



# *Willamette Falls*

LEGACY PROJECT

## **Riverwalk**

Existing Conditions and  
Site Opportunities Summary  
Spring 2016

## What Makes a Waterfall Destination?

At Workshop I, members of the Design Collective and the Client Team started their session by introducing themselves and sharing their 'most favorite waterfall after Willamette Falls'. The personal descriptions of the resulting twenty-odd waterfalls were revealing. Nearly everyone described waterfalls set within wild or park-like settings, most of the group described their journey to the falls as much as the falls themselves, and many waterfalls were attributed to strong memories of close friends and family.

Given that Willamette Falls has been and will continue to be the site's unifying element and driver - from natural systems, to American Indian presence, to the basis of industrialization, to the Riverwalk effort today - the Design Collective thinks it fitting that we start our design process by examining it: understanding what tools can elevate the forgotten falls into a world-class waterfall destination.

We can learn from other famous waterfalls.



### Awe - Niagara Falls

Destination waterfalls often provide vantage points where the power of water can be felt emotionally. This might mean close access to the roar of the cascade, to precipitous heights, to curtains of mist, to the roiling currents. The viewer, because of their proximity, has a bodily encounter with the power of the falls, resulting in the feeling of awe.



### Pilgrimage - Oneonta Gorge

Waterfalls, because of their vertiginous nature often require a bit of a trek to arrive at prime viewing locations. At some destination waterfalls, the pilgrimage is as much of an attraction as the falls themselves. The exerted effort and gathered experiences along the way can be just as memorable as the falls.



### Setting - Niagara Falls

Many, but not all, destination waterfalls are situated in wild or park-like settings. For those waterfalls not surrounded by rugged terrain and vegetation, it is a challenge to balance experience of the falls with the setting, be it urban or industrialized. Niagara Falls, for instance, is surrounded by development that many would argue detracts from the character of the falls.



### Composition - Yosemite's Bridal Veil Falls

Since falls themselves and their surrounding context are often inalterable, vantage points are often strategically positioned to compose the best view. In an ideal composition, distracting surrounding elements are cropped out, putting the fall's viewer's in the most advantageous position. Considering the advent of digital image sharing platforms like Instagram and Facebook, this compositional quality now has even great significance: the most photogenic falls find wide digital circulation and appeal.



