

Central City 2035 Plan In-House Review Draft Comments

Bureau/Office: PBOT

Date: November 30th, 2015

Primary Issues or Areas of Concern

1. "Greenways", definition and use
2. Use of "pedestrians" "cyclists" and zero-emission transportation
3. Public Spaces and the Green Loop as the Big Idea, not just Green Loop
4. Bicycle Locker and Shower Bonus

Detailed Comments

PBOT has submitted "track changes" edits to the transportation policies in Volume 1. Below are other issues that came up as part of the internal PBOT review.

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
1-6	Guiding Principle 2. Human Health	The word "greenway" is used inconsistently with adopted City policy. "City greenways" are not a recognized element of the TSP. "Neighborhood greenways" are residential streets with low volumes of auto traffic and low speeds where bicycles and pedestrians are given priority, and are a subset of a larger pedestrian and bicycle network.	Amend last sentence starting with "connecting" to read: "Developing a dense and high quality network of pedestrian and bicycle infrastructure reduces automobile...."
	Guiding Principle 2. Human Health	Amend "to have active lifestyles and integrate exercise into their daily lives" to be more directly tied to the goal of being healthy.	Amend to read "to live healthy lifestyles by integrating activity into their daily lives"
	Guiding Principle 3. Environmental health.	Add zero carbon transportation	Add "supporting nature-friendly infrastructure; increasing mobility and access to services through zero- and low-carbon transportation options."
1-11	Big Idea 6. Street hierarchy	Edit "...important for pedestrians, bicycles, transit vehicles, freight, cars and trucks"	Amend to: "important for people walking, bicycling, using transit, driving and freight" Keep order the same (walking, bicycling, transit as



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			the first three) for Retail Commercial, Boulevard and Flexible.
1-19	5. Green Loop	Green Loop is part of a larger idea that should be acknowledged and reinforced. The idea is right-of-way repurposing for community use.	Relabel “4. New Public Spaces and the Green Loop” Add at the beginning: “With over 40 percent of the Central City area being public right-of-way, this plan calls for creating additional public and community gathering spaces and new and better infrastructure for people walking, bicycling and using transit. Envisioned as”
1-68	Policy 5.5 Public Realm	Add more detail and definition	Add “...guidelines, amenities, and land uses that activate the pedestrian environment and encourage community gathering and the creation of new plazas”
1-79	Policy 6.10 Low-carbon development	F Low carbon transportation. Add bicycle infrastructure.	Add “...including supporting electric vehicle and bicycle infrastructure.”
2-114	33.510 Locker Room and Bicycle Facilities	Comments regarding deletion of locker/shower room incentives and inclusion as requirement. 33.510.210.C.8	We would like to discuss the option of keeping the locker/shower room bonus, perhaps with a less attractive incentive ratio. PBOT is in the process of working through changes to citywide bicycle parking requirements (33.266) including reevaluating the minimum bicycle parking spaces for short and long term (Table 266-6), for which the majority were established in 1998 and need to be increased. Increasing bike parking minimums will be a priority during this effort and PBOT sees the inclusion of locker/shower rooms as a lower priority. We are concerned that requiring locker/shower rooms (particularly at 40,000 sq ft) will be seen as a costly requirement and could make increasing other areas of the bike parking section politically difficult.



			<p>We would like to discuss the issue further with BPS staff, including:</p> <ul style="list-style-type: none"> • Feasibility of developing a workable incentive, however including the language as part of the bicycle parking Title 33 changes. This would allow PBOT staff to work through the tradeoffs with our stakeholders. • We would be interested in any additional data that BPS has on the use of the locker room bonus for only <u>commercial</u> developments. Also the rate of which lockers/showers are being provided by the market. • Any data BPS has on cost of locker/shower rooms per sqft.
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Portland, Oregon**
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FROM CONCEPT TO CONSTRUCTION

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MEMO

Date: November 23, 2015

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From: Kara Fioravanti, Supervising Planner, BDS

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Re: BDS Comments on Central City 2035 Volume 2, In-House Review Draft
October 9, 2015

Thank you for the opportunity to review and comment on the Central City 2035 project. This draft takes some good steps forward toward streamlining the code; addressing issues such as affordable housing, historic preservation, and the public good; 2035 Quadrant Planning goals; and consolidates the Willamette River Central Reach regulations into a single chapter.

The comments below highlight our primary areas of concern and provide detailed comments on the proposal. We look forward to working with BPS staff to address our concerns and to providing additional feedback as the project develops.

Primary Areas of Concern

1. Staff has concerns about allowing too many permanent buildings in Open Space (OS) zoned sites. Central City is our densest area of the City; unobstructed open spaces are an important aspect of counteracting dense development on our small grid system. A 10,000 SF limit is quite high if you consider one single use can be 10,000 SF. We support temporary "moveable rental units" as you suggest in your commentary; perhaps the Temporary Activities Chapter should be revised to allow these temporary structures in any OS zoned property in the Central City Plan District (or City-wide). If the concern is ensuring safety and activity, i.e. 'eyes on the Parks', then perhaps consider requiring Retail Sales and Service uses on the ground floors of properties abutting OS zoned sites. Finally, the Code language suggests "pedestrian-oriented retail sales and service uses", but the pedestrian-oriented nature is not defined and therefore confusing.

2. Staff is concerned that ANY increase in height above the base height will now be a discretionary review. Most Central City buildings today take advantage of general bonus heights (+15', 30', 45') and few take advantage of the housing height bonus (+75'). The general bonus height is allowed outright without discretion. The housing height bonus is subject to discretion and some of those reviews have been very controversial. To make any height bonus subject to discretion, we are opening up a height discussion for almost every building in Central City and the discussion must focus around the approval criteria, one criterion states the request has to better meet design guidelines. That means we would have to describe how a building that is seeking a bonus of 1' above the base height limit better meets design guidelines, among other criteria. This is too onerous a process for the public, staff and the Commission.
3. BDS staff and the Portland Historic Landmarks Commission continue to struggle with the disconnect between predominant historic district heights and Zoning Code allowed heights. Consider ways to incentivize properties in a Historic District to transfer their FAR outside of the district. Consider not limiting 33.510.210 B.5.a. to just Skidmore/Old Town and New Chinatown/Japantown, and instead make it apply to all CCPD Historic Districts.
4. We applaud the efforts to ensure affordable housing in our CCPD. To make the affordable housing inclusive of a variety of family sizes, consider including a variety of minimum size and/or # of bedroom requirements in the regulations.
5. Ground Floor Windows, Ground Floor Active Use and Required Building Line standards are arguably the three most important development standards in the creation of a vibrant CCPD. Staff is concerned about these standards applying to fewer areas than they are today, allowing for deviations from current standards (like green walls instead of windows), etc. If these standards are to be revised, they should go the other way and be more comprehensive and stronger in activating the streetscape.
6. Generally, purpose statements should be very clear and comprehensive and tested by trying to write findings for Modifications using them, especially height, floor area and required building lines. When processing a Modification to development standards staff is required to make findings that describe how the project is consistent with the purpose statement. With weak, or unclear purpose statements and/or conflicting language within a purpose statement, staff is challenged to make credible findings.

Detailed Comments

We offer the following additional detailed comments.

Page	Code Section	Comment	Division/Team
2-16	33.510.115 commentary BPS questions re: moveable rental units	Allowing these types of structures are better than allowing permanent buildings in our public parks. However, we need to consider impacts on the park and the different impacts they have on grass vs. hardscape. Should there be a limit on how long mobile trucks can last (event-based or permanent?) Should you instead look at Temporary Activities Chapter to allow temporary structures in OS zones for CCPD (or City-wide)?	
2-17	33.510.115 B.1.	“Retail Sales and Service” (RSS) is broadly defined in our Code. This Code citation further limits allowed RSS uses to “pedestrian-oriented”. What is pedestrian-oriented RSS vs. non-pedestrian oriented RSS? Do we allow any RSS or only pedestrian-oriented RSS? If the latter, we need more guidance.	
2-17	33.510.B.1.b.	10,000 SF seems like too much if you consider that someone could build one single facility up to 10,000 SF. Consider limiting each individual RSS to no more than 3,000SF and allow up to a total of 10,000 SF for all RSS uses. Or, to ensure activity and safety in our Parks, don’t allow permanent buildings, just temporary buildings and require RSS uses at the ground level of properties fronting OS zoned sites.	
2-17 and 2- 18	33.510.115 B.3.b.	Are there any other OS zoned properties that meet these criteria other than Providence Park? If so, we should limit these provisions to just Providence Park.	
2.-19	33.115.C.2.	Demonstrating a current Good Neighborhood Agreement is required before “a building permit” is issued. Do we want this to apply to any building permit (which includes tenant improvements, and minor work), or should it apply to certain large-scale work?	

2-21	33.510.115.C.3.c.3	Recommend deleting reference to City staff attending the Good Neighbor meeting as the City as the City is most likely not a party to the Good Neighbor Agreement, and to avoid expectations as to what City staff's role is at these meeting. Code isn't needed to say that staff can attend but that it is not mandatory. If in unique situations City staff does attend, they will do so with or without this Code language.	
2-21	33.510.115.C.3.d	Who is expected to staff the Council hearing on the Good Neighbor Agreement, in terms of making the presentation, and providing guidance or a recommendation, or is it left entirely to the applicant?	
2-25	55.510.115.D	Just to clarify, the requirement for the TDMP would not be a land use review, but would just be a document presented by the applicant to Council? Similar to the above comment, who from the City staffs such a hearing, and who reviews the submitted TDMP and makes a recommendation to Council?	
2-31	33.510.117	Can we view a map of all remaining RX properties in the Plan District to see where these regulations will apply?	
2-32	33.510.117 D.2.b. commentary	Residential units above the ground floor do not typically convert to RSS and Office.	
2-32	33.510.117 commentary BPS question re: existing non-residential buildings to allow for non-residential uses	Yes, please!	
2-33	33.510.117 D.2.a.	How is underground parking regulated re: Use? Do we want to allow underground parking of any use? a.(2) allows 40% if 100% of ground floor is RSS, Office, Common Areas for residential. When calculating 100% of ground floor, what do we classify parking entry, loading, electrical room, etc?	

2-42 and 2-43		We should protect and maintain existing residential uses, especially those in historic residences in the I and E zones. The impact of these residences on the industrial activities that grew up around them is relatively minimal. They should be able to remain a residence even if the property has been vacant.	
2-45	33.510.200 A.	The purpose statement states FAR's, "...limit and step down building bulk to the River and residential neighborhoods." Do FAR's step down to the River? Some FAR's jump up the closer you get to the River. And, clarify what "residential neighborhoods" you are referring to. We have a current LU case going to the Circuit Court because the neighborhood disagrees that this purpose statement is met due to this exact confusion about stepping down the River and what neighborhoods are being acknowledged.	
2-45	33.510.200 B.4.	Should we allow this provision for anywhere in the CCPD, not just SOWA?	
2-45	33.510.200 C.2.	Last sentence, add "land use" after, "...executed covenant with the permit or..."	
2-47	33.510.200 C.4.	Should we add "or from" to the language, "Transfers of floor area to <u>or from</u> RX-zoned sites..." We have a problem right now understanding how you transfer FAR from an RX site to a CX site. If you transfer from an RX site, it has use limitations on it and that is hard to track once it moves to a CX or EX site.	
2-48	33.510.200 D. commentary BPS question re: allowing transfer across a ROW	We strongly believe all sites should be able to transfer FAR across a ROW, including downtown and Goose Hollow. And, we should not subject a simple transfer of up to 3:1 across a street to have to go through a CCMP.	
2-49	33.510.200 D.	We support removing "within a project" and adding "within the CX and EX zones". We do not support the elimination of "This also applies to lots within a site which would be abutting but for a ROW." Many projects do this today, why should it be eliminated? Your new language <u>prohibits</u> transfer across the ROW in the entire CCPD, which is significant.	

2-52	33.510.200 F. commentary BPS questions re: HRI	If you don't have an HRI option, property owners may be encouraged to list an HRI property as a Landmark. This is a better outcome than giving all HRI properties transfer ability. Let's instead list properties so there are more protections for the resources.	
2-52	33.510.200 F. commentary BPS questions re: seismic retrofits	Yes, we need to incentivize seismic upgrades. Selling FAR from upgraded URM's could help owners recover costs. Perhaps we could also include a bonus 3:1 FAR for seismically upgraded URM's so that the owner can sell more FAR than just the unused base FAR. Bonus should apply to seismically upgraded historic resources, too.	
2-52	33.510.200 F. commentary BPS questions re: "How does the transfer provision, as it applies to RS sites, relate..."	We don't understand this question.	
2-52	33.510.200 F. commentary BPS policy question re: prohibiting transfer of FAR from outside CCPD to sites within CCPD	We shouldn't limit transferring FAR into our densest neighborhood of the City. Plus, if we limit it, then we are limiting the 2-mile provision, which is already felt by some as too narrow.	
2-53	33.510.200 F.2.	Does this apply to RH, RX, CX or EX in CCPD only or anywhere in the City? Consider adding a "c." that says: HRI property that is designated as a Landmark during the LU process.	
2-53	33.510.200 F.4.b.	This is stating the obvious. Do we need b. (1) and (2)?	
2-53	33.510.200 F.5.	a. and b. refer to "historic resources" – what are you considering "historic resources", does that term include HRI properties?	

2-54	33.510.200 F.5.b. commentary BPS question re: exception or incorporate into F.2. and F.3.	Incorporate into F.2. and 3.	
2-55	33.510.200 I.2.a.	Why not private schools, too? Communities benefit from all types of schools, not just public schools.	
2-55	33.510.200 I.2.b.	Why be so limiting on daycare? Open at least 50 weeks/calendar year doesn't allow for more than a week at Christmas and a week at Spring Break. What about 4 th of July, Thanksgiving, etc. Lower 50 to something more reasonable. Also, daycare is defined. Does that definition work for your needs.	
2-57	33.510.200 I.2.d.	Does the center have to be operated by PPR?	
2-57	33.510.205 A.	The purpose statement states heights, "...step down buildings" and "emphasize bridgehead locations". These 2 statements are in conflict. Plus, do heights step down to the River when you consider max bonuses? Also, clarify what "neighborhoods at the edges of the CCPD" you are referring to. Do you mean residential neighborhoods outside the CCPD at the edges, or neighborhoods in the CCPD at the edges, or both? We have a current LU case going to the Circuit Court because the neighborhood disagrees that this purpose statement is met due this exact confusion about stepping down the River and what neighborhoods are being acknowledged.	
2-57	33.510.205 C.1.	Are the sites eligible to use this provision labeled as "area eligible for height increase"?	
2-57	33.510.205 C.2.	You may want to expand the days/times of a shadow analysis to better capture the impacts of a building. San Francisco has an actual review process that is very thorough, FYI.	

2-60	33.510.205 D. commentary BPS question re: Parks map	What would the map show? These regulations refer to sites that MAY be given to Parks. How do you map that?	
2-61	33.510.205 D.	1. and 2. are not aligned and font in 2. is small. Also, does this provision only apply to undeveloped future open space sites? It reads that way, but doesn't say it explicitly. In 2.c., it would be nice to hear from Parks Bureau during the LU that establishes the actual design of the open space. If they don't like what BDS approves, then what?	
2-68	33.510.210 B.4. commentary BPS question re: call out SOWA	Calling out SOWA has different regs would be helpful to us and the customer.	
2-68	Commentary general BPS question re: FAR increase language in 2 locations	Seems fine as-is.	
2-69	33.510.210 A.	Weak purpose statement. Needs to be expanded. It only focuses on affordable housing. If that is the only purpose, then why all the other bonus options?	
2-69	33.510.210 B.1.	This provision says the regs apply, "only to new development unless specifically stated otherwise". However, when you go through all the provisions, you see different terms. Please clarify what terms should be used. For example: C.1. – new development and alterations to existing, C.2. – projects, C.3. – projects, C.4.and C.5. – proposals, C.6. – contributions. We need consistent language	
2.69	33.510.210 B.5.a.	Why not say this applies to all CCPD Historic Districts? It shouldn't only be limited to Skidmore/Old Town and New Chinatown/Japantown. What about excluding this provision from being used within all Historic Districts? This is part of the struggle with a current project in Grand Avenue H.D. and the Commission is being challenged.	

2-70	33.510.210 A.1. commentary	“Economically feasible for a developer” doesn’t always = affordable.	
2-70	33.510.210 A. commentary BPS question re: Housing Bureau	Make sure this is implementable for BDS and align with MUZ language getting at the same thing.	
2-71	33.510.210 C.1.	1.b.: When is the letter required? It has to be early as projects will rely on the bonus to build what is desired by the developer. 1.c.: Remain affordable for how long?	
2-71	33.510.210 C.2.	BDS Permit Center is called the BDS Development Services Center. 2.a.: submit the letter with which development application – LU or building permit? If an LU is necessary, the letter should come with the LU.	
2-74	Percent for Art commentary	You say, “Developers do not have control over artwork selected for a project” when dealing with RACC. This is not true. When going through RACC, the developer has every opportunity to propose their own art and/or artist to RACC. There is a true <u>public</u> benefit in this bonus, a benefit that is not limited to the enjoyment of the development itself or its tenants. At a minimum consider areas with public art deficits to still utilize this bonus. Design Guidelines “encourage” art, they don’t require it. We’ll have less opportunity to get real <u>public</u> art if this goes away. You note optional artwork is an opportunity through base zone. However, that regulation does not require RACC. There is a big difference between private art a developer likes vs. RACC-endorsed, true public art.	
2-80	Commentary BPS question re: minimum dimension	Yes, please make it meaningful.	

2-81	33.510.210 C.4.	4.: publically is spelled wrong. 4.c.: Why is this 7AM-9PM, but 3.d.(1) and (2) are full access and 5.b.(1) and (2) are full access? It all should be 24 hours. The building is there 24 hours, so should the public space. 4.e.: seating should be "permanent". 4.e.: add "of open space" after ...200 square feet. 4.e.: the reg is for a certain # of "seats" per SF, what is a "seat" – a bench or 2 linear feet of a relatively flat surface? 4.f.: we don't tie many regulations to certificate of occupancy, instead we should require this before permit issuance.	
2-82	Commentary on large dwelling units with multiple bedrooms	A mix of sizes and # of bedrooms should be a part of our new affordable housing bonus. If not, many affordable units will be micro units, forcing families out of the CCPD.	
2-86	Commentary re: open space bonus option	We can only think of 1 project that used this bonus option – the John Ross. What are the other 5? If it has been used only once, should we keep it? The John Ross example is an open space that is the building's forecourt, not a very "public" spot.	
2-88	Commentary re: efficient family size unit housing bonus	If the current priority Citywide is to encourage more affordable housing, let's be less narrow and, instead, say more affordable housing <u>of a variety of types and sizes</u> . In the new affordable housing bonus, require a percentage of affordable units to be 2 bedrooms or more.	

2-91	33.510.210.D.	<p>D. Most buildings take advantage of bonus heights today. The way this section is reworded, you are essentially requiring a Modification each and every time a building wants to be 1' or more beyond the base height allowed. That is a big shift from today where all buildings get 45' outright with no discretion. The discretionary criteria are hard to make findings against, i.e. how does a building that is 1' taller than base height better meet design guidelines. Too onerous. Some amount of bonus height should be allowed outright as it is today. D.2.a.: add historic resource review to design review. D.3.b.: when should applicant submit this letter? We prefer at the time of LU if an LU is required.</p> <p>D.3.a.: Is our understanding correct? A project gets 75' of height for only a 1:1 FAR bonus and if it is affordable housing, only 25% of the 1:1 needs to be affordable housing? For a typical 40,000 block, you provide only 10,000 SF of affordable housing for 75' of height above the base height? That is a lot of development potential for not providing much public benefit.</p> <p>D.4.b.: you should prescribe when the shadow studies should be taken. We noted above that the current Code reference of April 21st at noon and 3PM should be expanded. That citation and this should be the same expanded days/times.</p> <p>D.4.b.: why not expand this to say significant negative impacts on open spaces, too, to be consistent with the purpose statement?</p> <p>D.4.e.: The purpose statements need a lot more meat and accuracy if we are to make findings against this criteria each and every time a building wants to be 1' taller than the base height. One element missing entirely from the purpose statement is height effects on historic districts/resources. These bonuses will have a negative effect on the protection of historic resources, but they are not noted in the purpose statement. The effect of these bonuses on historic districts should be considered at least. Comments re: purpose statements provided elsewhere in this report.</p>	Dteam
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2-96	33.510.xxx commentary BPS question re: required setback	Coordinate with PBOT. We should have a required setback at Burnside. When you ask if it should be required, are you suggesting people can still request a Modification? We should still allow for Modifications.	Dteam
2-96	33.510.215 commentary BPS question re: C2)	L2 isn't a great landscape solution for an urban setting. More work on good landscaping criteria is necessary here. You question if we let the base zone setbacks handle all other areas. If you look at the base zone language for setbacks, they do NOT apply to CCPD. This seems to be a big mistake. Right now, if a site doesn't have a required building line, there is no min or max setback because the base zone doesn't apply and the CCPD doesn't have any other setback-like regulations.	Dteam
2-97	33.510.xxx A.	The purpose statement says this is for "substandard sidewalk sites", but C. says it applies to all new development (regardless if it has a full or substandard sidewalk). When does it apply? Plus, PBOT may require a dedication and then the site is no longer "substandard" – does this standard still apply? More coordination necessary.	Dteam
2-97	33.510.XXX.C	It is not clear where the minimum setback is intended to apply. Is it only along the site's W. Burnside frontage? If so, the standard should read, "New development must meet a minimum setback of 10 feet along the street lot line along W. Burnside." Also, is this really only intended to apply to "new development" as that term is defined in 33.910?	Hardy
2-97	33.510.215 A.	This purpose statement is woefully inadequate. Plus it doesn't acknowledge the big changes proposed regarding too many types of street edges. Needs a lot more work. Especially since we would expect a lot more Modifications since the standard is getting too prescriptive. (When we process Modifications, we have to say how the purpose statement is met.)	Dteam
2-97	33.510.215 C.1. a. and b.	Isn't a. essentially included in b.? A building at the street lot line is within 12' of the lot line. Seems redundant.	Dteam

2-98	33.510.215 C.2.	Design Commission struggles every single time a project wants landscaping between the building and the property line. This will not be supported as an outright requirement. It can work in few instances dependent on the adjacent uses and the actual design. This puts a lot of pressure on discretion.	Dteam
2-98	33.510.215 C.4.	Does this only apply to Burnside? If so, say it. And, if there are other streets, they should be listed here or mapped. It is confusing to know what streets this refers to. If this regulation only applies to Burnside, then we should move this language to 33.510.xxx on page 2-97 so all the Burnside-related regulations are in one place.	Dteam

2-101	33.510.220 B.	<p>B.1.: should apply to “new development” and major remodeling projects:</p> <p>B.1.: If the site is on a 510-18 street, then they should meet the 510-18 standard in B.2.?</p> <p>B.2.a. Remove “... that are 20’ or closer to a street lot line adjacent to a street”. I.e. we need windows on walls facing plazas and those are usually further than 20’ from a street lot line. I.e. a building wall 21’ from a street lot line wouldn’t have to include one window the way this language reads. The CX zone regulations now do not have this 20’ limitation, why add it in now?</p> <p>B.2.c.: Under areas not counted toward meeting g.f.w., add: bike rooms, parking, vehicle storage, loading, stairwells.</p> <p>B.3.: Remove “adjustment” and make it “modification through design review or historic resource review”. 99.9% (or maybe 100%) of our g.f.w. exceptions in CCPD are Modifications, not Adjustments.</p> <p>B.3.: The language about artwork relating to activities within the building is an empty statement because our Constitution does not allow us to regulate content. We can approve artwork displaying theater and costumes on a performing arts center and the next day the entire installation can change to a Coca-Cola advertisement.</p> <p>General statement on B.: This confuses projects that aren’t a major remodel or are not on 510-18. Should you say for all other situations, the base zone regulations apply?</p>	Dteam
2-102	33.510.221	<p>Why eliminate Required Windows Above Ground Floor? Parking garages need to meet this standard. When they don’t we have to process a Modification to make the garage better. We should hold onto this standard for those situations and others. We should actually up the 15% minimum to a 25% minimum. We’ve recently had 3 recent cases that have questioned the lack of windows above ground floor and this standard helped out a lot.</p>	Dteam
2-105	33.510.225 C.	Thank you	Dteam

2-105	33.510.225 D.5.	Add D.5. to say something like this, "The spaces provided to meet this standard cannot include vehicle areas."	Dteam
2-107	33.510.225 E.2.	As noted in suggested 225 D.5. above, not allowing parking in areas required to meet this standard should be everywhere in CCPD, not just along Streetcar in Pearl and West End. The standard only says 50% of the building wall has to meet the standard; that means half the building wall can have parking access, loading, parking, etc. That isn't too onerous as suggested in the 2-106 commentary.	Dteam
2-108	33.510.226	Say why this is eliminated.	Dteam
2-110	22.510.240 commentary BPS question re: drive- thru	There shouldn't be a reason to keep it so long as the definition of drive-thru includes all of these components.	Dteam
2-111	33.510.240 A.	Thanks!	Dteam
2-112	33.510.242 commentary BPS question re: subsection B	Subsection B is necessary because "parking" is defined as "development". This subsection disallows someone knocking down a building and just developing it as parking with no SF. We don't know why there is a distinction b/w the core and the rest of the CCPD.	Dteam
2-112	33.510.xxx commentary BPS question re: ecoroof	Ask BES if they want to provide the certification letter and, if so, when in the process do they want to do it.	Dteam
2-113	33.510.xxx B. Ecoroofs	You say, "...20,000 SF in size". Does "in size" mean footprint or floor area? "An ecoroof", not "an ecoroofs". Must be approved by BES when – time of LU, time of permit?	Dteam
2-113	33.510.xxx Low- Carbon buildings	A. This purpose statement is weak. If someone wants a Modification to this standard, we have nothing much to say about how the project would be consistent with the purpose statement. Or, do you want to prohibit AD's/Modifications? B. You say, "...50,000 SF in size". Does "in size" mean gsf or nsf or what?	Dteam

2-115	33.510.xxx Locker rooms	D. Instead of distinguishing gender, should we say 2 distinct facilities? Should we add a minimum size to each?	Dteam
2-121	33.510.252	B.2. You refer to “accessways”. Do you mean accessways as indicated in PBOT’s street plan, or accessways as in the 33.510 Maps? They are different (unfortunately). We should coordinate with PBOT on this. B.3. before you say, “...buildings must be setback at least...” we need to qualify what part of the building needs to be setback – the ground level or the ground level and upper levels. Because accessways are private property, there are no limits on how much upper floors can encroach into the accessway.	Dteam
2-122	33.510.252 commentary	This discussion is not accurate. The SOWA provision was specifically meant to say Retail Sales and Services, not just any active use, are required in these locations. By eliminating this standard and incorporating it into other standards earlier in the Chapter, the proposal changes the specific intent of Design Commission.	Dteam
2-126	33.510.xxx commentary BPS question re: map	Yes, create a map. Maps are always helpful.	Dteam
2-127	33.510.xxx.A	<p>BDS staff has serious concerns about adding a disclosure statement requirement as this is too difficult to enforce. If this must be adopted, the requirement should be limited to just Household Living, Retail and Traditional office uses as there are too many uses other than Industrial where it doesn’t make sense to apply (i.e. Vehicle servicing/repair, RF Facilities, Self-Service storage, etc.)</p> <p>There is a typo in B.3 at the end of this page where is says “for” instead of “from”</p> <p>Should you add “interior” to: day/night average “interior” noise level?</p> <p>Also, if pursuing a disclosure statement, A.2 needs to be specific about what the disclosure statement is for. Something like, “Before a building permit is issued, the owner must record a disclosure statement with the</p>	S. Ellis, Dteam, Hardy

		County that acknowledges the property-owner is aware of the potential impacts of industrial uses, and provide.....”	
2-158	33.510.255 Commentary	Third paragraph – You note there have been multiple projects, but there has only been one project; the Allegro, which you cite. Fourth paragraph – Grammar errors. Fourth paragraph – add “public” to more direct local “public” benefits are derived	Dteam
	Maps 510-3 and 510-4	Why are we increasing heights in the Grand Ave. Historic District? We should be increasing heights outside of HD’s not inside. In ALL our historic districts, how do the proposed max heights compare to our current base+45’ and base+75’?	Dteam
	Map 510-8	Add the requirement to SE Morrison and Belmont	Dteam
	Map 510-11	Add Director Park? Do we want 3,000 SF of buildings in the park at Madison and Jefferson?	Dteam
2-236	Commentary on Map 510-17	What’s the difference between “at-grade” and “can be crossed by vehicles”? Clarify why this doesn’t apply to Streetcar, too.	Dteam
2-239	Map 510-17	Why is there a big gap at SW Lincoln where it turns South?	Dteam
2-247	Map 510-19	What about eastside waterfront sites? (Especially if I5 freeway ever goes underground.) What about site north of Hawthorne Bridge? What about Tazo site?	Dteam
2-249	Map 510-19	Code references notes at bottom left is wonderful. Please include on ALL maps.	Dteam
?	Parking Access Restricted Streets Map	Does “Parking Access Restricted” mean “Parking and Loading Access Restricted” or just “Parking Access Restricted”? For more than a dozen years BDS staff has enforced it to be Parking and Loading. We should coordinate with PBOT staff about what it should be, and we should change the term to include loading if we confirm loading is included. Also, we need a purpose statement for this standard since we process Modifications and Adjustments that reference a purpose statement that doesn’t exist.	Dteam

?	How is FAR calculated in South Auditorium Plan District, in conjunction with CCPD?	The CCPD re-write would be a good opportunity to clarify how the FAR bonuses apply to SAPD. For example: SAPD indicates an FAR of 6:1 for a site and does not state options for bonus FAR. Being in the CCPD, we think a project can utilize bonus for the additional 3:1 FAR. SAPD includes the standard language of “where the regs of this chapter conflicts w/ the regs of CCPD, the regs of this chapter prevail”, which creates confusion about the ability to use bonus.	Dteam
2-253	33.475.020	Concern about confusion with g* overlay symbol. Did staff look at options for a different name for the Central Reach River General overlay that could be translated to the River General overlay for the other reaches when adopted?	S. Ellis
2-255	33.475.030.B,C and E	Can we add “additional” before the word regulations to alert people to look at “A” for all? Should E include a reference to ORS 465? Can we just change all the references to ORS 465 throughout the code to not include specific subsections which seem to have changed from current code references.	S. Ellis
2-257	33.475.060.B.e	Why 4-inches and not 6-inches? Why is there a reference to trees that “may” be shown? Wouldn’t we just allow this without having to codify it?	S. Ellis
2-261	33.475.210	Concerned about changes to buildings with non-conforming setbacks. Will there be allowances for any modifications to these buildings or will all exterior alterations be subject to review?	S. Ellis
2-265	33.475.220.B and C.2.d	Instead of referencing the park’s name (which could change) can we just reference the area on the map? Can the area for any required public trail be removed from required landscaping calculations?	S. Ellis
2-269	D.2	What about legal non-conforming structures? Should we set allowances for minor modifications or will River Review be required for any exterior alteration?	S. Ellis
2-341	33.430.195	Discussed in meeting with BPS staff. Should say “view corridors” not scenic resources. Trees blocking view corridors are probably more than 12-inches so can we increase limit to avoid review?	S. Ellis

2-415	33.10.030 B.3.	Is this outdated Code language? Seems it is missing reference to “Design Overlay or Historic Resources Protection Overlay”	Dteam
2-419	33.140.230 C.	Match to comments made prior re: what areas should have windows.	Dteam
2-421	33.140.230 F.	This is an urban condition we cannot support for many reasons. Not enforceable over time. It is not urban and does not belong in CCPD. Green walls do not in any way substitute for active ground levels. The green wall at the Hotel Modera private patio is nice, however it should in no way be on a wall that faces a busy, public downtown street.	Dteam
2-431	33.272.020.A	How will it be determined whether application of the regulations is “logically related and roughly proportional to the impacts of the proposed development”? This is incredibly discretionary when applied to a ministerial building permit review. Even for discretionary reviews, a standard approach (formula?) will be needed to ensure we are being consistent from project to project, and that our determination is legally defensible.	Hardy
2-457	33.920.240	Discussed in meeting with BPS staff. Some detail needs to added to 33.920.240 A. Characteristics to clarify the link to C. Examples. There needs to be a differential between Industrial Service and Production Office. Troy & Derik have said they will look for redundancies within the Industrial Services examples and remove them if repeated in the Industrial office examples. Also take a look at the application of this amendment and how it applies in all IG1 zones outside of Central Eastside.	S. Ellis
2-459	33.920.240.C.2	The list of uses that qualify as being Industrial Office is helpful. However, how is “real estate development that rehabilitate or redevelop property” consistent with the stated characteristic of an Industrial Office that focusses on “research and development, and testing of digital and physical goods and products”?	Hardy
2-257	33.475.050	PLA regulation needs commentary to explain why. Also, need to more clearly identify if this regulation is a standard and can be adjusted or can be modified through river review. I thought the original purpose was to eliminate PLAs to remove all river frontage. Should that be included?	Tallant

2-265	33.475.220	What if the applicant doesn't want to install the landscaping? Adjustment or River review?	Tallant
2-277	33.475.230.C.5	Remove the requirement for a report to be submitted to BDS documenting landscaping has been met within 1 year of installation. We get 0 compliance with these requirements.	Tallant
2-293	33.475.430.C.7	Typo- item "d" should be "c"	Tallant
2-295	33.475.430.D.6	Change 4" tree to 6" tree to be consistent with other code provisions regulating trees	Tallant
2-297	33.475.430.10	Typos – f-h should be changed to a-c	Tallant
2-297	33.475.430.11	Current GW code exempts signs. Please change the standard to be more general o that BDS is not regulating purpose and content of signs.	Tallant
2-297	33.475.440.A	The use of "installation" and "construction" in this section is awkward as you don't install or construct a corridor. It is suggested to substitute those words with development so that the standard can be used for initial installation/construction as well as future upgrades and improvements.	Tallant
2-299	33.475.440.C	Expand this section to be used for new or replacement outfalls. If a property wanted to upsize and existing outfall I don't see what we would get out of a review given they can install a new outfall through standard.	Tallant
2-301	33.475.440.D	Expand section to also include alterations to existing trails, not just new trails.	Tallant
2-301	33.475.440.H	Change 4" tree to 6" to align with other zoning code regulations for trees, including Section J which applies to many of the standards in this section and only applies to 6" trees. Not clear as to why some sets of standards regulate at 4" and others use J at 6"	Tallant
2-305	33.475.440.I	Remove the last two sentences. You don't have those statements in each set of standards so it seems out of place or that there is something different about these standards. Those statements are already made in 33.475.440	Tallant
2-311	33.475.440.K	2 nd #3 of this section is a typo, but also please remove	Tallant

		this section. You cannot verify the timing of installation when doing an EN plan check. Also, “time of development or alteration” is not clear as to when exactly the 6 months starts. Issuance of permit, final, ?	
2-341	33.430.195	Clarify that this applies to tree removal in view corridors	Tallant
2-387	33.865.040.A	Add to 3 rd sentence – or when mitigation is proposed, in order to meet River review approval criteria	EN team
2-389	33.865.040.A.1.b(2)	Change root zone to “root protection zone”	EN team
2-389	33.865.040.A.2	- add boundary of the river environmental zone to the requirements for what is to be shown on a proposed development plan. e – change to read: delineated areas of ground disturbance and vegetation removal;	EN team
2-389	33.865.040.A.3	Add boundary of the river environmental overlay zone. Add balanced cut and fill calculation for grading in the 100 year floodplain	EN team
2-391	33.865.040.A.3.i	Add “,in accordance with Title 11 “ to the end of the sentence	EN team
2-391	33.865.040.A.4	a – add “using standard landscape graphics” to the end of the sentence. We get too many mitigation plans that do not show a detail of the mitigation. b – delete. c – change to “Location, species, and size of each shrub and tree to be planted, using standard landscape symbols”	EN team
2-397	33.865.040.B.5.a	We may need to discuss in more detail with BPS the mitigation bank concept. Item 5a may be misleading as we have no current mechanism in place, and have not been made aware that there are plans for a bank to be established at the time of implementation of this code. If you choose to keep this item, please include commentary in the document about the plans for development of the bank and timing.	EN team
2-399	33.865.100	This section starts with item “B”. typo? The sentence in B needs to be written to allow more than just the “Impact evaluation” to be the document referred to demonstrate that the following criteria are met. We need to use the entire supplemental narrative listed in 33.865.040.B (biological assessment, supplemental	EN team

		assessment, construction management plan, mitigation/remediation plan), not just B.1 Impact Evaluation.	
2-399	33.865.100.B.2.a	Change to “approved conditional use <u>review</u> ”	EN team
2-399	33.865.100.B.2.b	Change to “Proposed development locations, designs, and construction methods <u>are less detrimental to</u> identified natural and scenic resources and functional values <u>than</u> practicable and significantly different alternatives...” May not be possible to identify “all” alternatives	EN team
2-401	33.865.100.B.2.d(3)	Remove “... and the extent to which the project design minimizes impacts” as you can’t quantify this because there are too many variables to assess. a – only include “uniqueness” if this is measured and referred to in the inventory. b – how do you measure “relative condition”. c – for “distance” how do you multiply the ratio. d – same as above for “time lag”. You need to add more commentary to assist with implementation of this section.	EN team
2-403	(4)	Are the 2 nd and 3 rd bullets in this section criteria or submittal requirements?	EN team
2-403	(5)	Option 1 – this section needs to be simplified	EN team
2-404	Commentary 3.	Mo mitigation banks exist. So it is misleading to include code sections for that because applicants will not understand and write up a proposal to use this. Staff will continuously have to explain to applicants that these options are not available even though they are in the code. Please remove this code section until there is such a time that a bank is available.	EN team
2-405	Option 3	Remove per comments above	EN team
2-407	33.865.100.C	Please define “minor” as used in this criterion. We continue to have to push back and argue with applicants about what minor means when modifying the zone boundaries.	EN team
2-337	33.430.020	Typos. In first sentence list “ten” reports and in last sentence list “nine”. Should there be mention of the Mult co inventories? People forget about those being	EN team

		hidden away in other reports.	
2-341	33.430.195	Insert that this applies to view corridors. B – add “...be replaced <u>outside of the Scenic overlay</u> as shown...”	

Date	Draft	Commenter Type	Commenter Detail (Bureau, Agency, Office, etc.)	Commenter Dept/Division	Commenter Name	Document	Chapter	Section	Page #	Policy or Code Reference	Comment/Issue	Commenter's Proposed Changes (Public)
11/9/2015	Pre-DD	City Bureau	BES			CC2035 Volume 2			2-96 thru 99	33.510.215	Required Building Lines - C1 and C2 seem to be in direct conflict with each other. "an extension of the side walk committed to active uses." and "will be required to be landscaped to L2". This carries through to the policy language on p 2-97, 2-99 C1-2.	Require some minimum portion (25% perhaps) of the 75% frontage to be landscaped, but it depends on what you are trying to get at.
11/9/2015	Pre-DD	City Bureau	Parks		Sarah H	CC2035 Volume 2			2-115	33.510.220.B.2	In addition to ground window requirements along streets, we would also like to add them along public parks, open spaces, and trails. Would also impact Map 510-8 on page 2-199	Update 33.510.220.B.2 and Map 510-8 to include parks, open spaces, and trails. PP&R can provide layer.
11/23/2016	Pre-DD	City Bureau	BDS			CC2035 Volume 2	B. Major Amendments	33.510.205	2-57	33.510.205 A.	The purpose statement states heights, "...step down buildings" and "emphasize bridgehead locations". These 2 statements are in conflict. Plus, do heights step down to the River when you consider max bonuses? Also, clarify what "neighborhoods at the edges of the CCPD" you are referring to. Do you mean residential neighborhoods outside the CCPD at the edges, or neighborhoods in the CCPD at the edges, or both? We have a current LU case going to the Circuit Court because the neighborhood disagrees that this purpose statement is met due to this exact confusion about stepping down the River and what neighborhoods are being acknowledged.	
11/23/2016	Pre-DD	City Bureau	BDS	Dteam		CC2035 Volume 2	B. Major Amendments	33.510.215	2-96	33.510.215 commentary BPS question re: C2)	L2 isn't a great landscape solution for an urban setting. More work on good landscaping criteria is necessary here. You question if we let the base zone setbacks handle all other areas. If you look at the base zone language for setbacks, they do NOT apply to CCPD. This seems to be a big mistake. Right now, if a site doesn't have a required building line, there is no min or max setback because the base zone doesn't apply and the CCPD doesn't have any other setback-like regulations.	
11/23/2016	Pre-DD	City Bureau	BDS	Dteam		CC2035 Volume 2	B. Major Amendments	33.510.215	2-97	33.510.215 A.	This purpose statement is woefully inadequate. Plus it doesn't acknowledge the big changes proposed regarding too many types of street edges. Needs a lot more work. Especially since we would expect a lot more Modifications since the standard is getting too prescriptive. (When we process Modifications, we have to say how the purpose statement is met.)	
11/23/2016	Pre-DD	City Bureau	BDS	Dteam		CC2035 Volume 2	B. Major Amendments	33.510.215	2-97	33.510.215 C.1. a. and b.	Isn't a. essentially included in b.? A building at the street lot line is within 12' of the lot line. Seems redundant.	
11/23/2016	Pre-DD	City Bureau	BDS	Dteam		CC2035 Volume 2	B. Major Amendments	33.510.215	2-98	33.510.215 C.2.	Design Commission struggles every single time a project wants landscaping between the building and the property line. This will not be supported as an outright requirement. It can work in few instances dependent on the adjacent uses and the actual design. This puts a lot of pressure on discretion.	
11/23/2016	Pre-DD	City Bureau	BDS	Dteam		CC2035 Volume 2	B. Major Amendments	33.510.225	2-105	33.510.225 D.5.	Add D.5. to say something like this, "The spaces provided to meet this standard cannot include vehicle areas."	
11/23/2016	Pre-DD	City Bureau	BDS	Dteam		CC2035 Volume 2	B. Major Amendments	33.510.225	2-107	33.510.225 E.2.	As noted in suggested 225 D.5. above, not allowing parking in areas required to meet this standard should be everywhere in CCPD, not just along Streetcar in Pearl and West End. The standard only says 50% of the building wall has to meet the standard; that means half the building wall can have parking access, loading, parking, etc. That isn't too onerous as suggested in the 2-106 commentary.	
11/23/2016	Pre-DD	City Bureau	BDS	Dteam		CC2035 Volume 2	B. Major Amendments	33.510		Map 510-8	Add the requirement to SE Morrison and Belmont	

11/23/2016	Pre-DD	City Bureau	BDS	Dteam		CC2035 Volume 2	C. Minor Amendments	33.140.230	2-421	33.140.230 F.	This is an urban condition we cannot support for many reasons. Not enforceable over time. It is not urban and does not belong in CCPD. Green walls do not in any way substitute for active ground levels. The green wall at the Hotel Modera private patio is nice, however it should in no way be on a wall that faces a busy, public downtown street.	

Hi there- Thank you for the opportunity to comment on the Implementation Workplan. The one item I feel is missing from this document is addressing the areas in the City where we have Oregon white oak habitat. In attempting to preserve this rare habitat, we should be reducing tree canopy in appropriate areas. Many of the existing oak habitats in Portland are threatened due to encroachment of Douglas-fir or big-leaf maple. Setting a random number such as 30% canopy cover does not take into account the variability of these habitats. Since we do have a significant amount of oak habitat within the City of Portland, BPS should provide an exception in oak habitat areas to the uniform tree canopy goals that are laid out in this plan.

Also, in the past several years, Metro has undertaken a regional mapping effort of oak habitats, including those inside the City of Portland. It would be wonderfully cooperative if BPS could incorporate some of the knowledge that has been gained to have a more thoughtful perspective on tree canopy targets in the region. I have CC'ed Lori Hennings so that she may be able to give you some insight into their work.

Angie Kimpo

From: Warnke, Cherri

Sent: Tuesday, November 10, 2015 7:45 AM

To: Kehrli, Margaret <Margaret.Kehrli@portlandoregon.gov>; Carter, Tom <Tom.Carter@portlandoregon.gov>; Kimpo, Angie <Angie.Kimpo@portlandoregon.gov>; Greenberger, Stu <Stu.Greenberger@portlandoregon.gov>

Subject: FW: Printed In-House Draft CC2035 Plan Materials - Vols 1, 2 and 5

After talking with Margaret briefly this morning, I was reminded that you four may be interested in providing comments regarding the Tree Canopy goals of BPS as well.

Cherri

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
general	General Comment	<p>If property within the Central City Plan boundary were to develop to the impervious area allowed by the comp plan zoning, additional stormwater runoff would be generated from approximately 190 acres of new impervious area. Much of the stormwater runoff would be directed to the Willamette River CSO tunnel system. The Willamette River CSO tunnel system was designed assuming full implementation of the stormwater management manual (SWMM) requirements. Therefore, in order to maintain/improve the performance of the Willamette River CSO tunnel system, no exceptions to meeting the SWMM requirements should be allowed.</p>	<p>Need to write code so there are few (if any) exceptions to meeting the SWMM requirements for the proposed zone types within the Central City. Support the proposed Ecoroof target (408 acres of total ecoroof area by 2035) and the related ecoroof <u>requirement</u> for some building types in the Central City.</p> <p>Enhance SW requirements in the 100 yr floodplain to meet the expected FEMA BiOp requirements.</p>

Regarding reviewing the proposed Document for the Tree Canopy development and Title 11, I will provide the following comments in this format since I could not get the form provided to work.

