



Abstract

This is an urban design proposal for the Portland, Oregon West Waterfront Blocks bound by SW Yamhill St, SW 3rd Ave, and NW Couch St in Portland, Oregon. The over-arching proposal here is to introduce higher density near the waterfront, and to propose incentives that may help preserve historic buildings. Specifically, the incentives involve added Floor Area Ratios (FAR) to development properties for taking advantage of certain existing site amenities and design guides. Additionally, for preserving historic buildings (or buildings of substantial age and/or cultural/historic value) a transfer of allowable building FAR may take place.

As a baseline, the existing FAR allowance within the study area is 4:1, and the height restriction is 75ft. These existing restrictions would still be in place. However with added incentives such as TDRs, the allowable FAR and max height would be given the right to increase. As much as a total of FAR 9:1 may be achieved with the right mix of incentives.

The following memorandum will further propose how these steps may be taken, and should be viewed in conjunction with the accompanying *Portland, Oregon West Waterfront Urban Design Proposal* document.

Phasing

Immediate Phasing (within 5-years)

- Allowance for FAR transfer of development rights (TDR)
 1. +2 FAR for Stepped Building Façade (façade to match adjacent buildings)
 2. +1 FAR for Below-Grade (or concealed) Parking
 3. +2 FAR, Preservation of Significant Historic Buildings
- SW Ankeny St Alteration
 - SW Ankeny St is currently a very pedestrian-centric alley and connection from the city to the Waterfront. This vehicular street would be converted into a pedestrian-way, with appropriate landscaping, and proper pedestrian crossings at the North-South streets.
- Skidmore Public Square
 - In an effort to maintain a historic district and aesthetic, the existing blighted buildings between the New Market Building and the Burnside Bridge Ramp will be demolished. A public square, grand arches, stair/stepped grassy terrace, and a small well-designed food/café pavilion.

Intermediate Phasing (5 to 10-years from now)

- Morrison Bridgehead off-ramp re-design.
- Skate park under and around new Morrison Bridge off-ramp.
- James Beard Public Market between Naito, 1st, and Stark. Office and mixed-use above public market.

Long Term (+10-years from now)

- Densification and high-rise construction near and around Morrison Bridgehead.
- Continued Historic preservation district near and around Skidmore district.

Funding

- City Investment in Low-Income Housing (city and private investment)
 - Some of the stepped high-rises may be incentivized to be residential above and mixed use at the base (office/retail). The city of Portland would invest in new residential projects, which would help fund a developer, provided that a portion of new residential units be reserved for low-income tenants.
- Tax Incentive (city and private investment)
 - A 10-year non-taxation period. This would provide developers several years to develop the land and begin earning a profit before paying property taxes.
- Skidmore Public Square Funding (city, private, and public investment)
 - The City of Portland offers property owners 5-years to develop the blighted buildings between Ankeny, 1st, Burnside, and 2nd (city block 11). After this time, the city would seize control of the land, and pay the property owners market value of \$1,846,090 plus the value increase 5-years from now.
 - The city would provide a portion of the public square funding. It would be requested that the American Institute of Architects (AIA) Portland chapter would a small contribution of funding, and petition for potential public contributors within the architecture and affiliated professions for funding. The AIA would likely receive the benefit of searching for the public square designer, and put a large plaque up in the square.
 - Social Equity: Providing this public square would invite visitors back to the historic area of Portland.
- Skate Park (private investment)
 - The city would, similar to the Skidmore Public Square, seize control of block 16, after the Morrison Bridgehead construction. Then contact the stake-holders of the organization known as the X-Games (an affiliate of ESPN), which is a company that publicizes sporting events. They would be given the option to develop the land as a nationally acclaimed skate park, and highly publicized location.
 - This would be profitable to the city in terms of tourism, and local attraction, while also making Portland a highly visible city.
 - Social Equity: With the skate park in such a highly visible place, it may welcome new families in the newly-constructed apartment towers to skate together. The fast-pace city and youngsters who will inevitably grow up there may find value in interacting with diverse people throughout their life, while they skate.
- James Beard Public Market (private investment)
 - The board whom currently organizes this effort has already begun raising \$25 million in funds. The city of Portland has already agreed to sell Portland blocks 01, 02, 16, and 39 for \$10 million (Culverwell, 2011). According to a study performed by R. Wilson, the current market value is \$9,905,940 – the city got a deal there!
 - Currently, the prospects for the Market hold strong, and the comprehensive article written by W. Culverwell effectively explained the prospects. (Culverwell, 2013).

- Social Equity: The incoming residents of the new high-rise apartment towers will find value in this market as a place to shop and potentially meet friends. It would also bring a level of tourism to the area. This may demand varying types of healthy foods for people to try, enhancing local investment in Portland.

Wrap-Up

The population increase is to be anticipated, and the city of Portland as a current global leader in sustainable forward thinking must be conscious of how to remain competitive in this market. The strategies listed above are very specific:

1. Increased density with high-rise mixed-use,
2. Introduction of social mixing opportunities,
3. Decreased surface-level parking (a waste of valuable city land),
4. Preservation of valuable urban buildings through FAR increase incentives.

This strategy did not address the full range of opportunities that should be evaluated within and around, the study area. For example, the waterfront park did not receive attention in terms of potentials for social activation nodes. Another example is the relatively high homeless population that inhabits the bridges and sidewalks. These two items were possibly critical points that should have been addressed.

For the sake of specificity however, this proposal focused more on livability within the urban fabric. Although there is still room for improvement, a significant amount of valuable experience was gained in the process of studying and researching the study area of Portland. This proposal provided a significant learning opportunity in terms of how to address the large-scale issues that come with urban design. In future urban design studies, these things, and more, will be included.

Project Influences & References

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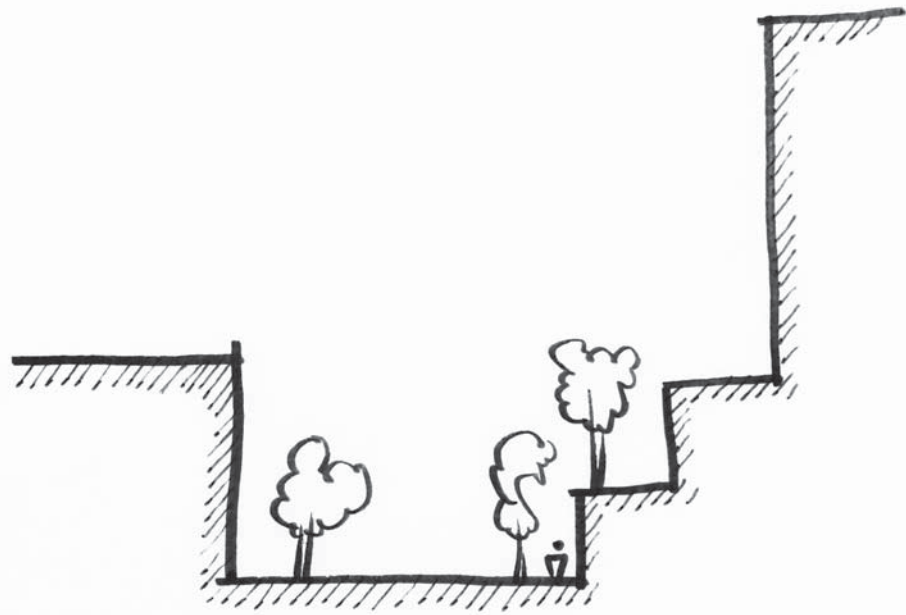
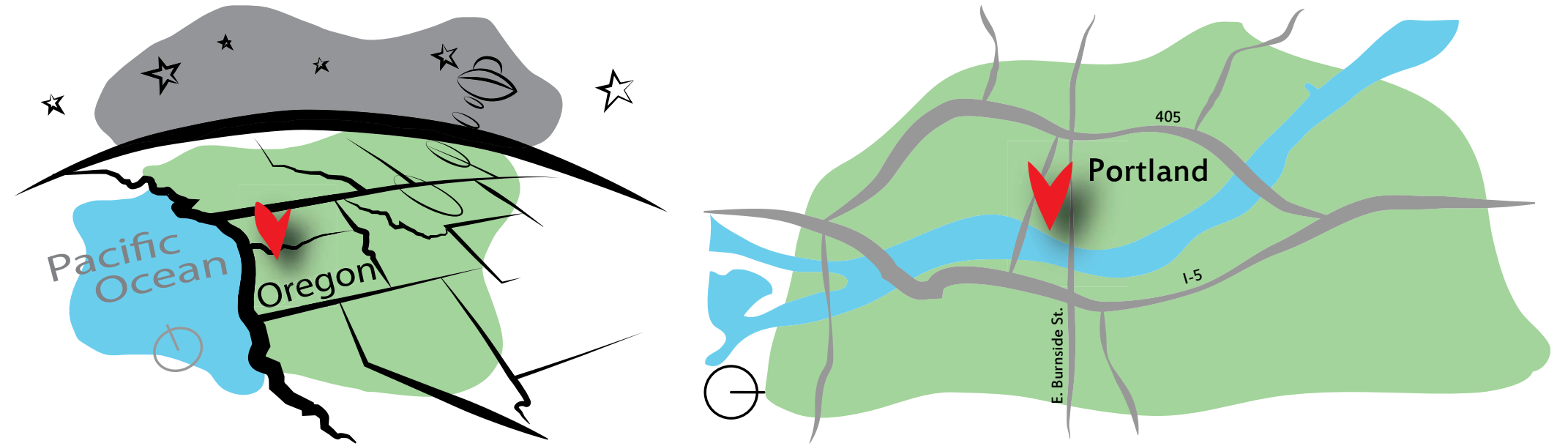
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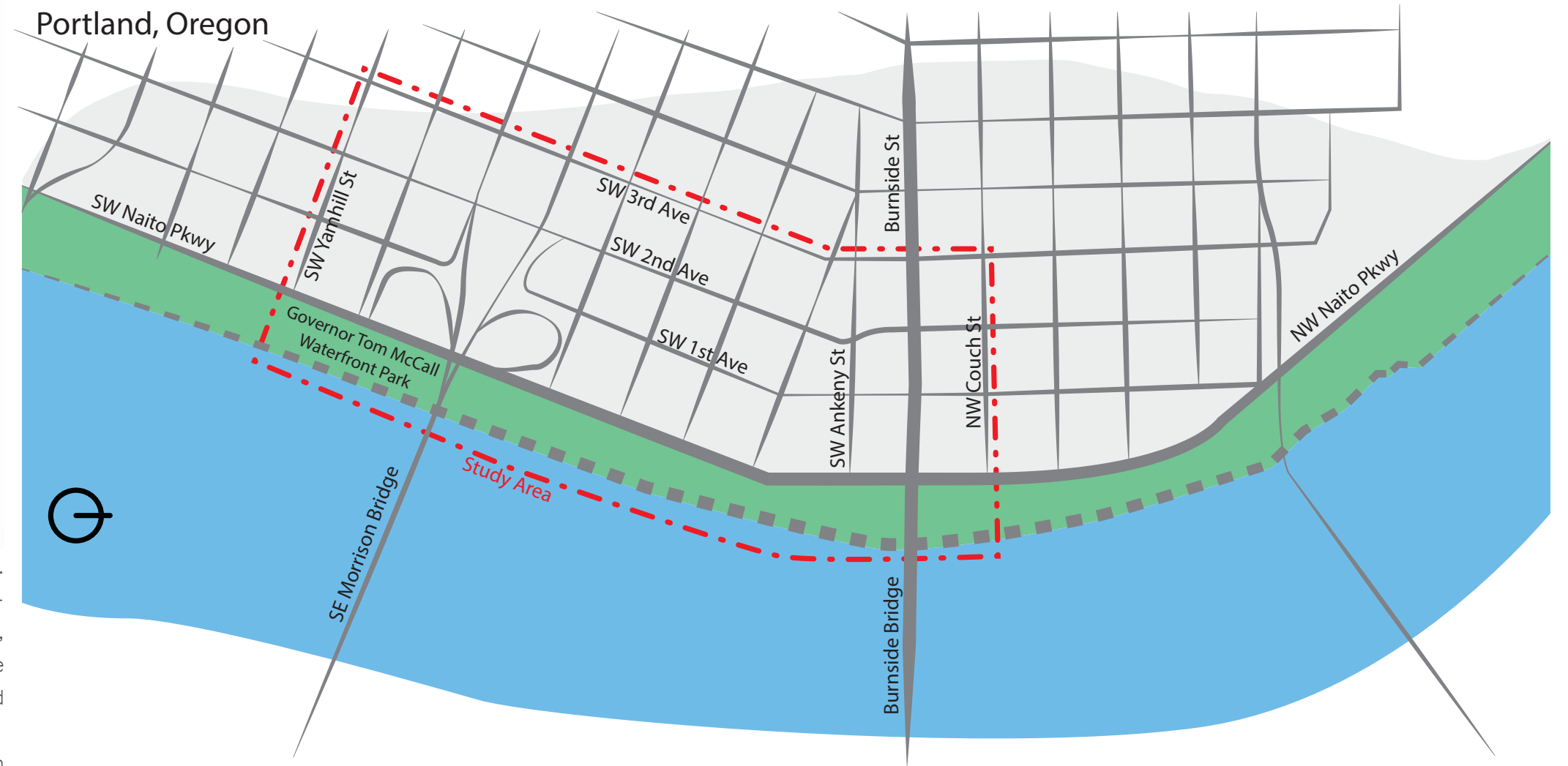
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“The human population continues to grow, and will likely not slow down. Now that we are aware of our impacts on the environment, we may no longer continue on our path of gross expansion or inefficient use of land, energy, and resources. Through design, we may find healthy ways to live close and together, so that we maintain a strong sense of community, and reduce our boot-print.”

