedestrian crossing distances, and makes pedestrians more visible to drivers. Faster moving motorists have longer stopping distances and are less likely to yield to crossing pedestrians. Areas with a right turn auxiliary lane would be prime candidates for this as they provide space for the deceleration required for tighter turning radii.



Source: Global Designing Cities Initiative

The Plan for Sheridan Boulevard

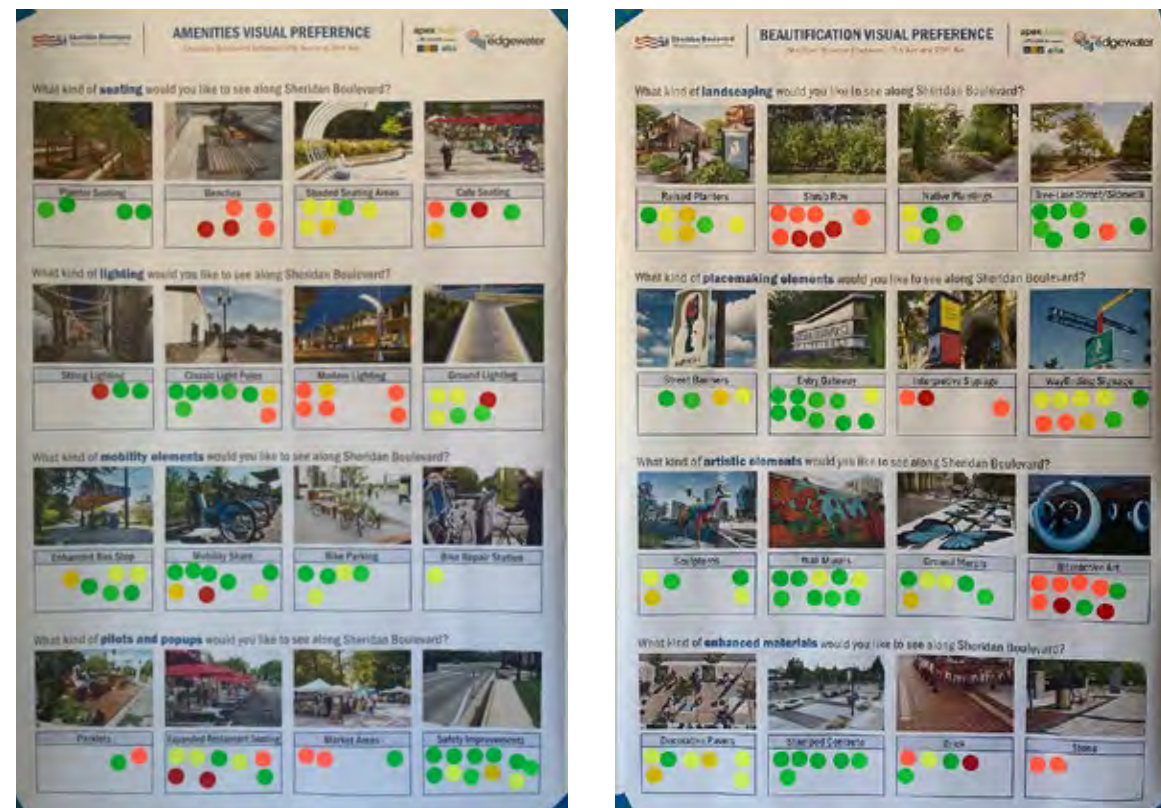


Alternatives Development

After analyzing the existing conditions of Sheridan Boulevard and feedback received from the community, business owners, Project Management Team, and Stakeholder Working Group, two alternatives were developed. Overall, safer and more comfortable pedestrian and bike facilities, more landscaping, and better urban design elements are needed and desired along the corridor. Additionally, countermeasures to reduce vehicle crashes are also desired and critical to developing a multimodal Sheridan Boulevard. To accomplish these goals, two alternatives were developed: the **Main Street Alternative** and the **Boulevard Alternative**.

Both alternatives included:

- Construction of a center running median (varying widths)
- Native, low-water landscaping
- Enhanced pedestrian and bike crossings
- Public art and gateway signage
- Enhanced transit stops
- Driveway treatments



Amenities and beautification visual preference activity at a stakeholder working group

Main Street Alternative

Overall, the Main Street Alternative focuses on providing a safer and more comfortable pedestrian realm through wider sidewalks and amenity zones, more frequent crossings along the corridor, and restricting left turn access onto W 22nd and 24th Avenues.

The Main Street Alternative differs from the Boulevard Alternative in a few main ways:

- Narrow raised median
- Three enhanced pedestrian crossings
- Larger pedestrian and amenity zones on the west side of Sheridan Boulevard
- Right-in/right-out only on W 22nd and W 24th Avenues



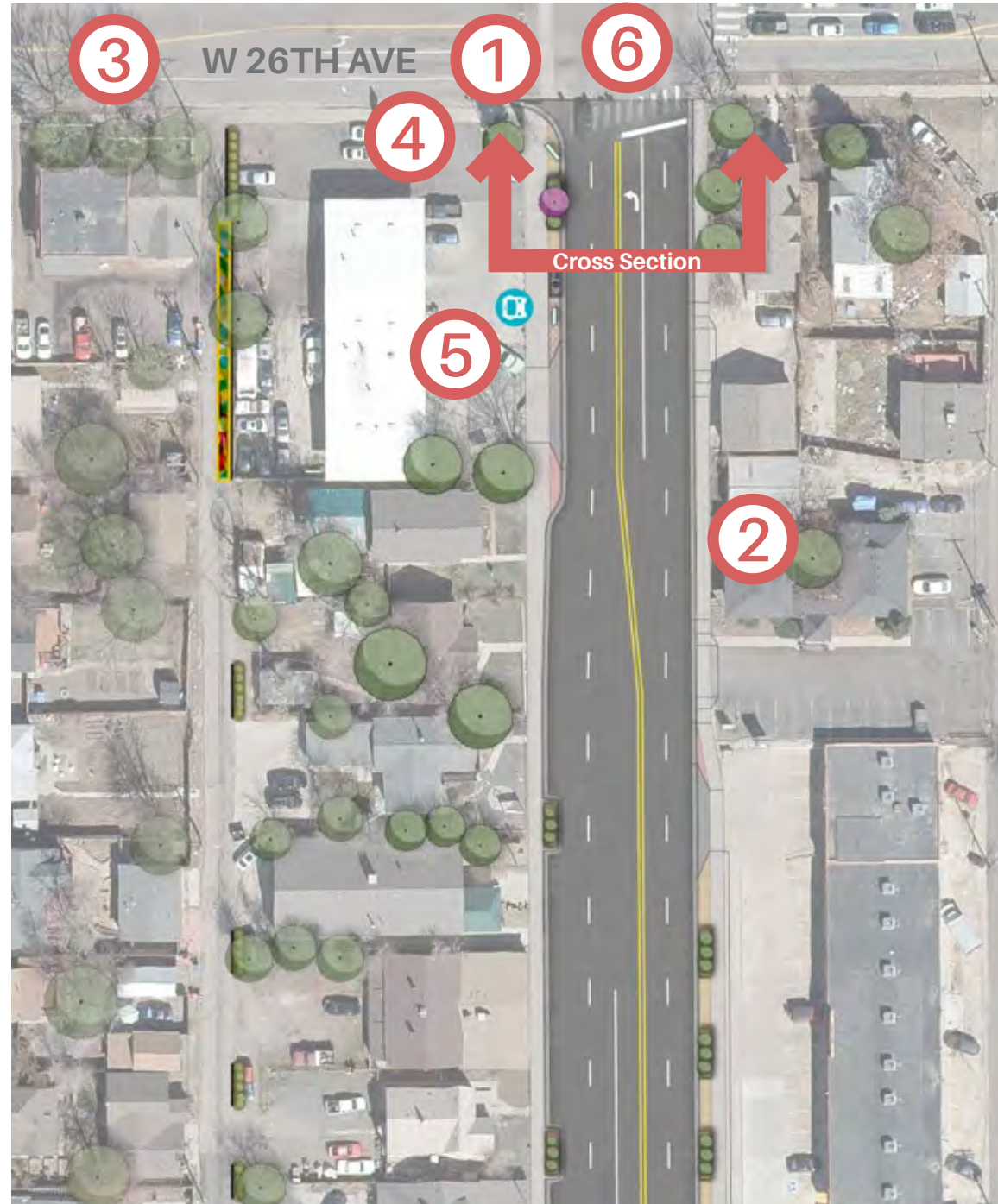
Source: Seth Dewey on Unsplash

Main Street Alternative

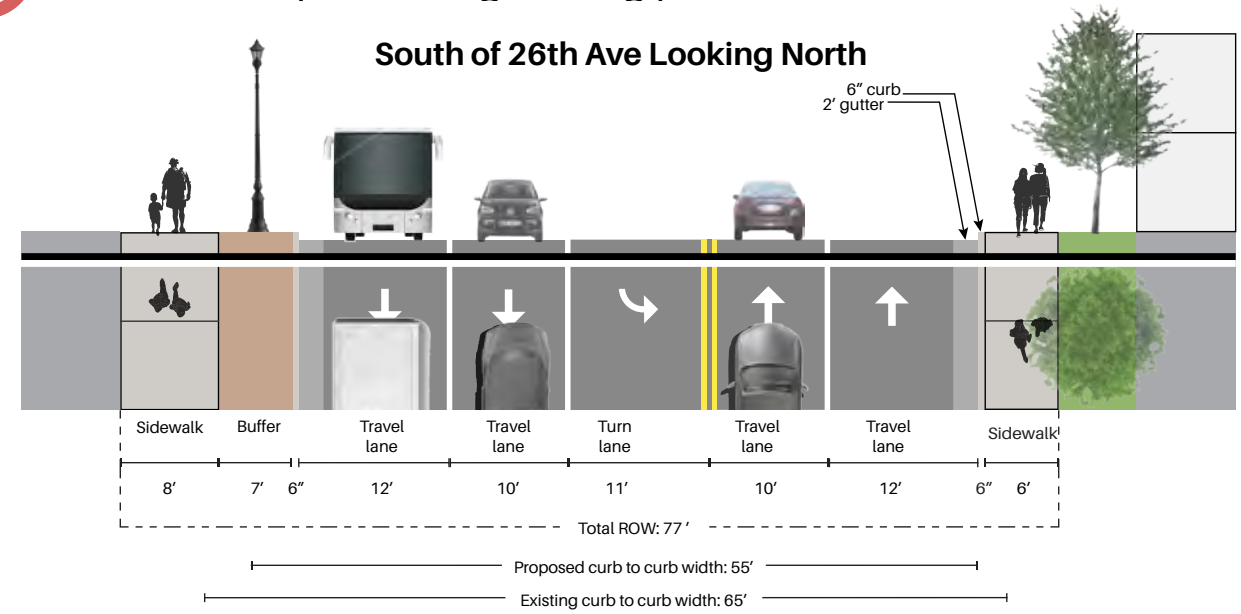


Main Street Alternative

West 26th Avenue



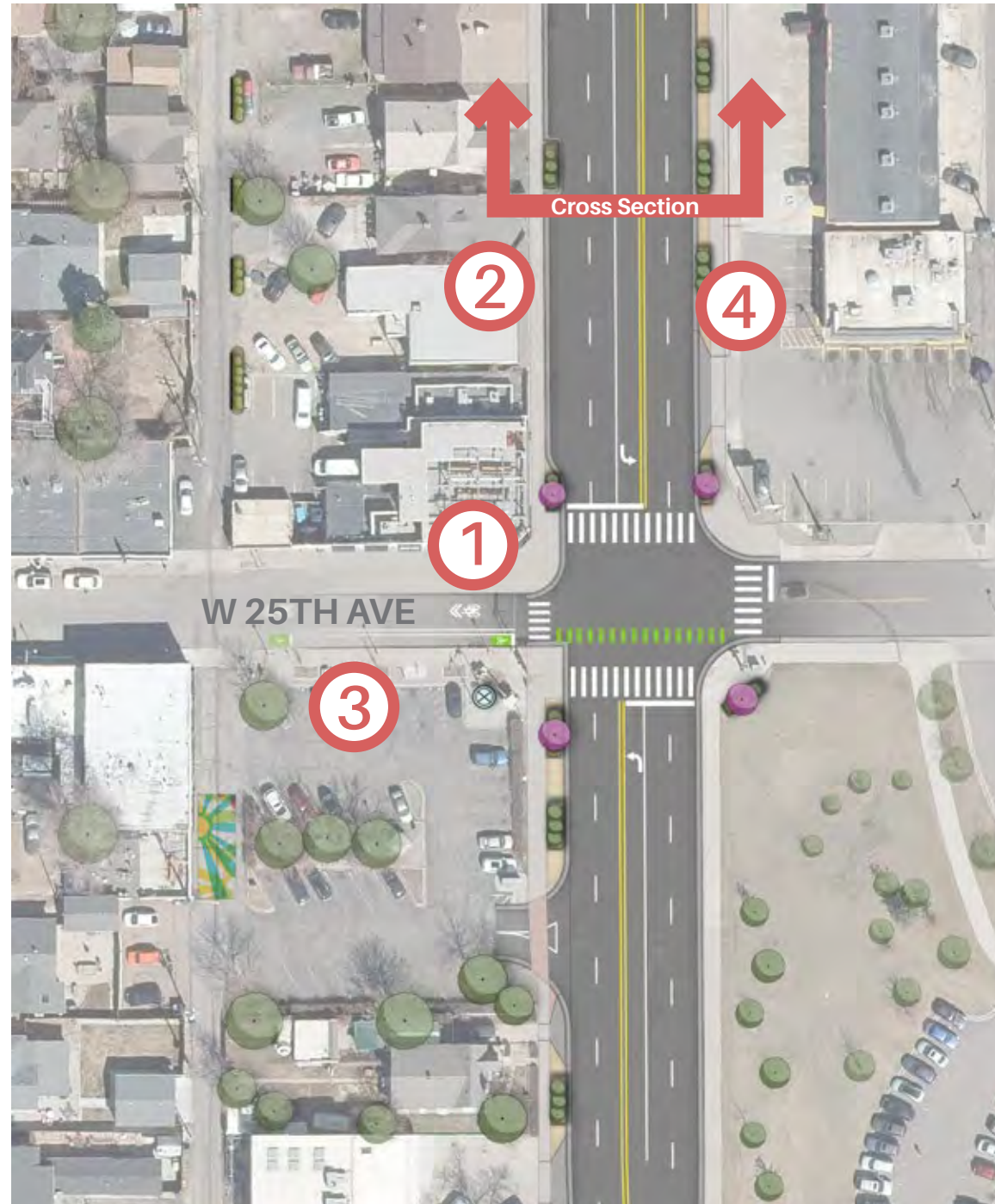
- 1 Reconfigure curb extension on west side near intersection
- 2 Widen sidewalks on east side of Sheridan Boulevard
- 3 Provide eastbound bicyclist on W 26th Avenue with an alternate route to travel into Denver as the bicycle lane ends on the approach to Sheridan Boulevard and there is no bicycle facility east of Sheridan in Denver
 - Provide bicycle wayfinding signs to help bicycles navigate to and from W 25th Avenue and W 26th Avenue via Depew
 - Utilize existing rectangular rapid flashing beacon at intersection of W 26th Avenue and Depew to facilitate safe bicycle crossings
- 4 Install City of Edgewater gateway signage at intersection (property coordination may be required)
- 5 Enhance transit stop on southbound Sheridan
- 6 Consider implementing leading pedestrian interval (LPI)



Plan Location Diagram

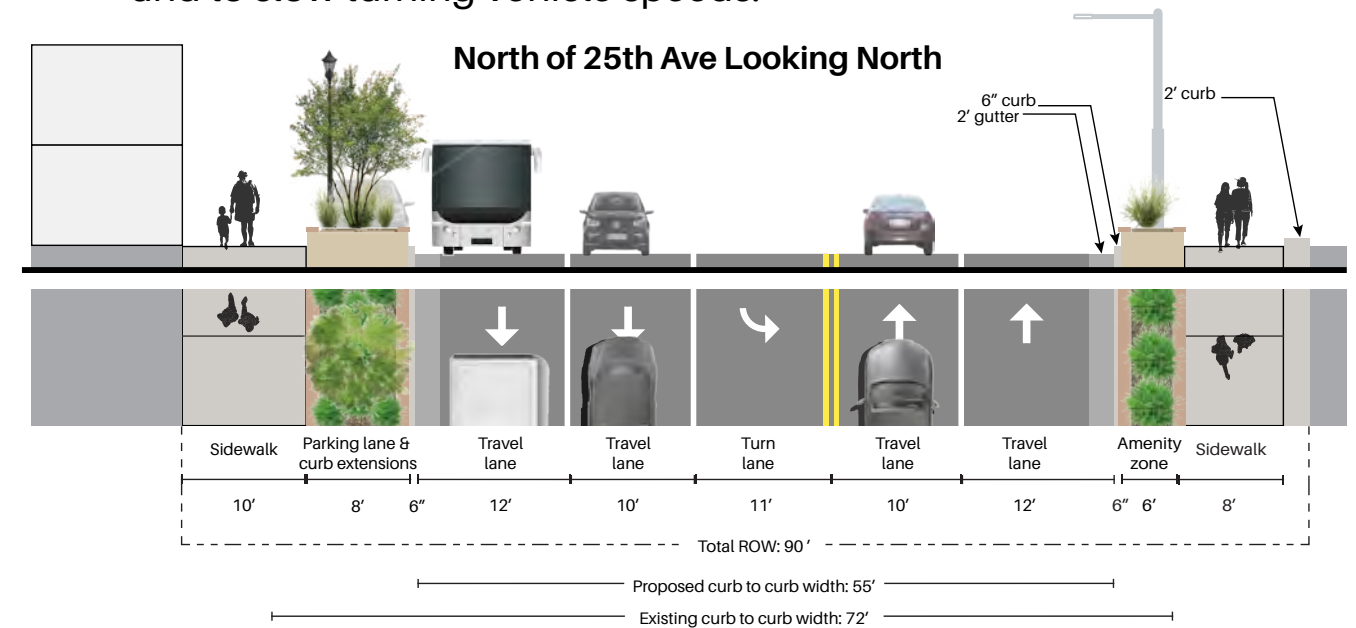
Main Street Alternative

West 25th Avenue



Plan Location Diagram

- 1 Install curb extensions on NW corner of the intersection (coordinate with W 25th Avenue Streetscape Project) to reduce pedestrian crossing distances and exposure to turning vehicles
- 2 Maintain on-street parking on the west side of Sheridan Blvd between W 25th and 26th Avenues.
 - Install a few curb extensions along this segment to provide opportunities for additional plantings, bike parking, and other pedestrian amenities.
 - This also has the potential to reduce vehicle speeds.
 - This parking may be phased out due to safety concerns or as parking becomes available in nearby areas.
- 3 Provide better bicycle connectivity between Denver’s Neighborhood Bikeway on Byron Place and Edgewater’s Protected Bike Lane on W 25th Avenue
- 4 Remove NB acceleration lane north of intersection to provide more pedestrian space, reduce pedestrian crossing distance and exposure, and to slow turning vehicle speeds.



