



MILWAUKIE OREGON

Architecture and Urban Design Ideas
for Livability and Ecological Harmony

Designs by Shanghai Xian Dai Architects
and University of Oregon Architecture
students

Booklet by Nancy Y Cheng & Matthew
Nyweide

<http://blogs.uoregon.edu/oneworld>



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Downtown Milwaukie provides a multi-faceted location for studying historic development, examining current dynamics and projecting future possibilities. In January to March 2015, a University of Oregon architectural design studio brought Oregon students and visiting Shanghai architects together to learn about Milwaukie and propose ways to create a more livable, ecological future with the opening of a new light-rail station. Thoughtful Milwaukie planners, architects, stakeholders and consultants introduced the history and challenges of the area, along with emerging opportunities. Hearing about the piecemeal progress from passionate advocates provided compelling motivation for the class. The group enjoyed digging through many years of planning studies carefully documented by the City and neighborhood stakeholders.

The area's bucolic natural beauty and Main Street's pedestrian-friendly small-town character are immediately evident on first encounter. The creeks and riverbanks and lush green trees provide a graceful setting very different from urban centers dominated by buildings. But the challenges of an automobile-centric society are just as present in the form of McLaughlin Boulevard, parking lots and under-developed plots.

The moment of our site visit revealed a city in transition. Investment in the Riverfront Park, Adams Street Connector, North Main housing and the TriMet MAX light-rail station were catalyzing a long-awaited moment of change. Outside of new upscale Main Street developments and the leafy residential neighborhoods, neglected spots looked ripe for development. The studio's purpose was to identify ways to build on Milwaukie's existing strengths, such as the character of Main Street, through small urban interventions and buildings. This booklet summarizes our perceptions and suggestions.

Nancy Cheng, September 2015

Complete presentations and bibliography are online:

<http://blogs.uoregon.edu/oneworld>

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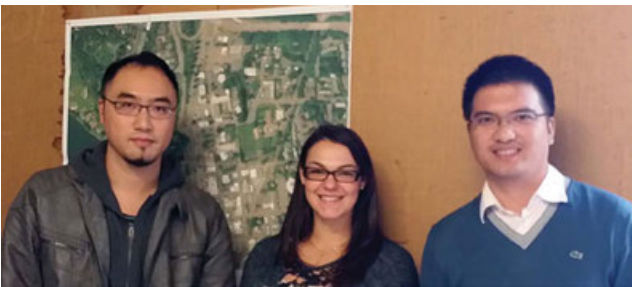
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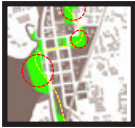


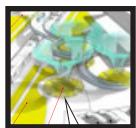




Nancy Cheng

The enthusiasm of the Milwaukie leaders, design consultants and community members made this a memorable learning experience. The Chinese architects felt it was invaluable to study an archtypal U.S. community and see the connections between public transportation, land-use planning and economic conditions. They were impressed that young students could propose ideas directly to decision makers. The Oregon hosts served as excellent interpreters for the Chinese visitors. Students and faculty alike enjoyed learning from the diverse concepts brought by our generous clients, critics and visitors.




URBAN DESIGN

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Bob Bo Hu			
Jian Zhou	Healthy Trails		6-7
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SITE DESIGNS

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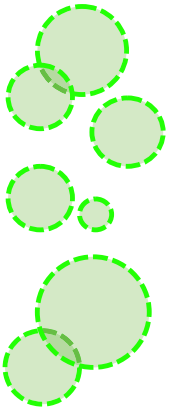
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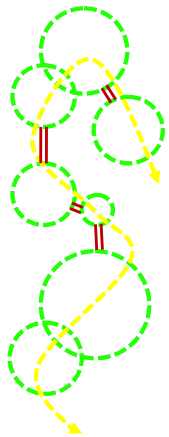
XIAN DAI DESIGN TEAM

Highlighting natural assets

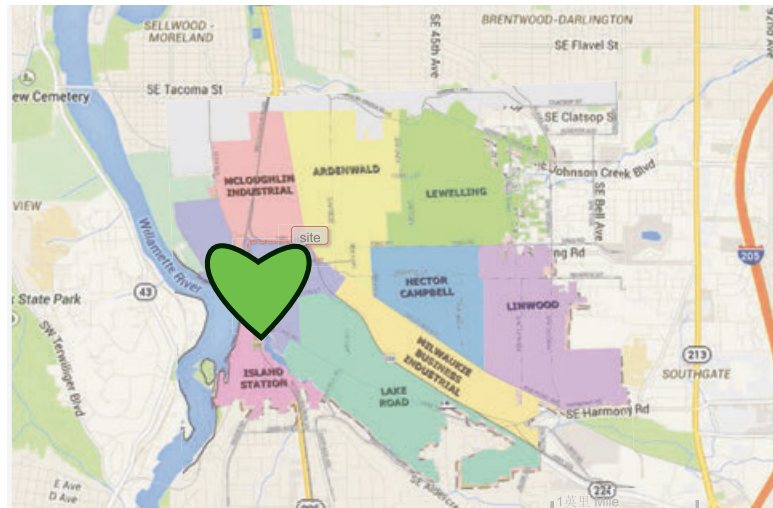
Milwaukie's existing natural areas can be linked with a series of pedestrian walkways to form a green network. Downtown would be the Green Heart from which radiates green arteries and nature-friendly pedestrian walkways. The creeks that feed into the Willamette River are natural wildlife corridors and pedestrian conduits. With the Kellogg Dam Habitat Restoration, salmon passage and stream habitat will provide visual interest. Where Johnson Creek and Spring Creek are hidden, they could be revealed with through interpretive artwork.