Richard H. Wilson

Sources (note that all illustrations and photos were works of Richard H. Wilson, unless otherwise noted):



Introduction

Portland, Oregon has become a model for sustainable urban living. This transit-focused, bicycle-centric, walk-ability fanatic city has been mentioned as one of the best places to study urban design. Even as this proposal was being written, a new bridge was under construction just south of the central city that was designed specifically for light rail, bicycle, and pedestrian use only. The success of Portland did not come easily though, and the city as a whole has undergone significant changes. Coincidentally, 40-years before the writing of this analysis, the highway that once congested Portland's waterfront had been removed. In 1978 the newly landscaped and revitalized Governor Tom McCall Waterfront Park opened to the public. The waterfront park has wide expanses of grass, was a wonderful success for the city, and even geese like it.

Although the Portland waterfront successfully serves as the lungs of the city, the adjacent 200ft x 200ft blocks have fallen into a relative state of negligence. The study area that was specifically investigated for this proposal was bound by SW Yamhill St, SW 3rd Ave, NW Couch St, and the Waterfront. This study area was chosen for several reasons:

- High amount of surface parking lots,
- Apparent development stagnation,
- Potential historic building value,
- Unrealized urban space.

This urban design proposal of the Portland waterfront was the culmination of three previous design analyses. This final implementation memorandum shall outline one overarching concept for the study area, and provide other smaller-scale proposals. The following document was intended to invigorate this area of Portland that holds such a great potential for urban life.

To be clear, this document was created under the guidance of Gerald Gast, Architect, and Associate Professor at the University of Oregon in Portland. His input was valuable in helping to decide design decisions for this proposal.

Findings

A] Within the Architecture astute community the late famous writer and journalist, Jane Jacobs, composed a significant book titled 'The Death and Life of Great American Cities.' Much of here writing outright challenged and altered the once-modern approach to urban design, and has since had a significant impact. One particular point that she emphasized was the care in which planners must take inserting parks into cities, especially large parks. The Portland Waterfront is a huge park! Contrary to Jacob's work however, the waterfront is a very successful place for city-dwellers. Those who use the park have a chance to connect to their roots (waterfront commerce and ship voyages), take a bike ride, a run, or play soccer on the 165ft wide lawn. During the summer this park becomes a festival of food, games, concerts, and more. It is likely that if Jacobs visited this park, she would appreciate how it functions. Although, in its present state, it may be lacking key elements.

Sources:

- Jeff Speck: The Walkable City [Motion Picture]. (2013). Retrieved Jan 20, 2014, from www.ted.com/talks/jeff_speck_the_walkable_city.html
- Leinberger, C. (2004). The Shape of Downtown: What America's Downtowns Need is Walkable Urbanity. *Urban Land*, 69-75. Retrieved Jan 16, 2014
- Jacobs, J. (1992). *The Death and Life of Great American Cities*. New York: Vintage Books.
- PortlandMaps.com: <http://www.portlandmaps.com/>

Portland, Oregon West Waterfront Urban Design Proposal | Univ of Oregon in Portland | Richard H. Wilson | www.rhwdesigns.com

B] By using the online resource, PortlandMaps.com, an inventory was taken within the study area to evaluate building vulnerability. The inventory included data for each building regarding age, floor area ratio (FAR), monetary value, and more; the inventory also included one subjective value which was aesthetic appeal. This inventory turned out to be both exhausting and valuable in terms of indicating which buildings may not be able to withstand the interests of stake-holders or property owners. Upon completion of the data collection, many important aspects were learned. Also worth noting:

- The average building age in the study area was 1907.
- Average building height was three floors.
- Only 66% of the FAR had been fulfilled.
- The average FAR was 2.6:1
- 49 of the 83 buildings, within the study area, were built in the 1800s.
- 43% (358,000sf) of the 30 blocks were surface-level parking lots. There were also two parking garages that added almost 60,000sf.

See the spread sheet included at the end of this document for the data.

C] Vulnerable buildings were important to document as well, because they tend to be historically significant, city-defining elements that help maintain livable urban environments. There are some methods for preserving such important buildings however.

- 1) Transfer of Development Rights (TDR), allowing a property owner or developer to receive some additional incentives for maintaining the existing environment, or building in this example.
- 2) Allowing development to build on top of, or above existing buildings (which also carries seismic upgrade potential).
- 3) The City of Portland may offer varying incentives to entice development, such as a 10-year property tax-free period.
- 4) A city may invest in a new apartment building with the agreement that the management maintain a minimum amount of low-income units.

D] Subjectively the existing streets were not bad for pedestrians or cyclists. The short 200x200 blocks are an ideal model, which supports a healthy living environment. Particularly in this study area there was added benefit of proximity to practically every need for a person to live comfortably. Perhaps the only thing that seemed to be missing was a healthy mix of uses and some additional social nodes. The central city was found to be zoned as 'CXd', or Central Commercial Zone. In this zoning area, the FAR was set at 4:1, with a 75ft height restriction. Although residential was allowed per the Portland code, almost none were found. Also note as mentioned earlier, that the average FAR was 2.6:1, which means that this area has not fully reached its potential.

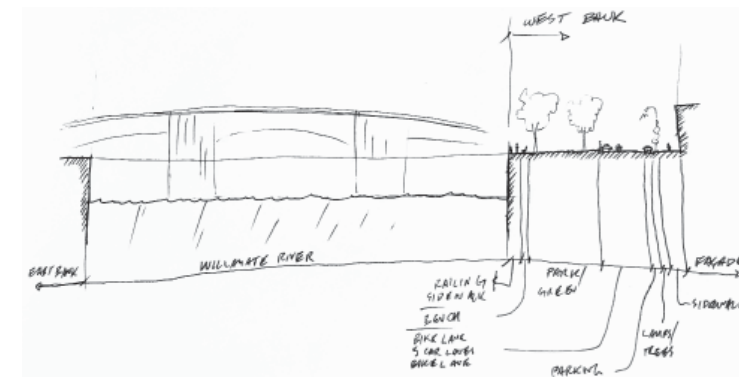
E] A new ad-hoc movement in Portland had moved in to suppress the overwhelming height of potential high-rises to come. This designer does not see high-rises as a detriment to human life, but instead as a means to live dense and together. This designer also sees the prospects that come with cherishing those parts of the urban fabric that are frayed, but beautiful and give a sense of place to Portland.

Proposal

It shall be proposed here that the urban design consideration is to rezone the adjacent waterfront blocks to Commercial Mixed Use and encourage development for stepped high-rises - a middle-ground if you will. The stepped building facade is the key, and is meant to be combined with preservation of historic buildings. The City of Portland would offer developers the TDR incentive. The TDR would involve increased height restrictions and FAR allowance provided three conditions:

- 1) +2 FAR, Stepped Building Facade. An additional FAR (and height) allowance be granted for stepping newly constructed high-rises back equal to the height from the sidewalk to the parapet/top of the second floor. Ideally, the new building facade would closely match the height of adjacent buildings, while allowing more leaseable square footage.
- 2) +1 FAR, Below-Grade (or concealed) Parking. Moving parking either out of sight, or below grade should incentivize less surface-level parking lots.
- 3) +2 FAR, Preservation of Significant Historic Buildings. By maintaining existing buildings of significance to the city, developers may achieve greater heights, and add valuable density and capitol to the city.