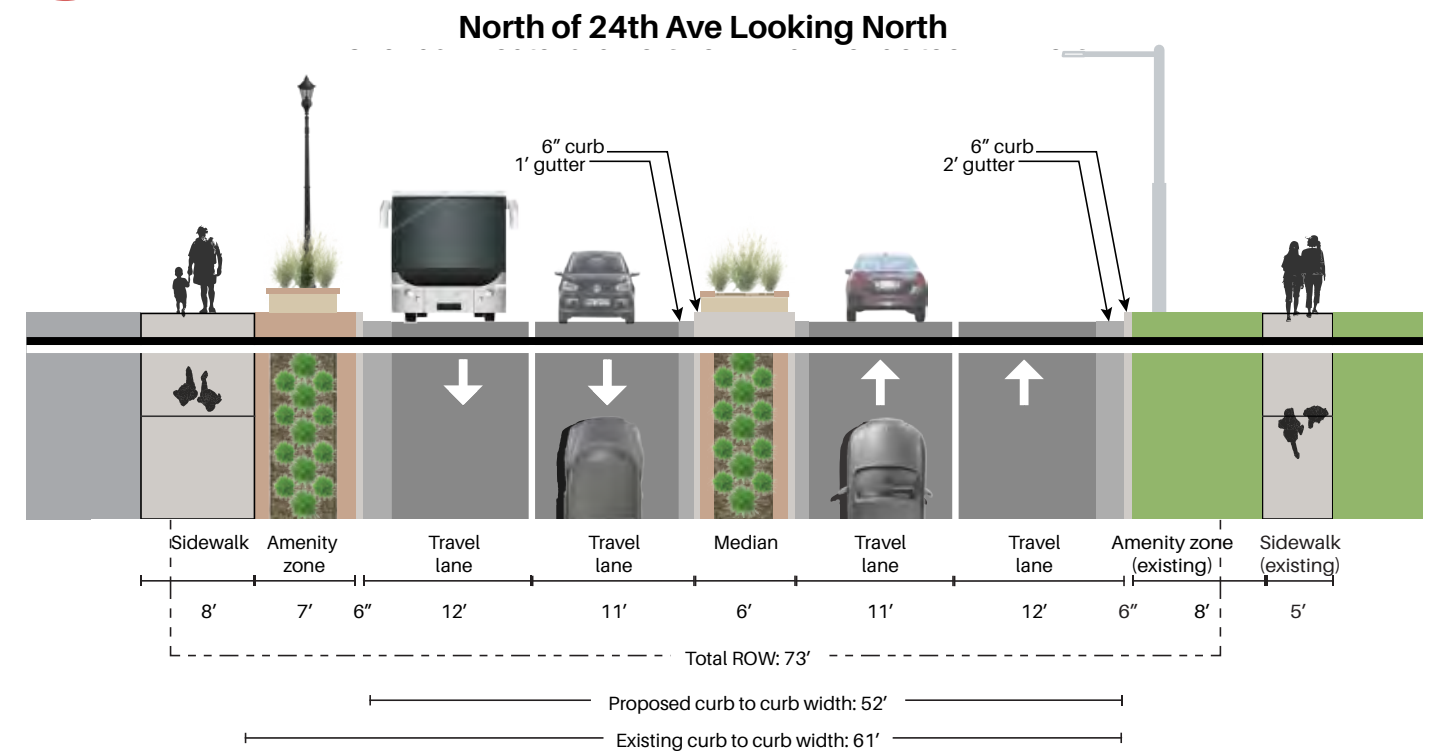
Main Street Alternative

West 24th Avenue



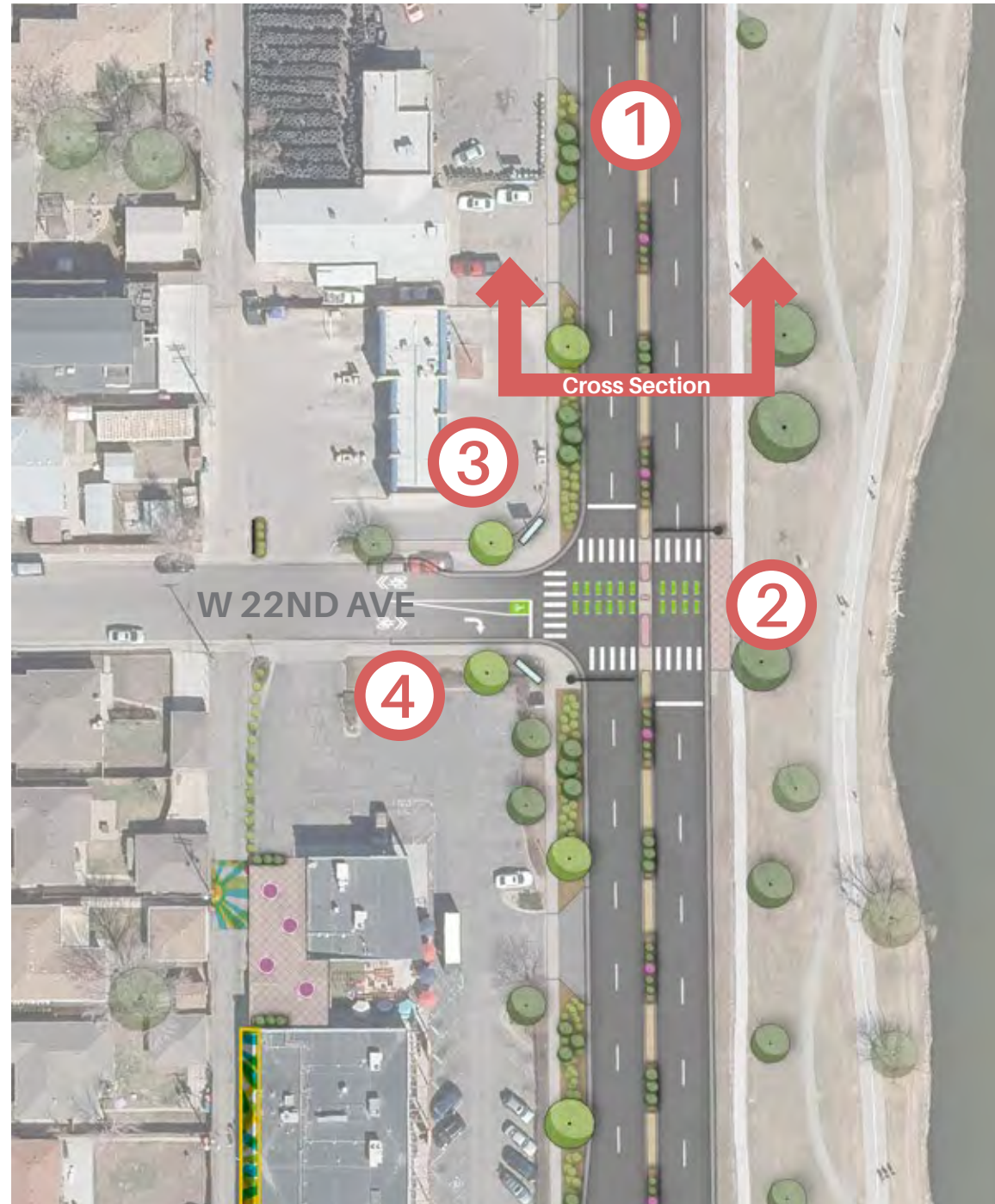
Plan Location Diagram

- ① Repurpose two-way left turn lane for a raised median to restrict left turn access onto W 24th Avenue, but maintain pedestrian crossing ability
- ② Install an enhanced crossing that includes a Pedestrian Hybrid Beacon (PHB), pedestrian median refuge and crosswalk markings and bicycle intersection crossing markings for better pedestrian and bike access to Sloan's Lake Park
- ③ Enhanced transit stop on northwest corner of the intersection
- ④ Install a "neighborway" with shared lane markings and other traffic calming elements on W 24th Avenue
- ⑤ Former City Hall (development opportunity)

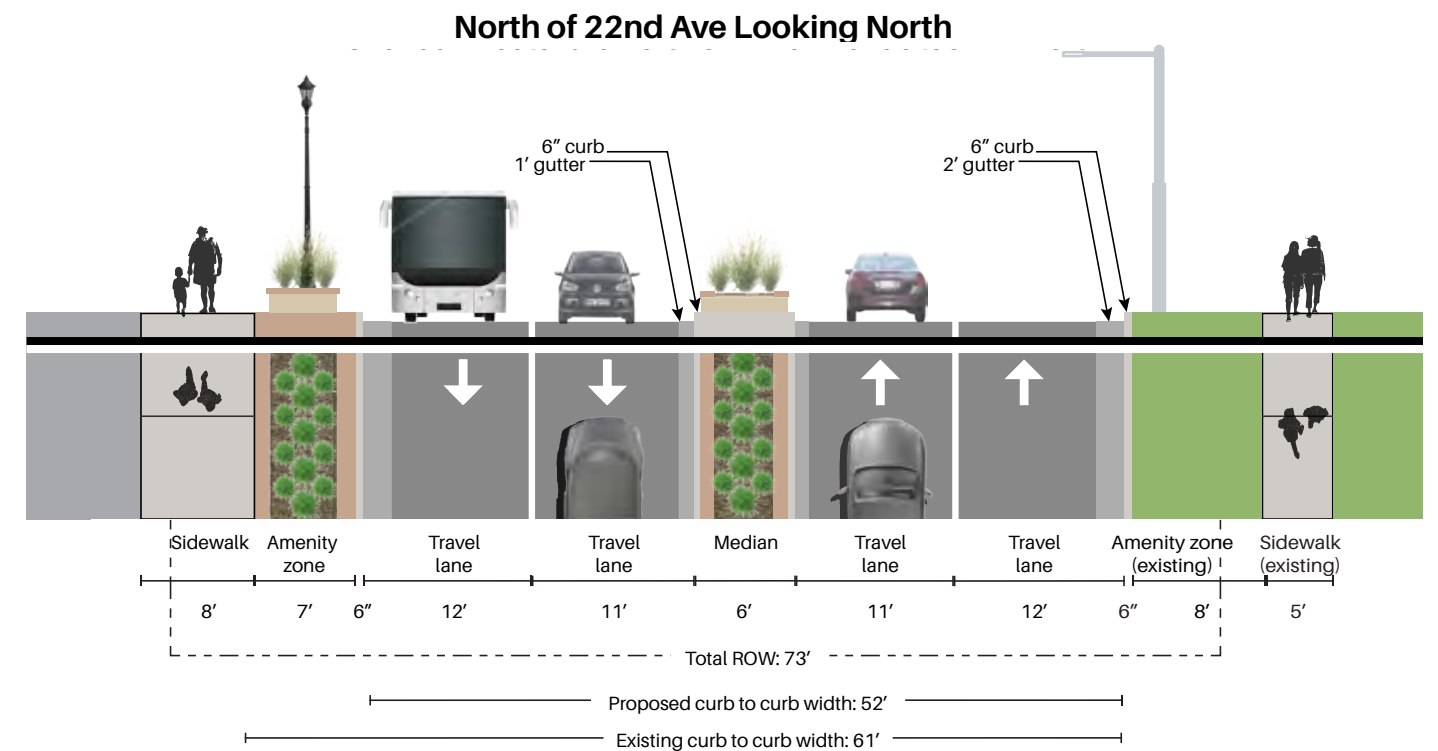


Main Street Alternative

West 22nd Avenue



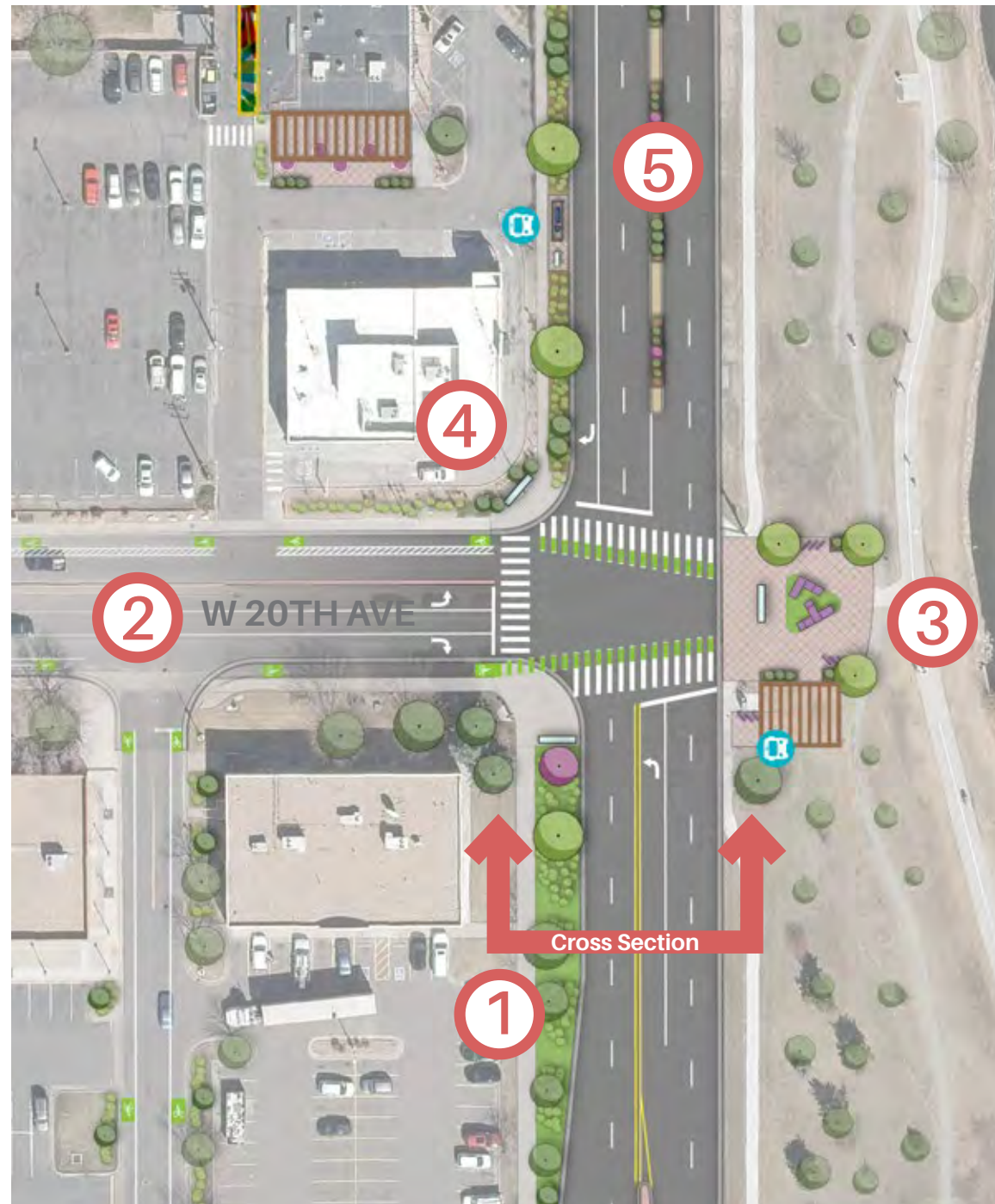
- ① Repurpose two-way left turn lane for a raised median to restrict left turn access onto W 22nd Avenue, but maintain pedestrian crossing ability
- ② Install an enhanced crossing that includes a Pedestrian Hybrid Beacon (PHB), pedestrian median refuge and crosswalk markings and bicycle intersection crossing markings for better pedestrian and bike access to Sloan's Lake Park
- ③ Install City of Edgewater gateway signage that works with existing business signage on the corners of the intersection
- ④ Install a "neighborway" with shared lane markings and other traffic calming elements on W 22nd Avenue



Plan Location Diagram

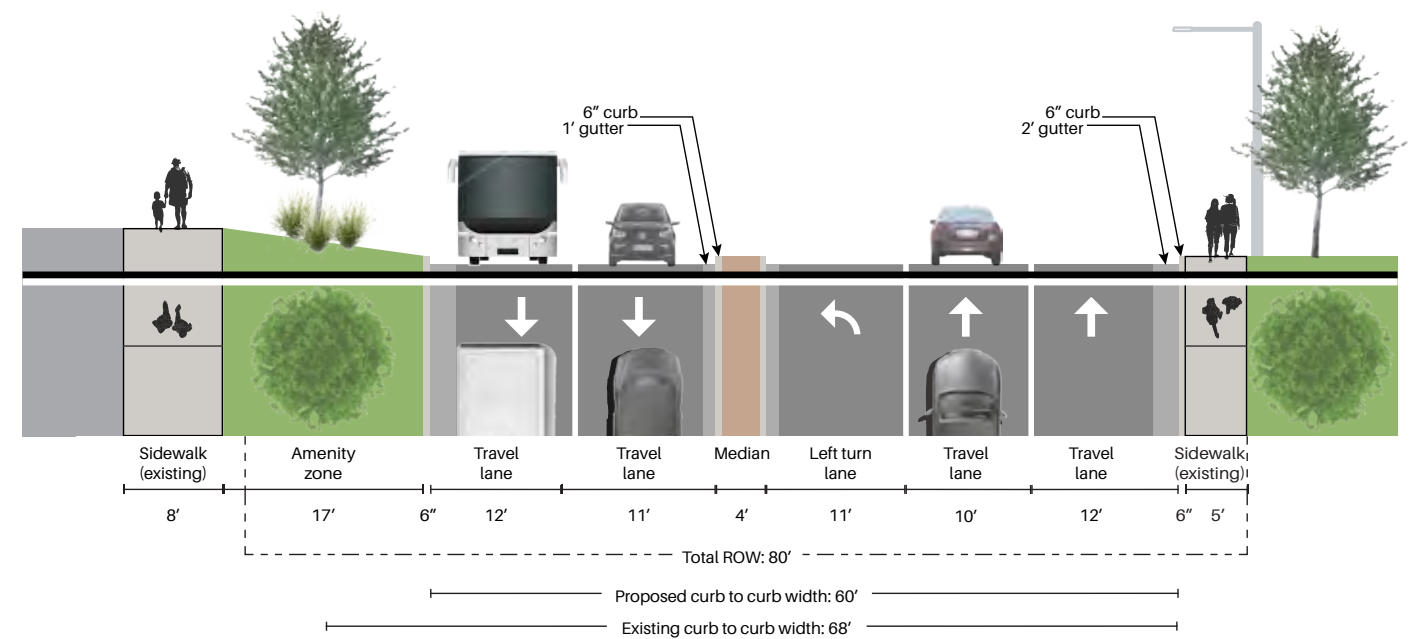
Main Street Alternative

West 20th Avenue



- ① Remove SB acceleration lane south of intersection to provide more pedestrian space, reduce pedestrian crossing distance and exposure, and to slow turning vehicle speeds.
- ② Install protected bike lanes on both sides of W 20th Avenue and extend across the intersection for better bike access to Sloan's Lake Park
- ③ Create a gateway plaza in Sloan's Lake Park
- ④ Install City of Edgewater gateway signage on the corners of the intersection
- ⑤ Continue raised median north of the intersection

South of 20th Ave Looking North



Plan Location Diagram

Main Street Alternative

Driveways between W 17th and W 20th Avenues



- ① Redesign driveway to slow turning traffic and reinforce that pedestrians on the sidewalk have the right of way. Install a raised pedestrian crossing and require cars to mount an apron, improving pedestrian safety by slowing turning movements.
- ② Repurpose the existing two-way left turn lane for a raised median
- ③ Repurpose extra space in SB right turn lane for a wider amenity zone/ sidewalk buffer
- ④ Extend driveway median past sidewalk
- ⑤ Install an enhanced crossing that includes a Pedestrian Hybrid Beacon (PHB), pedestrian median refuge and crosswalk markings
- ⑥ Enhanced transit stop at Sloan's Creek Trail



