

# STADIUM DISTRICT STUDY

## STREET CONCEPT PLAN

Department of Planning & Development (DPD)  
staff recommendations for  
comprehensive plan amendments  
public review

December, 2013



# STREET CONCEPT PLAN

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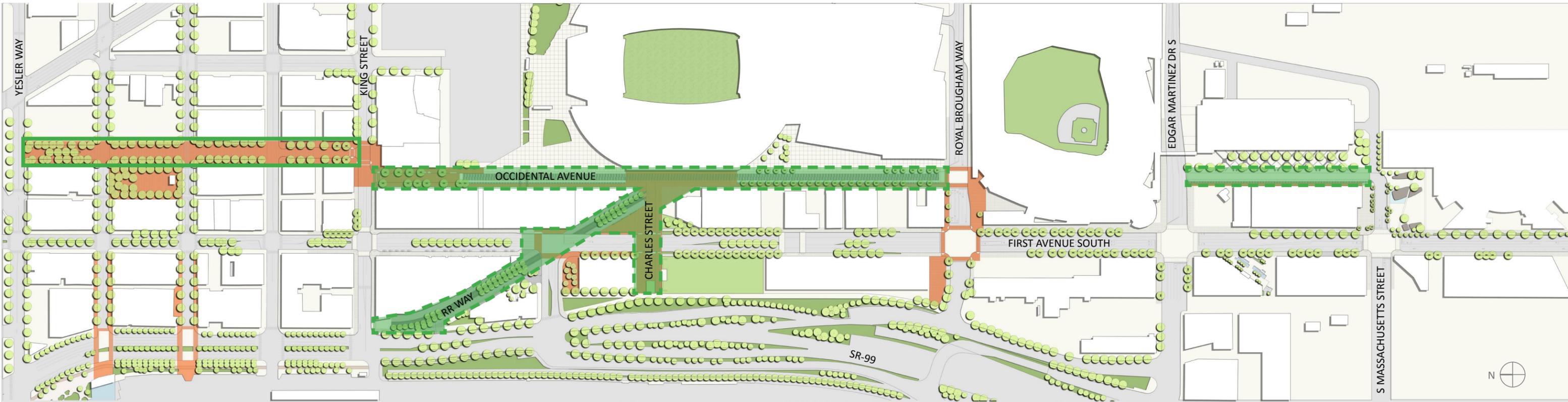
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# STREET CONCEPT PLAN

## Street Concept Plan Overview



Green Street Designation (Existing)

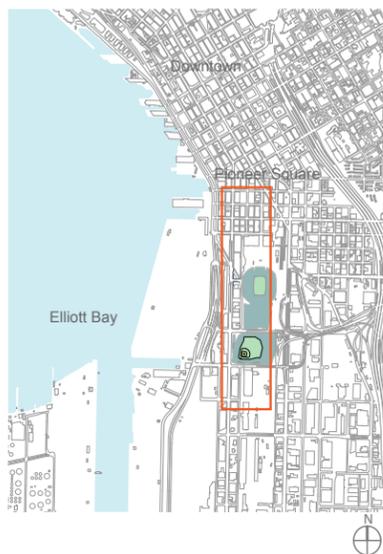


Neighborhood Green Street Designation (Proposed)

*“Neighborhood Green Streets emphasize pedestrian amenities, landscaping, historic character elements, traffic calming, and other unique features.”*

The northernmost four blocks of Occidental Avenue are currently designated as a Green Street. This plan proposes to designate the remaining portions of Occidental Avenue as a Neighborhood Green Street, as well as the Charles Street and Railroad Way rights-of-way. The Neighborhood Green Street designation emphasizes pedestrian amenities, landscaping, historic character elements, traffic calming, and other unique features to create an enhanced public realm.

This street concept plan includes 1st Ave. S. and Occidental Ave. S. from S. King St. to S. Holgate St. The plan can guide improvements that can be made over time in conjunction with private development, by stakeholders, or through capital projects. The plan seeks to create a linked network of streetscapes and public spaces that can support goals and policies for the Stadium District.



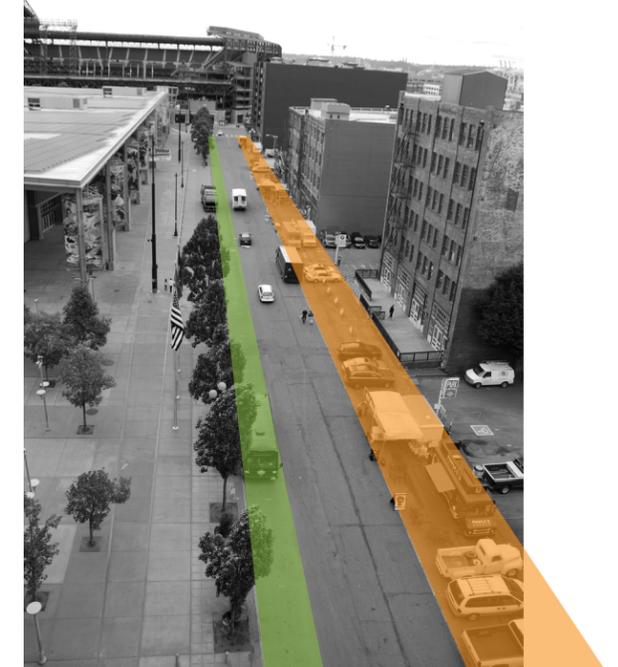
# Occidental Avenue

## Existing Conditions

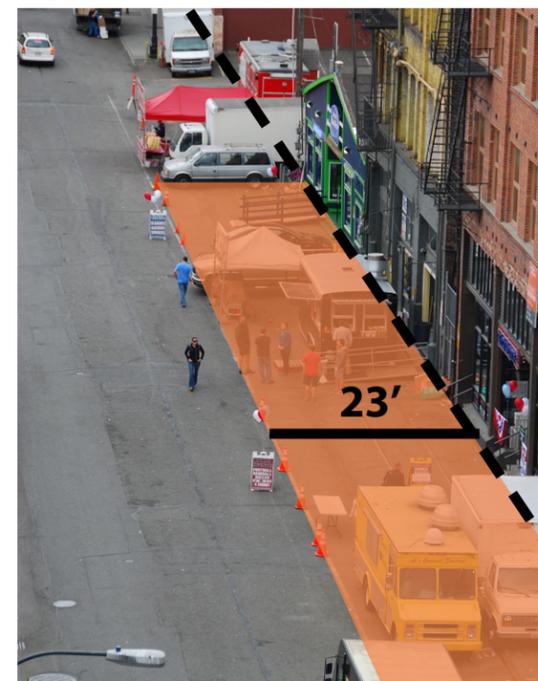
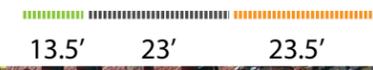
Occidental Avenue currently functions as a shared street that accommodates a variety of uses, including walking, biking, driving, deliveries, parking, trash collection and services, and vendors. Allocation of street right of way to these uses is informal and changes between event and non-event days. This plan seeks to upgrade the design of Occidental to reinforce the character of the district and better inform how space should be allocated between uses on both event and non-event days.



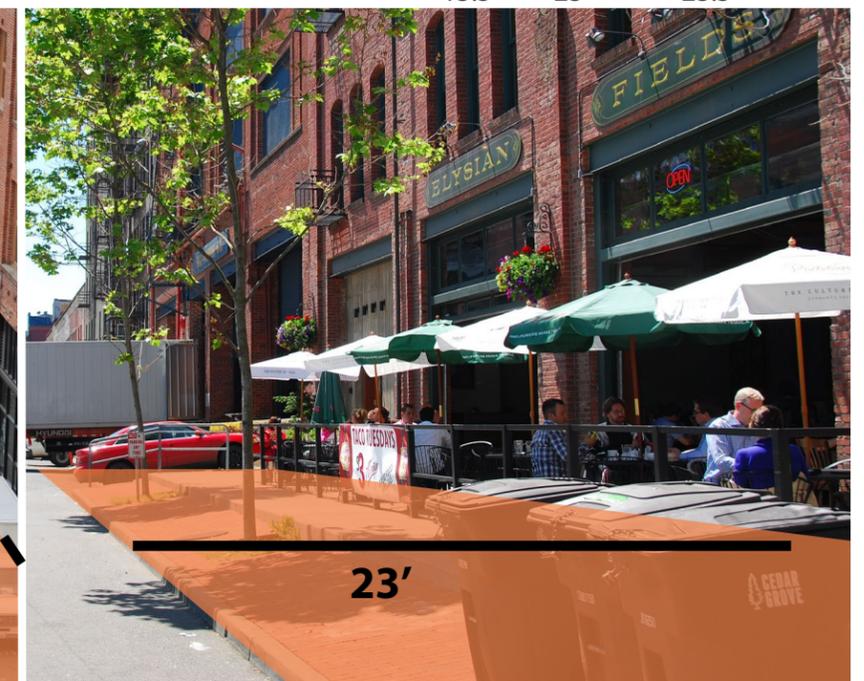
Standard side walk in Occidental Avenue



Exist street use zones



Building frontage zone



# First Avenue

## Existing Conditions

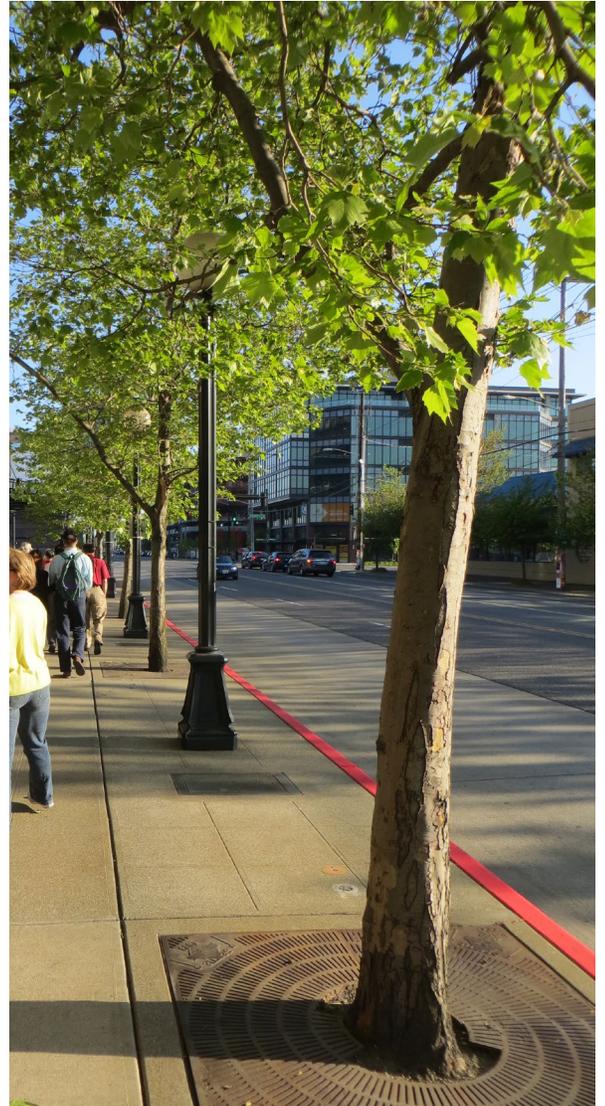
First Avenue is a primary arterial south of Railroad Way and generally has a cross-section of two-through lanes in each direction, with on-street parking, and sidewalks on each side of the street. At intersections, the roadway widens to include turn lanes and drops on-street parking. Major street users include through traffic, port-related freight, patrons of retail along the corridor, and event-related pedestrian and vehicle traffic. This plan seeks to upgrade the street design to improve pedestrian character and sense of safety while maintaining traffic functionality for freight and vehicles.



Major freight on First Avenue



Retail on First Avenue



Streetscape on First Avenue

# Occidental Avenue

## Traffic Operations (King St. to Royal Brougham Way Vicinity)

	Existing / Planned 2030 Conditions*	Proposed Change Per Street Concept Plan (if any)
Roadway Classification / Street Type	<ul style="list-style-type: none"> <li>• Non-arterial</li> </ul>	<ul style="list-style-type: none"> <li>• Neighborhood Green Street</li> </ul>
Traffic Operation	<ul style="list-style-type: none"> <li>• Two way travel</li> <li>• 1 NB Lane and 1 SB Lane</li> <li>• No marked channelization</li> <li>• Roadway closed to through vehicles traffic during major events at CenturyLink or Safeco Fields</li> </ul>	<ul style="list-style-type: none"> <li>• No operational changes</li> <li>• Curbless roadway configuration enhances shared street characteristics. Mixing of slow speed travel by vehicles, pedestrians, and bicycles</li> </ul>
Traffic Volumes (Source: Arena DEIS*)	<ul style="list-style-type: none"> <li>• AWDT @ 1.850/850</li> <li>• PM Peak @ 185/85</li> </ul>	No change proposed
Level of Service (Source: Arena DEIS*)	<ul style="list-style-type: none"> <li>• With Event Operations: Occidental/ S Royal Brougham LOS E/F</li> </ul>	No change proposed
On Street Parking and Curbspace Management	<ul style="list-style-type: none"> <li>• On street parking interspersed in some locations west side. Some parallel, some perpendicular. Depends on adjacent building use</li> <li>• East side: on street parallel some locations</li> <li>• West side: Street vending in right of way within some locations during event times</li> </ul>	Improved organization and demarcation of curb spaces including parking. Improved organization for vending spaces
Freight Movement	<ul style="list-style-type: none"> <li>• Local freight access to Nordic Cold Storage</li> <li>• Some local truck loading to businesses on west side</li> <li>• Freight access for large trucks for events at CenturyLink Field through north lot parking lot</li> </ul>	No change proposed
Bicycle Facilities	<ul style="list-style-type: none"> <li>• None designated</li> <li>• Bicycle and vehicles share travel lane</li> </ul>	<ul style="list-style-type: none"> <li>• Identify as bicycle Shared Street</li> <li>• Curbless roadway configuration enhances shared street characteristics. Mixing of slow speed travel by vehicles, pedestrians, and bicycles</li> </ul>

\* This summary adopts assumptions made as part of the DEIS for the proposed basketball Arena including: the proposed vacation of Occidental Ave. S. between S. Holgate St. and S. Massachusetts St.; and incorporation of assumptions regarding future traffic functionality after completion of the SR99 replacement project.

