

WILSONVILLE TOWN CENTER

I-5 PEDESTRIAN BRIDGE + PLAZA



March 10, 2021



WILSONVILLE TOWN CENTER
I-5 PEDESTRIAN BRIDGE



Current Bridge Design

TIED ARCH



Standard Bridge Customization Options.

Prioritized Options (From Previous Meetings)



LIGHTS AND COLOR

ILLUMINATED BRIDGE STRUCTURE



LIGHTS AND COLOR

ADJUSTABLE LED LIGHTING ALONG CABLES AND/OR RAILING



SAFETY

CUSTOM SAFETY FENCING



CONCRETE

SHAPE OF BRIDGE SUPPORTS



LIGHTS AND COLOR

COLOR OF BRIDGE SUPPORT

Other Considerations:



BRIDGE PATH LIGHTING



BRIDGE WALLS

Bridge Aesthetic Enhancement Options

Illuminated Bridge Structure: Recessed Lighting

Arch Lighting

TROJA BRIDGE

Prague, Czech Republic

The public identified an illuminated bridge structure as the number one bridge customization option.

The Troja Bridge pictured uses a recessed lighting. The goal of the recessed lighting is to project the light onto the path serving to light the structure elements while also providing path lighting. This option could create glare for drivers on I-5 and would need to be vetted with ODOT. Different colored lights could also be explored with this option.

The recessed lighting may be challenging with the tubular arch being proposed.

Option	Cost	
	Low	High
Recessed Lighting	\$500k	\$550k



Illuminated Bridge Structure: LED Strip Lighting

Arch Lighting

MINTO BROWN BRIDGE *Salem, Oregon*

The Minto Brown bridge shown uses another structurally mounted LED strip lighting. The bridge pictures uses a constant white light but additional color options could be pursued. This lighting will likely require additional path lighting.

Option	Cost	
	Low	High
LiniLED Lighting	\$500k	\$550k



LiniLED Lighting

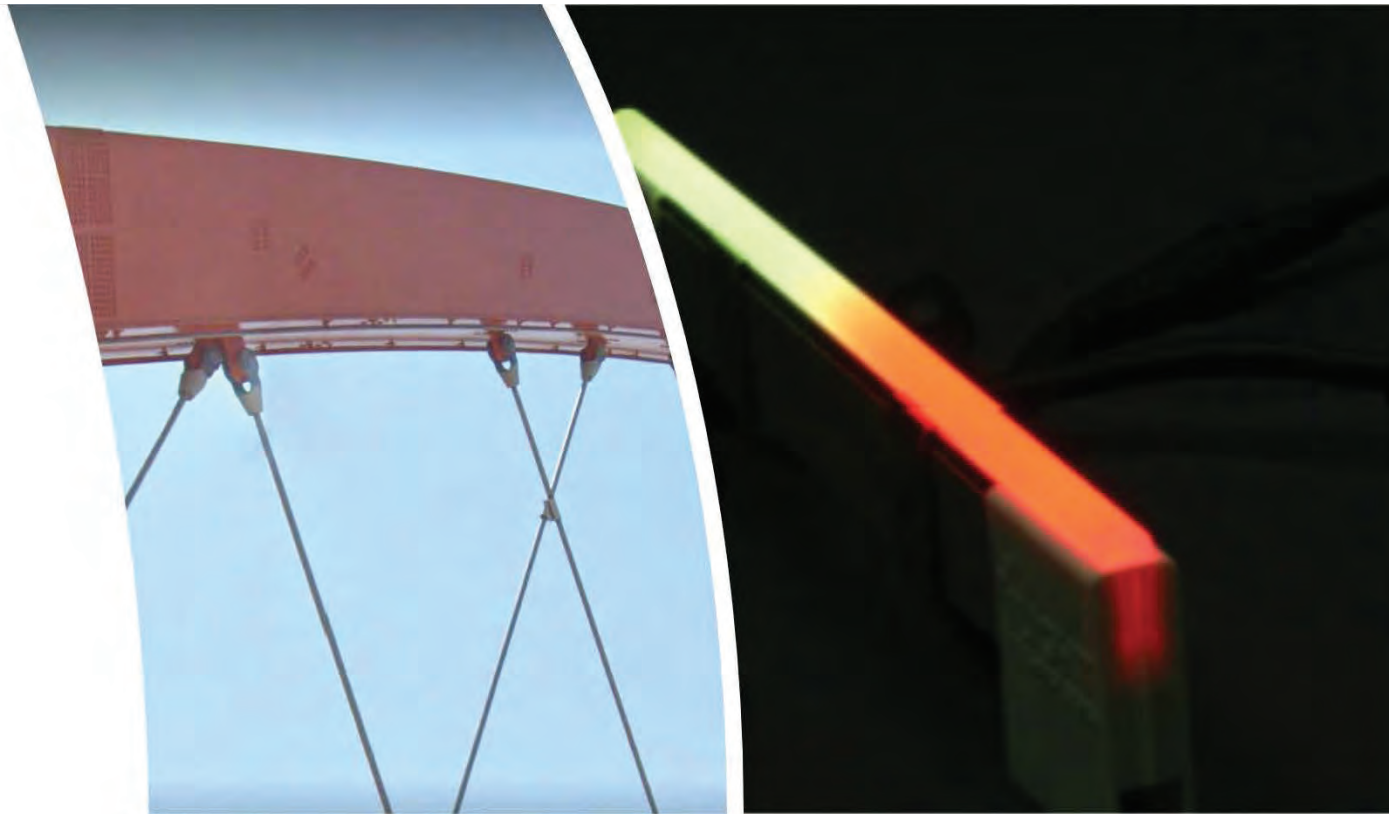
Illuminated Bridge Structure: LED Strip Lighting (multi-colored)

Arch Lighting

HASTINGS BRIDGE *Hastings, Minnesota*

The Hastings bridge uses an LED strip mounted to the bridge structure. The lights can be a variety of colors while still providing sufficient light to the pathway.

Option	Cost	
	Low	High
Hypnotica LED Strips	\$500k	\$550k



Hypnotica Color Changing Lighting

Illuminated Bridge Structure: Projected Lighting

Main Span Projection Lighting

INFINITY BRIDGE (Left)
Stockton-on-Tees, United Kingdom

I-5 BRIDGE (Right)
Woodburn, Oregon

Main span projection lighting would be mounted at the base of the bridge and directed upwards onto the bridge structure. The lighting would highlight the architectural elements of the tied arch structure while also providing light to the pathway.

Option	Cost	
	Low	High
Projection Lighting	\$500k	\$550k



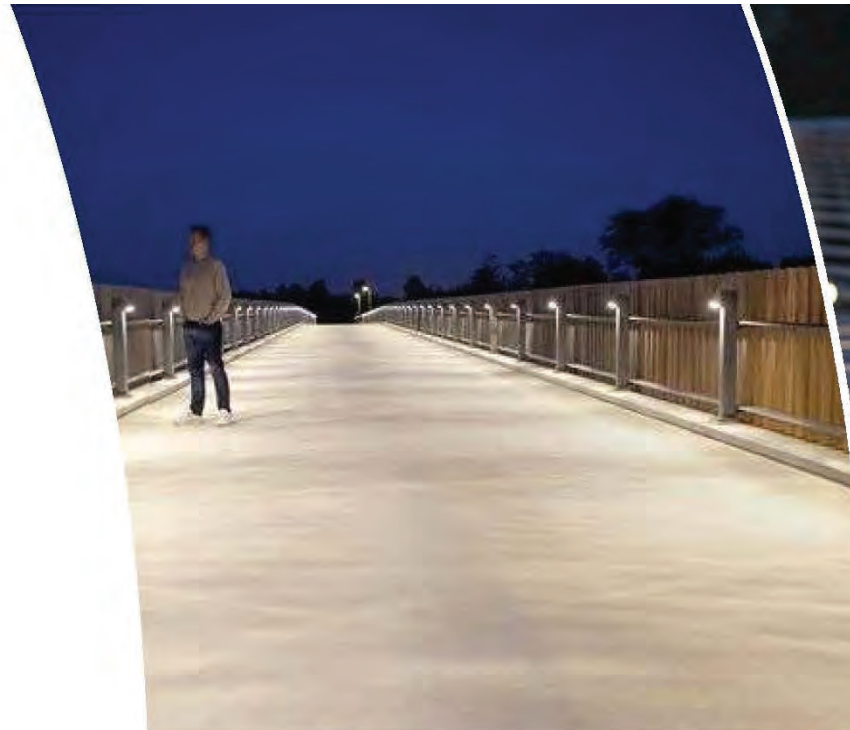
Illuminated Bridge Structure: Path Lighting

Bridge Path Lighting

Two forms of bridge path lighting are available. The first option is to use the City of Wilsonville's standard pathway lighting, Hadco Westbrooke LED light fixtures on NOVA Poles. This option would require bulb outs on the bridge deck to support the poles and may deter from the aesthetic lines of the tied arches. The protective screening could also be customized to support lighting fixtures.