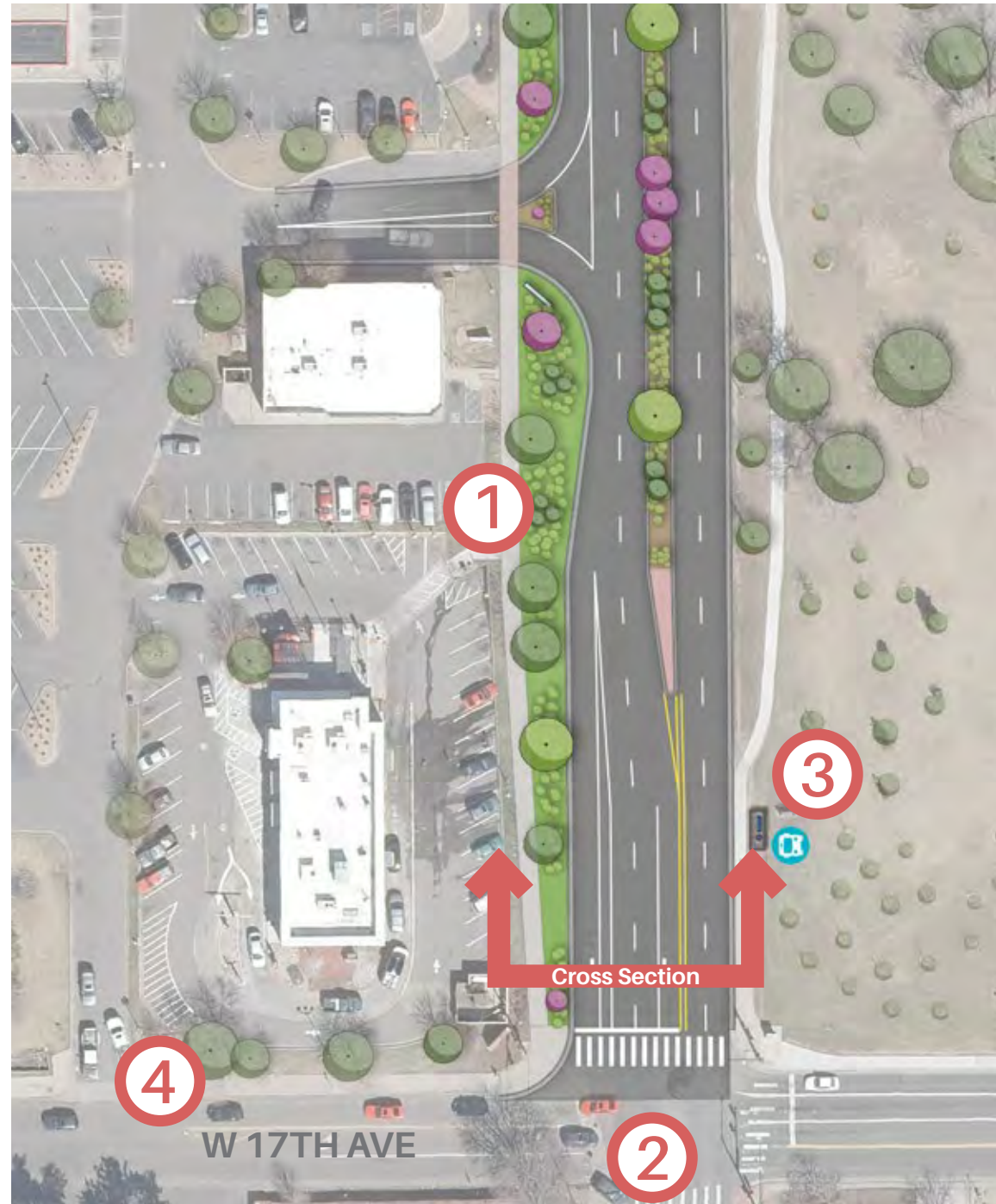
Mid-block Pedestrian Hybrid Beacon



Raised pedestrian crossing

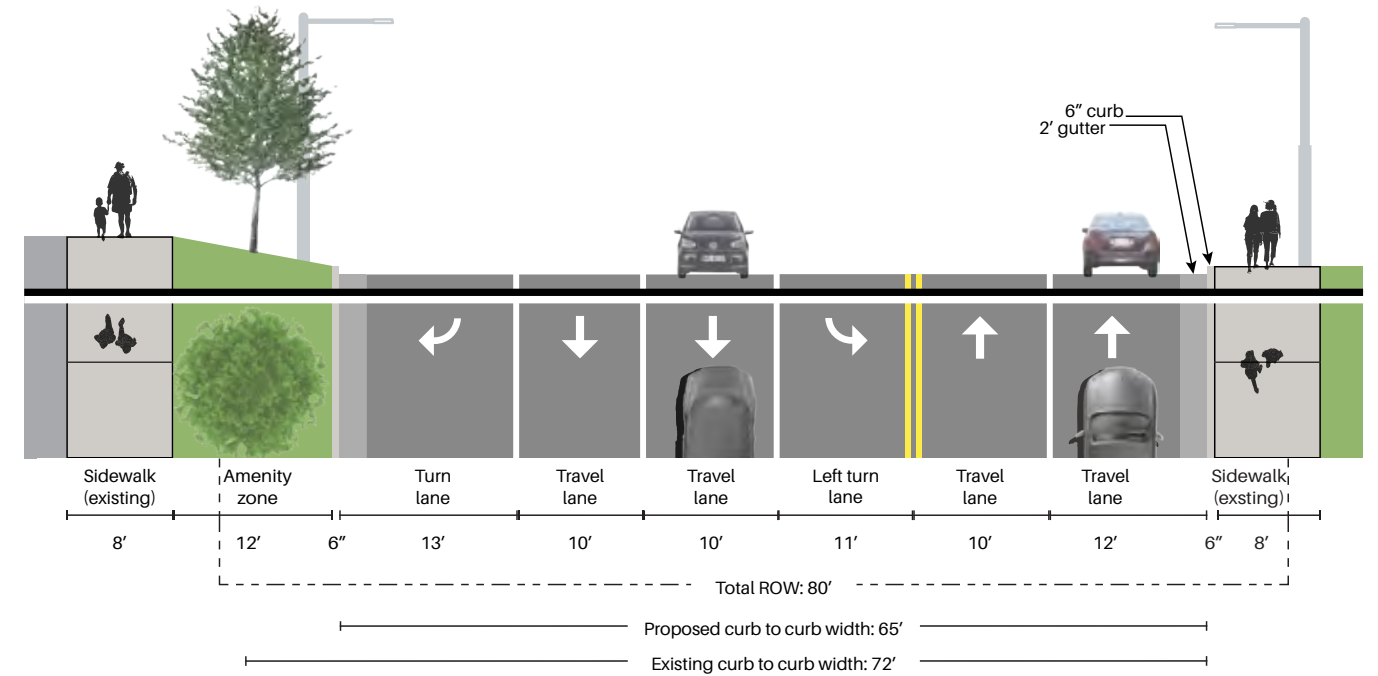
Main Street Alternative

West 17th Avenue



- ① Repurpose additional roadway space for wider sidewalk buffer (north of the intersection)
- ② Complete sidewalk segments on both sides of Sheridan Boulevard south of the intersection
- ③ Enhance transit stop on east side of Sheridan
- ④ Provide a bicycle facility on W 17th Ave west of Sheridan Boulevard in coordination with the City and County of Denver protected bike lane

North of 17th Ave Looking North



Plan Location Diagram

Boulevard Alternative

Overall, the Boulevard Alternative focuses on a wider median but maintains left turn access on W 22nd and W 24th Avenues. This alternative also provides more consistent lane widths for safer driving conditions.

The Boulevard Alternative differs from the Main Street Alternative in a few ways:

- Wider, planted median
- Two mid-block crossings
- Smaller pedestrian zone
- Provides full turn access on W 22nd and W 24th Avenues



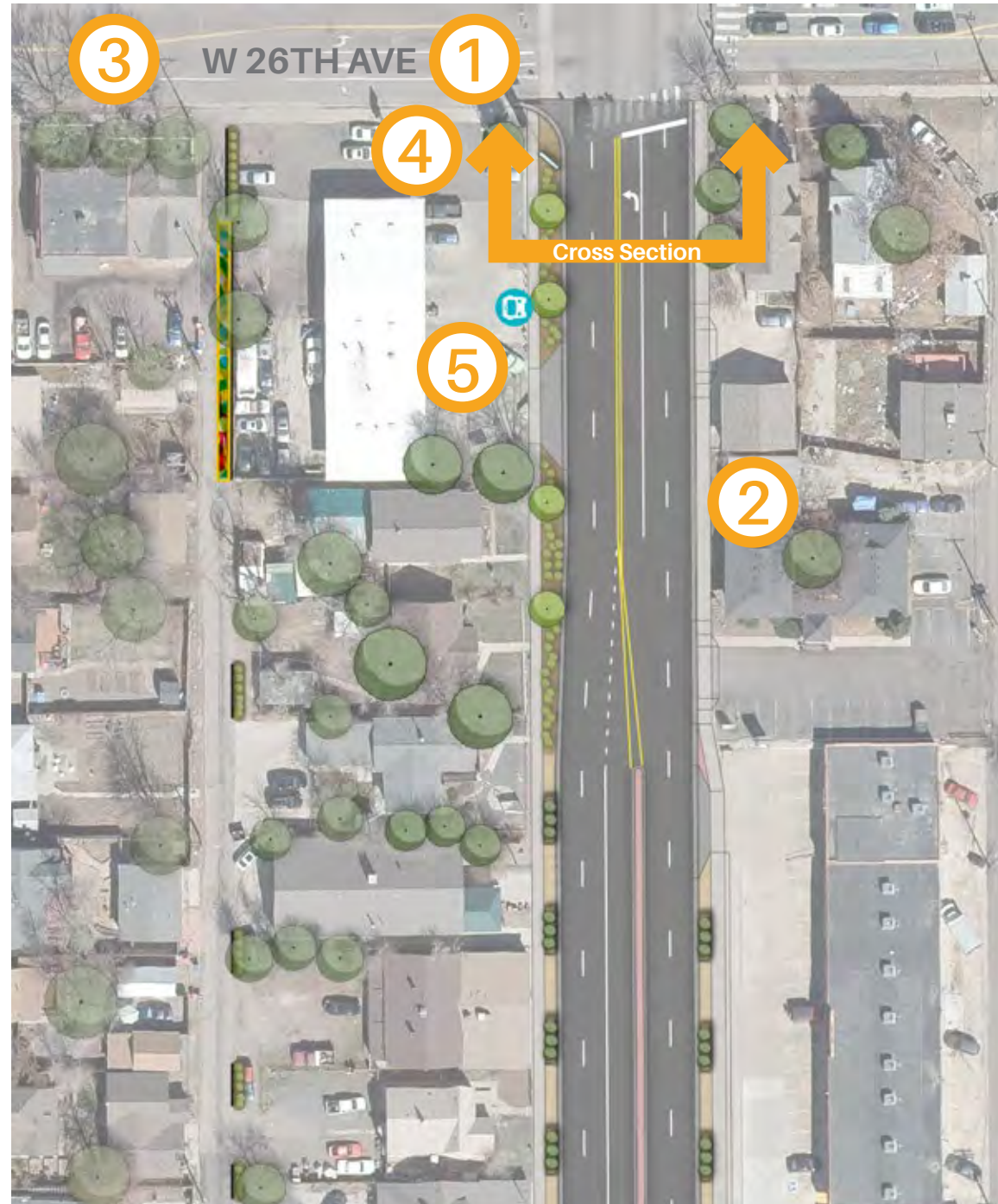
Source: Outdoor Design Group

Boulevard Alternative



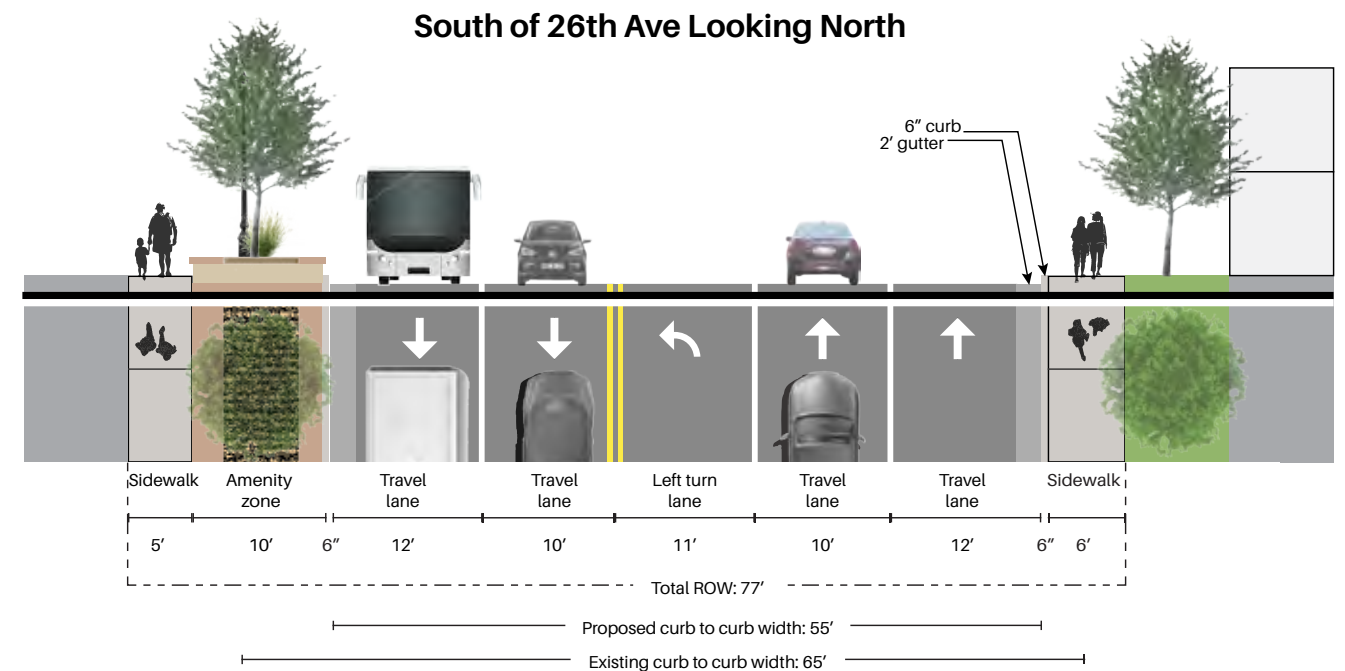
Boulevard Alternative

West 26th Avenue



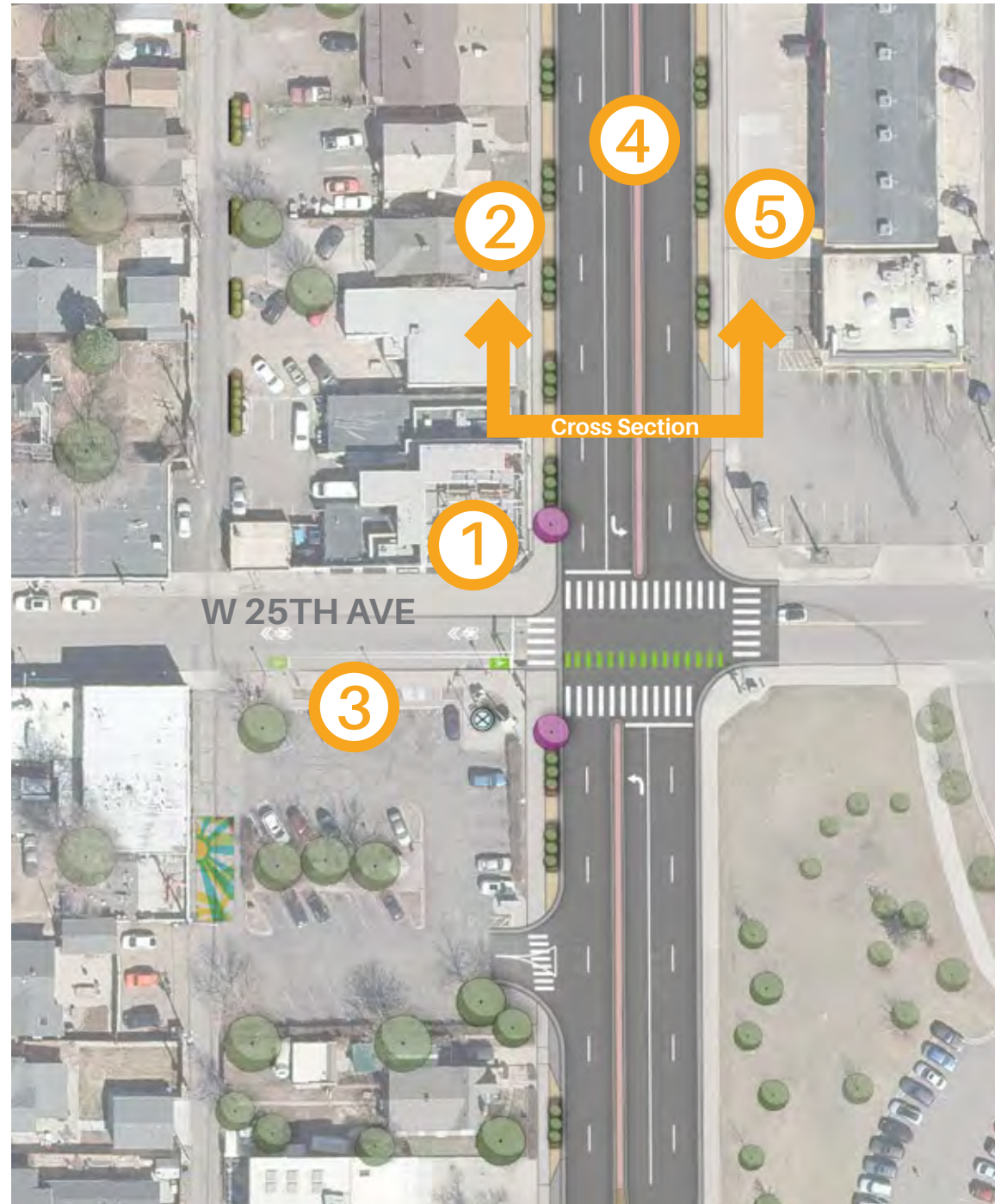
Plan Location Diagram

- 1 Reconfigure curb extension on west side near intersection
- 2 Widen sidewalks on east side of Sheridan Boulevard
- 3 Provide eastbound bicyclist on W 26th Avenue with an alternate route to travel into Denver as the bicycle lane ends on the approach to Sheridan Boulevard and there is no bicycle facility east of Sheridan in Denver
 - Provide bicycle wayfinding signs to help bicycles navigate to and from W 25th Avenue and W 26th Avenue via Depew
 - Utilize existing rectangular rapid flashing beacon at intersection of W 26th Avenue and Depew to facilitate safe bicycle crossings
- 4 Install City of Edgewater gateway signage at intersection
- 5 Enhance transit stop on southbound Sheridan



Boulevard Alternative

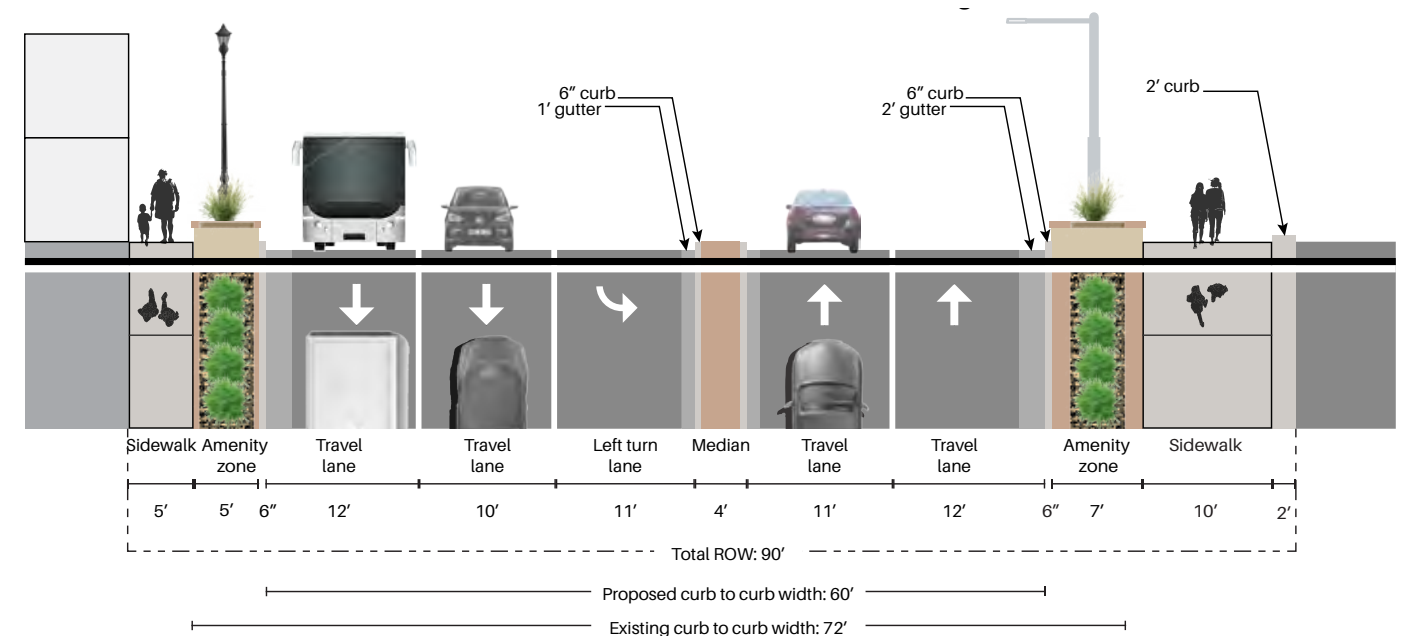
West 25th Avenue



Plan Location Diagram

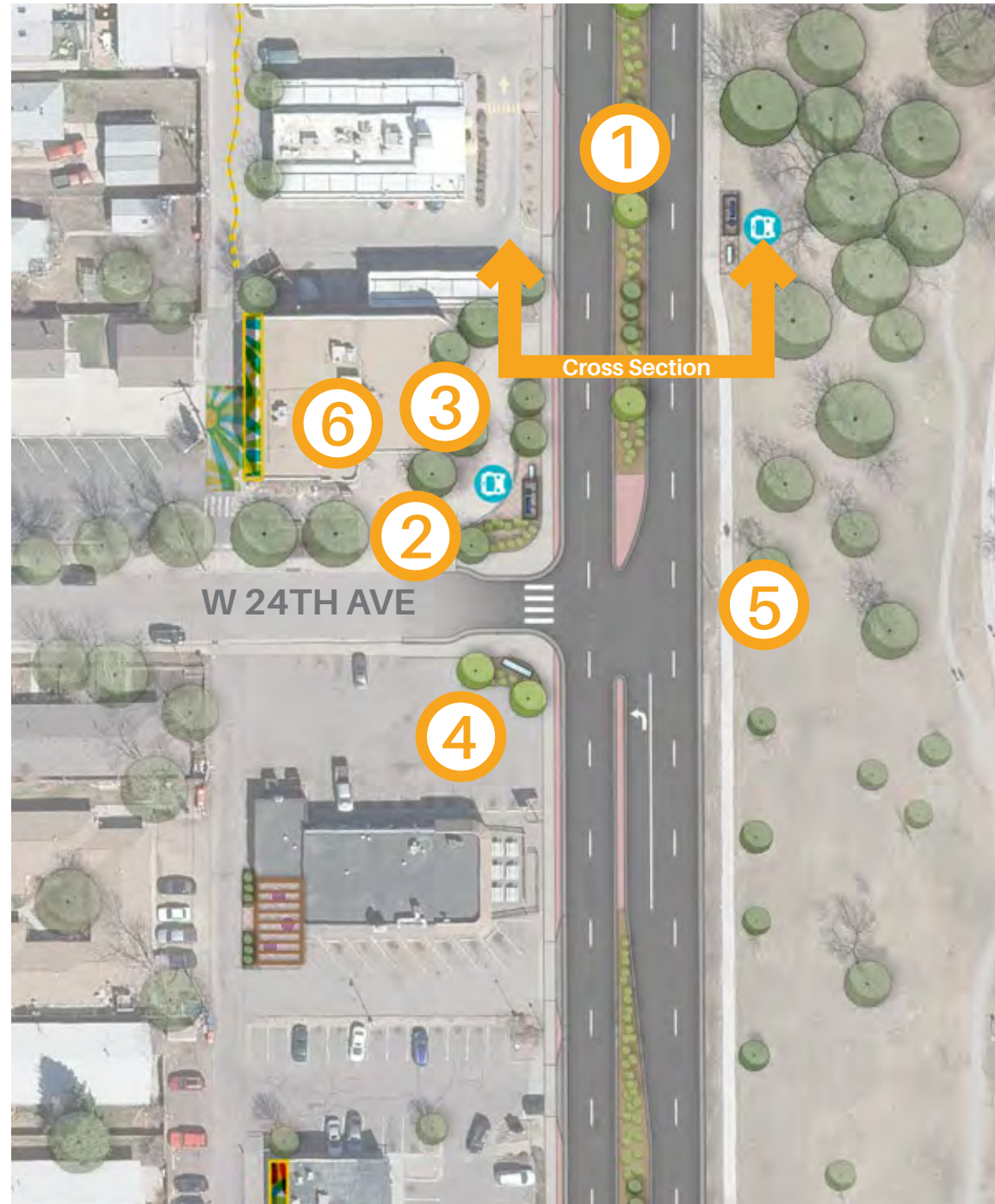
- 1 Install curb extensions on NW corner of the intersection (coordinate with W 25th Avenue Streetscape Project) to reduce pedestrian crossing distances and exposure to turning vehicles
- 2 Repurpose parking lane for sidewalk buffer
- 3 Provide better bicycle connectivity between Denver's Neighborhood Bikeway on Byron Place and Edgewater's Protected Bike Lane on W 25th Avenue
- 4 Continue median on both sides of the intersection
- 5 Remove NB acceleration lane north of intersection

