



North Downtown Waterfront Development: Building Design Proposals

Fall 2010 and Winter 2011 • Architecture

Elizabeth M Schmidt • Architecture

Nico Larco • Assistant Professor • Architecture

Acknowledgements

The participants of this course would like to acknowledge all of the City of Salem staff members who offered knowledge, support, and constructive criticism throughout the design process: Courtney Knox, Senior Project Manager from the City's Urban Development Department; Sheri Wahrgren, Salem's Downtown Revitalization Manager; John Wales, Urban Development Department Director; and Vickie Woods, Community Development Director.

Students would also like to thank the University of Oregon faculty, staff, and visitors who offered guidance both during structured reviews and outside of set class times: Austin Bailey, Juli Brode, Virginia Cartwright, Howard Davis, Stephen Duff, Ihab Elzeyadi, Michael Fifield, Mark Gillem, Peter Keyes, Kaarin Knudson, Brook Muller, Melinda Nettles, Kevin Nute, Otto Poticha, John Rowell, Christine Theodoropoulos, Jim Tice, Roxi Thoren, and Robert Trempe.

And a special thank you to the studio faculty, professor Nico Larco and instructor Allen Lowe, who took the time to fully engage the students with the city, the site, the project, and the many participants of the North Downtown Waterfront classes, including University of Oregon planning students and faculty.

SCI Directors and Staff

Robert Liberty, Executive Director

Nico Larco, SCI Associate Director, and Associate Professor of Architecture

Marc Schlossberg, SCI Associate Director, and Associate Professor of Planning, Public Policy, and Management

Chris Jones, SCI Program Manager

Amy Hause, SCI Program Manager

About SCI

The Sustainable Cities Initiative (SCI) is a cross-disciplinary organization at the University of Oregon that seeks to promote education, service, public outreach, and research on the design and development of sustainable cities. We are redefining higher education for the public good and catalyzing community change toward sustainability. Our work addresses sustainability at multiple scales and emerges from the conviction that creating the sustainable city cannot happen within any single discipline. SCI is grounded in cross-disciplinary engagement as the key strategy for solving community sustainability issues. We serve as a catalyst for expanded research and teaching, and market this expertise to scholars, policymakers, community leaders, and project partners. Our work connects student energy, faculty experience, and community needs to produce innovative, tangible solutions for the creation of a sustainable society.

About SCY

The Sustainable City Year (SCY) program is a year-long partnership between SCI and one city in Oregon, in which students and faculty in courses from across the university collaborate with the partner city on sustainability and livability projects. SCY faculty and students work in collaboration with staff from the partner city 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. SCY's primary value derives from collaborations resulting in on-the-ground impact and forward movement for a community ready to transition to a more sustainable and livable future. SCY 2010-11 includes courses in Architecture; Arts and Administration; Business Management; Interior Architecture; Journalism; Landscape Architecture; Law; Planning, Public Policy, and Management; Product Design; and Civil Engineering (at Portland State University).

About Salem, Oregon

Salem, the capital city of Oregon and its third largest city (population 157,000, with 383,000 residents in the metropolitan area), lies in the center of the lush Willamette River valley, 47 miles from Portland. Salem is located an hour from the Cascade mountains to the east and ocean beaches to the west. Thriving businesses abound in Salem and benefit from economic diversity. The downtown has been recognized as one of the region's most vital retail centers for a community of its size. Salem has retained its vital core and continues to be supported by strong and vibrant historic neighborhoods, the campus-like Capitol Mall, Salem Regional Hospital, and Willamette University. Salem offers a wide array of restaurants, hotels, and tourist attractions, ranging from historic sites and museums to events that appeal to a wide variety of interests. 1,869 acres of park land invite residents and visitors alike to enjoy the outdoors.



Course Participants

These are the course participants for the winter (second) term portion of this two-term course. Additional students participated in the fall (first) term of this course. Their names appear in the North Downtown Waterfront Development: Urban Design Proposals report.

Nico Larco, Assistant Professor, Architecture

Hugh Bitzer, Architecture Undergraduate

Jay Cicack, Architecture Graduate

Miranda Hawkes, Architecture Undergraduate

Tim Kremer, Architecture Undergraduate

Matthew Linn, Architecture Undergraduate

Colin McNamara, Architecture Undergraduate

Heather Metz, Architecture Undergraduate

Natasha Owens, Architecture Undergraduate

Molly Rogers, Architecture Graduate

Elizabeth M Schmidt, Architecture Graduate

Alisha Snyder, Architecture Undergraduate

Wanting Chen, Architecture Graduate

Table of Contents

Executive Summary	7
Introduction	8
Site Context	9
Methodology	14
Student Projects	15
Conclusion	58

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 Salem, the Urban Renewal Agency of the City of Salem, or the Salem Housing Authority. Text and images contained in this report may not be used without permission from the University of Oregon.



Executive Summary

During the Fall 2010 and Winter 2011 academic terms at the University of Oregon, twelve students in an architecture studio course worked with the City of Salem to develop twelve different architectural programs and designs for the redevelopment of Salem's North Downtown Waterfront.

The students began their investigations by analyzing existing site conditions and developing urban design proposals for the future of the entire site. Using these new urban design schemes as the new site context, students selected a building type and location within the site for each of their projects. This selection was made based on existing and proposed amenities, city and community feedback, and investigations into the needs and possibilities for the North Downtown site.

The projects produced cover a wide range of building types, including main attractions, housing, and neighborhood amenities. Many of the building types and selected locations could work well individually or in conjunction with the other projects. The North Downtown site has the capability of sustaining a fully mixed-use neighborhood, and the students' projects helped to spur excitement for a wide range of projects.

Proposals include a Salem river research center, brewpubs, museums, recreation centers, hotels, and housing. A river research center has the potential to draw tourism to the area and to provide a home for new and innovative research. Brewpubs would provide another form of attraction, fitting in to the current industrial feel of the area. Museums and civic attractions can provide a complement to the downtown commercial district, and higher-density housing will help support any potential new businesses. This wide range of project types displays the great potential of the site as a whole.

Introduction

As part of the year-long Sustainable City Year partnership between the University of Oregon and the City of Salem, the North Downtown Waterfront Development architecture studio focused on the area of Salem north of Union Street and south of Mill Creek, and east of the Willamette River and west of High Street.

This North Downtown Waterfront site is currently a location for industrial buildings, car lots, and other stand-alone businesses that do not necessarily make full use of the value and possibility of the area. While the riverfront is currently zoned for high-density residential use, progress in that direction has been limited. This site was the focus for multiple Sustainable City Year projects, including the beginning work of this two-term studio which focused on new urban designs for the location. Students initially worked in groups of three to envision an overall plan for the North Downtown site, looking at factors such as transportation, use, public space, sustainable neighborhood development, and ecological conservation and restoration. After finalizing that work (available in full in the North Downtown Waterfront Development Fall 2010 SCY report), the teams broke off to work individually on a specific building that would fit within the initial framework of their urban design proposal. Students selected the use and location for each structure and then determined a specific program to meet the necessary functions. The wide range of project types and designs are a testament to the vast potential of the site as a whole.

The two-term studio took place in the Fall of 2010 through the Winter of 2011 and was led by Nico Larco, assistant professor of architecture. The following report is a summary of the studio's work and recommendations.

Site Context

Salem is the state capital of Oregon, and with a population of 157,000, it and Eugene are the second and third most populous cities in Oregon. Salem is located in the heart of the Willamette Valley and straddles the Willamette River and the border of Marion and Polk Counties. The downtown core offers retail and other commercial amenities and is closely connected with vital historic neighborhoods, the campus-like Capitol Mall, and Willamette University. Salem is surrounded by green pastures and enjoys the benefit of a vibrant agricultural community in the surrounding area.

The North Downtown Waterfront site is a mix of beautiful natural environment and a highly paved industrial area. While the natural and scenic Willamette River borders the site on the west, Front Street, just beyond the riparian trees, is the location for industrial buildings and pedestrian-unfriendly sidewalks and streets.



Figure 1: Willamette River, just west of the project site.



Figure 2: Front Street.

The initial site analysis and vision resulted in five new urban design schemes for the unique area and can be found in full in the North Downtown Waterfront Development, Fall 2010 report. A brief introduction to the initial schemes can be found on the following pages. These schemes were the framework which informed building type and program, location selection and response, and building form and design.

Scenario I: The Warehouse District

Heather Metz, Amelie Reynaud, and Elizabeth Schmidt

The Warehouse District proposes a fully mixed-use district that supports ecological awareness and appreciation. The feel of the place respects current and historic structures and uses by maintaining a location for Salem production.



Figures 3 - 5: Scenario I plan and perspectives. The Willamette River lies on the west edge of the site, and Mill Creek forms the north boundary.

Scenario II: Liberty Square

Matt Linn, Krystan Menne, and Molly Rogers

Liberty Plaza provides a new town square for the City of Salem, connecting the site with the current downtown area through landscape, hardscape, and an ecologically focused public place.



Figures 6 - 8: Scenario II plan and perspectives.

Scenario III: Living Lightly on the Waterfront

Miranda Hawkes, Tim Kremer, and Colin McNamara

Scenario III would create a lively, active waterfront by engaging a variety of activities through the integration of commercial businesses, housing and civic structures.



Figures 9 - 11: Scenario III plan and perspectives.

Scenario IV: New Town Center

Matt Brooke, Jay Cicack, and Alisha Snyder

The New Town Center brings the character of Downtown Salem further North, emphasizing a pedestrian-friendly environment with a strong connection between Mill Creek and the Willamette River and a 'Greenbelt' path linking many Salem highlights.



Figures 12 - 14: Scenario IV plans and perspective. The Greenbelt path lies south of Mill Creek and along the east bank of the Willamette River.

Scenario V: Arbor Lane

Hugh Bitzer, Natasha Owens, and Wanting Chen

Scenario V focuses on connectivity, diversity, and sustainability through a mixed-use, pedestrian-friendly environment. Arbor Lane is a multi-modal, urban promenade connecting the bend in Mill Creek with the Willamette River.



Figures 15 - 17: Scenario V plan and perspectives.

Key locations for development

While each project outlined in this report was designed with a particular urban design scheme in mind, the building programs, formal ideas, and specific location selections are not necessarily exclusive to one urban design scheme. Many of the projects could be very successful within the framework of an alternative proposal or a combination of multiple ideas. The building projects can be seen as a jumping-off point for location selection and building type.

Although the range of locations chosen are spread throughout the area, overlapping ideas helped to identify key locations for development.

Southwest block: The block surrounded by Front Street, Union Street, Division Street and the Willamette River was identified in most schemes as a critical development point for the area. The proximity to the river and the Union Street Pedestrian Bridge offer the potential for high visibility and a great starting point for development in the area. Two different ideas for a brewpub are proposed for this block, along with a proposal for a YMCA.

Northwest block: The northwest block marks an important ecological area, at the confluence of the Willamette River and Mill Creek. It is at this point that a visitor might actually be able to get closer to the water, with a more gradual

slope than most of the riverbank. As such, two different iterations of a river research aquarium are proposed for this location.

Proposed plazas and other public places: While the five urban design schemes vary on where exactly the public plaza or open space exists within the overall site, each one is noted as a prime spot for significant development. Many project programs and locations were chosen to coincide with areas of public open space. These projects included entertainment facilities, extended-stay hotels, museums, and civic buildings.



Figures 18: Aerial site view with popular locations selected by students.

Methodology

This report contains a summary of building type, program, and formal design recommendations from the two-term architecture studio course. The design studio included twelve architecture students at both the graduate and undergraduate level. Students in the two-term studio focused on the North Downtown Waterfront area during both terms; the first half of the fall 2010 term focused on the urban design of the district and the rest of the two-term studio focused on building design. A separate report summarizes the students' urban design work.

Students chose one of the five urban design schemes described above as the context for choosing both building type and location. Contributing factors included:

- The potential value of a particular location
- The appropriateness of the location for more private or public functions
- The size of a proposed lot
- The scale of the program
- Proximity to the creek or river
- Proximity to a public open space

Through site analysis, community input, cooperative charrettes, and creative thought, students edited and refined their building's program and design proposal. While the types of buildings varied greatly, each student worked to create a final project that responded to the site, the community, and the potential viability of the proposed use. Students considered the needs of their chosen urban design scheme, the neighborhood, the city, and the region as a whole. The projects in this report represent a wealth of possibilities for new building types in the North Downtown Waterfront district. Many of the building types and selected locations could work well individually or in conjunction with other proposed projects.

Student Projects

The projects produced cover a wide range of building types, including main attractions, housing, and neighborhood amenities. The North Downtown Waterfront is located in a part of Salem that has the potential to support all types of uses. A continuity of commercial businesses could extend north from downtown Salem. With multiple single-family residential areas nearby, the neighborhood could provide great possibilities for higher-density housing in the space between downtown and these existing residential areas.