The second option is to provide handrail lighting. This would integrate the lighting element into the bridge rail.

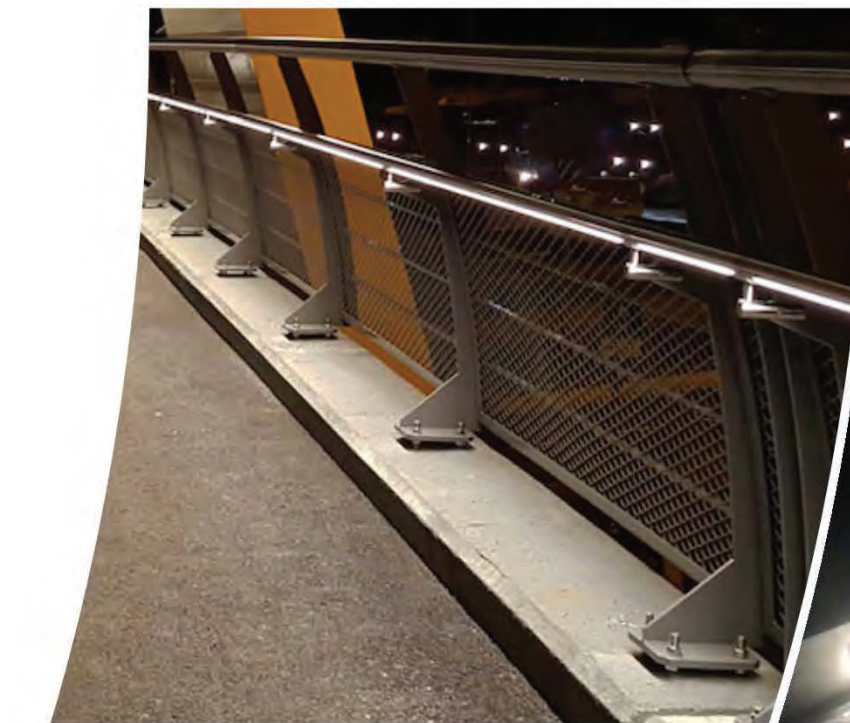
Option	Cost	
	Low	High
Hadco Westbrooke LED	\$160k	\$180k
Intermittent Handrail Lighting	\$80k	\$90k
Curb Lighting in Rail	\$80k	\$90k
Continuous Handrail Lighting	\$80k	\$90k
Lighting in Concrete	\$80k	\$90k



Intermittent Handrail Lighting



Curb Lighting in Rail



Continuous Handrail Lighting



Lighting in Concrete

Adjustable LED Lighting Along Cables and/or Railing

Main Span Projection Lighting

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Stockton-on-Tees, United Kingdom

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Option	Cost	
	Low	High
Projection Lighting	\$500k	\$550k



Color of Bridge Support



Arch Color



Color of Bridge Support



Arch Color



WHITE

OFF-WHITE (NOT SHOWN)



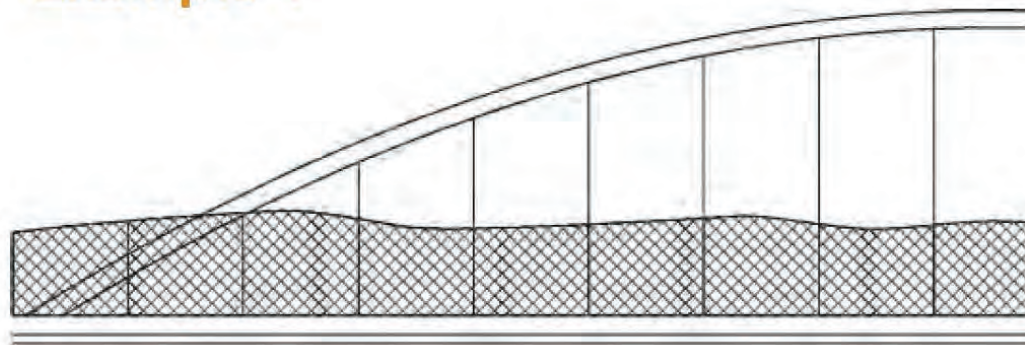
GREY

Custom Safety Fencing

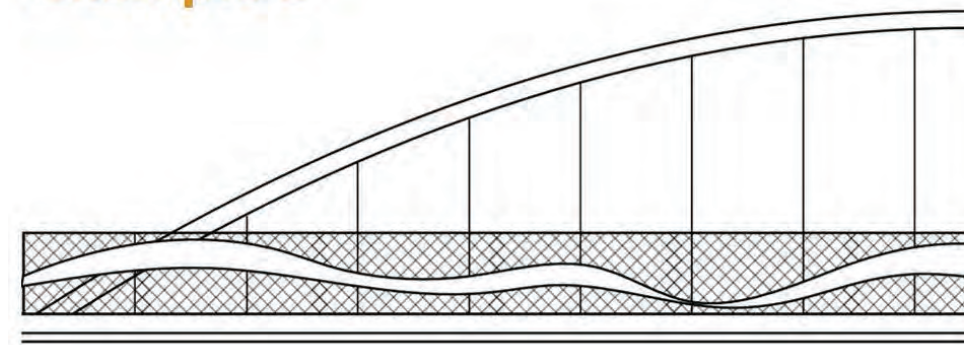
Protective Screening Examples

Custom safety fencing or protective screening was selected by the public as the third bridge option to customize. There are endless opportunities to customize the welded wire fencing including various shapes to the top of the fencing, attaching metal shapes and providing coloring.

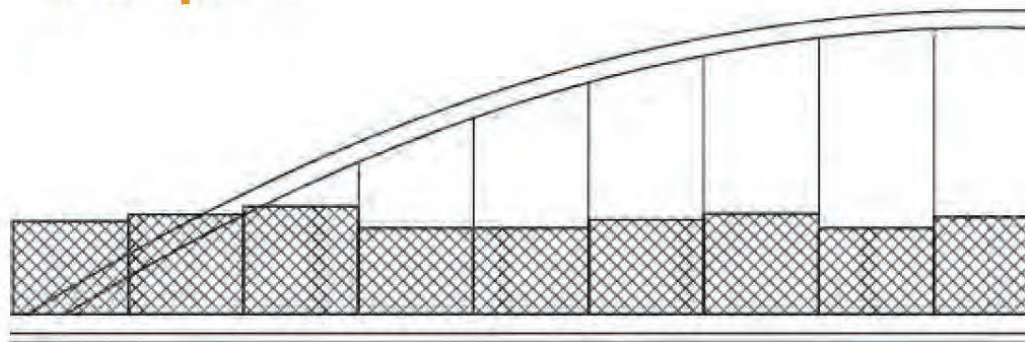
Example 1



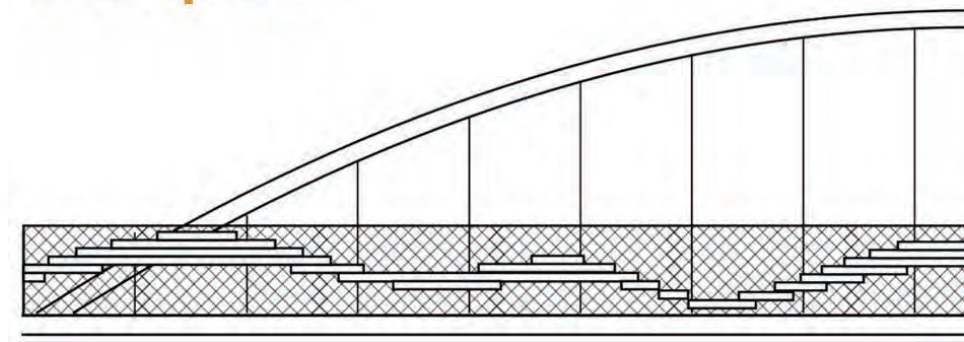
Example 3



Example 2



Example 4



Custom Safety Fencing

Protective Screening Examples

Custom safety fencing or protective screening was selected by the public as the third bridge option to customize. There are endless opportunities to customize the welded wire fencing including various shapes to the top of the fencing, attaching metal shapes and providing coloring.