North of 25th Ave Looking North



Boulevard Alternative

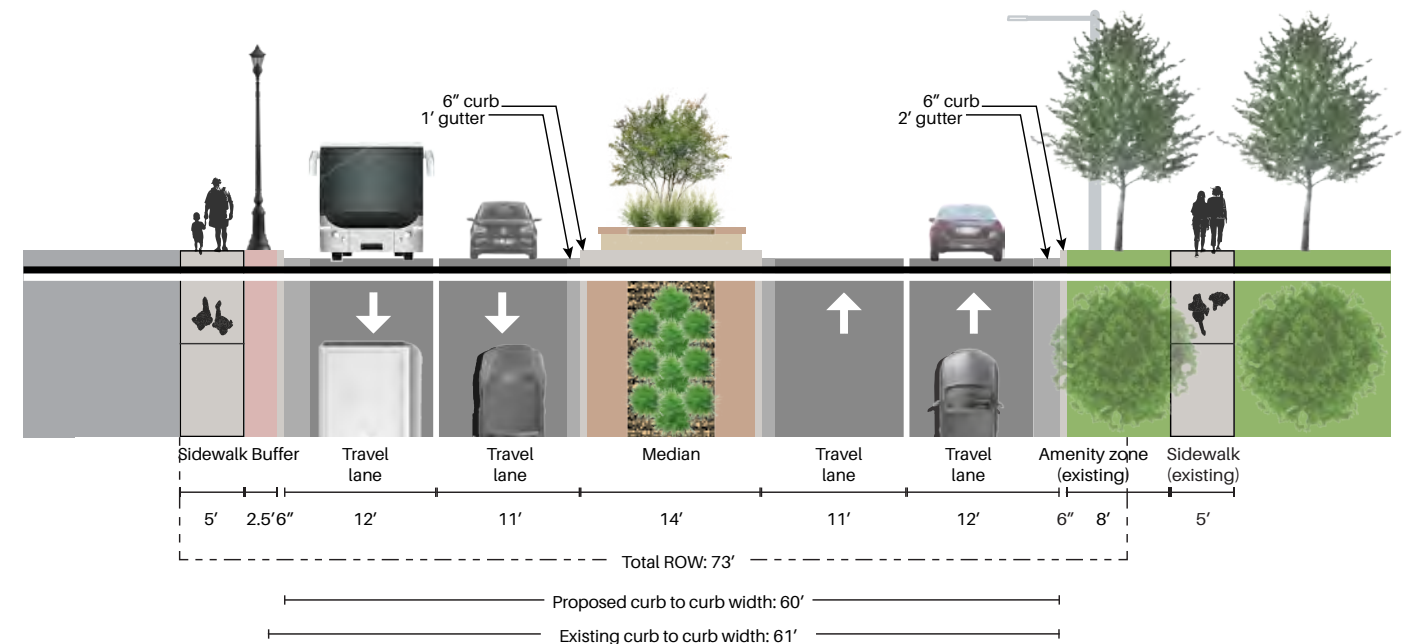
West 24th Avenue



Plan Location Diagram

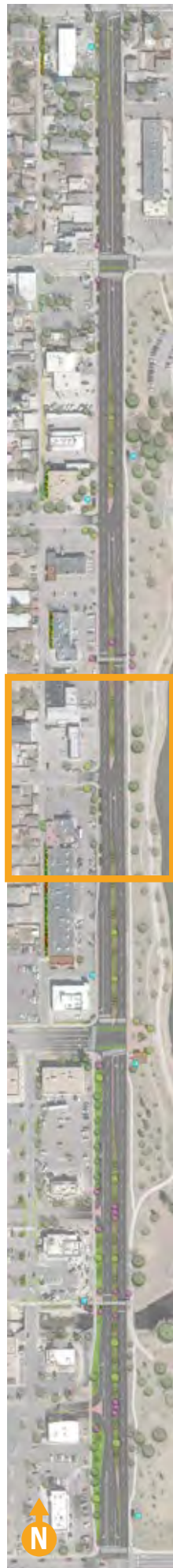
- 1 Maintain existing left turn access onto 24th Avenue
- 2 Install curb extensions to shorten crosswalk distance
- 3 Enhanced transit stops on northwest corner of the intersection and on NB Sheridan
- 4 Install City of Edgewater gateway signage that works with existing business signage on the corners of the intersection
- 5 No pedestrian or bike access across Sheridan
- 6 Former City Hall (development opportunity)

North of 24th Ave Looking North



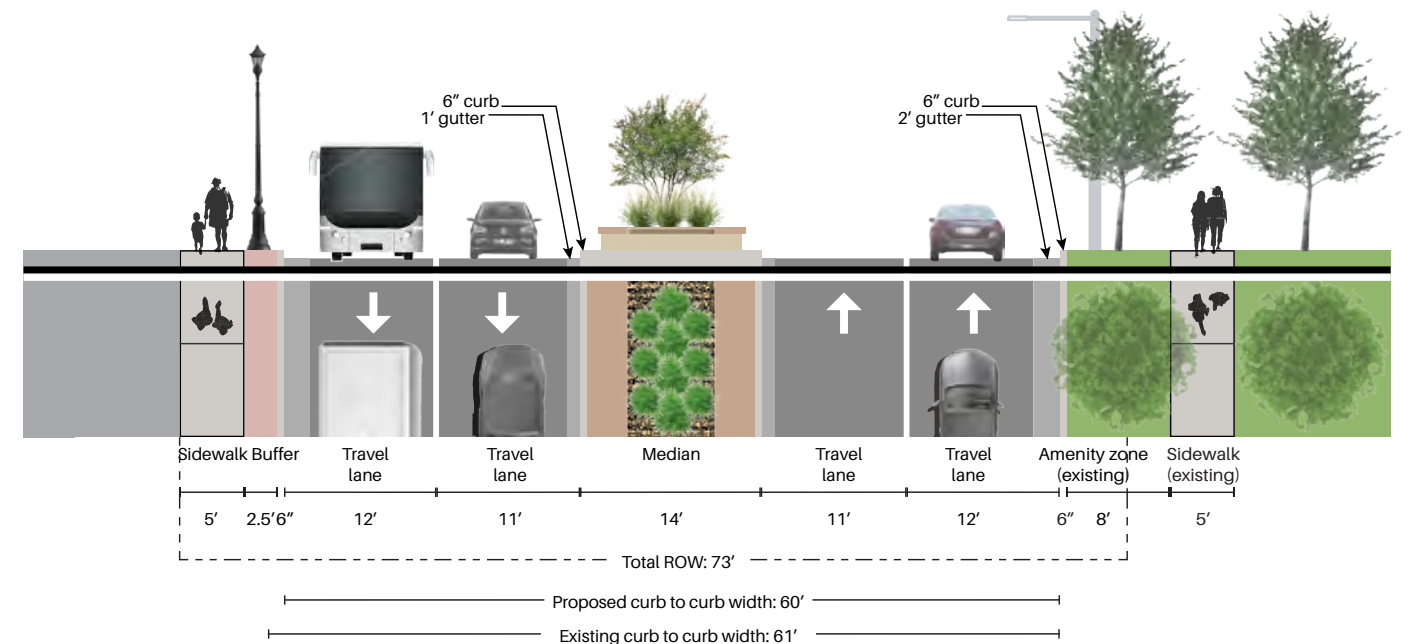
Boulevard Alternative

West 22nd Avenue



- 1 Maintain existing left turn access onto W 22nd Avenue
- 2 Install curb extensions to shorten crosswalk distance
- 3 Install City of Edgewater gateway signage that works with existing business signage on the corners of the intersection
- 4 Install Pedestrian Hybrid Beacon (PHB) and crosswalks for better pedestrian access to Sloan's Lake Park

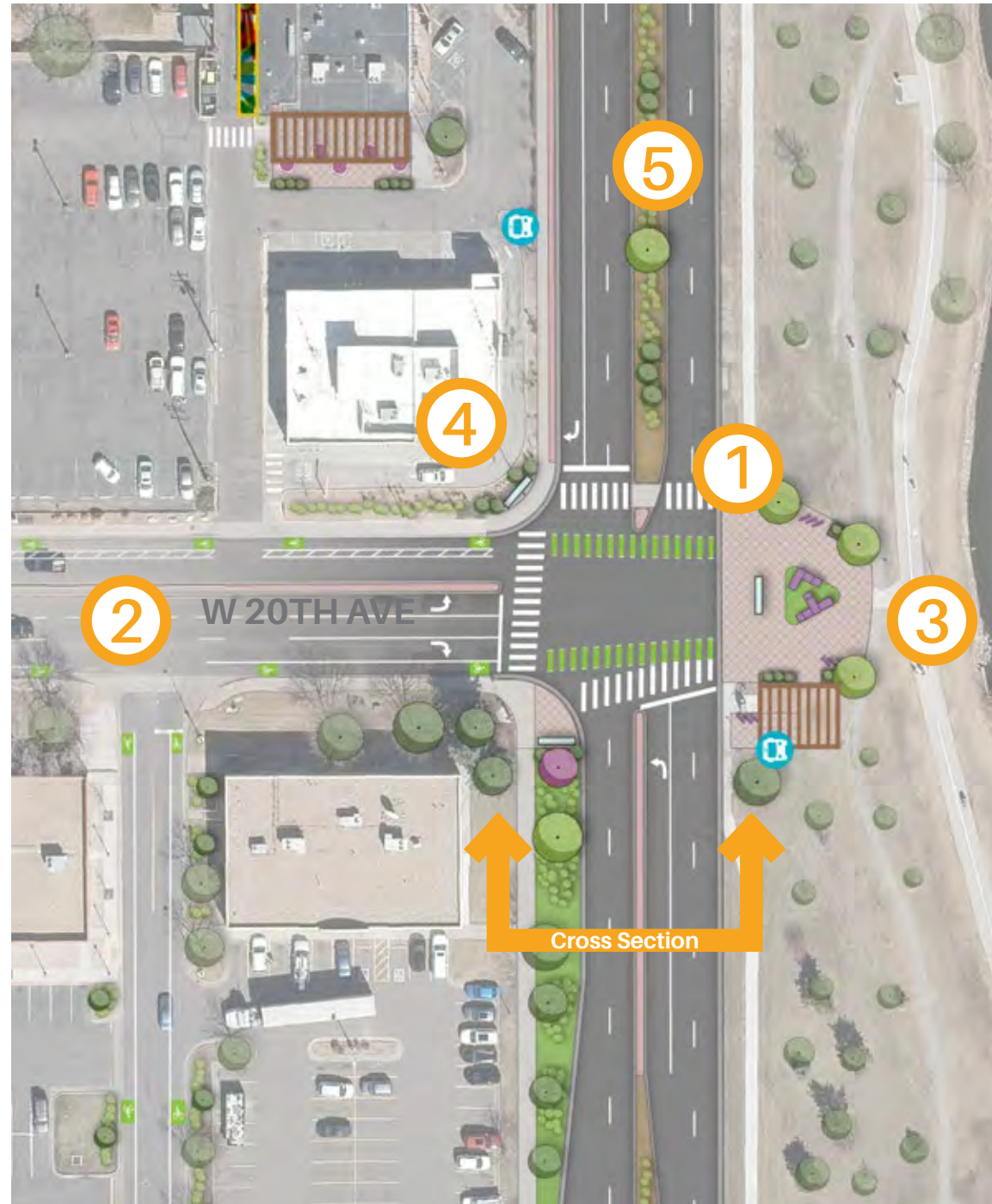
North of 22nd Ave Looking North



Plan Location Diagram

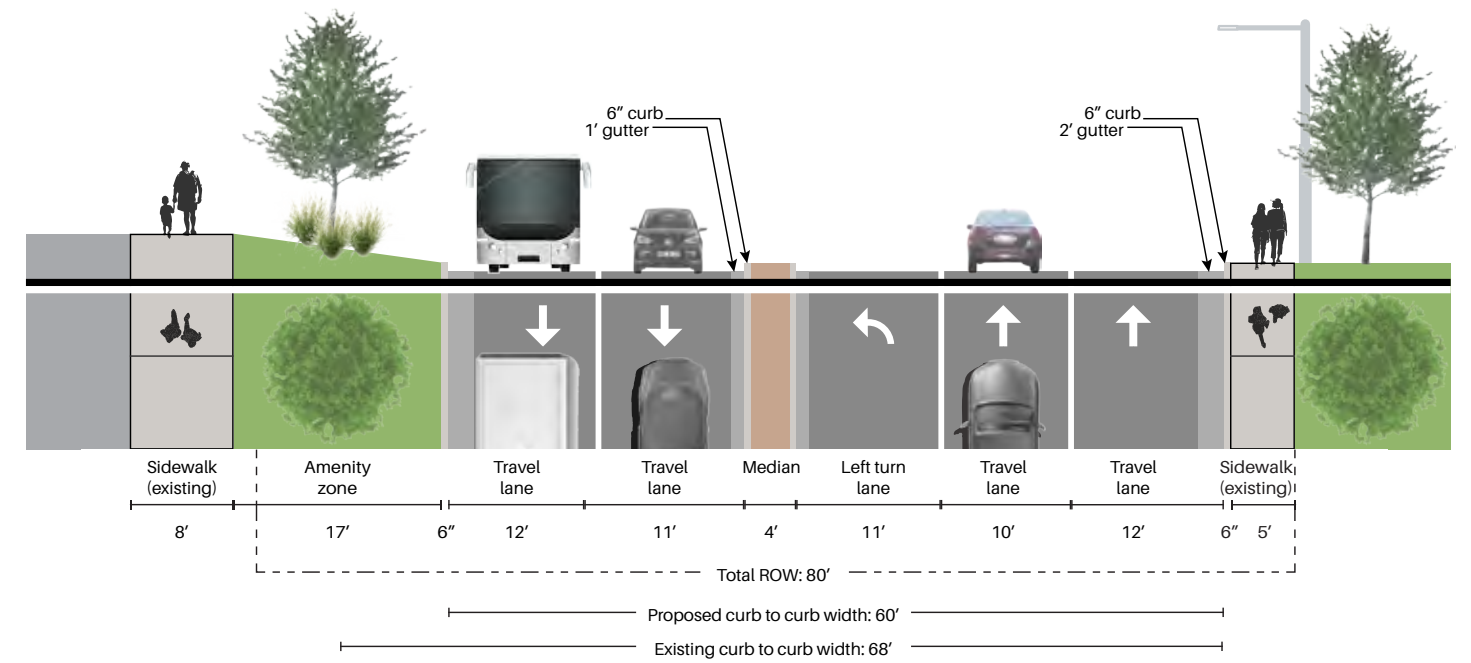
Boulevard Alternative

West 20th Avenue



- 1 Straighten crosswalk across W 20th Avenue
- 2 Install bike lane on eastbound W 20th Avenue and a buffered bike lane on westbound W 20th Avenue for better bike access to Sloan's Lake Park
- 3 Create a gateway plaza in Sloan's Lake Park
- 4 Install City of Edgewater gateway signage on the corners of the intersection
- 5 Continue the raised median on both sides of the intersection, allowing for a pedestrian refuge island on the northern side

South of 20th Ave Looking North



Plan Location Diagram



Boulevard Alternative

Driveways between W 17th and W 20th Avenues



- 1 Redesigned driveway to slow turning traffic and reinforce that pedestrians on the sidewalk have the right of way. Install a raised pedestrian crossing and require cars to mount an apron, improving pedestrian safety by slowing turning movements.
- 2 Repurpose the existing two-way left turn lane for a raised median
- 3 Repurpose extra space in SB right turn lane for a wider amenity zone/ sidewalk buffer
- 4 Extend right-in and right-out channelizing median
- 5 Install an enhanced crossing that includes a Pedestrian Hybrid Beacon (PHB), pedestrian median refuge and crosswalk markings
- 6 Enhanced transit stop at Sloan's Creek Trail