## Traffic Operations (Edgar Martinez Drive to Holgate Street Vicinity)

	Existing / Planned 2030 Conditions*	Proposed Change Per Street Concept Plan (if any)
Roadway Classification / Street Type	<ul style="list-style-type: none"> <li>• Non-arterial</li> </ul>	<ul style="list-style-type: none"> <li>• Neighborhood Green Street</li> </ul>
Traffic Operation	<ul style="list-style-type: none"> <li>• Two way travel</li> <li>• 1 NB Lane and 1 SB Lane</li> <li>• No marked channelization</li> </ul>	<ul style="list-style-type: none"> <li>• No operational changes</li> <li>• Curbless roadway configuration enhances shared street characteristics. Mixing of slow speed travel by vehicles, pedestrians, and bicycles</li> </ul>
Traffic Volumes (Source: Arena DEIS*)	<ul style="list-style-type: none"> <li>• AWDT @ 3,100/1,000</li> <li>• PM Peak @ 310/100</li> </ul>	No change proposed
Level of Service (Source: Arena DEIS*)	<ul style="list-style-type: none"> <li>• With Event Operations: Occidental/ S Royal Brougham LOS E/F</li> </ul>	No change proposed
On Street Parking and Curb-space Management	<ul style="list-style-type: none"> <li>• On street parking interspersed in some locations west side. Some parallel, some perpendicular. Depends on adjacent building use</li> <li>• East side: on street parallel parking south of Massachusetts</li> <li>• West side: Primarily perpendicular parking interspersed with business access and loading zones</li> </ul>	Improved organization and demarcation of curb spaces including parking. Improved organization for vending spaces
Freight Movement	<ul style="list-style-type: none"> <li>• Some local truck loading to businesses on west side</li> </ul>	No change proposed
Bicycle Facilities	<ul style="list-style-type: none"> <li>• None designated</li> <li>• Bicycle and vehicles share travel lane</li> </ul>	<ul style="list-style-type: none"> <li>• Identify as bicycle Shared Street</li> <li>• Curbless roadway configuration enhances shared street characteristics. Mixing of slow speed travel by vehicles, pedestrians, and bicycles</li> </ul>

\* This summary adopts assumptions made as part of the DEIS for the proposed basketball Arena including: the proposed vacation of Occidental Ave. S. between S. Holgate St. and S. Massachusetts St.; and incorporation of assumptions regarding future traffic functionality after completion of the SR99 replacement project.

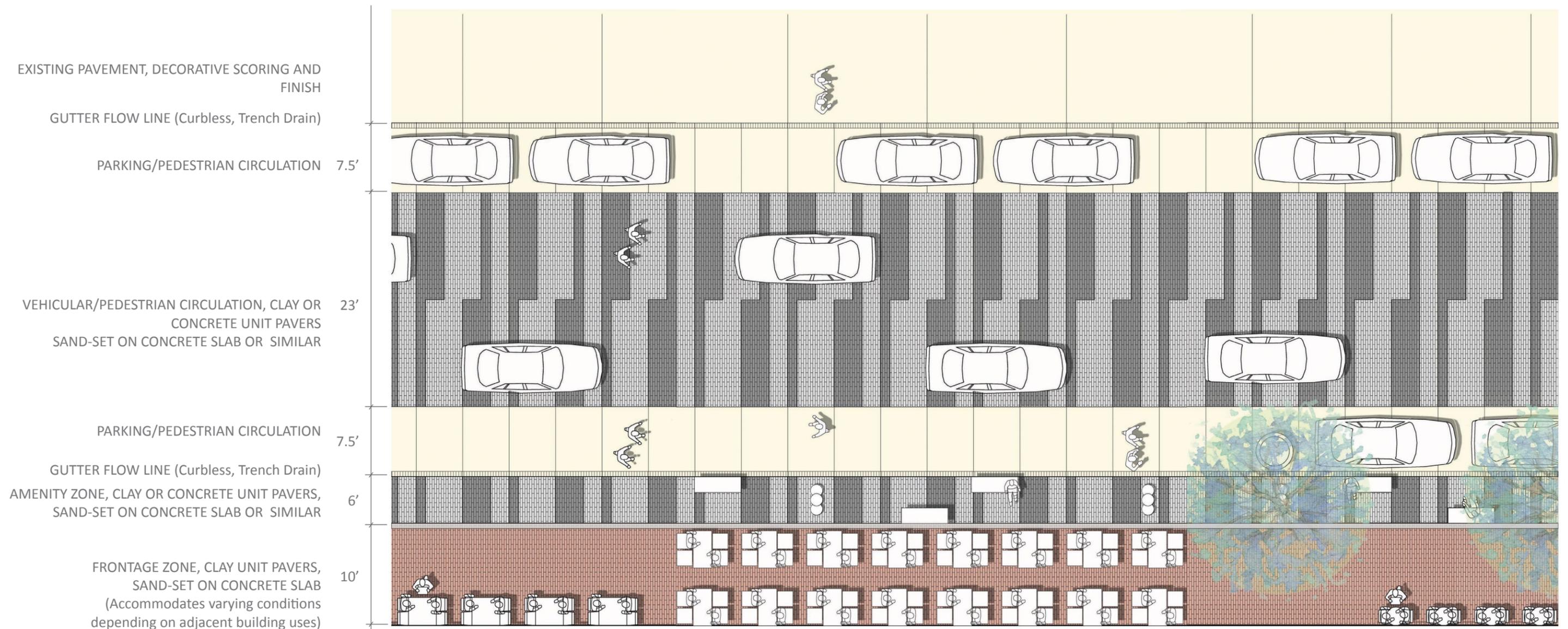


# Occidental Avenue

The Occidental Avenue South streetscape design emphasizes flexibility, mobility, a variety of scales, and a high degree of amenity to create a vibrant streetscape. A curbless streetscape is proposed to provide greater flexibility in accommodating event day crowds and non-event day pedestrian and vehicular flow efficiently. Use zones are implied through pavement patterns and reinforced through streetscape elements such as planters and signage.

The design draws on the converging styles of the proposed Railroad Way improvements, Pioneer Square’s historic character, and the monumental scale and sports themes of the stadiums.

- **Existing Pavement, Decorative Scoring and Finish:** Retain the existing pavements of Centurylink and Safeco fields
- **Gutter Flow Line:** Curbless with trench drain, continuous.
- **Vehicular/Pedestrian Circulation Zone:** Pavement to accommodate two-way flow of vehicular traffic and game-day crowds of pedestrians; clay or concrete unit pavers in colors relating to Railroad Way palette.
- **Parking/Pedestrian Circulation Zone:** Concrete pavement, raised planters, non-event day street parking
- **Amenity Zone:** Unit paver pavement, street furniture and street trees where underground conditions permit
- **Frontage Zone, Clay Unit Pavers, Sand-Set On Concrete Slab:** A flexible zone for pedestrian circulation, dining, retail displays, street vendors, or loading. Unit paver pavement. This plan proposes the adjustment of code to allow the construction of semi-permanent structures such as decks, ramps, and stairs in the public right-of-way to provide outdoor dining/retail space and to mitigate difficult grade transitions between finished floor and street elevations.

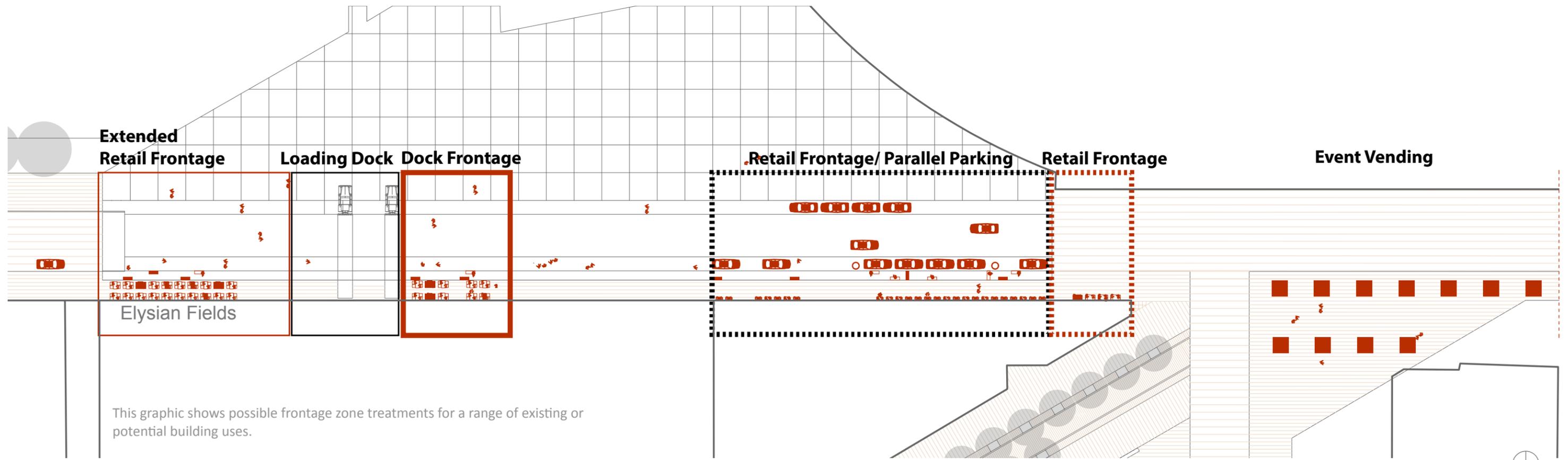
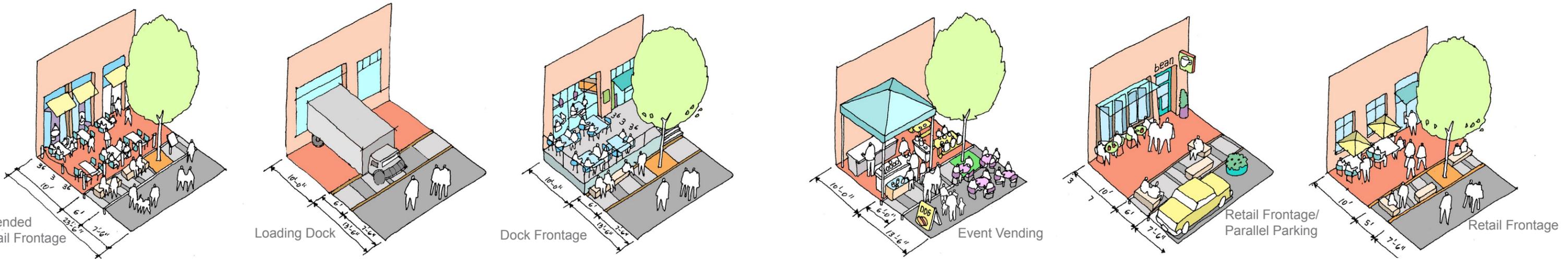


Typical Streetscape Elements - Occidental Avenue  
3/32"=1'-0"

# Occidental Avenue

## Frontage Zone

The Occidental Avenue streetscape provides the flexibility to address a variety of existing and future conditions along the street's west edge. Use of the zone by adjacent building activities is encouraged. Physical improvements to accommodate sidewalk cafes and vending are allowed pursuant to SDOT street use permitting. Durable and permanent materials, and attention to design detail should be used for features in the zone. Street Vending Development of guidelines for street vending in the Stadium District is recommended.

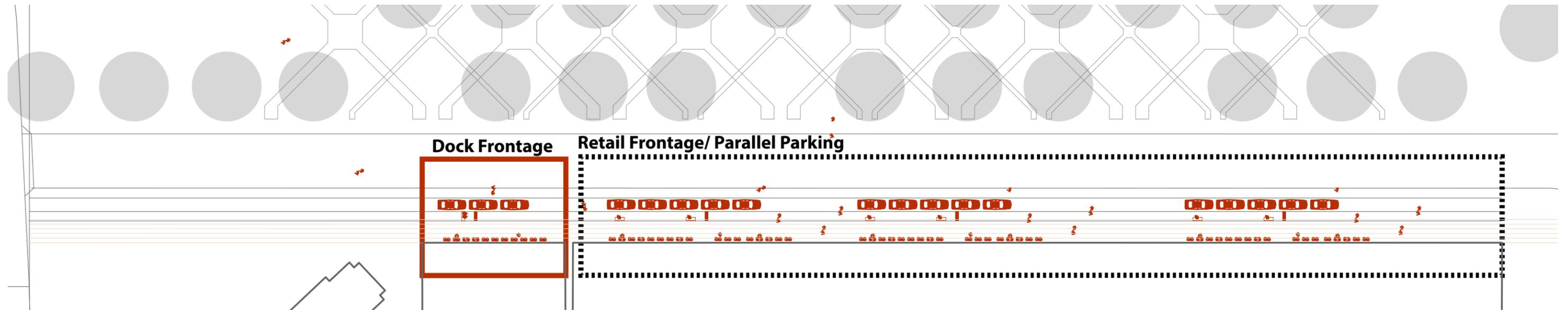
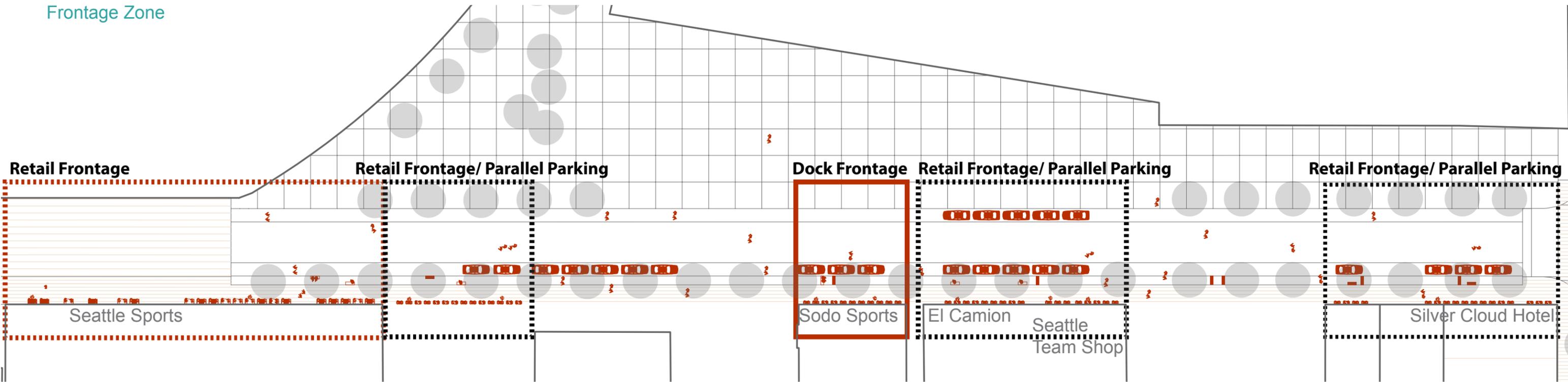


This graphic shows possible frontage zone treatments for a range of existing or potential building uses.



