



Portland Downtown Waterfront Development, Volume 1

Urban Design Proposals

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COLLEGE OF DESIGN

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About SCI

The Sustainable Cities Institute (SCI) is an applied think tank focusing on sustainability and cities through applied research, teaching, and community partnerships. We work across disciplines that match the complexity of cities to address sustainability challenges, from regional planning to building design and from enhancing engagement of diverse communities to understanding the impacts on municipal budgets from disruptive technologies and many issues in between.

SCI focuses on sustainability-based research and teaching opportunities through two primary efforts:

1. Our Sustainable City Year Program (SCYP), a massively scaled university-community partnership program that matches the resources of the University with one Oregon community each year to help advance that community's sustainability goals; and

2. Our Urbanism Next Center, which focuses on how autonomous vehicles, e-commerce, and the sharing economy will impact the form and function of cities.

In all cases, we share our expertise and experiences with scholars, policymakers, community leaders, and project partners. We further extend our impact via an annual Expert-in-Residence Program, SCI China visiting scholars program, study abroad course on redesigning cities for people on bicycle, and through our co-leadership of the Educational Partnerships for Innovation in Communities Network (EPIC-N), which is transferring SCYP to universities and communities across the globe. Our work connects student passion, faculty experience, and community needs to produce innovative, tangible solutions for the creation of a sustainable society.

About SCYP

The Sustainable City Year Program (SCYP) is a yearlong partnership between SCI and a partner in Oregon, in which students and faculty in courses from across the university collaborate with a public entity on sustainability and livability projects. SCYP faculty and students work in collaboration with staff from the partner agency through a variety of studio projects and service-learning courses to

provide students with real-world projects to investigate. Students bring energy, enthusiasm, and innovative approaches to difficult, persistent problems. SCYP's primary value derives from collaborations that result in on-the-ground impact and expanded conversations for a community ready to transition to a more sustainable and livable future.

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This report represents original student work and recommendations prepared by students in the University of Oregon's Sustainable City Year Program for the City of Portland. Text and images contained in this report may not be used without permission from the University of Oregon.

Executive Summary

Students in a graduate urban design studio based at the University of Oregon's Portland campus were asked to create urban design redevelopment proposals for downtown Portland. Students began the term by analyzing the site as a team of eight groups assessing existing building typologies and dimensions, transportation infrastructure, environmental conditions, zoning requirements, history of the place and culture, physical aspects of the site, relevant urban design precedents,

and by creating base drawings from which the class could then build upon throughout the term (see appendix for this analysis). The class was then divided into six groups, each of which developed an urban design development proposal for the same downtown site. The students worked together to draw from downtown Portland's existing qualities while addressing challenges by proposing designs that could make the city's center a more welcoming and vibrant area.

Introduction

The site was limited to Portland's downtown core, including Tom McCall waterfront park, north of SW Jefferson Street, south of W Burnside Street, and east of SW Broadway Avenue. Each group of students conducted their own analysis on the existing conditions within

the site, thus determining target areas for redevelopment and topics of focus within their redesign schemes. Common areas of focus included the waterfront park, ecological and social sustainability, pedestrian-centered design, and increasing housing options downtown.

Figure 1: Physical site. Site contains 184 buildings.



It was generally agreed upon across groups that downtown Portland is lacking in housing, that the waterfront park is lacking in activation beyond its use as a fairground, and that the city does not take full advantage of the Willamette River as a social, ecological, and cultural resource. While Portland's 200-foot by 200-foot block grid is walkable and revered for this,

the downtown area is lacking in hierarchy, leading people to wander the blocks without any particular draw toward the river or other downtown attractions. The students aimed to address these issues in their urban design proposals to improve the livability of downtown Portland, as well as to increase economic and social growth in the area.

Methodology

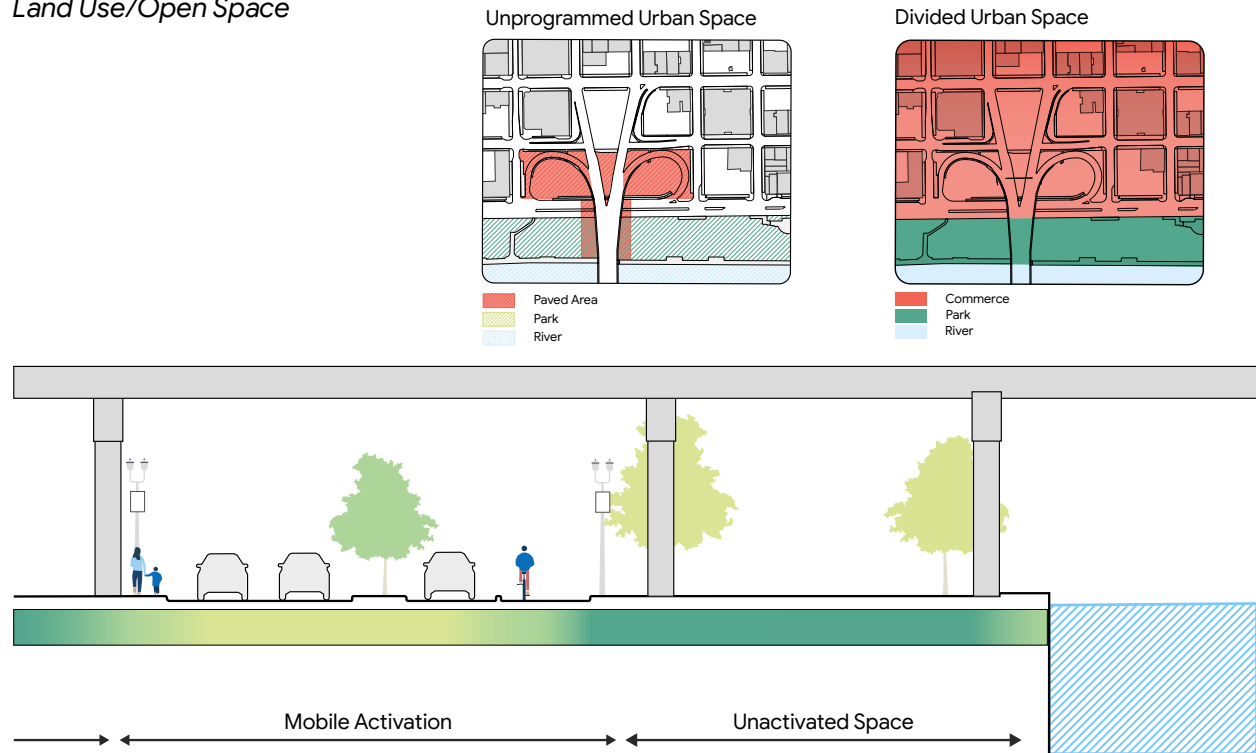
Course Structure

To begin this ten-week studio, the students worked individually to analyze smaller areas within the larger downtown site and were asked to identify what could make that area “better” as an urban space. Through this initial analysis, students determined that the downtown waterfront is lacking in

residential buildings, there are many unprogrammed, underutilized spaces throughout the site, the Willamette River is underappreciated and could be better connected to the city, and that the downtown waterfront is lacking in notable landmarks that provide a sense of identity to the area.

Figure 2: Problem Analysis

Problem Analysis: *Land Use/Open Space*



Problem Solutions: *Land Use/Open Space*

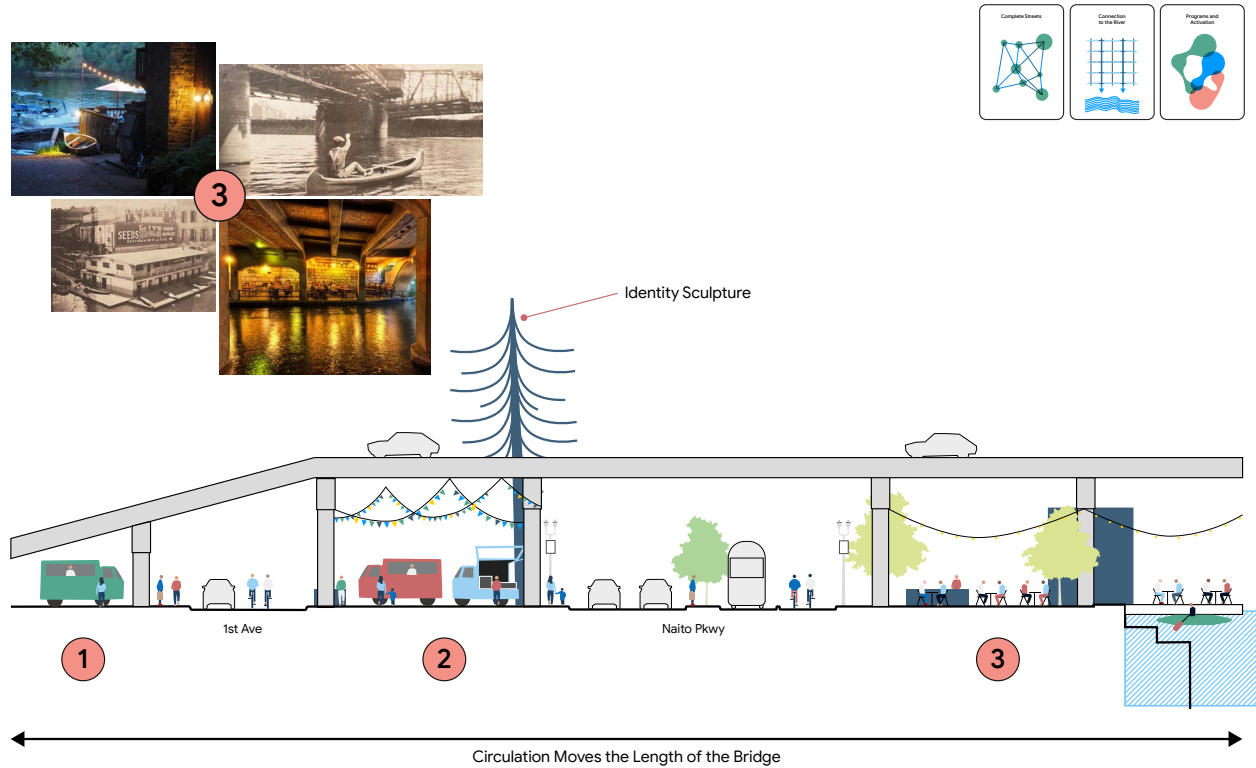


Figure 3: Problem Solutions

The students suggested introducing significant landmarks along the waterfront park, such as amphitheaters, iconic sculptures, high-rise residential towers, food markets, or areas for engaging with the river through swimming or boating.

After this brief initial analysis, students were divided into groups to conduct a thorough investigation of the existing site. Students researched the typologies and dimensions of existing buildings, transportation infrastructure, environmental conditions, zoning information, history of the culture

and place, physical characteristics of the site, and precedent studies of other waterfront areas in city centers worldwide. Additionally, one group compiled a set of base drawings including street sections and 3D models of the site so students could work from these templates throughout the term. This analytical groupwork was compiled into a 156-page document that can be found in the appendix as the *Downtown Portland Urban Design Studio: Site Analysis and Logistics*. A few pages were selected below to summarize the analysis:

Typologies/Dimensions

This group compiled information on the dimensions of temporary shelters, townhouses, residential buildings of varied sizes, retail/mall buildings, food cart pods, food halls, restaurants, bars, coffee shops, grocery stores, ground-floor retail, stadiums, performance halls,

convention centers, parking spots sizes and layouts, individual market booths, office buildings, food trucks, and shipping containers. This information was used by students who were interested in incorporating any of these aspects in their urban design proposals. Two pages are shown below as an example of this work:

TYPOLOGIES / DIMENSIONS
PUBLIC MARKETS- INDOOR

Figure 4: Typologies/ Dimensions 1



PORTLAND NIGHT MARKET

S M T W T F S

ADDRESS 100 SE ALDER ST, PORTLAND, OR
 HOURS 4PM- 11PM (APR-DEC)
 # OF VENDORS 175+
 BOOTH SIZES 6' x 6', 8' x 8', 10' x 10'
 SITE SF 10,000 SF



UNIQUE MARKETS

S M T W T F S

ADDRESS 300 N WINNING WAY, PORTLAND, OREGON
 HOURS 10:00AM- 4:00PM (5/13-5/14)
 # OF VENDORS 150+
 BOOTH SIZES 6' x 6', 10' x 10', 10' x 20'
 SITE SF 40,000 SF



PORTLAND FLEA (SE LOCATION)

S M T W T F S

ADDRESS 240 SE CLAY ST. PORTLAND, OR
 HOURS 11:00AM- 4:00PM (APR-OCT)
 # OF VENDORS 50+
 BOOTH SIZES 10' x 10' (AREA OF CANOPY)
 SITE SF 4,000 SF



PINE STREET MARKET

S M T W T F S

ADDRESS 126 SW 2ND AVE, PORTLAND, OR
 HOURS 11:00AM- 9:00PM (YEAR ROUND)
 # OF VENDORS 9
 BOOTH SIZES VARIES PER TENANT
 SITE SF 10,000 SF



PIKE'S PLACE MARKET


S M T W T F S

ADDRESS 4420 NE HANCOCK ST, PORTLAND, OR
 HOURS 9:00AM- 5:00PM (YEAR ROUND)
 # OF VENDORS 220+
 BOOTH SIZES 6' x 8', 10' x 10', 10' x 20'
 SITE SF 44,000 SF

TYOLOGIES / DIMENSIONS

OFFICE TYPOLOGY

Figure 5: Typologies/
Dimensions 2





FOX TOWER
121 SW SALMON ST, PORTLAND, OR

USE	RETAIL + COMMERCIAL OFFICES
ARCHITECT	TVA
# OF STORIES	27
BUILDING AREA	599,388 SQ FT
BUILDING HEIGHT	113 FT
YEAR OF COMPLETION	2000
TOTAL GHG EMISSIONS	1,328.3 MT CO2E

OFFICE

RETAIL



PARK AVENUE WEST TOWER
121 SW SALMON ST, PORTLAND, OR


USE	RETAIL + OFFICE + RESIDENTIAL
ARCHITECT	TVA
# OF STORIES	30
BUILDING AREA	474,000 SQ FT
BUILDING HEIGHT	460 FT
YEAR OF COMPLETION	2016
TOTAL GHG EMISSIONS	3,239.1 MT CO2E

RESIDENTIAL

OFFICE

RETAIL

PARKING



ANDY KREITER & SPENCER DAIGLE

Transportation

This group mapped existing transit routes and drew sections of significant streets downtown to display the spatial needs

for different kinds of transportation.

Downtown Portland is well connected by public transit and has substantial existing bike infrastructure.

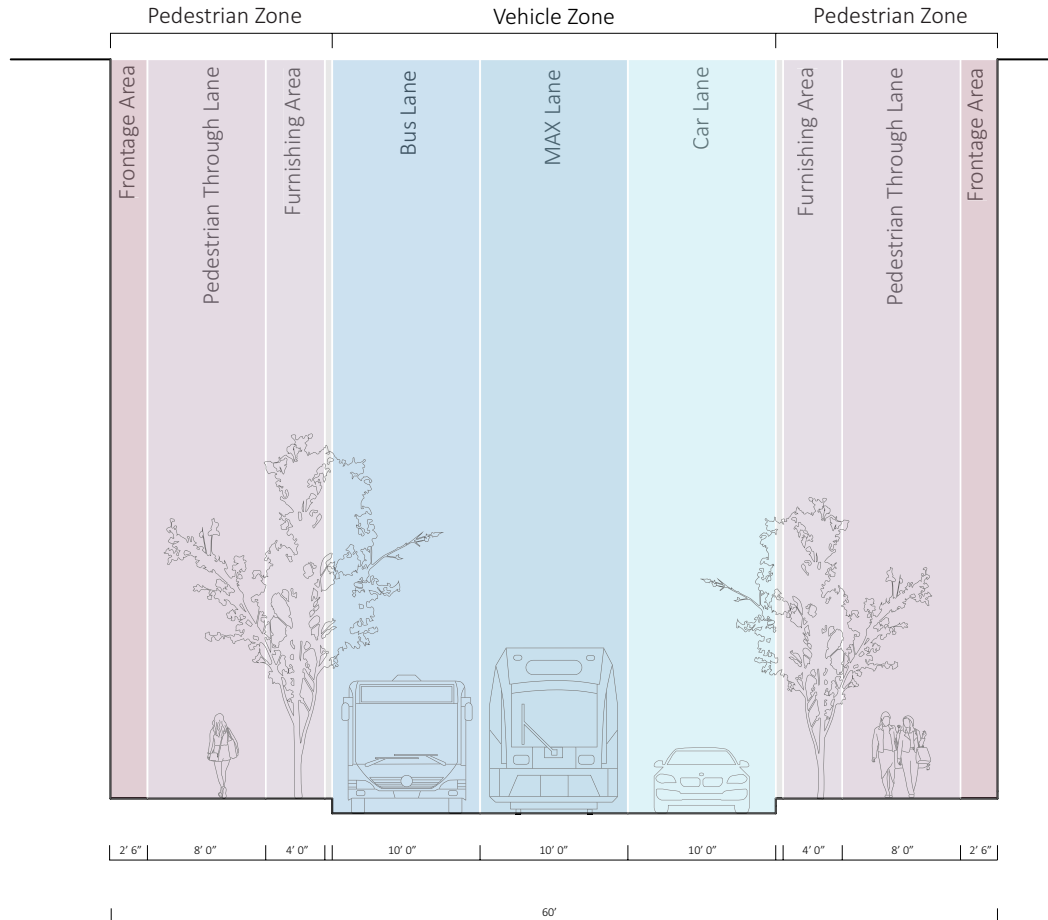
TRANSPORTATION

TRANSIT ORIENTATED STREET

SW 5TH AVE. and SW ALDER ST.

NEIGHBORHOOD MAIN STREET DESIGN

Figure 6: Transportation



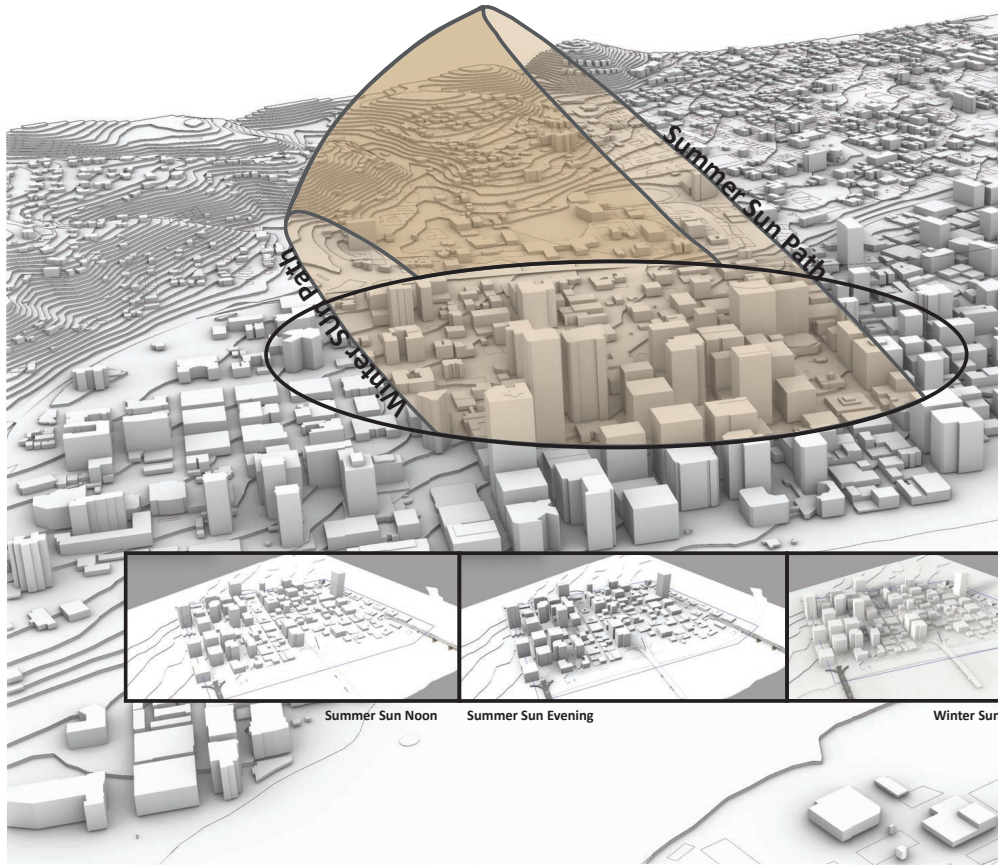
Environmental Information

This group conducted a solar analysis, finding that the site has ample access to daylight as sunlight is unobstructed from the east due to the site's

juxtaposition with the Willamette River. The sun sets over the western hills, minimizing afternoon heat gains from western solar exposure.

Figure 7: Environmental Information

ENVIRONMENTAL INFO
SOLAR STUDY



Seasonal wind patterns also favor the site, as summer winds blow cool air over the river from the southeast, and winter winds approach from the northwest, largely obstructed by natural topography. The group graphed typical and projected climate patterns, mapped topography, air quality, and existing greenery on the site, documented benefits of urban greenery, and compiled a list of plant and animal species that are native to the site.

They included design suggestions for promoting a healthy aquatic ecosystem downtown, as well as examples of sustainable drainage systems for stormwater management. The students also diagrammed building energy performance downtown and showed that compact urban blocks and higher density residential buildings are associated with lower energy demand per capita.

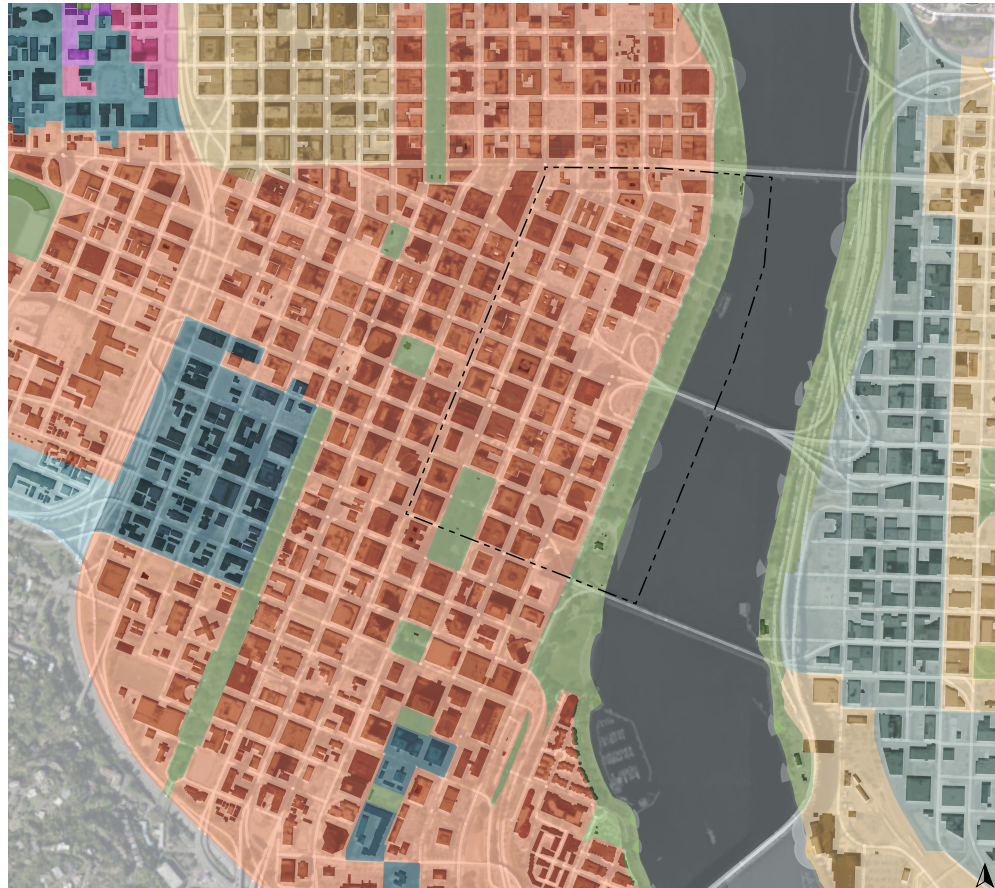
Zoning










This group mapped zoning designations on the site, Floor Area Ratio (FAR) requirements, height limits, and compiled information on parking requirements by zone. Students were not

required to design according to existing zoning requirements, but acknowledging the current zoning ordinances allowed them to consider how zoning changes could improve the design of the city center.

ZONING
ZONING MAP

Figure 8: Zoning



- | | |
|--|---|
|  Central Commercial (CX) |  General Industrial (IG1) |
|  Central Employment (EX) |  Central Residential (RX) |
|  Commercial Mixed Use 2 (CM2) |  Residential Multi-Dwelling 4 (RM4) |
|  Commercial Mixed Use 3 (CM3) |  Residential Multi-Dwelling 3 (RM3) |
|  Open Space (OS) | |

Culture/Place

This group compiled historical images and anecdotes providing a historical context for the site. They created a timeline of significant events, such as the completion

of major infrastructure projects in the city. The graphed population change over time, and mapped recent and recurring events downtown, as well as popular things to do and see in the area.

CULTURE/PLACE
HISTORICAL CONTEXT



Portlanders gather for the opening of the dedication of the Burnside Bridge.



Roy Woods dives off Burnside in 1934.