EXISTING GREEN NODES



NEW CONNECTIONS



STACY LEVY'S ARKANSAS RAIN GARDEN REVEAL UNDERGROUND WATER

DEVELOPING THE GREEN HEART

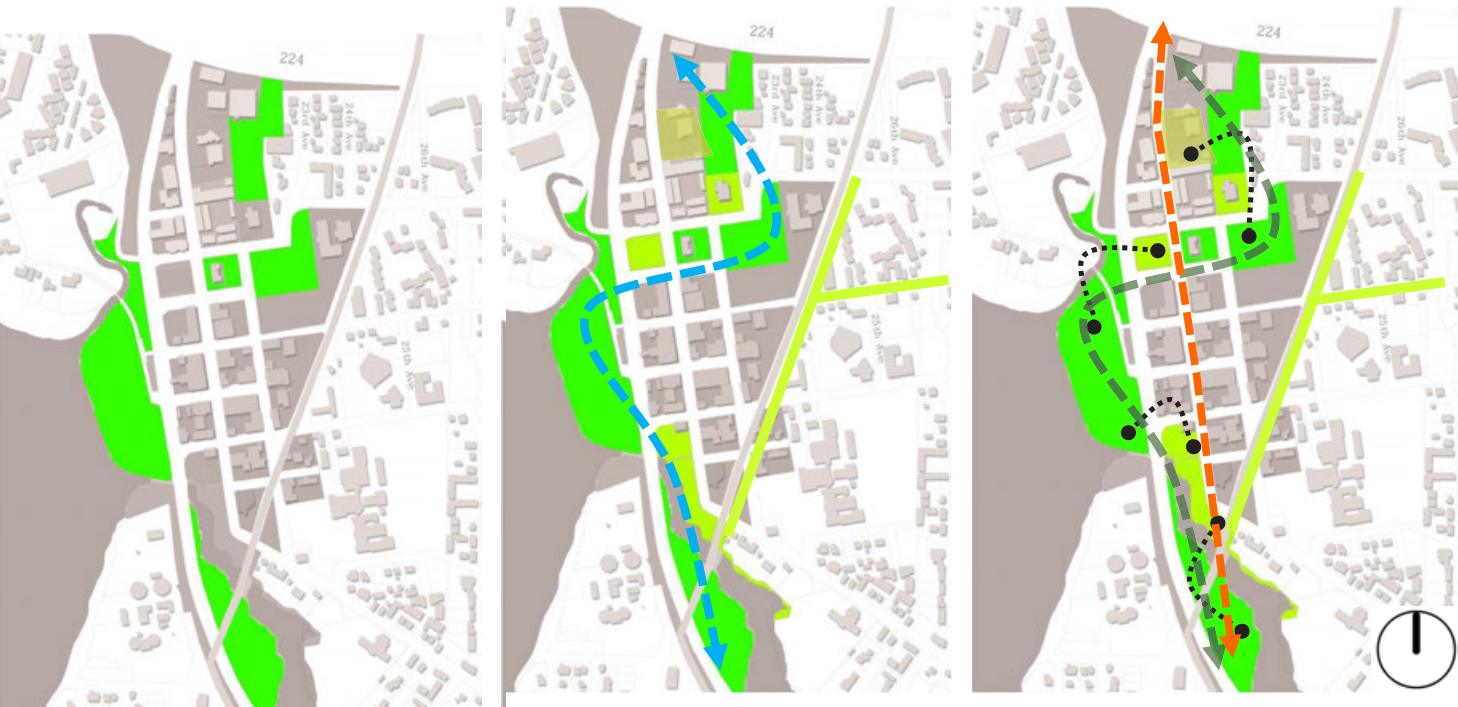
EXISTING GREEN NODES



ADD AND INTEGRATE



GREEN HEART NETWORK



INTEGRATING WATER

EXISTING WATERWAYS



CLEAR AND SUPPLEMENT



WATER HIGHLIGHTS PATHWAY

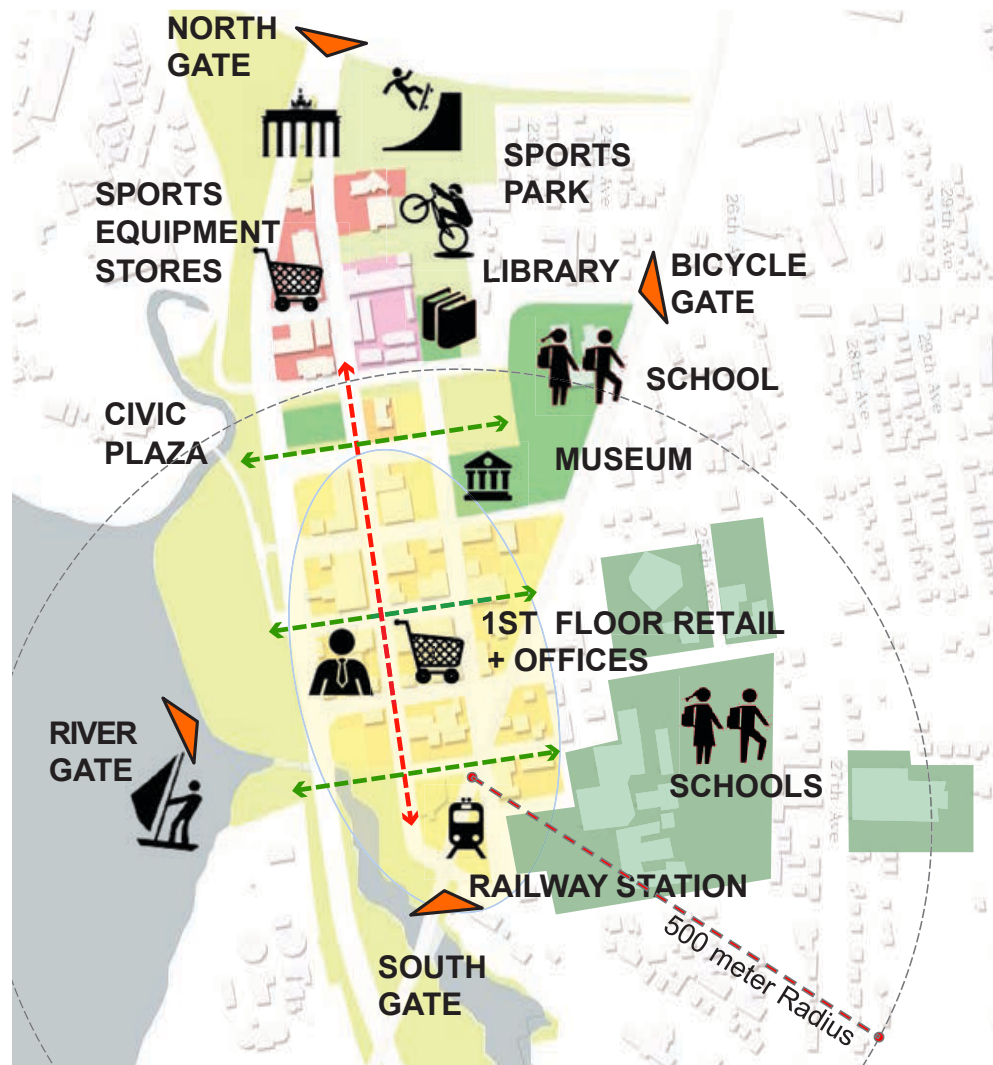


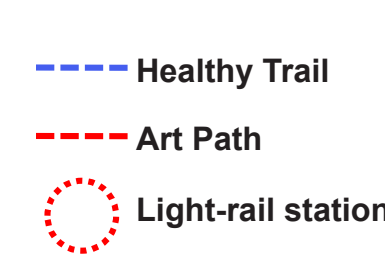
XIAN DAI DESIGN TEAM

Mixed-Use & Active Recreation = Vitality

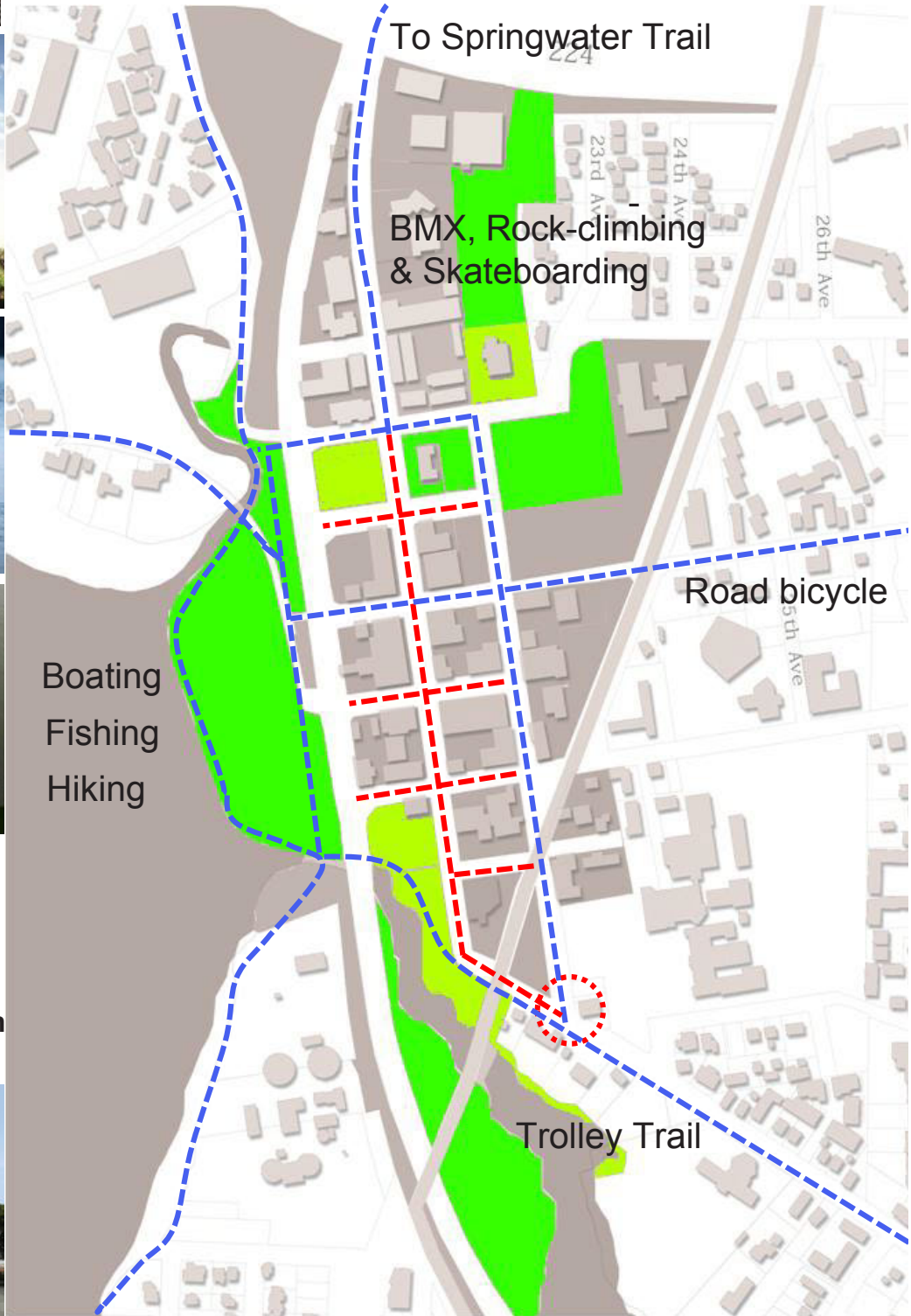
Downtown's Riverfront Park is a natural starting point for boating, fishing, and bicycling. Cyclists can connect to the Trolley Trail to the south and to the Springwater Corridor to the north. A walking loop could connect MAX light-rail users with these recreation opportunities that highlight the area's natural features.