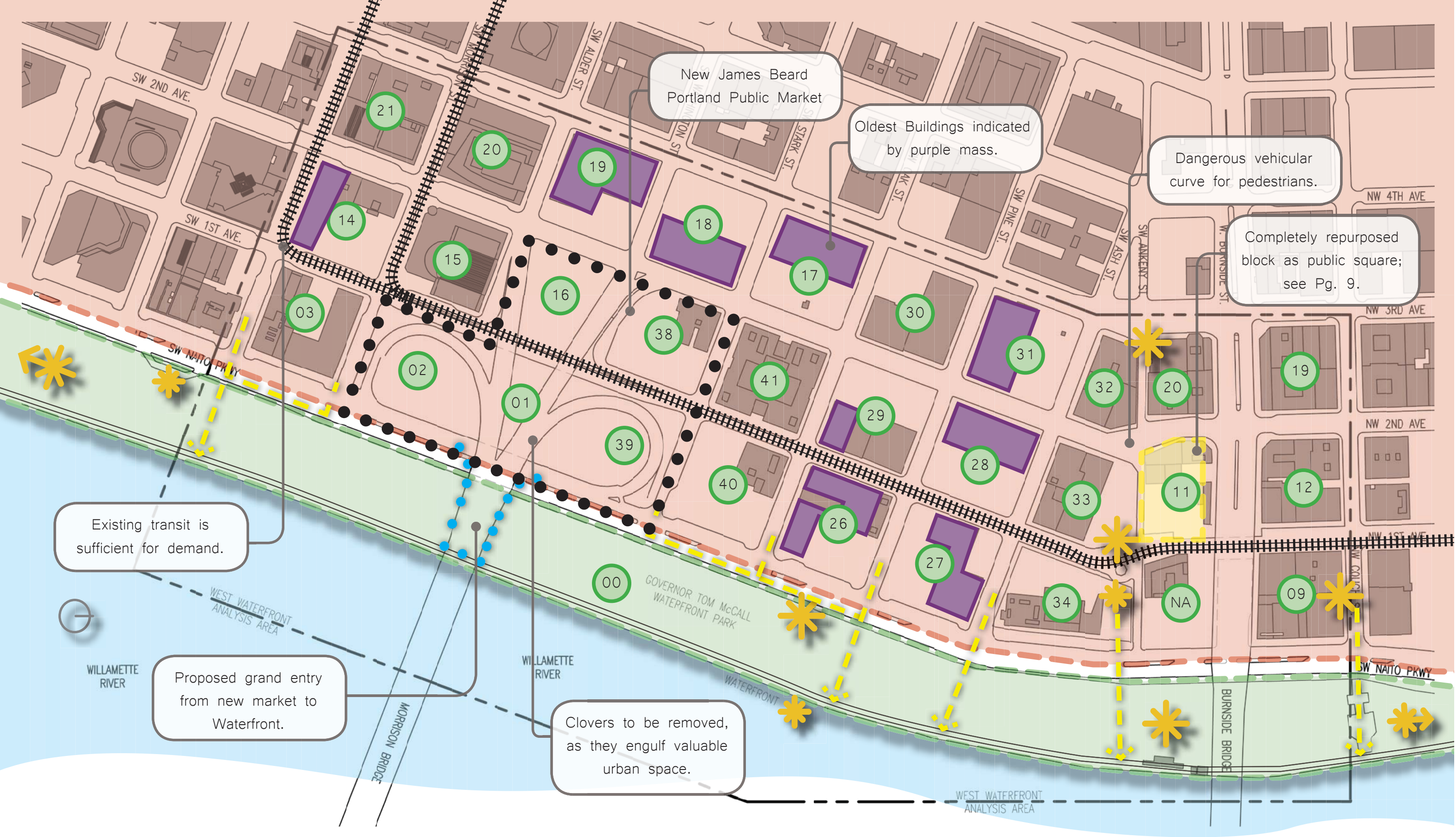
There are perhaps many more incentives that a city may implement that would also increase incentive, and should be explored. For the time being however, if a property owner was able to take advantage of all three of these points, then they may have a total allowable FAR of 9:1. This means that some buildings may reach as high as 20 floors.



South-facing sketch from SW Ash St. & SW Naito Pkwy.

There is an obvious need for proper scaling of facades in this proposition. Notice the Willamette River, at a width of 812 feet, steps from East up to the West bank. The West Waterfront then continues for 285 feet. The horizontal plane interacts with the building facade of 10 SW Ash St which is 40' in height. See "Appendix I" for x2.

From a distance, the scale of the tiny building of 10 SW Ash seems insignificant. However, once an individual moves closer to that facade, its height becomes ever-more obvious. This building, being one of the closest facades to the waterfront within the study area is subjectively a comfortable distance from the water's edge, and this distance should be maintained. Similarly the height to run ratio feels comfortable. Maintaining the existing facade height is the goal of this proposal, while also providing the proper incentive for development to take place. The following will delineate the findings.



Not More Attractions, Instead More Livability

It is common for designers to wade into every project believing that their work will be the next Frank Gehry Guggenheim. However there is something to be said for creating livable cities rather than implanting shiny objects to attract more people. Portland seems to be trying a bit of both. For example, in this area, a new public market is planned for blocks 02, 01, 16, 39, and 38. It seems appropriate that the correct response is to feed that market with residents who will use it year-round. However, this proposal suggests later on, better positioning.

This designer has taken the role of livability, and asked the question of, what does the Waterfront already have, and what does it lack? From a broad view, the Waterfront has sufficient walkable connections to the city center, with very easy access to transit and drivable roads that are not too fast on Naito Pkwy. Also at the waterfront are already several nodes that exist, in particular:

- * The Saturday & Sunday Market for half the year.
- * A Maritime Museum and memorial
- * Vehicle/Pedestrian drop-off points
- * The Portland Rose Festival that takes place each Summer on the lawn
- * The Oregon Brewers Festival on the lawn
- * Occasional concerts
- * Nearby Nodes within less than a 3-minute walk.



Potential new grand Public Market entry near or under the Morrison Bridge.

See "Appendix E" for Lynch-style map analysis.

Notes & Reactions

Governor Tom McCall Waterfront Park is to remain as is in this design guide. The current functions that the park serves have been successful over the years, and if maintained will likely continue to be an attraction to the public. However, one node will be added under or near the Morrison Bridgehead to act as the grand entry in the new Public Market. The integration of a public market will stimulate the need for residential to provide patronage. With the added axial connection to the waterfront that is also planned as part of the development, creating more "there theres" may end up over-crowding the waterfront. This is a contributing factor for why this design guide has focused on building type at particular blocks.

According to the "Summary of Portland Historic Preservation Zoning Incentives" of 2011 from the City of Portland any historic buildings in this area will benefit from tenant incentives. The reason for so much surface-level parking was uncovered in this document: "Increased maximum parking ratios for historic properties in the Central City." This issue may be resolved by allowing shared parking to tenants of historic buildings within any newly constructed underground parking facilities. Take note of the purple masses, which indicate the buildings built during the 1800s. Although not all of these are historic buildings, some of them receive the benefit of increased parking ratios, as stated above. It is clear to see too that the empty space within those blocks directly correlates to the amount of historic buildings.

These blocks will be rezoned to allow greater FAR for stepped building designs, while at the same time providing below-grade parking. The intention here would be to shift the existing surface-level parking out of sight, while also providing enough for both residential and business use. This is integral to stimulating the area. With the integration of residential and business. This proposition plans to entice more activity to this area by directly activating uses. The great benefit of this decision is the close proximity to transit, reducing the need for vehicles. After performing an in-depth analysis of the case study area, it became obvious which areas needed improvement. For example the yellow zone will be planned for re-purposing as a public square. The intention is to enhance the Saturday Market, and strengthen the street. See "Appendix F" and the data spread sheet at the end of this document.

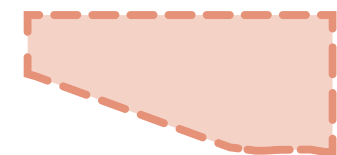
Source:

- Portland Bureau of Planning and Sustainability. (2011, Jul). Summary of Portland Historic Preservation Zoning Incentives. Retrieved Feb 2, 2014, from The City of Portland Oregon: <http://www.portlandoregon.gov/bps/article/150295>



Sunday Afternoon: Families, Joggers, Doggies, Children - All Headed to the Waterfront

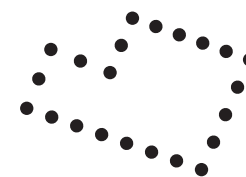
This photo was captured on Feb 2nd, 2014. At a cold 42 degrees, on a sunny day, all walks of life find pleasure at the Park.



CXd (Existing)
Central Commercial Zone



OSdr (Existing)
Open Space Zone



Possible New James Beard Public Market (Proposed)
17-story (block 08) grocery with restaurants, business, and retail.



Access to Waterfront (Existing)

These indicate the path a pedestrian must take to access the waterfront walking path. In some cases, a person may need to walk up to six blocks to find a crossing on pavement.



Concept

One very influential writer who provided great insight into strategies for this proposal was Christopher Leinberger, who wrote about 12 key elements in designing “walkable urbanity.” Adapting from his writing slightly, the following list are a simple break-down of the main concepts in this design proposal.

Concept Diagram

- Below-Grade Parking
- Ground-Level Commercial
- Human Scale Street Frontage
- Residential Living
- Stepped Building
- Historic Preservation

These points all coalesce into allowing the City of Portland to build tall, maintain human scale, and nurture a livable urban fabric.

Statement

As Portland prepares for densification, so shall it anticipate the requisite for a livable city. It is proposed here that the city simplify the off-ramps of the Morrison Bridgehead; incentivize development for property owners by increasing the FAR/height allowances given certain restorative and human-scale design criteria; create more mixed-use functions for residential and business commerce in the central city.

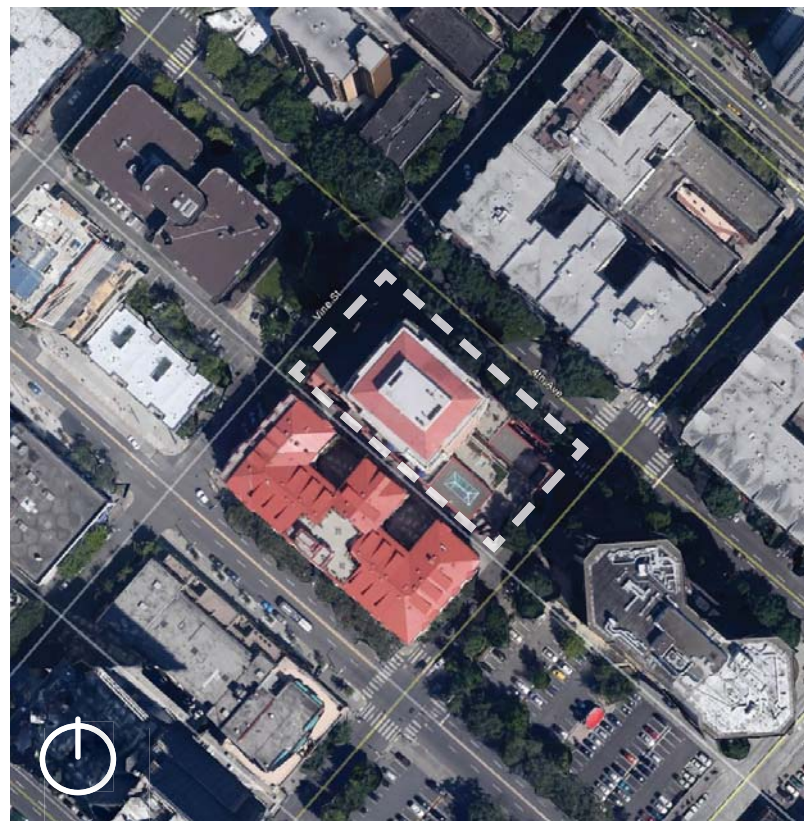
Precedent

A successful example of the concepts presented here may be found at the Centennial Tower Apts in Seattle. A 26-story apartment complex with commercial at grade and three floors of below-grade parking.

