Public Spaces | Public Life
for Seattle's South Downtown

2008 Scan|Design Interdisciplinary Master Studio
University of Washington

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Connections
Alleys
Alleyways
Stations
Lidded

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Acknowledgements

Scan|Design by Inger & Jens Bruun Foundation
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Todd Vogel, International Sustainablilty Institute
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Seattle Department of Planning and Development
U.W. College of Architecture and Urban Planning (College of Built Environments)

Foreword

Through the generous sponsorship of the ScanlDesign Foundation, our graduate planning, architecture and landscape architecture students at the University of Washington have experienced a rare opportunity to work together in an interdisciplinary design studio environment. The class was able to travel together to Denmark and Sweden, work with the internationally renowned Copenhagen firm of Gehl Architects, and apply the lessons and inspirations of human-oriented design to Seattle's South Downtown. Together we walked Copenhagen's pedestrian network, sketched and analyzed the city's public spaces and traveled on the city's separated bicycle tracks to experience its renewed neighborhoods, innovative architecture, repurposed waterfront and restorative parks and gardens. The class toured a variety of unique housing projects in Denmark and Sweden--historic, new and planned—with a focus on understanding sustainable practices, and examined the design treatment of space that contributes to urban conviviality and civic sensibility. Guided by the staff of Gehl Architects, Copenhagen's bicycle planners, and Malmö's Mayor and Western Harbor designers, the class gained insight into these cities' historical development and contemporary planning issues, design approaches to successful projects, and personal Danish perspectives.

We brought these collective experiences back to Seattle, to consider how Seattle's pedestrian spaces can create a better and more ecological urban environment for the city. Working with data generated through Gehl Architects' Public Spaces Public Life project for the City of Seattle, along with additional analyses and recently completed plans for Seattle's South Downtown, the design studio focused on five study areas at different scales in the south downtown area of the city. The sites ranged from the entire Pioneer Square district between the transit hubs at Union/King Stations and Coleman Ferry Dock, to the alleys of the district, to the two-block area over the rail tracks north of the train station and the station area itself. Students from all three departments worked together as interdisciplinary student groups, and created both group contextual plans for their larges sites as well as designed individual projects for individual sites. The students developed and re-examined their work through several cycles over the course of ten weeks, interacting with Louise Grassov of Gehl Architects and outside professional reviewers as well as through faculty and peer review. Their final proposals are represented on the pages within this document. We sincerely hope that it will suggest new ideas and possibilities for the City of Seattle, and that it might be useful in illustrating Gehl Architects' recommendations for cultivating "life between buildings" in the city's downtown.

We have many people to thank for this remarkable opportunity. Without the support of the ScanlDesign Foundation this rich set of shared experiences could not have reciprocated, and we are sincerely grateful for this solid pedagogical opportunity for our students. We are deeply appreciative of Louise Grassov's clear teaching and helpful critique--and her ability to adapt so easily to UW ways and Seattle times--and to Helle, Lars, Lærke and Kristian at Gehl Architects for the fantastic lectures and tours in Copenhagen. Todd Vogel has been a fountain of encouragement, coordinating with Gehl's project for Seattle and contributing his understanding of Gehl's methods and the needs and opportunities of the neighborhood. We also very much appreciate the City of Seattle's interest and support, including Barbara Gray, Gary Johnson and Robert Scully. Finally, we couldn't have done it without our tireless and able teaching assistant, Liz Stenning, who has kept us on track for the last many months, in Copenhagen and in Seattle.

We thank you all, and hope that this work will make a difference not only in the education of our students, but also in the positive, sustainable evolution of our city's public realm.

Nancy Rottle, Associate Professor, Landscape Architecture

Kathryn Merlino, Assistant Professor, Architecture

Downtown Seattle Pedestrian Study

Green Futures Lab Data Collection

Before our studies began, the Copenhagen firm of Gehl Architects initiated their Public Space l Public Life project for the City of Seattle to improve the city's Downtown pedestrian realm. As part of this work, the University of Washington's Green Futures Lab (GFL) conducted extensive baseline surveys on the physical qualities of the Downtown environment, and the human uses of it. For one week in July 2008, a large corps of University of Washington students counted, observed, mapped, and interviewed pedestrians throughout downtown Seattle.

In addition, over the course of several months two GFL interns thoroughly mapped the experiential qualities of the 100+ block district. This data contributed not only to the studio's work, but also to Gehl Architects' final recommendations and report. The 40 + maps they generate will establish a baseline snapshot for the city against which the results of new design interventions may be measured.

1st Ave S and Main St.

February '08
- moving pedestrian counts

July '08
- moving pedestrian counts
- survey of stationary pedestrian activities in urban open spaces
- demographic interviews

January '09

pedestrian data collection

Gehl final report and recommendations

July '08 Pedestrian Counts

July '08 Demographic Interviews

Downtown Seattle urban quality and conditions mapping: GFL Lab interns created over 40 maps.

Left map: Canopies on Buildings
(from field data collection and mapping)

Copenhagen Study Tour

September 7-21: Master Studio Study Tour

Masters students from the University of Washington's College of Architecture and Urban Planning traveled to Copenhagen, Denmark in September 2008. Students were immersed for two weeks in the city's and region's design and planning strategies. Absorbing the famous Danish networks of public space and the culture's emphasis on bicycle and pedestrian planning. The trip to Copenhagen was generously supported by the ScanIDesign Foundation.

Students came from three disciplines: Architecture, Landscape Architecture, and Urban Planning & Design. In Copenhagen, these students were led by the renowned urban planning consultants Gehl Architects, who introduced the group to their working methods. Other highlights included tours of redeveloped neighborhoods, the waterfront, plazas, and parks.

After returning from the trip, the group continued working in a studio course to study and design public spaces in Seattle's South Downtown, with the goal of creating a socially vibrant, ecologically healthy public realm.

Master Studio Group at Amager Strand

Gehls' working methods exercise

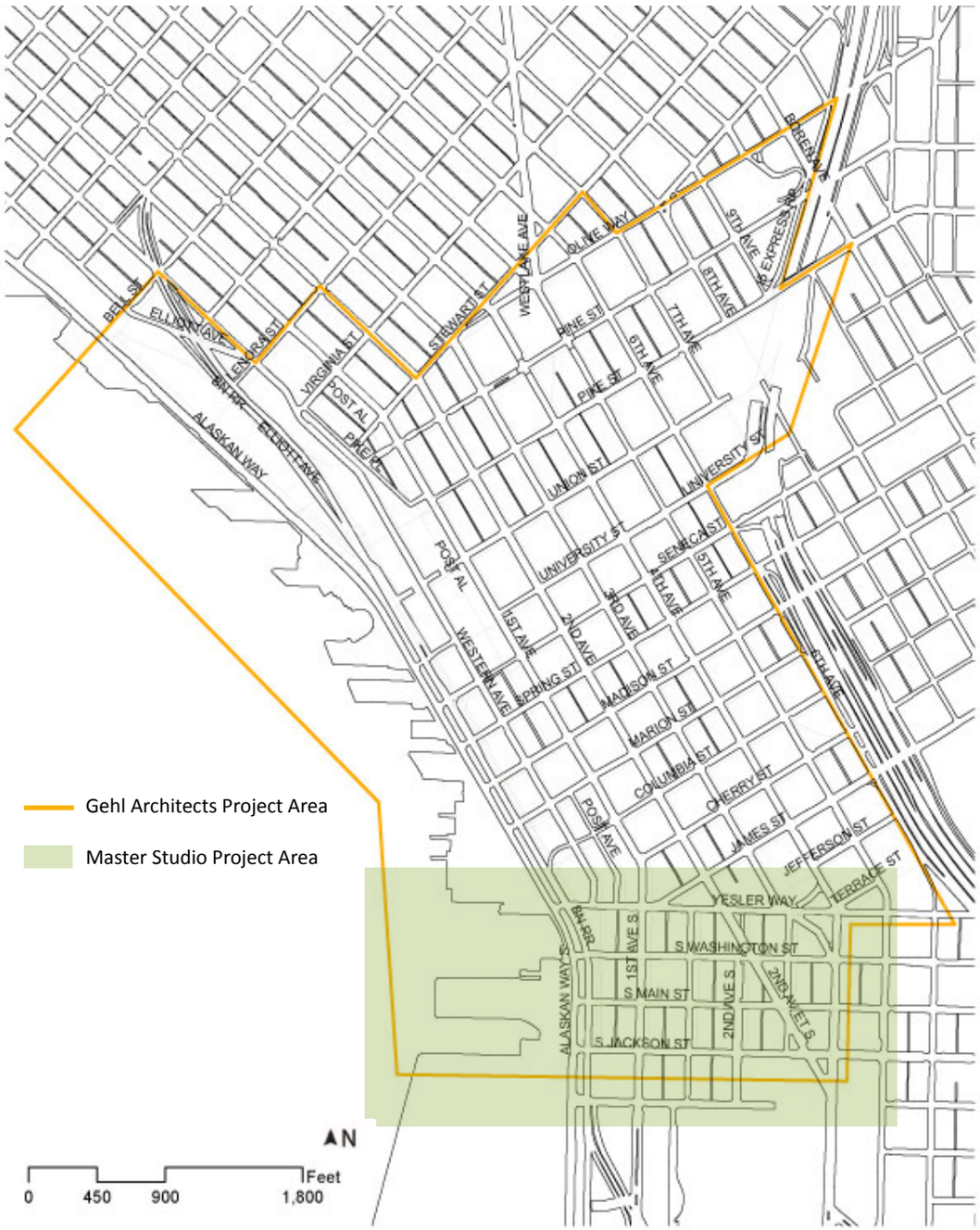
sketching

waterfront bicycle tour

Studio Project

The project area for the UW Master Studio consists of the southern portion of Gehl Architects' project area, denoted in green on the map below. This area was selected due to its significance as a transportation hub and its potential for quality pedestrian space.

Project Area



Seattle

Project Boundaries:

West - Waterfront
East - 5th Avenue
North - James Street
South - King Street

Past + Future

Early South Seattle

Long before the Euro-American settlers arrived in the Pacific Northwest, the Coastal Salish people had developed a complex culture based on fishing, hunting and gathering around the area of present day Seattle. In 1853, the south downtown area saw the beginning of the Northwest's first commercial enterprise, Henry Yesler's sawmill, which was constructed on the downtown waterfront in 1853. The completion of the first transcontinental railroad in 1869 and in 1883 the city finally achieved connection to national rail lines at the south end of the city. Thereafter the surrounding area slowly grew to serve as the city's center of commerce and industry.

On June 6, 1889, Seattle's commercial district burned to the ground. In place of the two and three-story wood buildings, a four to six story city was constructed over the old city, and was created in fire-resistant stone, brick, and heavy timber with cast iron and terra cotta detail to match current architectural trends. In addition to the architectural upgrades, streets were widened and paved. A thorough regrade of the downtown area made both an interesting temporary underground area from the old street grade, but also built functional water and sewer systems. In certain areas, the first floor of the old city was placed directly underneath the new modern city, creating an 'underground Seattle' that in many ways stayed in use for years as a shopping area and additional commercial space. Soils from the regrade provided fill to transform the extreme tidelands into buildable spaces.

Aftermath 1889 Fire
source: University of Washington Special Collections

Underground Seattle

The new and improved city benefited greatly at the turn of the century from the Alaska Klondike gold rush. Prospectors were outfitted from sellers in the city, and prosperity and population continued to grow. With new steel framed buildings and elevators, the commercial district moved both upward and northward, beginning with the Smith Tower in 1914, on the northeastern edge of our site on Yesler Avenue. It remained the tallest building in the city until 1969 when new, taller commercial buildings began to rise in the new commercial district north of Pioneer Square.

In the mid 1960s, the preservation movement began to take hold, and the first historic district in the city was created in Pioneer Square. In the 1970s, this set up regional guidelines for the preservation, rehabilitation and conservation for development around historic districts, and the area became a popular region for tourism and entertainment. Now, with the additions of the sports stadiums, rehabilitation of two train stations and light rail station, and new residential developments, this district in South Downtown is seeing a resurgence of population and activity. With careful attention to its rich natural, cultural and architectural history alongside sustainable urban growth, the area can be a place thriving with public spaces for a rich public life.

Future Plans

Planning efforts in the Pioneer Square neighborhood stem from the South Downtown Study, a project of the Mayor's Center City Seattle strategy. The Center City strategy focuses on the Seattle downtown and the surrounding nine neighborhoods. The Livable South Downtown Plan, May 2008 focuses on Pioneer Square, Chinatown/ International District, Little Saigon, the stadium area, and the predominantly industrial area south of Chinatown. The primary goals for the Livable South Downtown plan include:

- Housing and job stimulation through zoning and land use decisions
- Respect neighborhood character and plans
- Promote integrate mixed-use development
- Enhance quality connections between neighborhoods and downtown
- Encourage economic vitality
- Promote environmental sustainability
- Support regional services while maintaining community goals

Dumpster Free Alley

Future Developments

The following developments are in the development phase or recently implemented.

- Housing: North Lot, Yesler Terrace, Goodwill site developments
- Transportation: King Street Station restoration, Light Rail
- Streets: Waterfront connection improvements, Dumpster-Free Alley Initiative
- Public Realm: Sidewalk Cafe permit expedition, Busker program

King Street Station

Open Space, Vegetation, Habitat

Existing Vegetation and Habitat

- Street trees comprise the majority of vegetation

Potential

- Green development may provide additional vegetation due to LEED or Seattle Green Factor landscape requirements.
- Green roofs and courtyards
- Shoreline habitat restoration at Pier 48

Existing Open Space

- Private and Public Plazas
- Streets and Alleys

Potential

- Parking lots and unbuilt spaces
- Redesigned streets and alleys with dumpster removal
- Lids over rail tracks

Occidental Mall: London Plane tree canopy

Occidental Park: vertical vegetation on building façade

ECOLOGY- Site Vegetation

ECOLOGY- Tree Canopy Species

Topography + Hydrology

Conditions

Seattle's downtown is largely built upon deposits from glacial outwash from the late Pleistocene and subsequent riverine deposits from the Duwamish River. The original shoreline is outlined in the map below, indicating that much of the southern portion of Pioneer Square is built up fill.

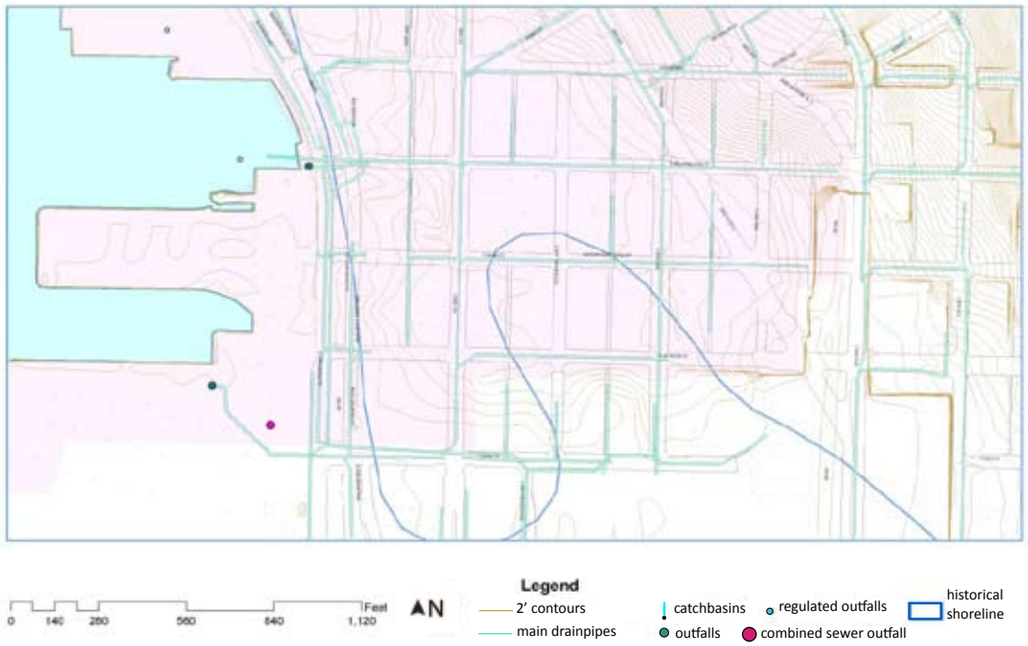
Continued regrades of the city, filling in of the south downtown tidal flats, created a steady outward growth of the city.

Beacon and First Hill from Tideflats
source: University of Washington Special Collections

TOPOGRARHY

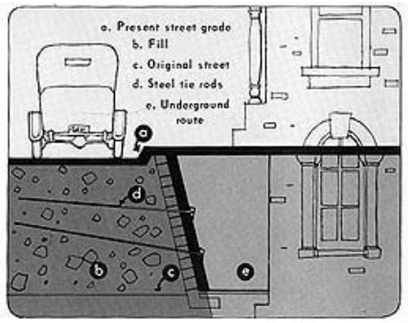
Stormwater Control

Under normal conditions, all runoff water in the site area falls into catchbasins. Much of it joins combined sewer outfalls (CSOs) and heads north to the West Point treatment plant. In heavy storm events, these CSOs empty sewer and stormwater from the shaded area directly into Elliot Bay via the CSO beneath Pier 48. Some of the area regularly drains polluted stormwater into Elliot Bay through stormwater outfalls.



Underground Infrastructure

During the rebuilding of Seattle, the streets were filled and underground sidewalks were left open and accessible for occupants. Now used primarily for underground tours, the city below has left a complex system of underground spaces. These areas do no leave room for stormwater infiltration throughout the entire district.



Underground Seattle
source: City of Seattle

Transportation and Circulation

The Pioneer Square neighborhood currently hosts several transportation systems. The site has the potential to act as a major transportation hub for the entire city. Coordinated ticketing and wayfinding would enable tourists and residents to easily navigate from one system to another.

Automobile: The site is surrounded by two major freeways, Interstate 5 and the Alaska Way Viaduct. Both serve as the two major north/south highways for automobiles and busses.

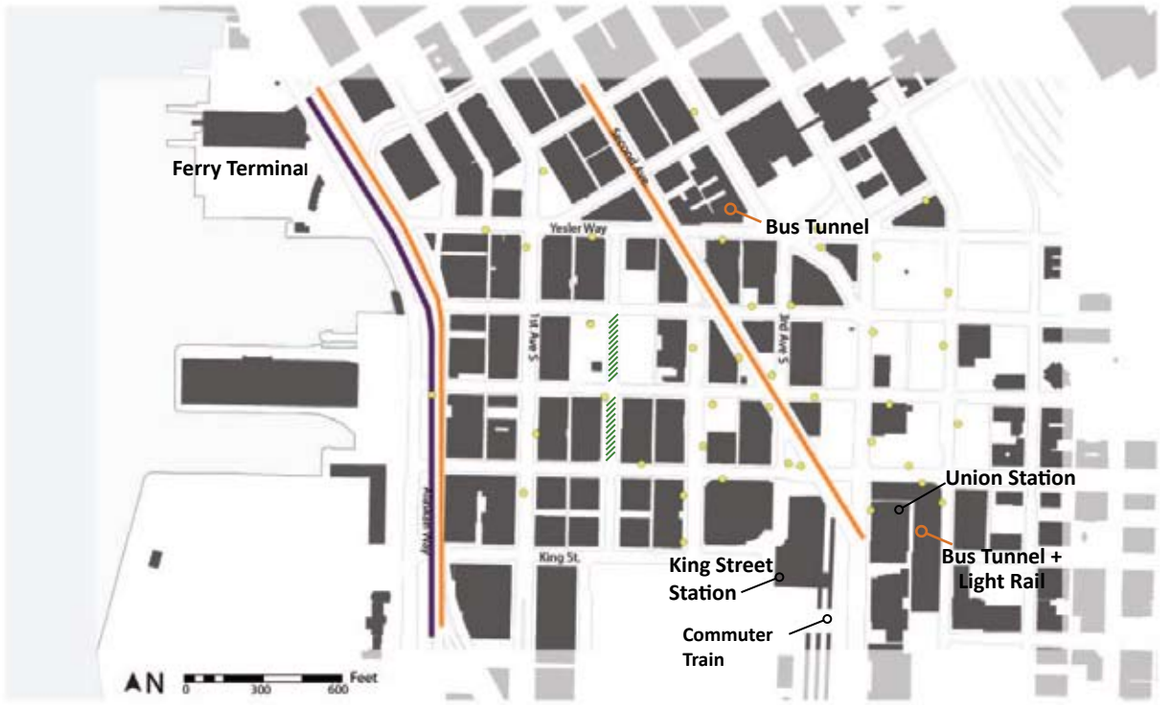
Bus: Numerous bus stops are located throughout the neighborhood with local and regional service. Additionally, two underground bus tunnel access locations easily connect the International District and Pioneer Square to the center of downtown.

Light Rail: Light rail serving Seattle will be accessed through the International District/Union Station bus tunnel, beginning in early 2009.

Train: Long distance train travel is served by Amtrak located in King Street Station, which is currently being remodeled and restored to its original grandeur. Commuter train travel is served by Sound Transit accessed just north of King Street Station.

Ferry: The Colman dock located at Alaskan Way and Marion is the ferry terminal for service to Bainbridge Island and Bremerton. Thousands of commuters arrive at and depart from the city daily.

Bike: Designated bike lanes run along 2nd Ave S and Alaskan Way. The Bike Station, a bike repair and storage facility, is located on 3rd Ave S, north of S. Jackson St. With the 2007 Bicycle Master Plan, further improvements are planned for bike facilities throughout the entire city, including the bike trail south of the study area.



Union Station Plaza: Bus Stop

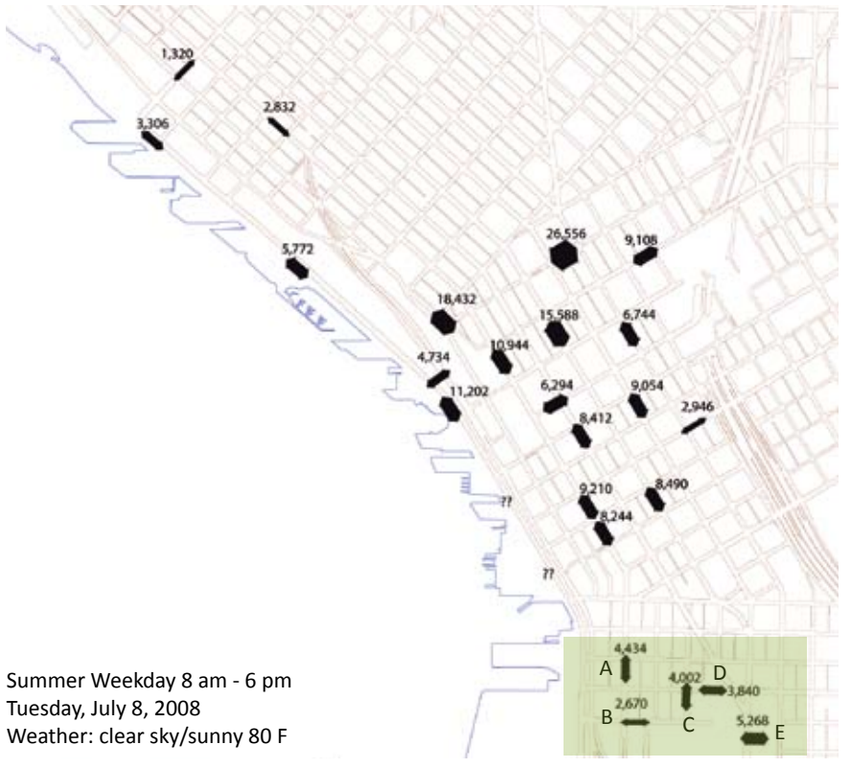
Waterfront bike path: cyclist

Pedestrian Circulation

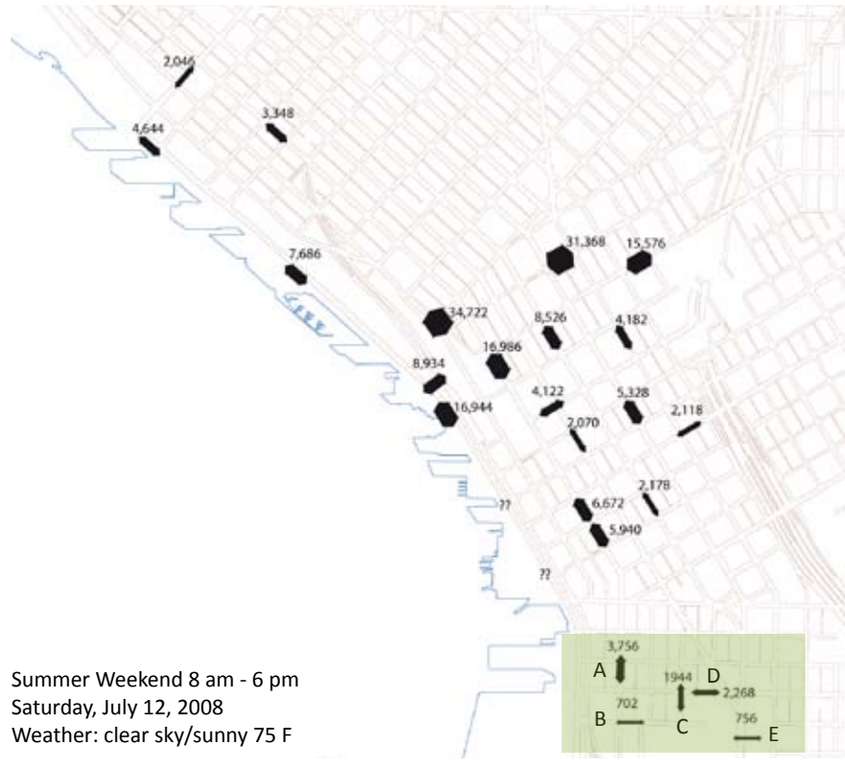
Pedestrian Counts

Results from the summer 2008 pedestrian counts (see p. 2) indicate that downtown's pedestrian network is fragile, but has excellent potential. Counts tend to be lower in the southern portion of downtown. The number of pedestrians ebb and flow significantly, due to stadium events.

Ferry Terminal pedestrian bridge



Summer Weekday 8 am - 6 pm
Tuesday, July 8, 2008
Weather: clear sky/sunny 80 F



Summer Weekend 8 am - 6 pm
Saturday, July 12, 2008
Weather: clear sky/sunny 75 F

A. 1st (btw. Marion & Columbia) | **B.** King Street (btw. 1st & Occidental | **C.** 2nd (btw. Jackson & King) | **D.** Jackson (btw. 2nd and 3rd) | **E.** 4th (at pedestrian bridge)

Stationary Mapping

Pedestrians at parks and plazas throughout the downtown were observed and mapped to determine the predominant activities in the park. The following results show trends in usage at 8 parks and plazas in Pioneer Square on a summer weekday with warm temperatures and clear sky.

Further analysis can be found in Gehl Architects' Public Space|Public Life report for Downtown Seattle.

Park/Plaza	predominant activities	sample times totals (10 am - 8 pm)	peak usage hours
City Hall Park + Prefontaine Place	lying down	178	2 pm
Union Station Plaza - north	sitting on benches	39	8 pm
Union Station Plaza - east	sitting on benches	122	12 pm and 8 pm
King County Plaza	sitting on cafe chairs	21	12 pm
Pioneer Square Park	standing	168	10 am and 8 pm
Occidental Park	sitting on cafe chairs	217	12 pm
Occidental Mall	sitting on cafe chairs	72	12 pm
Waterfall Park	sitting on cafe chairs	40	12 pm

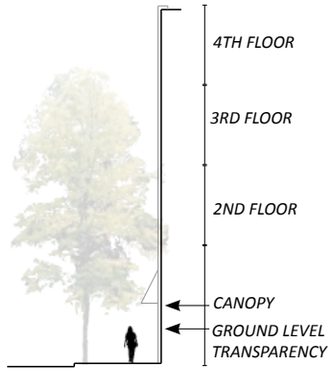
The Pedestrian Environment

Building Stock, Facade Quality

The Pioneer Square neighborhood has numerous historic buildings, most of which were constructed in the post-fire era. Most are four to six stories in height, constructed of stone or brick and decorated with terra cotta and cast iron detailing, typical of the end of the century. Much of the ground floor is activated with retail and restaurants. The following is a sample of students' assessments of building façades using Gehl Architects' 12 Quality Criteria (see p. 14 for explanation of the 12 Quality Criteria).

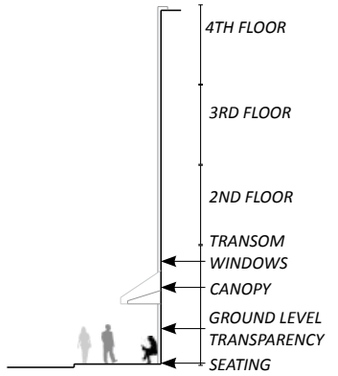
1st Ave S

PROTECTION	*AGAINST CRIME AND VIOLENCE: transparency allows passive surveillance.*
	AGAINST UNPLEASANT SENSORY EXPERIENCE : canopy provides a shelter from weather.
INVITATION	*FOR WALKING : Interesting facade, quality surfaces, no obstacles*
	FOR STANDING AND STANDING: attractive and functional edges, defined spots for staying
	FOR SITTING: defined zones for sitting
	FOR VISUAL CONTACT: unhindered views
DELIGHT	*DIMENSIONED AT HUMAN SCALE*
	AESTHETIC & SENSORY: quality design, robust materials, rich sensory experience.
EXPERIENTIAL	*The quality of the brick and stone material of the facade and active ground floor provide stimuli for the pedestrian.*



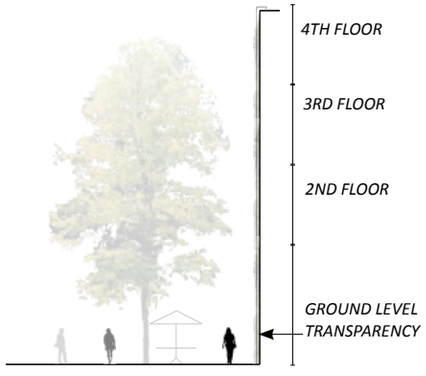
Zeitgeist Coffee

PROTECTION	*AGAINST CRIME AND VIOLENCE: transparency allows passive surveillance.*
	AGAINST UNPLEASANT SENSORY EXPERIENCE : canopy provides a shelter from the weather.
INVITATIONS	*FOR WALKING : Interesting facade, quality surfaces, no obstacles*
	FOR STANDING AND STANDING: attractive and functional edges, defined spots for staying
	FOR SITTING: defined zones for sitting
	FOR VISUAL CONTACT: unhindered views
DELIGHT	*DIMENSIONED AT HUMAN SCALE*
	AESTHETIC & SENSORY: quality design, robust materials, rich sensory experience.
EXPERIENTIAL	*Awning provides protection for sitting while still allowing sunlight for the rest of the sidewalk. Transom windows above the awnings allow interior lights to further activate the street at night.*



Occidental Square

PROTECTION	*AGAINST CRIME AND VIOLENCE: transparency allows passive surveillance.*
	AGAINST UNPLEASANT SENSORY EXPERIENCE : canopy provides a shelter from the weather.
INVITATIONS	*FOR WALKING : Interesting facade, quality surfaces, no obstacles*
	FOR STANDING AND STANDING: attractive and functional edges, defined spots for staying
	FOR SITTING: defined zones for sitting
	FOR VISUAL CONTACT: unhindered views
DELIGHT	*DIMENSIONED AT HUMAN SCALE*
	AESTHETIC & SENSORY: quality design, robust materials, rich sensory experience.
EXPERIENTIAL	*This facade defines Occidental Square on the west side. The vines covering the entire surface provides a humane contrast to the hardscaping of the square.*



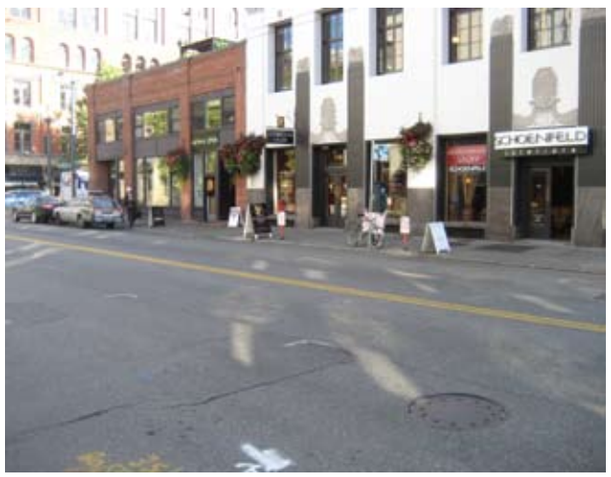
PROTECTION from Vehicular Traffic:

- Railings, green buffers, bollards, and parked cars
- Signalized crosswalks

5th Ave S

PROTECTION from Crime & Violence:

- Many street lamps present, but often lighting too high
- Tree canopy blocks light to street
- Passive surveillance: active ground floors
- Overlap in functions: offices, cafes restaurants, bars, and night clubs



1st Ave S

INVITATION for Walking:

- Wide sidewalks on all streets (4-7 feet)
- Pedestrian-only street along Occidental Ave.
- Accessible to two major transport hubs, stadiums, and waterfront
- Few obstacles inhibit pedestrian circulation
- Sidewalk quality normal with occasional uneven surfaces

Occidental Ave S.

INVITATION for Standing and Staying

- Objects to lean against: Street furniture, railings, and ledges throughout the district

S Jackson St. above train tracks

INVITATION for Sitting

- Benches and cafe seating generally found in parks and bus stops
- Variety of people lend to people watching

Occidental Park

INVITATION for Visual Contact:

- Stadiums, tall buildings, and waterfront create visual wayfinding landmarks, however the Viaduct inhibits clear views of the waterfront
- Few maps
- Abundant street signs

3rd Ave S view south

Precedent Studies

During the initial stage of site analysis, students researched relevant precedent studies. Below is a list of the students' research in the categories of Alleys, Plazas, Transportation Hubs, Lidded Tracks, Green Infrastructure, and Waterfront Connection. The following pages highlight four case studies. Further detail can be found on the Master Studio website (http://courses.washington.edu/gehlstud).

STREETS & ALLEYS:

Melbourne Lanes
Melbourne, Australia
source: Melbourne Today

Post Alley
Seattle, USA
source: UW Master Studio

Pirate Alley
New Orleans, USA
source: www.inetours.com

Chicago Green Alley
Chicago, USA
source: City of Chicago

Cat Street
Tokyo, Japan
source: www.flickr.com

GREEN INFRASTRUCTURE:

Green Streets
Portland, USA
source: City of Portland

Urban Food Chain Project
Los Angeles, USA
source: www.worldchanging.com

SEA Street
Seattle, USA
source: UW Master Studio

Musée du Quai Branly
Paris, France
source: www.greenroofs.com

PLAZAS & TRANSPORTATION HUBS

Pioneer Square Courthouse
Portland, USA
source: Portland Development Commission

Potsdamer Platz
Berlin, Germany
source: www.uploadwikimedia.org

Kogod Courtyard
Washington D.C., USA
source: David S. Holloway/Getty Images

Place de l'Homme de Fer
Strasbourg, France
source: Ben on picasa.google.com

LIDDED TRAIN TRACKS:

Atlantic Yards
Brooklyn, USA
source: www.nolandgrab.org

Federation Square
Melbourne, Australia
source: Bates Smart

WATERFRONT CONNECTIONS:

Embarcadero
San Fransisco, USA
source: www.preservenet.com

Precedent Studies

Chicago Green Alleys Chicago, USA

The City of Chicago started the Green Alley program in year 2006. Since this time, more than 80 Green Alleys have been installed. One of the most significant driving factors in motivating the city to give attention to their alley system was stormwater management. Chicago's alleys are paved in asphalt or concrete that doesn't allow for stormwater to filter back into the ground and flooding is a frequent occurence in the city's alleys.

Green Alley features include:

- permeable pavement (asphalt, concrete or pavers) used the full alley width or in a center trench
- open bottom catch basins to capture water and filter into ground
- high-albedo pavement to reflect sunlight, reducing the urban heat island effect
- recycled materials (concrete aggregate, slag, and recycled tire rubber)

Chicago Green Alley - before
source: City of Chicago

Chicago Green Alley - after
source: City of Chicago

Federation Square Melbourne Australia

In 1996, the Federation Square Management Pty Ltd, the State Government of Victoria, and the City of Melbourne held an international design competition for a new civic square capable of accommodating up to 20,000 people in an open-air amphitheater to be built above the Jolimont railyards. The site was completed in 2002 with a total budget of $440 million, entirely publicly funded. It is colloquially known as "Fed Square."

The deck over the railways is supported by over 3,000 tonnes of steel beams, 1.4 km of concrete 'crash walls' and over 4,000 vibration-absorbing spring coils and rubber padding. It was designed to support sensitive uses, such as galleries, cinemas, and radio and television studios, which needed to be isolated from vibration and noise.

The site functions as a street-like space with flexible uses, which attracts a broad range of civic, cultural and commercial activities. The flow of the site creates a series of exciting and varied experiences that encourage public interactions and promote spontaneous activities.

Federation Square
source: Bates Smart

Place de l'Homme de Fer Strasbourg, France

Place de l'Homme de Fer is located in the city center and serves four of the five existing tram lines. It is sited in the middle of a triangular shaped, pedestrian-oriented square, the design of which was left to a competition designed and constructed by architect Guy Clapot in 1994.

The circular glass roof rises above a pedestrian plaza and defines the public space, while serving as a tram stop for north-south and east-west lines. The roof also helps to lower the scale of the square, acting as a canopy amidst the surrounding six-story buildings.

The square provides a mix of public and café seating. Furniture and paving on the square are pink, white, and gray to coordinate with the façades of surrounding buildings.

The plaza encourages gathering or hosting impromptu celebrations following some sporting events. There is also plenty of foot traffic on the plaza, even in the rain. However, while the plaza seems to be a perfect venue for impromptu or scheduled performances, it does not seem to host buskers or similar activities. More could be done to encourage passive street life like sitting and watching, aside from the sidewalk cafés in one corner.

Place de l'Homme de Fer
source: Ben on picasa.google.com

Pioneer Courthouse Square Portland, Oregon

The Square, often cited as Portland's Living Room, is a downtown focal point, host to major civic events, and a lively meeting and gathering place with a variety of users. It is cited as Portland's most visited site with 26,000 visitors daily and over 300 yearly events. The decision to develop a public square of one city block marked the beginning of a more vibrant and active downtown. Formerly the site of the Portland Hotel then converted to a 2-story parking garage by landowners Julius Meier and Aaron Frank (owners of Meier and Frank Department Store), the Square was redeveloped in 1984, in close relation to the opening of the MAX Light Rail system. Since the Courthouse Square and MAX Light Rail system openings, Portland has become a well recognized site for successful transportation improvement projects.

Pioneer Courthouse Square
source: Portland Development Commission

Site features:

- Public art displays, flowers, trees, walls, and stairs that allow people to engage and use the space.
- Frequent public events
- Coffee shop and food vendors
- Visitors Center
- Small ampitheater
- Keystone lectern: focal speaking point for public gatherings
- Weather machine with daily weather forecasts
- Seward Johnson's Allow Me aka Umbrella Man statue
- Large chessboard

Design Methodology

12 Quality Criteria

During site analysis, students used Gehl Architects' 12 Quality Criteria approach for observing and assessing sites for their pedestrian quality. This qualitative approach complemented the project's quantitative analysis, allowing for students to further understand how pedestrians experience the neighborhood. For examples of how students incorporated this approach, see The Pedestrian Environment on pages 10-11.

Sustainability Metrics

In addition, each team chose a set of metrics to guide and evaluate their overall plans. Students were asked to use or modify an established system to assess the sustainability of their proposals. These assessments can be found with each team's plan description later in the document.

Metrics employed included:

- The Seattle Green Factor
- LEED ND (LEED for Neighborhood Development)
- The Living Site Challenge
- Gehl Architects' 12 Quality Criteria (to which the team added 12 Environmental Criteria)

12 Quality Criteria
source: Gehl Architects

Studio

During the 10-week studio, students added to the site analysis and researched pedestrian-use, employing Gehl Architects' working methods. In addition to using the 12 Quality Criteria, in one exercise called "Life Space Building" students took on different roles: student, artist, business woman, clubber, etc. to establish the required program elements needed to create vital public space that is inviting to all.

Over the course of the terms, students continually refined their initial group and individual design proposals, working between districts and site scales and responding to feedback from guests, peers, faculty and from Louise Grassov of Gehl Architects.

UW Masters students working in Studio

Students using Gehl Architects' working methods exercise

MIdterm Review

Louise Grassov working with students

source: Gehl Architects

Louise Grassov first introduced students to Gehl Architects' working methods while in Copenhagen. Students benefitted from an additional two weeks working with her in Seattle, during the middle and end points of the studio. She provide valuable feedback to guide the development of students' designs for the pedestrian realm.


Introduction Page 1


Analysis Page 5


Design Page 17

Connections

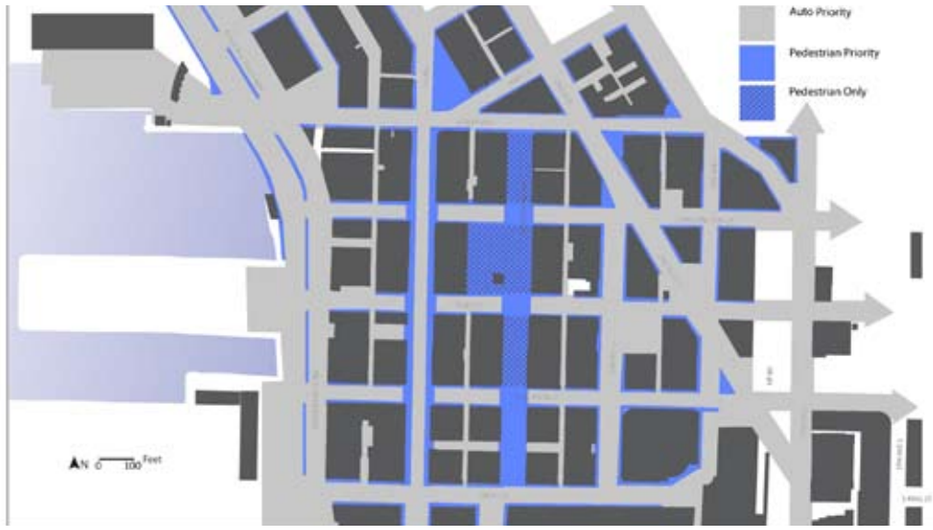
Alleys
Alleyways
Stations
Lidded

CONNECTIONS
Integrated Networks

Students: Brian Fabella | Claire Gear| Seth Geiser | Tori Halligan | Eric Scharnhorst
Orion Stewart| Corinna Welzenbach | Gilbert Wong

Connections: Integrated Networks

Pedestrian Network: Before



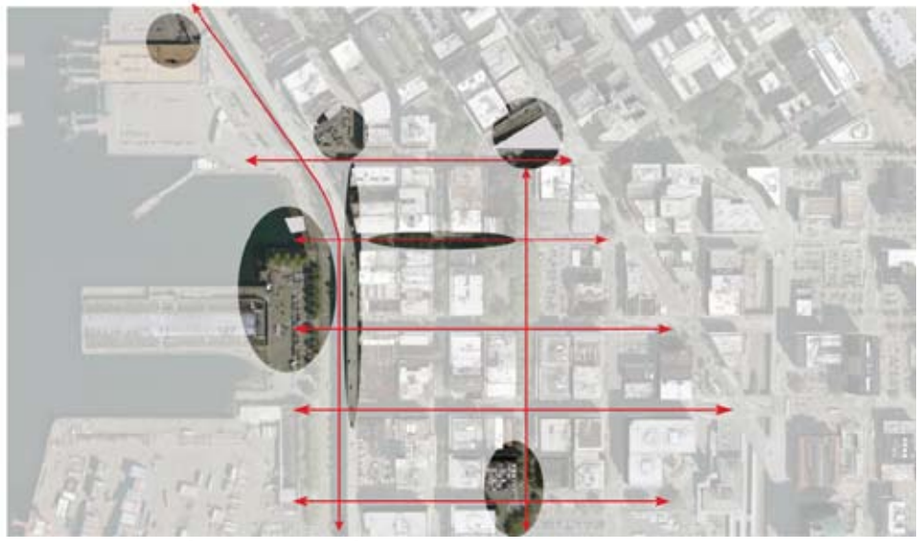
Pedestrian Network: After

Ecological Network

New Green Infrastructure

Ecological solutions: Remove areas of sea wall and create intertidal habitat;network of natural drainage systems to capture rainwater; build Green Streets and Green Roofs.

Project areas



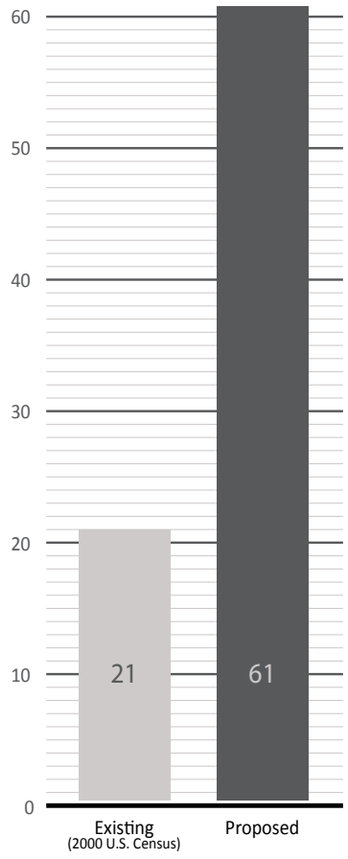
Integrated Networks

The scope of this master plan is the entire study area in the South Downtown/Pioneer Square historic district. The neighborhood can be seen as a incomplete network--a series of disconnected nodes and paths--each with varying characteristics that are often not complementary. Our initial goal to develop a pedestrian connection between the Coleman Ferry Terminal and King Street Station grew into a master plan to fill the gaps between existing nodes and paths, creating a complete pedestrian network.

Our proposal also aims to energize the site as a whole by adding housing units to the neighborhood. Census data and walking audits revealed a relative lack of housing in our study area compared to other neighborhoods in Seattle. Well used urban spaces contain a mixture of functions that is inclusive of housing, a 24/7 land use. Some of our individual schemes explicitly address this goal.

Central to the plan is regeneration of the waterfront. This would be possible with the removal of the Alaskan Way Viaduct. The removal of the Viaduct will result in a vast space of underutilized urban fabric that can be used to tie the neighborhood back together and to the waterfront. Many of the projects presented here take advantage of this opportunity.

All schemes aim to knit together the physical pedestrian environment with transit, cyclist circulation, and ecological patterns. Green infrastructure and pedestrian priority circulation paths connect and integrate the individual schemes, both with one another and the existing fabric of Pioneer Square. Integral to all targeted sites is a focus on the physical pedestrian environment. This includes all urban open space: circulation, façade quality, climatic comfort, safety and beauty. The result is a more than a pedestrian network, it is a comprehensive series of integrated networks.

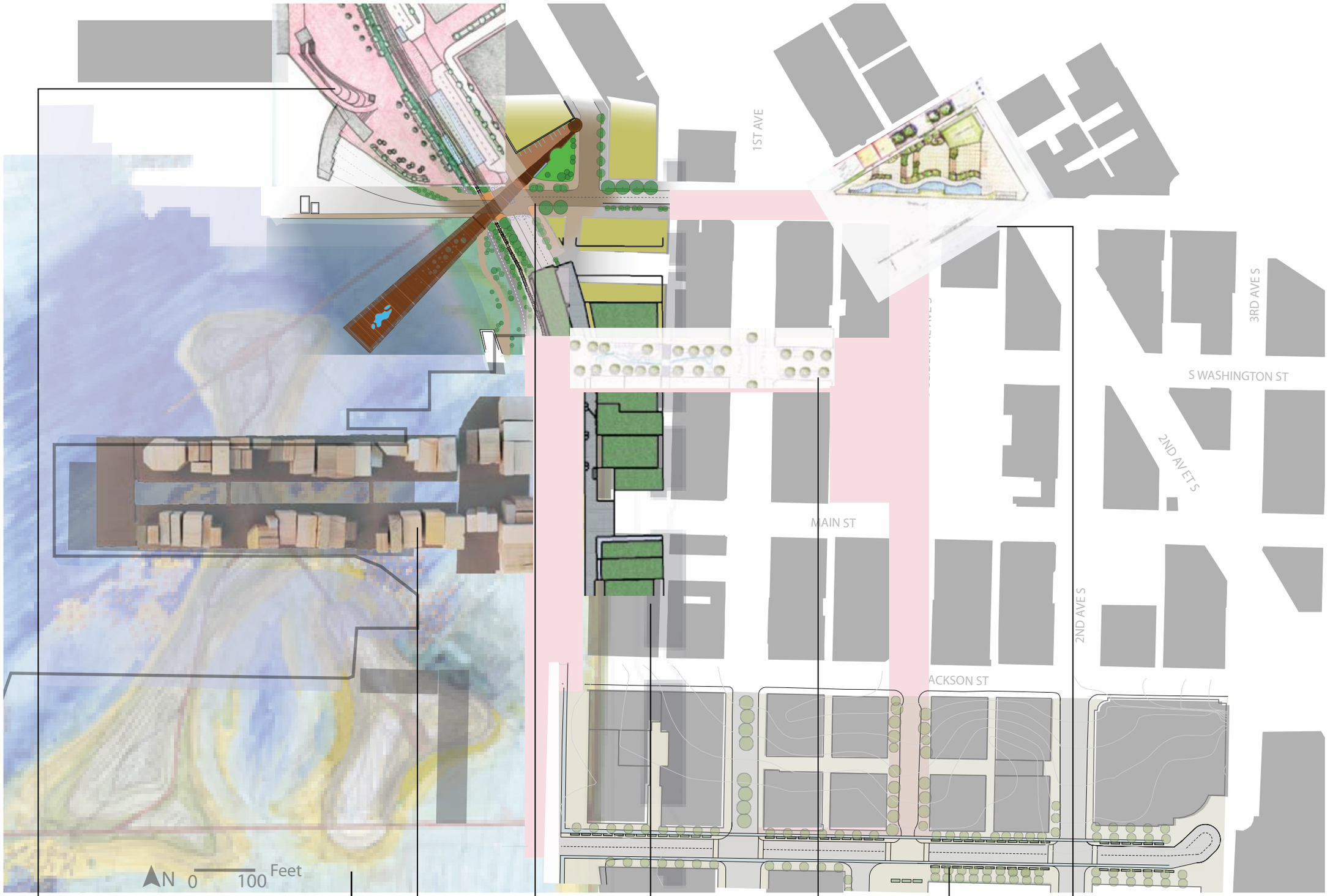


Parcels With Housing

LEED for Neighborhood Development:

- Reduce Urban Sprawl
- Encourage healthy living
- Protect Threatened Species
- Focus on locations that are closer to existing town and city centers
- Focus on areas with good transit access
- Focus on Infill sites
- Focus on Previously developed sites
- Focus on sites adjacent to existing development

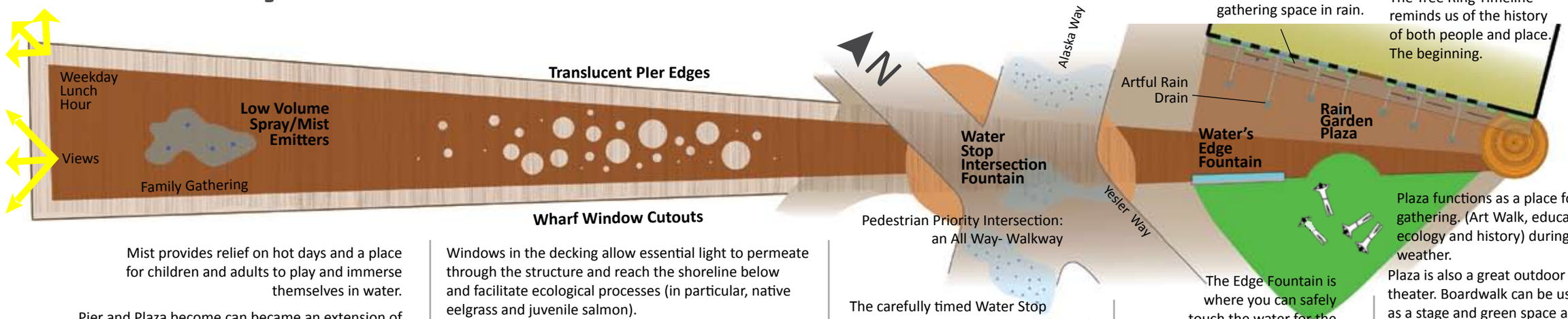
Project Locator



Orion Stewart | Tori Halligan | Eric Scharnhorst | Brian Fabella | Seth Geiser | Corinna Welzenbach | Claire Gear | Gilbert Wong

Yesler Way Plaza: reConnected

Aerial View of Pier+Plaza



Mist provides relief on hot days and a place for children and adults to play and immerse themselves in water.