More edgy, urban activities would enhance the area's appeal to youth. Rock-climbing, BMX and skateboarding park could attract the teens and young adults who visit Dark Horse Comics store. A sports park and related equipment sales and rentals would naturally fit at the north end of downtown among car-oriented businesses.





Public space that supports a range of activities could strengthen the social foundation of downtown. A sports park, arts center and civic plaza would complement Milwaukee's natural parks. A central Art Path would lead people to Healthy Trails that connect with the larger neighborhood.



XIAN DAI DESIGN TEAM

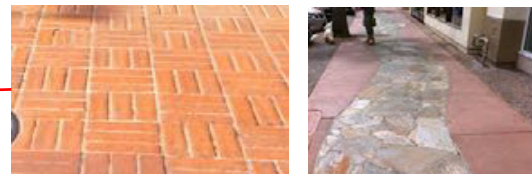
Revitalizing Lost Space

The historic downtown has some attractive shops and cafes whose pedestrian appeal could be increased by introducing an Art Path with sculptures, vendor kiosks and seating areas. Building on the City Hall Sculpture Garden, local artists could install pieces temporarily in under-utilized spaces such as parking lot corners until more intensive development occurs. Rotating the art would provide regular opening events to attract visitors, with exhibits timed to fit with larger Portland Metro events such as comic conventions.

Sites could be connected by inexpensive street painting as in Boston's Freedom Trail, special paving or sculptural beacons.



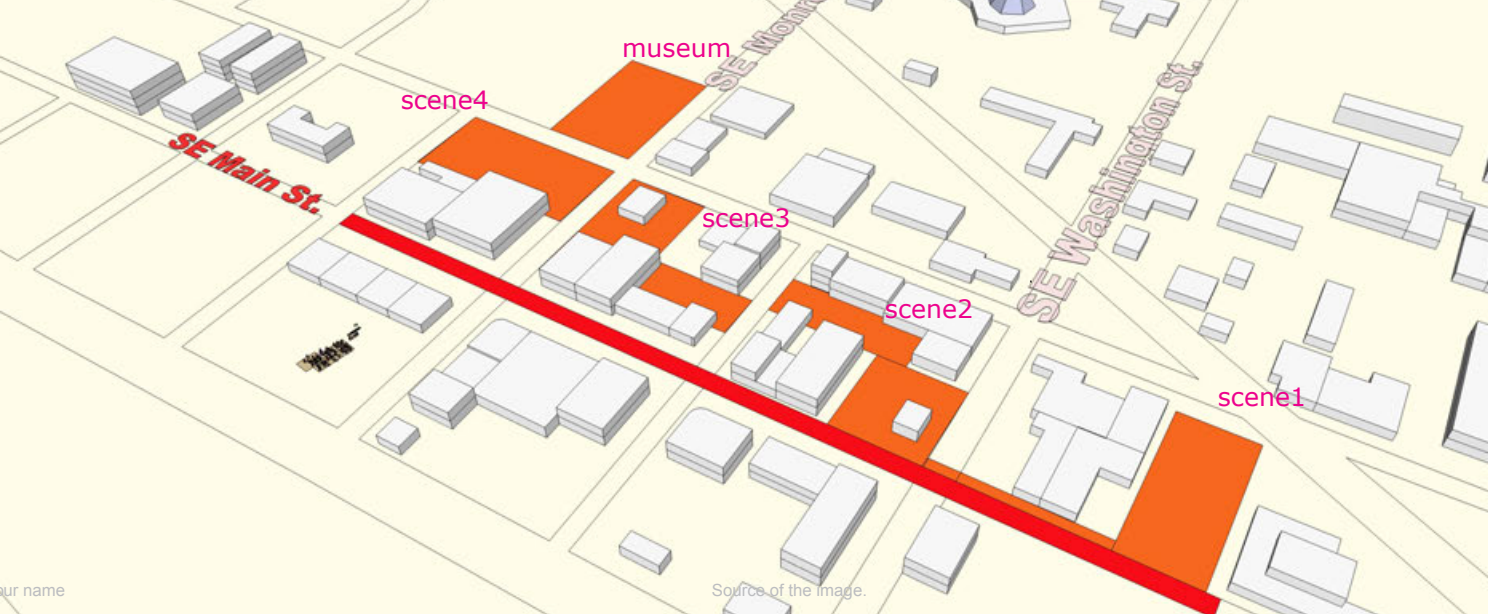
Retail Kiosk: coffee / sandwich



Special paving textures



Sculpture / Attraction points

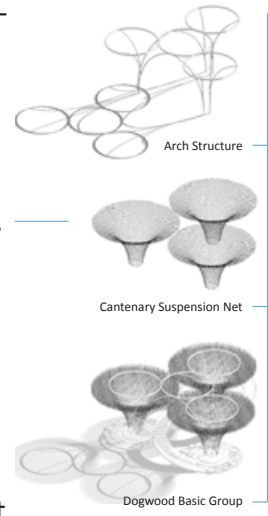


BOB BO HU Iconic Urban Landmarks

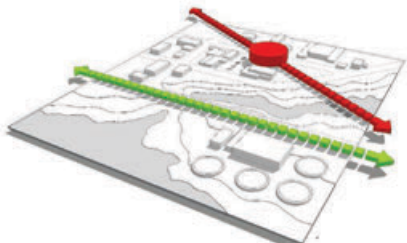
The Arts Path could be highlighted through a sculptural translation of the Milwaukie Dogwood tree. Based on Singapore's Gardens by the Bay, these urban tree umbrellas would lead visitors from Milwaukie's new light rail station into historic downtown and northward to the performing arts center. The futuristic tree form represents Milwaukie's commitment to sustainability and development.

The umbrellas would help anchor the station and connect both sides of the platforms. Solar panels mounted into the upper structure could either return electricity to the city grid or light the area at night and charge electric cars parked nearby. The trees could also provide shade and collect stormwater. They incorporate swales to purify road runoff before returning it into the earth.

The base of the umbrellas could be used for seating along with public art, wayfinding or sustainability signage.