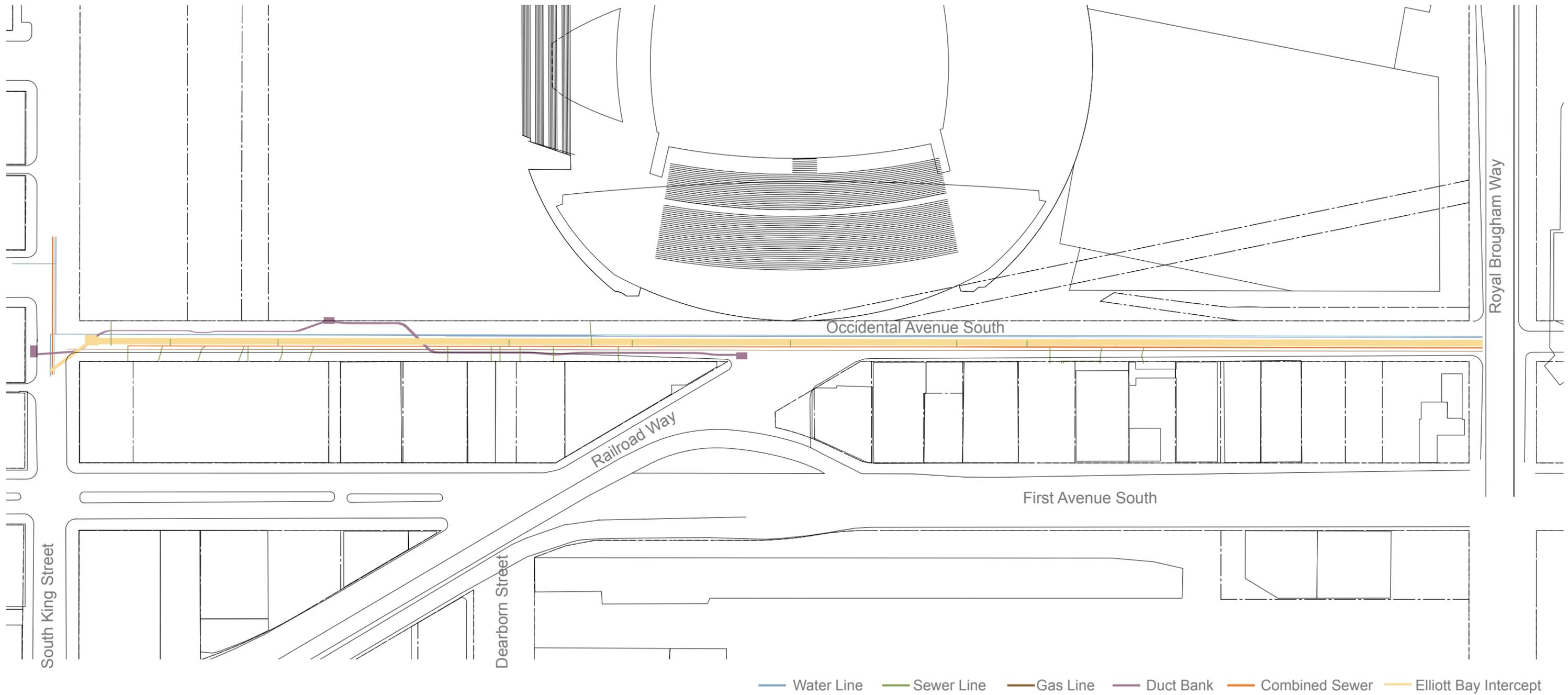
# Occidental Avenue

## Frontage Zone



# Occidental Avenue

## Utilities



Occidental Avenue accommodates a wide variety of utilities, including the eight foot diameter Elliott Bay Intercept. While utilities such as the Intercept provide opportunities for shared district sustainability strategies, they also limit the area in which in-grade landscaping can occur. For this reason the proposed street tree layout for Occidental Avenue is intermittent and supplemented by above-grade planters.

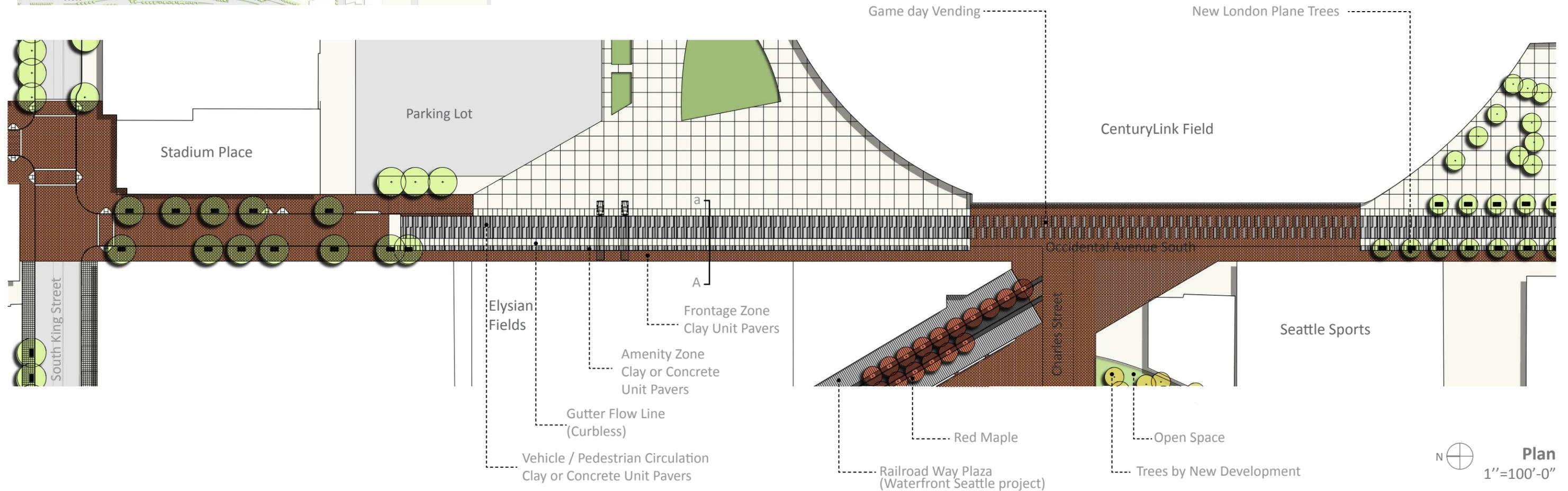
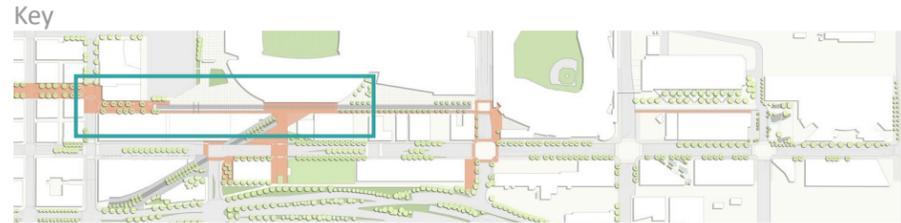
# Occidental Avenue

Occidental Avenue serves as the major north/south pedestrian thoroughfare through the Stadium District, and also as a vital component of the stadiums' access and staging. These important functions are being retained and enhanced through the following measures:

- Retain all loading and charter bus parking, maintain critical clearances and turning movements
- Extend the pedestrian experience of Occidental Avenue in Pioneer Square southward through the Stadium District and imbue it with the character of the District
- Address the diverse set of existing conditions along the west edge of Occidental Avenue
- Retain existing street trees and provide new street trees where utilities allow. The density of utilities in the Occidental corridor may preclude the use of trees in the streetscape, particularly along the west edge or the right of way.
- Maintain space at the nexus of Railroad Way and Occidental Avenue for a game-day vending envisioned to extend westward from the CenturyLink concourse

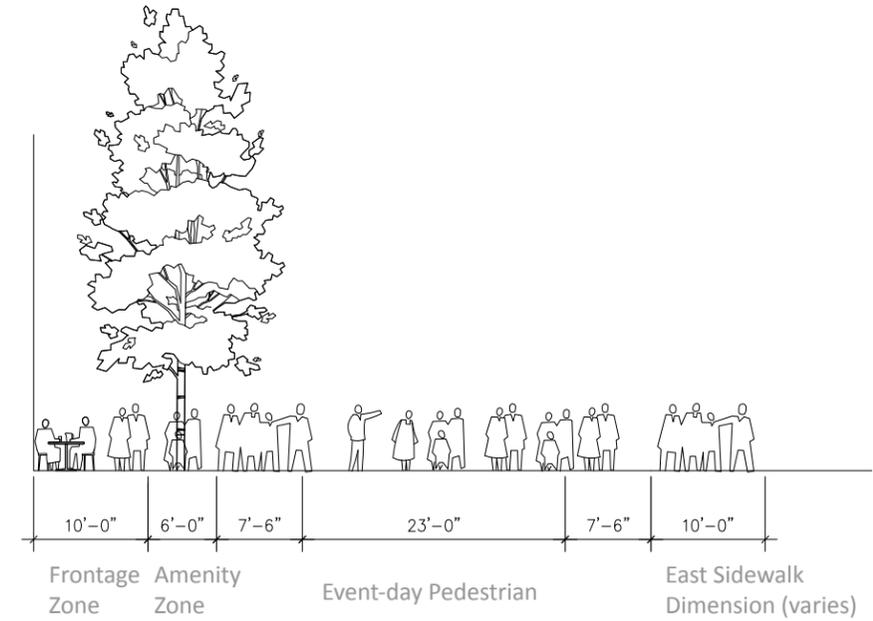
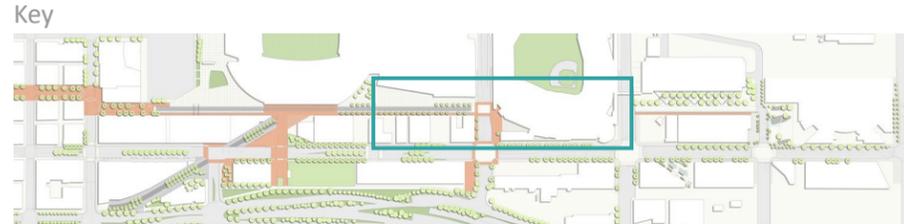


**Non-event Day  
Section\_A-a**  
1/16"=1'-0"

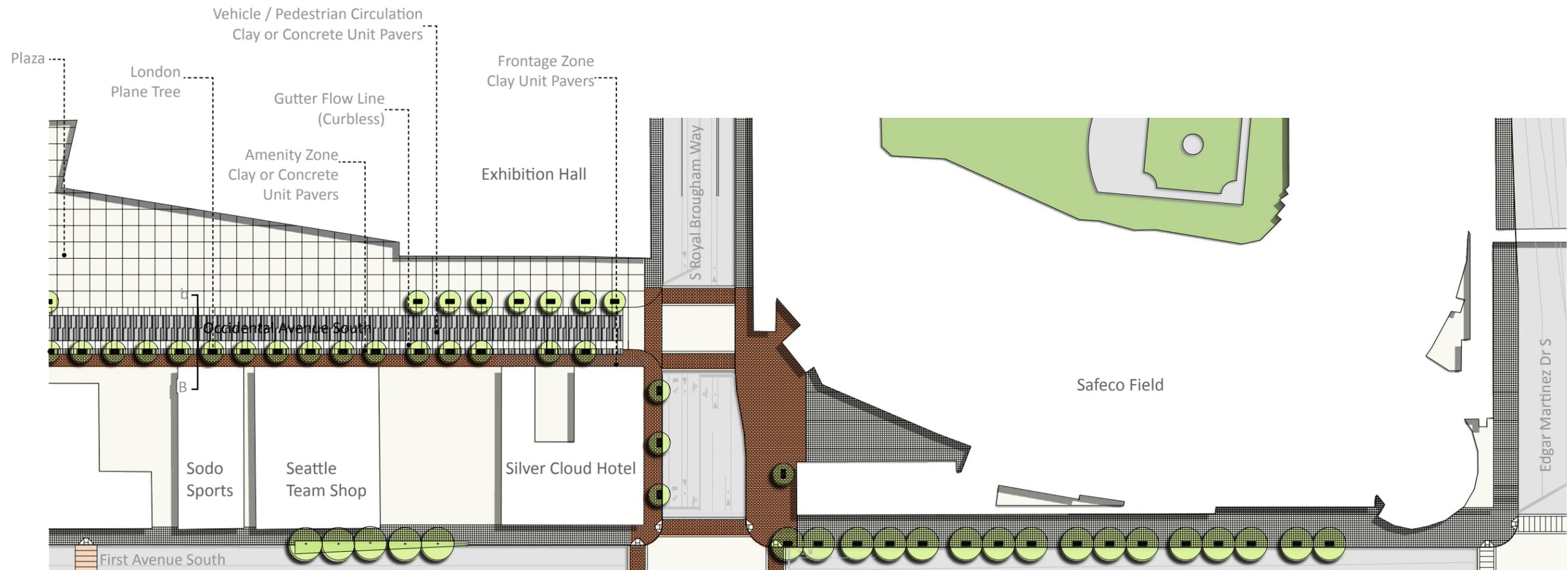


**Plan**  
1"=100'-0"

# Occidental Avenue



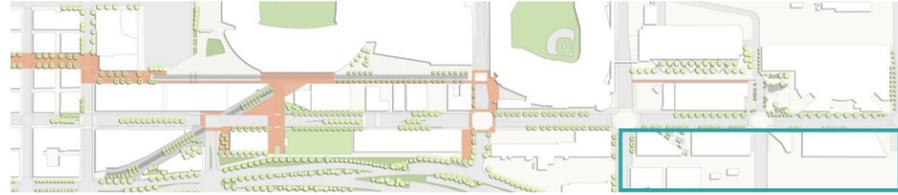
**Event Day Section\_B-b**  
1/16"=1'-0"



N **Plan**  
1"=100'-0"