Some additional comments –

For 5-28, section 111 –

All due consideration should be given for the infrastructure Bureaus, and in this case The Water Bureau, to meet rate payer concerns regarding increase difficulty of infrastructure construction, maintenance and placement, and how these can and will add an additional burden of cost to increase rates as time goes by.

1. Placement of trees within increased area of the right-of-way, such as taking lanes for trees, with larger ones being preferred, placement of trees in curb bump outs at mid-block and corners as proposed, will impact the cost of placement of water mains and subsequent access for maintenance and development needs for services and hydrants due to the critical root impact zone standards, and in surface spacing may well impede in certain areas access for the Fire Bureau at hydrant locations.
2. State of Oregon OAR 333 rules require placement of water mains (Potable water lines) and water services a specific distance apart from all sewer mains and laterals and when combined with tree placement proximities make infrastructure placement almost to absolutely impossible when combined with the item 1 above (larger trees) in certain areas, especially when the rules are written in a manner which do not allow for the variability of the size of public right-of-way and total infrastructure needs for all utilities, so this should be in the forefront of rule and standard development thought when considering the city water supply and its placement with regards to tree code standards.
3. The placements of Vaults and Meter boxes in the sidewalk corridor revolves around and is a result of the Water Bureaus historic efforts to maintain lower water rate costs, safety issues for access and maintenance, ready access for emergency and regular maintenance and meter reading, design requirements since a majority of locations do not have the in-road space for these water facilities, especially service vaults which require much larger vaults when placed in traffic areas.

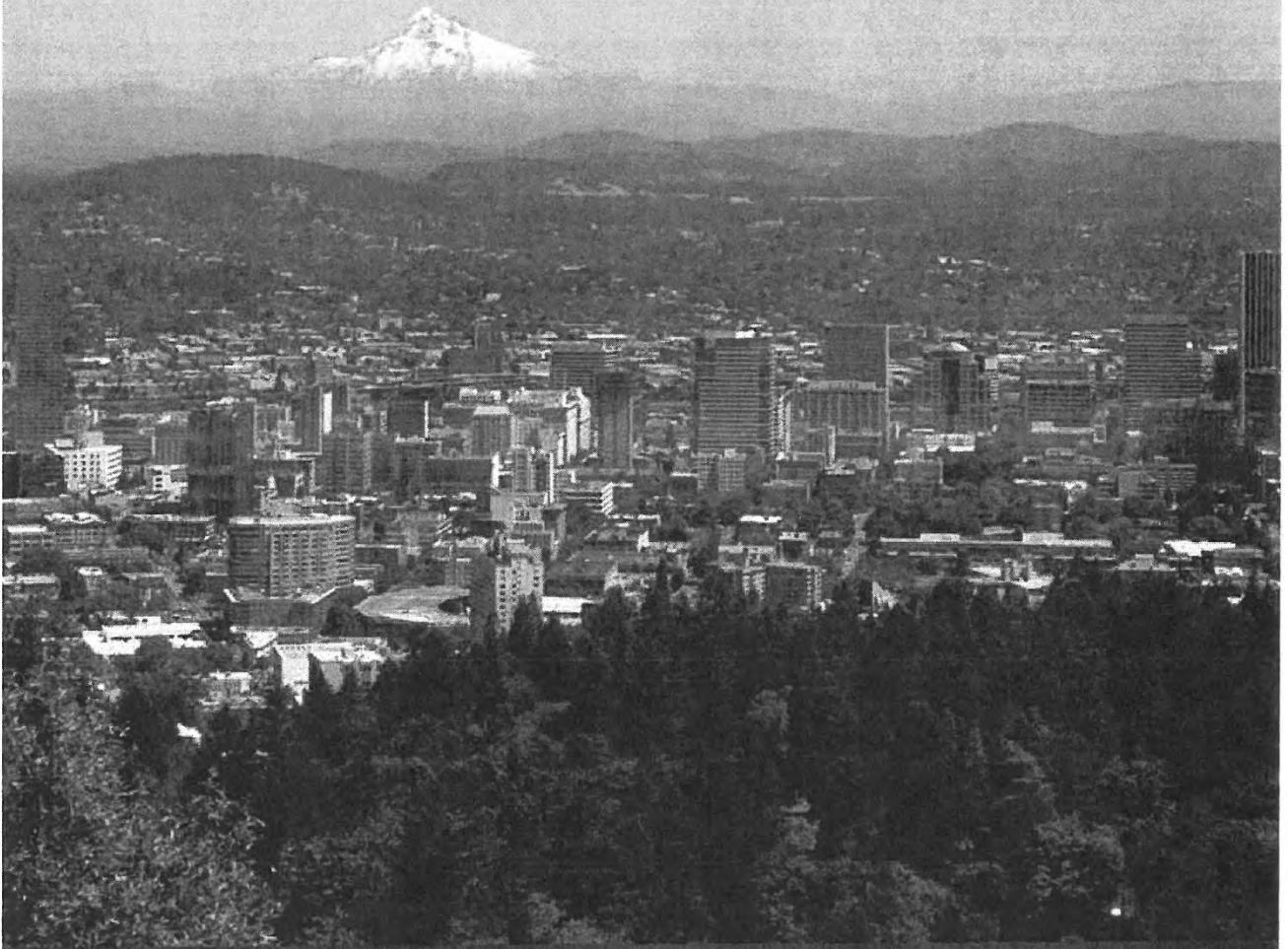
In mentioning the above items of concerns regarding city infrastructure needs, the Water Bureau's specific needs and requirements for infrastructure placement should be considered as an essential resource for the city and how in meeting these new rules and standards we can maintain minimal impacts to rates, maintenance and worker access and safety.

Terry Wenz
PWB Capital Project Manager 1
Water Bureau Development Services Group
(503) 823-7171

**CENTRAL CITY 2035
VOLUME 5: IMPLEMENTATION WORKPLAN**

IN-HOUSE REVIEW DRAFT | OCTOBER 9, 2015

COMMENTS DUE NOVEMBER 9, 2015



Bureau of Planning and Sustainability
Innovation. Collaboration. Practical Solutions.

City of Portland, Oregon
Charlie Hales, Mayor • Susan Anderson, Director



Questions about Performance Measures?

Contact: Mindy Brooks

Mindy.Brooks@portlandoregon.gov

503-823-7831

4. Tree Canopy Target

Central City 2035 - Tree Canopy Targets - Overview

Updated October 2015

Introduction

As part of the Central City 2035 plan, targets related to many topics (e.g., jobs, parking, tree canopy) are being proposed. Staff anticipates that the City Council will adopt these targets by resolution, and the targets will serve to help the city know if the plan is being achieved as envisioned. The targets are expected to be non-binding. However, they will allow the city to track progress after 5, 10 or 15 years of plan implementation, which will help the city adjust its course where needed. For example, the city could choose to fund additional street tree plantings or revisit specific policies or practices in areas not meeting the targets.

This overview presents the general approach that will be used to identify tree canopy targets for the Central City. An additional methodology summary is provided as an appendix.

Background

Tree canopy targets for Portland were first established in the 2004 Urban Forestry Management Plan (UFMP). The UFMP set a 15% tree canopy coverage target for commercial/industrial/institutional areas, a 35% canopy target for rights-of-way, a 35-40% canopy target for residential areas, and a 30% canopy target for parks. The UFMP does not include a citywide canopy target; however, when the targets for different development types are aggregated and applied across the entire area of the city, the average is 33%.

The Portland Plan, adopted in 2012, calls for tree canopy to cover one-third of the city on average by 2035. It also includes a Central City tree canopy target of 10 – 15% and calls for a minimum of 20 – 25% canopy in all residential neighborhoods as measures of success. The Central City canopy target reflects the fact that the Central City is much more urbanized and development generally covers lot line to lot line. This is in contrast with more residential or less intensive non-residential areas where there is often more room for trees in yards and landscaped areas.

The Climate Change Preparation Strategy adopted in 2015 also features tree preservation and planting as a tool to help meet key objectives and strategies such as decreasing the urban heat island effect and increasing the resilience of the built environment to increased winter rainfall. Actions defined in the strategy include implementing the UFMP, using trees and other green infrastructure to reduce impervious area, and maintaining tree canopy in parks. The strategy does not modify or clarify the targets set by the UFMP or the Portland Plan; however, the Climate Action Preparation Strategy has a schedule of being met by 2030.

Through the Central City 2035 planning process, the following Central City-wide goals, policies and actions pertain to tree canopy. There are specific district actions in some cases; however, the overall intention is that tree canopy is increased throughout the Central City.

CC2035 Goal G. Support the ability to meet human and health service needs of at-risk populations concentrated within the Central City.

CC2035 Policy 15 Promote healthy active living. Design and develop Central City neighborhoods to support physically and socially active healthy lifestyles for all people through inclusion of plazas, parks and open spaces, a safe and inviting public realm, access to healthy food and active transportation and the density of development needed to support these economically.

Proposed CC2035 Policy Streetscape. Improve street environment and pedestrian experience by providing urban greenery and community uses of the right-of-way and by integrating high-density uses.

Proposed CC2035 Policy Green Infrastructure. Increase the use of ecoroofs, vertical gardens, sustainable site development, landscaped setbacks and courtyards, living walls and other vegetated facilities to manage stormwater, improve the pedestrian environment, reduce the heat island effect, improve air and water quality and create habitat for birds and pollinators on new buildings.

Proposed CC2035 Policy Urban Habitat Connections. Create upland wildlife habitat connections using street trees, native vegetation in landscaping, public open spaces and ecoroofs that provide a connection for avian and pollinator species between the West Hills and Willamette River.

Proposed CC2035 Policy Climate Change Preparation. Reduce the adverse impacts of urban heat island effects on public health, especially in underserved and under-represented communities.

Proposed CC2035 Policy Climate Change Preparation. Protect and improve terrestrial and aquatic wildlife movement corridors.

Community stakeholders expressed a range of viewpoints relating to trees in the Central City during the quadrant planning efforts. Some stakeholders support ambitious targets that call for significant increases in Central City tree canopy and the benefits it provides, including air cooling, stormwater management, aesthetic beauty, improved pedestrian environment, and habitat for birds and pollinators. Others expressed concern about potential constraints and conflicts between land uses and trees, such as impacts on freight movement and visibility, and obscuring storefronts and signs.

The Portland City Council has endorsed preliminary tree canopy targets that were developed in conjunction with the North/Northeast, West, and Southeast quadrant plans. (See 5.4 Table 1) These targets were developed using 2007 vegetation data and a largely qualitative assessment of existing and potential tree canopy. This analysis reflects an assumption that future increases in tree canopy would come primarily from additional trees in Central City rights-of-way (ROW). The analysis also drew on the 2004 Urban Forestry Management Plan targets, particularly the UFMP citywide 35% ROW tree canopy target. For example, preliminary targets for the N/NE quadrant were derived in large part by applying the 35% target to the ROWs in that district.

5.4 Table 1. Preliminary 2035 Tree Canopy Targets by Central City District

Central City District	District Size (acres)*	Existing Tree Canopy (acres)	Existing Tree Canopy (%)	Preliminary Tree Canopy Target (acres)	Preliminary Tree Canopy Target (%)	Additional Tree Canopy Acres Needed to Reach Preliminary Target
Lloyd	407	28	7	73	18	45
Lower Albina	201	10	5	20	10	10
Downtown	261	34	13	65	25	31
West End	95	7	7	19	20	12
Goose Hollow	175	23	13	35	20	12
Pearl	349	14	4	70	20	56
Old Town/Chinatown	178	12	7	18	10	5
South Waterfront	243	15	6	49	20	34
University	243	49	20	73	30	24
Central Eastside	802	24	3	80	10**	56
Total	2,954	207	7	502	17	295

*Does not include water.

**This is a placeholder and is the same as Lower Albina. Like Lower Albina, the Central Eastside District has a lot of industrial uses. Putting in a placeholder allows staff to calculate a target for all of the Central City.

In response to the preliminary targets some stakeholders requested a more rigorous, in-depth analysis to confirm that the targets are appropriate, and to be clearer about how and where Central City tree canopy would change in the future. The quadrant plans also included a draft methodology to guide additional refinements to the canopy targets prior to adoption of the Central City 2035 Plan.

Currently the Bureau of Planning and Sustainability (BPS) is working with Portland Parks and Recreation (PP&R), the Bureau of Environmental Services (BES), and the Portland Bureau of Transportation (PBOT) to update the methodology and the preliminary tree canopy targets contained in the quadrant plans. Staff will update the 2007 vegetation data with 2014 LiDAR data to represent existing tree canopy, and will use GIS analysis to estimate the tree canopy changes associated with development and redevelopment, changes in policies and regulations, proactive tree planting, and riverbank enhancements.

This approach will allow the review and refinement of preliminary targets and will allow staff to assess how different policy assumptions and options could affect future tree canopy in the Central City. This approach will also facilitate monitoring and tracking of future tree removal, planting, and canopy coverage in the Central City over time.

The proposed approach is summarized below.

Central City Tree Canopy Scenarios and Targets – Proposed Approach

Prior to refining the preliminary tree canopy targets in the quadrant plans, staff will develop several future tree canopy scenarios to illustrate how different policy and investment options would affect tree canopy. Staff will also address the respective pros and cons of the scenarios. The scenarios are intended to help inform the refinement of the tree canopy targets.

Each of the tree canopy scenarios will reflect analyses of:

- Tree canopy associated with rights-of-way
- Tree canopy associated with tax lots in private and public ownership
- Tree canopy associated with parks and public spaces

Given the diversity of landscape and land uses in the Central City, future tree canopy scenarios and targets will be developed for each quadrant and districts within the quadrants. Scenarios will reflect the following key factors:

- Replacement of the 2007 vegetation data used to develop the preliminary tree canopy targets with 2014 LiDAR vegetation data. This will greatly improve the accuracy of information on existing tree canopy.
- Field survey data on tree planting spaces along Central City rights-of-way.
- GIS modeling to estimate:
 - Existing and potential tree canopy capacity along Central City rights-of-way.
 - Changes in tree canopy on tax lots and along rights-of-way associated with development and redevelopment (sites identified as vacant and/or underutilized in the Buildable Lands Inventory).
 - Changes in tree canopy based on proposed river setbacks and riverbank enhancements.
- Preferred canopy ranges for existing and anticipated future parks and public spaces in the Central City.
- Evaluation of previous and potential future investments in street tree planting.

Staff anticipates that the new LiDAR vegetation data will be available by the end of calendar year 2015. When this data become available staff can incorporate it the tree canopy scenarios for presentation in the Discussion Draft. Future tree canopy scenarios include a “Baseline” scenario, a “Central City 2035 Plan” scenario, and a number of additional alternative scenarios. These scenarios will provide a “reality check” for the preliminary tree canopy targets contained in the quadrant plans, and will inform an update these targets.

Taking into consideration public comments on the Discussion Draft, staff will develop recommended tree canopy targets for inclusion in the Proposed Draft for the Planning and Sustainability Commission (anticipated winter 2016).

The future tree canopy scenario concepts are presented below.

“Baseline” future tree canopy scenario

The baseline future tree canopy scenario is intended to reflect future canopy in the Central City given existing policies, regulations, and investment levels. For this scenario, the existing tree canopy data will be adjusted to reflect changes associated with:

- a. Anticipated Central City development and redevelopment between now and 2035. This analysis will assume development or redevelopment will occur on Central City vacant and/or under-utilized sites identified in the Recommended Buildable Lands Inventory (BLI). The BLI was approved by the Planning and Sustainability Commission July 2015, and will be going to the City Council for adoption in fall 2015.

This analysis will project canopy changes on tax lots and rights-of-way associated with development or redevelopment of sites identified in the BLI. The analysis will reflect current zoning code (Title 33) and tree code (Title 11) allowances and requirements (e.g., building coverage, landscaping, tree planting/density). The analysis will also reflect current streetscape and street tree planting policies (e.g., minimum pedestrian through zone, furnishing zone width, sidewalk dedication requirements, etc.). It should be noted that net tree canopy could increase or decrease as a result of development and redevelopment depending on the current state of the vacant or underutilized site in relation to the proposed development/redevelopment.

- b. Anticipated increases or decreases in tree canopy associated with existing City-managed parks. Portland Parks and Recreation (PP&R) has produced preferred canopy ranges for City-managed parks and public spaces in the Central City. The preferred canopy ranges reflect consideration of current and desired park uses, maintenance, and security issues, along with goals for improved quantity and quality of tree canopy.
- c. Assumed continuation of periodic, limited City tree planting initiatives in the Central City. The City periodically offers to plant trees free of cost based on property owner agreement to accept and maintain the trees.
- d. Anticipated increases in canopy associated with recently developed/redeveloped areas that contain a large number of newly planted trees. In these cases, the existing canopy layer will not sufficiently represent expected 2035 canopy and additional modeling will need to be conducted to account for anticipated tree growth. This will only apply to relatively large areas of land with large numbers of newly planted trees, like the Pearl District and South Waterfront.

Central City 2035 Plan scenario, and additional alternative future tree canopy scenarios

Building on the baseline tree canopy scenario, an additional scenario will be developed to reflect changes in existing policy, regulations, and investments that are expected to be included in the draft Central City 2035 plan. The assumptions in this scenario will reflect concepts and direction from the adopted quadrant plans.

Additional alternative tree canopy scenarios will also be developed to evaluate more options to improve tree canopy in the Central City. The various scenarios will include general discussions of relative advantages, disadvantages, and tradeoffs.

It may not be possible to model every potential options so it may be necessary to describe the potential options and issues qualitatively.

Options to be considered in the Central City 2035 Plan future tree canopy scenario, and/or additional alternative scenarios, include:

- a. Changes to Title 33 zoning regulations such as:
 - building coverage allowances or requirements
 - building setback allowances or requirements
 - building step-backs (e.g., podium)
 - landscaping allowances or requirements
 - Willamette River setback and planting requirements

Much of the land in the Central City is within zones that allow 100% building coverage, with no required setbacks or landscaping. This reduces the space for trees on tax lots and inhibits the planting or growth of street trees. Changes to building coverage, setback, building design, and landscaping requirements would provide more room for street tree canopy to reach its potential, and for trees to be planted on tax lots. Changes could be evaluated for specific zones, areas, or street typologies.

The quadrant plans call for an evaluation of the width of the Willamette River setback. An increased river setback would provide more space for tree planting along the Willamette River.

- b. Changes to Title 11, Trees regulations. Currently Title 11 exempts development that is occurring in commercial and industrial zones that do not have landscaping requirements from tree preservation and tree density (planting) standards. Removing these exemptions in the Central City and applying tree preservation and/or tree density standards in all zones would improve tree canopy associated with development and redevelopment.
- c. Changes in tree canopy associated with anticipated new parks. Portland Parks and Recreation is evaluating existing and potential future tree canopy scenarios that support City urban forest goals while also meeting other parks related needs and priorities.
- d. Increased City investment in street tree planting and maintenance. A key barrier to additional street tree planting in the Central City and elsewhere is property owner resistance to the additional responsibility and cost of tree maintenance. Scenarios involving substantial increases in Central City street tree planting will likely include assumptions that the City has at least some responsibility for maintaining the trees. It may require code changes for the City to assume street tree maintenance responsibilities.
- e. Streetscape improvement projects that could involve additional street tree planting and maintenance along major street segments, not just on sections of the street abutting sites that are expected to develop or redevelop between now and 2035. Streetscape improvements could also result in larger trees being planted if the improvement included tree bulb-outs on corners and/or mid-block, or if the improvement involved a road diet or median.

- f. Investment in riverbank enhancements on City-owned and other public property, and through public and private partnerships. Use riverbank enhancement targets from the Southeast Quadrant Plan.
- g. Increased right-of-way dedications associated with new development. Increased ROW dedications could allow more or bigger trees to be planted. In order to require additional sidewalk dedication for trees (tree canopy) specifically, the City would have to establish a nexus and proportionality between new development and impacts on trees (tree canopy).
- h. Require new developments to install “Silva Cells” or other tools to improve soil volume for street trees or tax lot trees. This could increase the number of trees or the size of trees that can be planted.
- i. Limitations on the placement of vaults, voids, or other encroachments to avoid or reduce intersection with sidewalk corridors and barriers to tree planting.

Staff have produced preliminary results for the Baseline Future Tree Canopy Scenario and the Central City 2035 Plan Future Tree Canopy Scenario. These results are provided in the attached Methodology Summary report. These results will be revised when the 2014 LiDAR tree canopy data become available.

The additional alternative future tree canopy options are under development. Methodologies and preliminary results for these will be provided in the Discussion Draft.

Once all the updated future tree canopy scenarios are available, staff will provide an analysis of the results, along with respective benefits, costs, constraints (e.g., legal and otherwise), concerns, and tradeoffs, including the ability to meet multiple City goals and policies. This will inform the refinement of the preliminary Central City tree canopy targets, and support the establishment of canopy targets that are both practical and aspirational.

Central City Tree Canopy Scenarios – Methodology Summary

I. Baseline Future Tree Canopy Scenario

A baseline Central City tree canopy estimate will provide a snapshot representing what canopy might look like across the Central City if the conditions, policies, regulations, etc. existing today persist through 2035. The Baseline Scenario builds on the existing canopy analysis outlined above, and models anticipated changes in canopy in the right-of-way, on tax lots, and in parks/open spaces assuming anticipated future growth, development, and investment play out in accordance with current policies and regulations (e.g., land use, zoning, sidewalk widths and street dedications), and programmatic practices (public investment in tree planting).

The specific approaches to estimate baseline future tree canopy in rights-of-way (ROW), on tax lots, and in parks and public spaces are described below. It should be noted the analysis reflects assumptions that apply “on average” across Central City quadrants and districts, and is not intended, unless otherwise noted, to apply to specific properties, ROW, or parks and public spaces.

The preliminary results of the Baseline Future Tree Canopy Scenario are presented at the end of this document, but will be recalculated for the Discussion Draft when new LiDAR tree canopy data become available (expected Nov/Dec 2015).

A. Baseline Existing Tree Canopy

To date, existing tree canopy coverage has been calculated with the “High Structure Vegetation Value” of Metro’s 2007 vegetation layer. Two calculations were carried out: 1) Total existing canopy, by zone, by Central City district, and 2) Existing canopy on vacant/underutilized sites (these sites were generated by the City of Portland’s Buildable Lands Inventory [BLI] Model).

Total existing canopy was calculated for the entirety of each zoning category and Central City district. Total area of each zoning category and Central City district excludes water. Existing canopy on vacant/underutilized sites only includes the area within vacant and/or underutilized tax parcels. The analysis conducted for BLI-designated vacant and underutilized sites also excludes all parcels zoned as Open Space.

For the purposes of this project, existing tree canopy will be recalculated and replaced with 2014 LiDAR data when it becomes available.

B. Baseline Right-of-Way Tree Canopy

Developing Central City right-of-way (ROW) tree canopy scenarios involves analyzing how existing street tree canopy is anticipated to change in the future. This analysis includes several components. One component involves analyzing how street tree canopy is expected to change in conjunction with development and redevelopment. Another involves analyzing how street tree canopy could change in conjunction with voluntary or proactive investment in tree planting and establishment.

For the purposes of this analysis, it is assumed that existing street tree canopy will remain constant overall, recognizing that existing street trees will grow, die, and be replanted in an assumed dynamic equilibrium. However, in portions of the Central City that are newly developed, street trees have been planted recently and are still small, but are expected to grow over time (e.g., South Waterfront, the Pearl). For these districts the baseline scenario will incorporate an estimate of the future canopy of these existing trees when they are fully grown. This “tree canopy capacity” estimate will be developed based on the existing planting spaces and planting strip codes referenced in the next section. Modeled ROW canopy capacity will replace existing ROW canopy in these districts.

This section starts with a description of key data used in the analysis, followed by methodology summaries for changes in ROW canopy associated with development/redevelopment as well as changes in ROW canopy associated with tree planting investment.

Underlying ROW tree data

Right-of-way tree canopy analysis requires basic information on existing street trees and potential street tree planting spaces in the Central City. The Central City street tree survey conducted by the Bureau of Environmental Services (BES) provides a strong foundation. This survey was conducted between 2012 and 2014 and identifies by address for much of the Central City the number of planting spaces with existing trees, and the number of potential planting spaces. (See 5.4 Table 2).

5.4 Table 2. Existing and Potential Planting Spaces by District

Geography	Area (acres)*	# Existing (Planted) Planting Spaces	# Potential Planting Spaces	Total # of Planting Spaces
Central Eastside	706	2,071	2,167	4,238
SE Quadrant Totals	706	2,071	2,167	4,238
Lloyd District	385	1,600	516	2,116
Lower Albina	138	141	187	328
N/NE Quadrant Totals	523	1,741	703	2,444
Downtown	222	1,748	579	2,327
Goose Hollow	175	793	375	1,168
Old Town/Chinatown	130	939	184	1,123
Pearl District	277	1,795	482	2,277
South Downtown/University	218	915	81	996
South Waterfront	177	483	155	638
West End	95	639	355	994
W Quadrant Totals	1,294	7,312	2,211	9,523
Central City Totals	2,523	11,124	5,081	16,205

* Does not include water.

The BES survey also assigned planter strip codes that reflect planting strip width and the presence or absence of overhead high voltage wires. Planter strip codes are associated with different tree sizes (small, medium, or large) that are appropriate to plant in that space. These three tree size categories are

a proxy for the more diverse range of tree shapes and sizes that exist currently and will be planted in the future. The BES survey also denotes planter strips and sidewalk corridors that are too narrow for potential tree plantings. These records were considered as no potential tree plantings in the analysis. The canopy areas associated with small, medium, and large trees are based on categories provided by Portland Parks and Recreation, Urban Forestry program.

This information is summarized in 5.4 Table 3.

5.4 Table 3. Planting Strip Codes and Tree Size

Planting Strip Code ¹	Planting Strip Width ¹	High-Voltage Overhead Wires ¹	Potential Tree Size ²	Potential Tree Canopy Diameter ²	Potential Tree Canopy Area (sq ft)
A	2.3-2.9'	with or without	Small	20'	314
B	3.0-3.9'	with or without			
C	4.0-5.9'	without	Medium	40'	1256
D	4.0-5.9'	with			
F	6' and greater	with			
E	6.0-8.4'	without	Large	60'	2826
G	8.5' and greater	without			
X	<2.3' OR sidewalk corridor <8.5'	with or without	No Tree	0	0
MS	Based on average planting strip code ³				
U/UC	Unspecified	Unspecified	Based on average tree size by district ⁴		

¹ BES, *Planting Strip Guide For Inspectors 2014*

² Urban Forestry, *Street Tree Inventory Data Available Site Codes*; Urban Forestry, personal communication.

³ MS code indicated an address with more than two frontages; an A-X planting strip code was assigned to each frontage and listed in a notes column during data collection. This analysis used the average tree size based on the A-G codes across all frontages.

⁴ U/UC code indicated an unimproved site without or with a curb. This analysis assumed the average tree size based on the average planter strip width by district.

The Bureau of Planning and Sustainability (BPS) conducted additional analyses to fill in data gaps for portions of the Central City 2035 planning area that BES did not canvass during the survey, or portions where BES did canvas but did not note planting strip width. Where BES did not canvas, BPS used the average tree sizes and number of existing/potential tree planting spaces per tax lot by district and base zone (see 5.4 Table 4) to extrapolate the data.

5.4 Table 4. Average number of street tree planting spaces and tree sizes per tax lot by sub-district

Subdistrict	ZONE	Average Existing Trees	Average Potential Trees	Average Tree Size
CENTRAL EASTSIDE	CG	2	0	Small
CENTRAL EASTSIDE	EG1	1	1	Small
CENTRAL EASTSIDE	EG2	5	0	Small
CENTRAL EASTSIDE	EX	2	2	Small

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CENTRAL EASTSIDE	IG1	2	2	Small
CENTRAL EASTSIDE	IH	0	1	Small
CENTRAL EASTSIDE	R1	1	1	Small
CENTRAL EASTSIDE	RX	2	1	Small
DOWNTOWN	CX	5	2	Medium
DOWNTOWN	OS	10	6	Medium
DOWNTOWN	RX	3	1	Medium
GOOSE HOLLOW	CX	3	1	Small
GOOSE HOLLOW	OS	22	12	Small
GOOSE HOLLOW	R1	1	1	Small
GOOSE HOLLOW	R2	0	0	Small
GOOSE HOLLOW	RH	3	3	Small
GOOSE HOLLOW	RX	5	1	Small
LLOYD DISTRICT	CX	7	2	Medium
LLOYD DISTRICT	EG1	0	7	Medium
LLOYD DISTRICT	IG1	1	2	Medium
LLOYD DISTRICT	OS	14	7	Medium
LLOYD DISTRICT	RH	2	1	Medium
LLOYD DISTRICT	RX	5	3	Medium
LOWER ALBINA	EX	2	1	Medium
LOWER ALBINA	IG1	1	2	Medium
LOWER ALBINA	IH	0	0	Medium
OLD TOWN / CHINATOWN	CX	5	1	Medium
OLD TOWN / CHINATOWN	RX	13	0	Medium
PEARL DISTRICT	CX	2	2	Medium
PEARL DISTRICT	EX	6	1	Medium
PEARL DISTRICT	IH	2	8	Medium
PEARL DISTRICT	OS	19	3	Medium
PEARL DISTRICT	RX	7	0	Medium
SOUTH DOWNTOWN/UNIVERSITY	CX	6	0	Medium
SOUTH DOWNTOWN/UNIVERSITY	OS	2	2	Medium
SOUTH DOWNTOWN/UNIVERSITY	RX	5	1	Medium
SOUTH WATERFRONT	CX	9	3	Medium
WEST END	CX	5	2	Medium
WEST END	EX	1	1	Medium
WEST END	RX	3	1	Medium

Baseline right-of-way tree canopy associated with development and redevelopment

In order to determine how street tree canopy might change with anticipated development and redevelopment in the Central City, it was necessary to determine how many existing street trees and

potential planting spaces are associated with the vacant and underutilized sites designated in the Buildable Lands Inventory. (See 5.4 Table 5)

5.4 Table 5. Existing and Potential Planting Spaces Associated with BLI sites, by District

Geography	District Area (acres)	BLI Sites Area (acres)	# Existing (Planted) Planting Spaces adjacent to BLI sites	# Potential Planting Spaces adjacent to BLI sites	Total # of Planting Spaces adjacent to BLI sites
Central Eastside	706	109.7	434	447	881
SE Quadrant Total	706	109.7	434	447	881
Lloyd District	385	77.4	505	198	703
Lower Albina	138	2.7	13	25	38
N/NE Quadrant Totals	523	80.1	518	223	741
Downtown	222	20.7	207	99	306
Goose Hollow	175	24.0	194	127	321
Old Town/Chinatown	130	18.9	203	29	232
Pearl District	277	66.6	250	166	416
South Downtown/University	218	36.8	225	48	273
South Waterfront	177	90.6	152	54	206
West End	95	13.3	110	109	219
W Quadrant Totals	1294	270.9	1341	632	1973
Central City Total	2523	460.6	2293	1302	3595

existing water facilities : water mains , meters , fire hydrants ,
 utilities corridors

For the Baseline Scenario, it will be assumed that the existing street trees associated with BLI-designated vacant and underutilized sites will be retained or replaced and that 70% of the potential planting spaces will be planted with trees according to the planting strip category associated with those BLI-designated vacant and underutilized sites. This 30% constraint on planting future street trees is intended to account for known and potential constraints to street tree planting and root growth. A key constraint is the impact of underground vaults and voids. Other constraints include driveways and curb cuts, conflicts with other sidewalk furnishings, freight streets, etc.

BPS evaluated the extent of sub-surface encroachment associated with vaults and voids, using GIS data layers for tax lots and vaults and voids. This analysis also required the generation of hypothetical average sidewalk corridor widths by district. Estimated existing encroachments between underground vaults and sidewalk corridors vary by district, and were estimated to range from 0 to 32 percent, which includes an assumed 5 foot buffer around existing vaults and voids. It is not possible to determine the extent to which these existing encroachments affect potential tree planting spaces as the data does not

include locational information for the potential tree planting spaces. It is also not possible to predict future encroachments associated with new vaults and voids. However, according to PBOT staff, vaults are an increasing barrier to planting street trees.

In addition, the street tree canopy will be further adjusted to reflect constraints on tree growth associated with buildings that abut the sidewalk corridor. This occurs through much of the Central City in zones that allow 100 percent building coverage (i.e. lot-line-to-lot-line) and that do not require landscaping. In these zones the buildings keep the street trees from growing to their full capacity. For zones that allow lot-line to lot-line development, street tree canopy will be adjusted by applying a 20% reduction to medium tree canopy and a 30% reduction to large tree canopy. These percent reduction numbers will be derived from geometry related to the area of a circle/circle segment and assuming a typical sidewalk corridor of 12'.

Some of these baseline assumptions and constraints will be revisited in developing alternative tree canopy scenarios. For example, the establishment of optional or mandatory building setbacks would provide more room for street tree canopy and trees on tax lots. If new development were required to install Silva Cells to increase underground soil volume this too could facilitate the planting of larger trees in a given planting space.

Baseline proactive street tree planting

Proactive street tree planting scenarios will be incorporated into the baseline and alternative tree canopy scenarios. The baseline scenario will assume that the City maintains a basic investment level in street tree planting over the Central City 2035 planning horizon. It will also assume current programmatic approaches and city policies, specifically that the City will, periodically, offer trees to be planted free of cost, at the adjacent property owner's discretion. And, per current city policy, the ongoing maintenance for the tree is the responsibility of the adjacent property owner.

For the Baseline Scenario, the additional tree canopy increment associated with this basic level of investment was based on information provided by the Bureau of Environmental Services. BES reviewed response rates to recent planting efforts in the Central Eastside to develop the recommendations. Given the number of districts in the Central City and the fact that a majority of Portland is outside of the Central City, the baseline scenario will reflect an assumption that the City will invest in one additional planting initiative per district over the Central City 2035 planning horizon. It is further assumed that each initiative will involve reaching out to property owners and offering to provide and plant trees at no cost during two consecutive years. Based on the recent planting effort in the Central Eastside, it is expected that the two-year effort would result in the additional planting of approximately 20% of the potential planting spaces on average for each district.

Alternative tree canopy scenarios will include a greater level of effort and investment in Central City street tree planting. Given that property owner resistance to cost of tree and sidewalk maintenance is a documented barrier to tree planting, alternative scenarios will likely assume that the City will take some level of responsibility for tree maintenance and sidewalk repair.

C. Baseline Tax Lot Tree Canopy

For the Baseline Future Tree Canopy Scenario, existing canopy on tax lots is assumed to remain constant except for lots that are expected to develop or redevelop during the Central City 2035 planning horizon. To estimate the potential canopy for parcels expected to develop or re-develop (derived from the vacant/underutilized sites as designated in the BLI), low and high estimates of potential canopy were calculated. To determine the expected changes in tree canopy associated with development and redevelopment of tax lots, existing canopy on BLI sites will be subtracted from the modeled low and high range estimates by district.

The Baseline Future Tree Canopy Scenario applies existing zoning and other regulations, including the provisions of Title 11, Trees (see 5.4 Table 6).

5.4 Table 6. Existing Zoning and Tree Standards, by Zone

Zone	Total Area of BLI Sites (acres)	Area as % of Total BLI Sites	Max Building Coverage Limit (Title 33)	Min Landscaped Area (Title 33)	Min Landscaping Abutting R Zoned Lot (Title 33)	Min Building Setback – Street Lot Line (Title 33)	Max Building Setback – Transit Street or Ped District (Title 33)	Tree Density (Planting) Standard (Title 11)
CX	249.7	54.21%	No limit	None	5 ft. at L3	0	10 ft.	Exempt
EX	77.9	16.91%	100% of site area	None	5 ft. at L3	0	10 ft.	Exempt
IG1	76.4	16.58%	100% of site area	None	5 ft. at L3	0	None	Exempt
RX	24.4	5.29%	100% of site area	None		0	10 ft.	20%
IH	9.8	2.13%	100% of site area	None	10 ft. at L3	5 ft.	None	Exempt
EG2	9.3	2.03%	85% of site area	15% of site area	10 ft. at L3	25 ft.	None	10% (industrial) 15% (commercial)
EG1	5.7	1.24%	85% of site area	15% of site area	5 ft. at L3	5 ft.	10 ft.	10% (industrial) 15% (commercial)
RH	4.4	0.96%	85% of site area	15% of site area		0	20 ft.	20%
R1	2.4	0.51%	60% of site area	20% of site area		3 ft.	20 ft.	20%
CG	0.7	0.15%	85% of site area	15% of site area	5 ft. at L3	0	10 ft.	15%
R5	0.0	0%	40% of site area			10 ft.		40%

For BLI vacant and underutilized parcels that are zoned CX, EX, IG1, or IH, it will be assumed that the low estimate of potential canopy would be zero as these zones have no minimum landscaping requirement and allow a the maximum building coverage of 100%. In addition, the Title 11 (Trees) development standards for tree preservation and tree density (planting) do not apply in these zones. For the high estimate it is assumed that the average tree canopy that currently exists on fully developed (non BLI) sites could be either retained or planted on the BLI sites as they develop or redevelop. The low and high tax lot canopy estimates for each of these zones will be adjusted where tax lots abut residential-zoned parcels. In these instances the Zoning code requires a minimum landscaped area along the tax lot abutment with residential parcels (see table below). It is assumed that canopy covers 100% of the required landscaped area along tax lot abutment. This increment is then added to the low and high estimates for each tax lot.

For BLI-designated vacant and underutilized parcels that are zoned EG1 and EG2, the low baseline future tree canopy estimate will be 10% of the total tax parcel area and the high estimate will be 15%. This reflects the existing 85% maximum building coverage and 15% minimum landscaping requirements in the Zoning Code for EG1 and EG2 zones. This also reflects, Title 11 tree density standards which require 10% minimum future tree canopy for industrial sites and 15% tree area for commercial/retail/office/mixed use development, or payment of a fee in lieu of planting to the City's Tree Fund.

For BLI parcels that are zoned RX, R1, R5, and RH, the low baseline future tree canopy estimate will be 10% of the total tax parcel area and the high estimate will be 20%. This reflects the existing 20% minimum landscape requirement for R1 and 15% minimum landscape requirement for RH. In addition, Title 11 tree density standards require a 20% minimum future canopy coverage for sites in multi-family residential zones, or payment of a fee in lieu of planting to the City's Tree Fund. The low baseline estimate reflects an assumption that many developers may choose to pay a fee in lieu of meeting density standards given relatively small sites and block sizes, and relatively high property values.

In addition to the base zone-specific landscaping requirements, the Zoning Code also requires development to meet specific planting requirements along the river frontage within the existing 25-foot Willamette River setback. In addition, a 25' proxy will be used to estimate the area between ordinary high and top of bank; this will be added to the 25' river setback area for a total of 50' for the Baseline Scenario. For this analysis, an additional increment of tree canopy will assigned to this area on BLI-designated vacant and underutilized tax lots along the Willamette River that are not owned by Portland Parks and Recreation (PP&R-owned lots will be addressed below). This additional increment is added to both the low and high baseline future tree canopy estimates. For the low estimate, the additional canopy increment is assumed to be 40% of the area within the riverbank and river setback. For the high estimate, the additional canopy increment is assumed to be 80% of the area within the riverbank plus and river setback. This canopy range is based on the current river setback landscaping standard of one tree for every 20' of river frontage, acknowledging that, in many cases, trees will be clustered or a view corridor will need to be maintained. River setback landscaping requirements are in addition to any landscape requirements of other chapters of Title 33.

D. Baseline Parks and Public Spaces Tree Canopy

To develop tree canopy scenarios for existing and potential future Central City public parks and public spaces, the Portland Parks and Recreation (PP&R) analyzed existing tree canopy and developed preferred tree canopy ranges for 2035.

PP&R's Planning, Urban Forestry, Zone, and City Nature East staff conducted a tabletop exercise, using Google Maps (and Street View), Bing, City of Portland GIS data, and current canopy cover data in Central City parks. Staff viewed images of each existing Central City park and property boundaries, examined existing canopy cover at each Central City park, and discussed existing and future tree health/species mix, maintenance issues, programming issues, and unresolved issues from various perspectives.

From these qualitative discussions, individual PP&R staff developed proposed low to high ranges of preferred tree canopy cover in 2035 for each existing Central City park. Staff compiled these recommendations and developed a single set of low and high preferred tree canopy ranges, which reflect the diverse professional opinions and perspectives. These preferred canopy ranges are presented in 5.4 Table 7. This table will be updated and PP&R may choose to refine this analysis when the 2014 LiDAR data become available and the existing tree canopy statistics for Central City parks and public spaces are revised.

5.4 Table 7. Preferred Central City 2035 Tree Canopy Scenario for existing PP&R parks/open spaces

Central City District	Existing Park Area (acres)	Existing Park Canopy (acres)	Preferred future canopy – LOW (acres)	Preferred future canopy – HIGH (acres)	Difference between LOW and existing (acres)	Difference between HIGH and existing (acres)
SE QUAD						
Central Eastside	9.09	2.41	2.47	3.00	0.06	0.59
SE Quad Total	9.09	2.41	2.47	3.00	0.06	0.59
N/NE QUAD						
Lloyd	4.54	3.32	2.72	3.33	-0.60	0.01
Lower Albina	0.00	0.00	0.00	0.00	0.00	0.00
N/NE Quad Total	4.54	3.32	2.72	3.33	-0.60	0.01
WEST QUAD						
Downtown	23.12	10.16	9.67	11.18	-0.48	1.02
Goose Hollow	0.00	0.00	0.00	0.00	0.00	0.00
Old Town/Chinatown	11.02	3.98	4.07	4.78	0.09	0.80
Pearl District	8.14	2.38	2.93	3.53	0.54	1.15
South Downtown/University	17.58	7.94	8.44	9.69	0.50	1.75
South Waterfront	6.62	0.24	1.81	2.14	1.57	1.90
West End	0.00	0.00	0.00	0.00	0.00	0.00
West Quad Total	66.48	24.70	26.92	31.32	2.23	6.62
CENTRAL CITY TOTAL	80.11	30.43	32.12	37.65	1.69	7.22

II. Central City 2035 Plan - Future Tree Canopy Scenario

The Central City 2035 Future Tree Canopy Scenario builds on the Baseline Scenario described above. This scenario incorporates several regulatory and investment options that are anticipated to be part of the Central City 2035 Plan recommendations. These options have been discussed as part of the quadrant planning process and are alluded to directly or indirectly in quadrant plan policies.

The preliminary results of the Central City 2035 Plan - Future Tree Canopy Scenario are presented at the end of this document. These results will be recalculated for the Discussion Draft when new LiDAR tree canopy data become available (expected Nov/Dec 2015).

A. Optional Front Setbacks for New Development and Redevelopment

It is anticipated that the Central City 2035 Plan will propose additional allowances for building setbacks. The anticipated proposal would allow buildings to be set back up to 12 feet from the front property line. Treatment of these setbacks would vary by street typology. Proposed street typologies for the Central City are currently referred to as "Red," "Blue," and "Green" streets. Red streets are the retail/commercial corridors and are intended to be busy with active ground floor uses throughout the day. Blue streets are boulevards and are intended to be greener, though still may support active uses. Green streets are flexible and meant to be quieter, low-stress streets that are bicycle and pedestrian friendly. Along Red streets, setbacks are envisioned as an extension of the sidewalk and would be hardscaped. Trees could be planted in tree wells or planters. Along Blue and Green streets, property owners would be required to install vegetative landscaping in the setback from the street. On all other streets, property owners could choose to treat their setback with hardscape, vegetated landscaping, or both. A setback, vegetated or hardscaped, would allow increased room for street tree canopy to grow. In addition, a setback could be expected to provide additional canopy within the setback itself, with a vegetated setback likely providing more additional canopy than a hardscaped setback.

For the purpose of this exercise, it is assumed that 25 percent of new BLI developments would include the setback. It is expected that most property owners and developers would not choose a setback given impacts on developable area and Portland's relatively small city blocks (200'x200'). It is also assumed that the setback will not span the entire length of the building, and that constraints associated with vaults and voids will continue to be applied.

The assumed impacts on tree canopy from the optional setbacks are as follows:

- An optional setback, whether hardscaped or vegetated, would result in increased room for street tree canopy. Specific assumptions regarding street tree canopy are:
 - 25% of the small potential planting spaces associated with BLI sites, by district, would be able to accommodate medium trees. This would require the installation of Silva Cells to increase soil volume in narrow planting spaces.
 - 25% of the medium potential planting spaces associated with BLI sites in zones allowing 100% maximum building coverage and that have no landscaping requirements, by district, will regain the 20% canopy constraint subtracted in the Baseline Scenario.

- 25% of the large potential planting spaces associated with BLI sites in zones that allow 100% maximum building coverage and that have no landscaping requirements, by district, will regain 20% of the 30% canopy constraint subtracted in the Baseline Scenario.
- The 30% constraint on planting due to vaults/voids, etc. still applies.
- In addition, an optional setback would allow for increased canopy within the setback itself. For 25 percent of the BLI lots in each district, it will be assumed a setback will be incorporated into future development, and that 1 – 3 small trees will be planted for each of those sites. This assumed range is intended to reflect uncertainty associated with whether BLI lots abutting will be allowed a hardscaped, mixed, or vegetated setback.

B. Streetscape Improvements for the Green Loop and the Central City Multi-Modal Safety and Access Project

Anticipated Green Loop east-west connection streets include NW Pettygrove, NW Flanders, SW Oak/Stark, SW Salmon, and SW Montgomery. TSP Greenscape streets and Willamette River access ways could also be included.