Pier and Plaza become can became an extension of 1st Thursday Night Art Walk as well as a space for unscheduled performance art.

Windows in the decking allow essential light to permeate through the structure and reach the shoreline below and facilitate ecological processes (in particular, native eelgrass and juvenile salmon).

This spot could be used for on-going reaserch at the university level or with local grade schools.

The carefully timed Water Stop Fountain creates a temporary physical and visual aquatic barrier to cars, allowing pedestrains to safely cross.

CONCEPT

People	Immersion	Observation	Transition	Interaction	Gathering
	SUBTIDAL ZONE	**INTERTIDAL ZONE**			**RIPARIAN ZONE**
Water	Gathering	Restoration	Movement	Edge	Infiltration

Water in the form of mist disperses into the atmosphere, continuing on in the hydrologic cycle.

Water also condenses onto surfaces and into puddles, again revealing its unique characteristics.

The constant cycle of water supports people's activity. The constant use and care by people will support the hydrological cycles present on site and in the area.

This new relationship reveals how place and people have become reConnected.

Water cleaned from soil infiltration and sufficient light allows eelgrass beds to develop and salmon polutaions to return, and therefore a healthier ecosystem has developed.

Urban Reforestation brings the landscape closer to its natural forested state, prior to dense settle- ment of the late 1800's.

It also provides urban habiat opportunities for various species pushed out of developed areas.

Water constantly cycles throughout the site, in and out of the ground. For some, this is a problem. Here, it is demonstrated as an opportunity.

Water used onsite gets recycled and filtered back into Rain Garden.

The core of this site is an intersection of cars, people, art, ecology, history-- plenty of opportunity for reConnection.

Like the shoreline, the edge of water acts as a guide for paths and gathering areas-- it defines spaces.

Green Roof runoff ultimately filters through building facade and into rain garden

Section View of Pier+Plaza

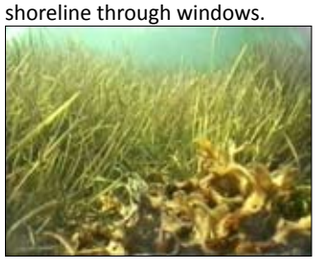
People experience delight in water.

Wading Pool, Toronto, CA
Source: www.dufferinpark.ca

Salmon can swim safely along shoreline.

Juvenile Salmon
Source: www.normandyparkwa.govoffice2.com

Underneath pier, light reaches shoreline through windows.



Eelgrass meadow
Source: www.habitat.adfg.state.ak.us

Water Stop Fountain in intersection stops auto traffic.

Random Unknown Fountain
Source: www.Images.Google.com

Edge fountain in plaza offers first interaction.

Random Unknown Fountain
Source: www.Images.Google.com

In Rain Garden Plaza, where building meets ground and water.

Stephen Epler Hall, Portland, OR
Source: www.ArtfulRainWaterDesign.net

More than just Visual cues of water process.

On building facade, between windows..

Growing Vine, Seattle, WA
Source: www.DJC.com

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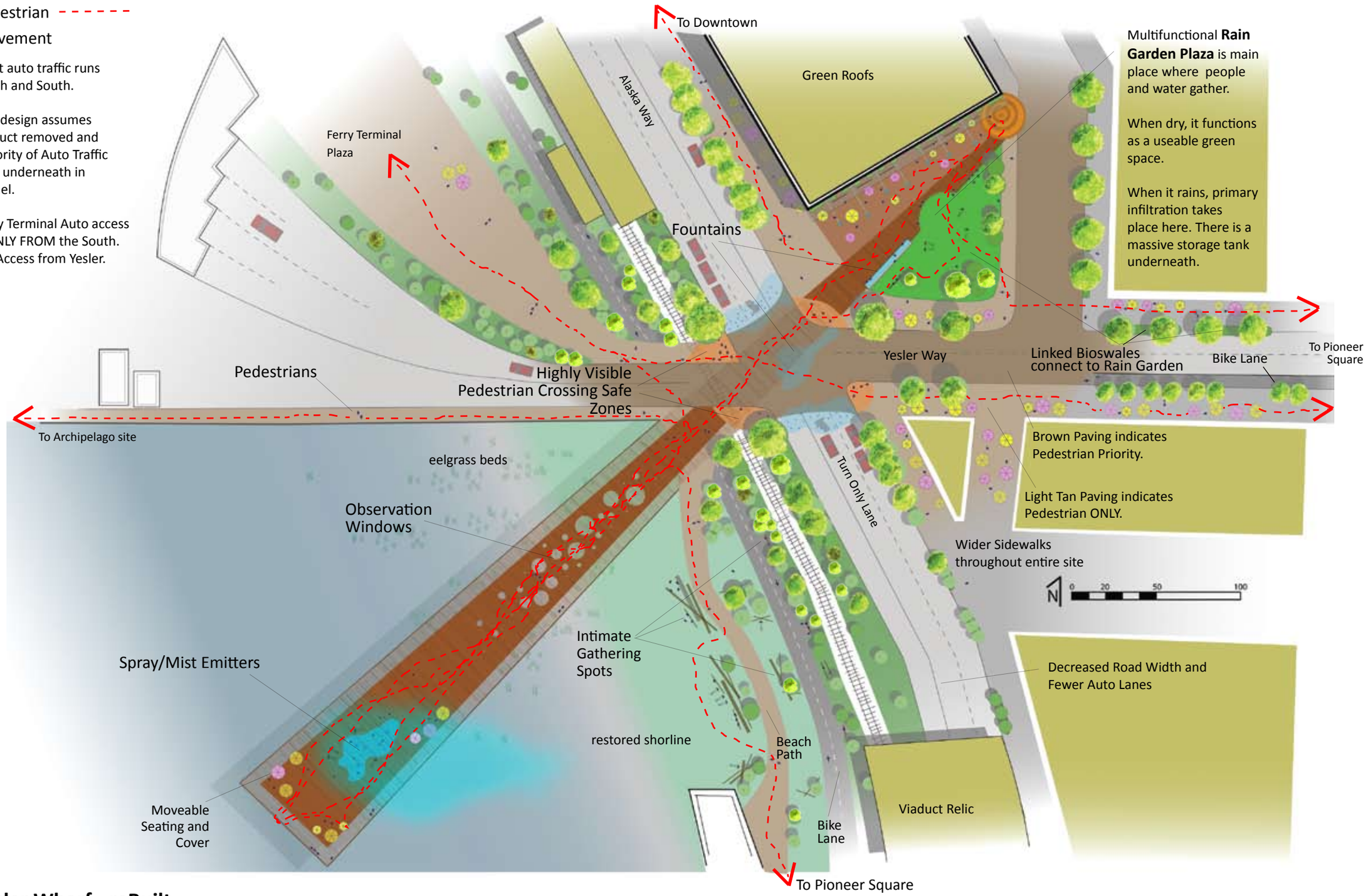
Pedestrian Movement

Most auto traffic runs North and South.

This design assumes Viaduct removed and majority of Auto Traffic runs underneath in tunnel.

Ferry Terminal Auto access is ONLY FROM the South. NO Access from Yesler.



Yesler Wharf - reBuilt

The reBuilt Yesler Wharf and Plaza is located on the shoreline at the intersection of Yesler and Alaska Way, which is where the historic Yesler Mill and Wharf once stood more than 150 years ago. These were some of the first structures ever built in Seattle by early settlers. This marked a great historical achievement as well as the beginning of radical change in the landscape--from massive deforestation to changing the path of the shoreline. This site has endured severe ecological stress since settlement began.

Inspiration was drawn from the historic structure, its interaction with the shoreline, and the need to manage urban runoff. The overall layout of the pier follows the narrative of how water moves on land, as it returns to the ocean, completing part of the hydrologic cycle. Amenities for comfort, education, safety, play, and socializing are spatially arranged to allow the user to metaphorically explore the different ecological zones of a natural shoreline: Riparian, Intertidal, and Subtidal. The treatment of runoff follows this concept and reinforces these activites and amenities. By reBuilding an ecologically sensitive Wharf and Plaza, this site will “reConnect” people to one of our most important natural resources and create a new sense of place built upon history.

Neighborhood Network & Node

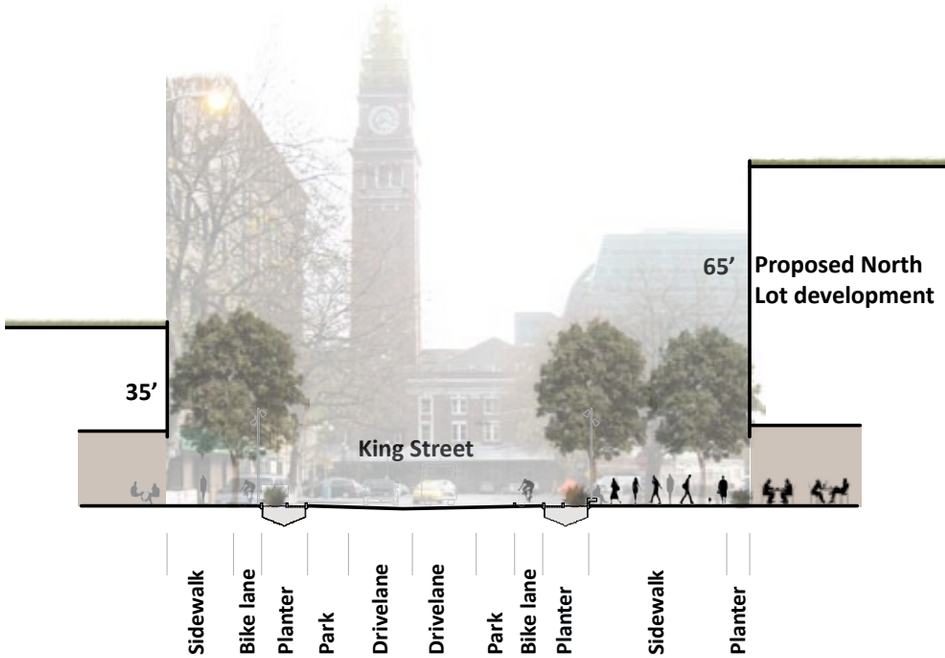
[incorporating the human dimension at King Street, Seattle WA]

_site identification

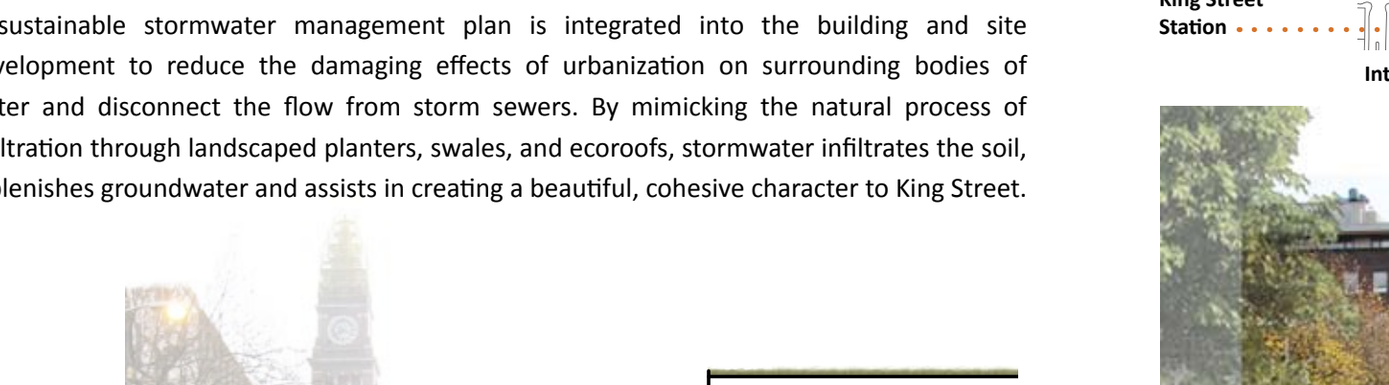
At the master planning level, King Street was identified as a corridor of particular importance within the context of Pioneer Square. King Street is located between Qwest Stadium and the pedestrian street Occidental Ave, and links the industrial waterfront and King Street Station. Currently, a strong disconnection exists between the lower level of King Street Station and any form of pedestrian environment, particularly the connection to Occidental Ave.

_stormwater

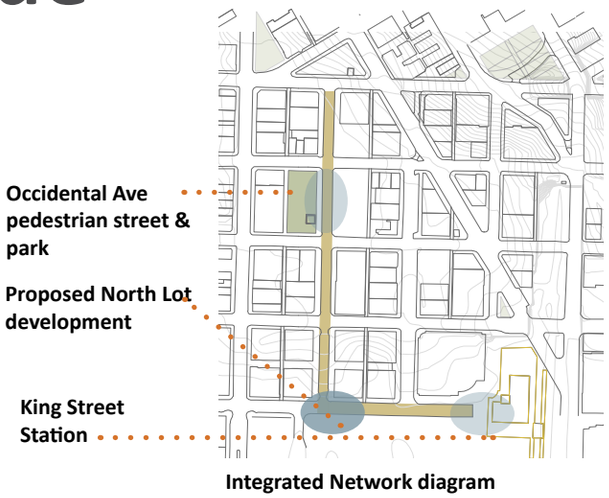
A sustainable stormwater management plan is integrated into the building and site development to reduce the damaging effects of urbanization on surrounding bodies of water and disconnect the flow from storm sewers. By mimicking the natural process of infiltration through landscaped planters, swales, and ecoroofs, stormwater infiltrates the soil, replenishes groundwater and assists in creating a beautiful, cohesive character to King Street.



Section A, looking East at King Street
1”=32’-0”



Plan of King Street 1:3000



Integrated Network diagram

The current condition as a pedestrian, looking west to King Street Station at intersection of King Street & Occidental Ave.

life space building_gehl architects model

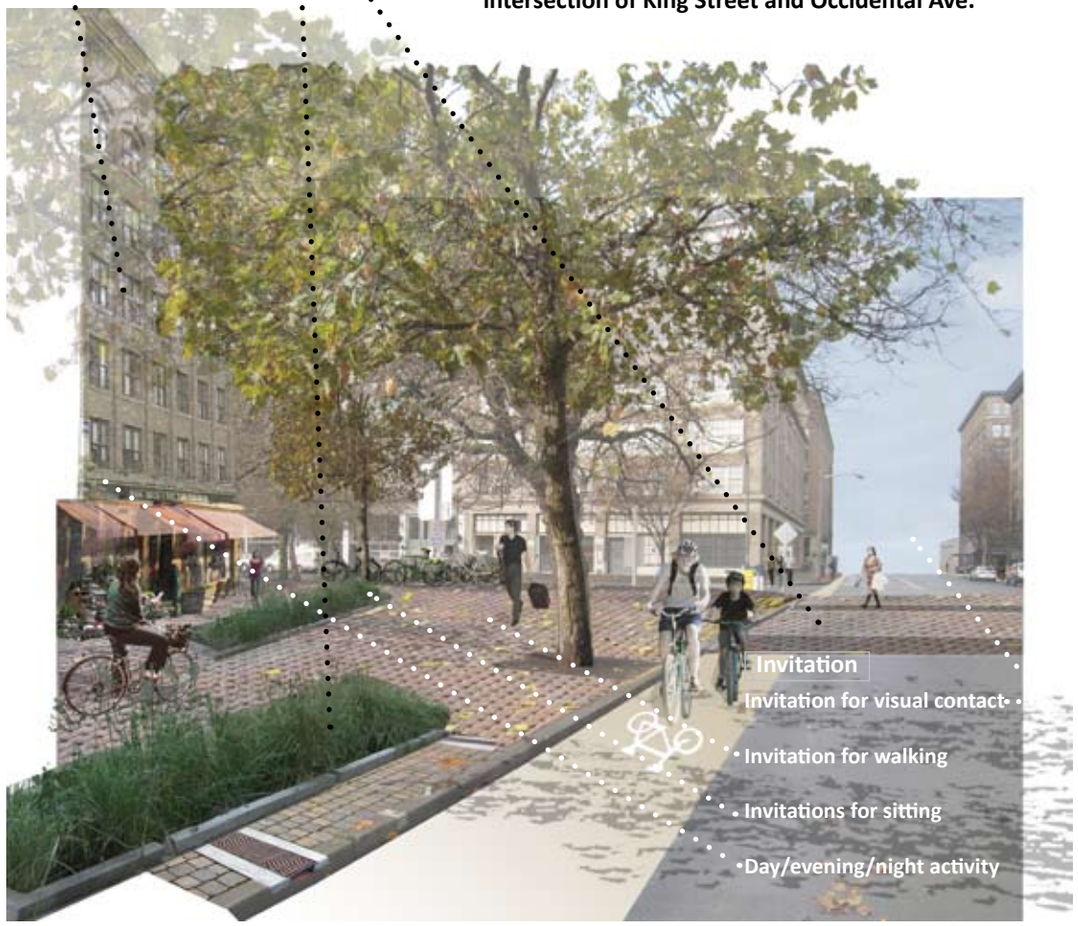
The vision for King Street keeps both travelers from King Street Station and residents of the neighborhood in mind. Pioneer Square, although rich historically and architecturally, suffers from a lack of diverse users, activities and 24 hour “eyes on the street,” stemming mainly from a lack of residential units. This scheme proposes restricting the height limit of the North Lot development along King Street to 65’ (in contrast to the 150’ proposed) for light, harmony with the existing fabric, and pedestrian experience.

Protection

Protection against crime & violence through passive surveillance and overlapping functions in space & time

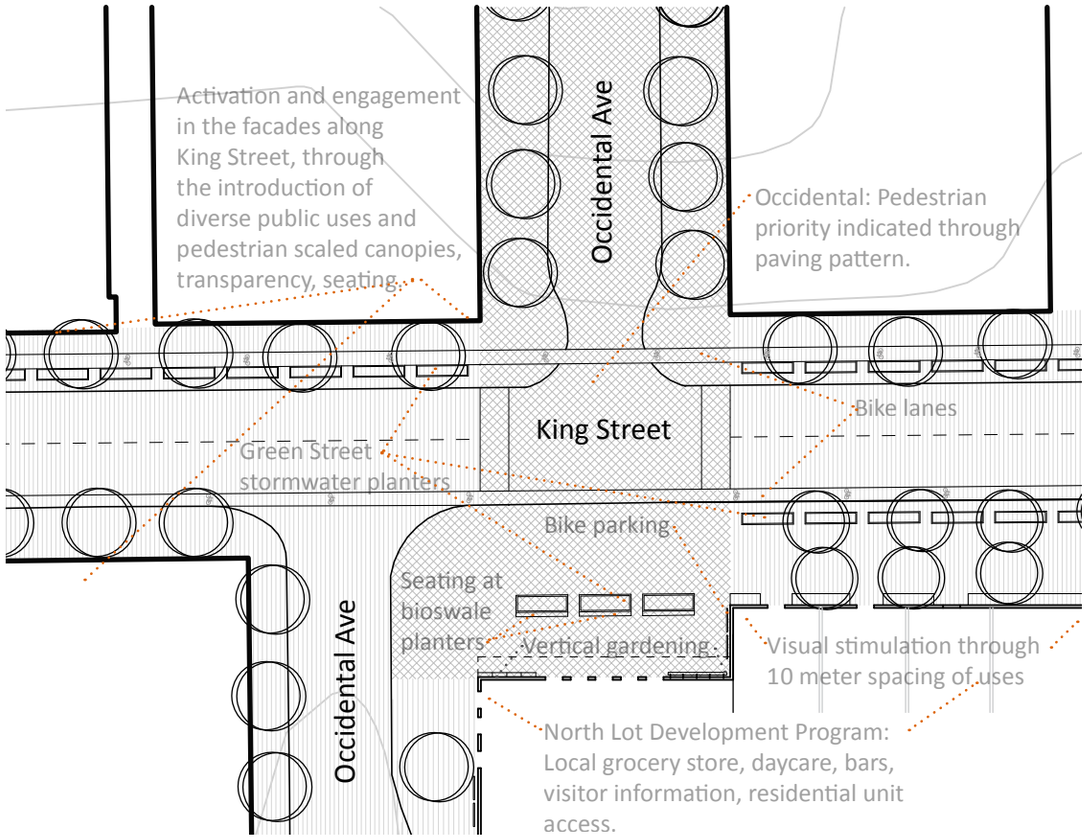
Protection against vehicular traffic through bioswale planters and change in paving, for both cyclists and pedestrians

A 3.5 acre parking lot now occupies the site at the intersection of King Street and Occidental Ave.



life **space** building

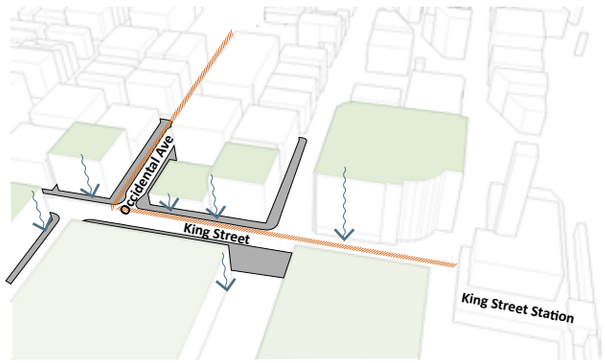
The scheme aspires to create a node within the Pioneer Square neighborhood that is lively, diverse and distinctively pedestrian. This public space embraces the qualities of Pioneer Square and creates an open, flexible, inviting neighborhood node at the important intersection of Occidental Ave S and King Street. Multiplicity and diversity is encouraged in the flexible space: an area is provided for a local grocery store, urban gardening, seating, bicycle parking, and an integrated system for stormwater collection and management.



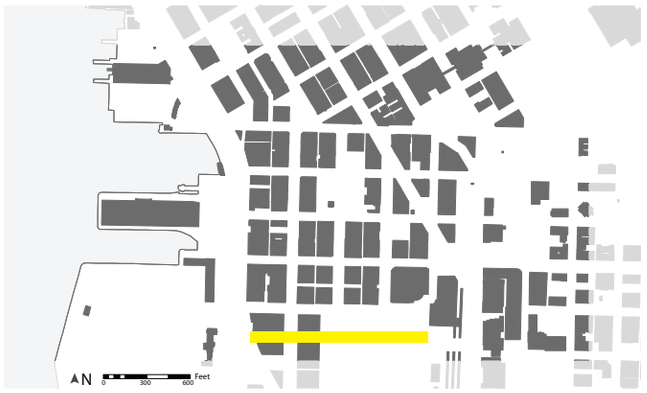
Plan at King Street & Occidental intersection
1”=64’-0”

life space **building**

The buildings framing King Street currently do not contribute to the public realm at the ground level, lacking uses that engage pedestrians. The proposal includes activation and engagement in the facades, mainly through introducing diverse public uses on the ground level and features speaking to the human scale (awnings, benches, texture of materials). The introduction of residential units, a neighborhood grocery store and daycare facilities will provide the life and vibrancy of truly pedestrian space along King Street.

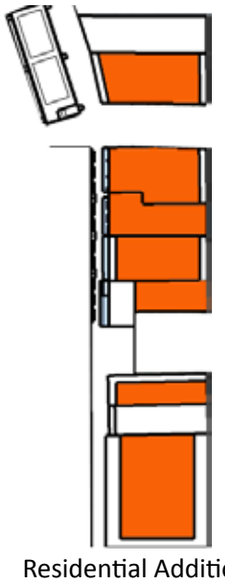


Green roofs, water conveyance to Green Street planters

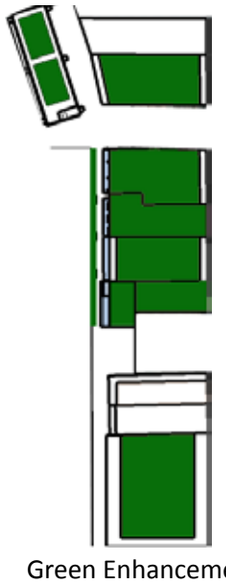


The Viaduct Relic

Project Site



Residential Addition



Green Enhancement

Reimagining the Viaduct

In order for Seattle to reconnect to its waterfront, the Alaskan Way Viaduct must come down. But as a lasting memory of the past, a portion of the Viaduct should be retained and repurposed as a multi-functional public space.

Situated at the intersection point of Downtown, Pioneer Square and the Waterfront, the Viaduct Relic could enliven and activate the pedestrian environment by providing Seattle with a new elevated park and a flexible public plaza. Envisioning more than just the movement of cars, the Viaduct Relic would provide Seattle with an iconic landmark that would celebrate the importance of public space and life.

Elevated View From Viaduct Park

Viaduct Relic at Night

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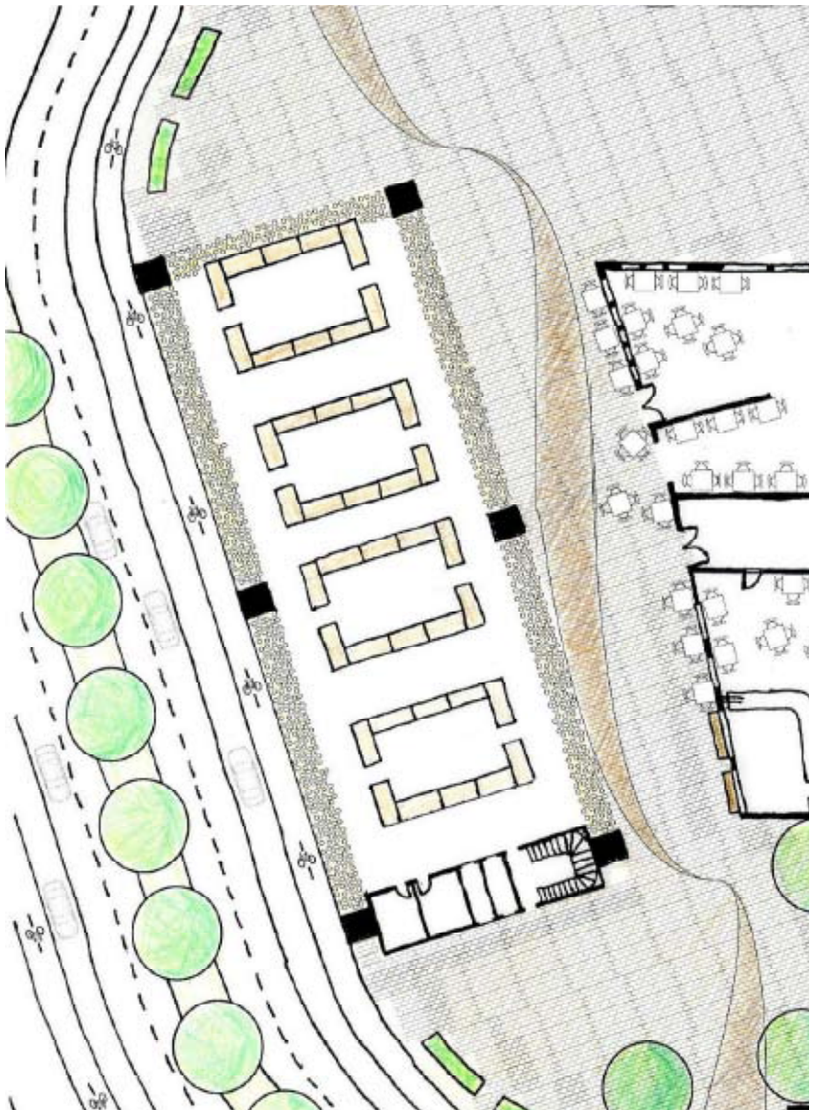
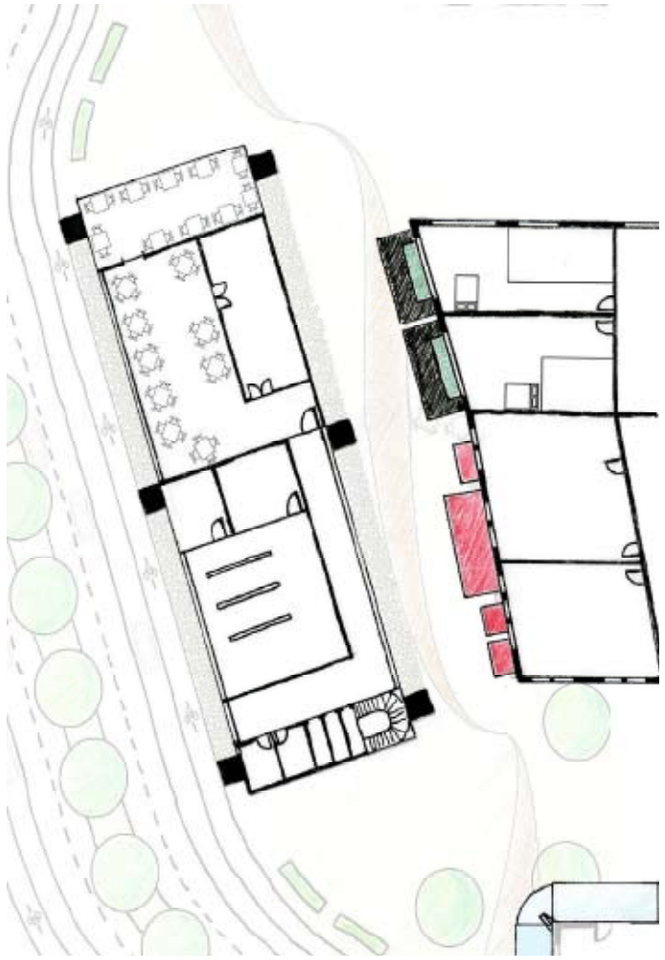


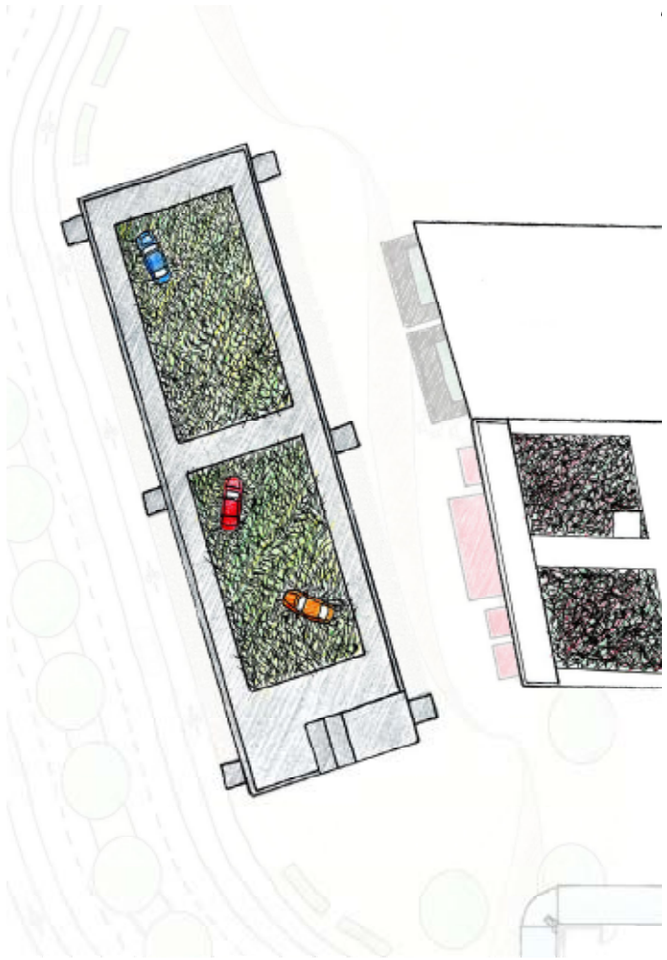
Viaduct Plaza -

By routing the Alaskan Boulevard around the Viaduct Relic, a unique urban space is created. Partially open and partially covered, the Viaduct Plaza is a flexible space for a variety of active, public functions. Ground-floor uses in the adjacent buildings spill out onto the plaza, further expanding the pedestrian realm.



Viaduct Shops -

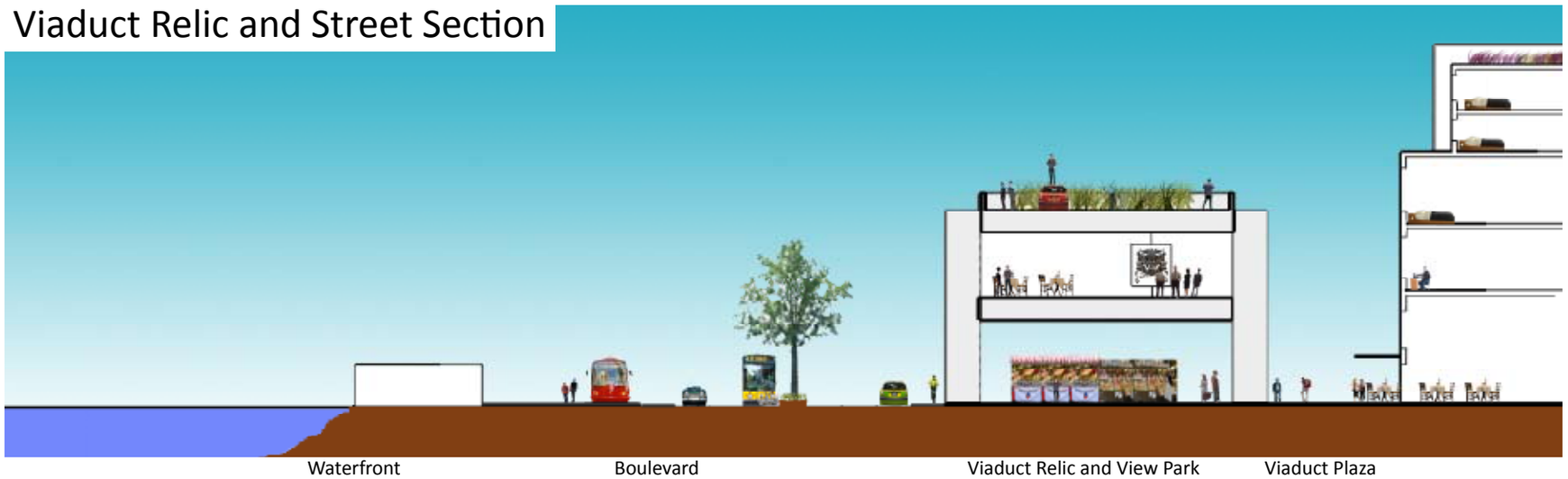
In addition to the possibility of a public market underneath the Viaduct Relic, the 1st level provides additional space for commercial uses which help to activate the site at all times of the day. By benefiting from the special location and vibrant street-life below, businesses here can attain iconic stature and draw more visitors to the site.



Viaduct View Park -

Unlike any other park in Seattle, the Viaduct View Park gives visitors and residents an opportunity to experience scenic views into Downtown and across the Sound. The elevated park provides a relaxing space to meet friends and reflect on the beauty of Seattle.

Viaduct Relic and Street Section

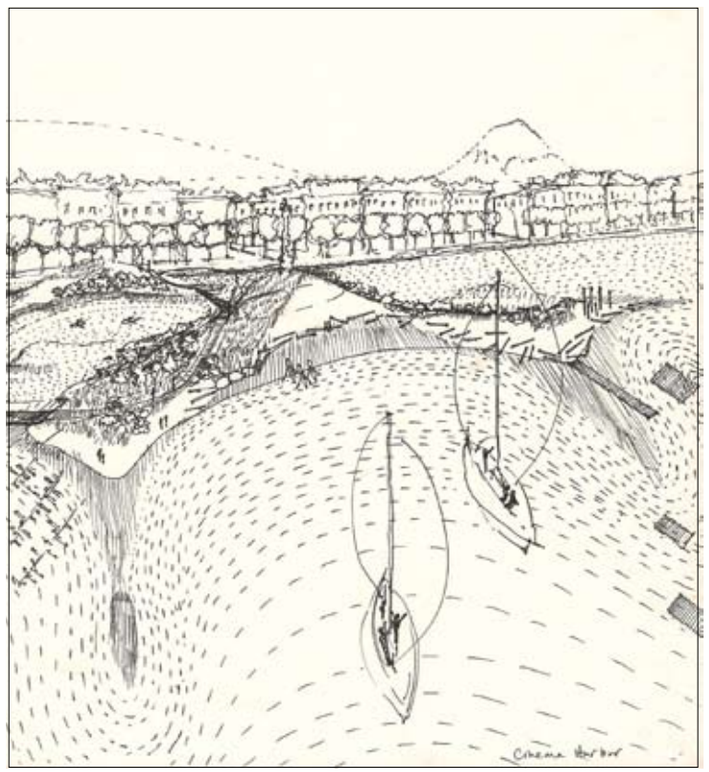


Waterfront | Boulevard | Viaduct Relic and View Park | Viaduct Plaza

Waterfront: Tidalscape Park

Duwamish 1909

Duwamish Current

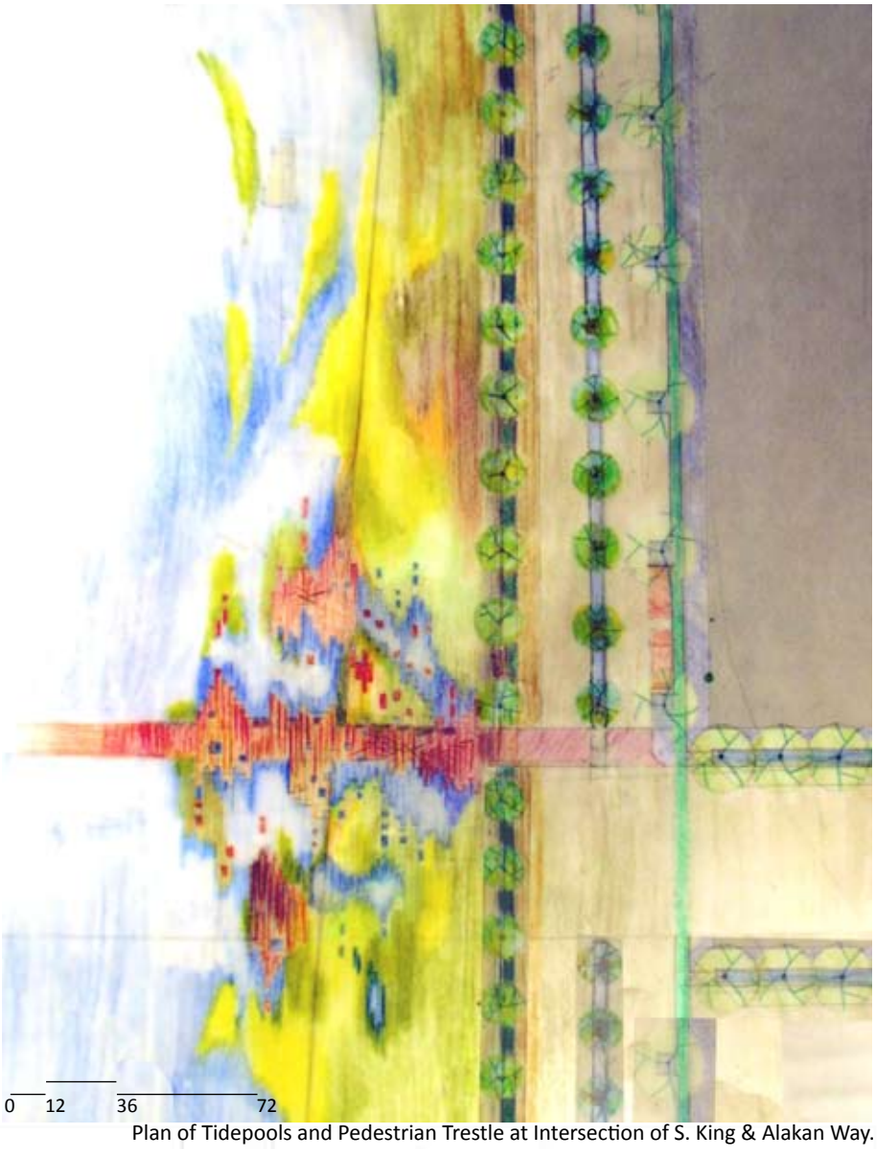


Birdseye View of Archipelago

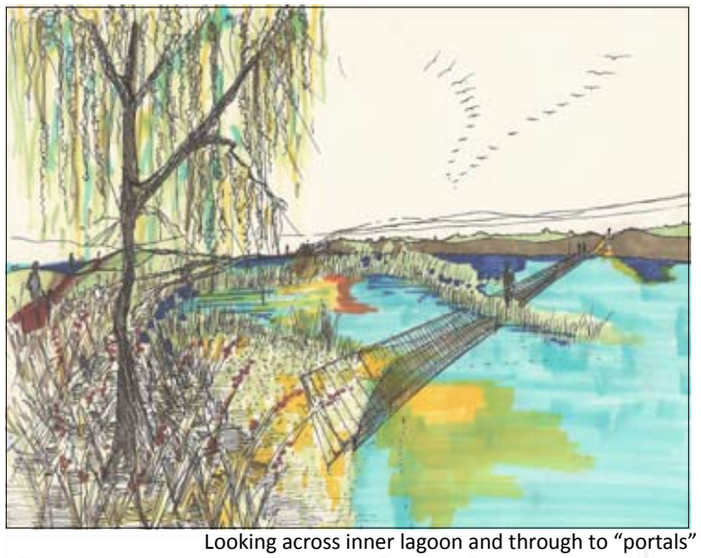
PARAMETERS: This project focuses on the removal of the existing seawall and re-grading of shoreline to provide for pre-existing estuarine habitat and to restore flow patterns from the Duwamish River into Elliot Bay.
STRATEGY: This is accomplished through the creation of a self sustaining offshore archipelago connected to the city network by two pedestrian trestle bridges terminating in piers off of S. Main and S. Jackson (mirroring the railroad trestles that existed in the late 1800's). A third bridge extends along the existing Vashon Pedestrian Ferry Pier. These islands are structurally sustained via the construction of intersecting tapered jetties made from recycled pier rubble and viaduct remains. The jetties are placed in succession, like catches; open to the flow and natural sedimentation build up from the Duwamish outflow and wave action from the Sound. The shapes of the islands are designed to fluctuate with the process of sedimentation and aggradations.

RESTORED HABITAT: The archipelago creates a protected and non-uniform habitat which varies from shoreline to bluff to lagoon to inner urban shoreline. At each trestle the shoreline is cut back to provide for tide pools coupled with floating docks for recreational purposes.

CULTURAL ENGAGEMENT: The archipelago incorporates a 700 meter pedestrian loop to symbolize the cycle of the Salish Medicine wheel. This cycle is evidenced through the color, stone, season of life and the spiritual significance each cardinal direction represented within the

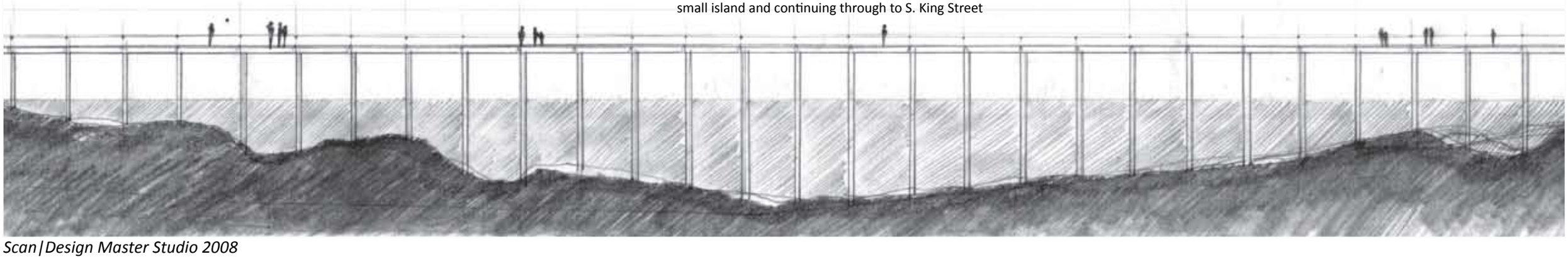


Plan of Tidepools and Pedestrian Trestle at Intersection of S. King & Alakan Way.



Looking across inner lagoon and through to "portals"

Looking East across pedestrian trestle, intersecting small island and continuing through to S. King Street



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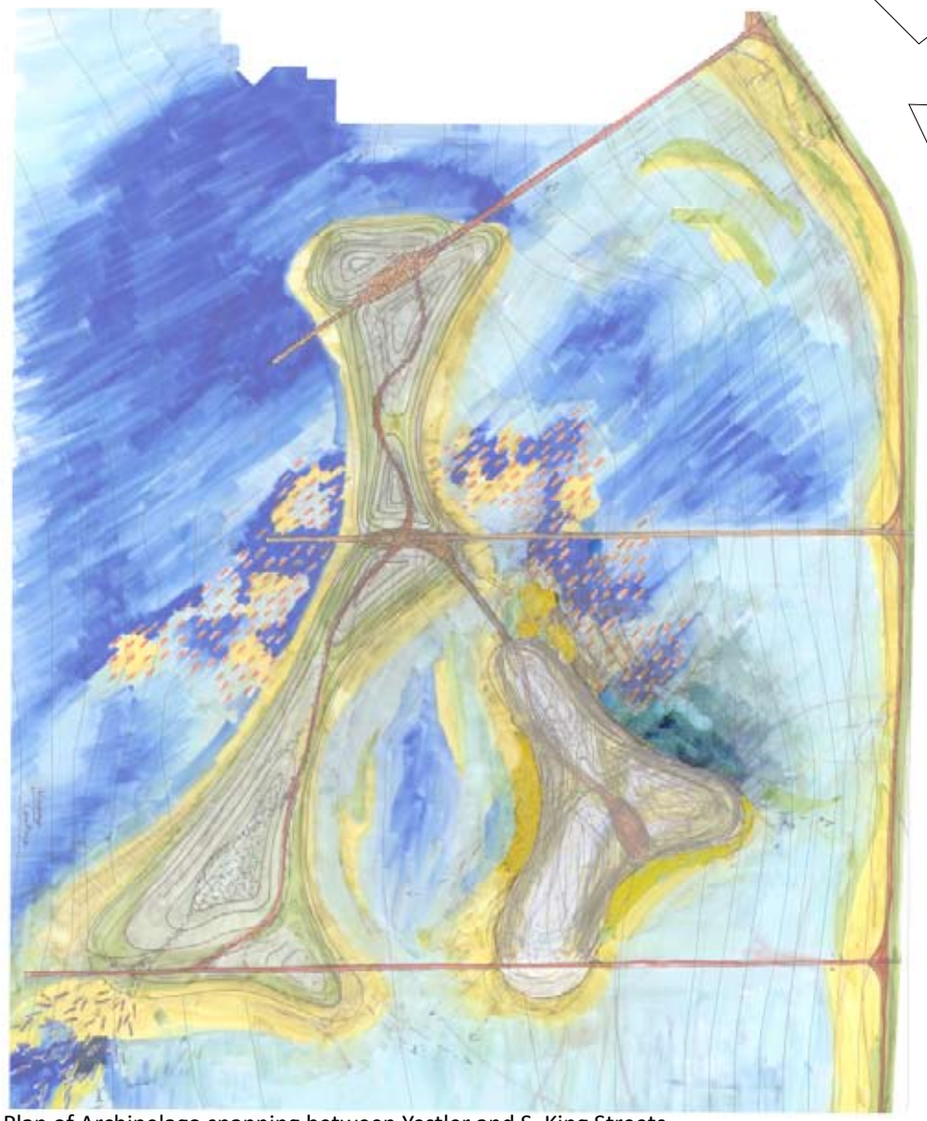
Salish Nation. These directions are brought to life in strategically placed portals set within the bluffs looking west, and framing the Sound and the Olympics, signifying transcendence and the unconscious. The paving consists of embedded railway ties that provide directionality and flow like logs flowing down a stream. The stream is represented in a mosaic of red and gold glass, expressing the sunrise colors of the East, to Blue and Black signifying the colors of the west; Likewise Alabaster and Serpentine are incorporated into the paving pattern running north to south. These four qualities intersect at key moments where the trestles meet the islands.