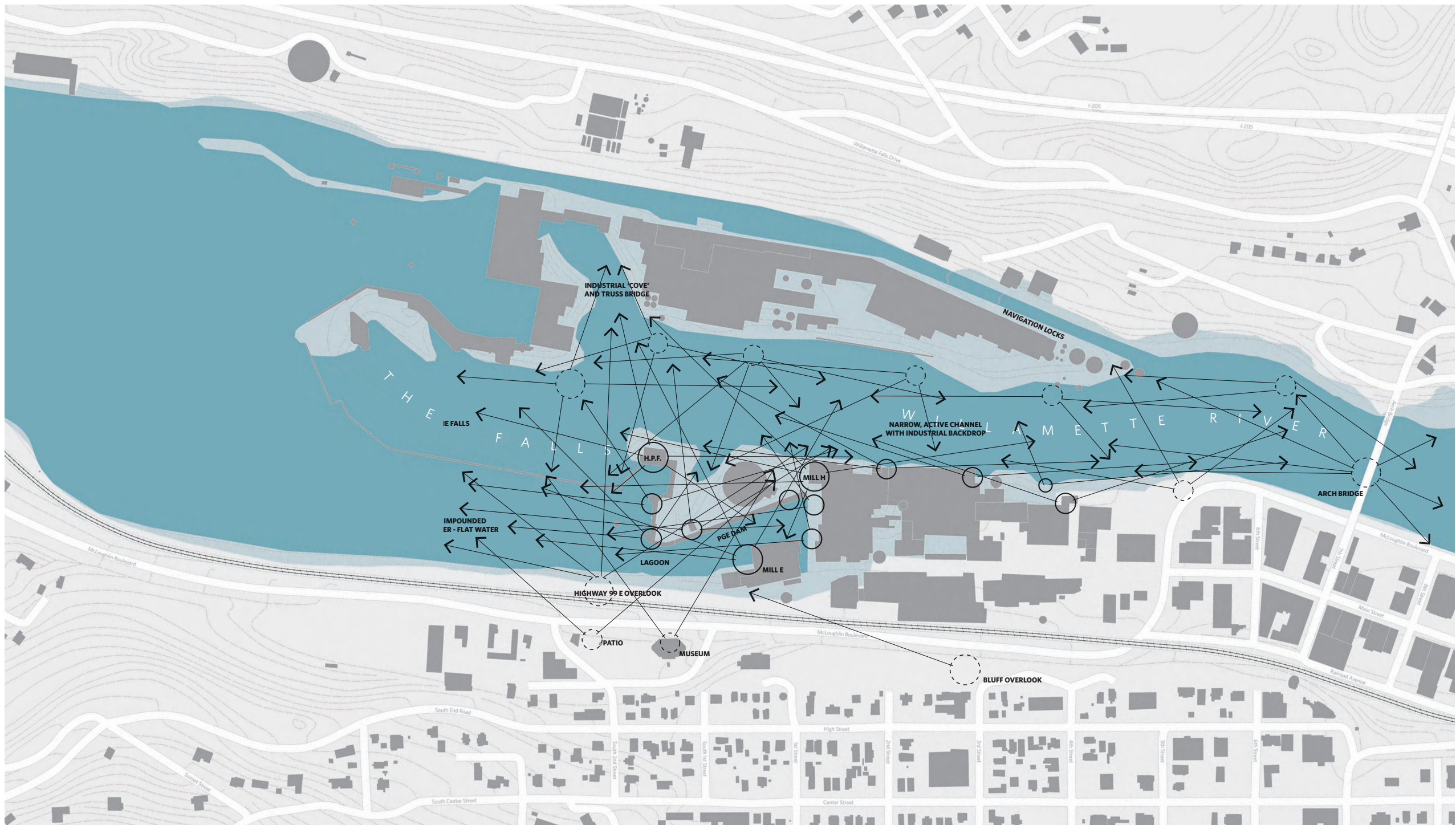
### Sequence - Multnomah Falls

Popular waterfalls often offer a sequence of experiences that stage the level of intrigue and physical investment asked of visitors. Multnomah Falls in Oregon's Columbia River Gorge does this exceptionally well. First, an easily accessible viewpoint offers universal access to the falls close to parking and amenities. Second, the historic pedestrian bridge that intersects the primary view tempts the slightly more ambitious visitors with another level of experience. Last, the long, rugged trail to the precipice of the upper falls offers the truly adventurous a rewarding, yet strenuous experience.



### Sharing - Niagara Falls

Destination waterfalls are inspirational gathering places that we experience collectively with other falls-goers, personally with close friends and family, and privately with our own thoughts and memories. Different types of viewing areas encourage these different types of sharing, from large gathering to private contemplation.



## River and Falls Viewpoints

Site Plan - Surrounding Project Area

Key

○ On-Site View Location

○ Off-Site View Location



The site offers numerous places to experience the river and falls; we can evaluate the value of each locale by asking questions.

### **Awe**

How can the design of the Riverwalk invoke feelings of awe?

### **Composition**

Are 'picture postcard views' important to the Riverwalk? Where and how here how might they be composed and accessed?

### **Setting**

How can we elevate the authentic industrial quality of the site and use future development to frame and further the falls' allure?

### **Pilgrimage**

How can the Riverwalk dramatize the pilgrimage and approach to the falls?

### **Sequence**

Where and how can these different levels of waterfall experience and access occur on and off site?

### **Sharing**

At the Riverwalk's viewing locations, how can we provide for meaningful collective, personal, and private experiences?