Notice the below Google Earth images.



North Aerial Perspective View - Centennial Tower Apts
Just as potentially impending as the other near-by towers, but still subtle.



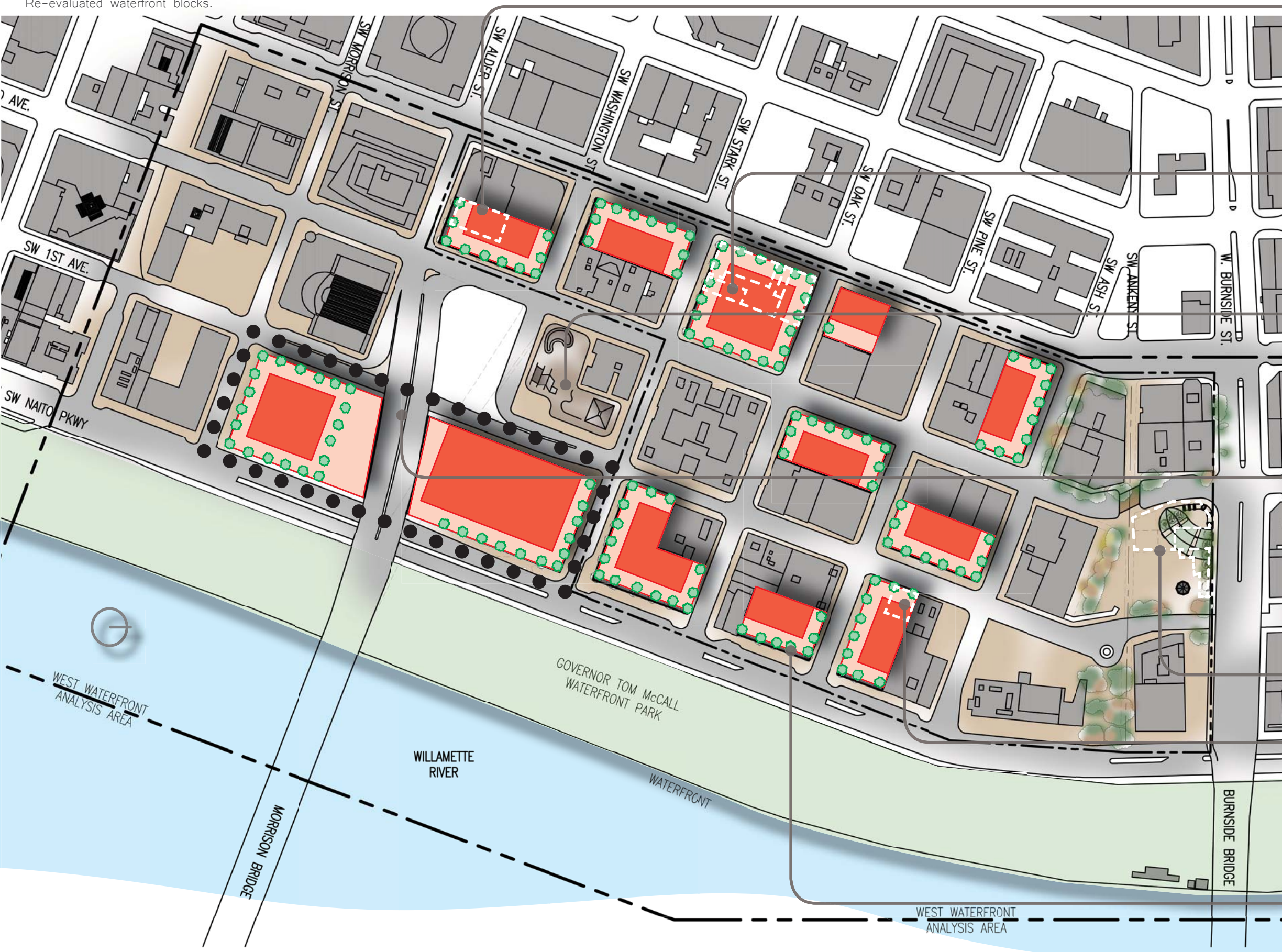
Plan View - Centennial Tower Apts
A base of 240'x120' or 28,800sf footprint.



NW Street Perspective View - Centennial Tower Apts (left side of image)
Notice how the tower rises discretely above the street-scape



SW Street Perspective View - Centennial Tower Apts (right side of image)
The stepped facade allows for healthy canopies to grow on trees, simultaneously allowing the tower to rise high while maintaining a human scale.



Demolished 1-story FedEx. To be replaced by a stepped high-rise, with retail at base.

Lost possibly one of the most beautifully detailed buildings in Portland. The 1889 "Bishop's House" taken by a mixed-use, stepped, high-rise tower. The adjacent buildings however were categorized as vulnerable with an average block score of 40%, as may be seen on "Appendix F."

New AW3SOME PDX Sk8 P4rk. Intended as catalyst to draw families, and friendly inter-city competitions. Complete with the world's most excellent Parkour obstacles.

Morrison Bridge Head off-ramps removed, and converted into a two-way off-ramp that should smoothly direct and disperse existing traffic. The new James Beard Public Market is suggested to occupy these blocks, and encouraged to develop higher density above their open market at the base level with an entry to the Waterfront.

Newly redesigned Public Square.

An 1887 building with a nice facade, but crumbling brick and under-used property.

Stepped mixed-use facades will allow the human scale to be present at the street-front while also providing increased livability and density in the heart of Portland. Along the unchanged SW Naito Pkwy, these towers will gleam in the sun, and provide a comfortable public room for the Waterfront.

The existing crosswalk at SW Ankeny St and SW 2nd Ave is relatively dangerous to cross, since the south to north traffic cannot see around the corner upon approach. The street has been converted into a pedestrian-only path with pavers introduced to slow traffic, emphasizing to drivers that this is a pedestrian way. The street curb-cuts were redesigned to be more gentle as well.

Imagine standing above the Saturday Market, looking down from the newly-constructed arches. One would descend the steps, like a royal person, into the bustle for a fresh chili-dog, or tie-dye shirt. Following the steps would be a new stepped lawn, trees, and a fixed food stand that sells coffee to transit riders who wait under the Burnside Bridge, and during Market days.

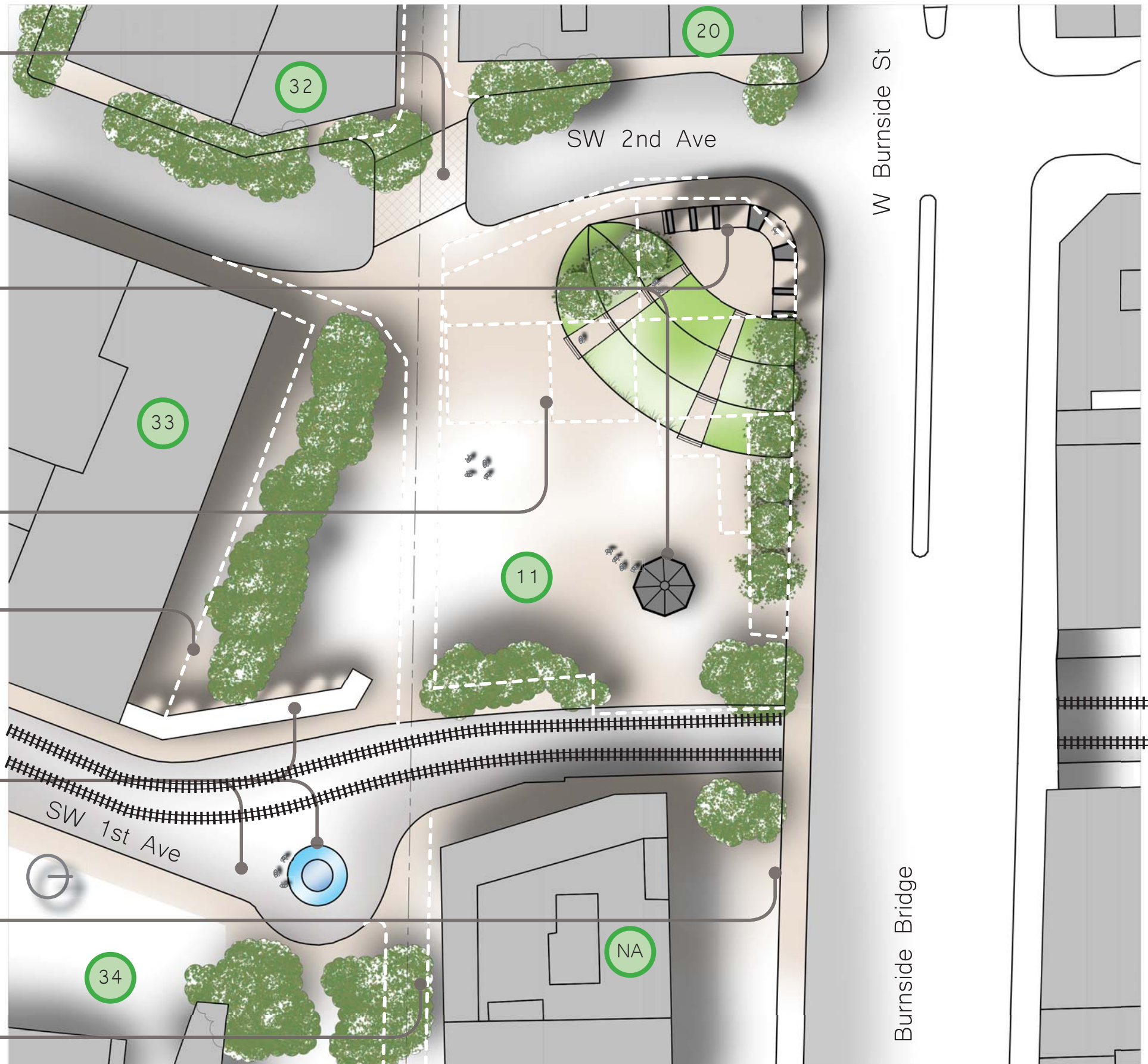
The existing parking lot and decaying concrete structures that lined 2nd and Burnside have been removed to make way for the new plaza.