- Assume that X percent of the potential planting spaces along these streets would be planted, regardless of whether or not the planting space abuts a BLI site.
- Curb bump-outs, which would likely only occur at corners and/or mid-block, could also result in larger trees being planted and, therefore, additional canopy.

C. Willamette River Setback

It is anticipated that the proposed Central City 2035 Plan will include an expanded Willamette River setback. An expanded setback will help advance numerous City policies calling for improved access to and along the river, and for improved protection and enhancement of riparian ecological functions.

For the purposes of this analysis, it is assumed that the plan will propose expanding the existing 25' river setback to 50' from top-of-bank. The 40% to 80% tree canopy coverage range will be applied to the 25-foot proxy for the riverbank plus the area within the expanded setback on BLI vacant and under-utilized sites with Willamette River frontage.

D. Riverbank Enhancements

The Central City 2035 Plan is expected to call for riverbank enhancement as specified in the Southeast Quadrant Plan. For the purposes of this analysis it is assumed that the additional tree canopy will be associated with enhancement of vegetated banks as follows:

- City-owned and other publicly owned land: Assume 70% of the linear feet of vegetated riverbank will be enhanced. Multiply by 75' (50' setback area plus ~ 25' between ordinary high and top of bank). Assume 40-80% tree canopy coverage for that area. Existing canopy on city or other publicly-owned vegetated banks will be subtracted from modeled low and high range estimates.

- City/private partnerships: Assume 1800 linear feet of privately owned vegetated riverbank will be enhanced. Assume proportional distribution of 1800 linear feet based on the percent of the Central City privately-owned vegetated riverbank contained in each district. Multiply linear feet by 75' and assume 40-80% tree canopy coverage within that area.

Specific locations of the 1800 linear feet of enhancement generated by city/private partnerships are not known, so it is not possible to subtract existing tree canopy from the proposed enhancement area. However, the Central City 2035 Plan will likely include a recommended new River Open Space Bonus which would allow property developers to choose to increase their setback width in exchange for increased FAR. The increased setback would have to be landscaped. For the purposes of this analysis, it was assumed that the existing tree canopy and any potential new canopy from the river open space bonus would balance each other out.

E. Future Central City Parks and Public Spaces

During the Central City quadrant planning processes, a number of potential new parks and public spaces were identified. For the Baseline Future Tree Canopy Scenario, Portland Parks & Recreation (PP&R) evaluated the existing canopy for existing Central City parks and public spaces, and determined preferred future canopy ranges for each.

For potential new parks in the Central City, PP&R recommends applying an average tree canopy range rather than creating specific canopy cover estimates for individual potential future parks. Determining the amount of tree canopy that will be desirable and feasible for each future park would require a robust planning process and consideration of factors that are not known at this time, such as desired park uses, landscape objectives, etc.

When PP&R acquires or redevelops park land in the Central City, incorporation of trees, along with other park needs, will be considered via a master planning process. In the meantime, for the purposes of this analysis, the average low and high preferred tree canopy estimates that PP&R prepared for existing Central City parks will be applied to estimate future tree canopy for anticipated future Central City parks.

F. Additional Investment in Street Tree Planting

The Central City 2035 Plan calls for a number of goals and policies related to increased tree canopy. For example, Central City-wide Policy 58, watershed health, calls to "Improve watershed health by reducing effective impervious surfaces, increasing the quality and diversity (both species and age distribution) of the tree canopy, and protecting and restoring riparian and upland fish and wildlife habitat," while Central City-wide Action EN4 calls to "Identify tree preservation and planting opportunities and implementation strategies (e.g., street tree planting and maintenance programs) that meet multiple objectives, including reducing urban heat island, improving local air quality, intercepting stormwater and providing habitat." Based on these specific tree canopy related policies and actions, it is probable that there will be additional investment in street tree planting across the Central City.

For the Central City 2035 Future Tree Canopy Scenario, it is assumed that there will be two, two-year City-sponsored planting initiatives in each district over the plan time horizon (increased from the one tree planting initiative assumed for the Baseline Scenario). This is projected to result in an additional 20% of the potential planting spaces being planted.

III. Alternative Future Central City Tree Canopy Scenarios

In addition to the Baseline and Central City 2035 Future Tree Canopy Scenarios, additional options to encourage or remove barriers to increasing tree canopy in the Central City will be evaluated. Staff will explore, to the extent feasible, potential tree canopy impacts associated with the following hypothetical changes in assumptions, policies, investments and practices:

- Replacing optional building setbacks with required landscaped setbacks.
- Increased City investment in street tree planting and City assumes partial or complete responsibility to maintain street trees.
- Title 11 tree density (planting) standards apply to zones that are currently exempt. These include commercial and employment zones with no existing Title 33 landscaping requirements.
- The City undertakes proactive streetscape improvements (e.g., targeted planting of large trees, replacing a traffic lane with a treed median, etc.).
- Requiring installation of Silva Cells to increase subsurface soil volume allowing the planting of larger trees without increasing planting strip size (may be coupled with building setback requirements).
- Limiting the placement of new vaults/voids under the sidewalk corridor.

Methodologies under development and will be presented, along with preliminary results, in the Discussion Draft.

5.4 Table 8. Baseline Central City Future Tree Canopy Scenario

Central City District	PROJECTED CHANGES IN TREE CANOPY (from existing canopy)										BASELINE FUTURE TREE CANOPY SCENARIO	
	District Area (water not included) (acres)	Existing Canopy (2007) (acres)	ROW			BLI TAX LOTS ³		PARKS ⁴		Existing tree canopy as percent of total district area	Baseline Tree Canopy - LOW	Baseline Tree Canopy - HIGH
			Investment: street tree planting (non-BLI sites) (acres) ¹	Districts with recently planted street trees (acres)	Potential planting spaces (BLI sites) (acres) ²	LOW (acres)	HIGH (acres)	LOW (acres)	HIGH (acres)			
SE QUAD												
Central Eastside	706	20.3	2.8	0.0	2.6	-1.0	1.5	0.1	0.6	2.9%	3.5%	3.9%
SE Quad Total	706	20.3	2.8	0.0	2.6	-1.0	1.5	0.1	0.6	2.9%	3.5%	3.9%
N/NE QUAD												
Lloyd District	385	28.9	1.3	0.0	2.7	-4.9	-3.6	-0.6	0.0	7.5%	7.1%	7.6%
Lower Albina	138	5.2	0.5	0.0	0.4	0.0	0.0	0.0	0.0	3.8%	4.4%	4.5%
N/NE Quad Total	523	34.1	1.8	0.0	3.1	-4.9	-3.5	-0.6	0.0	6.5%	6.4%	6.8%
WEST QUAD												
Downtown	222	28.0	2.1	0.0	1.4	-1.6	-1.3	-0.5	1.0	12.6%	13.2%	14.0%
Goose Hollow	175	23.1	0.6	0.0	0.7	-4.1	-2.4	0.0	0.0	13.3%	11.7%	12.7%
Old Town/Chinatown	130	8.8	0.6	0.0	0.3	-0.5	-0.3	0.1	0.8	6.7%	7.2%	7.9%
Pearl District	277	9.4	1.3	33.9	2.0	0.1	3.1	0.5	1.2	3.4%	17.1%	18.4%
South Downtown/University	218	43.3	0.1	0.0	0.7	-7.0	-3.7	0.5	1.7	19.9%	17.2%	19.3%
South Waterfront	177	10.2	0.3	5.7	0.5	-2.3	2.0	1.6	1.9	5.8%	9.1%	11.7%
West End	95	6.7	1.2	0.0	1.6	0.4	1.4	0.0	0.0	7.0%	10.3%	11.4%
West Quad Total	1,294	129.5	6.3	39.6	7.3	-15.0	-1.1	2.2	6.6	10.0%	13.1%	14.5%
Central City Total	2,523	183.9	10.9	39.6	13.0	-20.9	-3.1	1.7	7.2	7.3%	9.0%	10.0%

1 Additional canopy associated with city investment in street tree planting - 20% of potential planting spaces in the ROW (not adjacent to BLI sites).

2 Additional canopy due to planting potential ROW planting spaces associated with development/redevelopment (BLI sites).

3 BLI tax lot analysis reflects canopy impact from zoning, landscape requirements, and landscaping the river setback.

4 Reflects PP&R preferred future tree canopy ranges for existing PP&R managed parks.

5.4 Table 9. Central City 2035 Plan Future Tree Canopy Scenario

Central City District	PROJECTED CHANGES IN TREE CANOPY (from Baseline Scenario)												CC2035 PLAN		
	District Area (water not included) (acres)		ROW		TAX LOTS				PARKS		OTHER		Tree Canopy LOW	Tree Canopy HIGH	
	Baseline LOW (acres)	Baseline HIGH (acres)	Investment: street tree planting (non-BU sites) ¹ (acres)	PENDING Green Loop/ Streetscape Improvements (non-BU sites) (acres)	Optional front setbacks - ROW (BU sites) ² (acres)	Optional front setbacks - tax lots (BU sites) ² (acres)	Increased river setback - LOW ³ (acres)	Increased river setback - HIGH ³ (acres)	Investment: new parks - LOW ⁴ (acres)	Investment: new parks - HIGH ⁴ (acres)	Investment: riverbank enhancement - LOW ⁵ (acres)	Investment: riverbank enhancement - HIGH ⁵ (acres)			
SE QUAD															
Central Eastside	706	24.4	27.2	2.2	0.0	1.0	0.4	0.3	0.5	0.4	1.8	1.8	3.8	4.3%	5.2%
SE Quad Total	706	24.4	27.2	2.2	0.0	1.0	0.4	0.3	0.5	0.4	1.8	1.8	3.8	4.3%	5.2%
N/NE QUAD															
Lloyd District	385	27.4	29.3	1.0	0.0	0.2	0.7	0.0	0.0	3.0	4.4	0.2	0.3	8.4%	9.3%
Lower Albina	138	6.1	6.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	4.8%	4.9%
N/NE Quad Total	523	33.5	35.5	1.4	0.0	0.2	0.7	0.0	0.0	3.0	4.4	0.2	0.4	7.5%	8.2%
WEST QUAD															
Downtown	222	29.4	31.2	1.7	0.0	0.1	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	14.0%	14.9%
Goose Hollow	175	20.4	22.1	0.5	0.0	0.4	0.4	0.0	0.0	0.0	0.4	0.0	0.0	12.4%	13.7%
Old Town/Chinatown	130	9.4	10.3	0.5	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.2	0.3	7.8%	8.7%
Pearl District	277	46.6	49.4	1.0	0.0	0.2	0.4	0.6	1.1	0.4	1.5	0.2	0.5	17.8%	19.6%
South Downtown/University	218	37.6	42.2	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.5	17.4%	19.8%
South Waterfront	177	15.0	18.6	0.3	0.0	0.0	0.2	1.9	3.9	4.5	6.2	0.8	1.9	12.8%	17.5%
West End	95	9.8	10.8	1.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	11.5%	12.6%
West Quad Total	1,294	168.1	184.6	5.0	0.0	0.9	1.6	2.5	5.0	4.9	8.2	1.0	3.3	14.2%	16.1%
Central City Total	2,523	226.0	247.3	9.6	0.0	2.1	2.7	2.8	5.5	8.3	14.4	3.0	7.5	10.1%	11.5%

1. Additional canopy resulting from a second 2-year city street tree planting effort - an additional 20% of potential planting spaces planted (not adjacent to BU sites).
 2. Optional setback associated with new development/development (BU sites). Setback may be landscaped, vegetated, or a mix, based on street typology. It is assumed that 25% of developers will choose the optional setback. Includes additional canopy from ROW and tax lot trees.
 3. Additional canopy from increasing river setback from 25' to 50'. Also includes area between ordinary high water and top of bank, using 25 feet as a proxy.
 4. Includes anticipated future parks (PP&R managed and other).
 5. Additional canopy based on the 2035 riverbank enhancement targets. Includes canopy within 75' landward from ordinary high water.

5.4 Table 10. Central City Existing Tree Canopy, Baseline Future Tree Canopy, and Central City 2035 Plan Future Tree Canopy Scenarios

CC District	Existing tree canopy as percent of total district area	Baseline Future Tree Canopy Scenario		CC2035 Plan Future Tree Canopy Scenario	
		LOW	HIGH	LOW	HIGH
SE QUAD					
Central Eastside	2.9%	3.5%	3.9%	4.3%	5.2%
SE Quad Total	2.9%	3.5%	3.9%	4.3%	5.2%
N/NE QUAD					
Lloyd District	7.5%	7.1%	7.6%	8.4%	9.3%
Lower Albina	3.8%	4.4%	4.5%	4.8%	4.9%
N/NE Quad Total	6.5%	6.4%	6.8%	7.5%	8.2%
WEST QUAD					
Downtown	12.6%	13.2%	14.0%	14.0%	14.9%
Goose Hollow	13.3%	11.7%	12.7%	12.4%	13.7%
Old Town/Chinatown	6.7%	7.2%	7.9%	7.8%	8.7%
Pearl District	3.4%	17.1%	18.4%	17.8%	19.6%
South Downtown/University	19.9%	17.2%	19.3%	17.4%	19.8%
South Waterfront	5.8%	9.1%	11.7%	12.8%	17.5%
West End	7.0%	10.3%	11.4%	11.5%	12.6%
West Quad Total	10.0%	13.1%	14.5%	14.2%	16.1%
Central City Total	7.3%	9.0%	10.0%	10.1%	11.5%

DRAFT

Page/Section	Comment
2-11/ 510.100-105	The significant expansion of this provision is going to create numerous new non-conforming uses – particularly north of Burnside where there are several auto repair businesses adjacent to the transit mall. Does this also apply to rental car businesses? There are several along the alignment and in the Downtown Core? I can't really think of a good policy reason to limit those functions, particularly if the vehicles are in garages. Maybe this should be a limitation on exterior functions associated with vehicle leasing/repair? At the very least, I suggest mapping out all the businesses potentially impacted by the change. Also, make sure new map 510-17 is modified to exclude the BMW dealership in Goose Hollow.
2-12/510.110	Minimum residential density: what's the point of such a low minimum? Drop or at least explain rationale?
2-16/510.115	Allowing moveable rental units in parks? Yes. This makes sense, and is consistent with the policy directions established.
2-17/510.115	<p>A. Why delete "promote downtown as regional attraction"? Still seems valid to me – and consistent with policy. Explain in commentary?</p> <p>B. 2. Consider deleting "existed as of Feb. 9, 2000". This would allow O'Bryant to be rebuilt with below grade parking – if that turned out to be desirable.</p> <p>3. Q: verify that Holladay Park is less than 5 acres in commentary – is it?</p>
2-18/510.115	Clarify in commentary that the provisions regarding Providence Park are not changing.
2-31/510.116	B. Why not set limit at 60k sf in the new provision, as it's the higher of the two today? If you go with 50k, you should probably build a strong rationale as to why that regulation needs to be tighter in the new code.
2-32/Commentary	Question on flexibility for existing non-residential buildings in non-residential use. Yes. This was envisioned as part of the WQ process and will help older buildings stay relevant and reduce demolition pressure.
2-33/510.117	a. (2) 100 percent of ground floor is a bar too high. There will always be a need for mechanical, service, lobbies, etc on the ground floor. Maybe 70%?
2-34/510.118	Good. I definitely support eliminating this section with the following cautions: The main two things the section was trying to do were: a) preserve existing, often affordable, housing stock. And b) preserve older, potentially historic, buildings in the area. This code rewrite addresses the concerns about the affordable housing with the strong emphasis on new housing programs and funding through the bonuses. However, it really doesn't do much for the preservation objective. The case for eliminating this section would be stronger if there were provisions included in this rewrite to encourage preservation of HRI properties that may not be individually listed resources. (and the West End constituents involved in the WQ process would like more urban design and livability tools as well).
2-45/510.200	B.4. Why not expand the automated parking FAR exemption to the whole CC? I'm not sure how FAR would be calculated in these facilities anyway. If you don't want to expand the exemption, then we probably should devise and explain a manner for calculating FAR usage. Maybe based on the vehicle storage capacity?

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2-48/510.200 D	Commentary: explain why it is proposed to prohibit FAR transfers across ROW. Master Plan seems a good mechanism – but if the sites have to be over a certain size to qualify for the MP provision, that may not work.
2-52/510.200 F	Yes, I think we need to consider preservation candidate properties that are not individually listed. HRI? Maybe with a local landmark listing requirement? Nicholas will figure this out. We made this provision a key piece in the conversation about increasing height limits. In the Pearl, for example, we proposed making any heights above 175’ contingent on an HRI or historic property transfer. All the Deschutes Brewery-type structures are at risk eventually.
2-52/510.200 Seismic	What makes a property eligible for the URM retrofits? Is there a list? Is it accurate? Maybe criteria would be better than being on a list.
2-52/510.200 F	3. Limiting historic transfers to within the subdistrict should be considered. Or maybe a quadrant-level geography. It’s important to keep the benefit in the same general areas as the impact. To me, Goose Hollow to Lloyd is too far. If HRI properties are added to the eligible sending sites, then they should definitely be limited to the subdistricts. 4.b. I think the City needs a system for FAR transfer tracking beyond the covenants. It’s too difficult to easily access the information.
2-54/510.200 F	Commentary: is there a reason the base zone language on the transfer is inadequate?
2-57/510.205	A. delete “tallest buildings along transit mall”. Too rigid. Doesn’t capture Lloyd and North Pearl policies. Maybe “greatest employment densities near high capacity transit” instead.
2-58/510.205	D. Great! Add to commentary the feedback we got from Landmarks that clear transitions are desirable at historic district boundaries. Maintaining appropriate scale within the districts is more important than controlling scale and transition outside the boundary.
2-62/510.205	E. Delete this section. It’s enough to give incentives through additional FAR for housing in the West End. The different height limits for residential and commercial should be dropped. The logic that the housing has to be on top of a mixed use building is outdated – look at Park Avenue West. This is consistent with WQ direction.
2-70/510.210 C	New housing bonus. Looks good, but generally, the references to this being consistent with current priorities and policies are a little problematic for me. I don’t disagree, and affordable housing was/is one of the many priorities that came out of the quadrant plans and CC2035, but it’s not the only one. And in the context of this being a 20+ year plan, I think it’s a little troubling that we’re building a code that is so heavily focused on one single area of need/interest. It brings up the idea of establishing a cyclical review of the bonuses in 510. Is that still alive?
2-73/510.210 C	c. specify where housing bonus \$\$ may be spent, and how. In the CC? In the City? In the region? Unit preservation? Unit renovation? New units only?
2-80/510.210 C	4. Riverfront Open Space Bonus Option: In some situations this may need to come with additional height as well as FAR to be useful. Because FAR from the setback is already available for the project, and height limits along the

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	bank are often fairly low, height may be what makes this tool appealing, rather than FAR alone.
2-82/510.210 C	Ecoroof deletion: reference new requirement in commentary here.
2-84/510.210 C	Below Grade Parking Bonus Option – may need to wait to see what the CCTMP rewrite looks like regarding incentives for below grade parking and incentives for development on lots (like in the west end) that are undedicated general status. The risk is creating a disincentive to redevelopment on older surface lots.
2-88/510.210 C	Explain why we’re keeping the OS fund bonus option in SoWa in commentary.
2-90/510.210 D	D.3.b: \$10.60 seems pretty high. Is this in addition to the housing fee for buying the far through the affordable housing bonus? I don’t think we want to charge twice for that same FAR, do we? It’s quickly going to get so expensive that it will have a negative impact on the design of buildings as developers try to cram FAR in under the height limit to save \$\$\$. This could lead to an urban design (design review) crisis? D.4.: is the reference to nearby R zones intended to include RX? I’m not sure it should, but it should be specific.
2-102/510.221	Explain why this is being deleted in commentary.
2-110/510.240	I’m a little concerned that expanding the prohibition on drive-through facilities across the Central City could end up being a disincentive for redevelopment of sites that currently have drive throughs. We’ve seen that dynamic in some places (the Wells Fargo Bank on SW 5 th and Hall for example. They’ve said they won’t consider redevelopment because they don’t want to lose their drive through. In a place like Lloyd, we could be locking in a whole bunch of drive throughs for the long-term because new ones wouldn’t be allowed. What about allowing them, but only within structured parking/garages? Or allowing existing, legal drive throughs to be replaced in redevelopment on the same sites, provided they are incorporated into parking structures/garages? Also, where’s the exception for gas stations?
2-112/510.242	Demolition question. I’m not sure if subsection B is needed, but I think the goal may be to prohibit demolition unless a new building is approved on the site. We want to avoid demos that aren’t associated with replacement development, right?
2-114/510.XXX	This looks good, but I think the variable needs to be the number of potential employees, not occupancy. Occupants that are not employees (customers or clients) would be expected to use short-term bike parking and presumably wouldn’t have access to secured locker rooms anyway. Maybe it only applies to “office” use buildings over 40,000 sf..
2-126/510.XXX	Should these requirements also apply to EX in Lower Albina?
2-160/510.255	Add Transitions to Adjacent Uses (particularly industrial) to list of bullets on key issues to explore. (I’m thinking particularly of the PPS Blanchard site and that transition to the industrial uses North and West as critical issues).
2-191/Map 510-6	It wasn’t super clear in the W Quadrant Plan – but I’d like to see this requirement lifted from the Burnside Corridor as well.
2-191/Map 510-6	Delete requirement from RiverPlace – no longer needed.

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Karl Lisle Comments on CC2035 Volume 2

2-237/Map 510-17	Make sure restrictions don't apply on Portland BMW site in Goose Hollow – BPS had to change this code in the past for them, I don't think you want to do it again. See comments above for 2-11/ 510.100-105
2-473/Proposed Zoning	N/NE Quadrant action TR14 changed the zoning lines between the RQ Transit Center and the Dryfus grain elevator. That should probably be reflected in this map. Also I think the zoning line at the west end of the Steel Bridge should follow Glisan to the west, not the ramp to the south.
2-479/Overlay Map	Map 2: consider cleaning up strange swooshing boundaries in the zoning at the Steel Bridgehead, and at the south end of Waterfront Park at SW Clay and SW Harbor Way.



INTERAGENCY PROJECT REVIEW COMMENT FORM

Project: Central City 2035 Plan In-House Review Draft Comments
 Document: Volume 2: Zoning Code and Map Amendments
 Agency/Contact: BPS/
 Review Type: _____
 PWB Reviewer: Cherri Warnke (503-823-6036)/ November 9, 2015

Primary Areas of Concern:

1. Ensuring Harbor Master review of all dredging and placement of structure or fills within 200' of the submerged water mains of the City of Portland, per Title 19.16.355.
2. Ensuring no planting of trees within utility corridors, or within 10' of the outside diameter of \geq 16-inch water mains.

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
2-158	33.510.255, New Provisions and Approach	Please ensure that new master planning tool required for the Blanchard PPS School District HQ - Lloyd District, specifically notes that the adjacent PWB property will not be included in any development plan, as PWB has no plan to vacate any portion of that property.	
2-292, 2-293	33.475.430.C.6	Please keep in mind that Title 19.16.355 - Protection of Water Mains, also requires obtaining written permission from the Harbor Master before dredging within 200' of the submerged water mains of the City of Portland.	
2-296, 2-297	33.475.440	PWB would be interested in reviewing the Draft Development Standards for installation of rail road tracks, the installation of utility lines and stormwater outfalls, public trains and viewing areas, scenic resources, resource enhancement projects, site investigative work not done with hand-held equipment, and the removal of trees. within the River Environmentla overlay zone.	

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
2-304, 2-305, 2-307	33.475.440.J	PWB is concerned about the potential for tree plantings within utility corridors. PWB is in the process of creating a Standard Plan Drawing that will reflect the Conduit/Supply/Transmission Protection Requirements of no trees are allowed to be planted within 10' of the outside diameter of a \geq 16-inch water main. This would apply to all of the water mains located under the river banks that qualify as the submerged water mains of the City of Portland.	
2-414, 2-415	33.10.030.C	The siting of fills or structures, as well as dredging within 200' of the submerged water mains of the City of Portland is also subject to Title 19.16.355 - Protection of Water Mains, and requires written permission from the Harbor Master.	

Attachment 2. Comment Form

Please use the following comment form to the extent that you can to make it easier for us to track your comments!

Central City 2035 Plan In-House Review Draft Comments

Bureau/Office: **PP&R Urban Forestry**

Date: **11/9/2015**

Detailed Comments

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
5-13	"Baseline", d.	I expect all areas of the Central City to have many newly planted trees. You will need to define what areas qualify for this additional level of analysis and defend why others are left out—preferably by saying that x% of trees in each district were newly planted, and those that reached a certain threshold then had this additional analysis. Also, it seems like if you are going to “grow out” trees, you also might have to account for some mortality. Typical studies use between 1% and 5% annual loss.	Use data to support the method. Include mortality estimates in the baseline for new plantings.
5-14/15	a-i	You may want to clarify that these options are not necessarily “and/or”—for instance, without increased soil volumes for street trees, increased building setbacks won’t matter. In order to grow the trees that will increase canopy over the long term, structural soils or Silva Cells may be necessary. Required minimum soil volumes with new development (rather than required Silva Cells, in h.) would achieve this—see DC’s Green Infrastructure Standards for a good example.	
5-14	b.	UF would be in favor of this change, but we would expect the majority of new developments in these zones to “pay out” of these requirements through fees-in-lieu, allowed under T11. In that case, funds would be used to plant trees within watershed, and not necessarily within the CC boundaries.	

5-22	C.	This is great. To what extent is potentially preservable canopy generated from ROW trees adding to on-site canopy cover?	
5-25	A.	Report states that on “Red Streets,” trees can be planted in planters. Trees should never be planted in planters, if avoidable.	
5-28	III	In a future draft, it would be good to present the difference in expected benefit between optional and required changes side-by-side.	
5-31	Table 10	It seems as though the biggest gains are for South Waterfront and the Pearl—where you “grew out” the existing trees. Maybe I’m misunderstanding—I thought that you’d grow out trees for the existing canopy then fill in vacant spaces for estimating future canopy. It’s unclear to me whether the big gains are due lots of empty spaces or the “grow out.”	
5-31	Table 10	I know that % cover is the target metric, but it may be helpful to include land area. The CC2035 scenario actually creates a lot of tree canopy (50 acres or so) but the 1.5% increase is not impressive. I’m afraid that the CC2035 changes will seem not worth it for such seemingly small (%) canopy gains.	

[Type here]

Attachment 2. Comment Form

Please use the following comment form to the extent that you can to make it easier for us to track your comments!

Central City 2035 Plan In-House Review Draft Comments

Bureau/Office: Portland Parks & Recreation

Date: November 9, 2015

Primary Issues or Areas of Concern

- 1.
- 2.

Detailed Comments

VOLUME 1

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)	Reviewer
1-4	CC2035 Vision	Mentions in the vision that Portland is a livable American city. Suggest adding a sentence recognizing the importance that civic spaces play in this livability	First paragraph, before final sentence about booming residential development over the last 10 years, add new sentence, " <u>A network of parks, greenways, and open spaces contribute to the health and vitality of the central city.</u> "	Sarah H
1-6	Principle 2	Please directly note recreation as contributing to human health.	Suggest altering third sentence to add the underlined text "Its proximity to the Willamette River, <u>variety of recreation opportunities</u> , and stunning surrounding landscape allows people to experience and interact with nature <u>and each-other.</u> "	Sarah H
1-6	Principle 3	Please mention urban canopy in environmental health principle.	Suggest altering second sentence to add urban canopy to the list of environmental amenities.	Sarah H

[Type here]

1-9	Big Ideas 3.	Please mention the desire for better access to / along the river.	Second paragraph, add " <u>access to and along the riverfront</u> " to the list of ways to strengthen the CC tie to the river.	Sarah H
1-36	Civic and Cultural Center Paragraph	Please mention the variety of public spaces.	Suggest altering to add underlined text "Portland's City Center contains a broad array of institutions, venues, cultural assets, <u>public spaces</u> , historic sites..	Sarah H
1-38	Civic and Cultural Center, 1.4	Add public spaces to Tourism, retail and entertainment policy.	Add underlined text, "with a special focus on retail, cultural events and institutions, <u>public spaces</u> , arts and entertainment...	Sarah H
1-44	Housing and Neighborhoods, Neighborhood Livability Paragraph	Add public spaces to paragraph.	Add underlined text, "contains a broad array of institutions, venues, cultural assets, <u>public spaces</u>	Sarah H
1-46	2.1	Add urban canopy to policy.	Add underlined text, "essential public services, including public schools, parks, open space and recreation opportunities, community centers, <u>urban canopy</u> ...	Sarah H
1-54	3.7	Somewhere in transportation policies should mention off-street options, like trails.	Suggest 3.7, Active Transportation policy as a good location to mention off-street opportunities to enhance livability.	Sarah H
1-60	Willamette River	In main description of how the Willamette riverfront is forgotten, can we mention the vibrant public spaces.	Suggest striking the second sentence about the Willamette riverfront becoming forgotten. Suggest replacing with "The extremely high usage of public riverfront spaces like Governor Tom McCall Waterfront Park, and the Vera Katz Eastbank Esplanade speak to the public desire to activate the riverfront as a vital Central City feature."	Sarah H
1-62	4.2	Please also add 'along' the riverfront	Not just on and in-river rec experiences, but also recreation experiences along the riverfront.	Sarah H



1-63	4.DT-1	Official name is Governor Tom McCall Waterfront Park.	Change wherever referenced for consistency.	Sarah H
1-69	5.13	Let's not just say in existing parks.	Add underlined text, "Beyond signature open spaces, expand opportunities in existing parks and open spaces, <u>or acquire new parks and open spaces</u> , to meet the needs of..."	Sarah H
1-78	New policy	There does not seem to be any specific policy that speaks to urban canopy.	Suggest a new policy in Section 6, Health and the Environment.	Sarah H
1-85	9.45, Active Transportation	Add language about off-street opportunities.	Add underlined text, "Encourage walking and bicycling with improved infrastructure, <u>including off-street on-street infrastructure</u> , and other means as a way to increase access and transportation choices..."	Sarah H
1-103	TSP CC2035 candidate project	I didn't see North Portland Greenway Segment 5 on the list. IT's in CC. Did I miss it? Is it called something else here?	Add NPGW Segment 5.	Sarah H
1-117	Glossary	Define park	Park is used broadly to include, for example, developed parks, open spaces, plazas, community centers, and natural areas.	Sarah H
1-117	Glossary	Define transportation terms in maps.	Example: city bikeways can include off-street and on-street networks. All the TSP maps could use glossary language for the terms in their legends.	Sarah H

VOLUME 2

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)	Reviewer
2-16 (and general)	33.510.114	The official name is Governor Tom McCall Waterfront Park. We	Change all mentions of Waterfront Park or Tom McCall Waterfront Park to	Sarah H



		should use the official name throughout.	<u>Governor Tom McCall Waterfront Park.</u>	
2-18	33.510.B4.b	What proposed limitations on allowed uses are being discussed? Why are sites in River General not eligible?		Sarah H
2-19	33.510.115.C	Good Neighbor Agreement – would this include Governor Tom McCall Waterfront Park? Other PP&R facilities?	This does not apply to park plans and park construction – Brett. BPS to confirm	Sarah H
2-80/81	33.510.210.C.3.d (1) and (2)	Pedestrian access is mentioned	Please change to public access. Intent is not just for pedestrian access to riverfront, but often multi-use access – bikes, peds, sometimes maintenance / emergency vehicles.	Sarah H
2-81	33.510.210.C.4.c	Notes that a public access easement has hours of 7am – 9pm. Does this include greenway trail if applicable (generally riverfront properties have greenway trail designations).	PP&R generally has trails / parks open from 5am – 12pm, though if federal funding is involved, that’s 24 hours / day. Do we want a provision stating that hours for public access easement are different for trail vs. other associated open space?	Sarah H
2-89	33.510.210.C.6	\$21.70 contribution	Do we want to have a dollar amount in the code? Does that get updated every year for inflation? If not, would it make sense to reference a fee schedule here instead of listing the exact \$ amount? Yes – reference the fee schedule - Brett	Sarah H
2-89	33.510.210.C	Have we considered use of open space bonus / fund option in other areas than just South Waterfront? Central	Yes – there are incentives for other areas - Brett	Sarah H



		Eastside, where we also have deficiencies, etc.?		
2-100	33.510.220.B.2	In addition to ground window requirements along streets, we would also like to add them along public parks, open spaces, and trails. Would also impact Map 510-8 on page 2-199	Update 33.510.220.B.2 and Map 510-8 to include parks, open spaces, and trails. PP&R can provide layer.	Sarah H
2-115	33.510.251	Does PP&R agree to remove open area standards in North Pearl? Seems like there are still some large blocks, like Post Office, in that area that could qualify.	This seems fine to me. USPS site is not in the North Pearl defined area - Brett	Sarah H
2-169	Draft Central City Plan District and Subdistrict (and all maps of the sub-districts that show proposed right of way in S. Waterfront – all of the subsequent maps do)	In South Waterfront, Elizabeth Caruthers Park is bounded by Gaines, Curry, Moody, and Bond. Currently the map shows SW Pennoyer as a proposed right of way through the center of the park. There is no ROW there.	Remove the proposed right of way designation from the map on SW Pennoyer between SW Moody and Bond.	Sarah H
2-257	33.475.060 B.1.e(1) (note that d. is missing in the list)	Trees = to or > 4" must be indicated on the site plan. In Title 11 trees in the e-zone and greenway are regulated at = or > that 3" for street and city trees and = or > 6" for private. This should be consistent with Title 11.	Change to > or = to 3" for city and street trees and > or = to 6" for private trees. This will also match the measurement for the trees to be removed in 2.b.	Emily R.
2-260	River setback	Commentary notes that river setback doesn't apply to Greenway Trail.	Add language –does not apply to Greenway Trail, trail connections, or other open space or recreation –related development, if development standards are met.	Sarah H



2-265	C. Required Landscaping 1.	Do not require landscaping of beach areas.	These areas provide valuable habitat as beach. Plus, it will be very difficult to establish and maintain grasses and forbs.	Emily R.
2-265	C. Required Landscaping 2.b.	These areas are highly disturbed and often contain fill. Planting on the slope is very difficult. What is proposed is very prescriptive and most likely will not survive.	Suggest allow willow planting and other native plant cuttings that will survive the river fluctuations and the bank armoring in these areas. Also may need to auger through the bank armoring with a small machine, not hand help tools.	Emily R.
2-269	D. Landscaped area site preparation 3.b.	A civil engineer is not the right profession to certify a soil mix.	Change to a registered landscape architect or horticulturalist. Or just delete the certification.	Emily R.
2-289	33.475.420 Review Procedures B. Standards	Expand this list.	Include a standard for beach access for recreational uses such as swimming, human powered craft and/or fishing.	Emily R
2-291	22.475.430 Exemptions C.1	Additions/Deletions	Delete "and paths". This is not a term that is used for trails. Include signs – both parks rules and wayfinding.	Emily R.
2-293	Exemption 9.	"..no trees six or more inches in diameter are removed."	Require a tree permit for tree removal and not review. Also, if this is kept, modify to " no native trees six...."	Emily R.
2-293	Exemption 10.a (1)	With hand-held equipment	There are many instances that it is more efficient to use appropriate machinery to remove nuisance or prohibited plants. Parks often uses a flail mover that hooks to an excavator or a brush rake especially for steep banks that may be hazardous to have staff work on. Perhaps this could	Emily R



			be based on a limit of soil disturbance.	
2-295	Exemptions D.3	With hand-held equipment	Allow for small equipment such as an augur for planting into the bank.	Emily R.
2-295	Exemptions D.3	Planting of native vegetation	Including an exemption for using NW Hardy perennial vegetation in the river setback subareas 2 and 3.	Emily R.
2-297	Exemptions 11		Add: for wayfinding	Emily R.
2-301 and 2-305	33.475.440.D and E, and G.6; 33.475.440.I	30' setback from top of back of stream, wetland, drainageway, or other water body seems very restrictive. Total trail width of not more than 16' and total viewing area of not more than 500SF also seems restrictive.	Remove the 30' setback as that is unreasonable and costly for bridging a waterway or wetland. Change to top of bank for stream wetland and drainageway for standards for trails, viewing areas and other development in a City of Portland park. Change total trail width for walking and biking to a maximum of 25 feet per PP&R Trail Guidelines. We are activating the Central City along the River, people want views and 16" is too narrow, creating numerous conflicts. Increase viewing area and other development in a City of Portland park standard to 1800 square feet. This would be in agreement with the Commentary on page 3-304 33.475.440. This allows for a group of 30 people to comfortably view the river and allow of appropriate recreation development.	Sarah H Emily R
2-305	J. Standards for tree removal	1. hand held equipment	To remove a tree, may require small equipment to pull the stump. Do not restrict this to hand help	Emily R.



			equipment, ensure limited ground disturbance with erosion control and replanting.	
	Standards	ADD	Standard for beach access. As sites are designated and developed, it will be important to have a standard that protects the environment and allows appropriate access.	Emily R.
2-333	Map 475-1	Greenway Trail is missing form S. Waterfront Area	PP&R staff can provide updated Greenway alignment. Primary Greenway trail extends all the way through S. Waterfront.	Sarah H
2-337	33.430.170.8	Viewing area no larger than 500SF and at least 30' from any waterbody seems restrictive	Viewing areas no larger than 1800SF and change 30' to top of bank. 30 feet away will not provide views or enjoyment of the river.	Sarah H Emily R.
2-339	33.430.190	You delete recreational twice from trail, but not third time.	Delete recreational from before trail.	Sarah H
2-339	33.430.190 A-C	No change proposed	B: Trail should be able to be longer than 5,000 SF and wider than 4' and still be exempt. PP&R requests 330.430.190.B state that trail can be 25' wide, with no limit on length.	Sarah H
2-339	33.430.190.D	Size of viewing area and 30' from top of bank... are too restrictive.	Change viewing area size to 1800SF and allow for it to be placed at the top of bank or edge of the wetland. Viewing should be allowed in the floodway if elevated above floodway.	Emily R.
2-339	E. Tree Removal	Hand-held equipment	Often machinery is needed to remove large trees. Should be allowed to this and restore site.	Emily R.



2-241	22.430.195.A	Hand-held equipment	Often machinery is needed to remove large trees. Should be allowed to this and restore site.	Emily R.
2-341	33.430.250.C	Lists approval criteria for public recreational facilities	Add amenities and signage to list	Sarah H
2-352	33.440.240.C	Notes that trails in River Natural and River Water Quality Zones must be designed to minimize natural environment impacts.	Add 'While also ensuring trails are able to satisfy State Planning Goal 15 (Greenway) and meet PP&R Trail design standards and user needs.'	Sarah H
2-359	Public Access Maps	Unsure how an "access path" is defined.	Need to define and set a standard for an access path. Is this in the right of way? Paved? ADA accessible?	Emily R.
2-387	22.865.040.A.1.a.(1)	Existing condition plan, wetlands on adjacent properties	Add or mapped within 50 feet of the site.	Emily R.
2-389	22.865.040.A.1.b.(2)	Tree size	Make consistent with the requirement of Title 11. See comment on 2-257.	Emily R
2-419	33.140.230.B.1.a	Window requirements next to street or public plaza	Change to read street lot-line or a publically-accessible plaza, <u>park, open space, or trail.</u>	Sarah H
2-431	33.272.020.A	New language about rough proportionality.	Recommend deleting – opens the door for more questions about when rough proportionality applies.	Sarah H
2-431	33.272.030	Language was deleted requiring easement to be recorded as part of a land use review	PP&R often receives easements as part of a land use decision, rather than at time of development. Add language back in that easement must be recorded prior to final certificate of occupancy or final land use approval, as applicable.	Sarah H
2-433	33.272.040C	Does deleting this section (South Waterfront) mean that developers adjacent to the Greenway and that	We hope so – right now, it is not required to build the dual ped and bike trails	Brett



		have lands designated with public trail symbols are now required to provide an easement AND build the dual trails shown on the SWF Greenway Plan?		
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VOLUME 5

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)	Reviewer
5-4	Riverbank Enhancement	Define Riverbank Enhancement up front	You have a good definition on page 5-33 of River Enhancement. Is this the same as Riverbank Enhancement? Suggest also defining at first mention.	Sarah H
5-9	Tree Canopy	General: Suggest looking at area targets rather than parcel or taxlot targets. Appropriate to think about some parks being more heavily treed, others may offer more open space / plaza experiences.	Sarah – good points – we are still working with BPS on this	Sarah H
Chapter 5 General	River Recreation	Why such an emphasis on how to address riverbank restoration, but not emphasis on how to accommodate riverfront recreation?	Some confusion on the purpose of Volume 5.	Sarah H
5-24	Section 1.D.		Please include a comment indicating that any potential tree additions to Central City parks must be considered carefully, with input from various PP&R staff, Urban Forestry, etc.	Maya A





CITY OF
PORTLAND, OREGON

PORTLAND HOUSING BUREAU

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Date: November 9, 2015

To: Susan Anderson and staff, Bureau of Planning and Sustainability

From: Kurt Creager, Javier Mena, Karl Dinkelspiel, Matt Tschabold, Barbara Shaw
Portland Housing Bureau

Re: **Central City 2035 -- In-House Review Drafts Volumes 1, 2 and 5**

Congratulations on getting to the “In-House Review Draft” stage on the Central City 2035 plan including the proposed changes to the zoning code in the Central City. We appreciate the considerable amount of work this represents and the on-going collaborative efforts of BPS staff. We also applaud your staff’s willingness to re-imagine the FAR bonus system and embrace the vision that private residential development in the Central City can include affordable housing.

PHB offers the following comments on Volumes 1, 2, and 5:

Volume 1 – pages 44-50 Housing and Neighborhood Goals

The language in policy 2.8 may lead some to think that the no net loss policy ‘current number’ is being reset with this plan. The number in 2015 is significantly lower than the number when the policy was originally adopted.

The Housing Bureau does not operate homeownership programming in the Central City due to the large portion of the stock as rental housing and homeownership cost being prohibitively expensive. Policy 2.10 may need to be reconciled with this fact.

Volume 2 – page 34 -41 West End

As you know, PHB did not fully support removal of all protections for the older residential properties in the “West End Quadrant”. However, as a trade-off, we are pleased to see that this draft sets a higher threshold for the use of the affordable housing bonus in the West End than other areas of the Central City. This is done by requiring a higher minimum threshold of affordable housing FAR bonus (i.e. 3:1 versus 2:1) before allowing entitlement to be obtained through other transfers or bonuses. PHB would prefer to see a differentiated structure proportionally maintained through any adjustments to the overall density bonus update.

Volume 2 – page 54 **Neighborhood Facilities / Day Care Bonus**

BPS proposes that the current provisions allowing bonus FAR for the provision of a day care facility be eliminated along with most other potential FAR bonus options. However, in the case of day care, the bonus has been replaced by expanding **Section 33.510.200** related to “Neighborhood Facilities”. A developer proposing to operate a “Neighborhood Facility” (i.e. public school, public library, public community center or daycare facility for children) for ten years would not include that floor area in calculating floor area ratios. While supportive, PHB is mindful of the 10-year covenant required for a neighborhood facility versus the 60-year covenant for affordable housing. Also, because “public community center” is only generally defined, we assume it is up to the assigned BDS staff to make the determination as to what is or is not a public community center.

Volume 2 – page 68 **Historic Resources Transfer Option**

In **Section 33.510.200.F**, this draft expands the historical bonus transfer program by allowing transfers of floor area from sites located within the Skidmore/Old Town historic district or the Japan town/Chinatown historic district. The “receiving” site can now be located anywhere in the Central City. The new draft also allows this bonus to take a priority over the affordable housing bonus. While this seems like a potentially reasonable policy given the needs of some of those properties in the “sending” district, several facts should be highlighted:

- (i) The historic resource transfer process does not in any way guarantee that funds generated from the sale of floor area entitlement are used to support the historic property. The sale of entitlement simply provides funds to an owner for any purpose (e.g. retirement, education, vacation home, historic property renovation), and precludes some further development of the sending site-- which in itself may or may not support a vibrant Old Town/Chinatown.

- (ii) Because the price of floor area purchased under this provision will be market driven-- it will always be priced below the cost of delivering affordable units or paying the affordable housing bonus fee. Therefore it will be used ahead of the affordable housing bonus to the extent available.

Taken together, these facts point to a potentially greater public benefit from the affordable housing bonus. PHB recommends limiting the use of floor area entitlement from the historic resource transfer provision to floor area in excess of the first 2:1 FAR. This initial FAR bonus should be obtained only by the provision of the affordable housing public benefit.

Volume 2 – page 69-71 **Affordable Housing Bonus (AHB)**

Section 33.510.210 needs some additional work on the language. After reading the draft, we want to be sure that we are clear on a few details. Please let us know if the following correctly describes the bonus system.

In the Central City, bonus floor area up to 3:1 FAR is allowed above the base zoning and the first 2:1 FAR must be earned through the AHB provisions which require either the payment of a fee or the

development of 25% of the bonus floor area as affordable housing at 80% MFI. Exceptions to this statement are the following:

- Transfers of floor area from the two named historic districts can be used ahead of, or instead of, the AHB,
- In the South Waterfront Greenway bonus target area, the South Waterfront open space bonus **must** be used for the first 7,500 square feet of bonus floor area before the AHB bonus or any transfers. After the first 7,500 square feet, the AHB bonus **must** be used for the next 2:1 FAR before moving to transferred floor area. (We made this assumption about the AHB bonus because it is not clarified in the draft.)
- The Riverfront Open Space bonus may be used ahead of, or instead of, the AHB bonus.
- Transfers of floor area within a single site may be used ahead of, or instead of, the AHB.
- The first 3:1 FAR (of a possible 9:1 bonus FAR) **must** be earned through the AHB in the West End subdistrict before using any transferred FAR.