Maritime Youth Center: Material Language of Portals at trestle intersection with the island

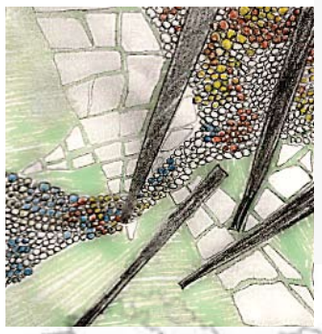


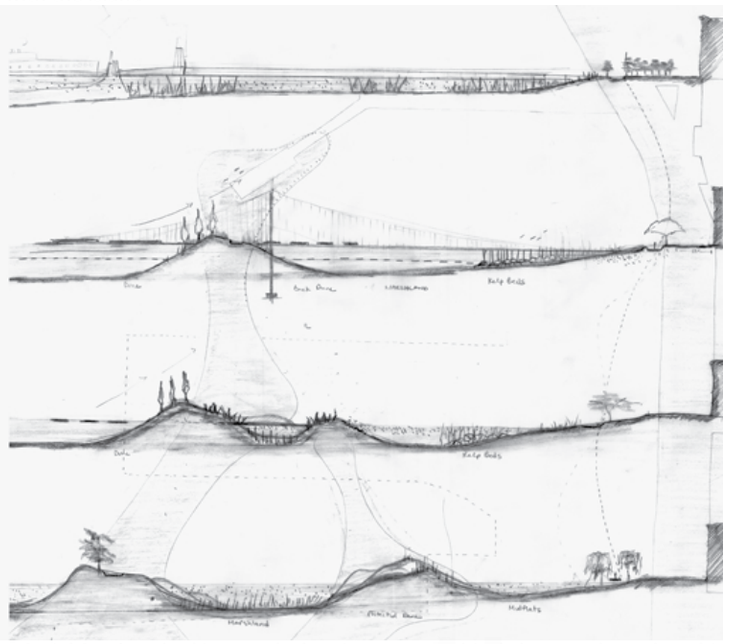
Yestler
S. Main St
S. King St

Plan of Archipelago spanning between Yestler and S. King Streets

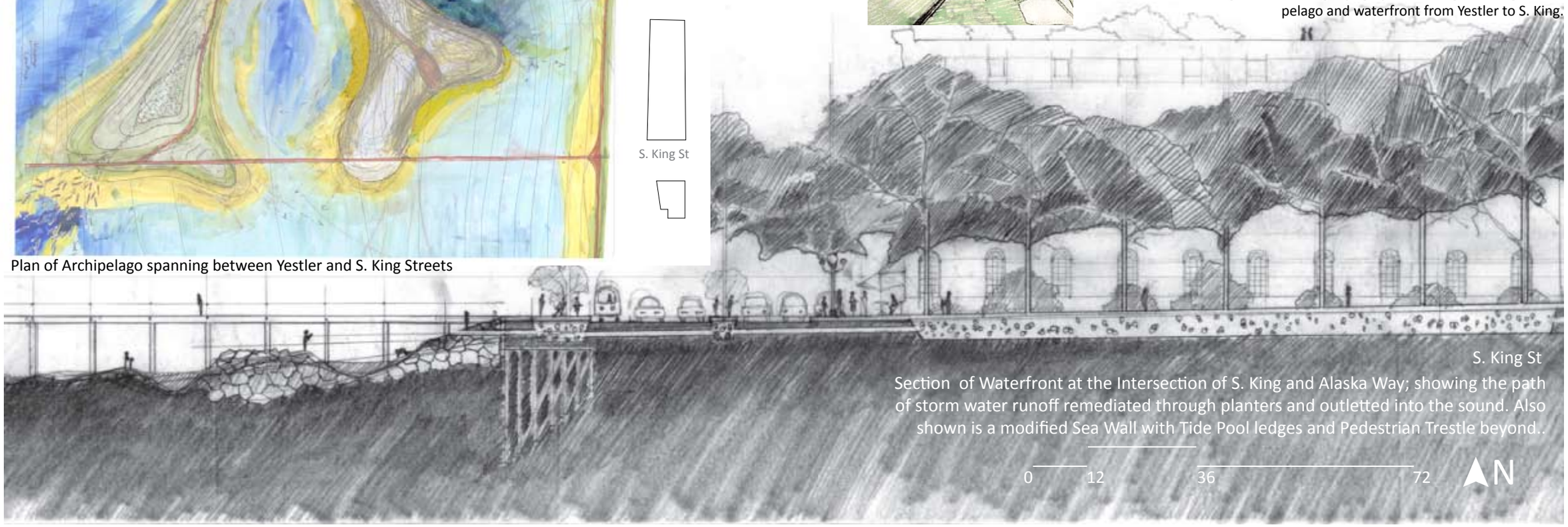
Igualada Cemetery: Language of gathering spaces, openings along the path

Paving Language at gathering space when paths intersect





Serial Sections looking north showing topographical changes through archipelago and waterfront from Yestler to S. King.

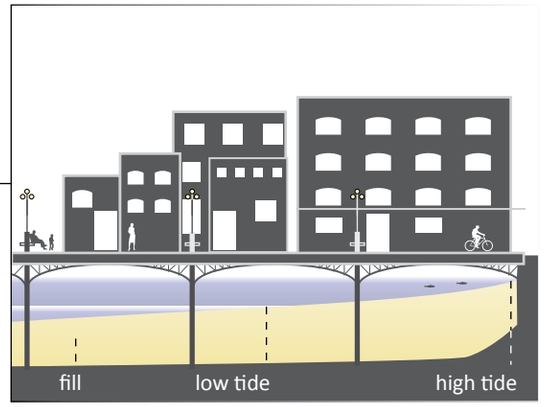


S. King St

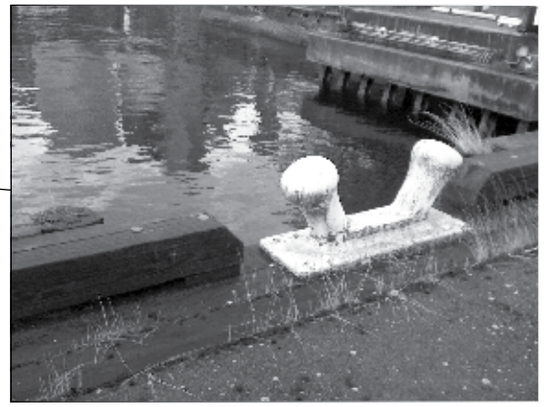
Section of Waterfront at the Intersection of S. King and Alaska Way; showing the path of storm water runoff remediated through planters and outletted into the sound. Also shown is a modified Sea Wall with Tide Pool ledges and Pedestrian Trestle beyond..

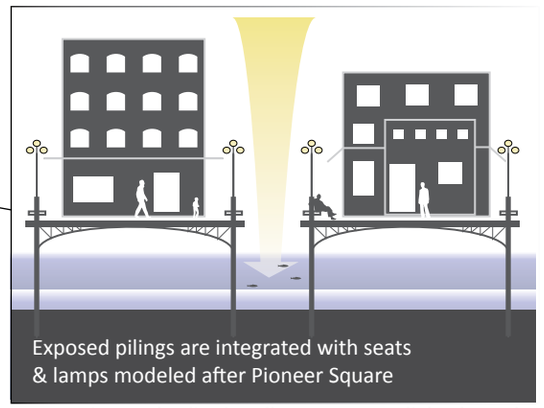
0 12 36 72 N

Pier 48



Re-grading will increase lateral tidal range


Looking down at the tide today



A re-engineered split pier allows more sunlight through


Looking west to pier 48

The Problem

Pier 48 is a dead node within Seattle's integrated ecological, pedestrian, and economic networks. It extends the western axis of Main Street over Puget Sound. The ferry terminal lies to the north. South of Pier 48 is an active industrial area where shipping containers are loaded onto freighters. The views from the pier are breathtaking. Today the pier is rotting. It is locked and wrapped by a chain link fence. A dusty orange sign warns trespassers that they will probably fall through the floor.

Solutions

Life

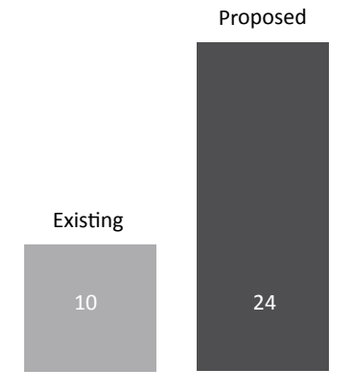
The proposal on this spread aims to energize the site and stimulate the networks. A walkable, highly residential mixed use framework will replace the current structure and activate the pier 24 hours a day, seven days a week. This pedestrian hub will be nested within its own network of beautiful water-focused public spaces. The development will extend east into today's parking lot where it will transform the concrete and strengthen the site's neighborhood connectivity.

Environment

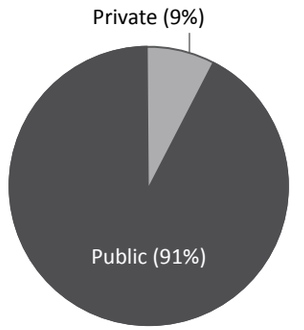
This new human habitat will be engineered in response to the site's ecological functions. Prior to construction, the shore will be re-graded to accommodate better intertidal habitat. The defunct structure is to be rebuilt as two parallel piers, doubling the potential for promenading while allowing sunlight to reach the water through the open axis. Shared green roofs will be engineered to support enough soil for gardening.

Space

Almost two acres of useful new public space will be created. The varied architecture of Pier 48's new buildings will contribute a texturally delightful frame without compromising the space's new form & functionality.



Hours of Use



Proposed On-Grade Distribution

Buildings

Many vibrant and scenic places are functionally broken into smaller pieces. The new pier's integrated public spaces will create the frame for 102,000 square feet of new real estate, packaged into 35 buildings.

- Define building footprints with smaller parcels
- Enable greater flexibility of use with unique zoning that affords an elastic response to market conditions
- Provide 102 new housing units
- Integrate the site into the existing and proposed neighborhood networks
- Measure the design & construction using LEED for Neighborhood Development - Platinum
- Design spaces & buildings for people

Looking west from the parking lot (proposed)

Looking west from the parking lot (existing)

Pedestrian Interest

Human Scale

Regular Variety

Public Safety

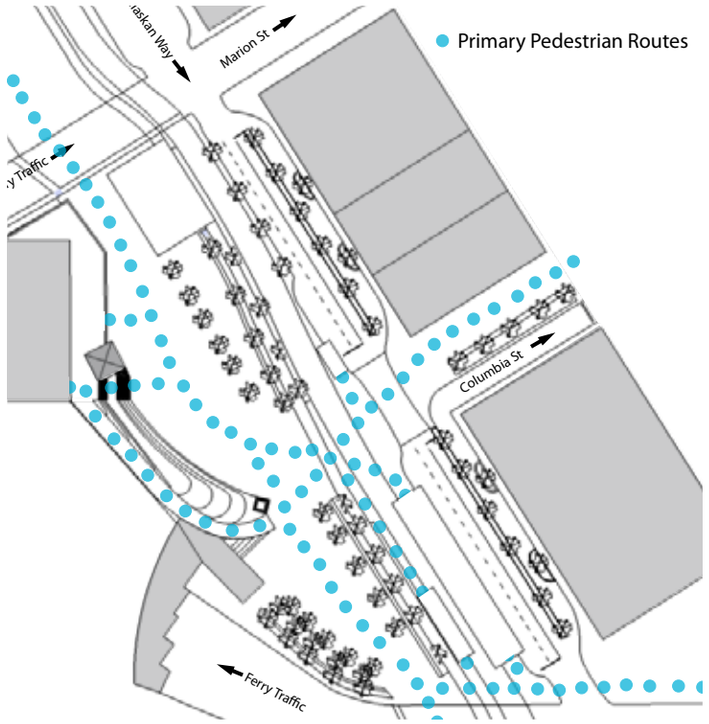
Ferry Terminal: Colman Transit Plaza

Unrealized potential

The Colman Ferry Terminal is one of three major transit hubs in Downtown Seattle. Annual ferry ridership out of the terminal is more than 8.7 million. Yet the streetscape outside the terminal belies the activity within. A 2008 Gehl stationary survey found a total of only 26 people using the space throughout a warm, sunny day in July. Poor-quality edges, noise from the Alaskan Way Viaduct, little space to wait for buses and taxis, and a skybridge that connects pedestrians directly to downtown Seattle all likely contribute to this low number. The eventual removal of the viaduct will provide the opportunity to recreate the streetscape as a welcoming, human-scale environment. The Colman Transit Plaza offers such a vision.

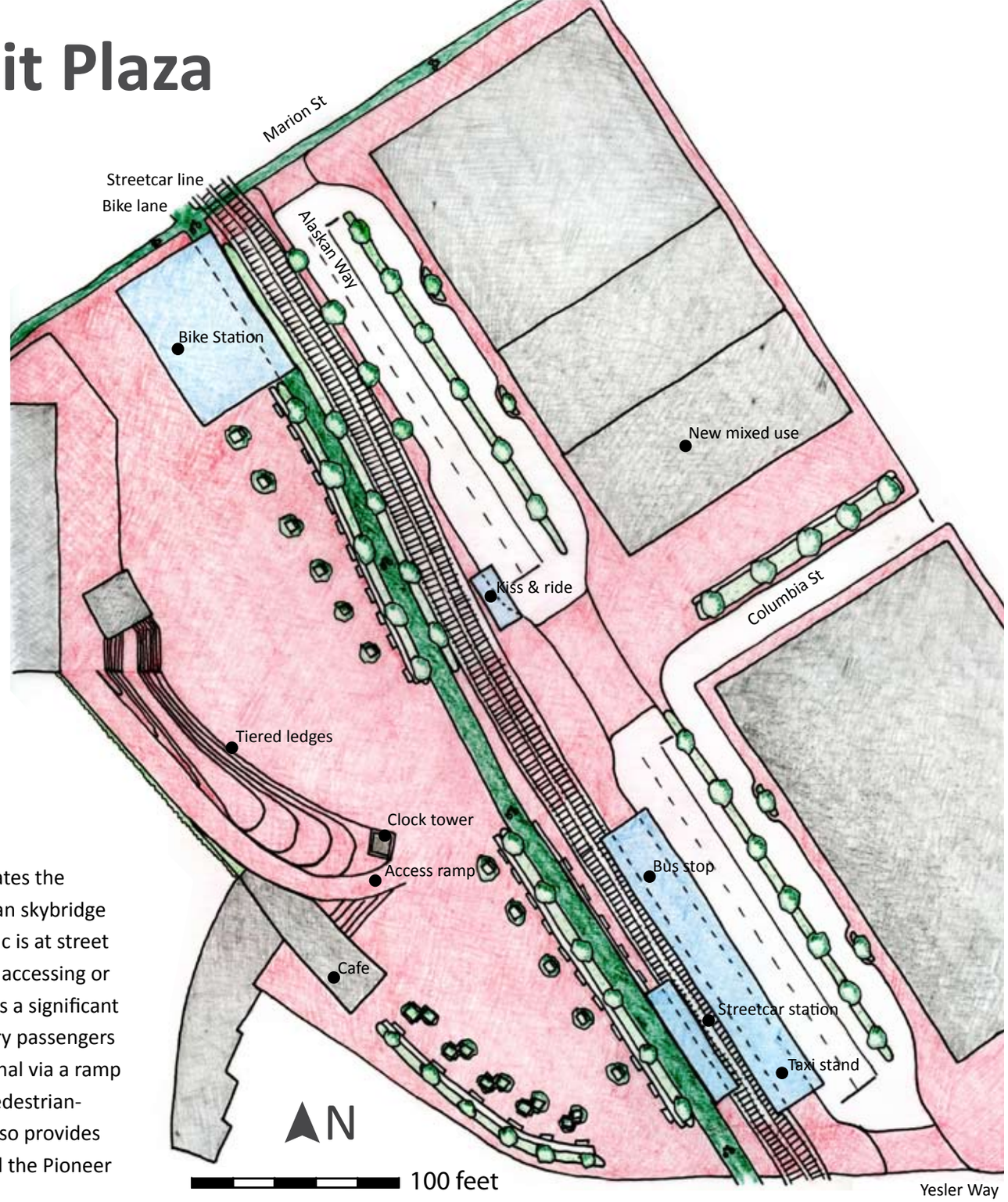
Streetscape outside Colman Ferry Terminal. Source: *Orion Stewart*

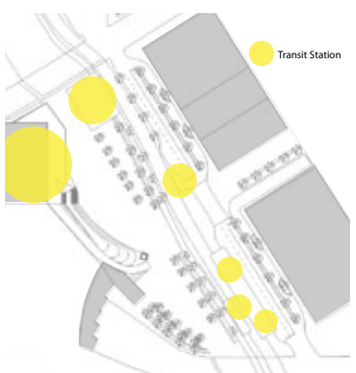
Seattle waterfront post-viaduct.
Source: Seattle P-I



Foot traffic

Walk-on ferry terminal traffic activates the Colman Transit Plaza. The pedestrian skybridge is removed so that all walk-on traffic is at street level. With only 44% of passengers accessing or departing the terminal by car, this is a significant amount of foot traffic. Walk-on ferry passengers access the upper level of the terminal via a ramp aligned with Columbia St, now a pedestrian-priority street. This arrangement also provides better access to the waterfront and the Pioneer Square historic district.



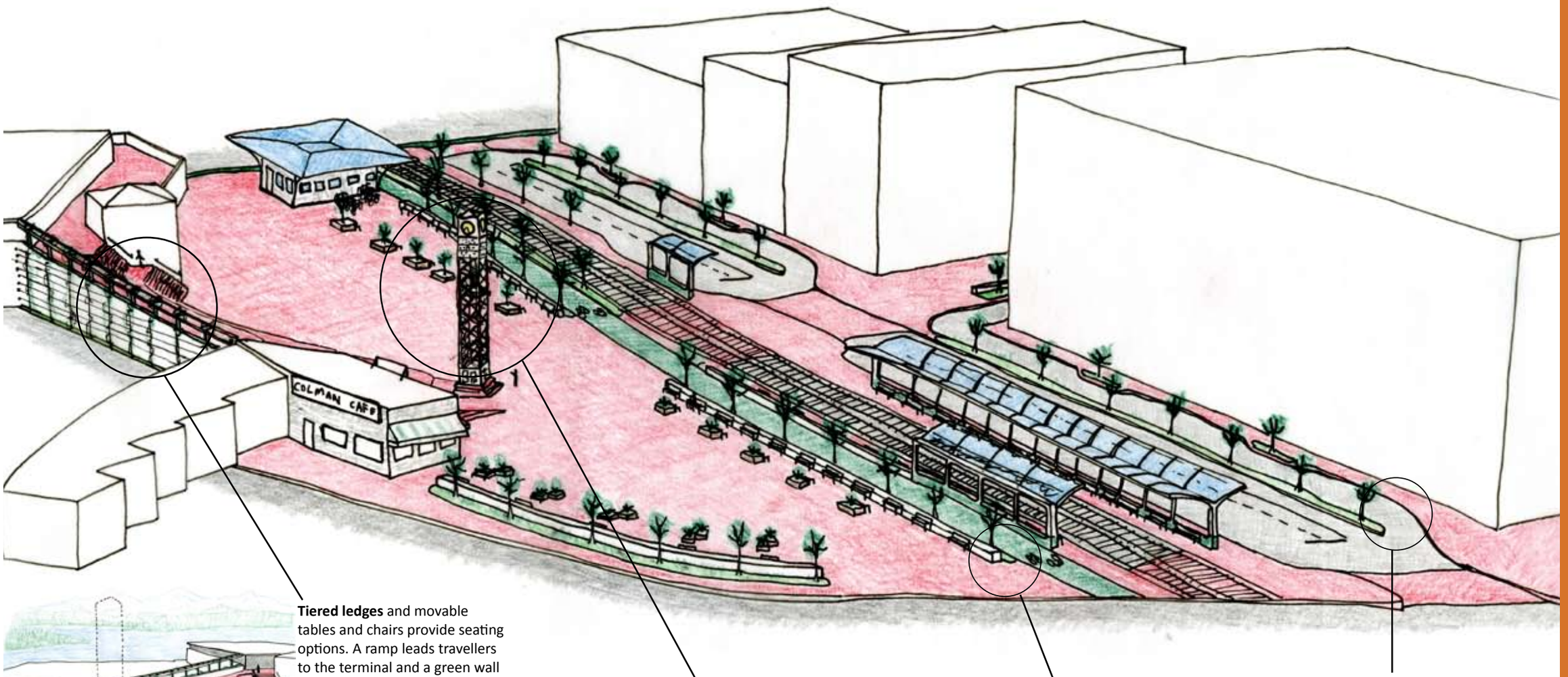


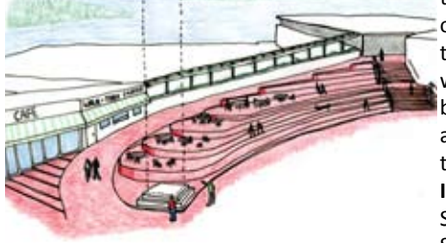
Waiting for transit

Outdoor, covered transit waiting areas formalize the space as a true transportation hub and create the sense of a coherent multi-modal system. These stations would likely reduce the number of vehicle ferry passengers. A 2006 survey found that better transit at the origin/ destination is the improvement most likely to cause ferry riders to leave their car at home.

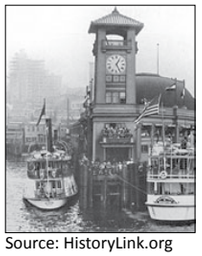
Standing and sitting

Passengers are encouraged to stay and enjoy the plaza. It offers numerous comfortable and interesting seating opportunities that are well-buffered from traffic. Spaces for food vendors with outdoor seating act as a further invitation for pedestrians to sit and eat. Ample space is provided for street performance, seasonal markets, or other special events.





Tiered ledges and movable tables and chairs provide seating options. A ramp leads travellers to the terminal and a green wall with a trellis structure acts as a buffer to the adjacent parking area while permitting views across the sound.
Influences: Pioneer Courthouse Square, Portland; Harbor Steps, Seattle



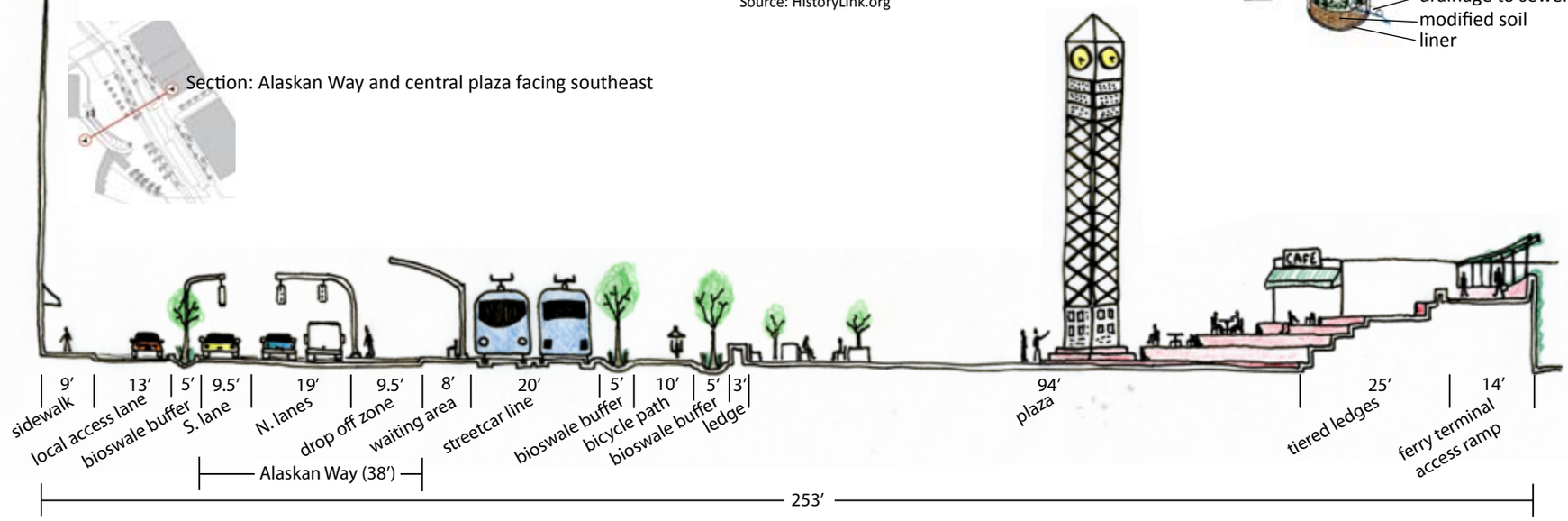
Source: HistoryLink.org

A New Colman Clock Tower serves as a landmark and wayfinding device. It displays the time of the next ferry departure, allowing passengers to linger in the plaza until the last minute.
Influence: old clock tower that once stood on site

Bioswale buffers separate modes of traffic and provide stormwater management for the site.
Influence: SEA Streets, Seattle

Local access lanes separate drivers seeking parking spaces from through traffic. Local traffic uses a narrow one-way lane with textured paving materials. This encourages drivers to travel slowly and makes it safe and comfortable for pedestrians.
Influence: Sonder Boulevard, Copenhagen

Section: Alaskan Way and central plaza facing southeast

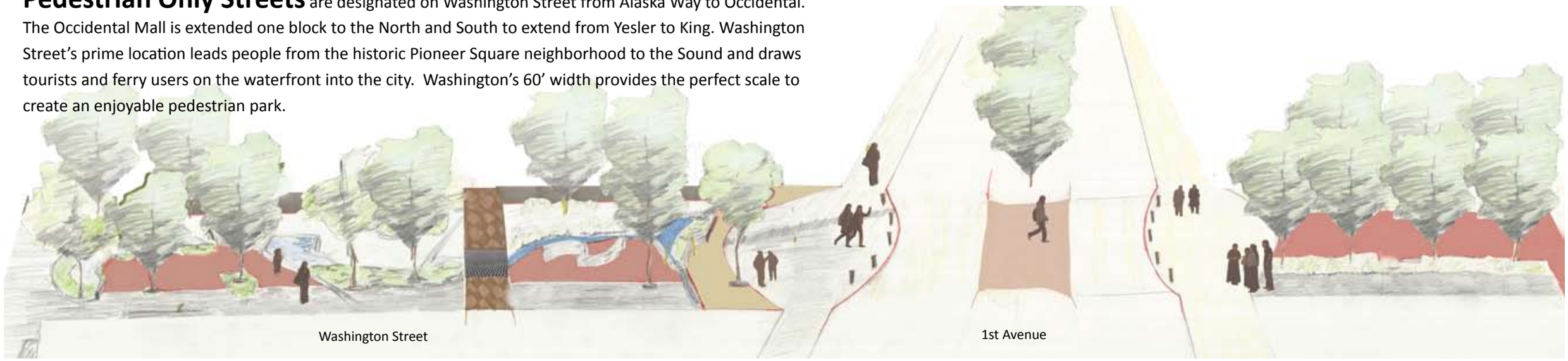


Washington: City to Sound Pedestrian Street


Inspiration

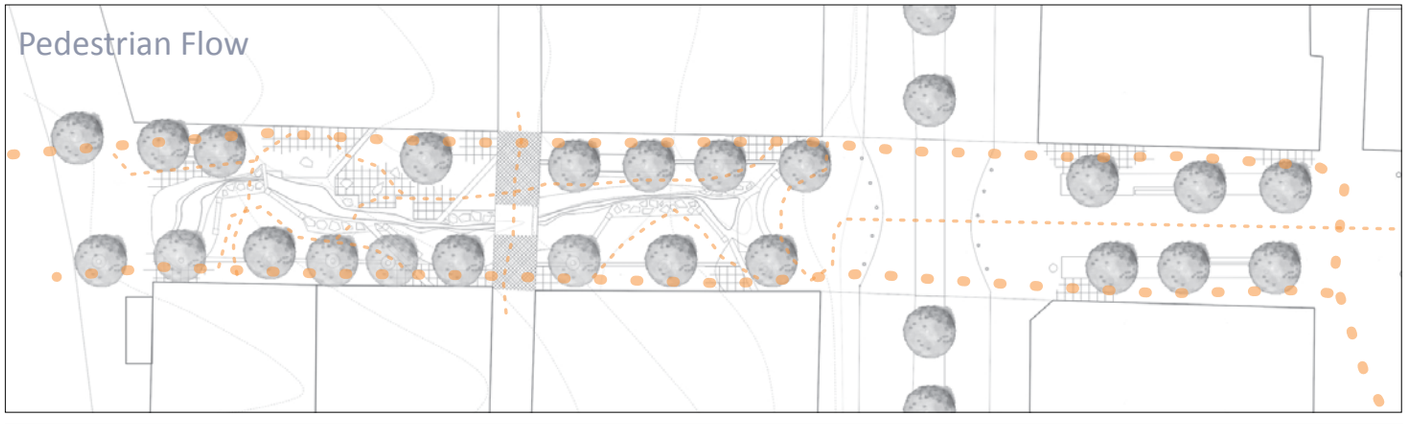

Site Conditions

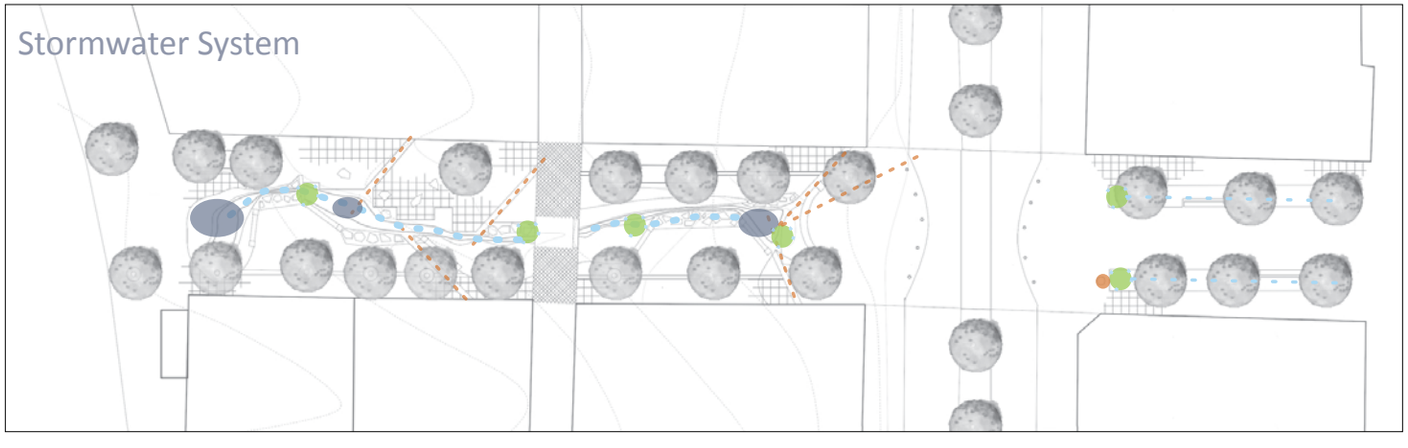
Pedestrian Only Streets are designated on Washington Street from Alaska Way to Occidental. The Occidental Mall is extended one block to the North and South to extend from Yesler to King. Washington Street's prime location leads people from the historic Pioneer Square neighborhood to the Sound and draws tourists and ferry users on the waterfront into the city. Washington's 60' width provides the perfect scale to create an enjoyable pedestrian park.

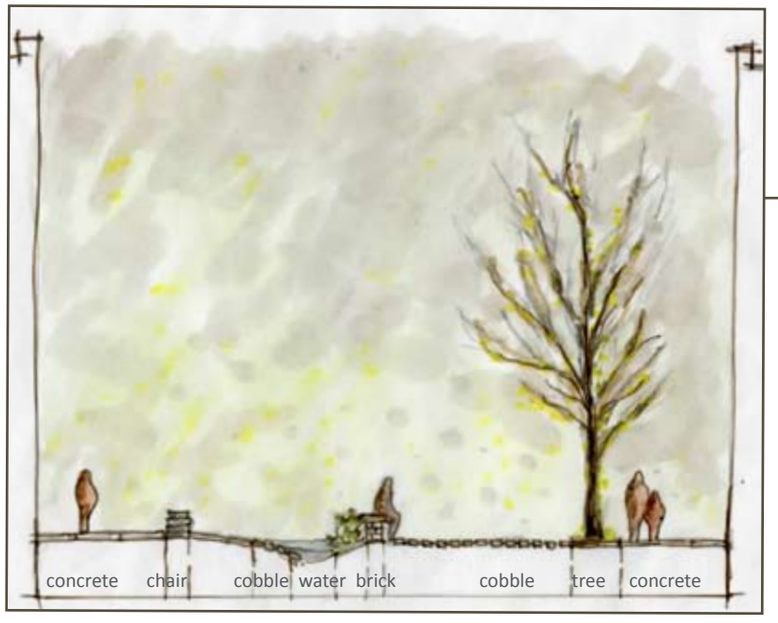

Washington Street

1st Avenue

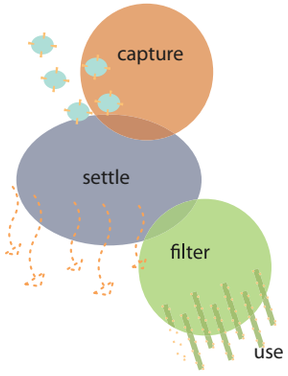
Copenhagen, Denver, Tokyo, Paris.....Seattle!. . Many cities throughout the world are reaping the benefits of pedestrian streets. Pedestrian streets provide: Safety (40% of Seattle Streets lack full sidewalks on both side of the road), Invite visitors (Denver's 16th Street Mall rated #1 visitor attraction in the metro area), and increase Character, Community and Health. By acting now Seattle can transform into a world class pedestrian city.





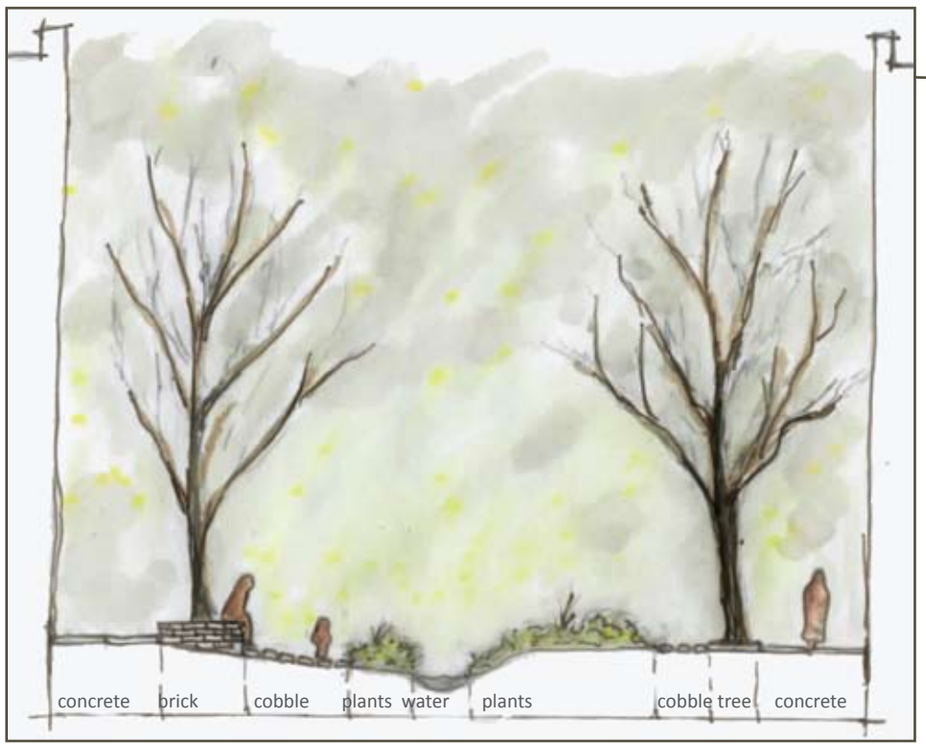


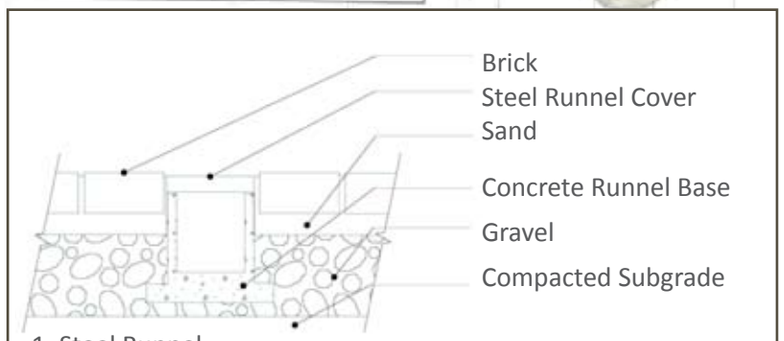
The Emerald City. . . Swales on the site capture street and roof runoff. The water is cleaned in settling tanks and by aquatic plants and sand filters. The clean water is used in the Compass Center Building for flushing toilets, feeds the cisterns that water green walls, and flows into the sound. Lush vegetation is planted in the swales and throughout Washington St. from 1st Ave to Alaska Way.



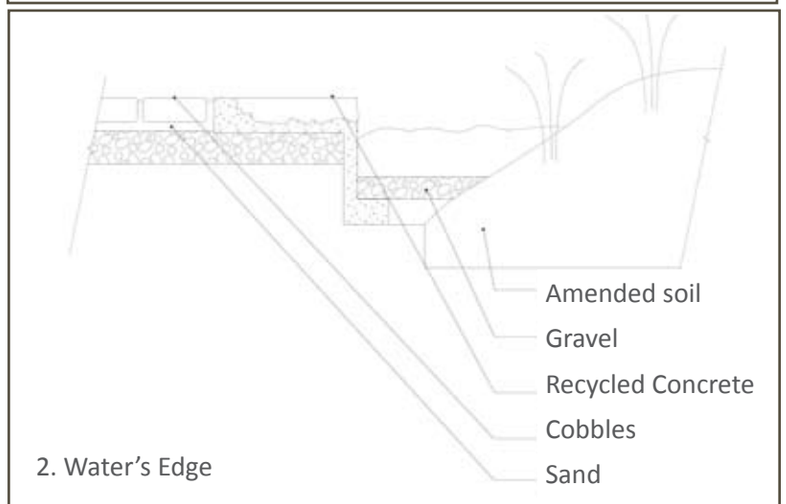








1. Steel Runnel



2. Water's Edge

KEY

a. Settling pond: underground outlets
b. Cobble plaza
c. Sand filter weir
d. Stacked recycled concrete seat
e. Runnel catching roof and street run-off
f. Steel grate pedestrian bridge
g. Recycled concrete mosaic paving
h. Settling pond w/ biofiltration
i. Extend pedestrian realm to 1st Ave
bollards and paving narrows street
j. Benches throughout

The Ship Sails On.....

to a more vibrant and cleaner environment

Goals:

- Revitalize the “Sinking Ship”
- Preserve the history and culture of Pioneer Square
- Create a user friendly site for pedestrian, cyclists and commuters
- Serve as an integral part of the communty networks
- Mitigate urban stormwater runoff
- Provide green corridors for biodiversity

James Street Plaza looking north

James Street Plaza

Yesler Way looking east

Enhancing life between buildings:

- Pedestrian streets
- Narrow 2nd Ave. S. and Yesler Way to reduce vehicle traffic
- New bicycle tracks
- New Green Streets
- Green corridors for birds and insects
- Rooftop garden/plaza
- James Street Plaza
- Video art wall
- Diner, coffee house, deli
- Farmers market
- Outdoor movies

Seattle Hotel replaced with parking garage in 1970s
source: www.skyscraper.com

Current site of parking garage
source: Fred Chabot, www.panoramio.com

Coffe shop for gathering

Mural for local artists


Introduction Page 1


Analysis Page 5

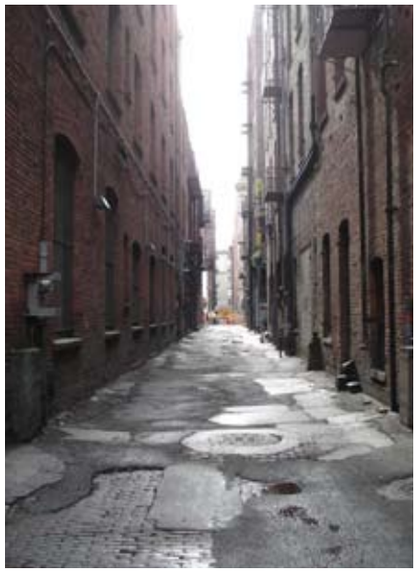

Design Page 17

Connections
Alleys
Alleyways
Stations
Lidded

ALLEYS
Connecting the Dots

Students: Sarah Ferreter | Ro Hohlfeld | Selina Hunstiger | Michael Lewis | Heide Martin
William Payne | Bradley Pavlik | Megan Schoch

Connecting the Dots



Typical Alley Condition
Source: William Payne

Alleys as the new pedestrian network

Changes to downtown Seattle's transportation network including increased mass transit opportunities with the proposed light rail additions and the impending changes to the Alaskan Way Viaduct, will have a direct impact upon how downtown functions, and how public life will be affected. This neighborhood will face two major changes with regards to circulation. First, it will be better served by mass transit which will eliminate the need for some parking spaces because fewer people who work downtown will need to drive there. Second, changes to the Alaskan Way Viaduct will disperse more vehicular traffic that is not stopping in downtown throughout its grid which will have a negative impact upon the pedestrian network, making it less pleasant and safe to move about on foot. The proposed North Lot development will also contribute more pedestrians to the neighborhood, further highlighting the need to create safe and pleasant spaces for people.

In response to these challenges the following projects seek to engage the existing network of alleys as a new network of pedestrian passageways. Some projects seek to address the alleys through programming and in changes to the spaces themselves, while others seek to address spaces and open lots that directly border an alley. All of which respond to a pedestrian promenade along Main Street that is anchored at its center where it intersects with the existing pedestrian-oriented Occidental Avenue.

Materials

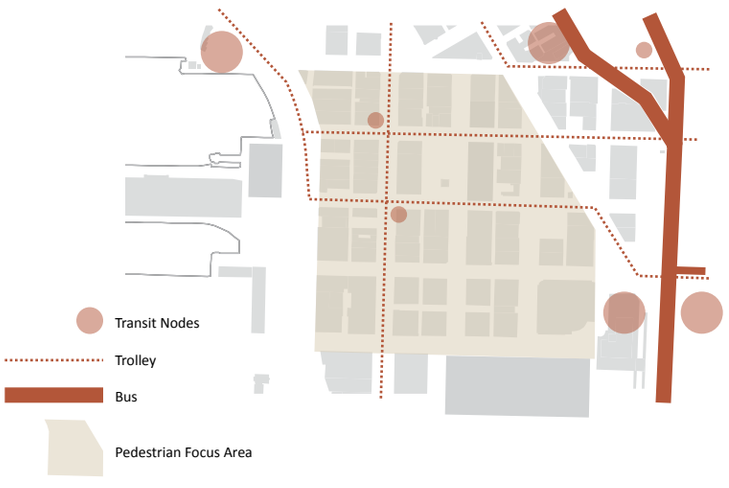
water

light

glass

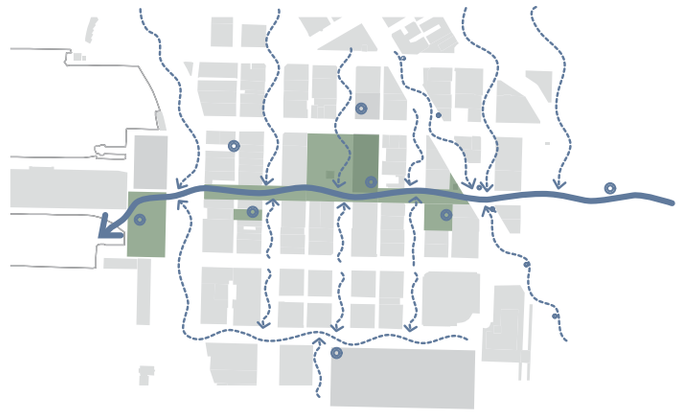
The Pedestrian Network

Proposed Transit Network

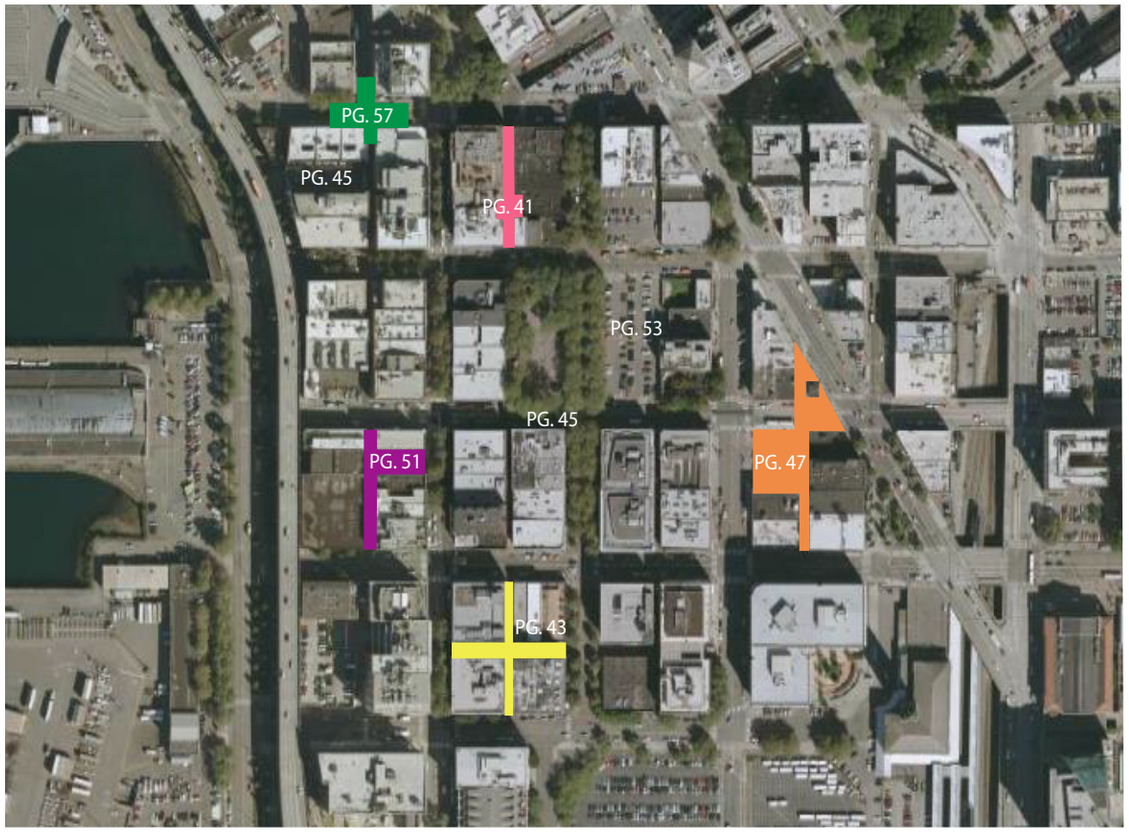


Proposed Auto Street Network

Proposed Green Network and Water Route



Project Location Map



12 Pedestrian Criteria:*

PROTECTION	vehicular traffic crime & violence unpleasant sensory experiences
INVITATION	walking standing and staying sitting visual, audio & verbal contact varying seasonal/24 hr activity play, recreation & interaction
DELIGHT	dimensioned at human scale positive aspects of climate aesthetic & sensory

12 Environmental Criteria:

ATMOSPHERE	greenhouse gas emissions air pollution heat island effect
RESOURCES	water quality and quantity recharge & replenishment conservation & reuse non-hazardous materials locally available
BIOTA	vertical & horizontal structure microclimates & niches food/nest/rest sites & materials connectivity/corridors

* Gehl Architects

Programming

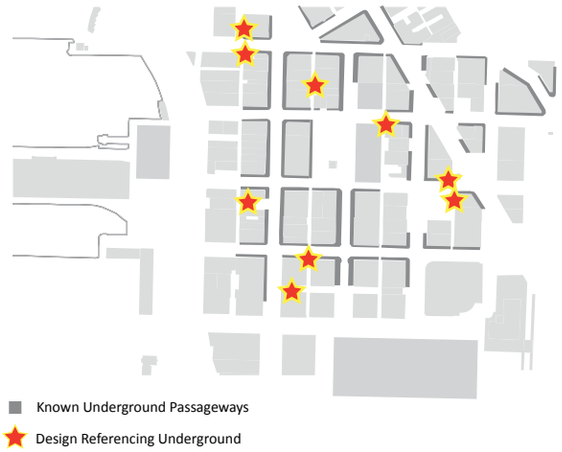
Strengthen the Pedestrian Network
Connect major destinations throughout the site
Utilize alleys and improve East/West connections as pedestrian ways
Design inviting, human scale pedestrian routes
Increase public transit use and bicycling

Activate the Neighborhood
Improve safety with lighting and nightlife opportunities
Encourage unique shops, services, restaurants and entertainment
Provide a variety of comfortable, human scale spaces for different users
Transform alleys and parking lots into new pedestrian spaces

Incorporate Green Infrastructure
Emphasize and celebrate hydrological processes
Treat, store, and reuse stormwater and greywater
Improve local biodiversity and mitigate climate change
Create comfortable microclimates

Reveal Site Histories and Celebrate Local Culture
Reveal the underground with lighting, glass and water
Emphasize historic materials, details and textures
Highlight local artists and galleries
Integrate and provide opportunities for the homeless community

Incorporating the Underground



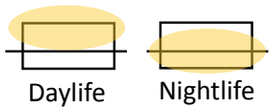
Proposed Bicycle Network

Residential Buildout Opportunities

ALLEYS: Step in Time

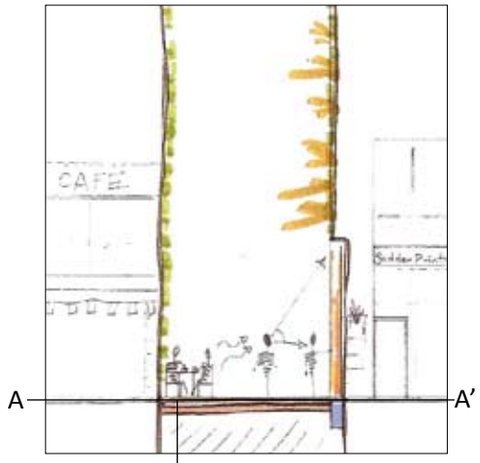
N

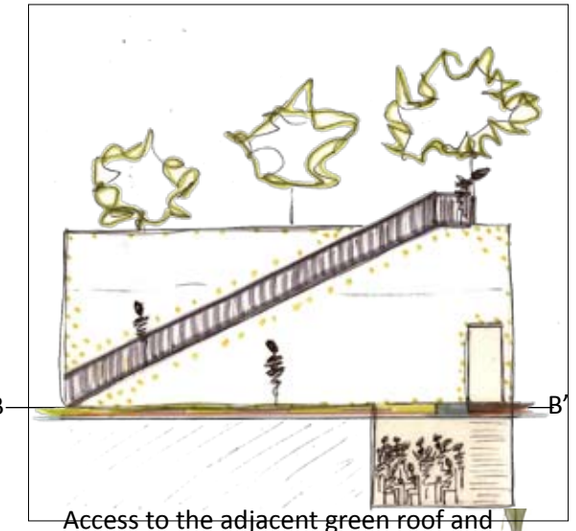
The alley between Pioneer Square and Occidental Park is currently uninviting by day and dangerous by night. However, given the proximity to two public open spaces and the adjacent nightlife venues, the potential for this alley is great.