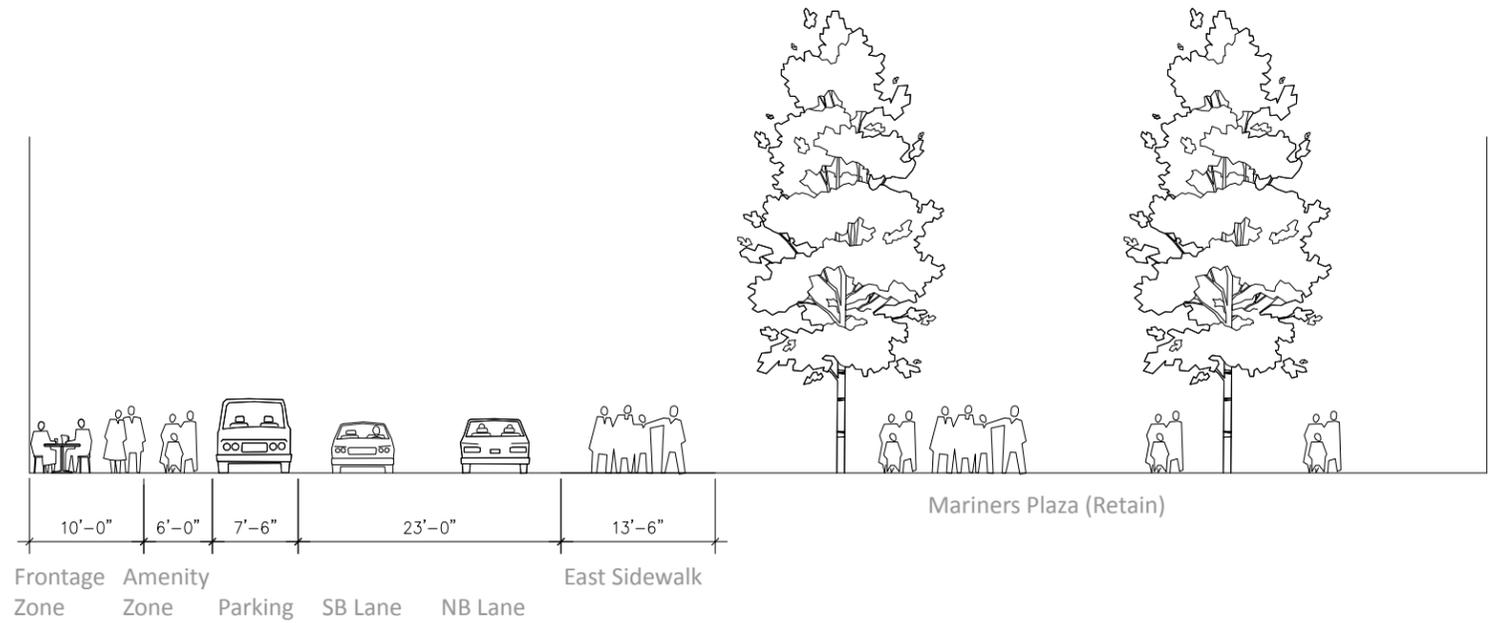
# Occidental Avenue

Key

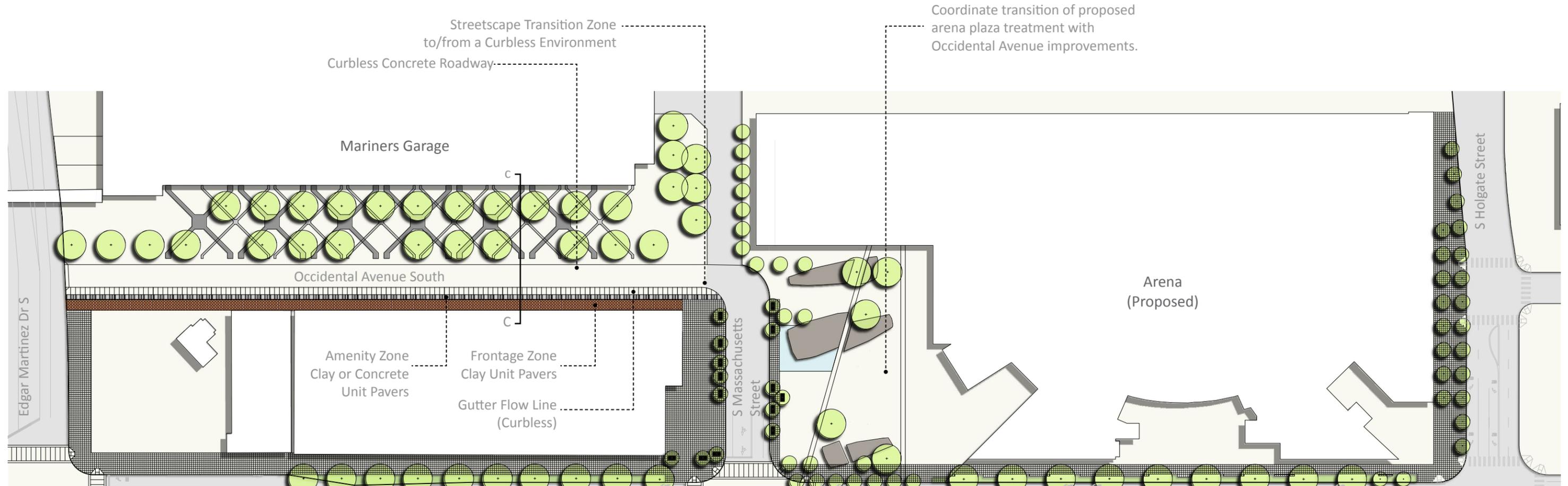


The southern block of Occidental Avenue is particularly important to Safeco Field's operation and the game-day experience of its patrons. The proposed enhancements maintain all existing functions and create a more cohesive Stadium District while anticipating a future arena.

The Arena DEIS documents the impacts of Occidental Avenue South vacation on overall circulation in the area. These impacts include diversion of vehicle traffic that currently uses this segment of Occidental, as well as an altered network for bicycles and pedestrians. The Arena DEIS describes an enhanced sidewalk network in the vicinity of the proposed Arena.



**Section\_C-c**  
1/16"=1'-0"



**Plan**  
1"=100'-0"

## Occidental Avenue



### Non-event Day

During non-event times Occidental Avenue will be an increasingly lively open space amenity for area residents and employees while continuing to support vehicular movement and staging within the District.



### Event Day

During event times Occidental Avenue will accommodate a number of game day activities for a variety of users.

# First Avenue South

## Traffic Operations (South Dearborn St. to South Holgate St.)

	Existing / Planned*	Proposed Change Per Street Concept Plan (if any)
Roadway Classification / Street Type	<ul style="list-style-type: none"> <li>Principal Arterial</li> <li>Designated Major Truck Street</li> </ul>	No change proposed
Traffic Operation	<ul style="list-style-type: none"> <li>Two way travel</li> <li>2 NB Lanes and 2 SB Lanes with left turn lane at major intersections</li> <li>Double left turn SB at S. Atlantic St</li> <li>Right turn lane NB at S. Atlantic St</li> </ul>	No operational changes
Traffic Volumes (Source: Arena DEIS*)	<ul style="list-style-type: none"> <li>AWDT @ 21,500/35,300</li> <li>PM Peak @ 2,150/3,530</li> </ul>	No change proposed
Level of Service (Source: Arena DEIS*)	With Event Operations: 1st Avenue S/ Atlantic LOS E/F	No change proposed
On Street Parking and Curbspace Management	<ul style="list-style-type: none"> <li>Parallel on street parking west side except where roadway widens for turn lanes</li> <li>Parallel on street parking west side except where roadway widens for turn lanes</li> </ul>	<ul style="list-style-type: none"> <li>Remove parallel on street parking on east side between S. Holgate St. and S. Atlantic St, retaining extent of right turn lane approaching S. Atlantic St</li> </ul>
Freight Movement	<ul style="list-style-type: none"> <li>Designated major truck St.</li> <li>Regional freight access to and from Duwamish Industrial areas</li> <li>Freight access to Terminal 46 at S. Atlantic St</li> <li>Freight access to I-90 and I-5 Freeways via S. Atlantic / Edgar Martinez Dr</li> </ul>	No change proposed
Bicycle Facilities	<ul style="list-style-type: none"> <li>None designated</li> </ul>	<ul style="list-style-type: none"> <li>None proposed</li> <li>Alternate north/south bicycle facilities to be constructed at west edge of WOSCA site between S. Royal Brougham Way and S. Dearborn St. "cityside trail"</li> </ul>

\* This summary assumes the proposed vacation of Occidental Ave. S. between S. Holgate St. and S. Massachusetts St. as indicated in the DEIS for the proposed Arena.

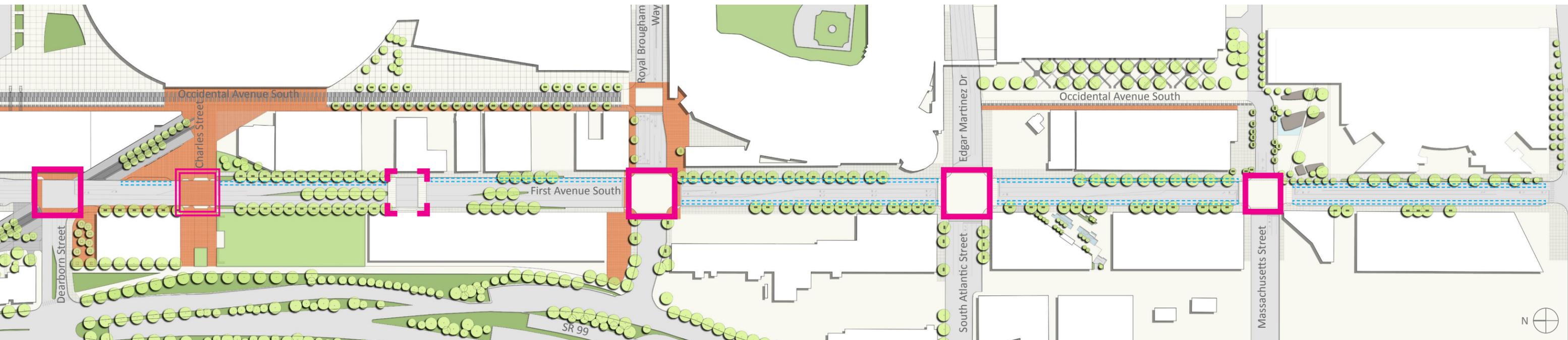


# First Avenue South

## Intersections

The design intent for the First Ave. S. right of way is to improve the pedestrian character and sense of safety while maintaining maximum traffic functionality for freight and vehicles. The concept seeks to extend character elements of Pioneer Square into the stadium district. The design also introduces additional trees, natural elements, and stormwater planters where possible. These elements can help buffer pedestrians from traffic.

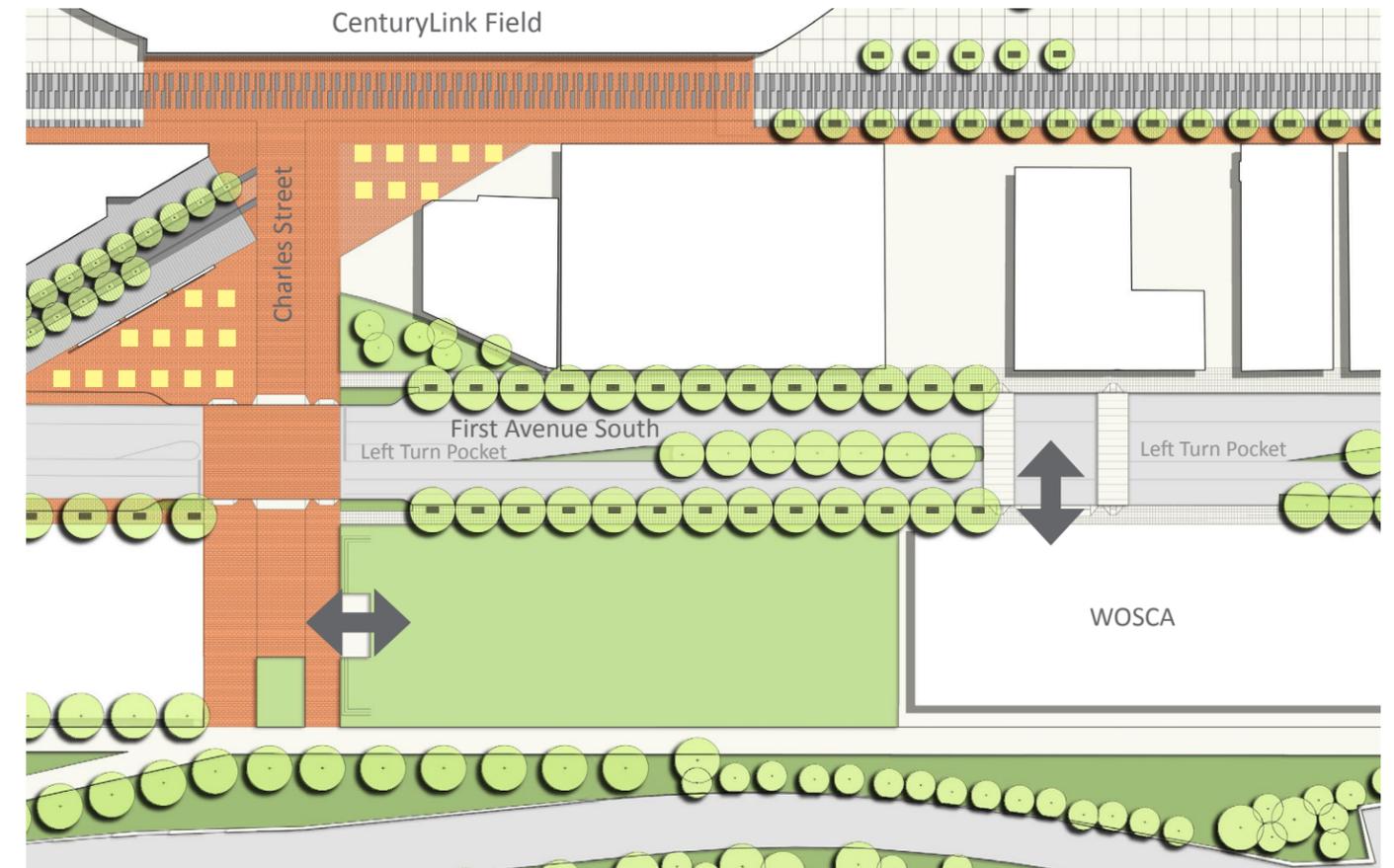
The WOSCA site will only be accessible to vehicles from First Avenue South. Given the site's length of almost 1,400 feet, access points are envisioned at Charles Street and midway between Charles and Royal Brougham Way. The Charles Street signalized intersection is a component of the State Route 99 South Portal project. This plan proposes a second signalized intersection with full vehicular and pedestrian movements and a left turn pocket for traffic approaching from the south. The impacts of these intersections will be minimized through the use of signal timing and coordination to maintain the greatest possible through-put on First Avenue South.