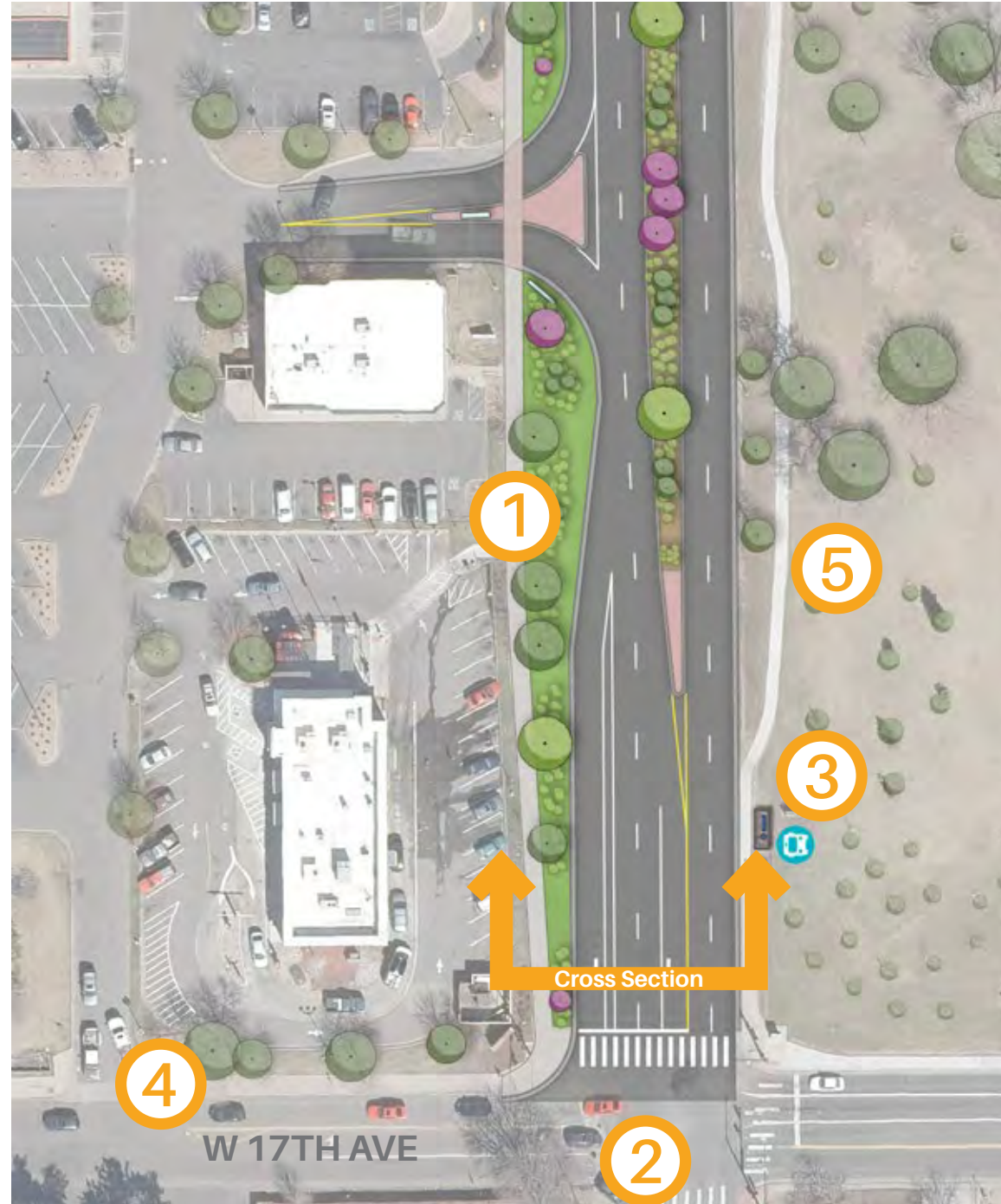
Mid-block Pedestrian Hybrid Beacon



Raised pedestrian crossing

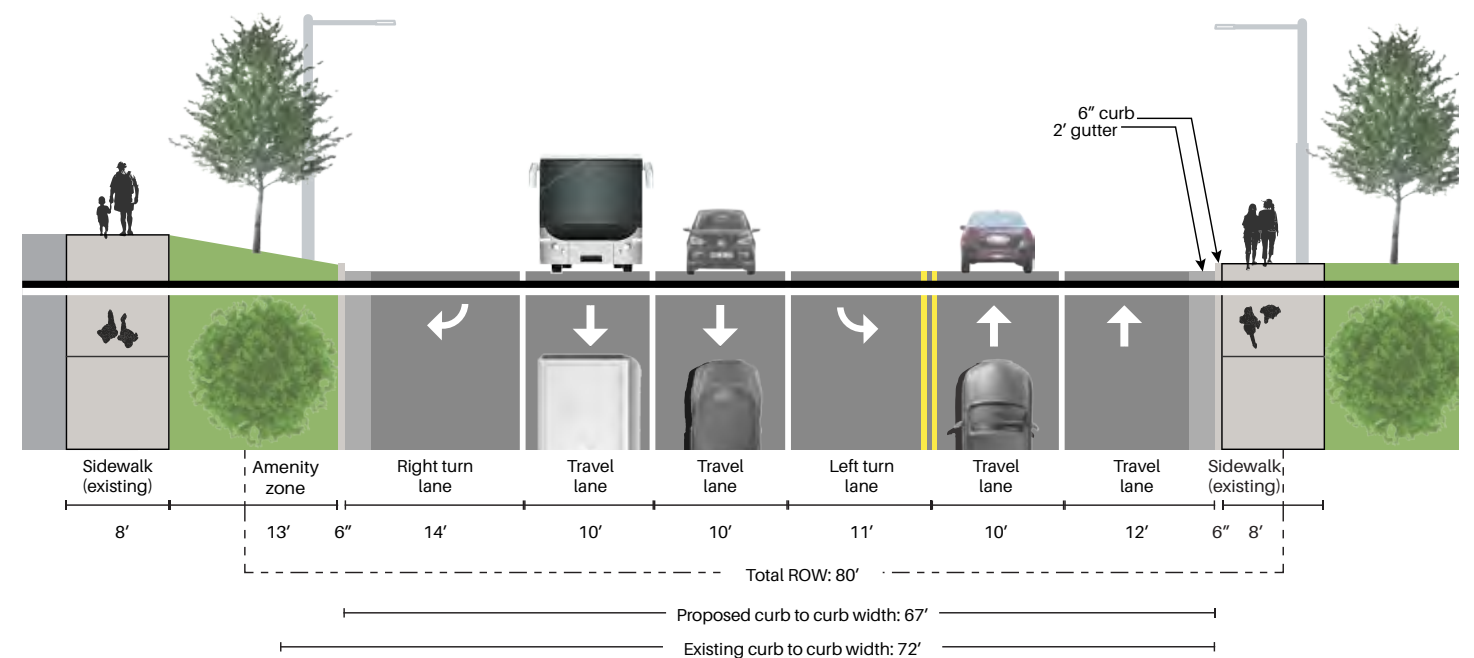
Boulevard Alternative

West 17th Avenue



- 1 Repurpose additional roadway space for wider sidewalk buffer (north of the intersection)
- 2 Complete sidewalk segments on both sides of Sheridan Boulevard south of the intersection
- 3 Enhance transit stop on east side of Sheridan
- 4 Provide a bicycle facility on W 17th Ave west of Sheridan Boulevard in coordination with the City and County of Denver protected bike lane
- 5 Widen the sidewalk in Sloan's Lake Park to serve as a bike facility connecting to the park trail

North of 17th Ave Looking North



Plan Location Diagram



Alternatives Assessment

The two alternatives were taken to stakeholders, the public, and businesses for feedback. Generally, the Main Street Alternative was preferred over the Boulevard Alternative due to the larger pedestrian spaces. However, there were some concerns about limiting turn access onto W 22nd and 24th Avenues due to the school and commercial uses along Sheridan Boulevard.

Stakeholder Feedback

Stakeholders expressed a preference for the Main Street Alternative due to wider sidewalks, more crossings, and tree shade that would benefit pedestrians. They had mixed feelings about keeping on-street parking by W 25th Avenue. This group also echoed concern about restricting turn movements, particularly at W 24th Avenue, in the Main Street Alternative.

Regarding the Boulevard Alternative, stakeholders felt that some of the pedestrian elements were not as safe as the Main Street Alternative. They did like the raised median, however, expressed concern that a high frequency of trees in the median could block views from the businesses to Sloan's Lake Park and Downtown Denver along the corridor.

To objectively compare the two alternatives to the existing condition of Sheridan Boulevard, an evaluation matrix was made using the plan goals. Each of the three goals was broken into subgoals to more easily quantify benefits from each alternative. Stakeholders were asked to score the alternatives as better, neutral, or worse than the existing condition using green, yellow, and red dots. Table 2 shows the scores given. The Main Street Alternative scored higher overall, which is consistent with the feedback received.

Table 2: Concept Evaluation Matrix with stakeholder scoring

Key	Existing	Boulevard	Main Street
<p>Goal 1: Improve safety for all ages, abilities, and modes traveling along and across Sheridan Boulevard.</p> <p>1.1. Reduce risk of serious injuries and fatalities</p> <p>1.2. Improve comfort for all users by providing spaces for all ages and abilities</p> <p>1.3. Improve bus stop amenities and access to bus services</p> <p>1.4. Address all of the above while maintaining reliable vehicular travel times</p>	<p>Ensure safe alternatives against the existing conditions. The existing conditions are the reference.</p>	<p>3, 4, 3, 3, 4, 4, 3, 4, 1</p>	<p>10, 7, 2, 4, 4, 5, 4, 5</p>
<p>Goal 2: Establish corridor branding and identity to enhance the urban environment and vitality of local Edgewater businesses.</p> <p>2.1. Incorporate consistent branding and other street design features</p> <p>2.2. Enhance on-Sheridan Lane and adjacent view-front businesses</p> <p>2.3. Encourage local to visit destinations along the corridor</p> <p>2.4. Invest landscaping elements to local destinations</p> <p>2.5. Create attractive City of Edgewater gateway at key locations along the corridor</p> <p>2.6. Identify public spaces along the corridor that become a destination</p>	<p>Evaluate both alternatives against the existing conditions. The existing conditions are the reference.</p>	<p>1, 5, 1, 1, 1, 4, 2, 2, 3, 2, 5, 3, 2, 5</p>	<p>9, 5, 3, 7, 2, 4, 5, 1, 2, 4, 5</p>
<p>Goal 3: Repair and beautify infrastructure with resilient and sustainable solutions.</p> <p>3.1. Plant street trees for a comfortable travel experience</p> <p>3.2. Increase accessibility to Sloan's Lake Park and local transit</p> <p>3.3. Incorporate green infrastructure for sustainable management</p>	<p>Evaluate both alternatives against the existing conditions. The existing conditions are the reference.</p>	<p>2, 2, 2, 2, 2, 1</p>	<p>5, 5, 2, 5</p>
<p>Funding and Private Property Considerations</p> <p>Funding to implement and maintain</p> <p>Require parking under density or reducing on-street</p>	<p>None</p>		<p>1</p>

Public Feedback

Two pop-ups were held to receive community feedback on the alternatives. Members of the public and business owners were able to ask the project team questions about the alternatives as they reviewed the different elements of each, as well as place sticky notes indicating what they did and did not like. Using the same online interactive map program (Social Pinpoint) that existing conditions feedback was gathered, the public was also able to comment on the two alternatives, expressing design elements that they did or did not like. Approximately 330 people viewed the alternatives, leaving 191 specific comments, and 79 responded to the demographic survey.

The public generally preferred the Main Street Alternative for the same reasons as the stakeholders expressed: larger pedestrian realm, enhanced and more frequent crossings, and trees in the buffer space between the sidewalk and road. They also expressed concern about access to retail destinations if left turns into W 22nd and W 24th Avenues were restricted.

In addition, the public expressed that they would like to see all curb ramps brought up to ADA standards and sidewalk repairs to be made, particularly at W 17th Avenue. They also want to maintain a view of Sloan's Lake Park from the businesses along the corridor and want a more comfortable crossing to W 25th Avenue.

Business Feedback

Business owners liked aspects from each alternative. They felt the larger and improved pedestrian realm on the western side of Sheridan Boulevard in the Main Street Alternative would make it safer and more comfortable for people walking, biking, or taking transit to get to their businesses. They also saw these improvements as having the potential to positively impact their properties/businesses. More frequent crossings were also appealing to the business owners, however, they had concerns that this design would limit driveway and side street access, which they thought may cause a reduction in visitors. The less restricted side street access in the Boulevard Alternative was preferred, but some business owners thought that restricting driveway access may negatively impact their business. Comments were summarized, discussed with the City of Edgewater team, and incorporated into the preferred alternative.



Snapshot of Online Interactive Map feedback

Preferred Alternative

Generally, the Main Street Alternative was preferred over the Boulevard Alternative. However, to adequately address feedback from all those who provided input, the preferred alternative consists of elements from each alternative. The preferred alternative, a multimodal Sheridan Boulevard, will accomplish the following:

- Provide a roadway that is safer and more comfortable for all users who travel to, from, and along Sheridan Boulevard.
- Enhance the pedestrian realm on the western side of Sheridan Boulevard, to make it more comfortable to walk and bike to local destinations.
- Connect bicycle facilities across Sheridan Boulevard between the City of Edgewater and the City and County of Denver.
- Provide a center median that has the potential to reduce approach turn and broadside crashes for automobiles.
- Enhance existing intersection safety and crossings and incorporate additional safe crossing opportunities for pedestrians, reducing vulnerable user crashes.
- Provide urban design, branding, and landscape elements, creating a cohesive corridor that will serve as the City of Edgewater's front door.
- Enhance transit stops and connectivity to transit stops to make it easier and more comfortable to ride transit.
- Maintain adequate access to businesses along Sheridan Boulevard.

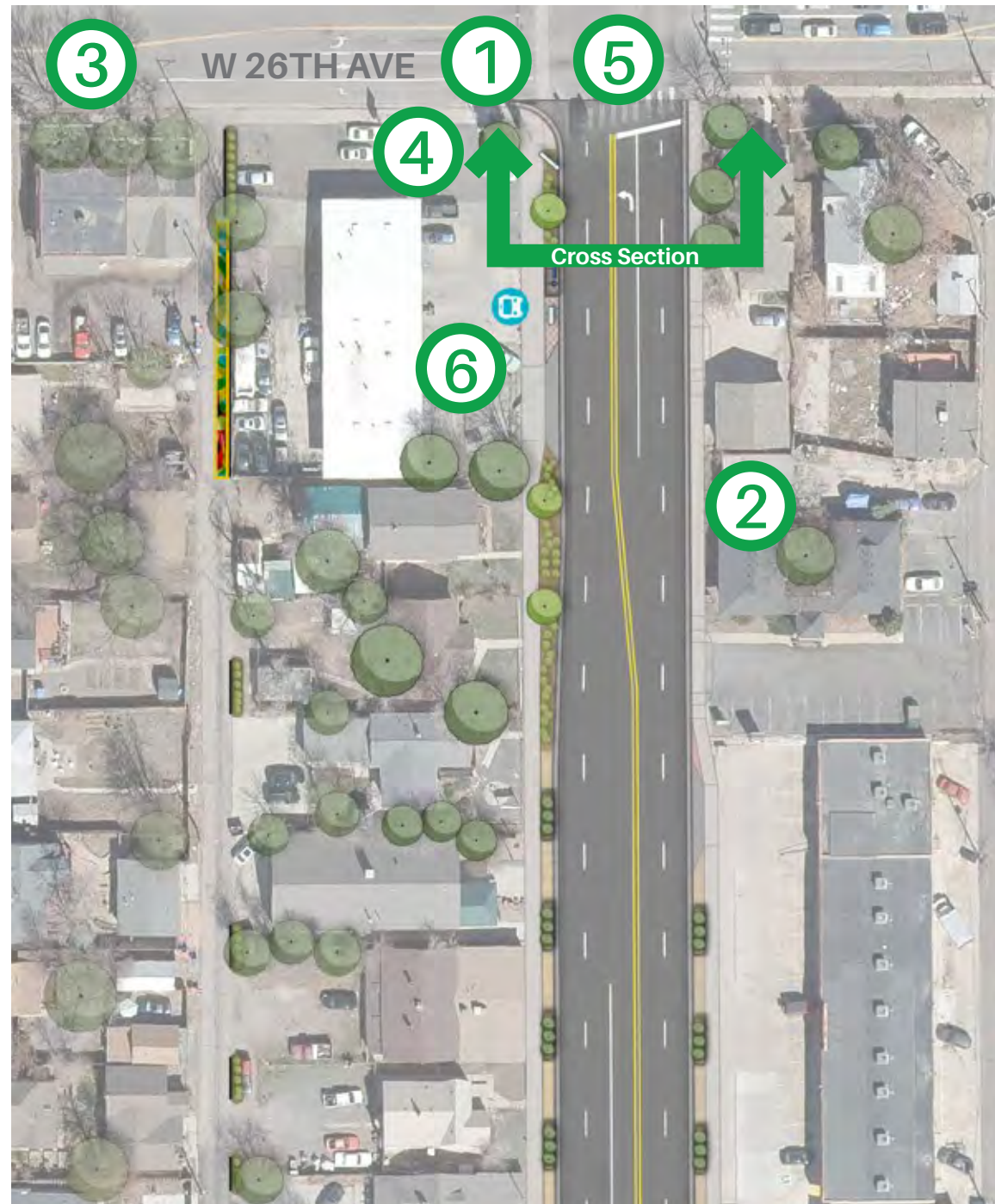
Above are a few critical components of a more multimodal Sheridan Boulevard. See below for a more detailed breakdown of the recommended transportation and urban design elements.

Preferred Alternative



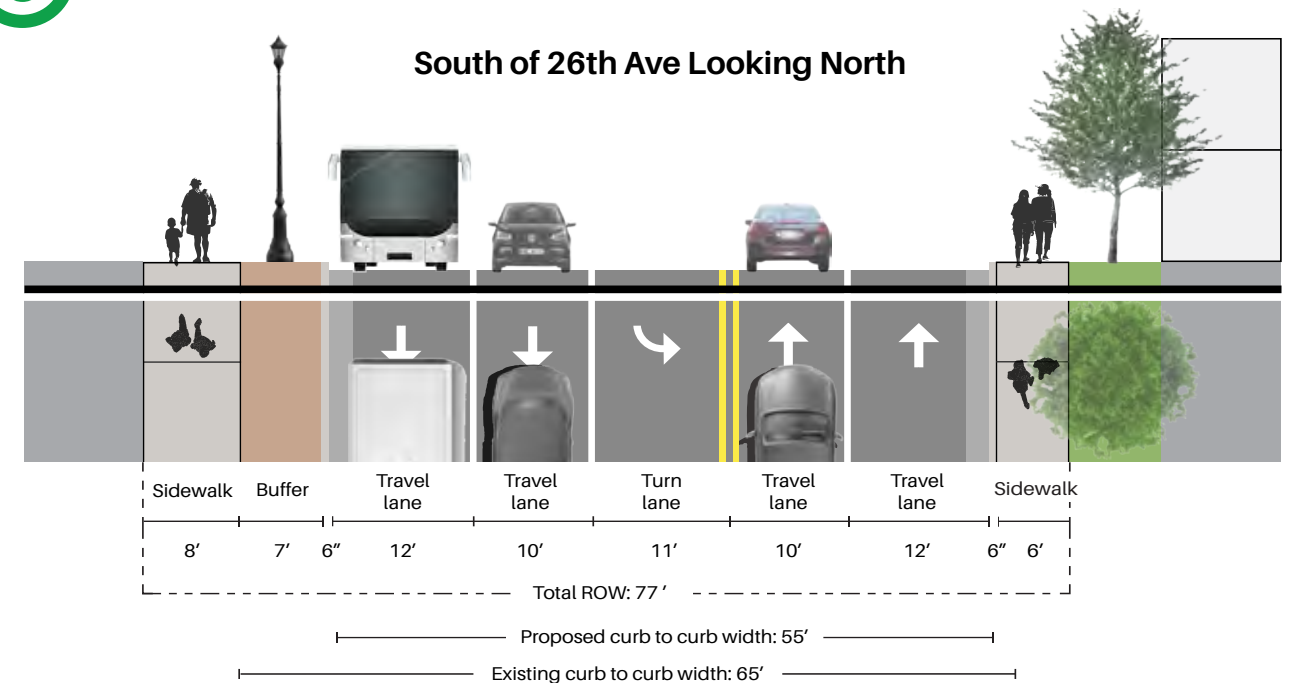
Preferred Alternative

West 26th Avenue



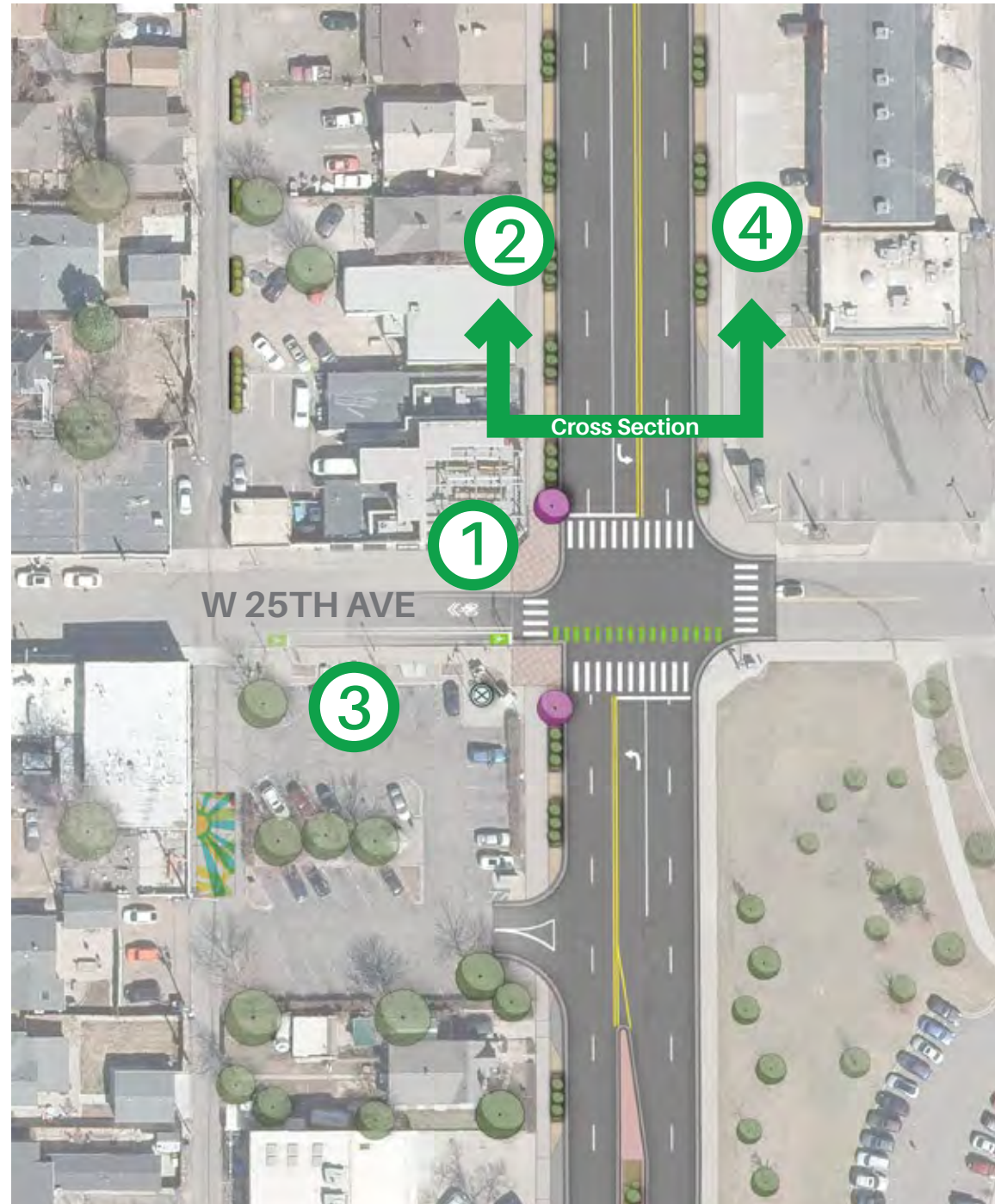
Plan Location Diagram

- ① Reconfigure curb extension on west side near intersection
- ② Widen sidewalks on east side of Sheridan Boulevard
- ③ Provide eastbound bicyclists on W 26th Avenue with an alternate route to travel into Denver as the bicycle lane ends on the approach to Sheridan Boulevard and there is no bicycle facility east of Sheridan in Denver
 - Provide bicycle wayfinding signs to help bicycles navigate to and from W 25th Avenue and W 26th Avenue via Depew
 - Utilize existing rectangular rapid flashing beacon at intersection of W 26th Avenue and Depew to facilitate safe bicycle crossings
- ④ Install City of Edgewater gateway signage at intersection
- ⑤ Program a Leading Pedestrian Interval (LPI) for pedestrians crossing Sheridan Boulevard in the east-west direction
- ⑥ Enhance transit stop on southbound Sheridan



