

# SUN VALLEY REDEVELOPMENT Infrastructure Master Plan

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Denver Housing Authority  
Matrix Design Group  
July 2020

# Sun Valley Redevelopment Infrastructure Master Plan

The Sun Valley Redevelopment Infrastructure Master Plan is hereby approved by the Development Review Committee Approved by:

\_\_\_\_\_  
Executive Director of Community Planning and Development

\_\_\_\_\_  
Date

\_\_\_\_\_  
Executive Director of the Department of Transportation and Infrastructure

\_\_\_\_\_  
Date

\_\_\_\_\_  
Execute Director of Parks and Recreation

\_\_\_\_\_  
Date

The Sun Valley Infrastructure Master Plan is hereby approved by the Property Owner, Denver Housing Authority, by its Executive Director:

\_\_\_\_\_  
Executive Director Denver Housing Authority

\_\_\_\_\_  
Date

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# 1.0 Project Overview

## 1.1: Project Objectives

The 24-acre Sun Valley Redevelopment will be a new mixed-use, mixed-income, multi-generational community in the heart of Denver’s Sun Valley neighborhood. The redevelopment plan replaces the existing suburban street layout and low-density barracks-style housing with an urban street grid in order to reconnect this historically isolated community with the surrounding neighborhoods and enable development to better utilize the newly established C-RX-8 zone district. The proposed plan increases the overall density, replacing and increasing the low-income housing, while adding new rental and for sale units (both workforce and market rate) to create a new mixed-income community of renters and homeowners. New housing will expand affordable opportunities for a range of Denver residents, including young professionals, families, and seniors aging in place and those with disabilities. Ground floor commercial will focus on community serving uses, neighborhood-serving retail services, and various economic development opportunities.

The plan realizes the vision of the City and County of Denver (“City”) for the Sun Valley Neighborhood. Vision Objectives as stated in the 2014 Decatur-Federal General Development Plan (“GDP”) and the 2013 Decatur-Federal Station Area Plan (“SAP”) include:

- Residential Communities: Establish high quality residential communities by providing opportunities for affordable housing in a mixed-use and mixed-income neighborhood.
- 10th Avenue: Extend and Enhance 10th Avenue to connect the neighborhoods west of Federal to the river, including a public space at 10th and Decatur, including enhanced pedestrian elements to connect the Villa Park neighborhood to the river.
- Decatur Street: As redevelopment occurs along the spine of Sun Valley, ensure that Decatur Street is improved to a multi-modal corridor for all modes of transportation including, detached sidewalks, on street parking, and bicycle facilities.
- New Riverfront Park: Establish a new riverfront park along the South Platte River expanding the greenway and connecting the neighborhood to the river.
- Create a Riverfront Park Drive: Providing access to the park and multi-modal circulation for the neighborhood.
- As redevelopment occurs, recreate a street grid and pedestrian friendly blocks on the DHA parcel and along the riverfront to help organize new development and provide better access to the proposed riverfront park.
- Create a walkable and bikeable neighborhood. Utilize streets as public spaces.

The Infrastructure Master Plan (“IMP”) was initiated to refine the development vision for the Sun Valley Redevelopment by the Denver Housing Authority (“DHA” and/or “Property Owner”) and the City, to incorporate updated mobility data from the surrounding neighborhoods, and to serve as a regulatory tool to augment the GDP.



Project Location



## 1.2: Project Background

The IMP process was initiated at the request of the City to update and refine the mobility assumptions in the Decatur-Federal General Development Plan and define the infrastructure necessary for redevelopment of DHA’s Sun Valley neighborhood with the focus of the study on the project area between 9th and 11th Avenue and Decatur Street to the South Platte River.

Throughout the planning process DHA has met regularly with the Sun Valley Registered Neighborhood Organization, the Sun Valley Community Advisory Committee, the Sun Valley Site & Housing Working Group, residents of the existing Sun Valley housing development, the River Sisters Park Advisory Committee, neighborhood businesses and other stakeholders to seek input on development outcomes, modes of transportation, and open space programming. As a result, there is broad community support for the planned redevelopment outlined in this IMP.

Two public meetings were held specific to the IMP process:

- [April 2020 Riverfront Park Open House]
- [May 2020 IMP Public Meeting]

## 1.3: Regulatory Tools

Overall development of Sun Valley Redevelopment will be supported by three regulatory instruments:

Denver Zoning Code - Denver Zoning Code (“DZC”) regulates land uses, building forms and development standards.

Infrastructure Master Plan - The IMP is a narrative document combined with graphical depictions of the plan concepts, and it includes supplemental engineering studies. These combined elements outline the infrastructure and open space requirements associated with developing the property in the future as well as general compliance with the GDP. The IMP and supporting supplemental engineering studies will include conceptual design and layout of transportation and mobility, water, wastewater, storm water, and open space.

All subsequent subdivision, site development plans, zoning permits, and other applications submitted to the City for construction of infrastructure, open space, roadways, and site development are subject and shall be designed in accordance with the IMP.

The IMP provides design guidance for future site plans and engineering in lieu of City administered Urban Design Standards and Guidelines, specifically:

- Street Cross-Sections
- Street Corridor Hierarchies
- Primary and side street classifications
- Location and connections to minimum amount of publicly accessible open space

The property will be subject to privately administered design standards and guidelines in addition to this IMP’s design guidance for the elements listed above.

The IMP and its components have been reviewed concurrently across City agencies to ensure coordination and organization. The IMP will serve as the conceptual infrastructure design document on which final engineering plans and other submittals will be based at the time each portion of the development goes through the Site Development Planning process with the City.

### 1.3.1: Development Agreements

Ownership, construction, operation, timing, and design agreements related to public infrastructure and open space are controlled by the Sun Valley Development Agreement (“Development Agreement”). This IMP establishes the general location of public amenities, but does not dedicate land to parks, trails, open space, natural areas or public facilities. Dedication, whether public or private, will occur at the time of subdivision or during the Site Development Plan process, or as otherwise established through future development agreement(s) or revisions to the Development Agreement, which will be executed concurrently with this IMP.

## 1.4: Procedures for Amendments

The City may approve amendments to the Approved IMP. Any of the following changes to the Approved IMP, if included in the Approved IMP, shall be considered an amendment, as determined by the City:

- Significantly altering the location or amount of land area intended for publicly accessible open space or other public purposes required by the Approved IMP or by other City ordinances, rules or regulations;
- Substantially moving or altering the vehicle access and circulation to or within the development;
- Substantially moving or altering stormwater drainage or water quality to or within the development;
- Modifying any other element of the Approved IMP that would substantially change its character or impacts on surrounding property, as determined by the Manager of Community Planning and Development

### 1.4.1: Procedures for Amendments and Minor Deviations

An amendment or minor deviation to an approved IMP may be reviewed concurrently with other applications. An amendment or minor deviation to an Approved IMP shall be reviewed according to the following procedures:

1. A concept meeting will be scheduled to discuss the proposed change. At the concept meeting, a determination on whether a proposed change to an Approved IMP constitutes a minor deviation or amendment, the submittal requirements, and necessary referral agencies will be established based upon the scope of change and other pertinent information.
2. Amendments will require a public meeting before a formal application is submitted.
3. After the concept meeting, and public meeting, as applicable, a formal application will be submitted for Approved IMP.

4. After the concept meeting, and public meeting, as applicable, a formal application will be submitted for review by the agreed upon referral agencies.
5. Minor deviations will be approved as redlined edits to the Approved IMP.

### 1.4.2: Filing IMP

The approved IMP and any amendments, supplements or minor deviation shall be put on file in the City Clerk's Office and assigned a City Clerk File Number.





# 2.0 Districts & Uses

Proposed districts and uses are complimentary to the Sun Valley circulation and mobility network. The districts emphasize connection to existing neighborhoods to the proposed development and the Riverfront Park.

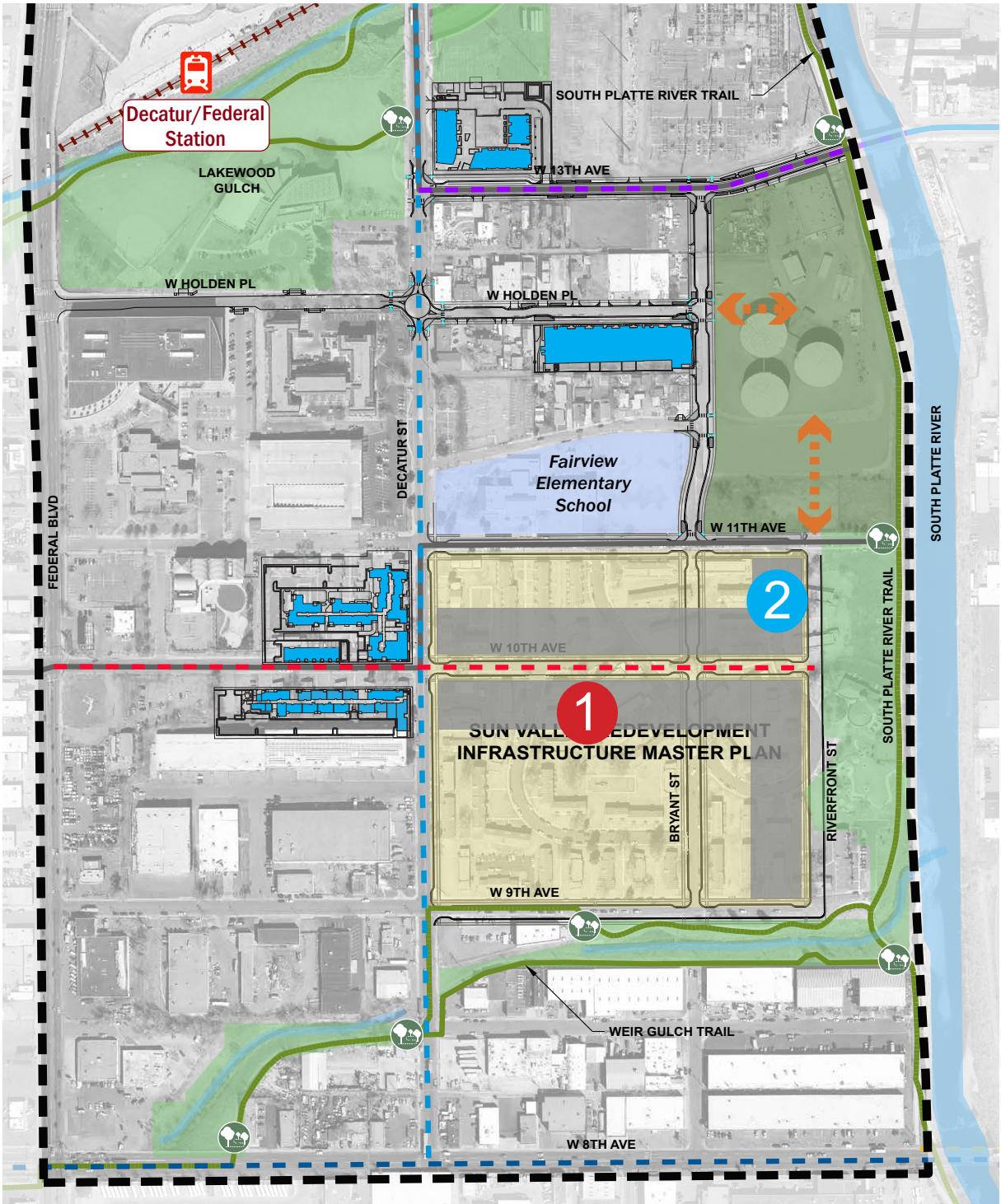
- 1

10th Avenue District – This district is envisioned as a vibrant mixed-use corridor with ground level retail activation, additional width is being provided on 10th Avenue to allow for interaction between the buildings and the public space.
- 2

Riverfront Park District – The focal point of this development will be the proposed City Riverfront Park. Residential development will be focused on the park providing access and views over the park and to the South Platte River.

## Proposed Uses and Heights

Anticipated land uses and levels of development are detailed in Exhibit 2.1 and are provided as the basis for infrastructure and transportation system analysis. The uses and densities are anticipated as an upper-limit to proposed development on the site. Deviations to the exact mix and land uses are anticipated based upon market conditions and as permitted by underlying zoning. Increases in overall housing density or significant changes in total use categories exceeding capacity of planned infrastructure may necessitate a need to modify the IMP through amendment or minor deviation as provided in Section 1.4 above. To evaluate potential utility and transportation changes based on such increase in overall housing density or significant changes in total use categories, the DRC may approve amendments and minor deviations from the approved IMP in conformity with Section 1.4 above.



### 2.1 Districts & Uses Height and Uses Exhibit

Proposed uses by Block are consistent with the Sun Valley GDP and align with the circulation network and infrastructure plans in this Approved IMP.