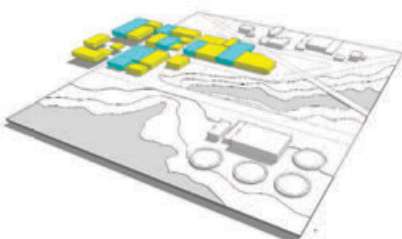
KEY MAP



TRANSPORTATION

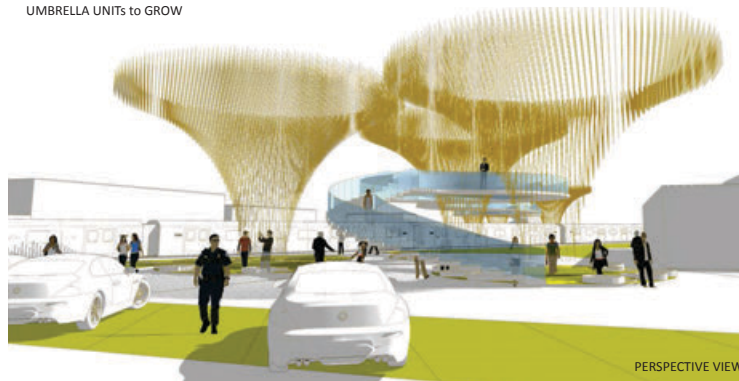


EXISTING

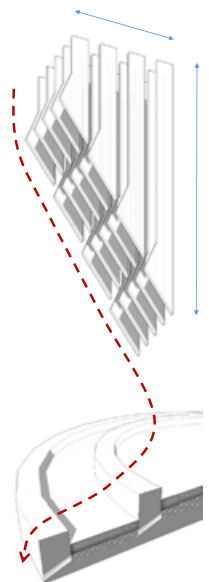


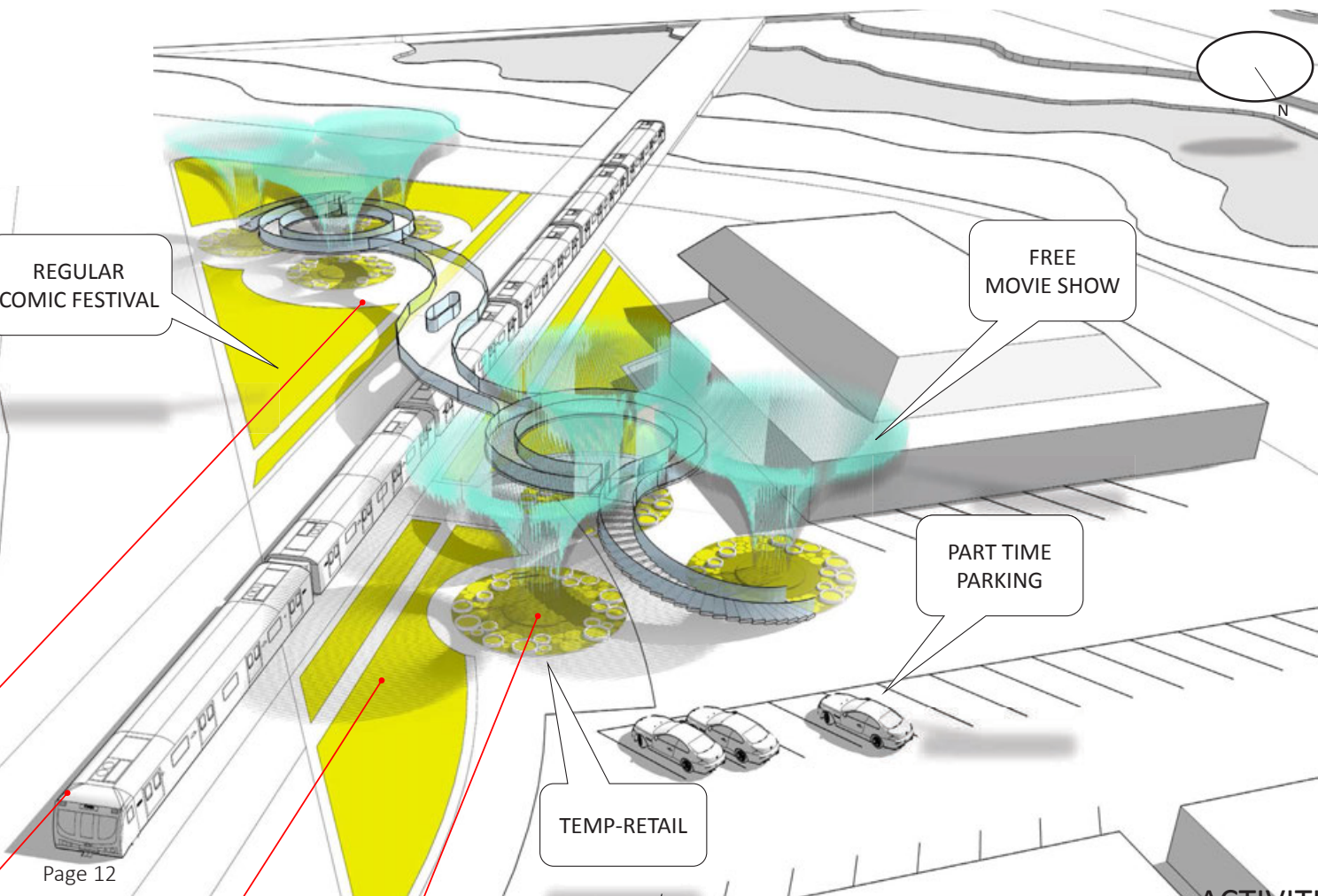
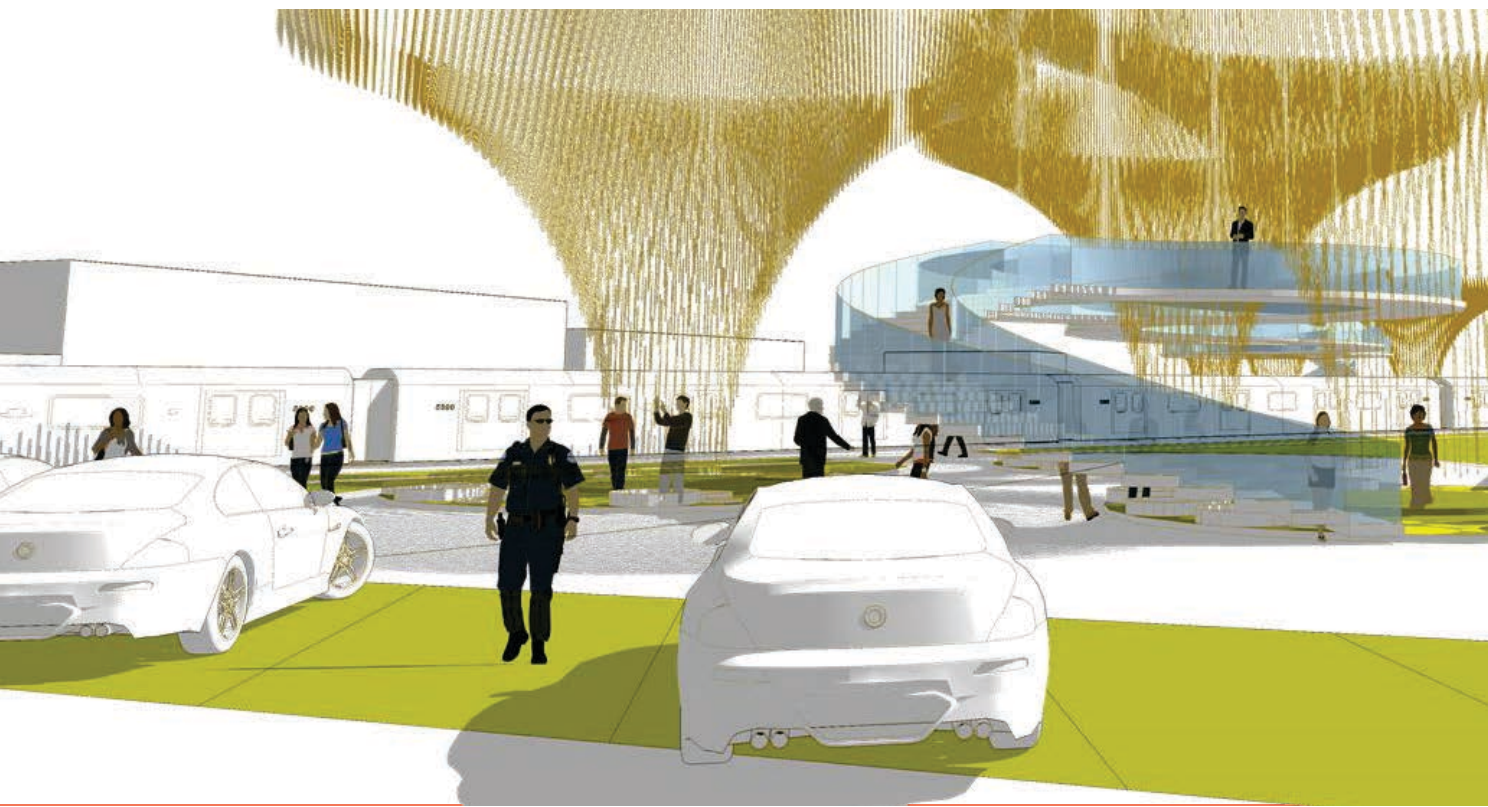
URBAN INFILL