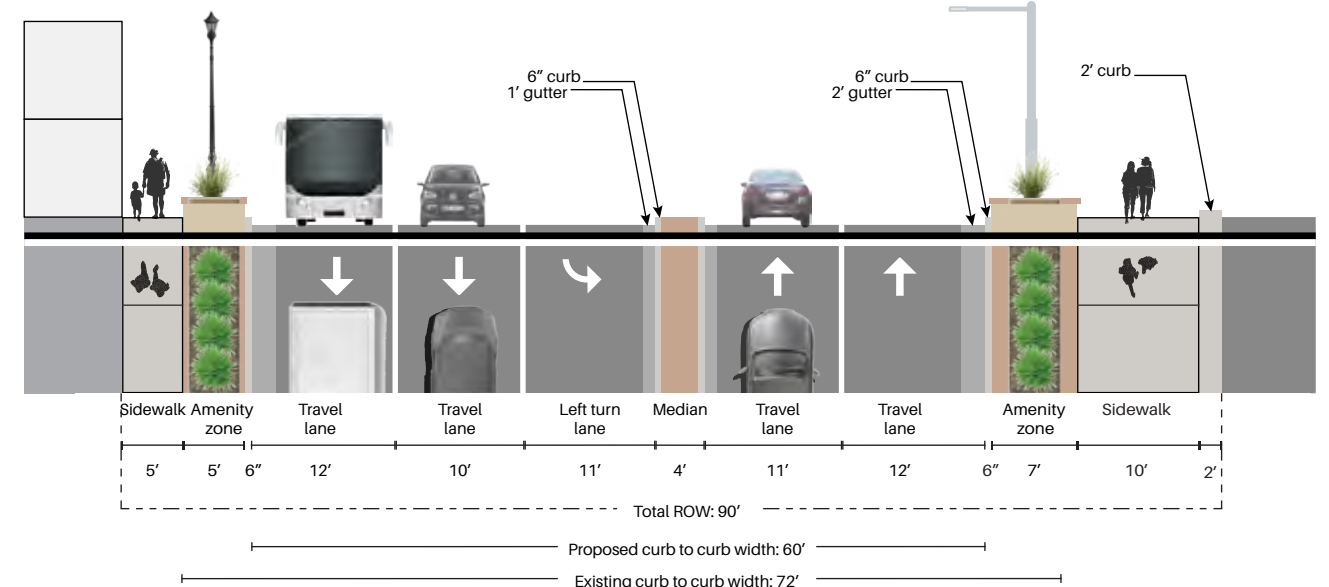
Preferred Alternative

West 25th Avenue



- ① Install curb extensions on NW corner of the intersection (coordinate with W 25th Avenue Streetscape Project) to reduce pedestrian crossing distances and exposure to turning vehicles
- ② Remove on-street parking on the west side of Sheridan Boulevard between W 25th and W 26th Avenues in coordination with future improvements/development
 - New amenity zone will include plantings, bike parking, and other pedestrian improvements
- ③ Provide better bicycle connectivity between Denver’s Neighborhood Bikeway on Byron Place and Edgewater’s Protected Bike Lane on W 25th Avenue
 - Bicycle improvements should include enhanced pavement markings and bicycle detection.
- ④ Remove NB acceleration lane north of intersection

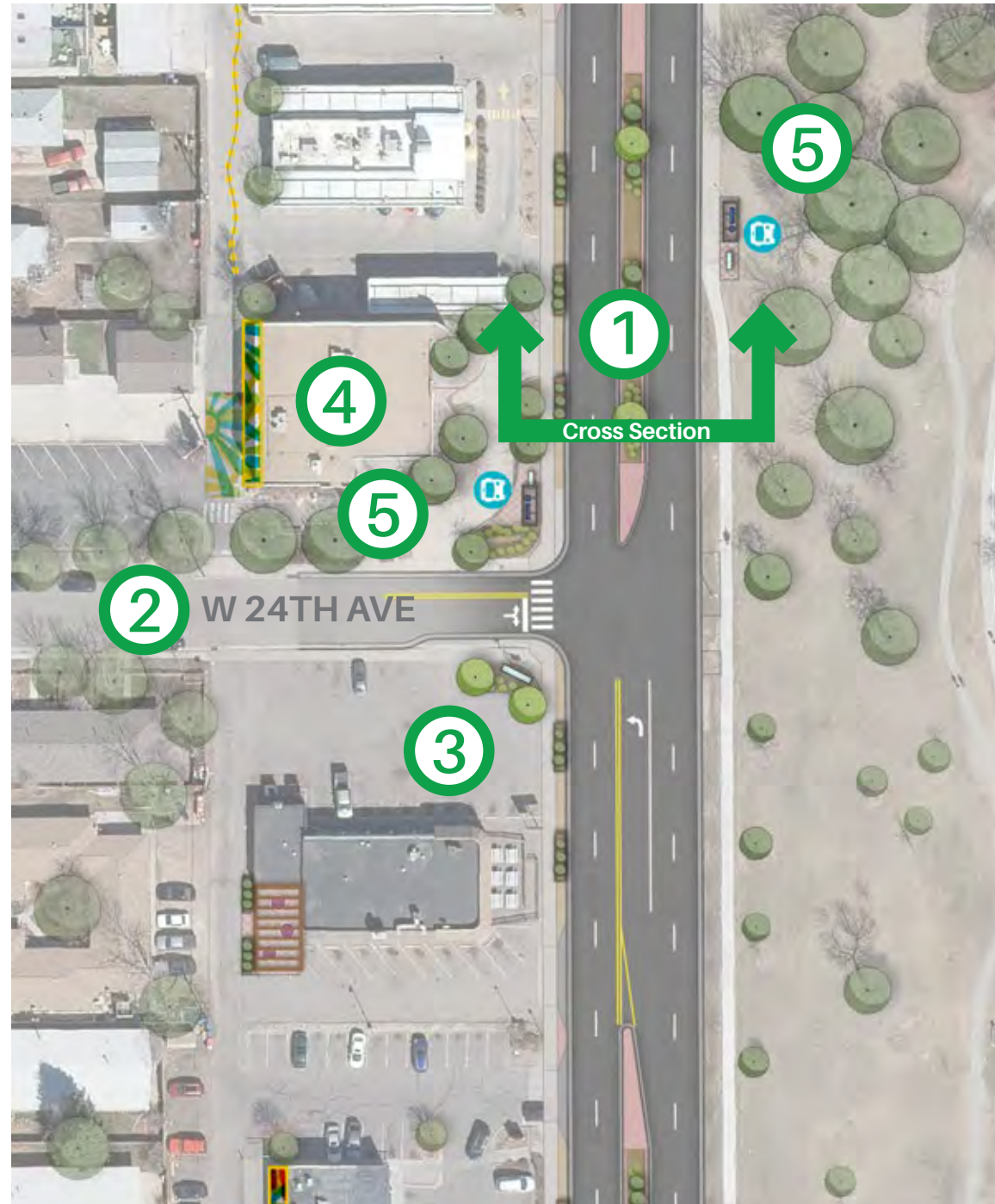
North of 25th Ave Looking North



Plan Location Diagram

Preferred Alternative

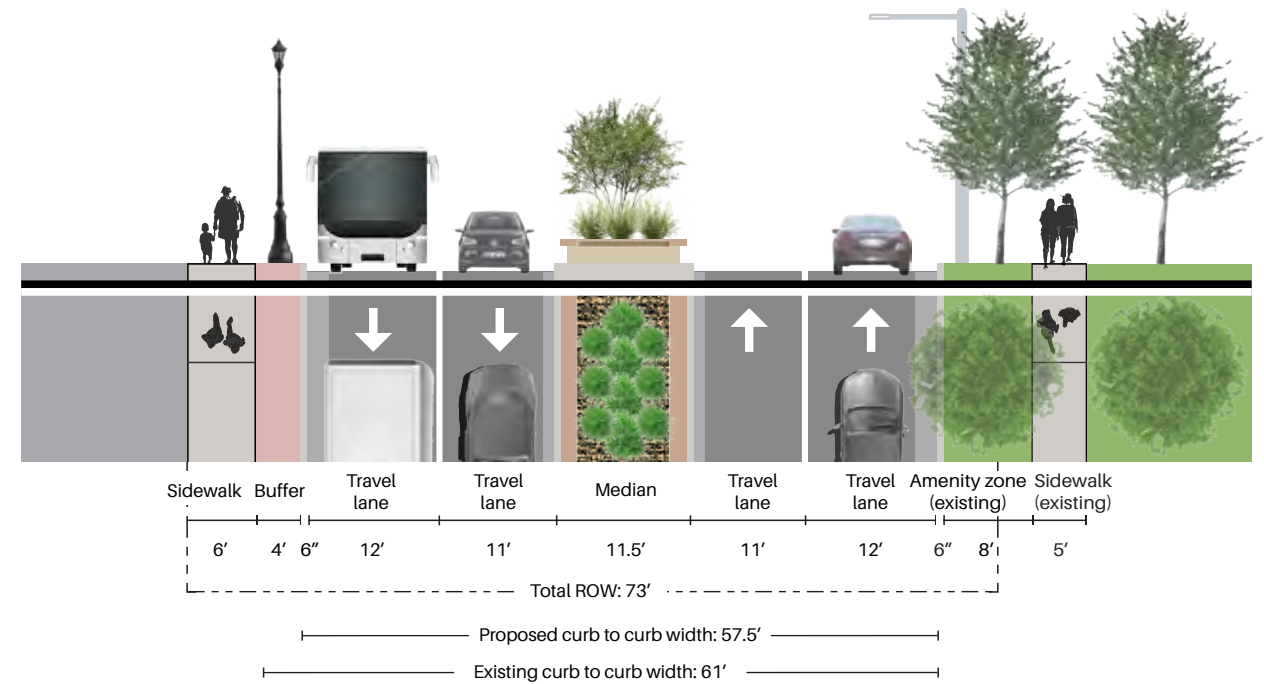
West 24th Avenue



Plan Location Diagram

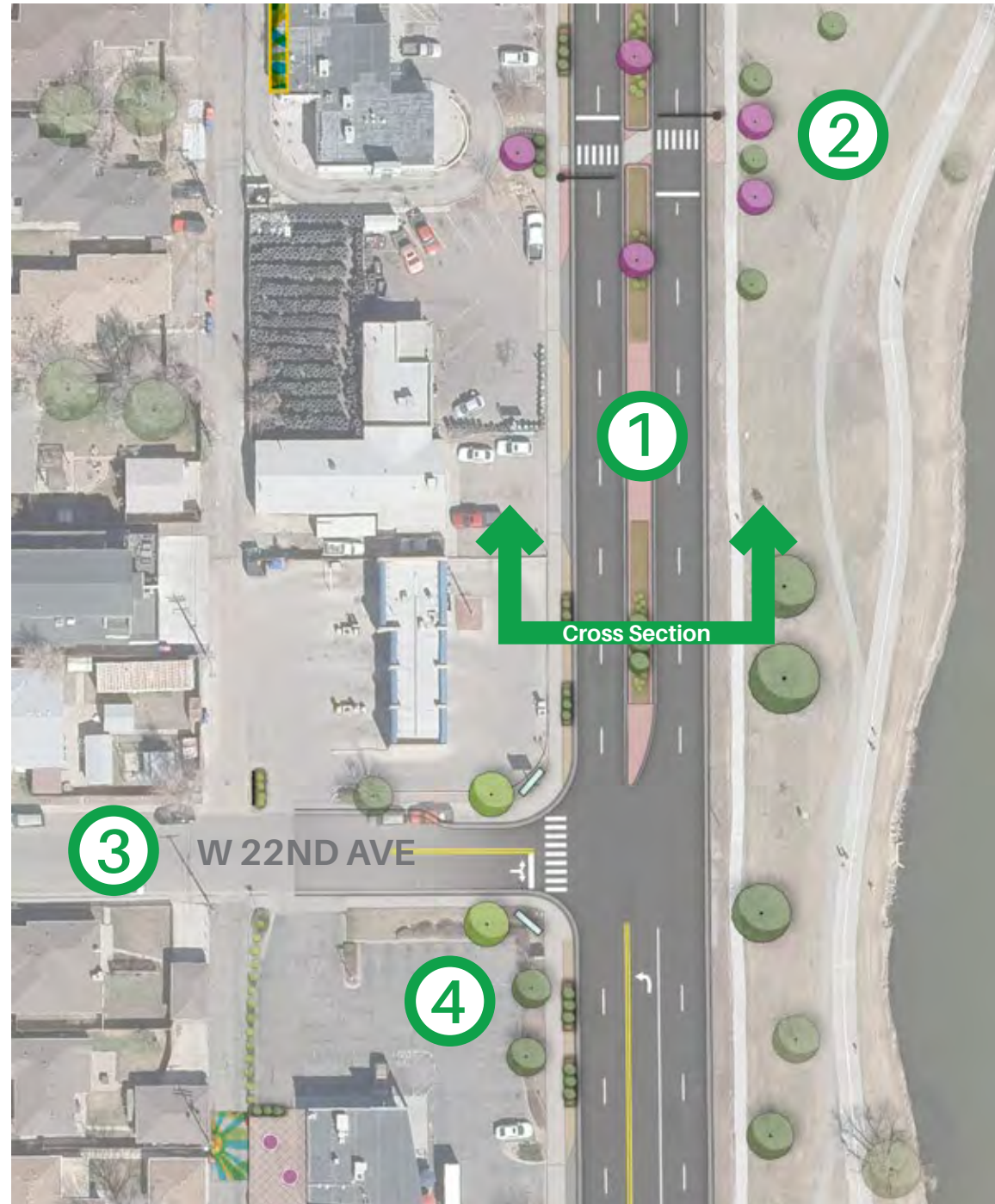
- ① Provide full vehicle turning access at W 24th Ave
- ② Install a “neighborway” with shared lane markings and other traffic calming elements on W 24th Avenue
- ③ Install City of Edgewater gateway signage that works with existing business signage on the corners of the intersection
- ④ Former City Hall (development opportunity)
- ⑤ Enhance transit stops on northwest corner of the intersection and on NB Sheridan Boulevard

North of 24th Ave Looking North



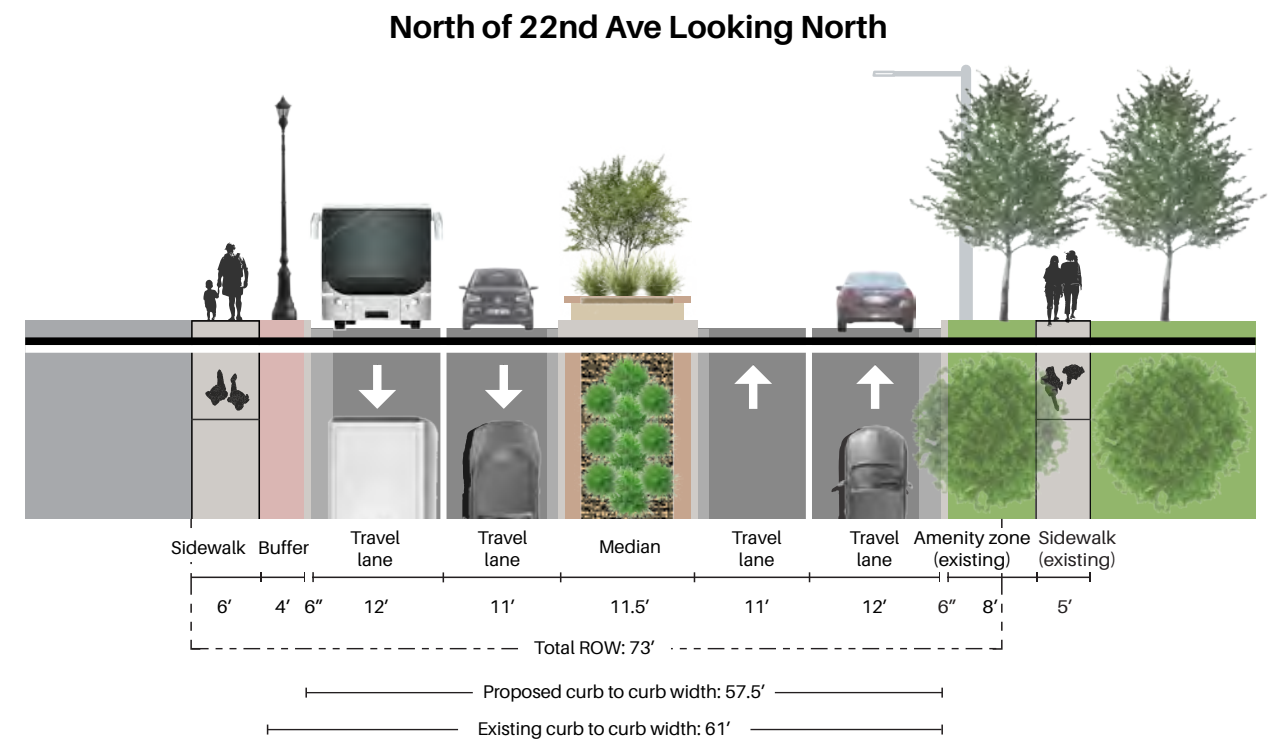
Preferred Alternative

West 22nd Avenue



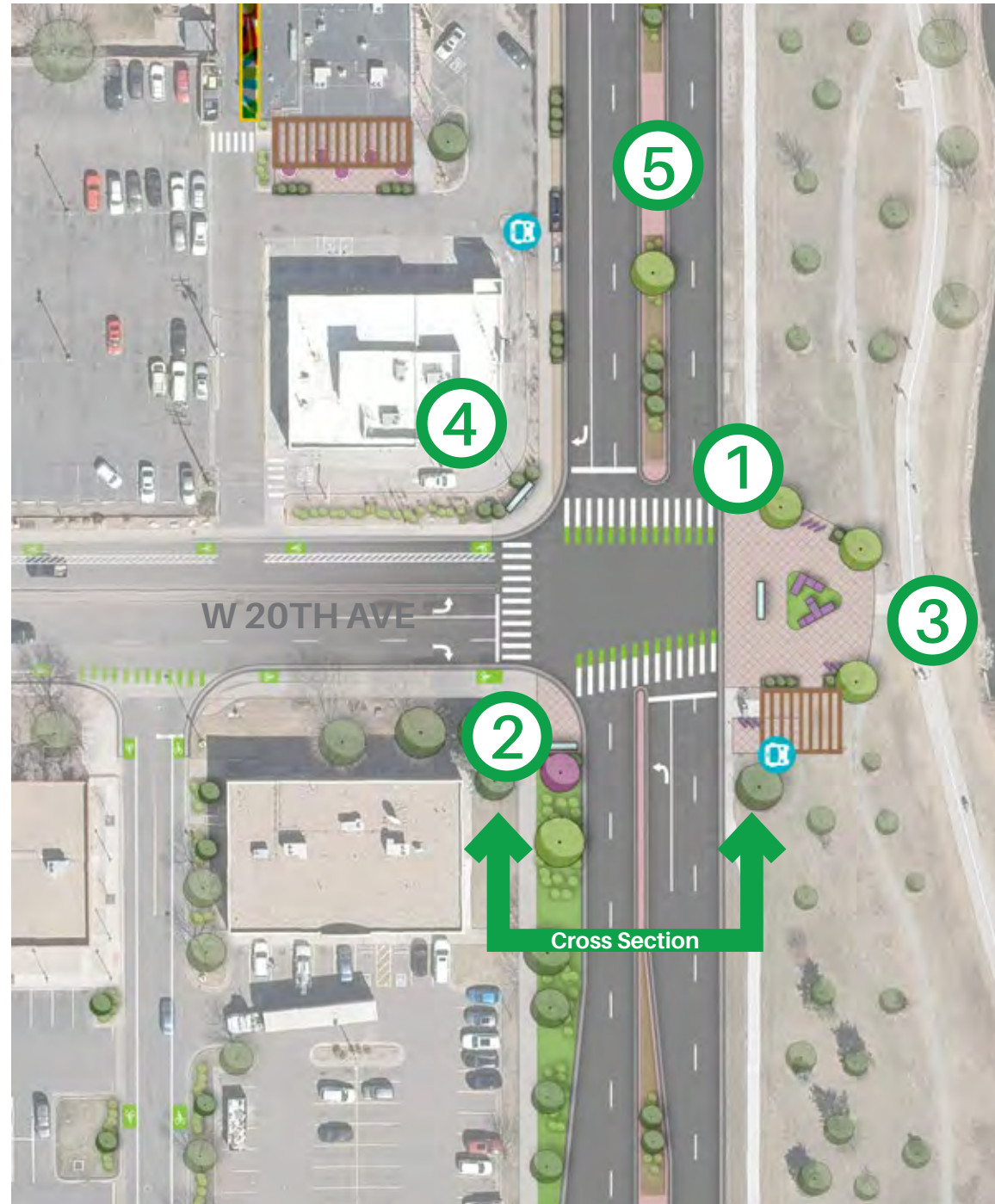
Plan Location Diagram

- ① Break the median to maintain existing left turn access onto W 22nd Avenue
- ② Install Pedestrian Hybrid Beacon (PHB) and crosswalks for better pedestrian access to Sloan's Lake Park
- ③ Install a "neighborway" with shared lane markings and other traffic calming elements on W 22nd Avenue
- ④ Install City of Edgewater gateway signage that works with existing business signage on the corners of the intersection



