



# Belmont Bridge Replacement

Board Of Architectural Review Meeting

August 20, 2019



# Introduction

August 20, 2019 BAR: Plan Updates

- Southwest stair design
- Site Lighting
- Crash rated, removable bollard locations
- Site Furniture
- Crosswalks - material update
- Southwest parking lot - material update
- Bridge parapet wall and railings
- Bike Runnel @ Stairs
- Retaining wall design
- Knuckle design
- CSX fencing



# Stairs: Southwest Stairs



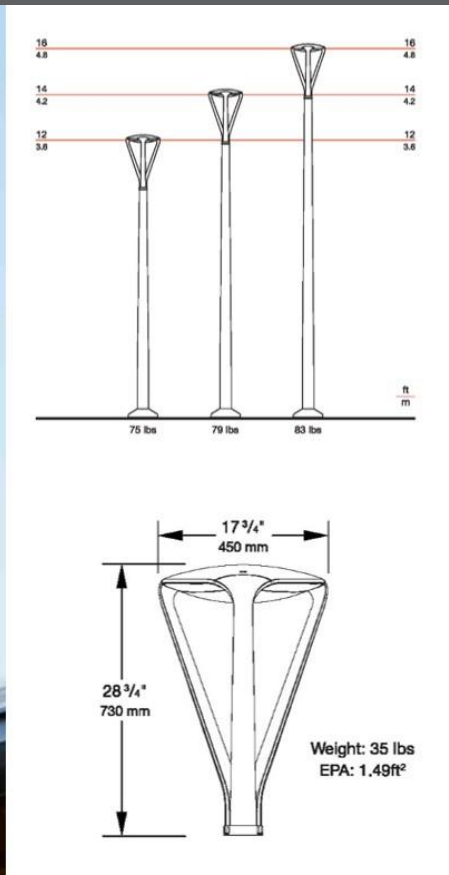
*Perspective View- Southwest Stair*



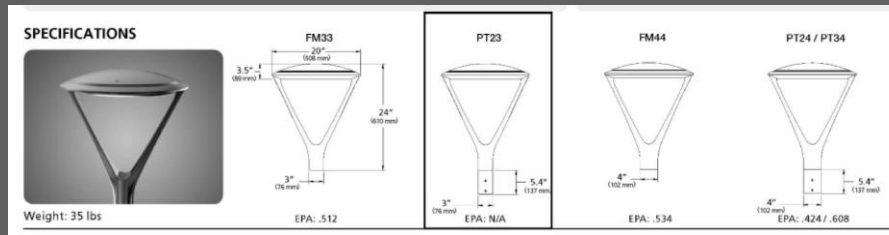
# Lighting

## Pedestrian Walkway

### Lighting Types



**PREVIOUS** Pedestrian Light (Landscape Forms FGP)



**PROPOSED** Pedestrian Light (Kim Lighting Ouro)

- 12' Ht. Mounting Height used for Pedestrian Light
- 3000K Color Temperature
- Color: Graphite
- Round pole used for Pedestrian Light
- Dark Sky Compliant

Note:

The current intent for the Belmont Bridge project is to use the same Site Light Fixture family as East High Streetscape.



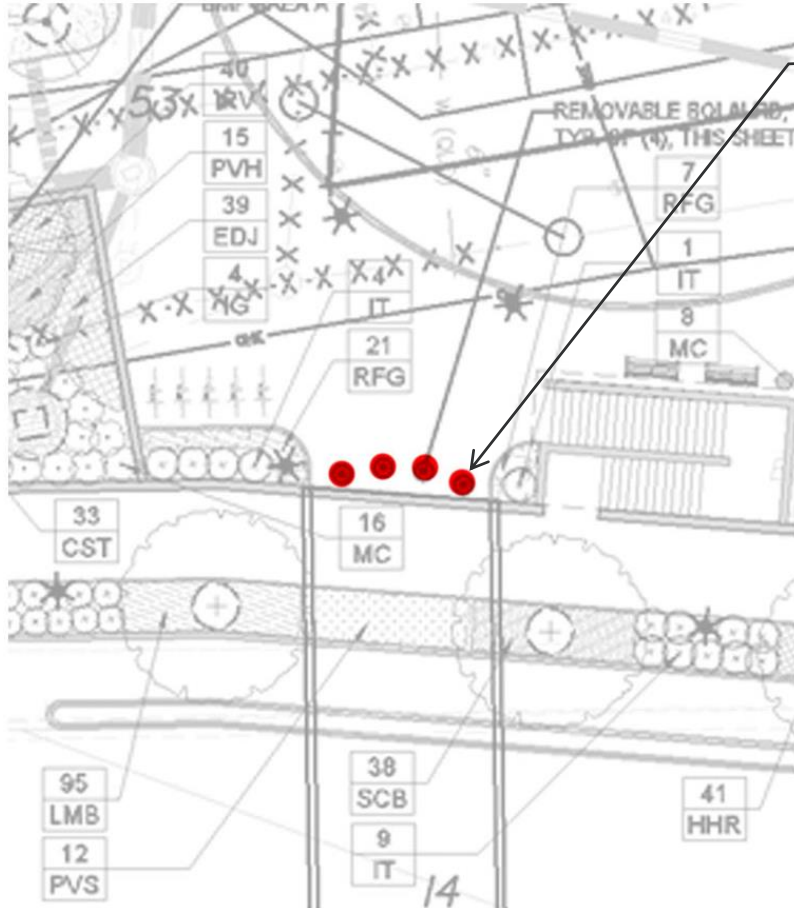
# Lighting

## Site and Accent



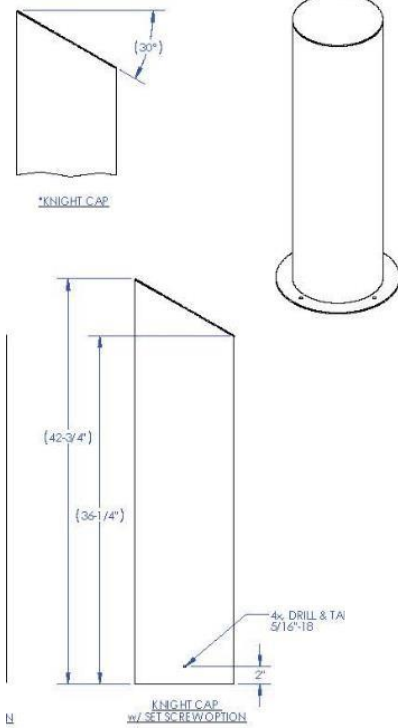
*Recessed Wall Fixtures at Knuckle (No handrail accent lighting)*

# Urban Design – Removable Bollards @ Southwest Passageway



KEY PLAN

(4) CRASH RATED M-50,  
REMOVABLE BOLLARDS AT  
SW PASSAGEWAY ENTRY



SLEEVE FINISH: POWDERCOATED STORMCLOUD GREY



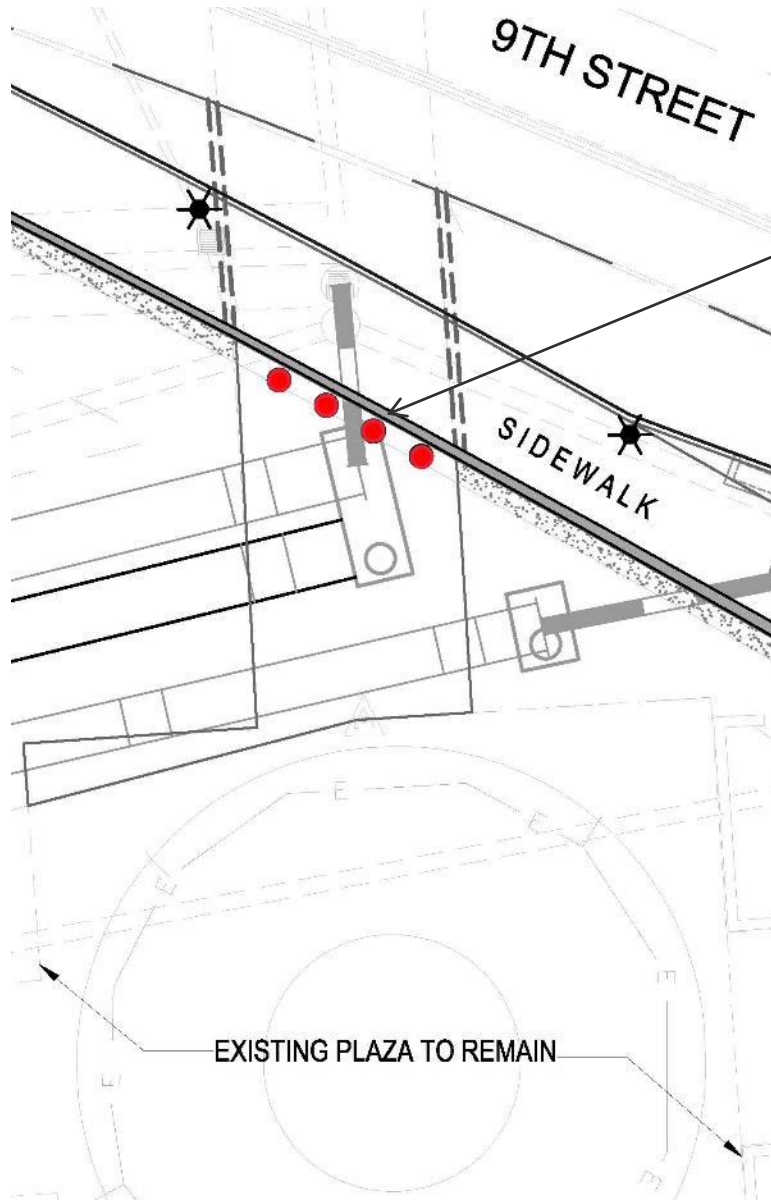
**PROPOSED CRASH RATED BOLLARD**  
Calpipe-M-50 Rated Bollard-Storm Cloud Grey Sleeve