Two students proposed designs for a Salem river research center. The Willamette River is a significant contributor to Oregon's environment, history, and culture, and Salem has an opportunity to be the home of an institute that would allow visitors to see river wildlife and riparian habitat and would provide a home for new and innovative research. A river research center has the potential to draw researchers and tourism to the North Downtown Waterfront.

Several students proposed entertainment venues. The Willamette riverfront location was selected for two proposed brewpubs. The brewpubs would provide another form of attraction, bringing both daytime and nighttime activity to the area. A brewery would fit in to the current industrial feel of the area and could provide a jumping-off point for future development. One student proposed a combination of a brewpub and movie theater.

Museums and other cultural attractions were also on the list of proposed projects. A center for urban agriculture would provide education and visibility for Salem's agricultural past, present, and future. A railway heritage center would showcase a major aspect of the site, the active train line on Front Street. A YMCA is also proposed along the riverfront to provide a new facility for the current Salem YMCA and to bring people to a very active waterfront.

Three students also proposed housing, including high-density multi-family housing and less-dense row housing. Both types have a place in a mixed-use neighborhood. One student proposed an extended stay hotel that would provide a service to Salem's many long-term visitors, especially those staying in Salem for reasons related to the State Capitol.

A number of the projects described below incorporate or reference elements of one of the above urban design scenarios. These elements, which do not exist within the North Downtown Waterfront site today, include public plazas, systems of multi-use paths, and other public amenities. In addition, as the individual students focused on specific locations for their projects, some of the projects propose changes to the urban design scenarios' amenities. The intent of all of these projects is not to propose a single unified vision for the North Downtown Waterfront site. Rather, the projects should be viewed as conversation starters, ideas about what the North Downtown Waterfront site, and specific locations within it, could become.

RiverQuarium and Research Center

Matt Linn

The RiverQuarium and Research Center would allow visitors to see the river wildlife and riparian habitat of the Willamette River as well as provide a home for new and innovative research. The research component and museum component would overlap to highlight the value in both and their dependence on one another.

The idea of the past, present, and future was a major design factor. The natural landscape of the riparian areas has been drastically changed over time. While many dams and revetments have been put in place, the future is yet to be determined. The design highlights the potential futures of the river by allowing for different and fluid paths. The meandering paths of the museum allow people to choose their own way through the exhibits, much as a natural river is able to seek its own path. The design reflects the movement of the river, where riffles and pools follow the river's serpentine form, with occasional oxbow lakes and side channels where the river has broken through its banks.

The design also encourages movement up and down so that people can see the landscape from different perspectives. The Living Laboratory Boardwalk allows people to get down to the water, and the Heron's Nest brings them up into the treeline to see the river from the perspective of the birds.

Main Ideas

- An iconic building, integrated with nature, seeks to reunite the urban landscape with the natural landscape.
- Exhibits teach people how to live more harmoniously with nature.
- The Main Channel acts as the connective piece between the two programmatic components. It mirrors the main channel of the river, with heavy concrete walls augmented with softer wood screens.
- The Screen is also a connective piece that helps to unite the complexity of the program, defining the programmatic volumes.



Figure 19: Site map.

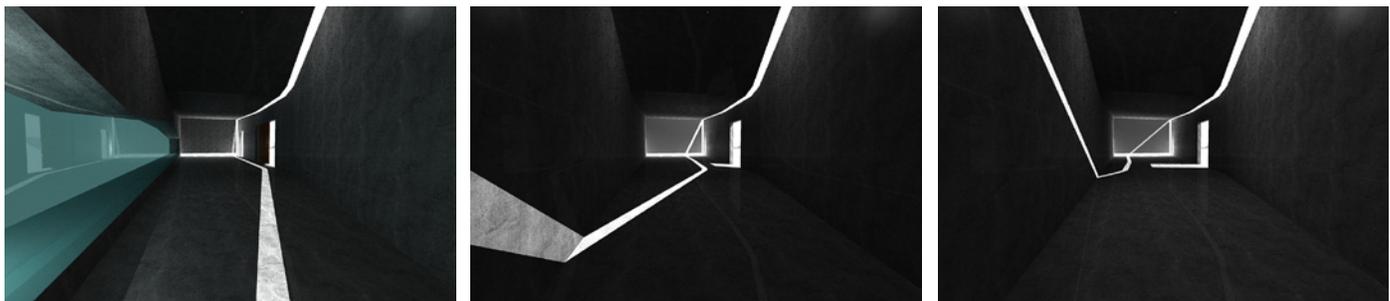


Figure 20: Lighting studies showing the passage of time inside the museum.



Figure 21: Interior perspective.

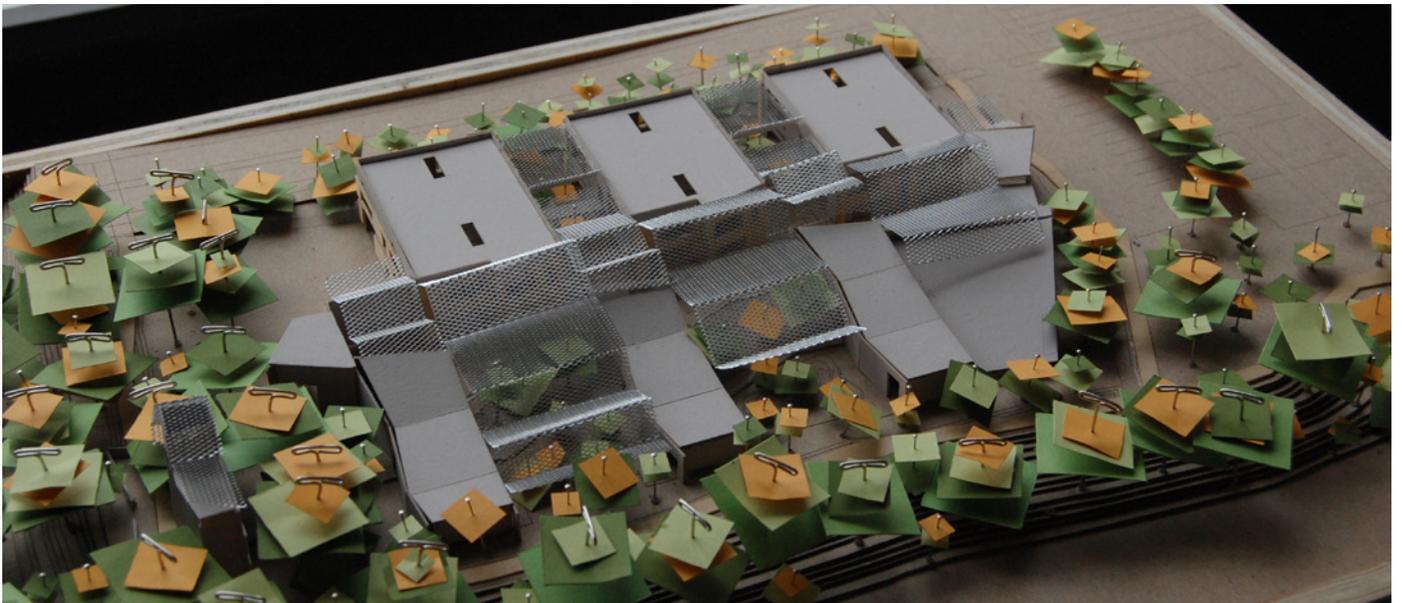


Figure 22: Physical site model.

RiverQuarium and Research Center

space programming

<p>Living Laboratory Interpretive Center- 40,000 sqft</p> <p>Front of House- reception- 200 sqft public restrooms- 600 sqft. (8x32 mens 10x32 womens) fish aquariums- (linear, fluid aquarium exhibit space) outdoor riparian garden- (interactive artificial habitat stream) Diana Mem. Fountain avian habitat garden native ecology habitat</p> <p>Back of house- food prep- 400 sqft storage- 1,000 sqft aquarium managers office- 200 sqft employee space- 1,000 sqft</p> <p>Auditorium- Assembly Space- 2,500 sqft Projection Room- 150 sqft</p> <p>Library/Media/ Public Meeting Space- 2,500 sqft</p> <p>Front of House- media- 1,000sqft computer/media space- 1,000sqft small meeting room- 300 sqft large meeting room- 600 sqft lobby space w refreshments room</p> <p>Back of House- front desk/ media circulation- 500 sqft</p> <p>Maintenance/ Workshop-</p> <p>Back of House wood shop/mechanical shop 400 sqft welding station- 200 sqft garage for equipment- 600 sqft office- 150 sqft bathrooms- 300 sqft</p>	<p>20,000 sqft</p> <p>2,650 sqft</p> <p>3,400 sqft</p> <p>1,650 sqft</p>	<p>Laboratories-</p> <p>Back of House w/ visual connection to Front outdoor fish aquariums 2,000 sqft -round tubs 50sqft -cannadian troughs 60 sqft -raceway 1,200 sqft indoor incubation room (racks w/ small troughs) 500 sqft incubation trays 2x4 stackable 16sqft laboratroy space- 4,800 sqft (2) Wet Labs 1,200 sqft each (2) Dry Labs 1,200 sqft each storage space- 700 sqft bathroom- 300 sqft</p> <p>Classrooms- (4) 1,000 sqft break out flex space- 1,500 sqft riverkeeper classrooms (2) - 1,200 sqft</p> <p>Administration and Staff- 1,600 sqft facility manager/director- 200 sqft technician/outreach coordinator- 200sqft senior scientist- 200 sqft ecology recovery coordinator- 200 sqft communications director-200 sqft meeting room- 400 sqft support space-200 sqft</p> <p>Professors/Researchers Offices- (8) 150 sqft</p> <p>Circulation- Aquarium exhibit would double as atrium/circulation additional circulation- 2,000 sqft</p> <p>Total 63,900 sqft</p>
--	--	--

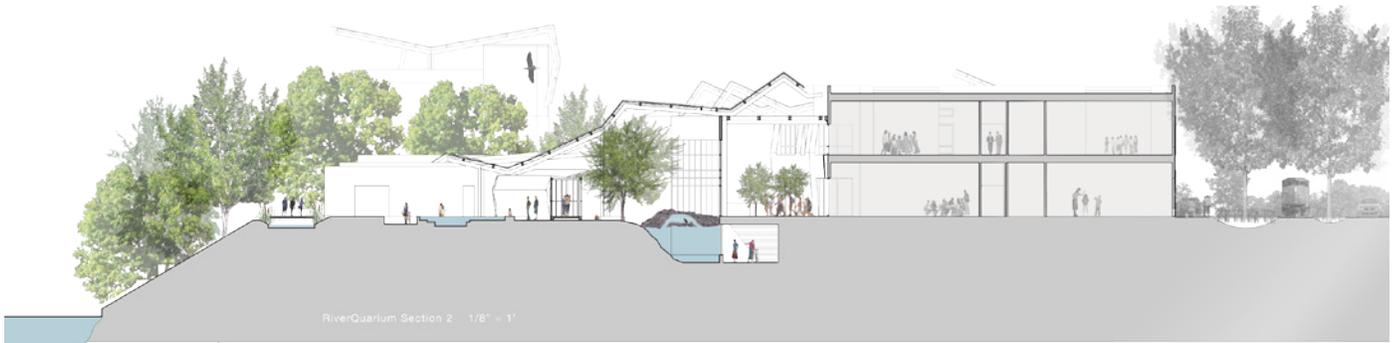


Figure 24: Site cross-section.



Figures 25 and 26: Habitat perspective and physical model.

Willamette Aquarium and Research Center

Hugh Bitzer

This proposal for a freshwater aquarium attempts to fulfill the need for a project to spark development in the area, along with Salem's desire to build a marquee project which would revitalize the city's image. With its proximity to Portland, Salem has the ability to support a destination project, and given its location right along the Willamette River, it is the perfect spot for a freshwater aquarium showcasing the many habitats of Oregon.

The building sits at the confluence of Mill Creek and the Willamette River, with close proximity to downtown, and can serve as the place where the city meets the river. The building unfolds into the landscape, terracing down towards the river in a sort of mini-watershed which would contain all the exhibits. Formally, the building language would be characterized by three separate elements representing different aspects of nature. The rooms themselves would be developed as solid masses bound to the earth; above this would spring tree-like columns. Resting on the columns, the roof would act like a canopy, filtering in light and water. As visitors enter, they pass under the canopy into a series of habitats which gradually terrace down and open up to the river. The individual exhibit areas are located on the platforms. By simultaneously stepping down and out, the building is able to unfold seamlessly into the landscape while affording a variety of different interactions with the natural habitat areas.



Figure 27: Interior perspective.