The Sun Valley IMP area is divided into four “super blocks” created by the extension of 10th Avenue and Bryant Street through the site. Consistent with the existing C-RX zone district, development will be mixed-use, but primarily residential with commercial and other community-serving amenities limited to the ground floor. DHA’s Residential developments will be mixed -income with DHA replacing and adding to the existing affordable housing stock, including of replacement of public housing units and a range of workforce and market rate units, with a specific focus on affordable family and senior housing options.

Block-specific development and internal circulation will be approved at the time of site development plan (SDP) and the addition of internal private or public circulation will not require major or minor amendment of this Approved IMP.

**Block 1** - Block 1 will be developed by DHA as mixed-income housing with a focus on larger 2, 3, and 4-bedroom rental and for sale units serving Denver families, and ground floor commercial spaces to activate portions of 10th Avenue with community serving uses. The Primary Street designation for Block 1 is 10th Avenue which will feature wider streetscapes to accommodate patio seating, green space and broad pedestrian walkways linking neighborhoods to the west to Riverfront Park. Enhanced 10th Avenue will also connect the community to the market at DHA’s Gateway development. Building heights are expected to range between 3 and 8 stories and oriented to maximize sunlight along the 10th Avenue “linear plaza” while stepping down heights toward 11th Avenue to hold a lower-residential building type adjacent to Fairview Elementary.

**Block 2** -Block 2 is anticipated to be sold for private-sector development. While subject to Denver’s linkage fee and any other ordinances in effect at the time of development, Block 2 is anticipated to be largely market-rate housing in order to further DHA’s goal of mixed-income and decentralizing poverty. The Primary Street designations for Block 2 are 10th Avenue and Riverfront Drive. Due to its smaller size and location across from Riverfront Park, building height is expected to be between 6 and 12 stories. As with Block 1, building setbacks will be greater along 10th Avenue and extension of the linear plaza connection to Riverfront Park. Block 2 will be subject to Design Guidelines imposed and implemented by DHA to ensure urban design, sustainability, open space, and community objectives are maintained.

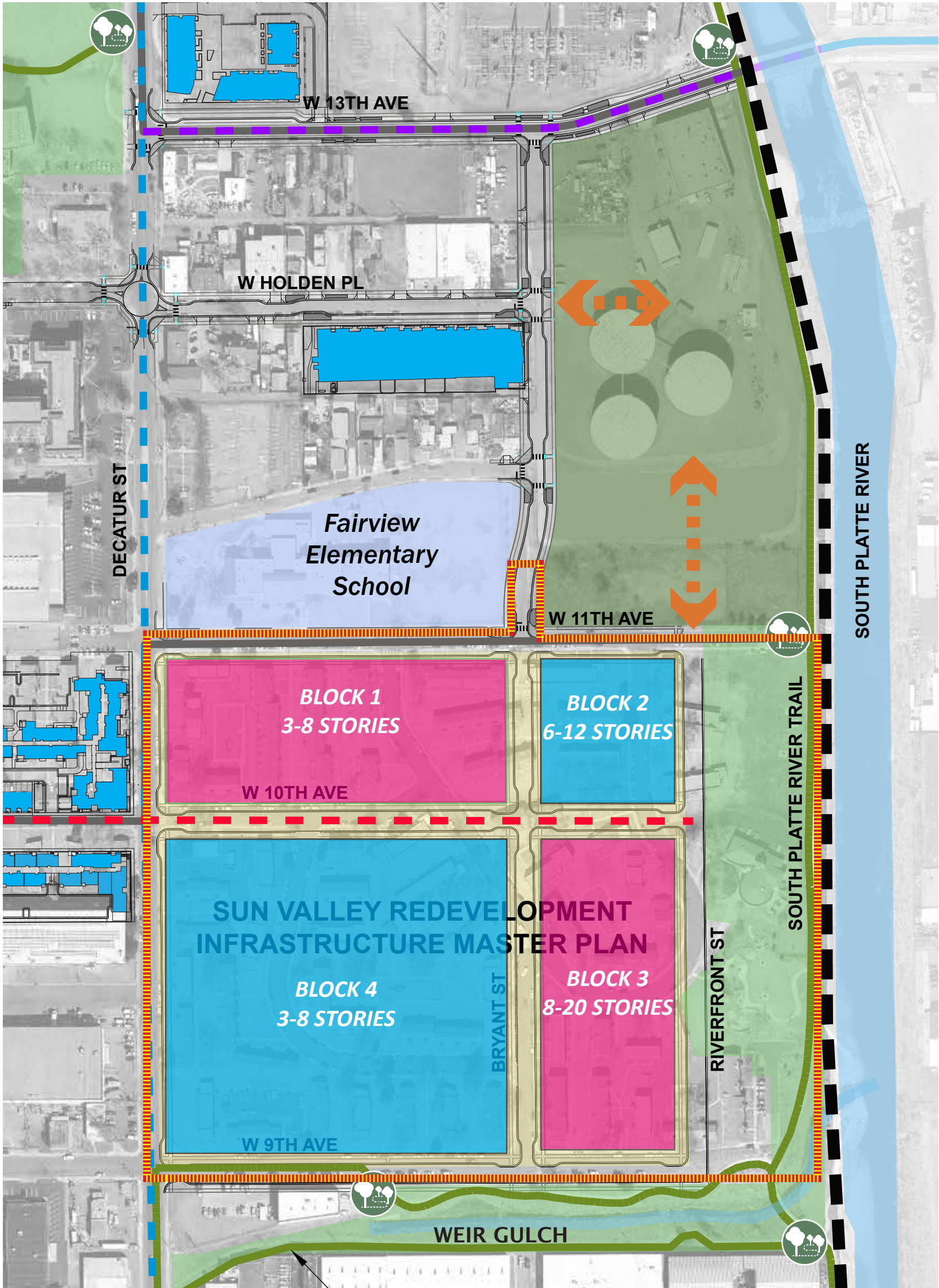
**Block 3** -Block 3 will be developed by DHA as two separate developments, the north end will be developed similar to Block 1, serving larger households and ranging in height from 3 to 8 stories, while the south end will be an affordable senior building ranging from 8 to 20 stories. The use is to be predominately residential, serving both families and seniors but will incorporate ground-floor retail along 10th Ave. and/or the Riverfront Road. The Primary Street Designations for Block 3 will be Riverfront Road and 10th Avenue and the overall block layout will incorporate east-west pedestrian connections designed to facilitate access to Riverfront Park from Block 3 and neighborhoods to the west.

**Block 4** - Block 4 is anticipated to be sold for private-sector development. While subject to Denver’s linkage fee and any other ordinances in effect at the time of development, Block 4 is anticipated to be largely market-rate, for sale and for rent housing. The Primary Street designation for Block 4 is 10th Avenue which, like Block 1, will feature wider streetscapes to accommodate patio seating, community spaces, and broad pedestrian walkways linking neighborhoods to the west to Riverfront Park and the new community to the east. Building heights are expected to range between 3 and 8 stories and oriented to maximize sunlight on the 10th Avenue “linear plaza”.

Due to its large size, it is anticipated that Block 4 will be further subdivided at the time of site development plan (SDP), including new east-west and north-south pedestrian and vehicle connections subject to the DRC approval. New rights of way may be public or private and, while they may require further subdivision and/or other City approvals, shall not be considered an Amendment or Minor Deviation to this Approved IMP; unless the then applicant seeks to change the Primary Street Designation, which shall require approval of a Minor Deviation. As with Block 1, building setbacks will be greater along 10th Avenue.

Finally, Blocks 2 and 4 will be subject to Design Guidelines imposed and implemented by DHA to ensure urban design, sustainability, open space, and community objectives are maintained.





# DISTRICT HEIGHTS & USES

## Exhibit 2.1

SUN VALLEY INFRASTRUCTURE MASTER PLAN

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# 3.0 Circulation Network

## 3.1 Circulation Overview

Well integrated with the neighborhood and adjacent street grid, the circulation network proposed in Sun Valley Redevelopment fosters an engaging and connected public realm accommodating all modes of transportation: pedestrian, bike, vehicle, and transit.

Existing access to the site is shown in the Mobility Exhibit (Exhibit 3.1). Neighborhood access to the regional network is provided via Federal Boulevard and Colfax Avenue. Natural barriers exist that limit access into and out of the site. Weir Gulch limits access on the south side of the development, with Decatur Street providing the only access point. On the north, the site access is limited by Lakewood Gulch and to the east by the South Platte River. Decatur Street is the primary north-south roadway and connects the neighborhood across Lakewood Gulch to the proposed Stadium District development, 8th Avenue, and 13th Avenue which connects the neighborhood across the South Platte River to other local and regional destinations.

### *Proposed Street Hierarchy*

Primary and side streets will be defined with the site developmet plans, however active uses should be oreined towards the guildelines and focus areas as described in Section 4.0. Actiive uses will need to be oriented towards key public streets and open spaces. Street sections (Exhibit 3.1) further detail the composition of the three corridor hierarchies.

**Collector Streets:** Decatur Street is Sun Valley’s primary north/south connector, connecting to the greater neighborhood, transit station, other local destinations, and the existing Denver street grid. As a low-level collector, Decatur Street accommodates vehicle travel lanes, bus service, dedicated bike lanes, on-street parking, and generous pedestrian sidewalk and amenity zones.

**Local Streets:** These streets provide access to homes, parks and open spaces, and other local destinations, and accommodate car, bike and pedestrian travel. In specific instances enhanced pedestrian amenities have been provided to create a sense of place. For example, the street design on 10th Avenue includes wider sidewalks that aim at aligning the site to create a better connection to and from the West Colfax and Villa Park Neighborhood to Riverfront Park and the South Platte River Trail.

**Pedestrian Ways:** In order to provide a better experience for people walking, the Sun Valley Redevelopment is providing detached sidewalks that connects residents and visitors to places where people live work, and play. Additionally, Sun Valley proposes that 10th Avenue become an enhanced street for pedestrians. It is envisioned as the developments “main street”. Ground floor activation, wide sidewalks, and enhanced amenity zones will provide a place for residents to gather and discuss the days happenings.

**On-Street Bikeways:** The Sun Valley Redevelopment will provide comfortable on-street bikeways that allow people of all ages and abilities to travel by bicycle. A mix of dedicated bike lanes and neighborhood bikeways are being planned as shown in Exhibit 3.2. A list of facilities by roadway is noted below:

- Decatur Street - Bike Lanes
- 10th Avenue - Neighborhood Bikeway
- 13th Avenue - Protected Bike Lane

## 3.2 Onsite Neighborhood Traffic Management

The proposed development will contemplate on-site traffic management in this Section of the IMP.

### 3.2.1 Onsite Road Infrastructure

Includes all onsite traffic infrastructure: public streets, private streets, sidewalks, streetscape improvements, including privately owned streets, lighting and signage. It is anticipated that Block 4 may have future roadway improvements internal to the block.

- 10th Avenue - Decatur Street to Riverfront Street.
- Bryant Street - 9th Avenue to 11th Avenue.
- Riverfront Street - 9th Avenue to 11th Avenue.

### 3.2.2 Adjacent Road Improvements

Sun Valley Redevelopment will not be responsible for improvements to the ½ section of roadways immediately adjacent to the development. These improvements will be triggered when warranted or adjacent parcels are developed.

- Decatur Street – The east half of the roadway improvements as shown in the interim section.
- 11th Avenue – The south half of the roadway improvements.
- 9th Avenue – The north half of the roadway improvements

**3.2.3 Offsite Road Improvements**

No offsite roadway / transportation network improvements are required for this project.

**3.2.4 Adjacent Project Roadway Network Improvements**

Sun Valley Redevelopment will not be constructing any offsite improvements as part of this IMP. However DHA is managing the design, implementation, and construction of the improvements for the 13th Avenue Elevate Bond Project. Scope of the project includes the following improvements

- 13th Avenue - South Platte River to Decatur Street.
- Bryant Street - 12th Avenue to 13th Avenue
- Holden Place - Bryant Street to Decatur Street

**3.2.5 Transportation Demand Management**

In order to mitigate transportation demand, transportation demand management measures will be instituted per the Development Agreement.

**3.3 Regional Traffic Mitigation**

There are no regional traffic mitigation measures required because of this development.

**3.31 Regional Traffic Improvements**

There are no regional traffic improvements required because of this development.

**3.4 Bus Route Improvements**

RTD bus Route 9 travels through the site along Decatur Street. On the south the route connects to 8th Avenue and travels to the east. The route travels to the west along 10th Avenue from Decatur. Through the proposed development Route 9 travels along Decatur Street adjacent to the development.