The commentary for this section states that the portion of bonus floor area that must be affordable is still being studied. PHB is against any reduction below 25% of the bonus floor area.

PHB has begun work on the administrative rules and implementation guidelines. We plan to develop these documents working internally, and with BPS and BDS staff, over the next six months. The administrative rules must make clear how this 25% of bonus floor area requirement results in a specific affordability requirement governing a specific number of units.

Two suggested edits:

Section 33.510.210.C.1.b “The applicant must provide a letter from PHB **prior to the issuance of a building permit** certifying that the development will meet the standards of this subsection and any administrative requirements ~~have been met.~~”

Section 33.510.210.C.1.c “The property owner must execute a covenant with the City that complies with the requirement of Section 33.700.060. The covenant must ensure that affordable dwelling unit created using this bonus will remain affordable to households meeting the income restriction and meet the ~~reporting~~ **administrative** requirements of the Portland Housing Bureau or qualified administrator.”

Volume 2 – page 69 Affordable Housing Fund

Section 33.510.210.B references the new “Affordable Housing Fund” that will be established by PHB to accept fees generated by the affordable housing bonus provisions of the zoning code. PHB confirms that a new fund will be set up for this purpose rather than using any existing accounts (e.g. HIF). PHB will do this in order to clearly segregate the zoning-related fees. The terminology used in the draft, “the Affordable Housing Fund”, is accurate.

Volume 2 – page 70, 71, 81 and 87 South Waterfront and Riverfront Open Space Bonuses

PHB supports these provisions that allow (i) properties located in the River General Overlay Zone to gain three square feet of bonus floor area for every square foot of publically accessible open space (**33.510.210.C.4**) and (ii) properties in the South Waterfront subdistrict to gain one square foot of bonus floor area for every foot of publically accessible open space (**33.510.210.C.3**). The South Waterfront open space bonus must be used for the first 7500 of bonus floor area.

For clarification-

- What happens in the South Waterfront after the first 7500 SF bonus floor area?
- Can the AHB be used instead of the open space bonus in the River General Overlay Zone?

Additionally, PHB will oppose any expansion of these geographic areas. The Commentary on page 70 notes that the eligibility areas in SOWA will be expanded to include “g and r overlays”. PHB would like to see what is included in the overlay areas.

Volume 2 - page 91 Purchase of Bonus Height / Amount of Fee

PHB is pleased that bonus height can be obtained in some areas for projects that did not receive floor area through the historic resource transfer or through the affordable housing bonus provisions of the code. These projects would pay a fee to the Affordable Housing Fund to take advantage of this additional height. The current draft, **Section 33.510.210.D.3**, sets the fee at \$10.60 for each square foot of floor area developed above the area’s base height limits. This amount was chosen to be consistent with the fee charged for additional height in the South Waterfront (which goes to an open space fund). In contrast, the affordable housing bonus fee for the Central City is being considered at a rate close to \$30 per square foot in the economic modeling undertaken by PBS and PHB. Admittedly that affordable housing bonus fee was designed to be more expensive than the cost to deliver affordable units on-site, however, we still question the widely different levels for fees paid to the city’s affordable housing fund for bonus height versus bonus floor area (\$10 vs \$30). Can the bonus height fee be set in the same manner as the affordable housing bonus fee described in **Section 33.510.210.C.2** (i.e. BDS publishes the fee which is set by PHB and updated at least once every 3 years.)

Volume 2 – page 171 Map 510-2 Bonus Options target Areas

In order to be more clear, is there any benefit in labeling map #510-2 “Maximum Base Floor Area Ratios” instead of “Maximum Floor Area Ratios”?

Volume 5 – page 3 and 7 Jobs/Housing Projections

Can BPS please provide clarity on how performance targets will be developed and/or finalized, what role the Housing Bureau will have in this, and who will be the implementing agency for each performance target.

Can BPS please provide clarity on how work plans/action charts will be developed and/or finalized, what role the Housing Bureau will have in this, and who will be the implementing agency.

Central City 2035 Plan In-House Review Draft Comments

BES
42297

Primary Areas of comment

- 1 Ecoroof Requirement and Targets
- 2 Canopy
- 3 Stormwater management facilities
- 4 River setback and exempt reviews

Detailed Comments - VOLUME 1			
Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
	Table of Contents	The document is large and extremely difficult to navigate. These headings are not sufficient: VOLUME 1: Goals and Policies A. Introduction B. Central City Subdistricts C. Central City 2035 Goals and Policies D. Amendments to the Comp Plan and Transportation Systems Plan E. Glossary	Add subheadings to the TOC. Including just the four main sections in the TOC does not help the reader find what they're looking for in the document.
page 1-2	Why Plan Now?	The paragraphs describing how the 3,000 acres of land in the CC is categorized is confusing. Developable and buildable lands terms not interchangeable. Buildable land does not include ROW as is implied in 2nd sentence.	Add definitions of "developable" and "buildable" to glossary. Clarify that 1,500 acres are developable (includes Willamette River acreage?--clarify how river acreage is developable). The bottom line is that 460 acres are considered "buildable" and thus future growth can be accommodated on this acreage, given certain assumptions about availability and redevelopment.
1-7	4. Equity	Look for the words like "encourage" and "promote." Especially with equity, we need to achieve and not just promote.	Change "promote" to "achieve."
page 1-9	The Big Ideas--3. Focus on the Willamette River	Last sentence uses the word "balance" in describing how to accommodate competing demands on the river	recommend replacing "balance" with "integrate."

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
	2035 Vision	I'm not sure I would say Lloyd is a model of sustainability. That's the goal, but it's not there yet. Also, in the preceding paragraph you state that the district could become a model of sustainable development.	Reword the sentence to remove "model."
1-17	Key Elements of the Subdistrict Urban Design Concept	I thought Jefferson St was taken off the list of commercial streets. This formerly was a "festival" street, but we changed that because of the infrastructure under Jefferson.	Will there be opportunities to install green streets and plant trees along Jefferson?
1-18	Key Elements of the Subdistrict Urban Design Concept	Confused about the street typologies. Jefferson is a main street? How does that fit with the 3 types of streets?	Possibly give a different category for Jefferson St.
1-29	Strengthen Transportation for All	This says transportation for all, but the action relates to freight only.	Active transportation is mentioned, but in reference to freight. Broaden this to include all types of transportation, including ped and bikes.
page 1-62	CC Policies: Willamette River	Policy 4.5 Watershed health needs more emphasis on ecological functions including quality, quantity, and connectivity of habitats. Why does the term "ecological functions" so pivotal to a healthy river, not appear in the Willamette River policies but does in Urban Design? Seems term is central to Willamette River policy.	Recommend following additions: "Maintain and improve ecological functions, [the] water quality and the quality, quantity, and connectivity of riparian and in-water habitat of the WR..."
page 1-63	CC Policies: Willamette River--Downtown Subdistrict	Policy 4.DT-1b for watershed health refers only to maintaining in-water habitat--needs to include enhancement and reference riparian habitat.	To make subdistrict policies consistent, add "enhance" and "riparian" to the policy to read: "Maintain and enhance in-water and riparian habitat at Hawthorne Bowl..." Add "features" to read: "habitat features along the seawall" to last sentence of policy.
page 1-63	CC Policies: Willamette River--Pearl Subdistrict	Policy 4.PL-2 add riparian habitat to policy.	revise as follows: "Maintain and enhance in-water and riparian habitat at Centennial mills and replace invasive..."
1-64	Policy 4.LA-2 Watershed health.	Is "River Plan" the full title of this plan?	Give the full title, if appropriate. Why is this subdistrict policy for watershed health in Lower Albina not specific as are other watershed health subdistrict policies? Are there areas in-water, riverbank, and riparian areas that can be enhanced or restored upon redevelopment or remediation?
Volume 1, page 64	Policy 4.LD-3 Watershed health.	Are there other areas that can be restored and replanted?	Add other areas that can be replanted. Can the Thunderbird site be replanted?
1-65	Policy 4.SW-2 Watershed health.	The list is incomplete. This should read the same as the description for other areas.	Maintain and enhance in-water habitat and incorporate low impact design in new/replaced docks, and replace invasive, non-native plants with native plants and trees on the river banks along . Importantly, add innovative stormwater management to the list of actions covered by the subdistrict policy.

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
1-67	Parks and Open Space	Elsewhere the document talks about increasing the number of parks and the amount of open space, not just improving as the document says.	These policies support enhancements to existing open spaces and consider improvements increasing the Central City's park and open space network.
Page 1-68	Central City Policies: Urban Design-- Context and Form	Missing a Context and Form Policy for open space and habitat connections to the river	Add a "Policy 5.5 Open Space and Habitat Connectivity: Maintain, enhance, and establish a network of open space and tree canopy corridors to make ecological and design connections to the river. Relate to Parks and Opens Space Poicy 5.12 and 5.13..
page 1-70	CC Policies Urban Design: Downtown Subdistrict	Add to Policy 5.DT-4: add to end of policy "and actions to improve the quality, quantity, and connectivity of habitat.	The adjacent South Park Blocks serve as fundamental building block for enhancement of the urban tree canopy and building connections within the Downtown subdistrict.
page 1-70	CC Policies: Urban Design: The Pearl	Urban Design subdistrict Policies for the Pearl lack reference to any urban habitat features such as street trees, linkages in forest canopy, and open space to areas outside of Centennial Mills and US Postal Service sites.	Add to existing Policy 5.PL-5: "...as part of redevelopment to provide linkages to street tree canopy, open space, eco roofs and other elements of green infrastructure within the subdistirct."
page 1-71	CC Policies: Urban Design: Old Town/Chinatown	Add subdistrict policy addressing actions to enhance and create an open space network and connection to North Park Blocks.	Need a subdistrict policy for something green for Old Town/China Town
page 1-73	CC Policies: Urban Design: Lloyd	Add definition of "wayfinding system" in glossary section	Wayfinding system appears in several policies and subdistrict policies and should be defined in glossary
page 1-73	CC Policies: Urban Design: Central Eastside	This subdistrict needs an urban design policy relating open space and other green infrastructure elements with connectivity to the river.	While primarily an industrial and commercial core area, there are oppourtuniies for eco-roofs, street trees, innovative stormwater management facilities that can add up to a 'greening' of the industrial area and its functional relationship to the river.
page I-74	CC Policies: Urban Design: South Downtown/University	The existing subdistrict Policy 5.SD-5 needs additional language to address improving quantitiy, quality and connectivity of tree canopy.	See comment for Downtown subdistrictd.
page 1-78	CC Policies: Health and Resilience	Good set of policies to advance city's preparedness for climate change and other hazards.	Policy 6.4c: are terrestrialand aquatic wildlife movement corridors mapped or otherwise identified (i.e. any other s besides salmon migration corridors in river and its tributaries)?
1-78	Health	I expected to see a policy that, basically, says plant trees through out the Central City. Trees are mentioned under upland habitat, but we don't plant trees only for habitat, there are human health and many other benefits as well. Because trees are so important, we need a separate citywide policy that calls for planting trees throughout the Central City. It can go in the Resilience or Health sections.	Add a policy that says: Plant trees throughout the Central City to improve human health, provide habitat, manage stormwater, reduce urban heat island, and improve overal livability for people who live and work in the Central City.

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
page 1-78	Health	Need to expand title of Policy 6.6 to include "Water quality and Watershed Health."	Note: first time that protecting "and restoring" in-water, riparian, and upland habitat appears in CC policies. All other policies use "enhance" or "improve" when referring to these same natural features. Also, first time upland habitat appears. Should consider integrating these terms "restore" and "uplands" in Willamette River and Urban Design policy sections.
page 1-79	Health	Policy 6.7 nicely done referring to upland habitat connections should also expand to east side Willamette to include connectivity to buttes such as Mt. Tabor, Powell Butte, Rocky Butte, etc.	Expand policy 6.7 so it is inclusive of both sides of the river.
1-81	policy 6.SW-1	The tracking spreadsheet indicates a comment to be more specific.	Add language to incorporating district scale stormwater infrastructure that integrates green facilities on a contaminated site
1-81	policy 6.CE-2. Strategic tree canopy enhancement.	Why restrict where trees are planted? We plant the right tree in the right place so they won't interfere with trucks.	Plant and preserve trees, where appropriate, throughout the subdistrict. Prioritize planting along mixed use commercial corridors with higher employment densities and residential uses. Encourage plantings along pedestrian and bike corridors. Select trees and locations that provide adequate clearance for freight movement on streets prioritized for freight mobility.
Detailed Comments - VOLUME 2			
Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
general	General Comment	If property within the Central City Plan boundary were to develop to the impervious area allowed by the comp plan zoning, additional stormwater runoff would be generated from approximately 190 acres of new impervious area. Much of the stormwater runoff would be directed to the Willamette River CSO tunnel system and would increase the number and severity of CSOs. There is a high need to maintain or improve the performance of the Willamette River CSO tunnel system by reducing the volume of stormwater flow that is directed to it.	Need to write code so there are few (if any) exceptions to meeting the SWMM requirements for the proposed zone types within the Central City. Support the proposed Ecoroof target (408 acres of total ecoroof area by 2035) and the related ecoroof <u>requirement</u> for some building types in the Central City. Enhance SW requirements in the 100 yr floodplain to meet the expected FEMA BiOp requirements.

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
general	Ecoroof requirement	General comment: any remaining area not managed by ecoroofs still needs to meet technical requirements for stormwater management, especially prior to any offsite discharge, if any (e.g. exemption from the ecoroof requirement is not exemption from the SWMM). We wouldn't want someone to put in an extensive rooftop amenity and then think they wouldn't need to do stormwater runoff for that portion.	
2.16	33.510.115	The temporary kiosks should be located outside the 50' setback if the kiosks etc. are > 500 ft ² then the SWMM will apply. There is no exception for "temporary" structures. Treating stormwater in the park will be difficult	mandate ecoroofs on the structures.
2.57	33.510.205	Due to the potential changes in the FEMA BiOp, consider limiting height in the 100 year floodplain.	Copy the requirement in SOWA that the height limit is 75 feet within 125 from top of bank (Map 510-3)
2.81	33.510.210(C)(4)(E)	Recreational bench requirement is too dense in the greenway. Would result in 12 benches in a 2500 ft ² area. Results in too much fragmentation of any habitat in the area.	Consider reducing density in half to 1 bench every 400ft ²

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
2-81	33.510.210.C.4	The code/commentary is silent on whether or not stormwater management facilities can be placed within the bonusable area. This question should be addressed in the code because the question will come up in development review, including whether the vegetation within s/w facilities can count toward meeting the landscaping standard (i.e. 33.510.210.C.4.d). Depending on how the bonusable area ends up being configured, it may or may not be reasonable to allow stormwater facilities. For example it might make sense to allow them in larger dimensioned usable areas (e.g. the 25'x25' minimum area) as a compliment to landscaping and pedestrian access, but may make less sense in narrow strip areas (i.e. bonus for narrow strips that only contain stormwater facilities adjacent to building edges may not make sense, because there is no public access component). This raises the question of whether narrow strips of land should even be eligible for the bonus unless they serve to directly meet the stated intent, which is to "expand publically accessible open space". Perhaps that should be clarified in the standards.	Clarify whether stormwater facilities are allowed in bonus area. BES recommends that stormwater facilities approved by BES be allowed, provided they do not restrict public access.
2.99	33.510.215(C)(3)	May not meet the terms of the South Waterfront/ZRZ development agreement, specifically the requirements of the district stormwater system. Conflicting landscaping or setback requirements may conflict with the SWMM.	The building will need to provide stormwater management, in some places both private and public stormwater, around the building footprint. Especially in places where they opt not to use ecoroofs, the buildings may need to have more than 12' clearance. Consider allowing greater distance in some areas if needed to meet stormwater requirements.
2-96 thru 99	33.510.215	Required Building Lines - C1 and C2 seem to be in direct conflict with each other. "an extension of the side walk committed to active uses." and "will be required to be landscaped to L2". This carries through to the policy	Require some mininum portion (25%perphaps) of the 75% frontage to be landscaped, but it depends on what your are trying to get at.
2-112	33.510.XXX Ecoroofs (commentary)	The required ecoroofs will need to meet technical standards as outlined in the SWMM; maybe it's enough to just leave the code general, i.e. 'The ecoroof must be approved by BES'; but it might be good to have something in the commentary that references the technical standards as well	If it is better suited for the comments, add something like "The City's Stormwater Management Manual includes technical details for ecoroof design that BES will use to review for compliance with this requirement", or something along those lines

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
2-112	33.510.XXX Ecoroofs (commentary)	Clarify review procedure	BES will not need to issue a letter certifying the ecoroof under this requirement, because staff will be reviewing for compliance with SWMM technical requirements during permit. For compliance with the area requirement and allowed exemptions, it would make sense to include BDS planners as well (e.g. P&Z, Design). Does that need to be spelled out, or would they review for overall compliance with T33 (including this requirement) regardless?
2-113	33.510.XXX Ecoroofs	Should be clear to applicants that the fulfillment of the ecoroof requirement may not be sufficient to fully meet City stormwater management regulations	Include statement like: "Ecoroofs that fulfill this requirement may not be sufficient to meet a project's overall stormwater management obligations as outlined in other City codes and rules, such as the Stormwater Management Manual." -- possibly in the commentary vs. code?
2-113	33.510.XXX Ecoroofs	The 60 percent minimum threshold has no basis in our technical stormwater standards, and will add confusion.	Change 60% to 100% coverage, and add outdoor amenity space to roof area exemptions. This will allow for clarity on required coverage, but may necessitate some additional parameters around the exemptions, for example allowing some flexibility in case the City's list of acceptable rooftop uses is not exhaustive. This could be accomplished by providing a mechanism through which the standard can be varied from, i.e. Adjustment or Design Review Modification – is this currently allowed in the code as written? A minimum ecoroof % may be required to avoid small ecoroof patches.
2-113	33.510.XXX Ecoroofs	Outdoor amenity spaces should be included as an exemption, as they are a common feature on MFR and creative office buildings, and we should implement the ecoroof policy with flexibility towards comparable amenities the market supports. Also clarify the fire/access exemption is for those areas that are required by PF&R (verify)	"Roof area does not include areas covered by solar panels, skylights or mechanical equipment, outdoor amenity spaces , or areas required for fire and access routes by Portland Fire & Rescue. "
2-113	33.510.XXX Ecoroofs	20,000 "total square feet" might not be completely clear	Recommend changing unit to be consistent with Zoning Code definitions (e.g. "gross building area")
2-113	33.510.XXX Low-Carbon Buildings	50,000 "square feet in size" might not be completely clear	Recommend changing unit to be consistent with Zoning Code definitions (e.g. "gross building area")

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
2-113	33.510.XXX Low-Carbon Buildings	Unclear if requiring a letter from owner is adequate to ensure the intent of this code section will be met.	Consider bolstering the materials required for review, and/or require additional work by the project team during permit review: Idea for submittal materials: in addition to a signed letter from owner, provide documentation from USGBC that project has been registered at Gold level. Idea for additional work: require that the project must register as a split design/construction project. Approval of design phase required during building permit review (prior to occupancy?) to provide a measurable check on progress toward certification. From the USGBC website: "The split review is designed to help your team determine if your project is on track to achieve LEED certification at its preferred level."
2-113	33.510.XXX--Bird-friendly building design standards	A new section to the code is needed to provide building design standards that are bird-friendly (i.e., minimize the possibility of building-induced bird mortality due to in-flight collisions.	The code section should require bird-friendly design standards for windows and building orientations to minimize bird strike mortality. Building windows facing the Greenway are of special concern.
2-160	33.510.255	Given the public investment in and around OMSI, including interest and potential investment in activating the waterfront, OMSI should be required to do a master plan.	Consider adding Central East Side/OMSI to the areas where the Central City Master Plan is required.
2-252	33.475.020 A.	The 50' setback is a great improvement, however it is still insufficient to meet the functional riparian corridor requirements of any stream, especially the Willamette. Notably, the Oregon Dept of Forestry just did a study that found a minimum 60' setback for small streams and an 80' setback for mediums streams is the minimum required to meet temperature requirements for listed fish, and they changed their regulations accordingly. The South Waterfront setback requirements should serve as the best example of what is achievable in the central city and that should be the standard	Change setback to match South Waterfront. Adopting the South Waterfront requirements for the entire central city will also make it much easier to fully incorporate 33.475.230 Additionally, the River Overlay should apply to all lands within the 100 year floodplain, not just within the setback. Without the map it is difficult to determine how many properties this extension may affect.
2-254	33.475.040	The City has not determined if an enhanced coordination process is possible or desirable. This statement predetermines the outcome of the Innovation Grant with PSU	Change commentary to read: The City is in the process of developing <u>evaluating</u> an enhanced coordination process to improve the city/state/federal permitting process.
2-257	33.475.060 (B)(1)©		Add mapped 100 year floodplain
2-261	33.475.205		Adopt the SOWA greenway requirements for the entire central city

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
2-261	33.475.210 (B)	The FEMA BiOp is currently drafted to prohibit ancillary buildings in the 100 year floodplain. Those are not considered river-dependent uses (parking lot, storage areas, corporate offices)	Consider noting in the commentary that this provision may change due to changes in federal law and encourage non-river dependent facilities to be located outside the 100 year floodplain
2-262	33.475.210 E	Agree with the need for flexibility however, the 10% encroachment allowance into a 50' setback undermines the limited value of the 50' setback. Would be much more acceptable if the SoWA setback standards were adopted. Fill in the 100 yr floodplain should be subject to River Review regardless of if it is landward of the setback.	Allow encroachment only if setback is >50'. Fill landward of the setback should be subject to River Review if it is in the 100 year floodplain.
2-264	33.475.220B	Required landscaping in C should be the minimal requirement. It is unclear if it is the maximum required or minimum	Denser planting should be required in enhancement/restoration areas as long as it is not in a Scenic Resources Overlay Zone
2-267	c	trees must be planted 20' apart	I don't have context for this language, but this is mighty proscriptive. 20' is too close for medium or large-canopy trees, or is the intention that some of the trees will be removed over time as the trees mature?
2-267	33.475.220(C)(2)(d)	Exception (3) should be eliminated. Conflicts with 33.475.500	Landscaping should be required where cleanup is required. Need to make the revegetation a substantive requirement for exempt reviews.
2-269	33.475.220(D)	Riprap should be considered debris Under 3.b. allow for a landscape architect or a civil engineer to certify the growing medium. Under D.5 ensure that temporary erosion control measures are biodegradable.	For any nonbiodegradable erosion control measures, mandate that they must be removed within 3 years or when the permanent stabilization measures are functional, whichever is sooner.
2-271	33.475.230(B)		Make (B) language the same as 33.475.040. Add Dept. of Environmental Quality
2-275	33.475.230(c)(2)	Reference to paragraph E.5.f doesn't make sense	E.5.f is "other development" allowed in SOWA. DO you mean D(5)(e)(3)?
2-277	33.475.230.D	Excavation, fill, bridges, docks and bank stabilization should be subject to River Review as well as design review. Under D.4, excavation and fill less than 50 feet should not be exempt. It is Essential Fish Habitat. There is no threshold for DSL review in EFH, and there shouldn't be for city review either. Dredging, channel maintenance and removal of gravel should also be reviewed. Sould only exempt if it is within the federal navigational channel managed by the Corps under the Rivers and Harbors Act.	Adopt language of 33.475.430(C)(7) to narrow the exemption and solve the issues that would otherwise arise with exempt reviews in SOWA.

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
2-279 and 2-281	33.475.230.D(5)(a) and D(5)(d)	This should be the standard for trails in the setback area in the entire central city river overlay zone. If in the rest of the Central City BPS stays with the 50' setback, the non-landscaped areas should only be allowed in Subarea 3 and should not exceed 30% of the area (which results in a 16' trail area). Parks desires a minimum 25' trail, however that eliminates the benefits/purposes of the 50' setback for the river. Any trail greater than 16' should be allowed only if the setback is greater than 50' and should still be limited to no more than 30% of Subarea 3. Furthermore the non landscaped area should not be closer than 15' of the top of bank.	Adopt the SOWA greenway requirements for the entire central city - not only is it better for the river and the city, but it will resolve the trail/habitat conflicts inherent in a 50' setback.
2-279	33.475.230.D(5)(b)	References to D.2.a, b, c or d do not make sense anymore.	Fix cross reference. Subsection b.(4) should not be allowed if subarea 3 is within the 100 year floodplain.
2-279	33.475.230.D.5.c	If stormwater facilities are allowed in the setback, human impacts undermine their effectiveness and fences may be required to protect the functionality of the utility. (ex: SOWA swale)	Allow fences around stormwater facilities if they are no more than 4' high and must allow visibility.
2-288	33.475.410	Commentary is misleading. Unvegetated river banks may be medium or high ranked resources if they are in the 100 year floodplain. Not all unvegetated river banks are low ranked.	River environmental should apply to the 100 year floodplain. Floodplain lands are medium and high ranked regardless of vegetation on the riverbank.
2-291	33.475.430		Note that (c)(1) may no longer be allowed under the FEMA BiOp. The BiOp may require these to be relocated outside the 100 yr floodplain or to the highest point of the floodplain, with accommodations for flow, upon repair, alterations or replacement.
2-295	33.475.430.D.2	Should be worded so that there is a net reduction in piles or dolphins	Reword to state: The placement of up to four single piles or two multiple-pile dolphins for each 100 feet of shoreline <u>as long as there is a net reduction in piles or dolphins</u> for an existing river-dependent or river-related use;
2-297	33.475.430.D.10	See comments re fences on 33.475.230.D.5.c above	Allow fences around stormwater facilities if they are no more than 4' high and must allow visibility. Could be written as a standard and not an exemption.

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
2-299	33.475.440.B.2 Utilities	Disturbance associated with the installation of a utility line may not occur riverward of the top of bank of the Willamette River, within the river channel, or within 30 feet of the top of bank of a stream, wetland or other water body.	Should be some provision for relocation, abandonment or repair of an existing utility within these areas. Example, PWB has transmission mains that cross the Willamette and BES has sewer force mains that cross as well. Should have provisions for maintenance and replacement/rehab. The 2016 Stormwater Management Manual will have requirements for culverts and outfalls that will apply to C. Planting riprap will not be allowed/required (C)(3) because it doesn't work. Will recommend minimal sized rock and planting of the area outside of any riprapped pad.
2-299	33.475.440.B - C	Paragraph K (pg. 2-309)	Should have provisions for survivability within the first two years of the installed plants.
2-299	33.475.440.B - C	10 foot wide corridor of disturbance	In some situations, specifically for larger public utilities, a 10 foot wide path may not be wide enough for equipment and material handling. At a minimum, the disturbance width should be 15 feet similar to 33.430.150 B (existing code). There should include some provision where the width could be expanded if shown that more is needed. Include an exemption, similar to 33.430.150 F in the Environmental Overlay Zone (existing code language). Area should be returned to better condition than pre-disturbance condition.
2-301	33.475.440.D	See comments re Trails on 33.475.230.D above. 5' from the TOB on the Willamette is far too close. Should be a minimum of 15' from TOB and only in Subarea 3.	A maximum of 16' trail should only apply if it is a 50' setback. If the setback is greater than 50' then a wider trail should be allowed by standards as long as the impervious area does not exceed 30% of subarea 3 and is setback a minimum of 15' from the TOB.
2-301 and 2-303	33.475.440.E. and 33.475.440.G.6		Note that the FEMA BiOp proposes to define the 100 year floodplain as the floodway. Therefore E.3. and G.6.c should be deleted.
2-303	33.475.430.G	Subsection 4 implies rock armoring can be allowed below OHW Subsection 5 conflicts with subsection 3. Large wood and bioengineered structures technically count as fill and construction activity. They may be below the OHW which counts as a stream.	Do not allow rock armoring below top of bank except as required by outfalls. Allow subsection 5 below OHW
2-313	33.475.450.B		Note that B does not count towards any violations that may be assessed by state or federal regulators (for work below OHW). Any violation below TOB should only be allowed to use Option three (River Review)

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
2-321	33.475.500	This section is rendered virtually pointless due to the 33.475.220.C.2.d.(3) exemption and 33.475.230.D.4(d) for SOWA. Based on those exemptions, there are no substantive requirements that can be applied to contamination cleanup.	Need to first eliminate the exemptions in those sections. (The Greenway Design Guidelines - Riverbank Enhancement do not need to come back because they are just guidelines and therefore not considered substantive requirements). Then the code must make it clear that alternations to the bank below TOB must go through River Review. TO be clearer, the exempt review substantive requirements should follow Section 865, not come before it. That makes it seem as though River Review wouldn't result in these substantive requirements. Through the River Review section, the substantive requirements will apply. May need to enhance 33.475.865 to match 33.475.500.
2-325	33.475.500.F.1.(d)	Non biodegradable erosion control should be removed within 3 years; plants must be viable after 2 year establishment period	See comment re: 33.475.220.D.5 and ensure it applies to F.1.(d).
2-326	33.475.500.F.2.a	Commentary should make clear that these substantive requirements reflect the substantive requirements contained within the River Review 33.475.865. Furthermore, if rock is used, it should be the minimal size required to meet engineering requirements, rounded river rock, and it should have clean soil to allow plant survival; Section 2.a. should not include a 50cy minimum requirement. Any excavation or fill below TOB should be considered significant alteration. Rock armor should not be allowed below Top of Bank, period...it shouldn't stop at OWH. 2.a.(1) first bullet appears to conflict with Subsection 3. Also note that rock armor is technically "natural substrate" and would meet the requirements of subsection 3.	Eliminate " more than 50 cubic yards of excavation or fill " Include a typical drawing with planted riprap showing minimal rounded rock with planting wells interspersed to allow for plant survival. Planting in straight riprap will not work or survive. If rock armoring is required in the ROD for stabilization purposes of the cleanup, it should be the minimum sized rock, rounded, for stabilization purposes and should include a minimum 6" layer of sand or habitat gravels on top to provide habitat. Figure 475-X Marsh Bench does not appear to meet these requirements and contradicts the requirements spelled out in Subsection 3. Consider adding a planted riprap bank as a typical. Should be at least one tree per 200 feet consistent with landscaping requirements.
2-383	33.865	Significant is too high of a bar and imparts discretion into the review which in turn weakens the exempt review requirements in 33.475.500	restate purpose "compensate for unavoidable significant detrimental impact...". Change also in 33.865.040 (A); 33.865.040.B.1.a(3); 040.B.5;
2-389	33.865.040.A.1.a(7)		add <u>drainageways, drainage reserves</u> before drainage patterns.
2-395	33.865.040.B.1.a(3)		include excavation and fill in the 100 year floodplain
2-399	33.865.100.B.1	Significant improvement of at least one functional value appears too subjective. Will make it more difficult to apply during exempt reviews (33.475.500). Consider adding typicals or expanding on what it means to improve at least one functional value in a way that corresponds to 33.45.500	Add typicals. Add language such as, "including but not limited to, creating shallow water habitat, reducing slope, increasing floodplain storage and function, adding vegetation to the banks, increasing habitat complexity below OHW, increasing stormwater management, to meet the functions and identified in B.1.a.(1).

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
2-399	33.865.100.B.2 and B.2.d.	With River Review, the standards still allow for slow but persistent declines in Willamette River quality, resources and functions. Need to move beyond a "no net loss" standard which really isn't a no net loss, and instead require a <u>net gain standard</u> for River Review.	Consider requiring all other proposals to meet B.1.b. - require at least a significant improvement of at least one functional value with all development, not just resource enhancement projects
2-401	33.865.100B.2.d	Support minimum ratio requirement for impacts but allow for more mitigation.	Consider adding "including threatened and endangered species" in (3)a.
2-403 and 2-405	33.865.100.B.2.d	<p>Off site mitigation needs much greater discussion. BES is not set up yet to accept a fee in lieu and the HEP and HEA methodologies are being updated and reevaluated. Further, we do not have costs established for the fee in lieu. We agree that this needs to happen and we have recently added this to our work plan however it is too premature to include it in the public draft of this code. Furthermore, it is the functional equivalent of a mitigation bank so in the meantime, inclusion of the mitigation bank option may suffice and not require future code changes if it is set up in a way to include a fee-in-lieu to BES.</p> <p>The accredited mitigation bank should be clear who is doing the accrediting? Right now only the Corps and DSL accredit mitigation banks. NOAA Fisheries and the City of Portland do not. Should be clear that it is any federal, state or City of Portland accredited mitigation bank that accounts for the functions and values impacted by the development (i.e. don't use a wetland mitigation bank for floodplain impacts).</p>	All offsite mitigation should be within the City of Portland and within the same watershed
2-405	33.865.100B.2.e	Contradict, circumvent or otherwise undermine are very subjective terms. Consider tightening language. Local laws can always be more protective of federal or state laws, just not less.	Suggestion, "...the conditions of approval for this River Review shall be interpreted to be in addition to those other regulatory approvals. Where regulatory approvals apply to the same area, the most restrictive and protective of the natural resources, functions and values, shall be deemed controlling."

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
2-461	33.930.150 Top of Bank	<p>Measuring top of bank, as defined for defaults, does not take into consider several impotent factors. First, stream systems are highly variable. A deep incized system quite often will have an actual top of bank that is further than 15' from the OHW. Don't recommend using default values for top of bank (33.930.150 C).</p> <p>The default top of bank also contradicts the approach being evaluated for BES' drainageway reserves in the SWMM.</p>	<p>Top of Bank determination should be made by a combination of topographic features, field indicators (plant communities) and consideration for stream and riparian functions. Perhaps it should be identified in the field at the time when the ordinary high water mark is identified. A qualified individual would need to identify the ordinary high water mark, so why not have that same qualified individual identify the top of bank. What is wrong about having a survey determine the top of bank if the surveyor is already out there identifying the ordinary high water mark? Consider adopting a different default.</p>
Detailed Comments - VOLUME 5			
Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
5-9	Introduction	I don't see the additional methodology summary appendix	
5-9	background	Paragraph 2: the Portland Plan calls for at least 33% canopy cover and a minimum of 25% canopy in all residential neighborhoods	
5-11	5.4 Table 1	Adding a percent increase column will emphasize the current low level of canopy relative to what is needed to meet the targets.	
5-13	baseline future tree canopy scenario a.	last sentence in paragraph 2: add "and adjacent ROW" between "site" AND "in"	
5-13	baseline future tree canopy scenario c.	the Environmental Services Tree Program is a going concern that is not funded by an initiative.	please change the word "initiatives" to "projects"
5-13	baseline future tree canopy scenario d.	why assume a net increase in canopy when many trees were planted? Many trees may have been removed to make way for the development, some of the newly planted trees may not survive, and the short time frame of this plan may not be enough time for the new trees to grow to significant size. Do you intend to model canopy loss in the areas where you intend to model canopy growth? If not, I'm concerned you'll over-estimate increases in canopy.	I would frame this as changes in canopy, including losses as well as anticipated additions.
5-14	Central City 2035 Plan Scenario... b.	how does the PAR factor in? As I understand it, you can pay in lieu fees for all required trees both on real property and in the ROW. This could significantly affect the amount of canopy we hope to gain in the central city	

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
5-14	Central City 2035 Plan Scenario... d.	the language around the City taking some responsibility for street tree maintenance is fantastic. Thank you for including this.	
5-15	Central City 2035 Plan Scenario... i.	the wording is confusing; I'm not sure what you mean to say here.	
5-17	B. Baseline Right-of-Way Tree Canopy	paragraph 2: will you offset anticipated gains with anticipated losses? Will you consider a mortality factor for newly planted trees?	
5-17	Underlying ROW tree data	please add a caveat that the number of available planting spaces may change as trees get planted. The numbers reported in 5.4 Table 2 are maximums.	
5-17	5.4 Table 2	Please add "ROW" between "potential" and "planting" in the title and before the word "planting" in the headings of columns 3, 4, and 5.	
5-17	5.4 Table 2	adding a column for stocking level will help give a quick picture of how much potential there is left in the districts	
5-18	5.4 Table 3	Heads up: UF just released planting standards for ROW trees that may restrict planting to spaces at least 3' wide (at present, we may plant in spaces at least 2.3' wide). We are waiting to get confirmation from them.	
5-20	5.4 Table 4	adding a column for % of available planting spaces gives a quick picture of how much of the overall potential is adjacent to BLI sites	
5-21	baseline proactive street tree planting	paragraph 2: note that we do not plant trees that are required by code with our program, so when you calculate the proportion of planting spaces we are likely to fill, you should leave out the BLI sites from the calculation	
5-21	baseline proactive street tree planting	paragraph 3: thanks, again, for adding this language and including sidewalk repair.	
5-22	5.4 Table 6	how does the PAR affect this table?	
5-23	baseline taxlot tree canopy	end of paragraph 1 on this page refers to a "table below" that I do not find.	
5-23	baseline taxlot tree canopy	end of paragraph 1: why assume 100% canopy cover? Is the landscaping requirement limited to trees? Can we assume this?	
5-23	baseline taxlot tree canopy	end of paragraph 2: option to pay an in-lieu fee demonstrates that assuming 100% canopy cover is an overestimate	

Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)
5-23	baseline taxlot tree canopy	paragraph 3: R5 has greater tree density standards than these other zones; does it belong in this list? At the end of this paragraph, you recognize the hit canopy cover may take resulting from in lieu fees, but you do not recognize this above. Maybe I'm missing something.	
5-23	baseline taxlot tree canopy	paragraph 4: is the additional 25' setback a done deal? If not, why is it assumed in the baseline scenario for canopy cover?	
5-26	b. streetscape improvements...	what assumptions would you base your ability to fill x number of available planting spaces? Absent a code requirement, we would still need to get adjacent PO permission to plant a single tree (including the large-canopy trees in bump outs)	
5-47	Baseline conditions for targets	"Using these data, the total roof area for the Central City is 2,383 acres, which is % of the whole area"	Add percentage of Central City is covered by roof area (excluding the Willamette River)



Bureau of Planning and Sustainability
Innovation. Collaboration. Practical Solutions.

MEMO

DATE: October 9, 2015

TO: **City Attorney:** Kathryn Beaumont and Linly Rees
Development Services: Rebecca Esau, Kim Tallant, Kara Fioravanti, Tim Heron, Susan Ellis, Jill Grenda, and Stephanie Beckman
Emergency Management: Jonna Papaefthimiou
Environmental Services: Jane Bacchieri, Kaitlin Lovell, Paul Ketcham, Amy Chomowicz, Alice Coker, **Stephen Himes, Elizabeth Reese-Cadigan**
Equity: Judith Mowry
Fire: Nate Takara
Housing: Javier Mena, Kim McCarty, and Barbara Shaw
Management and Finance: Karl Lisle
Neighborhood Involvement: Paul Leistner and Brian Hoop,
Parks and Recreation: Brett Horner, Alan Schmidt, Sarah Huggins, Maya Agarwal, and Emily Roth
Portland Development Commission: Lisa Abuaf, Geraldene Moyle, Shelly Haack, and Sarah Harpole
Transportation: Art Pearce, Judith Gray, Mauricio Leclerc, and Grant Morehead
Water: Cherri Warnke

FROM: Sallie Edmunds, Planning and Sustainability (3-6950)

CC: Susan Anderson, Joe Zehnder, Rachael Hoy, Troy Doss, Nicholas Starin, Debbie Bischoff, Mindy Brooks, Kathryn Hartinger, Derek Dauphin, Mark Raggett, Lora Lillard, Marc Asnis, Tyler Bump, Roberta Jortner, Emily Meharg, Taren Evans, Shannon Buono and Phil Nameny

SUBJECT: Internal City Review of Central City 2035 – Part 1. **Deadline for comments 11/9/15**

We are pleased to forward you this Internal City Review Draft of the Central City 2035 Plan for your review. This is based on all of the work that we have done to date including the Central City 2035 Framework Plan (2012) and the Quadrant Plans (2012 – 2015). While the final document will include all of the following volumes, not all of the material is ready for your review. Also, we have not yet had time for our graphics team to work on layout so please review for content only.



City of Portland, Oregon | Bureau of Planning and Sustainability | www.portlandoregon.gov/bps
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Printed on 100% post-consumer waste recycled paper.

Here is the link to our FTP site:

ftp://ftp02.portlandoregon.gov/BPS/Central_City/In_house_review_draft/ . We have also included links within the table of contents to adopted plans on our regular website. We also plan to make one copy of the review material per bureau and will deliver it to the first person listed above. If you need additional copies, please let us know and we will order more from P&D.

The following sections describe the volumes and summarize what is and is not included in this review.

VOLUME 1: Goals and Policies

This volume includes goals and policies that guided the development of the plan and the follow up actions. The goals and policies are drawn from the work done as part of the CC2035 Framework Plan and the Quadrant Plans.

For those of you who tracked the Quadrant Plans closely, we have included an excel Tracking Table that tracks the edits that we made to quadrant plan goals and policies as they were consolidated into a single CC2035 document. The edits that we made were intended to provide more consistency, clarity, and to reduce duplicative policies. The Excel file has two sheets with the same content, ordered differently. The first sheet, CC2035 SORT, sorts the goals and policies as they are found in the CC2035 Internal Review Draft. The second sheet, Quad Plan SORT, sorts the goals and policies as they are found in the quadrant plans. Depending on your reviewing style, one or both of these sheets should be helpful. This excel document is on the FTP site.

This Volume also includes proposed amendments to the Transportation System Plan (TSP) that is in process as part of the Comprehensive Plan.

If you have any questions about this chapter when you are reviewing it please contact Kathryn Hartinger at 3-9714. If you have specific questions about the TSP amendments contact Mauricio Leclerc at 3-7808.

VOLUME 2. Zoning Code and Map Amendments

This Volume includes most of the changes to the zoning code that we plan to propose. There are a few that are still under development within several of the code chapters. For example, Chapter 33.510 Central City Plan District is fairly complete but does not include code for the new master plan process or a revised parking code. We anticipate having drafts of these sections to you for your review in about three weeks.

The Parking section of Chapter 510 is currently under development by PBOT and their Stakeholder Advisory Committee. We will try to send out an early draft on Oct 30 as part of our Part 2 release, and then a more complete draft sometime in November prior to the release of the Discussion Draft.

Zoning Map changes are also included in this Volume. Some of the maps are included in this Part 1 Package (base zone changes). Additional changes will be included in the Part 2 package (scenic and environmental overlay zones) that we will send to you in about 3 weeks.



If you have any questions about Volume 2 please contact Rachael Hoy at 3-6042. If you have any questions about the River, Environmental or Scenic resources chapters please contact Mindy Brooks at 3-7831.

VOLUME 3 Inventories and Analyses

This volume will include the Scenic Resource Inventory and the Natural Resource Inventory and ESEE analyses. Many bureau staff reviewed drafts of the inventory documents over the last year or so. We are not planning to make copies of these documents but you can access them here:

Scenic Resource Inventory: <http://www.portlandoregon.gov/bps/67334>

Natural Resource Inventory: <http://www.portlandoregon.gov/bps/article/354442>

Once we complete the analyses for these Inventories we will forward them to you for review. If you have any questions about these, please contact Mindy Brooks at 3-7831.

Volume 4 Background studies and supporting documentation

This volume will include documents that we prepared to inform CC2035 and adopted by resolution (e.g., the West Quadrant Plan), studies and memos that we prepared to inform CC2035 or explain in greater detail why we selected a course of action. These documents will not be distributed for your review but if you think there is some material that should be published in this volume, please let us know.

VOLUME 5 Implementation Workplan (Adopt by resolution)

This volume will include draft work plans for each bureau based on the actions charts that were in the Quadrant Plans and will also include Targets and Performance Measures. The Targets and Performance Measures are included in your review packet. If you have questions about the Targets and Performance Measures related to the environment, please contact Mindy Brooks at 3-7831. If you have questions about the Transportation measures please contact Mauricio Leclerc at 3-7808. We will distribute a draft work plan in a few weeks.

Invite us to a meeting! Thank you in advance for your review of the document. We would be happy to come to a meeting to introduce the package to you or to talk in detail about any of the elements. Just let us know what your interest is so we can be sure the right staff are there to answer your questions.

Commenting on the Internal Draft Plan. Send us your Bureau's feedback as soon as you can!

We've created and attached a form that we would like you to use to comment on the Internal Review Draft. Also, we would be happy to receive your comments in parts. If you complete your review of some portions of the plan feel free to send them to us so we can start to work on addressing them.

Central City Schedule

I've attached a CC2035 schedule for your information. As you can see it is aggressive but with your help, doable.

Please contact me at 3-6950 if you have any questions about CC2035 as a whole.



Attachment 1. Central City 2035 Schedule

Internal City Review Draft Part 1 (See above)

Publish: October 9, 2015

Comments Due: November 9, 2015

Internal City Review Draft Part 2 May include, but not be limited to, the following:

Volume 2: Code amendments including a new Urban Design Master Plan, Electrical Vehicle plug ins, Transportation Demand Management code and program elements, Seismic related transfer provisions. We hope to also include maps of the environmental and scenic overlay zones and an early draft of the parking code.

Volumes 2 and 3: Scenic Resources ESEE and any related height amendments

Publish: October 30, 2015

Comments Due: November 20, 2015

Discussion Draft This public review draft will include Volumes 1-3 and 5.

Publish: December 11, 2015

Comments Due: February 1, 2016

Internal City Review Draft Part 3 (remaining amendments including)

Volume 5: Implementation Workplan.

Publish: January 8, 2016

Comments Due: February 1, 2016

Proposed Draft for Planning and Sustainability Commission Review Volumes 1-5.