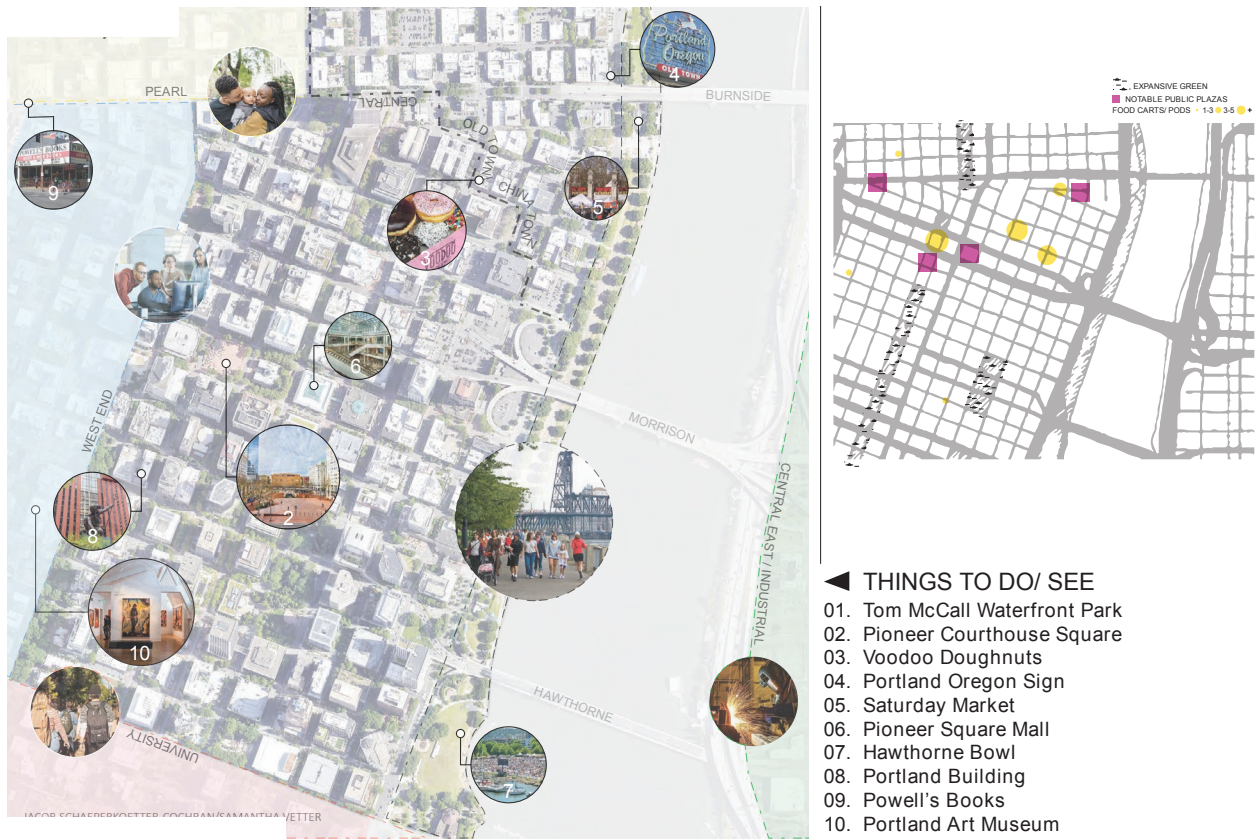


Man dives into the waters surrounding the Skidmore Fountain during the Willamette Flood of 1894.



The 1894 flood raised the Willamette River 30 feet, flooding the central business district.

Figure 9 : Culture/Place history



- ◀ THINGS TO DO/ SEE
01. Tom McCall Waterfront Park
 02. Pioneer Courthouse Square
 03. Voodoo Doughnuts
 04. Portland Oregon Sign
 05. Saturday Market
 06. Pioneer Square Mall
 07. Hawthorne Bowl
 08. Portland Building
 09. Powell's Books
 10. Portland Art Museum

Figure 10: Culture/Place
now

Physical Site

This group mapped building footprints, major infrastructure, street directions, water fountains, sidewalks, popular destinations, block layout, major and minor elements, parking areas and

types, street parking, opportunity sites, critical sites, existing uses, area context, amenities, barriers and challenges, public transit connections, and viewpoints on the site.

PHYSICAL SITE STREET INFRASTRUCTURE

Except for two streets, Natio and Burnside, all of the streets we will be working with are one way streets. There is also a stop light at just about every stop in our site



Figure 11: Physical Site

- Stoplights
- ↔ Street Direction

Methodology

Precedents

This group studied precedents that are examples of successful design in waterfronts, plazas, pathways, urban

recreation, urban swimming, public markets, and street activation. Two examples are shown below.

PRECEDENTS JIAOZHOU SANLI RIVER *jiaozhou, china*



Significance
Waterfront activation, varied pathways (boardwalks) and transportation modes, rehabilitation of natural ecology, interface of urban density and greenspace, spaces for recreation



<https://moool.com/en/jiaozhou-sanli-river-the-central-business-district-by-ldg.html>



Size: 10000 ft long

Figure 12: Jiaozhou Sanli River precedent

PRECEDENTS
CHATTANOOGA WATERFRONT PARK
Chattanooga, TN



First plan for the park was successfully implemented through the 90's and 2000's, and a renewed master plan was made in 2020 to further activate the green outside of festivals and big events.

Significance

Stepped connection down to water, piers into the water. Major green/fairground as center of the park and waterfront.



<http://www.hargreaves.com/work/chattanooga-21st-century-waterfront-park/>



Figure 13: Chattanooga Waterfront Park precedent

Methodology

Base Drawings

This group provided snapshots and street sections of significant streets within the

site, a 3D model of the site, and a file including linework in plan-view of the city center, encompassing the site.

BASE DRAWINGS STREET SECTIONS

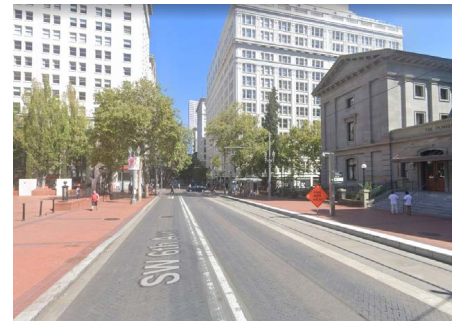
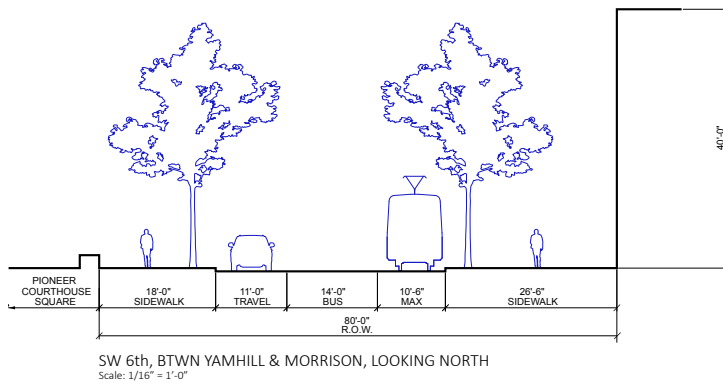
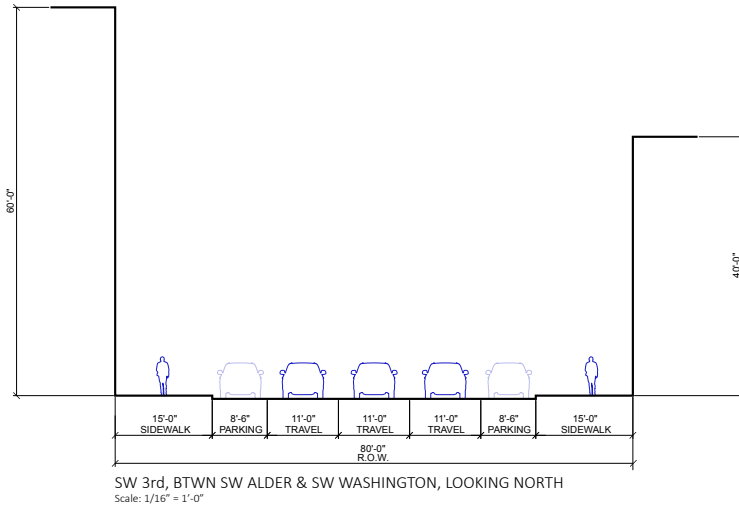


Figure 14: Base Drawings: Street Sections

Takeaways

After each group presented their work from the logistics assignment, the class was able to discuss the following overarching findings. Since the global COVID-19 pandemic in 2020, and the shift toward remote and hybrid work, office buildings nationwide have struggled to fill their leases back to pre-pandemic levels of capacity. This has left central

business districts feeling empty as a large portion of daytime office workers have not returned to the office five days a week. Downtown Portland has been especially affected by this phenomenon because the area was so heavily reliant on office workers coming into downtown daily, eating at local restaurants for lunch, and running errands at local businesses.

PHYSICAL SITE EXISTING USES

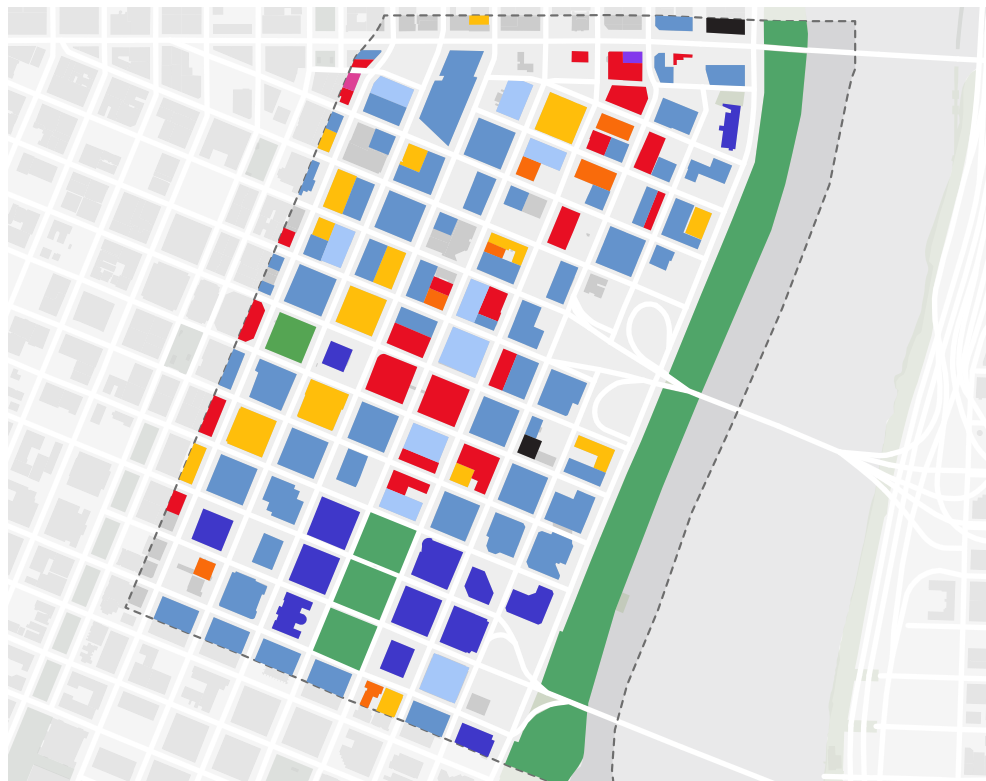
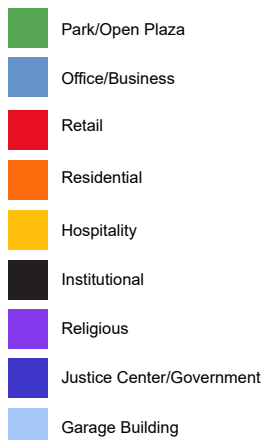


Figure 15: Existing Uses



Methodology

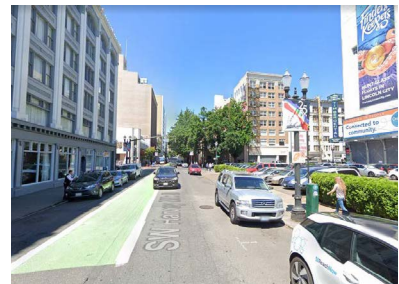
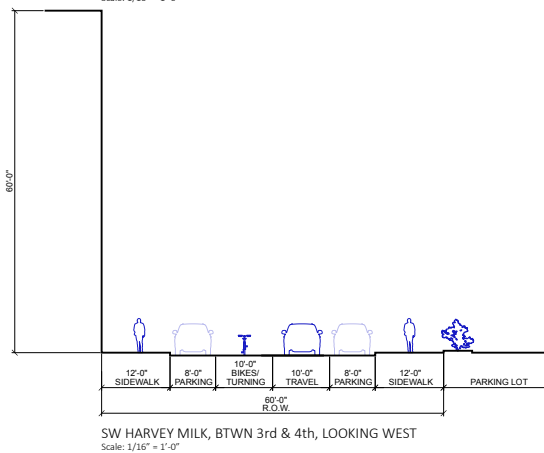
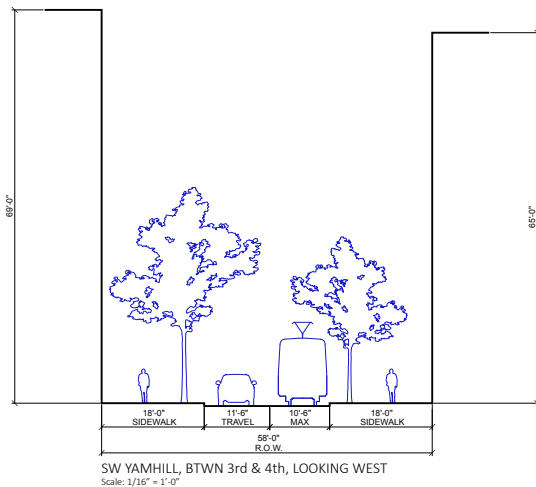
Downtown Portland has very few residential buildings, as shown in the previous graphic, highlighting how few people live in the area. Because the majority of buildings in the city's center are designated as either office space, retail, or hospitality, the city's streets have not perked up to pre-pandemic levels of activity, even three years later. Another culprit for the decline in downtown retail traffic has been an increase in online shopping. Additionally, shoppers who have returned to stores in-person are likely to shop in their own neighborhoods, leaving downtown with few customers.

Another detail that can be noted from the graphic is the amount of open space downtown that is designated for either surface parking or no specific use at all. Much of this space has huge potential for redevelopment.

To become familiar with key principles of urban design, the students began the course by learning about street design and placemaking. Students drew sections of existing streets and learned about typical dimensions in street design. Through this exercise, students learned what design components can make a street feel safer and more alive.

BASE DRAWINGS STREET SECTIONS

Figure 16: Street Sections



An important idea concerning safety in urban design is called “eyes on the street,” where people tend to feel safer when they feel that there are people around and aware of what is occurring on the street. Aspects such as ground-floor transparency, activated storefronts, residential balconies, frequent and bustling doorways, etc. can all contribute to a feeling of liveliness and community awareness along a street. Downtown Portland is lacking in many of these aspects due to empty storefronts, office buildings that do not have street-facing retail space, few residents, and infrequent doorways along a block. By studying these basic urban design principles alongside

the existing conditions in downtown Portland, students generated ideas about how the city center’s redesign could become a more pedestrian-friendly and vibrant area.

Another important area of focus throughout the term was the long-term sustainability of the students’ design proposals, both environmentally and socially. Students were encouraged to consider the site’s ecological health and history. Many groups decided to engage with the riverfront ecology, urban greenery, and the city’s existing green stormwater management infrastructure.

PHYSICAL SITE BARRIERS/CHALLENGES



Figure 17: Physical Site

Methodology

Additionally, students considered how their urban design proposals could reduce greenhouse gas emissions linked to transportation and buildings within the site by encouraging daylighting and the use of public transit, bicycling, and walking. In its current state, downtown Portland is very well connected by public transit, though its ridership has decreased since the pandemic. The same is true for downtown's bicycle infrastructure and ridership. Many commuters who used to ride a bicycle or the city bus to work every day, now that they only return to their downtown offices two or three times a week, instead choose to drive and pay for parking because the frequency of these trips has been reduced.

As for social sustainability, students noted that a downtown that caters to all users is one where there are plenty of places to sit, modes of transportation for people who do not drive or own cars, and where there are spaces to gather and participate in social activities without the need for spending money. In its recent history, downtown Portland has lacked in such spaces, and the free, open spaces that do exist are lacking in social activation, creating unsafe, shady areas. Students generated ideas by looking into Portland's history and current social attractors toward the city to consider how downtown could be programmed to incorporate bustling public activity that supports and engages people from all walks of life.

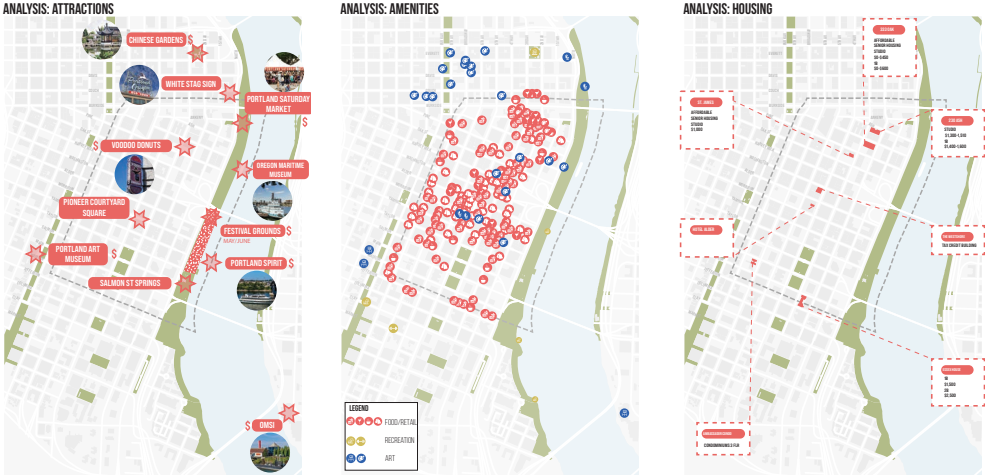
Student Design Proposals

Proposal 1: Live Like a Local

Emily Bratt, Hari Deeyi, Hanna Lindblad

This project began by analyzing downtown Portland through the lens of two user groups: 1) a Portland tourist and 2) a Portland resident. It was determined that experiencing Portland, for both user groups, falls under three major categories: recreation, food, and art.

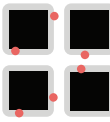
LIVE LIKE A LOCAL



PROBLEMS IDENTIFIED:



INADEQUATE CONNECTIVITY AND WAYFINDING



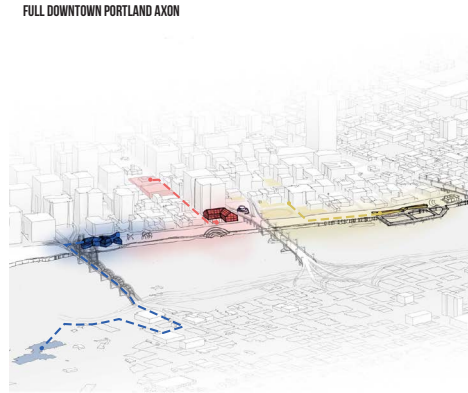
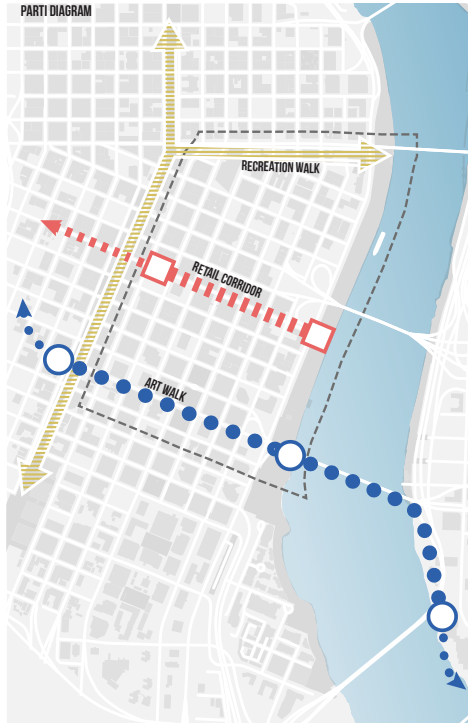
LACK OF ACTIVATION



INSUFFICIENT HOUSING

The following problems were identified within the site: a lack of connection and wayfinding between existing attractions, spaces that are only activated during

specific times of day, and a lack of housing in the area, contributing to the lack of 24-hour activation.



OUR PROJECT PROPOSES A REDEVELOPMENT OF KEY AREAS WITHIN OUR SITE, ACTIVATING THE PUBLIC SPACE FOR BOTH TOURISTS AND RESIDENTS, THROUGH RECREATION, FOOD AND ART

This project proposes a redevelopment of key areas within the site, activating the

public space for both tourists and residents, through recreation, food, and art.



The designers defined the three bridgeheads as opportunity sites for anchors that respond to their three

themes. The anchors influence the programming in their adjacent spaces, leading back into the city.

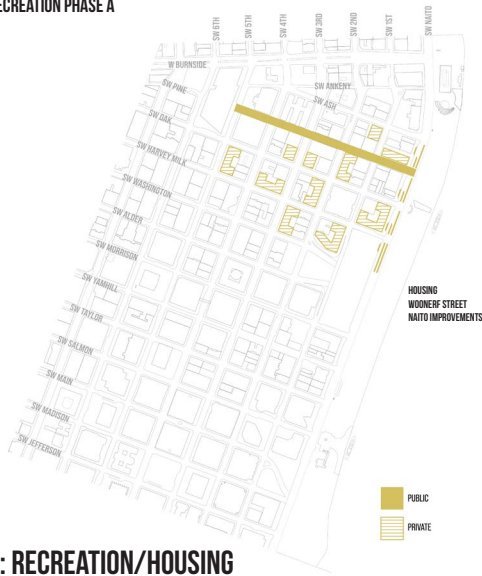


Student Design Proposals

The recreation anchor is at the Burnside bridgehead and is a proposed sauna and pools area. Inspired by historic bath houses, this new attraction would allow

people to interact with the river year-round. The sauna and pools would create a recreation hub, which would tie into the neighboring proposed housing district.

RECREATION PHASE A

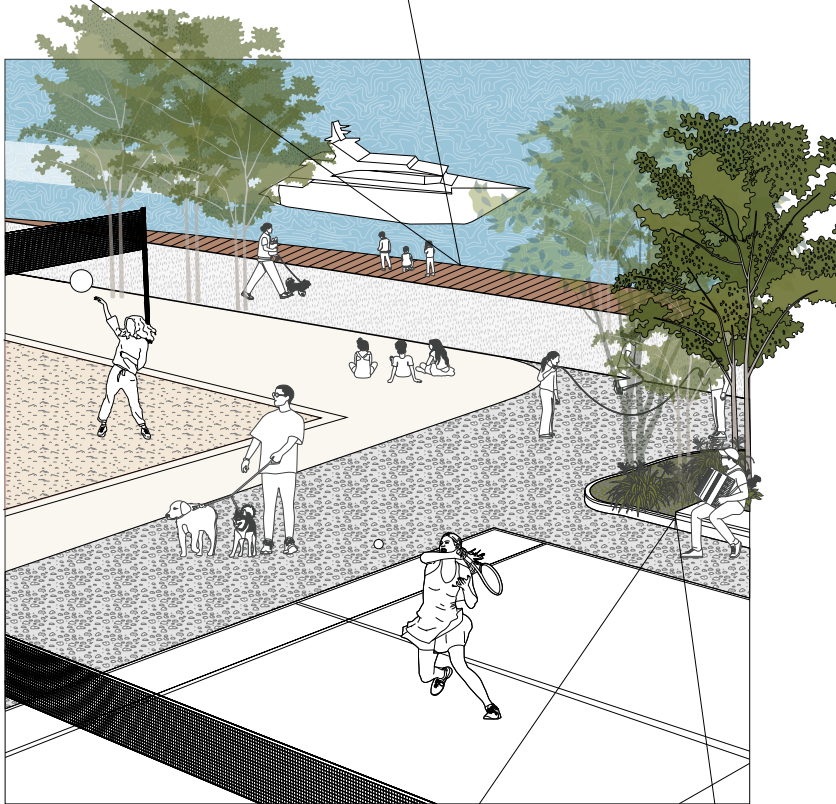
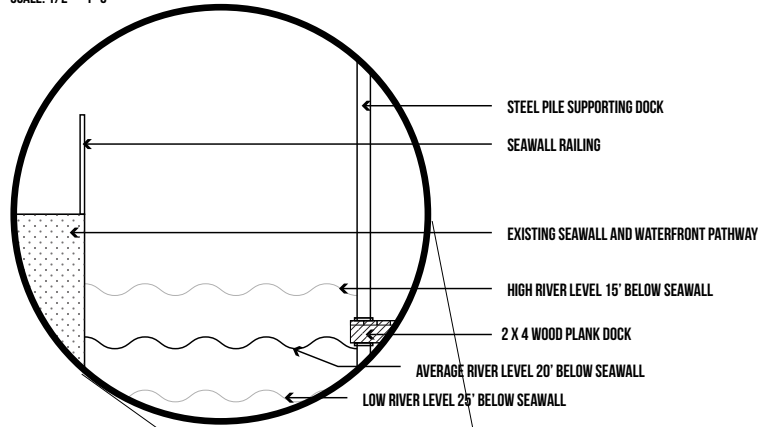


RECREATION PHASE B



PHASING: RECREATION/HOUSING

DETAIL: FLOATING DOCK
SCALE: 1/2" = 1'-0"



PERSPECTIVE: SPORT COURTS AND DOCKS

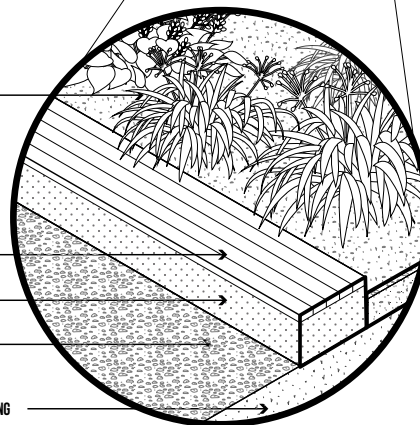
PLANTER BOX WITH NATIVE PLANTS

2 X 4 WOOD PLANK BENCH

CONCRETE BASE

PAVING

LANDSCAPING

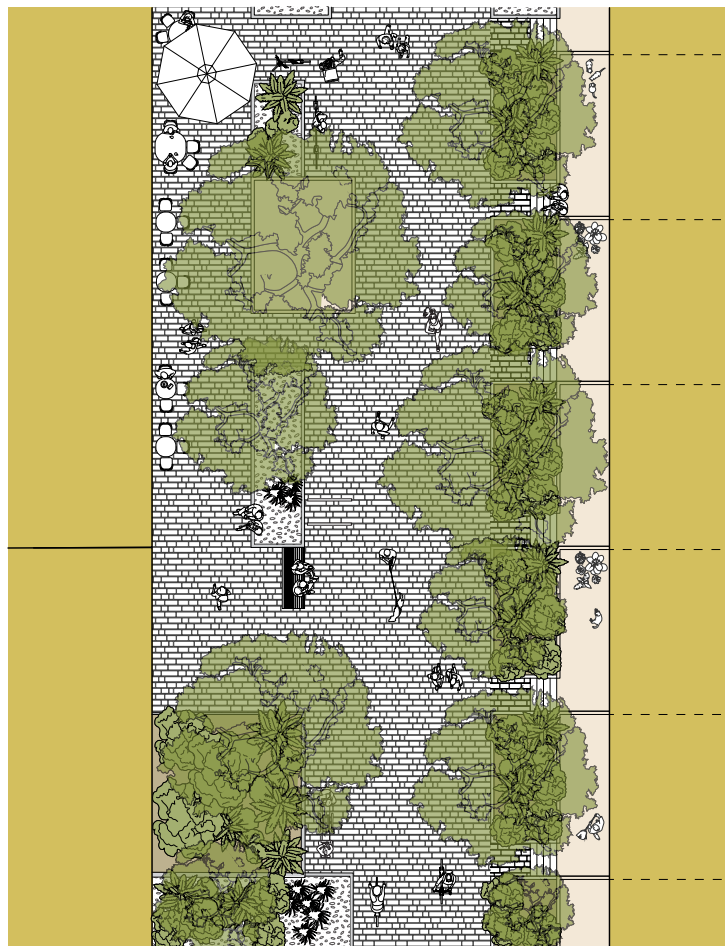
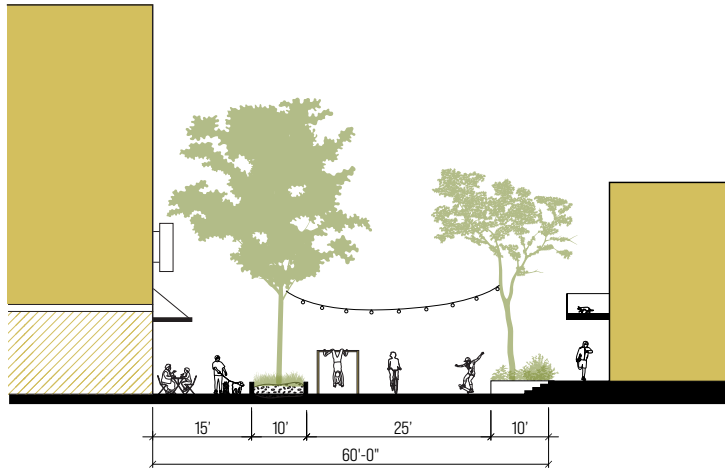


DETAIL: PLANTER BOX AND WOOD BENCHES
N.T.S.