UMBRELLA UNITS to GROW



PERSPECTIVE VIEW





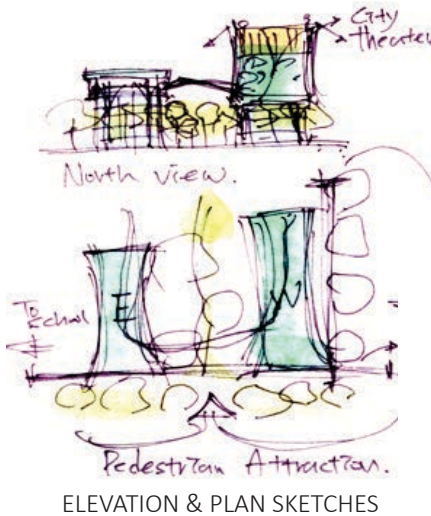
WEI CHANG Learning from Nature and the Community



KEY MAP

The northern culmination of the Art Path would be the Performance, Art & Agriculture Hall (PAAH), a community hub dedicated to both public and for Waldorf School activities. Built on the south half of the Waldorf School fields, it would provide a green east-west connection from the Willamette River, past City Hall, to the entrance of the Waldorf School. North-south, it would link the Ledding Library, Scott Park and North Main housing to the Art Path. It is envisioned to sit amidst multi-family housing for residents who desire the convenience of accessible activities and transit.

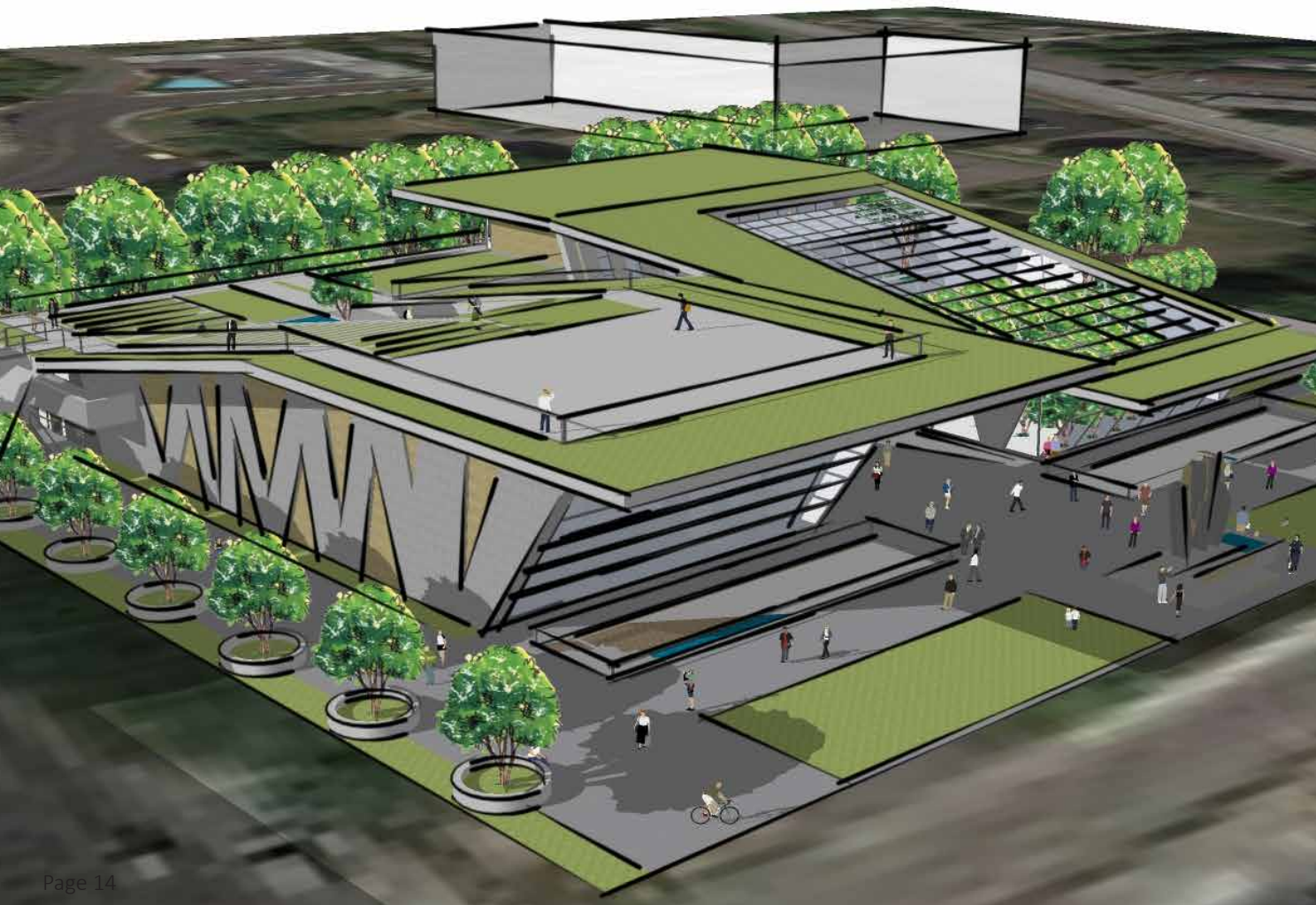
Community members could benefit through contributing to the Waldorf progressive arts and agriculture education. PAAH brings together neighbors with specialties such as gardening, performing, and drawing, to share their knowledge among students and neighbors. It is an environment where students learn from not only the teacher, but with nature and the community as a whole. The performance hall and art gallery invites the local community to celebrate their creativity. The community garden and greenhouse helps the Waldorf School to educate students about nature and agriculture through hands-on experience. The center will demonstrate how sustainable living can knit together a multi-generational community and promote healthy and active lifestyles.



ELEVATION & PLAN SKETCHES



WATER COLLECTION



DIANNA MONTZKA

Gardening meets wind power

This project shows how compact multi-family housing can be attractive and convenient. Located next to the Adam's Street Connector and the MAX light rail station, the building takes full advantage of its prime location. The housing is designed in conjunction with an adjacent underground car parking structure to the west, covered by an urban garden tended by residents that would be the focal point of the Adam's Street Connector.

Visitors and Portland commuters could park close to the MAX, enjoy beautiful riverfront views from the garden and take advantage of commercial and retail space along the ground floor perimeter. A range of unit types welcome singles, elders and families of different sizes, with vertically separated live-work units and townhouses providing strong acoustical privacy.