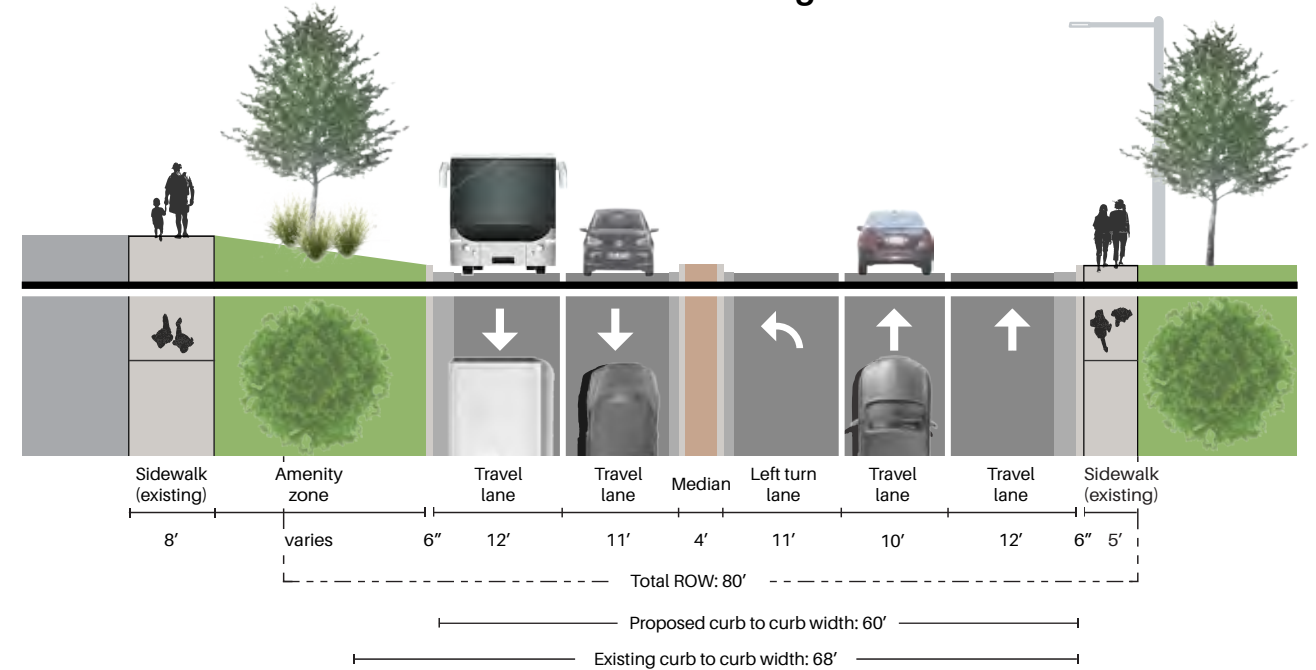
Preferred Alternative

West 20th Avenue



- 1 Straighten crosswalk across W 20th Avenue
- 2 Install bike lanes on both sides of W 20th Avenue and extend across the intersection for better bike access to Sloan's Lake Park
 - Bicycle improvements should include enhanced pavement markings and bicycle detection.
- 3 Create a gateway plaza in Sloan's Lake Park
- 4 Install City of Edgewater gateway signage on the corners of the intersection
- 5 Continue the raised median on both sides of the intersection, allowing for a pedestrian refuge island on the northern side

South of 20th Ave Looking North

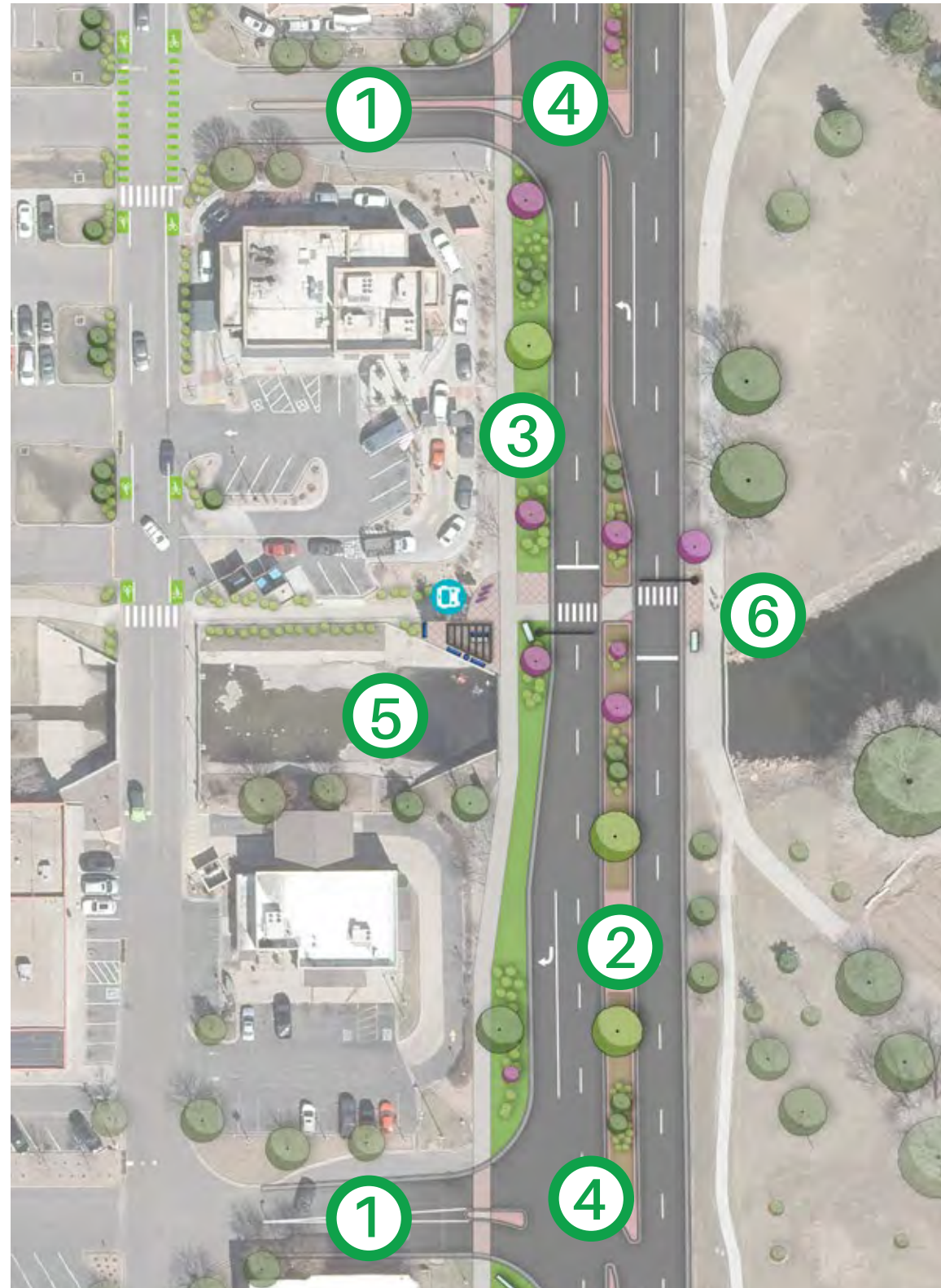


Plan Location Diagram



Preferred Alternative

Driveways between W 17th and W 20th Avenues



- ① Redesign driveway to slow turning traffic and reinforce that pedestrians on the sidewalk have the right of way. Install a raised pedestrian crossing and require cars to mount an apron, improving pedestrian safety by slowing turning movements.
- ② Repurpose the existing two-way left turn lane for a raised median to create three-quarter turning movements at both the King Soopers and Target driveways
 - This allows for NB left turn lanes, but restricts left turns out of these driveways
- ③ Repurpose extra space in SB right turn lane for a wider amenity zone/ sidewalk buffer
- ④ Extend driveway median past sidewalk
- ⑤ Enhance transit stop at Sloan's Creek Trail
- ⑥ Install an enhanced crossing that includes a Pedestrian Hybrid Beacon (PHB), pedestrian median refuge and crosswalk markings



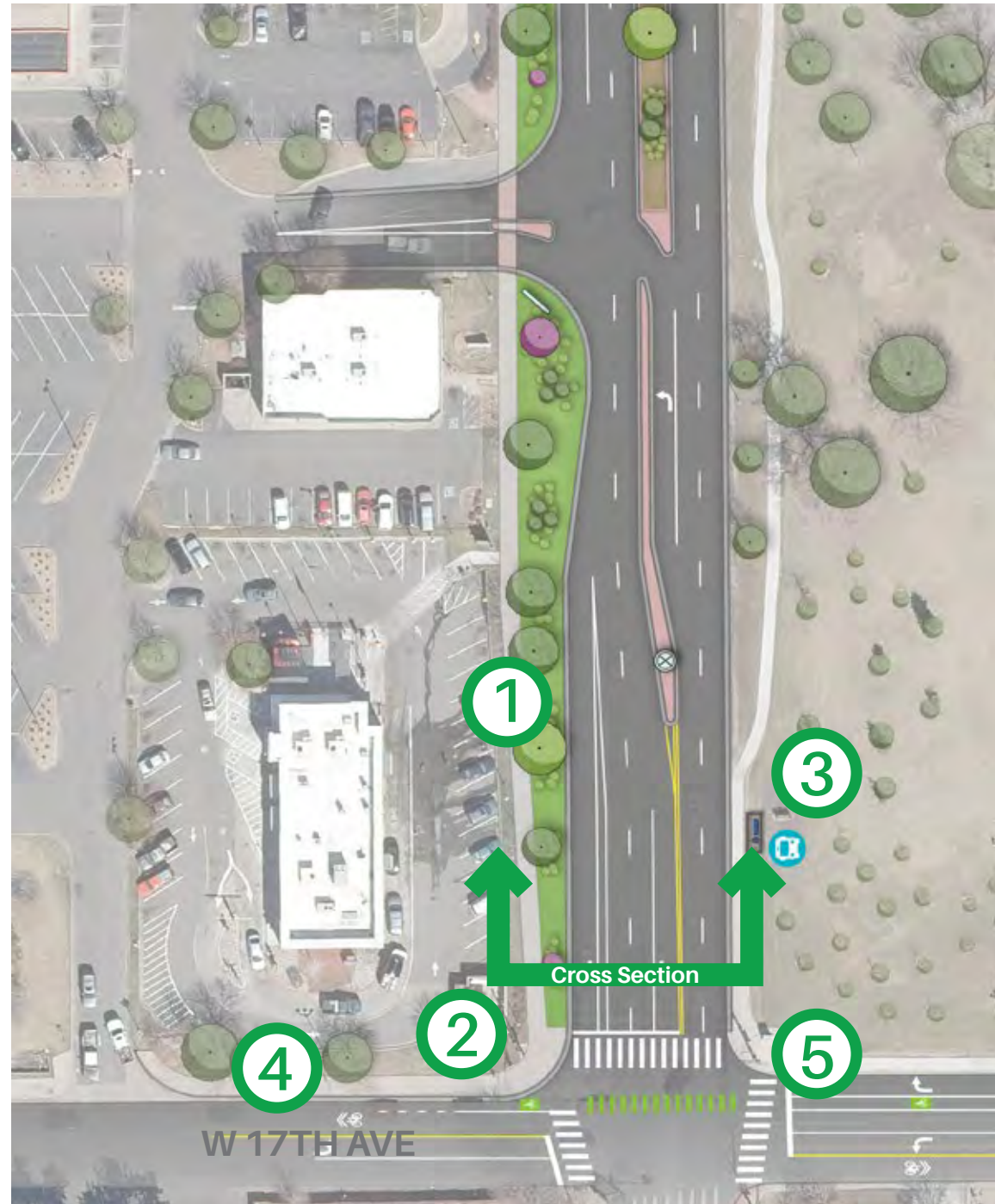
Mid-block Pedestrian Hybrid Beacon



Raised pedestrian crossing

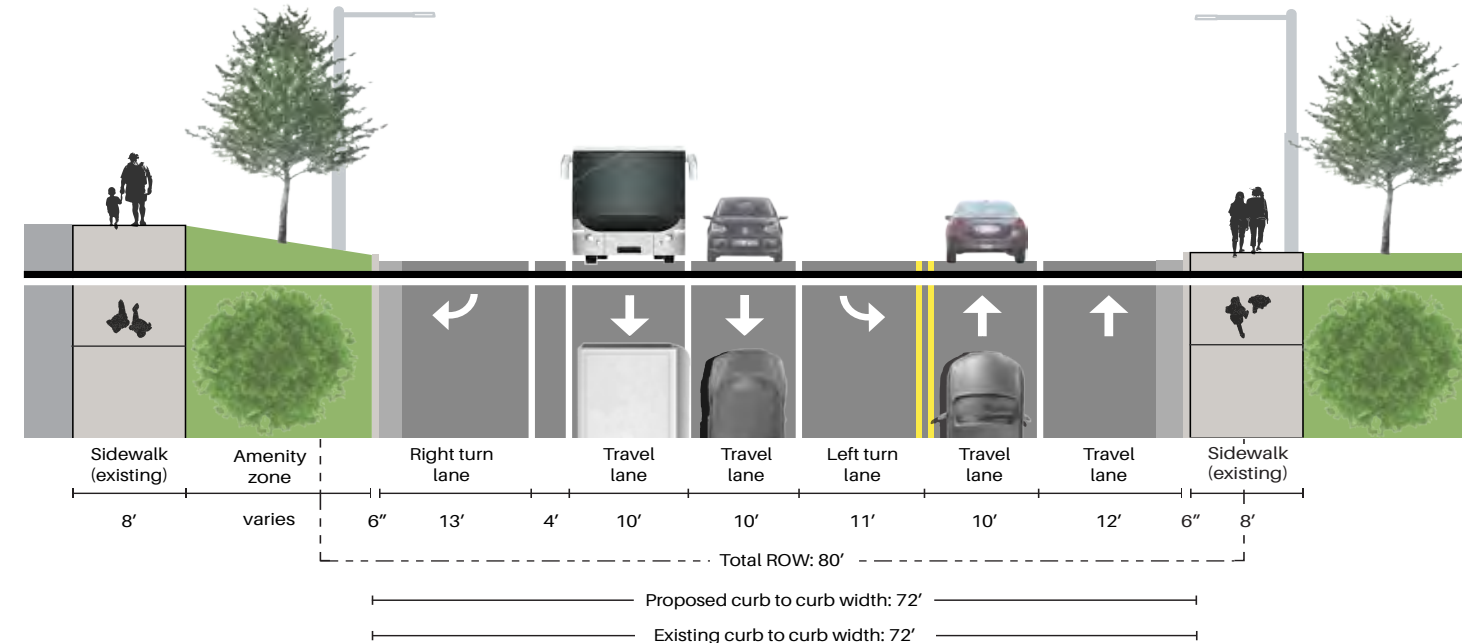
Preferred Alternative

West 17th Avenue



- ① Repurpose additional roadway space for wider sidewalk buffer (north of the intersection)
- ② Complete sidewalk segments on both sides of Sheridan Boulevard south of the intersection
- ③ Enhance transit stop on east side of Sheridan Boulevard
- ④ Provide a bicycle facility on 17th Avenue east and west of Sheridan Boulevard
- ⑤ Program a Leading Pedestrian Interval (LPI) for pedestrians crossing Sheridan Boulevard in the east-west direction

North of 17th Ave Looking North



Plan Location Diagram



Urban Design Elements

It should be noted for the following urban design elements that the proposed improvements will require ongoing maintenance to ensure the streetscape can be a safe and quality urban environment in perpetuity. The long-term costs and implications are just as crucial as the up-front investment in creating a more safe and vibrant Sheridan Boulevard. The proposed urban design features on the following pages should be accompanied by expanded financial resources and staff capacity to properly maintain the streetscape.

Landscaping

Enhanced landscaping along Sheridan Boulevard will have a number of health, comfort, and safety benefits for those using the corridor. These benefits include improved air quality, lower heat-island impacts, shaded sidewalks, reduced stormwater runoff, beautification of the streetscape, and lower vehicle speeds. Generally, selected plant species should be hardy, low-water, and low-maintenance. Native species also provide benefits to local flora and fauna and are more resilient to the sometimes harsh Colorado climate. Plant varieties with vibrant spring and fall colors are also preferred for additional beautification.

Trees along the corridor should be placed strategically to preserve views, limit maintenance needs, and reduce risk for drivers. Strategies to preserve views include aligning new trees with existing trees and buildings and avoiding planting new trees in existing view corridors to keep the same openings and lines-of-sight. To the extent feasible, trees should be spaced 50-100' apart and should be significantly set back from intersections and entries to maintain safe sight lines. They should also only be located where there is adequate space for at least an 18" separation from the roadway. For the safety of drivers along Sheridan Boulevard, species within the median should be relatively small. In the amenity zone, where there is sufficient width and fewer maintenance concerns, trees can be larger, more traditional street-tree varieties. These will also provide more shade for pedestrians.

Within the median, plantings should be relatively clustered and interspersed with decorative hardscape or rock mulch to allow maintenance access and reduce the areas that require consistent maintenance. Because median maintenance can be dangerous, expensive, and logistically complicated, median plantings should particularly prioritize low-water and maintenance needs. Species should be small and hardy, particularly to survive winter snow removal. This, however, does not necessarily mean a boring planting palette. Many low-lying, native species provide varied color, structure, and blooming patterns to create an interesting and vibrant landscape.



Native and low-water planting design

Within the median, in the most low-water planting zones, rock mulch is an appropriate ground material. In the amenity zones and within planters, wood chip mulch is likely the most appropriate. Where there is existing turf, in the amenity zone between W 17th and 20th Avenue, the grass should remain, given the slope of the hillside and the existing water and maintenance infrastructure in place to support grass in this area.

Median Design

The Sheridan Boulevard median should be designed to prioritize the safety of drivers along the corridor. The median improves overall driver safety by limiting many types of car-on-car collisions, but must be designed to minimize crash severity in a car/median collision. Strategies include tiered/sloped medians, with no hard corners or edges. There should also be limited or no fixed objects within the median. Medians should have curved concrete noses to reduce blunt edges and extend the safety benefits of the median all the way to intersections. The design of the median should include raised clear zones for maintenance vehicles to pull into for the safety of maintenance workers. Additionally, for pedestrian safety, medians should provide pedestrian refuge through crossings wherever feasible. Where planting occurs, medians should be raised (again, in a tiered or sloped design) to increase the soil depth.



Tiered/sloped median design

Raised Planters

Raised planters along the corridor should be used where there is limited planting width and so additional depth is needed to support plantings. Like the medians, planters should be designed with potential vehicle impact in mind. They should be tiered and/or sloped with rounded edges. Where a raised planter is in the amenity zone, the edge facing the sidewalk should be wide enough to provide pedestrian seating. A planter height of 24-36 inches will support most plants. Smaller species should be used in the planters, due to the reduced width. Plants should not extend outside of the planter area where they could potentially impede pedestrian or vehicle movements.



Raised Planters

Urban Design Elements

Public Art and Lighting Elements

Public art and lighting will create a cohesive, attractive, and recognizable character along the Edgewater Sheridan Boulevard corridor. Public art should be prioritized as a gateway element and within new and enhanced plaza spaces. Art pieces should act as vertical elements that indicate to travelers that they are in Edgewater, or as functional elements that pedestrians can interact with in the amenity zone or plaza spaces. Art can function as seating, a part of signage and wayfinding, or be integrated into other pedestrian amenities to create a more interactive and enjoyable pedestrian experience. More sculptural art elements were the community preference during visual preference activities. Art should have a unified theme or material palette to create a clear character for this portion of Sheridan Boulevard. When public art is located adjacent to travel lanes or in the median, it must meet CDOT guidelines and go through CDOT safety review. Art pieces should be designed to break away in the event of a crash.

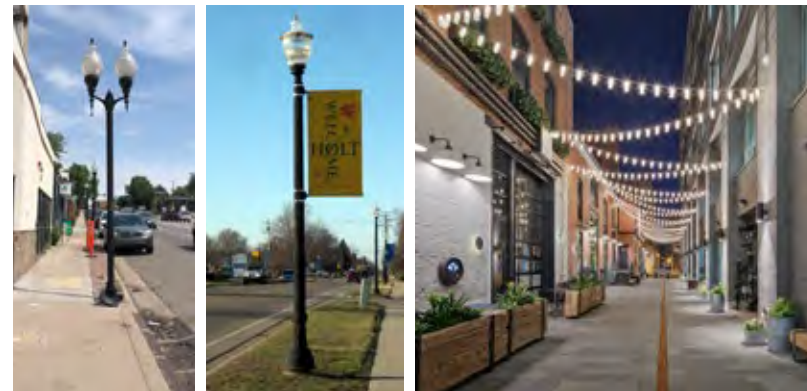


Rendering of pedestrian space north of W 25th Ave

Light poles should be spaced to provide even and consistent pedestrian lighting. Community engagement indicated that a more classic light pole style that matches the design along W 25th Avenue is preferred. Again, this will allow a more consistent community character and look and feel within Edgewater. Light poles also provide the opportunity for decorative banners that can be used to display Edgewater branding, events, and programming. In addition to traditional lighting, opportunities to provide more decorative lighting, like string lights, should be explored in patios, alleys, and public spaces to enhance the pedestrian experience.