## **The Falls**

### Opportunities

- Impressive, powerful volumes of water and sound at most times of year
- Intriguing water, light and sky effects
- J-shaped form of falls carved from basalt
- Impressive scale
- Unique industrial context
- A place of cultural gathering, trading and industrial innovation over time
- Nationally significant cultural and natural history
- Nationally significant interpretive opportunities
- Unique habitat and wildlife location around basalt outcroppings
- Fish ladders and lamprey ramps to enable anadromous fish migration
- Source of hydropower as clean energy generation
- Dramatic terminus to the lower reach of the Willamette River

### Constraints

- Small (if not disappointing) volumes of water in highest tourism months of year
- Setting not pristine compared to other Pacific NW waterfalls
- Man-made dam edges and fish ladder structure are aesthetic issues
- Service and operational requirements of PGE
- Visitor and boating safety concerns

## Opportunities to Connect the Region

# To enliven the site, the project will connect to regional transportation networks.

### Transit Connections

It is understood that future transit service will be planned and implemented over time as Oregon City and the region continue to grow. Currently, TriMet bus lines connect at the Oregon City Transit Center located on Main Street, six blocks north of the Blue Heron site.

### Vehicular Connection

Two vehicular connections will link the project site to Oregon City. The connection at the Main Street intersection of McLoughlin Boulevard is both symbolic and central to the identity and success of the site's redevelopment, reclaiming the site's historic relationship to Oregon City and expanding the downtown business district. The secondary vehicular access point also falls upon McLoughlin Boulevard, but further west along the historic right-of-way of Water Street. It is likely that this secondary vehicular access point will not be signaled, and will be limited to right-in, right-out access. It is understood that future transit service will take advantage of these two vehicular connections. The potential of tour bus access, drop-off, and parking should be considered as part of the site's Development Strategy,

and may require consideration of off-site strategies.

### Pedestrian Connections

Pedestrians will have multiple ways to access the project site.

Pedestrian access to downtown Oregon City will parallel vehicular access described above. The Main Street intersection at McLoughlin Boulevard will serve as a main urban gateway to the site, safely funnelling pedestrians back and forth between the downtown business district and the site. The second main pedestrian entry point to the site follows along the waterfront of Oregon City, and is a likely place to tie into the Riverwalk. Both of these connection points build upon the fabric of the downtown Oregon City street grid.

Flanked to the east by the UPRR Line, McLoughlin Boulevard, and the bluff, the site is cut off from uptown Oregon City neighborhoods. The Design Collective will study possible locations for the pedestrian and bicyclist overpass connection described in the Vision document, examining the potential of associating the overpass with one of the

bluff's numbered cross streets, Tumwater Drive, the McLoughlin Overlook or other locations inbetween. This upland connection may also be extended, connecting to Canemah atop the bluff.

The south side of the site has single point of pedestrian connection, which runs along the east bank of the river. It will connect the village of Canemah and Old Canemah Park to the core of the site to the North. A seamless cross over of the UPRR line and potentially McLoughlin Boulevard is required for safe travel.

### Bike Connections

While pedestrians will be given free access to the routes described, bicyclists will be concentrated on a subset of main pathways through the site, limiting conflict and ensuring safe travel. At this time, it is understood that the southern link between the site and Canemah will support bicycle traffic, the to be determined location of the bluff connection will also support bicycle traffic. Bicycle connections to the North currently exist along Main Street until 15th street, and connect to the Clackamas River Trail, and then the Trolley Trail to the Springwater Corridor.

### Water Trail Connection

The Willamette Water Trail is a recreational boating route designed for canoeists and kayakers to experience the varied terrain of the Willamette Valley from the water. The falls, dam, and industry present a challenging break in the 187 mile path. Currently boaters must portage around the area by pre-arranged vehicle, rather than by foot. With water safety and appropriate weather conditions considered, the water trail routed along the east bank could be designed to link into the Canemah Pedestrian/Bike path. Site redevelopment might include opportunities for portage, light craft launch below the falls, or overnight lodging for multi-day river trips. Currently, boating facilities include a public dock on the West Linn side of the river as well as launch points at Clackamette Park and Sportcraft Marina to the north and south of the I-205 bridge, respectively.

### Water Taxi Connection

The Design Collective may recommend that a future water taxi connection be considered to support water access to the site and multi-modal transportation.