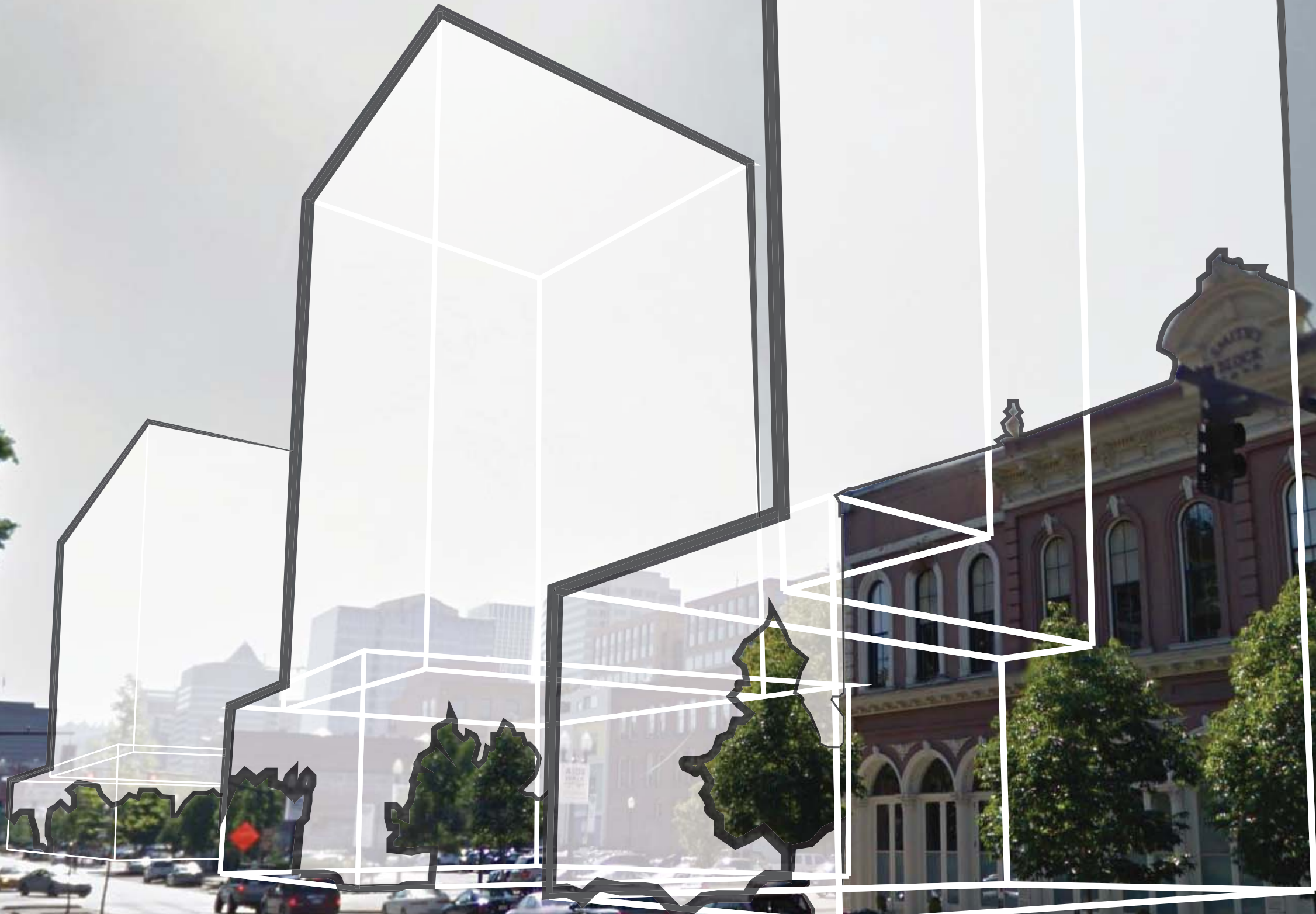
Glass facade removed, to uncover New Market Block Building.

The existing Skidmore Fountain, cobble pedestrian-way, and arcade have been preserved in this plaza. These elements help maintain human scale, and provide attractive historical elements. See "Appendix H" for images of the fountain and line-of-sight through the existing square and Ankeny Alley to the high-rise tower.

The existing Burnside Bridge has become shelter to many homeless each night - counting an average of 23 individuals during the study period. See "Appendix G" for a related photo.

SW Ankeny St converted into a pedestrian-way.





WASH ST



Aerial Perspective of Proposed Use

Seen above is a rough massing of what may be expected if developers were allowed to build full out with the FAR increase from a stepped building design in the new Commercial/Residential Mixed Use zone.

What this proposal allows for is below-grade parking, shifted from the existing surface-level parking. Additionally providing useful commercial office/retail on the first and second floor which is intended to bring activity to the waterfront blocks during business hours. If some of the spaces were

occupied by restaurant venues, then the lunch crowd may choose to bring their lunch to the water's edge; this also increases general activity in the area - enlivening the city. With apartments or condos above and a stepped terrace, residents and pedestrians may find comfort at the human scale while traversing the blocks of Portland.

Existing nearby transit would allow for residents and business folk to travel without such a dependence on vehicles. With the potential of a new Portland Public Market, the residents would likely be happy to occupy both the

interior and exterior spaces. Notice too that with stepped building facades, the buildings do not feel as claustrophobic as initial beliefs may generate.

Perhaps there may be some issues with this design proposal. One example may be that there are not enough elementary or middle schools nearby to support potential new families. So in a subsequent study more specific details of feasibility will be researched, and feedback from colleges will be considered. In particular, the issue of the homeless should be addressed and heavily investigated.

Appendix A - Human vs. Non-Human Interface

An early trace-sketch of the waterfront blocks. This delineated some of the important nodes, open spaces, lines of significant travel, and important pedestrian ways.



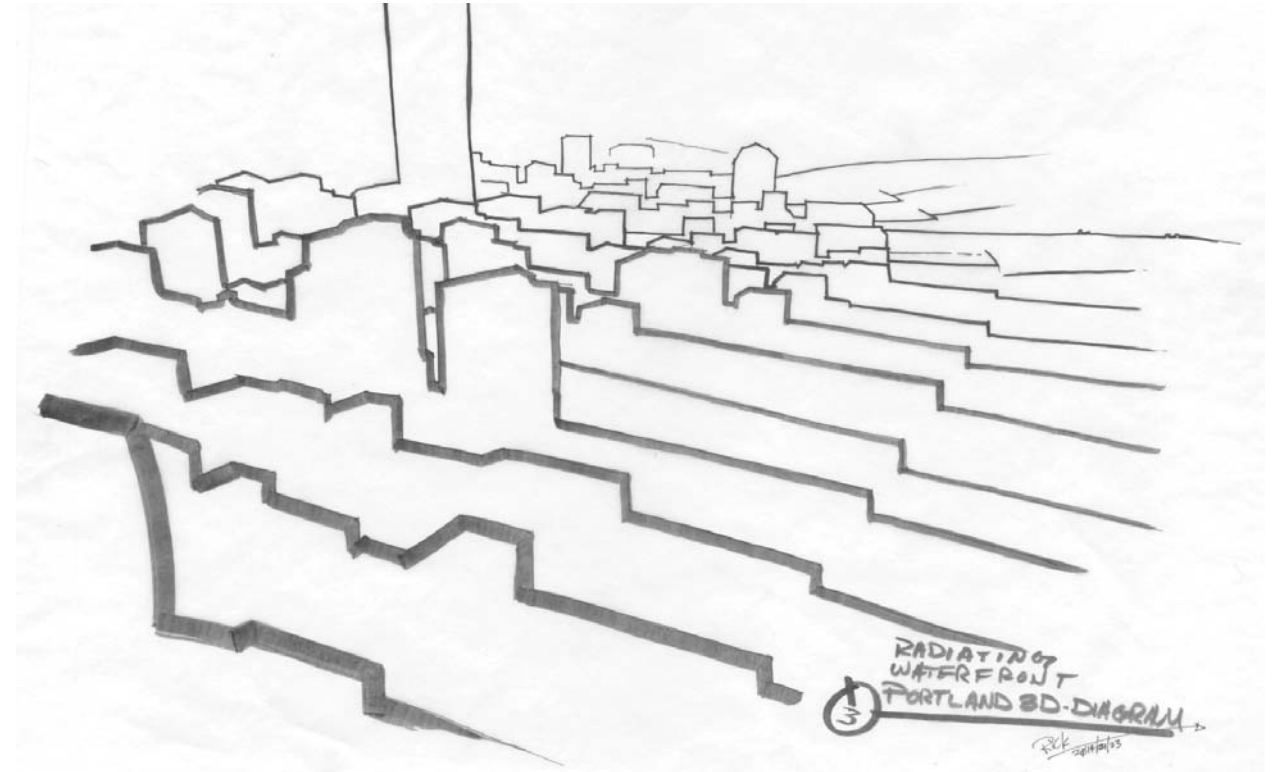
Appendix C - Noon Waterfront Shadows

A vertical line trace-sketch that only shows the shadows produced at high-noon in the summer. This along with the radiating sketch were intended to force the design to look at the city in a different way.



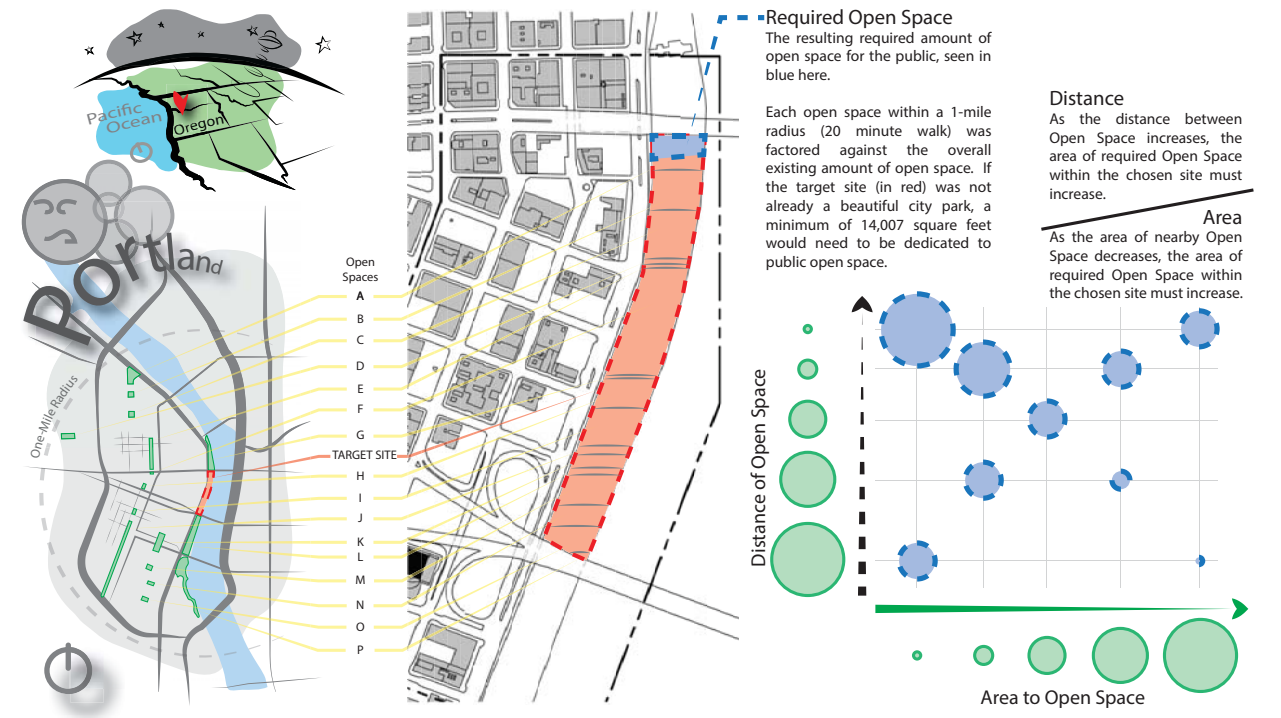
Appendix B - Radiating Waterfront

This trace-sketch of Portland followed the paths along each north street edge. Each line dropped once it reached the water's edge, then continued across the water, producing a radiating set of lines.