**PREVIOUS BOLLARD**  
UNRATED, REMOVABLE, INTERNAL LOCK  
LANDSCAPE FORMS -SENTINEL BOLLARD

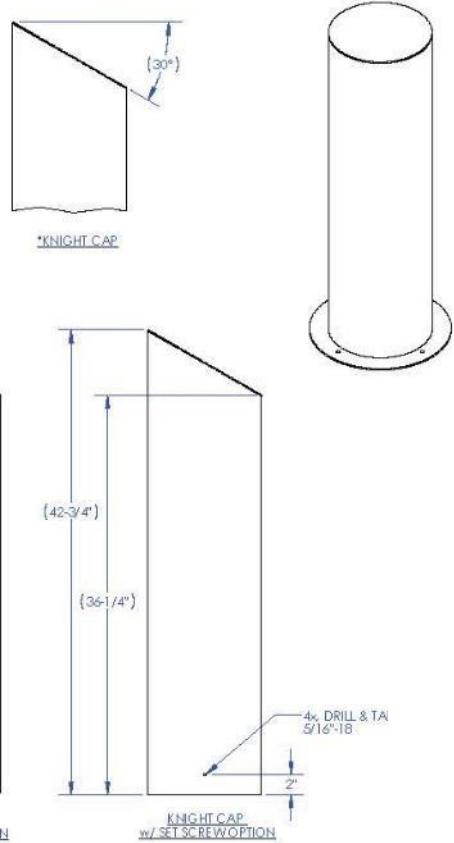


# Urban Design – Removable Bollards @ Northeast Passageway



KEY PLAN

(4) CRASH RATED M-50, REMOVABLE BOLLARDS AT NE PASSAGEWAY ENTRY



SLEEVE FINISH: POWDERCOATED STORMCLOUD GREY



**PROPOSED CRASH RATED BOLLARD**

Calpipe-M-50 Rated Bollard-Storm Cloud Grey Sleeve



**PREVIOUS BOLLARD**  
UNRATED, REMOVABLE, INTERNAL LOCK  
LANDSCAPE FORMS -SENTINEL BOLLARD



# Urban Design - Site Materials



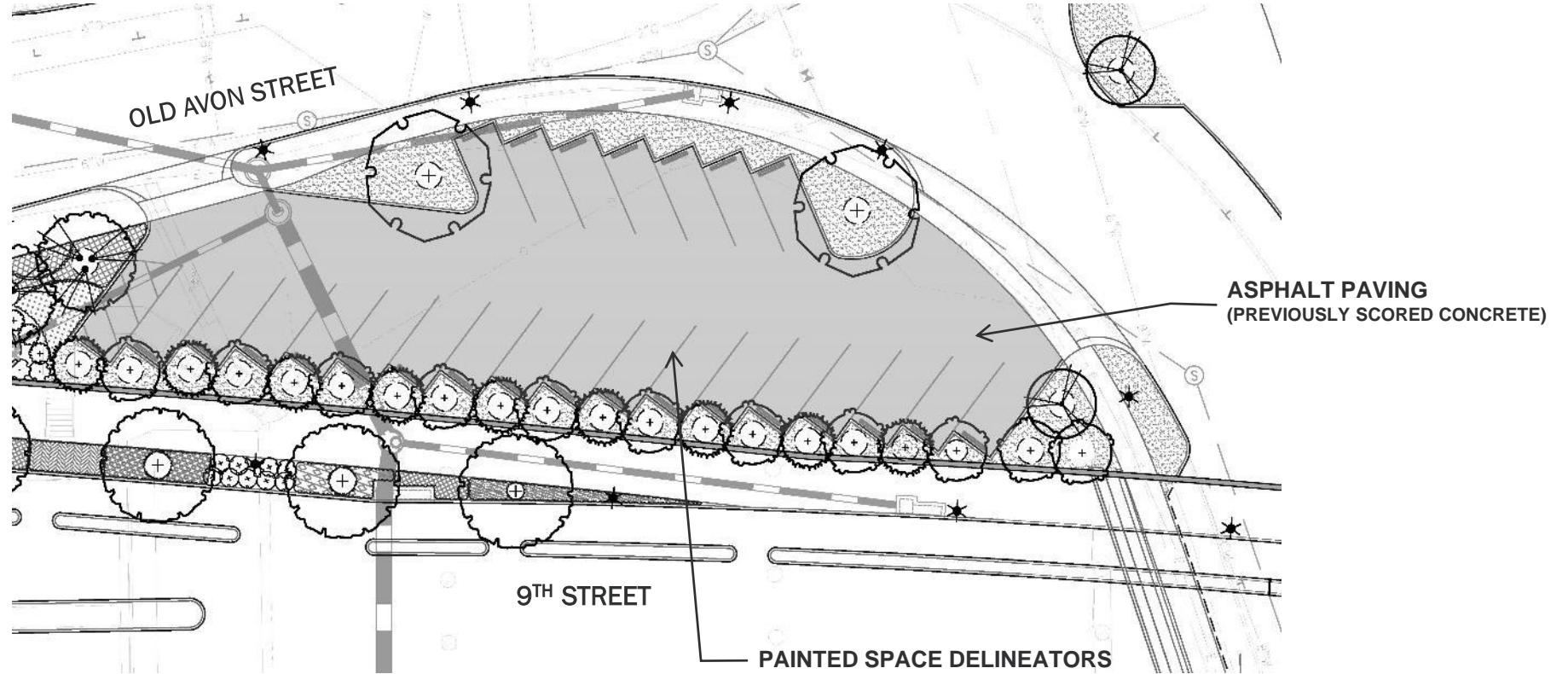
Scored Concrete Crosswalks Bordered with High Visibility Striping. \*CityMix 'Omaha Tan' Color Concrete

**PREVIOUS** Crosswalk (Scored Concrete)



High Visibility Crosswalk: Thermoplastic Striping  
City Standard Crosswalk Treatment

**PROPOSED** Crosswalk (Thermoplastic Striping)





# Urban Design - Site Furnishings



**Current Selection (Basis of Design)**

*Landscape Forms- FGP Backed Bench*



**Current Selection (Basis of Design)**

**Forms and Surfaces:**  
*Dispatch Trash Receptacle*



**Current Selection (Basis of Design)**

*Landscape Forms- MultipliCITY Bike Racks*

**NOTE:**

1. All Site Furniture to receive a Dark Gray (Storm Cloud) finish.
2. The current intent for the Belmont Bridge project is to use the same Site Furniture family as the West Main Street Streetscape and East High Street Streetscape projects.

# Urban Design – Bench Equals



**Current Selection (Basis of Design)**

*Landscape Forms- FGP Backed Bench*



**Alternate 1 (Potential Equal)**

*Forms + Surfaces- Trio Bench*



**Alternate 2 (Potential Equal)**

*Anova- Beacon Hill*

**NOTE:**

1. All Site Furniture to receive a Dark Gray (Stormcloud) finish.
2. The current intent for the Belmont Bridge project is to use the same Site Furniture family as the West Main Street Streetscape and East High Street Streetscape projects.

# Urban Design – Trash Receptacle Equals



**Current Selection (Basis of Design)**

*Forms and Surfaces: Dispatch Trash Receptacle*



**Alternate 1 (Potential Equal)**

*Thomas Steele- Chandler Trash Receptacle*



**Alternate 2 (Potential Equal)**

*Anova- Metrix Trash Receptacle*

**NOTE:**

1. All Site Furniture to receive a Dark Gray (Storm Cloud) finish.
2. The current intent for the Belmont Bridge project is to use the same Site Furniture family as the West Main Street Streetscape and East High Street Streetscape projects.