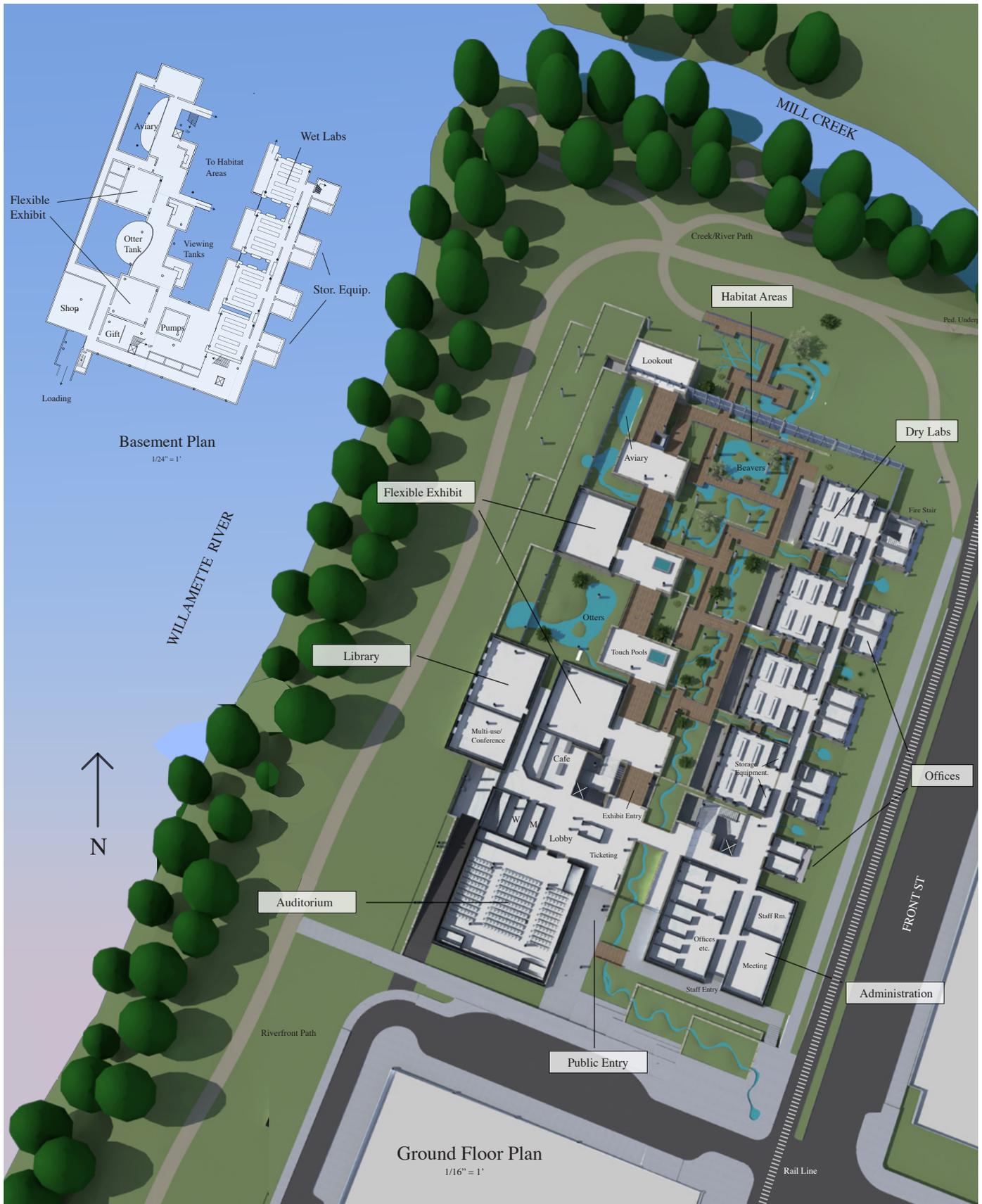


Figure 28: Site and building plans.

Major Project Goals:

- Help restore Salem's connection to Mill Creek and the Willamette River.
- Serve as an iconic destination that will attract people and development to Salem while enhancing the city's image.
- Educate the public about local habitats.
- Create a dynamic and intriguing space that fosters curiosity about the environment.
- Provide a place for researchers to work and connect to the public.
- Provide multi-use facilities (e.g. auditorium, conference rooms) where the public can gather.
- Restore habitat along Mill Creek and the Willamette River.
- Soften the topography such that the building terraces down towards the river.

Main Ideas:

- The building as an abstraction of nature (three elements: earth, tree trunks, canopy).
- Unfolding from the city into nature.
- The building, and program, as a watershed.
- Recreating phenomenological aspects of nature (biophilic design), i.e. the feeling of being in a glen.



Figure 29: Interior perspective.



Figure 30: Exterior perspective.



Figure 31: Bird's-eye view.



Figure 32: Building cross-section.

The Growler Brewpub

Elizabeth M Schmidt

Brewing is a part of Oregon's agriculture, economy, and culture. Salem has a rich brewing history and the potential to expand on the current brewing interest and excitement. A brewpub on the Willamette River would take advantage of a site with potential for public enjoyment of the riverfront. The brewpub would provide a daytime and nighttime attraction for the area; a brewery would fit into the current industrial feel of the area and could provide a jumping-off point for future development.

The Growler would be a cornerstone business for an entertainment district, located at the intersection of Union Street, Front Street, and a proposed river path. It would be a place that combines the presence of a historically significant Salem product with an entertainment hot spot for warm summer days and weekend nights. The Growler would bring some of Salem's brewing history to the forefront, providing waterfront dining and drinking for neighborhood residents, softball players at Wallace Marine Park, Truitt Brothers employees, Salem's growing young professional population, and tourists enjoying the many amenities that downtown Salem offers.



Figure 33: Interior perspective.

The project focuses on the many ways a person can interact with the people they came with, the other patrons, and the Growler employees. In the Growler's beer hall and beer garden, a visitor can enjoy a quality pint in the beautiful site with friends or unaccompanied, but always feeling part of a community.



Figure 34: Concept diagrams.

Main Ideas

- Embrace the beauty of the site and the inherent mess of the industry.
- Care about the quality of the product and the ingredients going into it.
- Notice the people you came with and the people working around you.
- Understand the history within the place and the process that continues.



Figure 35: Restaurant and beer garden plan.



Figure 36: Site cross-section.



Figures 37 and 38: Interior restaurant perspectives.



Figures 39 and 40: River path and front entry perspectives.



Figure 41: Site plan.

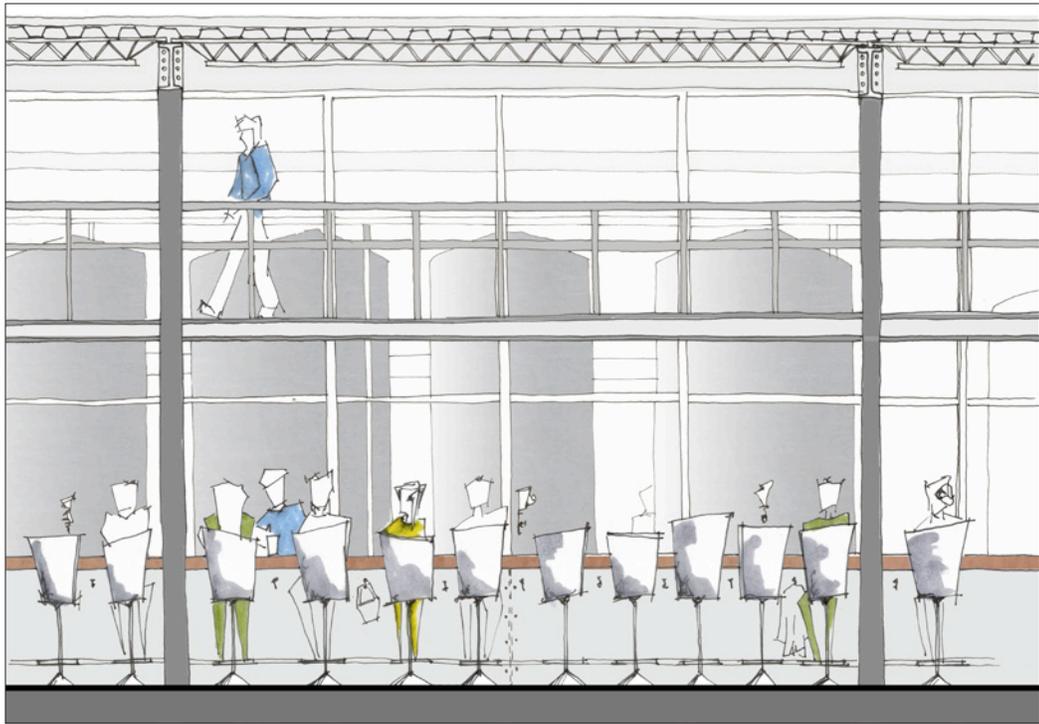


Figure 42: Interior elevation.



Figures 43: Beer Garden.

H.O.P.S. Brewpub in Salem

Heather Metz

Salem has an extensive history in brewing, but has lost some of the culture to other Oregon cities. While Polk and Marion counties still produce a large portion of the hops grown in the United States, there aren't many places in the area that really showcase the process. The H.O.P.S. Brewpub in Salem would do just that, while engaging visitors in the process from the production of the main ingredients to the enjoyment of a pint sitting in a scenic and unique location on the Willamette River. A small hops field would be located in the middle of the block. And with the structure of the restaurant mimicking the training poles used in hops production, the design allows for views of the entire process as well as the embracing the natural beauty of the site itself.

Main Ideas:

- Bringing awareness to a popular, historically and culturally rich process which is often left in the dark.
- Creating a place where the craft of beer making and the art of enjoying it collide and understand one another.
- The more you know about and support local production, the better the local economy and culture becomes.



Figure 44: Entry perspective.

The Facts:

- 1 acre hops = average 74 pints/year
- In 2007, the Willamette Valley produced an average of 1.5 lb/acre of hops.
- 5 pints of water = 1 pint of beer
- 1.5 barrels of water = 1/3 barrel of beer
- Hops vines need 20 - 30 inches of water per growing season to yield hops.
- Rows were traditionally planted 14' apart, but are now usually only 7' apart due to new picking methods.
- It takes an average of 5 pounds of hops to make 1 barrel of beer.



Figure 45: Building section.



Figure 46: Restaurant section.

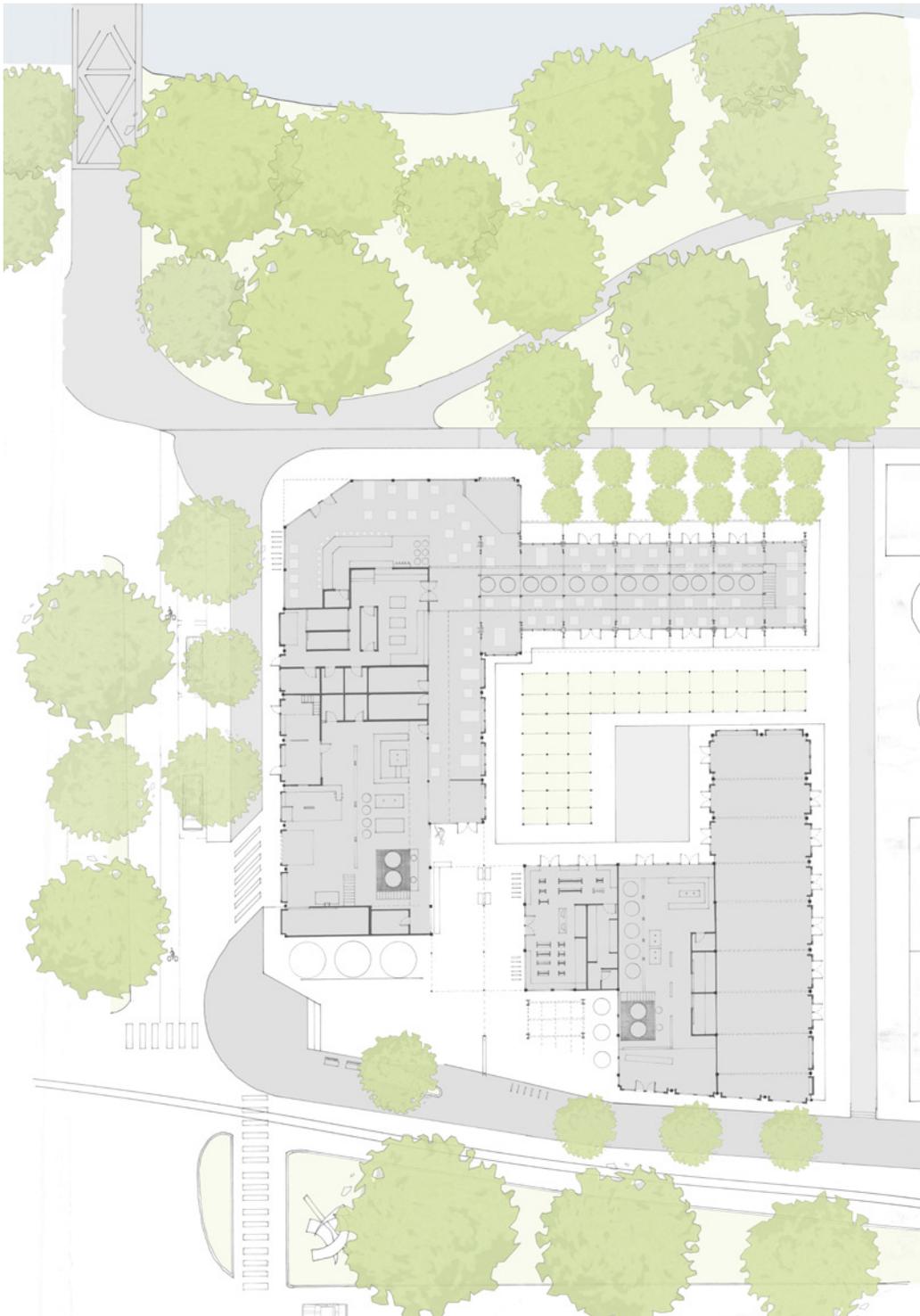


Figure 47: Site plan.