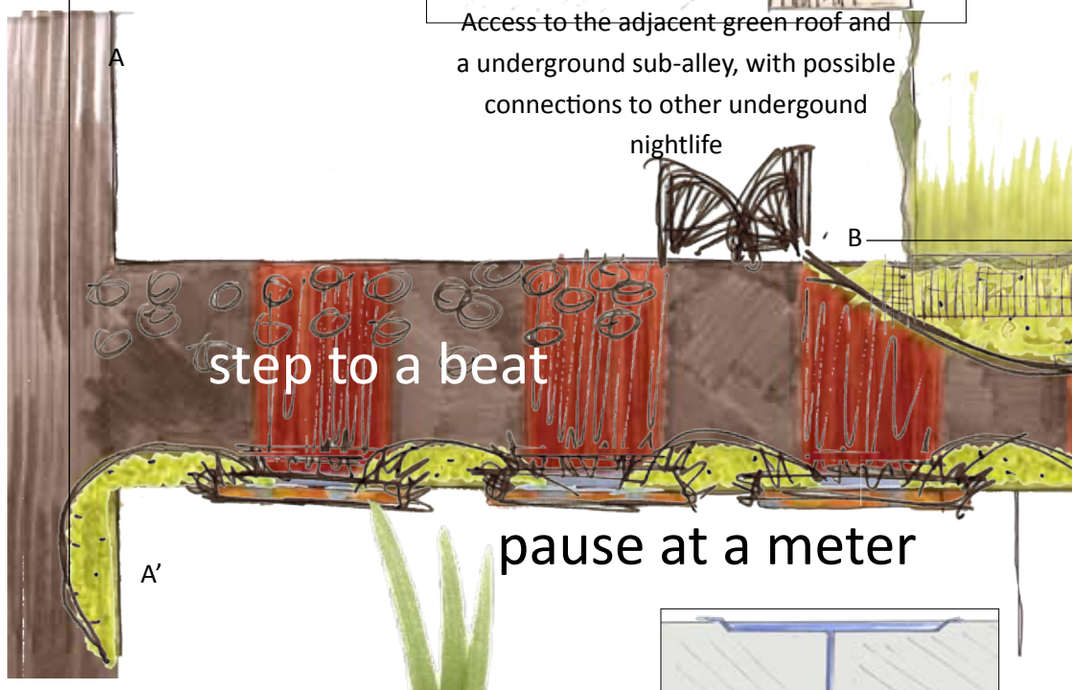
The proposed design entices pedestrians to use the alley throughout the day. As someone walks through, all senses engage in a pattern analogous to a musical composition. This experience provides an exploration of the alley (including an adjacent green roof) that would otherwise be limited to the sight at the end of the alley.

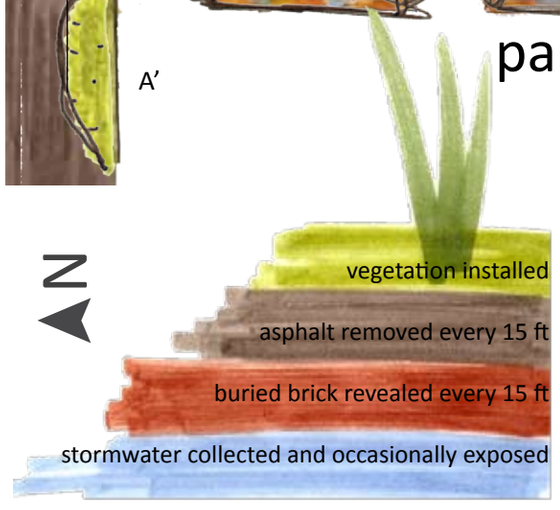
The design also offers an intriguing place for restaurant, cafe, art galley and dance club patrons to linger throughout the evening and night. Auxiliary entrances to adjacent nightlife venues in the alley and spilling of these uses into the alley increase the number of people occupying the space at night. Also accessed from the alley is an adjacent underground sub-alley proposed for use as an additional dance club/bar. Exciting features of water, light and fire frame history and ecology and create a place worthy of staying.



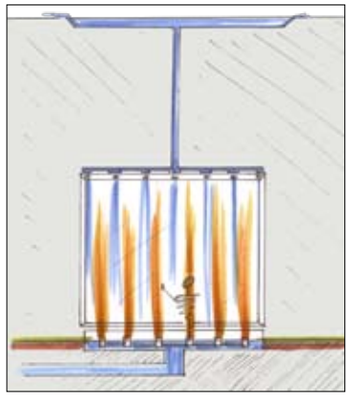


Access to the adjacent green roof and a underground sub-alley, with possible connections to other undergound nightlife

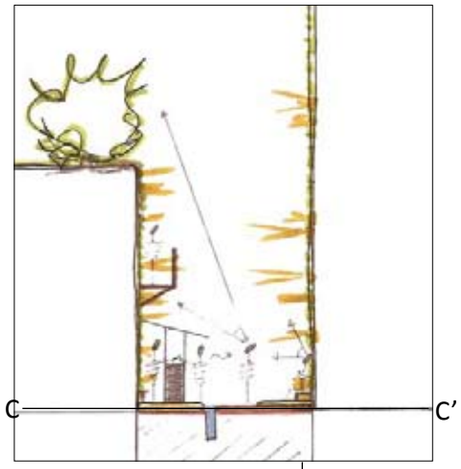




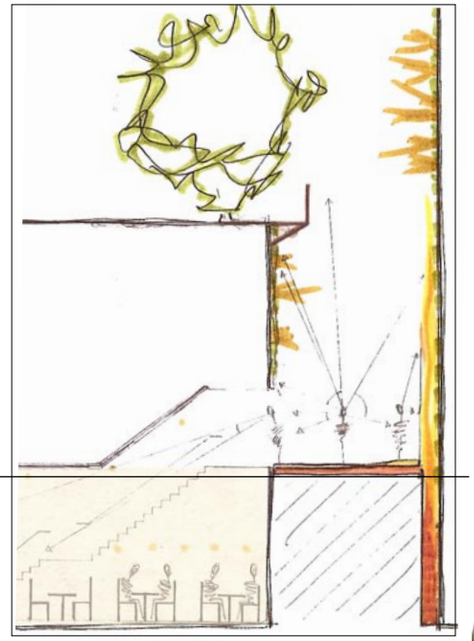
The paving pattern engages feet to a beat.

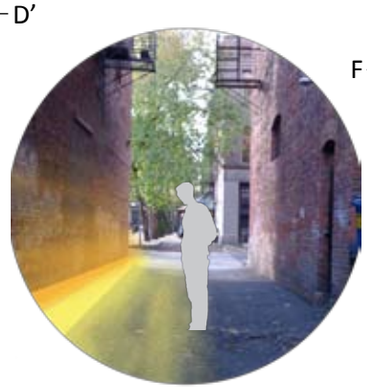


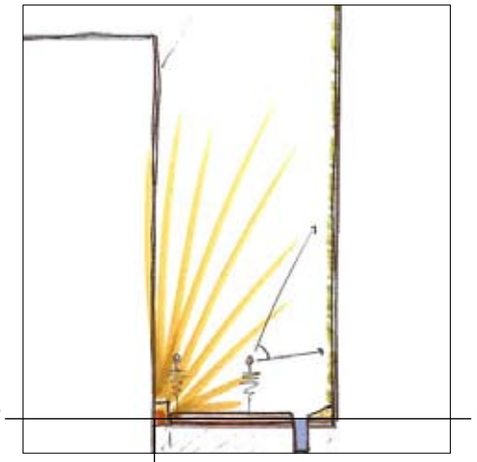
On the right, three fire features are occasionally extinguished by collected stormwater



A glass roof intensifies dissonance area, covers users, permits views and creates sheet walls of water during a rain event.



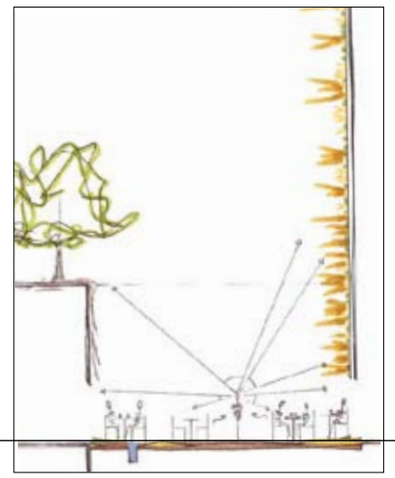




Light from the adjacent underound dance club emitted through red, orange and yellow acrylic blocks in a steel frame that functions as a bench during the day.

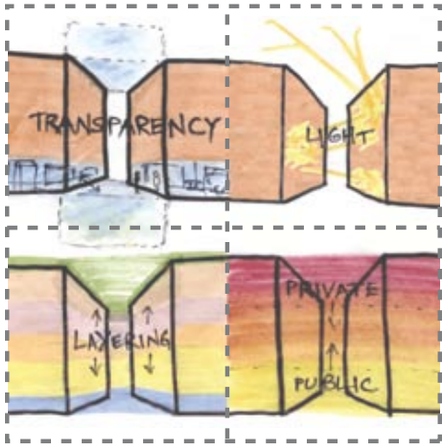
Both walls of the alley are covered in fire-resistant echevaria plants interspersed with lightbulbs that softly twinkle at night.

A tall fire feature set into a wall marks th beginning of dissonance, references the Great Fire, welcomes those coming from the undergound sub-alley and keeps users warm.



People gather here at night

Alleys: The Radiance Within

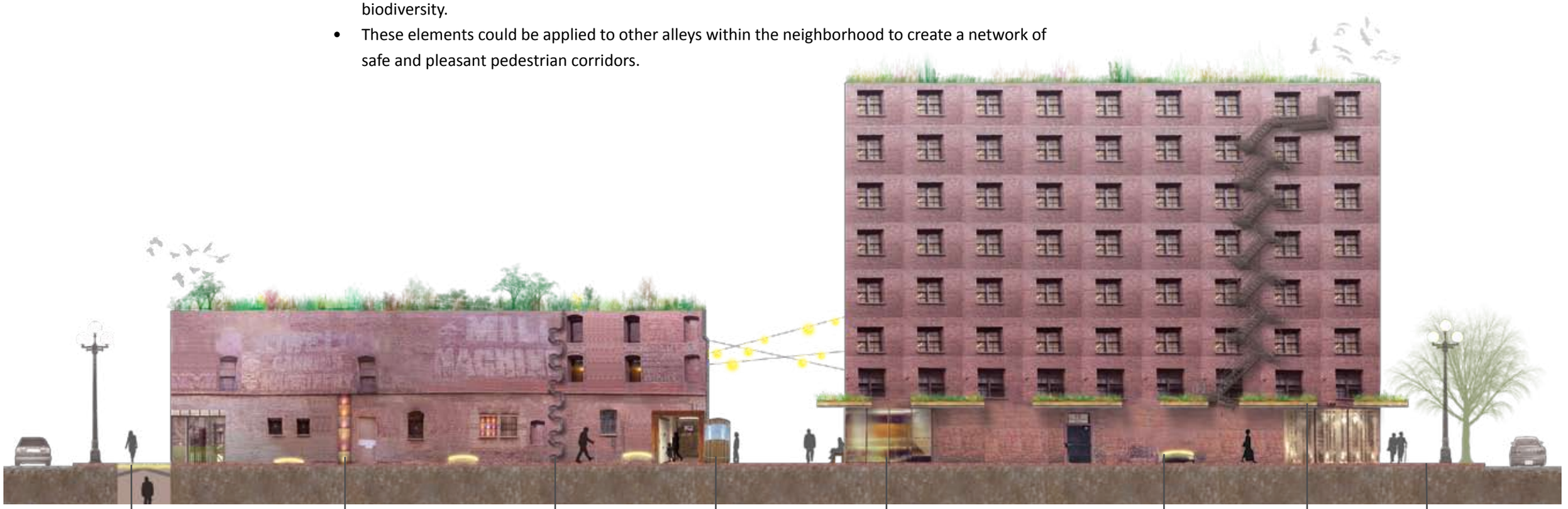


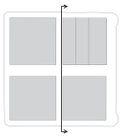
Concept Diagrams

The alleys of Pioneer Square hold great potential for the development of unique public spaces. As they are now, the alleys of this neighborhood are uninviting for pedestrian use. The design of these alleys seeks to utilize light and transparency to create intriguing passageways and stopping places for pedestrians, while still accommodating for typical alley services like trash collection and building access:

- At ground level, the existing facades are retrofitted with windows to reveal the internal functions of the building and to make the space feel more open and accessible. Live-in artist studios and galleries are proposed on site, as well as new mixed-use retail and office spaces.
- Various lighting features throughout the alley highlight historic site features and create a safe and inviting atmosphere for visitors.
- Stormwater is collected and reused on site as irrigation for green roofs, while grey water is cleaned then channeled through exposed pathways before leaving the site.
- Green roofs and vegetated walls clean the greywater collected on site and improve local biodiversity.
- These elements could be applied to other alleys within the neighborhood to create a network of safe and pleasant pedestrian corridors.

Connecting to alleys within the group that have similar characteristics.

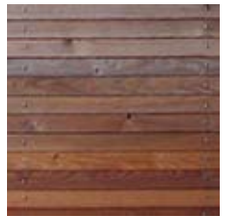




Precedents



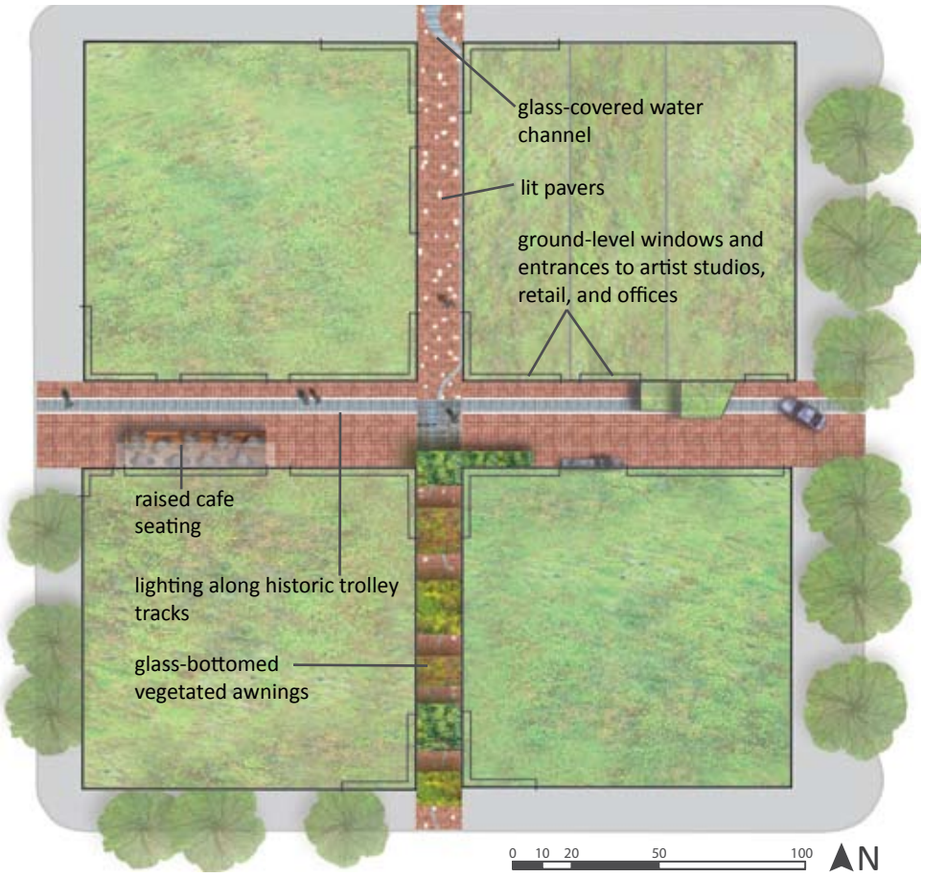

Materials

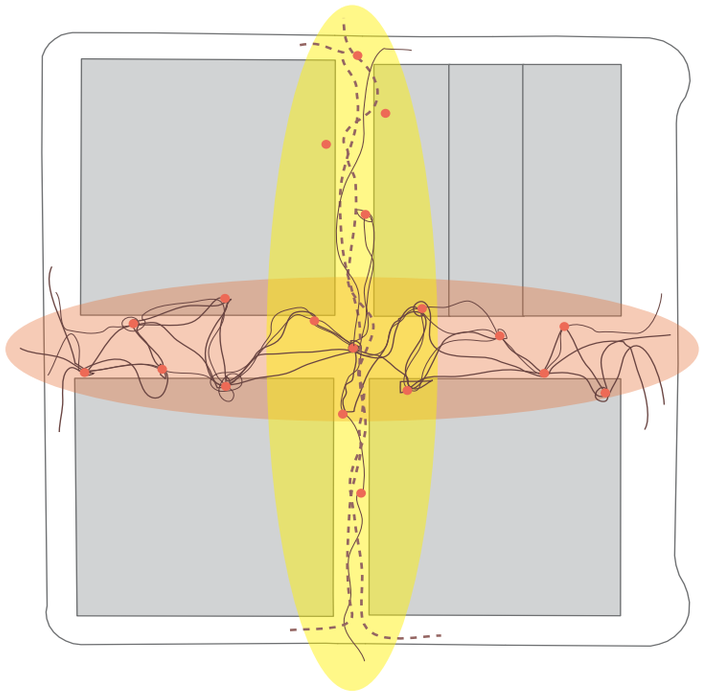



East alley showing ground-level windows and entrances to artist studios, retail, and offices

South alley showing glass-bottomed vegetated awnings

North alley showing glass-covered water channel and lit pavers





Circulation and Movement Diagram

Alleys: A New Main Street

Main Street acts as a spine for the pedestrian network, connecting alleyways and vibrant public spaces including a youth center, green roof park, outdoor theater space, and café plaza. The street car connects visitors from adjacent neighborhoods to this special pedestrian center. Main Street is also the primary site for stormwater and greywater treatment, featuring a series of bioswales and a living machine that cleanse water before it reaches the Puget Sound, and a living sidewalk system that allows for infiltration and flood control.

A Green Infrastructure: **stormwater management**

- Reveal and celebrate hydrological processes
- Collect, cleanse and reuse street and roof runoff
- Incorporate green roofs and walls into stormwater infrastructure

An Urban Open Space: **green spaces**

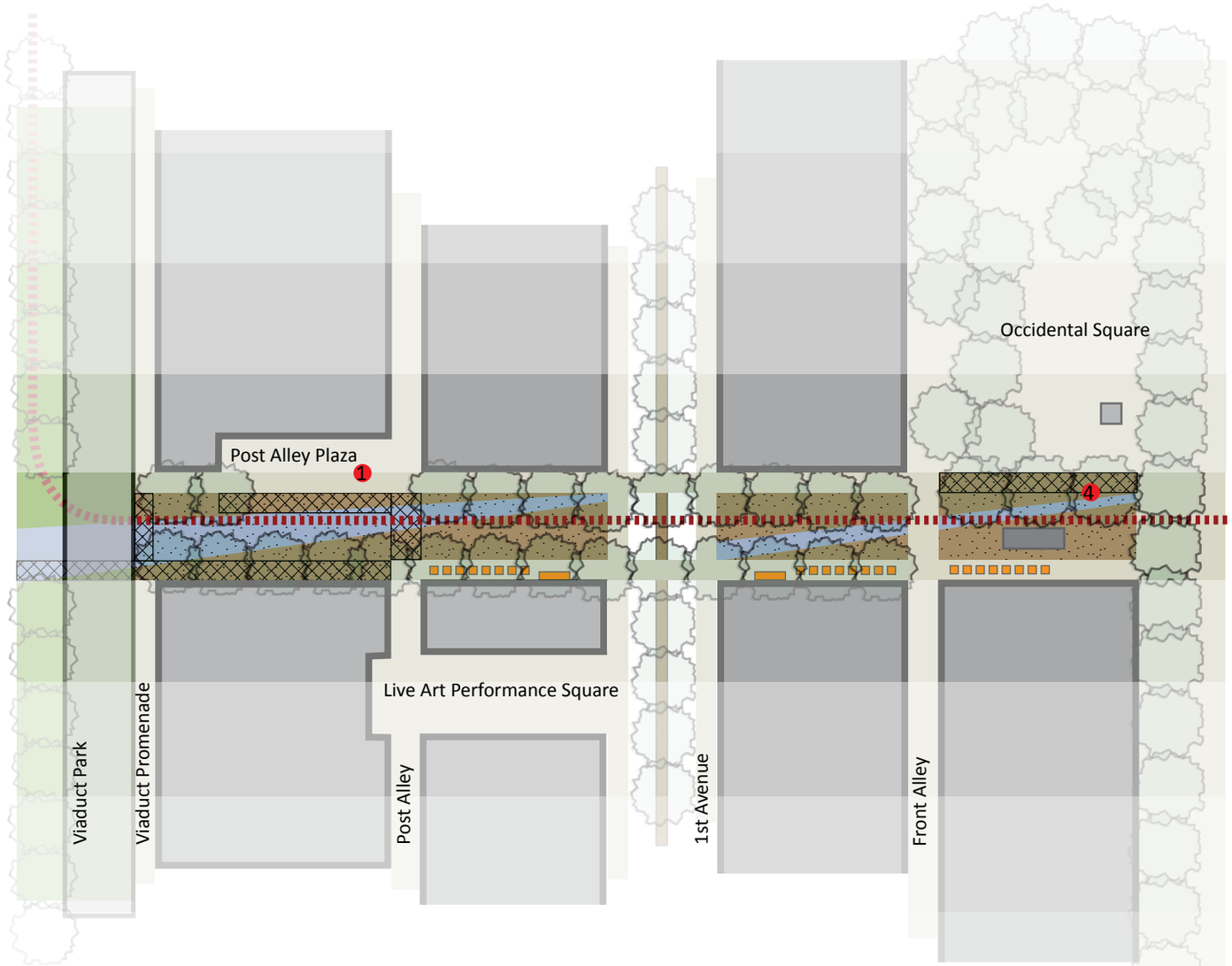
- Create habitat for urban wildlife, pollinators and plants
- Utilize horizontal and vertical layers for ecological functions
- Mitigate heat island effects and respond to climate change issues
- Provide comfortable microclimates for pedestrians

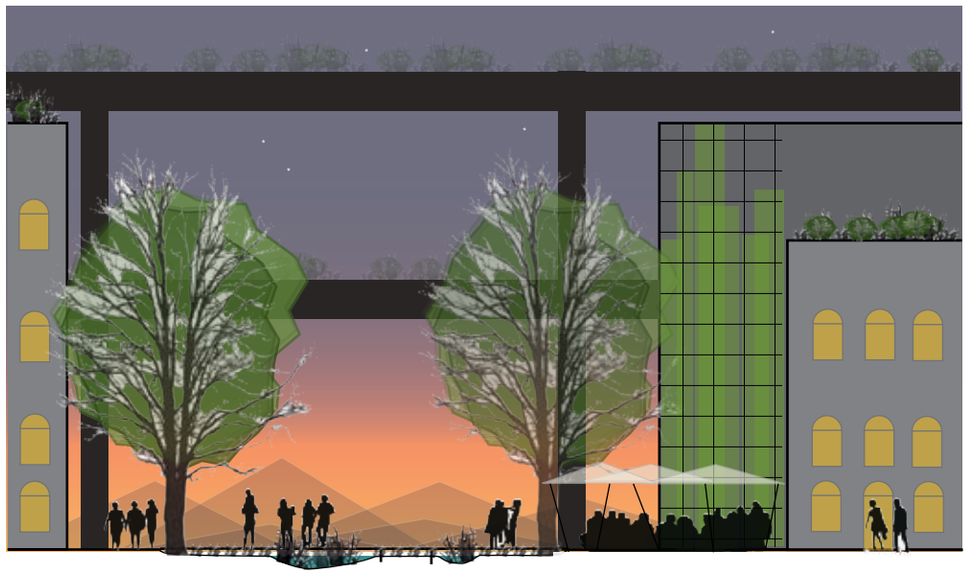
An Alternative Transit Corridor: **walkable streets**

- Establish primary east/west connection to waterfront
- Link pedestrians to network of north/south allies
- Reduce automobile use in the neighborhood

A Pedestrian Experience: **vibrant public life**

- Convert adjacent open spaces and brownfields into new destinations
- Create spaces for outdoor entertainment and dining
- Invite a diversity of users to use pubic spaces in the neighborhood
- Incorporate materials that highlight the site's history



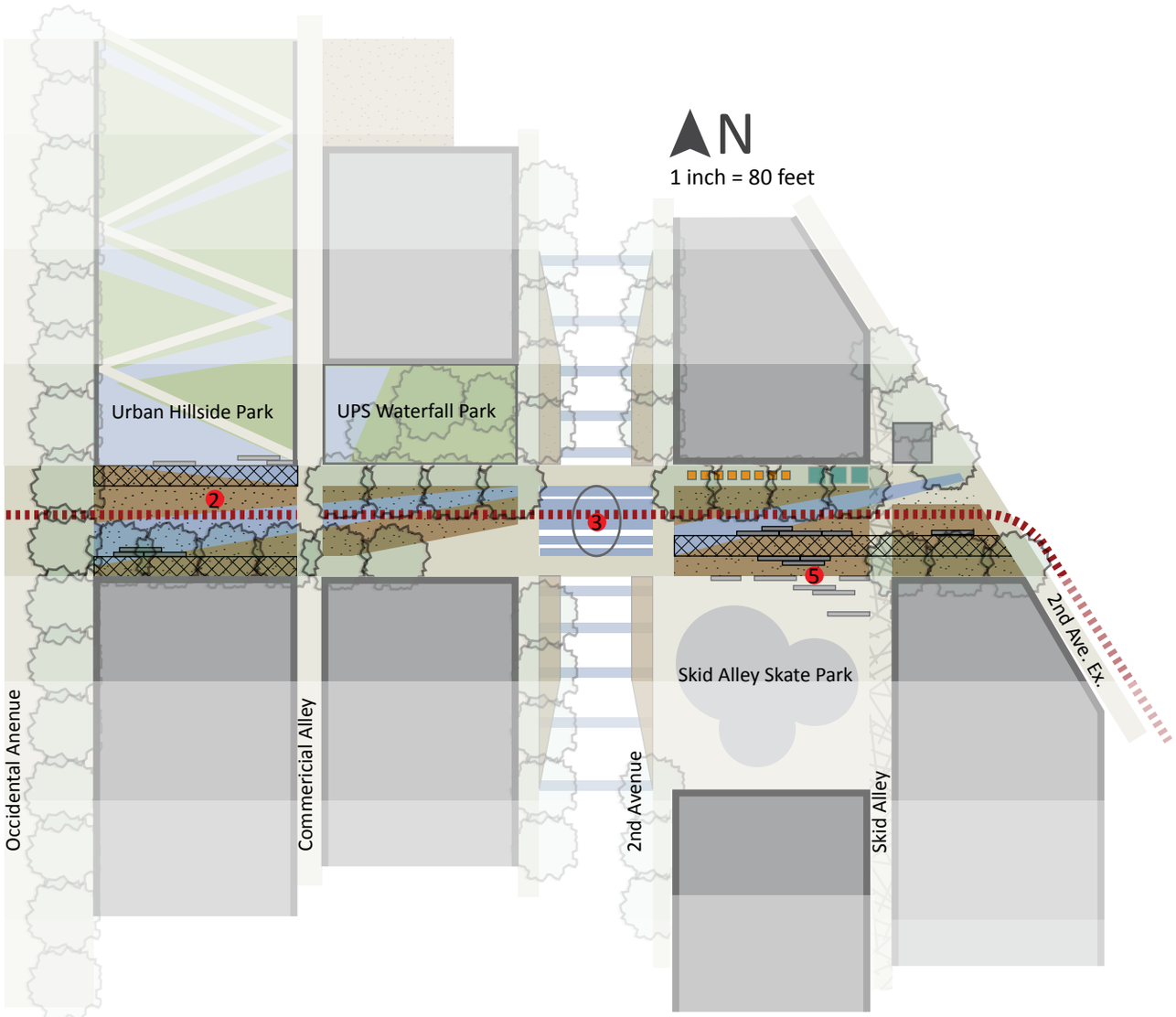


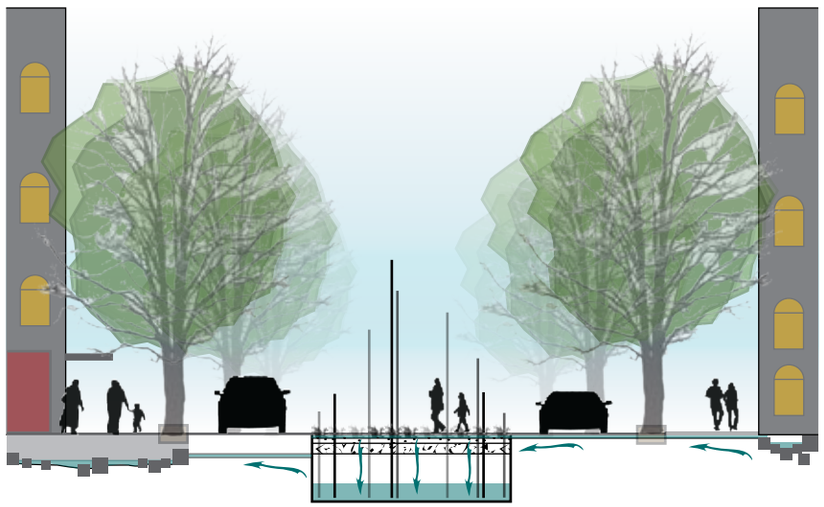
1. Post Alley Plaza at Sunset

Remnants of the viaduct freeway frame a view of the Puget Sound and Olympic Mountains at sunset. A pocket plaza edged with vegetated green walls provides fresh herbs and a comfortable outdoor dining and entertainment space. The living sidewalk connects Post Alley as it bridges the vegetated swale on Main Street.

2. Urban Hillside Roof Park

An angular extensive green roof on a modern building touches down on Main Street, creating a sunny, sloping park and a strong edge for Occidental Square. Rainwater zigzags down the rooftop over a series of cascades, providing irrigation for vegetation, habitat for birds and invertebrates, and opportunities for water play and exploration.





3. Second Avenue Living Machine

Water passing through a series of swales on Main Street spills into shallow runnels that calm auto traffic on Second Avenue. These runnels transform into linear planters in the center of the intersection, further slowing traffic, defining pedestrian crossings, and cleansing stormwater as it infiltrates into an underground cistern. Vertical pipes emerge from the planters, re-circulating water through the living machine and celebrating the cleansing process.

5. Nightlife at Skid Alley Skate Park and Youth Center

Stormwater entering Main Street passes through a concrete wetland adjacent to a new skate park. Warm light shines up from the wetland and the historic underground, projecting upon a translucent fabric canopy. The canopy is stretched over an informal seating area, offering a shelter where pedestrians can relax, watch skaters, or view an outdoor movie.

4. Living Sidewalk

The living sidewalk provides ADA access while allowing water to permeate and vegetation to grow underfoot, creating a space for soil invertebrates and root structures. The panels can be manufactured locally from common construction waste products with minimal technical equipment or expertise. Each panel is manufactured and installed individually, allowing for custom panels and easy replacement or access to the space below the walkway.

Alleys : Metabolize

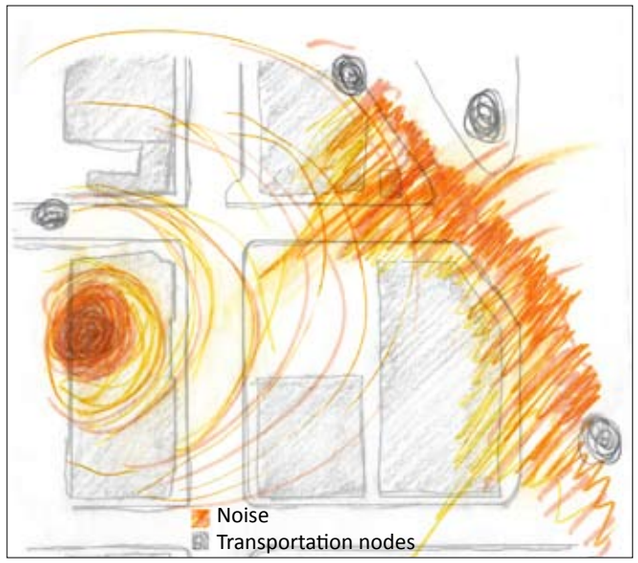
the process of changing energy sources into energy

Encourage Ecological Processes

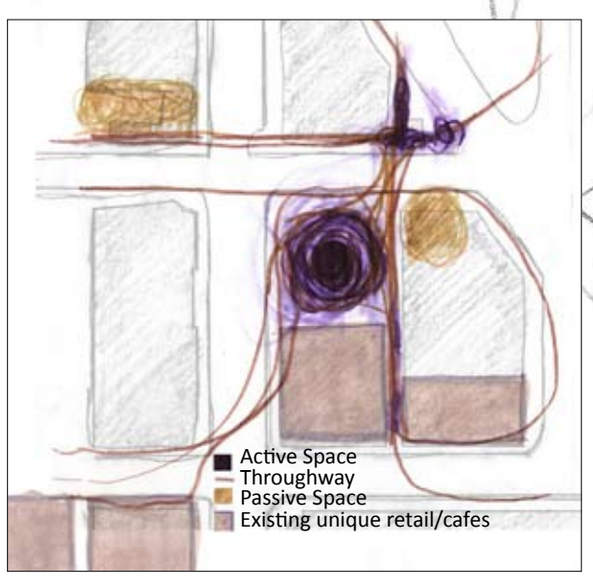
- Improve local biodiversity and mitigate climate change
- Establish green vertical and horizontal layers
- Collect, direct and filter stormwater
- Emphasize and celebrate hydrological processes

Celebrate Public Life

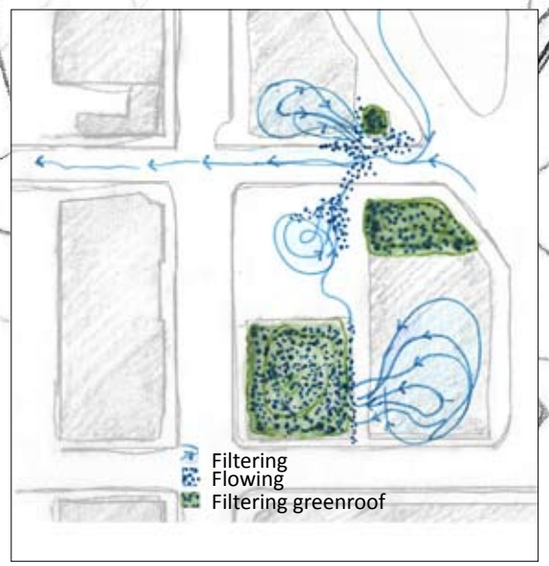
- Provide a variety of pedestrian spaces both active and passive
- Create a fun, joyful, safe space
- Accommodate the growing downtown residential population
- Encourage multifunctional use of spaces
- Reveal the underground with lighting, glass and water
- Emphasize historic materials, details and textures



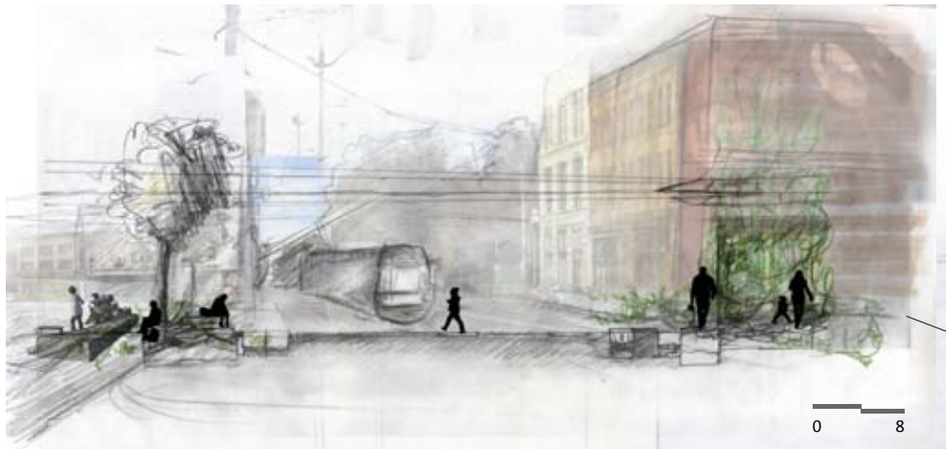
Opportunities



Circulation



Water Flow

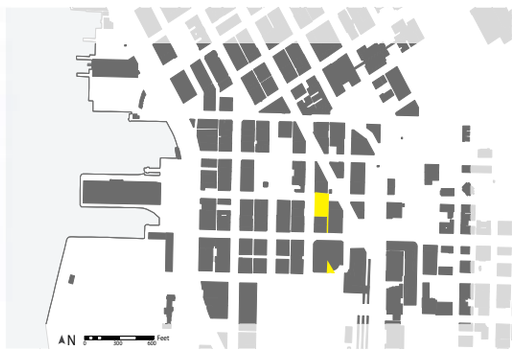


Greenhouse Sidewalk
Glass panels interspersed between concrete sidewalk slabs offer a view down to an underground greenhouse.

Concrete Wetland
Wetland plants appear to break through pieces of recycled concrete creating an urban nature area. This concrete wetland collects and filters stormwater and with a tilted ground plane it slows down the pedestrian experience catering to exploration and peaking curiosity.

Skatepark / Outdoor Movie Theater/ Water Feature
The skid alley skatepark is connected to the new youth arts and community center. During summer evenings the skatepark functions as an outdoor movie theater, offering seating on the green roof above the youth center, stacked slabs adjacent the sidewalk, and in the skate bowl. On rainy days water is highlighted by creating pools in the skate forms as it is aerated though the park flowing into the concrete wetland and main street swale.

Covered Walkway
An illuminated orange glowing glass covered walkway invites pedestrians to enter. The series of tilted glass panels lead storm water to rain cables, directing water flow to vegetated walls.



Alleys: Built Apparition

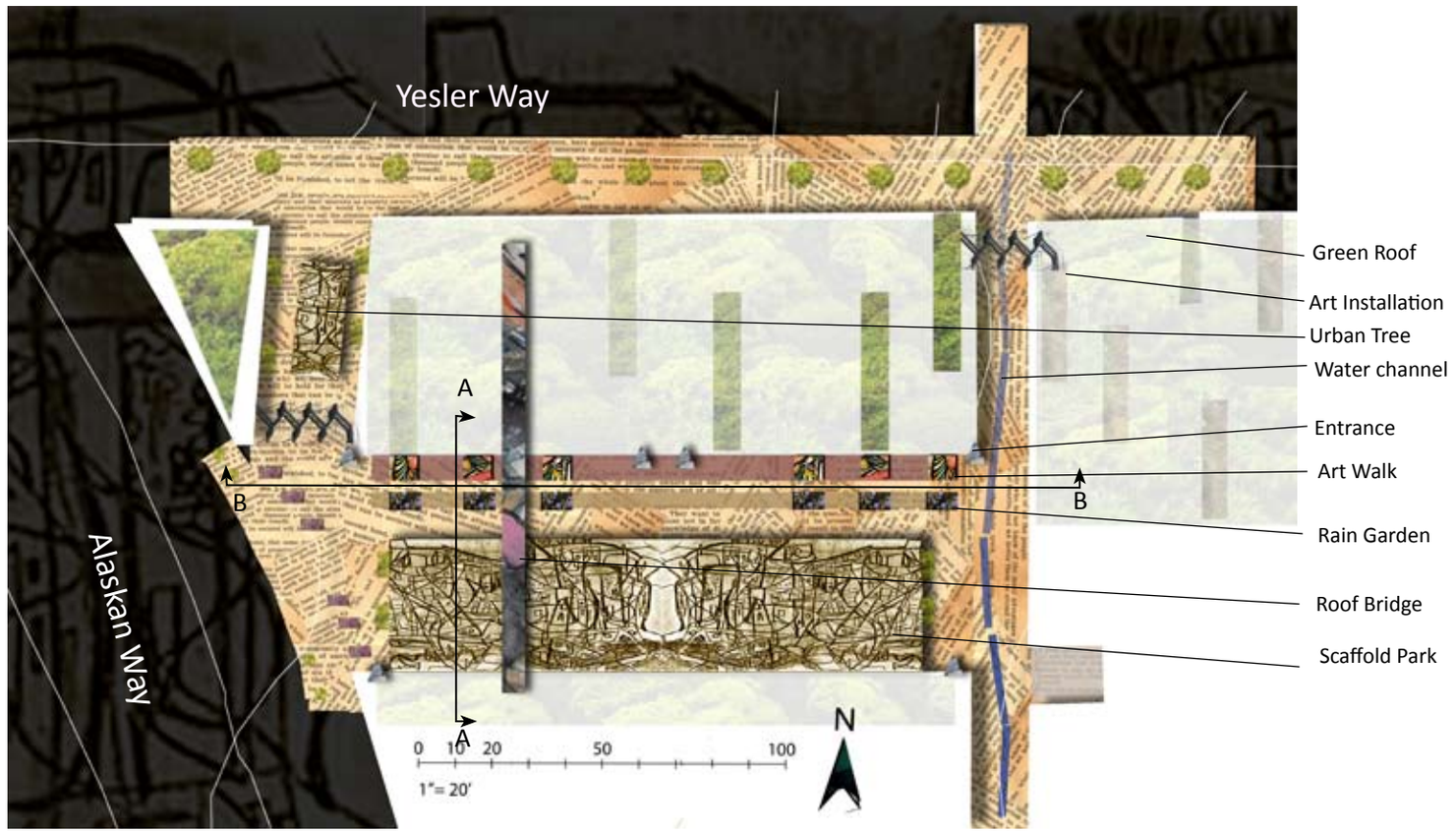
A new haunt for an old space

This alley functions as a vibrant gateway into the alley network. It is primarily for budding artists and young adults to socialize in and around studios, cafes, clubs, and shops. Built Apparition resurrects the intimacy of the alleyway, while providing a vertical infill park structure. It is a space where urban form, natural function, and artistic expression mix in a youthful environment unique to the city. Site obstacles have been framed as opportunities for an adaptive and changing canvas of urban form and function.

- The introduction of lighting and ground floor windows invite users and provide safety.
- Art installations of glass, water, light, and steel unify the space and frame the presentation of progressive art.
- Built Apparition functions as a park space and provides a vertical framework for vegetation.
- Greenroofs, downspouts, and rain gardens treat runoff and greywater.

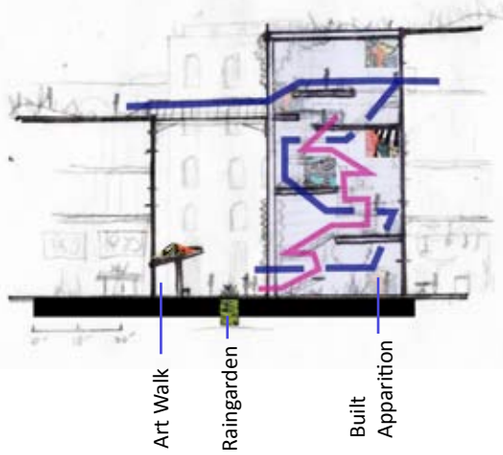
Massing and flow of visitors.

Urban Tree, also shown on the left side of section BB, functions as a self contained green wall. The trees are confined within the steel frame to reference the tight urban space and link to the form of the Built Apparition.



Viewing East from the waterfront entrance. Built Apparition functions as a public park and private terrace. The Art Walk, on the left with its Light Trellis and Sound Spouts, creates a rhythm of light, sound, and texture. The space is flanked by retail and artist studios. The structures create a variety of spaces to walk, sit, lean, and interact.

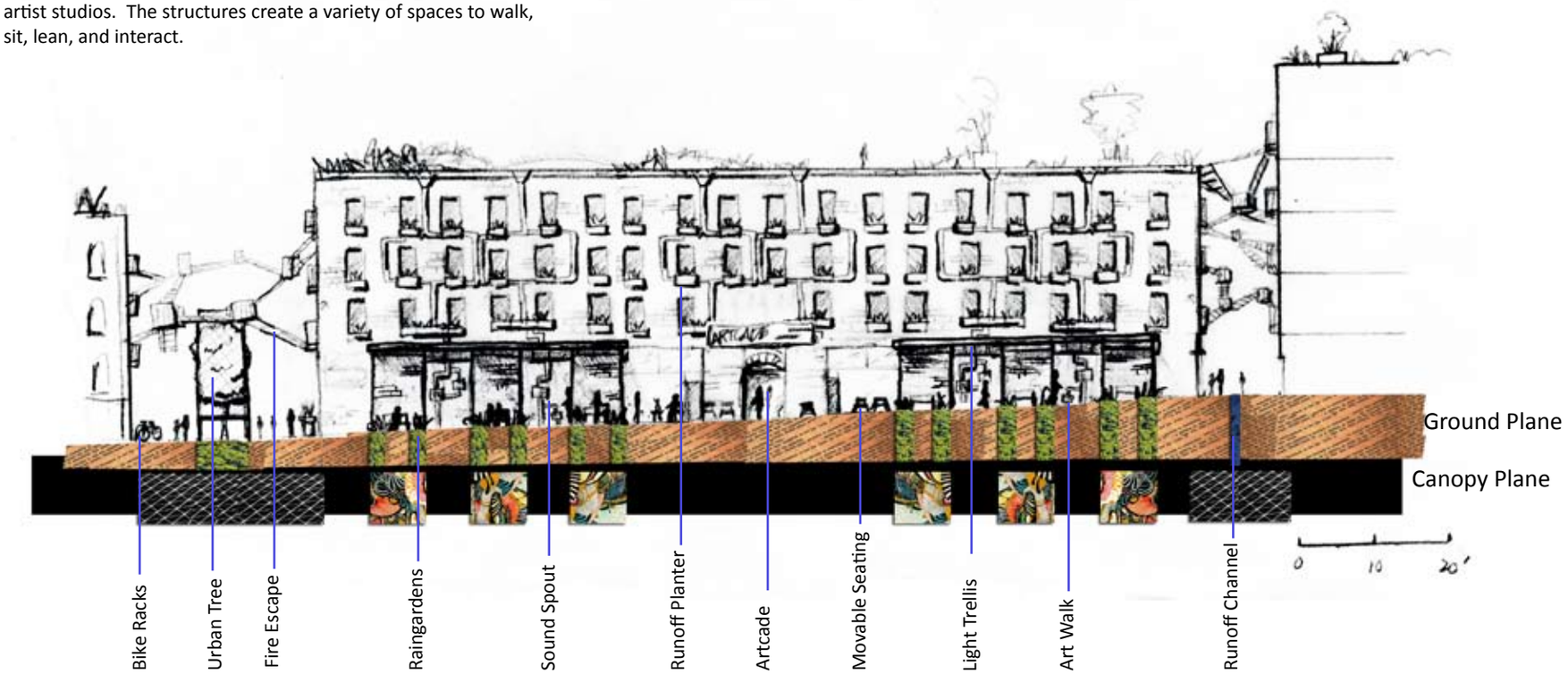
Though the space is catered to a particular user group, this core will attract a variety of visitors and curious users. Focus has been made on creating intimate spaces, and an interesting vertical plane for discovery.



Section AA: Separate paths for public and private use. The public is invited to explore the scaffold structure and discover views. Residents can access the building and greenroof though a separate path system. The framing references the previous building and creates a vertical structure for vegetation.

Alley entrance from Yesler. Fire Escape art installation functions as resident balconies, and create an intimate entrance and gateway.

Looking West from the Built Apparition toward Elliot Bay.



Section BB looking North. The ground, wall, and canopy planes create a rhythm for the senses. The experience is unified by light, water, glass, and steel. The Soundspouts, during, storms produce an audio experience of splashing and pulsing. The Rraingardens capture runoff from the Art Walks Light Trellis and the surrounding hardscape. Steel fire escapes play off historical reference and frame views. The Artcade provides studio space. The greenroof is a private retreat for residents of the north and south buildings.

Alleys: Live Art Studio

Drawing in the energy of Post Alley...

Pike Place Market performer

Pike Place to Pioneer Square: making the Post Alley link

and [dreaming past] current site conditions...

"That parking lot really hurts businesses on this side of First. Do you know the foot traffic ratio? It must be 5 to 1."

--Pioneer Square Merchant

"The city likes performers in the streets. We are free security for them, in a way. A performer changes a space, changes the way people feel in it."

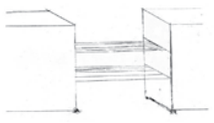
--Pike Place Busker

...to re-discover Pioneer Square

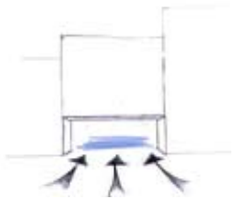
Site Proposal

The proposal for this site is to create a small public park in the space now occupied by a parking lot, and to open a view from First Ave to the waterfront by a restructuring of the current warehouse building.