Public art



Lighting elements

Alley Activation and Patio Opportunities

Several opportunities to activate the alley between Sheridan Boulevard and Ames Street should be explored. Because vehicle speeds, traffic noise, and fumes are often a deterrent for people to walk, bike, or dine directly on Sheridan Boulevard, the alley or existing parking lots can provide people with another option. While the community has expressed the desire to keep the functionality of the alley for vehicles, residential access, and commercial back-of-house, there are opportunities to make the space more comfortable and multi-functional.

Opportunities for private patios exist on the end caps of 2045 Sheridan Boulevard (the commercial strip between W 20th and 22nd Avenues) and 2375 Sheridan Boulevard (Lakeview Lounge), as shown in the preferred alternative graphic. The City of Edgewater should explore incentives or partnerships to encourage the creation of these spaces. Patios will provide additional activation of the alleys and street and contribute to a more pedestrian-friendly environment. They should be well-amenitized with outdoor seating, enhanced paving, decorative lighting, landscaping, and shade structures.



Patio in alleyway

In addition to patios, the alleys can be activated and improved through murals, painted crossings/intersections, landscaping, and enhanced lighting. Murals along stretches of blank wall within the alley will make it significantly more attractive for users and enhance Edgewater's character. The backside of the 2045 Sheridan Boulevard commercial strip and the 2255 commercial building (with the Starbucks drive-through) are particularly impactful locations that should be explored. Coordination and partnership with property owners and local artists will be important implementation steps to create something that is unique and reflective of Edgewater. A similar approach should be taken for painted intersections and pedestrian-crossings in the alleys. Frequent pedestrian crossing points should receive this enhanced treatment to indicate to vehicles in the alley that this is a shared space and to slow travel speeds. Finally, strategic landscaping should be used to better delineate business access points, parking areas, and pedestrian spaces. Providing clear and more intentional separation of spaces will reduce pedestrian and vehicle conflicts, increase pedestrian comfort, and further beautify the alley.



Alley activation, mural and painted intersections, and patio precedents

Urban Design Elements

Plaza and Public Space Opportunities

A number of opportunities exist along the Edgewater Sheridan Boulevard corridor to create vibrant and well-used public spaces. These improvements will help activate the corridor, serve as gateways into Edgewater, and create valuable places for people to rest and enjoy the lakeside setting. Specific locations to focus improvements include bus stops, the intersection of the Sloan’s Creek Trail/drainage with Sheridan Boulevard, and the W 20th Avenue and Sheridan Boulevard plaza in Sloan’s Lake Park.

Six bus stops exist within the study area, three on the east Sloan’s Lake/Denver side and three on the Edgewater side. All six stops have minimal amenities, some with a bench and trash can, while a few just have a sign and concrete pad. Coordination between Denver and Edgewater should be explored to do a complete update of these stops as part of the Sheridan Boulevard improvements. New amenities should include consistent seating, trash and recycling receptacles, enhanced paving, wayfinding signage, landscaping, lighting, and shelters or shade structures. Improved bus stops will encourage transit ridership and also provide an amenity for other pedestrians along the corridor. If possible, the stops should have a unified design and character to contribute to the consistent look and feel of the corridor.



Photo-sim of intersection of Sloan’s Creek Trail

The intersection of the Sloan’s Creek Trail/drainage between W 17th and W 20th Avenues and Sheridan Boulevard is a bus stop as well as an opportunity for additional enhancements (see photo-sim). This area sees significant traffic from the trail that connects to the Edgewater Civic Center, which will only be increased with the proposed mid-block pedestrian crossing. This volume of pedestrian traffic and the entry into Edgewater makes this an ideal location for an improved plaza. Amenities should include bench seating, trash and recycling receptacles, enhanced paving, landscaping, bike racks, public art, entry/gateway signage, wayfinding signage,

real-time transit information, and a shade structure. Wayfinding at this location is a high priority to help guide pedestrians and transit riders to the Civic Center, Sloan’s Lake, and other nearby destinations. A long-term opportunity for this area would be the clean-up and naturalization of the drainageway.

Finally, the crossing at W 20th Avenue, which serves as a major connection between Edgewater and Sloan’s Lake, is an important location to provide improvements. In partnership with the City of Denver, a vibrant plaza

in this location would serve as a key gateway into Edgewater and the park (see photo-sim). Preliminary design recommendations include enhanced paving materials connecting the two striped crosswalks to the lakeside trail system; a gateway sign reflecting both Edgewater and Denver; shade trees; a central turf or accent paving area with art and seating; improved landscaping; a shade structure that also accommodates the adjacent bus stop; bike parking; and wayfinding signage directing users to nearby destinations. An important consideration for the plaza will be maintaining clear and direct travel patterns while also providing a central place for gathering.



Photo-sim of gateway to Sloan’s Lake Park

Development Opportunity Sites

Without a market study and a more thorough analysis of the existing uses and operations for commercial uses along Sheridan Boulevard, it is uncertain as to whether any existing specific buildings or parcels offer potential redevelopment opportunities. That said, there are a few key sites where redevelopment could occur with reinvestment along the corridor. Dependent upon on current ownership and a site analysis, these parcels include the former City offices at the intersection with W 24th Avenue, public parking lot at the intersection with W 25th Avenue, and the industrial service uses north of W 22nd Avenue.

Given the current form, an adaptive reuse of the former City offices may prove challenging from a development perspective. However, redevelopment may prove equally challenging due to some zoning regulations. While the Sheridan Boulevard frontage allows for additional “bonuses”, other regulations, when paired together, make a significant redevelopment more difficult. Despite zoning allowances for up to 45’ in height (3 – 4 stories), current building bulk plane requirements, parking and minimum lot coverage requirements will cap redevelopment capacity. However, the existing surface parking, west of the alley and accessed by Ames Street, may provide the opportunity for unique and creative development solutions. However, there is documented comprehensive plan support for that type of change, so other regulatory tools may be considered to achieve it.

For example, a Planned Unit Development (PUD) is another option, although it’s application/implementation along the corridor will be difficult, as the current zoning code requires a minimum of two acres, and even if smaller parcels were assembled, all parcels fronting Sheridan Boulevard on a given block do not add up to that sum. Therefore, development will need to be more strategic, following existing zoning guidance.

As a means of better serving the ongoing investment along W 25th Avenue, and in conjunction with other development in the area, strategic purchases of existing properties both north and south of the intersection should be considered. These purchases may prioritize the land and proximity over the existing use. As such, buildings may be removed to provide temporary parking during adjacent redevelopment.

Implementation Strategy



Funding and Phasing

The purpose of this project was to evaluate opportunities for enhanced multimodal infrastructure that will deliver increased safety and comfort for people walking, biking, riding transit, and driving along, to, and from Sheridan Boulevard between W 26th and 17th Avenues. The plan also identifies opportunities to enrich public spaces and make Sheridan Boulevard into a gateway for Edgewater that is more inviting for residents and visitors alike. The recommendations developed as part of this planning effort function as a holistic solution, making this segment of Sheridan Boulevard a safer place for all users. However, each recommendation provides an incremental step towards achieving the overall vision.

The intent of the Sheridan Boulevard Multimodal Corridor Plan is to implement all of the recommendations as one complete project, as this is a relatively small segment of the roadway. However, funding for these types of projects is competitive and can be unpredictable. This plan presents the recommendations by intersection and in a few different arrangements so that recommendations can be designed and implemented as funding becomes available. Recommendations are generally organized into two categories: early action projects, which can be accomplished by Edgewater, Denver, and/or CDOT within the next 1-2 years, and near-term projects that can be completed within the next 10 years. With this type of implementation strategy, the Sheridan Boulevard corridor recommendations can be organized and packaged to take advantage of the multiple funding opportunities from federal, state, city, or local/regional programs.

Depending on project priorities, individual project costs, and available funding, different implementation strategies can be advanced to build out the project vision. One scenario may be to build the entire vision, taking advantage of economies of scale if a larger funding source or multiple funding sources become available. Another scenario might be to package all of the sidewalk improvements on the west side to pursue a smaller grant opportunity. Implementing the center median may also be a strategy that would immediately enhance safety for users along the corridor.

Sheridan Boulevard is an important corridor in the Denver metro region; providing regional connectivity, commerce, and green space access to those across the area. Due to the unique geographic position of this corridor, ongoing collaboration between the City of Edgewater, City of and County of Denver, CDOT, RTD, and other partners will be key to implementing and maintaining the vision developed within this planning process. As this vision moves into a design phase, understanding how water will be obtained to support landscaping within the right-of-way and who/how the proposed improvements will be maintained are two critical elements that must be addressed.

Early Action (pilot) Project

If funding is not able to be obtained in the next few years, pilot projects provide an opportunity to test and improve elements of design concepts in advance of permanent implementation. Public feedback and lessons learned from monitoring the pilot project can be applied to the final design.

The intersection of Sheridan Boulevard, W 25th Ave, and Byron Place, has been identified as the target intersection for a pilot project as part of this plan. This intersection was identified due to its bicycle- and pedestrian-involved crash trends and physical characteristics, which include opportunities to change geometry. Proposed interventions are the installation of curb extensions on three corners of the intersection and centerline hardening.

New York City DOT has made extensive use of curb extensions and centerline hardening and serious pedestrian injuries are down by 30 to 40 percent where they have been installed. By installing a pilot project, the public will be able to immediately experience the benefits of an improved intersection design with reduced pedestrian exposure and lower vehicle turning speeds, in advance of full project build out.

Intersection characteristics that contributed to pilot location selection:

- **The presence of bicycle facilities on W 25th Avenue**, and near-term installation of facilities on Byron Place, allows for the pilot project to include bicyclists in its design and evaluation process.
- **Excess roadway width along all the streets approaching the intersections** provides space for the implementation of curb extensions.
- **The presence of permitted left turn movements** from Sheridan Boulevard, devoid of a protected left turn signal phase, leads to potential conflict with pedestrians in crosswalks and bicyclists traveling North/South along Sheridan Boulevard.

Crash Data

Between 2015 and 2019, CDOT provided crash records document four bicyclist- or pedestrian involved collisions at the Sheridan Boulevard/W 25th Avenue/Byron Place intersection – two involving bicyclists and two involving pedestrians. There were 80 total documented crashes (of all categories) during the time frame. In all four cases, the vehicle that struck the cyclists or pedestrian was turning left. The speeds of the turning vehicles ranged from 5mph to 25mph. As higher speeds are correlated with more severe injuries and deaths, the pilot project interventions are designed to slow vehicle turning movements at the intersection and shorten the amount of exposure.

IMPLEMENTATION STRATEGY

Curb Extensions

As part of the pilot project, curb extensions would be constructed on three corners of the intersection using flexible delineator posts and semi-temporary asphalt paint. Curb extensions will narrow the roadway and shorten the exposure distance for pedestrians and bicyclists between two curbs. This will reduce the amount of time and distance they are exposed to traffic, reducing their risk.

In addition, curb extensions reduce the turning radius for vehicles at intersections, causing them to make slower turn movements and improve their orientation to the crosswalk, which results in improved driver yielding and reduced stopping distance. Studies have found that overall crash rates can be reduced by up to 45%.

Centerline Hardening

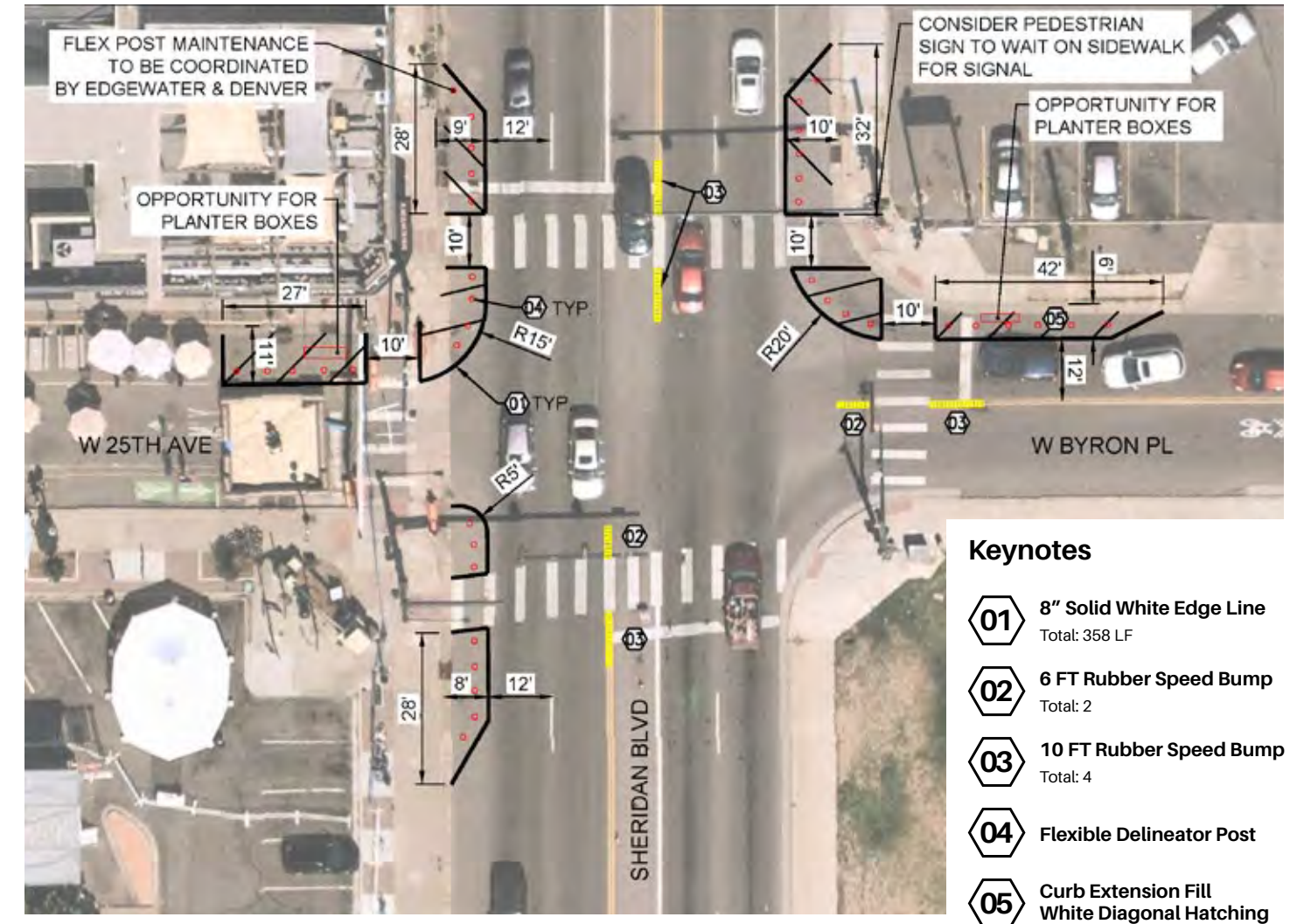
Modular rubber speed bumps would be installed to harden the centerline of Sheridan Boulevard and Byron Place, and to protect the bike lane on W 25th Ave. Modular speed bumps are made of rubber in order to be relatively forgiving to those driving over them.

Hardened centerlines reduce the radius of turns and slow turning vehicles by forcing them to make an arc closer to 90 degrees, as opposed to large and faster sweeping turns through crosswalks. This leads to vehicles and drivers facing the crosswalk more perpendicularly in the turn, reducing the instance of pedestrians obscured by blind spots. They also clarify the turn lane from the oncoming through lanes for drivers, reducing the likelihood of head on collisions.

Maintenance

After installation is complete, the facilities will need to be monitored to make sure they are working as intended and that they are being repaired as they are worn or damaged. Edgewater, CDOT, and the Denver will need to communicate to ensure that any issues with the pilot project are shared amongst all parties. It is recommended that the City and County of Denver be responsible for maintaining the project as it is currently maintaining many projects with similar installations as part of the neighborhood bikeway initiative. It is recommended that the jurisdiction responsible for the maintenance of W 25th Avenue, be responsible for snow removal. The intersection design is expected to have no impact on drainage.

Pilot Project: Sheridan Boulevard, W. 25th Ave and Byron Pl.



Implementation Matrix

SHERIDAN BOULEVARD: W 26TH AVENUE TO W 17TH AVE				
Project Description	Project Type	Cost Range	Implementation Strategy	Potential Funding Sources
Implement the holistic Sheridan Boulevard Multimodal Corridor Vision from W 26th Avenue to W 17th Avenue	Complete Streets (Pedestrian, Bicycle, Transit, Vehicle, and Urban Design)	\$6.5M - \$8.5M	Coordinate with CDOT, City of Edgewater, DOTI, and Denver Parks and Recreation to develop design plans Can be completed by CDOT, City of Edgewater, or DOTI	FASTER Safety, Highway Safety Improvement Program (HSIP), DRCOG Transportation Improvement Program (TIP), impact fees
Widen sidewalks on the west side of Sheridan Boulevard from W 26th Avenue to W 20th Avenue. Improvements include streetscape elements (trees, enhanced concrete paving, lighting fixtures, street furnishings, and gateway signs)	Pedestrian/Transit/Urban Design	\$1M - \$1.5M	Coordinate with CDOT, City of Edgewater, and DOTI to develop design plans Can be completed by CDOT, City of Edgewater, or DOTI	CDOT Revitalizing Main Streets (RMS) and DRCOG Transportation Improvement Program (TIP), City of Edgewater Capital Improvement Plan (CIP), impact fees
Widen sidewalk on the east side of Sheridan Boulevard from W 26th Avenue to W 25th Avenue	Pedestrian	\$100,000 - \$150,000	Coordinate with CDOT and DOTI to develop design plans Can be completed by CDOT and DOTI	CDOT Revitalizing Main Streets (RMS) and DRCOG Transportation Improvement Program (TIP), City of Denver Sidewalk Program
Install the center median on Sheridan Boulevard from W 25th Avenue to W 17th Avenue	Roadway	\$750,000 - \$1.25M	Coordinate with CDOT, City of Edgewater, DOTI, and Denver Parks and Recreation to develop design plans Can be completed by CDOT, City of Edgewater, or DOTI	FASTER Safety, Highway Safety Improvement Program (HSIP), DRCOG Transportation Improvement Program (TIP)
Install Pedestrian Hybrid Beacon (PHB) and enhanced crossing (pedestrian refuge, and markings) at Sloan's Creek Trail and enhanced transit stop	Pedestrian/Transit	\$650,000 - \$800,000	Coordinate with CDOT, RTD, City of Edgewater, DOTI, and Denver Parks and Recreation to develop design plans Can be completed by CDOT, City of Edgewater, or DOTI	FASTER Safety, FASTER Transit, Multi-modal Transportation and Mitigation Options Fund (MMOF), Highway Safety Improvement Program (HSIP), DRCOG Transportation Improvement Program (TIP)
Install Pedestrian Hybrid Beacon (PHB) and enhanced crossing (pedestrian refuge, and markings) between W 24th Avenue and W 22nd Avenue	Pedestrian	\$500,000 - \$650,000	Coordinate with CDOT, City of Edgewater, DOTI, and Denver Parks and Recreation to develop design plans Can be completed by CDOT, City of Edgewater, or DOTI	FASTER Safety, Multi-modal Transportation and Mitigation Options Fund (MMOF), Highway Safety Improvement Program (HSIP), Safe Routes to School (SRTS), DRCOG Transportation Improvement Program (TIP)

Implementation Matrix

SHERIDAN BOULEVARD: W 26TH AVENUE TO W 17TH AVE				
Project Description	Project Type	Cost Range	Implementation Strategy	Potential Funding Sources
Install gateway plaza at W 20th Avenue in Sloans Lake Park and enhance transit stop, enhance transit stops at NB W 17th Avenue, NB W 24th Avenue, SB W 26th Avenue, SB W 24th Avenue, and SB W 20th Avenue	Pedestrian/Transit/Urban Design	\$215,000 - \$500,000	Coordinate with CDOT, RTD, City of Edgewater, DOTI, and Denver Parks and Recreation to develop design plans Can be completed by CDOT, RTD, City of Edgewater, or DOTI	FASTER Transit, Multi-modal Transportation and Mitigation Options Fund (MMOF), Highway Safety Improvement Program (HSIP), DRCOG Transportation Improvement Program (TIP), Urbanized Area Formula (UAF)
Reconfigure curb line on west side of Sheridan Boulevard between W 17th Avenue and W 20th Avenue to reduce excess roadway space and enhance commercial driveway access (only allow right-in and right-out movements and install raised pedestrian crossings)	Pedestrian/Vehicle/Urban Design	\$350,000 - \$500,000	Coordinate with CDOT, City of Edgewater, and Private Property Owners to develop design plans Can be completed by CDOT, and City of Edgewater	FASTER Safety, Highway Safety Improvement Program (HSIP), private, DRCOG Transportation Improvement Program (TIP)

Appendices



APPENDICES

A: Existing Conditions & Needs Assessment

B: Synchro Report

C: Safety Data Report

D: Environmental Memo

E: Innovative Design Solutions Memo

F: Pilot Project Memo