Figures 48 and 49: Interior perspectives.



Figures 50 - 52: Building and site cross-sections.

Pioneer DraftHouse

Walter Jay Cicack

The North Downtown Waterfront has the potential to offer a variety of entertainment options to draw Salem residents and tourists alike. A unique theater and brewpub combination would provide the area with a venue that could support daily and late night activities.

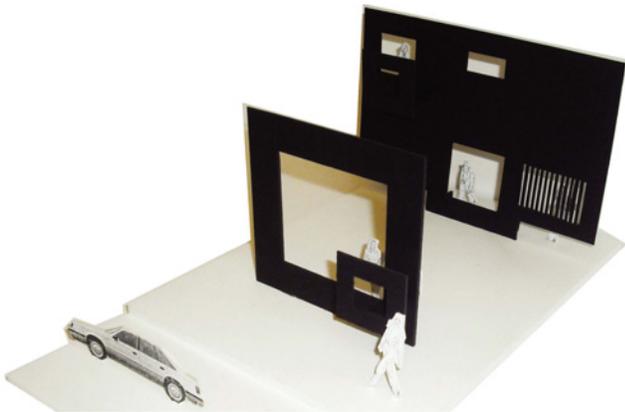


Figure 53: Concept model.

The idea of people watching people watching people watching movies originates from the voyeurism inherent in the cinematic experience. The essence of the cinematic experience is to watch people live their lives. The Pioneer DraftHouse seeks to facilitate a deeper interaction with the cinematic experience by highlighting the interactions among those present within it.

The concept model illustrates the idea that the interactions among people

would be highlighted by capturing those interactions in various “theatrically-framed” views. Big and small, across short or long spaces, and between floor levels were a few of the conditions presented in this model. The large mural provides the separation between the lobby/brewpub space and the theater. With carefully considered translucent “windows” located within the imagery of the mural, a visitor can get small glimpses of the happenings within the theaters.



Figure 54: Entry perspective.

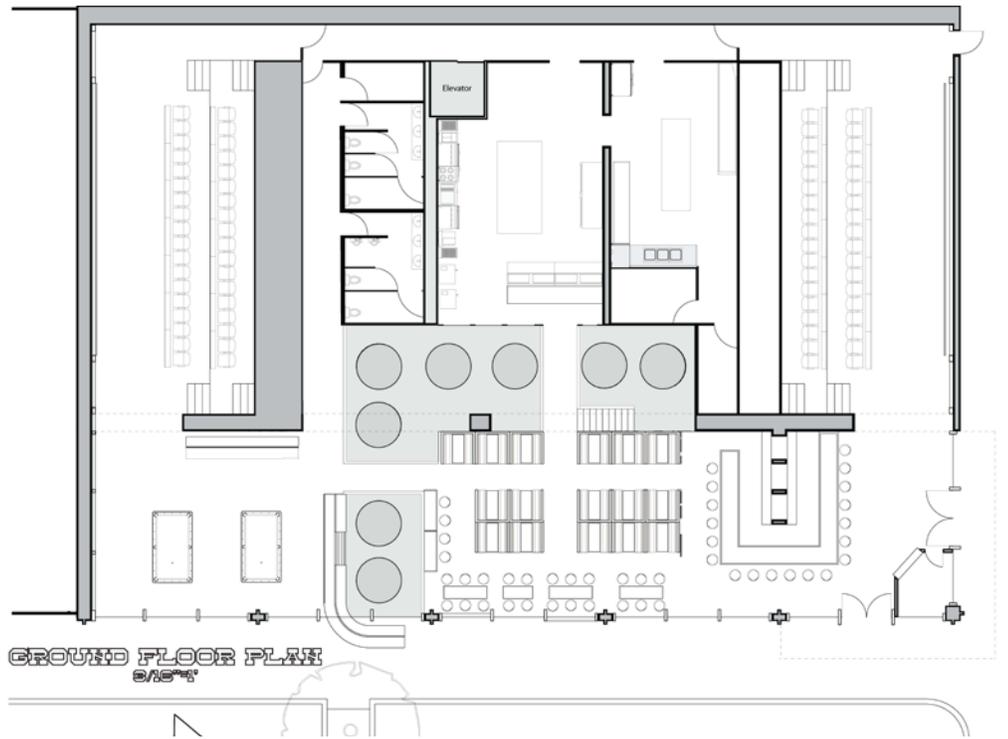


Figure 55: Ground floor plan.



Figures 56 and 57: Interior perspective and second floor plan.



Figure 58: Building cross-section.

Northwest Center for Urban Agriculture

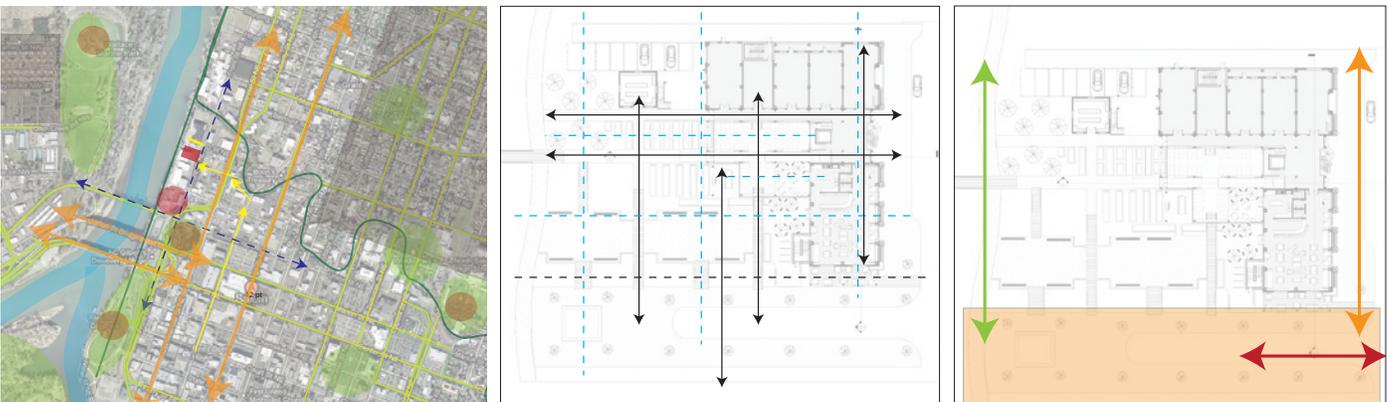
Tim Kremer

Oregon is proud of its agriculture, and with the increase in oil prices and the cost of food production, there is an increasing need for knowledge on home-grown food. The USDA is giving over \$50 million in grants to create “network nodes” to better facilitate the communication and transfer of goods between the Urban Consumer and the Rural Producer of small to mid-sized farms. The Center for Urban Agriculture will:

- Support local industry.
- Increase access to fresher food.
- Support the next generation of farmers.
- Decrease transportation costs.
- Improve the environment in both urban and rural areas.



Figure 59: Exterior perspective.



Figures 60 - 62: Overall site amenities and pathways, building structure and circulation, main exterior pathways.



Figure 63: Site plan.

The Center for Urban Agriculture is designed to be a network node between the rural producer and the urban consumer. More than just another farmer's market, the Center will showcase all the best agriculture that Oregon has to offer. The Center for Urban Agriculture will offer education and recreational opportunities, as well as a restaurant serving local, in-season food. This restaurant will not only boast some of Salem's best cooking, but will further showcase Oregon foods. The Center for Urban Agriculture gives the people of Salem the opportunity to know their food and know their farmers.

The proposed building is located along the riverfront, and the design takes advantage of the potentially highly trafficked spot by providing public space both inside and outside the building. The design offers education and visibility of both agricultural food production and sustainable building strategies. Water collection, solar panels, passive heating and cooling strategies, and water filtration systems are all present and visible to reduce energy loads, provide educational opportunities, and improve the quality of the food grown there and the natural habitat along the river.



Figure 64: Interior perspective.

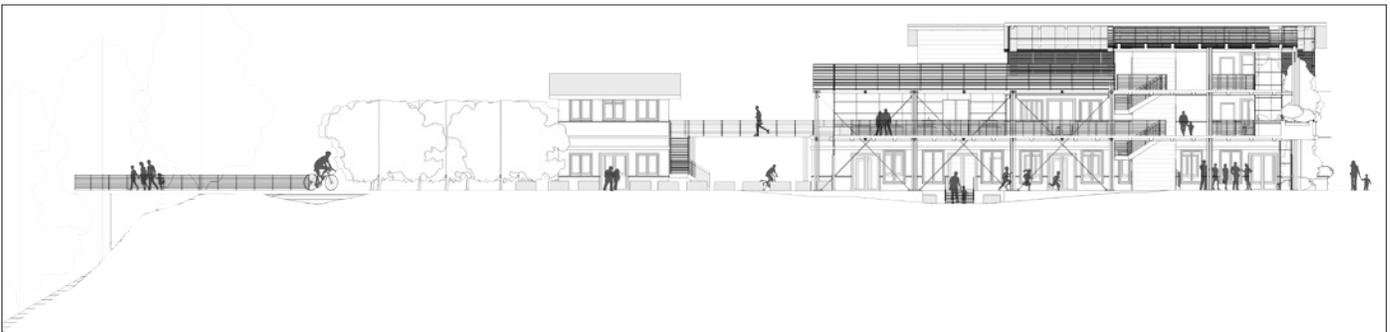
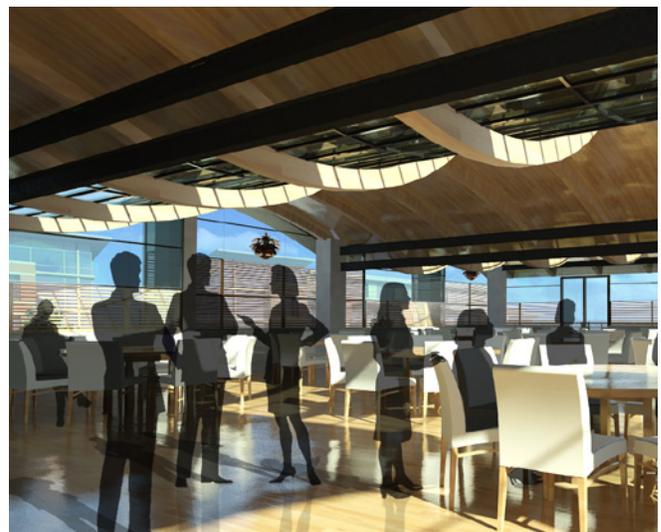


Figure 65: Site cross-section.



Figures 66 and 67: Interior perspectives.