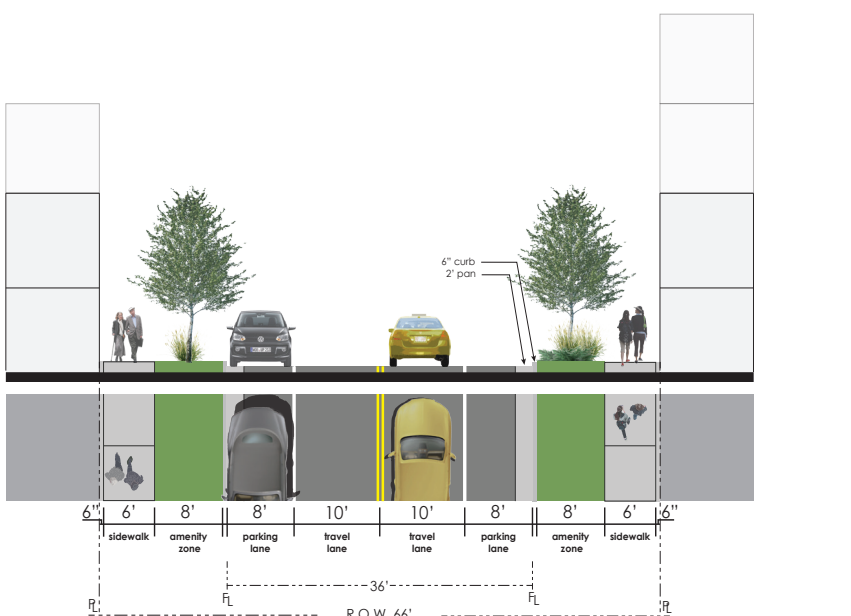
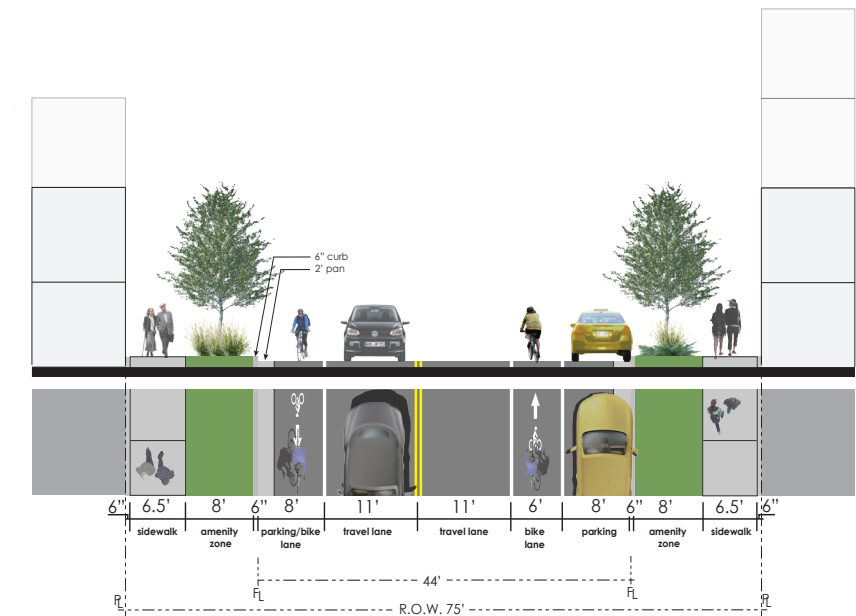
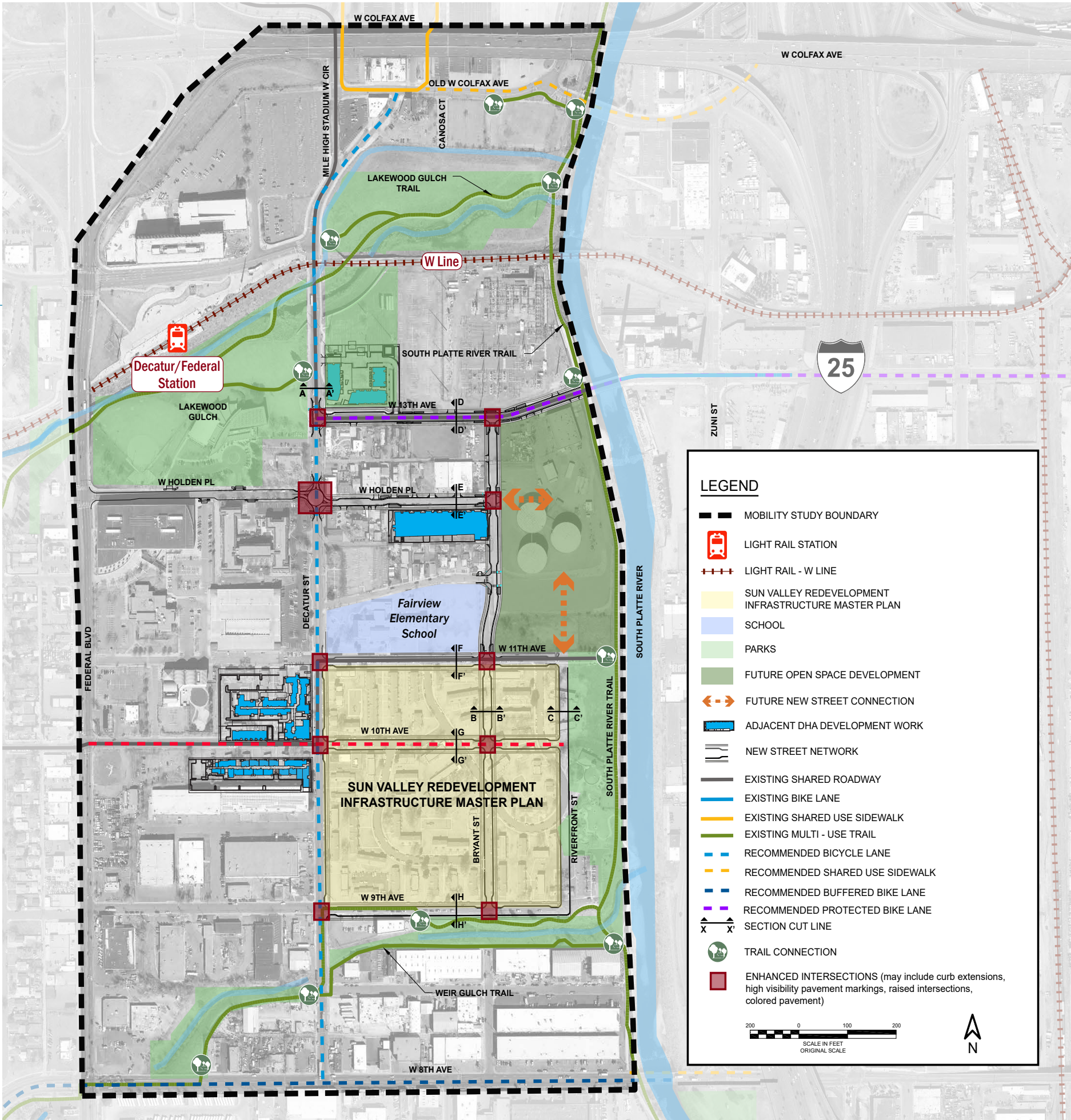
In addition to the routes that run through and adjacent to the site, Route 16 has a stop at the intersection of Holden and Decatur Street, this route provides service to the Federal and Decatur Station, with accesst to the W Light Rail Line, as well as service east and west on Colfax.

As development occurs at Sun Valley, DHA will work with RTD to evaluate potential adjustments to the bus route to better serve the residents and businesses as well as routes that might better serve the community.



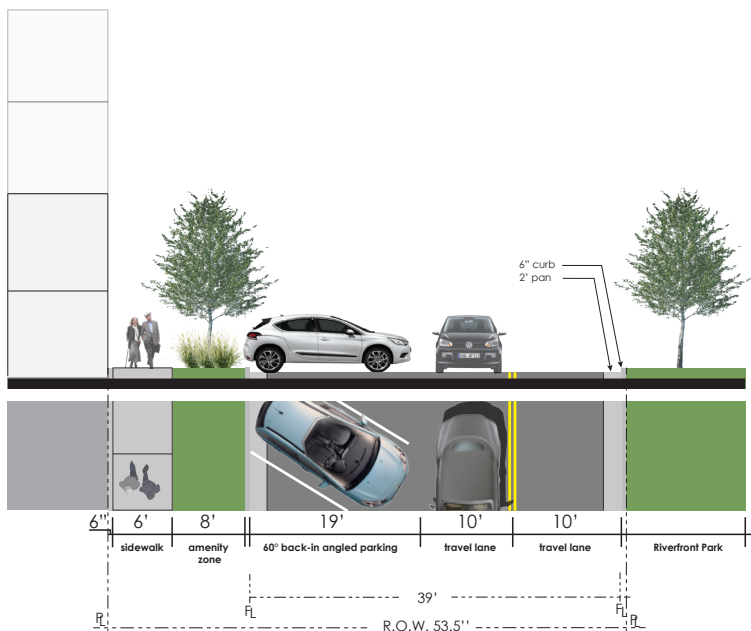
# MOBILITY EXHIBIT

## EXHIBIT 3.1





# MOBILITY EXHIBIT



Riverfront St

Typical Section - Looking North

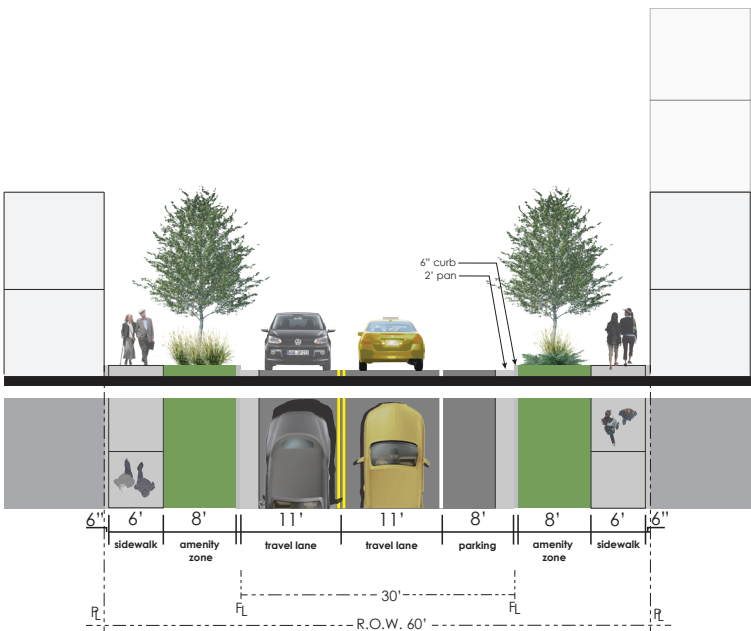
Section C - C'



13th Ave

Typical Section - Looking East

Section D - D'



Holden Pl

Typical Section - Looking East

Section E - E'

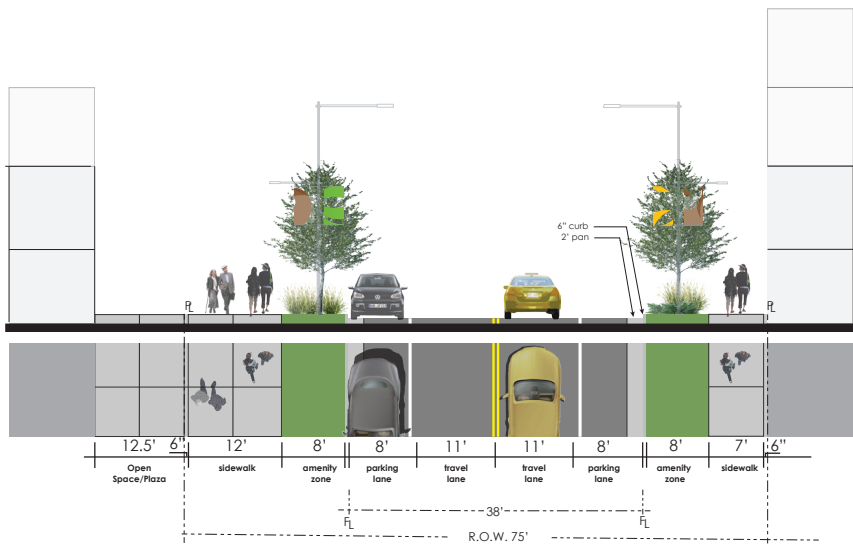


11th Ave - Local Street

Typical Section - Looking East

Scale: NTS

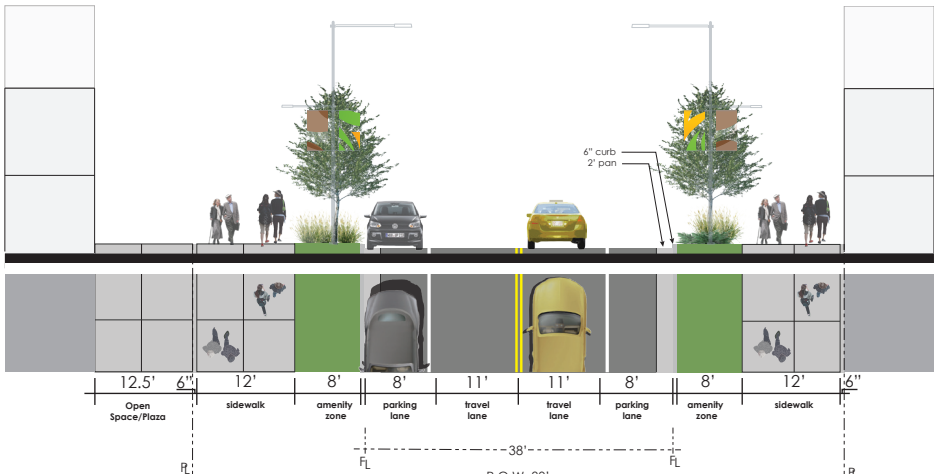
Section F - F'