-  Proposed Intersection
-  Specify signalized intersections
-  New Intersection by SR 99 South Portal Project
-  Existing On-Street Parking

## First Avenue South

### WOSCA Access, Curb Realignment



### WOSCA Access



- Increased accessibility to WOSCA at two points in long block
- Impact to throughput minimized by signal coordination
- Provides access to partially below-grade parking for vehicles on the WOSCA site

A curb realignment is being proposed at the intersection of First Avenue South and Edgar Martinez Way. The existing curb in the right-turn pocket of First Avenue South is currently misaligned with the curb across the street to the north. There is sufficient width in the roadway to pull the curb into alignment while retaining all through- and turn lanes in the roadway. This adjustment will create continuity in the sidewalk with more space for pedestrian queuing and provide a more desirable frontage for future development in the currently vacant lot that abuts the sidewalk.

The Arena EIS recommends restriping the westbound leg of this intersection to include a dual left-turn pocket



## Curb Realignment

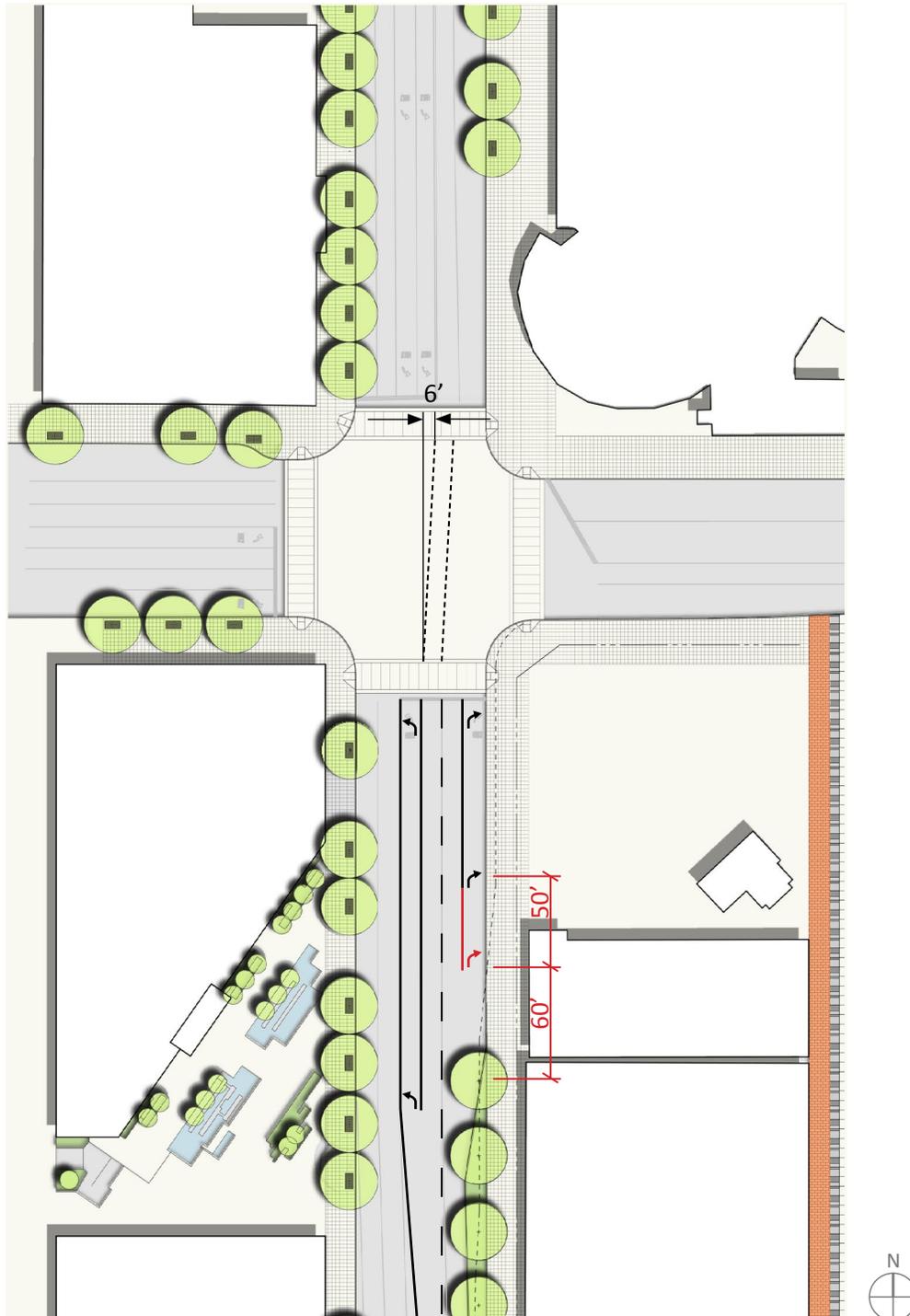


- Consistent curb alignment
- Increased pedestrian realm
- All lanes maintained

# First Avenue

## Intersection

This street concept plan includes a recommendation to extend the northbound right-turn pocket on First Avenue South to better accommodate vehicles turning onto Edgar Martinez Drive. By shifting the northbound lanes west, this turn lane extension can be accommodated in addition to the proposed sidewalk widening south of Edgar Martinez Drive.

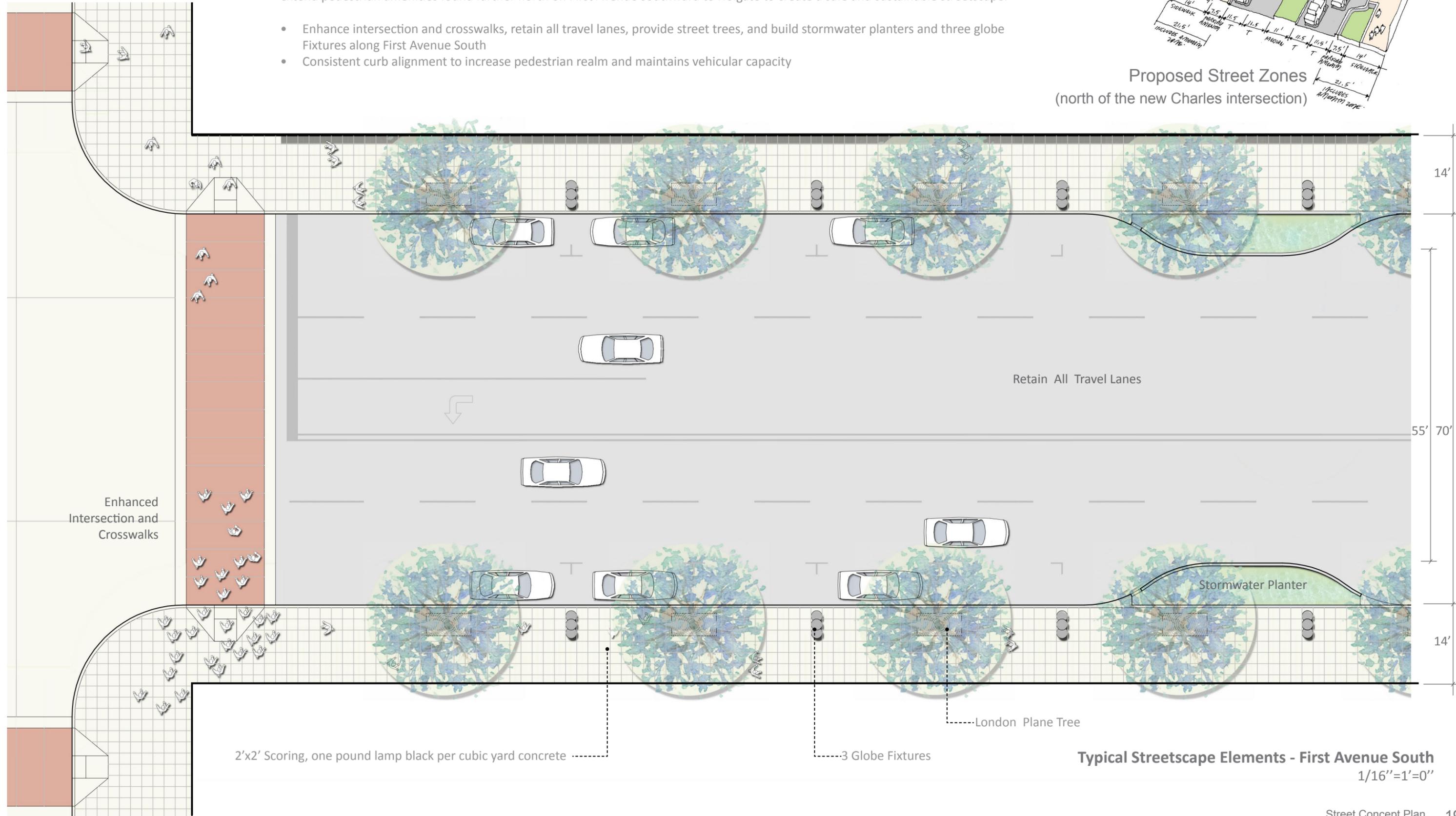
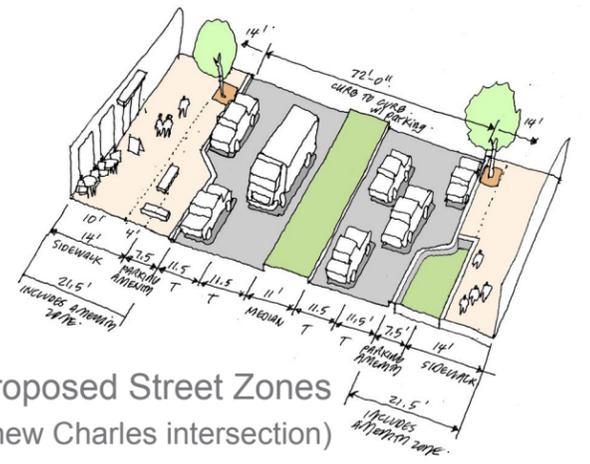


# First Avenue South

Acknowledging First Avenue South as a critical freight corridor, the proposed design treatments maintain freight mobility and extend pedestrian amenities found farther north on First Avenue southward to Holgate to create a safe and sustainable streetscape.

- Enhance intersection and crosswalks, retain all travel lanes, provide street trees, and build stormwater planters and three globe fixtures along First Avenue South
- Consistent curb alignment to increase pedestrian realm and maintains vehicular capacity

Proposed Street Zones  
(north of the new Charles intersection)

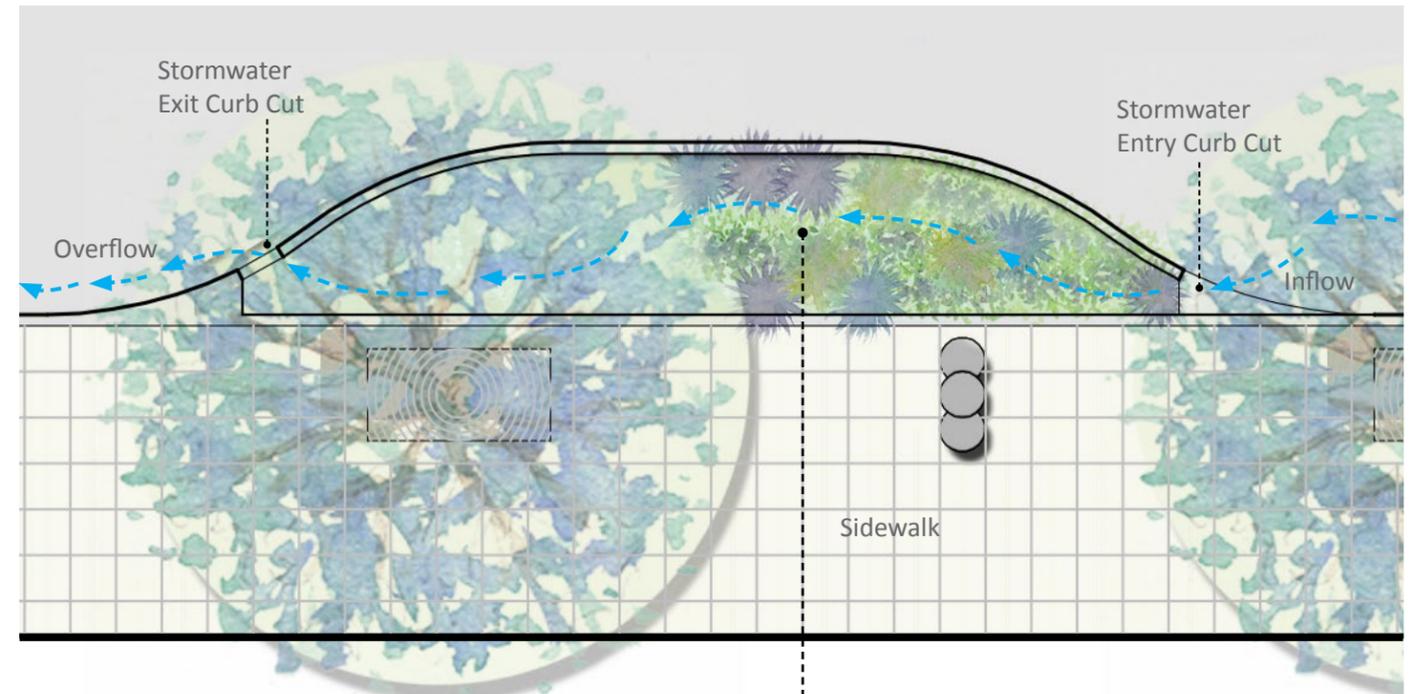


Typical Streetscape Elements - First Avenue South  
1/16"=1'-0"

## First Avenue South

### Stormwater Planter, Tree Grate

Given First Avenue South's shallow water table and proximity to Puget Sound, stormwater planters are envisioned to be detention planters rather infiltration planters. Stormwater will be taken from the gutter, detained in planters to settle out suspended solids, and then returned to the storm sewer system.