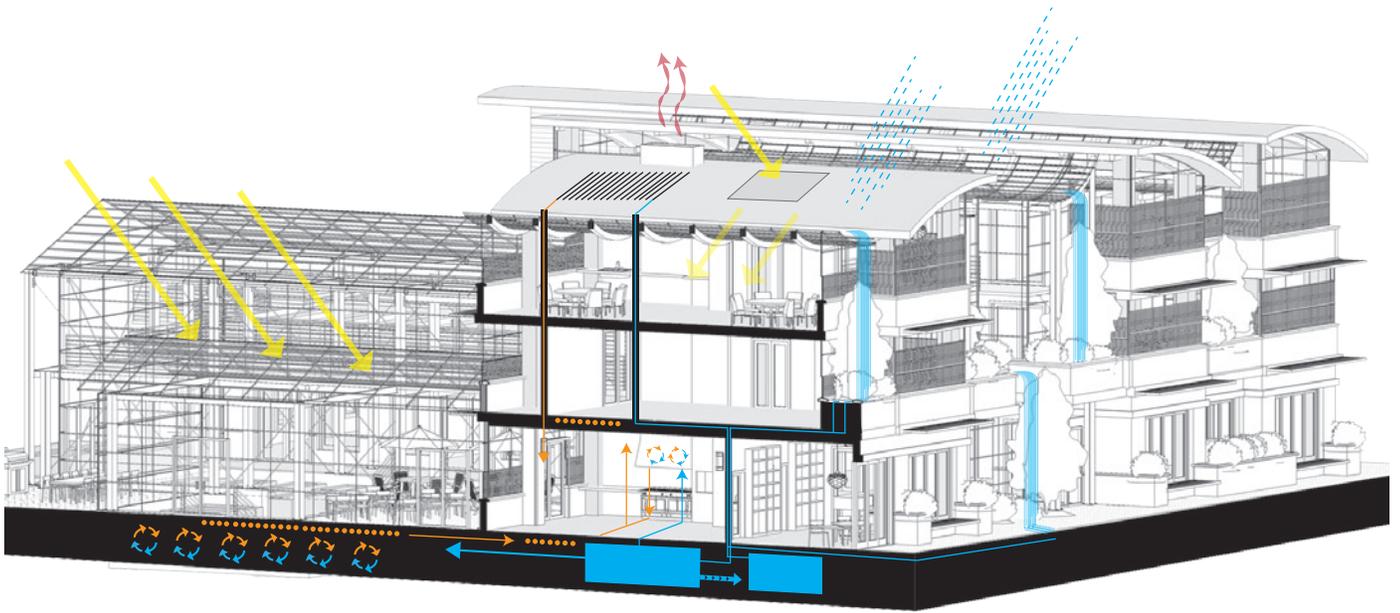


Figure 68: Sustainable strategies.



Figure 69: Front Street perspective.

Salem YMCA

Colin McNamara

This project is intended to replace the aged YMCA facilities currently located in Downtown Salem. The new building is designed to be more than just a place to exercise; it will be an active place to see and be seen. The new YMCA will improve the health of the individual members and the community as a whole.

The project's location, at the corner of Front and Union Streets, was chosen because of its proximity to the existing parks and recreation system, including the Union Street Bridge and the riverfront path system proposed in the urban design scenarios above. The new YMCA would tie into these systems, become an integral part of them, and serve as a gateway and hub for redevelopment.

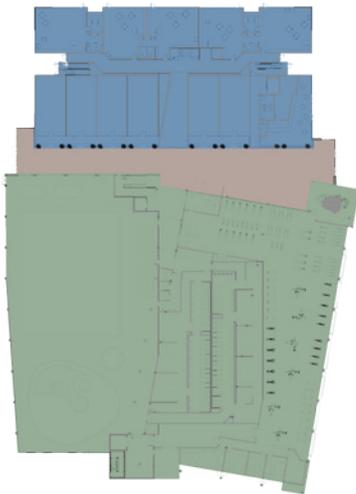


Figure 70: Use diagram.

The building would be approximately 120,000 square feet, and would include a six-lane lap pool, a fitness pool, a spa area, fitness and weight rooms, locker rooms, six racquetball courts, a 45-foot-tall climbing tower, three flexible studio spaces, a three-court gymnasium, and an indoor running track. In addition to the fitness facilities, there would also be administration space, a public café, eight classrooms for day care and preschool, with an associated play room, community space (library/computer lab/classroom), and a public rooftop garden with a flexible, rentable indoor space ideal for birthday parties or meetings. The interior and exterior public functions would enliven the North Downtown Waterfront area for YMCA members and area visitors alike.



Figures 71 and 72: Interior perspectives.



Figure 73: Atrium perspective.

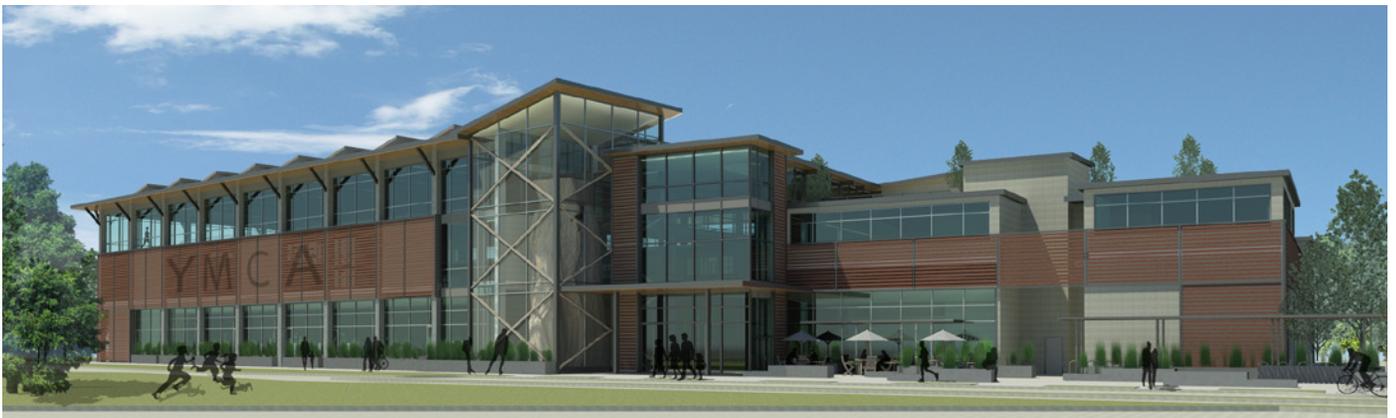


Figure 74: Front Street perspective.

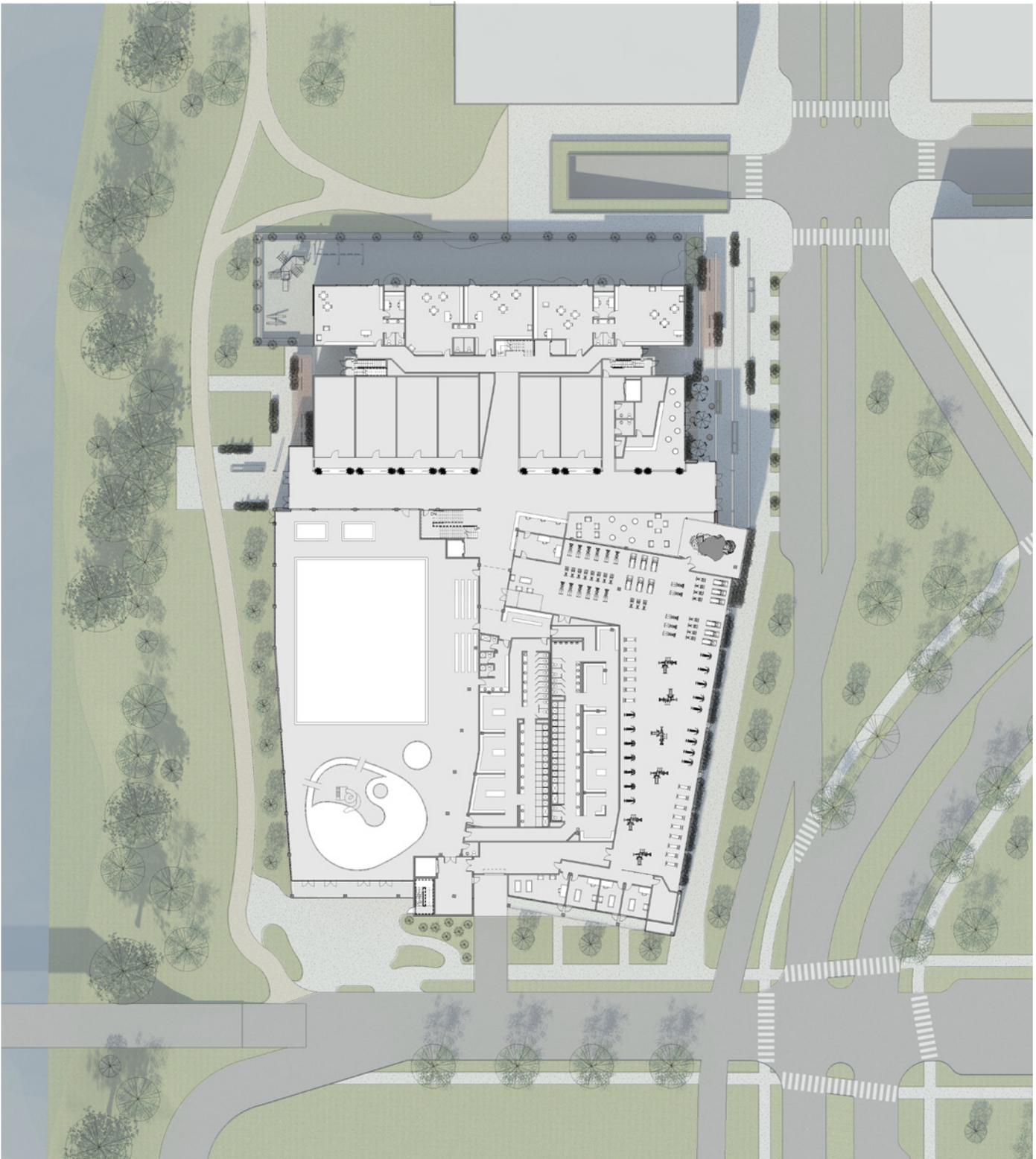
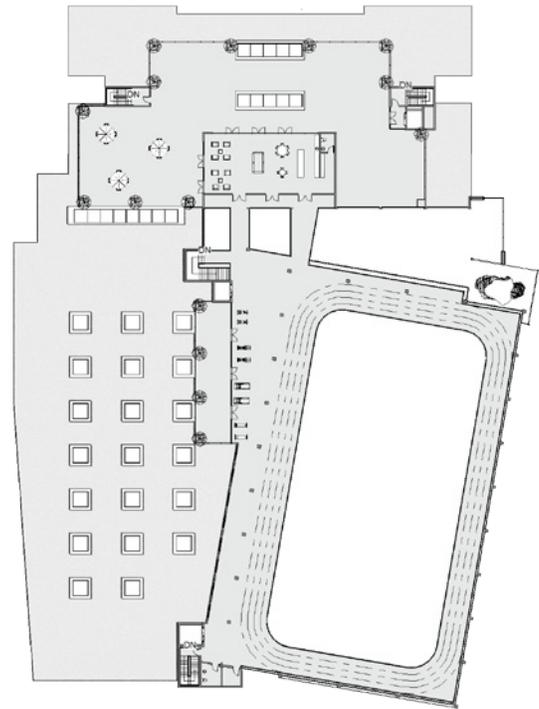
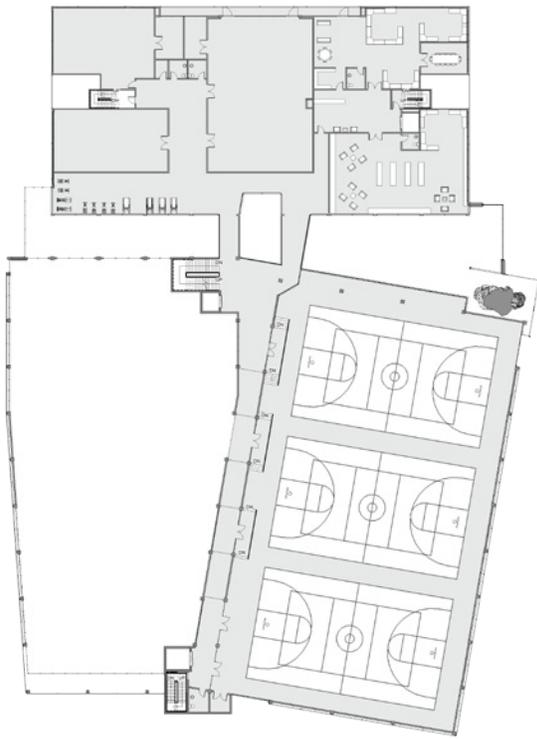
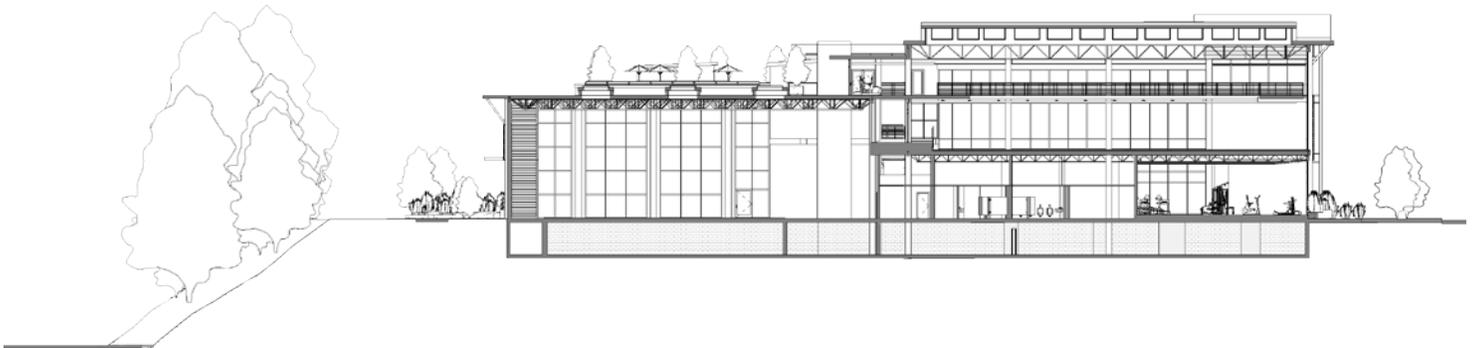


Figure 75: Site plan.