Example 1



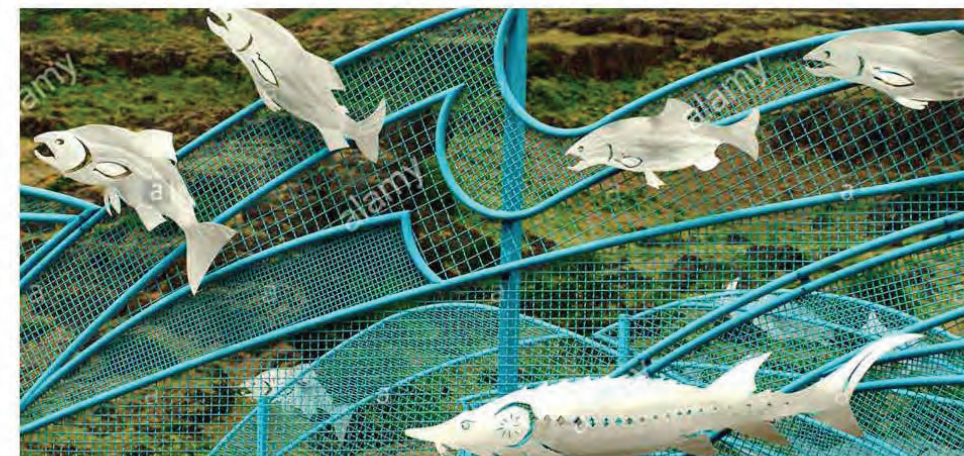
Example 3



Example 2



Example 4



Custom Safety Fencing

Bridge Rail

A bridge rail will be required along the length of the bridge and retaining walls. Some options shown include a more heavy-duty steel bridge rail similar to the Gibbs Street, Springwater Trail and Delta Ponds bridges which can blend into the protective screening over the highways below.

The Minto Island bridge provides a minimal bridge rail across the bridge to provide a straight line across the bridge and not diminish the unique arches.

Option	Cost	
	Low	High
Minimal Bridge Rail	\$200/LF	\$250/LF
Heavy Duty	\$250/LF	\$300/LF



Gibbs Street Bridge



Minto Island Bridge

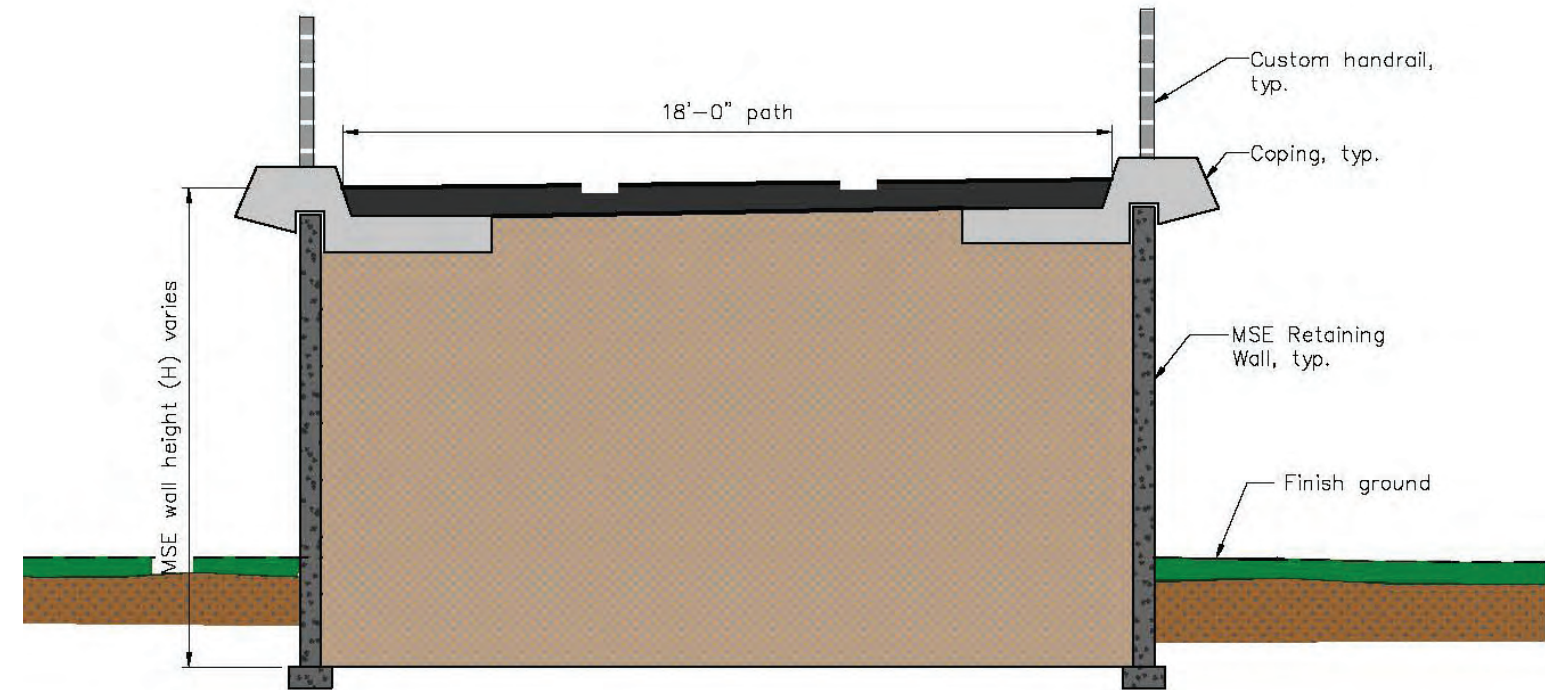
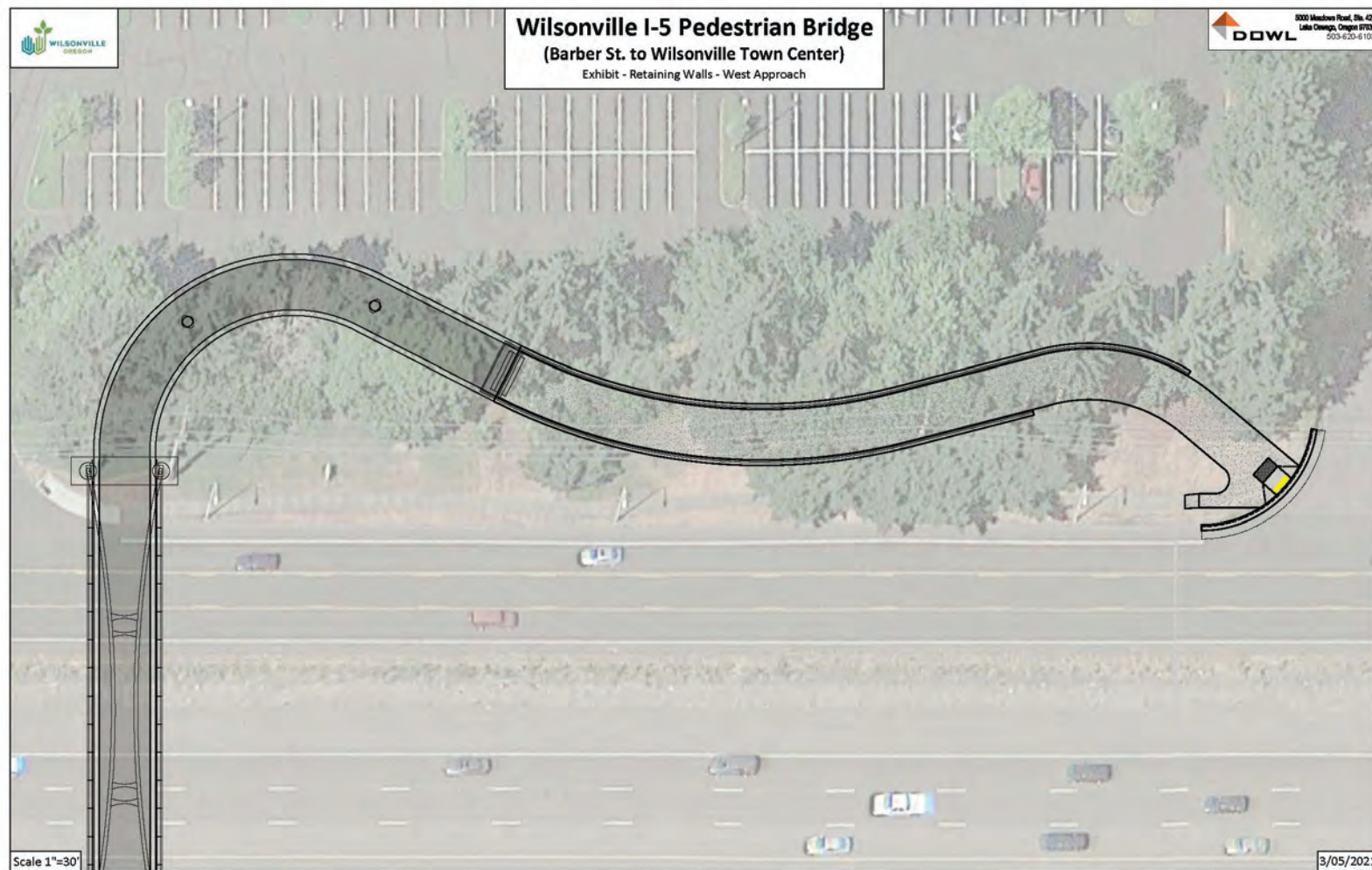