Publish : March 1, 2016

First PSC Hearing: April 12, 2016

Recommended Draft for City Council Review Volumes 1-5.

Publish: Summer 2016

CC Hearing: Summer 2016



Attachment 2. Comment Form

Please use the following comment form to the extent that you can to make it easier for us to track your comments!

Central City 2035 Plan In-House Review Draft Comments

Bureau/Office:

Date:

Primary Issues or Areas of Concern

- 1.
- 2.

Detailed Comments

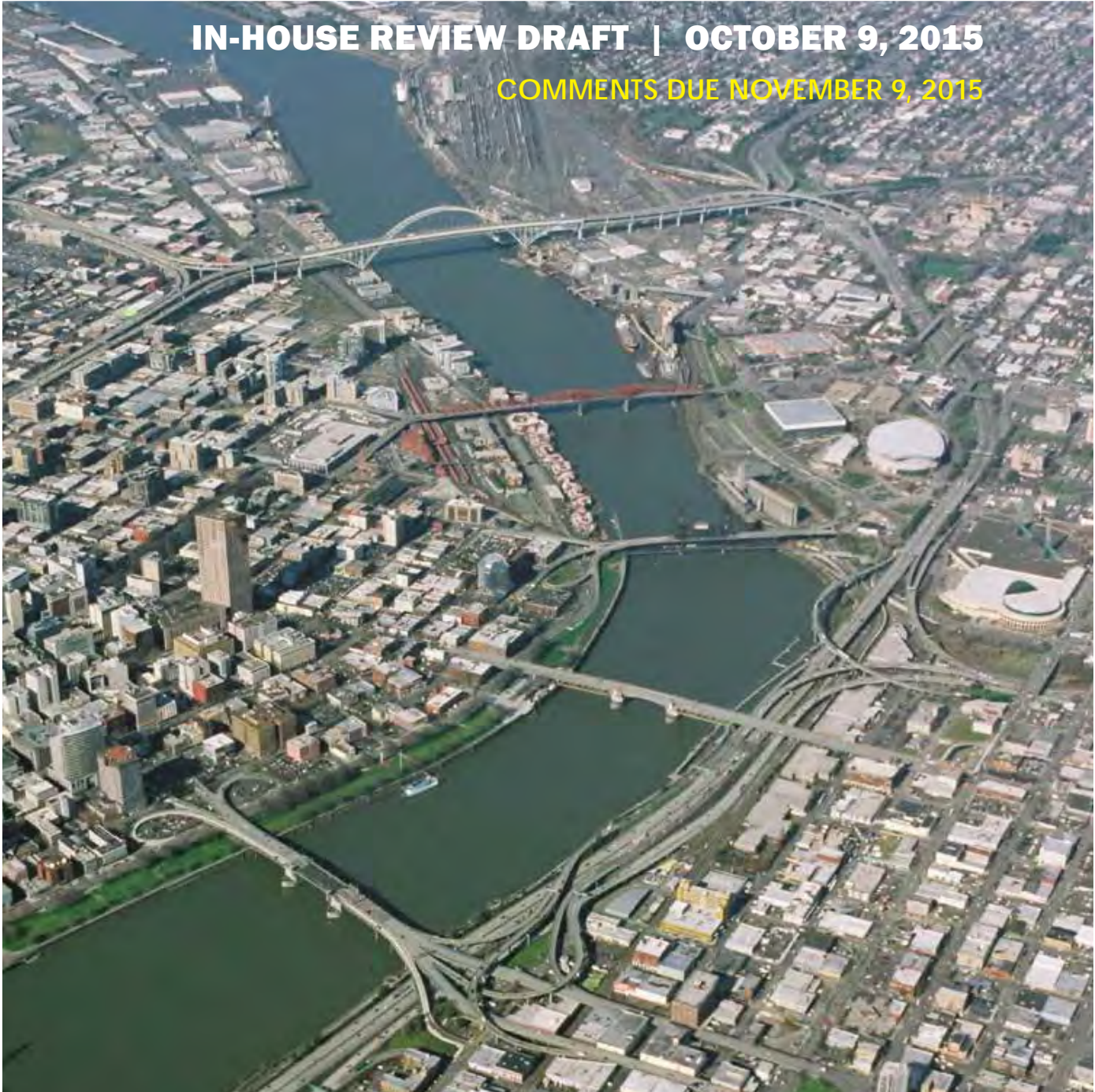
Page #	Policy # or Code Section	Comment/Issue	Suggested Changes (if any)



CENTRAL CITY 2035 VOLUME 1: GOALS AND POLICIES

IN-HOUSE REVIEW DRAFT | OCTOBER 9, 2015

COMMENTS DUE NOVEMBER 9, 2015



Bureau of Planning and Sustainability
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City of Portland, Oregon
Charlie Hales, Mayor • Susan Anderson, Director



Questions about Volume 1?

Contact Kathryn Hartinger, Bureau of Planning and Sustainability

kathryn.hartinger@portlandoregon.gov

(503) 823-9714

Questions about TSP amendments?

Contact Mauricio Leclerc, Portland Bureau of Transportation

mauricio.leclerc@portlandoregon.gov

(503) 823-7808

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- A. Scenic Resource Inventory <http://www.portlandoregon.gov/bps/67334>
- B. Scenic Resource Inventory ESEE (forthcoming)
- C. Natural Resource Inventory <http://www.portlandoregon.gov/bps/article/354442>

VOLUME 4. Background Reports and Supporting Documentation

- A. Documents Previously Adopted by Resolution to Inform CC2035
 - a. 2035 Framework Plan <https://www.portlandoregon.gov/bps/article/427039>
 - b. N/NE <https://www.portlandoregon.gov/bps/52841>
 - c. West Quad <https://www.portlandoregon.gov/bps/61672>
 - d. SEQ <http://www.portlandoregon.gov/bps/article/542604>
 - e. Goal 15 Inventory <https://www.portlandoregon.gov/rss.cfm?c=42540>
 - f. Bonus Study <http://www.portlandoregon.gov/bps/article/535198>
- B. Studies and Memos Prepared to Inform CC2035 (not included in this review package)
 - a. Housing/Jobs Allocation Memo
 - b. Height Memo
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 - i. Central Reach Concept (and narrative)
 - ii. Maritime Transportation Security Act
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A. INTRODUCTION

Portland's Central City has a rich history shaped by abundant natural resources, two working rivers and a temperate climate. From the Native Americans who fished the Willamette for salmon to the residents, workers and visitors to South Waterfront and the new Greenway Trail, Portlanders appreciate this special gathering place for work, play, culture, food ... and ideas. The Central City 2035 Plan (CC2035) presents an opportunity to improve and build upon this tradition, honoring the history of the place while boldly moving forward in new directions.

What the Central City means to Portland

Portland's Central City is the heart of the region. It is the city's premier center for jobs, services and entertainment, with civic and cultural institutions that serve more than two million from Gresham to Sherwood. The Central City supports the growth of local talent, industry and institutions; connects a dense urban environment to a stunning landscape; and advances a prosperous, healthy, educated and equitable community.

These ideals are reflected in the urban design and development decisions that have produced this attractive, sustainable and walkable Central City that continues to attract tourists and new residents to Portland from across the world.

What is the Central City 2035 Plan?

CC2035 offers goals, policies and actions designed to make the Central City even more vibrant, innovative, sustainable and resilient. A place that every Portlander can be proud to call their own. The plan replaces the 1988 Central City Plan as the primary guiding policy document for the Central City Plan District. Buttressed by the Portland Plan, the CC2035 Plan will be the first amendment to the City's updated Comprehensive Plan.

The plan also includes an update to the Willamette Greenway Plan for the Central Reach, a bold vision that will integrate a more vibrant, multi-purpose Willamette riverfront into the Central City's future.



Why plan now?

The Central City is growing.

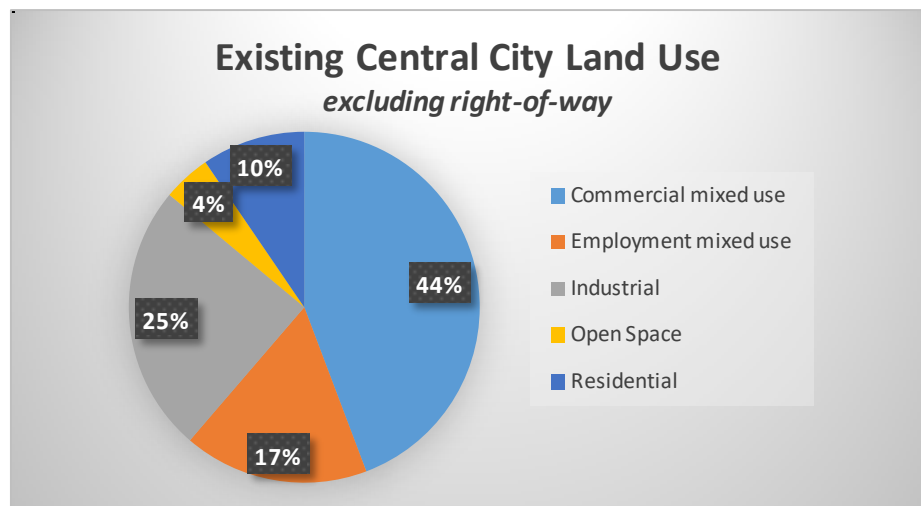
The Central City's economy, services, neighborhoods, natural setting and lifestyle continues to attract new residents. From 2010 to 2035, Portland's Central City is projected to add approximately **38,000 new households** and about **55,000 new jobs**.

*In the 25-year period between 2010 and 2035, the number of jobs in the Central City will increase by **45 percent**, and the number of households is expected to grow by more than **160 percent**.*

Space is limited but sufficient to comfortably accommodate the projected growth.

Of the nearly 3,000 acres of land in the Central City, there are about 3,800 parcels of developable land comprising about 1,500 acres, or about half of the total plan area. The Willamette River comprises approximately 500 acres and the remaining 1,000 acres, about a third of the Central City and 40 percent of the buildable land, consists of public right-of-way (streets, sidewalks, etc.).

The Central City's small blocks are an iconic part of its urban form, improving walkability and drawing light and air into the core. But small blocks mean lots of streets, so the Central City has a high percentage of land devoted to public rights-of-way relative to most other cities. Of the 1,500 acres of buildable land within the Central City, current land use breaks down as shown in the pie chart at right.



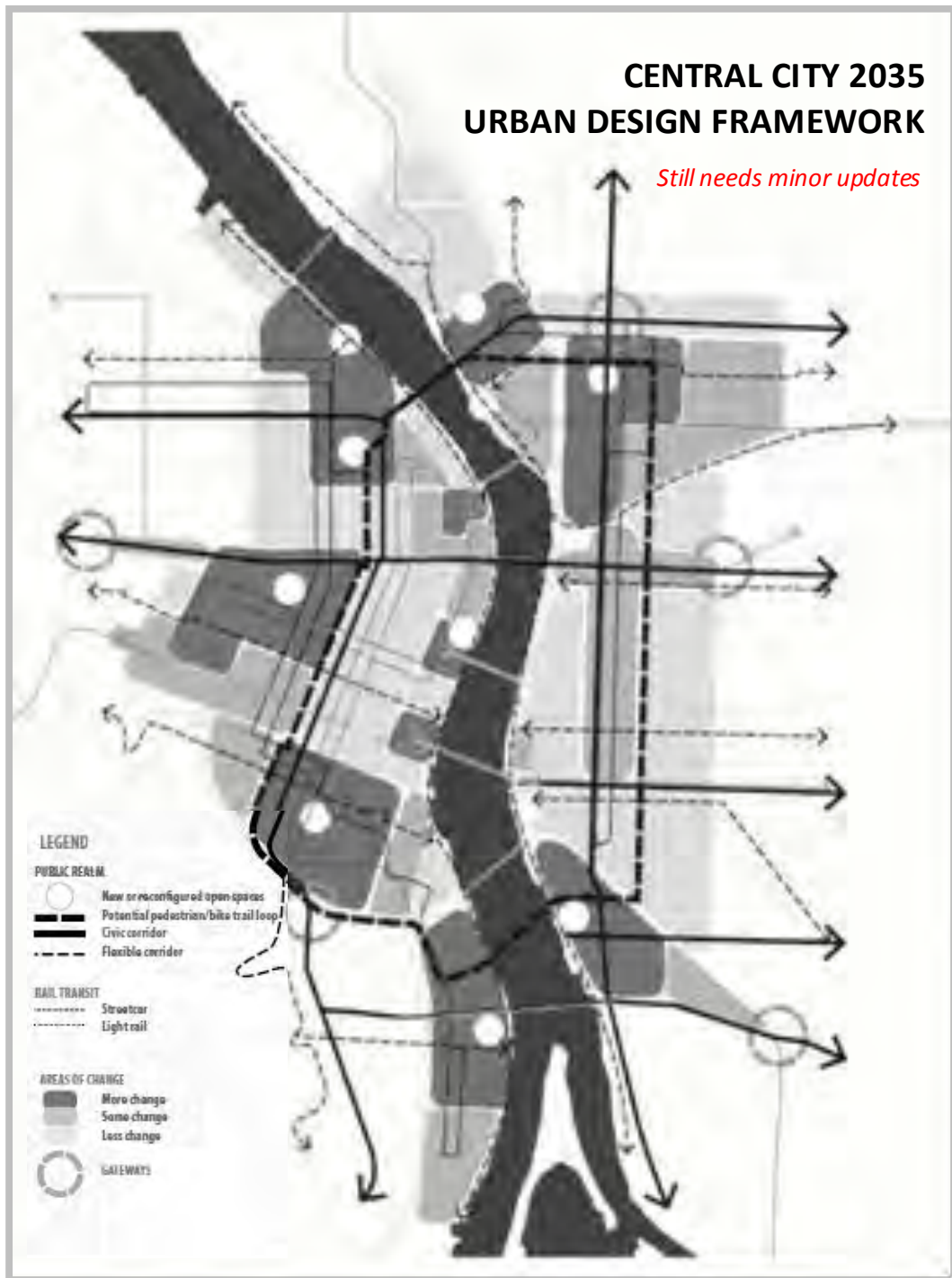
Of this, approximately 460 acres of land has been identified by the City as vacant or underutilized, and is now, or could likely become available for development/redevelopment at some point in the next 20 years. This is enough land to comfortably accommodate projected growth.

Through planning and urban design, we can grow in a way that benefits all Portlanders.

Change and growth will not occur uniformly across the Central City. Good urban design is essential for maintaining, enhancing and growing an attractive, well-functioning and sustainable city. The *Central City 2035 Concept Plan* outlined the three key Urban Design Concept themes on the next page, to shape the Central City through 2035. It also included an Urban Design Framework to “translate” these themes on the ground in more detail, highlighting areas of expected change and identifying specific districts, places and connections within the Central City's distinctive natural and topographic features. The themes and framework were tested and refined through the quadrant processes.

Central City 2035 Urban Design Concept Themes:

1. **Central River** – The Willamette River as the central feature of the Central City, with vibrancy, access, activities and riverfront districts
2. **Distinct Districts** – A diverse array of districts with linkages to the river and surrounding community
3. **Connected Public Realm** – Connection through a series of loops and a variety of street types

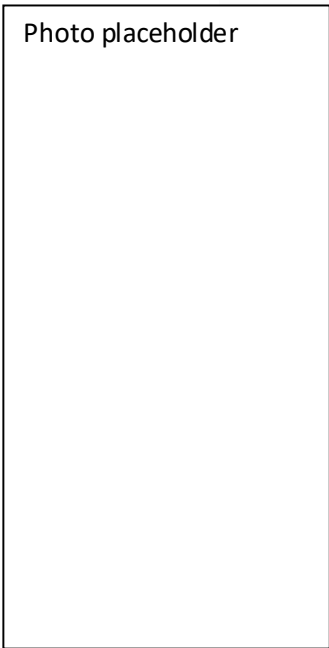
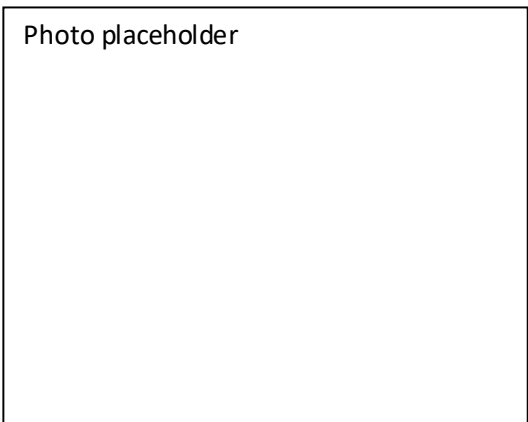


Central City 2035 Vision: A Center for Innovation and Exchange

This Central City Plan seeks to create an environment that brings businesses, workers, students and residents together to collaborate, innovate and create a better future.

Portland is recognized throughout the world as a uniquely comfortable and livable American city. Nowhere is this more true than the Central City, where decades of careful investment have resulted in streets busy with streetcars, cyclists and pedestrians, lined by trees, shops and restaurants, with energy-efficient residential and office buildings looming overhead. A boom of residential development over the last 10 years means more Portlanders than ever can call the Central City “home.”

Portland also has a growing number of creative firms and businesses located in the city center that are changing how the world operates, looks and functions. These businesses benefit from and support the universities and



colleges located in the Central City by nurturing local talent and creative energy. Portland State University, Oregon Health and Science University, the Pacific Northwest College of Art, the National College of Natural Medicine, the University of Oregon, Oregon State University and Oregon College of Oriental Medicine have all made the Central City the regional center for higher education. While educating future entrepreneurs, scientists, researchers and other workers, these institutions support a culture of lifelong learning and innovation.

This didn't happen by accident. Forty years of planning, partnerships and investments have led us here. In the last decade, the *Portland Plan* established a framework to build on past successes, while providing a new lens for how to view ourselves and our interdependent, collective future. Ultimately, Central City 2035 seeks to leverage these assets to position Portland's urban core as a global center of equity, innovation and exchange.

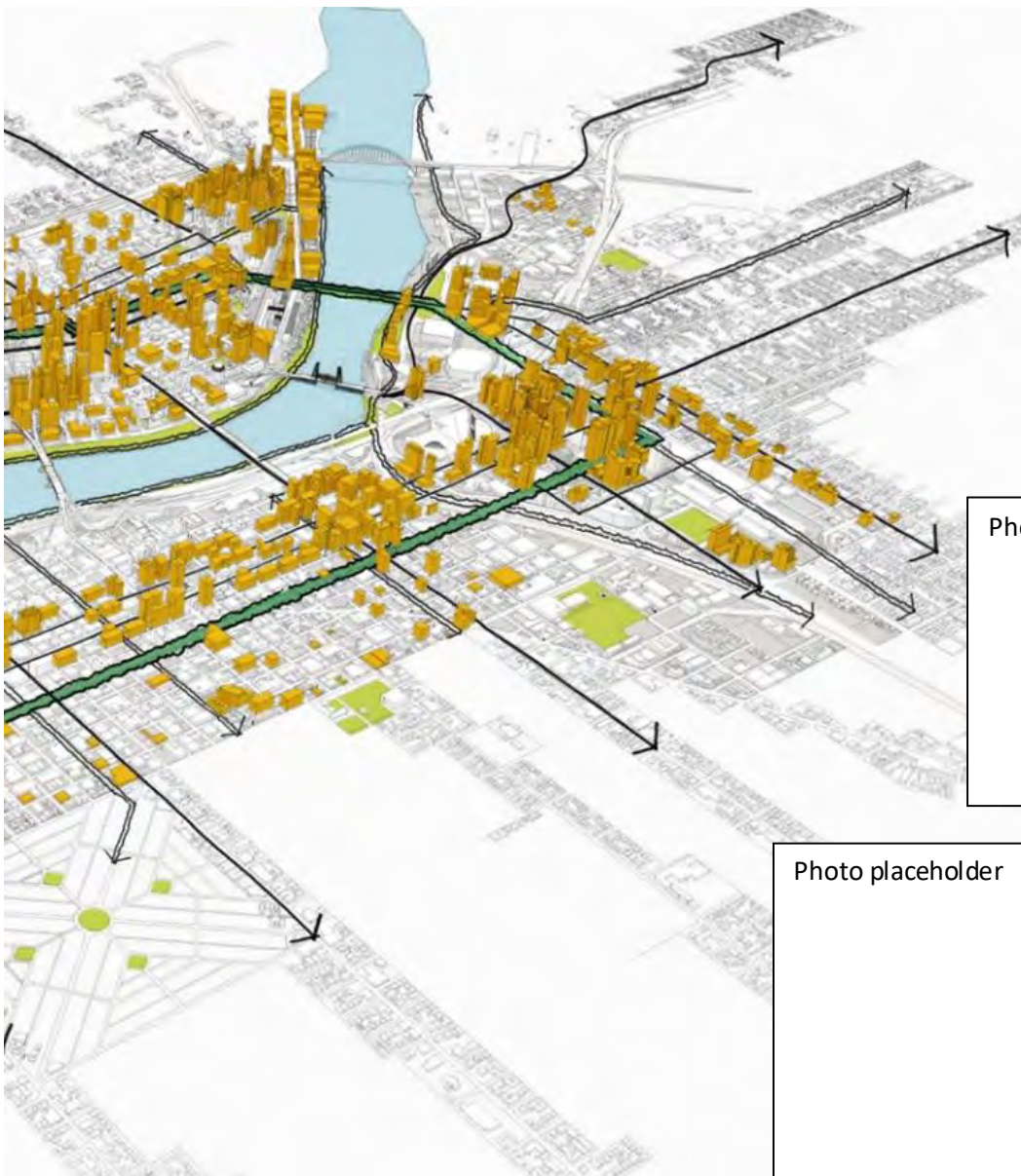


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Guiding Principles

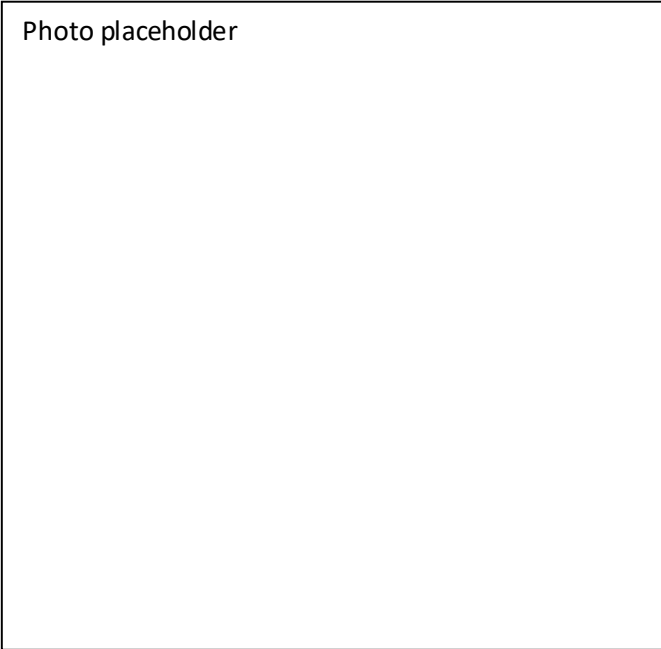
The influence of Portland’s Comprehensive Plan Guiding Principles is seen throughout the Central City 2035 Plan as they shape many of the individual policies and projects.

- 1. Economic prosperity.** Support a low-carbon economy and foster employment growth, competitiveness and equitably distributed household prosperity.

A robust and resilient regional economy, thriving local businesses and growth in living-wage jobs are all critical to ensuring broad community prosperity. As the region’s high-density employment center on the Willamette River and home to numerous institutions driving innovation, the Central City will continue to play a key role in moving all Portlanders toward economic prosperity.

- 2. Human health.** Avoid or minimize negative health impacts and improve opportunities for Portlanders to lead healthy, active lives.

The Central City’s physical environment has a significant effect on health. The area’s density lends itself to the formation of distinctive and complete neighborhoods that make it easier for people to have active lifestyles and integrate exercise into their daily lives. Its proximity to the Willamette River and stunning surrounding landscape allows people to experience and interact with nature. Connecting neighborhoods with City Greenways reduces automobile dependence and related household costs, improving personal and environmental health, and lowering carbon emissions and air pollution.



- 3. Environmental health.** Weave nature into the city and foster a healthy environment that sustains people, neighborhoods, fish and wildlife. Recognize the intrinsic value of nature and sustain the ecosystem services of Portland’s air, water and land.

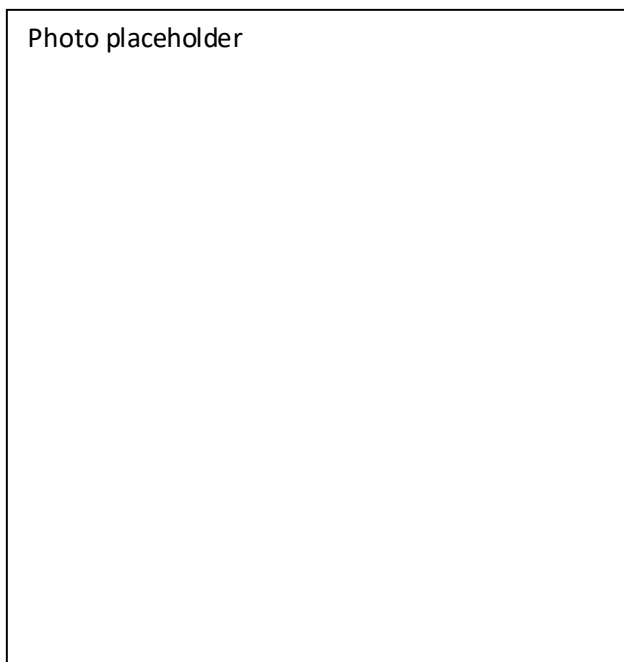
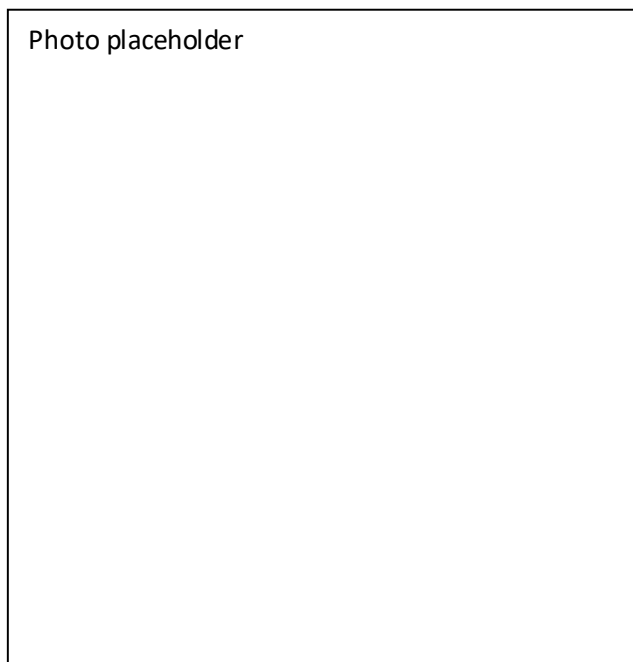
The Central City has a wealth of natural resources. The Willamette River, streets, parks, trails, open spaces and natural areas link people and wildlife to places around the Central City and surrounding areas. Portland’s Central City will continue to model how a city center can become more livable, prosperous and attractive through urban development that embraces environmental health. Strategies include expanding the public open space system; protecting urban habitat corridors; supporting nature-friendly infrastructure; increasing mobility and access to services through low-carbon transportation options; and avoiding, minimizing, and mitigating the impact of development on natural resource systems.

4. **Equity.** Promote equity and environmental justice by reducing disparities, minimizing burdens, extending community benefits, increasing the amount of affordable housing, affirmatively furthering fair housing, proactively fighting displacement, and improving socio-economic opportunities for under-served and under-represented population. Intentionally engage under-served and under-represented populations in decisions that affect them. Specifically recognize, address and prevent repetition of the injustices suffered by communities of color throughout Portland’s history.

All communities need the ability to shape their own present and future. Because the Central City functions as a center for the City of Portland and the entire region, policies and decisions here affect Portlanders across the region: all Portlanders are Central City stakeholders. Providing access to opportunities and minimizing burdens for under-served and under-represented populations is crucial to creating an inclusive Central City and an equitable City of Portland.

5. **Resilience.** Reduce risk and improve the ability of individuals, communities, economic systems, and the natural and built environment to withstand, recover from, and adapt to changes from natural hazards, human-made disasters, climate change and economic shifts.

Resilience means strengthening our people, neighborhoods, businesses, and built and natural infrastructure to withstand challenges – environmental, economic and social – that may result from major hazardous events. The Central City’s multi-pronged strategy directs growth in lower-risk areas; supports investment to reduce risk, educate and prepare residents; encourages a low-carbon economy and integrates resilience into natural systems.



The Big Ideas

Long-range planning encourages creativity and aspirational thinking to build a framework/set direction for the physical development of a city. Six “big ideas” for the Central City emerged during the planning process. These helped inform the development of urban design, land use and transportation concepts as well as the plan’s goals, policies and implementation actions.

1. Civic and Cultural Center

City centers are more than just centers of commerce. They are barometers of the regional economy; incubators of great ideas and invention, reflections of the community’s history and social conditions, and forums to showcase local cultural diversity and artistic expression. Portland’s Central City encompasses a broad array of venues, historical and cultural assets, and features that make it the heart of the region’s civic and cultural life.

Preserving and enhancing these unique assets is crucial for maintaining the region’s outstanding livability because they encompass much of what gives Portland its unique character and appeal. As the city and region continue to grow and diversify, the Central City must adapt to ensure it meets the needs of Portland’s ever growing and changing population.



2. Innovation Quadrant

The Innovation Quadrant represents an exciting opportunity to capitalize on synergies between Portland’s educational institutions, the private sector and workforce development providers. Portland State University (PSU) and Oregon Health & Science University’s (OHSU) Marquam Hill and Schnitzer campuses are included in the quadrant on the west side of the Willamette River. On the river’s other side, the Central Eastside Industrial District, the Oregon Museum of Science and Industry (OMSI), Portland Opera and Portland Community College (PCC) form the

quadrant’s boundaries. Strengthening partnerships and improving connectivity between these institutions and private sector employers will foster creativity and spur economic development, creating a regional center of innovation.



3. Focus on the Willamette River

More than anything else in the regional landscape, the Willamette River has influenced the development of Portland and its urban center. The river is core to the city's identity, image and place in the region. Throughout the planning process, a strong and universal desire was expressed to strengthen the Central City's tie to its central feature.

The reasons varied, but topping the list: greater environmental protection; a need to better celebrate the river's cultural and historical significance; and increased economic and recreational use of the waterfront and the river itself. These interests can compete with one another so careful planning will be required to balance them across time and place.



4. The "Green Loop"

Envisioned as an easy and smooth pathway through the Central City's parks and open spaces, the "Green Loop" is a conceptual multi-use pedestrian and bicycle path that will invite residents, employees and visitors to experience Portland's urban core in an entirely new way.



The six mile path will invite people to take a break from work. Walk, run or ride among trees and in beautiful parks. Enjoy restaurants and shops. Or just breathe fresh air, take in the city and get some exercise.

It will be the City's "Urban Promenade," promoting walking, biking and connecting people to light rail and streetcar, helping Portlanders access hard-to-reach places. It will draw people from around the region to a different kind of recreational destination, an urban trek through the city — safe, green, active, vibrant and fun for all ages and abilities.

5. Resilient Central City

Resilience in an urban context means many different things. A resilient Central City is one that improves the ability of individuals, communities, economic systems and the natural and built environment to recover from natural hazards and human-made disasters, climate change, and economic shifts. Better resilience is achieved through a multi-pronged strategy.

Natural Disaster Preparedness

Portland's most critical risk is from an earthquake, but the city is also vulnerable to other natural hazards including floods, landslides and urban wildland fire. The City uses infrastructure investments and land use planning policies to eliminate risk where possible, and to mitigate risk where it can't be avoided, often partnering with other agencies as well as the private sector.

Climate Change Mitigation

Climate change will increase Portland's risk for disaster. The city will likely be characterized by hotter, drier summers with more heat waves (increasing the urban heat island effect and wildfires) and warmer, wetter winters (increasing the risk of flooding and landslides). A reduction in carbon emissions from existing and new buildings, transportation systems and infrastructure will help mitigate the global challenge of climate change. A new generation of innovative new construction and adaptive reuse, technologies, green infrastructure and energy systems can reinforce the Central City's role as a global model for low-carbon, sustainable development.

Employment Diversity

The Central City contains 35 percent of the City's jobs and 13 percent of the region's jobs. It is important that the benefits of this employment density are shared and that opportunities are available for individuals with different interests, skill sets and education levels. A diverse workforce is better able to withstand economic downturns.

Housing Affordability

The Portland Plan states that by 2035, no less than 15 percent of the City's total housing stock should be affordable to low-income households, including seniors on fixed incomes and persons with disabilities. Currently, nearly a third of housing in the Central City is affordable and this plan aims to maintain that share as new development occurs. Housing affordable to all residents contributes to a sustainable, inclusive and diverse community, with strong social networks crucial for preparation and recovery.

Info-graphic placeholder

6. Street Hierarchy & Development Character

The Central City's streets and rights-of-way account for 40 percent of the land area — an untapped opportunity to meet multiple objectives. Compared with other U.S. downtowns, our streets are narrow, but we have far more of them.

This plan calls for being more intentional about which streets should be shopping streets, which should be quieter and greener, and which ones are important for pedestrians, bicycles, transit vehicles, freight, cars and trucks. It also calls for certain streets, regardless of type, to be classified as view streets on which existing public views will be preserved through development standards restricting heights or requiring setbacks or setbacks.

Street and development concepts include the following types of streets:

Retail Commercial

These are busy, continuous streets with retail activity throughout the day, evenings and weekends. They provide for multi-modal access for vehicles, transit, bicycles and pedestrians. Ground-floor retail uses are required or strongly encouraged. Multi-level or specialized retail is encouraged along with green features that support retail street vitality.



Boulevard

These are busy, continuous streets with emphasis on access and flow that provide multimodal access and circulation for vehicles, transit, bicycles and pedestrians. The streetscape includes visible green features. Ground floor retail uses are allowed and encouraged at key locations.



Flexible

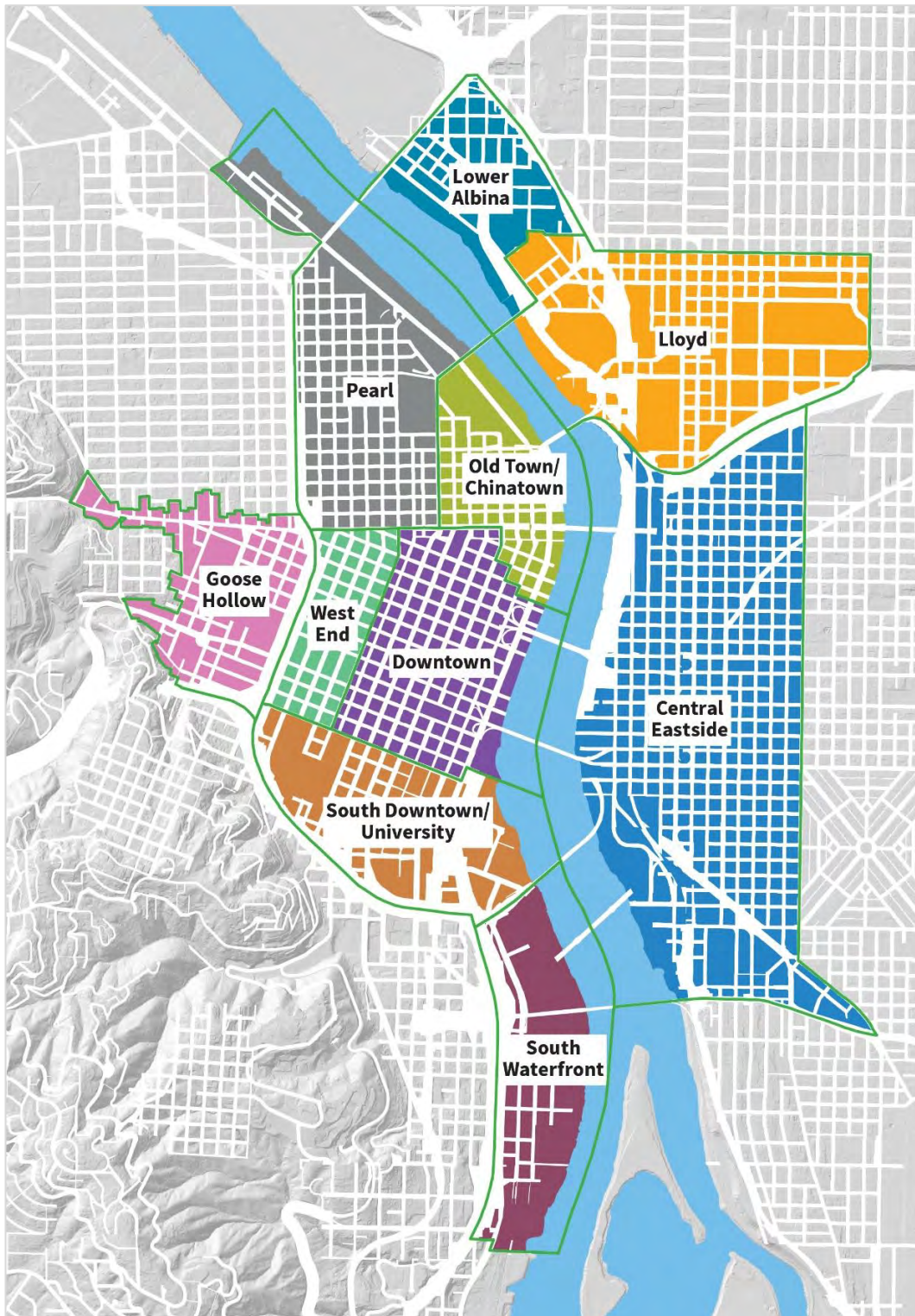
These are highly specialized localized street designs responsive to community needs and adjacent land uses and development that could be in public or private ownership. Key public features include low volume, low speed quiet streets that are part of a connected, primarily pedestrian and local bicycle network. Visible green features are encouraged.



PHOTO COLLAGE

B. INTRODUCTION TO THE CENTRAL CITY SUBDISTRICTS

The Central City is composed of ten vibrant subdistricts, each with its own unique character, assets and opportunities. The following section introduces subdistrict visions, potential growth scenarios and urban design concepts.



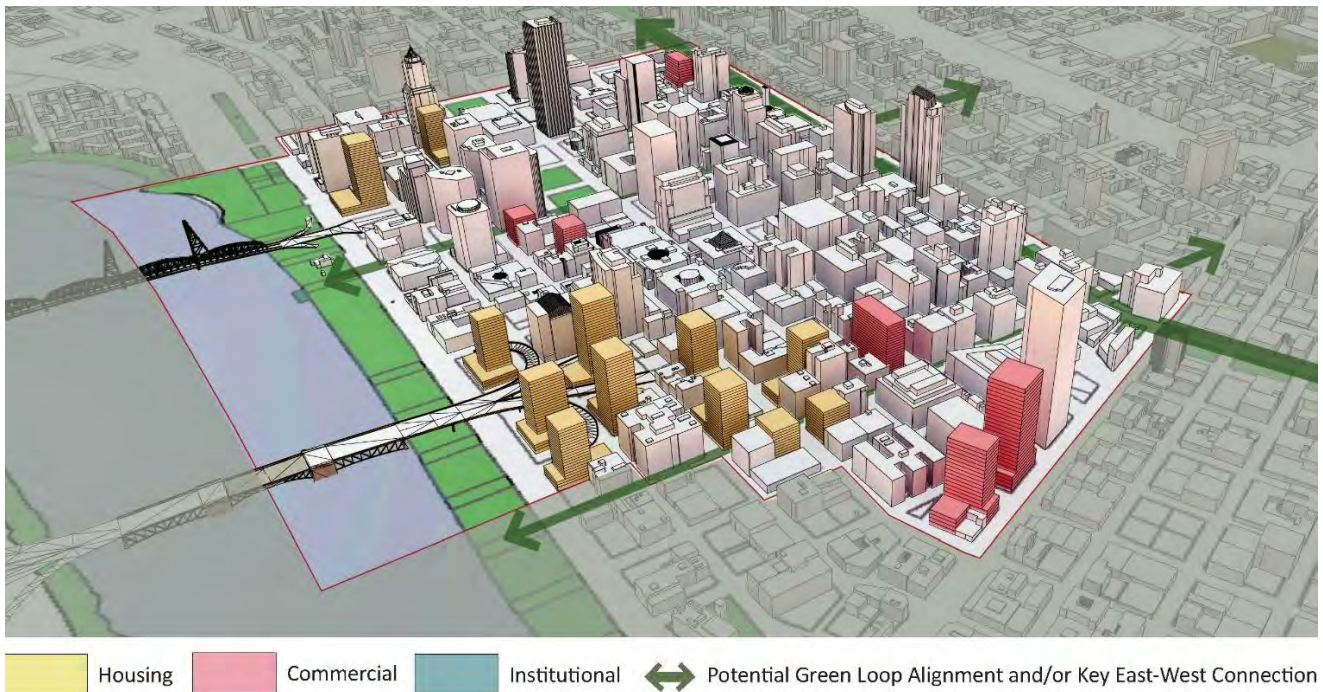
Downtown

Downtown’s tall buildings, retail center, Pioneer Courthouse Square, museums, performance halls and civic buildings, the Willamette River and Waterfront Park, and the historic bridges are iconic images of Portland. Downtown has been shaped by the settlement era, commerce, trade, urban renewal, urban flight and renewed efforts at revitalization and residential development. Downtown can continue to be the gathering place for Portlanders and visitors, as well as a center for innovation and exchange.



2035 Vision

Downtown is the economic and symbolic heart of the region and the preeminent location for office employment, retail, tourism, arts and culture, entertainment, government, urban living, and ceremonial activities. It is the most intensely urban and identifiable subdistrict in Portland’s Central City, at the center of the region’s multimodal transportation system, and anchored by the Willamette River and signature public spaces.



This rendering illustrates a possible development scenario meeting targets for 2,500 new housing units and 7,000 new jobs in the district

Key Elements of the Subdistrict Urban Design Concept

- Extend the Retail Core to the north and to the riverfront
- Establish a clearer set of east-west connections
- Enhance the character of Naito Parkway
- Support a future “Green Loop” alignment along the South Park Blocks



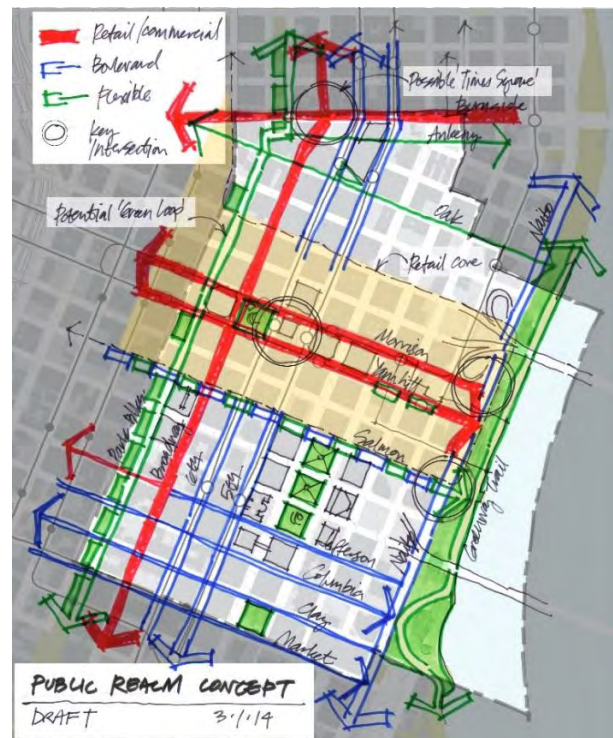
Places and Attractions Concept Diagram

Downtown has three identifiable areas, one along the waterfront, one that follows the office core, and one along the park blocks. Because much of the subdistrict is already built, it is anticipated that major new development will be limited to isolated infill sites. There are, however, more redevelopment opportunities along Naito Parkway, particularly at the bridgeheads. The darker the circle, the more change is expected in this part of the district.

Public Realm Concept Diagram

The public realm concept describes the character of existing and potential new public spaces in the district – its system of streets, parks and other open spaces. It locates existing parks and open spaces, suggests possible sites for new ones, and identifies possible connections between them.

It also illustrates a “street hierarchy and development character” concept for the district – a way of being more intentional about the desired design and function of both the streetscape and the ground floors of adjacent buildings. It highlights the desired signature retail/commercial character of SW Morrison, SW Yamhill, SW Broadway, SW Alder and West Burnside; signature boulevard character of 5th, 6th and Naito Parkway; and signature boulevard/flexible character of SW Salmon; and the flexible character of SW Oak and SW Ankeny.



West End

The West End serves as a downtown residential neighborhood. Its urban character is shaped by numerous historic buildings, new housing projects, many restaurants and retail activities as well as a strong relationship with the South Park Blocks and Cultural District. However, the area also contains a number of surface parking lots. Over the last decade the West End has established stronger ties with Portland State University to the south and the Pearl District to the north, effectively stretching the retail core from downtown to the Brewery Blocks.

2035 Vision

The West End is a thriving, mixed-use urban residential neighborhood with a diverse and distinctive architectural character, a range of building ages and scales and a wealth of historical, cultural, institutional and open space assets. The subdistrict benefits from its pedestrian orientation and central location, with excellent multimodal access to Portland State University, the South Park Blocks, Goose Hollow and Providence Park, the Pearl and the Downtown retail core.