To enhance the safety and vitality of the site and of Pioneer Square, the intent of the design elements and the site program are to draw street performers and artists into the area. The flexibility of the design will allow the space to be used on a daily basis by local residents and visitors, as well as facilitating intimate public events, concerts, and outdoor movie screenings.



rescaling the [parking] void



opening to the waterfront

PLAN: PRIMARY SITE AXIS BETWEEN MAIN AND JACKSON

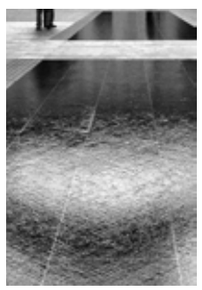
Materials + Forms

Dramatic Elements

- unexpected vegetated forms
- unique lighting elements
- "stages" for meeting and performance
- water flow and cleansing
- topographic shifts

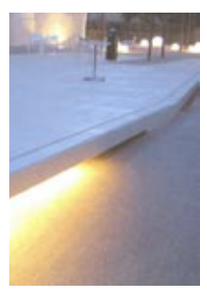
Historic Materiality

- wooden planks
- bricks
- rough hewn granite
- [immediate past] reclaimed asphalt



water walking stage
GGN

backlit gabion
Steven Wooster



lit patio "stage"
Alles Wird Gut

water benches
Dieter Kienast

roof collection system
Nigel Dunnett

steel gravel line
Dieter Kienast

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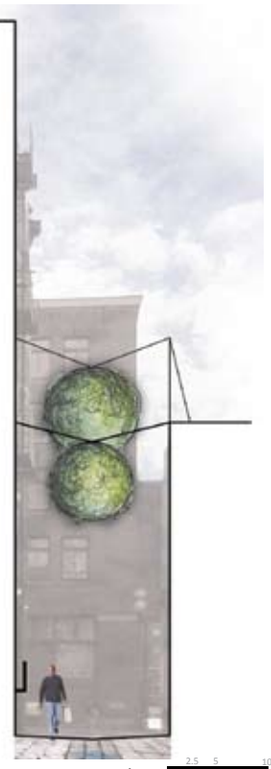
SECTION AA'
[looking from the street into the space]

SECTION BB'
[looking from the center of the space to the street]

SECTION CC'
[looking from the center of the space to the water]

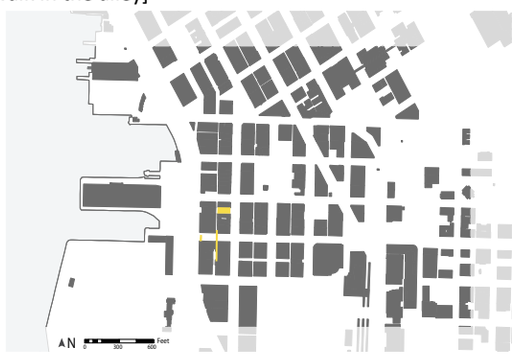
OVERVIEW PLAN: MOVEMENTS AND CONCENTRATIONS
water, vegetation, people

POST ALLEY AND MAIN STREET
[passing the green curtain]



SECTION DD'
[a walk in the alley]

SECTION EE'
[post alley section, facing west to water]



Alleys: The Urban Hillside

Delft Library
Source: www.floornature.com

1 Public space providing access to the sun and habitat

Amageltorv, Copenhagen
Source: *Gehl*

2 Create active edges

Stephen Epler Hall, PSU
Source: *Bradley Pavlik*

3 Utilize green infrastructure for stormwater filtration, control and reuse

Pfarzheim Water Playground
Source: *Dreiseitl*

4 Create an active family destination

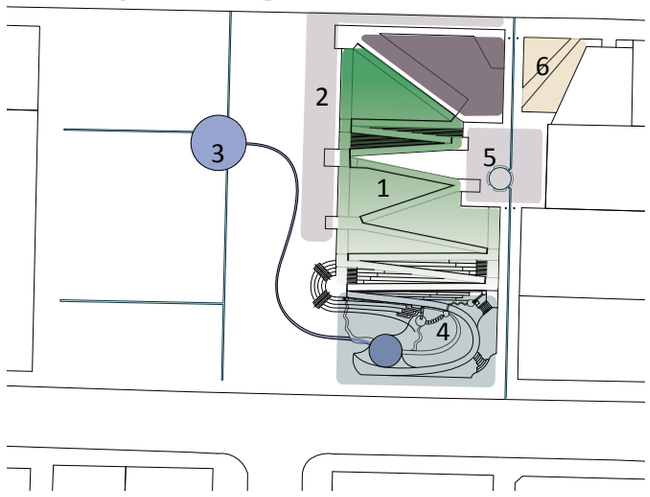
Montreal
Source: *www.pps.org*

5 Develop a hierarchy of public spaces

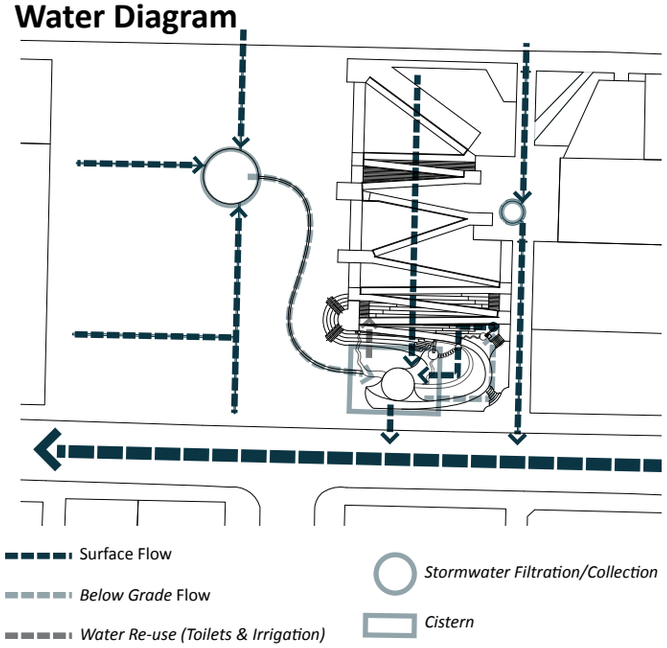
Seattle Underground
Source: *Bradley Pavlik*

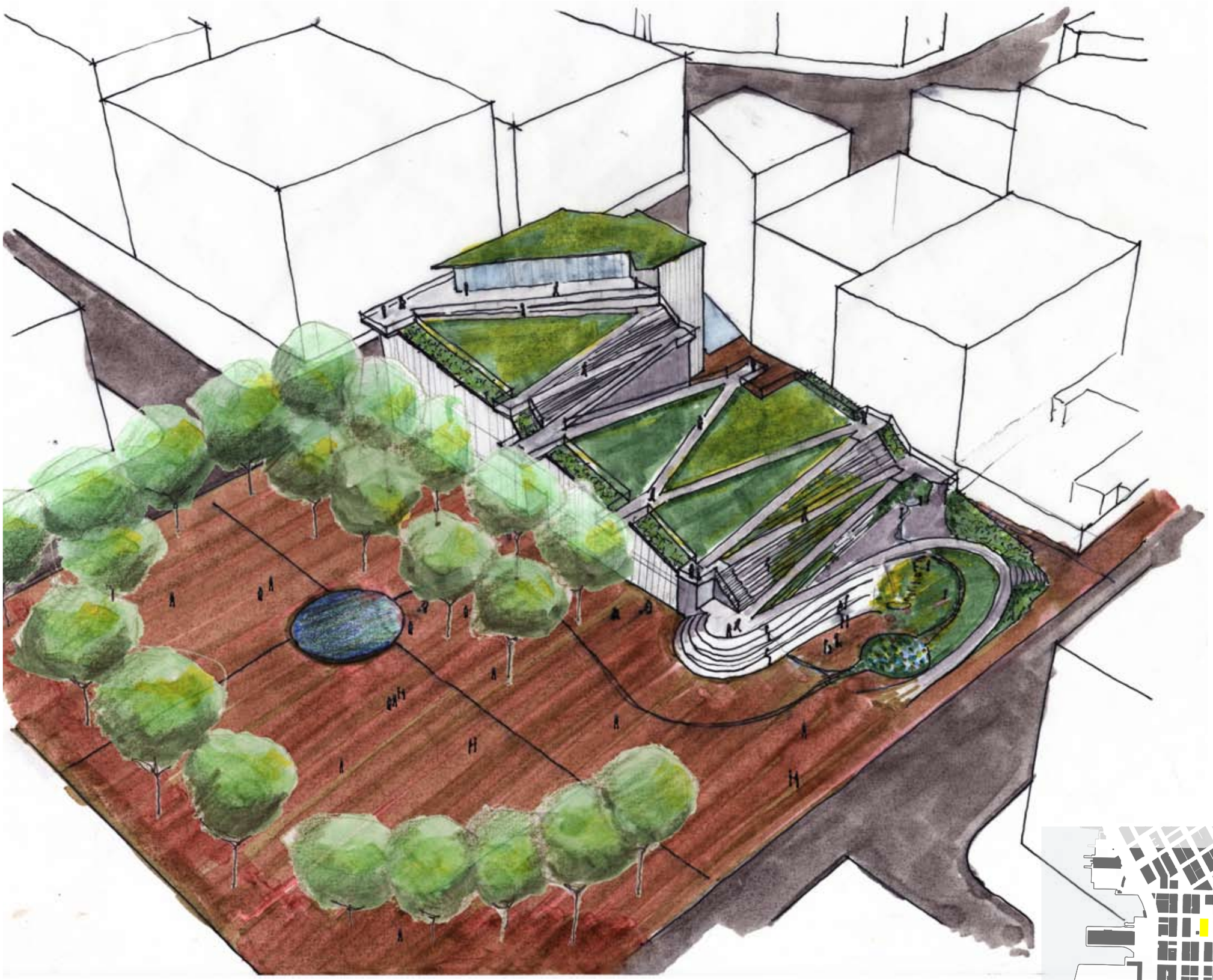
6 Reveal the underground

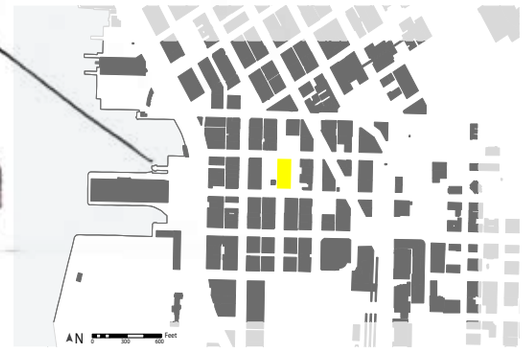
Public Spaces Diagram



Water Diagram



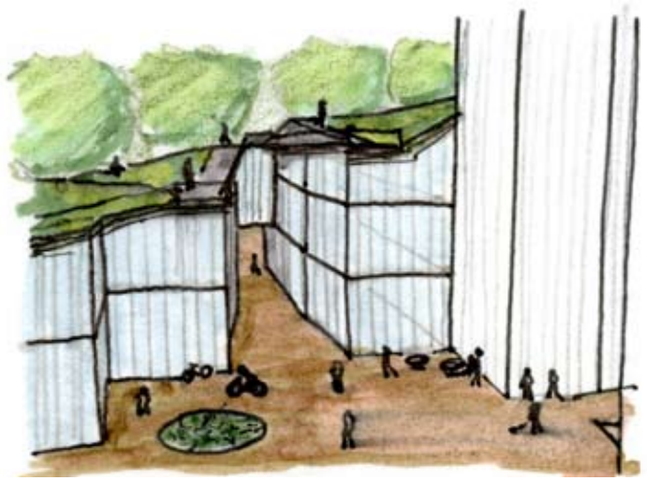




The Urban Hillside building provides an activated edge and a sunny outdoor counterpoint to Occidental Square. Water is captured and recycled in the building and fountains.

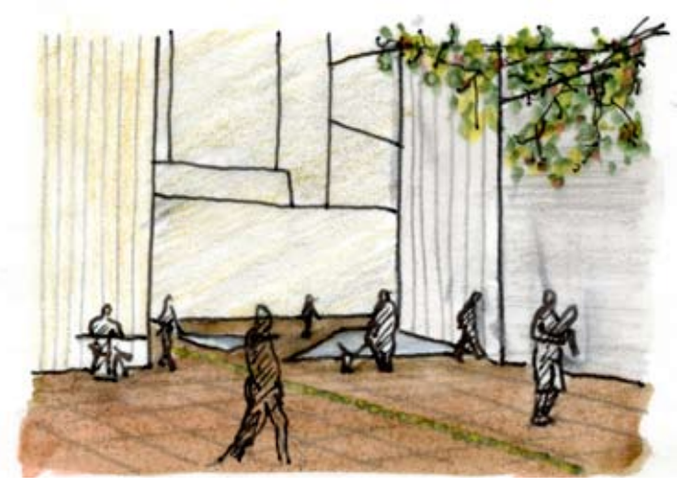
Alleys: The Urban Hillside

B



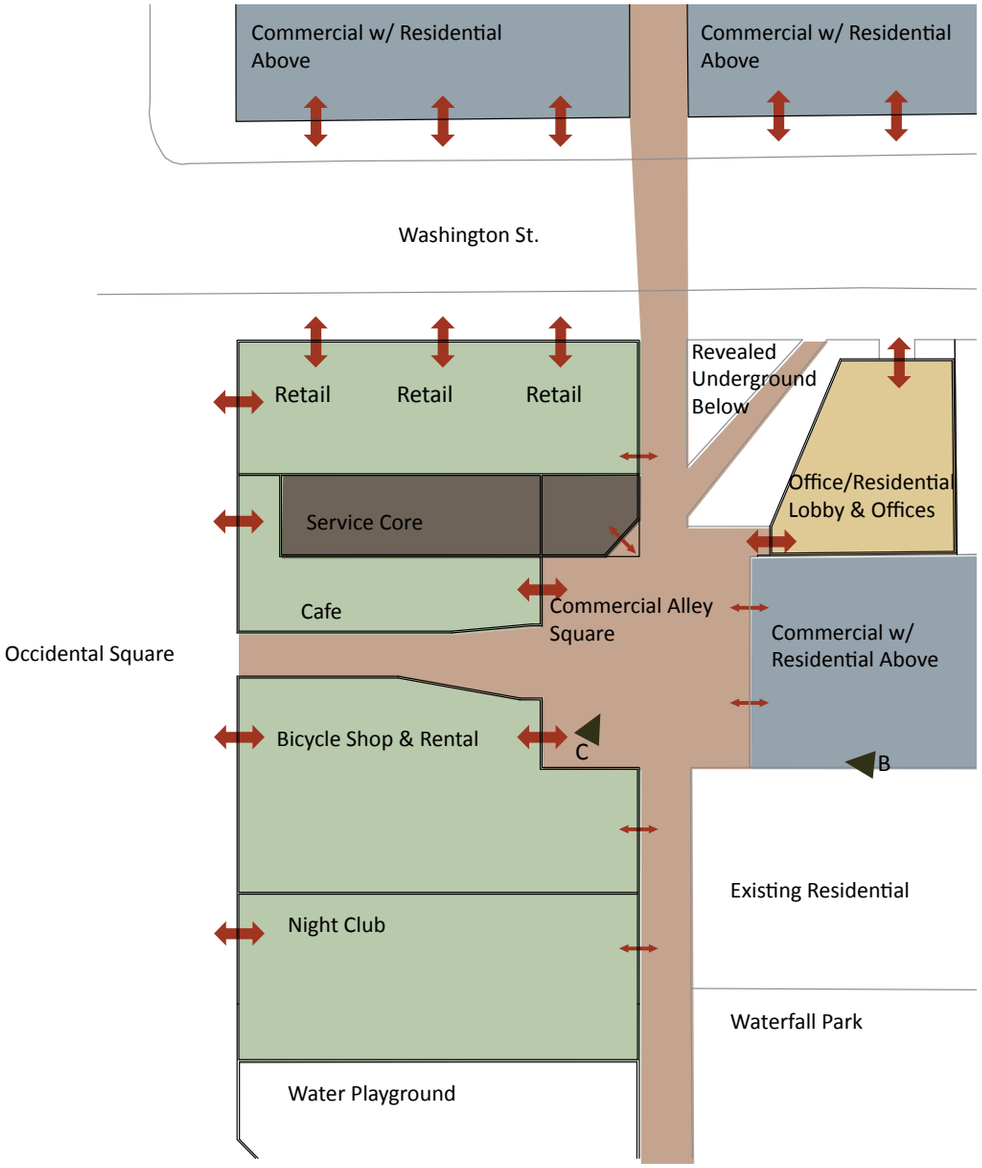
Aerial perspective looking west showing courtyard and through way to Occidental Square.

C



Ground level perspective looking north/east toward the exposed underground layer.

Ground Level Programing and Circulation Diagram

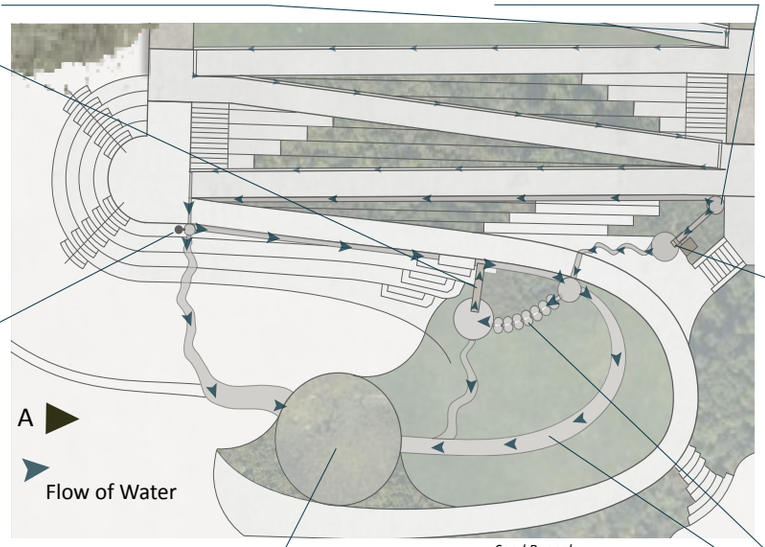


Stormwater from Roof

Spring (water pumped from cistern)

Hand Powered Archimedes Screw

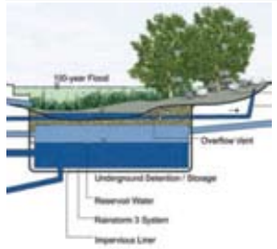
Hand Powered Force Pump



Water Wheel

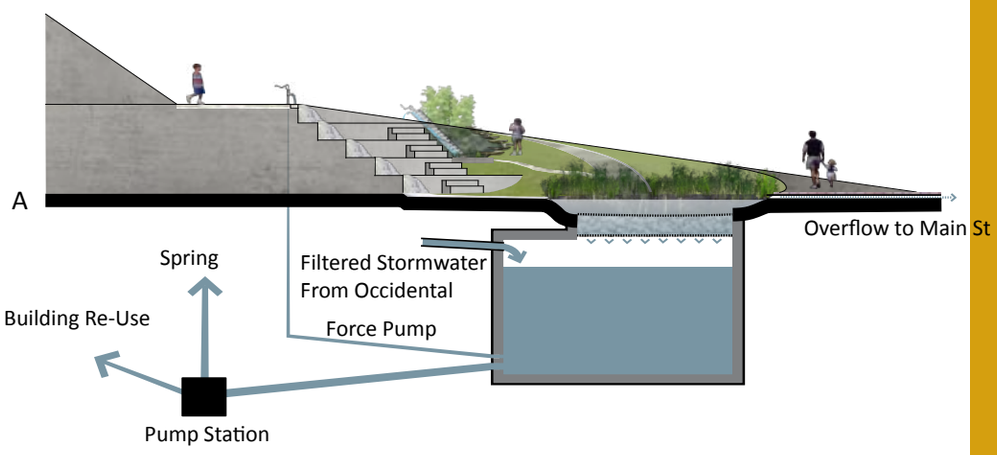
Flow Forms

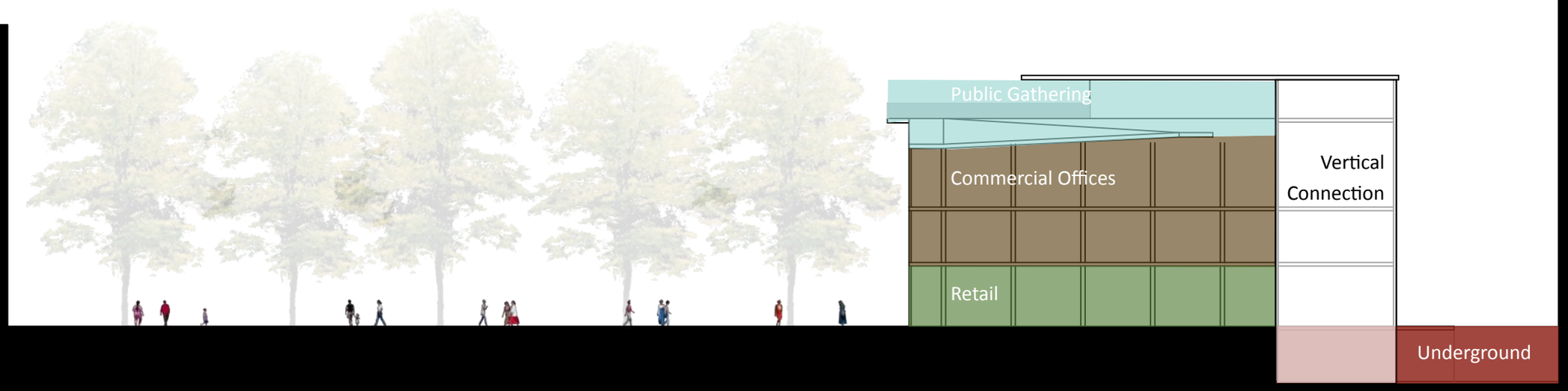
Filtration Wetland and Underground Cistern



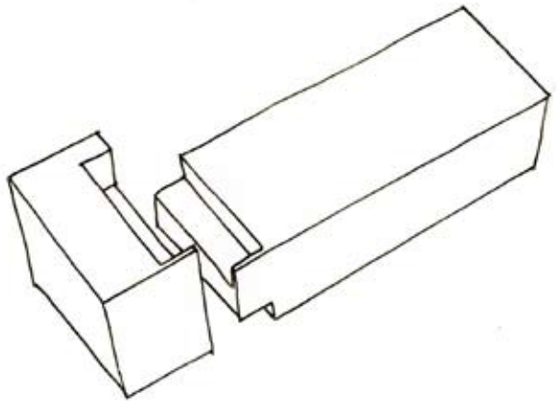
Sand Runnel

Families and children are an important user group to create a more vibrant pedestrian district for Pioneer Square. A water playground can function as a family destination year round. During the winter ample stormwater is filtered through wetlands, stored in a large cistern, reused for toilets in the building, and recirculated during summer months.





Alleys: Carving Public Space



Problem
The alleys in Pioneer Square are unsafe and unpleasant to use as a pedestrian. Many existing windows are boarded up and impair public interaction at the ground level. Standing water disrupts pedestrian movement through the alley. Furthermore, the ravine-like nature of the alley walls to the alley floor is without regard to human scale.

Opportunity
Use the alleys to create a vibrant pedestrian atmosphere. Express and respect the historical character of Pioneer Square, and denote new layers of development in the alleys with glazing and green space.

Pilot Site
The intersection of Yesler Way and Post Alley is a favorable site to enhance alleys. The alley at this intersection will be referred to as Lower Post Alley. As a crossroads between Pioneer Square to the East and the Waterfront to the West, this intersection will serve as a neighborhood connector through pedestrian and bicycle routes.

Concept
Lower Post Alley is a significant entry point into the neighborhood and, importantly, into the alley network. Due to the historical nature of the neighborhood, the streetwall should be left physically unaltered. However, the alley wall can be seen as an adaptable entity so that the alleys foster their own identity as a vital component of urban life in Pioneer Square.

The allley wall can be a malleable entity. Subtractions will be done with respect to the structural bays of the buildings. To distinguish these carved spaces as a new layer of development, glazing and green space will be integrated into the existing built fabric. The specific carved areas enhance the public realm in several significant ways. The colonnade at the street level creates needed shelter from the rain and provides places to sit, stay, and stand, essentially places to meet. Furthermore, the colonnade is especially strategic because of its relationship with the open space to the south. The southern open lot creates visible daylight at the end of the colonnade.

Conceptual Sketches

Section

With the colonnade at the ground level and the setbacks at the sky level, the intimate nature of the alley is maintained and built upon with both vertical and lateral layering. Inserting green roofs and storing grey water to use for building systems will significantly reduce the amount of stormwater in the alley. Permeable alley paving will absorb additional water.. The setbacks of the wall are proportioned in respect to not only human scale, but to the maximum allotment for vegetated walls according the to Green Factor.

Conclusions
Strategically carving space from the alleys creates a safe and sustainable public environment. Controlling stormwater and greening the city with vegetated walls and roofs, and adding first floor glazing allows a historic neighborhood to adapt to changing urban demands. This strategy could be applied to other areas of the neighborhood as well, where opportunities to create better public space exist.

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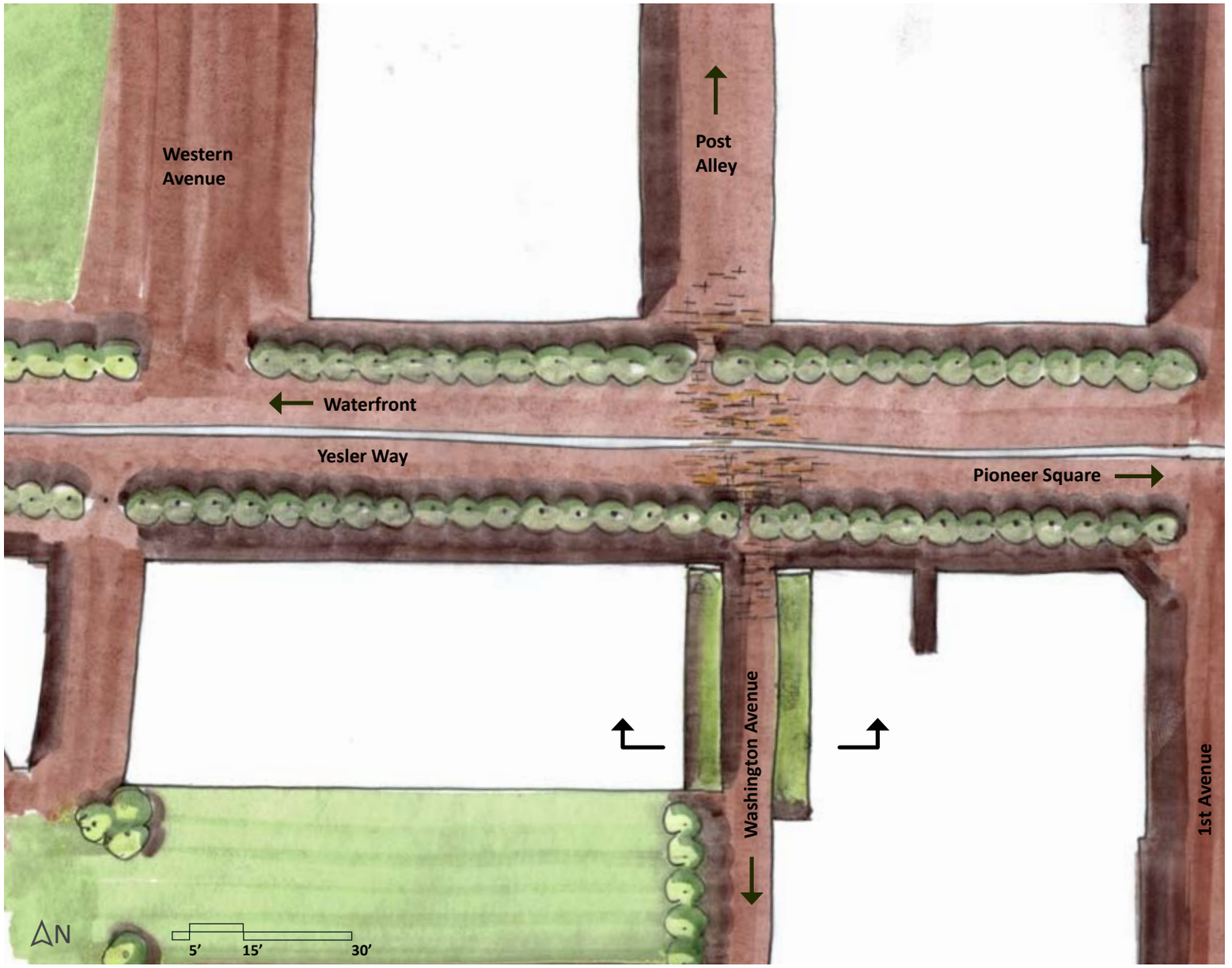
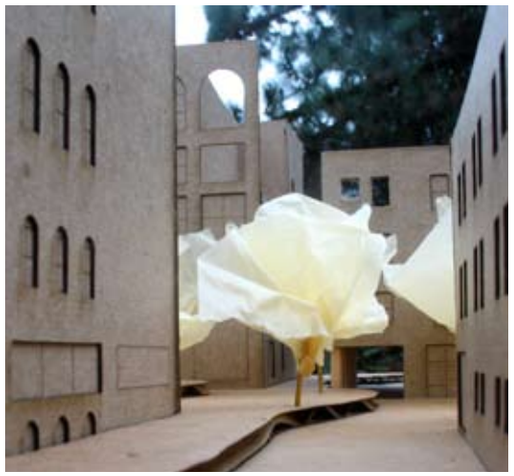
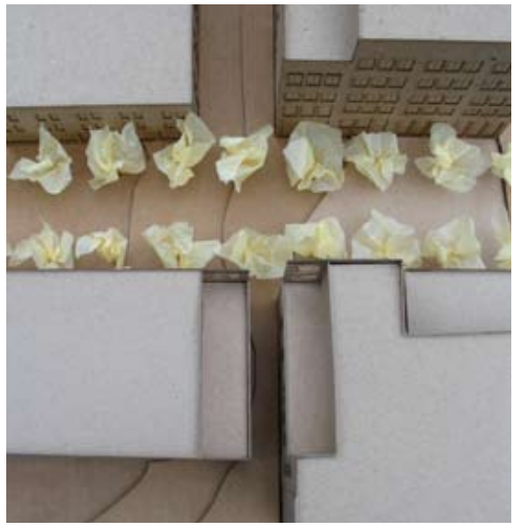
Site Plan



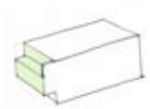




Materiality

Seattle Green Factor Data

Parcel Size	7000 sq. ft.
Max Green Roof	1200 sq. ft.
Max Vegetated Wall	5400 sq. ft.
Green Factor	1.1



Parcel Size	14,000 sq. ft.
Max Green Roof	1050 sq. ft.
Max Vegetated Wall	3240 sq. ft.
Green Factor	0.38


Introduction Page 1


Analysis Page 5


Design Page 17

Connections
Alleys
Alleyways
Stations
Lidded

ALLEYWAYS
Connecting the Dots

Students: Jonathan Bahe | Benn Engelhard | Jason Medeiros | Michael Pickford | Josho Somine

Alleyways: To Permeate and Saturate

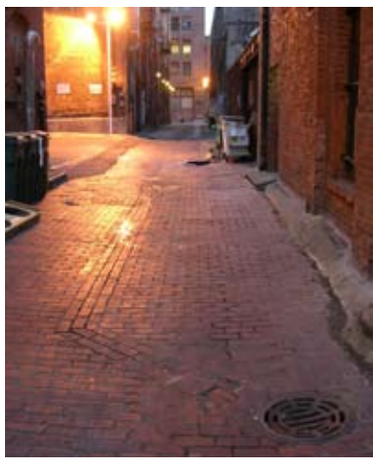
"Public Spaces in Pioneer Square - the streets, parks and alleys - serve many functions. They are places for pedestrians to walk and linger, places for visitors to sit and watch the world go by, routes for sports fans, places for festivals and events, even the front porches and backyards of residents. The City's designation of Pioneer Square as a pedestrian-oriented urban village is already a real and apt description."

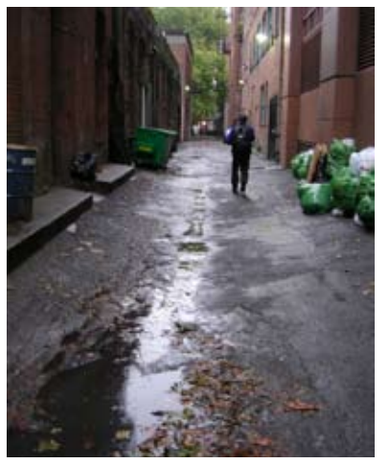
"The network of alleys is critical to Pioneer Square's urban identity and provides routes for pedestrians and service vehicles. Brick and granite paving in the alleys shall be maintained and, where feasible, restored. In specified locations, alleys shall be graded and repaved to improve drainage and maintainability."

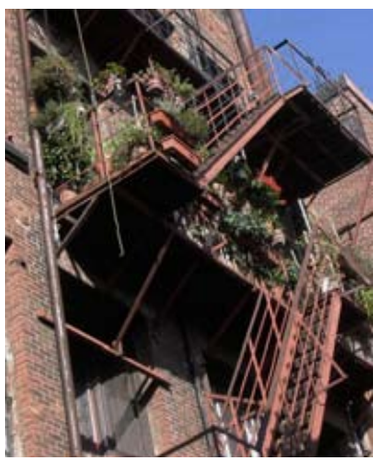
Pioneer Square Neighborhood Plan, 1998

These words are more true now than ever with residential development of the North Lot and Yesler Terrace expected to greatly increase the density and pressure in the public spaces of Pioneer Square. Improved and enhanced alley spaces will be needed as a secondary pedestrian network, and can provide a unique array of services and functions. They also represent a distinctive way to explore the historical architectural character of the district. As the neighborhood becomes saturated with new residents and tourists, the alleyways will become saturated with life!

Pioneer Square Alley Conditions

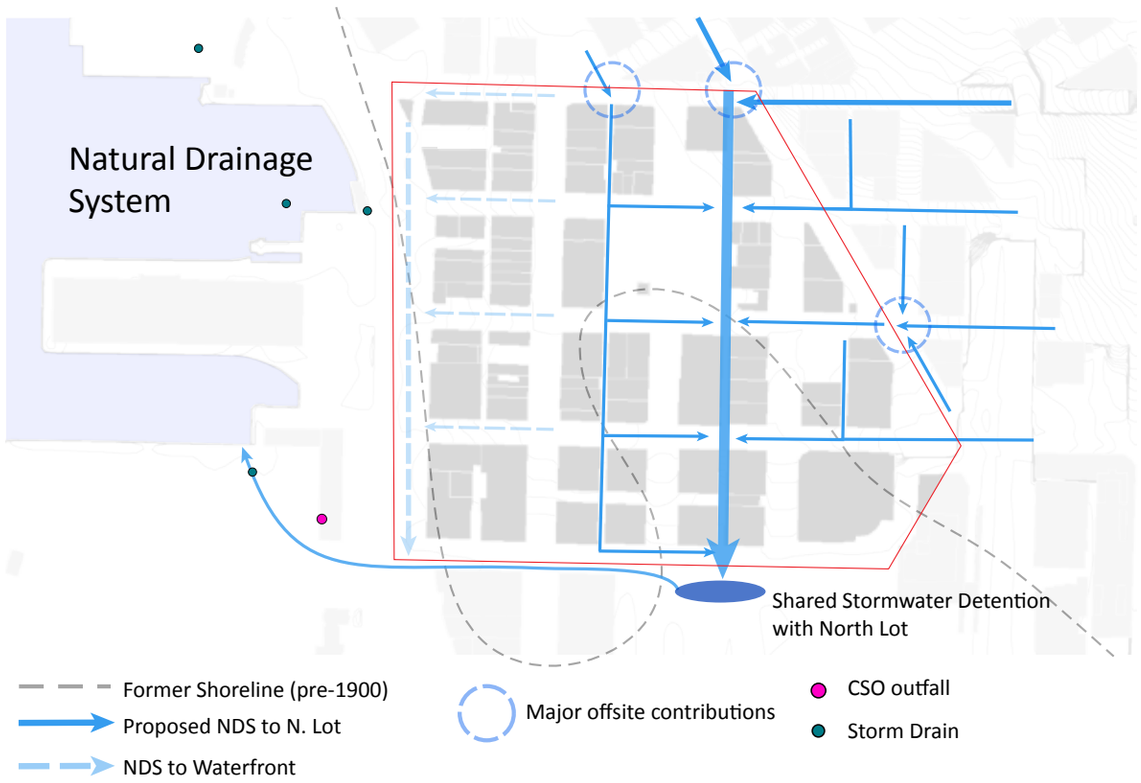




Program Elements

- Create inviting and exciting spaces for exploration by visitors
- Create secondary and tertiary paths of travel for neighborhood residents
- Enrich Pioneer Square through the creation of places and spaces for 24 hour activity
- Capture and treat stormwater runoff
- Repave alleyways with traditional brick pavers on pervious base



GUIDING METRIC: LEED for Neighborhood Development

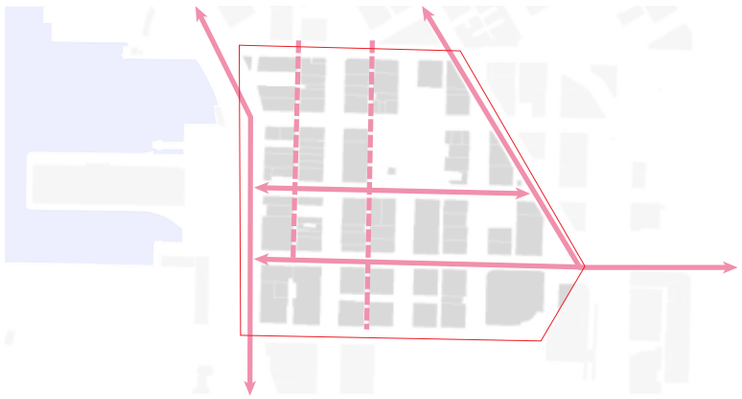
As a LEED for Neighborhood Development community, Pioneer Square will become a compact and liveable neighborhood model. Using LEED-ND as a metric, our goals included healthy living, protecting biodiversity and promoting alternative transportation.

Our design proposals alone will generate at least the 40 points required to certify Pioneer Square as Certified LEED-ND. The most significant contributions will be in the categories of Reduced Automobile Dependence, Walkable Streets, Access to Public Space, Certified Green Buildings and Stormwater Management.

Alleyway by alleyway, our proposals work from in between the buildings in underutilized spaces to meet LEED-ND standards and make Pioneer Square a more vibrant, liveable and sustainable place.

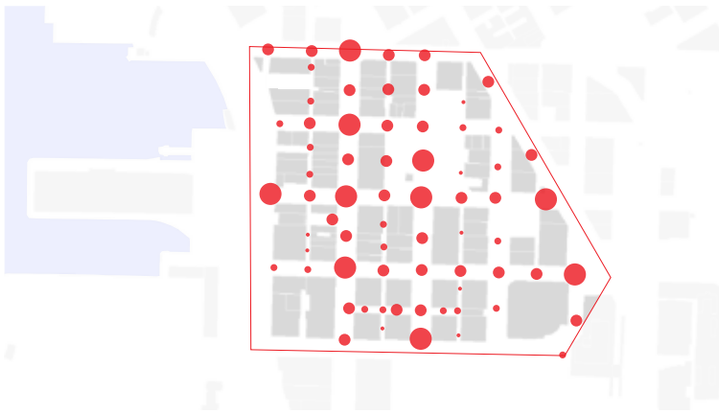
Future Functions
All alleyways will be programed for pedestrian activity while preserving priority for service and ecological function (habitat and hydrology) where necessary.

Fully Pedestrian
Weekend Pedestrian
Ped. & Service
Ped. & Eco-Services



Future Bicycle Movement
New bicycle opportunities including recreation, delivery service and trash collection

Recreation
Service



Future Pedestrian Activity
Nodes of increased pedestrian counts given new development and increased train, light rail and ferry ridership

Alleyways: Infill and Renewal

N Alley Node Diagram

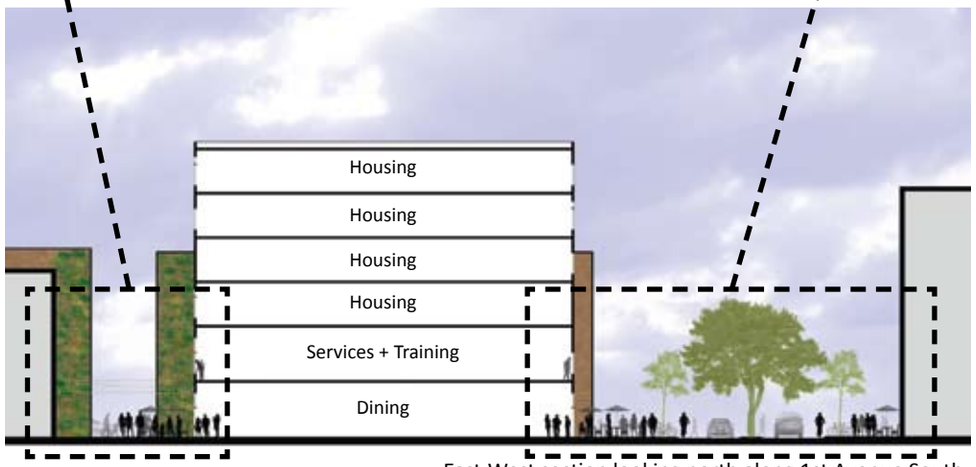
The alleyways of Pioneer Square present a unique opportunity to create public spaces within a neighborhood which is once again becoming appreciated for its walkability, sustainability, and the beauty of its historic fabric. These alleyways are currently drastically underutilized as public spaces, and in most cases actually detract from the potential of Pioneer Square. As highlighted in orange on the diagram to the left, there are opportunities for intervention at specific nodes throughout the alleyway system. These points are created when the existing alleys, which are sixteen feet across, widen to create spaces which are twenty-five to thirty feet across. While in most cases, it is unrealistic for entire block-long alleyways to be reclaimed for public use, the nodes hold tremendous potential for fostering unique public spaces within the alleyway system. By utilizing the additional width of the alleyway for cafe spaces, outdoor gallery/sculpture space or gathering space, the neighborhood will become renewed with spaces which draw residents and visitors into the alleyway.

In some areas of Pioneer Square, building lots remain which are currently open parking space or otherwise abandoned space. These parcels allow for the insertion of new infill development which will compliment the beauty of the Richardsonian Romanesque architecture which exists through much of the neighborhood, in addition to the other historic buildings. By drawing inspiration from points on the existing facades, the new infill projects establish contextual relationship within the historic fabric. In many areas, the infill projects also coincide with opportunities to create nodes within the alleyways. Utilizing these infill and alleyway node spaces creates a dense, mixed-use neighborhood which blends modern use and interventions with the historic beauty which defines Pioneer Square.

1st Avenue South Elevation Looking West

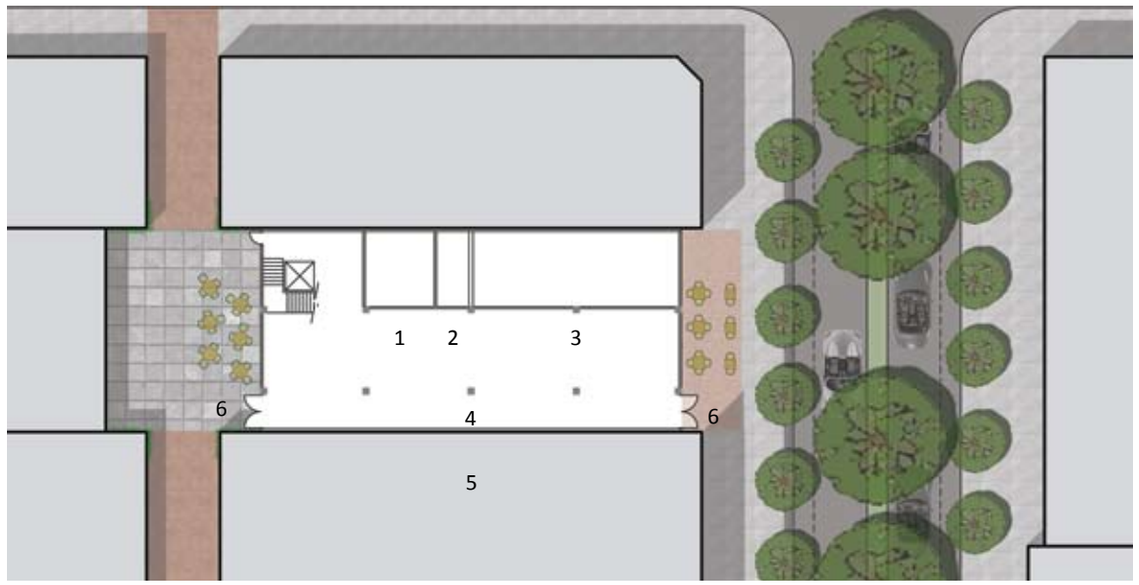
Alley Node Renewal

1st Avenue South Streetscape



East-West section looking north along 1st Avenue South

Pioneer Square is today home to many social services, which serve Seattle's homeless population. This project proposes the creation of a modern architectural intervention within the historic fabric of the Pioneer Square neighborhood to serve this community. Programmatically, the project builds on the success of FareStart (www.farestart.org), an organization which provides job training in the food service industry to homeless and disadvantaged individuals, and operates a highly successful restaurant which allows the public to interface with the program as the participants prepare and serve their meal. This building is envisioned as an expansion of the FareStart program, while also providing additional services to the program's students. Most importantly, the building creates housing for the program's students to allow them to rebuild their lives in a clean, safe, and highly sustainable setting.



Key
1-Storage; 2-Walk-in Freezer; 3-Kitchen; 4-Dining; 5-Circulation + Display Space; 6-Outdoor Dining

N Site Plan

The proposed infill project is the first of several projects within the neighborhood which utilizes an open lot adjoining an alley to create both a unique streetfront and alleyway node. This node serves as an example of the opportunity within the alleys to create new public spaces from forgotten ones, as shown in the upper left section. Additionally, the project proposes a new street condition for 1st Avenue South through the elimination of street parking, which allows for dedicated bike lanes to be installed in each direction as well as the widening of the sidewalks. These wider sidewalks allow for dedicated cafe or commercial space, pedestrian walking space, and spaces for seating, lighting, street trees and bike parking. This renewed streetscape is shown in the upper right.

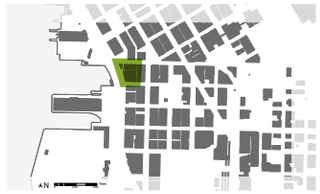
Alleyways: Bicycle Village

Vision

An urban bicycle alley village that invites and engages the public, expands the role bikes play in city utility services and advances a more sustainable Seattle.

Mission

To expose bike infrastructure and grow a diverse population of bike users.

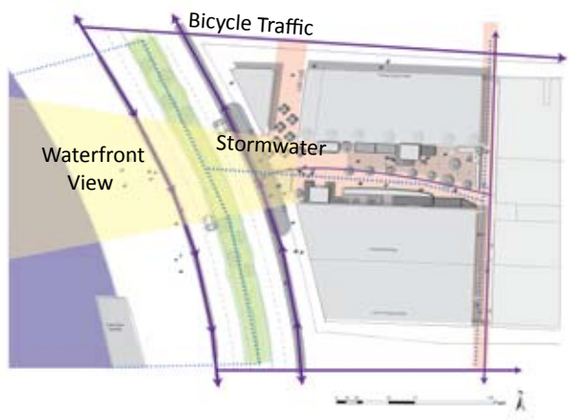


Goals

- Provide bike trash and alley services
- Reduce auto traffic
- Maintain clean and safe alleys
- Create precedent for others
- Increase bike presence
- Decrease accidents
- Create active public space

Activities/Facilities

- Bike parking & storage
- City tours & rentals
- Community workshop
- Afterschool mentorship
- “Green collar” training
- Offices, Cafe & Info kiosk
- Restrooms & lockers
- Demo & Gathering space



Site Context

Why Here?

Topography

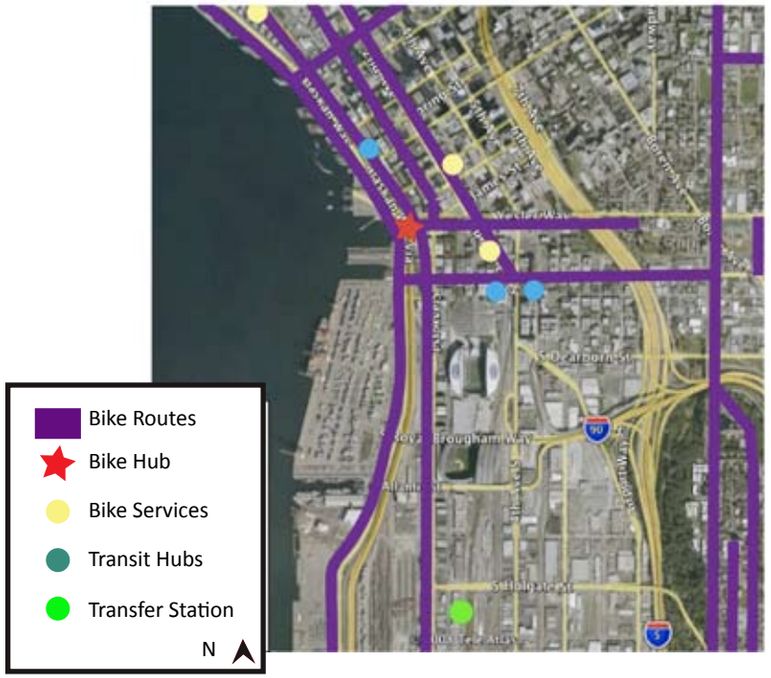
- Flat neighborhood, site and waterfront

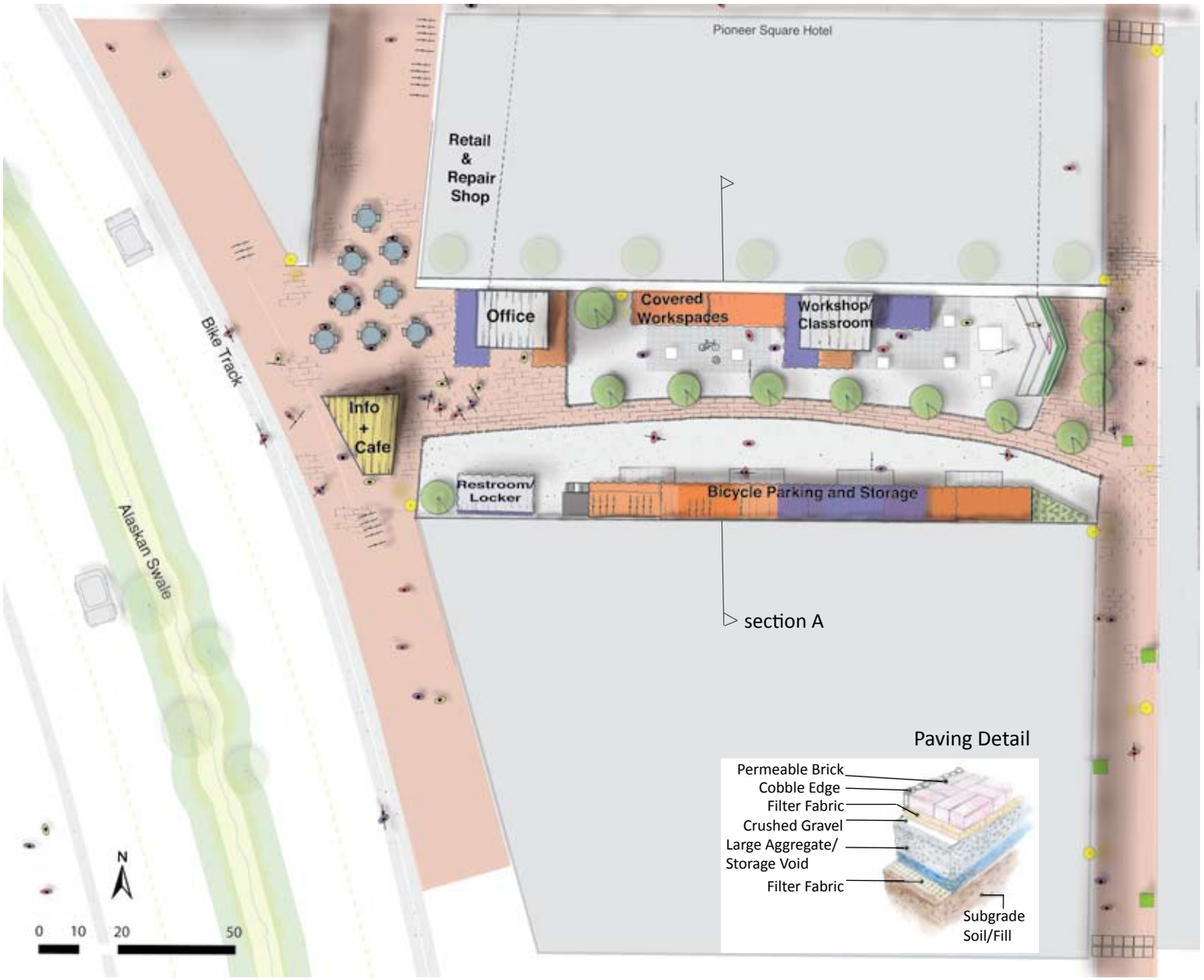
Connectivity

- Easy access to alleys, bike routes, transit hubs and waterfront

Location

- In the heart of historic Pioneer Square
- A live/learn/work/play neighborhood
- Waterfront views
- Diverse and growing population of commuters, tourists, residents, workforce, volunteers





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Why Now?