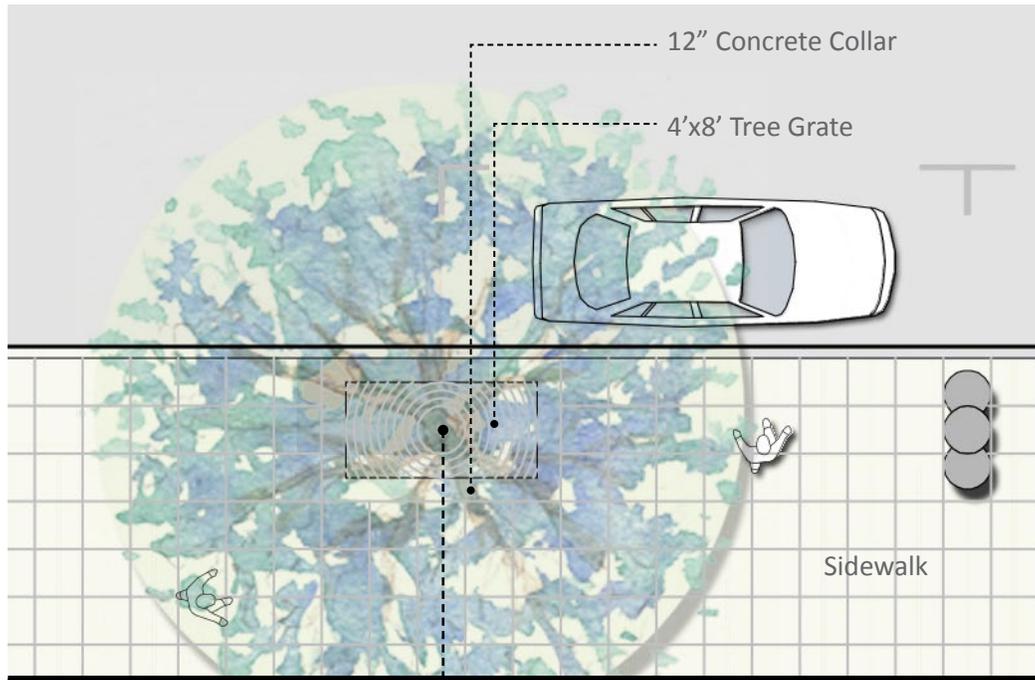


### Stormwater Planter

1/8"=1'-0"



Large tree grates are proposed for use on First Avenue to sufficient walkable surface on game day. The tree grates proposed are 4' x 8' to maximize exposure between soils and the atmosphere



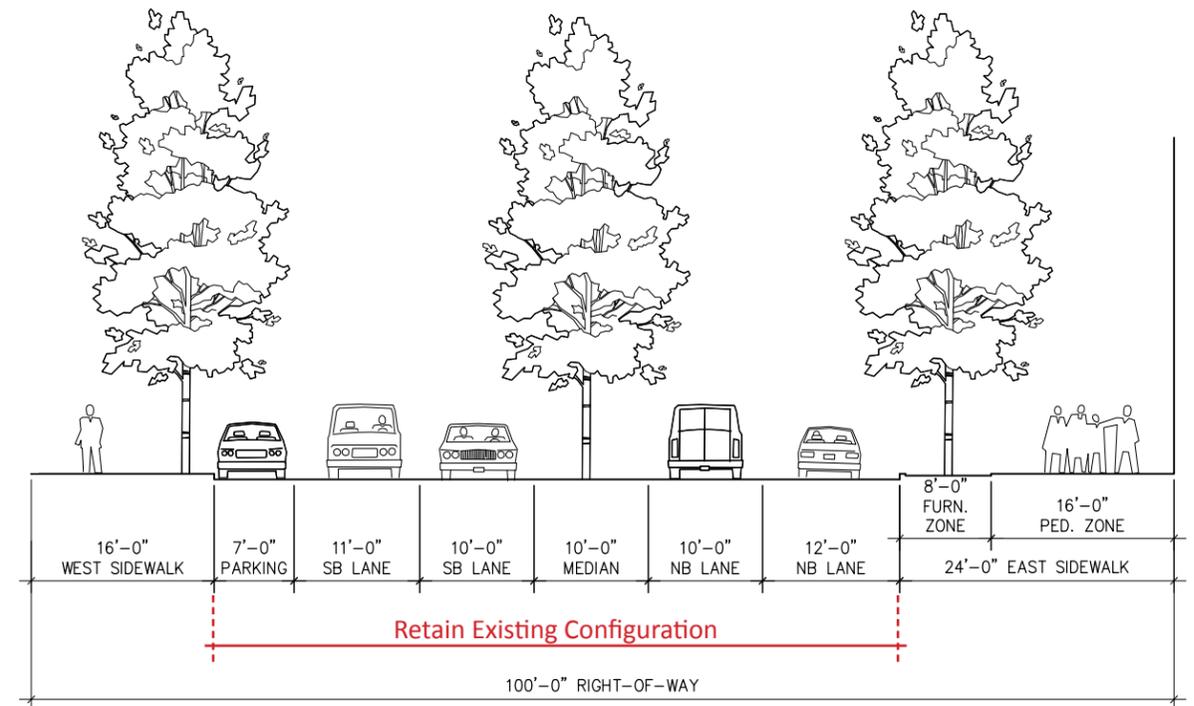
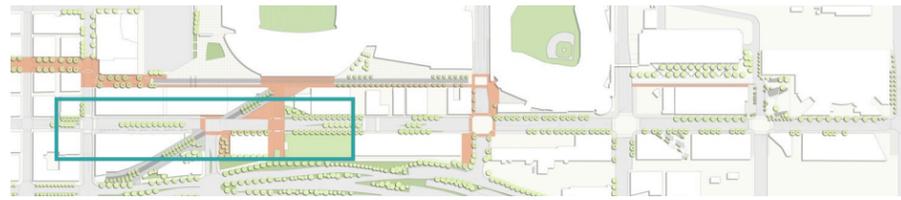
Tree Grate  
1/8"=1'-0"



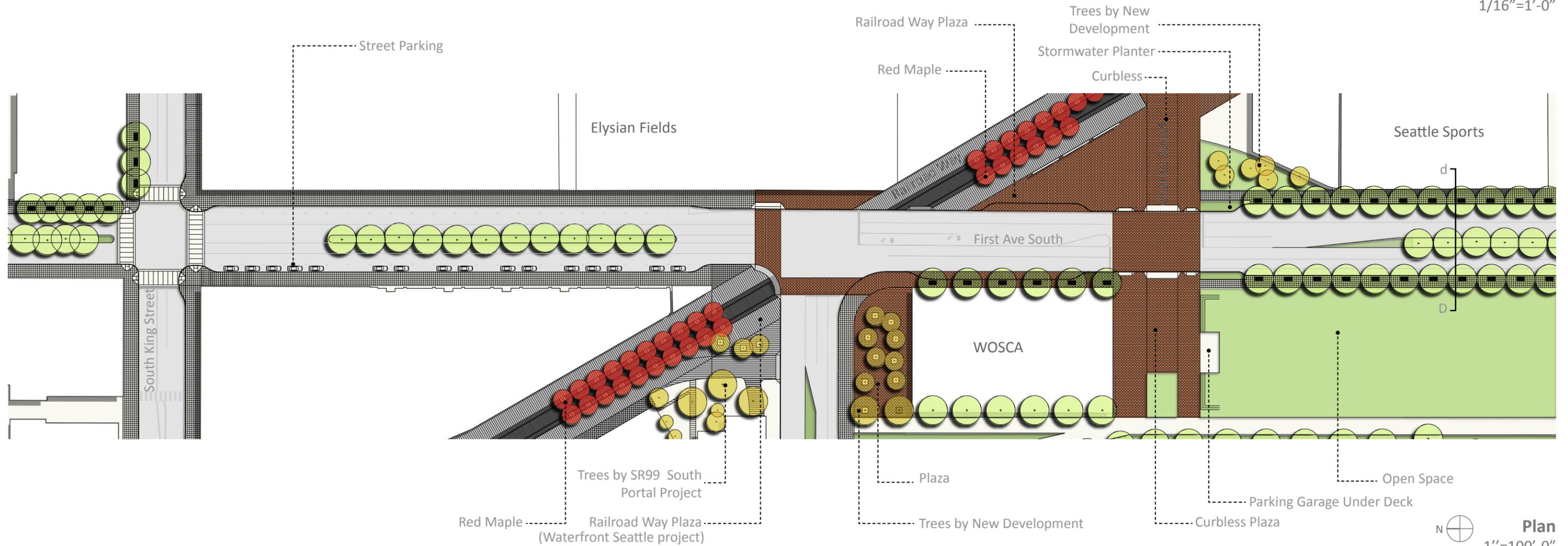


# First Avenue South

Key



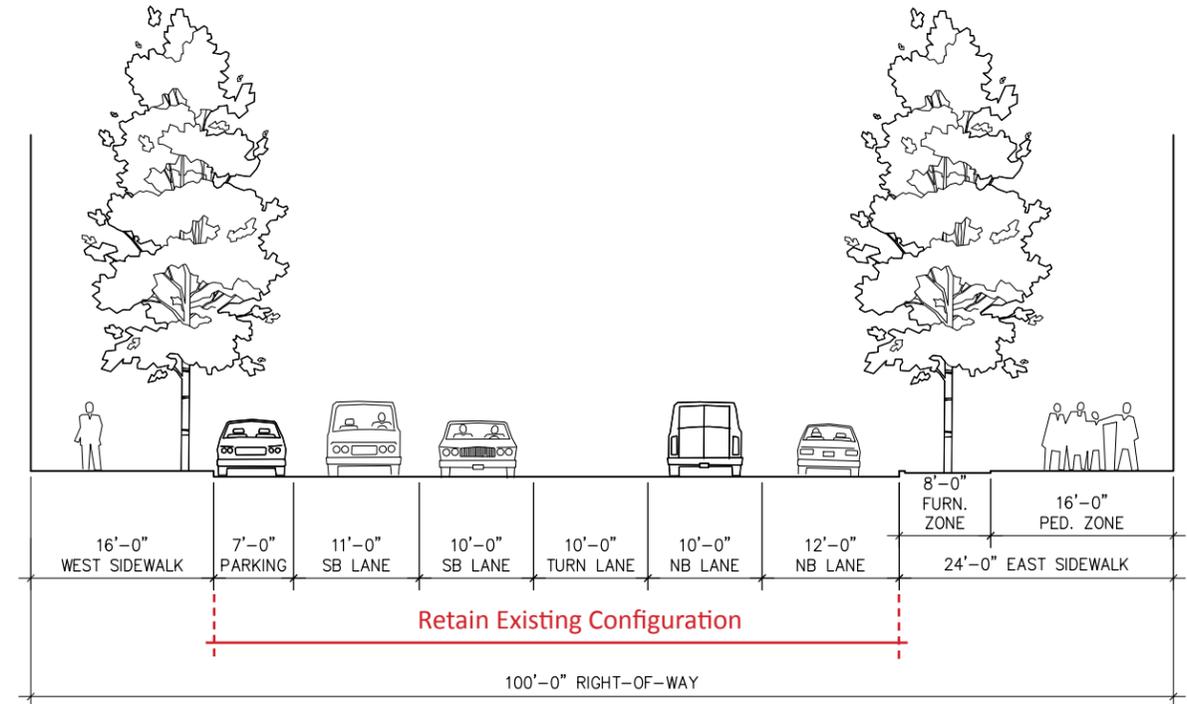
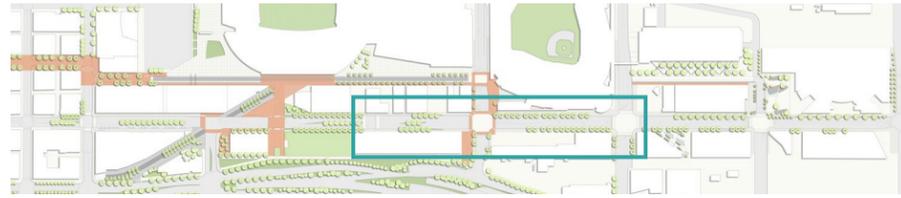
Section\_D-d  
1/16"=1'-0"



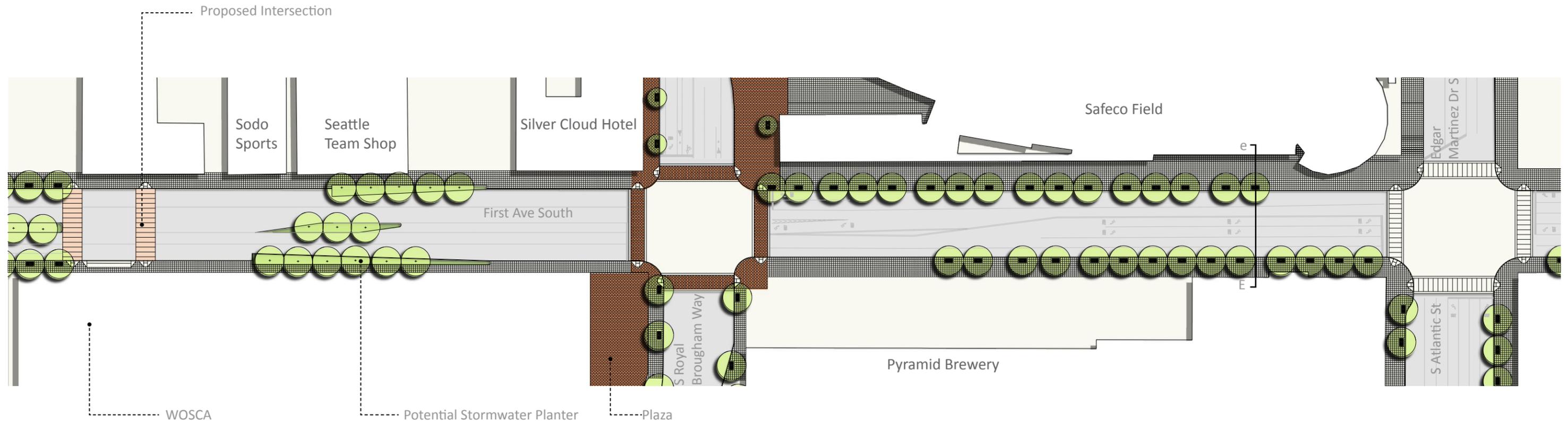
Plan  
1"=100'-0"