Figures 76 and 77: Second and third floor plans.



Figures 78 and 79: Building and site cross-sections.

Salem Railway Heritage Center

Alisha Snyder

The proposed Salem Railway Heritage Center contributes to key ideas in the urban design scheme on which it was based, including evening activity, creating a new town center, and creating a bike path circuit with interesting destinations. The proposed center would preserve the history of the site while improving its sustainability and value. It would make connections with the existing site conditions, especially the active train line and the Willamette River. The proposal is based on the concepts of heavy objects and light connections, constants and variables, and the multiple identities of the train.

Program

Railway Museum

- Exhibits are focused on Salem and regional railway history, with 3-4 full scale cars on display.

Model Shop and Display

- Workshops can be reserved and are open to the public. Models are updated seasonally. A control room allows visitors to interact with the models.

Gallery

- The gallery contains several large rotating indoor exhibits. Public contributions are welcome.
- A projection area shows rail-related media and doubles as exhibit space.
- An outdoor exhibit activates the space around the structure.

Café

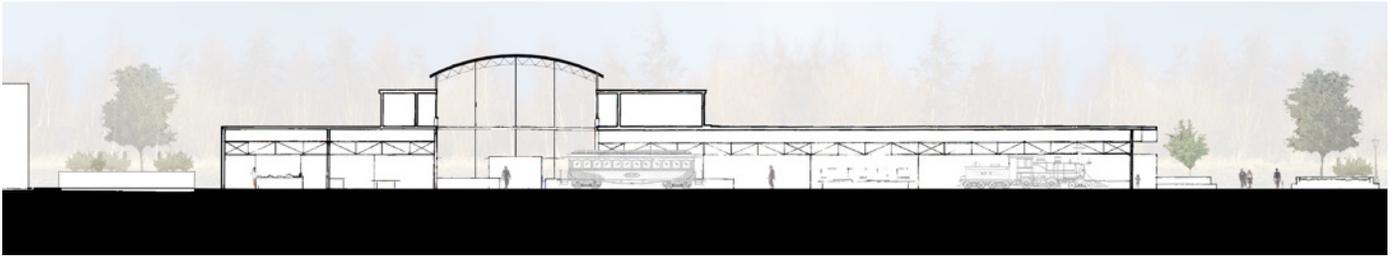
- Visitors can experience buffet-style railcar dining as well as outdoor seating.

Large Atrium Space

- A central lobby and information desk orient visitors. The second floor holds staff offices as well as a multipurpose room.



Figures 80 and 81: Atrium and interior perspective.



Figures 82 and 83: Building cross-sections.

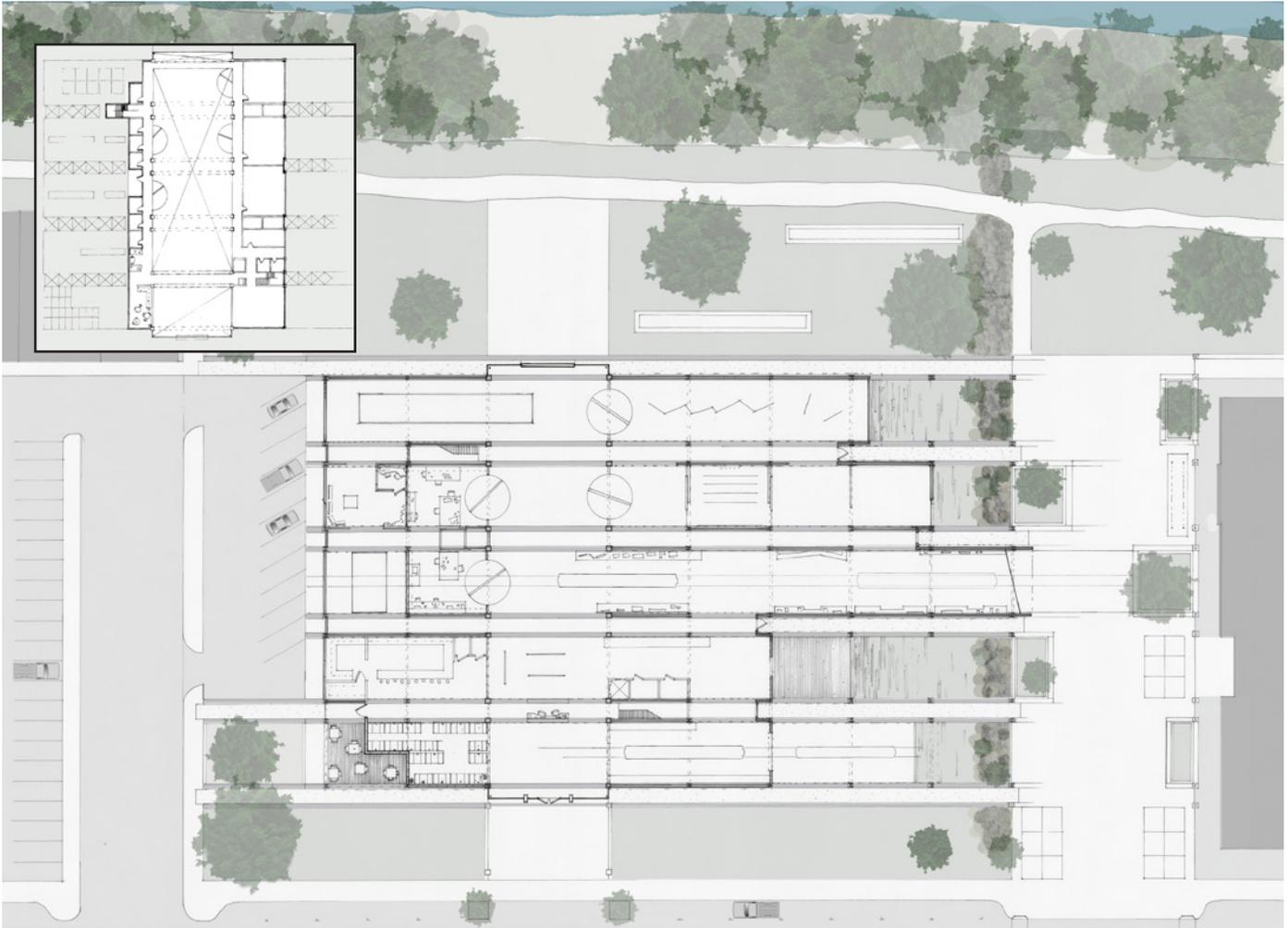


Figure 84: Site and building plan.

Union Street Hotel

Molly Rogers

The purpose and concept of the Union Street Hotel is to provide a home away from home for people visiting Salem for any length of time. While the program provides amenities for those staying for an extended period of time, the design, functions and proximity to downtown and the public square proposed in this project's urban design scenario (above) would be ideal for any traveler.

Main Ideas

Concept: Home

- Regional, local, and personal identity.

Regional: Oregon

- Fireplace in lobby, views of Union Street Railroad Bridge and the State Capitol, and figure-ground etchings of Oregon cities on glass screens.

Local: Neighborhood

- Corridor receives light from unit doors and kitchen window.

Personal: Individuals

- Family, relationships, and your personal belongings.

Program: Extended Stay Hotel

- 100 rooms, all with full kitchen.
- Gym, lap pool, jacuzzi, and locker rooms.
- Three conference rooms and a business lounge.
- Lobby, restaurant, bar, and 24-hour food market.



Figure 85: Room perspective.



Figures 86 and 87: Hall and room perspectives.



Figures 88 - 90: Floor plans.

The HUB

Natasha Owens

One of the main driving goals of the HUB was to create a strong sense of community. The lot selection for the architectural component was based on the main idea of creating community through connections to the extended network of paths proposed in the urban design scenario for the area. The building typology, multi-use residential, was chosen for its feasibility and based on the needs for the area. The horseshoe shape allowed for optimal sunlight throughout the units as well as for the courtyard and community greenhouse.

The northwest corner is focused on a major pedestrian intersection. A two-story community room allows for multiple events to happen at once at the location. The bottom floor opens up to the street creating an outward connection toward the neighborhood. The top floor would open up onto the courtyard, focusing on the connection to the inside community of residents.

The courtyard is intended mostly for residents' use, yet it is open to the public. Raising it onto a platform allows for a separation from the street level, with the open stairs acting like a filter. The courtyard is a destination, giving the place a feeling of security.

The residential units on the south arms of the building are stacked row houses. This allows for some reprieve from the living noises that may come from the surrounding units. The northern side of the complex is a mix of flats.



Figure 91: Exterior perspective.

A rainwater catchment system is in place to collect rainwater from the roofs, using it to water the landscaping and provide water for the garden plots and greenhouse plants. These cisterns work off gravity and incorporate natural filtering systems.

Below the courtyard on the ground floor level is a parking garage for residents. This helps hide the unsightliness of the parking lot and create more security. Along the south edge of the parking garage is an iron or steel screen wall where native vines are planted. The leaves of the vines can shade the garage during the summer months and the loss of leaves during the winter months will allow more sunlight in. Skylights that cut through the courtyard level help to add daylighting to the darker corners of the garage.

Some of the smaller features that help to support interaction of the residents are facing of front doors, shared main pathways, visual connection to public shared spaces, grouped stair accesses, and shared community garden plots.



Figure 92 and 93: Courtyard perspectives.

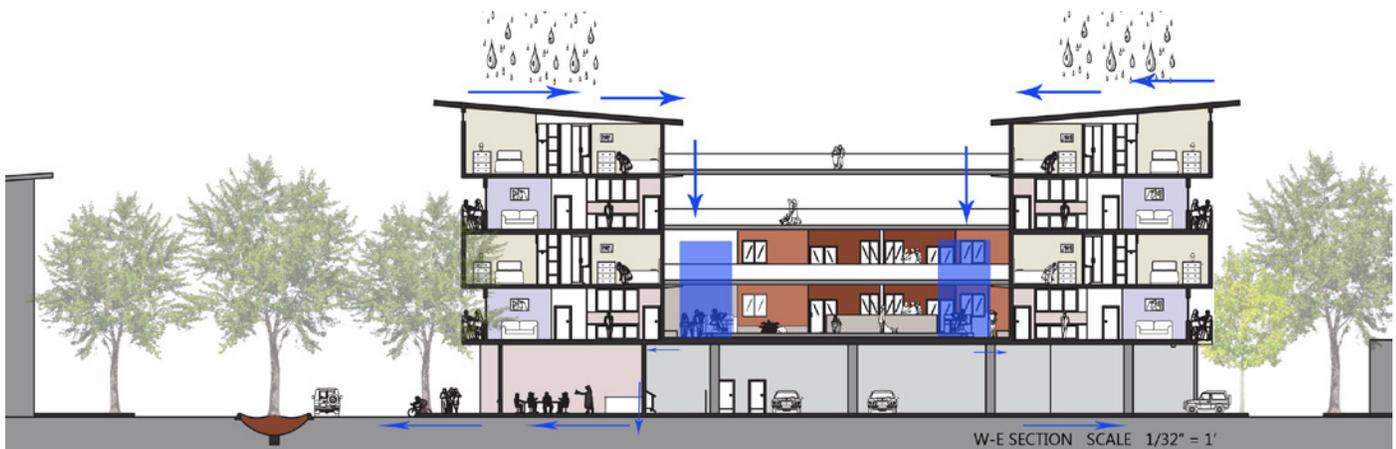


Figure 94: Cross-section showing sustainable strategies, including rainwater collection and bioswales.

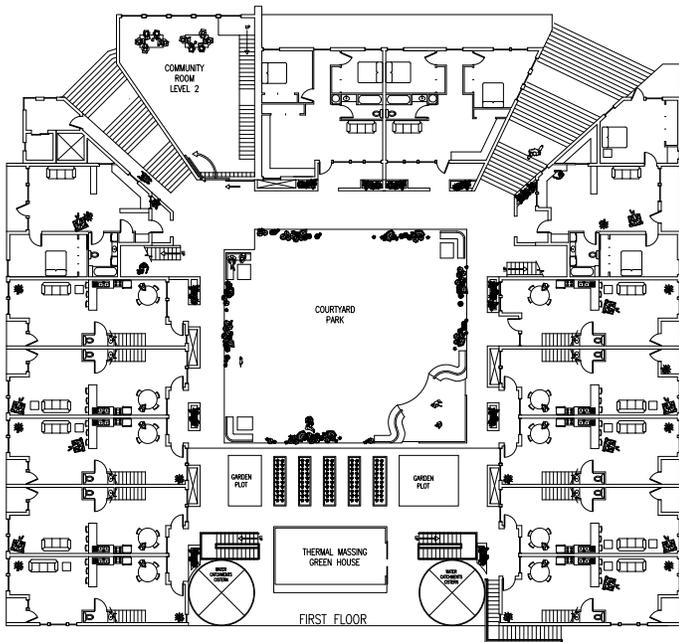


Figure 95 and 96: First and second floor plans.