Culture

- Vibrant and growing cycling population

City

- Leading model of Sustainability
- Committment to being bike-friendly

Infrastructure

- Firmly rooted bike services, businesses and workforce
- Capacity and energy to expand

www.cascadiacabs.com

www.flickr.com

Mike Kane, Seattle PI

Why This?

Sustainability

- Support Seattle's committment to sustainable development
- Provide carbon neutral and energy-efficient alternatives
- Shift away from an auto-dominated culture
- Build on city's national and International standing
- Capitalize on citizen support and energy
- Expand and bolster bike infrastructure and advocacy
- Grow a local economy

Before/After

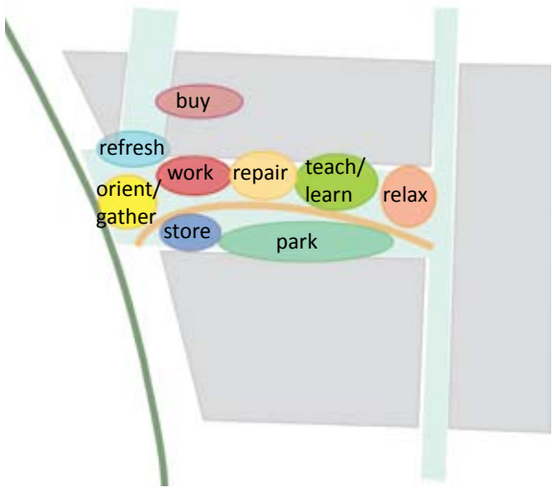
Utility alley

Village scene

Active cafe

www.pedalpeople.com

www.copenhagenize.com



Section A: Facing East

Section B: Facing North

Potlatch Alley: Welcome to the New Pioneer Square

Between King and Jackson off of Occidental Avenue

Artwalk Pirate Alley, New Orleans, LA

Water Sculpture in Gummersback H. Dreiseitl

Main Market Eau Claire, WI

JACKSON STREET

OCCIDENTAL AVENUE

1ST AVE.

RETAIL

GALLERY

LANTERN CANOE

PEDESTALS FOR OUTDOOR ART

VERTICAL CISTERN

VERTICAL CISTERN

STONE FLOOD PLAINS WATER FEATURE

RETAIL

GALLERY

BASEMENT GENERAL STORE

DINING

SHORT ORDER BICYCLE DELIVERY

PERGOLA

OPEN AIR MARKET

COFFEE WINDOW

LANTERN CANOE

FX McRORY'S

OCCIDENTAL SWALE

STREET TREE

PERGOLA

STREET TREE

STONE BENCHES

OCCIDENTAL SWALE

STONE BENCHES

STREET TREE

OFFICE

CENTRAL NATURAL DRAINAGE SYSTEM

DINING

VERTICAL CISTERN

LANTERN CANOES

UNDERGROUND CLUB

STAGE

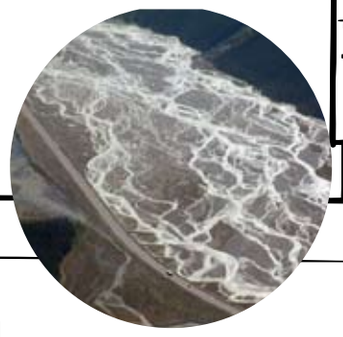
VERTICAL CISTERN

CAFE

THE GYRE WATER FEATURE

OFFICE

KING STREET



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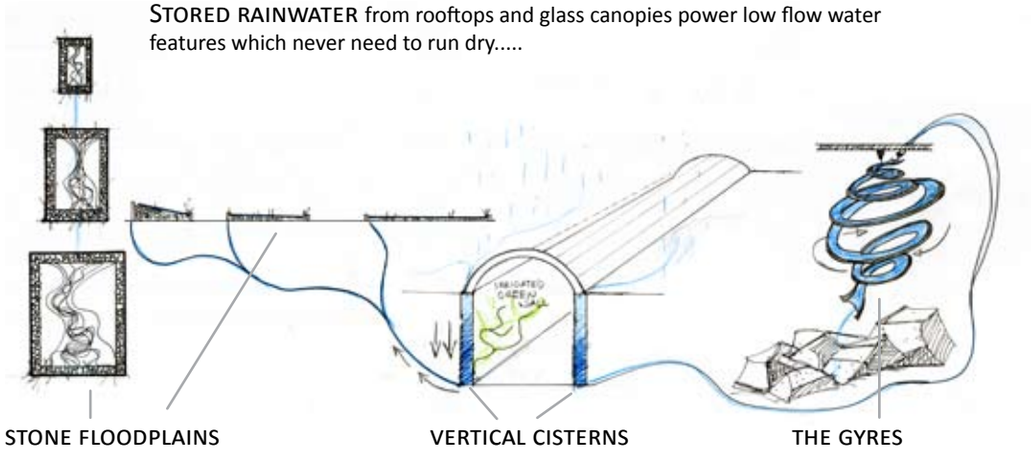
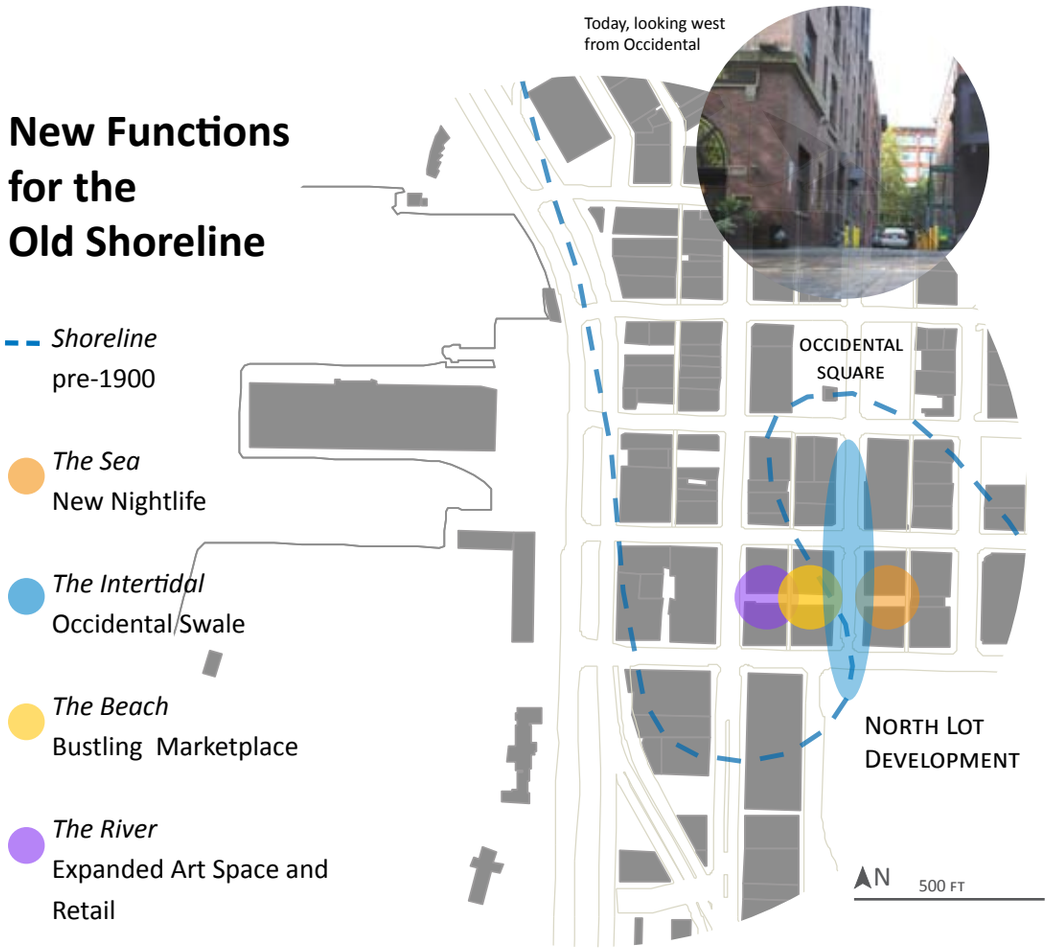
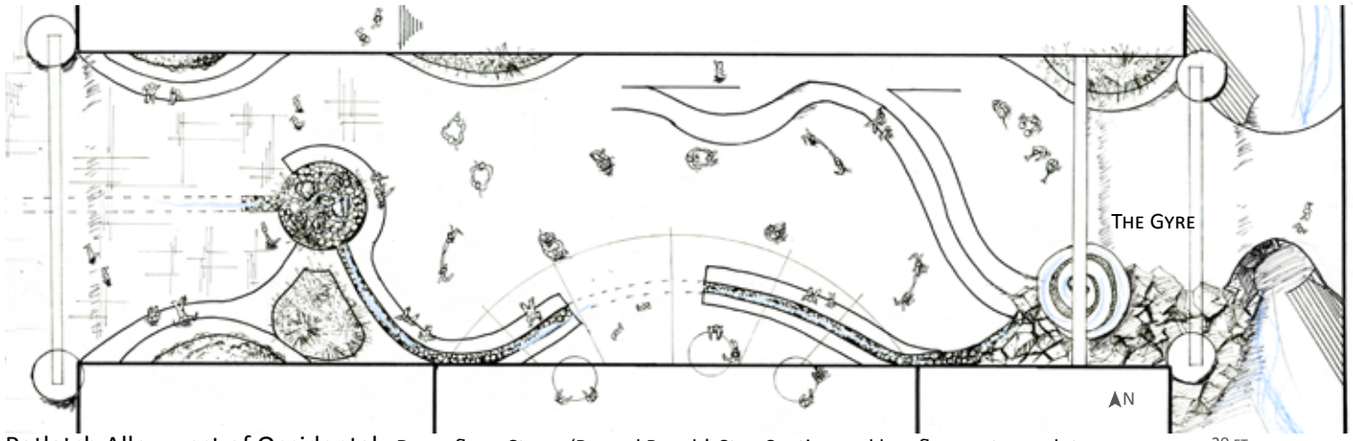




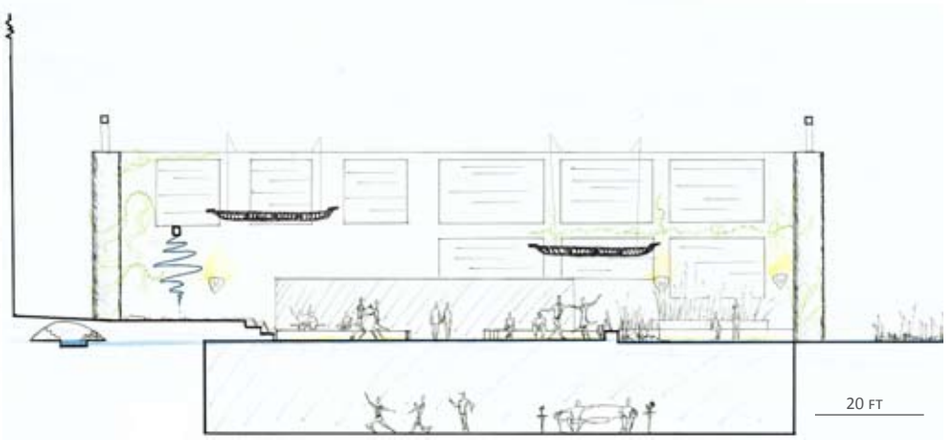
Poltatch Alleyway looking west from Occidental Ave. Lantern canoes, Pergola and Vertical Cisterns

Potlatch Alley sits upon the former tidelands that separated Puget Sound from original Seattle. Here, the beach once welcomed the tides twice a day, as it welcomed the canoes of the coastal Salish and eventually the Dennys, Yeslers and other white settlers to the region. Always a gateway, the mudflats and sandbars allowed the flow and exchange of salt water from the sea and fresh water from the land. This alleyway now has the potential to form the southern gateway for the new Pioneer Square, welcoming neighbors from the North Lot Development and all visitors entering the city from the south.

This proposal extends the Occidental walking mall to King Street, limiting car access and opening swales and rain gardens between street trees all the way to Occidental Square. Twice as wide as other alleys, Potlatch Alley has space for dancing, for shopping at an open air market, sitting at cafe tables and perusing outdoor artwork. Underground you will find a much needed general store and overhead. Suspended 'Lantern Canoes' light the way, casting patterns and shadows remeniscent of watery landscapes.



Potlatch Alley west of Occidental: Dancefloor, Stage, 'Runnel Bench', Step Seating and low flow water sculpture



Potlatch Alley west of Occidental looking South: Underground Club, Lantern Canoes, and Vertical Cisterns

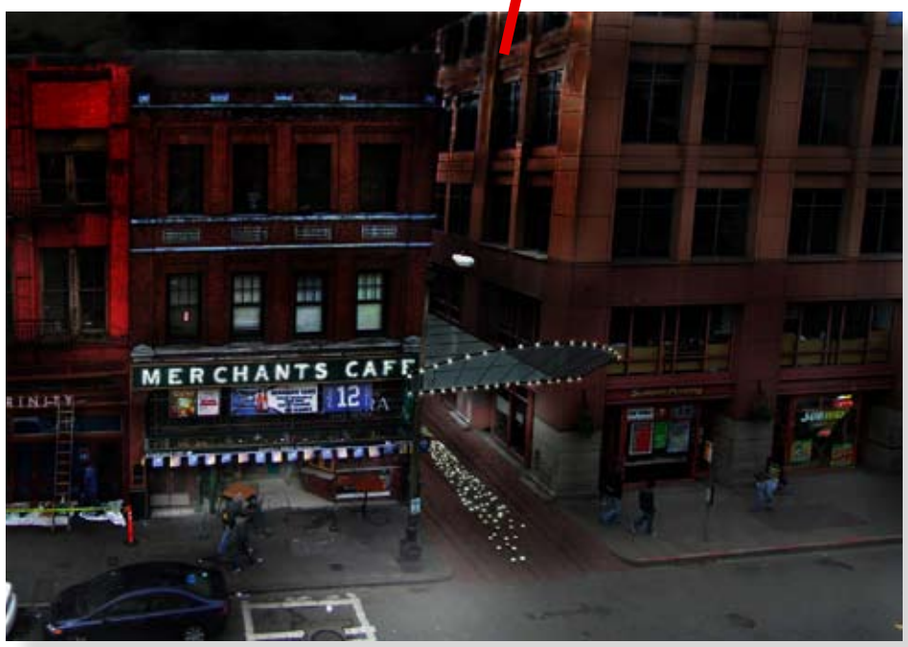
Art Walk Alley

Concept:

Art Walk Alley is designed to transform an alleyway currently devoted to cars and refuse into an appealing place for people, without displacing service functions or altering the historic character of adjacent buildings.

Source: Pioneer Square Community Association

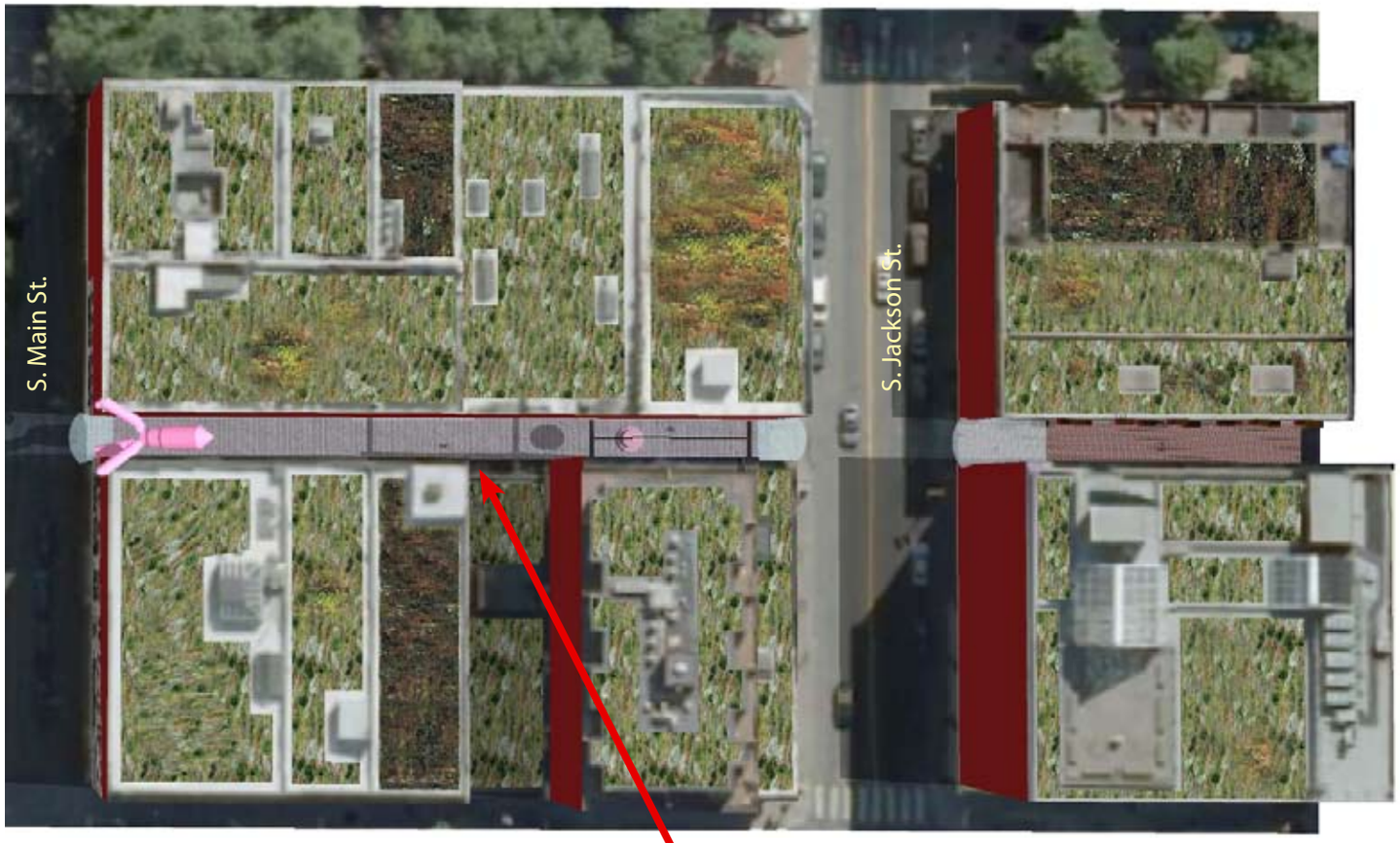
The alley would serve as a linear gallery for the existing First Thursday art walk and could help Seattleites to see the potential for alleys to be more than just places for trash.

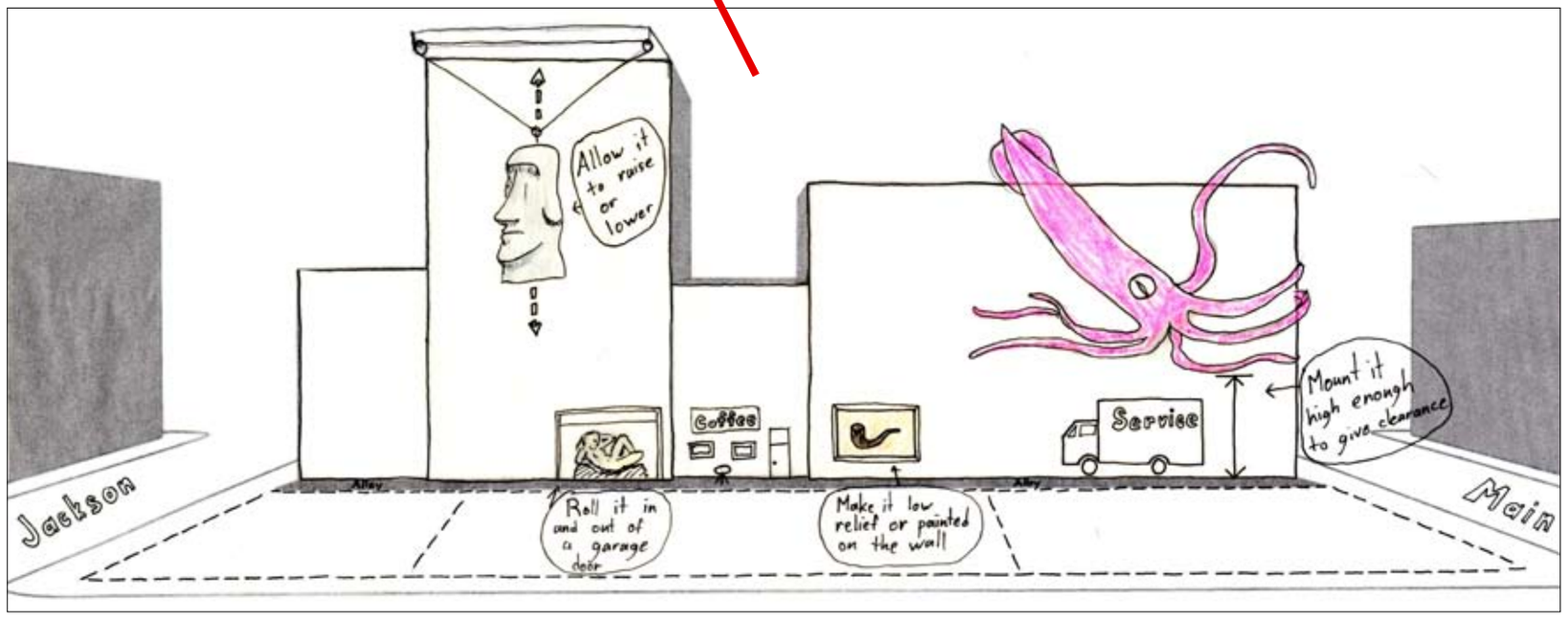


Alley Entrance Elements. Welcoming gestures, including lighting, special paving and canopies draw attention and link alley segments together.

Greenroof break-area for abutting offices. The small bridge across the alley creates tension between public and private space, adding to the sense of liveliness in the alley.

Stormwater runoff. Rain water is slowed by the lightweight greenroofs, before travelling to the ground via a series of planter boxes filled with native ferns.

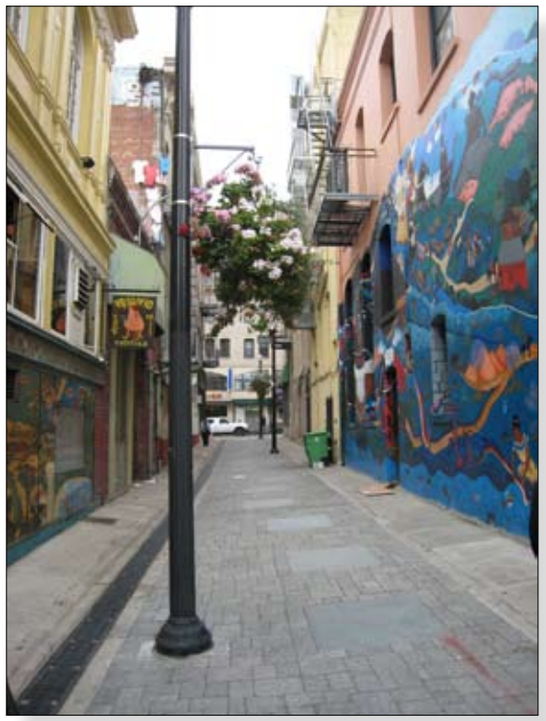




Increased density of function. Artworks would be designed to accomodate the service functions of the alley.

Precedents:

Laneway, Melbourne, Australia
Source: Flickr user, coloursofbohemia



Kerouac Alley, San Francisco
Source: About.com contributor, hallamon7

STORM WATER ALLEYS: Saturate the web of life

Currently, runoff water from streets combines with sewer effluent during storm events and overflows into Puget Sound under Pier 44. This rare shallow location would serve much better for salmon habitat and public access were it not subject to such pollution. This plan proposes to remove district stormwater from sewer pipes and treat it in a network of planted runnels within the pedestrian alley spaces.

Precedents:

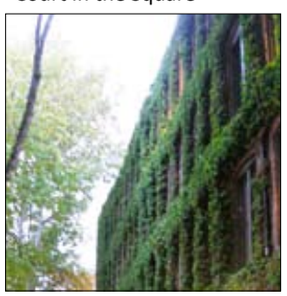
Seattle has a rich vocabulary of urban greening, but most of it serves no ecological function. With a few adjustments, and inspiration from some European cities, our greened alleys could also clean and store runoff water and provide native habitat.


Occidental Square


Photo: wikimedia
Freiburg, Germany


"Court in the Square"


Photo: wikimedia
Zurich, Switzerland


Occidental Square

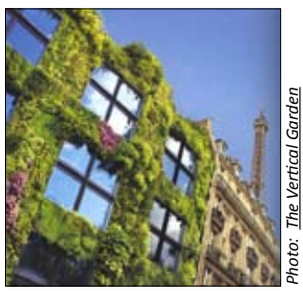
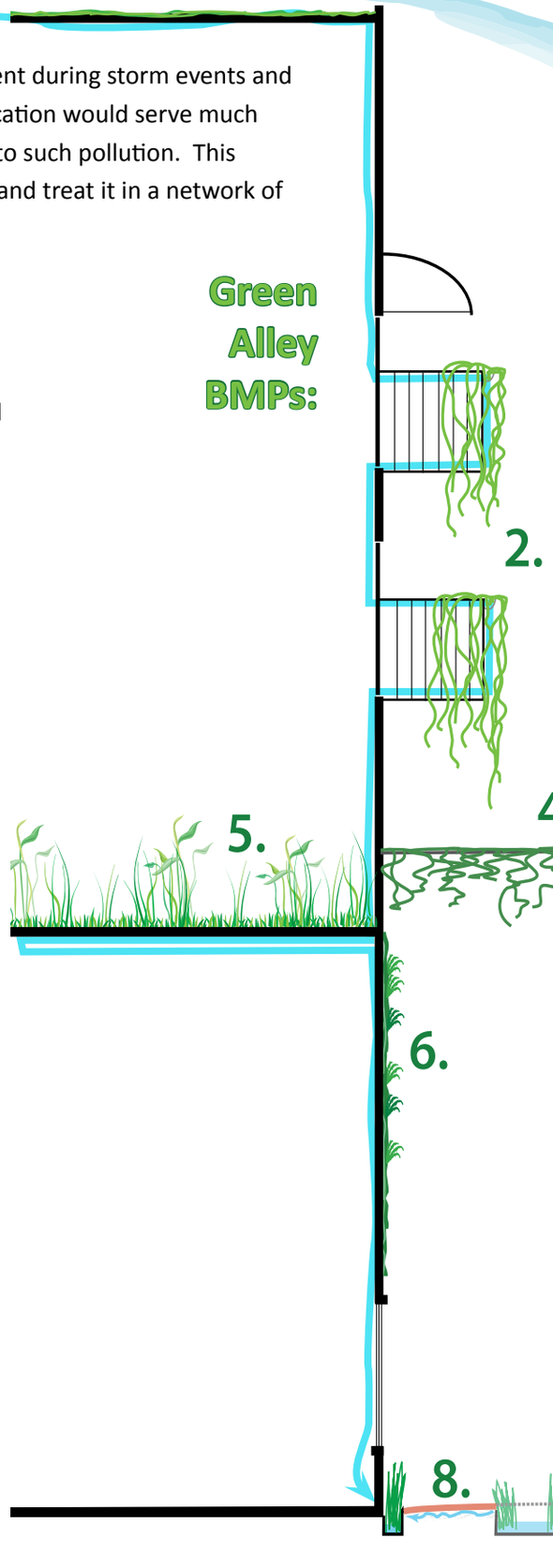


Photo: The Vertical Garden
Paris, France

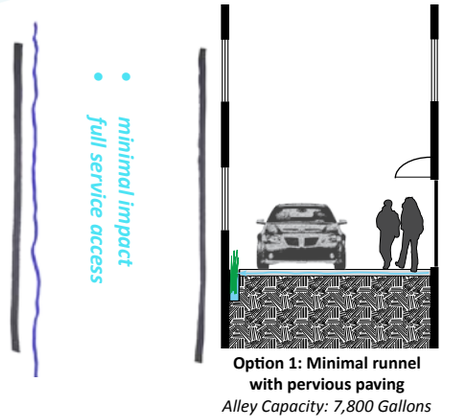

Belltown


Malmo, Sweden

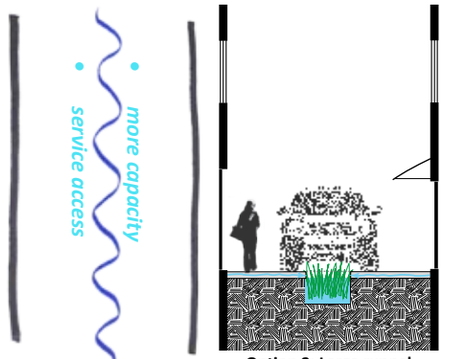
Green Alley BMPs:



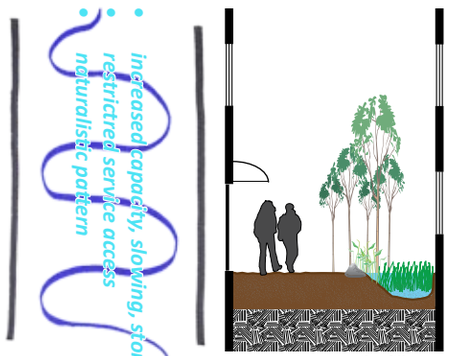
Water Runnel Profiles:



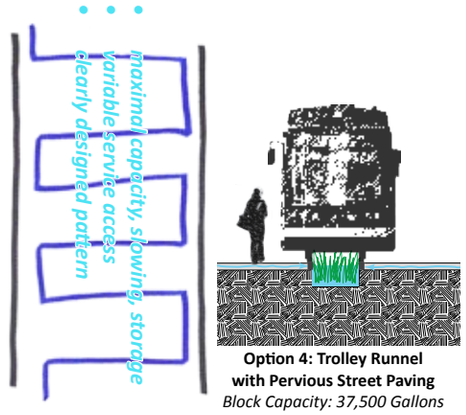
Option 1: Minimal runnel with pervious paving
Alley Capacity: 7,800 Gallons



Option 2: Large runnel with pervious paving
Alley Capacity: 22,400 Gallons



Option 3: Soil Infill with Vegetated Swale
Alley Capacity: 20-80,000 Gallons



Option 4: Trolley Runnel with Pervious Street Paving
Block Capacity: 37,500 Gallons

Specific alleys will have differing intensities of pedestrian, vehicular, and ecological functions. A varied and flexible palette of green infrastructure techniques will be required to comprehensively address the district's stormwater issues. In return, this water can enrich the pedestrian experience of the Northwest's unique biodiversity and vitality.

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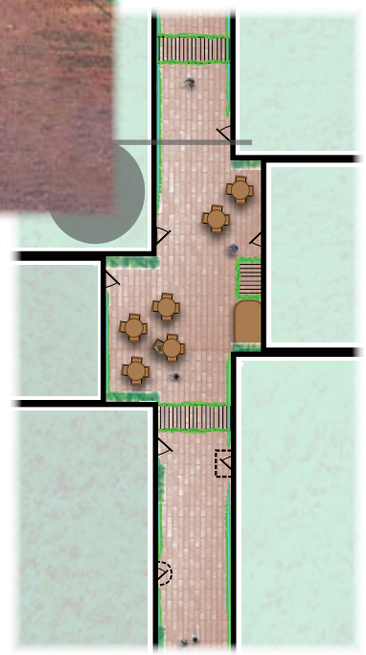
Brick crosswalks at the edges of the district lead strollers and stormwater into the alleyway passages

Blue bricks mark edge of historical shoreline throughout neighborhood

before

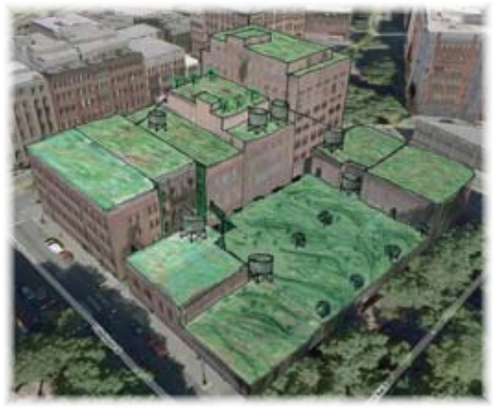
Alley 1:

- primary pedestrian throughfare
- full service vehicle access
- dramatic but low-impact greening



Walking south from Pioneer Square Park

Stormwater capacity: ***11,000+ Gallons***



Rainwater cycling works better at a city-block scale, where rooftop water tanks can collect the water cleaned by adjoining green roofs. This water can then be used in toilets, sinks, or even for drinking. Graywater from sinks and showers can then be returned to lower green roofs or green walls. The roofs also provide native habitat islands and semi-private open spaces for building residents and workers.

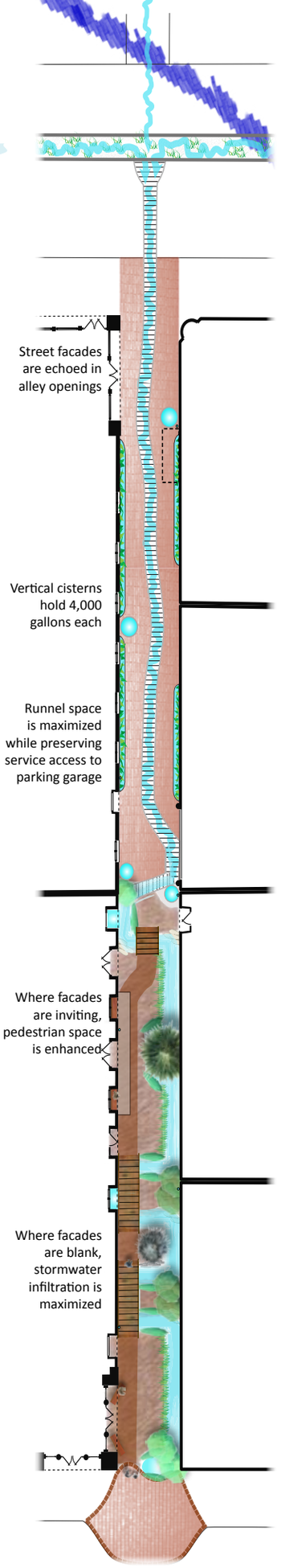
before

Alley 2:

- primary stormwater passage
- partial service access
- unique pedestrian amenities

Walking north from Jackson St.

Stormwater capacity: ***50,000+ Gallons***




Introduction Page 1


Analysis Page 5


Design Page 17

Connections
Alleys
Alleyways
Stations
Lidded

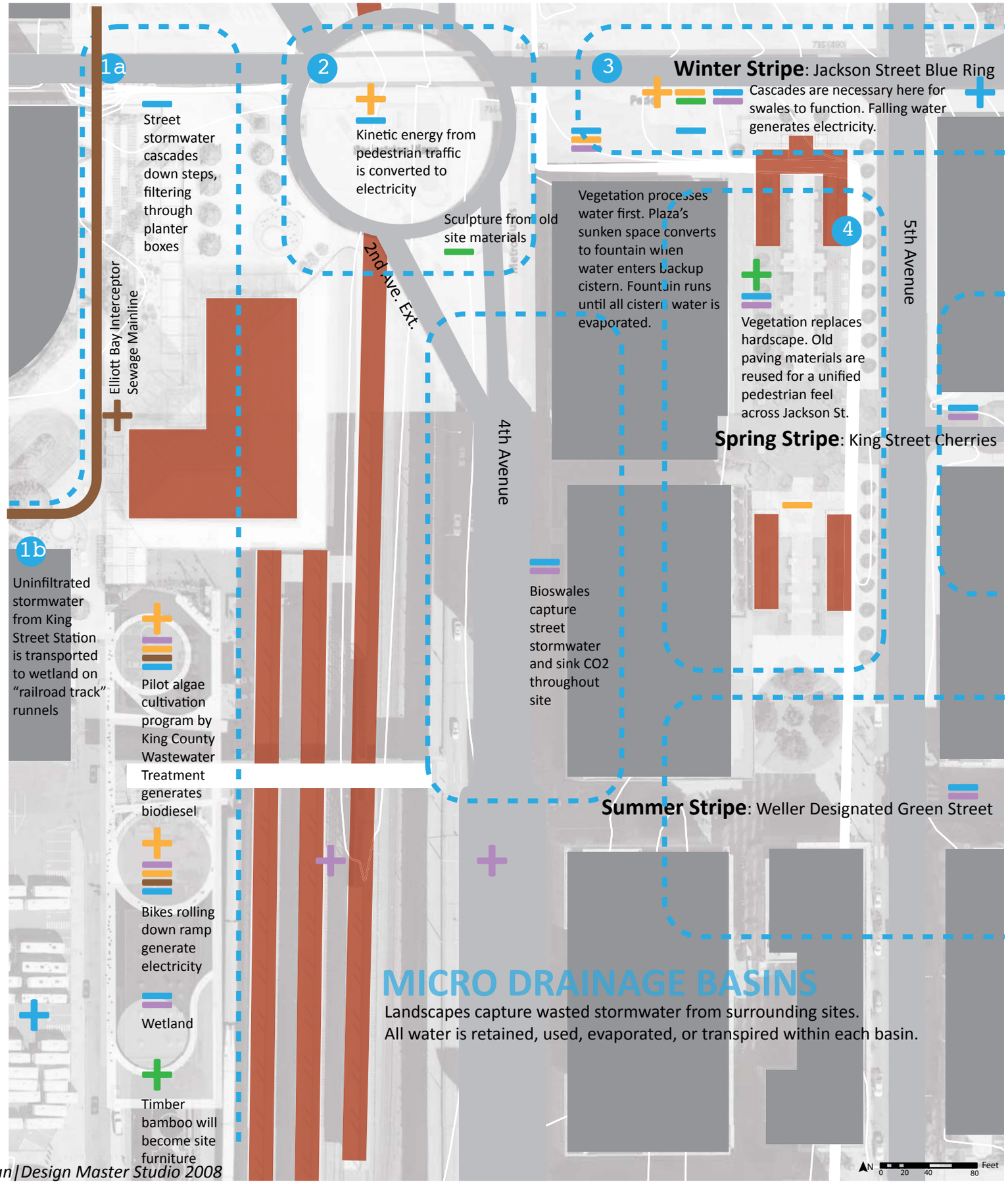
STATIONS

Connecting the Dots

Students: Erica Huang | Rie Shintani | Chilan Ta | Bo Zhang

Stations: Next Stop! Seattle

Micro-Ecology



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Metrics:

In addition to using Gehl's Quality Criteria, we strove to design a site that could win Living Site certification.

Ultimately, this site could be certified in five of the six Living Site Challenge "petals": Site Selection, Water, Energy, Beauty & Inspiration, and Culture.

While we were unable to satisfy the Materials petal, our site would gain nearly maximum credit for material use under the Sustainable Sites Initiative guidelines.

- Source. Blue: stormwater
- Sink. Orange: electricity
- Brown: wastewater
- Lavender: carbon dioxide
- Green: material reuse
- ② Basin / site I.D. number

We strove for net-zero water run-off over the extent of the Stations site, i.e. 2nd Ave S to the West, S Weller St to the South, 5th Ave S to the East, and S. Jackson St to the North. To achieve our goal a combination of bioswales, fountain amenities, cisterns, and wetland habitat create the on-site water management system.

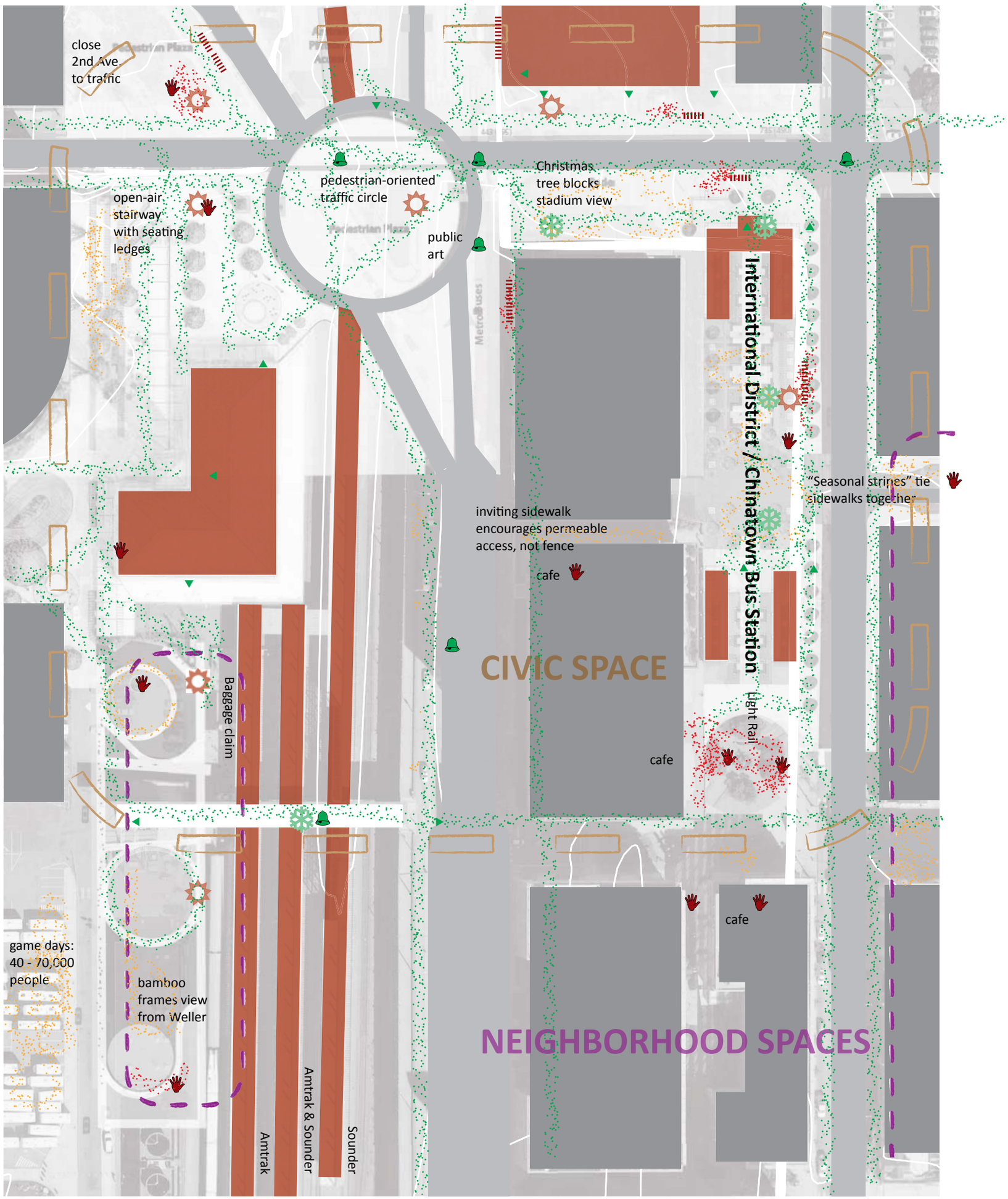
Removed structures from the International District/Chinatown Bus Station will be re-used in new design.

Carbon reduction strategies take the form of local energy generation from pedestrian and bike activities combined with the capturing and conversion of non-traditional forms of energy (e.g. the rolling of bicycle tires, heel clicks, cascading water falls).

Pedestrian Eventscape

Transit hubs are like Rube Goldberg machines. A train pulls in; people spill out like pinballs onto the sidewalk, responding to environmental cues to stop, go, and turn.

- Pedestrians: fast movement
- Windy location
- Noisy location
- Heavily trafficked edge
- Pedestrians: meandering movement
- Pedestrians: stopped
- Sunny location
- Meeting / rest point



Existing Opportunities & Constraints:

Vehicular protection and human-scale delight: Scale of roads and forms must be more human-friendly.

Pedestrian Amenities:

- Upper and lower KSS disconnected (Basin #1a)
- Lack awnings, Human-scale
- Changes in environment (e.g. seasonal, weather related, time of day)
- No resting opportunities (Basin #1b)
- Lack meaning in structures
- (International District/ Chinatown Bus Station)

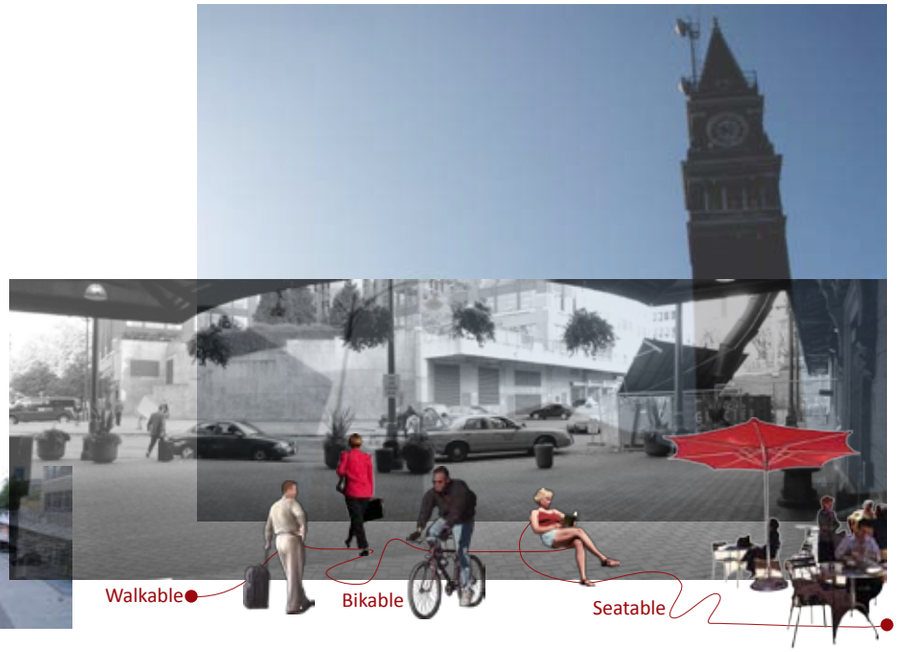
King Street Station: Connecting

Introduction>>

King Street Station is a historical building built in 1906; it is identified as one of three important downtown transportation hubs. For years, the station has been poorly maintained and greatly deteriorated during a period of declining rail travel. It has been unable to accommodate the demands of a growing number of commuters and travelers. Along with the King Street Station Renovation Plan, this project aims to regenerate the space by enhancing the pedestrian environment, rearranging the stormwater system, and emphasizing the aesthetic value of the historical building and its surrounding environment.