# Opportunities on Site: The Falls and PGE Dam Area

## Hawley Powerhouse Foundation

Approximately 32 x 85 ft. structure and platform

### Opportunities

- A 360-degree view to the river, falls, lagoon, bluff and larger regional landscape
- Long views northward to the Arch Bridge
- Terminus of a “pilgrimage” to the falls
- Interesting perch for wildlife observation
- Best place to “feel the mist”
- Tremendous re-use potential
- Place to experience seasonal power and sound of falls
- Views of interesting industrial paper mill operations across the river
- Potential for cultural and historic interpretation
- Stout; ability to withstand flood inundation
- Grating offers views to the lower levels of the structure

### Constraints

- Within the 1996 floodplain
- Needs improvements for access and safety
- Wet and windy
- Access dependent on PGE-owned dam



## PGE Dam

Approximately 1230 ft. in length, width varies

### Opportunities

- Tremendous public access potentials for viewing the lagoon, river and falls
- Potential for cultural and historic interpretation
- Impressive scale
- Provides definition of the urban edge

### Constraints

- Within the 1996 floodplain
- In need of significant improvements for access and safety
- Wet and windy
- Access dependent on PGE owned dam
- Potential for interference with dam maintenance and operations
- Narrow



## Clarifier

About 160 ft. in diameter

### Opportunities

- Highly adaptable; flexible potential for re-use or habitat
- Significant industrial structure
- Unique site element to interpret
- Impressive scale and size

### Constraints

- Blocks the floodway
- Occupies valuable space for habitat restoration
- Difficult and costly to remove
- Difficult to restore native basalt after removal





## Basalt Rock Outcropping Below Dam

### Opportunities

- Original bedrock
- Potential for habitat enhancement of unique, specialized plant communities
- Collects woody debris
- Curious mix of industrial site artifacts and geology
- Area of dynamic seasonal changes and dramatic light effects
- Can be viewed from a number of locations on the dam

### Constraints

- Pools trap native fish after inundation
- Safety concerns
- No public access (exception given to tribes with fishing rights)



## Intake Basin

**Approximately 160 x 680 ft.**

### Opportunities

- Creates a dramatic reflecting basin
- Potential for tailrace invigoration

### Constraints

- Water quality is poor due to restricted flow
- Invasive water plants and algae in summer
- Accumulates deadfall and debris
- Difficult to access for service and maintenance
- Limited water access with operating spillway present
- Safety concerns



## Mill E (Mill Offices)

Approximately 135 x 175 ft. plus 58 x 116 ft.

### Opportunities

- Potentials for re-use
- Offers outstanding views of lagoon, river and falls
- Terminus structure of Main Street
- Potentials to offer or support a water-related use
- Visible location from McLoughlin Blvd. and railroad
- Existing buildings that could not be permitted now

### Constraints

- Within the 1996 floodplain
- Limited access
- Dead-end location
- Sound from Hwy 99 and railroad
- Limited opportunity for public open space



## Base of Dam/Terrain Below Buildings

### Opportunities

- Experience base of dam
- Seasonally wet with springs
- Curious cave-like space under buildings
- Interesting sea of pilings
- Potentials for vertical linkages
- Potentials to experience site down to bedrock
- Potentials for daylighting and introduction of habitat

### Constraints

- Dark and weird
- Falls within flood overlay district
- Safety concerns behind dam wall and below upstream water level.

## Hawley Building

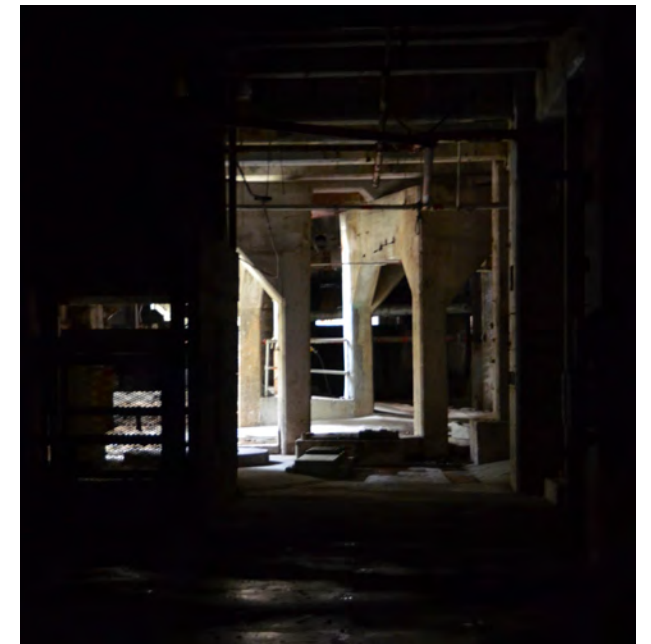
Approximately 80 x 80 ft.