# Urban Design – Bike Rack Equals



## *Current Selection (Basis of Design)*

*Landscape Forms- MultipliCITY Bike Racks*



## *Alternate 1 (Potential Equal)*

*Forms + Surfaces- Cordia Bike Rack*



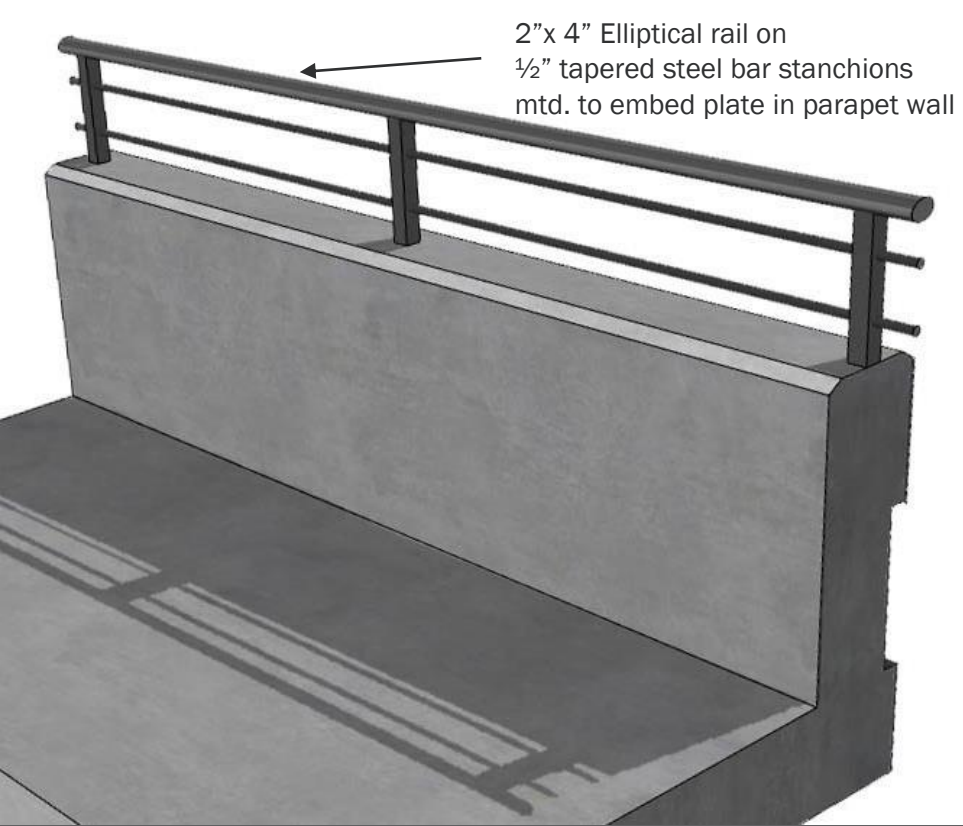
## *Alternate 2 (Potential Equal)*

*Anova- Allure Bike Rack*

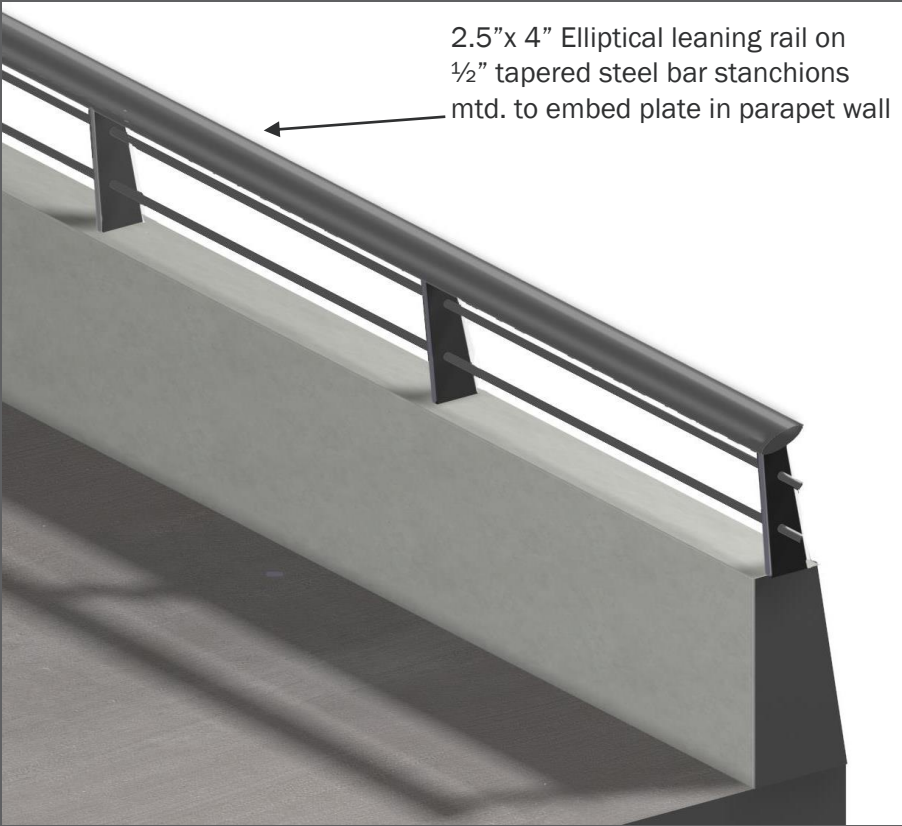
### **NOTE:**

1. All Site Furniture to receive a Dark Gray (Storm Cloud) finish.
2. The current intent for the Belmont Bridge project is to use the same Site Furniture family as the West Main Street Streetscape and East High Street Streetscape projects.