Delta Ponds Bridge



Springwater Trail Bridge

Bridge Wing and Abutment Wall Treatment (west approach and main plaza)



Bridge Wing and Abutment Wall Treatment (west approach and main plaza)

Wall Formliner Examples

TYPE

SOUTH MEDFORD BRIDGE
(Top Left)
Medford, Oregon



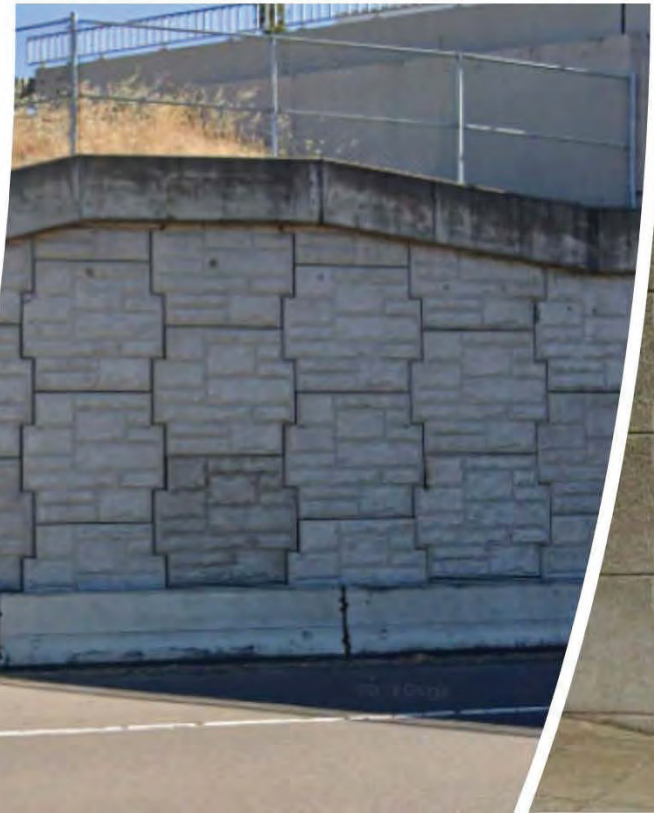
TYPE

DEL RIO ROAD INTERCHANGE
(Top Right)
Winchester, Oregon



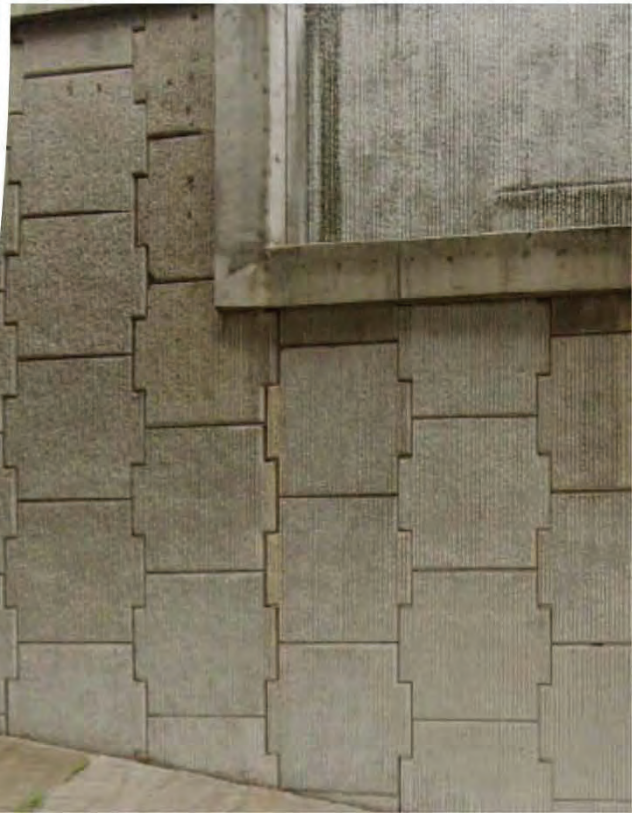
TYPE

GOSHEN INTERCHANGE
(Bottom Left)
Goshen, Oregon



TYPE

WILLAMETTE RIVER BRIDGE
(Bottom Right)
Eugene, Oregon



Bridge Wing and Abutment Wall Treatment (west approach and main plaza)