RECREATION PARK

The sport courts, playground, and sunbathing areas would serve as amenities to the neighborhood's residents. The

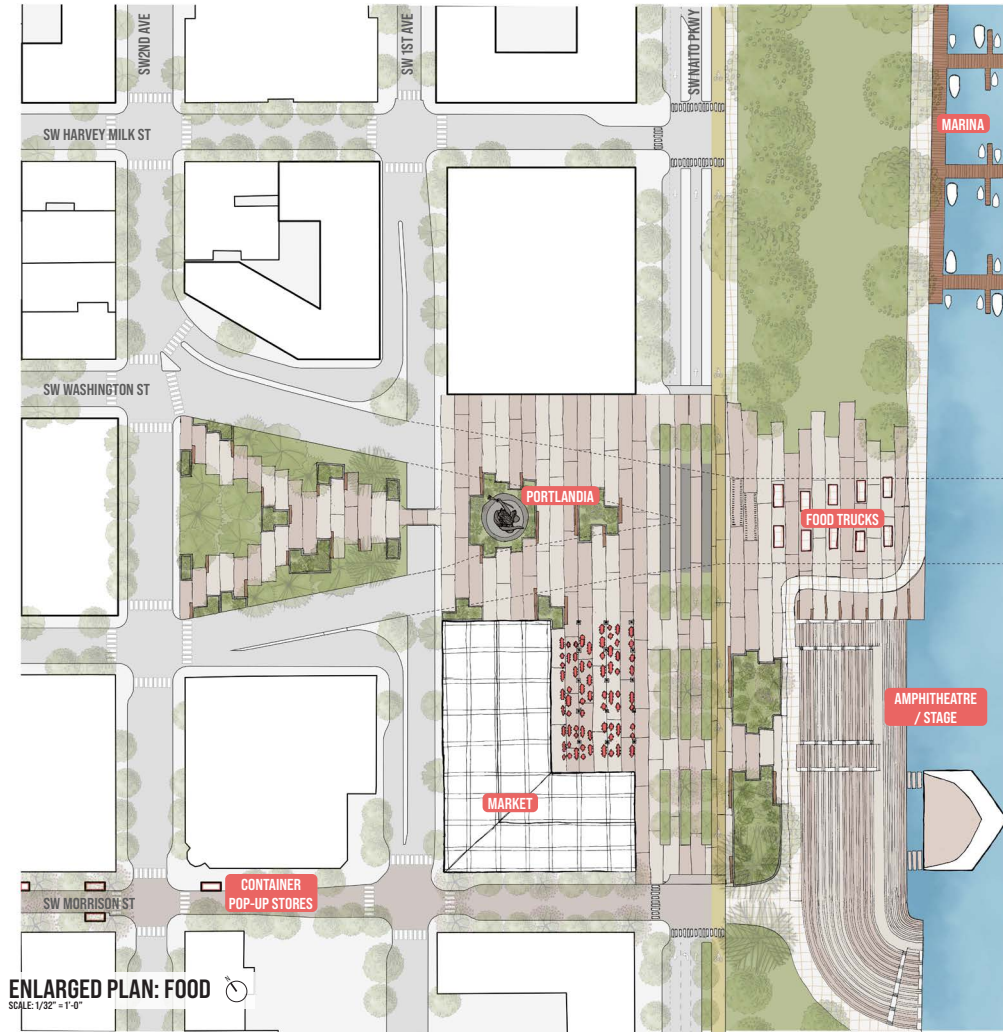
docks, marina, boat storage, and kayak launching spot would be especially active during summer months.



SW PINE 
Scale: 1/8" = 1'-0"

This area would connect with the city's residential district through a proposed woonerf along SW Pine Street, which would prioritize pedestrian activity by raising the street's surface to be level with

the sidewalk. It would include passive workout equipment, be heavily vegetated, incorporating bioswales, and a distinct paving pattern.



Student Design Proposals

South of the recreation area along the waterfront would be a public market and food hall, anchoring the Morrison bridgehead. This development could be modeled after San Francisco's Ferry

Building or Seattle's Pike Place Market. This area would create a food and retail hub using food trucks and outdoor seating, an amenity for residents and a magnet for tourists.

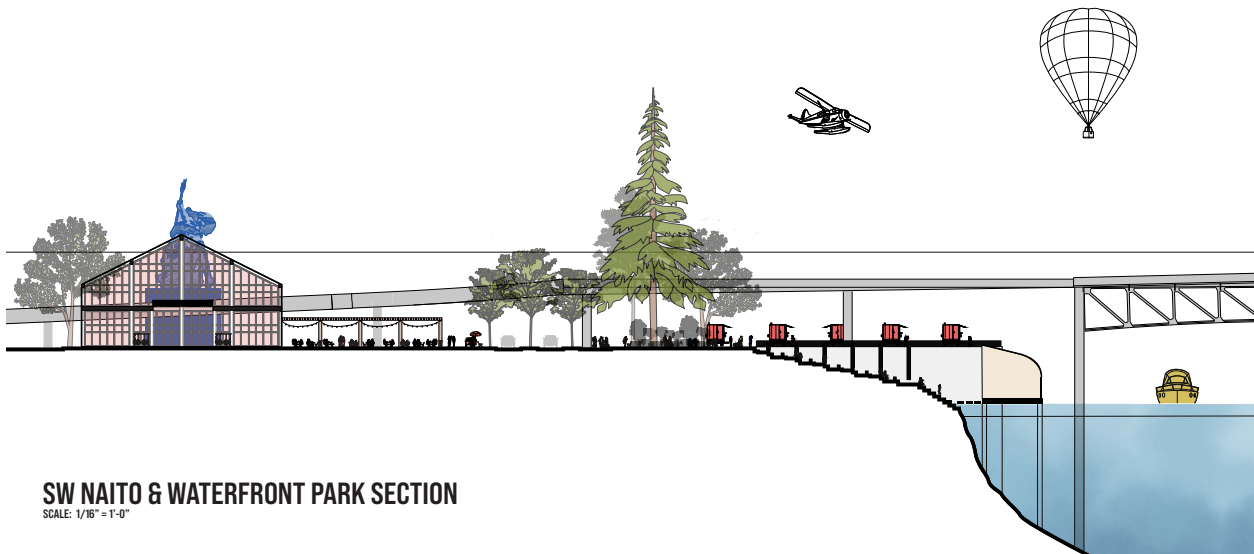
RETAIL PHASE A



RETAIL PHASE B



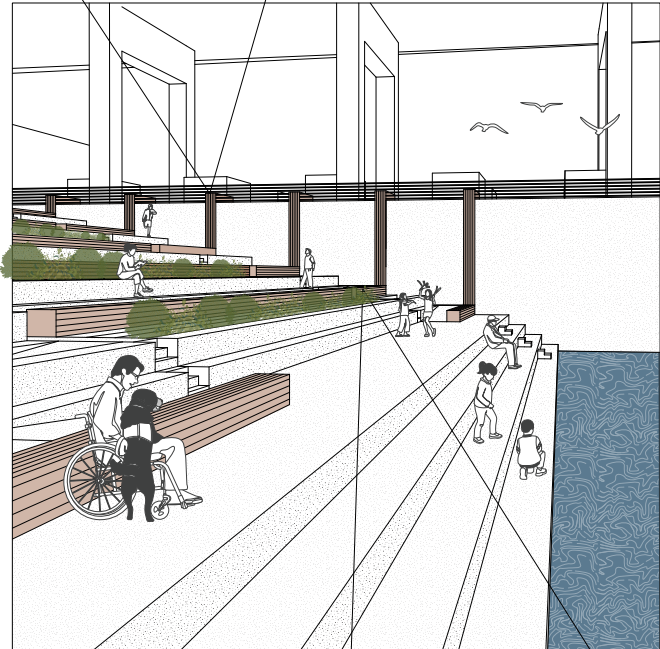
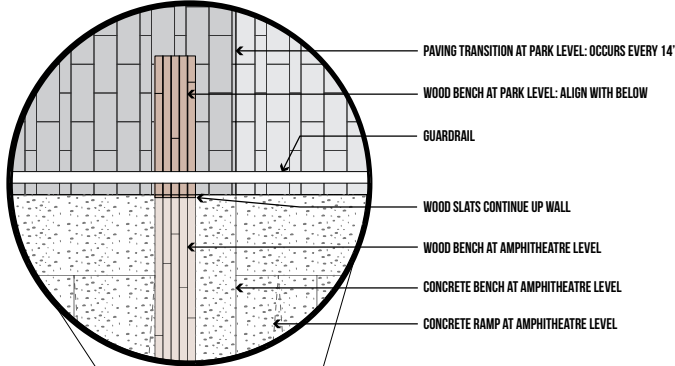
PHASING: FOOD/RETAIL



A major piece of this area's redesign proposal would be the relocation of the Portlandia statue, from the Portland

Building to the iconic entry to downtown as people cross the Morrison Bridge into the city center.

DETAIL: BENCH AND PAVING TRANSITION AT RETAINING WALL
SCALE: 1/2" = 1'-0"

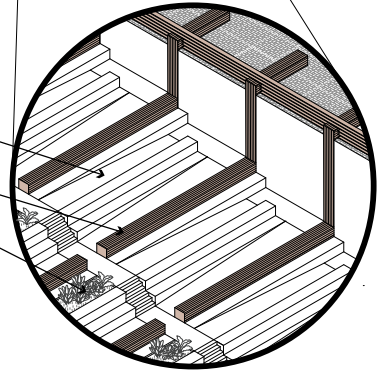


PERSPECTIVE: LOOKING NORTH TOWARDS MORRISON BRIDGE

RAMP: FROM PARK TO TYPICAL WATER LEVEL

TERRACED SEATING, MIX OF WOOD AND CONCRETE

INTEGRATED PLANTERS

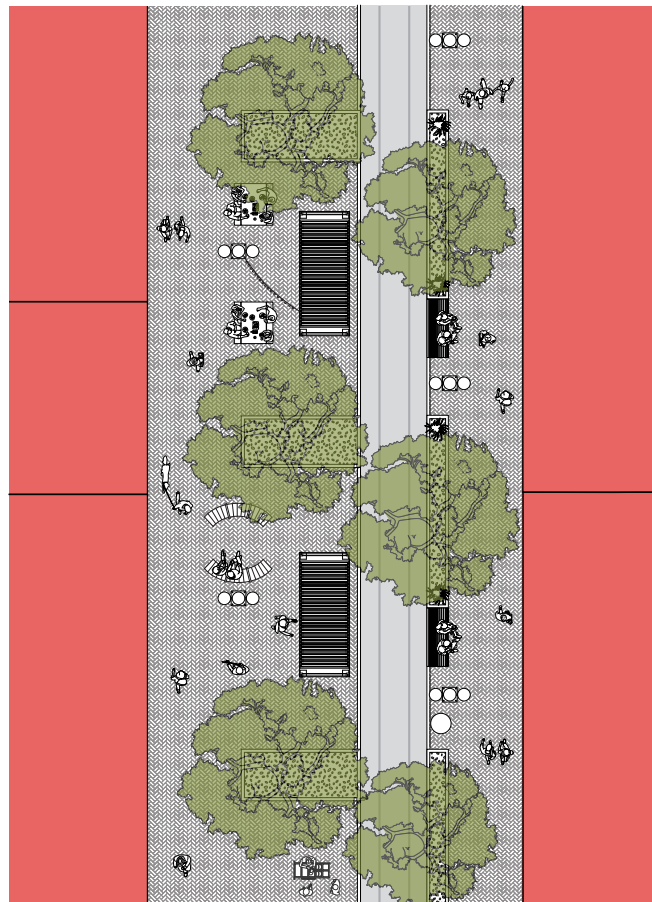


AMPHITHEATRE SEATING

DETAIL: STAIR & RAMP AXON VIEW
N.T.S.

Amphitheater seating on the waterfront with a floating stage would create an opportunity for people to touch the water, sit with a riverfront view while eating food from the food hall, and for

outdoor events to be hosted in public. This amphitheater would be designed to accommodate the river's fluctuating water levels while activating the public space at all times of day.



High-density housing is proposed adjacent to the market and food hall. Ties into the existing retail corridor along Morrison and Yamhill streets, leading toward Pioneer Place Mall, would bring a new pedestrian

focus to these streets. Shipping container retail spaces, outdoor café seating, and places to sit would replace an existing car lane to create a pedestrian and transit-only street.



The art anchor at the Hawthorne
bridgehead is a proposed art museum
with a focus on local art and culture.

ART PHASE A



PHASING: ART

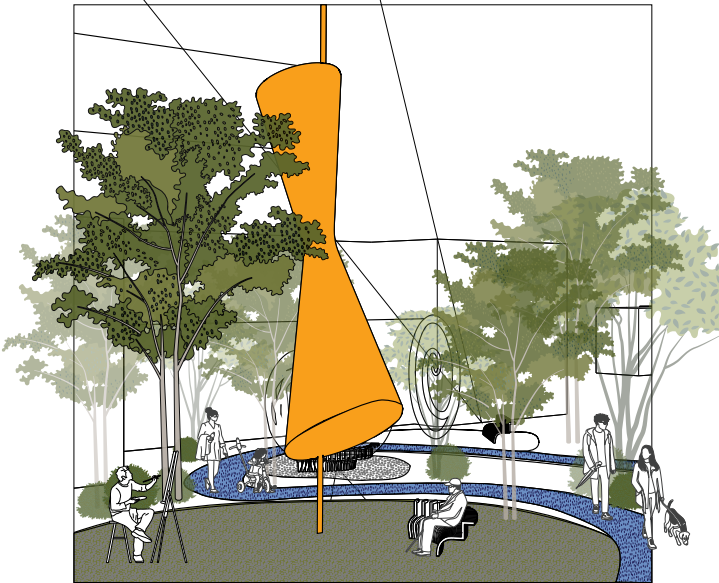
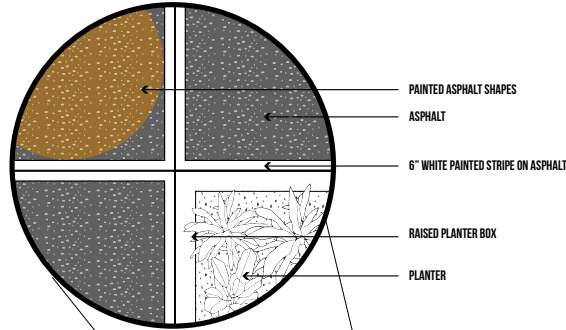
ART PHASE B



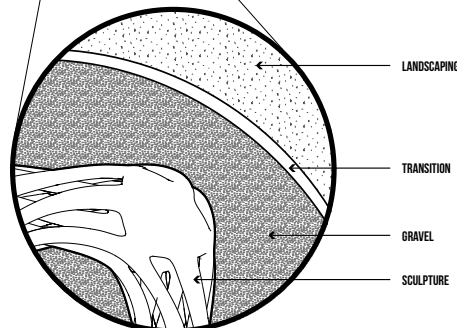
Artist studios would provide increased opportunities for artists to live and work in this district. They could be connected to the museum or provide private investment into the neighborhood. Unused office buildings could be converted into live-work studios and creative office spaces.

The newly proposed art museum could have ties with Portland's existing museums, while the painted walkway along SE Main Street would provide wayfinding toward the Portland Art Museum and over the Hawthorne Bridge toward the Oregon Museum of Science and Industry (OMSI).

DETAIL: TRANSITION BETWEEN GRAVEL AND LANDSCAPING AT SCULPTURE PARK
SCALE: 1/2" = 1'-0"



PERSPECTIVE: ART MUSEUM AND SCULPTURE PARK

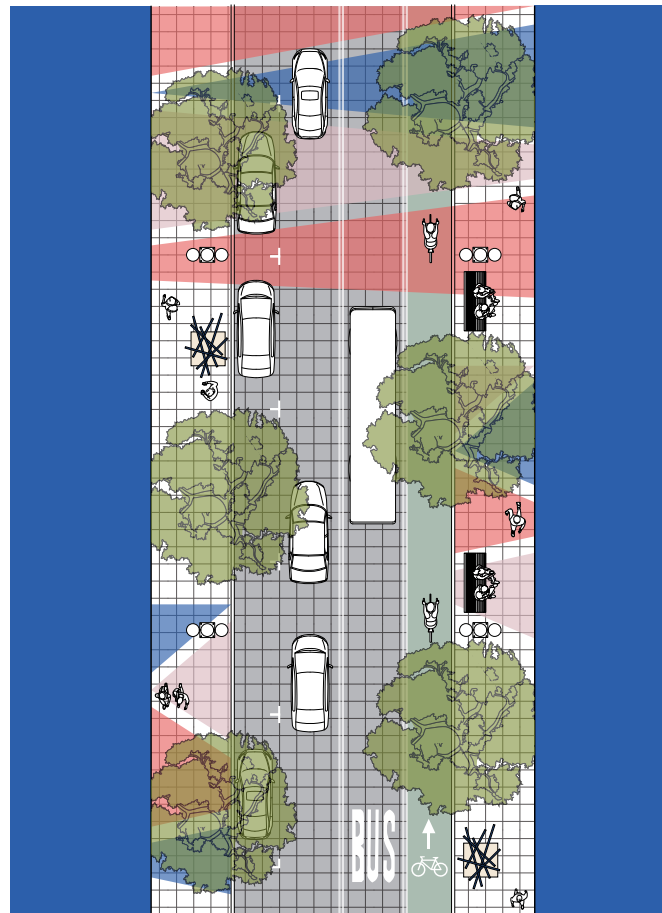
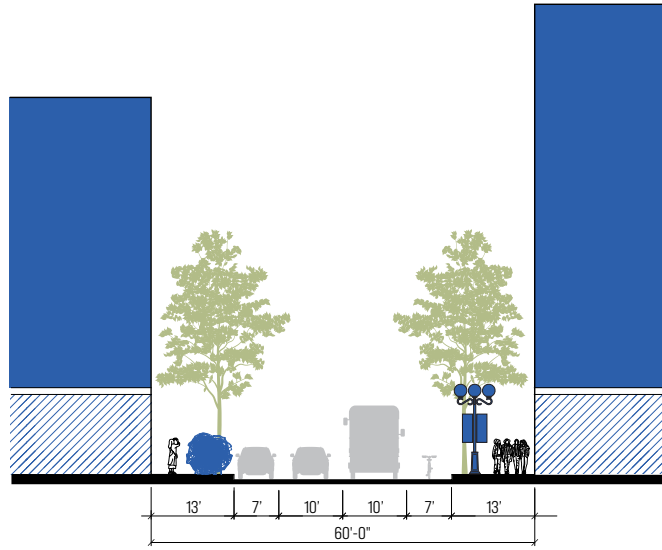


DETAIL: GRAVEL/LANDSCAPING TRANSITION AT SCULPTURE PARK
SCALE: 1/2" = 1'-0"

SCULPTURE PARK

A sculpture park would provide an opportunity for people passing by to

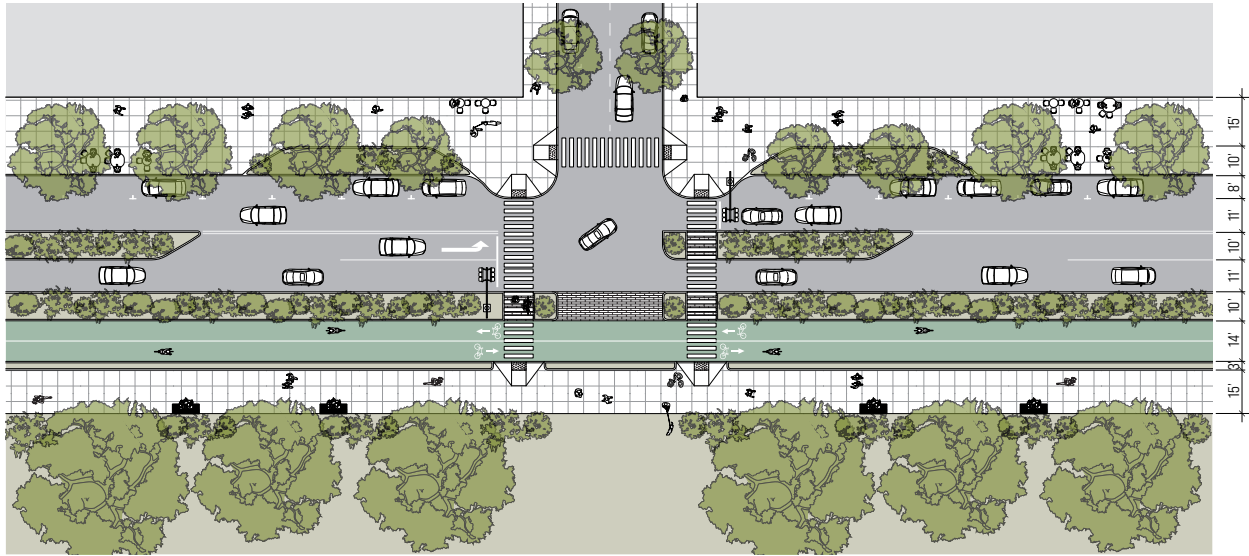
engage with art without entering the museum or needing to pay for a ticket.



SW MAIN 
Scale: 1/8" = 1'-0"

A painted plaza would engage locals and provide a moment for wayfinding,

differentiating this area of the waterfront from others.

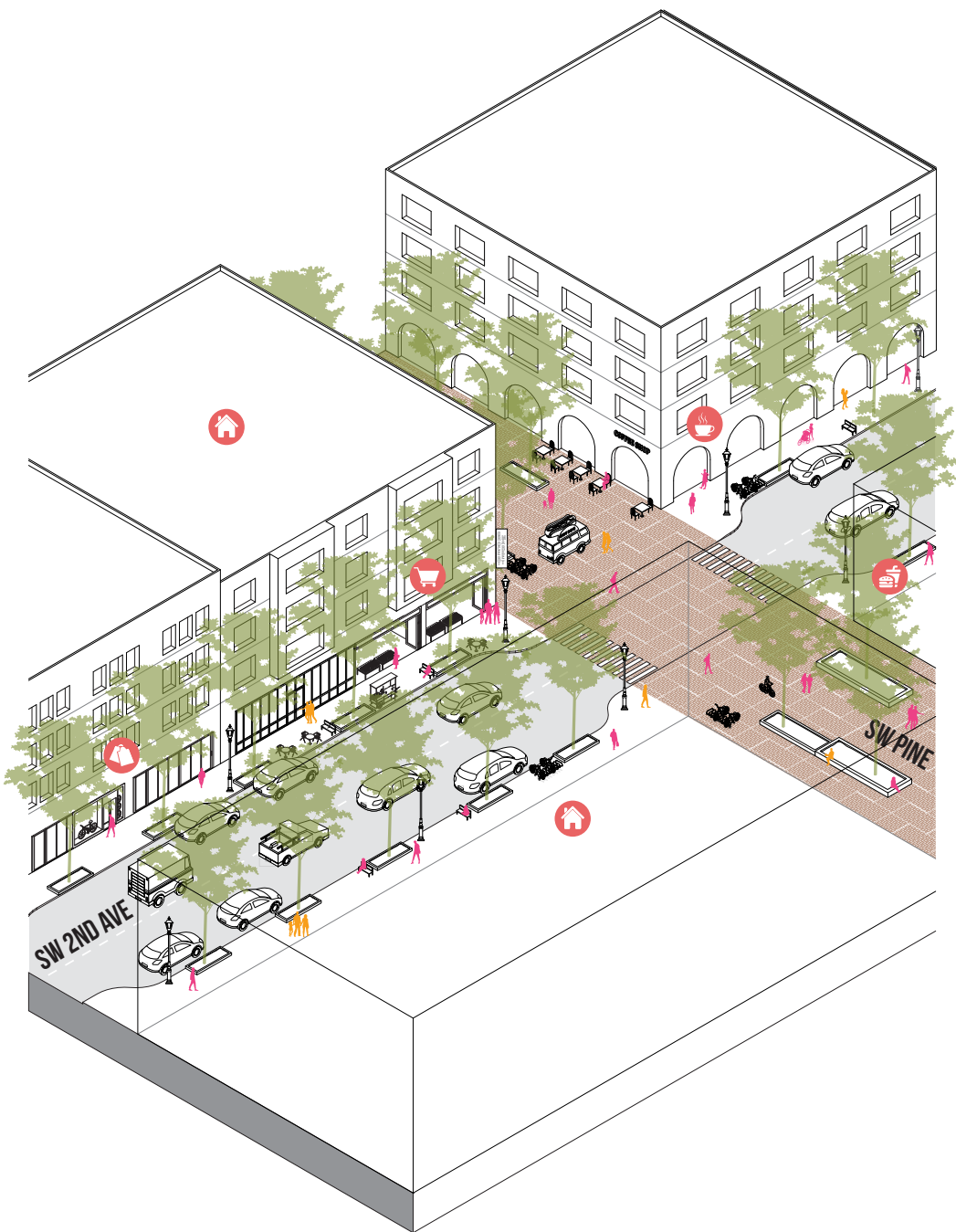


SW NAITO: TYPICAL INTERSECTION 

Scale: 1/16" = 1'-0"

Beyond the three overarching themes of this redesign proposal, the group decided on a reconfiguration of Naito Parkway: remove one travel lane; add vegetated islands between the travel lanes and bike lanes to slow down traffic; expand sidewalks on the west side of

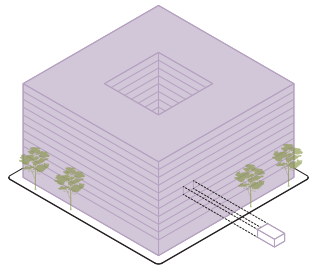
the street and add bioswales and pocket-parks to tie into the waterfront park; and expand sidewalks on the park side of the street adjacent to the bike lanes. This proposed design would make the bike lane feel like part of the park rather than part of the street.