# Railings: Bridge Parapet and Approaches

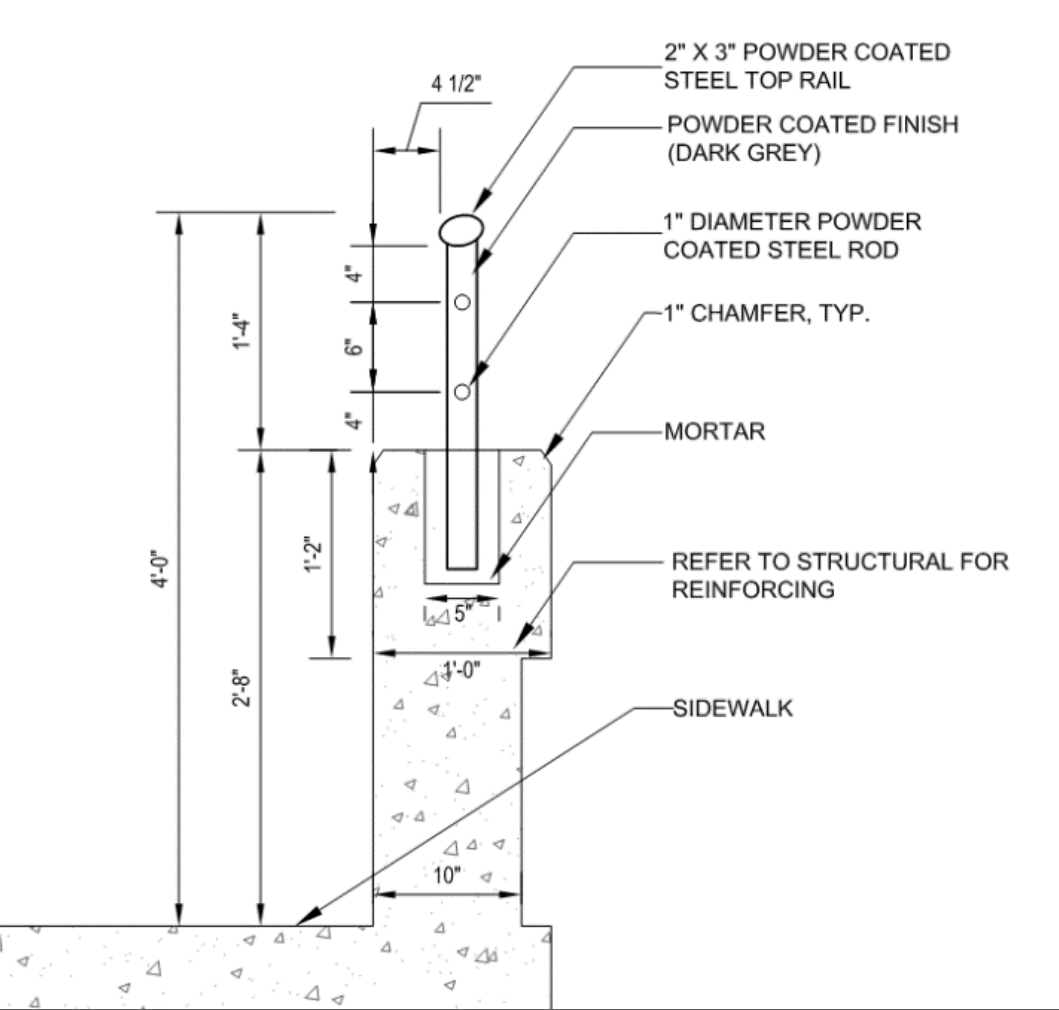


**PROPOSED** Axon View

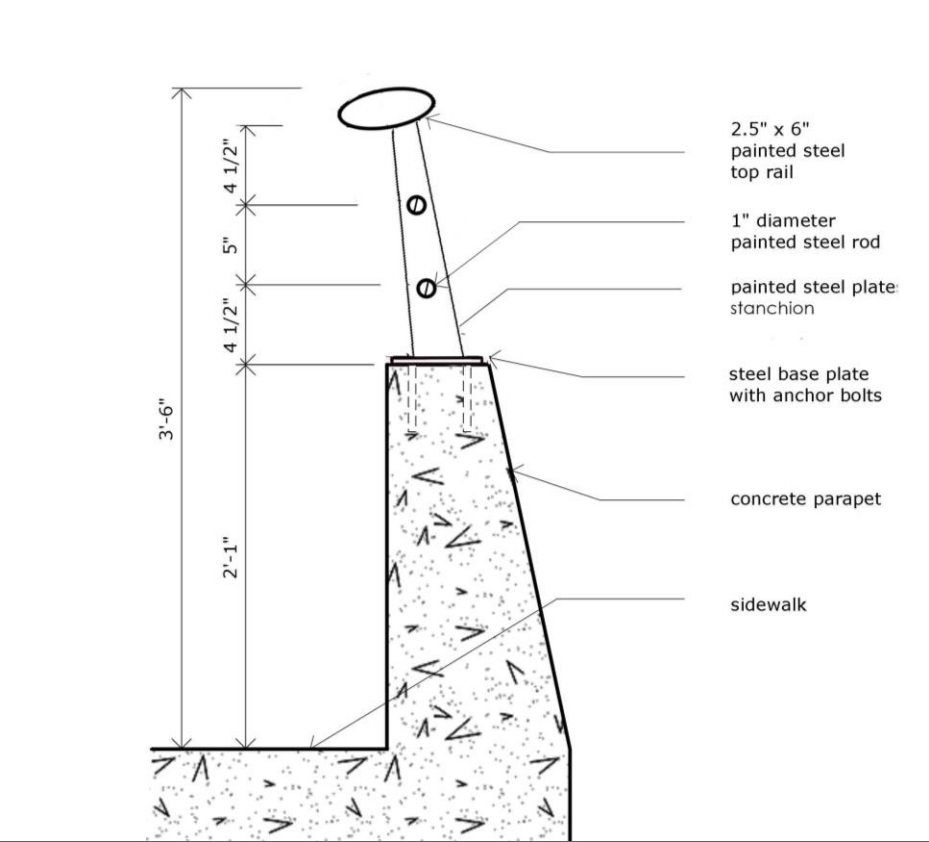


**PREVIOUS** Axon View

# Railings: Bridge Parapet and Approaches

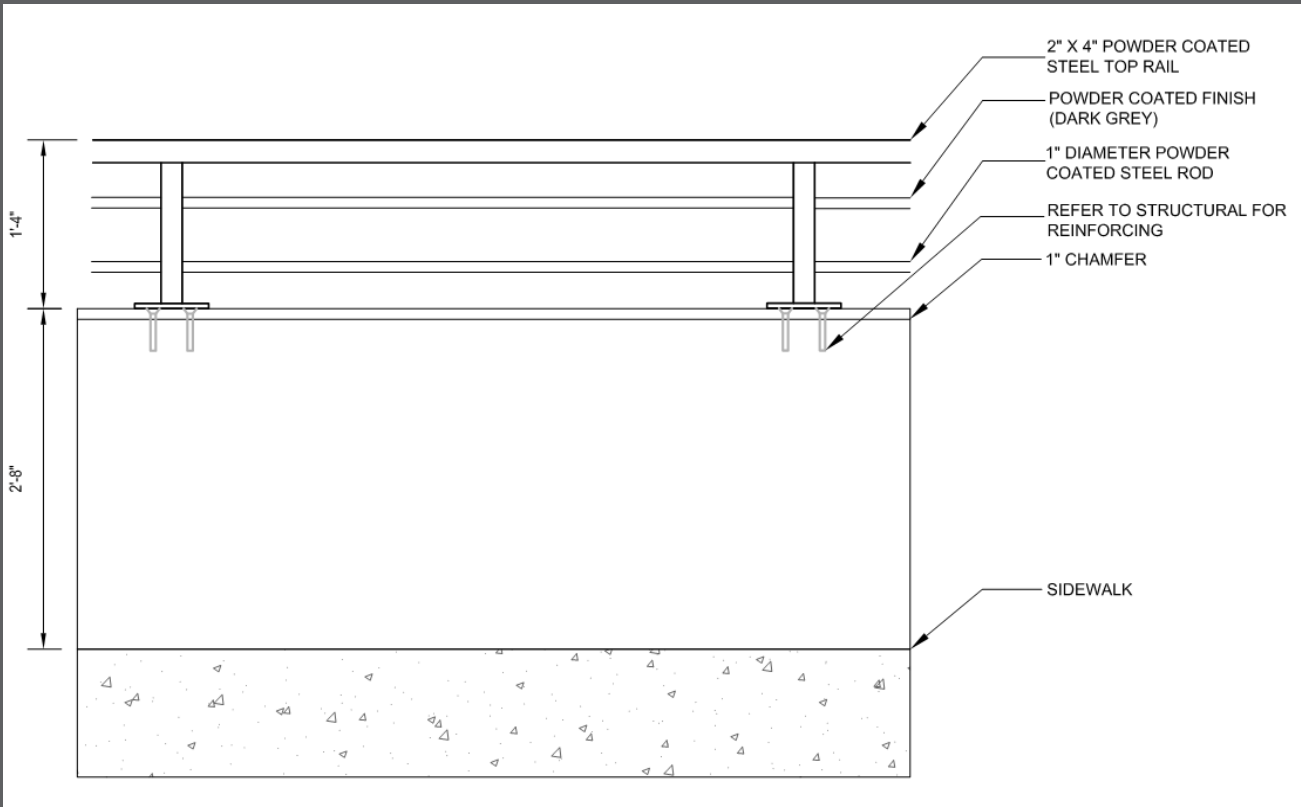


**PROPOSED** Section

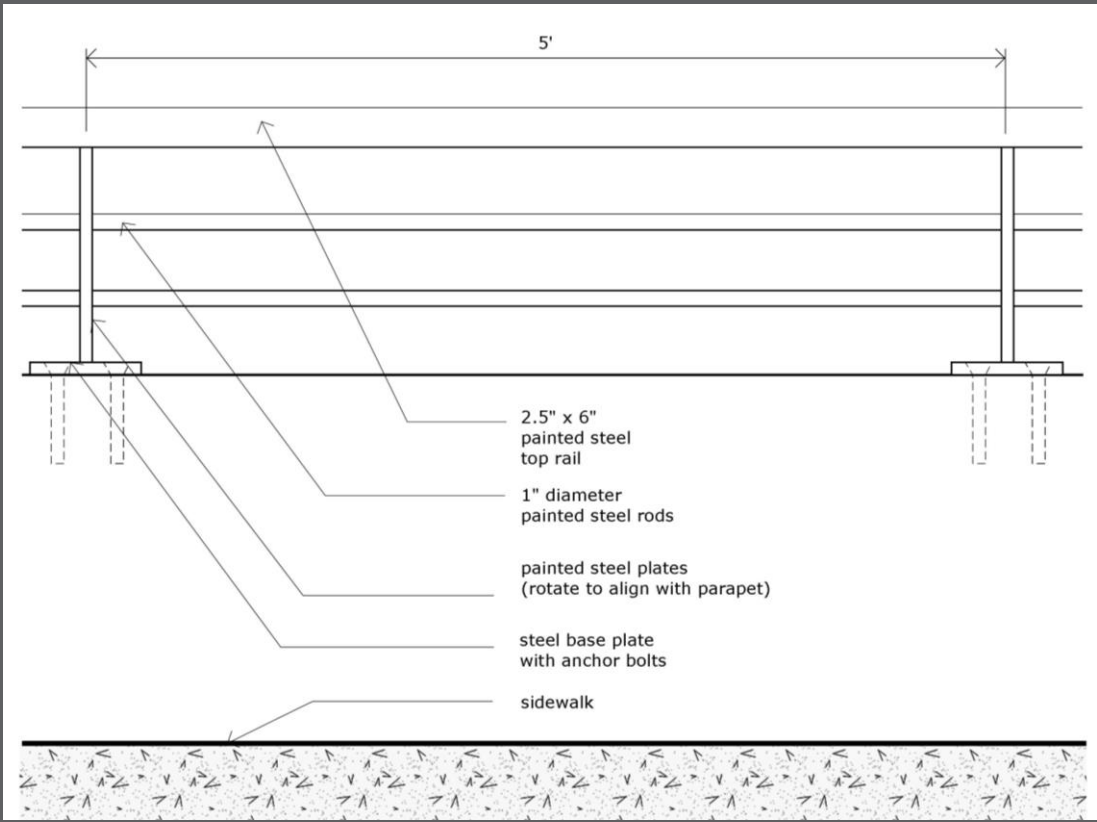


**PREVIOUS** Section

# Railings: Bridge Parapet and Approaches



**PROPOSED** Elevation

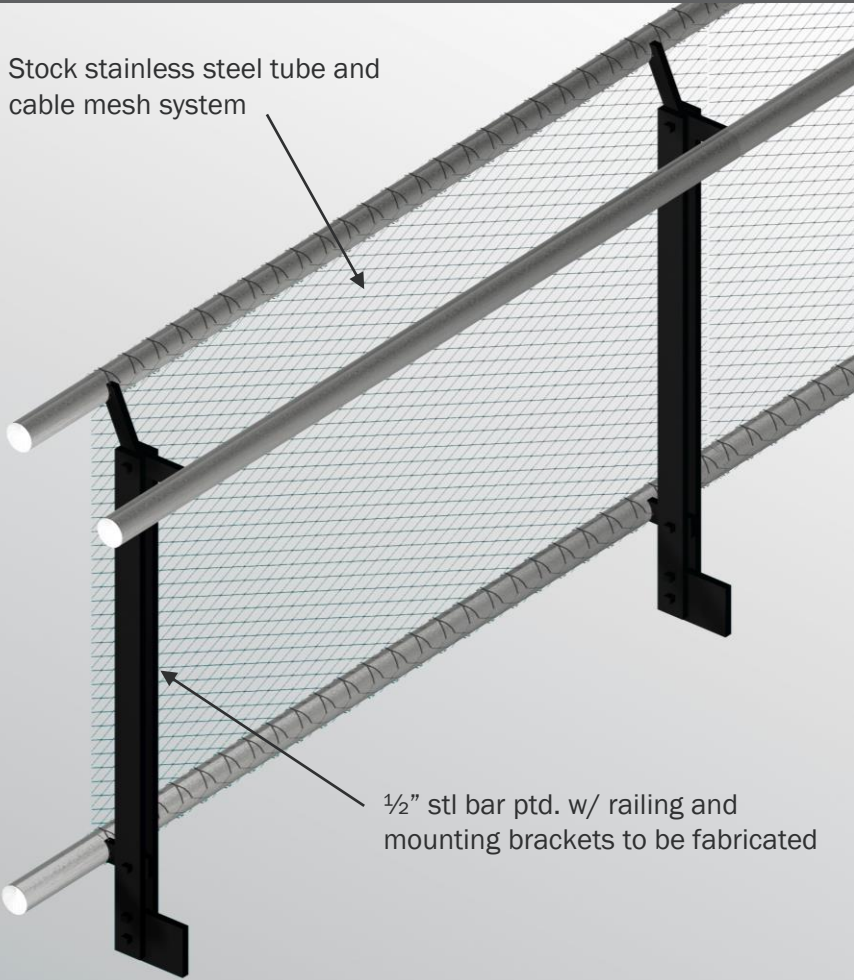


**PREVIOUS** Elevation



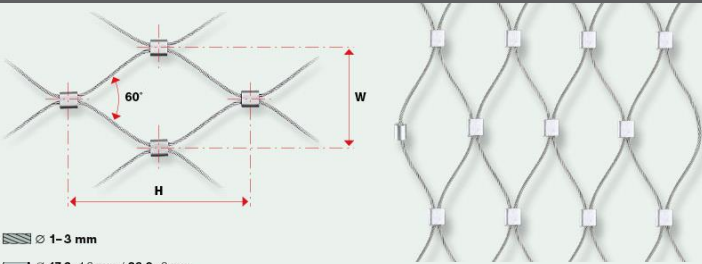
# Railings: Stairs, Ramps and Mezzanine

Stock stainless steel tube and cable mesh system



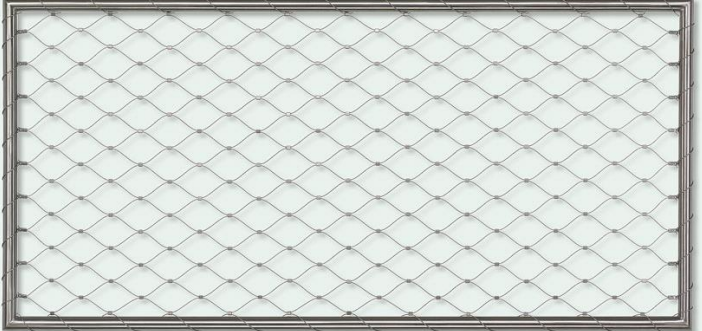
1/2" stl bar ptd. w/ railing and mounting brackets to be fabricated

Axon of Railing and Brackets



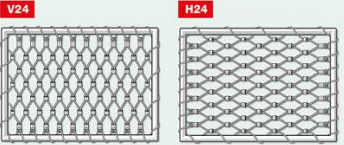
- ▬ ∅ 1-3 mm
- ▬ ∅ 17,2 x 1,6 mm / 26,9 x 2 mm
- ▬ ∅ 1-3 mm

CLASSIC



DIET-Zulassung / Autorisation DIET / DIET approval  
Z-14.7-557

- **Rahmentyp CLASSIC**  
Alle Rahmengenometrien möglich
- **Webnet**  
Alle Maschenweiten und Seildurchmesser
- **Webnet-Konfektion**
  - Liegende Maschen mit Randausbildung H24
  - Stehende Maschen mit Randausbildung V24
- **Type de cadre CLASSIC**  
Toutes géométries de cadre possibles
- **Webnet**  
Toutes dimensions de maille, tous diamètres de câble
- **Confection Webnet**
  - Mailles horizontales avec finition du bord type H24
  - Mailles verticales avec finition du bord type V24
- **CLASSIC frame type**  
All frame geometries possible
- **Webnet**  
All mesh sizes and rope diameters
- **Webnet mesh design**
  - Horizontal mesh design with perimeter type H24
  - Vertical mesh design with perimeter type V24