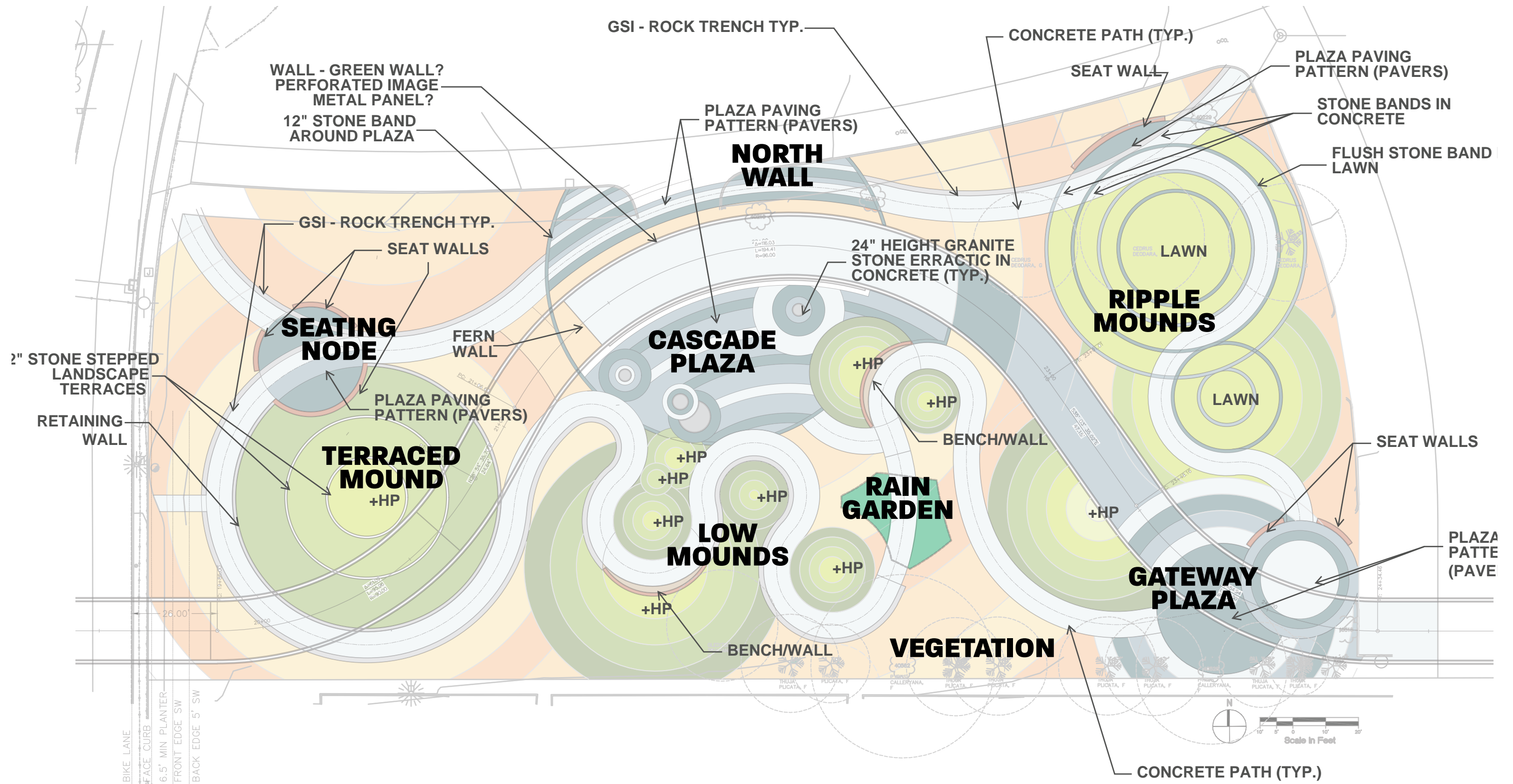
Wall Formliner Examples

- TYPE **SALEM SOUND WALL (Top Left)**
Salem, Oregon
- TYPE **WILSONVILLE ROAD INTERCHANGE (Top Right)**
Wilsonville, Oregon
- TYPE **CHENOWITH INTERCHANGE (Bottom Left)**
The Dalles, Oregon
- TYPE **BIGGS JUNCTION INTERCHANGE (Bottom Right)**
Biggs Junction, Oregon

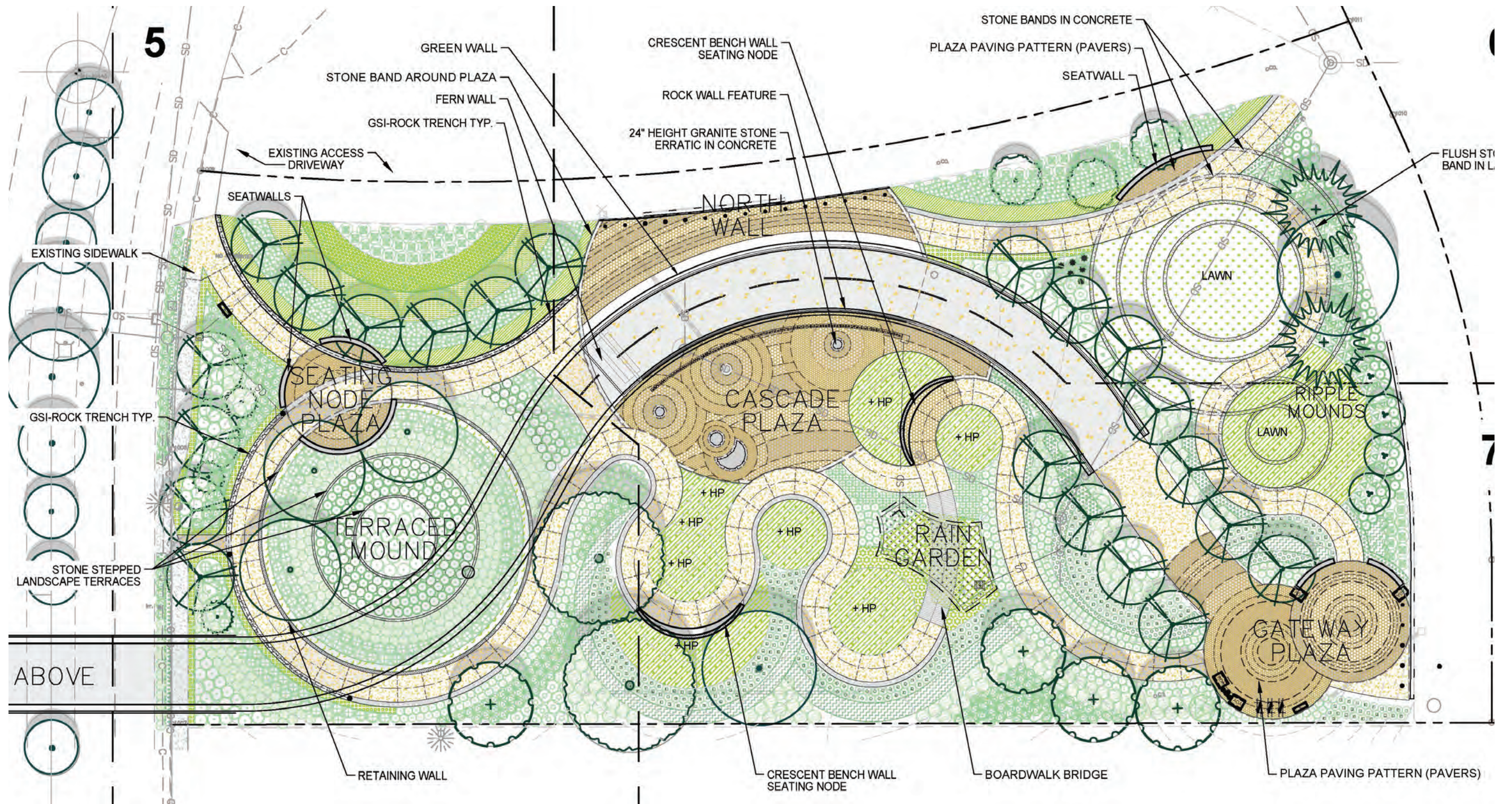


Plaza Design

30% Design Development Plan



30% Design Development Plan



Top ranking plaza components comparison.