10th Ave: Decatur Ave to Bryant

Typical Section - Looking East

Section G - G'



10th St: Decatur to Bryant - Local Street

Typical Section - Looking East

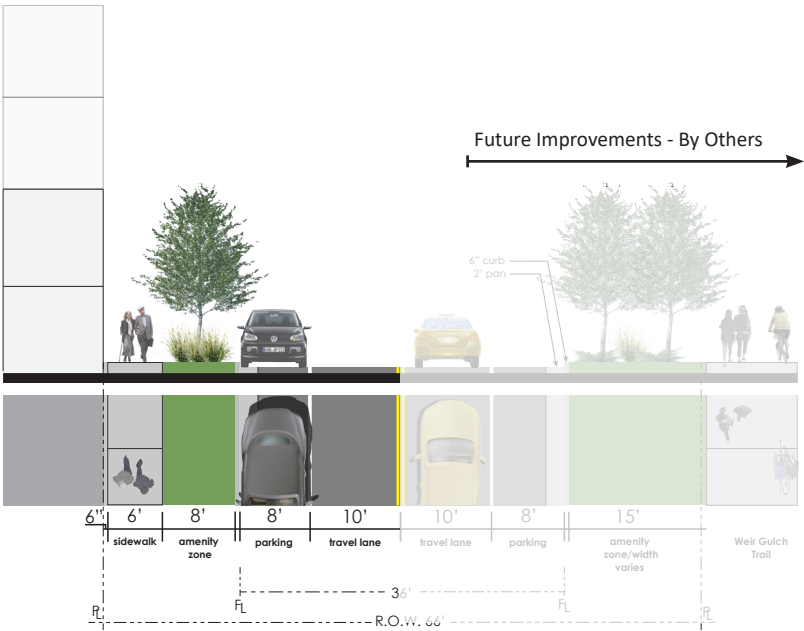
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Draft

10th Ave: Bryant St and Riverfront Street

Typical Section - Looking East

Section G - G'



9th Ave - Local Street

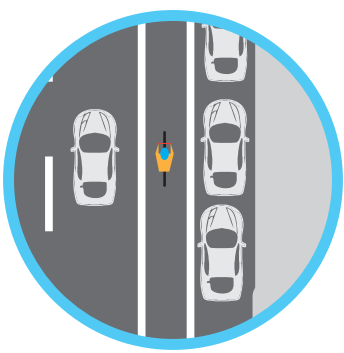
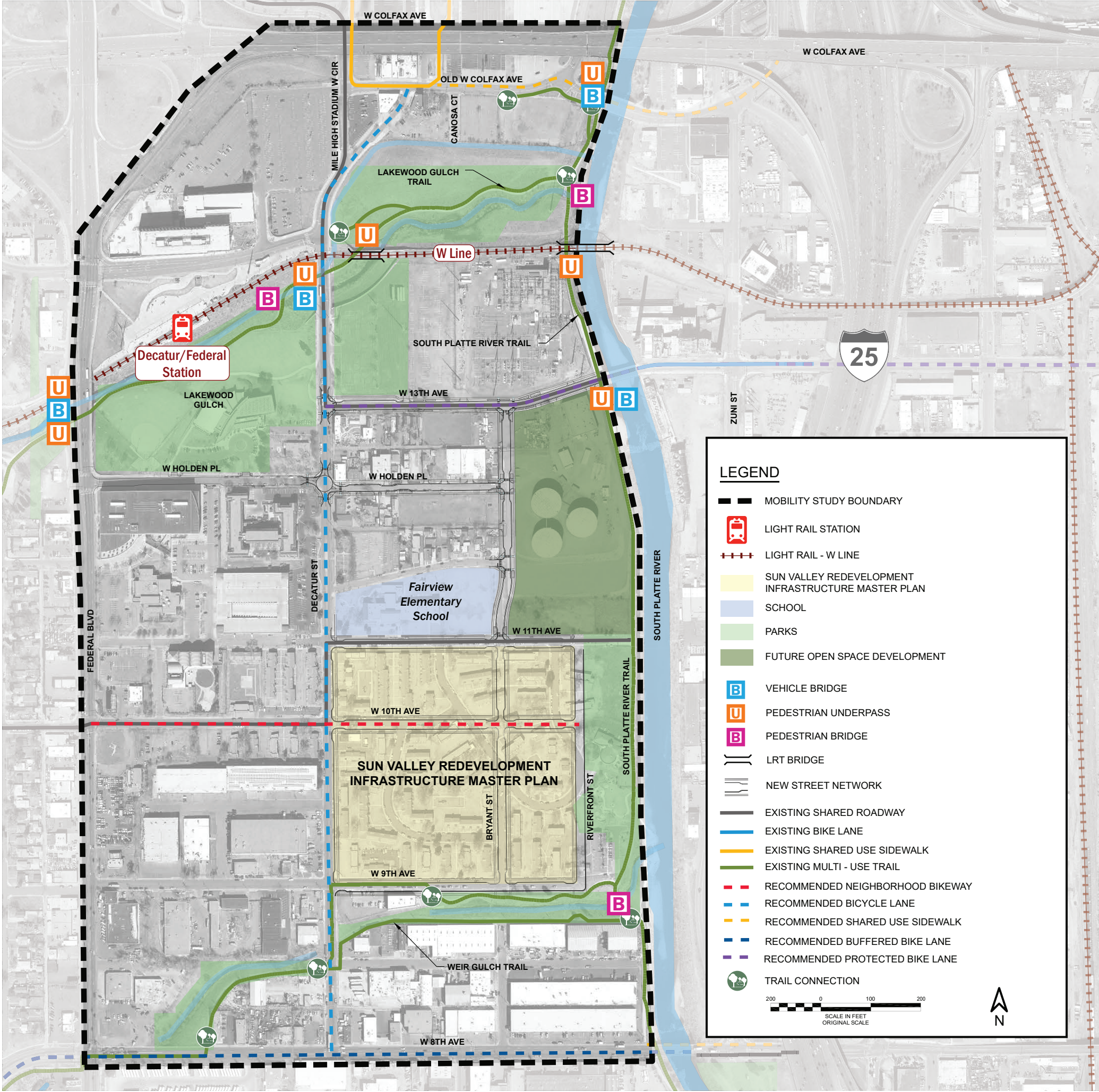
Typical Section - Looking East

Section H - H'