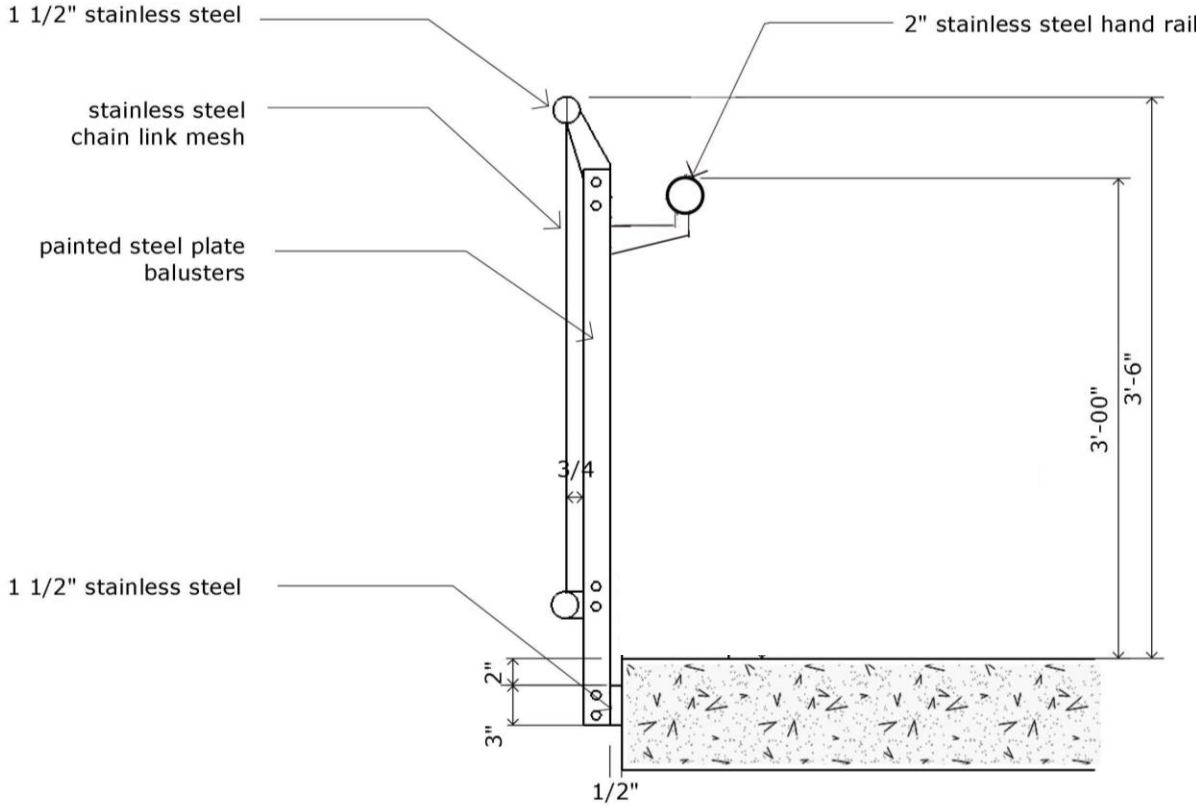


Stock 'Jakob Rope System' w/ Frame

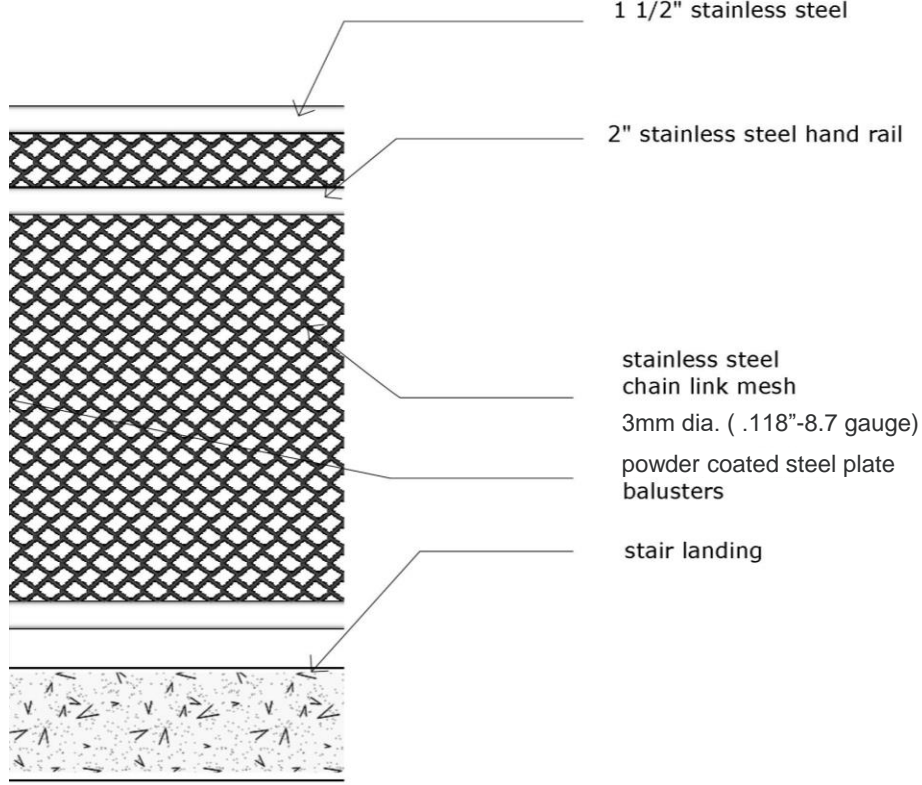




# Railings: Stairs, Ramps and Mezzanine



*Axon of Railing and Brackets*



*Stock 'Jakob Rope System' w/ Frame*



# Bike Runnel: At Concrete Stairs



4" WIDE BIKE RUNNEL, FLUSH WITH NOSE OF STAIR TREADS



*Precedent Image of Bike Runnel at stair cheek wall*

# Retaining Walls: Perspectives



Southwest Elevation of Bridge Wall

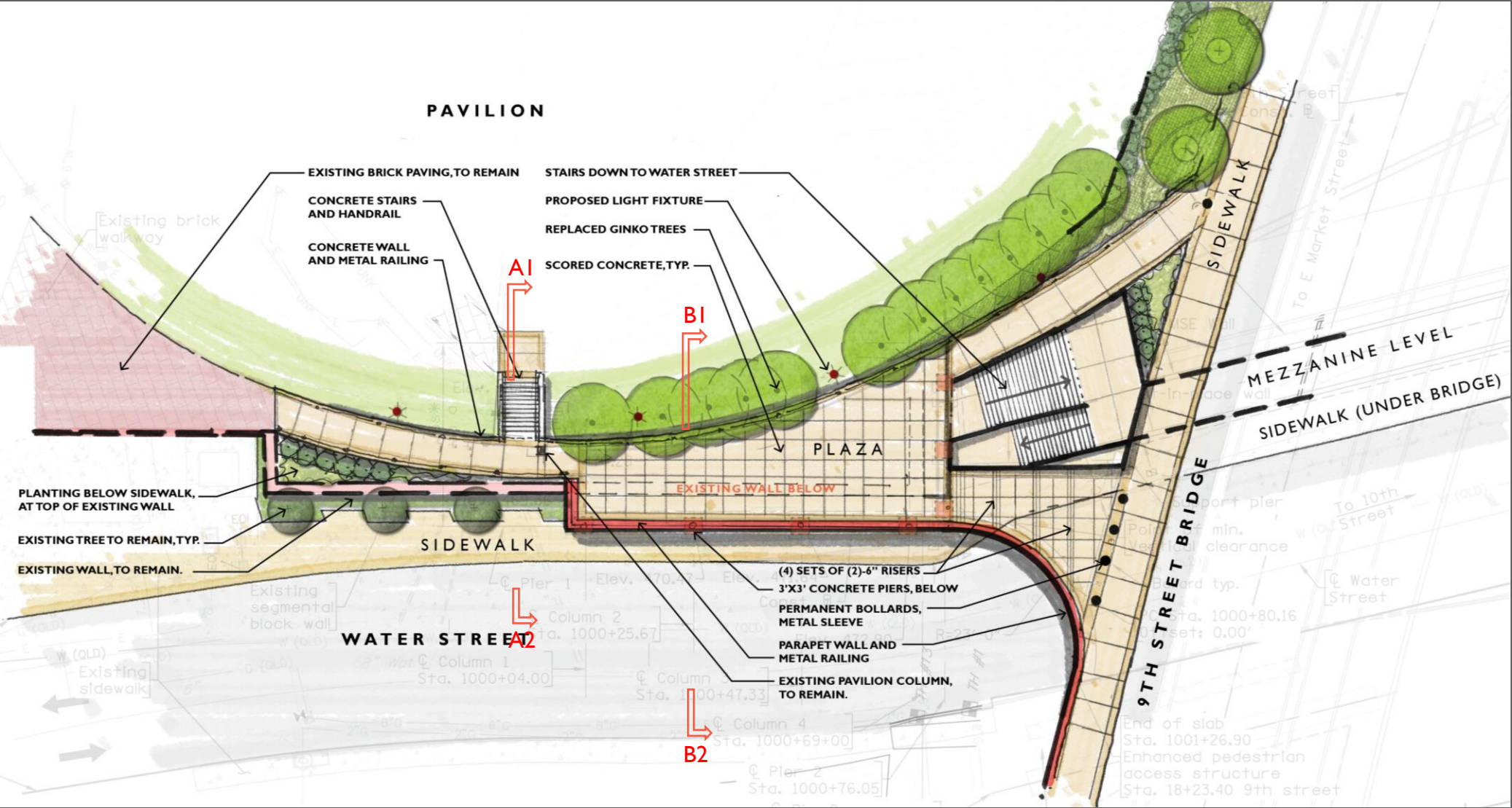


Panel Enlargement

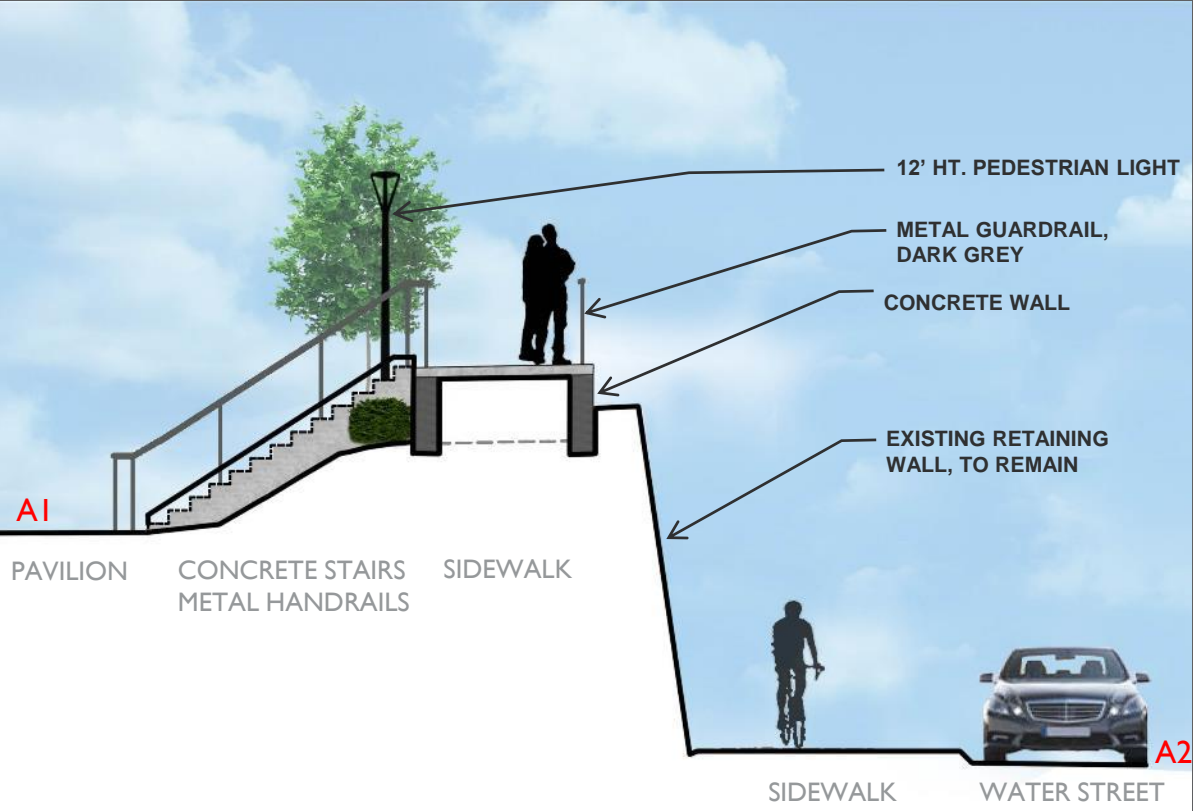
Color: Silversmoke 8084  
Grey (Davis Colors)