The design focuses on the idea of community with a central courtyard to complement the more public riverview garden. Multi-colored units add vibrance to the downtown and attract attention for the retail space below.

The subterranean parking structure features wind turbines and a rolling green space to act as a visual buffer from the busy McLoughlin Blvd.

Housing Plans



Main Floor

Live / Work Plans



1st Floor



2nd Floor



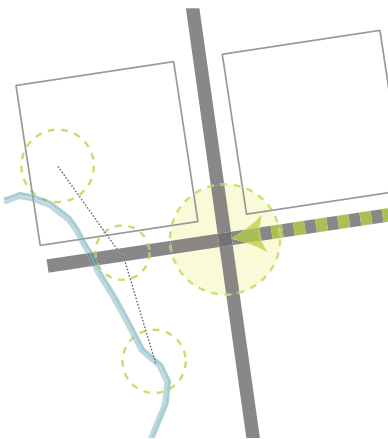
3rd Floor



Roof Plan



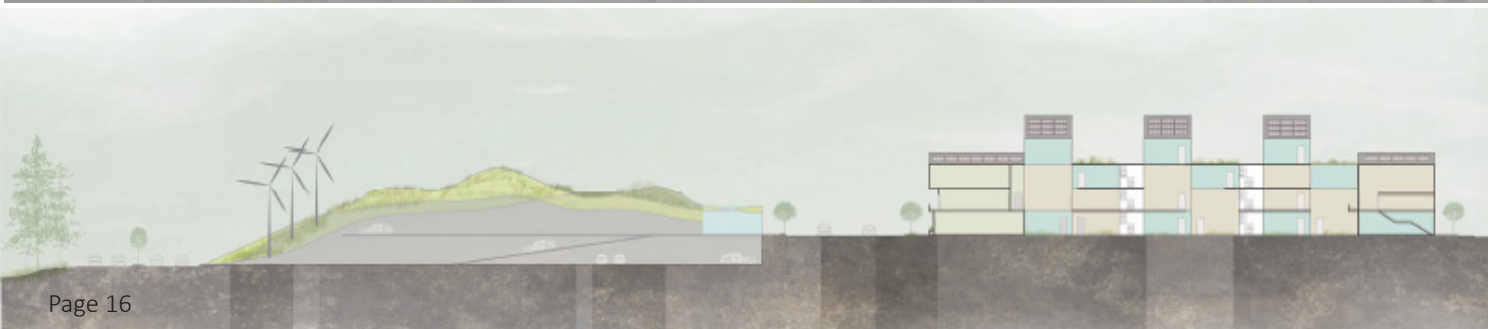
KEY MAP



RE-ESTABLISHED NODES



SITE PLAN



JACKIE STINSON

Courtyard light and amenities

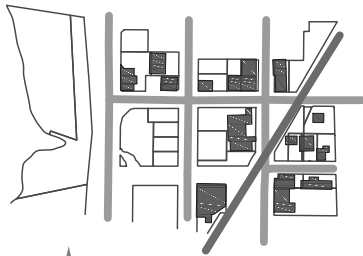
An alternate design for the north side of the Adams Street Connector contrasts quiet perimeter blocks with sculpturally organic rooms in a garden courtyard. The forms reflect concerns of fitting the urban context and creating human experiences. The rectangular building heights are tuned to ensure that the courtyard receives adequate daylight and surfaces are covered with either seasonal vines or built-in sun-shades. The major public entry is located at the southwest corner to recognize the importance of Main Street and the riverfront.

The building features an art gallery with retail below housing and offices to activate the streets edge and give privacy to the residence and employees. Parking enters on Washington Street hidden from view by an accessible green roof. The gallery is on the second floor at the Adam's Street edge so there is a visual connection with the main transportation hub.

The office spaces and housing units are unified by a central green courtyard which acts as the backyard and collaborative hub. It contains a fitness center, open work space, a small café and relaxation nooks. These amenities, along with the prime location will attract people from all walks of life.