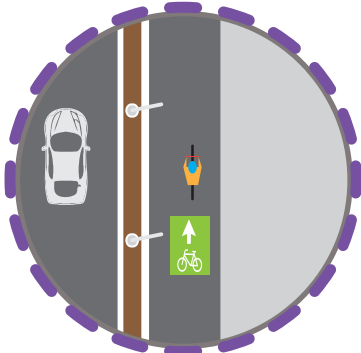


# EXISTING AND PROPOSED BICYCLE NETWORK

EXHIBIT 3.2



Buffered  
Bicycle Lane



Protected  
Bicycle Lane



Shared  
Roadway

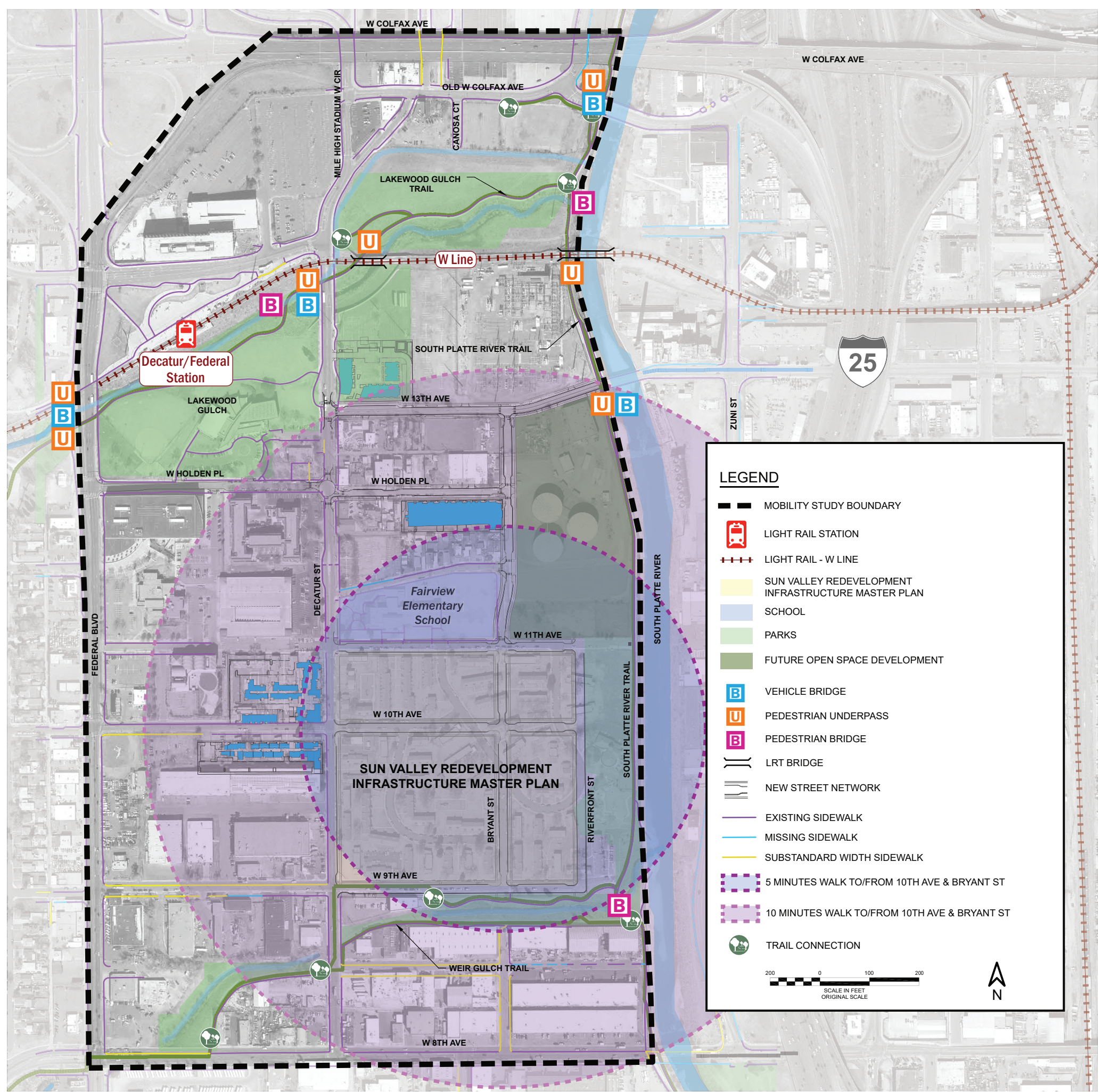


Multi-Use Trail



# EXISTING AND PROPOSED WALKING NETWORK

EXHIBIT 3.3



Missing Sidewalk



Substandard Width Sidewalk



Attached Sidewalk

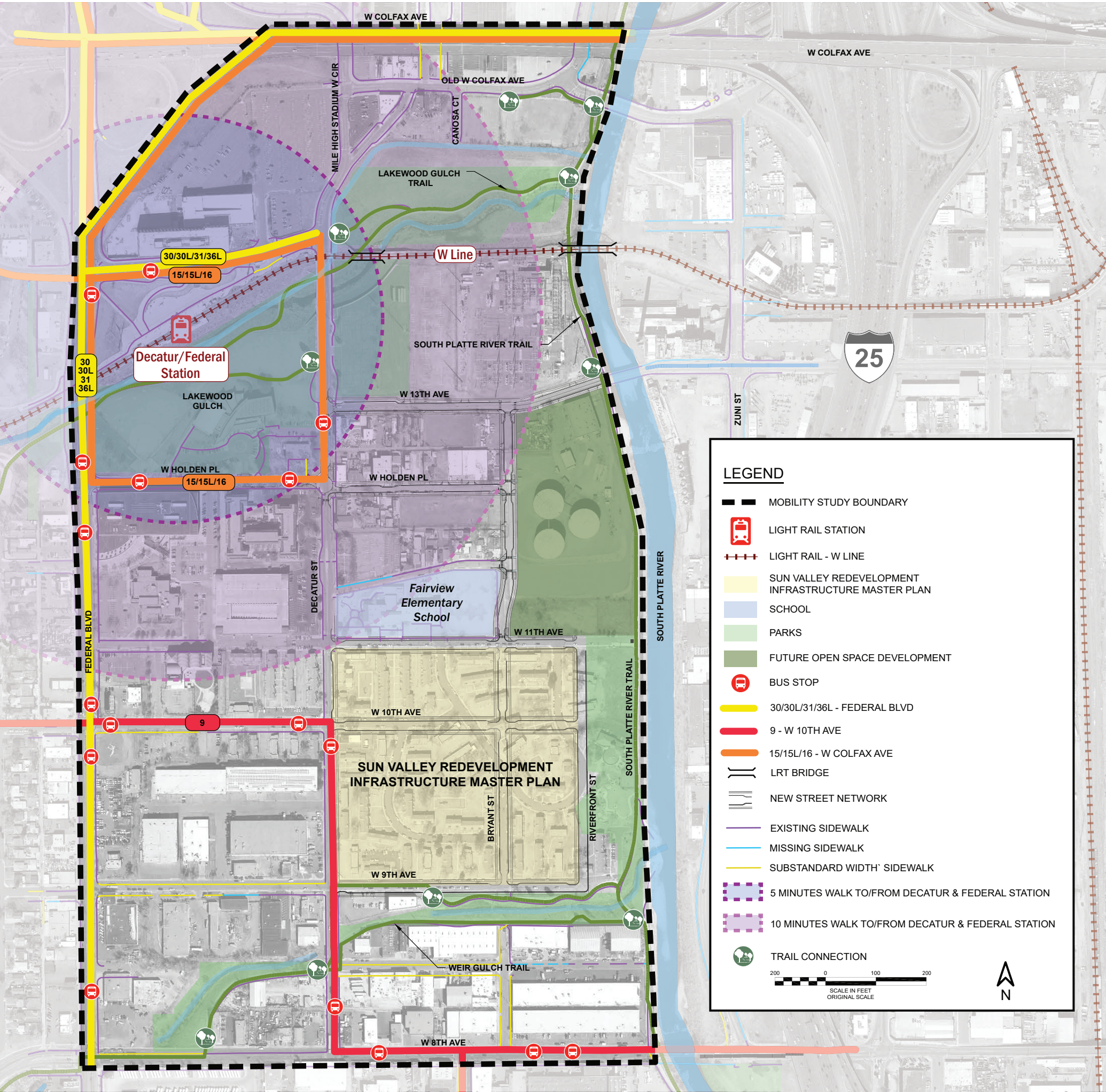


Detached Sidewalk



# TRANSIT NETWORK

EXHIBIT 3.4



Sign Stop



Bench Stop



Shelter Stop

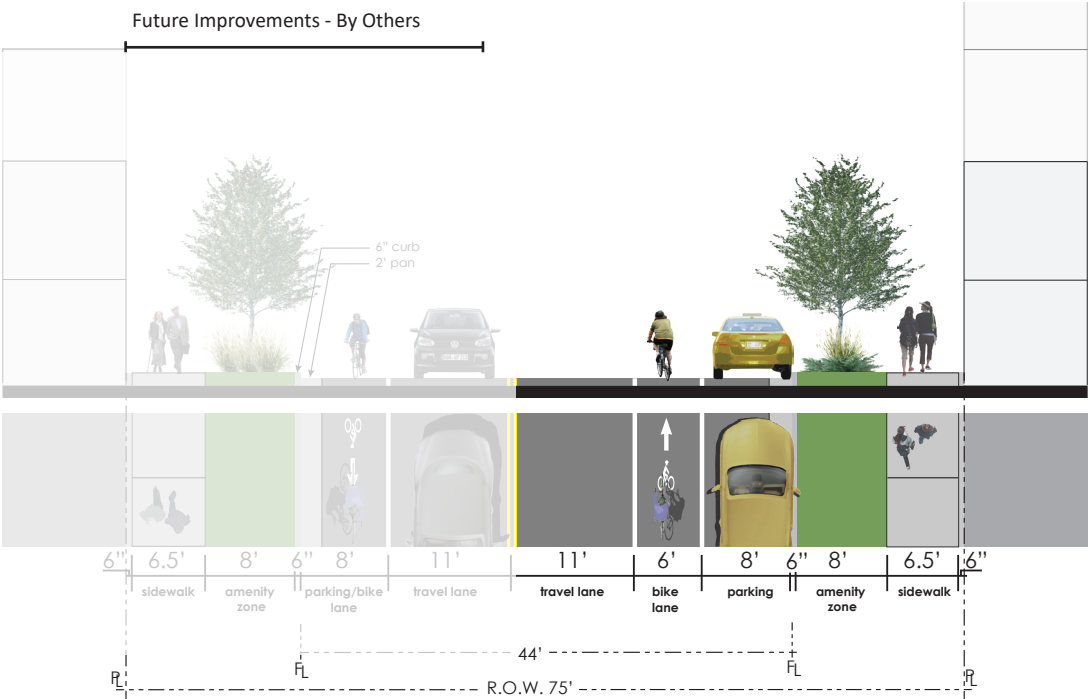


Station



# Decatur Street

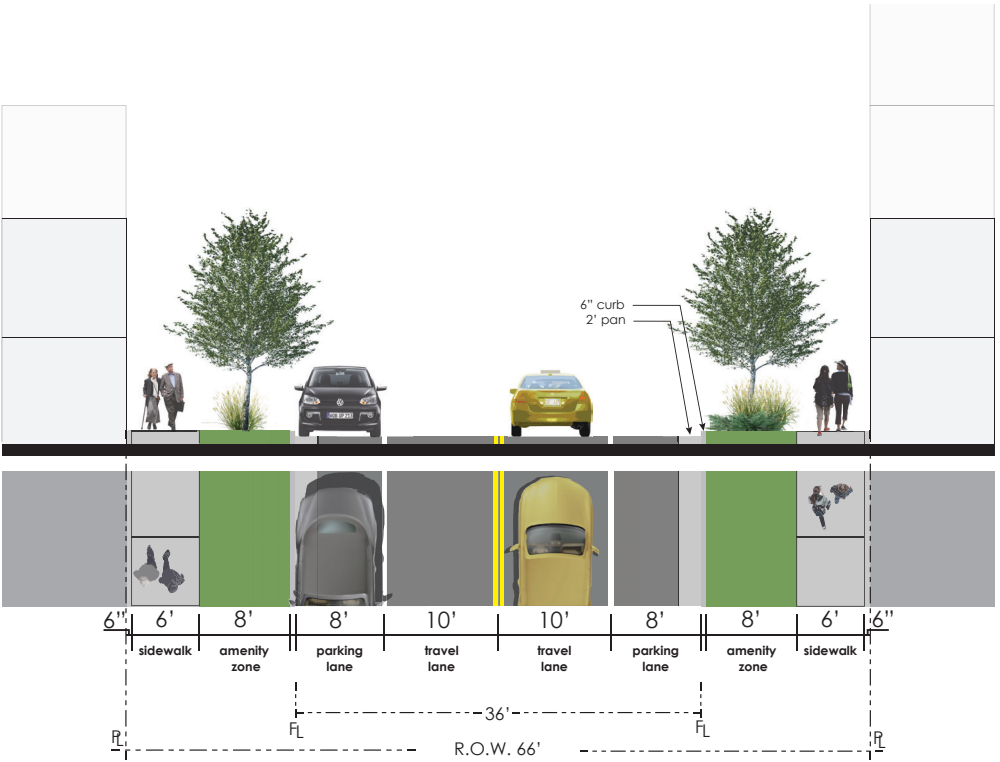
Decatur Street is an important connection for the Sun Valley neighborhood connecting 8th Avenue to Lower Colfax and the Stadium. While the IMP proposes improvements to the east side of Decatur Avenue from 9th Avenue to 11th Avenue.



**Decatur St - Collector Street** Scale: NTS  
Typical Section - Looking North Section A - A'

# Bryant Street

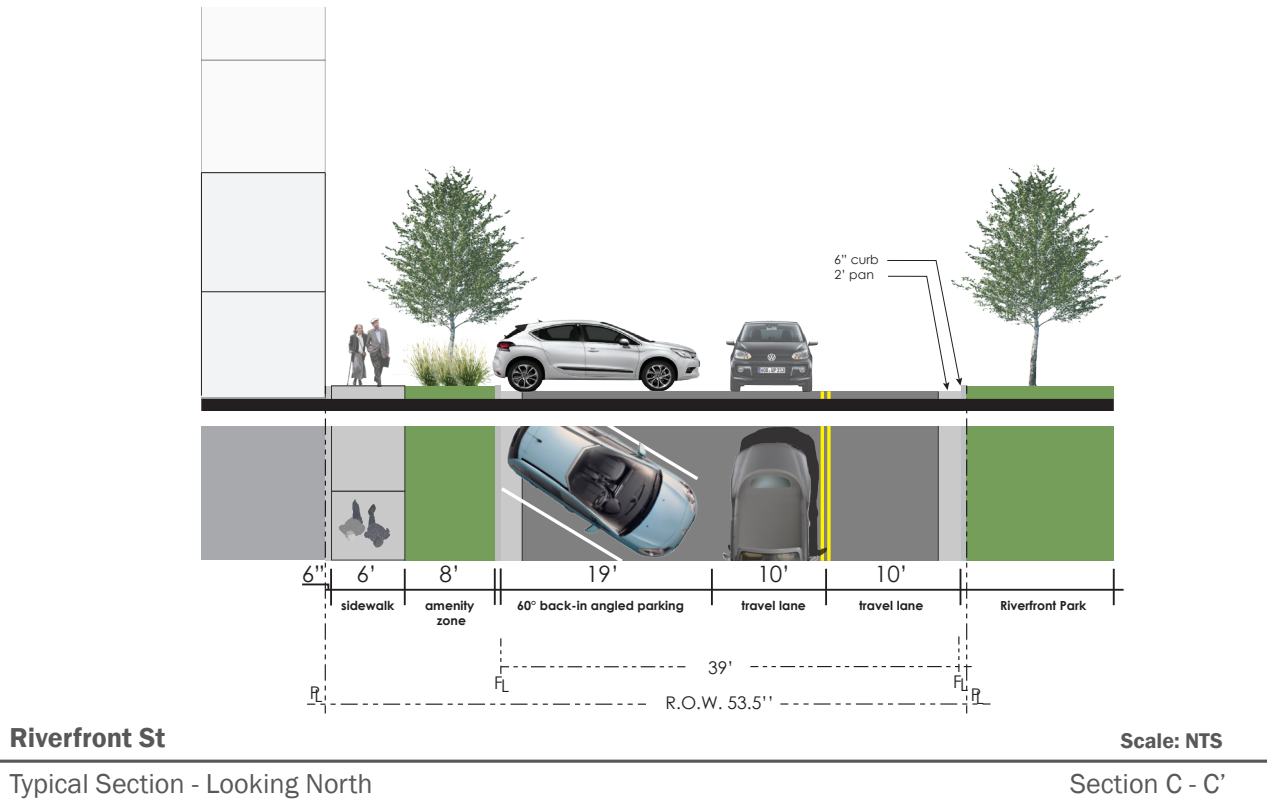
Bryant Street will provide a north south connection in the heart of the redevelopment area of the neighborhood. The roadway will also be critical to reestablishing the network grid connecting 9th Avenue to 12th Avenue. The 13th Avenue Elevate Bond project will construct Bryant Street from 12th Avenue to 13th Avenue.