Appendix D - Urban Analysis Open Space Index

This tool was used to analyze whether there was a subjective need for more open park space in the city. The blue indicates the required amount of park space within a one-mile walkable area. It is obvious though that more park is not needed since the entire red shaded zone is already a park.



Appendix E - Lynch Image of the City Map

Kevin A. Lynch style city analysis. This indicates the paths, edges, nodes, districts, and landmarks. Notice the 'major path', a pedestrian way, along the waterfront, equally as important compared to SW Naito Pkwy.



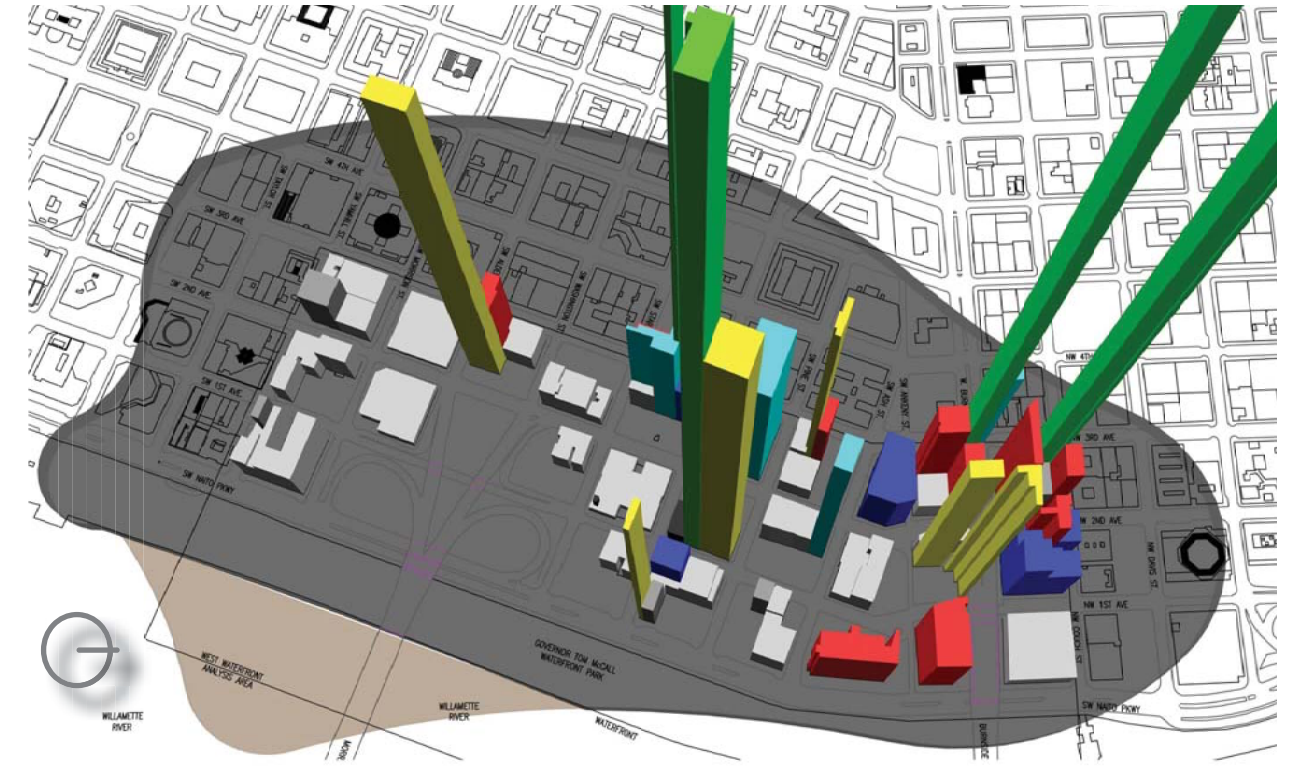
Appendix F - Vulnerability Risk Value

A low percentile value means the building did not meet standards for retention, and may be at risk of replacement.



Appendix F - Vulnerable Buildings

A 3D perspective view of the varying vulnerabilities for each building. The green buildings indicate the most vulnerable, while the grey and dark blue are at low risk.



Appendix F - Vulnerable Buildings

The most vulnerable buildings within the West Waterfront study area.

Notice the buildings in green. These depict the most vulnerable. Vulnerability defines the risk of a building from being replaced (demolished) for varying reasons. In this case study, all buildings were investigated individually on multiple objective factors:

- 1) Building Age
- 2) Floor Count
- 3) Market Value
- 4) Above Grade Square Footage
- 5) Property Square Feet
- 6) Existing vs Possible FAR
- 7) Aesthetic Urban Value (subjective)
- 8) General Use

Data was collected on each of these points, then factored together to produce a value that was used to assess vulnerability.

The buildings with the highest risk were those that tended to have a low existing Floor Area Ratio (0.85 to 1 for example), and were aesthetically unattractive, which rendered the adjacent sidewalk uncomfortable for occupiability.

The green buildings were predominantly 1-story bars or strip clubs, with poorly maintained facades, and very unfriendly street frontage. These buildings may be considered blighted.

Consider too that many of the colorful buildings were actually quite beautiful and friendly. However many of their other factors were not optimal, hence driving their vulnerability high.

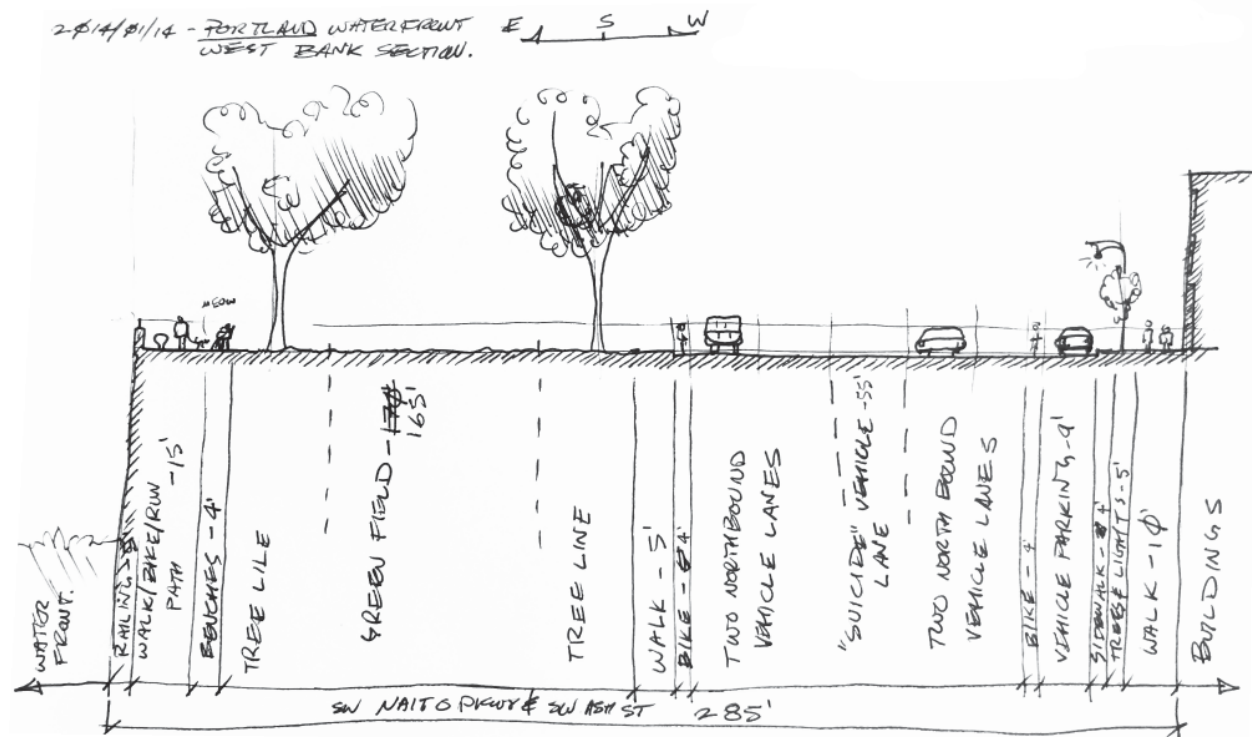
Appendix G - Boatless & Planeless: The Homeless

An issue that unfortunately was not approached in this analysis.



Appendix I - Waterfront Sketch x2

This sketch was drawn while sitting on the sidewalk of SW Naito Pkwy (the sidewalk on the right). The proportions were assumed, then later verified to be accurate within 2ft.



Appendix H - Photos of Important Nodes

These photos were taken during the beautiful summer months in Portland. They are of the most important nodes and paths included within the study area of this proposal.