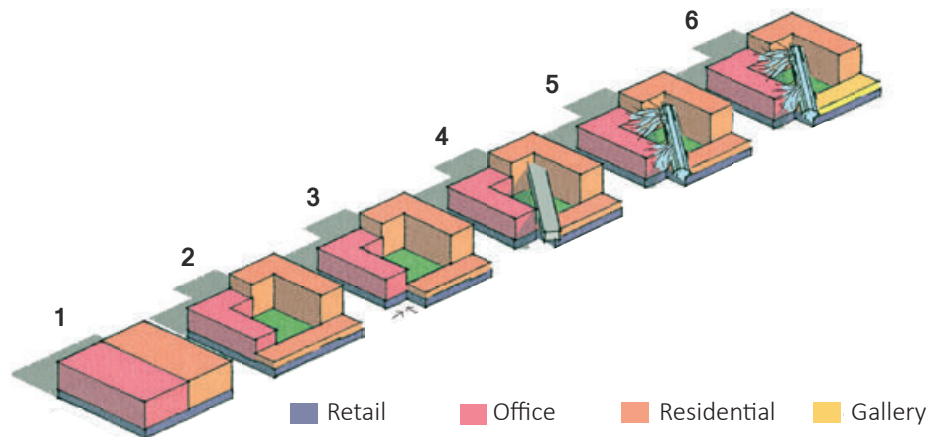
KEY MAP



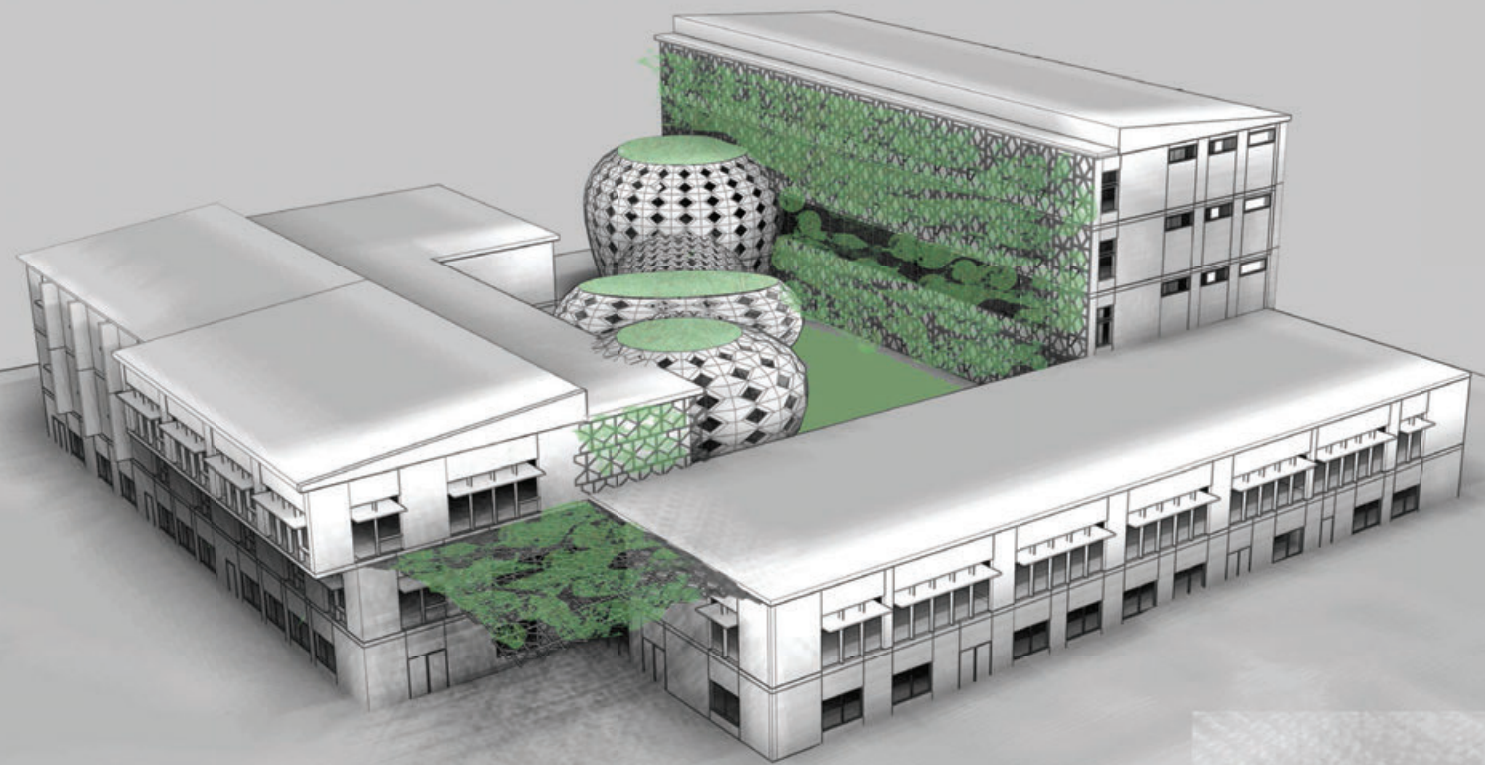
EXISTING CONDITION



PROPOSED



■ Retail ■ Office ■ Residential ■ Gallery



MAIN ENTRY AT WASHINGTON AND MAIN STREET

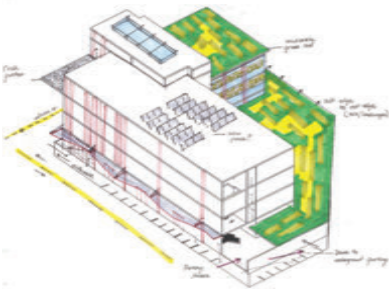
JEFF TORESON Business Incubator



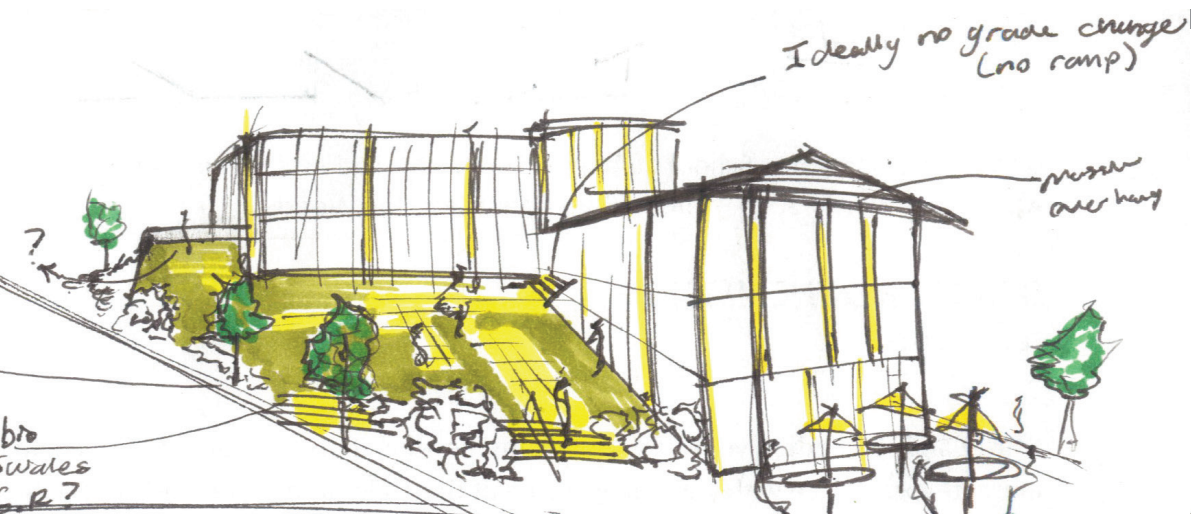
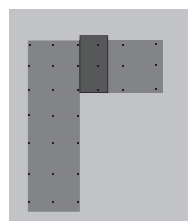
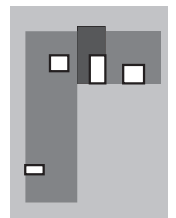
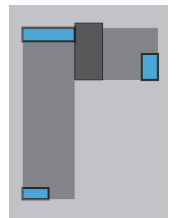
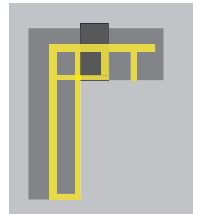
KEY MAP

On the south side of the Adams Street Connector, this commercial building serves as a welcoming point for visitors arriving by Lake Road from the south, and TriMet light rail to the east. Featuring a food court and market, retail shops and office space, the design provides small business owners a way to take advantage of the new commuter activity. The building welcomes vendors to start with a kiosk and build more permanent headquarters as their business grows.

Visitors approaching by rail can see the sunny green courtyard before alighting. As they walk from the platform on the Adams Street Connector towards Main Street, they are lured by aromas and music into buying a coffee and lunch. Parking underneath the courtyard is naturally lit at the edges and with skylights. Rainwater flows towards the southwest corner where a landscaped water feature and sign announce the gateway to nature-friendly Milwaukie.



green roof





MATTHEW NYWEIDE

Eco-lifestyle with river views

Across Main Street from the Adams Street Connector, the former Cash Spot site provides lovely views of the Willamette River and the adjacent Kellogg Creek habitat restoration area. A residential block and pedestrian bridge wrapped in foliage creates a gateway to downtown Milwaukie for northbound vehicles on McLoughlin Boulevard.

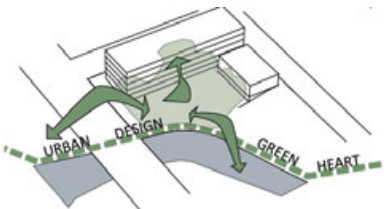
On Main Street, the project supports urban vitality with live-work spaces inviting entrepreneurs to inhabit downtown 24/7. On the more private Washington Street, most of the residents enter and can access gym, community lounge and porch spaces. Underneath, parking on the ground level of McLoughlin gets cars off the street into pedestrian downtown.

The lush vegetation of the Waterfront Park and the Kellogg Creek area is translated into site landscaping that grows up and over the south and west facades of the building. The green facade system provides summer shading and collects seasonal irrigation water, stored below the large porch.

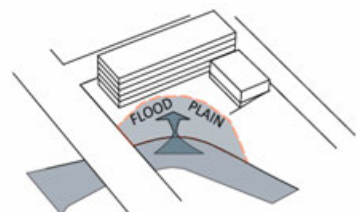
To complement the natural landscape accessible to the public, the private roof features a co-op garden space with photovoltaics and solar hot water collectors.



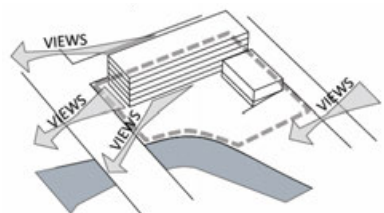
KEY MAP



CONNECTIONS



NATURAL BOUNDARIES



VIEWS



PHOTOVOLTAICS



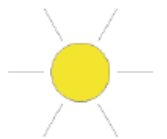
SOLAR
HOT WATER



WATER
COLLECTION



NOISE
MITIGATION



DAYLIGHTING



NATURAL
SHADING



HAYDEN KAISER

Take me to the river



KEY MAP

Another vision for the southern end of downtown proposes futuristic green terraces as a contrast to the natural Kellogg Creek area below. The planted pathways connect visitors and locals from the MAX light rail stop to Milwaukie's scenic Riverfront park via a multi-modal bridge along Washington Street, similar to Jones and Jones' habitat-filled Land Bridge in Vancouver, WA. The paths lead people past a Main Street restaurant, shops and a cafe with a river view, attracting commerce as well as new residents and business owners.