**Bryan Street: 9th Ave to 13th Ave - Local Street** Scale: NTS  
Typical Section - Looking North Section B - B'

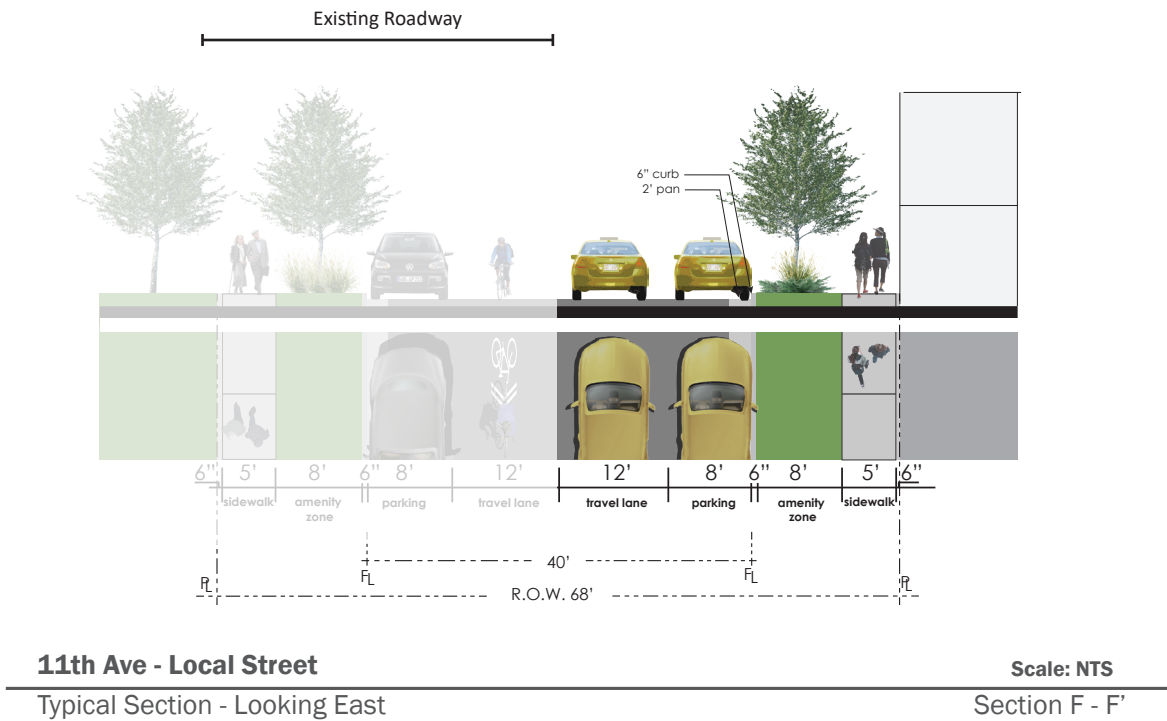
# Riverfront Street

Riverfront Street has been designed to be a low speed roadway to provide access to the park and circulation around the development. Public parking will be provided on the west side of the street allowing parking for development as well as visitors to the park.



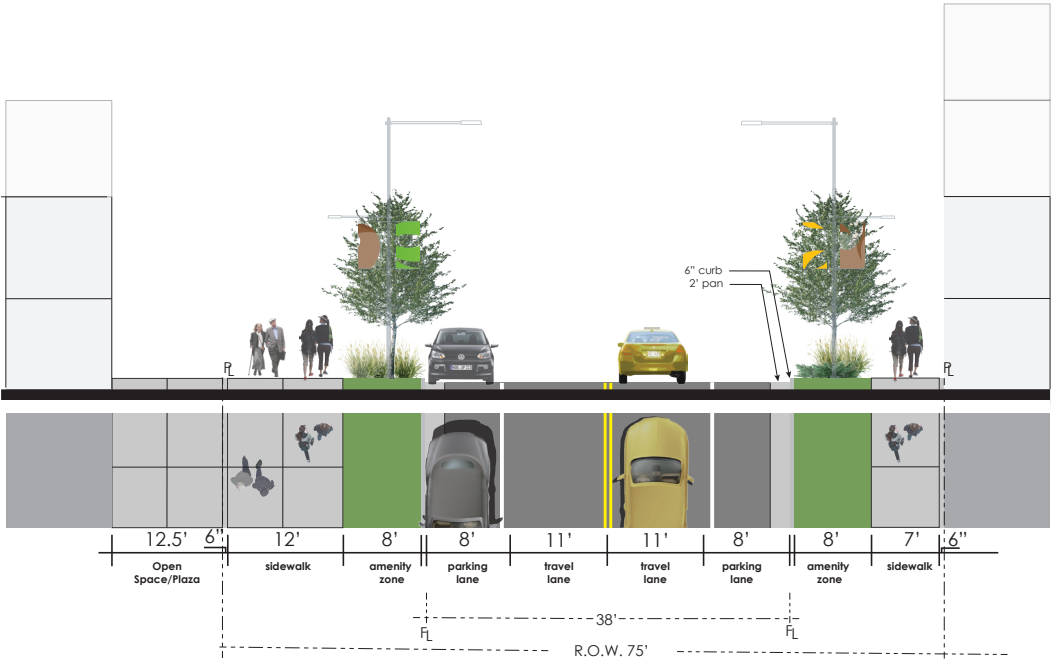
# 11th Avenue

11th Avenue will remain within the existing right-of-way with a similar section, the IMP contemplates improvements to the southern half of the roadway. Keeping this section narrow is important to keep vehicular speeds low next to Fairview Elementary.



# 10th Avenue

10th Avenue is the focal point of the development from the standpoint of the mobility network as well as the development. As identified in the GDP, 10th Avenue provides a critical connection from the Villa Park neighborhood to the South Platte River. The roadway will provide a mobility corridor for the neighborhood provide access to community amenities and the riverfront park, and the South Platte River. Along the north side of the street there will be a linear plaza, that with the widened sidewalk will provide 25-feet of space for people to walk, play, and enjoy.

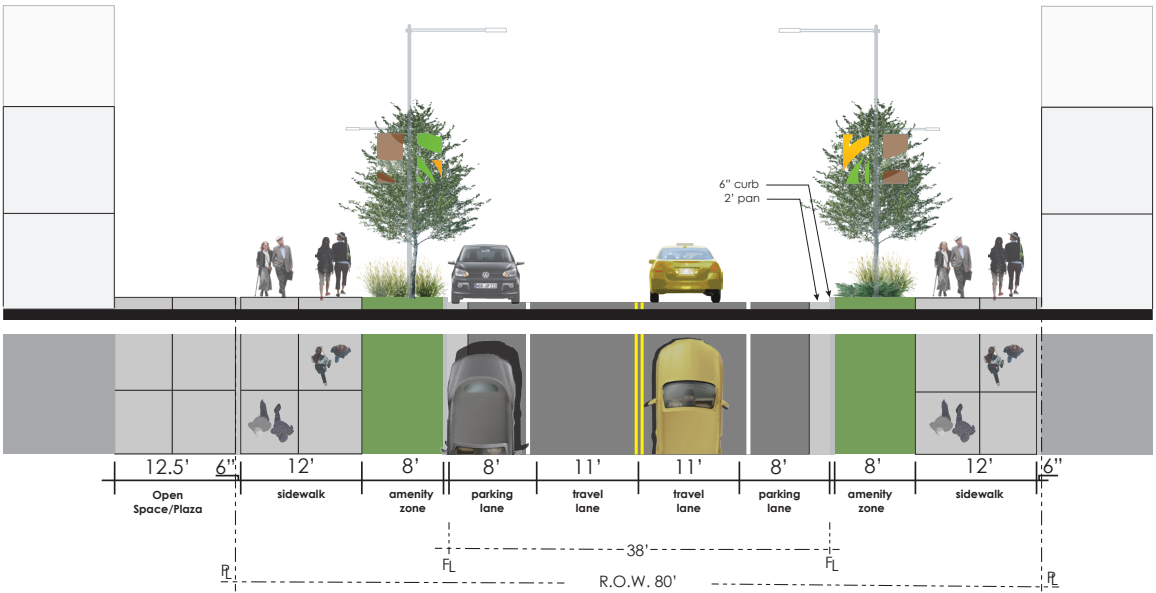


10th Ave: Decatur Ave to Bryant

Scale: NTS

Typical Section - Looking East

Section G - G'



10th St: Decatur to Bryant - Local Street

1/4"=1'-0"

Typical Section - Looking East

Draft

10th Ave: Bryant St and Riverfront Street

Scale: NTS

Typical Section - Looking East

Section G - G'



# 4.0 Open Space Network

## 4.1 Open Space Overview

The central components of the Sun Valley Redevelopment’s planned open space network are the 0.25-acre 10th Avenue Plaza and the 11-acre Riverfront Park – defined in and required by the Decatur-Federal General Development Plan (GDP) – which together exceed the 10% minimum publicly accessible open space requirement.

It is anticipated, that each of Blocks 1-4 will incorporate private open spaces into their overall site development framework to provide area residents with on-site open space amenities (community gardens, playgrounds, etc.) as well as publicly accessible pedestrian connections linking the neighborhood to Riverfront Park and other new community amenities (e.g. Grow Market at 10th & Decatur). The elements will be part of the parcel specific design guidelines.

1

### 10th Avenue Plaza

The 10th Avenue Plaza contemplated by the GDP will be satisfied by the creation of a “linear plaza” creating a pedestrian open space trail interspersed with larger gathering areas and serving as the primary connection from neighborhoods to the west to Riverfront Park. Design of the 10th Avenue Plaza will be submitted and approved concurrent with site development plan (SDP) for each Block; or the immediate 10th Avenue adjacent parcel if a Block is further subdivided. As such, the 10th Avenue Plaza may be constructed in phases and the terms of the Development Agreement will ensure that the sum of the phases meets or exceeds the 0.25-acre minimum required by the GDP.

2

### Riverfront Park

The Riverfront Park contemplated by the GDP is a minimum of 11.04 acres and extends generally from 13th Avenue on the north to 9th Avenue on the South, the first phase of the new park located between 9th and 11th Avenues will be deeded (parcels owned by DHA) to the City as a condition of this Approved IMP. The City and DHA have created a cooperative partnership to program, design, fund and construct the park in a phased manner as which will be codified in the Development Agreement.

Riverfront Park will be a regional park serving the greater Sun Valley neighborhood as well as the adjoining neighborhoods to the west, south, and north. It is anticipated to be a mix of active neighborhood serving uses (plazas, playgrounds, community gardens, sports fields, etc.) and serene natural areas that capitalize on the adjacency to the South Platte River. The park has been identified as a key component of the River Sisters initiative, and as such, is expected to highlight and educate visitors on the river’s ecology and place in the culture of the Native American and Chicano communities in the area. It is anticipated that a central plaza will be located within the park in the 10th Avenue alignment and serve as both a gateway to the new park and a gathering area for community events.





Within the IMP area, opportunities for additional public and private open spaces may be added to complement the Riverfront Park amenities. This may include courtyards, gathering areas, gardens, and internal block connections that will serve to increase pedestrian access from all directions.

**4.2 Riverfront Park Design Elements**

The following project narrative of open space elements and construction items is intended to illustrate the design intent of the Riverfront Park Open Space. The final schedule of elements will be determined during the design stage in collaboration with Denver Parks and Recreation (“DPR”). Both interim design submittal and final design will be led or reviewed by DPR. The park design will conform to DPR standards.

Further qualitative aspects of the park will include the following:

*Programmatic Elements*

The park will provide a variety of amenities and uses and contain the following programmatic elements that support its position as an active open space in the Sun Valley community and an expanded open space along the South Platte River. The programmatic elements include a blend of active and passive uses, with active uses located closer to River Street and passive uses closer to the river. Active uses, including playgrounds, court areas, plazas, and picnic areas, support families, encourage healthy living, and promote social interaction. Passive area closer to the river provide areas of relaxation and metal restoration, promote access to natural open space, and provide connections to the river. When the park is fully constructed, Riverfront Park will contain the following programmatic elements:

- Multi-use irrigated turf Lawn
- Sport Court(s)
- Dog Park/Area
- Concrete walks adjacent to Riverfront Street
- Park/Site Lighting
- Park Furniture
- Walking Paths throughout the Park
- Landscaping
- Irrigation
- Bathroom and/or Portalet Location
- Nature Play Area or Improved Playground Area
- Picnic Areas
- Small multi-use sports field (s)
- Areas with improved access to the riverfront
- Community Garden
- Passive Garden Areas

*Landscaping*

The planting design intent is to highlight the park’s location along the South Platte River by creating large areas of native or naturalized landscape along the edge of the river that transition to planted areas that promote areas of concentrated pedestrian activity closer to River Street. Shade trees in the open space, along the walkways, around amenity areas, and along River Street will create comfortable places for people to walk and sit. Tree species will be selected to meet Denver Forestry requirements. Plant material will be a variety of native plants and grasses that support the South Platte River ecosystem, evergreen and deciduous trees, ornamental trees, shrubs, and perennials. Selected plant species will reinforce the natural qualities of the river landscape, be adaptable to survive the Colorado climate, and provide year-round interest.