Portland Waterfront Blocks Building Evaluation															
Block #	Address	Building Age	Floors	Market Value	Above Grade SqFt	Land SqFt	Zoning				Worth Keeping?	Vulnerable?	Z-Value	General Use	Comments
							Existing FAR	Possible FAR	FAR Fulfilled	Category	100% = Yes	100% = Yes			
03	53 SW Yamhill	1878	4	\$ 2,125,240	17,112	4,398	3.89	4	97%	CXd	50%	74%	184	Offices	Gray, blan, semi-classic base. Concrete?
	727 SW Naito	1879	4	\$ 614,250	5,625	1,875	3.00	4	75%	CXd	80%	78%	166	Offices	Brick, pleasant façade.
	50 SW Morrison	1962	5	\$ 17,089,800	64,961	25,000	2.60	4	65%	CXd	75%	70%	204	Hotel	Good Condition.
	65 SW Yahmhill	1885	4	\$ 1,773,990	15,400	3,850	4.00	4	100%	CXd	100%	100%	100	Offices Restaurant	Beautiful.
	730 SW 1st	1878	2	\$ 494,320	3,500	1,750	2.00	4	50%	CXd	75%	63%	256	Offices	Semi-Modern/Classical.
	728 SW 1st	1878	3	\$ 700,000	9,375	3,125	3.00	4	75%	CXd	80%	78%	166	Retail Office	If improved, may be nice.
Study	Average	1893	3.67	\$ 3,799,600	19,329	6,666	3.08		77%		77%	77%	180		
14	733 SW 1st	1878	3	\$ 1,713,610	15,000	5,000	3.00	4	75%	CXd	100%	88%	131	Offices Restaurant	Classical High Order
	728 SW 2nd	1880	4	\$ 4,577,300	35,200	9,500	3.71	4	93%	CXd	100%	96%	108	PCC	Restored, attractive, classic
	715 SW 1st	1973	2	\$ 1,460,890	20,000	10,000	2.00	4	50%	CXd	25%	38%	711	Parking Garage	Not valuable
	710 SW 2nd	1967	7	\$ 5,655,510	50,230	14,500	3.46	4	87%	CXd	65%	76%	174	Offices Restaurant/Retail	Good place to do business - typical office building.
Study	Average	1925	4.00	\$ 3,351,828	30,108	9,750	3.04		76%		73%	74%	281		
21	733 SW 2nd	1946	2	\$ 2,730,000	16,676	9,500	1.76	4	44%	CXd	85%	64%	241	Offices	
	732 SW 2nd	1914	6	\$ 1,812,120	27,900	5,000	5.58	4	140%	CXd	45%	92%	118	Offices Retail	Looks like an oportunity for residence above. Think J. Jacobs (JJ).
	716 SW 3rd	1902	4	\$ 6,188,000	60,000	15,000	4.00	4	100%	CXd	90%	95%	111	Offices Retail	May be a nice conversion to apartments above (JJ).
	210 SW Morrison		4	\$ 1,190,590	38,000	9,500	4.00	4	100%	CXd	95%	98%	105	Offices Restaurant	Beautiful classical order, well-established restaurant
Study	Average	1921	4.00	\$ 2,980,178	35,644	9,750	3.83		96%		79%	87%	144		
02 01 39	(Parking Lots)		1	\$ 5,783,730	99,000	97,110	1.02	4	25%	CXd	12%	19%	2846	Parking Lot	Morrison Bridge Head
15	121 SW Morrison	1988	18	\$ 51,870,000	358,110	39,000	9.18	4	230%	CXd	100%	165%	37	Office/Commercial Retail & Restaurant	Sleek, and significantly stepped façade
20	601 SW 2nd	1998	19	\$ 87,793,020	584,483	39,000	14.99	4	375%	CXd	100%	237%	18	Office/Commecial Retail & Restaurant	Sleek new building, stepped façade
16	-	-	1	\$ 4,122,210	39,000	39,000	1.00	4	25%	CXd	10%	18%	3265	Parking Lot	Complete opportunity for development
19	201 SW Alder	1956	1	\$ 2,421,020	5,775	9,500	0.61	4	15%	CXd	30%	23%	1958	Retail	FedEx, really needs to be developed
	532 SW 3rd	1913	9	\$ 2,716,750	34,414	5,000	6.88	4	172%	CXd	90%	131%	58	Offices Retail	"Willamette Building." Recently upgraded aesthetically, attractive historic building (JJ).
	522 SW 3rd	1918	1	\$ 1,149,410	5,000	5,000	1.00	4	25%	CXd	65%	45%	494	Retail	Underdeveloped, but the building has a nice character. May be built-up above as long as the styles matched.

	502 SW 3rd	1900	4	\$ 3,861,120	34,960	10,000	3.50	4	87%	CXd	100%	94%	114	Offices Retail	"The Postal Building." Beautiful. Turn-of-the-century building. (JJ)
	201 N/ SW Alder		1	\$ 1,731,790	9,450	9,500	0.99	4	25%	CXd	10%	17%	3290	Parking Lot	Opportunity for development
Study	Average	1922	3.20	\$ 2,376,018	17,920	7,800	2.60		65%		59%	62%	261		
39	1 SW Stark 434 SW 2nd		1	\$ 3,909,180	27,000	27,313	0.99	4	25%	CXd	10%	17%	3319	Parking Lot	Opportunity for development
	404 SW 2nd	1906	5	\$ 1,377,910	44,956	9,500	4.73	4	118%	CXd	75%	97%	107	Office Retail	Nice details, but may be deteriorating at enclosures
Study	Average	1906	3.00	\$ 2,643,545	35,978	18,407	2.86		72%		43%	57%	308		
	431 SW 2nd	1886	3	\$ 2,000,000	14,250	4,750	3.00	4	75%	CXd	85%	80%	156	Office Restaurant	Classical order, nice detailing, (JJ), cast iron columns?
	421 SW 2nd	1886	4	\$ 3,804,470	30,300	9,500	3.19	4	80%	CXd	95%	87%	131	Office Retail	"Grand Stable Carrage Co" & neighbor. Nicely ordered.
	208 SW Stark	1891	6	\$ 1,669,840	27,000	4,750	5.68	4	142%	CXd	95%	119%	71	Office Restaurant	Beautiful base and entry, well-established restaurant, nice brick details.
	412 SW 3rd 221 SW Washington	-	1	\$ 2,830,380	19,200	20,000	0.96	4	24%	CXd	10%	17%	3460	Parking Lot	Opportunity for development
Study	Average	1888	3.50	\$ 2,576,173	22,688	9,750	3.21		80%		71%	76%	174		
	87 SW Stark 320 SW 1st	-	1	\$ 2,786,480	30,000	30,000	1.00	4	25%	CXd	10%	18%	3265	Parking Lot	Opportunity for development
	306 SW 1st	1902	4	\$ 7,202,280	38,440	10,000	3.84	4	96%	CXd	75%	86%	137	Office Retail	"The George Lawrence Company." Brick construction, thick walls, very high ceilings. May be good 'maker space.'
Study	Average	1902	2.50	\$ 4,994,380	34,220	20,000	2.42		61%		43%	52%	377		
41	333 SW 1st	1991	10	\$ 63,519,880	354,677	39,000	9.09	4	227%	CXd	95%	161%	38	Office/Commercial Retail & Restaurant	Very nice new high-rise building. Probably very functional and useful.
	2 SW Stark	-	1	\$ 3,050,250	18,950	19,000	1.00	4	25%	CXd	10%	17%	3278	Parking Lot	Opportunity for development
	219 SW Stark	1889	3	\$ 992,070	7,456	3,104	2.40	4	60%	CXd	90%	75%	178	Office Restaurant	"Bishop's House." Beautifully detailed! High Gothic. Crumbling.
	322 SW 3rd	1890	2	\$ 1,537,670	12,800	6,800	1.88	4	47%	CXd	40%	44%	528	Office + Retail	Building looks like crap, but may be able to be cleaned up
	318 SW 3rd	1894	2	\$ 372,330	5,166	2,783	1.86	4	46%	CXd	30%	38%	685	Office + Bar	Nasty, refurbish, but may not be worth saving.
	310 SW 3rd	1928	1	\$ 335,590	2,176	2,568	0.85	4	21%	CXd	5%	13%	5834	Bar	Replace immediately
	304 SW 3rd	1890	2	\$ 1,006,440	9,000	4,500	2.00	4	50%	CXd	60%	55%	331	Retail	Low rating due to potentially dangerous materials. But the materials are awesome although the base is incongruent with its top.
Study	Average	1898	1.83	\$ 1,215,725	9,258	6,459	1.66		42%		39%	40%	613		
	237 SW Naito	1870	2	\$ 527,790	4,525	2,537	1.78	4	45%	CXd	10%	27%	1342	Offices	Tear-down
	233 SW Naito	1870	2	\$ 585,480	4,862	2,600	1.87	4	47%	CXd	78%	62%	257	Offices	Beautiful façade, all brick construction, likely renovated.
	221 SW Naito		1	\$ 1,259,560	14,500	14,863	0.98	4	24%	CXd	10%	17%	3382	Parking Lot	Opportunity for development
	71 SW Oak	1870	3	\$ 669,200	8,125	2,500	3.25	4	81%	CXd	85%	83%	145	Offices	Quite pleasant indeed! (JJ). Brick.

26	79 SW Oak	1870	1	\$ 684,230	2,500	2,500	1.00	4	25%	CXd	85%	55%	331	Office	Very cute little place, should be a café/diner. But perhaps too short for its place, and underutilizing property.
	240 SW 1st	1870	1	\$ 882,950	2,500	2,500	1.00	4	25%	CXd	85%	55%	331	Office	Very cute little place, should be a café/diner. But perhaps too short for its place, and underutilizing property.
	220 SW 1st	1889	2	\$ 902,800	5,000	2,502	2.00	4	50%	CXd	80%	65%	237	Office Retail	Nice detailing, looks old, and crumbling. But should be fixable.
	209 SW 1st	1895	3	\$ 2,306,450	22,200	7,475	2.97	4	74%	CXd	76%	75%	177	Office Retail	Nice brick building. (JJ).
	50 SW Pine	1983	4	\$ 1,275,720	10,000	2,500	4.00	4	100%	CXd	70%	85%	138	Office Retail	I like this building, it appears both practical and has made a reasonable attempt at maintaining the classical order within its build time period.
Study	Average	1890	2.11	\$ 1,010,464	8,246	4,442	2.09		52%		64%	58%	294		
29	235 SW 1st	1890	3	\$ 2,527,970	18,738	5,000	3.75	4	94%	CXd	90%	92%	119	Office Retail	A beautifully detailed building. Should definitely be kept.
	225 SW 1st	1914	1	\$ 758,140	5,000	5,000	1.00	4	25%	CXd	10%	18%	3265	Retail	Poorly built, short, cracking concrete, too short for the area, trash it.
	106 SW Pine	1915	1	\$ 1,480,650	10,000	10,000	1.00	4	25%	CXd	20%	23%	1975	Retail	Nice brickwork, but not ADA compliant, okay street front. Bars should not be on first floors if they are going to black-out the windows.
	230 SW 2nd		1	\$ 2,139,150	19,000	19,000	1.00	4	25%	CXd	10%	18%	3265	Parking Lot	Opportunity for development
Study	Average	1906	1.50	\$ 1,726,478	13,185	9,750	1.69		42%		33%	37%	717		
30	209 SW Oak	1912	5	\$ 2,730,000	46,825	9,500	4.93	4	123%	CXd	100%	112%	80	Office/Business	Beautifully detailed Classical/American stone base and brick above. A wonderful building to cherish.
	209 N/ SW Oak	1945	5	\$ 5,672,270	39,000	19,500	2.00	4	50%	CXd	15%	33%	947	Office... Residential? Parking Garage	The above floors look like that may have residential up there, because of the blinds. Can't tell...
	209 NEC/ SW Oak		1	\$ 1,544,080	10,000	10,000	1.00	4	25%	CXd	10%	18%	3265	Parking Lot	Opportunity for development
Study	Average	1929	3.67	\$ 3,315,450	31,942	13,000	2.64		66%		42%	54%	345		
27	10 SW Ash 111 SW Naito	1870	2	\$ 3,652,760	31,800	12,569	2.53	4	63%	CXd	95%	79%	160	Office Retail/Business	Nice brisk and iron detail at façade. A keeper.
	131 SW Naito		1	\$ 1,235,200	12,500	12,500	1.00	4	25%	CXd	10%	18%	3265	Parking Lot	Opportunity for development
	122 SW 1st	1887	3	\$ 1,210,300	8,830	5,000	1.77	4	44%	CXd	85%	65%	240	Office Potential Retail	Nice façade, typical side and rear lack of windows.
	112 SW 1st	1885	2	\$ 1,916,440	12,100	4,976	2.43	4	61%	CXd	85%	73%	188	Office Potential Retail	Nice façade, typical side and rear lack of windows. The arched windows on the north side are nice, but the rest of the wall is unkept.
	118 SW 1st		1	\$ 532,690	5,000	5,000	1.00	4	25%	CXd	10%	18%	3265	Parking Lot	Opportunity for development
Study	Average	1881	1.80	\$ 1,709,478	14,046	8,009	1.75		44%		57%	50%	395		
	1 SW Pine		1	\$ 1,994,600	20,200	20,261	1.00	4	25%	CXd	10%	17%	3279	Parking Lot	Opportunity for development
	126 SW 2nd	1886	3	\$ 1,527,330	28,500	9,500	3.00	4	75%	CXd	65%	70%	204	Business Bar	Blocked windows at base, decrease visibility, and make less occupiable.