The West End hosts an attractive mixture of urban, family-friendly residential development with a range of scales, types and amenities that accommodate a socio-economically diverse population. It is a true mixed-use environment, where residents live in harmony with successful retail, cultural and office development.



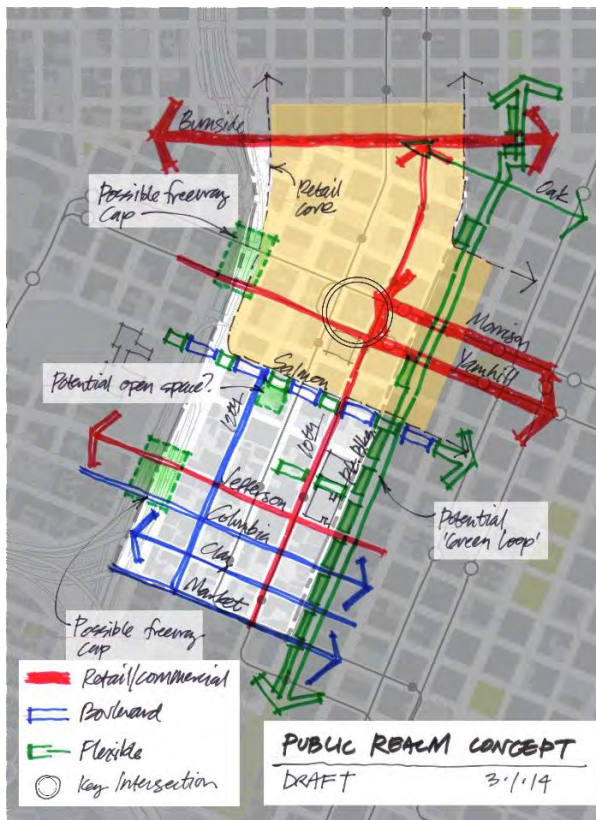
This rendering illustrates a possible development scenario meeting targets for 3,000 new housing units and 2,000 new jobs in the district

Key Elements of the Subdistrict Urban Design Concept

- Strengthen Jefferson main street
- Integrate new development with historic fabric
- Explore freeway capping opportunities to better connect with Goose Hollow
- Highlight the MAX/Streetcar interchange as a civic place
- Re-envision SW 12th Avenue as a boulevard

Places and Attractions Concept Diagram

The West End has a predominantly residential character south of Salmon and a more mixed use character north of the street. While there is a considerable amount of redevelopment possible in the district, there is also a collection of existing buildings, many of which are older and add architectural texture and variety to the district. The darker the circle, the more change is expected in this part of the district.



Public Realm Concept Diagram

The public realm concept describes the character of existing and potential new public spaces in the district – its system of streets, parks and other open spaces. It locates existing parks and open spaces, suggests possible sites for new ones, and identifies possible connections between them.

It also illustrates a “street hierarchy and development character” concept for the district – a way of being more intentional about the desired design and function of both the streetscape and the ground floors of adjacent buildings. It highlights the desired retail/commercial character of SW 10th Avenue, Jefferson and Yamhill streets and boulevard character of Morrison, Columbia, Clay and Market streets and 12th Avenue.

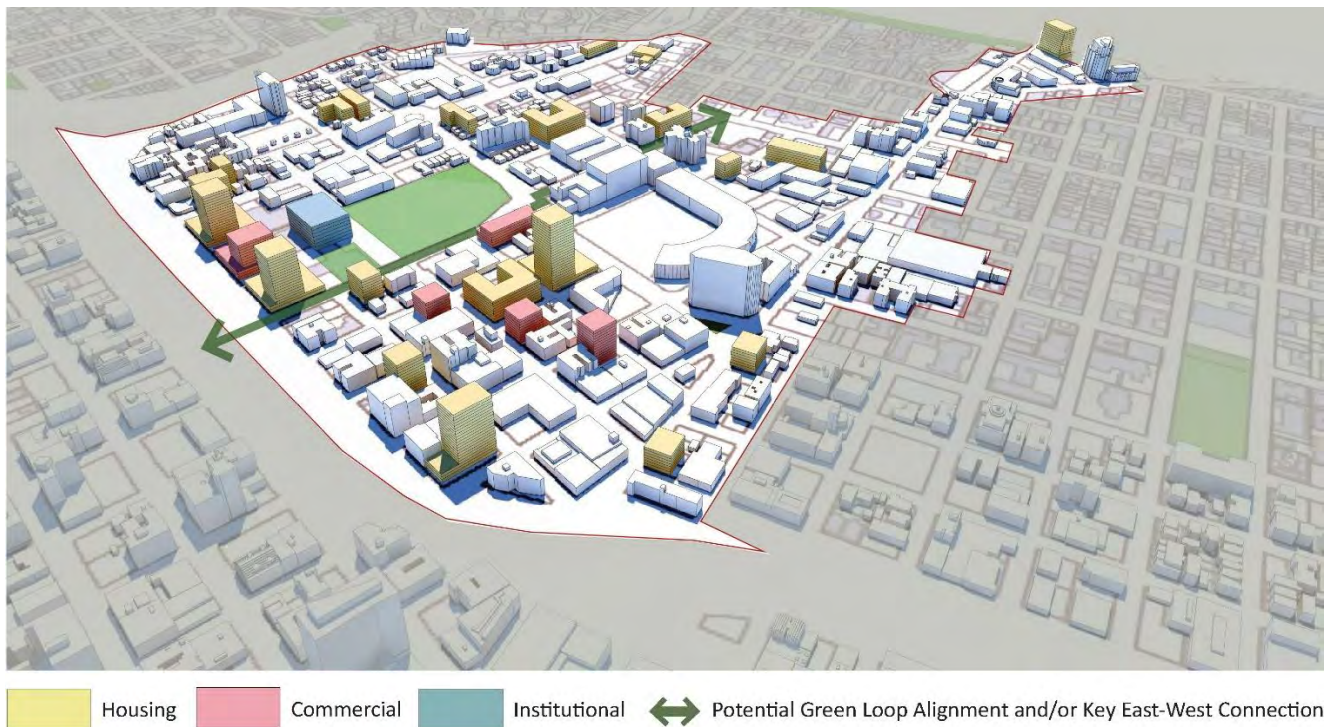
Goose Hollow

Goose Hollow is a mixed-use district with diverse residential, commercial and institutional uses. There is an eclectic mix of building types and ages, including a number of historic landmarks. Housing in the district ranges from high-rise apartments and condominiums to single-family homes. Goose Hollow is home to several large institutions which attract high volumes of people to the area. With light rail running through the heart of Goose Hollow, it is highly accessible.



2035 Vision

Goose Hollow is a family-friendly urban community with thriving neighborhood businesses and excellent access to downtown, Portland State University, the Northwest District and Washington Park. The subdistrict’s major attractions, including Providence Park, Lincoln High School, the Multnomah Athletic Club and religious institutions, exist in harmony with surrounding mixed-use development, and attract visitors from all over the region to dine, shop, and play in Goose Hollow. Bordering Washington Park, the Vista Bridge and West Hills, the subdistrict is known for its natural beauty.



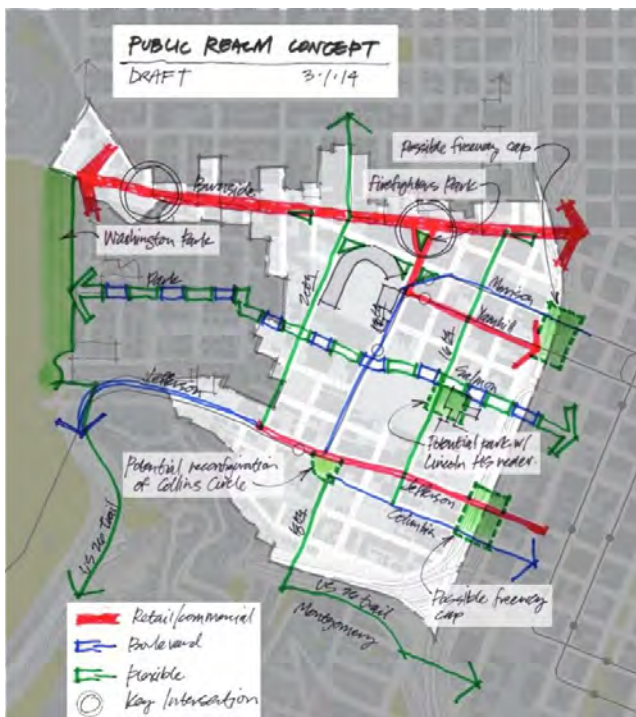
This rendering illustrates a possible development scenario meeting targets for 3,000 new housing units and 2,000 new jobs in the district

Key Elements of the Subdistrict Urban Design Concept

- Develop Jefferson Street as the center of a residential community
- Improve the character and create new places along West Burnside
- Create new public spaces at Lincoln High School
- Strengthen the identity of SW Salmon as a key east-west green corridor
- Explore freeway capping opportunities across I-405

Places and Attractions Concept Diagram

Goose Hollow has four distinct areas: West Burnside, the Jefferson Main Street area, a central area with Lincoln High School and Providence Park, and the so-called “Hollow” area just across I-405 from the West End. Future redevelopment of the Lincoln High School site could add needed north-south connectivity between the Jefferson Main Street and Hollow areas, as today only 14th and 18th go through. The circles indicate a relative “degree of change:” the darker the circle, the more change is expected in that part of the district.



Public Realm Concept Diagram

The public realm concept describes the character of existing and potential new public spaces in the district – its system of streets, parks and other open spaces. It locates existing parks and open spaces, suggests possible sites for new ones, and identifies possible connections between them.

It also illustrates a “street hierarchy and development character” concept for the district – a way of being more intentional about the desired design and function of both the streetscape and the ground floors of adjacent buildings. It highlights the desired retail/commercial character of West Burnside, SW Yamhill, and SW Jefferson; unique flexible/boulevard character of SW Salmon; and flexible character of SW 20th and 16th.

The Pearl

Characterized by a mix of housing, employment, retail and arts and entertainment establishments, the Pearl is supported by a multimodal transportation network, a system of parks, affordable and market rate housing, and a growing job base. The area combines new architecture within the context of its industrial past, as many former warehouse and industrial service buildings have been repurposed for different uses. The residents of the Pearl are some of the most diverse in the Central City and include people at all income levels, families with children, seniors and students.



2035 Vision

A highly livable and multimodal urban neighborhood, the Pearl is a culturally and ethnically diverse, family-friendly complete community, with excellent access to public amenities including the Willamette River, retail services, cultural institutions and public transportation.

The subdistrict is a twenty-first century model of social, environmental, and economic sustainability. Its industrial past and historical assets, high quality mixed-use development, exciting urban riverfront, shops, art galleries and restaurants attract visitors from all over the world, creating an ideal setting for its numerous creative-sector businesses.



Legend: Housing Commercial Institutional Potential Green Loop Alignment and/or Key East-West Connection

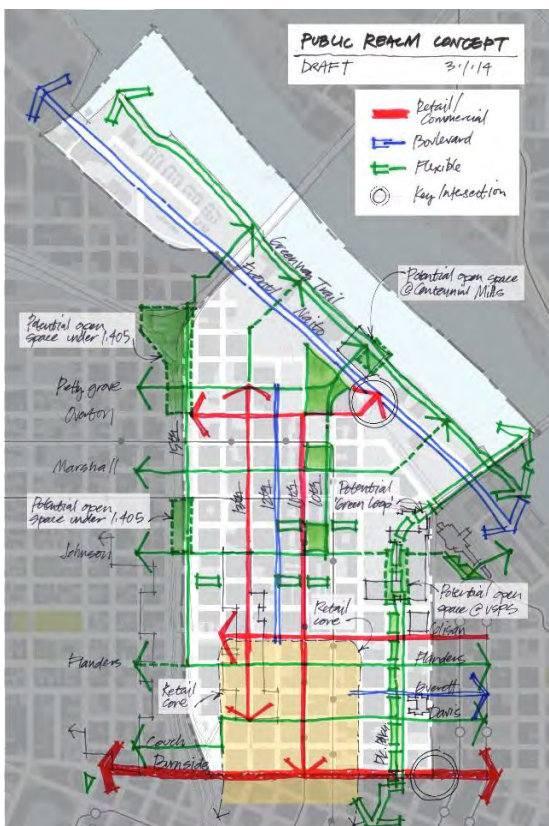
This rendering illustrates a possible development scenario meeting targets for 5,000 new housing units and 4,000 new jobs in the district

Key Elements of the Subdistrict Urban Design Concept

- Extend the retail core to NW Glisan
- Explore open spaces uses for parcels under I-405
- Redevelop the US Postal Service site for high density employment and signature city attractions
- Create a unique urban riverfront with Centennial Mills serving as the centerpiece
- Develop the “Green Loop” through the North Park Blocks to the Broadway Bridge

Places and Attractions Concept Diagram

The Pearl has several different subareas: the North Park Blocks, the Pearl Waterfront, a change in character and form north and south of NW Lovejoy Street, and the North Waterfront district beyond the Fremont Bridge. The southern part of the Pearl District is more developed, with the redevelopment areas on smaller infill sites and around the edges. The darker the circle, the more change is expected in this part of the district.



Public Realm Concept Diagram

The public realm concept describes the character of existing and potential new public spaces in the district – its system of streets, parks and other open spaces. It locates existing parks and open spaces, suggests possible sites for new ones, and identifies possible connections between them.

It also illustrates a “street hierarchy and development character” concept for the district – a way of being more intentional about the desired design and function of both the streetscape and the ground floors of adjacent buildings. It highlights the desired retail/commercial character of NW 11th, 13th, Lovejoy, and Glisan; as well as the desired flexible character of NW Davis, Flanders, Johnson, Marshall and Pettygrove.

Old Town/Chinatown

The site of Portland’s earliest commercial development, the Old Town/Chinatown area is rich in culture and historic buildings that evoke the city’s early years. More than 40 percent of the area lies within two historic districts: the Skidmore/Old Town Historic District and New Chinatown/Japantown Historic District. Skidmore/ Old Town is home to one of the largest collections of 19th century commercial cast iron buildings in the country and is designated as a National Historic Landmark. New Chinatown/Japantown commemorates Portland’s 19th and early 20th century Asian heritage. NW Broadway runs through the western portion of the area, connecting downtown to iconic Union Station and the Broadway Bridge.



2035 Vision

Old Town/Chinatown is a vibrant, resilient, 24-hour neighborhood rooted in a rich cultural and historical past. The subdistrict’s two thriving historic districts, numerous multi-cultural attractions and higher education institutions foster a thriving mix of office employers, creative industry start-ups, retail shops and a range of entertainment venues, restaurants and special events.

The subdistrict has a balanced mix of market rate, student and affordable housing. Its social service agencies continue to play a critical public health role within the Portland region. The subdistrict has a mix of human-scaled, restored historic buildings and contextually sensitive infill development. It is well connected to the rest of the Central City and the region through excellent multi-modal transportation facilities and safe and attractive street connections to adjacent neighborhoods and an active riverfront.



Housing
 Commercial

←
→
 Potential Green Loop Alignment and/or Key East-West Connection

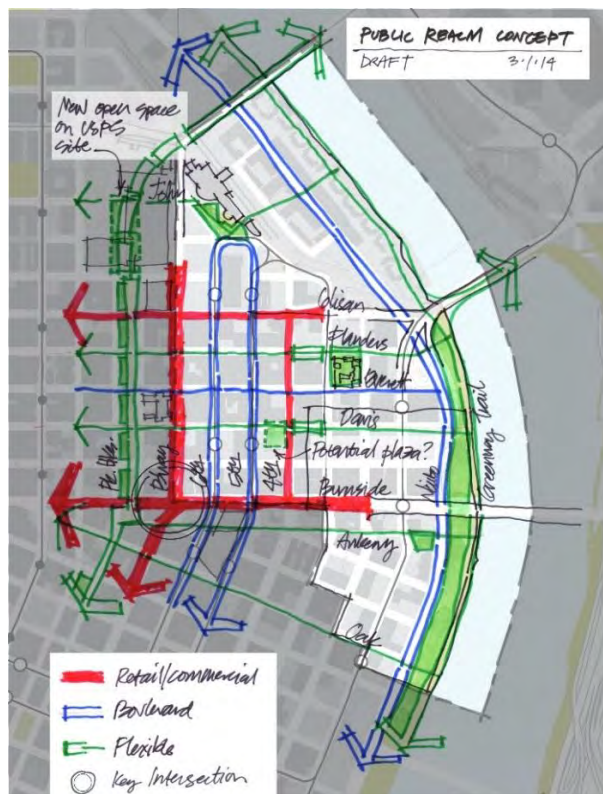
This rendering illustrates a possible development scenario meeting targets for 2,000 new housing units and 3,000 new jobs in the district

Key Elements of the Subdistrict Urban Design Concept

- Highlight the intersection at Broadway and Burnside
- Strengthen east-west connections between the North Park Blocks and the river
- Explore development of a multi-cultural history center
- Create a 4th Avenue main street

Places and Attractions Concept Diagram

Old Town/Chinatown has several distinct subareas: the Skidmore/Old Town Historic District to the south, the New Chinatown/Japantown Historic District flanked by the Glisan Corridor to the north and the Broadway area to the west. The riverfront area to the north is largely built out as a residential community, and the most change is likely to occur along NW Glisan and around Union Station. While this area already features some signature public attractions, it could benefit from new ones, including a possible Multi-Cultural History Center and a new public space at the intersection of Broadway and W Burnside. The circles indicate a relative “degree of change:” the darker the circle, the more change is expected in that part of the district.



Public Realm Concept Diagram

The public realm concept describes the character of existing and potential new public spaces in the district – its system of streets, parks and other open spaces. It locates existing parks and open spaces, suggests possible sites for new ones, and identifies possible connections between them.

It also illustrates a “street hierarchy and development character” concept for the district – a way of being more intentional about the desired design and function of both the streetscape and the ground floors of adjacent buildings. It highlights the desired retail/commercial character of W Burnside, NW Broadway, NW Glisan and

NW 4th; boulevard character of NW 5th and 6th, Naito Parkway and NW Everett; and flexible character of NW Flanders and Davis.

Lower Albina

Lower Albina is primarily an industrial district, with a working harbor area, an important living-wage job base and a small mixed-use historic area along N Russell Street. Freight movement by trucks and trains is an important part of the economic well-being of Lower Albina. The access route to I-5 South and I-84 is NE Broadway to the Wheeler on-ramp. Interstate Avenue is the major north/south arterial in Lower Albina and is used for automobiles, trucks, light rail, transit, bicycles, and pedestrians. Russell Street is the main east-west connection. The nearby Union Pacific rail yard is classified as a Freight District. Planning efforts from the last few decades in Lower Albina have focused on retaining and enhancing the industrial and employment functions of the district.

2035 Vision

Lower Albina is a strong industrial and employment area supported by the working harbor, providing diverse employment and development opportunities. The historic Russell Street is vibrant and rich with mixed-use and commercial activities that are compatible with nearby industrial and employment uses.

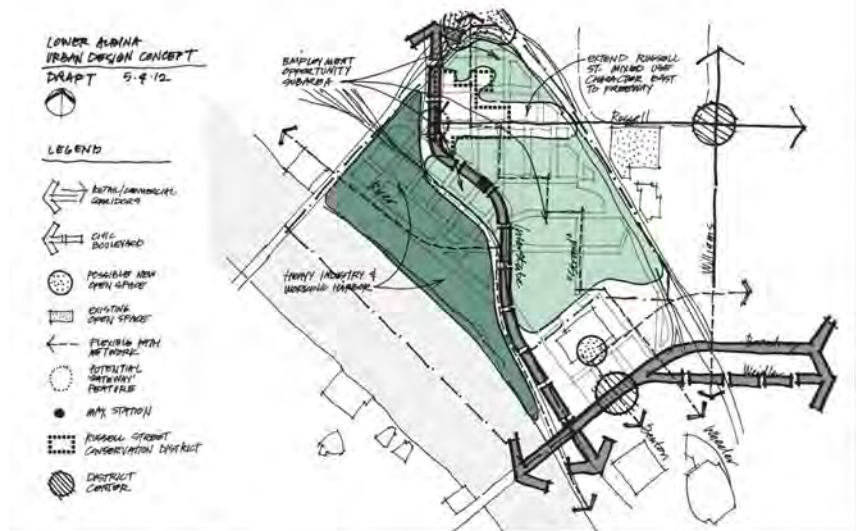
In progress

Key Elements of the Subdistrict Urban Design Concept

- Celebrate historic Russell Street and expand retail and commercial activity east, reestablishing the historic connection between Lower Albina and the Vancouver/Williams corridor
- Preserve the subdistrict industrial character while adding flexibility for some commercial uses
- Support regionally-significant heavy industry and the working harbor

Places and Attractions Concept Diagram

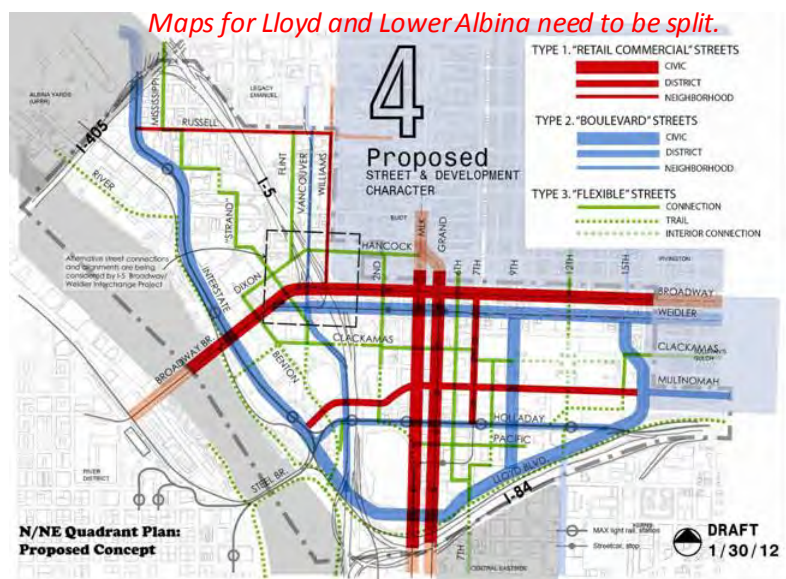
Lower Albina has three distinct subareas: the heavy industrial and working harbor area west of Interstate Avenue (99W), the general industrial area east of Interstate Avenue and the historic Russell Street mixed use area.



Public Realm Concept Diagram

The public realm concept describes the character of existing and potential new public spaces in the district – its system of streets, parks and other open spaces. It locates existing parks and open spaces, suggests possible sites for new ones, and identifies possible connections between them.

It also illustrates a “street hierarchy and development character” concept for the district – a way of being more intentional about the desired design and function of both the streetscape and the ground floors of adjacent buildings. It highlights the retail/commercial character of NE Russell; the boulevard character of Interstate Avenue; and the flexible character of the “strand” connection.



Lloyd

The Lloyd District is characterized by a number of large region-serving facilities, including the Rose Garden, Oregon Convention Center and the Lloyd Center shopping mall, as well as a concentration of large office buildings and neighborhood serving retail on the eastern portion of NE Broadway. The Lloyd District has been the focus of a number of planning efforts in the past few decades, many seeking to build on the district’s existing assets, such as its regional transportation connections and concentration of regionally significant event facilities. The Lloyd District has also been identified as an “EcoDistrict”. The district contains an enormous amount of development potential and unique opportunities for placemaking. As the district redevelops, there will also be opportunities to integrate nature into a densely developed urban area and to become a model of urban sustainable development.



2035 Vision

Lloyd is an intensely urban eastside center of the Central City that capitalizes on the subdistrict’s regional attractions, high quality transit and connections. It is one of the most vital and livable subdistricts in the Central City, with a strong employment base, successful residential communities and a variety of amenities. The subdistrict is a model of sustainability and resilience, complete with well-designed open space, streets, and high-performance green buildings and infrastructure.



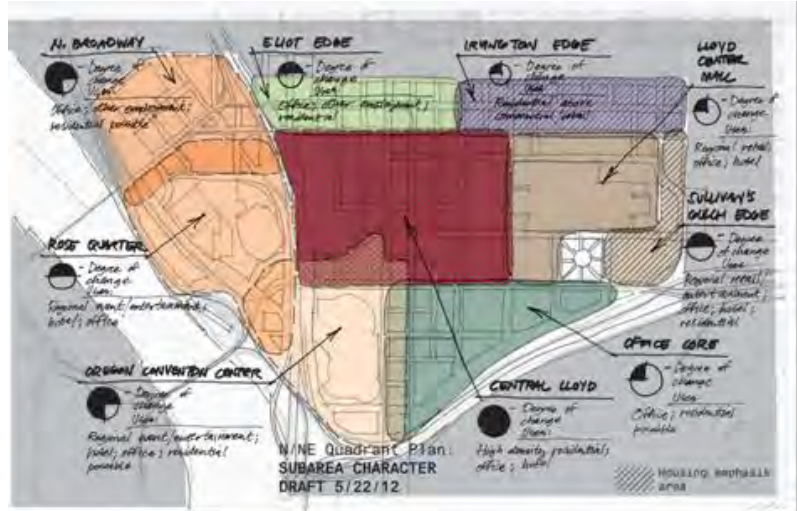
This rendering illustrates a possible development scenario meeting targets for 5,000 new housing units and 10,000 new jobs in the Lloyd District.

Key Elements of the Subdistrict Urban Design Concept

- Create an east-west open space spine
- Promote high-density mixed-use development and supportive amenities in the core
- Encourage sustainable development including green buildings, green infrastructure and habitat enhancement
- Support the development of unique gateways into and out of the subdistrict

Places and Attractions Concept Diagram

This diagram illustrates the types of uses planned for different areas of Lloyd, as well as the degree of change expected in those areas as the subdistrict develops. For example, major redevelopment with high-density, mixed-use development is envisioned within the Central Lloyd area, which is expected to have the highest degree of change. Other areas that are currently well established, such as the Office Core and Irvington edge, are expected to have a relatively low degree of change. This diagram also identifies “housing emphasis areas” where development of new housing is a priority. The circles indicate a relative “degree of change:” the darker the circle, the more change is expected in that part of the district.

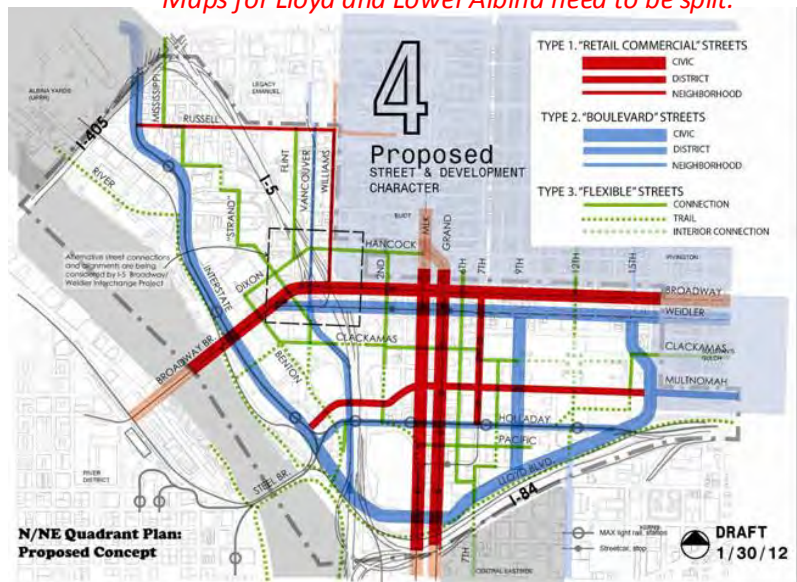


Public Realm Concept Diagram

The public realm concept describes the character of existing and potential new public spaces in the district – its system of streets, parks and other open spaces. It locates existing parks and open spaces, suggests possible sites for new ones, and identifies possible connections between them.

This concept also illustrates a “street hierarchy and development character” concept for the district – a way of being more intentional about the desired design and function of both the streetscape and the ground floors of adjacent buildings. It highlights the desired retail/commercial character of NE Broadway, MLK and Grand; boulevard character of NE Weidler, Interstate Avenue, NE Lloyd and NE 15th; and flexible character of NE Clackamas, NE 2nd, 6th and 12th.

Maps for Lloyd and Lower Albina need to be split.



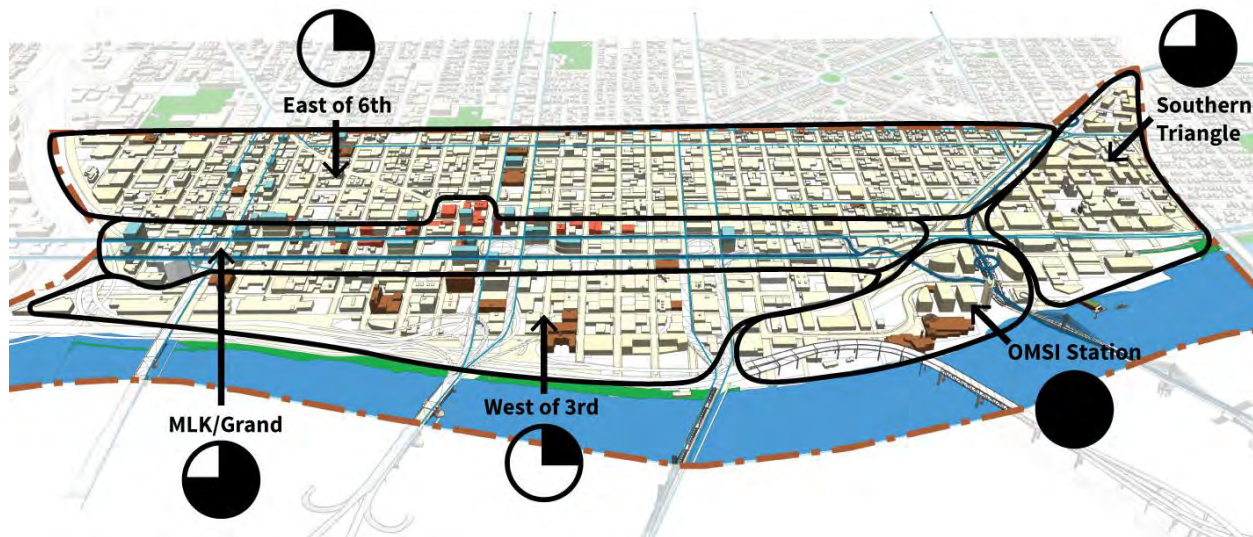
Central Eastside

The Central Eastside is one of the most dynamic and evolving parts of Portland’s Central City. The subdistrict has had a unique mix of industrial, commercial and residential uses since its initial development in the late 19th century – a pattern that continues today with new residential and office buildings being built along historic main streets with surrounded by the rehabilitation of older warehouses for manufacturing and compatible industries.

[Illustration: Photo featuring Burnside Bridgehead looking southwest from corner of MLK and Davis at the Yards project going up next to Towne Storage rehab and the EOS area behind it.]

Expected Growth

The Central Eastside is expected to grow by 2,500 households and 9,000 jobs by 2035, for a total of 3,500 households and 26,000 jobs. As shown on the diagram below, most of this change is expected to occur in the existing MLK/Grand mixed use corridor, the new OMSI Station Area, and the Southern Triangle, where zoning, large underutilized parcels, and transit access can accommodate more dense development.



Key Directions

The Central City 2035 Plan includes goals, policies and actions that will guide the continued development of the Central Eastside. This direction was developed through a two year public process.

[Illustration: Use an image of trucks loading or manufacturing from the building tour.]

Maintain the Industrial Sanctuary. Preserve the highly successful industrial sanctuary while allowing for higher employment densities by increasing flexibility for industrial and industrial office users.

[Illustration: Show improved Clay Street with bikes and freight or Green Loop rendering.]

Strengthen the Transportation System for All. Promote safe and easily identifiable routes that accommodate local freight service and prioritize and promote active transportation options that do not diminish freight operations.

[Show aerial of the vacant lands near the OMSI Station and new buildings across the river.]

Pursue the Innovation Quadrant. Support the unique opportunity that exists around the growing momentum in South Waterfront associated with OHSU's and PSU's new partnerships and the economic development potential embedded in the \$1 billion Knight Cancer Research Challenge. Recognize manufacturing, industrial services and other Central Eastside sectors as part of the Innovation Quadrant.

[Illustration: Photo of new and old development along Burnside such as bSide 6]

Activate the Mixed Use Corridors. Utilize the development potential along main street corridors already zoned for high density, mixed use development, such as MLK/Grand, East Burnside, SE Morrison and Belmont.

[Illustration: Show Pelett Park rendering and/or Morrison Viaduct rendering.]

Enhance the Livability of the District. Support quality of life and positive health outcomes by increasing the variety of public amenities in the Central Eastside that will enhance its livability for new and existing businesses, residents, and visitors. This includes pursuing opportunities to provide a variety of open space and recreational experiences for workers, residents, and visitors

[Illustration: Show rendering or other example of what the OMSI station could look like]

Create a Regional Waterfront Destination. Focus on creating a vibrant riverfront destination that includes improved habitat as well as attractors for people such as parks, beaches, retail, river transportation and visitor amenities.

South Waterfront

Less than a decade ago South Waterfront was characterized by vacant brownfield sites and underutilized buildings. Now the district is home to more than 1,300 housing units, a growing mix of jobs, new parks and greenway amenities, and will soon be connected with the most diverse multimodal transportation network in the state. Oregon Health Science University is beginning to develop the Schnitzer Campus, a science and high tech research university. A public/private development partnership is also underway for the Zidell properties, which includes the potential for new parks, greenway connections, housing and office development.



2035 Vision

The southern gateway to the Central City, South Waterfront is a dense, vibrant, walkable, distinctly urban mixed-use community with excellent access to transit, parks and neighborhood amenities, as well as the Willamette River and greenway trail. The subdistrict serves as a model for sustainable development.

The subdistrict benefits from strong connections to the South Downtown/University Subdistrict, Downtown, the Central Eastside, adjacent neighborhoods and a clean and healthy river that provides a range of urban amenities, recreational opportunities, beautiful views and ecological functions.



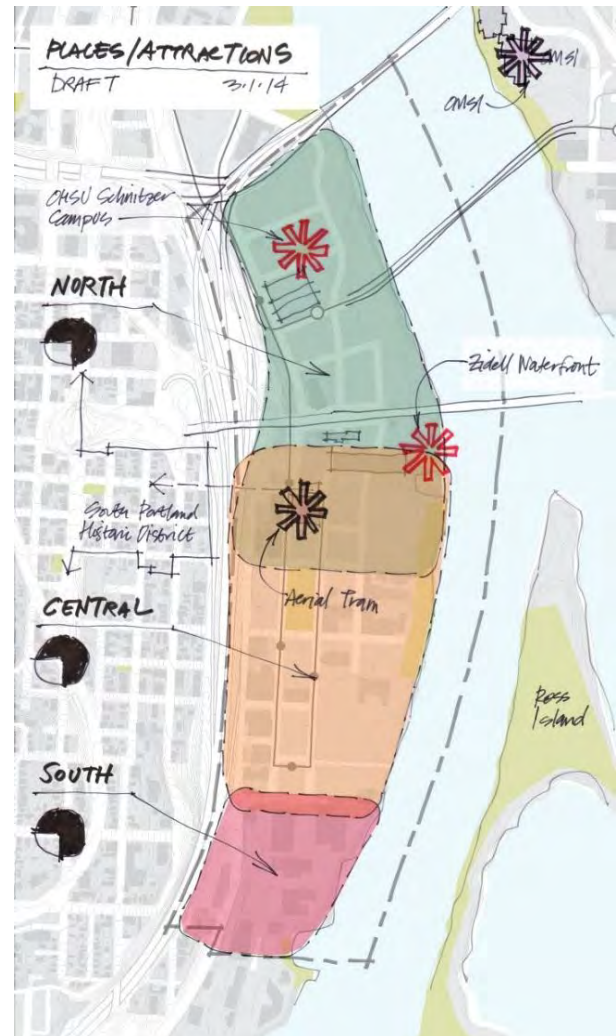
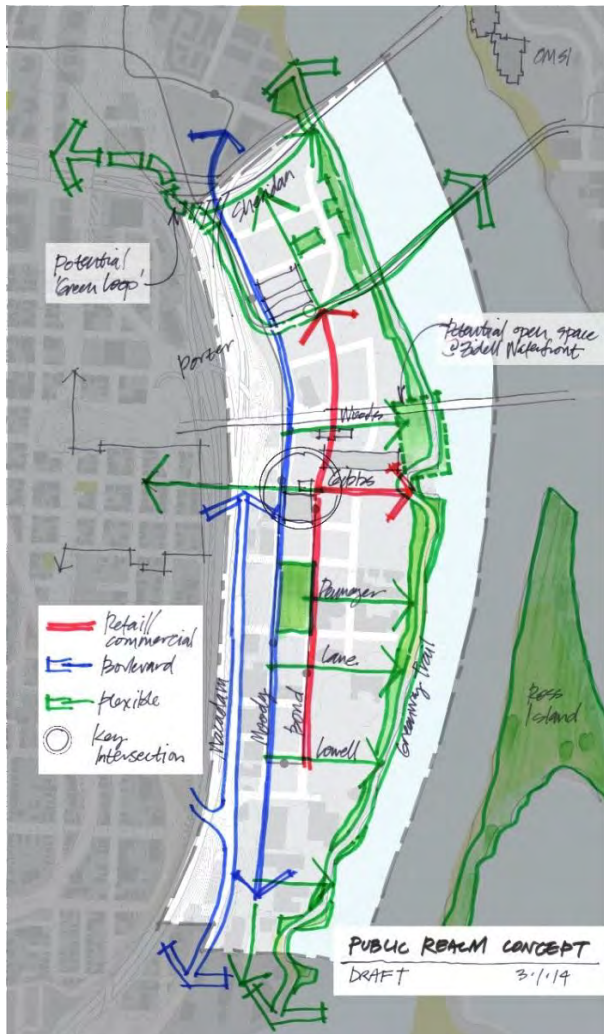
This rendering illustrates a possible development scenario meeting targets for 4,500 new housing units and 10,000 new jobs in the district

Key Elements of the Subdistrict Urban Design Concept

- Create a signature riverfront open space as part of the greenway system
- Enhance the transit hub at the tram landing
- Concentrate retail along SW Bond and Gibbs
- Improve multimodal connections to the south and west

Places and Attractions Concept Diagram

South Waterfront has several distinct subareas. The diagram’s black circles indicate that while many new buildings exist now in the district, most of South Waterfront is still yet to be developed. The darker the circle, the more change is expected in this part of the district.



Public Realm Concept Diagram

The public realm concept describes the character of existing and potential new public spaces in the district – its system of streets, parks and other open spaces. It locates existing parks and open spaces, suggests possible sites for new ones, and identifies possible connections between them.

It also illustrates a “street and development character” concept for the district – a way of being more intentional about the desired design and function of both the streetscape and the ground floors of adjacent buildings. It highlights the desired retail/commercial character of SW Bond Avenue and SW Gibbs Street; and boulevard character of SW Moody.

South Downtown/University

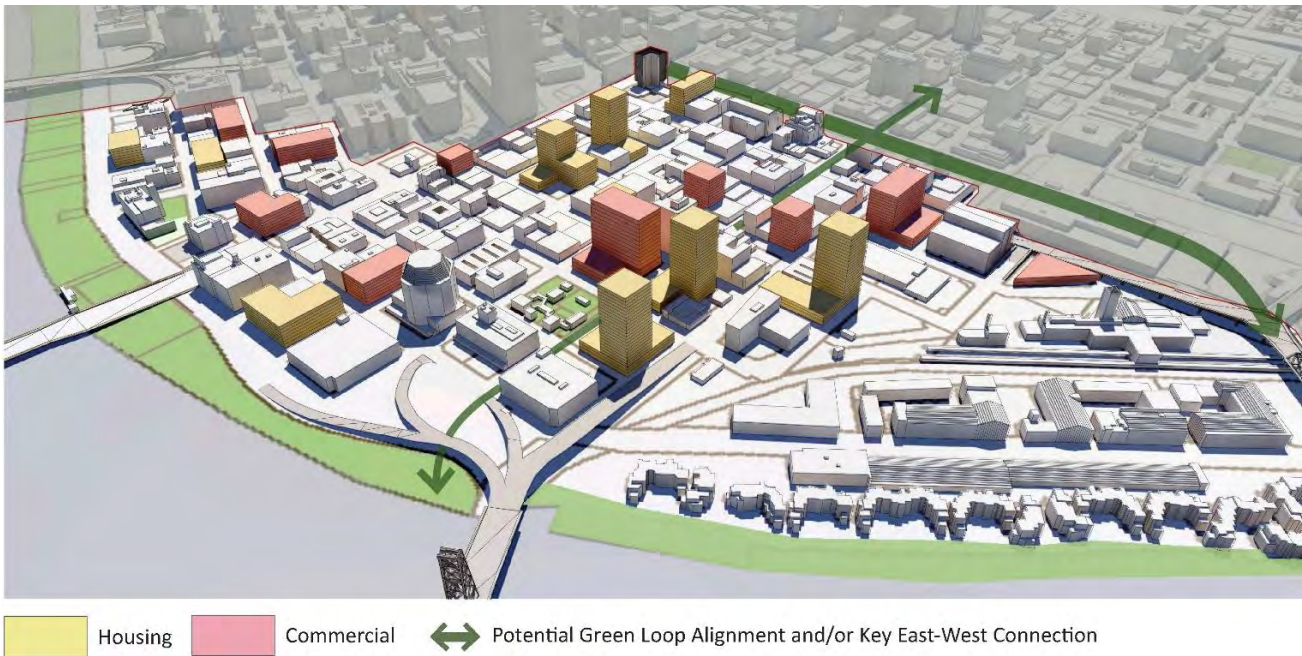
The South Downtown area is home to three distinct urban districts: Portland State University (PSU), the South Auditorium blocks and RiverPlace. With close to 30,000 enrolled students, PSU's growth and development is guided by the University District Framework Plan (2010). The strategic direction for the Central City as a center for innovation and exchange aligns strongly with PSU and its surrounding area. Developed in the 1960s, the South Auditorium Project was the city's first urban renewal area and now includes modern office buildings and apartment towers. The area is connected by a system of Lawrence Halprin-designed parks, fountains and pedestrian pathways. A community of apartments, condos and ground floor retail, RiverPlace is one of the few places in the Central City with direct access to the water's edge.



2035 Vision

South Downtown/University is the livable, accessible home to: Portland State University, Oregon's largest university; the South Auditorium District, a unique open space, commercial and residential landscape created by Portland's first experiment with urban renewal; and RiverPlace, a dynamic, dense residential and commercial subdistrict with an intimate relationship to the Willamette River.

While each of these three microcosms maintains its distinct character, in combination they provide the setting for a growing international, multi-cultural center of learning, fostering information exchange and innovation. The subdistrict plays a key role in accommodating and incubating the Portland region's growing cluster of knowledge-based research-oriented enterprises while remaining an attractive, vibrant and livable home for residents.



This rendering illustrates a possible development scenario meeting targets for 2,000 new housing units and 3,000 new jobs in the district

Key Elements of the Subdistrict Urban Design Concept

- Develop key a “Green Loop” connection between the South Park Blocks and SW Moody Street
- Focus new retail activity on 4th Avenue, College and Broadway
- Improve multi-modal connections across I-405
- Strengthen routes to the Willamette River

Places and Attractions Concept Diagram

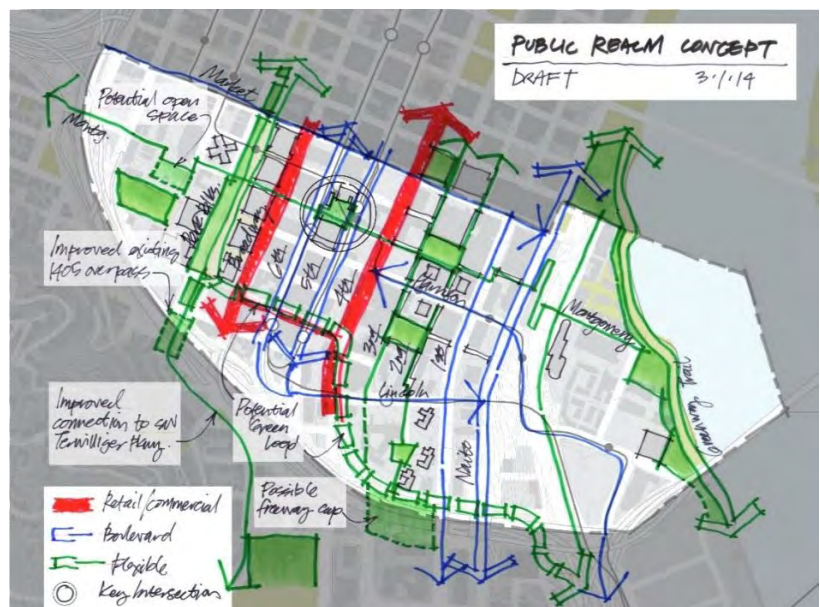
South Downtown/University has three distinct subareas: Portland State University, the South Auditorium District and RiverPlace, as well as the interstitial areas between them that have yet to develop new identities. These areas, the South Transit Mall and the Harbor/Naito Lands, generally have more redevelopment potential than the more mature districts they border. It is possible that these less-defined areas could be consumed by expansion of the three established places in this district. The circles indicate a relative “degree of change:” the darker the circle, the more change is expected in that part of the district.



Public Realm Concept Diagram

The public realm concept describes the character of existing and potential new public spaces in the district – its system of streets, parks and other open spaces. It locates existing parks and open spaces, suggests possible sites for new ones, and identifies possible connections between them.