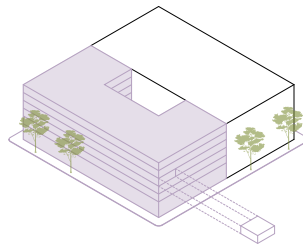
NEIGHBORHOOD CORE

A new neighborhood core centered around SW 2nd Avenue and SW Pine Street would add medium-density housing on all opportunity sites in this area. The proposed housing would match existing building heights and character. Existing and proposed amenities include dining

and retail, and a newly proposed grocery store would be essential. The nearby waterfront recreation area and woonerfs would act as outdoor, cost-free amenities. This pedestrian and transit-focused neighborhood would provide housing for residents with a range of income levels.

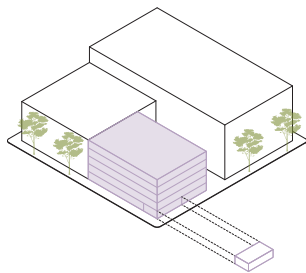


HIGH-DENSITY
GROUND FLOOR RETAIL

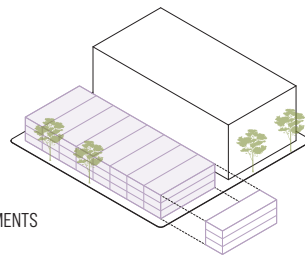


MEDIUM-DENSITY
GROUND FLOOR RETAIL

TYOLOGIES: HOUSING



MEDIUM-DENSITY
GROUND FLOOR WALK-UP APARTMENTS



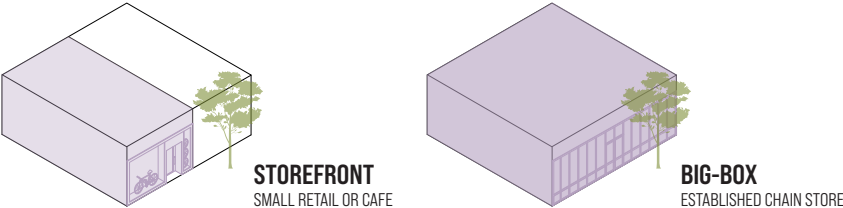
LOW-DENSITY
TOWNHOMES

This proposal focuses on providing varying scales of opportunity and low barriers of entry through all the newly introduced

development. The new housing would include a range of densities and unit sizes, catering to residents with varied space needs and incomes.

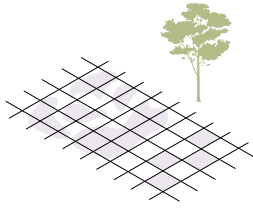


TYOLOGIES: RETAIL

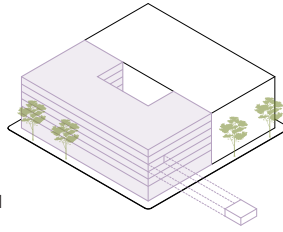


Retail opportunities would range from smaller market stalls and street vendors to more established food trucks and

shipping container stores, to storefronts and cafes, to large established retail businesses.

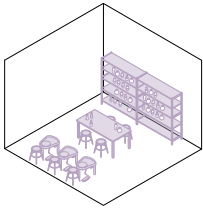


STREET MURALS
COMMUNITY INVOLVEMENT & ACTIVISM

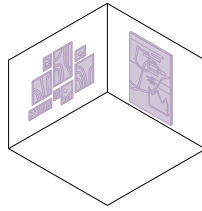


LIVE-WORK UNITS
CONVERT EXCESS OFFICE SPACE

TYOLOGIES: ART



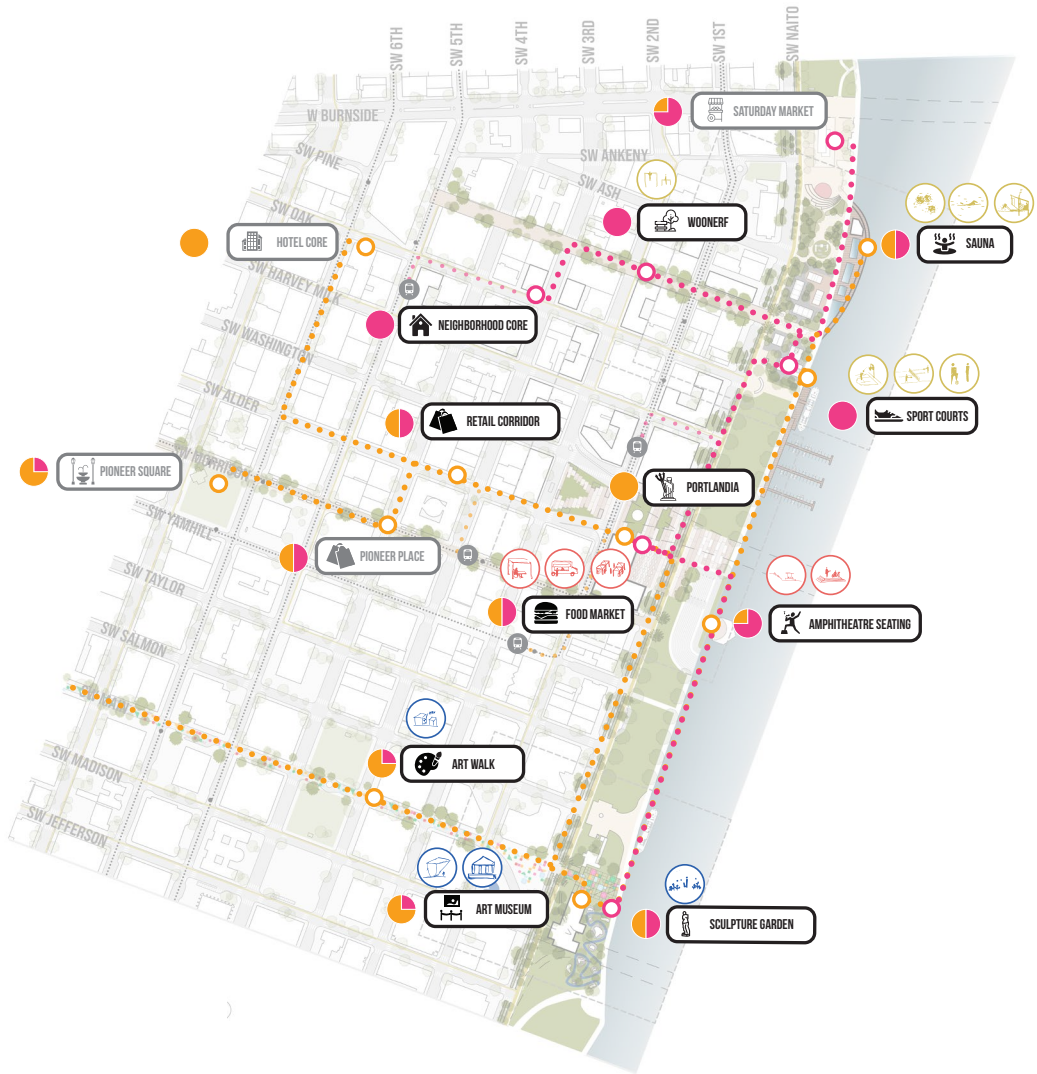
ART STUDIO
OPPORTUNITY TO BUILD BUSINESS



MUSEUM GALLERY
OPPORTUNITY TO DISPLAY WORK

Spaces for street painting, indoor galleries, studio space, and live-work

units would allow local artists a variety of places to create and display their artwork.

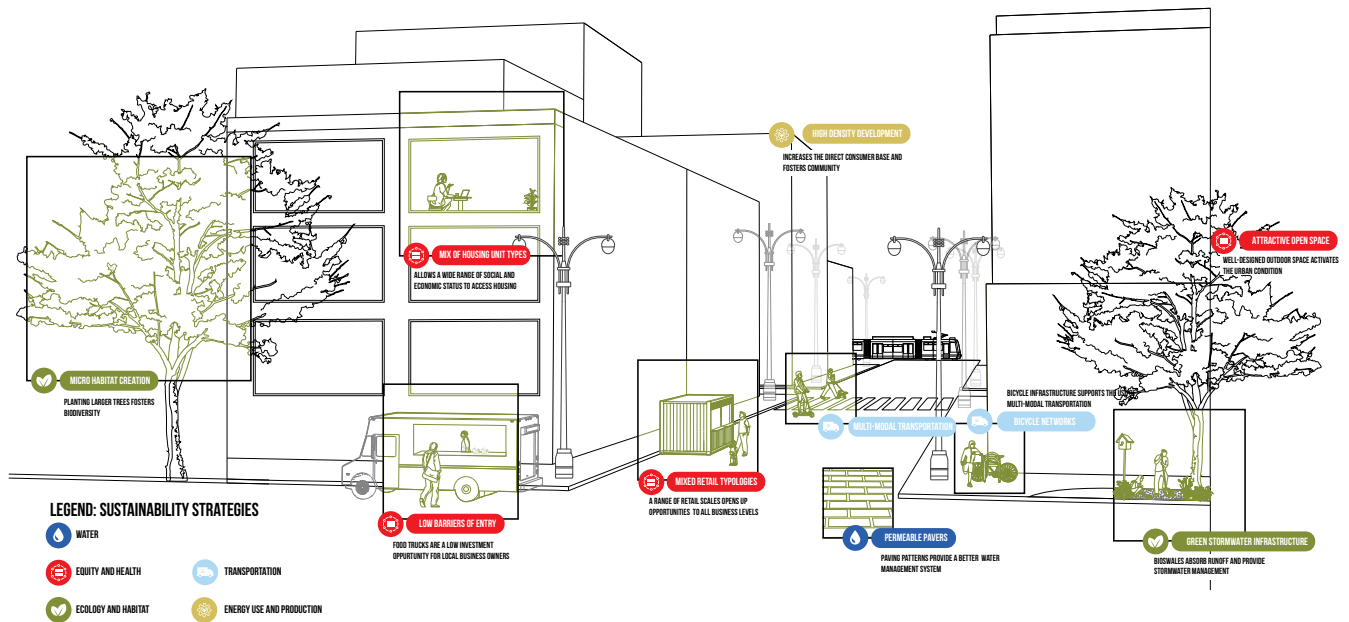


EXPERIENCE DIAGRAM

- TOURIST
- RESIDENT
- TARGET USER GROUP

Overall, the proposed design aims to cater to Portland residents and tourists

alike, creating a lively and bustling downtown core.



Sustainability strategies for this design proposal are grouped into the following categories: water, equity and health, ecology and habitat, transportation, and energy. Permeable pavers allow stormwater to pass through the site and into the soil underneath, reducing the amount of pollution that flows into the river from impermeable streets. A mix of housing unit types, mixed retail typologies, and low barriers of entry allow residents varied opportunities for living and doing business in the proposed neighborhood development. In addition, attractive open spaces activate the urban conditions, creating a healthy and

vibrant neighborhood where residents can interact with and feel connected to the river. Expanding green stormwater infrastructure and increasing urban greenery foster more biodiversity, mitigate flood risk, and reduce urban heat island effect. Pedestrian-focused areas, multimodal transportation, and bicycle networks allow residents to move throughout the city without the need to drive cars. High density development concentrates people around resources and increases efficiency by reducing distances people and goods need to be transported.

Proposal 2

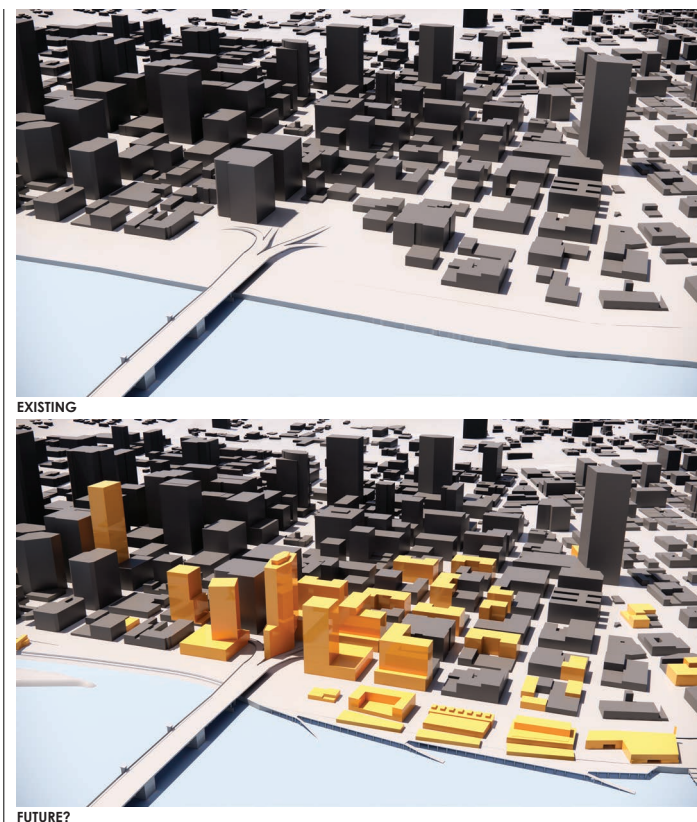
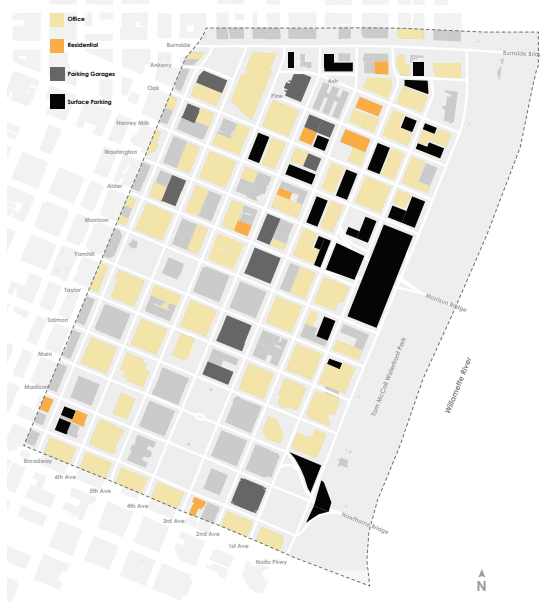
Spencer Daigle, Spenser Gould, and Jacob Schaepperkoetter-Cochran

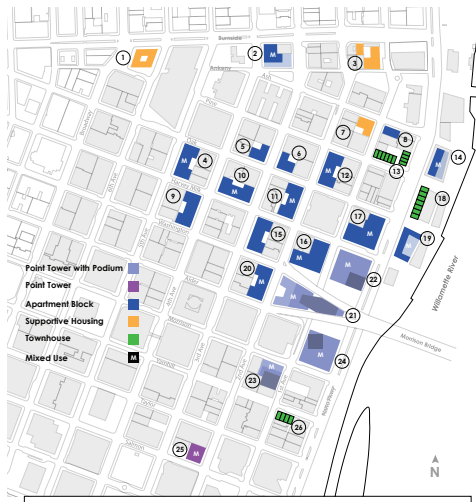
An initial analysis of downtown Portland's current state leads to the conclusion that its treatment as purely a central business district is no longer able to carry the city center. For downtown Portland to be an economically and socially vibrant district in this new era, housing needs to

be developed so that downtown can be transformed into a mixed-used residential neighborhood. To maintain affordable rental costs and accommodate a growing city, thousands of new units will need to be built throughout Portland in the coming years.

DOWNTOWN PORTLAND, OR

- High concentration of office buildings throughout central city and few residential buildings
- In the same area there are ample surface parking lots which can be readily developed
- Downtown is well suited for residential development which is needed now more than ever





26 NEW BUILDINGS ~ 3,900 UNITS

1 Supportive housing. Studio. 4 stories. ~138 units	16 3-2 bed units. 2 stories. ~8 units
2 Deeply affordable housing. Studio-1bed. 3 stories residential over commercial base. ~68 units	17 Studio-2bed. 8 stories. ~113 units
3 Supportive housing. Studio-1bed. 4 stories. ~122 units in two buildings	18 Studio-2bed. 10 stories. ~132 units
4 Studio-2bed. 8 stories residential over commercial base. ~217 units	19 Studio-2bed. 11 stories. ~122 units
5 Deeply affordable housing. Studio-1bed. 9 stories. ~90 units	20 3beds. 2 stories. 7 houses
6 Studio-2bed. 7 stories. ~80 units	21 Studio-1bed. 3 stories residential over commercial base. ~33 units
7 Studio-1bed. 5 stories. ~77 units	22 Studio-1bed. 13 stories residential over commercial base. ~94 units
8 Loft studios. 3 stories. ~20 units	23 1-2 bed 30 story tower. Commercial wing facing 2nd Ave. Studio office space. ~20 units
9 Studio-2bed. 9 stories. ~217 units	24 Studio-2bed. 20 story point tower with 4 story podium. Podium houses community rec center. ~60 units
10 Studio-2bed. 9 stories. ~217 units	25 Tenory condominiums. 121 2-3 bed condos over 15 loft style townhouses. Ground floor commercial with 18 stories residential above. ~154 units
11 Studio-2bed. 9 stories. ~217 units	26 Studio-2bed. 20 story point tower with 4 story podium. Ground floor commercial with 18 stories residential above. ~200 units
12 Studio-2bed. 3 stories residential over commercial base.	27 Tenory apartments. Ground floor commercial and 2 floors office. Top 28 stories residential. ~332 units
13 2-3 beds per house. 2 stories each. Shared courtyard parking. 10 houses	28 3-3 beds. 2 stories each. 4 houses

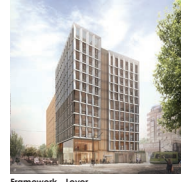
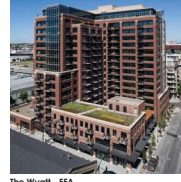
HIGH-RISE APARTMENT TOWERS

- Luxury tower
- Mixed-use for first few floors: retail ground floor and offices above
- Point tower on podium
- 3-4 story mixed-use podium
- Setback tower
- Commercial ground floor
- Loft-style units on second floor with outdoor terrace



HIGH AND MID-RISE APARTMENTS

- 3-4 block, double loaded slab-style apartments
- Mixed-use for first few floors: retail ground floor and offices above
- 1/2 block, double loaded slab-style apartments
- Mixed-use for first few floors: retail ground floor commercial or purely residential building



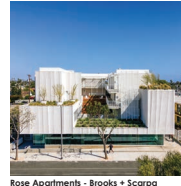
MID AND LOW-RISE APARTMENTS

- 5 over 1
- 4 stories residential or 5 floors residential over commercial ground floor
- Quarter block, double loaded apartments
- 4 - 12 stories
- 5-9 stories



LOW-RISE APARTMENTS AND TOWNHOUSES

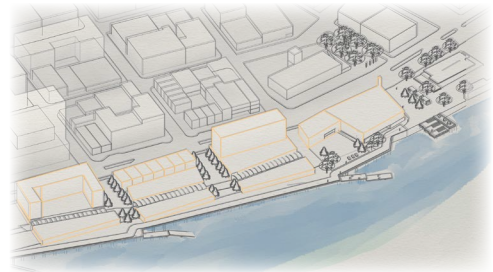
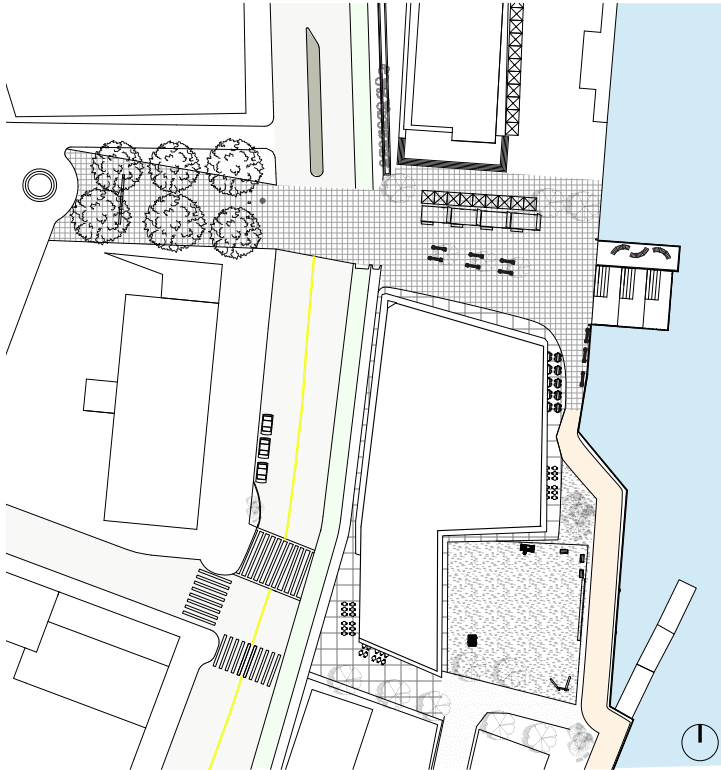
- Courtyard apartments, slab-loaded
- Small apartment building
- 3-5 stories
- Townhouses
- 2 stories with accessible roof
- 2-3 bed homes
- Walk up



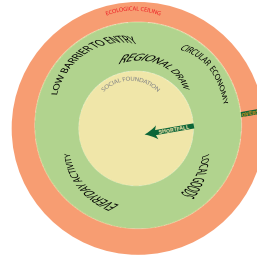
Another opportunity for improving Portland's downtown is to enhance its connection to the Willamette River. A

proposed waterfront marketplace and community center would bring people to the riverfront year-round.