ART



1. Interactive and Functional
2. Multiple, Small Installations
3. Murals or Mosaics

SUSTAINABLE FEATURES



1. Planting for Biodiversity
2. Climate Adapted Planting
3. Enhanced Stormwater

TREES AND PLANTINGS



1. Tree Allée
2. Formal Planting
3. Green Walls

SHADE/RAIN SHELTER



1. Tree Canopy
2. Modern, Artistic Shelter

GATHERING

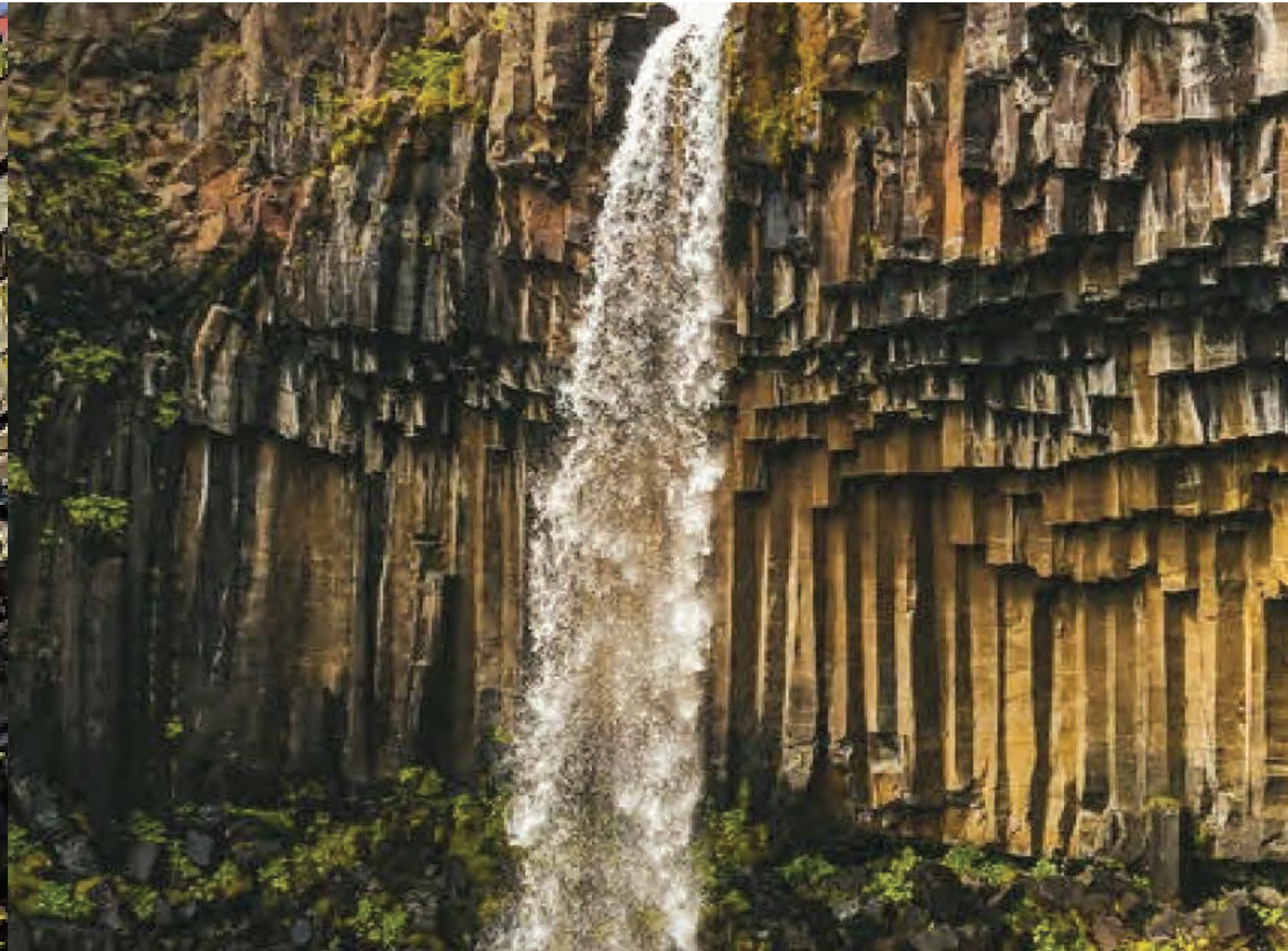
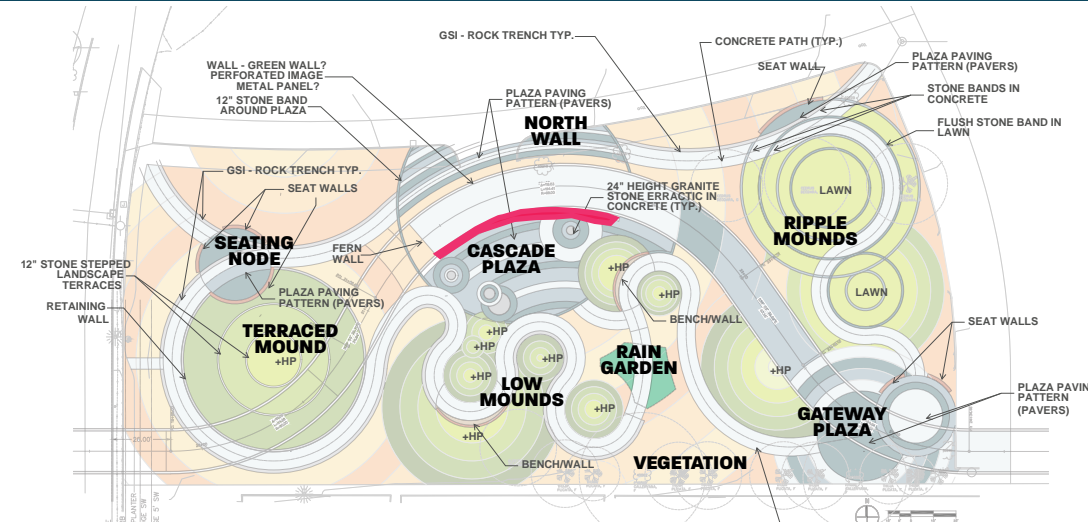


1. Multiple Smaller Spaces
2. Transitional Spaces

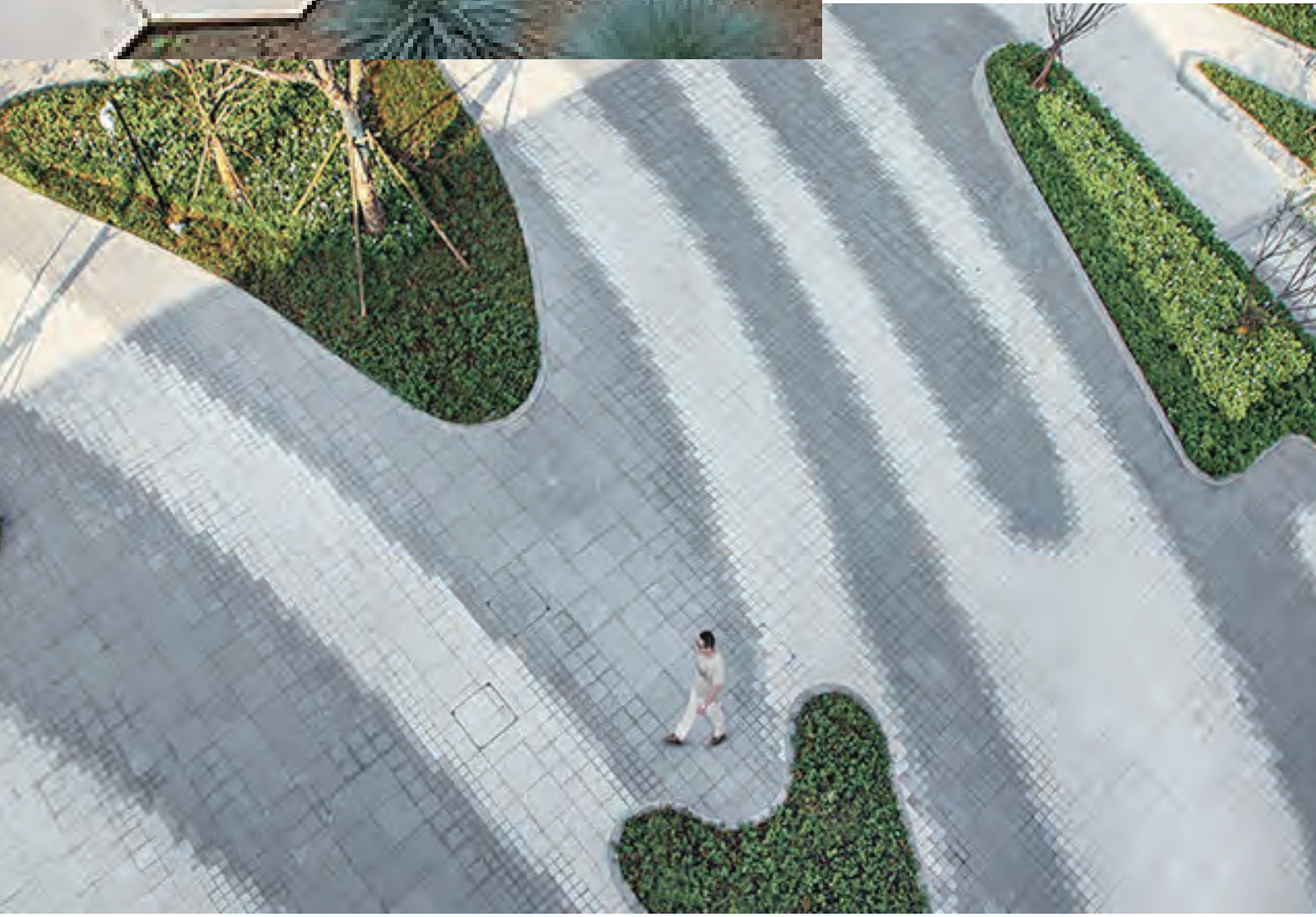
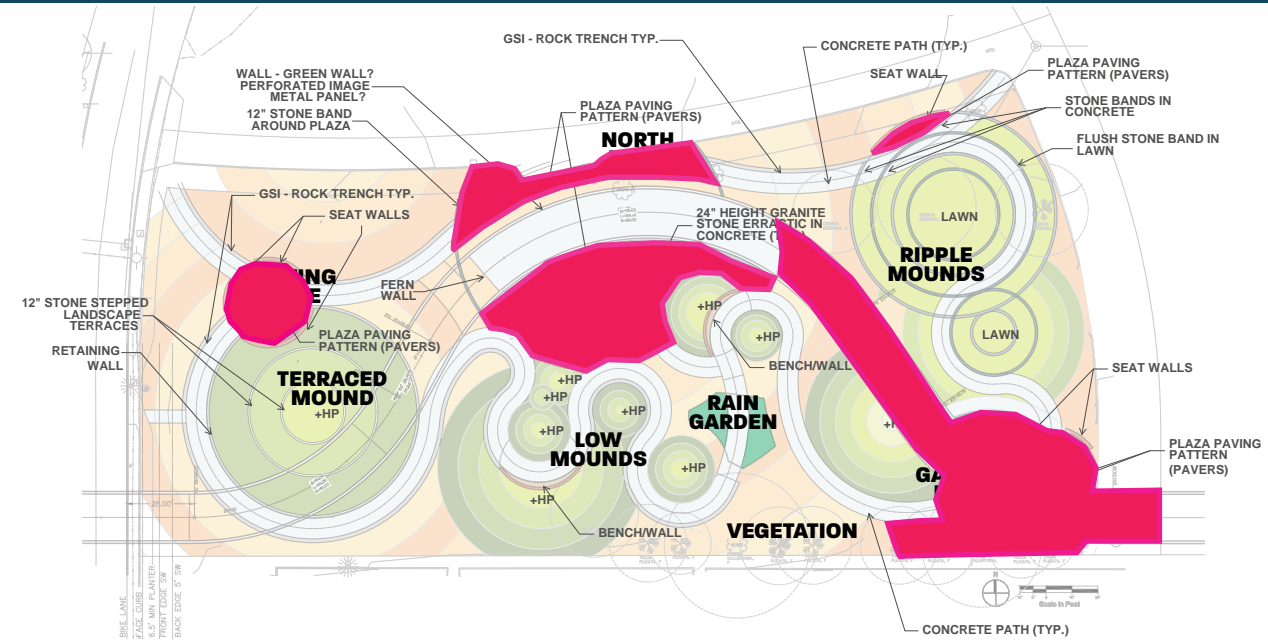
BRIDGE APPROACH (RAMP)