In accordance with the Denver Parks & Recreation’s Game Plan, this park will contain naturalized areas and drought resistant plants to promote the park’s relationship to the South Platte River ecology, water conservation, and reduce maintenance costs. Tree plantings will create 15% canopy coverage within 15 years in accordance with the Game Plan (pg. 29). Flexible, low water use, turf area(s) will be incorporated into the design to allow for a mix of activities, from community gatherings to organized and pick-up field games, concerts, and events. Mulch or groundcovers will be applied to all planting beds and underneath trees.

*Pedestrian Paving*

A variety of paving materials will be used for throughout the park. Concrete sidewalks will be the primary circulation route through the park, including 10’ sidewalks in higher use areas and 6’ wide secondary concrete walks to support circulation patterns and serve aesthetic aspects such as dividing landscape types or program elements. Additional crusher fines pathways will be incorporated into the park, as needed, to provide additional access to a variety of areas including access through and alongside native areas. For ease of maintenance a 12” wide concrete mow band will separate turf areas from other planting types.

*Site Elements (Furnishings, Structures & Lighting)*

A variety of site furnishings will be used throughout the park that meet DPR standards or otherwise approved by DPR. This includes tables & chairs, benches, litter & recycling receptacles and bike racks. Furniture will be either an exterior grade stainless steel or high-quality powder coated steel. It is anticipated that the site furniture will come from a variety of manufactures.

Shade is intended to be provided by the use of shade structures, trees, or a combination of the two to create respite from the sun and create comfortable places to sit. A variety of lighting types including LED post top lights will be used to create a safe, comfortable and inviting evening environment.

*Irrigation*

The irrigation system for this project will be designed as a fully automated irrigation system that adheres to DPR standards, sensors and features that will address water conservation and system efficiency while providing a system that minimizes water consumption and minimal maintenance costs. The system will be zoned such that different plant materials, exposures and elevation will be considered and separate zones will be provided where these conditions would dictate.

**4.3 Riverfront Park Phasing**

Riverfront Park will be a phased 11.04-acre park that will contain the following programmatic elements.

*A. Phase One Improvements*

The phase one area is located generally between 9th and 11th Avenues and included in this IMP.

The Phase 1 Improvements are anticipated to consist of the following elements:

- Multi-use, irrigated turf Lawn
- Concrete Walks and Paths
- Site Lighting
- Park Furniture
- Irrigation to support landscape areas installed with this phase
- Improved playground area
- Integration of existing Grown Garden/Community Garden
- Plaza
- Landscaping
- Passive Garden Areas
- Areas with Improved Access to the riverfront

The conceptual park design process will refine the scope and extent of these elements.

*B. Phase Two Improvements*

Phase 2 of Riverfront Park is the northern half of the park located beyond the bounds of this IMP and is included here for reference only. The Phase 2 area will be located generally between 11th and 13th Avenues. The Phase 2 area is anticipated to contain the following programmatic elements:

- Dog Park/Area
- Concrete Walks and Paths
- Site Lighting
- Park Furniture
- Multi-use turf lawn areas
- Landscaping

- Irrigation to support landscape areas installed with this phase
- Sport Court(s)
- Small Play Area
- Passive Garden Areas
- Picnic areas
- Areas with improved access to the riverfront

**4.4 Riverfront Park Design, Review and Approval**

Riverfront Park will be designed and constructed in accordance DPR design standards and specifications with final approval by the Executive Director of Parks and Recreation, or their designee. The Executive Director may approve any material deviations from the elements of Riverfront Park set forth in this IMP at the time of design of Riverfront Park pursuant to Section 4.4 of the IMP.

- Riverfront Park will be designed in an iterative process to accommodate the anticipated phasing and implementation of elements of the park.
- The conceptual plan will account for both Phase 1 and Phase 2 designs, plus any potential sub-phasing.
- A conceptual, 30% parks design for both Phase 1 and Phase 2 will be developed in partnership with DHA and DPR.
- One or more public meetings to be facilitated by DHA or DPR will be required at the concept-level design stage.
- Formal Site Development Plans and supplemental engineering plans for 100% design of each phase of Riverfront Park will be submitted to or prepared and approved by DPR.

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## 5.0 Water and Drainage

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### 5.1 Drainage Design

#### 5.1.1 Existing Drainage Conditions

The Sun Valley develop contains approximately 29.1 acres of land containing market rate and income restricted residential units within mixed use development with local roadways serving the residential neighborhood. There will be areas of landscape as common yards for the development. The site is located in downstream portion of the Denver Storm Drainage Master Plan (Master Plan) Basins 4900-01 (Weir Gulch). The project has major drainageways in proximity on 3 sides; Lakewood Gulch is to the north, the South Platte River (SPR) is east, and Weir Gulch is south of the project. The Project area ultimately flows from the west to the east and outfalls to the South Platte River. No deficiencies were identified within the project limits within the Master Plan.

According to the FEMA Flood Insurance Rate Map (FIRM) Panel 0800460182H (November 20, 2013) for the project shows a portion of the project within Zone AE. Currently the City and Mile High Flood District (MHFD) are reviewing the Flood Hazard Area Delineation (FHAD) for Weir Gulch which is currently in draft form and the project is coordinating with the city to ensure no adverse impacts to adjacent properties. Currently under study with the updated FHAD the City is investigating improvements to Weir Gulch to eliminate the FHAD from the site. While the project is currently in the planning phases funding has not been identified, therefore for the development we have assumed that there will be no improvements to the Weir Gulch drainage way.

Current drainage patterns within the project limits direct flows east towards the South Platte River. There is undersized drainage infrastructure within the 11th Avenue and locations south of the development with multiple outfalls to the South Platte River. In larger events the drainage flows to the east via overland flow and into the SPR

#### 5.1.2 Proposed Drainage System

Proposed redevelopment calls for mixed used buildings with ground level retail / commercial uses with residential above new roadways and utility infrastructure will be constructed to support the redevelopment. There are three major basins for each outfall into the SPR. The largest one is an outfall at the extension of 10th Avenue to the river. The other two basins are smaller and are at the extension of 9th Avenue and 11th Avenue. Detention for the site will be provide at the downstream end of the storm sewer systems prior to the outfall into the river. Per the Federal – Decatur GDP the site is not required to provide 100-year detention, however the Excess Urban Runoff Volume will be provided for the redevelopment area.

Water quality for the right-of-way area will be provided using best practices. Water quality treatment for the vertical development areas will need to be provided within the project.

### 5.2 Domestic Fire and Water Design

#### 5.2.1 Existing Water Distribution

The existing site receives water service from multiple water lines around the perimeter of the site. Within 11th Avenue there is an existing 12-inch water line that provide water to the exhibit facilities. There is another 12-inch line in Decatur that provides water to the site along with a 6-inch in 9th Avenue. The current housing units are served internally by a master meter and private water distribution system that will be removed as part of this development.

#### 5.2.2 Proposed Water Distribution System

Proposed development will utilize the existing 12-inch in 11th Avenue and Decatur Street. In addition, the existing 6-inch in 9th Avenue will be upgraded to an 8-inch line. 8-inch lines will also be constructed in Bryant Street and 10th Avenue. Water lines will all be within right-of-way or easements per Denver Water Board Standards.

For all future development, the latest International Fire Code shall be referenced to find the fire flow demand number of hydrants, and the spacing of the hydrants. The fire department must be contacted to coordinate the required fir flow and locations of the proposed hydrants.

### 5.3 Wastewater Design

#### 5.3.1 Existing Sanitary Sewer

The site is currently served by 2 existing 8-inch clay and concrete sanitary sewers that intercept flow from upstream as well as the proposed project site. The sanitary flows to the east and connects to the Metro Wastewater Reclamation District, 48-inch West Southside Interceptor.

#### 5.3.2 Proposed Sanitary Sewer

As part of the improvements there will be 2 new lines constructed from Decatur Street to the West Southside Interceptor. The new lines will be constructed in the street alignments of 9th Avenue and 10th Avenue. Within the City and County of Denver Sanitary Sewer Master Plan dated October 2009. The project site falls under Map Group 021 in this study, and the pages relevant to this Map Group are reproduced in the Appendix.

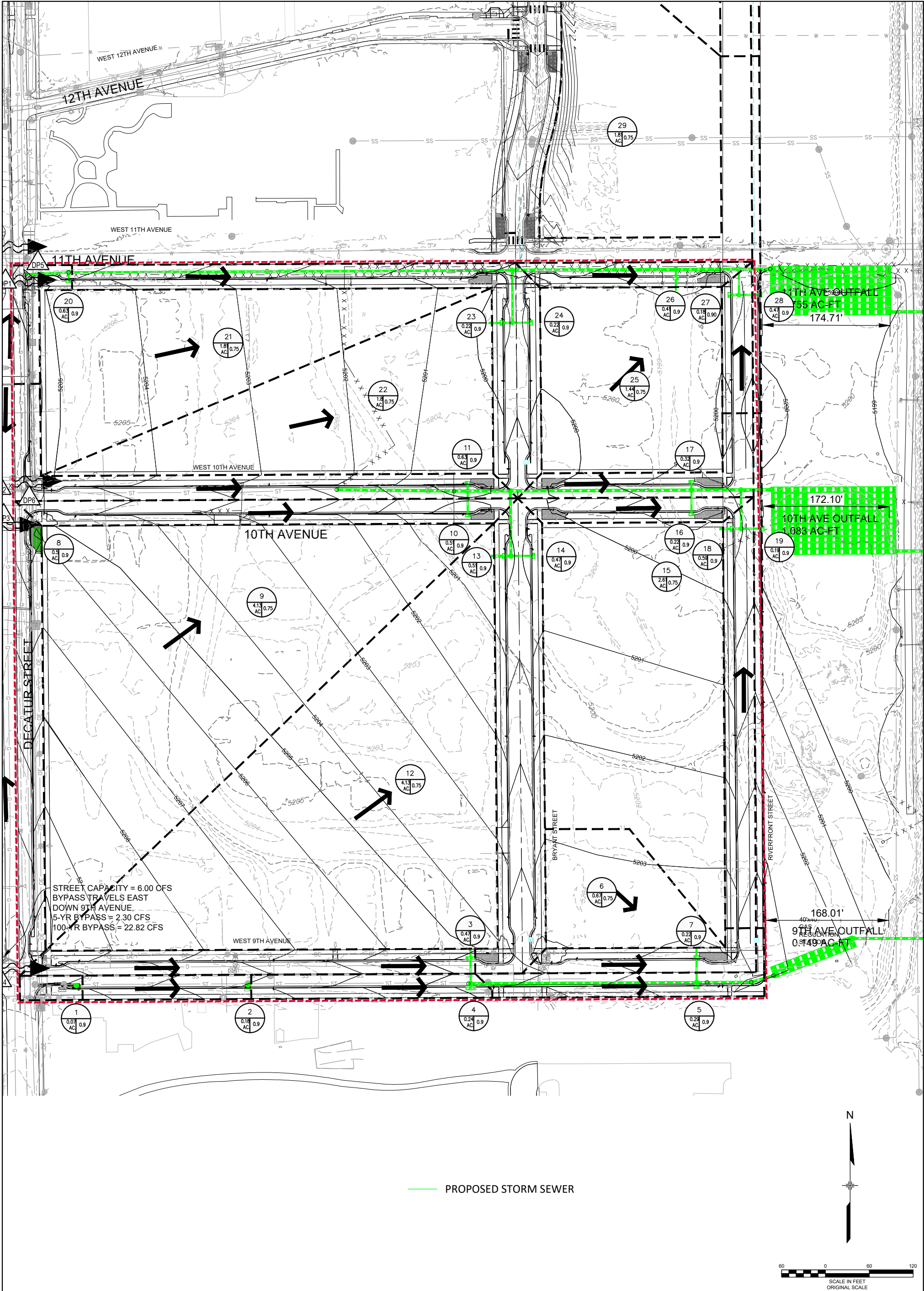
The City and County of Denver Sanitary Sewer Master Plan identifies the 10th Avenue Outfall as being over capacity. The master plan recommends upsizing the 8” pipe to a 15” pipe. The pipe will be upsized at the manhole between Decatur and Bryant street on 10th Avenue.