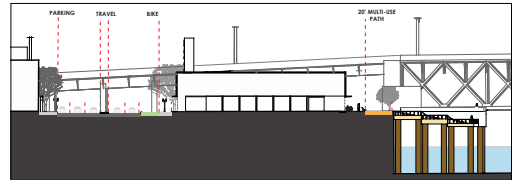
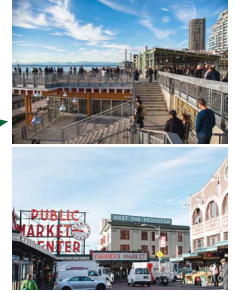
THE MARKET AT THE WATERFRONT



DONUT ECONOMICS

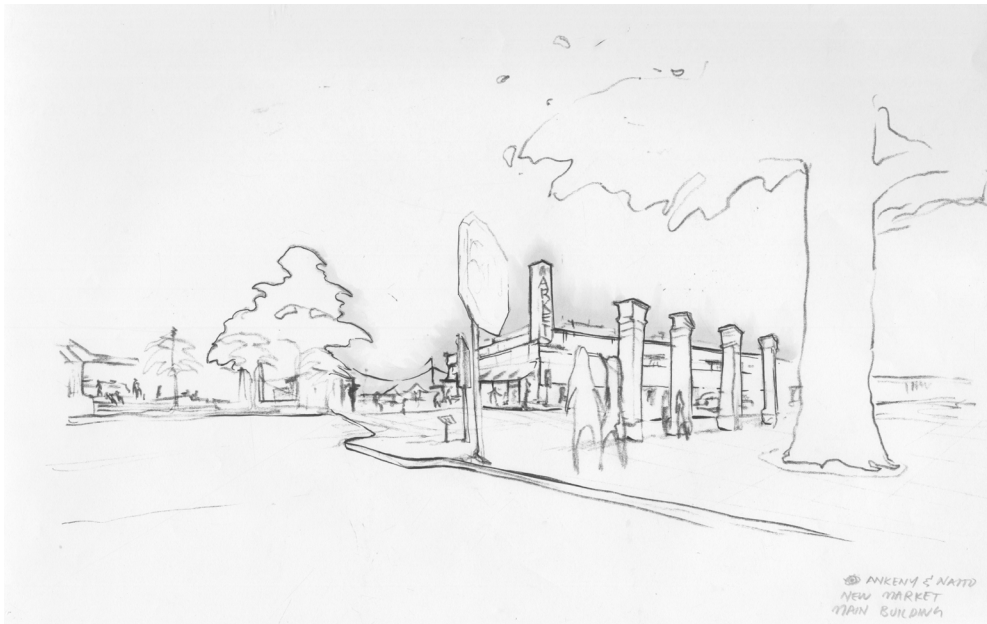
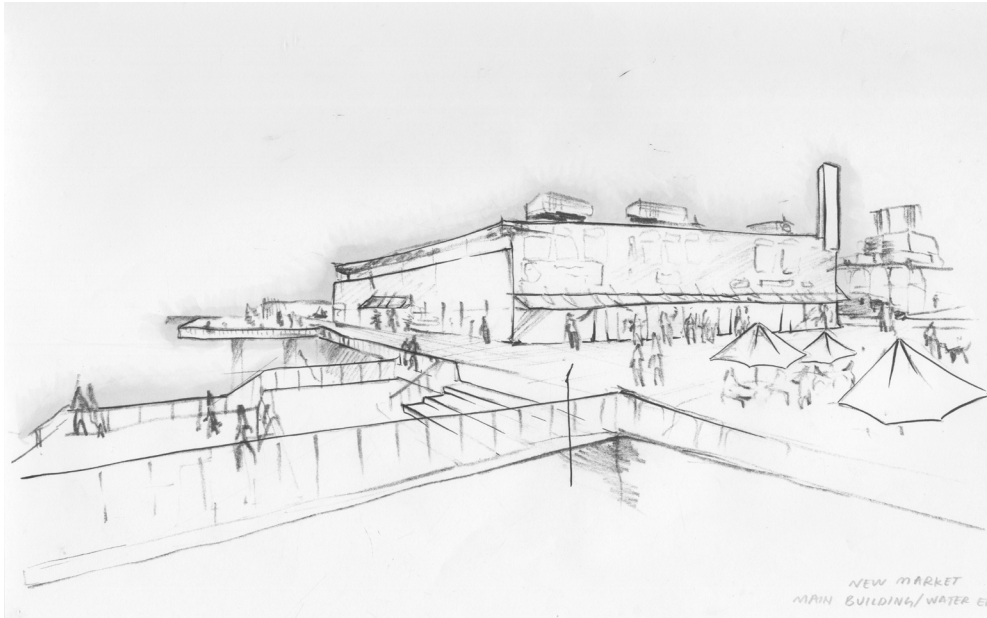


PIKE PLACE, SEATTLE



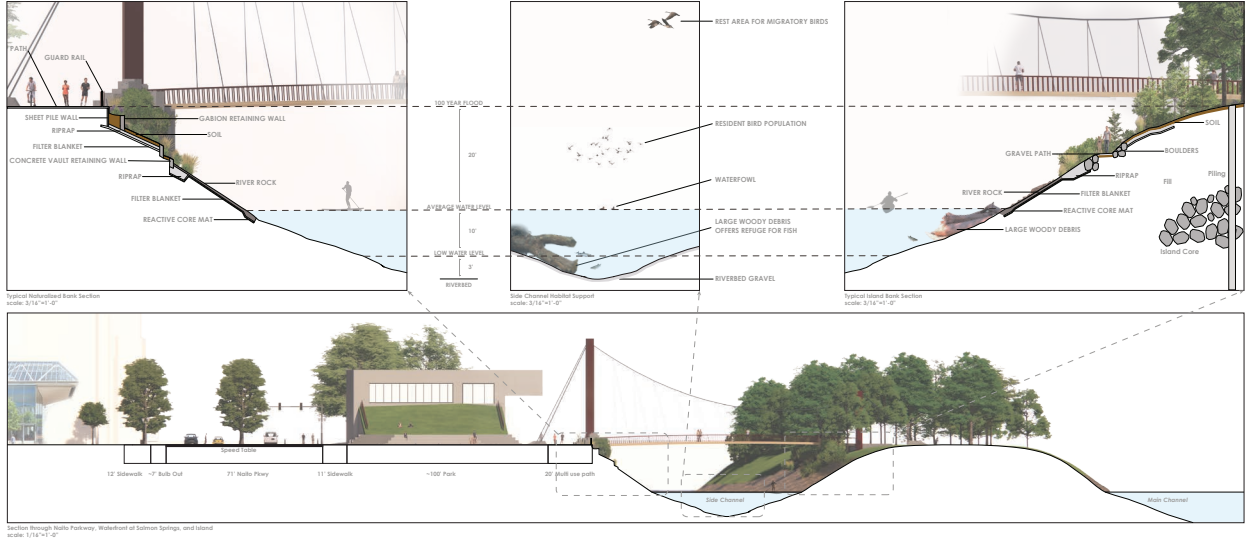
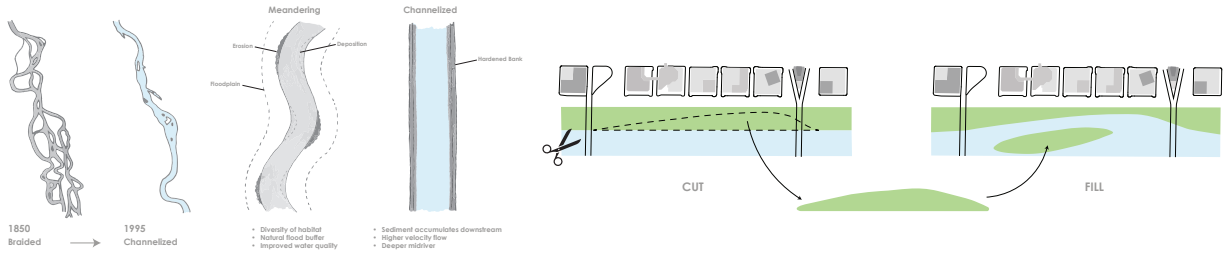
Inspired by Seattle's Pike Place Market, the market hall could have residences above the main shopping floor at the ground level. Shops could be rented day

by day, allowing vendors of all sizes and kinds to participate in the market's retail business without needed to fulfill an expensive or long-term lease.



Student Design Proposals

WILLAMETTE RIVER ISLAND



To improve the riverfront ecology, the designers propose the reintroduction of an island just off the waterfront park's shore, in addition to the deconstruction of the sea wall. This would allow the river's edge condition to return to a state more like that of its origins, before settler development channelized the river into a more streamlined basin. By removing the

sea wall and pulling the southern edge of the waterfront park inwards, the river would be brought closer to the city with a naturalized and gradually inclined bank. At the northern edge of the waterfront park, by the Burnside Bridge, the park could be pushed out over the river through the addition of a pier.



Student Design Proposals

The new island would serve as an ecological center for Portland's wildlife, bridging a gap between Forest Park and

Oaks Bottom Wildlife Refuge. This island would host important food and habitat for birds and aquatic animals alike.

2ND AVENUE STREET DESIGNS



A redesign of SW 2nd Avenue would promote a neighborhood spine for the proposed housing development. This corridor would allow people to work, socialize, and recreate where they live. Access to public transit and a pedestrian-oriented urban environment could be created by designing clear and

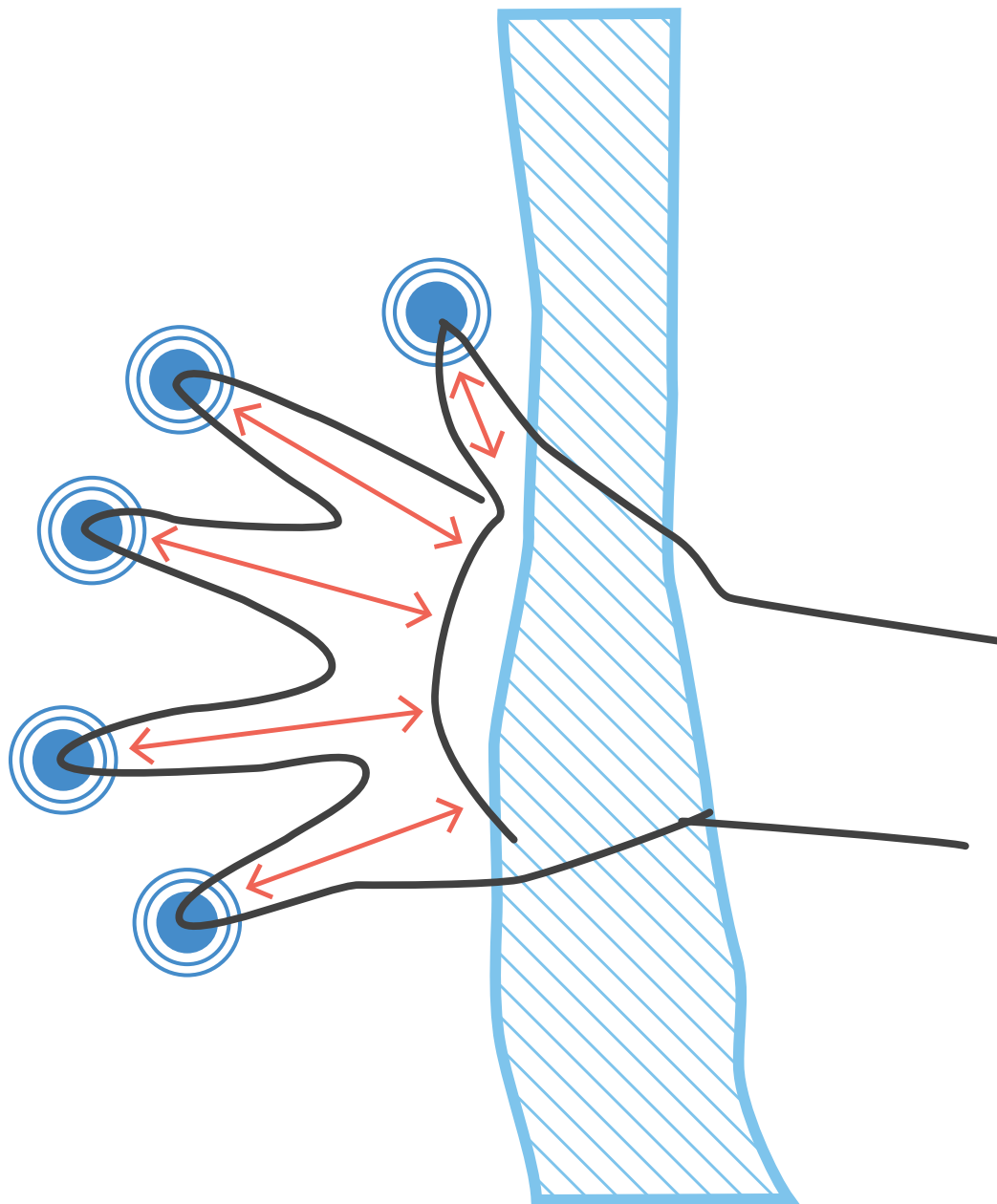
active ground floors to building blocks, implementing plantings and street furniture along the sidewalks, and by slowing down motor vehicle traffic using bulb-outs, planted medians, and bollards. Bicycle corridors could be enhanced by introducing cycle tracks and by protecting cyclists from cars using a lane of street parking and bollards.

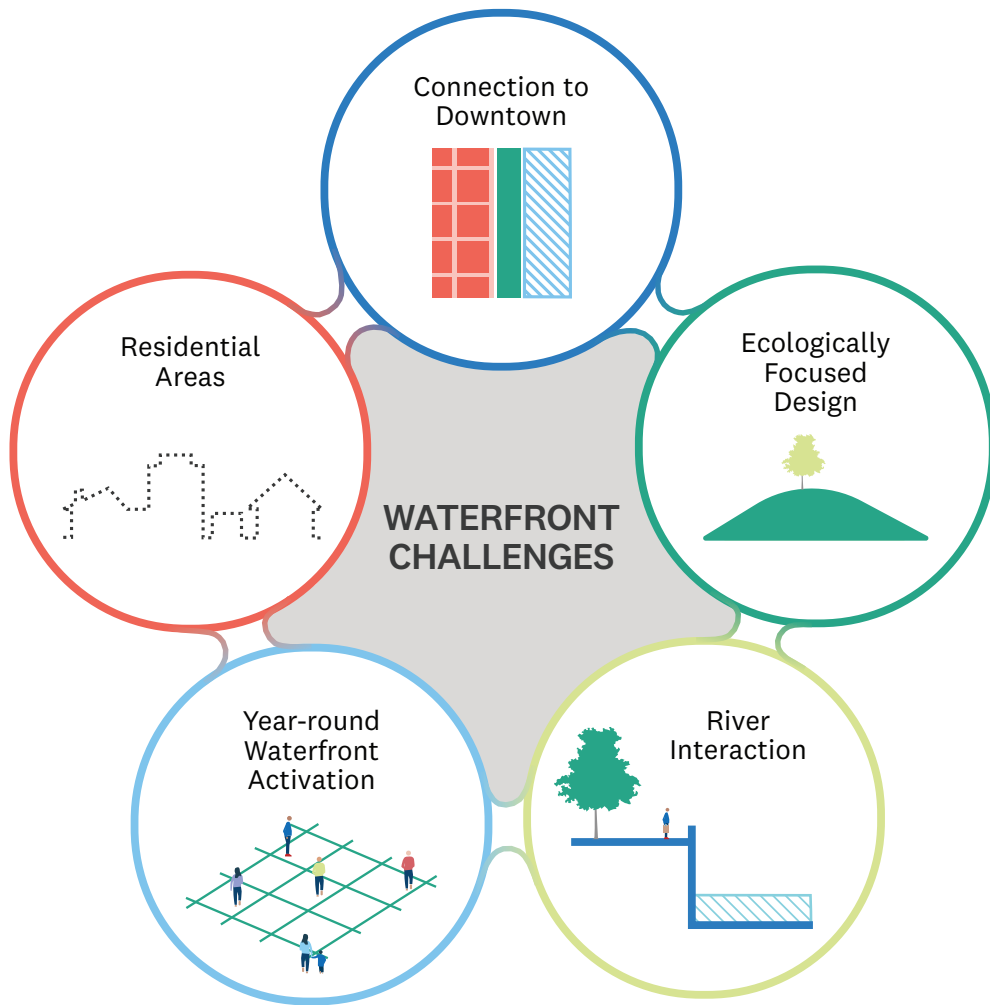
Proposal 3

EJ Del Rosario, Isabel Hoff, and Alyssa Rupp

This project uses a “hand” parti to define the Willamette River, or the “palm,” as the center of the city, with fingers that reach into downtown, drawing people toward Portland’s waterfront park. The sites selected as “fingertips” are some of downtown’s most culturally and economically important centers. By

daylighting streams that have long been buried and built over, this redesign plan further connects downtown Portland to the river by reviving aspects of the local ecosystem and connecting people to natural waterways. In addition, pedestrian byways further promote east-west circulation through the city center.

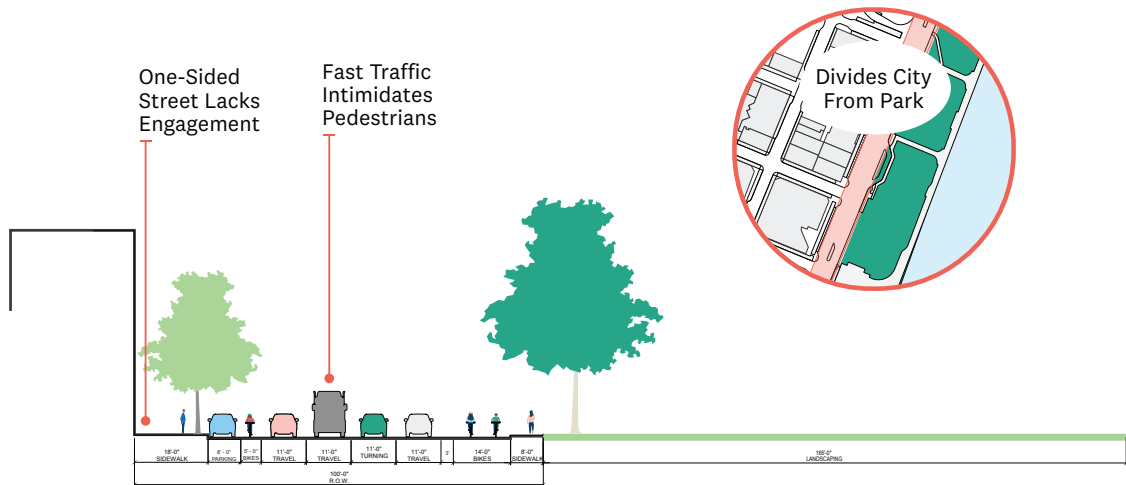




Student Design Proposals

This redesign plan aims to confront the following challenges identified during initial analysis of the site: lack of residential areas, lack of connection between downtown and the Willamette, lack of ecologically focused design, lack of access for people to interact with the river at the waterfront park, and a lack of year-round waterfront activation.

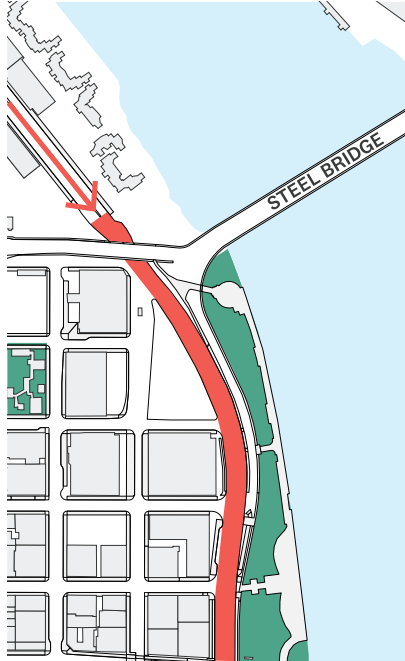
Another challenge identified when analyzing the existing site was Naito Parkway, as it currently divides Portland's city blocks from Tom McCall Waterfront Park. The four lanes of fast-moving traffic make the street unpleasant for pedestrians and intimidating to cross. In addition, people cannot see the Willamette River from the street level, as the combined width of the park and Naito is too great a distance to see across to the water.



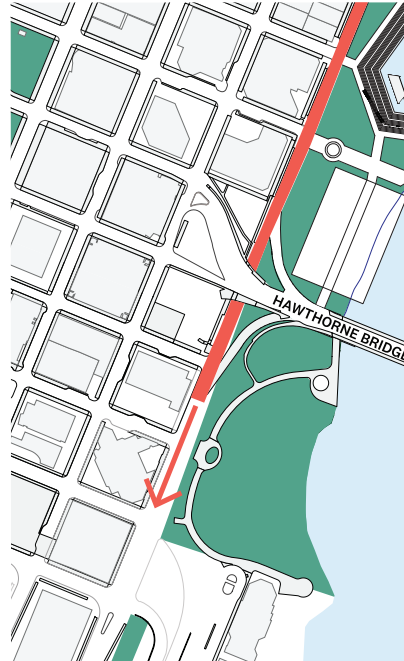
By burying Naito's drive lanes, this design proposes to turn Naito Parkway into a riverfront pedestrian plaza, allowing the

park to reach up to SW 1st Avenue through a series of woonerfs connecting the city to the waterfront.

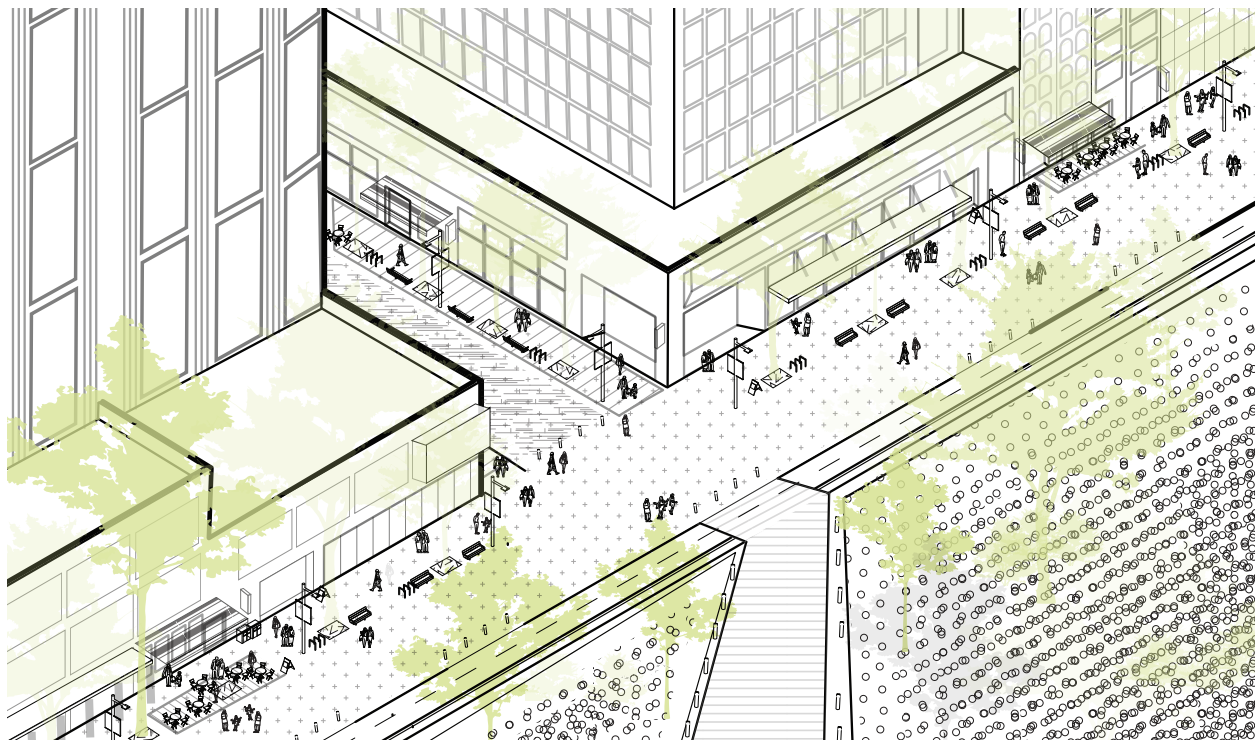
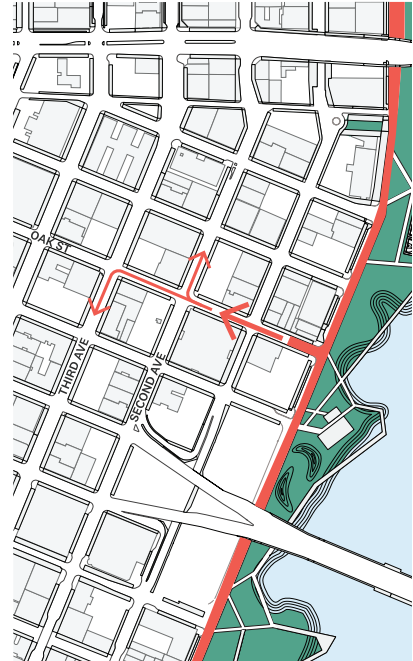
TUNNEL ENTRANCE

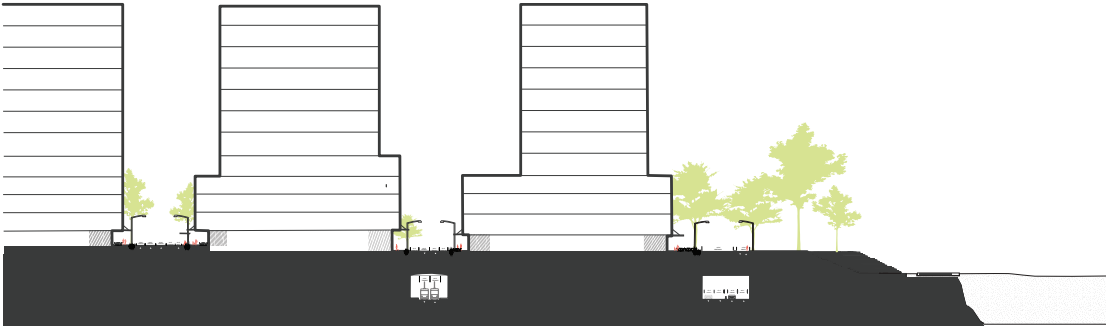
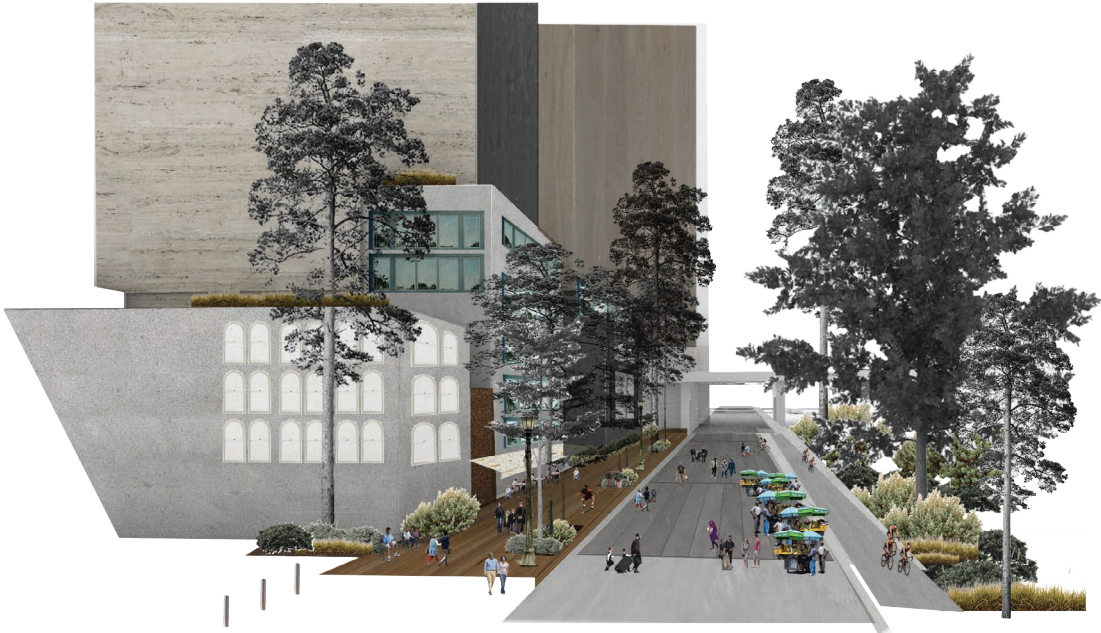