1. Whichever ramp provides the most sound and visual buffering from I-5 for visitors using the surrounding plaza space
2. Long swooping ramp on a sloping land form with planting to soften the edges of the ramp

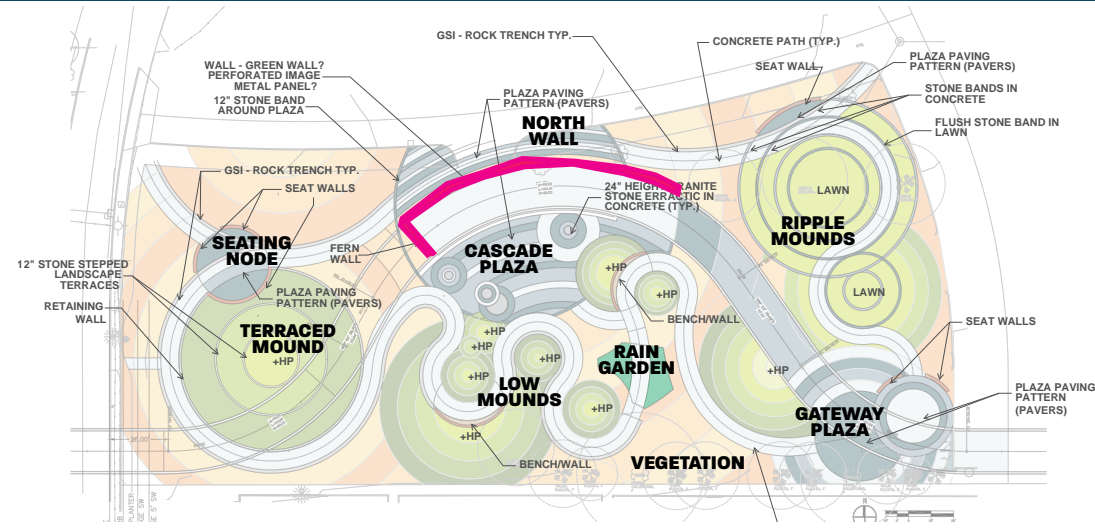
30% Design Features - CASCADE PLAZA ROCK WALL