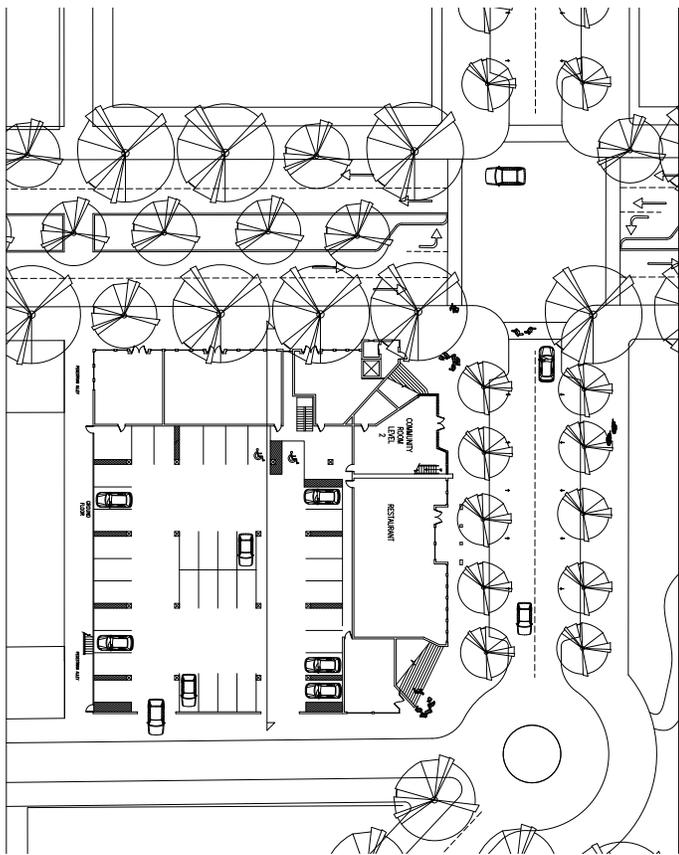


Figure 97: Ground floor plan.

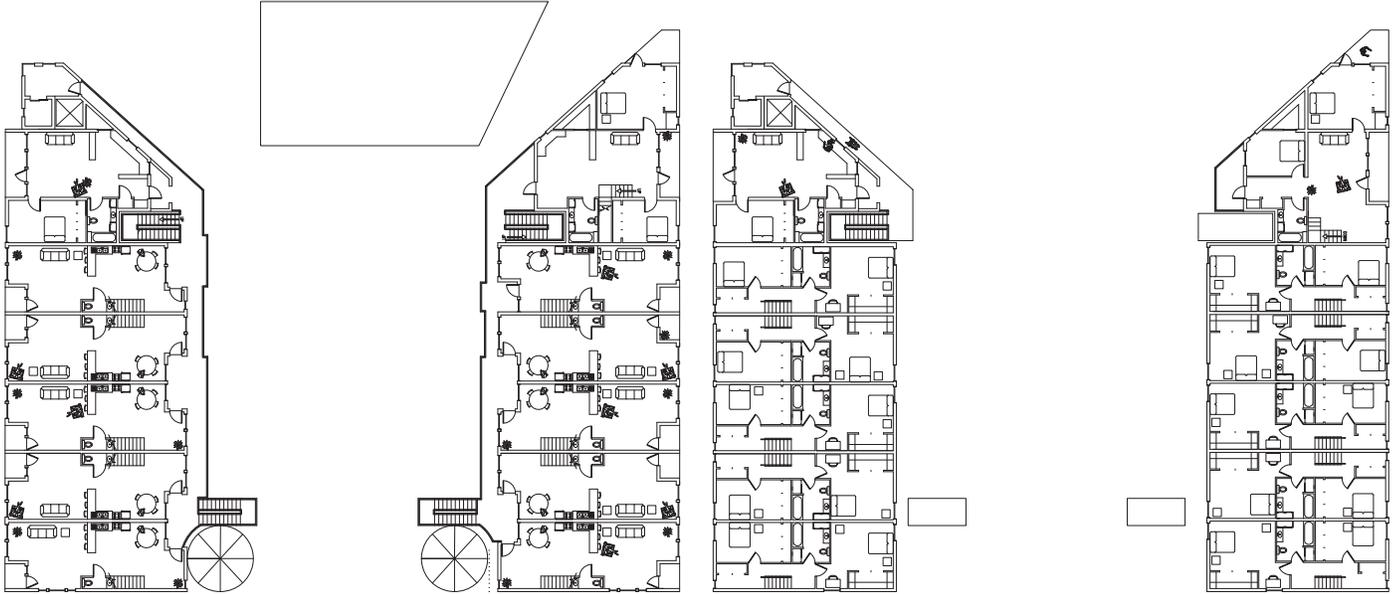


Figure 98 and 99: Third and fourth floor plans.

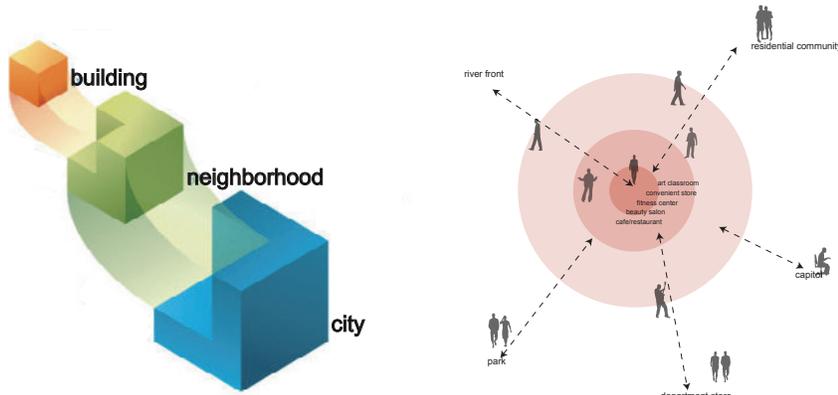


Figure 100: Interior perspective.

Senior Affordable Housing

Wanting Chen

This project proposes an attractive urban living space at the intersection of Division and Liberty Streets for senior citizens who are looking for a home that can provide many opportunities for social involvement and communication.



Figures 101 and 102: Conceptual diagrams.

Main Ideas:

- **Communal Spaces:** There are many public spaces for people to meet and talk on each floor. The lobby, courtyard, community room, terrace, alcoves in corridors, and some other smaller spaces all encourage positive social connections.
- **Outdoor Spaces:** Balconies in each unit, the courtyard, an outdoor activity room, and terraces are provided for seniors to enjoy the outdoor environment easily without being far away from home.
- **Contribution to the Neighborhood:** Classrooms, workshops, and studios are located on the east wing of the second floor. Continuing education will be open to building residents and to local senior citizens.



Figure 103: Perspective.



Figure 104: Lobby perspective.

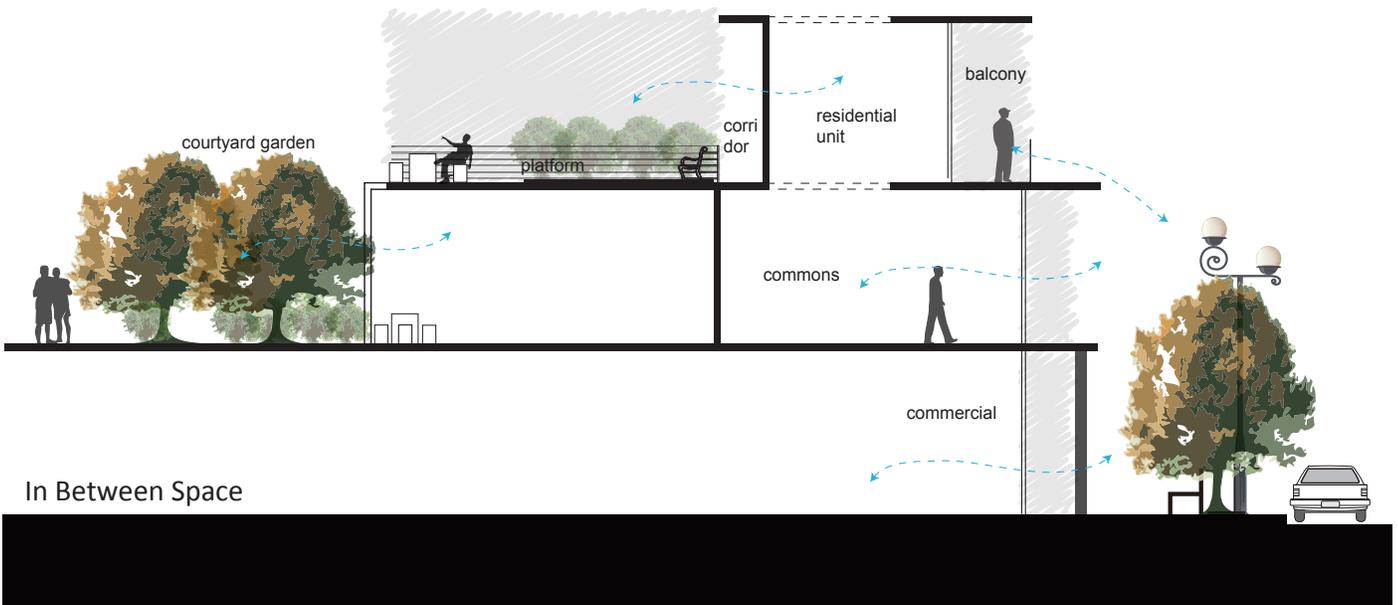
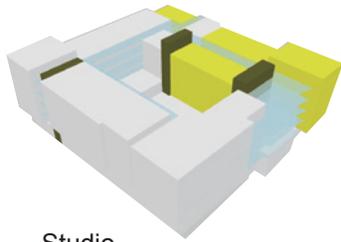
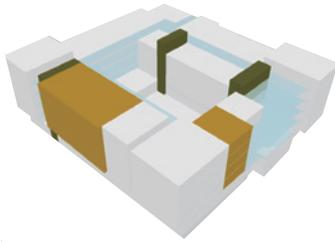


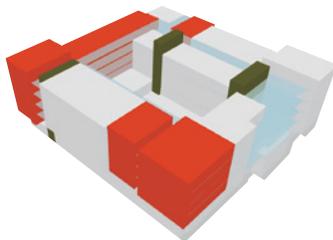
Figure 105: Cross-sectional diagram.



Studio

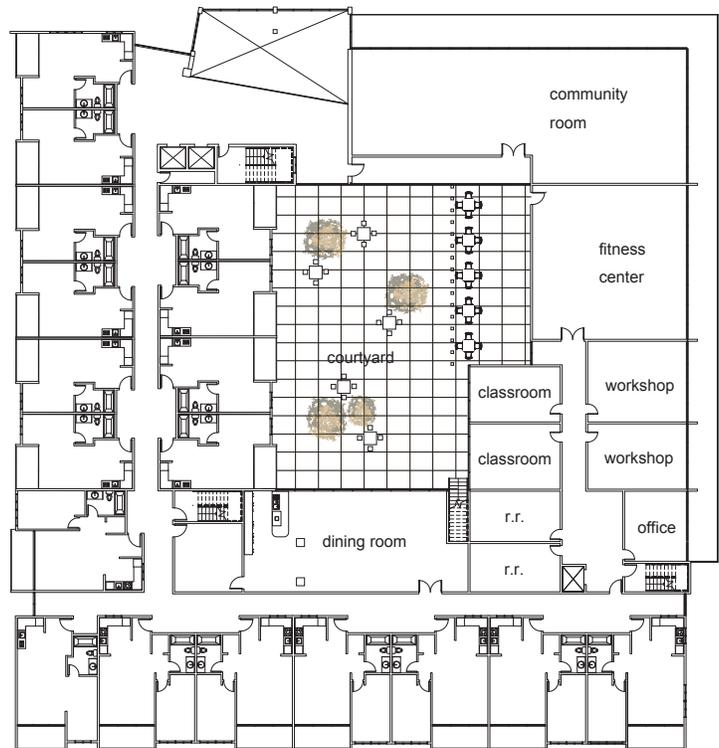
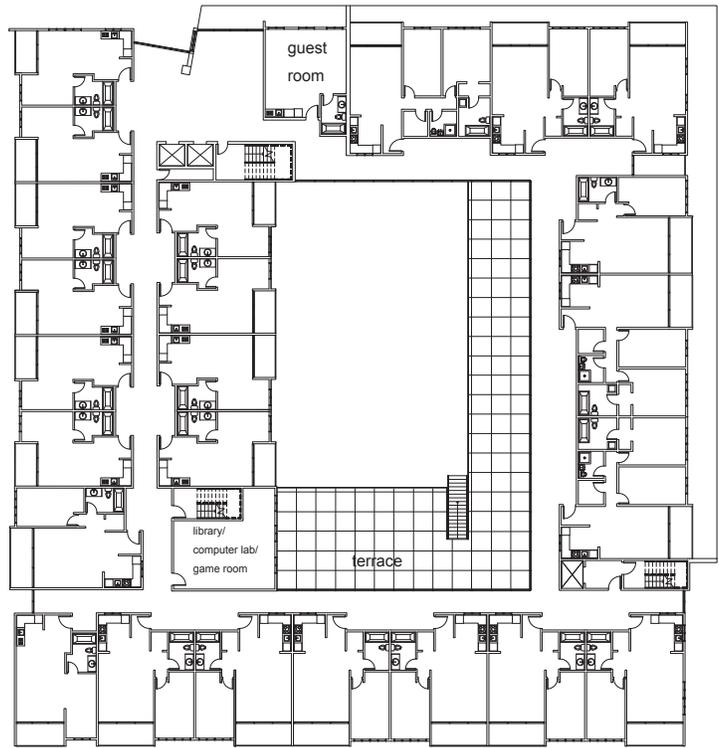


Two Bedroom Apt.