### Opportunities

- Historically significant
- Potentials for re-use
- Offers outstanding views of lagoon
- Focal point of multi-building cluster

### Constraints

- Within the 1996 floodplain
- Requires structural work



## Main St. Terminus

### Opportunities

- Unique place surrounded by interesting structures and significant site artifacts
- First glimpse of water from Main St.
- Multi-directional, pivotal space
- Shift of site grid geometry
- Potential for vertical link to bluff
- Potential for vehicular/fire truck turn-around
- Spatial containment creates threshold
- Direct trailhead and connection to Canemah
- Foreground to historic Hawley Building

### Constraints

- Restricted size due to surrounding structures and artifacts
- Sound from highway and railroad tracks
- Within 1996 flood plain
- PGE must maintain truck and heavy equipment access to spillway for maintenance and emergency response measures.



## Main Street

**Approximately 1240 ft. long, width varies**

### Opportunities

- Broad, wide north-south corridor through length of site
- Framed on east side by industrial buildings
- Provides foreground for large, significant historic structures
- Contains original industrial rails
- Carries infrastructure
- Valuable for cultural interpretation

### Constraints

- Old infrastructure
- Partially within 1996 flood plain
- No separation of vehicles and pedestrians
- May have limited ability to support trees



## Woolen Mill Foundation

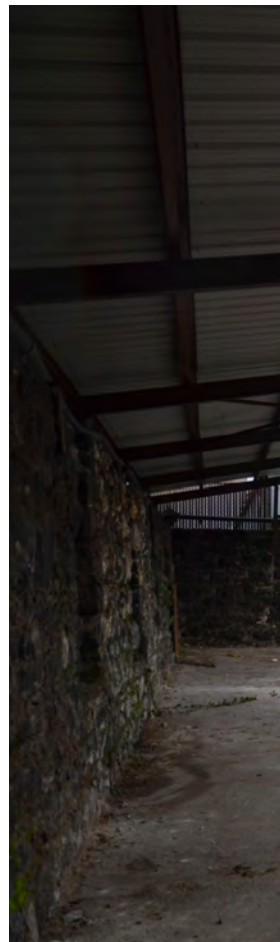
Approximately 55 x 250 ft.

### Opportunities

- Significant site open space
- Creates sense of arrival
- Highly adaptable flat ground plane for re-use
- Interesting architectural context and perimeter
- Contains interesting industrial fin walls, partial foundations and site artifacts
- Memorable, historic industrial structure
- Unique site element; valuable for cultural interpretation
- Impressive in size and scale
- Quiet space buffered from noise sources
- Archaeological dig site, education
- Potential for habitat improvement

### Constraints

- Questionable structural capabilities for new building
- Little habitat value
- Within 1996 flood plain
- Fixed geometry
- Archaeological dig site and future regulation
- Invasive, weedy plants



## Main St. Entry

### Opportunities

- Straightforward connection to Main St.
- Open, flexible site entry
- Valuable for cultural interpretation
- Signalized access across McLoughlin Blvd could be improved with pedestrian realm upgrades

### Constraints

- Currently the only site entry except for northwest parking lot
- Busy intersection operating at capacity
- Near entry of tunnel and curved roadway



# Opportunities on Site: Main Street Area



## Water Street and McLoughlin Blvd. Intersection

### Opportunities

- New access to site and parking
- New views into site
- Turning movements possible: right in, right out
- Potential to relieve site access

### Constraints

- Limited turning movements: no left turns due to curve and traffic volume
- Poor pedestrian crossing potentials