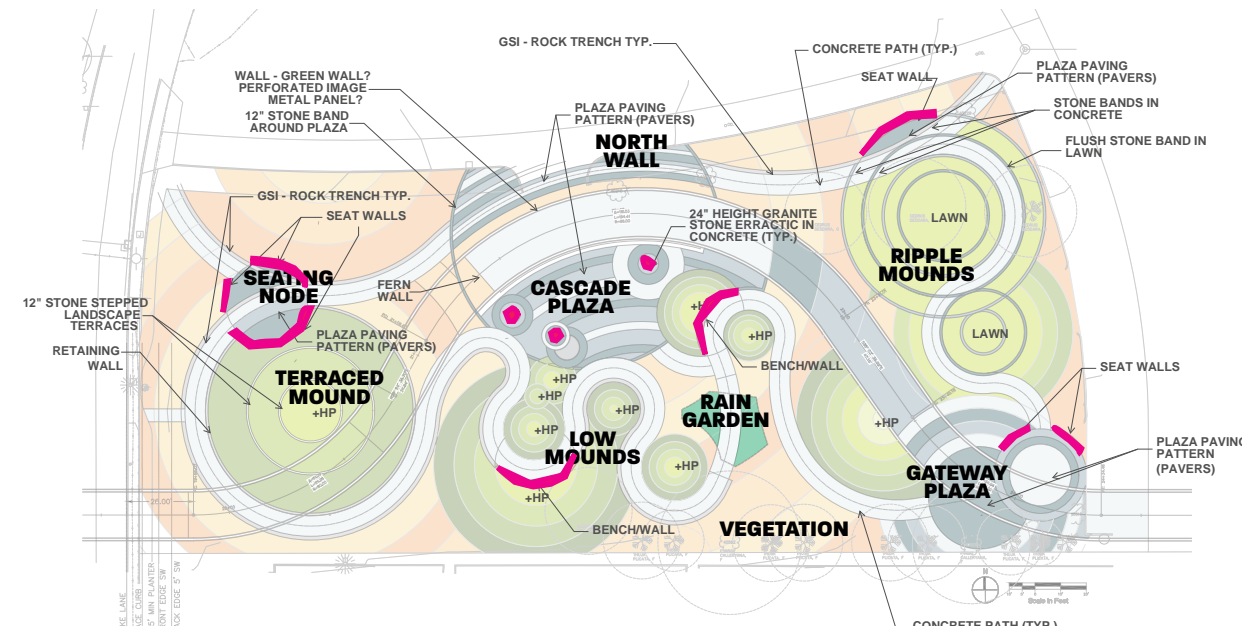
30% Design Features - SPECIALTY PAVING



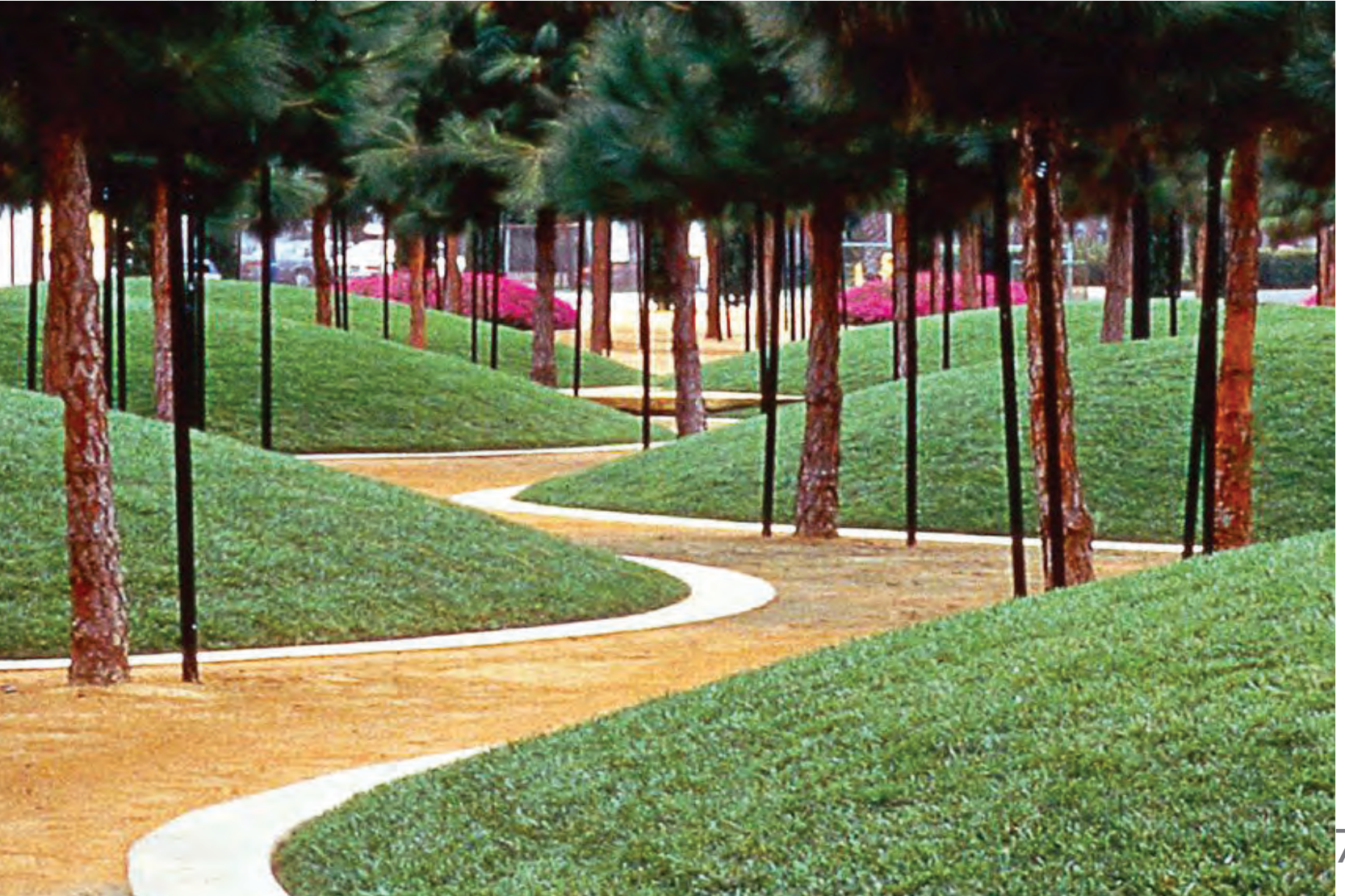
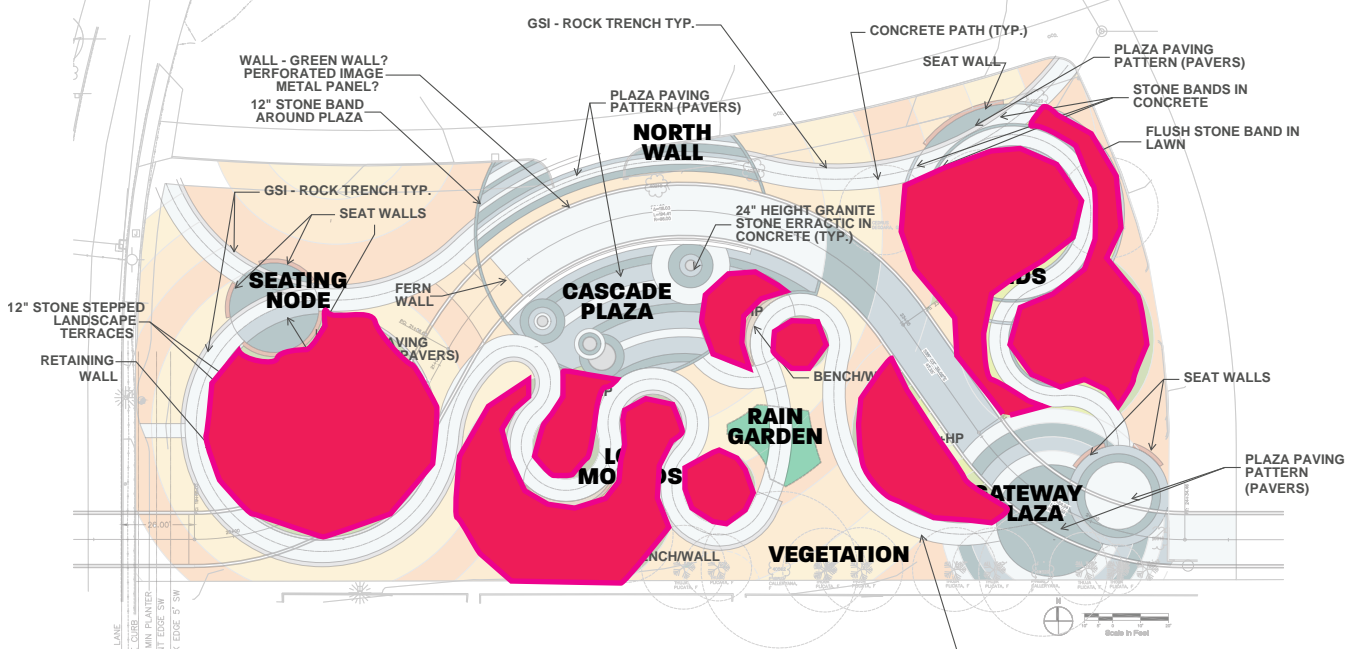
30% Design Features - GREEN/FERN WALL



30% Design Features - SEATING



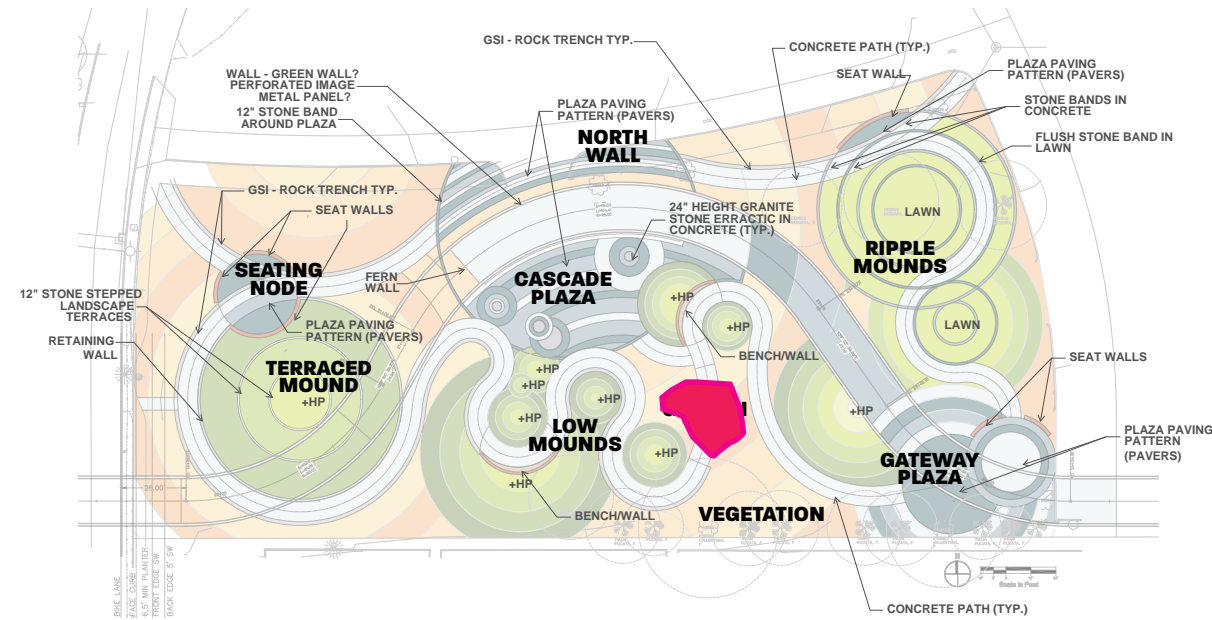
30% Design Features - MOUNDS



30% Design Features - RIPPLE DETAILS



30% Design Features - RAINGARDEN



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