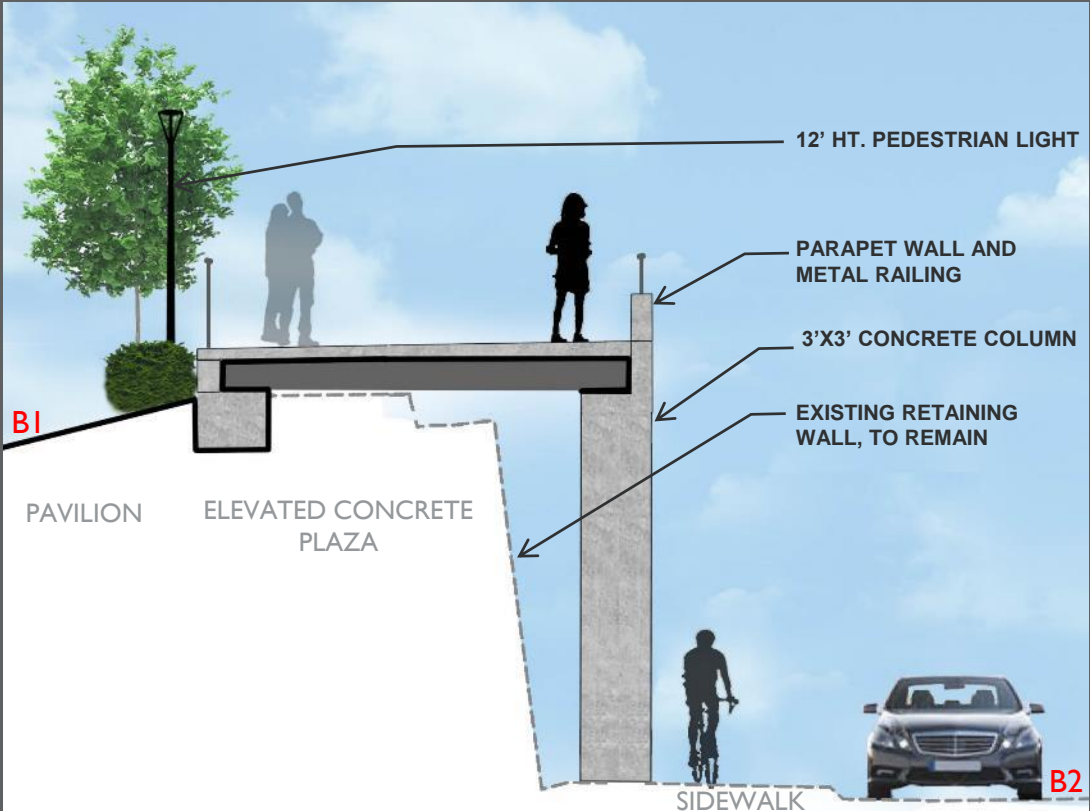
# Knuckle Design: site Plan



# Knuckle Design: Illustrative Sections



Knuckle Section A1-A2 - Looking East

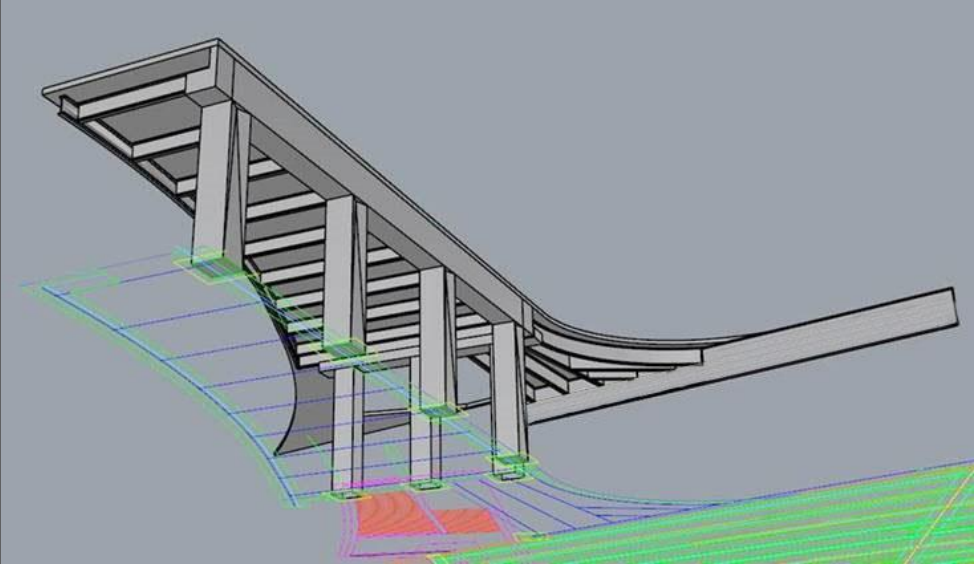


Knuckle Section B1-B2 - Looking East

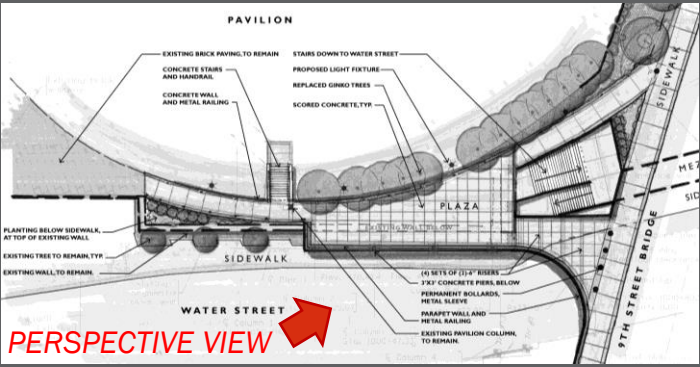
# Knuckle Design: Perspectives



ILLUSTRATIVE VIEW OF KNUCKLE FROM WATER STREET-LOOKING EAST



VIEW OF KNUCKLE FROM BELOW – AXON VIEW



KEY PLAN



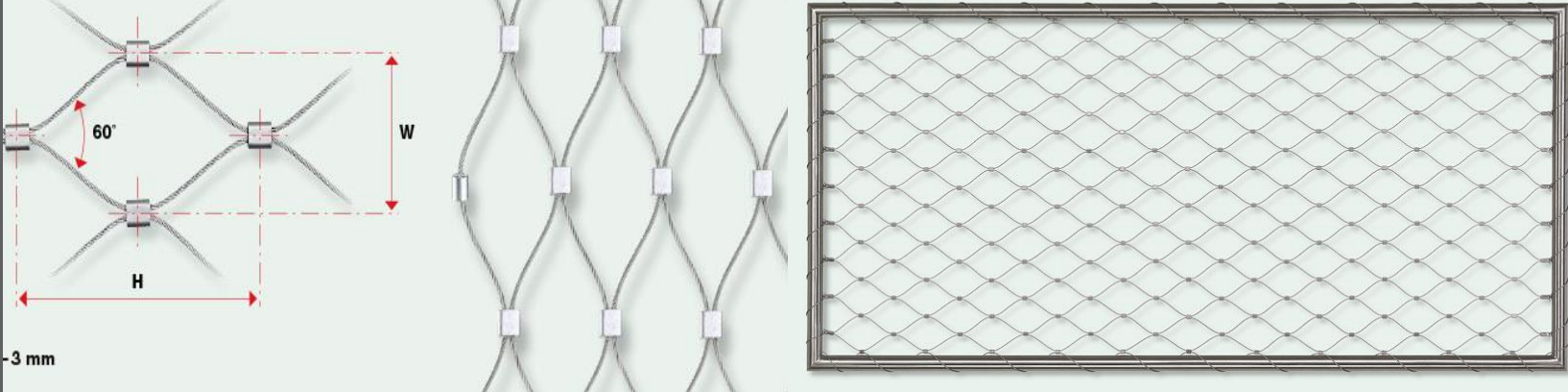
# CSX Fencing



*Buckingham Branch Railroad is tentatively supportive of elimination of the railroad fencing with the consideration of several stipulations:*

- CCTV monitoring via video cameras on the bridge*
- Liability agreement between the railroad companies and City (pending City Attorney review)*
- Design of fencing including a bridge design that will not preclude the installation*
- CSX approval required (won't be known until just prior to construction)*

# CSX Fencing:



*Application of Jakob System w/ curved tube frame*

*Jakob Rope System w/ Frame*





Thank you....



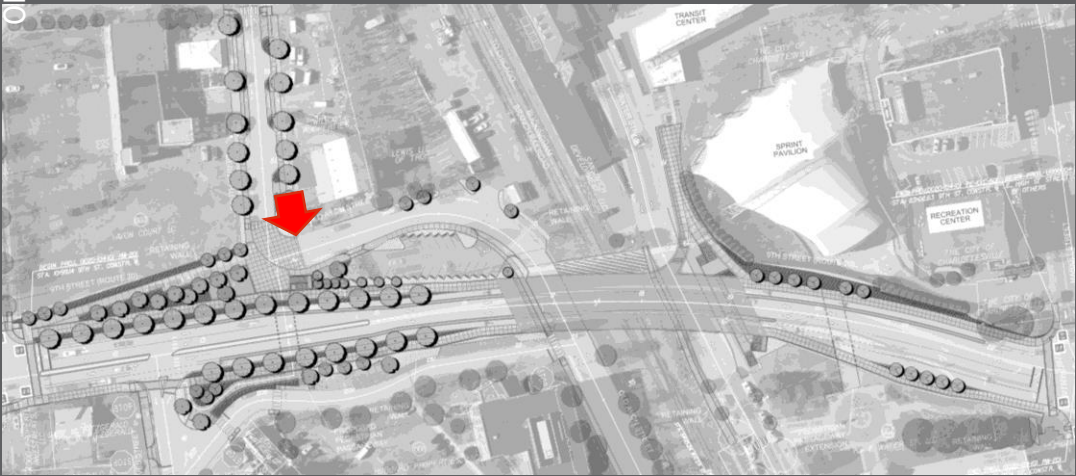
# Walls: South West Elevation



Old Avon St.

Pedestrian Passageway

Locust Avenue

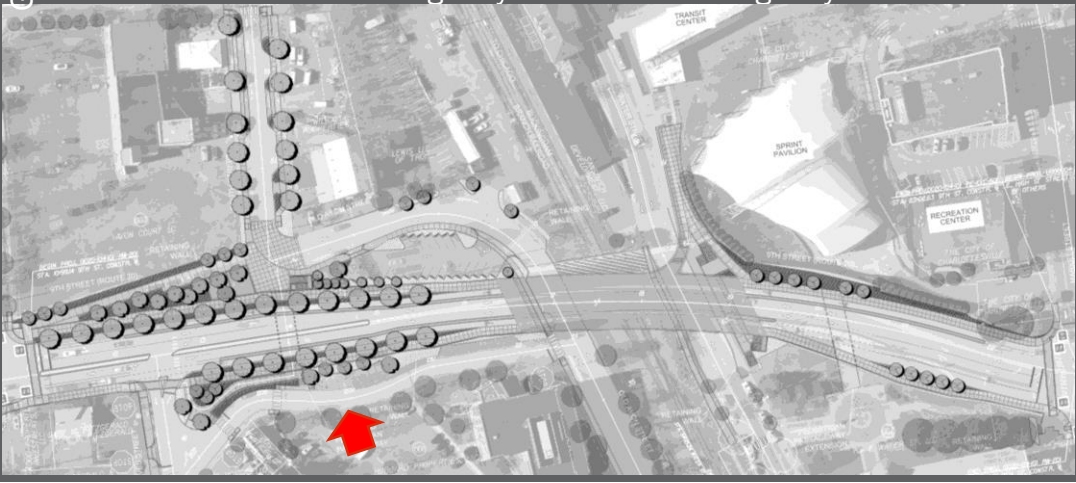
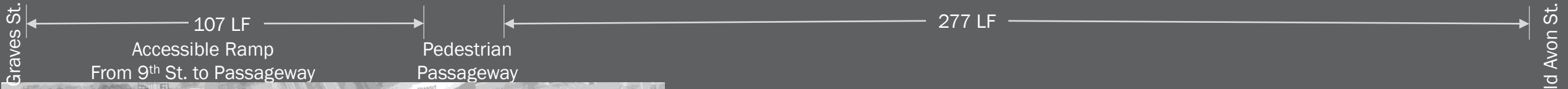


**Note:**  
Wall elevation to depict length and height of wall only. Architectural treatment for walls and stairs shall be as shown on Slide 19 and as directed by the BAR in 2018.