Problems>>

- Lack of connection between upper and lower levels
- No inviting point
- Dominated by vehicles
- Looks plain with a huge concrete wall on west side



Main Goals>>

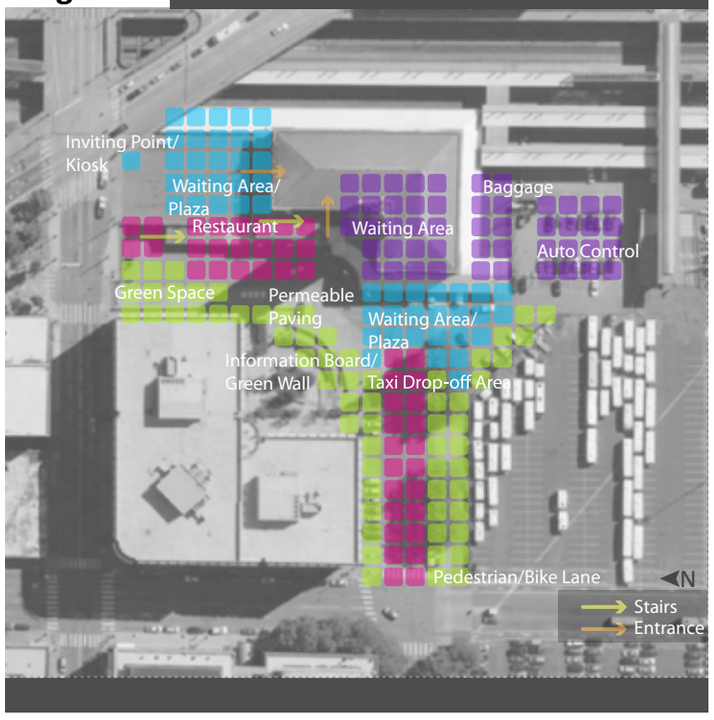
Transit

- Connecting two levels
- Providing clear way finding/ time/ information/ services
- Concentrating traffic lane, leaving space for pedestrian and bikes

Ecology

- Permeable paving
- Stormwater system
- Vegetation

Program>>



Pedestrian Environment

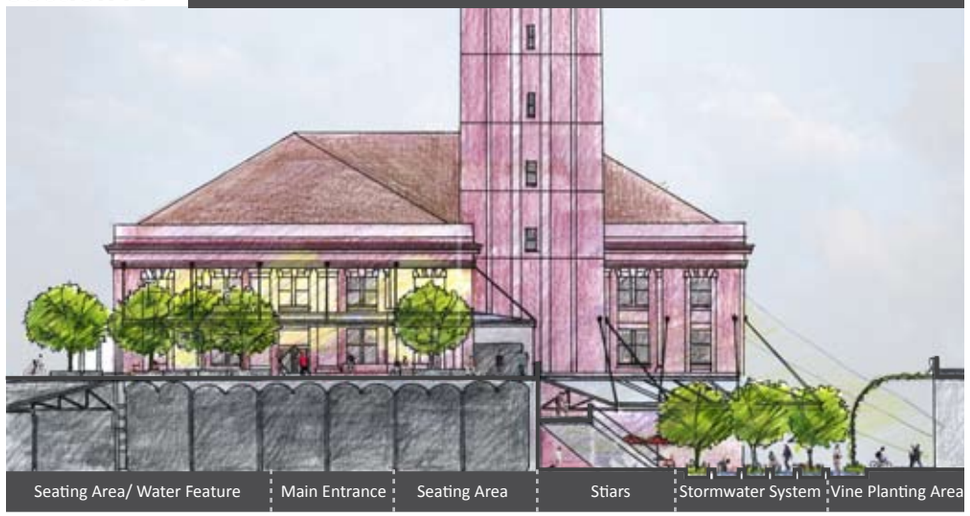
- Protection against vehicular traffic
- Invitation for sitting/ amenable waiting area
- Providing bike lane/ bike parking

Aesthetic

- Rich sensory experiences- lighting/ water/ plants' season change
- Invitation for visual contact- tower/ direction to waterfront

Ecology>>

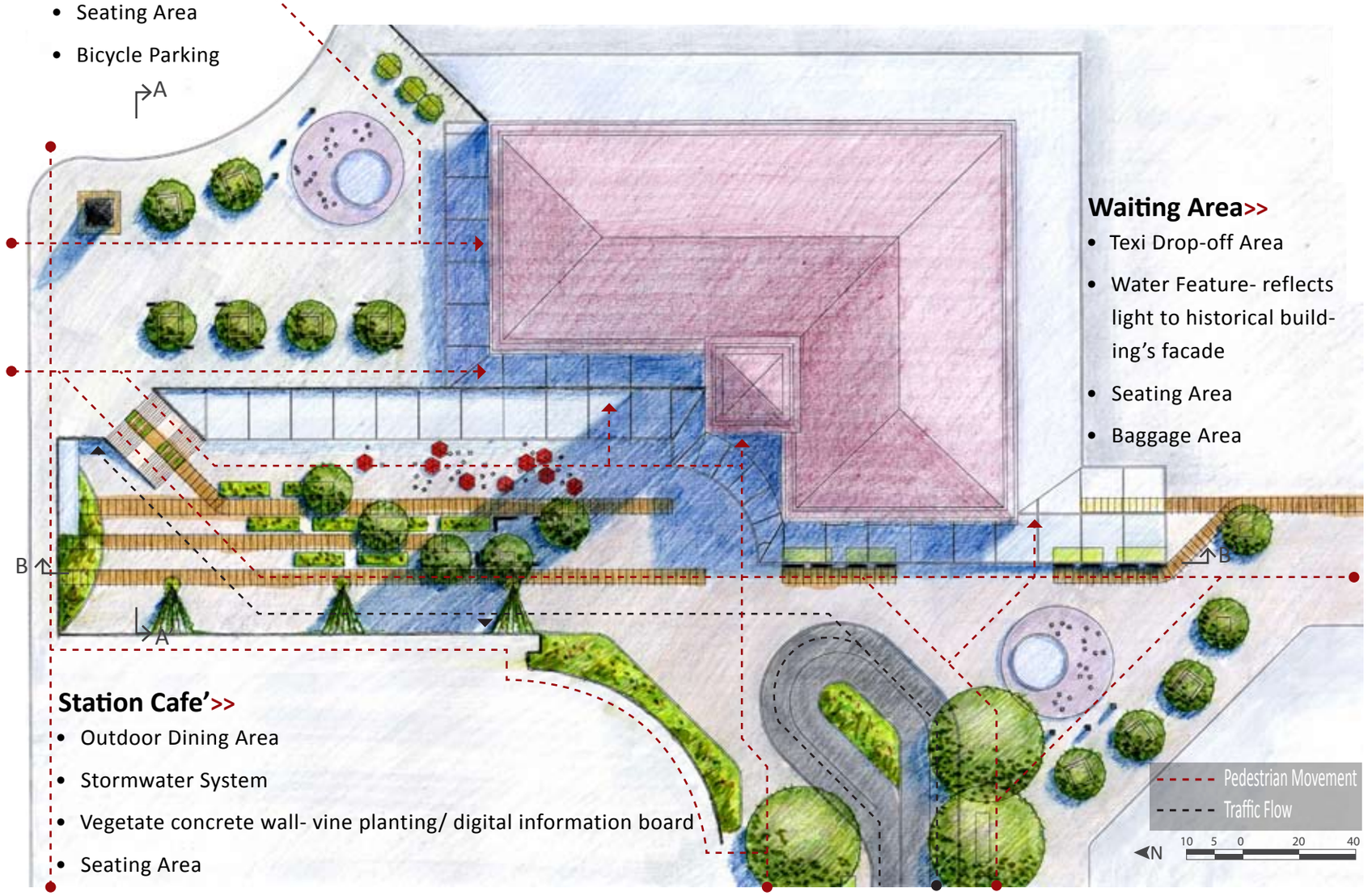
Section A>>



Scan|Design Master Studio 2008

North Plaza>>

- Water Feature- reflects light to historical building's facade
- Little Tower- kiosk/ clock
- Seating Area
- Bicycle Parking



Waiting Area>>

- Texi Drop-off Area
- Water Feature- reflects light to historical building's facade
- Seating Area
- Baggage Area

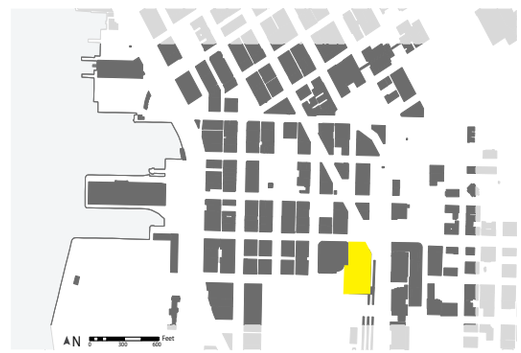
Station Cafe'>>

- Outdoor Dining Area
- Stormwater System
- Vegetate concrete wall- vine planting/ digital information board
- Seating Area
- Transparent Canopy

Detail- Stormwater System>>

This site is integrated with a stormwater system. The water on the site is collected in a pond on the north part of upper level, and goes down to the planters on the lower level. Also the whole lower level is covered with permeable paving. The water will permeate through the paving and then go down to the south. The train tracks are covered with wooden decks that function as pathways at grade and provide drain underneath. It also directs water for the use of each planter.

Section B>>



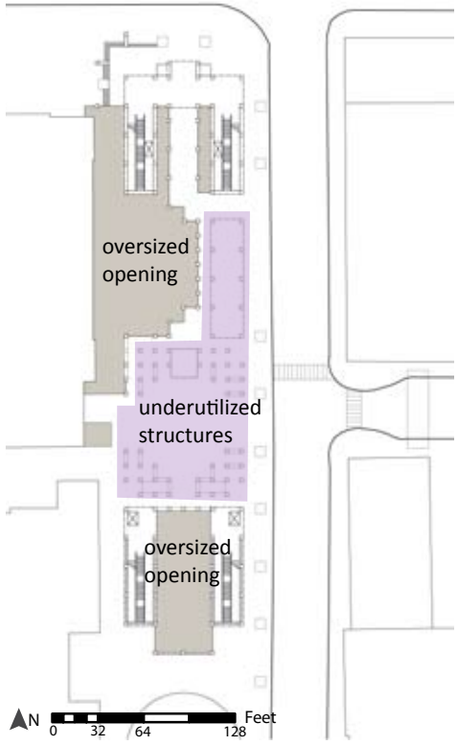
International District Bus Station Plaza: Green Up and Connect

The Challenge

The existing International Bus Station Plaza is not a friendly environment for the public. Oversized openings to the tunnel level blocks circulation, as well as too many existing underutilized structures. As a result, most people use the sidewalks instead of the center area. There is also a missed opportunity to connect to the International District.

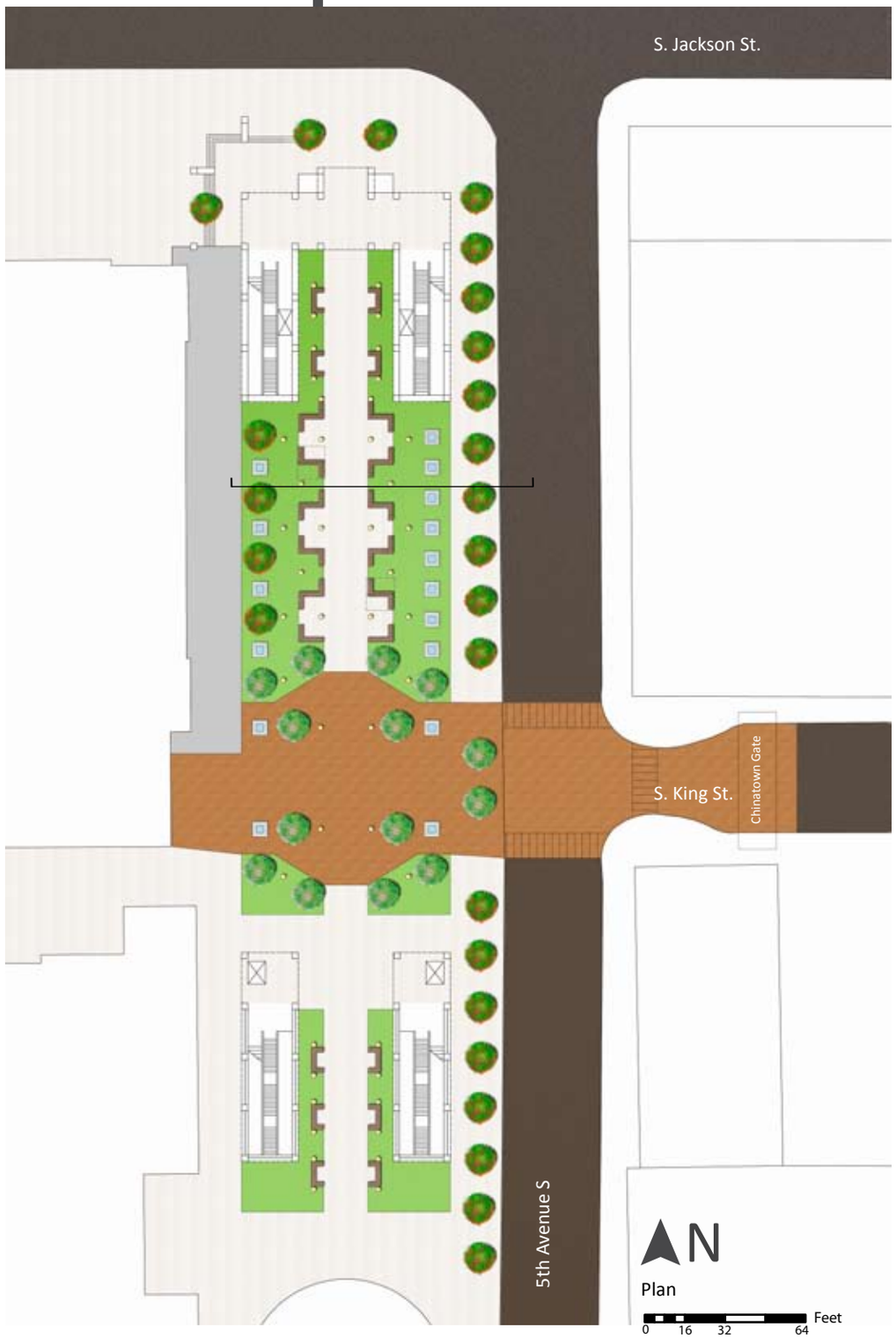
Time Lapse, Autumn Weekday Lunch Time

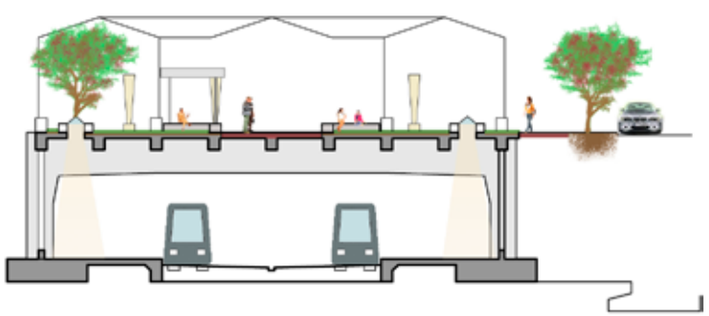
Underutilized Structures Cluttering the Plaza

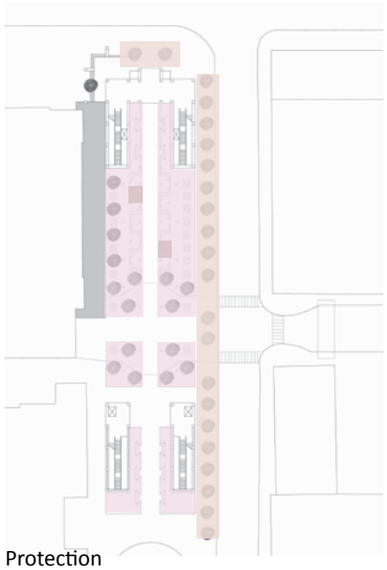


Proposed Seating/Occupiable Green Space - Autumn Day

Scan|Design Master Studio 2008





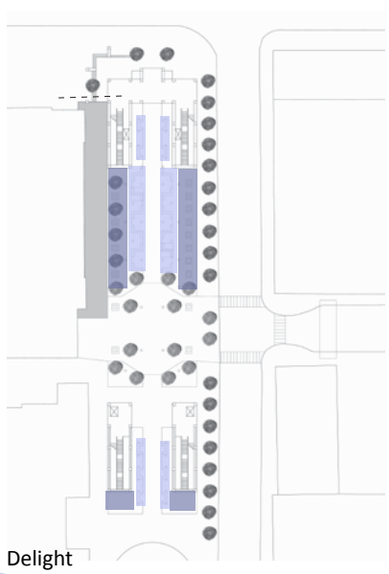


Protection

- Street Tree buffers vehicular traffic
- Greenery offsets air pollution
- Canopy on selected seating areas
- Well Lit

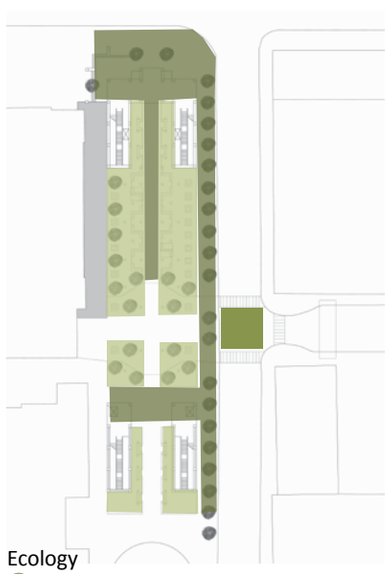
Invitation

- Improved circulation space
- Defined Seating Areas
- Seasonal activities on King Street can spill to the plaza area



Delight

- Human scale seating areas with board games imbedded on seating
- Greenery visually pleasing, seasonal (Maple and Cherries)



Ecology

- Energy Generating Floor to take advantage of foot traffic
- Greenery uses rainwater
- Permeable paving at intersection to prevent further run off

The Proposal

The design proposal is to improve circulation by removing all of underutilized structures except for the four main staircase/elevator canopy structures. The proposal is to also lid over the oversized openings and cover them with drought tolerant native plants. Connection to the tunnel level is maintained by new skylights that offers daylighting to the level below. Connection to the International District is emphasized by continuous pavement to the Chinatown Gate on the King Street.

Proposed Pavement Connection to Chinatown Gate - Spring Day

Vine Maple © Clay Antieau

Bitter Cherry © Clay Antieau

Oak Fern © Clay Antieau

Thick Headed Hedge © Clay Antieau

Dewey's Hedge © Clay Antieau

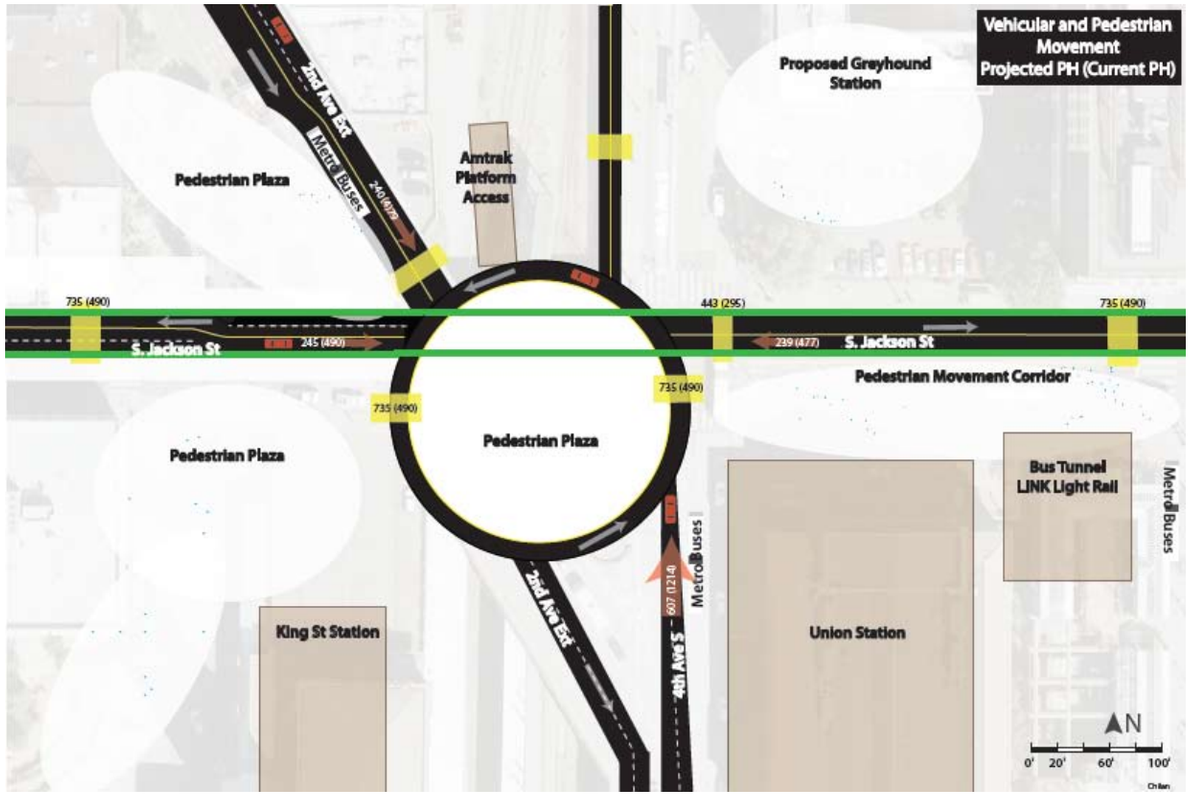
4th Ave S. & S. Jackson St: Flows, Fluidity

Evidence for high intensity transit hub development:

Seatle Comprehensive Plan
- 2010: 42% increase of non-SOV commute trips and 55% of all trips are non-SOV
- 2020: 60% of all trips are non-SOV

PSRC Vision 2040
- 6 million people, 3 million jobs
- Seattle Central City) identified to accommodate 32% population growth, 42% employment growth

Washington State Legislature 2050
- Desire 50% below 1990 GHG levels, where 50% GHG emissions are transportation-related

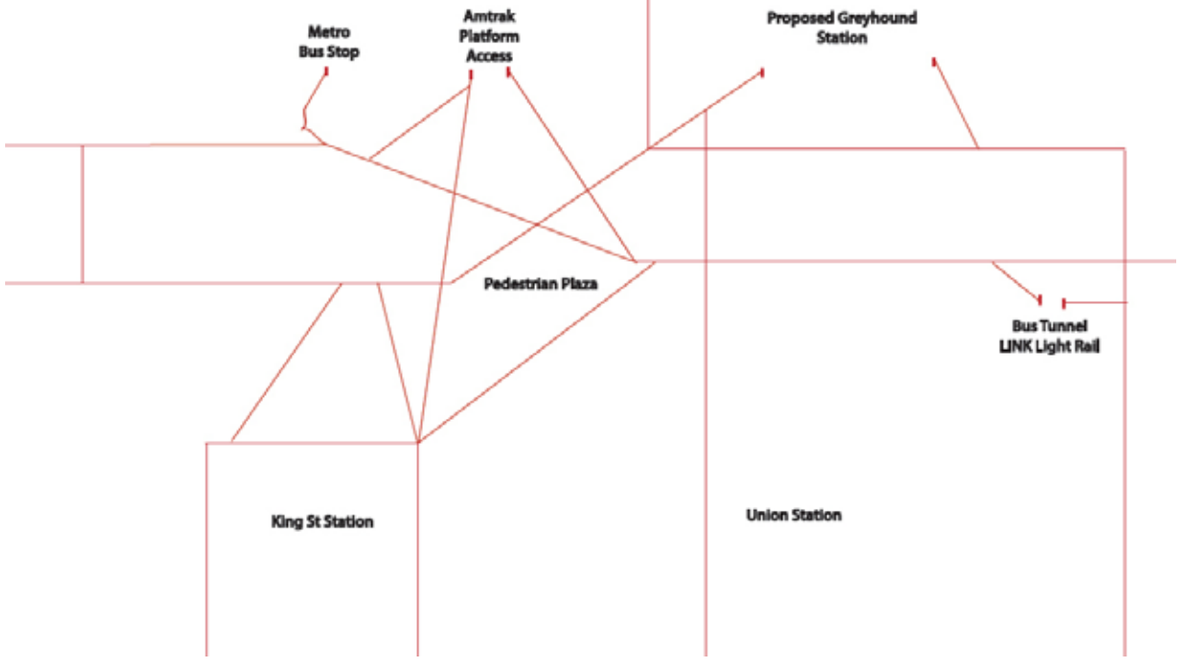


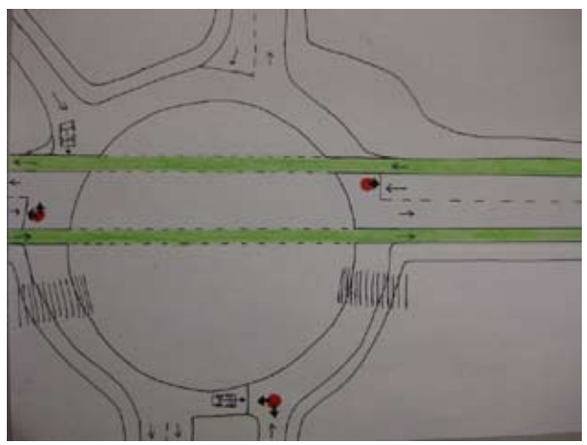
Roundabout design integrates East-West pedestrian and bicycle movements, while facilitating smooth traffic flows at safe speeds (15mph). Projected numbers are calculated based on 60% reduction in auto use, assuming a 60% increase in transit use and pedestrian activities.

Existing Condition

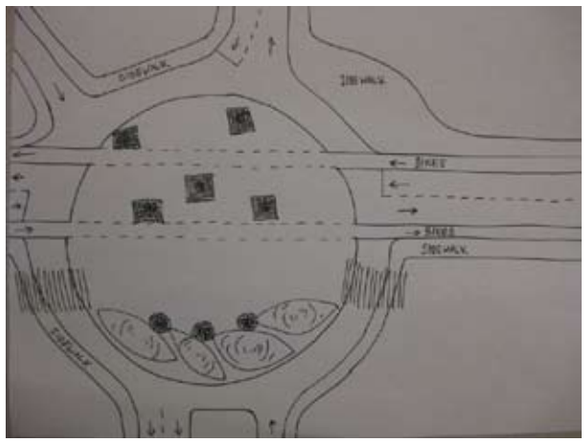
- Lacks human scale & visual interest
- Missed opportunity to highlight variety of transit and trans-portation modes (e.g. trains)
- 4th Ave S. intersec-tion extremely wide
- High traffic volumes 4th Ave S. inhibit E-W pedestrain flows

Pedestrian Movements Across Site

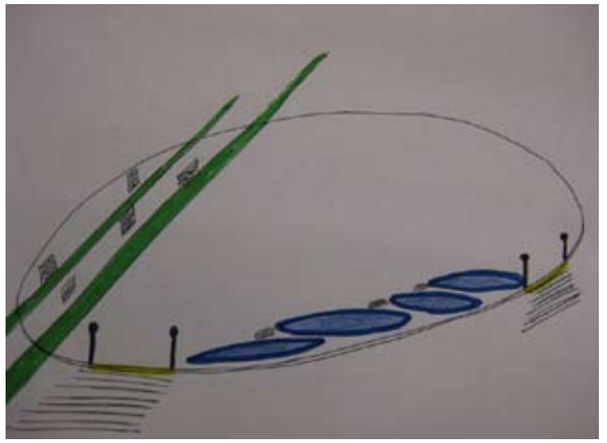




Signal timing conceptual scheme with pedestrian, bicycle, and vehicular infrastucture.



Plan view: Pedestrian plaza in roundabout.



Perspective: Pedestrian Plaza in Roundabout.

- Landscape supports free movement.
- Everchanging space.
- Still water pools activated by train vibrations.
- Organic grating pattern over surplus-water-triggered verticle fountains.

Above: grating detail.

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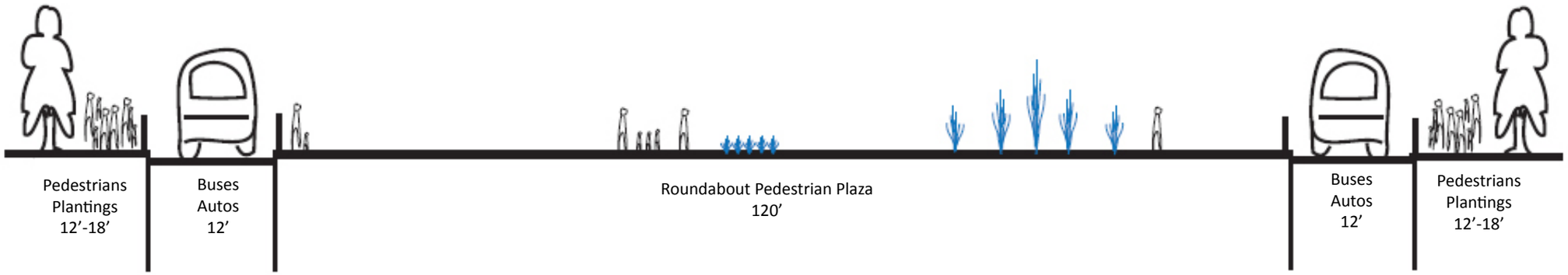
Sample Roundabout Section



Recycled Materials Inventory for 4th Ave S. Sculpture Focal Point - Small Wind & Interactive Gantry Crane


x110


x120


x110


x24,000 pavers


x50


x10

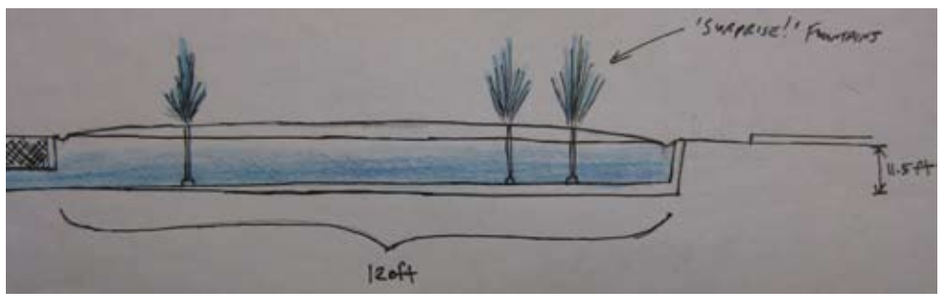

x180 ft


x25

Recycled materials from the International District station area will be used to create a visual focal point at the South edge of the roundabout and for those entering the CBD via 4th Ave S.

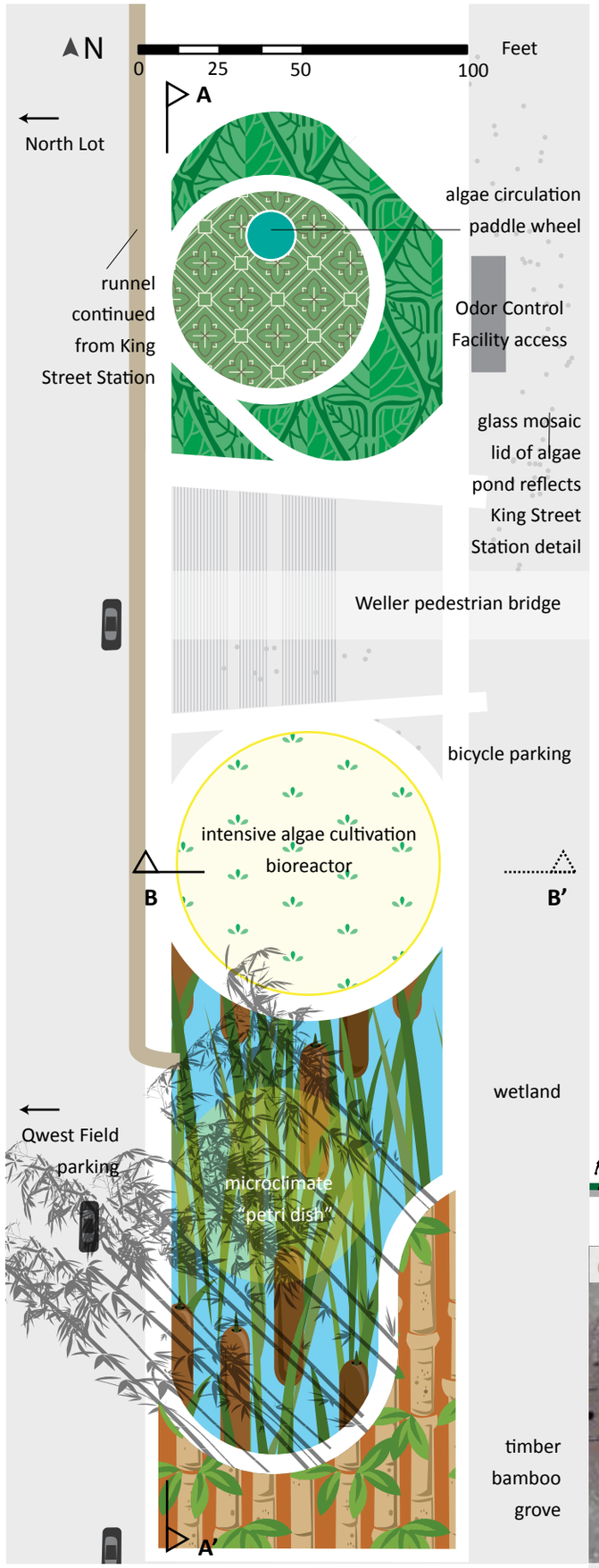
An interactive gantry crane sculpture (Schouwburgplein, Rotterdam, Netherlands) that harkens to Seattle’s industrial waterfront and indisutral past will frame a small will generator, a symboy for non-traditional energy sources and sustainability.

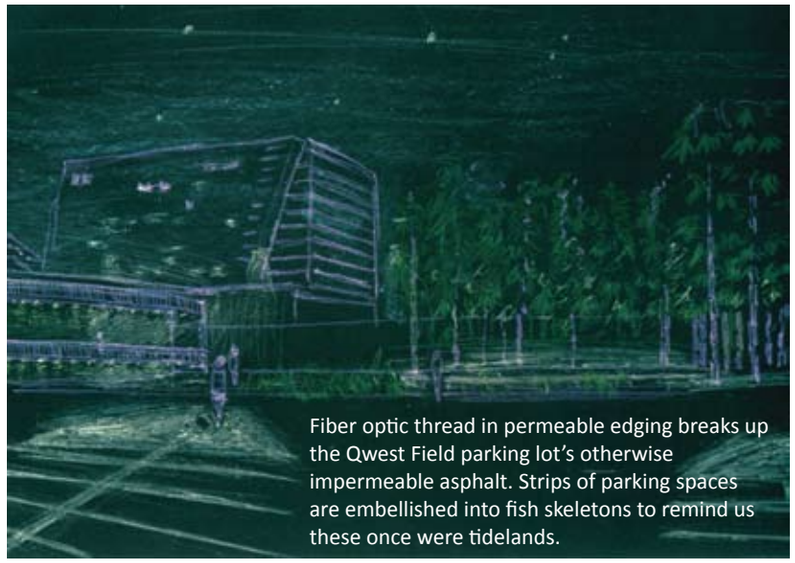
Net-Zero Water Run-off Concept



The net-zero water run-off scheme utilizes ‘surprise’ fountains in the roundabout pedestrian plaza. Only when there is surplus water are the fountains activated, thus adding spontenaity and supporting the feel of an everchanging space. Under worst-case scenario conditions of a ‘100 year’ storm, one hour yields 1 and 1/3 inch of rain.

Station Ecology: Microbes at Work





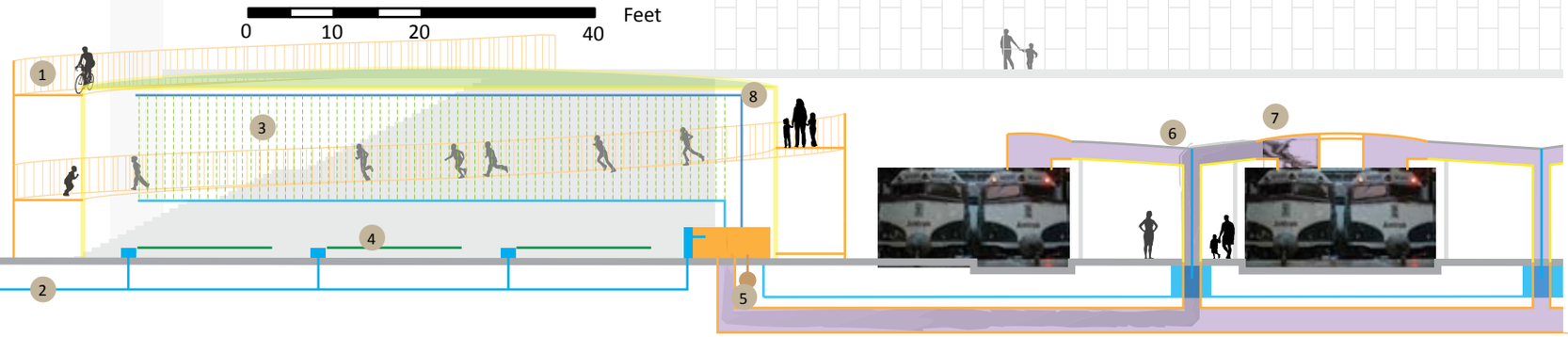
Fiber optic thread in permeable edging breaks up the Qwest Field parking lot's otherwise impermeable asphalt. Strips of parking spaces are embellished into fish skeletons to remind us these once were tidelands.

Adroit Algae

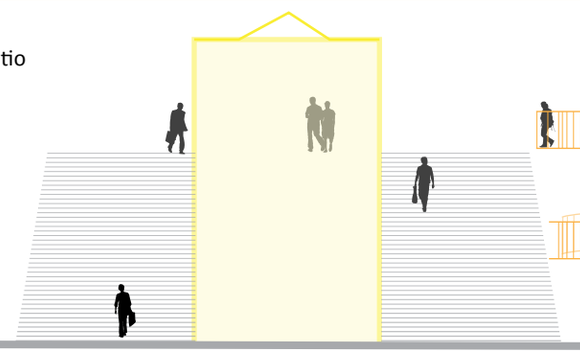
South of King Street Station was once tideland. Water reappears here in the form of a wetland and a glass-encased algae pond. The algae takes nutrients from train emissions and wastewater. Trains carry dried algae off site for processing into biodiesel.

The wetland is sited outside of frequent pedestrian traffic, allowing it to remain productive while easily adapting into a neighborhood park for eventual North Lot residents. A permeable "petri dish" in the wetland creates a warmer microclimate underneath, allowing the wetland's planting palette to evolve in the face of climate change.

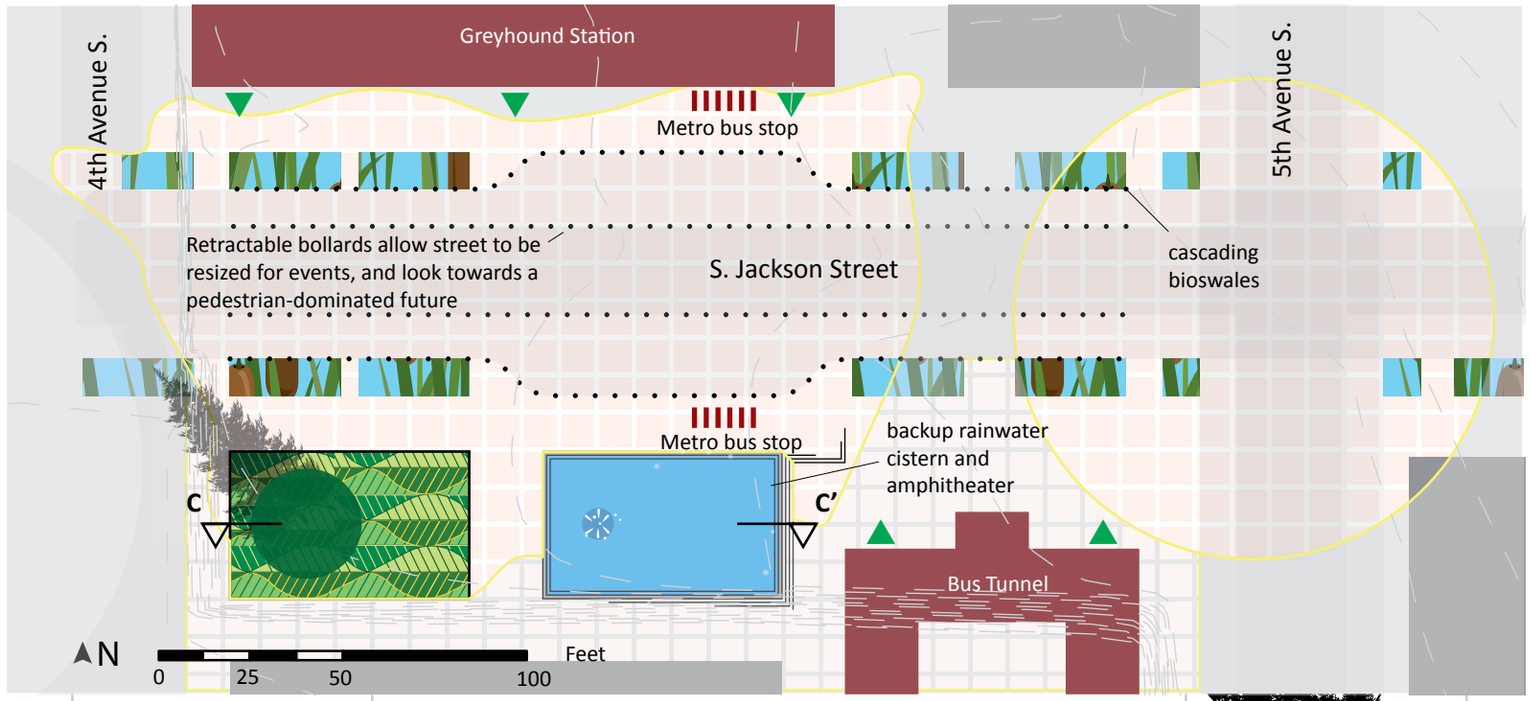
Section B-B'

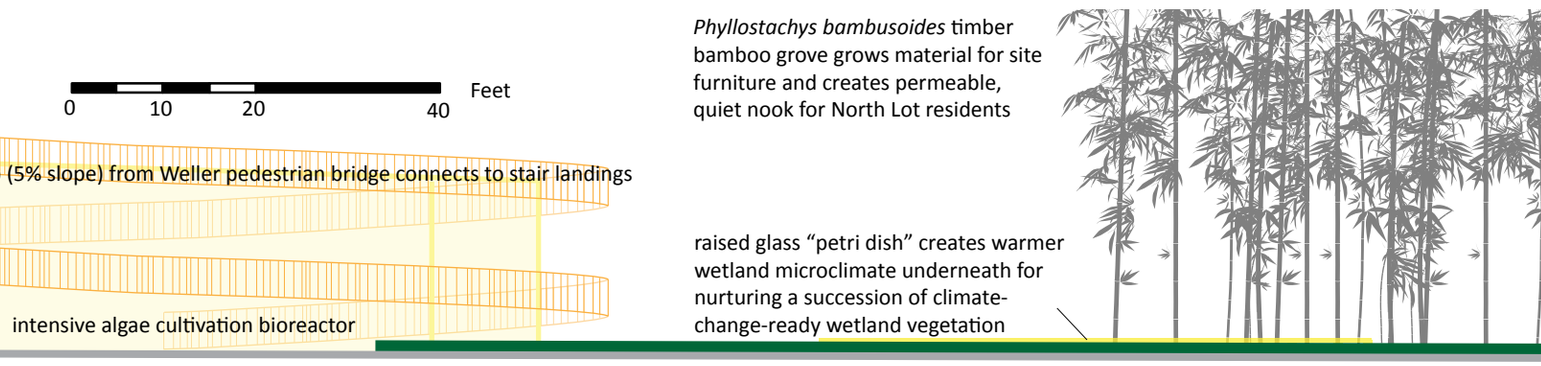


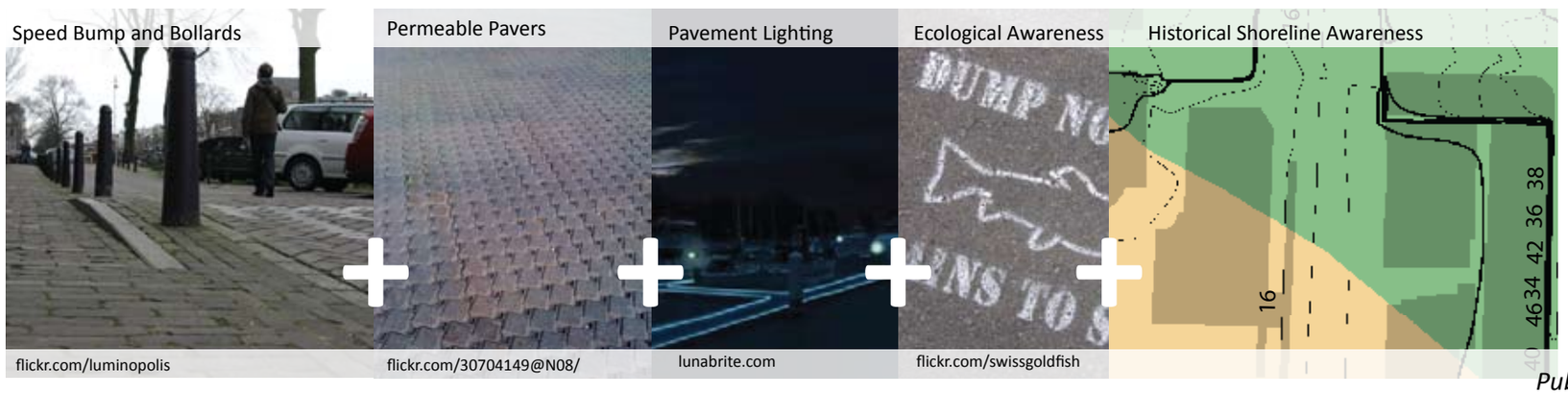
1. Bike ramp generates 1kW electricity needs
2. Reclaimed water to North Lot
3. *Haematococcus pluvialis* bioreactor requires C:N:P ratio of 50:8:1
4. Drying racks prepare algae for off-site processing
5. Wastewater from Elliott Bay Interceptor provides C:N:P ratio of 20:8:1
6. Stormwater cools exhaust, enters bioreactor
7. CO_2 from train exhaust provides additional carbon
8. Green and clear recycled glass facade allows in the light spectrum necessary for photosynthesis



Section A-A'



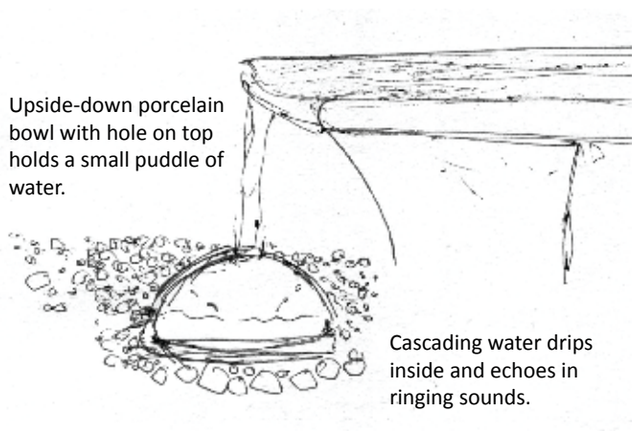




Active Amoebae

Without soil microbes, bioswales wouldn't function. Our streets highlight that fact with supersized microbes that span the street. Stormwater is processed within these microbes via permeable pavers, bioswales, and finally a fountain.

The edges of the giant microbes light up at night for 24-hour unified pedestrian spaces. These edges are also extended speed bumps: streets ramp up to sidewalk level within each microbe. Retractable bollards allow the streets to be narrowed for events, easily adapting to a future with fewer cars. Streets maintain unity with the International District through details such as *suikinkutsu* rain bells, drawn below.

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Analysis Page 5


Design Page 17

Connections
Alleys
Alleyways
Stations
Lidded

LIDDED
From Void Space to Green Place

Students: Julia Lindgren | Rachel Miller | Amanda Reed | Katy Saunders | Katherine Wimble

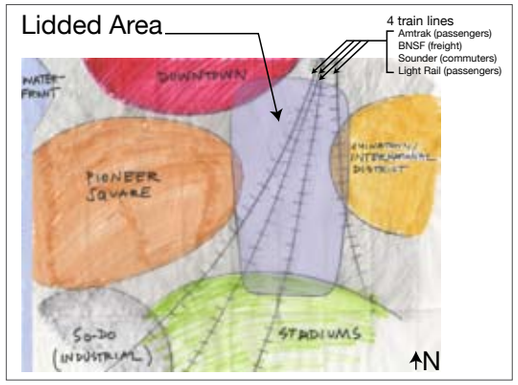
Lidded: From Void Space to Green Place

Site Identity and Character Guiding Design

- currently under-utilized, poor quality public space
- site of interaction with trains (sensorial experience)
- gateway to the city/ views of the city
- connection to history (site as palimpsest)

Activities Supported by the Site

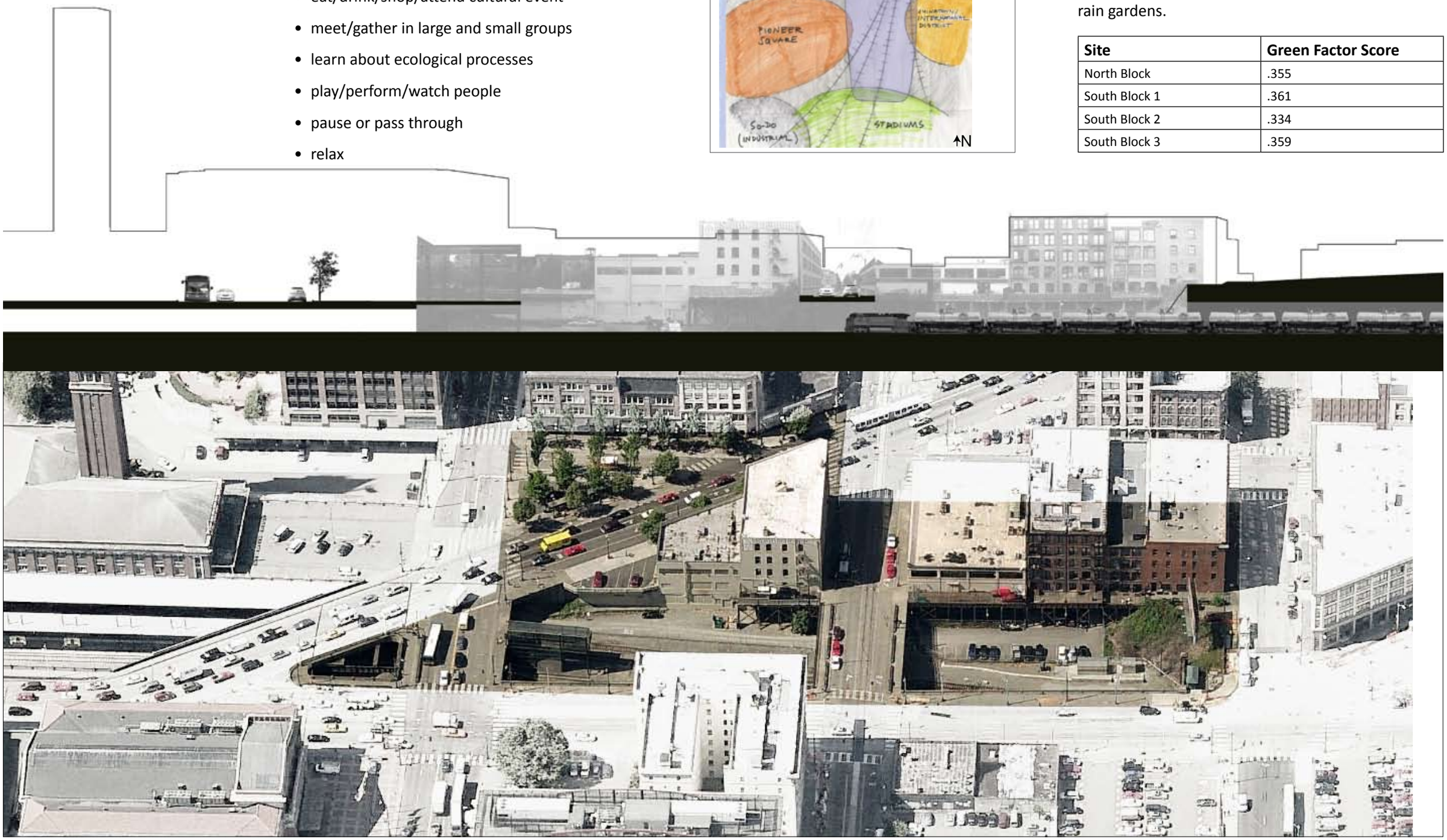
- eat/drink/shop/attend cultural event
- meet/gather in large and small groups
- learn about ecological processes
- play/perform/watch people
- pause or pass through
- relax



Metrics:

The City of Seattle's Green Factor is a system for rating the quantity and quality of landscaping in new developments. A score of .3 is required in applicable zones and is determined by planting information such as the number of trees and shrubs and the square feet of permeable paving, green roofs, and rain gardens.