One Bedroom Apt.

Figure 106: Use diagram.



Figures 108 and 109: Second and third floor plans.

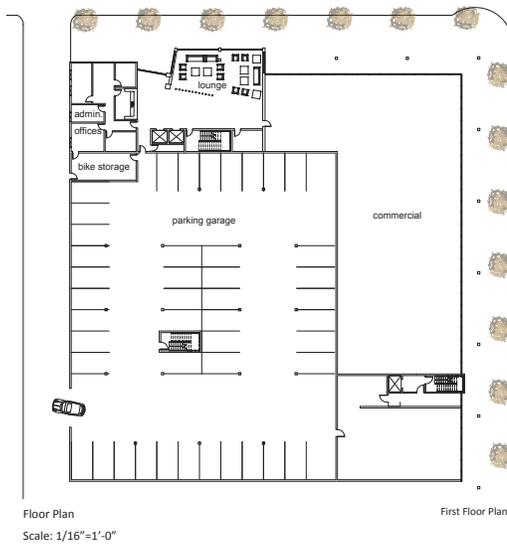


Figure 107: Ground floor plan.



Figures 110 - 112: Unit plans.



Figures 113 and 114: Interior perspectives.



Figures 115: Courtyard perspective.

gROW Housing

Miranda Hawkes

This project proposes new housing along Mill Creek, based on three main ideas:

Living with Ecology: Integration of ecology into the urban fabric is a key component of sustainability. Major waterways, such as the Willamette River in Salem, are particularly critical to ecological health, since riparian systems serve as spines of habitat connectivity. Living in concert with ecological systems provides education at the most basic level for people inhabiting the area.

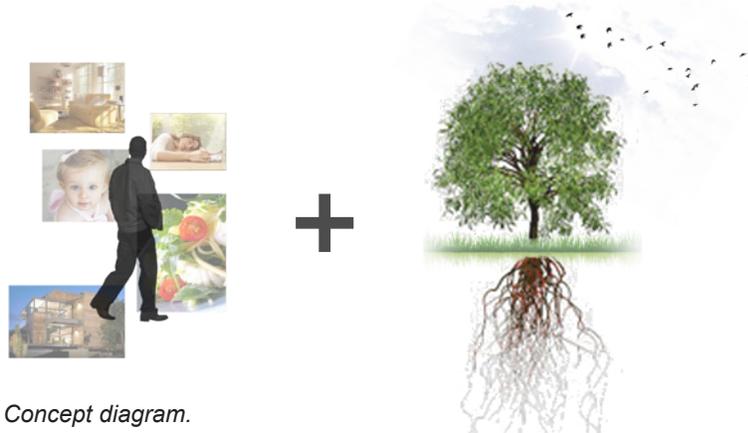


Figure 116: Concept diagram.

The Building as a Lens between the Urban and Ecological: At a site level, the organization of the urban design scheme within which this housing is proposed creates points of interaction between more urban or hardscaped areas and more ecological regions. The individual row house units serve as bounding elements between these disparate outdoor environments.

The Building as a Living Organism: In creating sustainability at a unit level, it is important to realize that each unit should adapt to changes in its inhabitants.

Site Organization: Meeting Human and Ecological Needs

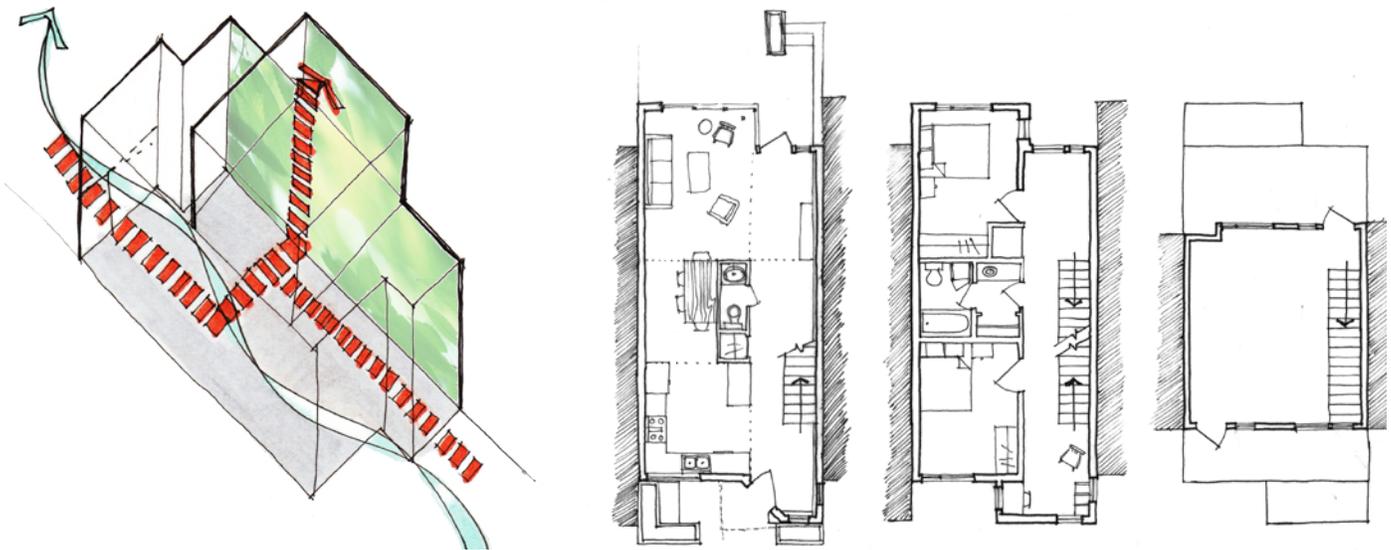
The site organization was formed around two major preexisting ecological features. One was a large Oregon white oak (*Quercus garryana*) tree; the other was a low region in the topography near the southern end of the site. These two elements become the focal features in two ecological courtyards: an upland prairie habitat patch, and a floodplain/wetland environment that serves as flood storage and water collection for the site. In addition to serving ecological functions, the site organization allows sunlight and air to reach each unit and provides aesthetic outdoor space for each unit as well. The courtyards provide recreation potential, linking into the Mill Creek bike/pedestrian trail proposed in the urban design scenario, and allow for outdoor activities and relaxation for residents. The dual purpose of creating ecological function and supporting human needs framed the project.



Figures 117 and 118: Site plan and cross-section.



Figure 119: Overall site plan.



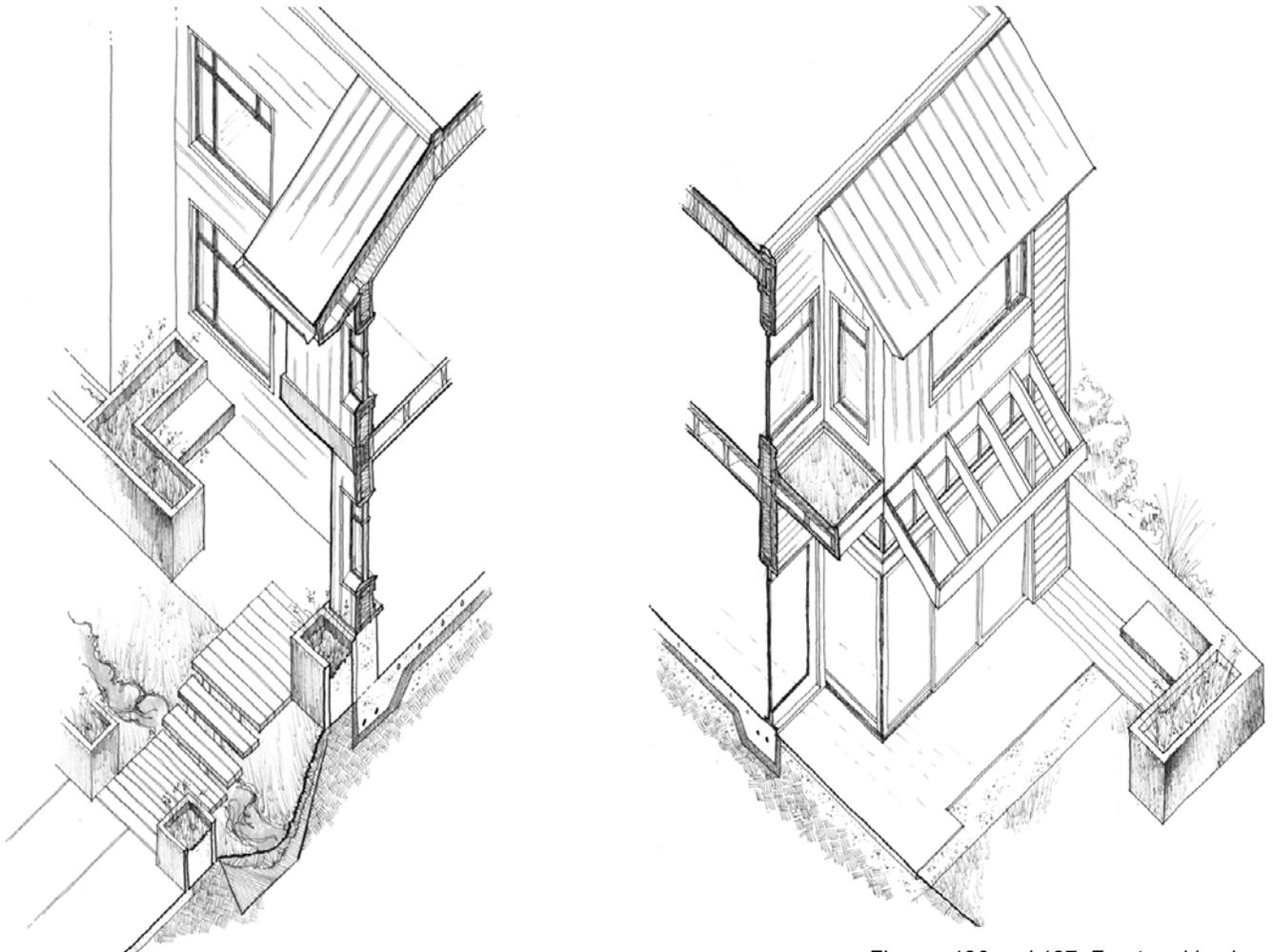
Figures 120 and 121: Unit circulation and plan.



Figures 122 and 123: Building facades.



Figures 124 and 125: Unit plans.



Figures 126 and 127: Front and back entry.

Conclusion

The North Downtown Waterfront site has enormous potential for rejuvenation. It is a prime location for the expansion of Salem's urban development, highlighting ecological habitat and sustainable strategies and creating a unique Salem district. The projects outlined in this report represent only a small portion of the visions described in the initial urban design schemes. The overall site has the capacity and the potential to create a neighborhood with entertainment venues, museums, aquariums, research centers, housing, hotels, civic buildings, and much more. Students generally chose building types that would serve as an attraction, a destination that could help to spur future development. With these types of attractions available, other building types, such as cafés, galleries, markets, and other local shops would be more feasible and appropriate.

While these projects are discussed individually, many of them would work in combination with other projects, and a few of them were designed with other student projects in mind. Due to the proximity of downtown Salem, the Willamette River, Mill Creek, residential neighborhoods, and many other amenities, the North Downtown Waterfront site has the ability to sustain these projects and much more. The city's excitement, energy, interest, and drive can turn this area into an active and uniquely Salem district.