KEY PLAN



# Walls: South East Elevation

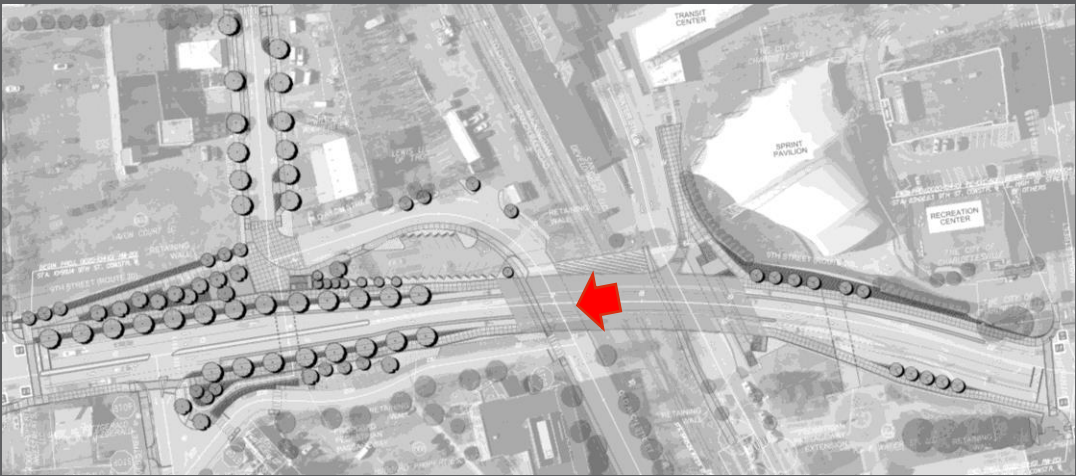


**Note:**  
Wall elevation to depict length and height of wall only. Architectural treatment shall be as shown on Slide 19 and as directed by the BAR in 2018.

KEY PLAN



# Walls: South Abutment Elevations

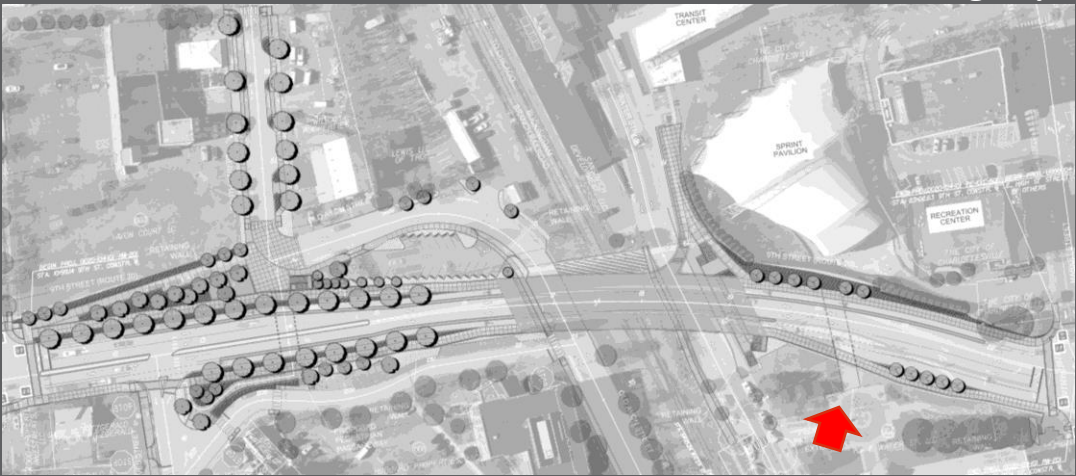
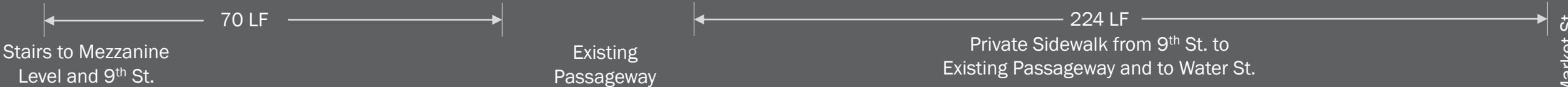


KEY PLAN

**Note:**  
Abutment elevation to depict length and height of abutment only. Architectural treatment of abutment shall be as directed by the BAR in 2018.



# Walls: North East Elevation



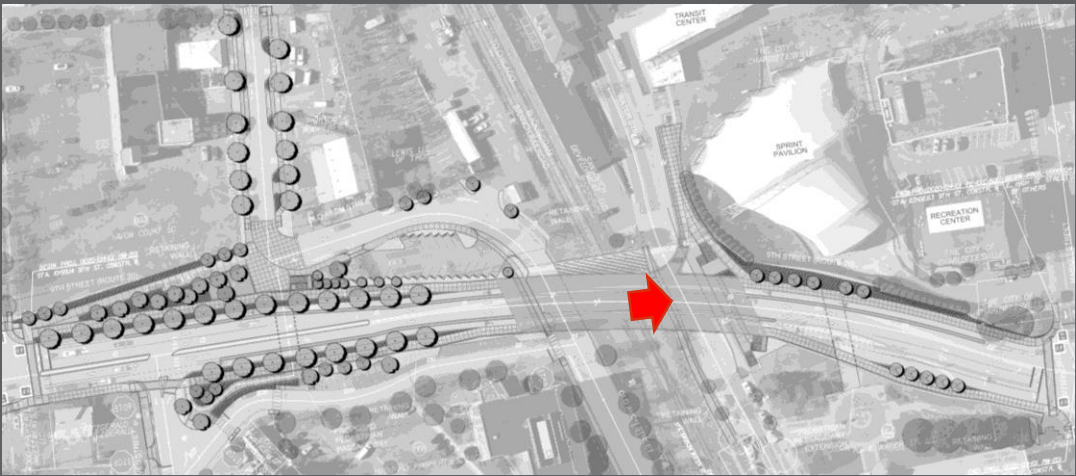
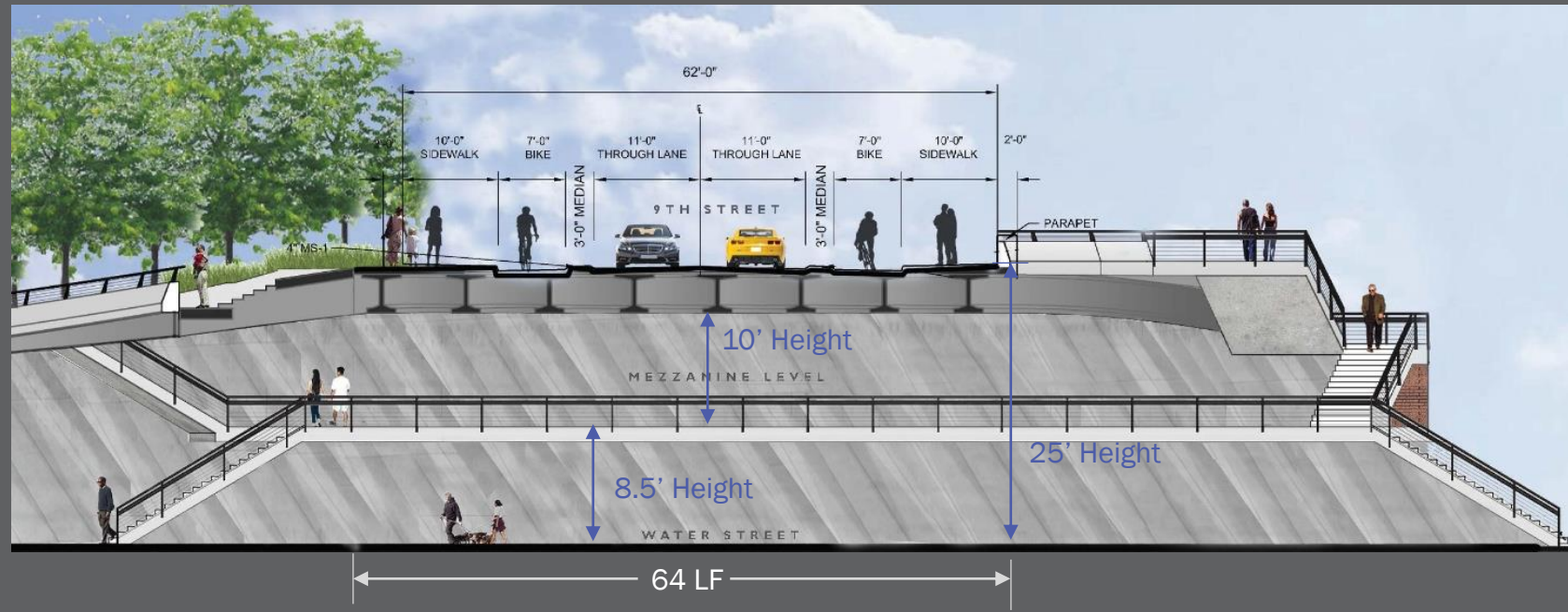
KEY PLAN

**Note:**  
 Wall elevation to depict length and height of wall only. Architectural treatment for walls and stairs shall be as shown on Slide 19 and as directed by the BAR in 2018.



E. Market St.

# Walls: North Abutment Elevations



**Note:**  
Abutment elevation to depict length and height of abutment only. Architectural treatment of abutment shall be as directed by the BAR in 2018.

KEY PLAN