Site	Green Factor Score
North Block	.355
South Block 1	.361
South Block 2	.334
South Block 3	.359



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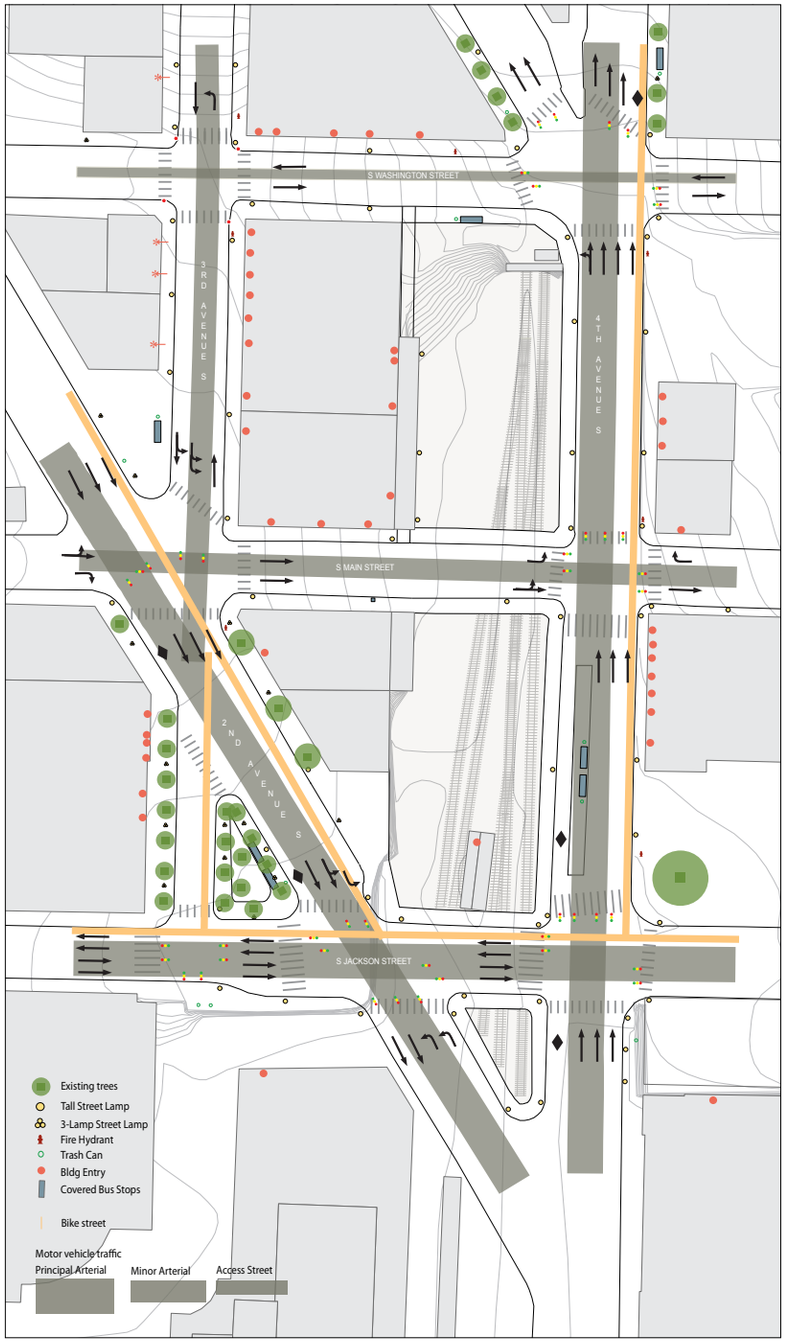


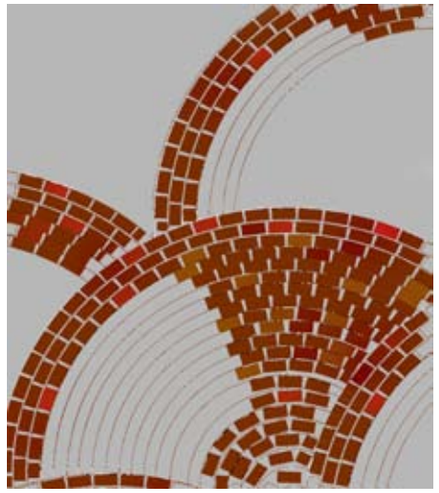
Current conditions and facilities

Proposed design and new facilities

1	ipê	5	concrete
2	cor-ten steel	6	brick
3	stone	7	water
4	stainless steel	8	glass

Proposed design: site-unifying material palette

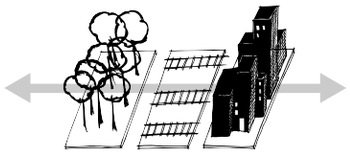
Proposed design: site-unifying brick pattern



Design Goals

- promote economic, social, and environmental sustainability
- provide ecological services through ecorevelatory, green infrastructure
- prioritize pedestrians, bicyclists, and public transportation over private motor vehicles
- create a multi-layered, multi-functioning, multi-textured site
- activate/energize and calm/quiet for different functions in different areas
- integrate buildings and landscape as functioning whole
- meet all 12 Gehl quality criteria

Lidded: Growing Grid



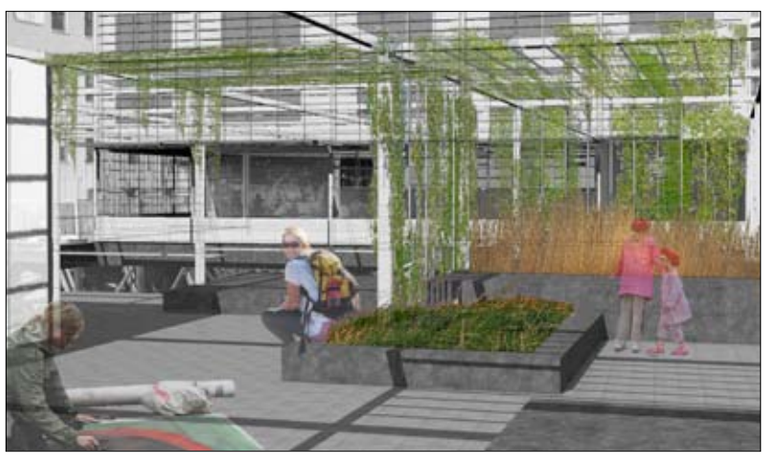
Lidding of Tracks: A Transit Focus

Due to its adjacency to King Street Station this design proposal caters to the traveler. 'Growing Grid' provides the necessary amenities needed for comfortable transit while establishing connections between the station and its surrounding neighborhoods. The site is divided up into three sections:

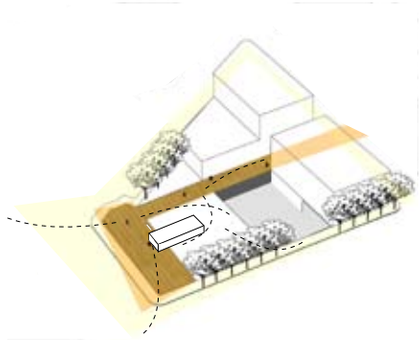
1 - landscape (southernmost portion): gathering space suitable for both large and intimate gatherings

2 - exposure to tracks (middle portion): public viewing area/ main pedestrian walkway

3 - building (northernmost portion): mixed-use commercial

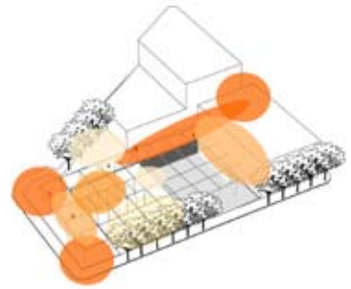


Below: Before and after perspectives of site looking north from 4th Avenue



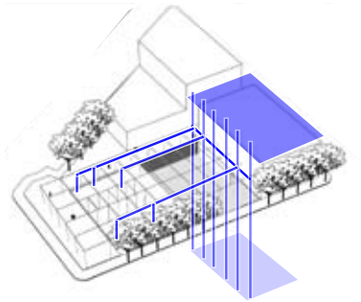
Circulation

- Main circulation path: pedestrian 'alleyway' connection between Station, North Lid, Downtown, Pioneer Square
- Secondary circulation path: site perimeter
- Informal path through site



Activity Zones

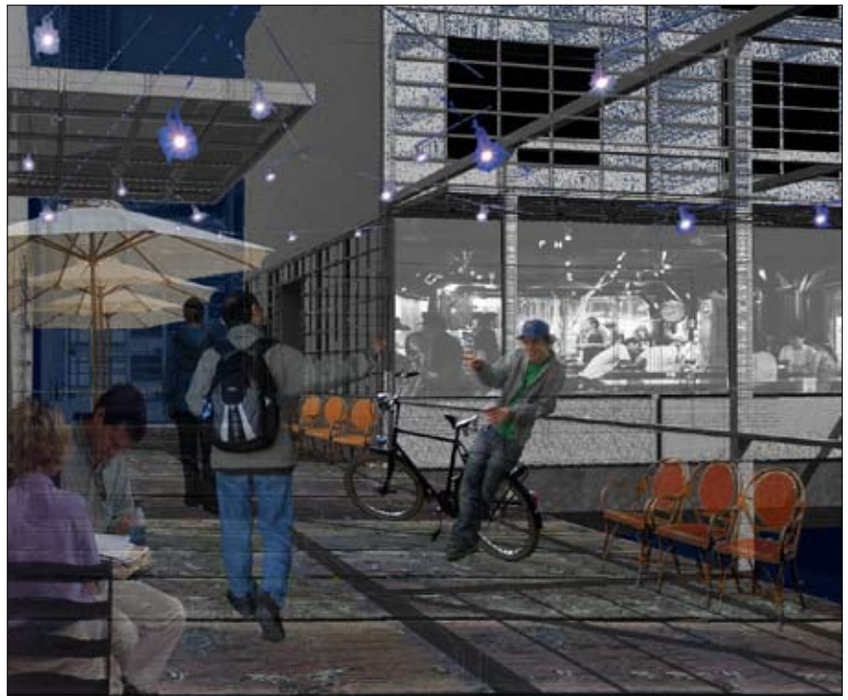
- High activity: site entrances, 'alley'
- Medium activity: larger gathering areas
- Low activity: intimate places to sit, gather



Water Circulation

- Roof collection: storm water funnels into gutters
- Gutters: water is distributed through grid for use by vegetation
- Cistern: excess water is stored for building uses

Site Plan



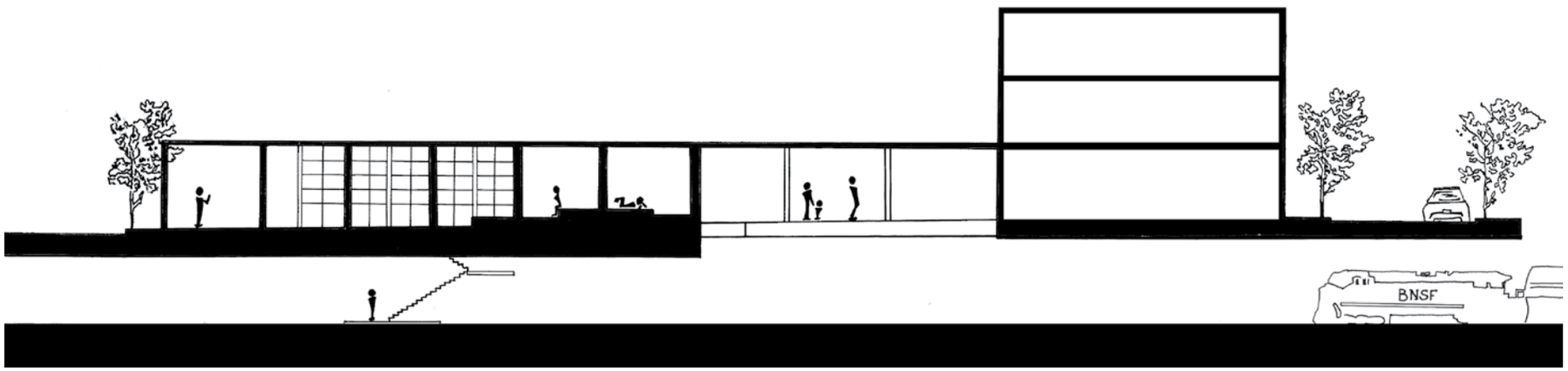
Above: Daytime perspective of site looking south towards King Street Station along Fourth Avenue.
Upper right: Nighttime perspective of site looking north along the pedestrian 'alleyway'

Site Connections

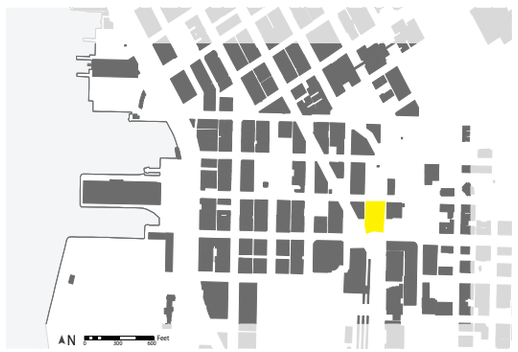
The site's three sections are unified aesthetically and functionally by a boardwalk and an overhead grid system.

- The boardwalk functions as a pedestrian alleyway providing direct access from King Street Station to Seattle's city center. The boardwalk is a highly activate place with outdoor restaurants, artists, and frequent train watching opportunities.

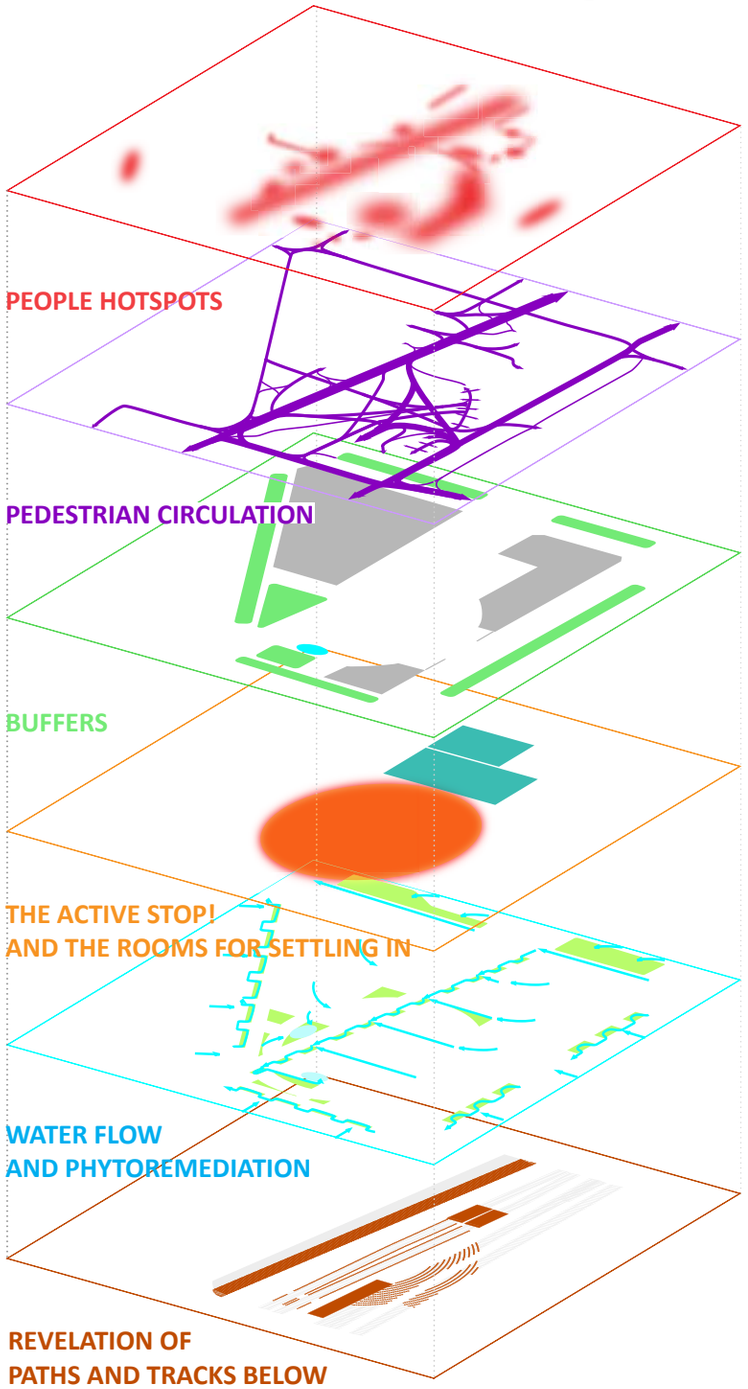
- The grid functions as a water collector, an armature for plant growth, and a structural system used to support the building's south-facing wall of garage doors. Storm water is captured off the building's roof, funneled into a gutter system (integrated with the grid), and released into planters on the southern portion of the site where the water is theatrically released and then either filtered or funneled into a cistern.



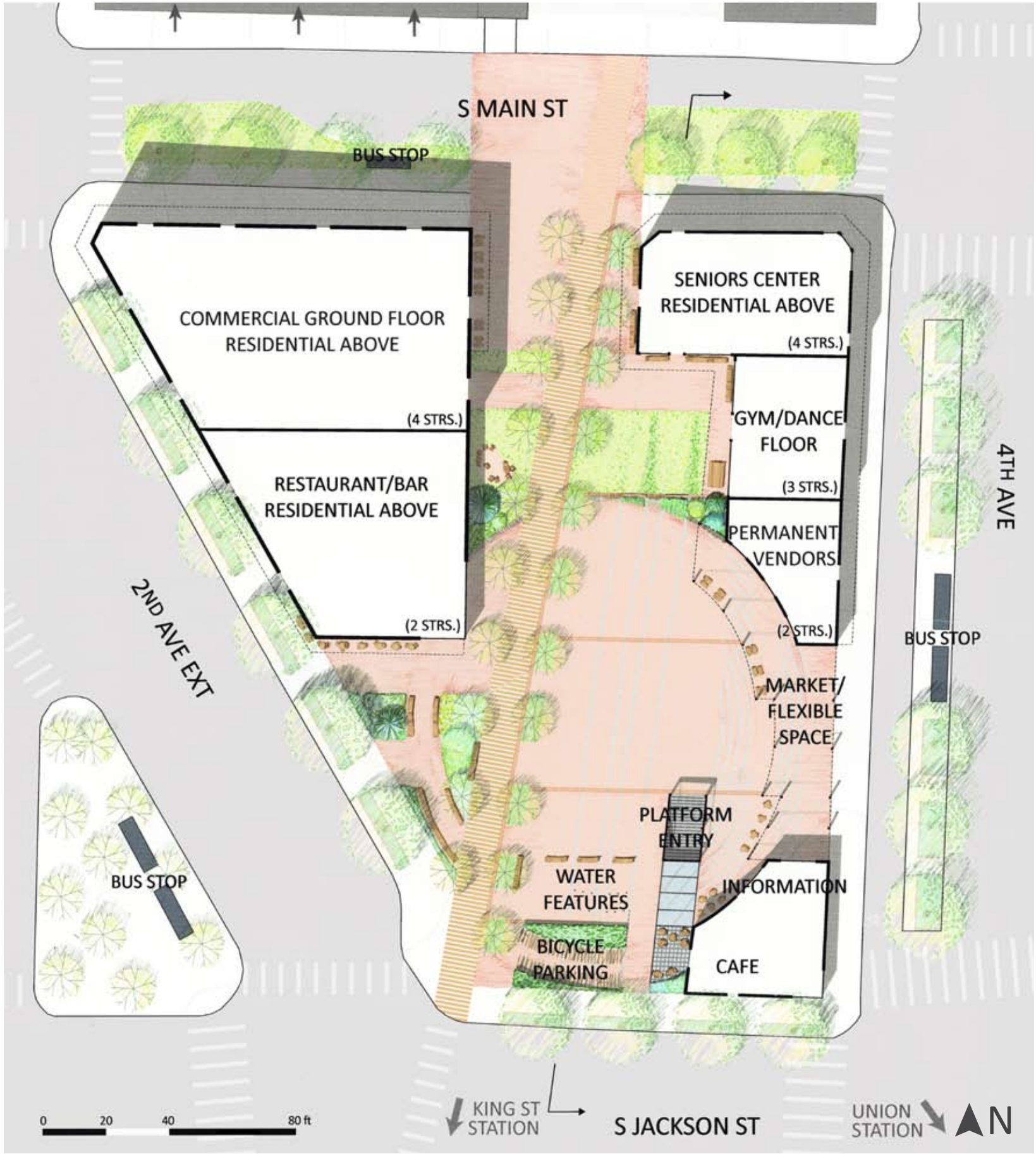
North - South section cut through site looking west



Lidded: The Stop! and the Settling In



This proposal bolsters the newly lidded area as a lively urban transit hub. Little, quick cafés and shops activate the space surrounding the train platform entry. Quieter outdoor rooms provide “settling in” places and allow children and elderly to interact. Residences on the upper floors extend the hours of life in the space. Landscaping, buildings, and a water fountain buffer the traffic noise and enclose the space. All stormwater flows through a series of retention ponds, directed to the fountain or the cistern for onsite use, while plants phytoremediate train smoke. Peephole mounds, a water fountain, and ground lighting playfully expose the passing trains and the history of the site.



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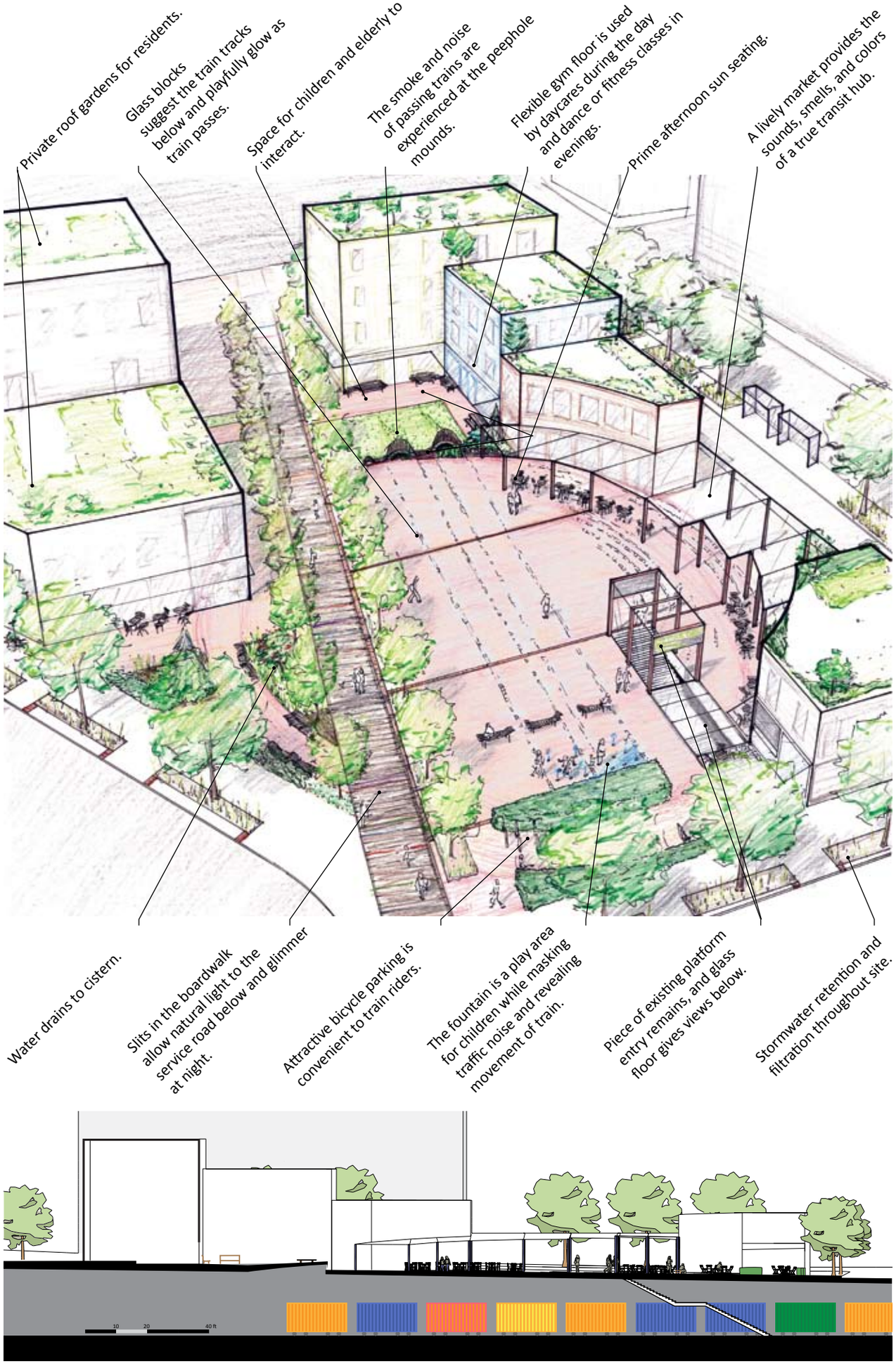
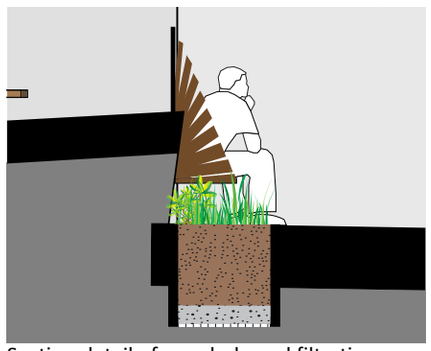


View looking south from the peephole mounds.

View looking east across the boardwalk path to the fountain.



Section detail of peephole and filtration.

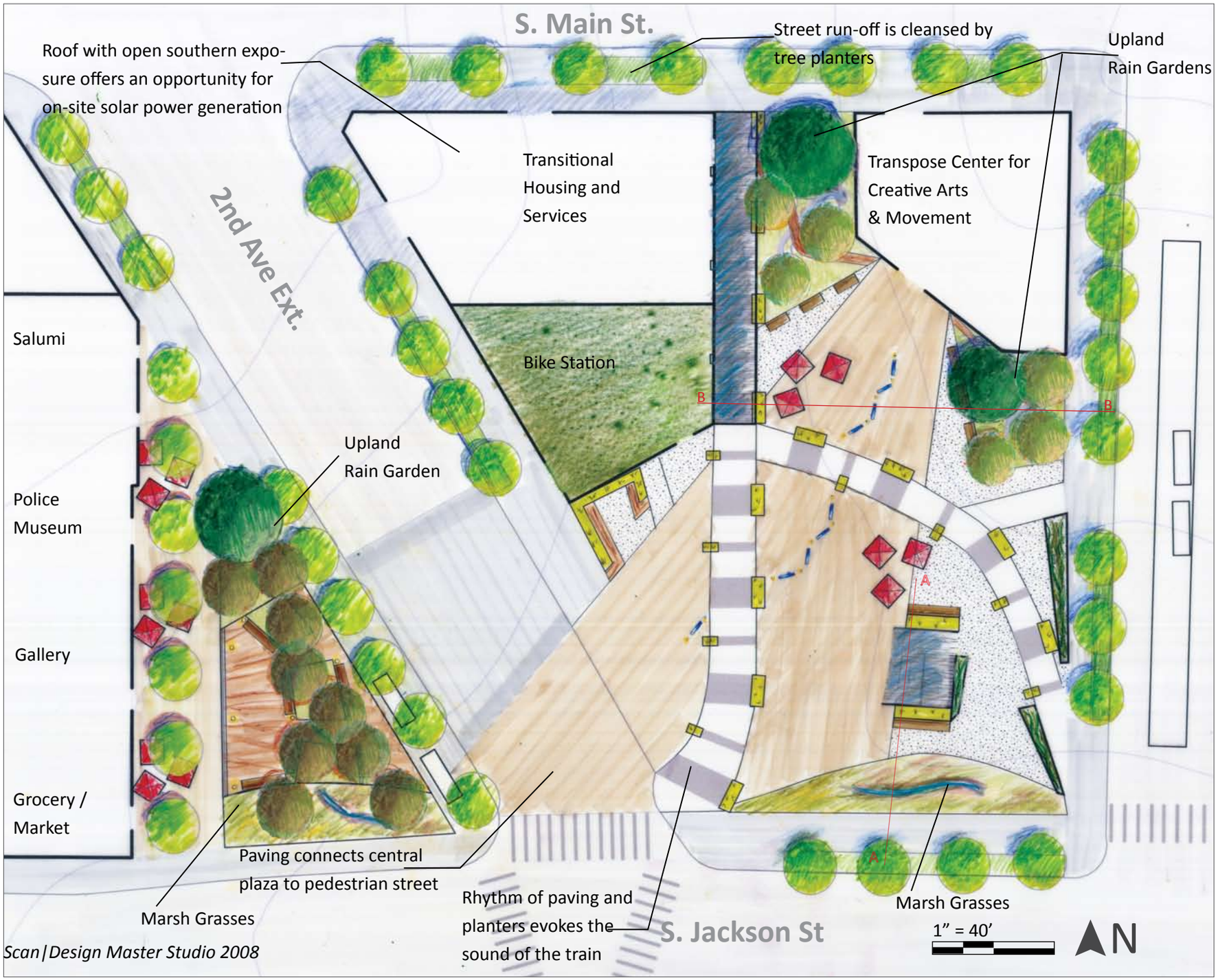
Transpose

FACILITATING TRANSITION AND CELEBRATING MOVEMENT IN A GREEN TRANSIT SQUARE

Drawing on the site's location next to two transit hubs, Transpose facilitates circulation via pathways that visually evoke the rhythm of a train. A central fountain, activated by the rails below, further reveals the site's industrial context. Dance and yoga classes offered at the Transpose Center continue the celebration of movement into the interior space.

The closure of 3rd Ave. S. to car traffic offers a protected pedestrian area, with options for shopping and dining. The relocation of Bike Station to a larger space on the central square provides essential services for bike commuters. Transitional housing center provides services and stability for low-income population.

The vegetation and water systems integrate to channel and store water on-site. Moving from tall marsh grasses in the south to upland plantings in the north, the plants illustrate the site's history as a salt marsh and create a visual juxtaposition against the Seattle skyline.



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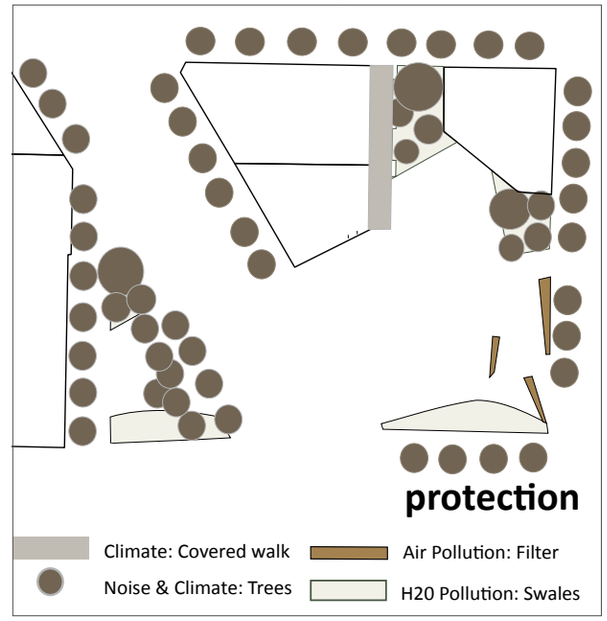
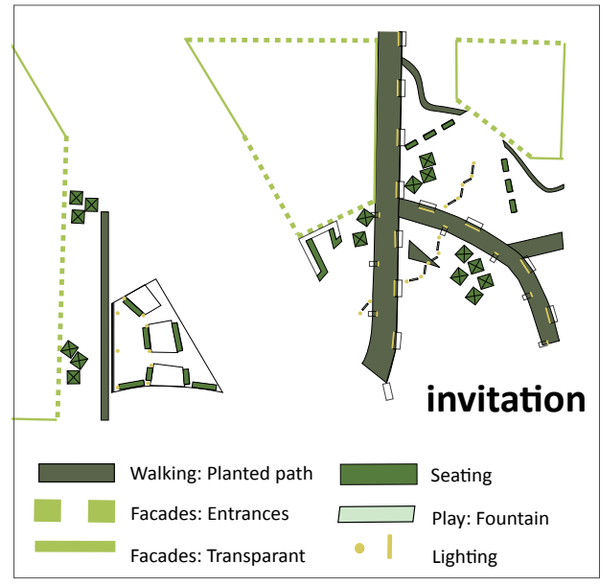
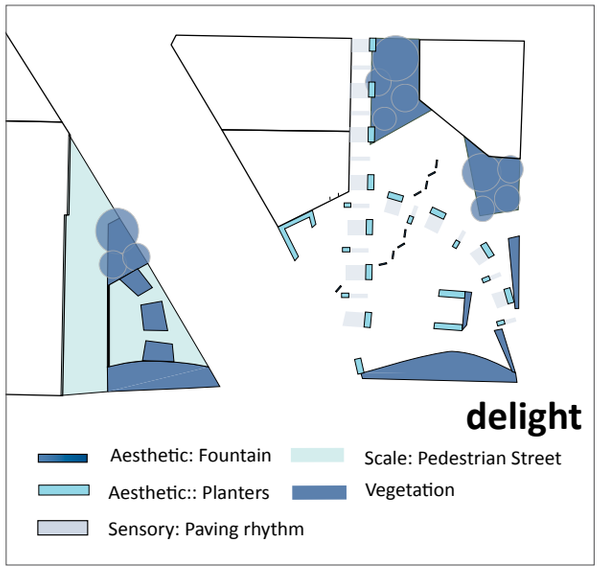
Meeting the Gehl Criteria

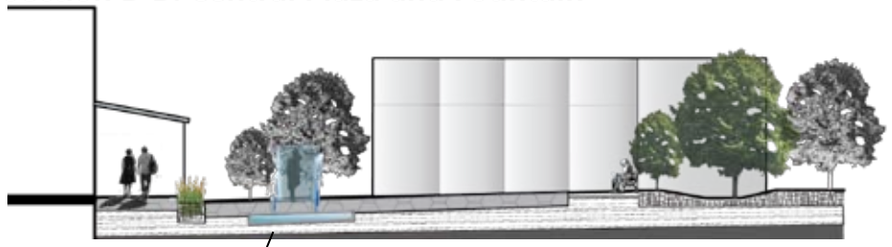






View south of proposed 3rd Avenue pedestrian street

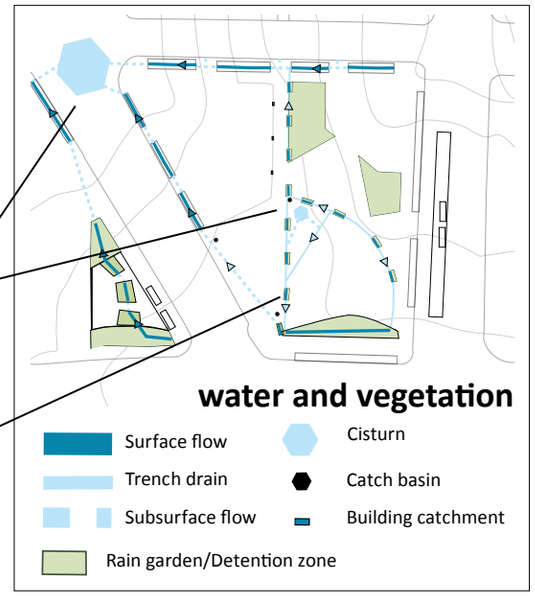
Section B-B: Central Plaza and Fountain



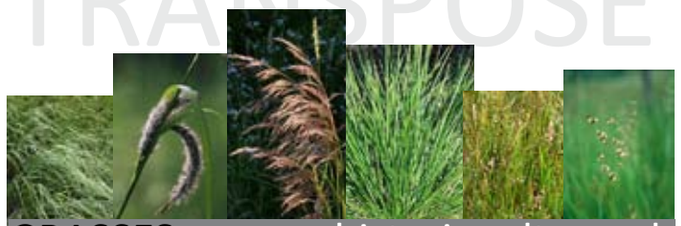
Fountain is fed by water collected on site

Cisterns store water for central fountain and use in adjacent buildings

Trench drain network filters water through planers and into swales



TRANSPOSE

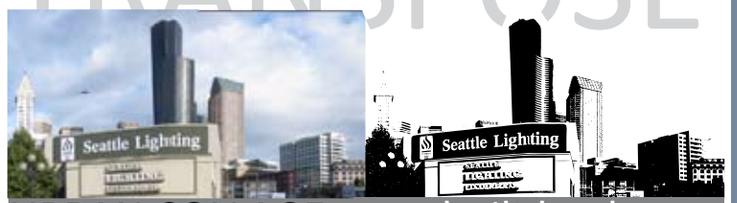


GRASSES historic salt marsh

TRANSPOSE

RAIN GARDENS upland forest

TRANSPOSE



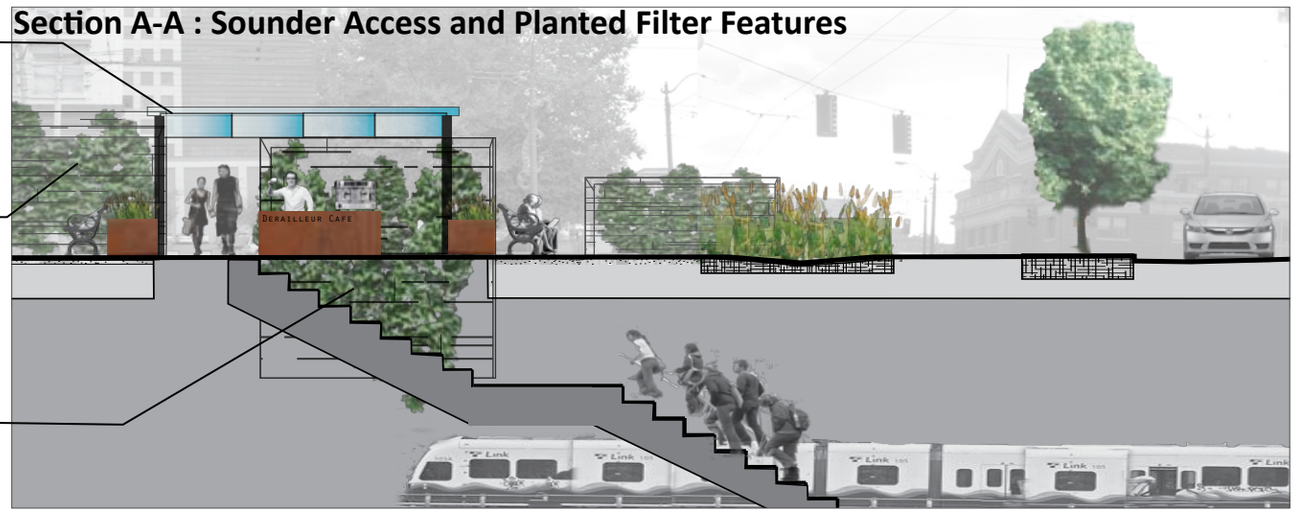
URBAN COLLAGE built landscape

Amenities placed near transportation hubs increase the appeal of public transit

Vines climb up steel structure, providing buffer from the busy street

Openings through to the tracks below vent train exhaust through the planted structures

Section A-A : Sounder Access and Planted Filter Features

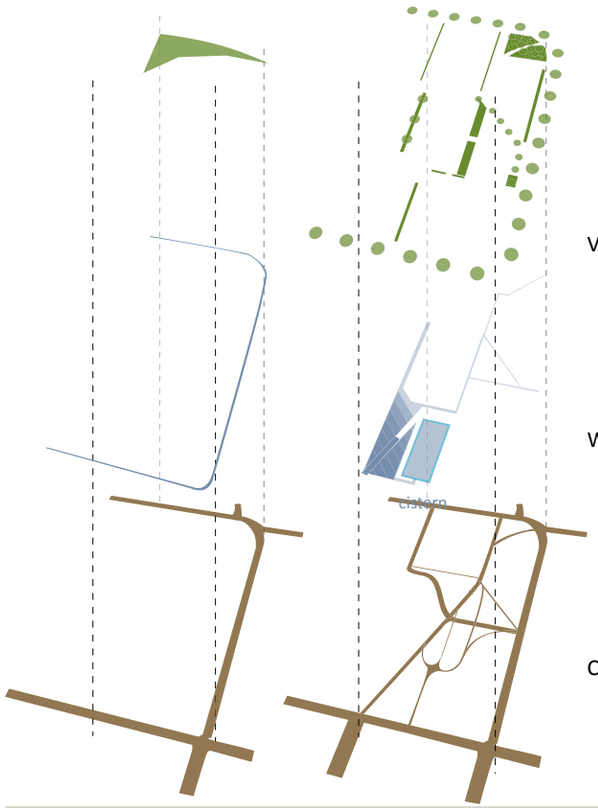


North Lid: *SOFTCITY*

Current conditions - looking north

Conceptual Framework

Cities are inherently theatrical, functioning as lit stages on which people, spaces, buildings, water, and plants perform meaningful acts. In SOFTCITY, the north lid becomes a stage for a performative network of human interaction—the soft infrastructure that maximizes the flow of ideas, connects people to place, and keeps the city alive. SOFTCITY provides ecological services, safety, comfort, and choice with distinct-but-connected “stages” for watching people, viewing films, gathering in groups, observing the city, playing, and witnessing natural processes.



Above: Existing to proposed site conditions

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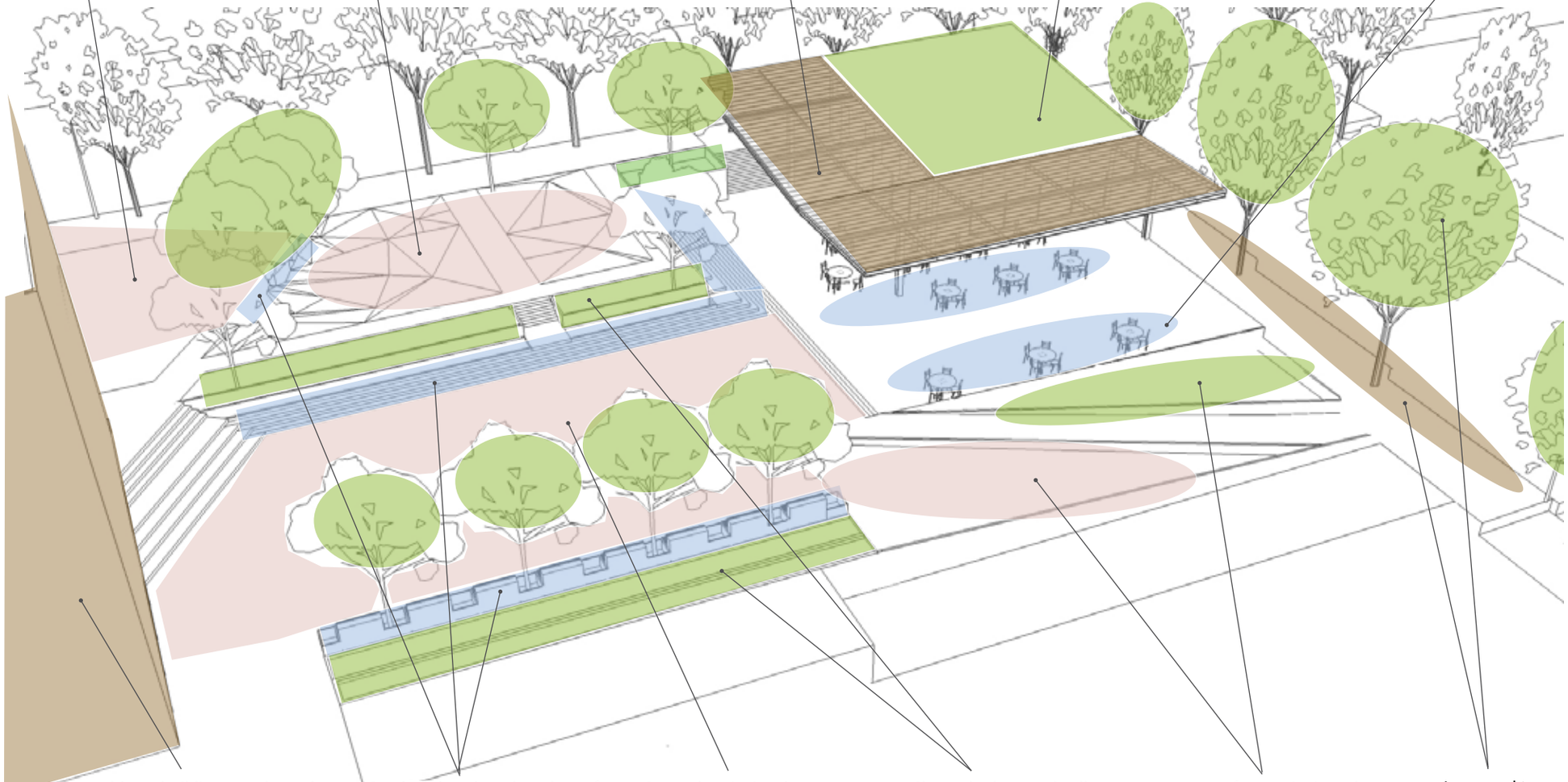
Views of train tunnel and city maintained

Varied surface invites play, discovery, and architectural interest.

Translucent outdoor roof provides protection from the rain and filtered shade.

Green roof provides habitat and captures stormwater. Cafe activates corner and plaza with food and drink.

Outdoor cafe seating allows all weather gathering and recreation.



12 QUALITY CRITERIA

- Protection
- Comfort
- Enjoyment
- Ecology

Multi-use building populates the public space with people at all hours of the day and night.

Seating placed on the edges of plaza invites rest and people watching.

Open plaza invites large gathering and provides seating for an outdoor cinema.

Channels clean and collect stormwater throughout site. Planters contain trees and grasses.

Water feature invites play. Water feature collects and recycles stormwater.

Increased tree canopy provides both environmental remediation and a physical buffer between cars and pedestrians.

Longitudinal Site Section
North to South looking West
Scale: 1”:40’

North Lid: *SOFTCITY*

SUMMER

WINTER


8AM


12PM


4PM


10PM

Life

- The ‘life’ of the new lidded space inspired the design of three distinct plaza areas as well as two new buildings that accommodate year-round, all-weather activities.
- The buildings provide boundaries to the public spaces, and programmatically support continual activity outside.
- Each public plaza is uniquely designed to facilitate different activities: the flat large space is best for large gathering, the mostly sheltered brick plaza is best for small gathering, and the smallest plaza has a varied surface that invites play.

Children play on gently undulating decking.

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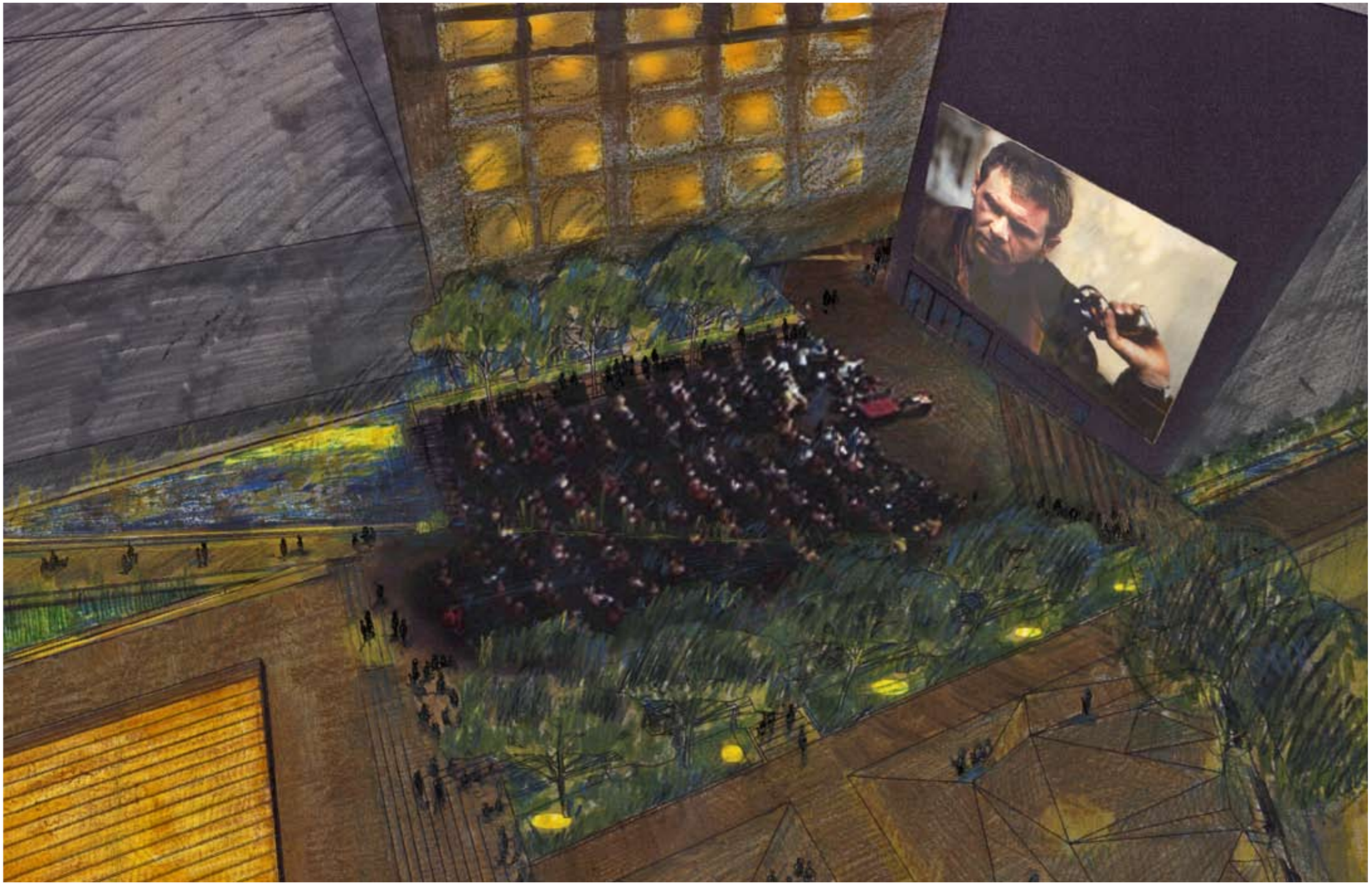

Above: A birds-eye view of the main public plaza on a summer night with people gathered to enjoy the outdoor cinema on the new theater building.

Left: Looking southeast towards the new cafe from the edge of the bridge over the water. People are sheltered from the rain under the overhang and the cafe glows warmly.

Public Spaces | Public Life for Seattle’s South Downtown
2008 Scan|Design Interdisciplinary Master Studio
University of Washington

"To be able to move about easily and confidently, to be able to linger in cities and residential areas, to be able to take pleasure in spaces, buildings, and city life, and to be able to meet and get together with other people - informally or in more organized fashion - these are fundamental to good cities and good building projects today, as in the past."

-Jan Gehl, Life Between Buildings