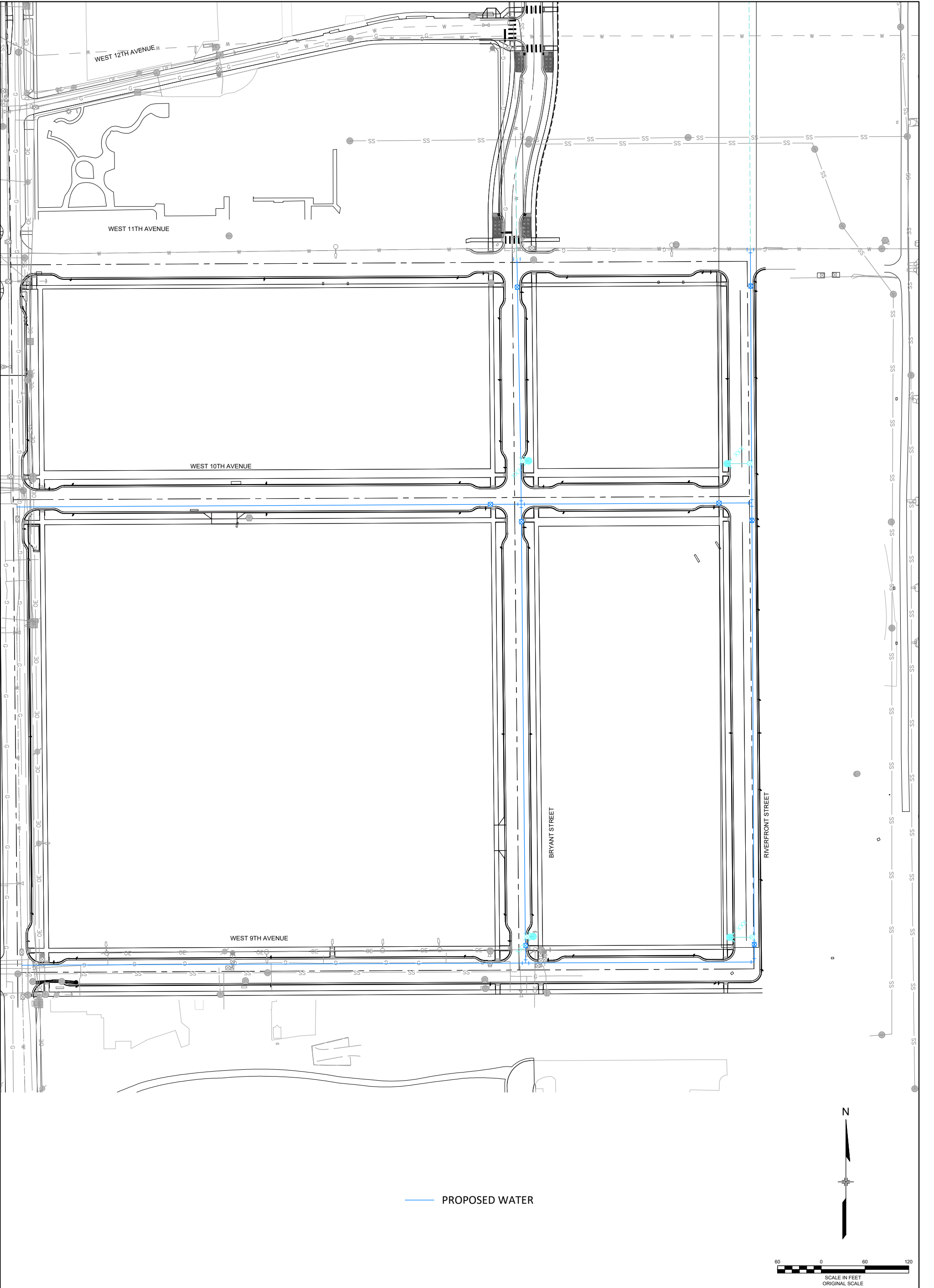


The 9th Avenue outfall will be aligned to follow the new road alignments and upsized to a 10” pipe.  
The 10th Avenue outfall will be aligned to follow the new road alignments and upsized to a 15” pipe.  
To adequately size the proposed sanitary sewer system the site build-out used for design was as show below:

- 1,539 Residentail Units
- 35,300 SF Commerical

The existing and proposed average and peak flows were calculated from the existing building uses and square footage as well as the proposed total unit counts of the proposed redevelopment.  
The average flow and peak flow for the 9th Avenue outfall in cfs are 0.31 and 0.98 respectively.  
The average flow and peak flow for the 10th Avenue outfall in cfs are 0.23 and 0.77 respectively.  
The improvements for this project will have no adverse effect on major outfalls that are part of the Denver Wastewater sanitary sewer network. It is anticipated that flows in the major outfall will be well below 86% of the full flow capacity.





# CONCEPTUAL WATER DESIGN

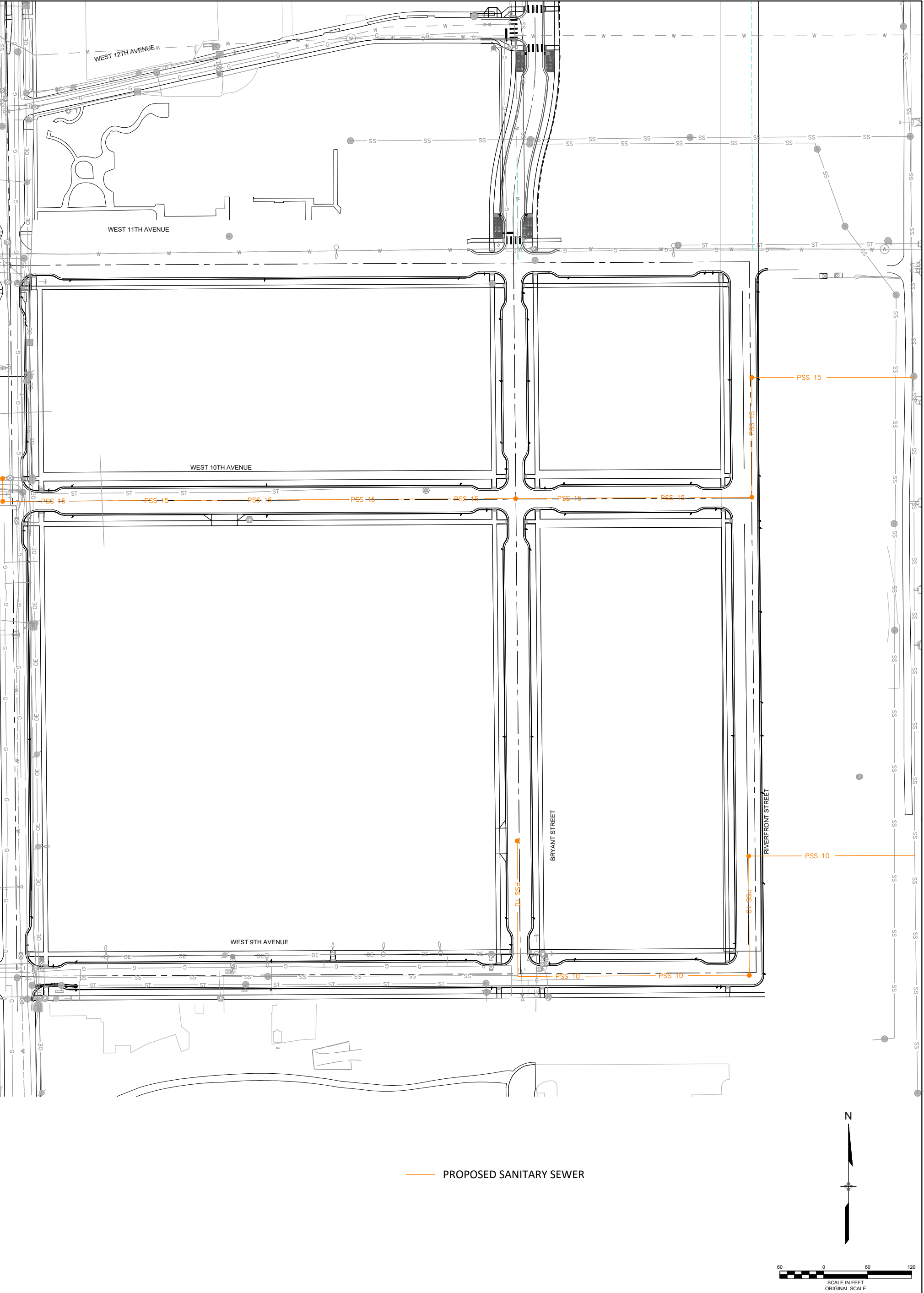
SUN VALLEY REDEVELOPMENT

March 2020

EXHIBIT 5.2







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# 6.0 Phasing

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The proposed phasing for the Sun Valley Redevelopment is intended to minimize displacement for existing residents and to closely align civil infrastructure phasing with vertical development phasing. DHA will serve as the master developer and be responsible for tenant relocation, abatement and demolition of the existing residential units, and design of the new civil infrastructure defined in this Approved IMP. Exhibit 6.0 illustrate infrastructure and non-City owned open spaces required to be constructed within each phase.

Vertical development will take place on the four “super blocks” defined within this IMP and development will be further defined through block specific site development plan submittals (SDPs). The proposed block phasing reflects anticipated market conditions; however, full development of the Sun Valley Redevelopment area will require flexibility/ responsiveness to the market, so such phasing is non-binding. Regardless of order, each SDP of or within a block must provide adequate fire access, drainage and utilities via permanent construction and/or interim site improvements. These requirements will be evaluated when each SDP is submitted to the City.

## Civil Infrastructure Phase 1A – 10th Avenue & Bryant Street

The first phase of civil infrastructure will be the extension of 10th Avenue and Bryant Street through the site, including all associated “trunk” utilities defined in the IMP, as shown on Exhibit 6.0. Both 10th Avenue and Bryant Street will be deeded as City ROW at the time of plat. It is anticipated that current residential units located in the future Block 4 area will remain occupied during the first phase of infrastructure to facilitate their ability to remain in the neighborhood long-term. As such, it is anticipated that a) vehicular, pedestrian, and first responder access will be maintained throughout the phase 1 construction and b) the existing internal Clay Way will be reconnected to 10th and Bryant upon completion. While the stormwater quality and streetscape designs for 10th Avenue and Bryant Street are defined in this Approved IMP, the City agrees to accept the roadway and stormwater improvements with temporary sidewalks and water quality treatment facilities, to help facilitate vertical development timing. Maintenance of any temporary improvements shall be the responsibility of DHA until such time as final improvements have been constructed and accepted by the City. Completion and preliminary acceptance of all 10th Avenue and Bryant Street improvements shall be required prior to the issuance of a certificate of occupancy for any development within this Approved IMP .

## Civil Infrastructure Phase 1B – Riverfront Road

Construction of Riverfront Road is expected to be completed concurrent with vertical development on Blocks 2 and 3. As such, Riverfront Road may be completed in two phases . In the event DHA constructs all or a portion of Riverfront Road prior to vertical development on Blocks 2 and/or 3, the City agrees to accept the roadway and stormwater improvements with temporary sidewalks and water quality facilities to help facilitate vertical development timing. Completion and preliminary acceptance of all Riverfront Road improvements adjacent to Block 2 and/or 3 shall be required prior to the issuance of a certificate of occupancy for any development within the adjacent block.

## Civil Infrastructure Phase – 3 Upgrading surrounding Streets

As shown on Exhibit 6.0, this IMP requires upgrades to all or portions of the existing streets surrounding the project area, including 11th Avenue, 9th Avenue, and Decatur Street. Construction of these improvements is expected to be completed concurrent with vertical development on the adjacent block and, as such, may be completed in phases. In the event DHA constructs all or a portion of these offsite improvements prior to vertical development on the adjoining blocks, the City agrees to accept the roadway and stormwater improvements with temporary sidewalks and water quality facilities to help facilitate vertical development timing. Completion and preliminary acceptance of all offsite improvements shall be required prior to the issuance of a certificate of occupancy for any development within the adjacent block.

## Vertical Development Phasing

As shown on Exhibit 6.0, the initial phase of vertical development by DHA is anticipated to begin concurrent with Phase 1 infrastructure construction and include development of Block 1 (Phase 1a), followed by Block 3 (Phase 1b). As Block 3 is expected to be developed as two separate projects, it may be submitted under two separate SDPs, allowing for a sub-phasing within the block.

Block 2 (Phase 2) is expected to be ready for development following the completion of Phase 1 infrastructure; however, the exact timing will be a function of market demand.

The existing residential housing on Block 4 is expected to remain in place and occupied until the completion of DHA’s off-site replacement housing phases, after which those residents will be given priority for relocation into new family housing developments as certificates of occupancy are received. As such, abatement, demolition and redevelopment of Block 4 (Phase 3) is not expected to take place until after all remaining public housing residents have been relocated from this Block . Due to its large size, Block 4 is expected to be developed as two or more sites and, as such, will likely require further subdivision and site planning, including the replacement of the existing Clay Way with new internal circulation and potentially dedication of new City ROW. These additional entitlements are anticipated to be approved concurrent with the required entitlements and permits for Block 4 and, as such, will not require Amendment or Minor Deviation of this Approved IMP unless the proposed development proposes to substantially change or alters the offsite of Block 4 public improvements identified within this IMP or otherwise triggers an Amendment as set forth in Section 1.4.