# First Avenue South

Key



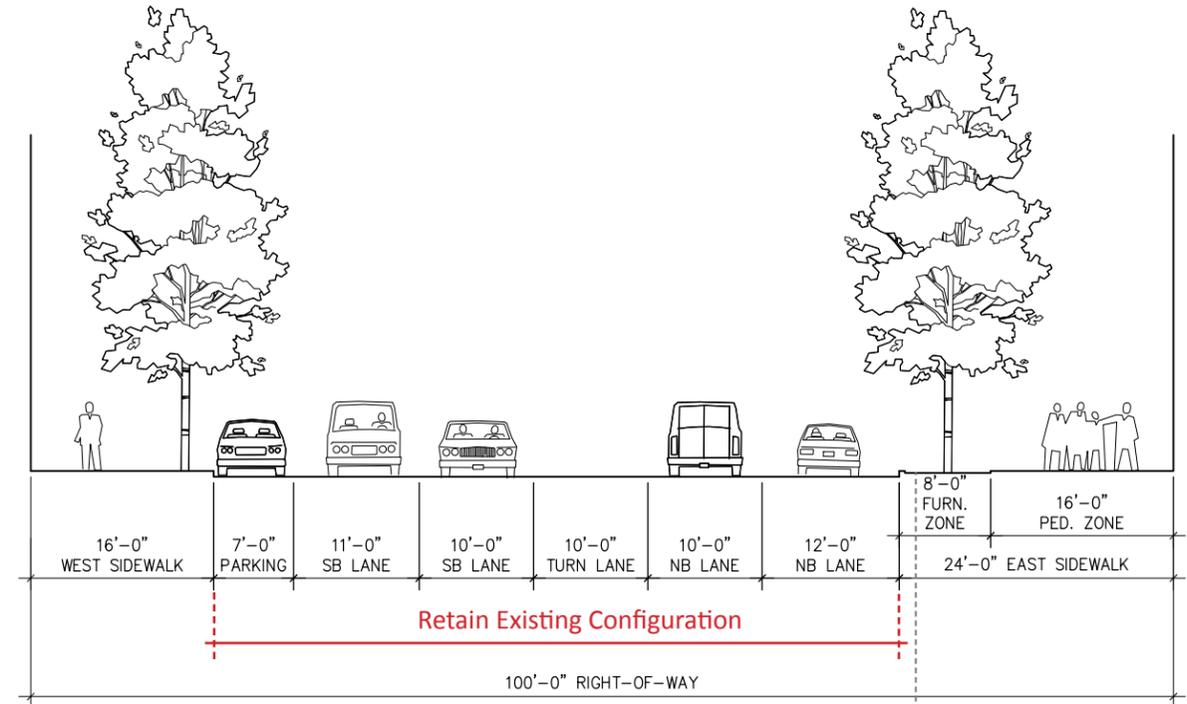
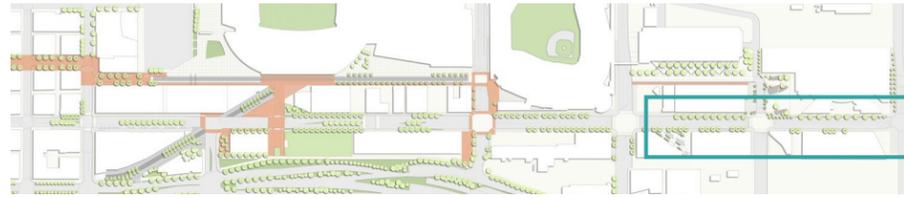
Section\_E-e  
1/16"=1'-0"



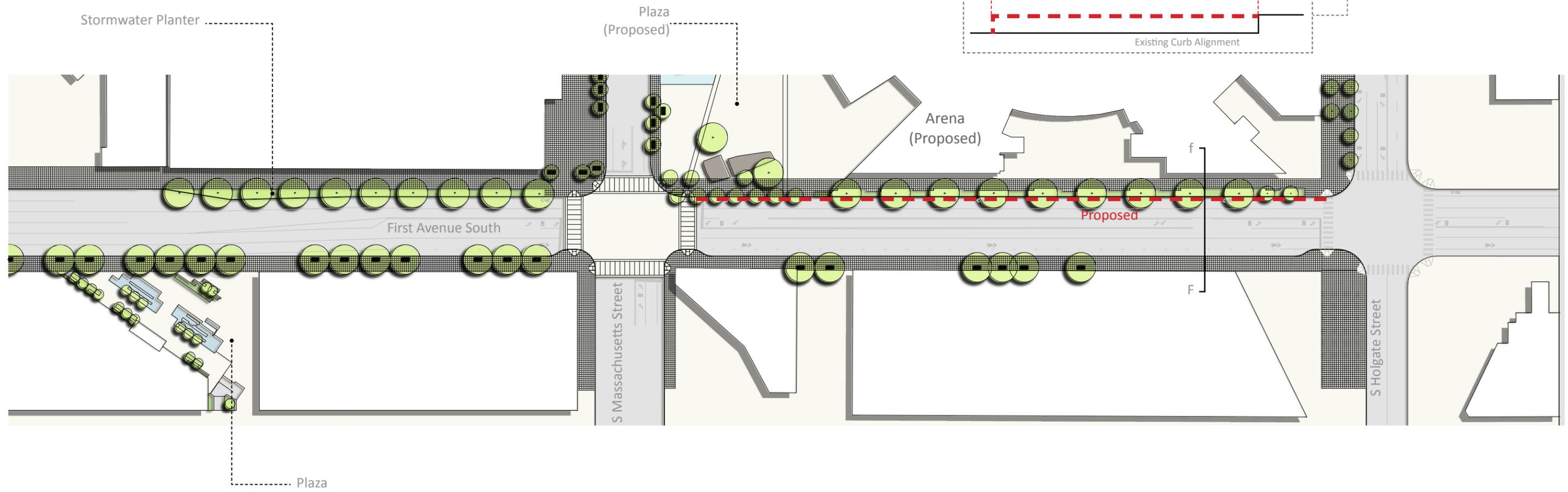
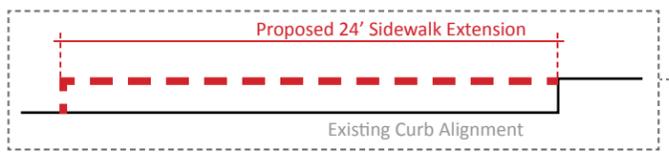
Plan  
1"=100'-0"

# First Avenue South

Key



Section\_F-f  
1/16"=1'-0"



Plan  
1"=100'-0"

## Street Furnishings

Street furnishings on Occidental and First Avenue should complement the District's historic character but also add modern elements appropriate to a sports and events district. Maintaining historic features such as the rails in Occidental Avenue and Three Globe Fixtures on both Occidental Avenue and First Avenue South honors the history of the neighborhood while contemporary needs are addressed by amenities such as movable planters, seating and stormwater planters.

### Decorative Metal

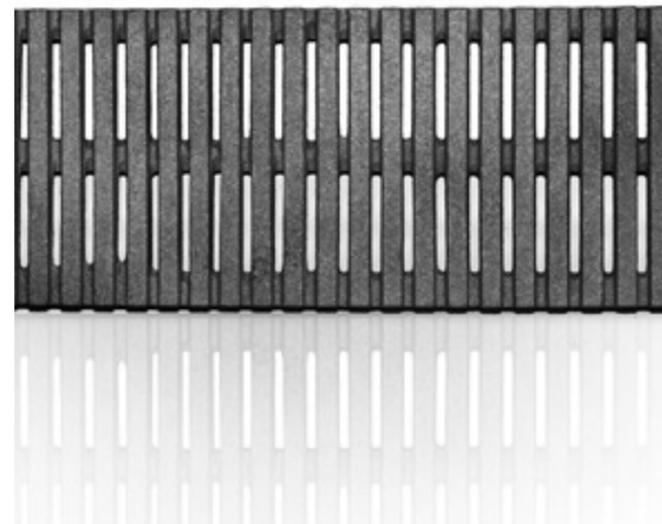


Rails (Occidental Only)

### Landscape



Stormwater Planter



Drain Grates



Median

### Bike Rack



### Street Lighting

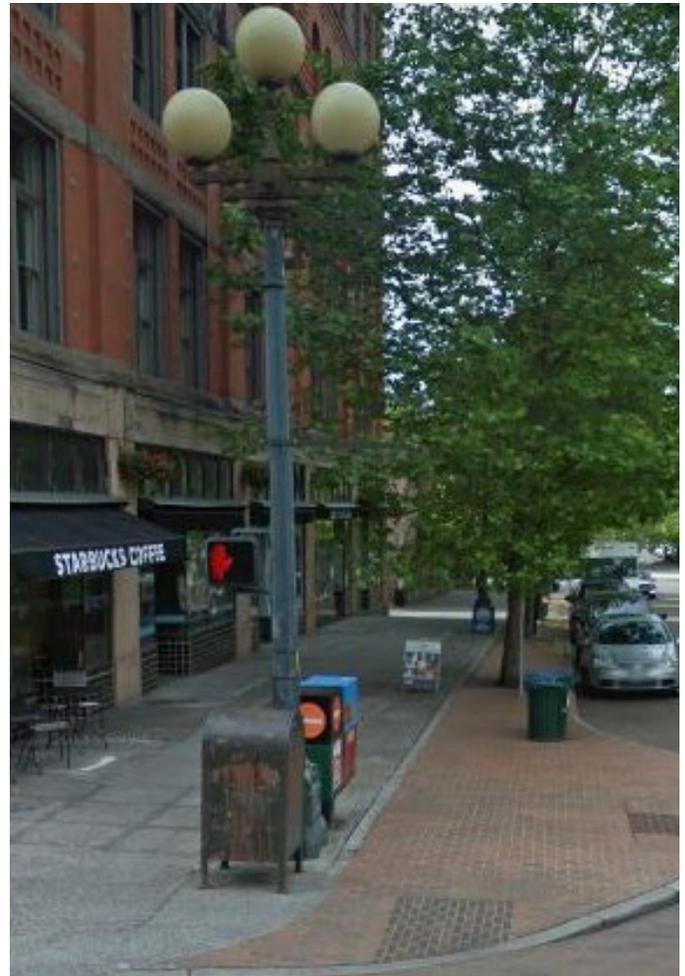


JCFO Tulip (Railroad Way, Charles St.)

### Tree Grate



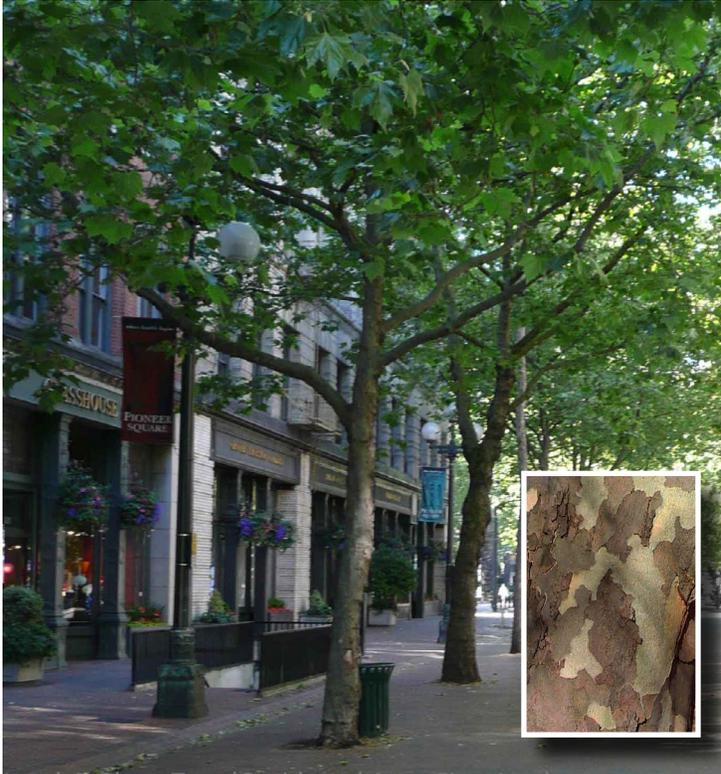
Tree Grate - 4'x 8'



Three Globe Fixture (Occidental Ave., First Ave.)

The existing street trees on Occidental Avenue and First Avenue are predominately London Plane trees which are tolerant of urban environments, have attractive bark, provide dappled shade, and are iconic of the neighborhood. To maintain consistency on the Avenues, extending the use of London Plane trees south to Holgate Street is proposed. To encourage ecological and aesthetic diversity the use of alternative tree species is proposed throughout the District's open spaces and on the east/west running streets, with plant selection being made on a case-by-case basis.

## Street Trees



London Plane Tree (Occidental Ave., First Ave.)



Alternative Tree at Railroad Way (Red Maple shown)

## Planters



Landscape Forms Lena



Landscape Forms Larkspur

Street furnishings in the District should consider scale and design cues from the stadia and event venues. Static furnishings should convey a sense of mass and permanence and relate thematically to stadium or event seating. Movable furnishings should be light and colorful. All furnishings should be durable and conducive to use during event times.