TUNNEL EXIT



NAITO TO DT

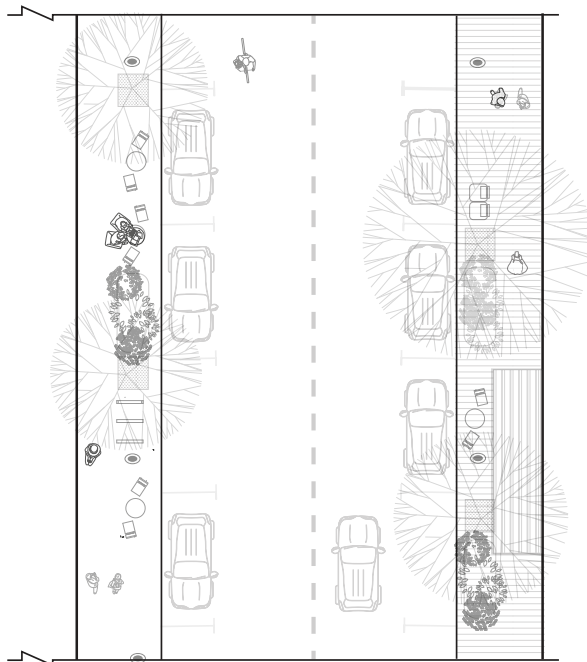
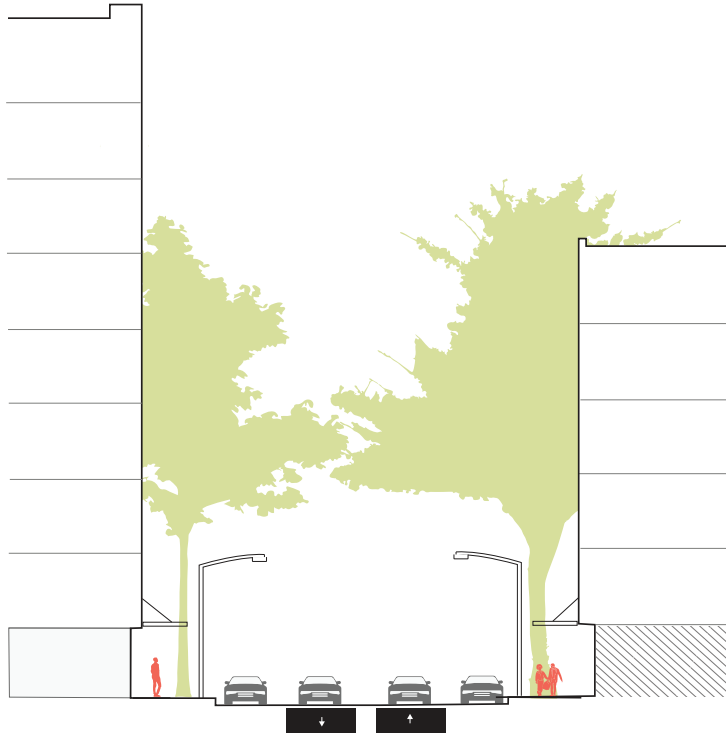




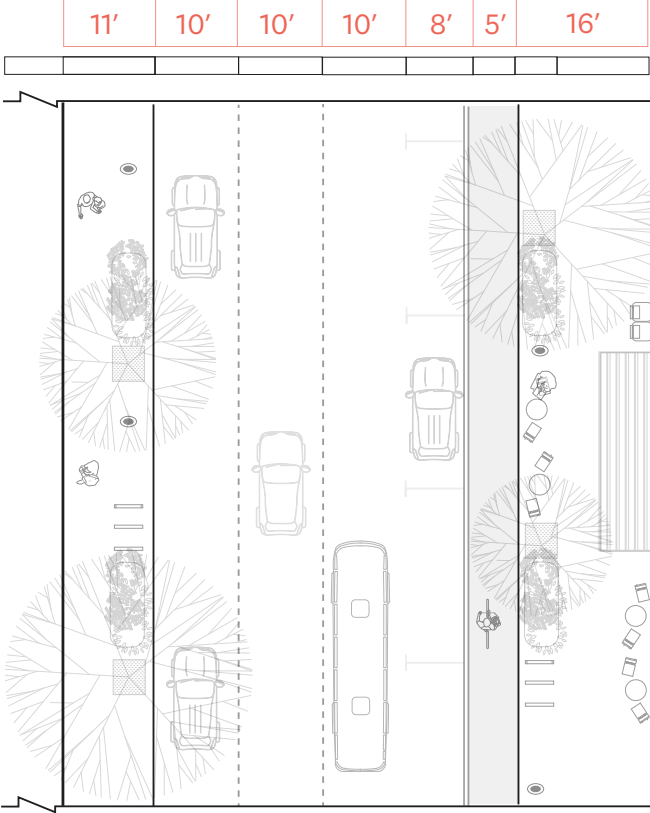
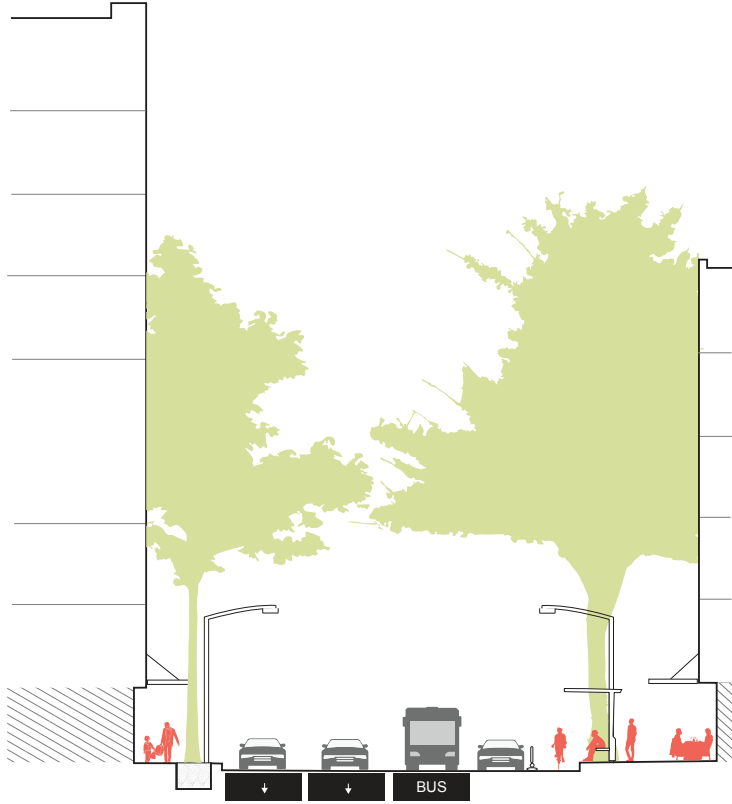
SCALE: 1" = 1/32"
WATERFRONT SECTION A

By converting the MAX lines on SW 1st Avenue into a subway, the street would be reactivated by two lanes of slow-moving two-way traffic servicing the proposed housing towers along the waterfront blocks. Following the Vancouver model

of development, buildings would sit on three or four-story podiums with narrower towers ascending higher up, allowing light to penetrate between city blocks onto the streets. Expanded transit networks would bring bus lines to SW 2nd Avenue.



SW 1st Ave 1/8" = 1'



SW 2nd Ave 1/8" = 1'



Site Plan ①



Node

1. Cultural District
2. Pioneer Courthouse Square
3. Powell's Books
4. Voodoo Doughnuts
5. Old Town



River Front Attractions



Bike/Pedestrian Priority Lane



Complete Street



Restored Streams

The circulation map shows the five nodes, which represent the symbolic fingertips of the design's "hand" parti. The map also shows the paths the daylight streams would take, originating at nodes one and four, drawing pedestrians toward the river, providing habitat for local flora and fauna, and further expanding Portland's stormwater management strategies. The two points where the streams would runoff into the Willamette would be celebrated moments; one a public

amphitheater, and the other a natural area for waterplay such as swimming, kayaking, and stand-up paddle-boarding.

By removing the existing seawall, the riverfront would become much more hospitable to aquatic wildlife. An expanded shoreline would increase areas for riparian plant life and habitat, allowing havens for migrating salmon to rest during their long journeys through the Willamette back to the streams where they spawn.



A natural history museum located just north of the Hawthorne Bridge would activate the waterfront year-round. While many people enjoy living in and visiting the Pacific Northwest for its incredible landscapes, the designers decided a natural history museum would be the perfect waterfront monument to celebrate Portland and the region's history and place. While Seattle and Portland both have excellent art museums, and Portland

has a museum for science and industry, both of which celebrate local industries that define the thriving character of the northwest, what lacks is a celebration of the region's natural history. Such a museum could be visited year-round, when rainy weather makes outdoor activities less enticing. Partnerships with local educational and research institutions could involve habitat restoration and research, as well as public education initiatives along the downtown waterfront.



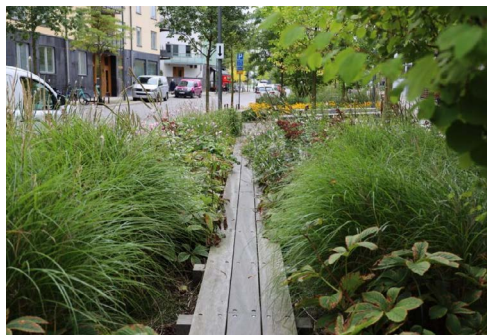
The neighboring amphitheater would flood and dry as the river's water levels rise and fall. Meandering paths and boardwalks extending over the river would increase pedestrian views to directions beyond the existing north-south walking paths. By pushing the park's edge in and away from the city, pedestrians would enjoy views toward and away from the river, allowing them to look back at the city from the boardwalk's farthest points. Pathways and open spaces are placed strategically to promote dynamic interactions with people and the water,

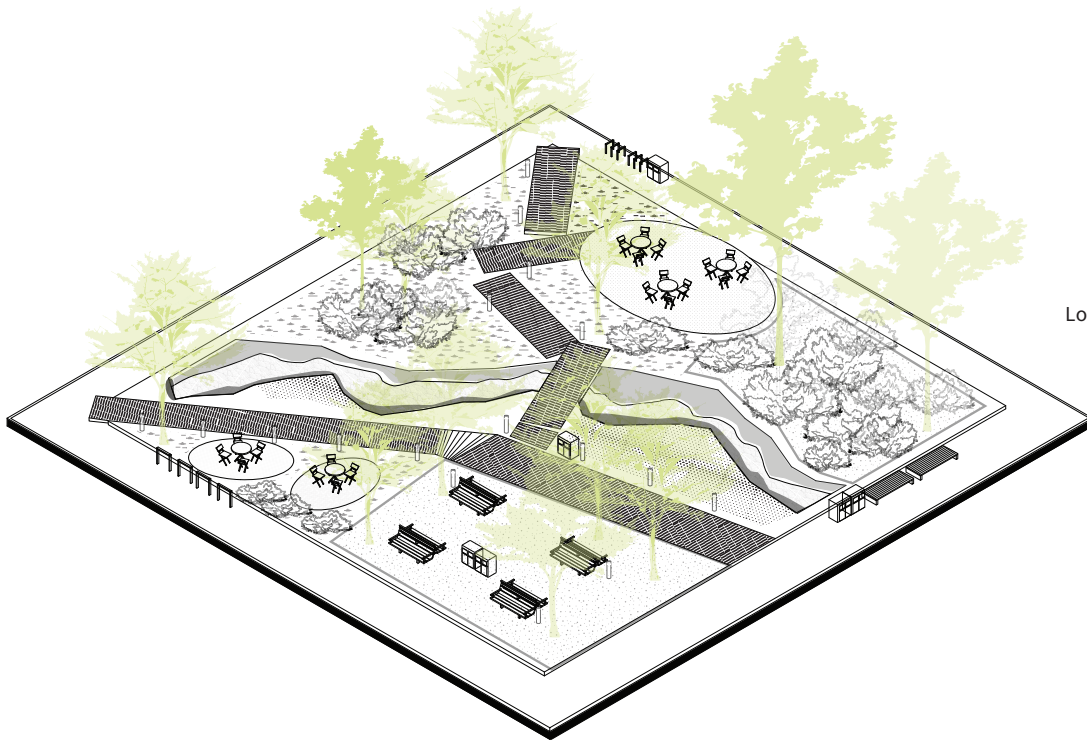
such as topographic variation, sight lines, program cadence, and supporting native ecology.

Daylit streams would be modeled after examples like the ones pictured below, in the Stockholm Royal Seaport, a newly developed mixed-use residential neighborhood built on a former brownfield site. By allowing Portland's streams to pass through the city's streets and parks, native ecosystems can regrow and further connect the city's residents to the place where they live.

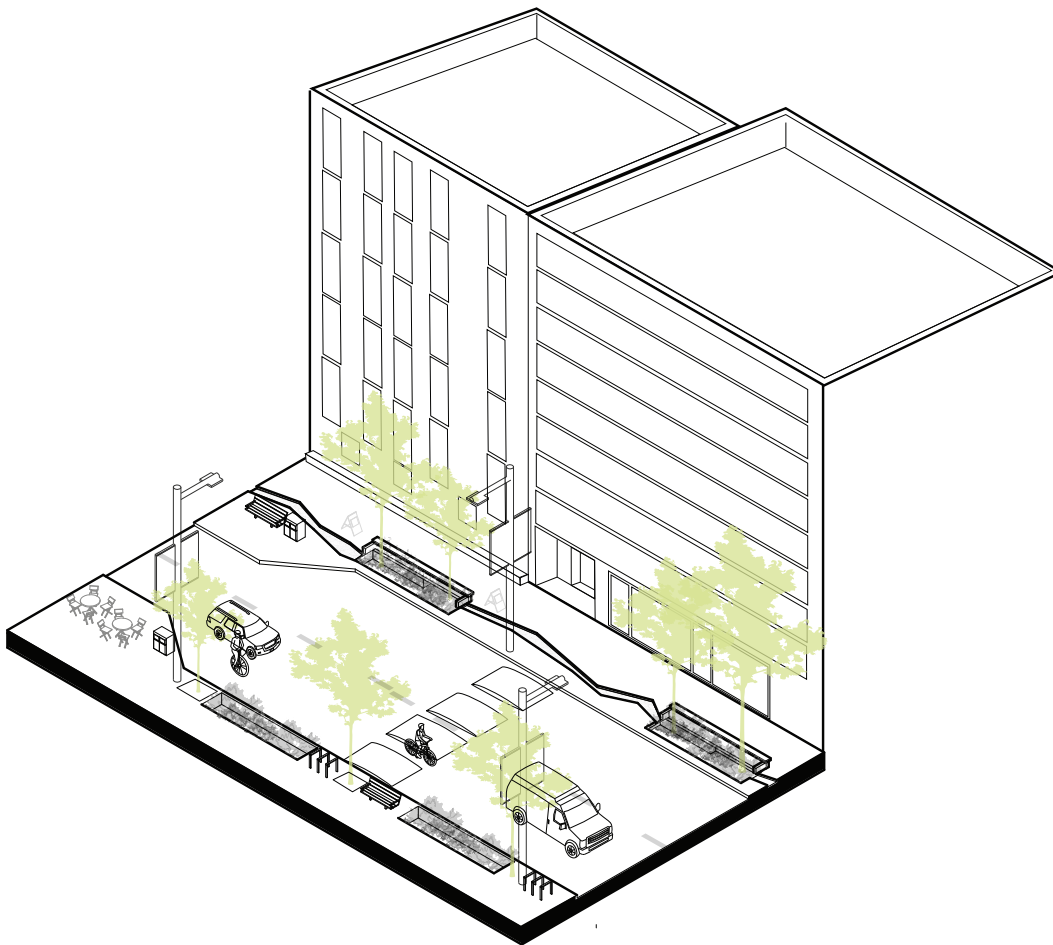
PRECEDENTS

Examples of urban streams at the Stockholm Royal Seaport
("Let Nature Do the Work." Stockholm Royal Seaport 2030, March 30, 2023. [norradjurgardsstaden.se/2030.se/results/let-nature-do-the-work.](https://www.norradjurgardsstaden.se/2030.se/results/let-nature-do-the-work.))



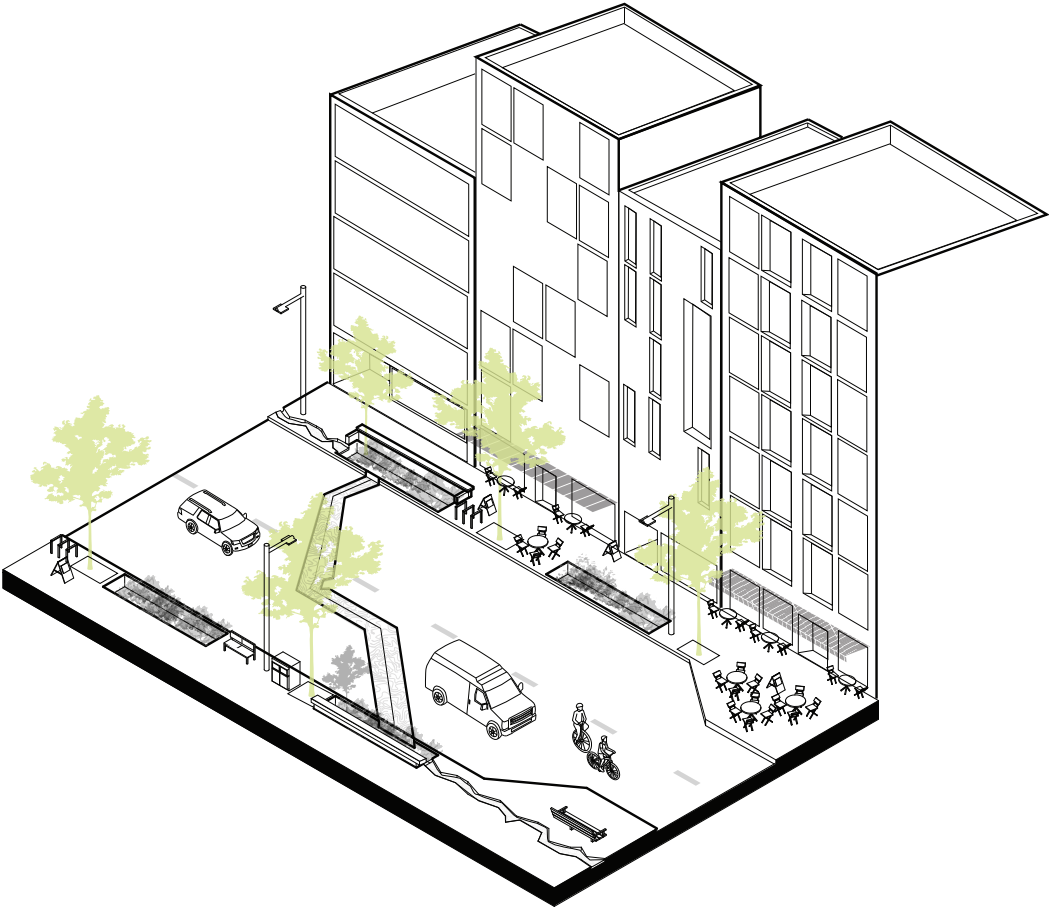


Lownsdale Square



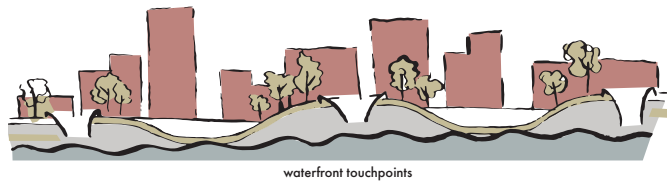
Taylor Street

Salmon Street



Proposal 4: Arts + Rec

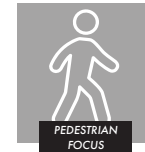
Mary Johnson and Sam Vetter



priorities



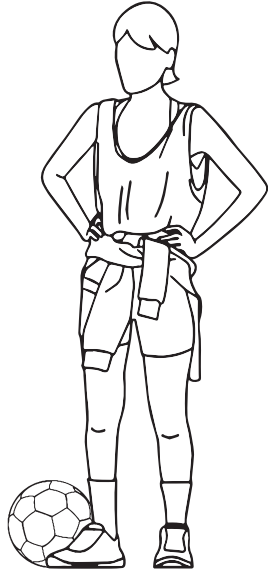
strategies



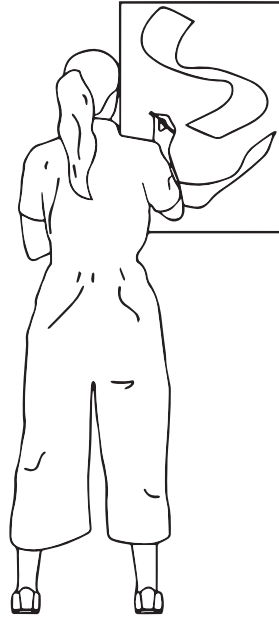
The designers in this group came up with two character groups, which represent a perspective on Portland's culture. One is an outdoorsy adventurer, who currently travels outside of the city for their

recreation needs. The other is a creative, looking for more places to engage with their art in the city. The designers attempt to fill gaps in downtown Portland by responding to these characters' needs.

identity



the adventurer



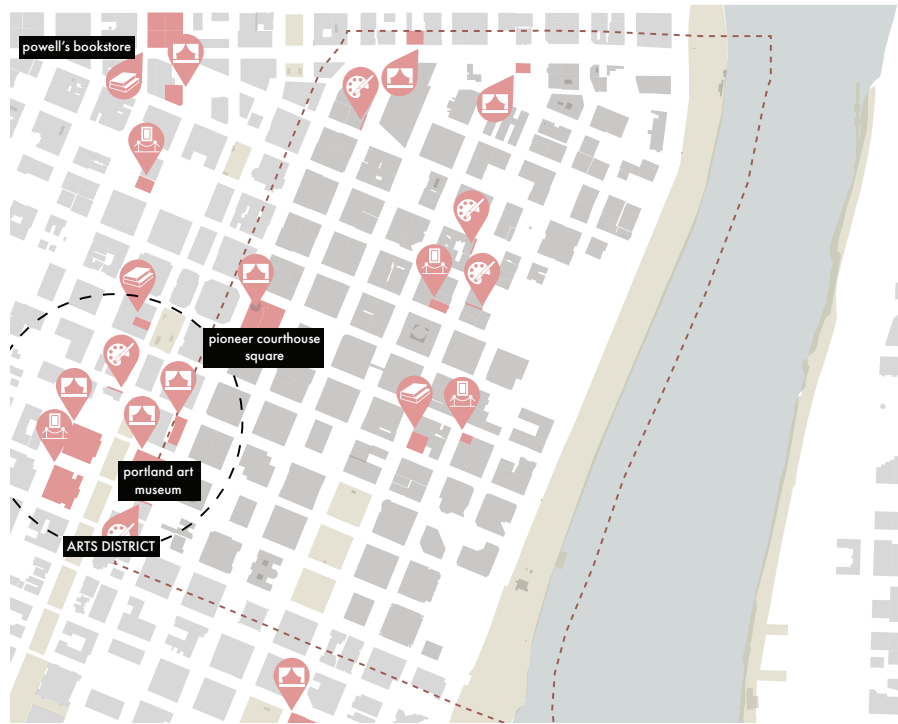
the creative

existing conditions

HOUSING



ARTS/MUSIC PROGRAMMING



mural



theater / venue

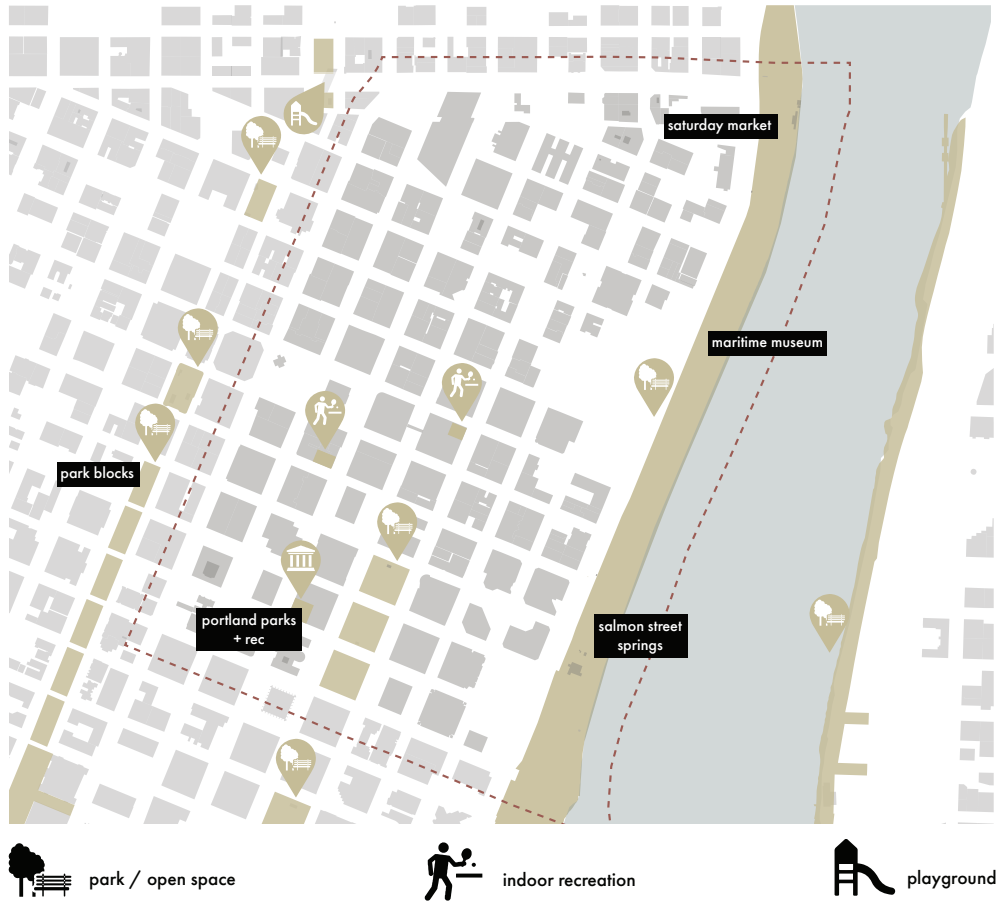


gallery / museum



bookstore / library

RECREATION PROGRAMMING



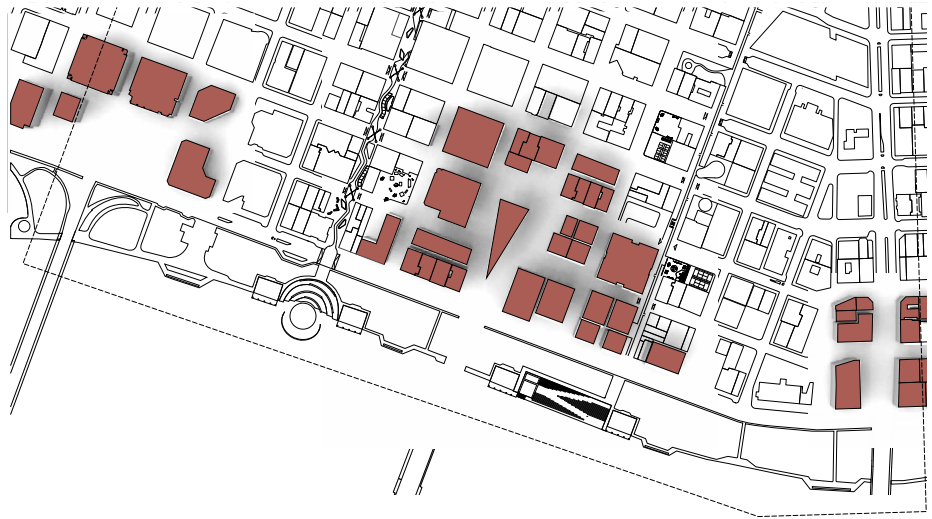
Through an initial analysis of Portland's downtown, it was determined that the city center needs to integrate new housing options and community-focused spaces.