It also illustrates a “street and development character” concept for the district – a way of being more intentional about the desired design and function of both the streetscape and the ground floors of adjacent buildings. It highlights the desired retail/commercial character of SW 4th Avenue, Broadway and College Streets; as well as the flexible character of SW Park Avenue and Montgomery Street.



C. CENTRAL CITY 2035 GOALS AND POLICIES

Goals and policies provide guidance

The goals and policies in the Central City 2035 Plan cover a wide variety of topics, but each serves to inform and guide land use decisions. A land use decision is one that has a significant impact on present or future land uses in the area. Examples of land use decisions include zoning decisions and adoption of growth related public facility plans.

Goals and policies are considered “on balance” in decision making

When applying goals and policies to particular situations, such as specific development proposals or area plans, there may be some policies that compete or conflict with one another. Although it would be ideal to always meet each goal and policy, sometimes that is not possible, so proposals or situations must be judged whether they meet the goals and policies on balance. Even the strongest policies do not automatically trump other policies. Every decision is different, with different facts. The particular policies that matter more will change from one decision to another. There is no set formula – no particular number of “heavier” policies equals a larger set of “lighter” policies.

In cases where there are competing directions embodied by different policies, City Council may choose the direction it believes best embodies the Plan as a whole. This approach recognizes that there are trade-offs and compromises and allows flexibility while still guiding land use and capital decisions. The Plan’s Guiding Principles provide an anchor or reference point to consider when making trade-offs and compromises.

HOW TO READ THE GOALS AND POLICIES IN THIS CHAPTER

CC2035 Plan goals and policies are organized into six sections:

1. Regional Center
2. Housing and Neighborhoods
3. Transportation
4. Willamette River
5. Urban Design
6. Health and Environment

Each section begins with a set of goals and policies that apply to the entire Central City Plan District. These are followed by a set of subdistrict policies that apply only in those respective areas.

Some Central City policies are followed by an “*,” indicating that policies highlighting related subdistrict-specific priorities can be found in the respective subdistrict portions of that section. Subdistricts containing related policies are noted in brackets at the end of the Central City policy.

Downtown	DT	Lower Albina	LA
West End	WE	Lloyd	LD
Goose Hollow	GH	Central Eastside	CE
The Pearl	PL	South Waterfront	SW
Old Town/Chinatown	OT	South Downtown/University	SD

1. REGIONAL CENTER: ECONOMY AND INNOVATION

Portland’s Central City serves as the region’s economic, cultural and civic center. To maintain and enhance this role, stakeholders identified the need to enhance the cultural and civic role of the Central City; support economic growth, particularly in traded sector industries; protect industrial and employment districts; capitalize on opportunities for partnering with higher education institutions; and address affordability barriers so that entrepreneurs and small businesses can thrive.

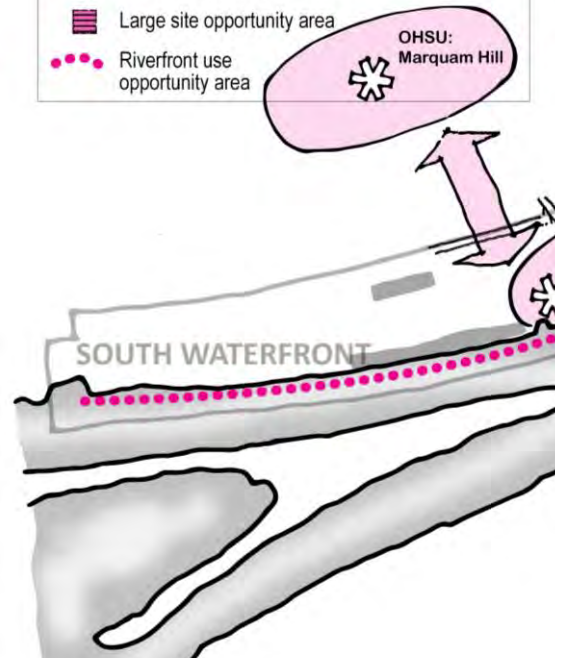
Central City Goals

- Goal 1.A:** Portland’s Central City is the preeminent regional center for commerce and employment, arts and culture, entertainment, tourism, education and government.
- Goal 1.B:** The Central City is economically competitive, especially relative to West Coast and regional markets, with robust and expanding business and development activity.
- Goal 1.C:** Portland’s Central City is a national leader for innovation in business, higher education and urban development with physical and social qualities that foster and attract diverse creativity, innovation, entrepreneurship and civic engagement.
- Goal 1.D:** The experience of the Central City’s urban character and livability make it the leading location in the region for business and commercial activity and an attractive location for new development.

REGIONAL CENTER

LEGEND

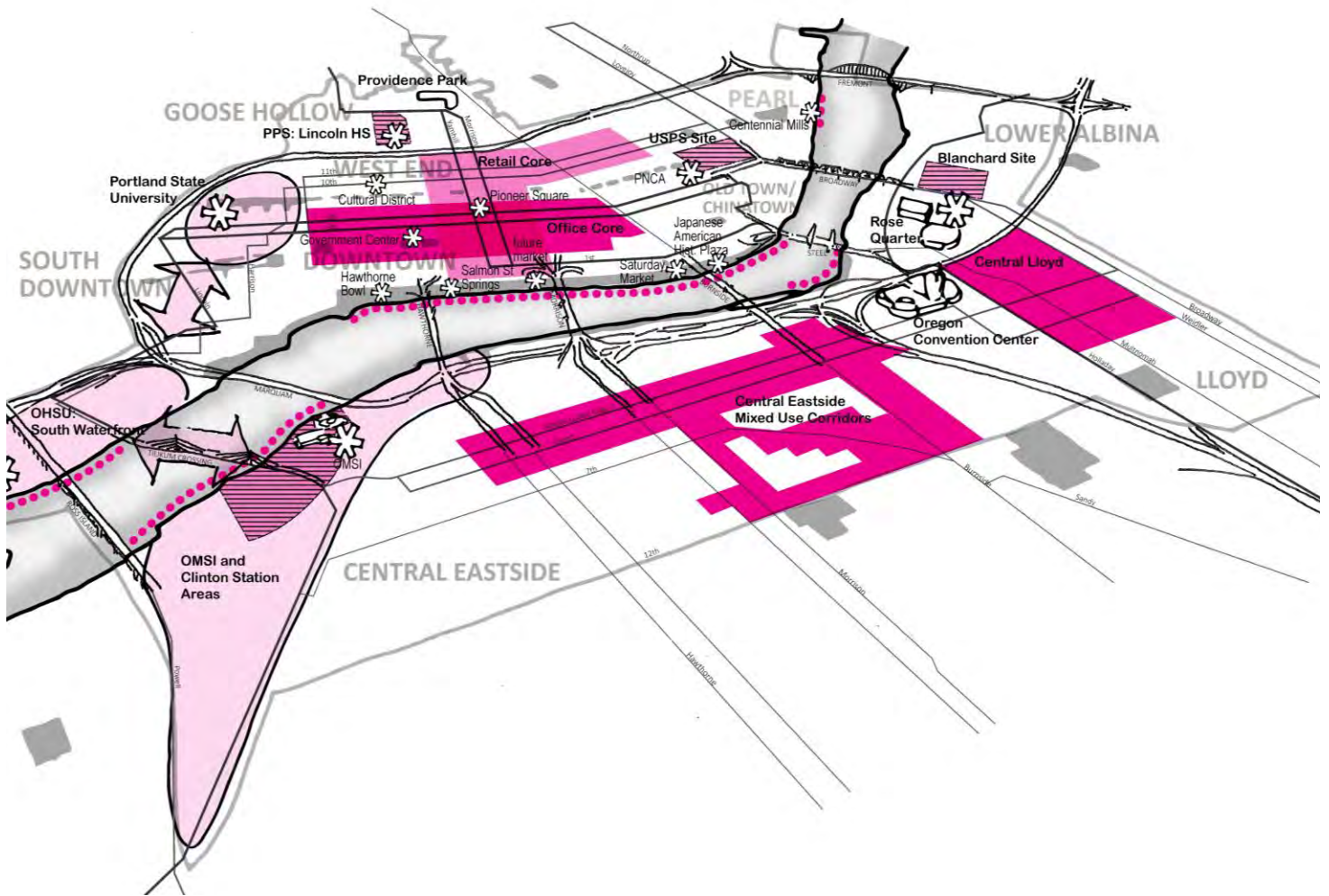
- High density office core
- Retail core
- Innovation Quadrant
- Places of learning and cultural districts
- Large site opportunity area
- Riverfront use opportunity area



Civic and Cultural Center

Portland’s City Center contains a broad array of institutions, venues, cultural assets, historic sites and the Willamette River, making it the heart of the region’s civic and cultural life. Policies in this section support the role of the Central City as the civic and cultural center of the region, serving all Portlanders.





Economic Vitality

The Central City is home to professional service industries that support the entire region; a growing number of colleges and universities; and a manufacturing base that hosts a number of emerging business sectors. Policies in this section support the continued economic vitality of the Central City, Portland and the region.



CENTRAL CITY POLICIES: REGIONAL CENTER

Civic and Cultural Center

- Policy 1.1** **Regional image.** Strengthen the role of the Central City and Willamette River in enhancing a positive image for the city, region and state.
- Policy 1.2** **Center of higher education.** Support the ability of major universities in the Central City and other higher education institutions to strengthen the Central City as a center of learning, business and innovation.
- Policy 1.3** **Center of urban innovation.** Strengthen the role and stature of the Central City as a laboratory and showcase for innovative urban development and a regional leader in the development of businesses related to clean technology, green practices and design, and resource conservation.
- Policy 1.4** **Tourism, retail and entertainment.*** Maintain and expand upon activities in the Central City that support tourism and complement economic success, vibrancy, and livability, with a special focus on retail, cultural events and institutions, arts and entertainment, urban design, and transportation.
- [DT, WE, GH, PL, OT, LD, CE, SW, SD]
- Policy 1.5** **Destination Willamette River.** Enhance the riverfront as a destination by encouraging shops; restaurants; art; cultural, historic, ecological and maritime attractions; and recreation. Support opportunities and amenities for river tours, river transit and regional cruises to and from the Downtown riverfront.

Economic Vitality

- Policy 1.6** **Traded sector growth.** Enhance business development efforts and assistance for targeted industry clusters and high growth sector companies.
- Policy 1.7** **Entrepreneurship and business innovation.** Strengthen the Central City as a location for job creation by addressing development issues that affect businesses and supporting economic development strategies and programs intended to facilitate economic growth in the Central City.
- Policy 1.8** **Equity and the economy.** Support greater access to and expansion of economic opportunities in the Central City for all groups facing longstanding disparities, including education and employment barriers, so that they can share in employment and economic prosperity.
- Policy 1.9** **Innovation Quadrant.** Build upon the physical connections created by the Tilikum Crossing to connect Central Eastside industries with westside institutional assets such as Oregon Health Science University (OHSU) and Portland State University (PSU). Facilitate the growth of traditional and emerging industries in service to the Innovation Quadrant and encourage venues such as the Oregon Museum of Science and Industry (OMSI) to showcase the diversity of research, economic development, and educational activities occurring within the quadrant.

Encourage a range of businesses from start-up firms to corporate headquarters, with particular focus on knowledge-based industries such as technology and research and development, to locate in the area.

Policy 1.10 **Next generation industrial/employment sanctuaries.*** Protect and foster the long-term success of Central City industrial districts and the continuation of these areas as prime locations for investment and new industrial businesses, while supporting their evolution into places with a broader mix of businesses, living-wage jobs, and higher employment densities.

[LA, CE]

Policy 1.11 **Commercial affordability.** Support efforts to make the Central City a competitive location for development and business location and operation.

SUBDISTRICT POLICIES: REGIONAL CENTER

This section contains Regional Center policies which are specific to a particular Central City subdistrict: Downtown, West End, Goose Hollow, the Pearl, Old Town/Chinatown, Lower Albina, Lloyd, Central Eastside, South Waterfront or South Downtown/University.

Downtown

Policy 1.DT-1 **Office core.** Maintain the Downtown office core as the region’s preeminent office employment district. Encourage new office development, with the largest buildings near the Transit Mall.

Policy 1.DT-2 **Retail core.** Encourage the growth and success of the retail core with new retail and supportive development. Expand the retail core east to Waterfront Park.

Policy 1.DT-3 **Government center.** Encourage the concentration of government services in the vicinity of Chapman and Lowndale Squares.

Policy 1. DT-4 **Tourism, retail and entertainment.**

- a. **Tourist information.** Maintain Pioneer Square as an important “first stop” for tourist information with Tom McCall Waterfront Park becoming a complementary “second stop.”
- b. **Events.** Encourage a wide range of entertainment opportunities and event venues including small-scale, more frequent events as well as large-scale episodic events.
- c. **Central cultural district.** Enhance the concentration of arts and cultural institutions and activities on and near the South Park Blocks between SW Salmon and SW Jefferson Streets. Expand the range of unique cultural and historic attractions along the Willamette River.

West End

- Policy 1.WE-1** **North of Salmon.**
- a. **Mixed use emphasis.** Encourage a broad mix of land uses, particularly north of SW Salmon Street, including office and retail opportunities in addition to residential.
 - b. **Retail core expansion.** Expand and enhance the Downtown Retail Core west to I-405 and north into the Pearl and encourage a broad mix of activity and retail opportunities at the street level.
- Policy 1.WE-2** **Tourism, retail and entertainment.** Support the West End's unique concentration of arts and cultural institutions.
- Policy 1.WE-3** **Surface parking redevelopment.** Encourage new development on surface parking lots and vacant lots.

Goose Hollow

- Policy 1.GH-1** **The Hollow.** Encourage vibrant, mixed-use development, especially residential, office and active floor uses that serve the needs of, and provide employment opportunities for, a substantial and growing residential population.
- Policy 1.GH-2** **Lincoln High School.** Encourage redevelopment of the Lincoln High School site to include improved educational facilities, new compatible uses, better connections through the site, a robust street presence, and new, green public open space and recreational facilities.
- Policy 1.GH-3** **Tourism, retail and entertainment**
- a. **Stadium supportive development.** Capitalize on activity generated by Providence Park, encouraging complementary redevelopment in the area near the stadium, emphasizing local businesses of moderate scale and supporting year-round functions, such as theaters, restaurants, hotels, pubs, cafes and galleries.
 - b. **Event frequency.** Expand the frequency and range of event types at Providence Park. Capitalize on this expanded activity to support complementary development of sustainable local business activities.
- Policy 1.GH-4** **Surface parking redevelopment.** Encourage new development on surface parking lots and vacant lots on West Burnside and SW 18th Avenue.

The Pearl

- Policy 1.PL-1** **Mixed use office center.** Support the continued development of a vibrant, mixed-use area with new commercial, retail, office and creative office opportunities.
- Policy 1.PL-2** **Large site employment opportunity.** Encourage redevelopment of large sites to include employment opportunities such as major office or campus uses.

Policy 1.PL-3 **Tourism, retail and entertainment.** Enhance the success of this urban mixed use subdistrict, drawing new visitors and supporting attractions, including unique retail, dining, riverfront and entertainment opportunities.

Old Town/Chinatown

Policy 1.OT-1 **Institutions, creative economy and target sector industries.** Support and capitalize on the success of higher education institutions as lasting anchors for creative industries and businesses. Support entrepreneurial incubation and encourage business start-ups and the City’s economic development cluster industries to locate in the subdistrict.

Policy 1.OT-2 **Tourism, retail and entertainment.** Support unique attractions in the subdistrict, including: cultural institutions; Waterfront Park; retail, dining, and performance venues; and nightlife attractions. Expand the festival and event programming of public spaces in the subdistrict; manage activities in a way that controls negative impacts.

Policy 1.OT-3 **Cultural assets.** Protect, promote and enhance the rich cultural and multi-ethnic history and diversity of Old Town/Chinatown, including its unique physical characteristics, cultural and arts institutions, community organizations, and mix of businesses.

Policy 1.OT-4 **Strategic redevelopment.** Encourage renovation to underutilized buildings to increase useable space and economic activity in the subdistrict. Encourage new mixed-use infill development on vacant lots and surface parking lots while supporting existing businesses.

Support location of retail uses in the ground floors of buildings, including retail businesses that complement and enhance the cultural and historical significance of the area.

Lower Albina

Policy 1.LA-1 **Next generation industrial/employment sanctuaries.** Diversify the range of employment activities allowed in the area east of the Union Pacific railroad and near the MAX station.

Policy 1.LA-2 **Incubator.** Support existing businesses and foster the subdistrict as an industrial and employment incubator.

Policy 1.LA-3 **Russell Street vitality.** Support the urban vibrancy of Russell Street and its unique blend of working daytime industrial activity with compatible nighttime restaurant and entertainment activity.

Lloyd

Policy 1.LD-1

Employment core.

- a. **Office core.** Maintain and grow the Lloyd as an employment center for headquarters office, institutions, professional services and the government sector.
- b. **Retail.** Support existing and new retail development including regionally focused uses in and around the Lloyd Center Mall and neighborhood-serving uses along the NE Broadway corridor.

Policy 1.LD-2

Sustainability innovation center. Promote Lloyd as a center for innovation and application of sustainable business and development practices, foster job creation in sustainable industries and encourage the incorporation of green technology and practices into businesses and development.

Policy 1.LD-3

Tourism, retail and entertainment. Support the continued success of the Rose Quarter and the Oregon Convention Center and encourage new development and businesses that complement and balance the episodic nature of event activity. Expand civic attractions to enhance tourism, regional attractions and the subdistrict's growing residential character.

Central Eastside

Policy 1. CE-1

Next generation industrial/employment sanctuaries.

- a. **Industrial center.** Protect the Central Eastside as a centralized hub of industrial businesses and services that support the regional economy by serving other industrial districts and businesses located throughout the Portland metropolitan area.
- b. **Central industrial diversification.** Support growth of new industrial sectors, protect existing sectors, and protect the Central Eastside as a place where startups and incubators can transition to mature and established businesses and sectors.

Policy 1.CE-2

Employment supportive mixed-use corridors. Enhance the vibrancy of major mixed-use corridors to optimize their potential to attract investment and the development of new retail, commercial office, and residential uses that complement and serve employees and businesses in the Central Eastside.

Policy 1.CE-3

Southern triangle. Encourage redevelopment of large sites to include employment opportunities such as industrial office and headquarters office opportunities, and invest in new infrastructure to address transportation constraints in the area. Promote bioscience and high technology sectors in the subdistrict, facilitated by the connection of the Tilikum Crossing to South Waterfront and Downtown.

- a. **Clinton Station Area.** Facilitate the development of employment and residential, as well as neighborhood serving retail and community services that serve the Central Eastside and inner Southeast Portland neighborhoods.

- b. **OMSI Station Area.** Create a major and active riverfront station area that includes land and water based transportation, as well as educational and recreational opportunities. Promote visitor-serving attractions, amenities, and retail, as well as a mix of high-density commercial office, institutional and industrial employment uses.

Policy 1.CE-4 **Workforce development institutions.** Support institutions such as Benson High School, Portland Community College’s CLIMB Center, OMSI, and others in their unique roles associated with workforce development through programs and partnerships that prepare Portlanders at different education and skill levels for employment in Central Eastside industries.

Policy 1.CE-5 **Day laborer organization and education.** Continue efforts and initiatives within the Central City that organize and centralize day laborer services that can provide for worker rights education, outreach, and protect the rights of laborers.

Policy 1.CE-6 **Tourism, retail and entertainment.** Encourage new and enhance existing riverfront uses and activities including active and passive recreation, ecological and maritime tourism, retail kiosks, restaurants and river transportation.

South Waterfront

Policy 1.SW-1 **Research and education institutions.** Support the development and expansion of institutions, such as Oregon Health and Science University, Portland State University and Oregon State University, as well as complementary knowledge, health and science-based industries.

Policy 1.SW-2 **Tourism, retail and entertainment.** Encourage new and enhance existing riverfront uses and activities including active and passive recreation; historic, ecological, maritime and cultural displays; and river transit. Encourage shops and restaurants to locate adjacent to the greenway at key locations.

South Downtown/University

Policy 1.SD-1 **Portland State University.** Support the continued success and growth of Portland State University. Specifically, encourage new university development and partnerships with public and private development in the subdistrict to promote a vibrant and diverse neighborhood.

Policy 1.SD-2 **Tourism, retail and entertainment.** Increase the number of visitors to the subdistrict by encouraging new and enhancing existing riverfront shops, restaurants and recreational opportunities at RiverPlace.

Policy 1.SD-3 **Strategic redevelopment.** Encourage public and private redevelopment in the subdistrict, while supporting the existing residential neighborhood, particularly in the areas around Naito Parkway/Harbor Drive, SW 4th Avenue, the Lincoln MAX Station and along the SW 5th and SW 6th Avenue Transit Mall. Where possible, encourage new development that supports public-private partnerships and activities or helps meet Portland State University space needs.

2. HOUSING AND NEIGHBORHOODS

Thirty-five years ago there were relatively few people living in Portland’s Central City. Today, residents number 23,000 and the district has become the fastest growing area in the City. To continue to enhance the livability of Central City neighborhoods, stakeholders felt affordability should be the top priority – housing should be available for households at all income levels and in particular, workers should be able to find housing within or close to their Central City jobs.

Further, a desire for a broader range of housing types was expressed – in particular, units that support students, families, and older adults. Lastly, in addition to housing itself, residents want access to public schools, community centers, child care and playgrounds, as well as neighborhood-serving retail and commercial services.

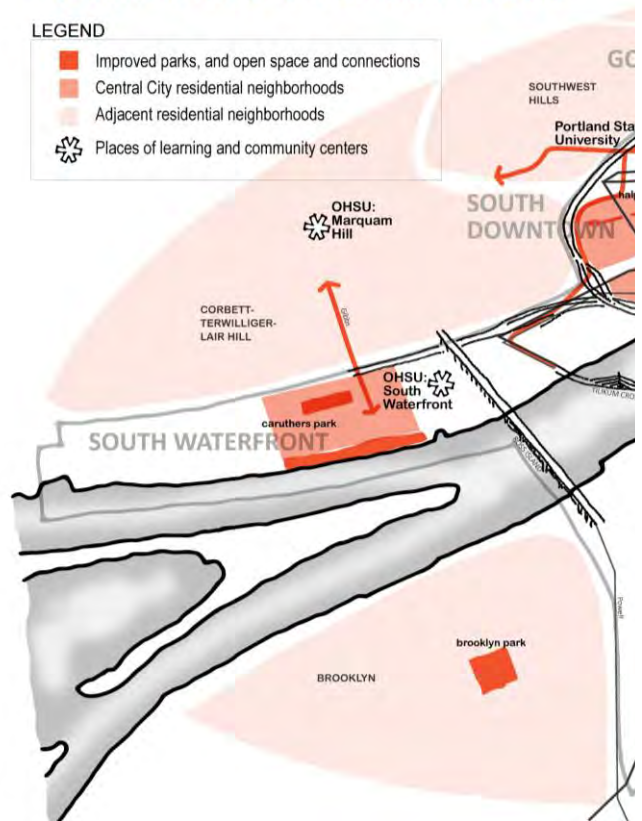
Central City Goals

- Goal 2.A:** The Central City is a successful dense mixed-use center composed of livable neighborhoods with housing, services and amenities that support the needs of people of all ages, incomes and abilities.
- Goal 2.B:** The Central City's affordable housing supply maintains and supports the area's growing racial, ethnic and economic diversity.
- Goal 2.C:** At-risk populations concentrated within the Central City are supported with access to needed human and health services.

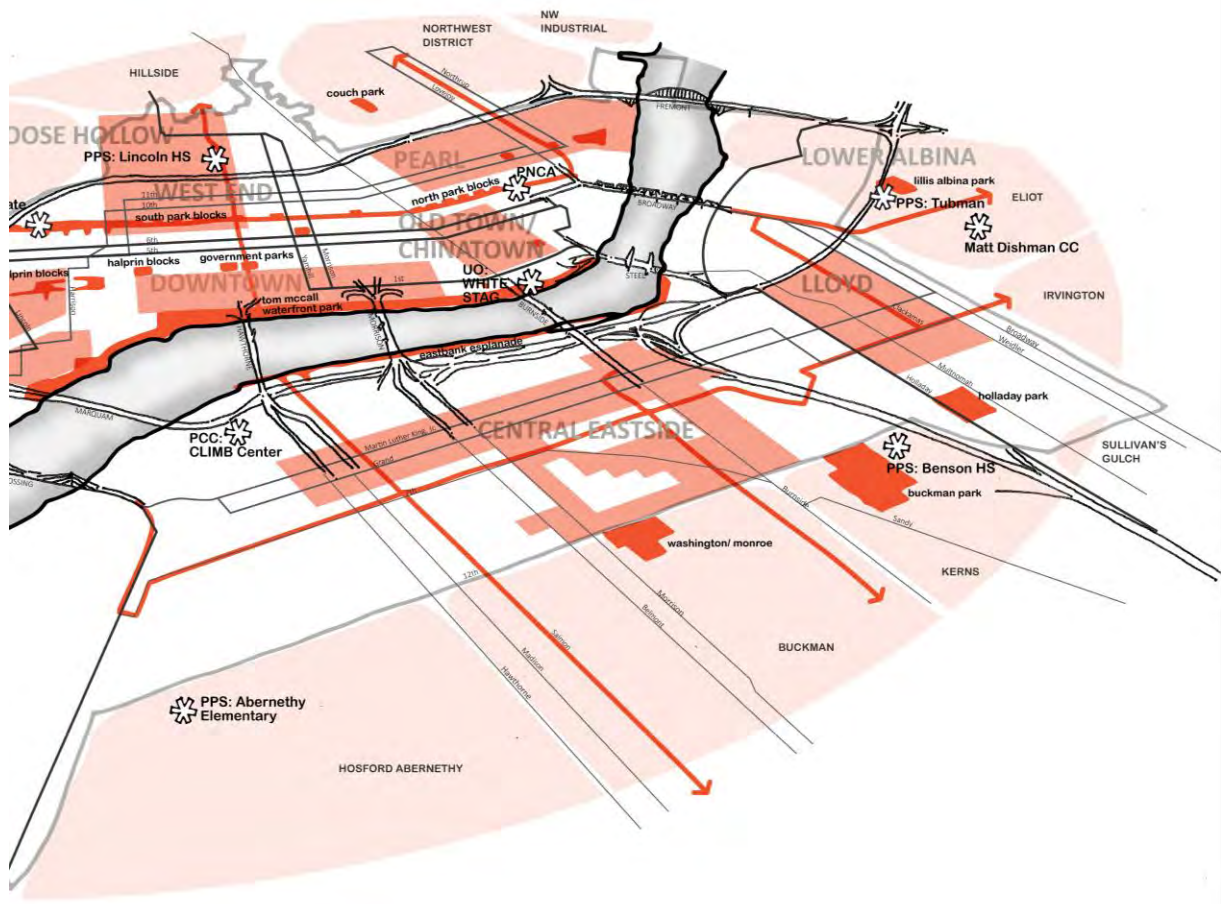
Neighborhood livability

Portland’s City Center contains a broad array of institutions, venues, cultural assets, historic sites and the Willamette River, making it the heart of the region’s civic and cultural life. Policies in this section support the role of the Central City as the civic and cultural center of the region, serving all Portlanders

HOUSING AND NEIGHBORHOODS

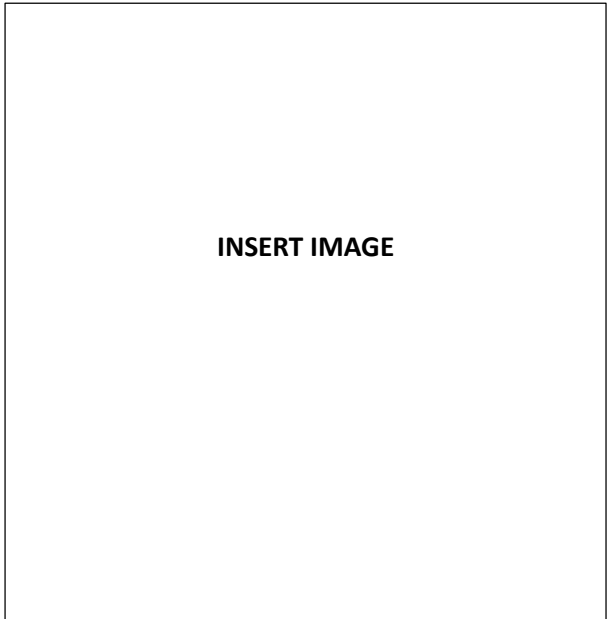


Conceptual drawing of Jefferson main street connecting Goose Hollow and the West End.



Housing affordability

Many households in the city have to spend significantly more than the recommended 30 percent of their income on housing. More and more households are falling into this category because of steep increases in home prices, a tight rental market, and falling household incomes. Policies in this section support housing affordability in the Central City.



CENTRAL CITY POLICIES: HOUSING AND NEIGHBORHOODS

Neighborhood livability

- Policy 2.1** **Complete neighborhoods.*** Ensure Central City neighborhoods have access to essential public services, including public schools, parks, open space and recreation opportunities, community centers, and amenities such as neighborhood-serving retail and commercial services that support sustainable and diverse community structure.
- [DT, WE, GH, PL, OT, LD, CE, SW, SD]
- Policy 2.2** **Promote healthy active living.** Design and develop Central City neighborhoods to support physically and socially active healthy lifestyles for all people through the inclusion of plazas, parks, open spaces, and recreation opportunities, a safe and inviting public realm, access to healthy food and active transportation and the density of development needed to support these economically.
- Policy 2.3** **Safe and secure Central City.** Maintain adequate public safety and security services and reduce sources of conflict and nuisance crime through design, regulation and management.
- Policy 2.4** **Mixed-use compatibility.** Promote design solutions and construction techniques to ensure that new development is compatible with existing uses, including noise and other pre-existing conditions.
- Policy 2.5** **Conflict reduction strategies.** Develop ongoing strategies and programs that reduce potential conflicts between special needs populations and other Central City residents, employees, visitors and businesses.

Housing affordability

- Policy 2.6** **Minimize displacement.** Maintain the economic and cultural diversity of established communities in and around the Central City. Utilize investments, incentives and other policy tools to minimize or mitigate involuntary displacement resulting from new development in the Central City or close-in neighborhoods.
- Policy 2.7** **Housing diversity.*** Create attractive, dense, high-quality affordable housing throughout the Central City that accommodates a broad range of needs, preferences, and financial capability in terms of different types, tenures, sizes, costs and locations. Support new housing opportunities for students, families and older adults.
- [DT, WE, GH, PL, OT, LD, SW, SD]
- Policy 2.8** **Housing affordability.** In accordance with the City’s No Net Loss policy for affordable housing in the Central City, the City will retain at least the current number, type, and affordability levels of housing units home to people at or below 60% of the median family income either through preservation or replacement. The preservation of these units will be monitored by the Portland Housing Bureau

though the Central City Housing Inventory. Continue to develop new affordable housing in the Central City so that approximately 30% of the total housing in the Central City is affordable to households between 0% and 80% MFI. Increase the supply of housing affordable to working households in the 50% to 80% MFI bracket, for whom the Central City's access to jobs and transit can be particularly beneficial.

- Policy 2.9** **Public investment in affordable housing.** For public affordable housing resources, prioritize funding for housing programs and investment to meet the unmet needs of extremely low and very low-income households (0-50% MFI).
- Policy 2.10** **Affordable homeownership.** Align plans, investments and other policy tools to support improving homeownership rates and location choices for people of color and other groups who have been historically under-served and under-represented in the Central City.
- Policy 2.11** **Transitional housing and services.** Provide housing and services that directly assist at-risk populations and allow people to transition to more stable living conditions.

SUBDISTRICT POLICIES: HOUSING AND NEIGHBORHOODS

This section contains Housing and Neighborhood policies specific to a particular Central City subdistrict: Downtown, West End, Goose Hollow, the Pearl, Old Town/Chinatown, Lloyd, Central Eastside, South Waterfront or South Downtown/University. There are no subdistrict-specific policies for Lower Albina.

Downtown

- Policy 2.DT-1** **Complete neighborhoods.** Encourage the development of community space to serve the subdistrict, and a dog park.
- Policy 2.DT-2** **Encourage evening and weekend activity.** Encourage the development of uses that are active in the evenings and on weekends such as restaurants, galleries, retail stores and performance spaces. In particular, encourage evening activities within Tom McCall Waterfront Park and along Naito Parkway.
- Policy 2.DT-3** **Housing diversity.** Encourage new housing development along SW Naito Parkway and the South Park Blocks.

West End

- Policy 2.WE-1** **Complete neighborhoods.** Encourage the development of child-friendly play areas, a dog park and contemplative spaces.
- Policy 2.WE-2** **West End Jefferson main street.** Encourage redevelopment and rehabilitation along SW Jefferson to create a vibrant neighborhood main street environment with pedestrian and bicycle-friendly street design, green street improvements and contiguous neighborhood retail linking the West End to Goose Hollow and Downtown.

- Policy 2.WE-3** **West End social services.** Preserve and support existing social service and shelter functions in the subdistrict. Discourage the location of additional social services in close proximity to existing services.
- Policy 2.WE-4** **Churches.** Support the subdistrict’s unique concentration of churches.
- Policy 2.WE-5** **Housing diversity.** South of Salmon Street, encourage residential development as the predominant use; to the north encourage it as a major component of new development. In particular, encourage multi-family housing supportive of families.

Goose Hollow

- Policy 2.GH-1** **Complete neighborhoods.** Encourage the development of community space and accessible open space to serve the subdistrict.
- Policy 2.GH-2** **Goose Hollow Jefferson main street.** Encourage redevelopment and rehabilitation along SW Jefferson Street between I-405 and SW 20th to create a vibrant neighborhood main street environment with pedestrian-friendly design, green street features, and contiguous neighborhood retail.
- Policy 2.GH-3** **West Burnside.** Encourage redevelopment, rehabilitation and streetscape improvements on West Burnside Street that support a vibrant and safe retail and commercial corridor.
- Policy 2.GH-4** **Housing diversity.** Support development that complements the distinctive residential feel of the subdistrict, especially within the predominantly residential areas south of SW Columbia Street. In particular, encourage multi-family housing supportive of families.

The Pearl

- Policy 2.PL-1** **Complete neighborhoods.** Enhance bicycle and pedestrian connections between existing parks, as well as future parks. Encourage the development of new public schools to serve the subdistrict.
- Policy 2.PL-2** **Pearl social services.** Encourage development of social services to support vulnerable members of the community and further a more equitable distribution of these services throughout the Central City.
- Policy 2.PL-3** **Housing diversity.** Encourage new development, including housing, along Naito Parkway in order to bring more people and activities to the riverfront. Throughout the subdistrict, encourage multi-family housing supportive of families and students.

Old Town/Chinatown

- Policy 2.OT-1** **Complete neighborhoods.** Encourage new and enhanced services to support subdistrict residents and workers, including commercial, retail, educational, medical, recreational, cultural, transportation, entertainment, and emergency services.
- Policy 2.OT-2** **Old Town/Chinatown social services.** Preserve and support existing social service and shelter functions in the subdistrict. Limit the significant expansion of these services and do not locate additional major social services in the subdistrict.
- Policy 2.OT-3** **Housing diversity.** Encourage market rate and middle-income housing.

Lloyd

- Policy 2.LD-1** **Complete neighborhoods.** Improve access to parks and open space, and encourage development of grocery stores, neighborhood businesses, daycares and schools.
- Policy 2.LD-2** **Successful neighborhood business districts.** Support and expand local main street business areas within the Lloyd and in adjacent neighborhoods. Cluster a diverse mix of neighborhood scale businesses within the NE Broadway Business District and on new subdistrict retail/commercial streets as a means of concentrating activity and promoting successful retail areas.
- Policy 2.LD-3** **Community building.** Encourage public spaces, public art and activities that celebrate the history of the subdistrict and that help build a community in the Lloyd and with surrounding neighborhoods.
- Policy 2.LD-4** **Housing diversity.** Encourage development of new housing, especially in Central Lloyd and on the Irvington and Sullivan’s Gulch edges of the subdistrict. Concentration of housing can foster a sense of community and support efficient provision of residential amenities and services.

Central Eastside

- Policy 2.CE-1** **Complete neighborhoods.** Ensure access to essential public services such as parks and open spaces, schools, and community centers.
- Policy 2.CE-2** **Compatible development and redevelopment.** Protect the existing industrial businesses and the livability of new employment and residential uses through development designed and constructed to insulate non-industrial uses from the characteristics common to industrial operations such as noise, fumes, and freight operations.

South Waterfront

- Policy 2.SW-1** **Complete neighborhoods.** Encourage development of a K-8 public school facility to serve the subdistrict, parks and greenway, a full-service grocery store, community space, senior center and daycare facilities.
- Policy 2.SW-2** **Ground floor vitality.** Support street-level neighborhood vitality by encouraging active but compatible ground floor uses in predominantly residential buildings
- Policy 2.SW-3** **Housing diversity.** Encourage multi-family housing supportive of families and students.

South Downtown/University

- Policy 2.SD-1** **Complete neighborhoods.** Encourage the development of a grocery store, new and improved open spaces, playground, daycare facilities, a small hotel, and a community or senior center.
- Policy 2.SD-2** **Community cohesiveness.** Support a cohesive, connected community. Create and enhance successful neighborhood-oriented retail/commercial areas near Portland State University, the Halprin Open Space Sequence and in RiverPlace.
- Policy 2.SD-3** **Evening and weekend activity.** Encourage the development of uses that are active in the evenings and on weekends such as restaurants, galleries, retail stores and performance spaces. Provide a safe and secure 24-hour environment, particularly in car-free pedestrian areas including the PSU campus, South Auditorium and RiverPlace Esplanade.
- Policy 2.SD-4** **Housing diversity.** Encourage multi-family housing supportive of families and students.

PHOTO COLLAGE

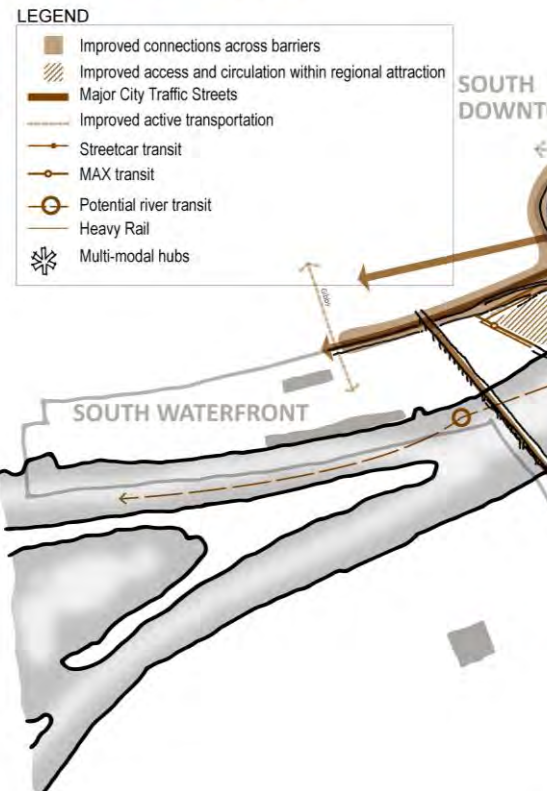
3. TRANSPORTATION

As the Central City grows over the next 20 years, the efficiency and safety of the transportation network must be maximized and emphasize bikes, transit, pedestrians and freight. Improvements will be needed to keep pedestrians and bicyclists safe and comfortable traveling to and through the Central City. Efficient transportation of freight within and through the Central City is important to supporting local and regional business growth. Parking will remain important to the local economy and the management of parking should be more simple and flexible to optimize use of the limited supply. Transportation goals and policies are intended to address these priorities.

Central City Goals

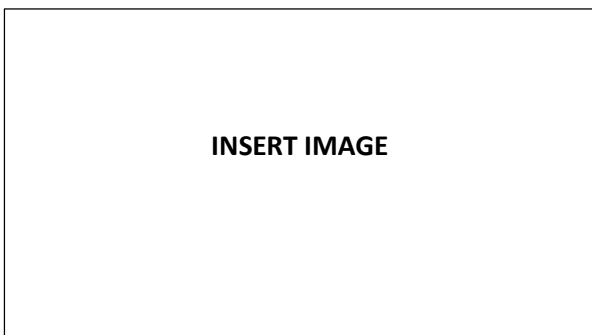
Goal 3.A: The Central City has a safe, affordable, efficient and accessible multimodal transportation system that supports growth and reinforces the role of the Central City as the region’s high density center.

TRANSPORTATION



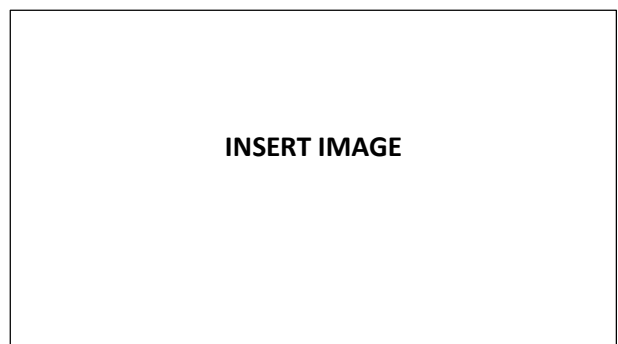
Regional hub

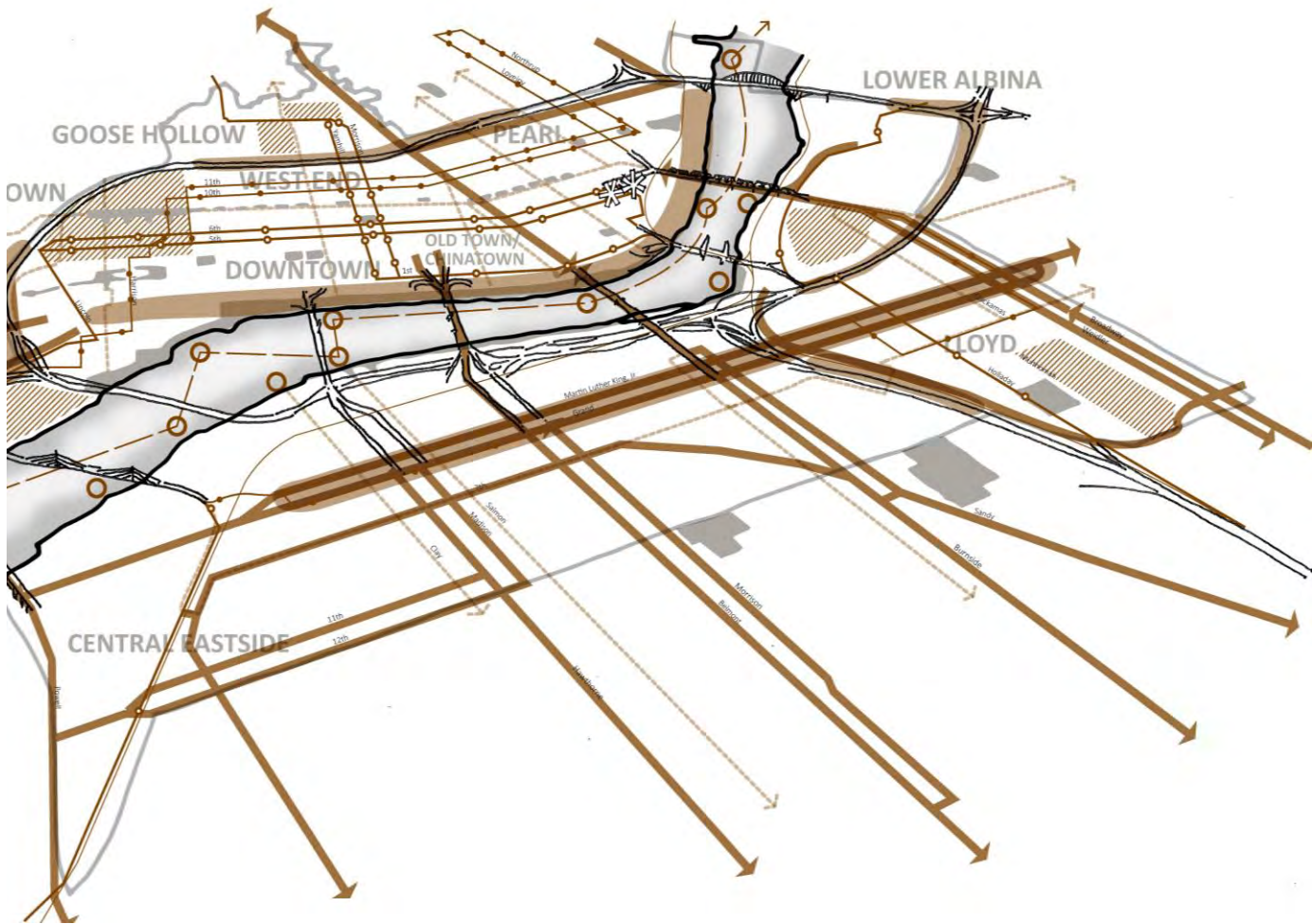
Policies in this section address the unique role the Central City plays as the hub in Portland’s “hub and spoke” pattern, which reinforces the sense of it being the center for commerce, entertainment and civic life. The following policies support this unique role.



Street network

Policies in this section support the efficiency, safety, connectedness and experience of Portland’s street network for all users and modes.