28	112 SW 2nd	1889	2	\$ 1,547,470	9,000	4,750	1.89	4	47%	CXd	95%	71%	197	Restaurant	Beautiful bclassical order, well-established restaurant/pub, friendly, adds a lot of character to the area.
	124 SW Ash	1889	2	\$ 639,900	9,000	4,525	1.99	4	50%	CXd	10%	30%	1121	Business Retail	A nasty concrete building that made a very poor attempt at some kind of gothic insane asylum style. Trash it.
Study	Average	1888	2.00	\$ 1,427,325	16,675	9,759	1.97		49%		45%	47%	450		
31	133 SW 2nd	1893	4	\$ 4,421,380	38,000	9,500	4.00	4	100%	CXd	90%	95%	111	Office Restaurant	Very heavy stone basalt(?) two-story base that is quite historic, but with brick upper that is not attractive. Good restaurant at base that is probably well-established. Bike shop at base, also probably going t be there for a long time.
	227 SW Pine St	1898	3	\$ 1,592,110	14,370	5,000	2.87	4	72%	CXd	90%	81%	153	Office Restaurant	Established restaurant at base. Nice brick relief details, thick wythe walls, appropriate order. I mostly like it.
	128 SW 3rd	1915	1	\$ 296,180	2,500	2,500	1.00	4	25%	CXd	30%	28%	1322	Restaurant	Dumpy place made to look hip with expensive coffee, and a crumbling structure. Trash it.
	122 SW 3rd	1902	2	\$ 868,210	4,375	2,500	1.75	4	44%	CXd	50%	47%	455	Office	Underused property. But brickwork is nice.
	108 SW 3rd 133 SW 2nd		1	\$ 2,194,850	19,400	19,500	0.99	4	25%	CXd	10%	17%	3289	Parking Lot	Opportunity for development
Study	Average	1902	2.20	\$ 1,874,546	15,729	7,800	2.12		53%		54%	54%	349		
34	55 SW Ash	1952	3	\$ 9,635,320	40,378	46,500	0.87	4	22%	CXd	77%	49%	411	Fire Station	Critical building. But under-used land.
33	75 SW 1st	1880	3	\$ 1,949,260	33,704	7,000	4.81	4	120%	CXd	95%	108%	86	Business Retail	Beautiful façade, along stone path and max rail, very pedestrian oriented, and highly relieved.
	58 SW 2nd	1889	5	\$ 4,589,260	37,590	6,650	5.65	4	141%	CXd	85%	113%	78	Business	Iron building tension cables holding building together. Basalt, base. Lots of care to the brickwork. I like this building.
	50 SW 2nd	1872	3	\$ 491,532	64,085	25,565	2.51	4	63%	CXd	100%	81%	151	Offices Retail & Business at Base	"New Market Block." A beautiful building all around that is currently underused for human services, which has rendered it discusting. Attached market glass façade with lots of strange tenants.
Study	Average	1880	3.67	\$ 2,343,351	45,126	13,072	4.32		108%		93%	101%	99		
32	61 SW 2nd	1890	2	\$ 3,203,530	31,692	22,000	1.44	4	36%	CXd	75%	56%	325	Offices Restaurant	Well establish restaurant at base, top is relatively attractive, underused, but pleasant.
NA	45 SW Ankeny	2010	4	\$ 2,652,817	18,317	36,187	0.51	4	13%	CXd	85%	49%	419	Offices	New + old building supposedly with intermingling facades, but I see no obvious sign of this.
	25 SW 1st	1999	1	\$ 654,770	8,672	15,072	0.58	4	14%	CXd	10%	12%	6727	Parking Lot	Opportunity for development, or to be converted into a large public square.
	108 W Burnside	1890	2	\$ 174,480	3,230	1,600	2.02	4	50%	CXd	5%	28%	1300	Abandon Building?	A bight to be removed.

11	131 SW Ankeny	1880	3	\$ 325,270	6,100	4,000	1.53	4	38%	CXd	20%	29%	1184	Office/Business	Salvation Army Harbor Light. A place for homeless? Should probably be removed, and converted into a public square.
	134 W Burnside	1904	4	\$ 493,450	21,595	5,200	4.15	4	104%	CXd	50%	77%	169	Office	Salvation Army, not helping the street interaction here.
	118 W Burnside		1	\$ 198,120	3,450	3,450	1.00	4	25%	CXd	0%	13%	6400	Empty Lot	Empty Lot
Study	Average	1918	2.20	\$ 369,218	8,609	5,864	1.85		46%		17%	32%	996		
20	15 SW 2nd	1906	4	\$ 4,422,840	31,720	8,200	3.87	4	97%	CXd	75%	86%	136	Office Restaurant	An okay brick building. May be nice as a (JJ).
	9 SW 2nd	1900	3	\$ 691,870	15,765	5,650	2.79	4	70%	CXd	20%	45%	497	Offices?	A run-down area, strip clubs, and unclean area. Feels unsafe. Trash it.
	16 SW 3rd	1908	2	\$ 761,500	12,450	6,267	1.99	4	50%	CXd	30%	40%	630	Offices/Reseidents Voodoo Donuts	A very popular venue at the base floor, for tourism too.
	6 SW 3rd	1890	1	\$ 405,330	2,850	2,850	1.00	4	25%	CXd	5%	15%	4444	Strip Club	A clacey joint that should be torn down now.
	222 W Burnside	1926	2	\$ 220,390	2,960	1,500	1.97	4	49%	CXd	10%	30%	1136	Grocery/Mini-Mart/Tobaco	Crappy little store wih little merchandise even stocked shelves. Building is dumpy.
Study	Average	1906	2.40	\$ 1,300,386	13,149	4,893	2.32		58%		28%	43%	540		
09	67 W Burnside St	1907	5	\$ 26,300,000	122,272	28,374	4.31	4	108%	CXd	100%	104%	93	Offices/University Retail	The University of Oregon, and iconic Oregon sign. Beautifully restored and maintained. A wonderful addition to the waterfront.
	30 NW 1st	1888	5	\$ 5,069,480	37,000	9,500	3.89	4	97%	CXd	100%	99%	103	Office	A beautiful building that should be presurved.
Study	Average	1898	5.00	\$ 15,684,740	79,636	18,937	4.10		103%		100%	101%	97		
12	105 W Burnside	1885	3	\$ 1,614,110	15,540	7,890	1.97	4	49%	CXd	50%	50%	406	Office Bar	Vulnerabe
	29 NW 1st	1875	2	\$ 1,400,000	16,000	9,500	1.68	4	42%	CXd	75%	59%	292	Office/Business Restaurants/Bars	"Norton House." A human-scale exterior, strong building aesthetic. Will probably last a long time more.
	2 NW 2nd	1912	3	\$ 3,605,580	19,820	7,500	2.64	4	66%	CXd	50%	58%	297	Office	Many homeless sleep against and loiter around this building, because it has something to do with human services. The building is unimpressive, but looks well-built.
	32 NW 2nd	1913	2	\$ 710,550	7,174	3,800	1.89	4	47%	CXd	40%	44%	526	Office	An imposing concrete base, brick above, landscape architecture firm on ground floor. Unfriendly.
	24 NW 2nd	1904	2	\$ 1,089,450	11,400	5,700	2.00	4	50%	CXd	60%	55%	331	Office Retail	L.ARCH at base. Antique store at base, which sells mostly things that appear pretty and rusted. Folks probably like the palce, but it is only open less than half of the week. Building seems to be falling into disrepair, and may need attention. But the window trim is attractive.
Study	Average	1898	2.40	\$ 1,683,938	13,987	6,878	2.04		51%		55%	53%	357		
	201 W Burnside	1926	2	\$ 864,510	4,750	2,375	2.00	4	50%	CXd	30%	40%	625	Restaurant	Unfriendly street façade, expensive restaurant.

19	23 NW 2nd	1912	3	\$ 2,000,000	23,349	10,000	2.33	4	58%	CXd	75%	67%	225	Offices (Unsure of base)	"Erickson Saloon." A nice building, and potentially attractive façade, but its current use does not seem friendly from the outside. The sidewalk is generally crowded with homeless/hungry people waiting in line.
	27 NW 2nd	1912	2	\$ 1,619,890	10,132	5,250	1.93	4	48%	CXd	45%	47%	460	Residential? Bar	A run-down place, nasty looking from outside.
	28 NW 3rd	1894	3	\$ 1,579,860	12,306	4,250	2.90	4	72%	CXd	65%	69%	212	Mixed-Use Bar	A generally nasty feeling about the place, very likely a strip club. The brickwork is nice though, and the building may last for a long time.
	22 NW 3rd	1938	1	\$ 160,140	1,062	1,062	1.00	4	25%	CXd	10%	18%	3265	Restaurant?	Not worth keeping.
	14 NW 3rd	1900	3	\$ 790,120	5,625	2,125	2.65	4	66%	CXd	65%	66%	232	Mixed-Use	Nice brickwork. I like the windows. The windows on the north side probably prevented the adjacent building from building any higher. Worth preserving.
	4 NW 3rd	1912	3	\$ 750,000	13,250	4,750	2.79	4	70%	CXd	75%	72%	191	Mixed-Use	"Fritz." Nice façade, but the building may be falling apart into disrepair. However it may be a good (JJ).
	219 W Burnside	1926	2	\$ 600,000	4,124	2,062	2.00	4	50%	CXd	30%	40%	625	Homeless Shelter	"Wax" building. Mostly a homeless shelter I think. Currently holds such little potential that I think I should be redeveloped.
Study	Average	1915	2.38	\$ 1,045,565	9,325	3,984	2.20		55%		49%	52%	367		
Study Area	Average	1907	3.03	\$ 4,160,606	31,633	10,962	2.63		66%		56%	61%			On average, the whole place failed to maintain above a failing grade. It is obvious that all of the West Waterfront blocks should be trashed, and replaced completely.
Block #	Address	Building Age	Floors	Market Value	Above Grade SqFt	Land SqFt	Zoning			Worth Keeping? 100% = Yes	Vulnerable?		General Use	Comments	
							Existing FAR	Possible FAR	FAR Fulfilled	Category	100% = Yes	100% = Yes			