The existing arts programming in the city is scattered, apart from the designated arts district in southwest Portland. While the theaters and museums in this district

are frequented, it is important to note that there is a barrier of entry to these spaces as they are only available to those who can afford tickets.

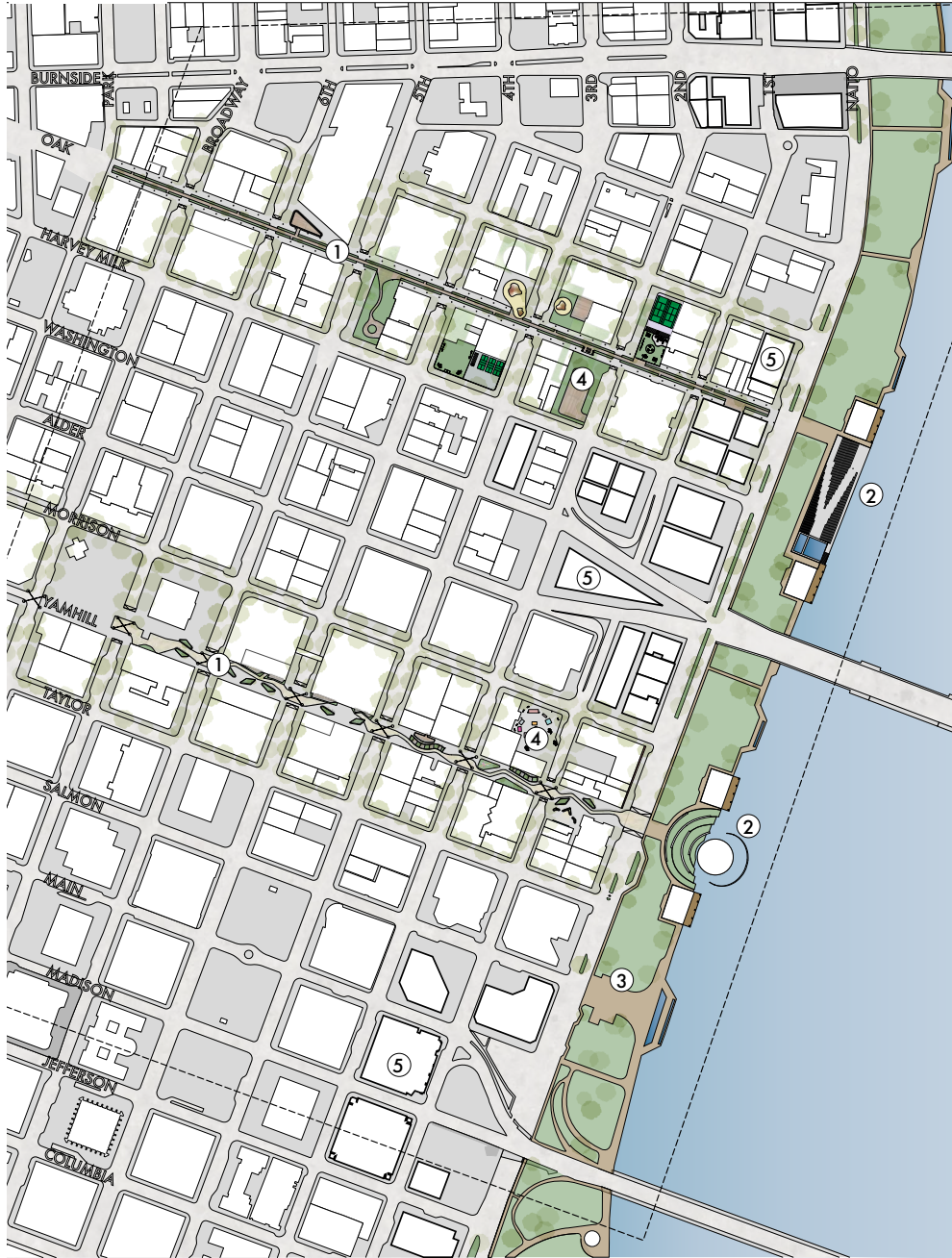
As far as recreational spaces are concerned, the main open space is obviously the waterfront, which is well-loved by the city but sporadically used due to its general lack of programming.

NEW HOUSING PROPOSAL
▶



MASTER PLAN

1"=120'



PHASING

1 REDEFINE THE STREET-SCAPE



2 WATERFRONT HUBS



3 WATERFRONT PATHS



4 ACTIVITY DEVELOPMENT



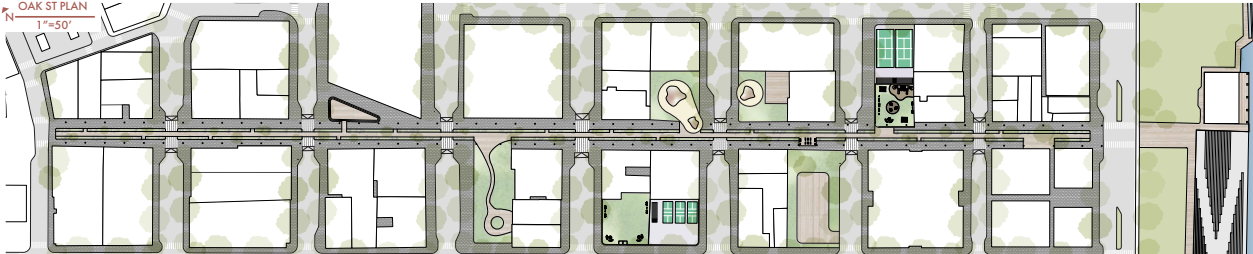
5 HOUSING



Student Design Proposals

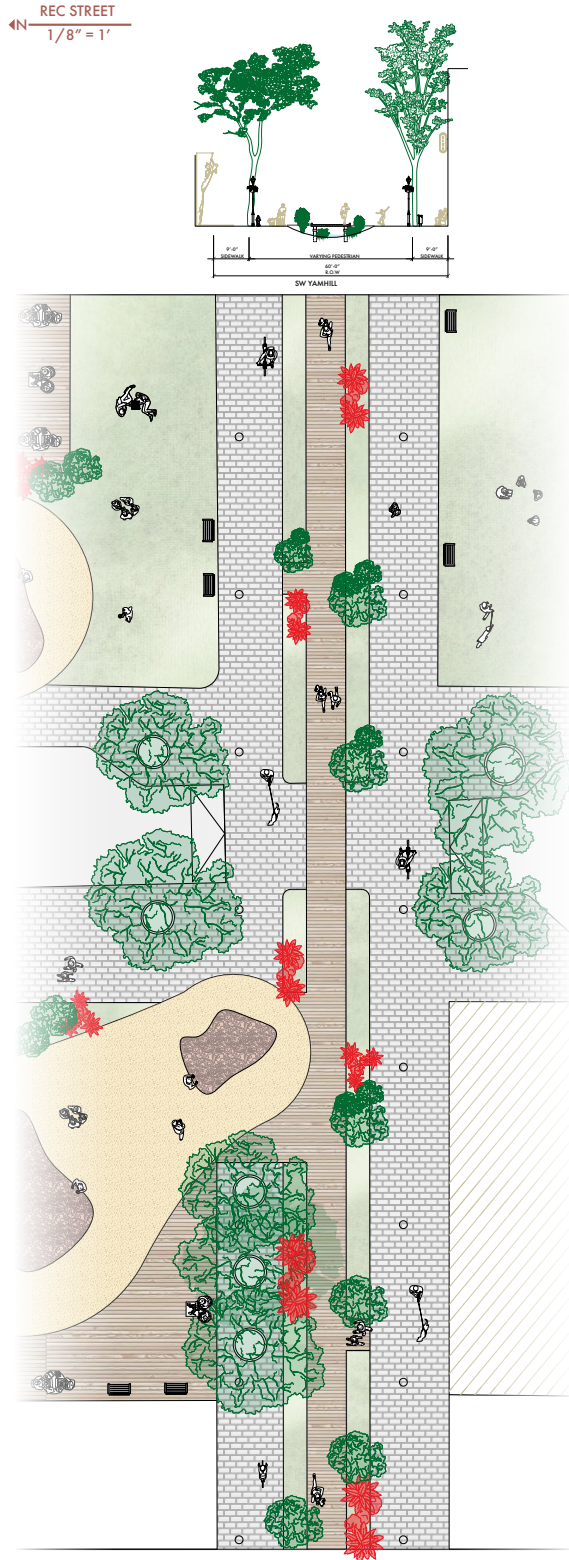
By removing motor vehicle traffic from both SW Oak and Yamhill Streets, these important corridors can be transformed into active pedestrian routes. These two arteries connect the waterfront to

Portland landmarks, Powell's Books and Pioneer Courthouse Square. These proposed pedestrian streets would be programmed with several indoor and outdoor activities relating to either arts or recreation.

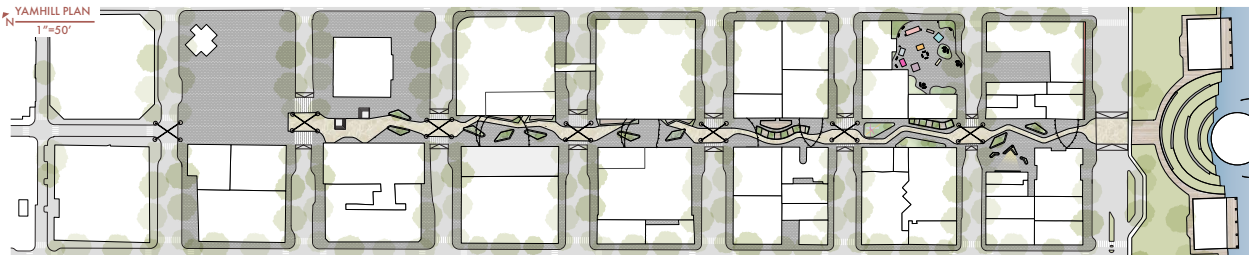


SW Oak Street, the recreation street, would be characterized by a boardwalk and bioswale, allowing for a pleasant walkable experience heightened by public activities such as rock climbing, tennis,

and yoga. Given that recreational activities are often associated with motion, this street would have a more linear circulation path in order to not disrupt runners, cyclists, or people out for a walk.



Student Design Proposals



Yamhill, as the arts street, would invite meandering, utilizing different materials and paving patterns to create an engaging experience alongside activities such as permanent busking stages, recording

studios, and galleries. This meandering feel would encourage people to take their time passing through the street and create pockets of areas for artists to create and display their artwork.

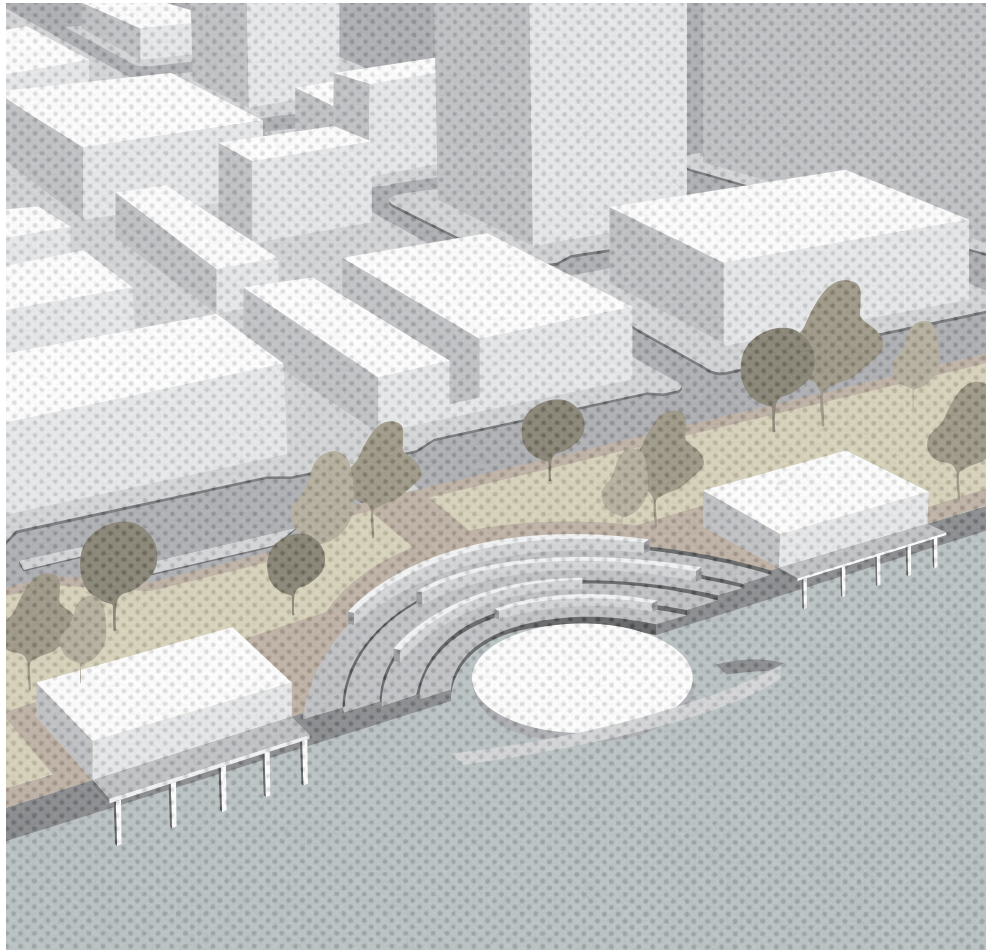




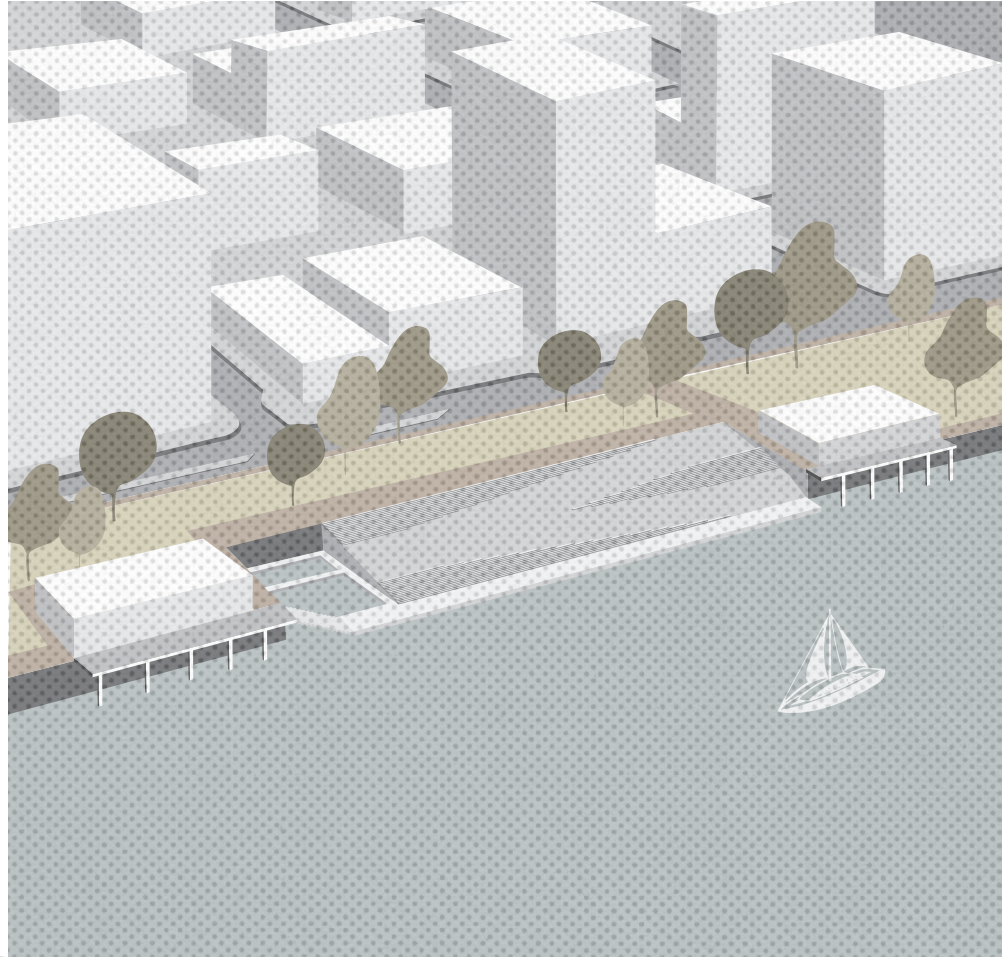
SW Oak Street would lead to a boating and swimming facility on the river, increasing residents' interactions with the Willamette. SW Yamhill Street would culminate at a waterfront amphitheater where performances could take place for

free, bringing activity to the waterfront day and night. Both new developments would be bordered by two new buildings which could be programmed as restaurant or café space, or as support functions, such as boat rental for the dock.

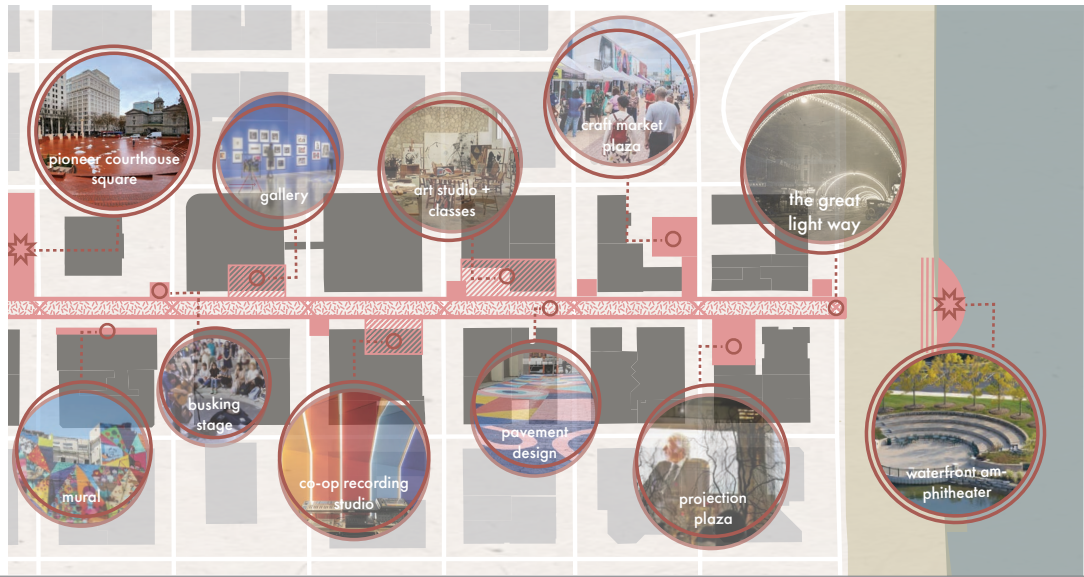
waterfront amphitheater



boating + swimming



**"arts" street
YAMHILL**



**"rec" street
OAK**

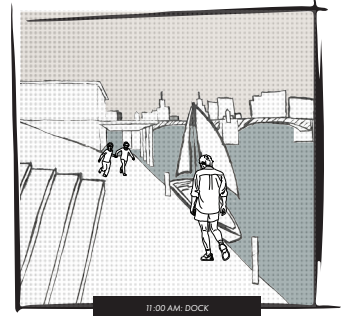
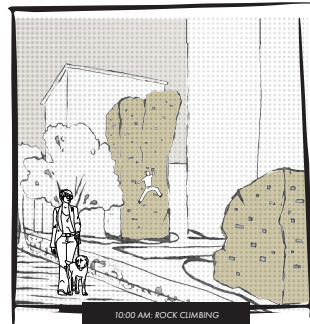
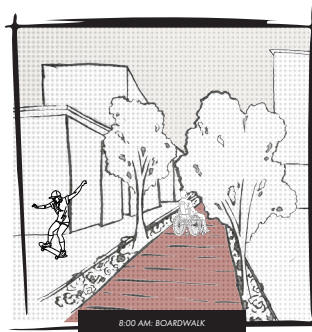


Student Design Proposals

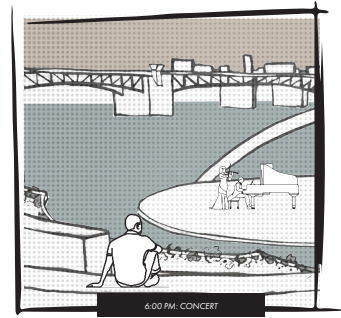
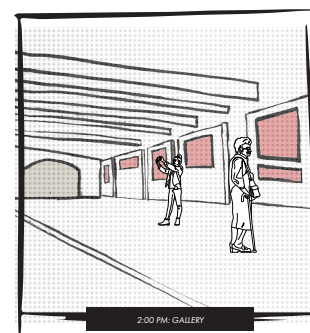
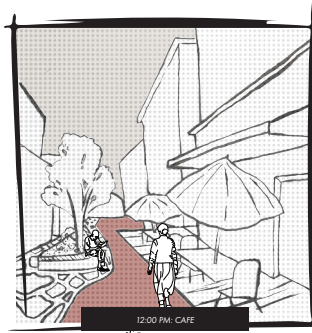
By creating spaces for engagement with arts and outdoor recreation in downtown Portland's public spaces, the designers hope to attract investment in new housing projects downtown. Free public activities could foster community and engagement

within the city's center, allowing all people to participate and engage with each other and the city. In addition, this proposal aims to bring people and activity to the waterfront park to improve downtown's connection to the Willamette.