## Seating



Forms And Surfaces Bantam



Landscape Forms Milenio



Landscape Forms Lena



Landscape Forms Socrates



Landscape Forms Flor



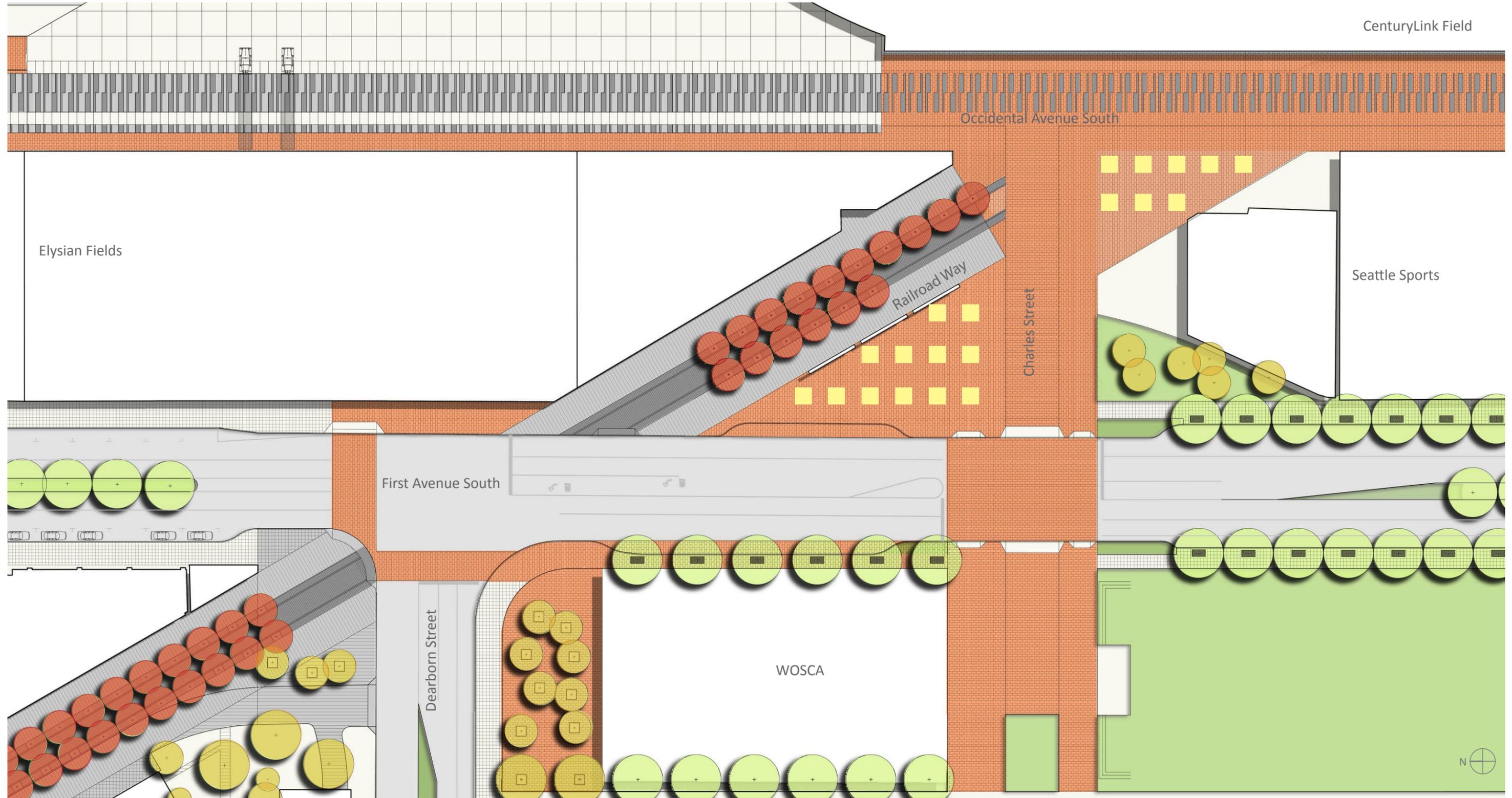
Landscape Forms Trapecio



# Public Realm Network

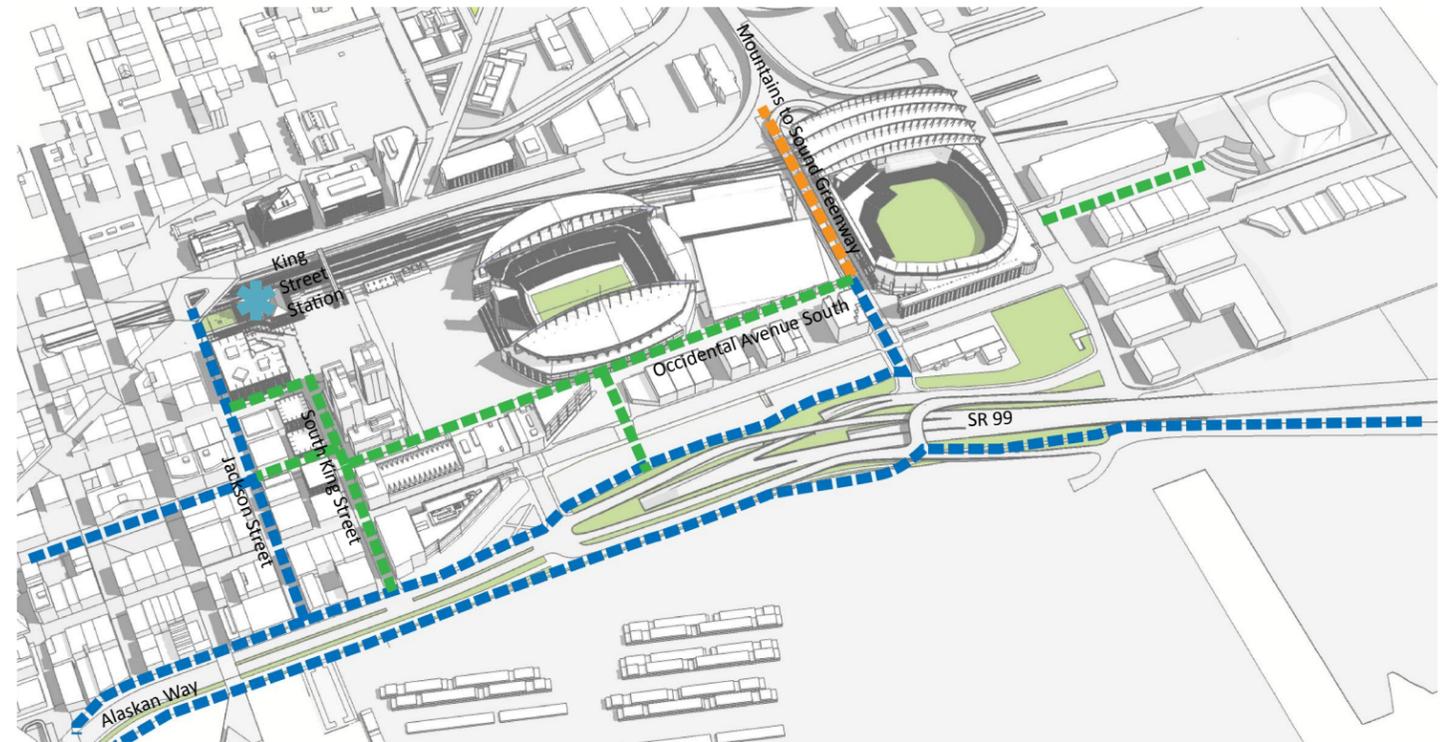
## Nexus

The series of open spaces near the intersection of Railroad Way, Occidental Avenue S. and First Avenue S. are important as they sit where the Central Waterfront and Stadium District overlap to create a public realm nexus. This plan proposes a treatment that would emphasize and create a plaza-like space near the terminus of Railroad Way. The design seeks to create a strong public link between potential open space on the WOSCA site, Railroad Way, and potential improvements on Occidental Ave. S.



# Public Realm Network

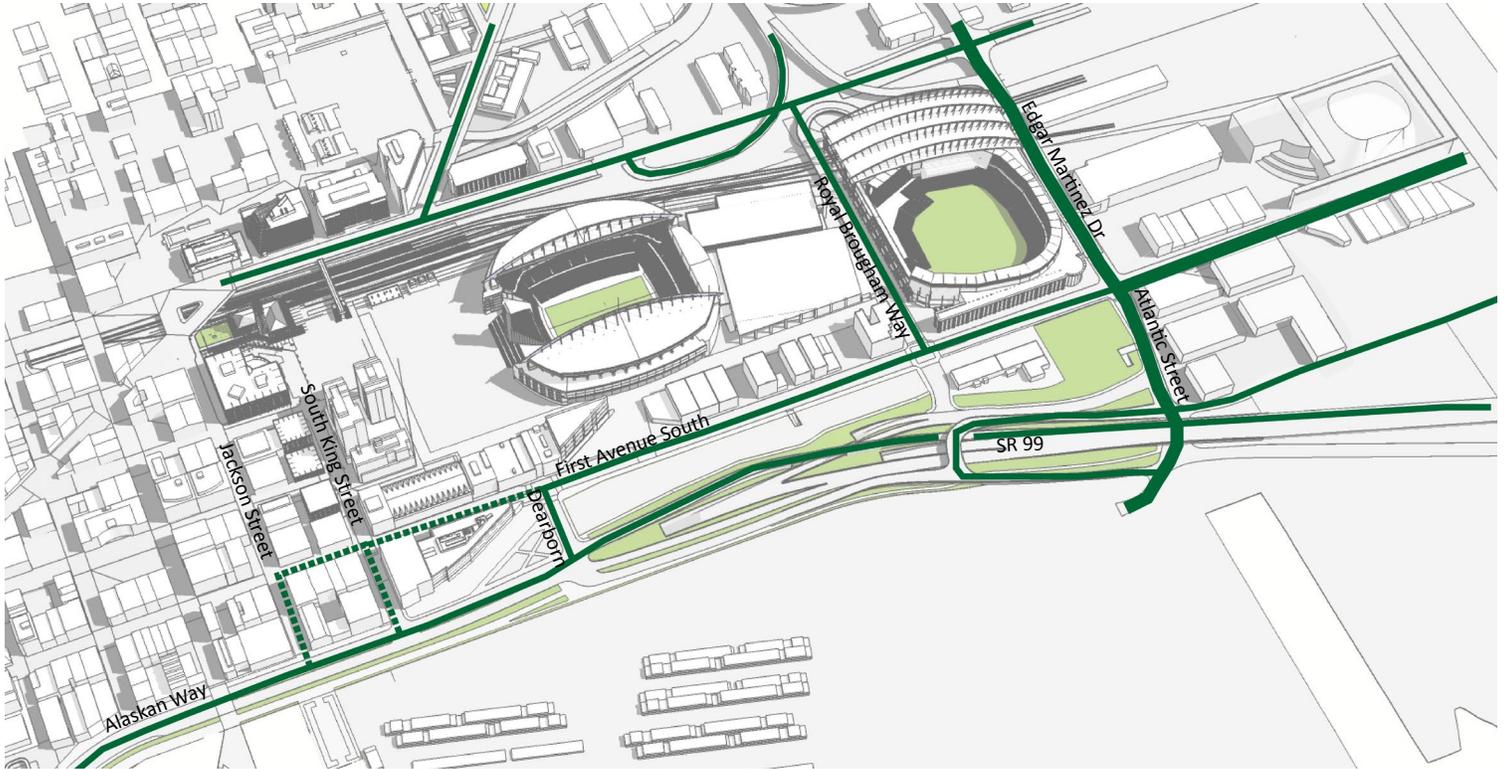
## Traffic Circulation



### Bicycle Network

- Existing Bicycle Network
- Proposed Shared Street
- Proposed In Street Bicycle Lane Minor Separation
- Potential Location for Bike Share Facility

The Stadium District is an important hub in the local and regional bicycle network. It makes connections between bicycle corridors and transit, and connects two regional trails: the Elliott Bay Bike Trail and Mountains to Sound Greenway. The streetscape improvements proposed in the plan support the goals of the 2013 Bicycle Master Plan, and integrate into the network proposed therein.



## Freight Mobility

The Stadium District's proximity to industrial and Port operations requires that improvements proposed have minimum impact to key freight corridors such as First Avenue and Edgar Martinez Way, as well as a network of secondary freight streets.

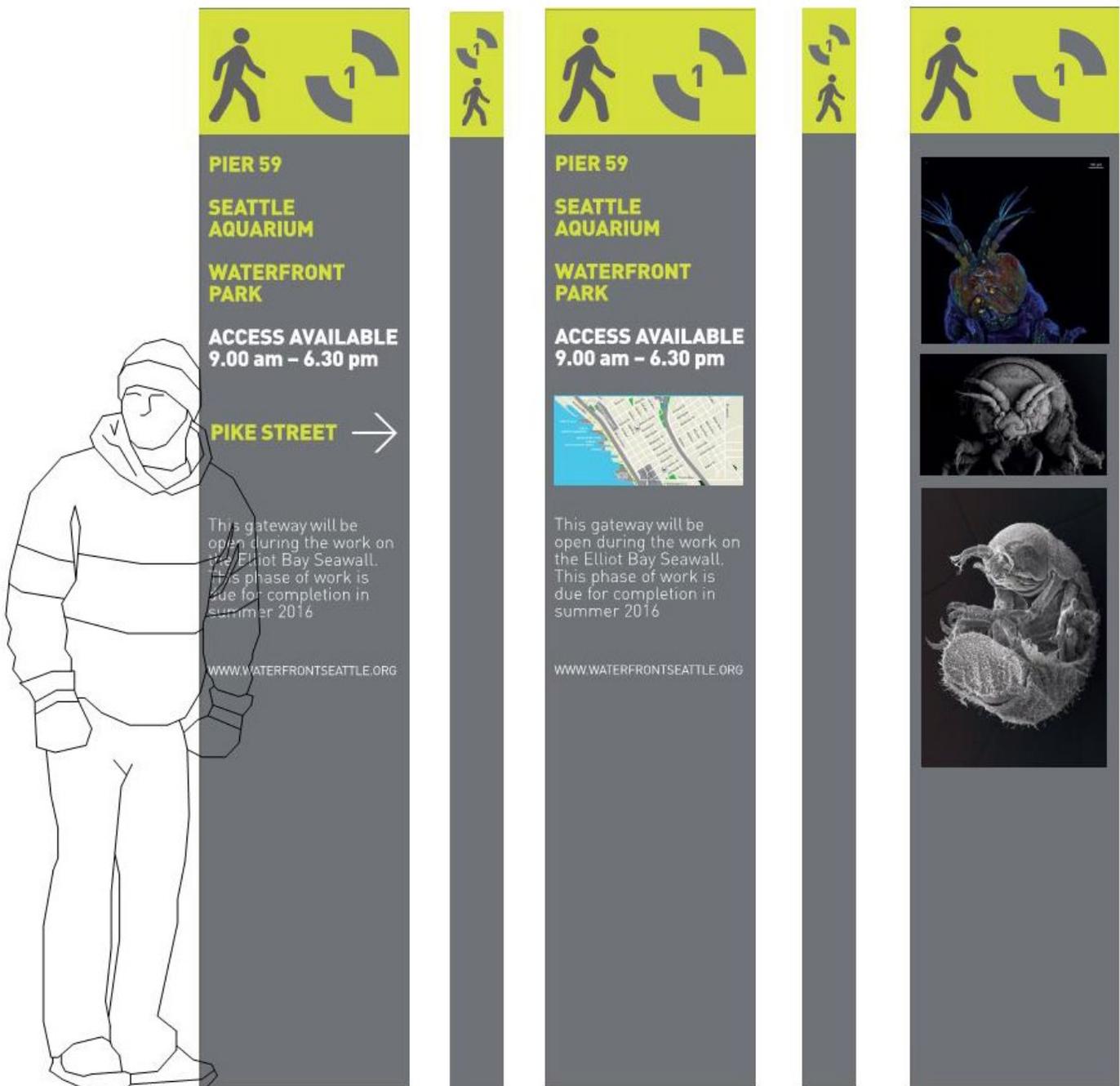
- Maintain all travel lanes and turn movements
- Accommodate new link to Alaskan Way at Dearborn

In 2014 and 2015 the City of Seattle will be conducting a citywide Freight Master Plan and an Industrial Access Study. Streetscape improvement in this area should be coordinated with both ongoing studies. Measures to improve freight mobility throughout the Duwamish Manufacturing Industrial center may be identified by the studies, and such findings should be integrated with future improvements to roadways made in the Stadium District.

# Public Realm Network

## Wayfinding

Existing wayfinding systems being used elsewhere in Seattle should be extended into the Stadium District. The downtown wayfinding system should be used throughout the district with the exception of Railroad Way, which as the southern terminus of the Central Waterfront project, should use that wayfinding system.



Seattle Central Waterfront Wayfinding Signs



Seattle Downtown Wayfinding Signs



# Public Realm Network

## Public Art - Major Pieces

The Stadium District already has a number of public art pieces. This collection should be expanded upon at key locations to mark special places and intersections. Art should be large enough to be seen from a distance so that it may serve as a beacon, anchoring view corridors and relating to the scale of its surroundings. Consider public art that draws inspiration from events and athletics and reflects the unique character of the Stadium District.



 Existing Public Art - Large Scale

 Existing Public Art - Small Scale

 Potential Public Art Location

Public Realm Network

Nexus