The lower level McLoughlin retail spot gives excellent visibility for a grocery store, with the rest of the level used for parking for residents, employees and visitors as it sits below Main Street. Three floors of residences sit above the food, retail and office spaces, with units ranging from 500 to 1000 square feet. These units have spectacular views of the riparian zone of Kellogg Creek to the South, the Willamette River to the West, and downtown Milwaukie to the North.



4th Floor
1/16" = 1'0"



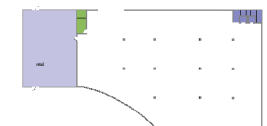
3rd Floor
1/16" = 1'0"



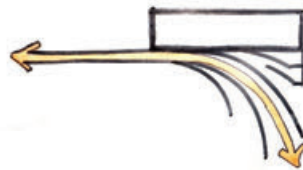
2nd Floor
1/16" = 1'0"



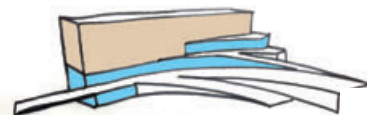
Ground Floor
1/16" = 1'0"



Lower Level
1/16" = 1'0"



CONNECT



CONTRAST



TRANSITION





MUBAI CHEN Knitting nature into the city

A third design for the southern site puts a bold housing block above a vital retail and restaurant center. A series of ramps and terraces leads pedestrians toward the Willamette River, delivering customers to the small businesses with a pleasant journey that moves from garden plantings to attractive shops. Visitors can choose to bridge across McLoughlin Boulevard to Riverfront Park or descend towards the more wild Kellogg Creek habitat area.

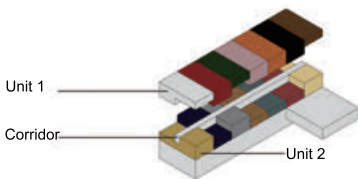
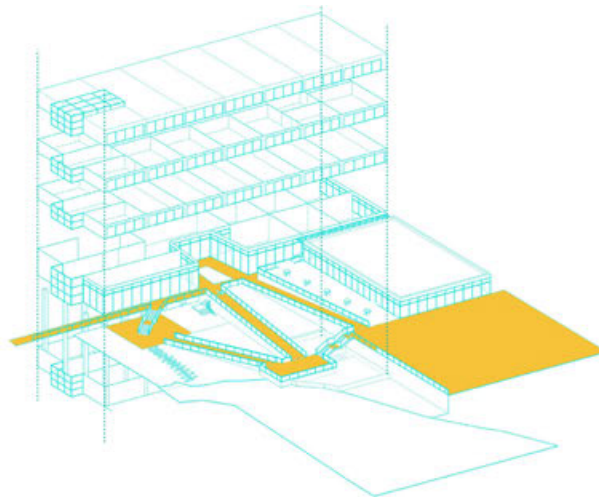
The upper three levels are dedicated to luxurious residences that have cross-ventilation, balconies with excellent views and southern solar exposure. To encourage community, a large outdoor patio is provided in the southwest portion of the site.



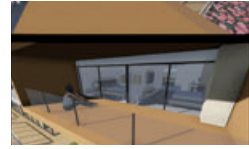
KEY MAP



FIRST FLOOR



UNIT ORGANIZATION





CONCLUSION

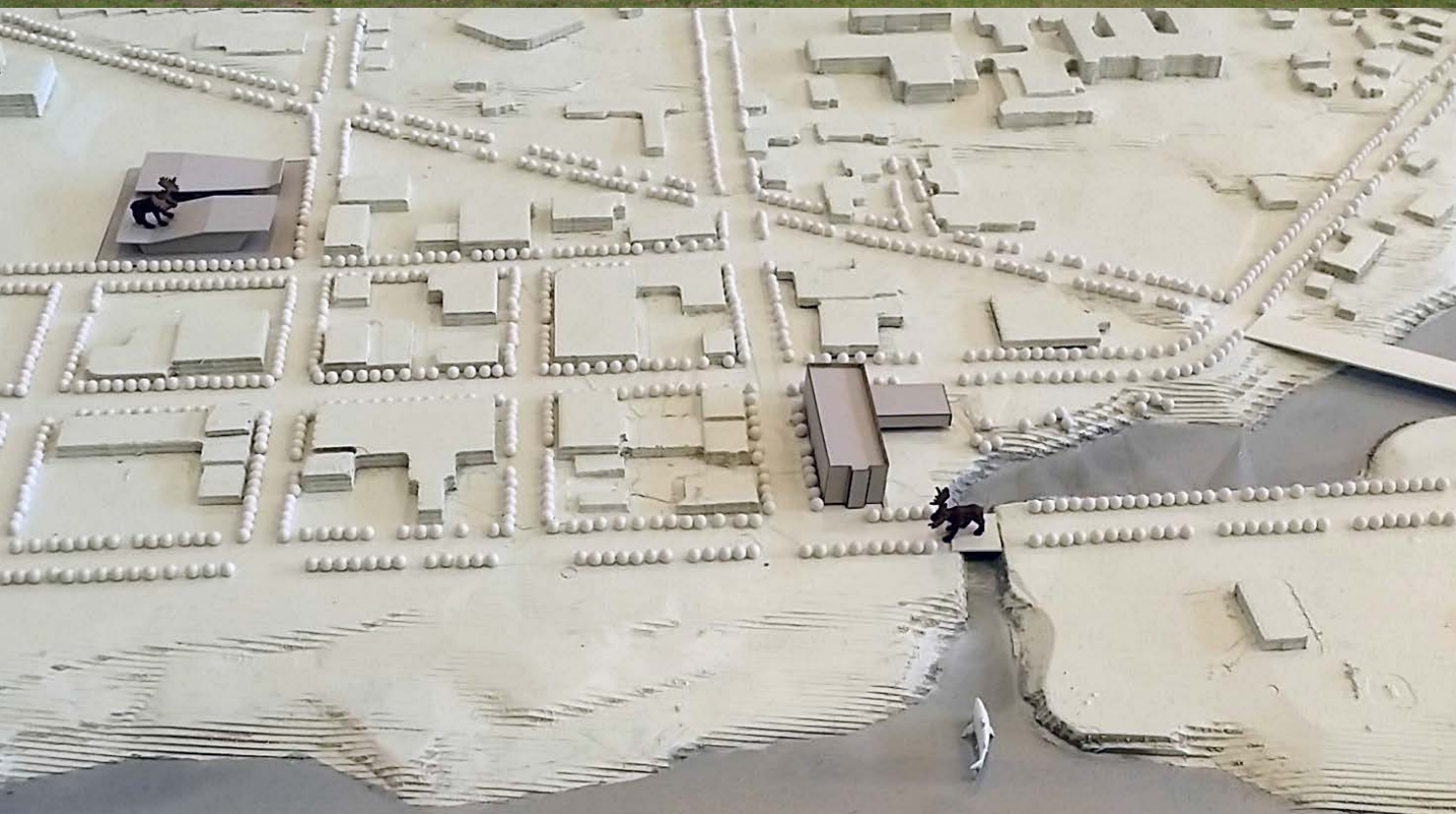


With the new light-rail station, thoughtful planners and beautiful natural setting, Milwaukie's downtown has strong ingredients for sustainable urban development. Economic vitality could be increased by strengthening pedestrian appeal with an Art Path, Performing Arts and Agriculture Hall and Healthy Trails. Our individual designs show how buildings can reinforce the hierarchy of the city plan by putting shops and eateries on Main Street and encouraging motorists to park their cars. Planning standards for wide sidewalks with planting strips and minimal set-backs, incentives to fill under-utilized lots and regular event planning can further support livability.



Downtown Milwaukie can appeal to people of all ages. The area's many students are a natural clientele for youth arts and recreation activities. Athletes could appreciate biking paths and hiking trails that highlight attractive natural waterways. Elder residents could teach students about the area history and keep the area active during the daytime. Strong voices from all these groups can keep Milwaukie moving towards a bright future.





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