## Rail Spur Area

### Opportunities

- Linear open space leading to covered areas behind industrial buildings
- Unique place surrounded by interesting structures
- Potentials for alternative site circulation
- Possible re-use of existing track way
- Visible location from McLoughlin Blvd. and railroad tracks
- Has potential for rail-related transportation link
- Departure from industrial grid
- Potentials for cultural interpretation

### Constraints

- Noise from McLoughlin Blvd. and railroad tracks



## Large Service Yard

**Potentially 265 x 320 (including carpentry shop and other small buildings)**

### Opportunities

- Large fill area behind the Pipe Gallery
- Significant site open space on site
- Well proportioned space
- Creates sense of arrival
- Broad overlooks to the river
- Structural deck has capacity for re-use
- Highly adaptable, flat ground plane
- Interesting architectural context and perimeter
- Has potential for vertical linkages
- Contains interesting industrial fin walls, partial foundations and site artifacts
- Potentials for cultural interpretation

### Constraints

- Largely a flat space built over structure
- No habitat value
- May have limited ability to support landscape elements such as trees



## Opportunities on Site: Riverfront Area

### Mill O

**Approximately 80 x 230 ft.**

### Opportunities

- Central location
- Large, open interior with heavy timber and steel framing
- West end of building has views of river
- Mill O annex is the only standing structure on site that is related to the Oregon Woolen Mill, one of the first industrial facilities on the property.

### Constraints

- Structural condition
- Within Floodplain



## Mill H Tailrace Outfall

### Opportunities

- River-related space
- Industrial cove
- Grotto tailrace outfall
- Seasonally wet with springs
- Curious cave-like space leading under buildings
- Has potential for vertical linkages
- Potentials to experience site down to bedrock
- Adjacent to boiler plant
- Interesting site artifacts and iconic smoke stacks

### Constraints

- Dark and weird
- Falls within flood overlay district



## Pipe Gallery (Pipe Tunnel)

**Approximately 24 x 390 ft. long**

### Opportunities

- Riverside north-south corridor (about 400 ft. long) through central portion of site
- Strong and somewhat adaptable for new uses
- Curious cave-like space with potential for more openings
- Simple structure with clean geometric form
- Potential for cultural interpretation

### Constraints

- Dark, wet and weird
- Falls within flood overlay district
- Extensive urban edge
- Limits habitat restoration
- Blocks the floodway
- Costly to remove



## Tailrace at Paper Machine #3

### Opportunities

- River-related overlook that leads to riverbank
- Located at terminus of east-west connection to Main St. (old Third St.)
- Unique place surrounded by interesting structures and significant site artifacts
- Industrial “cove”
- Grotto tailrace dam and outfall (connection to underground box flume?)
- Curious cave-like space leading under decks and buildings
- Exhibits three-dimensional site characteristics
- Potentials for vertical site linkages and experience site down to bedrock
- Potentials to adapt, remove or modify small buildings, tanks, foundations, decks
- Potential to re-use substantial industrial bulkhead for river landing or viewpoint
- Interesting sense of spatial enclosure
- Offers sound of water
- Presence of water in all seasons
- Valuable for cultural interpretation

### Constraints

- Dark, wet and weird
- Falls within flood overlay district
- Untreated municipal stormwater outfall



## North Site Riverbank and Dock

Approximately 690 ft. long; width varies from 50 to 130 ft.

River width varies from approximately 270 to 380 ft. wide

### Opportunities

- Great potential for upland and riparian habitat restoration
- Dynamic, swift, active stretch of river in all seasons
- Industrial bulkhead provides some protection and a cove
- Interesting seasonal water level variation
- Some native basalt outcrops remaining
- Potential for dock improvements
- Located near terminus of east-west connection to Main St. (between historic 3rd and 4th streets).
- Valuable for cultural and natural interpretation

### Constraints

- Water safety concerns; somewhat difficult place for water contact
- Swift current for boat maneuvering and docking
- Untreated municipal stormwater outfall
- Wide seasonal variation in water elevation (1996 flood level 50.69')
- Steep riprap fill bank