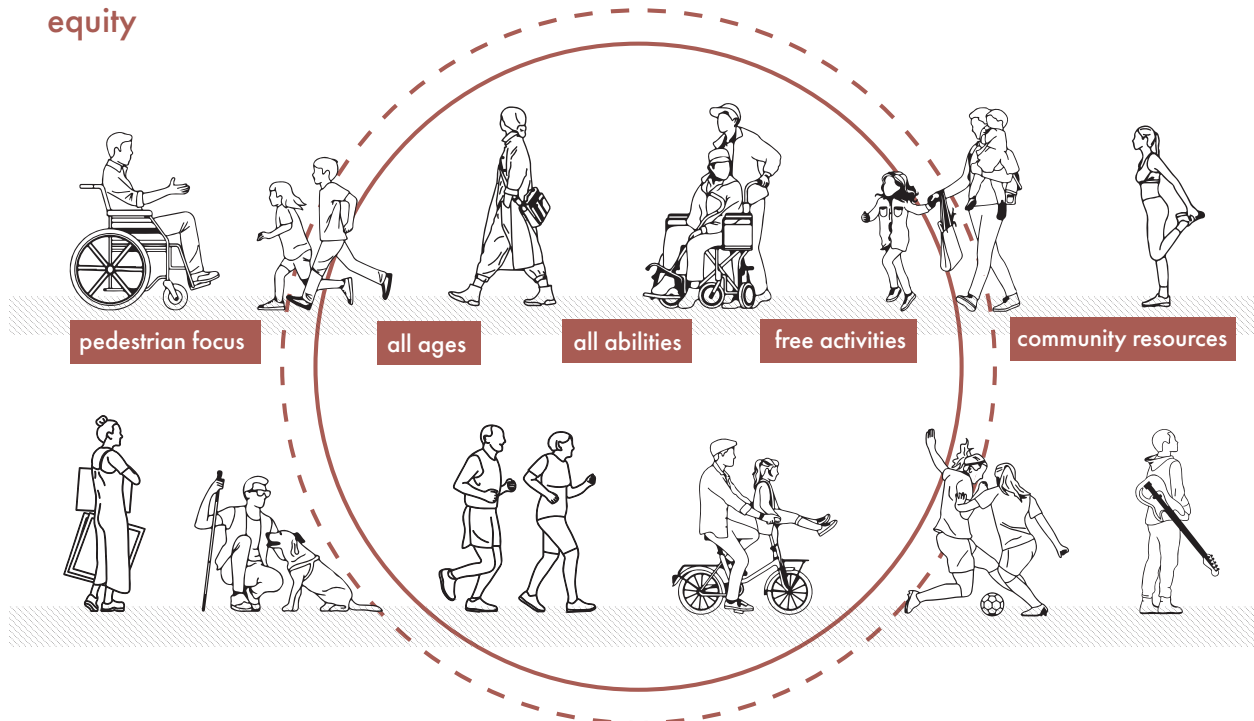
a day in the life: REC



a day in the life: ART



equity

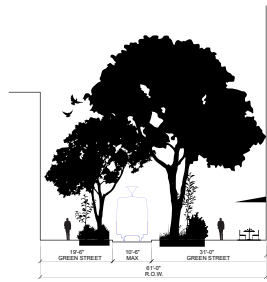
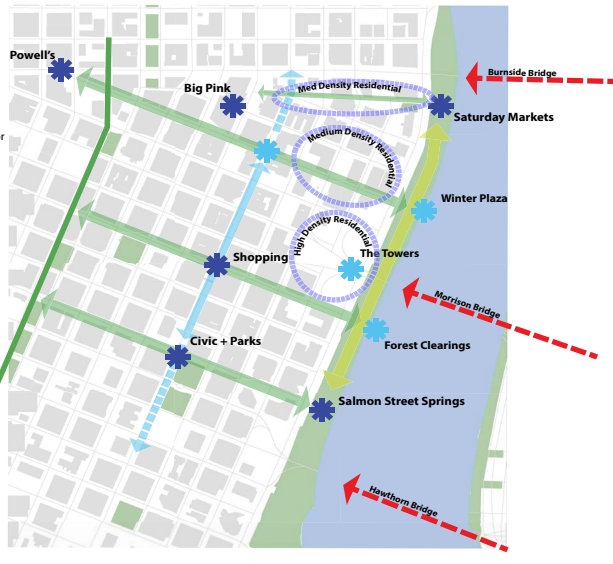


Proposal 5

Thalia Keirstead and Sergey Tkachenko



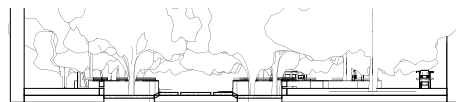
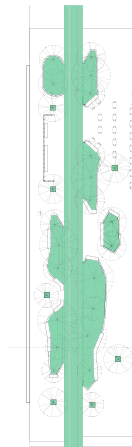
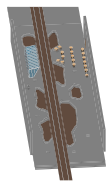
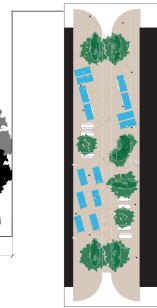
- PDX Green Loop
- Proposed Eco Corridor
- Proposed Commercial Corridor
- Traffic Into the City
- Park Programs
- Existing Anchor
- Proposed Anchor



SW MORRISON, BTWN 2nd & 3rd, LOOKING WEST
Scale: 1/8" = 1'-0"

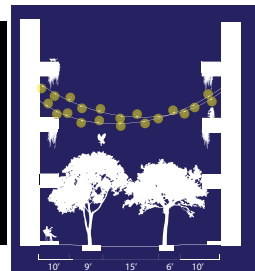
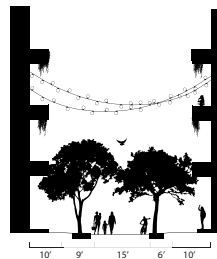


SW 4TH, BTWN SW PINE & SW OAK, LOOKING NORTH
Typical Commercial Street
Scale: 1/8" = 1'-0"



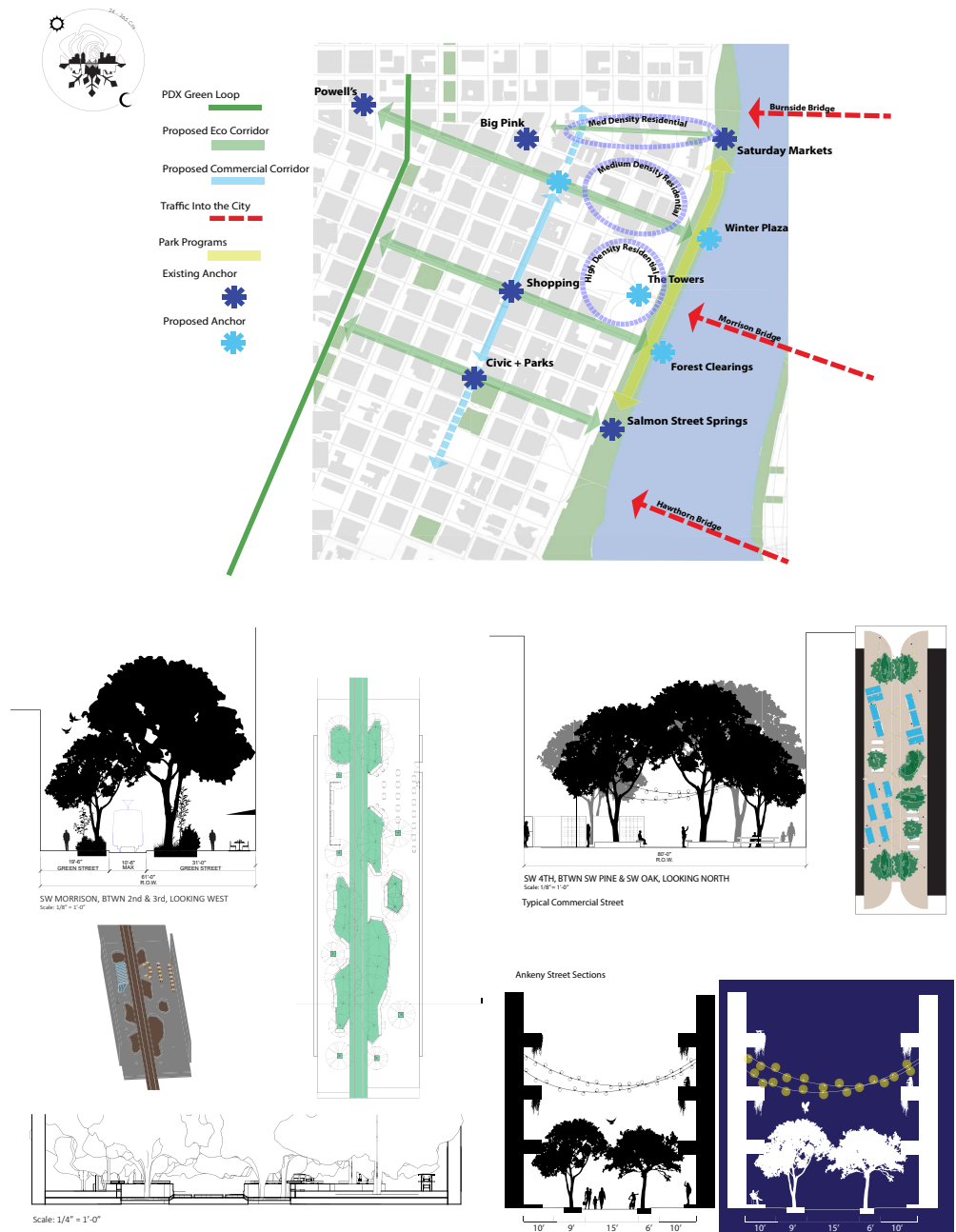
Scale: 1/4" = 1'-0"

Ankeny Street Sections



This proposal aims to increase residential density within downtown Portland by introducing new housing projects toward the northeastern area of the site. Proposed pedestrian-centered eco-corridors would allow residents to walk safely through downtown streets while increasing their connections to the surrounding landscape. In addition, more tree coverage and greenery in general would improve urban air quality, reduce

urban heat island effect, and provide food and habitat for local wildlife. While existing transit malls on SW 6th and SW 5th Avenues promote north-south circulation, the proposed eco-corridors would enhance downtown’s east-west circulation, bringing people toward the river and into downtown. Finally, proposed “anchors” would add waterfront attractions, contributing to the waterfront park’s active programs.



A closer look at the design's proposed eco-corridors shows residential balconies lining green streets alive with not only street trees but also vertical complexity; shrubs and grasses which contribute to habitat and food for pollinators and other wildlife. Bioswales and places for people to sit, eat, read, and connect with

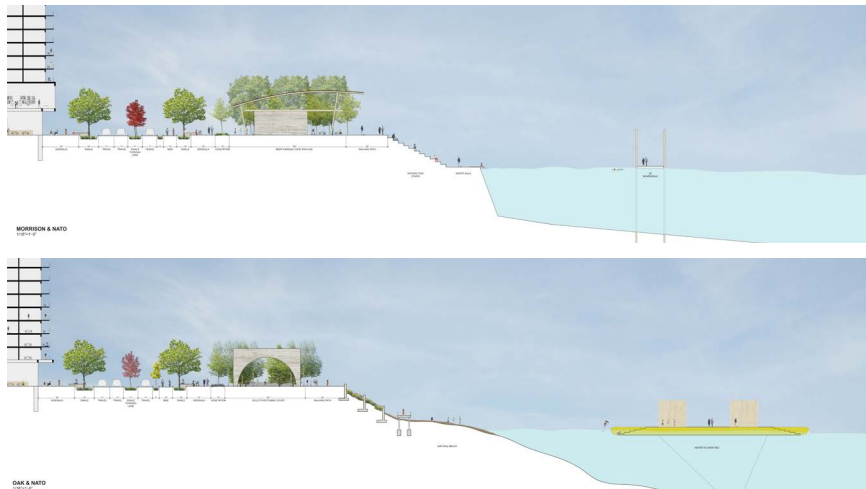
one another along these green streets would allow for a change of pace during a bustling downtown commute. Natural and locally sourced materials, such as wood and stone pavers, would enhance the natural qualities of the eco-corridors and create long-lasting pedestrian streets.



Two proposed access points along the waterfront would allow people to touch the water, whether it be for swimming, boating, or just dipping one's toes. One access point at the end of SW Oak Street would involve a gradual, natural descent toward the river's edge, allowing riparian greenery to grow in lieu of the existing seawall, providing habitat, food, and shelter for aquatic life such as migrating salmon. A seasonal public beach would certainly draw people to the park in the summer, while a sculpture garden, sport

courts, and a playground would provide waterfront activities year-round.

The other access point, at the end of SW Morrison Street, would boast warming huts in the wintertime, beer gardens year-round, a central pavilion for gatherings, performances, or a café, and a stair that allows for waterfront seating in addition to its descent toward a waterside walkway. At the southern end of the park, an opera house would create a year-round attraction beside the Hawthorne Bridge.

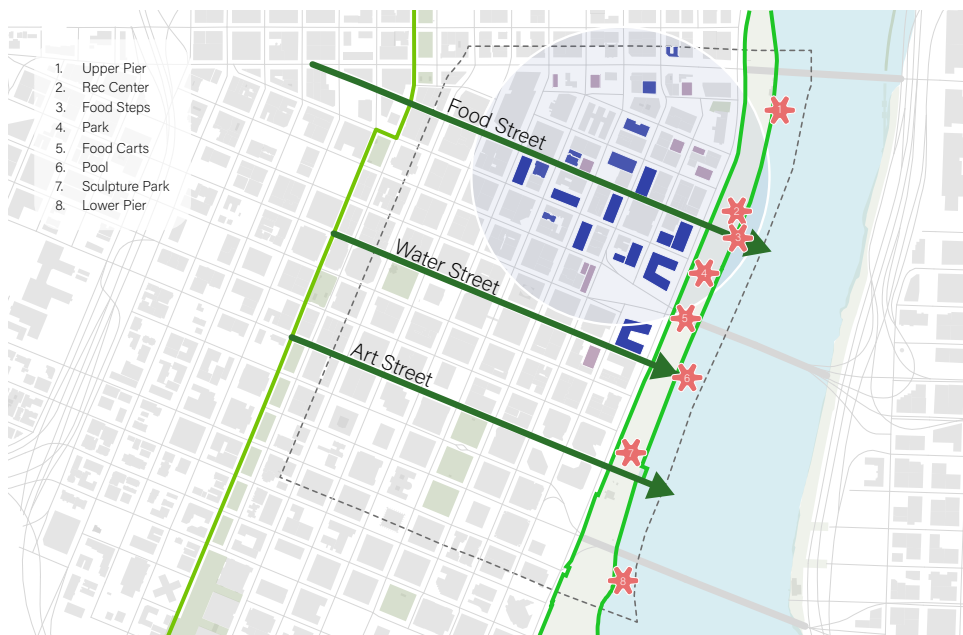
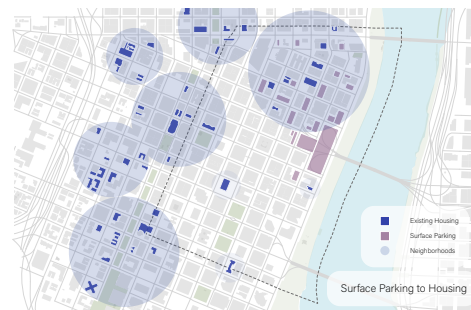
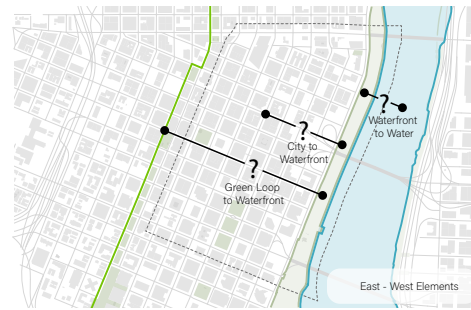
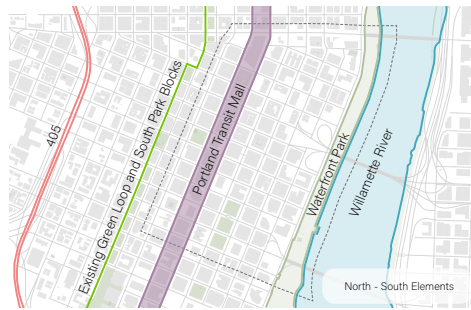


By introducing new housing and a commercial corridor along SW 4th Avenue, downtown's residential and visiting populations could increase significantly. The commercial corridor along SW 4th Avenue would host smaller vendors than those among existing commercial spaces along SW Yamhill and Morrison Streets. SW 4th Avenue would host vendors in shipping-container shops, allowing for a wider range of salespeople and products to grow business in downtown Portland. Craftspeople and artists could rent said spaces, displaying and supporting Portland's rich industrial and arts scene.

New housing projects would range from mid-size to higher density buildings, allowing for a variety of unit types, prices, and neighborhood characters within Downtown. Mid-rise buildings along SW Oak Street would create a smaller neighborhood feel along the eco-corridor, while allowing sunlight to reach the street and trees to grow taller and wider. The high-rise buildings along the waterfront park would create a stronger presence at the Morrison bridgehead, announcing one's arrival to downtown Portland as people arrive through the bridge. A similar approach is proposed along the southern edge of W Burnside Street.

Proposal 6: Willamette Ways

Andy Kreiter, Adel Makboul, and Emma Paget

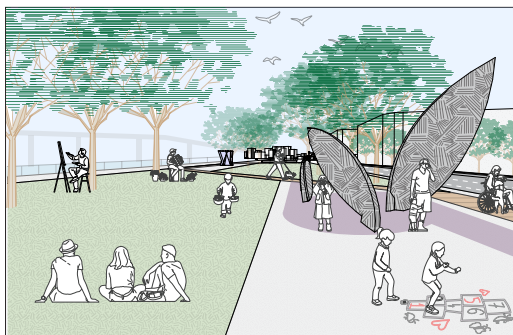
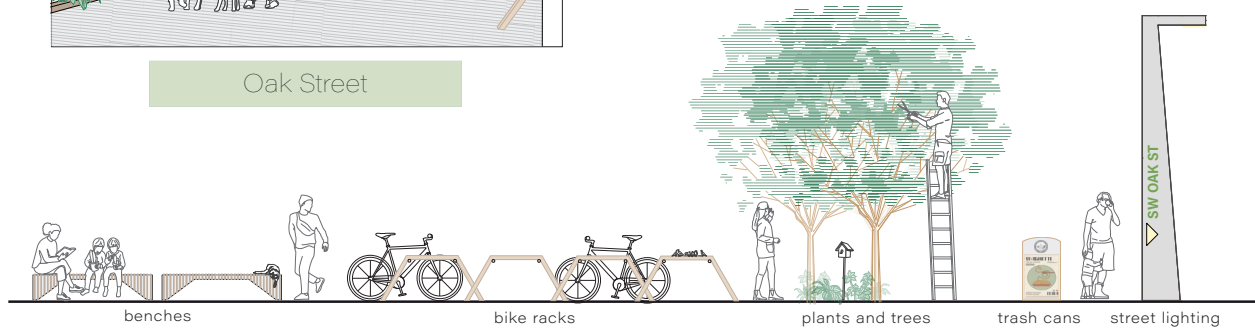


Initial assessment of the existing site led this group of designers to imagine how Portland's Green Loop could be connected to the waterfront park through east-west connections along SW Oak Street, SW Morrison Street, and SW Salmon Street. Using the themes of food, water, and art,

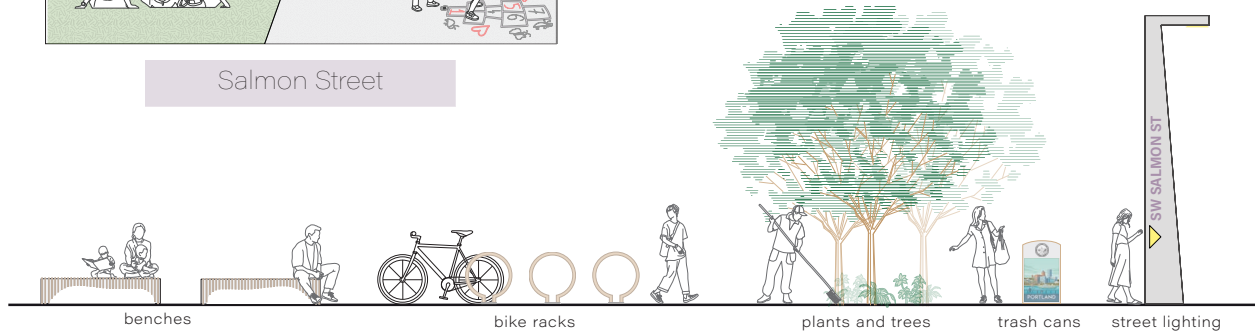
these three streets would contribute to more programming throughout downtown and the park. Lastly, the addition of housing on all existing surface parking lots within the site would contribute to the city's downtown residential population by 3,000 new units across eight buildings.



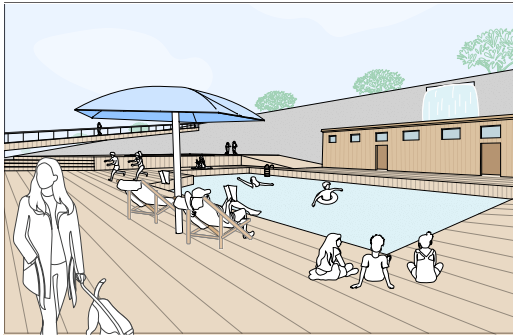
Oak Street



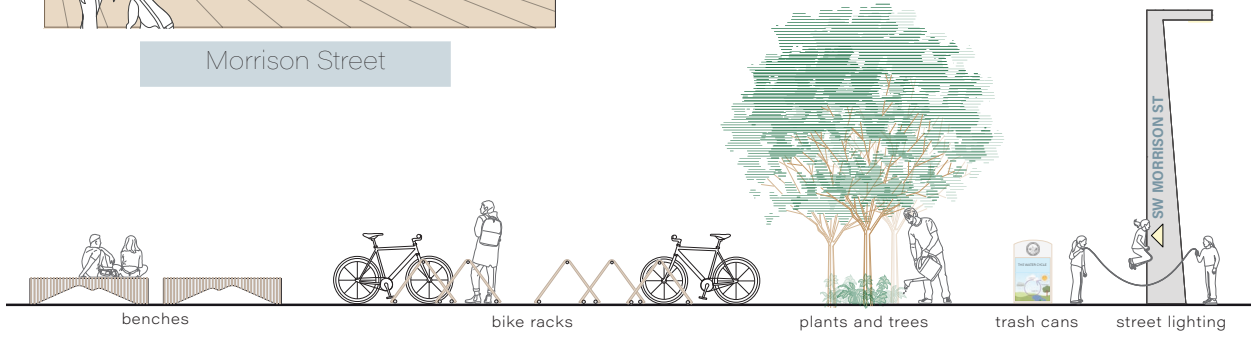
Salmon Street



Student Design Proposals



Morrison Street

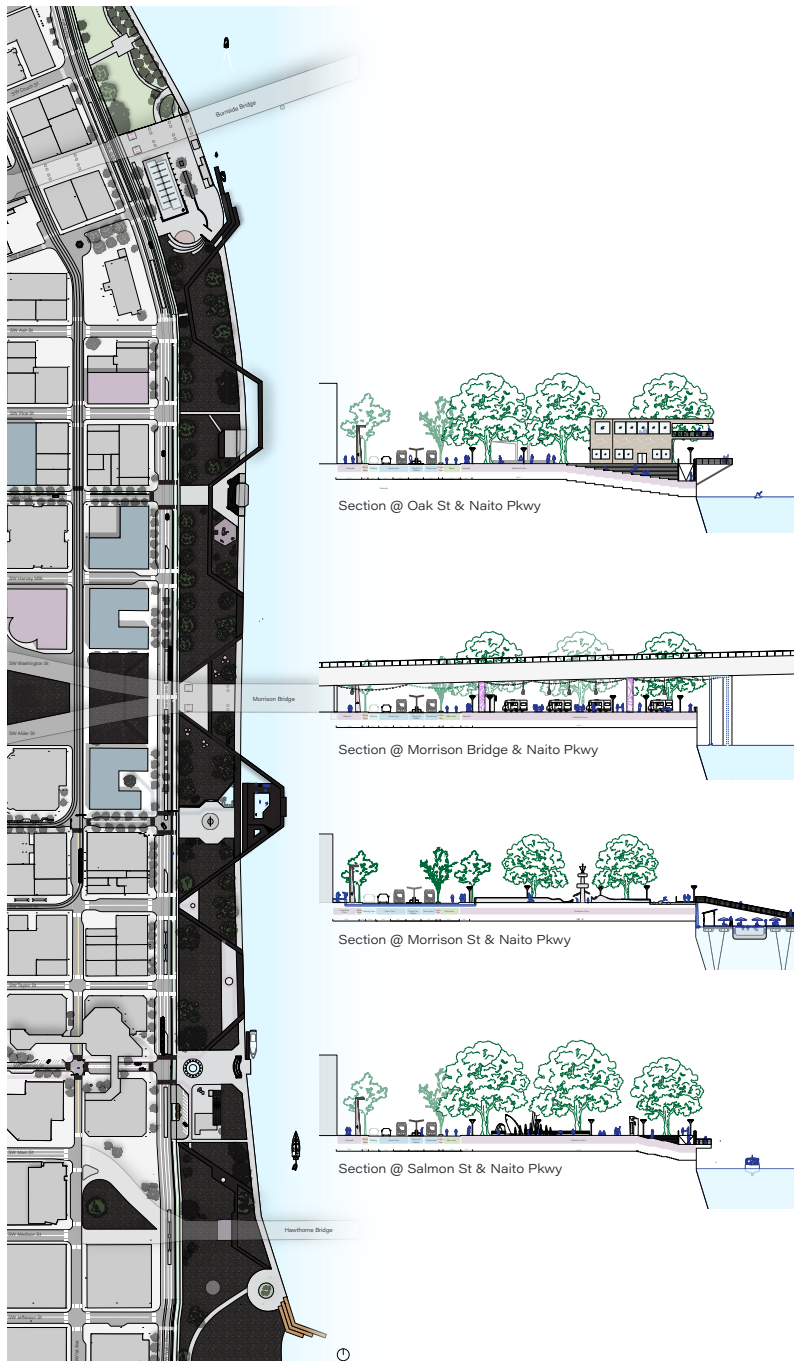


These improved streets would include new benches, bike racks, more greenery, and street lighting that would double as a wayfinding feature. SW Morrison Street

would include a swimming pool at the waterfront park, allowing people to enjoy the river's water in a safe environment.

SW Oak Street would be transformed into a woonerf between certain blocks, where pedestrians would be prioritized but motor vehicles could pass slowly as needed. Food carts, street vendors, and ample seating would make the street a great place to grab food, gather, and eat. Restaurants lining the street would have increased outdoor seating along the sidewalks.

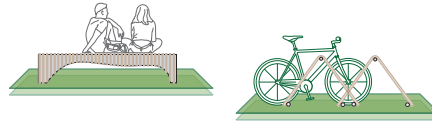
SW Morrison Street, as the water street, would include public Ashi-Yu – foot baths, allowing pedestrians to touch water blocks away from the river. SW Salmon Street would include sculptures as public art along the sidewalks. The buildings lining SW Salmon Street would include spaces for people to make and display art, further emphasizing the art theme along this street.



Student Design Proposals

At the waterfront park, the themes of these three improved streets would culminate with riverside attractions such as a community center, seating-steps

descending toward the riverside, food carts under the bridge, a swimming area, and a sculpture park.



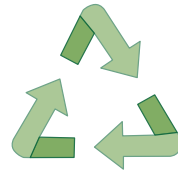
RECLAIMED
WOOD FURNISHINGS



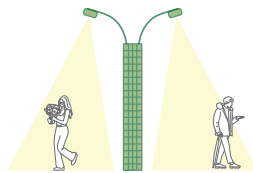
INCREASED PUBLIC
TRANSPORTATION



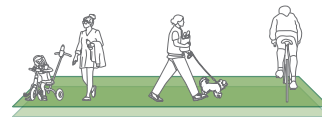
BIOSWALES



SUSTAINABILITY



SOLAR PANEL LIGHTING



CAR FREE STREETS

As for the sustainability of the redesign scheme, the new street furnishings would be made of reclaimed wood. Bioswales could increase the city's stormwater management infrastructure while adding greenery and slowing traffic. Increased

access to public transportation would decrease individually owned motor vehicle traffic and improve the pedestrian experience. Solar powered street lighting would create safer streets using only renewable energy.

Conclusion

While each group took a unique approach in their redesign schemes for the downtown Portland area, there are a few recurring themes across the six different proposals. All groups included new housing projects to increase downtown Portland's residential capacity, pedestrian-centered streets, and areas for gathering at the waterfront park.

Among all groups, a critique of the existing conditions at the waterfront park was a lack of programming, such as activities to do at the waterfront, especially in the non-summer months. Another common critique was the lack of water access at the Willamette; while pedestrians can walk along the riverfront in Tom McCall Park, there is no opportunity for people to touch the water due to the height of the sea wall and its design. Many of the students' designs included opportunities for swimming, or at least walking down to the water's edge. A few groups recommended removing the sea wall entirely, allowing for naturalization of the riverbank, which would improve ecological conditions for aquatic plants and wildlife. Some groups

designed ways for people to interact with the natural ecology or other water features throughout downtown streets, not only at the riverfront.

Beyond the waterfront park, the students' proposals included design schemes that would introduce a hierarchy, or some kind of change in pace, among Portland's even city block grid. Many groups chose to emphasize Portland's existing food and arts scenes, using these as themes for economic and cultural growth within downtown. Multiple redesign proposals chose to emphasize these themes along specific streets, creating a hierarchy within Portland's existing grid. Other groups created a hierarchy within downtown blocks by introducing green streets, which included more vegetation, tree cover, pedestrian space, and bike lanes.

Overall, an increase in housing opportunities across varied price ranges and unit sizes, pedestrian-centered street design, and free, public programming at the waterfront park were common to all student proposals.