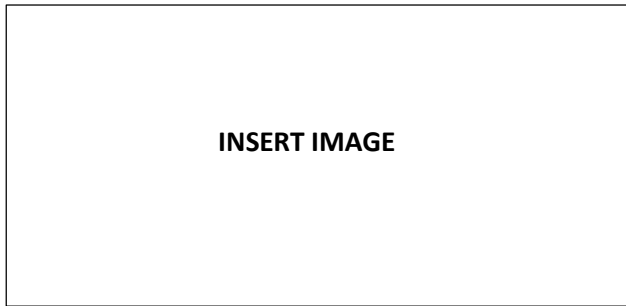
Active transportation

Policies in this section support a reduction in single occupancy vehicle (SOV) trips by encouraging active transportation, including walking, bicycling and transit, as well as the use of carsharing and carpooling



Parking and loading

Policies in this section address Central City parking, particularly to support retail, employment, tourism and residential growth; and loading to support the delivery of goods within the Central City.



CENTRAL CITY POLICIES: TRANSPORTATION

Regional hub

- Policy 3.1** **Regional transportation hub.** Strengthen the Central City as the highly accessible and multimodal hub for moving people and goods, reinforcing its regional center roles, enabling successful high density employment and housing development, and thereby affirming its role in Metro’s Region 2040 Framework Plan.
- Policy 3.2** **Portals.** Manage entry points into the Central City to provide balanced multimodal access to efficiently accommodate the increase in person trips and goods delivery as a result of growth and development. Discourage through trips from using Central City streets.

Street network

- Policy 3.3** **Optimized street network.*** Improve street design and function to increase efficiency and safety for all transportation modes and the ability of the existing network to meet the access needs of businesses, shoppers, residents and visitors. Establish a system and standards that emphasize pedestrian, bicycle, transit and freight access while continuing to provide automobile access.

[DT, WE, GH, PL, OT, LA, LD, CE, SW, SD]
- Policy 3.4** **Transportation system management.** Manage access and circulation to reduce traffic speeds and provide for safe street crossings, while balancing the need for vehicle and freight access to and from the district.
- Policy 3.5** **Street diversity.** Differentiate the character of key streets to offer a diversity of urban experiences and connections, reflect the character of unique subdistricts and expand open space and recreation functions where possible.
- Policy 3.6** **Streetscape.** Improve the street environment and pedestrian experience by providing urban greenery and community uses of the right-of-way and by integrating high-density uses.

Active transportation

- Policy 3.7** **Active transportation.** Encourage walking and bicycling with improved infrastructure and other means as a way to increase access and transportation choices, enhance livability and reduce carbon emissions in the Central City.
- Policy 3.8** **Transit.** Continue to strengthen the regional role of transit in the Central City. Support increased frequency, reliability and safety, as well as expansion of the rail, bus and streetcar system. Explore river transit opportunities. Facilitate safe, pleasant and efficient access and transfer opportunities for transit riders.
- Policy 3.9** **Transportation demand management.** Foster the development of business and property owner-supported programs, incentives and activities that encourage

employees, residents, students and visitors to use walking, cycling, transit, carpool and car-share.

Parking and loading

Policy 3.10 **Parking.** Support Central City parking needs, particularly for retail, employment and residential growth, as well as for access to major attractions such as universities and event venues. Continue to limit the growth of the overall parking supply, and maximize the joint use of existing and new stalls to manage parking in a more efficient and dynamic manner, lower the costs of construction and meet mode split and climate action goals for the City.

Policy 3.11 **Loading.** Support the delivery of goods in the Central City. Pursue strategies that bring new ways of delivering goods to the Central City in a way that optimizes loading and freight access and makes efficient use of limited urban space.

SUBDISTRICT POLICIES: TRANSPORTATION

This section contains Regional Center policies which are specific to a particular Central City subdistrict: Downtown, West End, Goose Hollow, the Pearl, Old Town/Chinatown, Lower Albina, Lloyd, Central Eastside, South Waterfront or South Downtown/University.

Downtown

Policy 3.DT-1 **Optimized street network.** Improve connections across West Burnside Street and across SW Naito Parkway to Tom McCall Waterfront Park, the Greenway Trail and Willamette River.

Policy 3. DT-2 **Downtown parking.** Recognize that parking is an important asset for Downtown to support regional activity and growth, while encouraging alternative modes and controlling traffic, design, and environmental impacts.

West End

Policy 3.WE-1 **Optimized street network.** Improve pedestrian and bike facilities across I-405 to Goose Hollow and across West Burnside to the Pearl.

Policy 3.WE-2 **SW 12th Avenue opportunity.** Support the reconfiguration of SW 12th Avenue right of way for better community use.

Goose Hollow

Policy 3.GH-1 **Optimized street network.** Improve connections across I-405 to the West End and across West Burnside to Northwest Portland. Encourage additional connections through large sites and blocks.

- Policy 3.GH-2** **Goose Hollow regional attractions.** Provide multimodal access and circulation to and from Goose Hollow’s major attractions (including Providence Park, Lincoln High School and Multnomah Athletic Club) to support their viability and increase entertainment activity, shopping and tourism while also maintaining local access.
- Manage available parking to efficiently accommodate the unique parking needs of major event facilities while continuing to promote transit and active transportation.

The Pearl

- Policy 3.PL-1** **Optimized street network.** Improve connections across I-405, West Burnside and to major parks. Encourage new connections to the Willamette River and through large sites and blocks, including the US Post Office site.
- Policy 3.PL-2** **Pearl transit service.** Enhance transit service to meet the demands of residents, employees and visitors as the subdistrict continues to grow. Improve access to transit particularly in the north end of the subdistrict and along the riverfront.

Old Town/Chinatown

- Policy 3.OT-1** **Optimized street network.** Improve connections to adjacent areas including Downtown and the Pearl; and along the Willamette River, bridgeheads and Waterfront Park.
- Policy 3.OT-2** **Union Station multi-modal hub.** Maintain and increase the viability of Union Station as Portland’s inter-city rail and multi-modal passenger transportation hub. Improve access to the station.
- Policy 3.OT-3** **Historic district parking.** Meet existing and future parking needs in a way that supports historic properties, while limiting the growth of parking as redevelopment occurs.

Lower Albina

- Policy 3.LA-1** **Optimized street network.** Improve connections to adjacent areas, including the Rose Quarter, the Vancouver/Williams Corridor and Mississippi Avenue. Improve pedestrian connections to Interstate MAX and bus service to enhance access to employment opportunities in the area.
- Policy 3.LA-2** **Freight system.** Prioritize freight movement and improve access from industrial areas to the regional freeway system while maintaining and improving the safety, efficiency and convenience of the transportation system for all modes.
- Policy 3.LA-3** **Rail and marine.** Preserve rail and inter-modal access to the Albina Rail Yards, marine freight facilities and local industries.

Lloyd

- Policy 3.LD-1** **Optimized street network.** Increase the number of connections across barriers within and to the subdistrict, including major arterials, large blocks, freeways, rail lines, and natural features, and with adjacent neighborhoods.
- Policy 3.LD-2** **Rose Quarter and regional attractions.** Provide access and circulation to and from the Lloyd that attracts and supports regional development, shopping and tourism. Promote the use of transit to access the area, including light rail, streetcar, bus, and a potential water taxi service.

Central Eastside

- Policy 3.CE-1** **Optimized street network.** Improve connectivity to and throughout the subdistrict for all modes by creating safe, accessible and convenient routes with improved signalization and clear signage to link landward portions of the subdistrict with major attractors and the riverfront.
- Policy 3.CE-2** **Freight system.** Emphasize freight movement in and through the subdistrict and maintain and improve access to and from the subdistrict and regional freeway system.
- Policy 3.CE-3** **Green Streets.** Strategically support the enhancement of east-west city walkways and bikeways to serve the multiple objectives of travel, stormwater management, open space and recreation, and placemaking. Routes should also strengthen connections to the river and riverfront. Green Streets should be chosen to avoid significantly impacting freight movement as identified by Transportation System Plan freight designations.
- Policy 3.CE-4** **Reduce trail conflicts.** Reduce bicycle and pedestrian conflicts on the Eastbank Esplanade and the greenway trail through design modifications like separating bicycle and pedestrian facilities, education, signage and other means.

South Waterfront

- Policy 3.SW-1** **Optimized street network.** Improve connections to adjacent areas, including South Portland, the Willamette River and South Downtown/University; and encourage an urban grid system that provides for internal circulation and connects to adjacent neighborhoods, as well as to the Greenway Trail.
- Policy 3.SW-2** **Collaborative Life Sciences Building and Schnitzer Campus.** Enhance multimodal access to the Collaborative Life Sciences Building and Schnitzer Campus from South Downtown/University, South Portland and the riverfront. Enhance circulation around campus for cyclists and pedestrians to create a highly walkable campus.
- Policy 3.SW-3** **Institution and visitor parking.** Maintain and enhance patient and visitor parking to serve healthcare facilities. Develop creative ways to provide, share and manage parking to support many types of trips and a diverse mix of land uses, including the unique needs of large educational/research institutions.

South Downtown/University

- Policy 3.SD-1** **Optimized street network.** Improve connections to adjacent areas, including South Portland, South Waterfront, Goose Hollow, Downtown and the Willamette River. Support east-west pedestrian and bicycle connectivity between Portland State University and the Willamette River bridgeheads.
- Policy 3.SD-2** **Portland State University.** Enhance multimodal access to Portland State University from South Waterfront, Goose Hollow and Downtown. Address parking and circulation issues around campus and address barriers for cyclists and pedestrians.
- Policy 5.SD-3** **Montgomery Green Street.** Support development of the SW Montgomery Green Street as a key east-west green connection from the West Hills and Goose Hollow to the Willamette River.

PHOTO COLLAGE

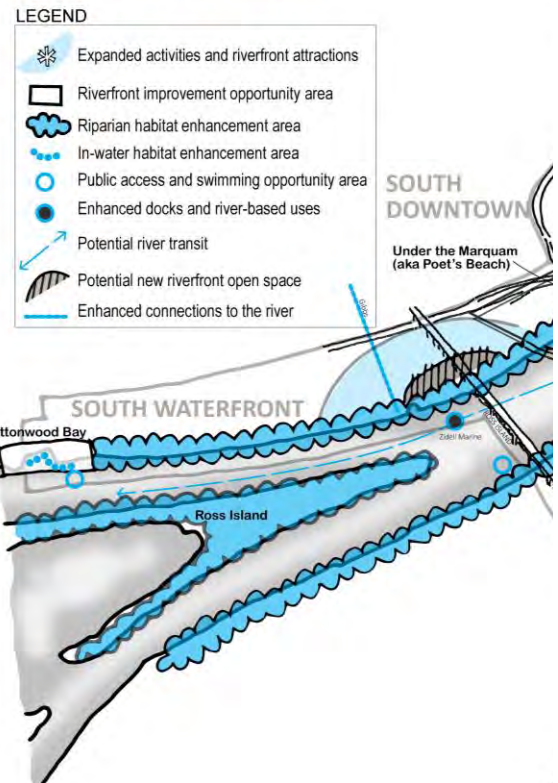
4. WILLAMETTE RIVER

More than any other feature in the regional landscape, the Willamette River has influenced human settlement since Native Americans arrived and through European settlement to the urban Central City of today. However, as the necessity for people to be close to the river for food, water, river commerce and transportation became less critical, the Willamette riverfront became forgotten in the daily life of the city. As the city developed, sea walls, buildings, roads and bridges were constructed in the riverfront area that greatly altered the natural function and habitat values. Members of the public expressed a strong desire to restore physical, social, environmental economic and historical connections for a variety of reasons: a desire for more river-related commerce; increased opportunities for riverfront and river-based recreation and transit; and the need to identify how and where best to enhance critical habitat intended to restore river health. The Willamette River goals and policies are intended to address these priorities.

Central City Goals

- Goal 4.A:** The Willamette River is the Central City’s defining feature, framed by a well-designed built environment that celebrates views to the larger surrounding landscape, encourages east-west access and orientation and supports a range of river uses.
- Goal 4.B:** The Willamette River plays a significant role in the environmental health, economy, recreation, urban form and character of the Central City.
- Goal 4.C:** The Willamette River is healthy and supports fish, wildlife and people.
- Goal 4.D:** The Willamette River and adjacent public areas are accessible and connected.

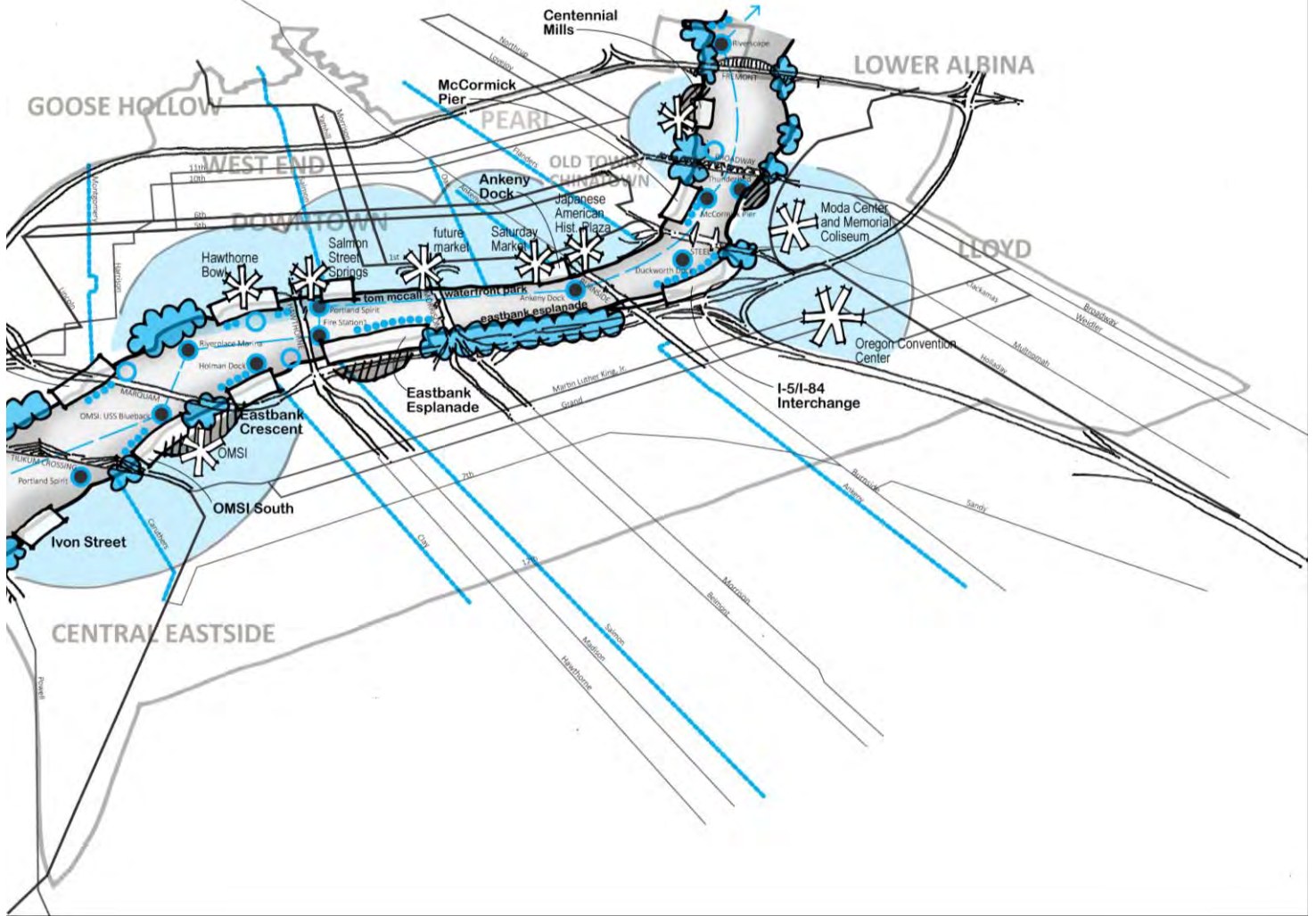
WILLAMETTE RIVER



Multifunctional River

The Willamette River supports a broad array of uses including boating, swimming, walking, biking, large and small events, commerce, natural resources, maritime history and other features making it the heart of the Central City. These policies support the role of the Willamette River as a defining feature of the Central City and the region.





River-oriented development

These policies address considerations for new development near the Willamette River and along Naito Parkway on the west side.



CENTRAL CITY POLICIES: WILLAMETTE RIVER

Multifunctional river

- Policy 4.1** **Portland's commons.** Promote improvements and activities on the riverfront and in the Willamette River to strengthen the physical, visual, and cultural connections between the river and the rest of the Central City. Increase public awareness of the river's historical, economic and ecological importance.
- Policy 4.2** **Willamette River recreation.** Provide for safe, enjoyable and valuable on and in-river recreational experiences for all users. Enhance the interconnected system of parks, trails, docks, natural areas and destinations adjacent to and within the river.
- Policy 4.3** **Prosperous and vibrant Willamette River waterfront.** Support uses that capitalize on the river and riverfront locations, expand tourism and commercial uses, and reinforce the distinctive character of the different riverfront subdistricts.
- Policy 4.4** **Willamette River transportation.** Improve infrastructure that supports commercial, river transit, individual watercraft, tourist and recreational boating uses. Ensure that new river transportation terminals and docks are connected by streets and trails that provide direct access to transit from points throughout the Central City.
- Policy 4.5** **Watershed health.*** Maintain and improve the water quality and riparian and in-water habitat of the Willamette River to protect public health and support the conservation and restoration of native fish and wildlife populations.
[DT, PL, LA, LD, SD, SW]
- Policy 4.6** **Connections to the Willamette River.** Increase the community's enjoyment of and direct experience with the Willamette River. Improve physical and visual connections between the subdistricts and the Willamette River.

River-oriented development

- Policy 4.7** **Periodic flooding.** Minimize the risk to new and existing development and infrastructure from flood events, while also maintaining and enhancing ecological functions associated with the river and floodplain.
- Policy 4.8** **Relationship to the river.** Encourage development adjacent to the Willamette River to orient buildings towards the river, at appropriate setback distances. Add entrances, visual and physical connections, art installments and other amenities in order to create a relationship between the built environment and activities along the river.
- Policy 4.9** **Commercial development.** Encourage new clusters of commercial uses adjacent to the Willamette River, at appropriate setback distances, in order to bring more people, events and activities to the riverfront.
- Policy 4.10** **Bridgehead redevelopment.** Redevelop bridgehead sites to create dynamic places that bring a diversity of residents, workers and visitors to the riverfront and link east- and west-side subdistricts of the Central City.

SUBDISTRICT POLICIES: WILLAMETTE RIVER

This section contains Willamette River policies specific to the particular Central City subdistricts that touch the Willamette River: Downtown, the Pearl, Old Town/Chinatown, Lower Albina, Lloyd, Central Eastside, South Waterfront and South Downtown/University.

Downtown

Policy 4.DT-1 Tom McCall Waterfront Park.

- a. **Promotion.** Recognize and promote the park, including the Willamette River, as a key regional attraction and asset serving visitors, employees and residents of the Central City.
- b. **Watershed health.** Maintain in-water habitat at Hawthorne Bowl, incorporate native vegetation and large canopy trees into landscaping within Tom McCall Waterfront Park, incorporate low impact design in new and replaced docks and explore innovative technologies for adding habitat along the seawall.
- c. **Improvements.** Facilitate planned improvements that activate the park; improve connectivity between the park and the subdistricts; and provide for a mix of river recreation and transportation.
- d. **Activities and amenities.** Expand the range of public activities and attractors in the park including but not limited to events; recreation; small-scale retail; and art, culture, ecological and historic displays.
- e. **Events.** Create a balance between large events, small events and other park activities to maximize public use and enjoyment of the park, especially during the summer when multiple large-scale events take place.
- f. **Flood Risk.** Explore options to increase flood capacity and reduce risks from flooding on critical infrastructure and improvements within and adjacent to the park.

The Pearl

Policy 4.PL-1 Pearl urban riverfront. Encourage the development of a distinctly urban riverfront that balances human activities including river transportation, recreation and development with habitat enhancement.

Policy 4.PL-2 Watershed health. Maintain and enhance in-water habitat at Centennial Mills and replace invasive, non-native plants with native plants on the river banks between Centennial Mills and McCormick Pier to the south.

Old Town/Chinatown

Policy 4.OT-1 Old Town/Chinatown urban riverfront. Encourage the development of a distinctly urban riverfront that that brings people closer to the riverfront. Encourage doors and windows with orientation toward SW Naito Parkway and the Willamette River.

Policy 4.OT-2 **Watershed health.** Maintain and enhance in-water habitat at McCormick Pier and replace invasive, non-native plants with native plants on the river banks between McCormick Pier and Centennial Mills to the north.

Lower Albina

Policy 4.LA-1 **Working harbor.** Protect the Lower Albina working harbor and support river-dependent uses.

Policy 4.LA-2 **Watershed health.** Support the natural resource protection and enhancement objectives of the River Plan.

Lloyd

Policy 4.LD-1 **Lloyd urban riverfront.** Encourage redevelopment of the Thunderbird site with a unique development that connects the subdistrict to the Willamette River.

Policy 4.LD-2 **Public trails.** Improve public trail connections between the Eastbank Esplanade, the Convention Center and the Coliseum and create a public trail connection from the Eastbank Esplanade to the Broadway Bridge.

Policy 4.LD-3 **Watershed health.** Maintain and enhance in-water and riparian habitat near the Duckworth Dock and replace invasive, non-native plants with native plants on the river banks from the Eastbank Esplanade north to the Broadway Bridge.

Central Eastside

Policy 4.CE-1 **River economy.** Leverage the Willamette River as an important component of the Central Eastside’s local economy by supporting river-dependent and river-related commercial and mixed uses that bring more people to and on the river.

Policy 4.CE-2 **Southeast riverfront.** Create a relationship of physical form, orientation, activities and access between Central Eastside development and the Willamette River. Utilize building design, active ground floors facing the river, new uses and open areas that encourage people’s enjoyment of the river in both public and private spaces.

Policy 4.CE-3 **Watershed health.** Maintain and enhance in-water and riparian habitat along the Eastbank Esplanade and the Eastbank Crescent and replace invasive, non-native plants with native plants and trees on the river banks along the Esplanade and south to the Springwater Trail.

South Waterfront

- Policy 4.SW-1** **River access, greenway and recreation.** Encourage improvements along the Willamette River in South Waterfront to enhance resident, employee and visitor access to and enjoyment of the river for activities such as contemplation, recreational boating, swimming and fishing.
- Policy 4.SW-2** **Watershed health.** Maintain and enhance in-water habitat and incorporate low impact design in new/replaced docks.

South Downtown/University

- Policy 4.SD-1** **South Downtown urban riverfront.** Leverage redevelopment to provide additional access to the riverfront.
- Policy 4.SD-2** **Watershed health.** Improve in-water and riparian habitat at the Riverplace Marina and under the Marquam Bridge and replace invasive, non-native plants with native plants on the river banks from the Hawthorne Bowl to South Waterfront.

5. Urban Design

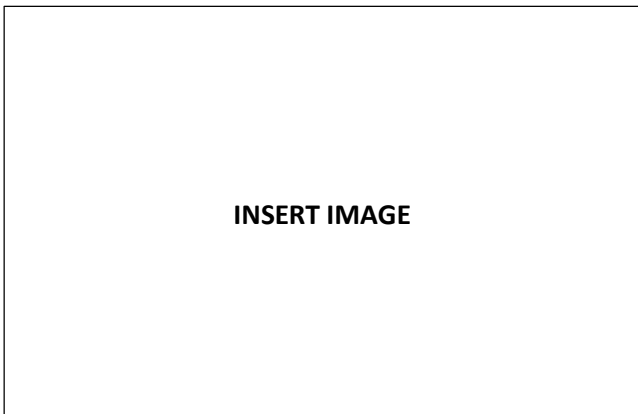
The practice of urban design involves the physical features of the built and natural environment that define the character of a place. It can be thought of as the art of making places for people. Urban design works at a variety of scales, and includes the larger urban form of the city to the design of buildings; streets and the public realm; parks and open spaces; and historic districts.

Central City Goals

- Goal 5.A:** The Central City is composed of diverse, high-density subdistricts that feature high-quality spaces and a character that facilitates social interaction and expands activities unique to the Central City.
- Goal 5.B:** The Central City’s public realm is characterized by human-scaled accessible streets, connections, parks, open space, and recreation opportunities that offer a range of different experiences for public interaction.

Context and Form

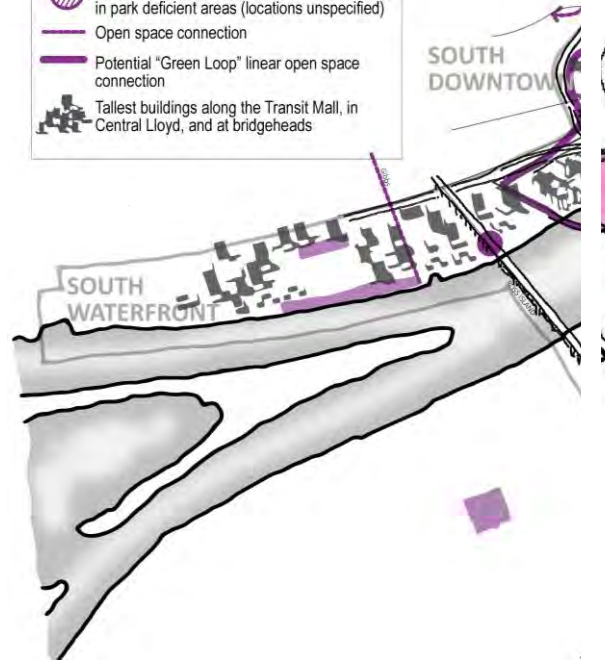
These policies address the context and form of the Central City as the most densely developed area in the region, a place where large numbers of people live, work and visit – and how it relates to the region, its surrounding neighborhoods and the natural landscape.



URBAN DESIGN

LEGEND

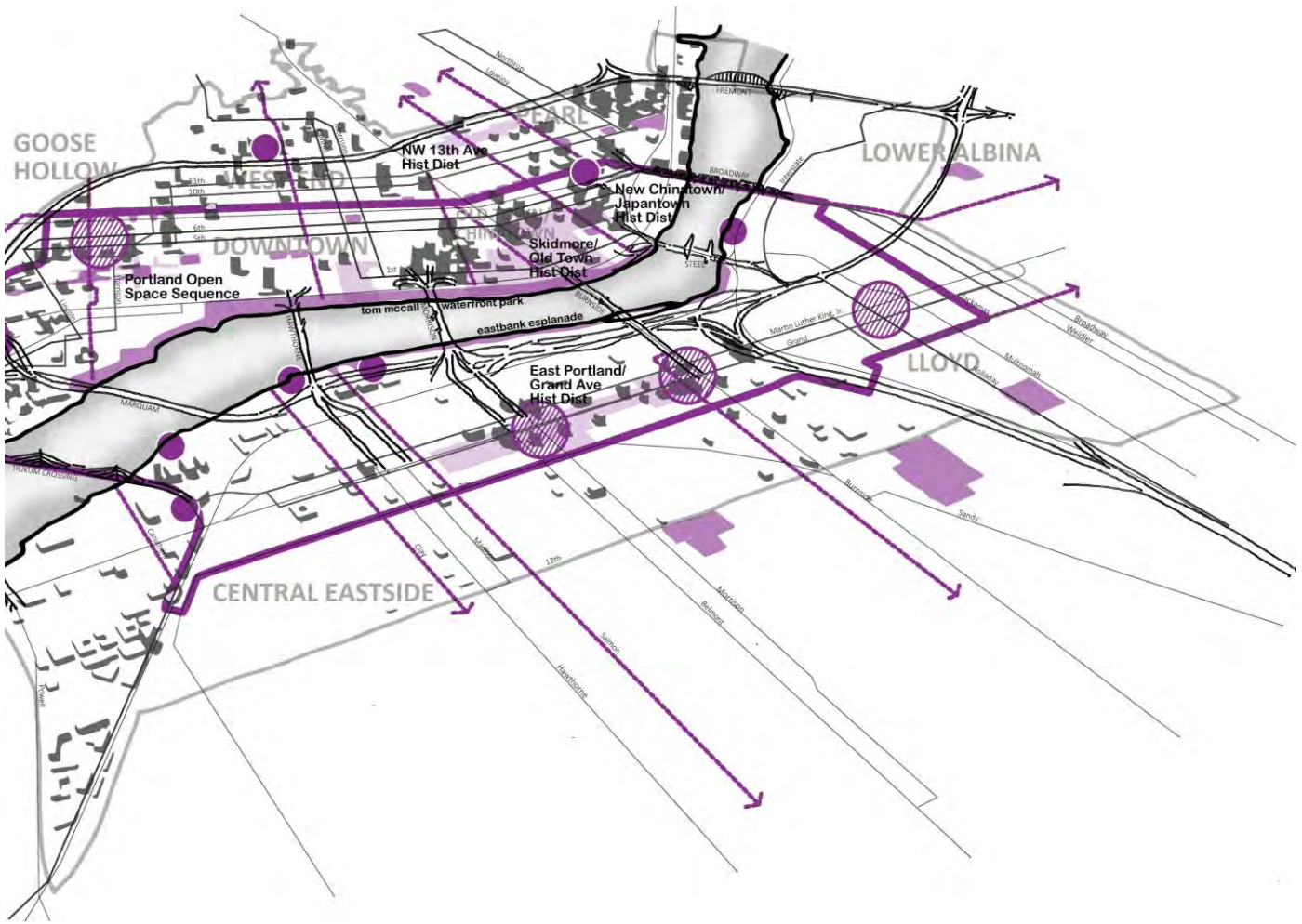
- Central City historic districts
- Existing open spaces
- Potential new open space with redevelopment in park deficient areas (locations unspecified)
- Open space connection
- Potential "Green Loop" linear open space connection
- Tallest buildings along the Transit Mall, in Central Lloyd, and at bridgeheads



Connected Public Realm

These policies support a more intentional approach to the design, function, connectivity and character that define the Central City’s public realm.



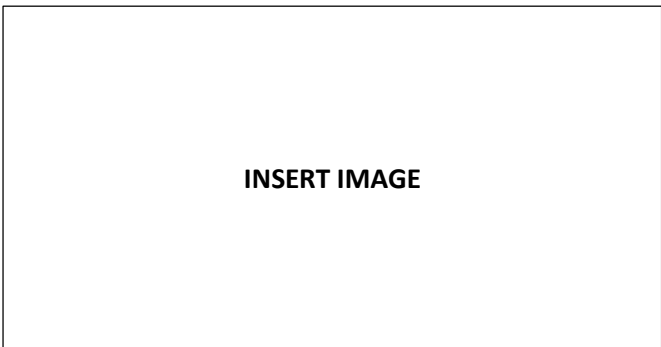
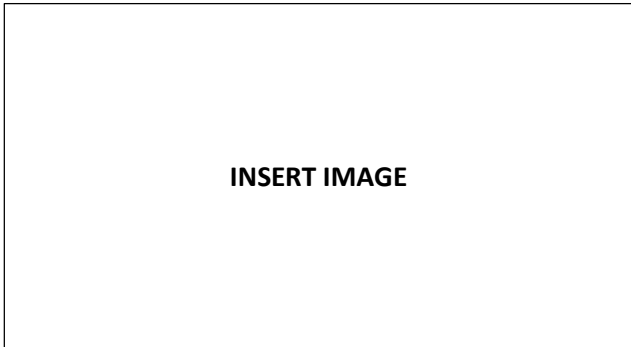


Parks and Open Space

These policies support enhancements to existing open spaces and consider improvements to the Central City’s park and open space network.

Historic Preservation

The Central City is rich with designated historic landmarks and historic districts that help create a sense of place, contribute to neighborhood character, and recognize Portland’s history. These policies support the protection and preservation of historic and culturally significant resources in the city as it continues to grow and change.



CENTRAL CITY POLICIES: URBAN DESIGN

Context and Form

- Policy 5.1** **Experimentation and innovation.** Support the design of new places and uses, both permanent and temporary that promote innovation, experimentation and exchange in the Central City.
- Policy 5.2** **Dynamic skyline.** Encourage the tallest buildings to locate adjacent to transit hubs and corridors, generally stepping down in height to the Willamette River. Allow taller buildings at bridgeheads and contextually sensitive heights within historic districts. Encourage heights that preserve sunlight on public open spaces and parks.
- Policy 5.3** **Scenic Resources.** Maintain and enhance public views of key landmarks and scenic resources (Vista Bridge, Union Station, Mt. Hood, Willamette River bridges) which define the Central City, help with wayfinding, and connect residents, employees and visitors to Portland’s varied and unique landscape.
- Policy 5.4** **Neighborhood transitions.** Establish transitions between the Central City’s denser, taller and more commercial and industrial land uses and adjacent neighborhoods, while highlighting key gateway locations.

Connected Public Realm

- Policy 5.5** **Public realm.** Enhance the character and function of the public realm through design standards, guidelines, and land uses that activate the pedestrian environment.
- Policy 5.6** **Wayfinding.** Develop and maintain wayfinding strategies and tools that allow residents, employees, visitors and customers to navigate the Central City and locate key attractions, businesses, institutions, the riverfront and other destinations in a safe, intuitive and enjoyable manner.
- Policy 5.7** **Street hierarchy and development character.*** Establish a more intentional street hierarchy with a greater diversity of street characters, distinguishing three main types: retail/commercial, boulevard and flexible.

[DT, WE, GH, PL, OT, LA, LD, CE, SW, SD]
- Policy 5.8** **Regional corridors and connections.** Elevate the presence, character and role of physical and visual corridors such as trails, transit lines, streets and scenic corridors, helping to bridge neighborhoods across physical and psychological barriers.
- Policy 5.9** **“Green Loop” concept.** Create a “Green Loop” within Central City that connects east and west side neighborhoods to open spaces and the Willamette River, with high quality bicycle accommodations and innovative, park-like pedestrian environments and wildlife habitat connections.

Enhance connections to the “Green Loop” alignment on key corridors throughout the Central City to improve access, create activity nodes and support neighborhood attractions and economic development.

- Policy 5.10** **MAX-Portland Streetcar interchanges.** Create supportive environments for transit connections that occur where MAX light rail lines cross Portland Streetcar lines in the West End, Lloyd and the Central Eastside.
- Policy 5.11** **Streetcar lines.** Require active uses near streetcar stations and limit auto-oriented development.

Parks and Open Space

- Policy 5.12** **Signature open spaces.** Advance and expand the Central City’s iconic interconnected system of parks, trails, and natural areas by offering a wide range of social, recreational, contemplative, respite and ecological functions to serve an increasingly diverse population of residents, workers and visitors.
- Policy 5.13** **Open space network.*** Beyond signature open spaces, expand opportunities in existing parks and open spaces to meet the needs of Central City residents, workers and visitors for both passive and active recreation, especially in areas zoned for high-density, mixed use development. Enhance the network by improving connections among parks, future parks and open spaces, and the riverfront.

Encourage the provision of publicly accessible private plazas and pocket parks with new development.

[DT, WE, GH, PL, LD, SW, SD; see Tom McCall Waterfront Park policies in Willamette River, Downtown subdistrict section]

Historic Preservation

- Policy 5.14** **Renovation and rehabilitation.** Encourage the preservation, renovation and rehabilitation of historic buildings.
- Policy 5.15** **Historic resources and districts.*** Enhance the identity of historically, culturally and architecturally significant buildings and places, while promoting contextually-sensitive infill development on vacant and surface parking lots.

[DT, WE, PL, OT, LA, CE]

SUBDISTRICT POLICIES: URBAN DESIGN

This section contains Urban Design policies which are specific to a particular Central City subdistrict: Downtown, West End, Goose Hollow, the Pearl, Old Town/Chinatown, Lower Albina, Lloyd, Central Eastside, South Waterfront or South Downtown/University.

Downtown

- Policy 5.DT-1** **Retail core.** Create and maintain a unified identity for the Retail Core through signage, banners, lighting, street furnishings and plantings.

- Policy 5.DT-2** **Transit Mall.** Provide a safe and pleasant street environment for transit riders and other pedestrians along SW 5th and 6th Avenues. Maintain the consistent streetscape, transit furnishings, and public art along the corridor.
- Policy 5.DT-3** **Street hierarchy and development character.** Support the signature retail/commercial character of SW Morrison, SW Yamhill, SW Broadway, SW Alder and West Burnside; the signature boulevard character of 5th, 6th and Naito Parkway; and the signature boulevard/flexible character of SW Salmon; and the flexible character of SW Oak and SW Ankeny.
- Policy 5.DT-4** **Open space network.**
- a. **Civic gathering places.** Provide safe and accessible urban spaces for large public gatherings including festivals, parades, concerts, sports events and other assemblies. Reinforce Broadway as Portland’s theater and bright lights district.
 - b. **South Park Blocks.** Preserve and improve the South Park Blocks as one of Portland’s signature open spaces and integrate them with high quality pedestrian and bicycle facilities as well as improved opportunities for habitat.
- Policy 5.DT-5** **Historic resources and districts.** Protect and rehabilitate significant historic resources throughout the subdistrict. In particular, protect the historic character and architecturally significant resources of the Yamhill Historic District.

West End

- Policy 5.WE-1** **South Park Blocks frontages.** Encourage active ground floor building frontages along the Park Blocks.
- Policy 5.WE-2** **Street hierarchy and development character.** Support the retail/commercial character of SW 10th Avenue, Jefferson and Yamhill streets and the boulevard character of Morrison, Columbia, Clay and Market streets and 12th Avenue.
- Policy 5.WE-3** **Historic resources and districts.** Retain the personality and character of the West End by encouraging the preservation and rehabilitation of existing buildings and historic resources that represent a wide range of architectural styles, scales and eras.

Goose Hollow

- Policy 5.GH-1** **Distinctive building character.** Encourage the diversity and unique character of Goose Hollow and its wide range of uses, building types, ages and scales. Seek ways to bring new uses and energy into the subdistrict while maintaining positive characteristics of existing buildings.
- Policy 5.GH-2** **Natural features.** Support and enhance existing natural features resulting from the subdistrict’s proximity to the West Hills, such as the varied topography, trees, and vegetation.

- Policy 5.GH-3** **Street hierarchy and development character.** Support the retail/commercial character of West Burnside, SW Yamhill, and SW Jefferson; the unique flexible/boulevard character of SW Salmon; and the flexible character of SW 20th and 16th. Activate ground floor facades throughout the subdistrict.
- Policy 5.GH-4** **Open space network.** Make existing open spaces, including Collins Circle, Firefighters Park and the stadium plazas more usable, engaging spaces and improve access to Washington Park.

The Pearl

- Policy 5.PL-1** **NW 13th Avenue Historic District and main street.** Protect the historic warehouse character and architecturally significant resources within the district. Continue the active character of the street environment north of the historic district by encouraging active uses; adding and maintaining loading docks; and maintaining lower building heights along NW 13th Avenue from NW Davis Street to the north.
- Policy 5.PL-2** **Under I-405 repurposing.** Support redevelopment of areas under I-405 to create safe, attractive, and engaging spaces.
- Policy 5.PL-3** **Large site development.** Encourage redevelopment of large sites that includes new compatible uses, sustainability and equity considerations, scenic resource preservation, pedestrian connections through the site, strong street presence, and new open space amenities.
- Policy 5.PL-4** **Street hierarchy and development character.** Support the retail/commercial character of NW 11th, 13th, Lovejoy, and Glisan; as well as the flexible character of NW Davis, Flanders, Johnson, Marshall and Pettygrove.
- Policy 5.PL-5** **Open space network.** Require the development of publicly accessible open space at the Centennial Mills and US Postal Service sites as part of redevelopment.
- Policy 5.PL-6** **Historic resources and districts.** Encourage the preservation of older and often smaller buildings with historic character.

Old Town/Chinatown

- Policy 5.OT-1** **New Chinatown/Japantown.** Protect significant resources and enhance the historic multi-cultural significance of the New Chinatown/Japantown Historic District. Support the subdistrict's historic character, multi-ethnic history and today's Pan-Asian culture.
- Policy 5.OT-2** **Skidmore/Old Town.** Protect historic and architecturally significant resources of the Skidmore/Old Town National Historic Landmark District. Support the district's historic commercial character, history of social service and connection to the Willamette River.

- Policy 5.OT-3** **East-west connectivity.** Increase east-west connections to the Pearl and the riverfront and strengthen the Festival Streets along NW Davis and Flanders streets through supportive adjacent new development and active programming.
- Policy 5.OT-4** **Active uses.** Increase the number of ground floor activating uses and eliminate gaps in the built environment.
- Policy 5.OT-5** **Street hierarchy and development character.** Support the retail/commercial character of W Burnside, NW Broadway, NW Glisan and NW 4th; the boulevard character of NW 5th and 6th, Naito Parkway and NW Everett; and the flexible character of NW Flanders and Davis.
- Policy 5.OT-6** **Historic resources and districts.** Protect and enhance the rich historic and cultural character of Old Town/Chinatown. Preserve and rehabilitate historic resources throughout the subdistrict.

Lower Albina

- Policy 5.LA-1** **Russell Street.** Strengthen the character of Russell Street and reestablish the historic connection between Lower Albina and the Vancouver/Williams Corridor by encouraging new mixed uses, rehabilitated buildings and a nighttime orientation.
- Policy 5.LA-2** **Industrial character.** Preserve and enhance the industrial character and functionality of the Lower Albina industrial area.
- Policy 5.LA-3** **Street hierarchy and development character.** Support the retail/commercial character of NE Russell; the boulevard character of Interstate Avenue; and the flexible character of the “strand” connection.
- Policy 5.LA-4** **Historic resources and districts.** Preserve, rehabilitate and celebrate historic structures in Lower Albina, including those in the Russell Street Conservation District and culturally significant African-American resources identified in the Cornerstones of Community inventory.

Lloyd

- Policy 5.LD-1** **Diverse and distinctive urban places.** Focus more intense development in the Central Lloyd area and Rose Quarter while strengthening the distinct character of the existing Lloyd subareas.
- Policy 5.LD-2** **Connectivity through large blocks.** Take advantage of the unique opportunity for dense, large site development made possible by the large blocks found in the Lloyd. Integrate this development into the surrounding blocks through well designed internal green spaces and pedestrian connections.
- Policy 5.LD-3** **Pedestrian-oriented development.** Discourage new automobile-oriented uses and encourage the eventual redevelopment of drive-throughs and large surface parking lots with development that is oriented to the street and enhances the pedestrian environment.

- Policy 5.LD-4** **Street hierarchy and development character.** Support the retail/commercial character of NE Broadway, MLK and Grand; the boulevard character of NE Weidler, Interstate Avenue, NE Lloyd and NE 15th; and the flexible character of NE Clackamas, NE 2nd, 6th and 12th.
- Policy 5.LD-5** **Open space network.** Develop a signature sequence of open spaces, linked through a pedestrian wayfinding system that serves the Central Lloyd area, becomes a primary organizing structure for new development, and offers a diversity of character, experiences, and recreational functions for district residents, workers and visitors.

Central Eastside

- Policy 5.CE-1** **East Portland Grand Avenue Historic District.** Promote the rehabilitation of existing and historic buildings in the Grand Avenue Historic District through enhanced design guidelines and regulations that incent rehabilitation and reuse over demolition. Encourage adaptive reuse of existing structures.
- Policy 5.CE-2** **OMSI Station area.** Create an urban form at the OMSI Station area that facilitates public access from the streetcar and light rail stations to the greenway trail and riverfront, PCC, OMSI, Portland Opera, Portland Spirit, the Oregon Rail Heritage Foundation sites, through public realm enhancements and ground floor active uses that create a safe and vibrant environment.
- Policy 5.CE-3** **Clinton Station area.** Establish an urban form at the Clinton Station area that creates a safe and active environment by incorporating a mix of uses that serve transit riders as well as residents and employees of the station area, Central Eastside, and inner Southeast Portland neighborhoods.
- Policy 5.CE-4** **Urban form on large blocks.** Use building massing and orientation, accessways, and open spaces in the development of large blocks and sites to establish an urban form and block configuration consistent with the rest of the Central Eastside.
- Policy 5.CE-5** **Street hierarchy and development character.** Support the retail/commercial character of East Burnside, NE Sandy, SE Grand, SE Division, SE Hawthorne and SE Morrison; the boulevard character of SE Stark, NE Couch, SE 11th and SE 12th; and the flexible character of SE Ankeny, SE Salmon, SE Clay, SE 7th and SE Caruthers. Create transitions between industrial and mixed use areas.
- Policy 5.CE-6** **Historic resources and districts.**
- a. **Industrial character.** Maintain and celebrate the historic industrial character of the Central Eastside through the preservation and enhancement of historic buildings and infrastructure that reflect past uses and architectural styles while serving existing and emerging industrial employment uses.
 - b. **Historic main streets.** Enhance the character and visibility of historic streets throughout the subdistrict such as SE Morrison Street, including areas under viaducts, through public realm improvements and building rehabilitations that acknowledge these streets' historic role in shaping the subdistrict, while

elevating their current status as important streets for commerce and employment.

South Waterfront

- Policy 5.SW-1** **Street hierarchy and development character.** Support the retail/commercial character of SW Bond Avenue and SW Gibbs St and the boulevard character of SW Moody.
- Policy 5.SW-2** **Open space network.** Create an exemplary open space network that embraces the river as the subdistrict’s “front yard” and provides a range of urban amenities, passive and active recreation experiences and ecological functions.

South Downtown/University

- Policy 5.SD-1** **Portland State University character.** Encourage the continued development of a pedestrian-oriented, predominantly university campus environment centered on the South Park Blocks.
- Encourage the development of an integrated urban environment with a rich mix of public and private institutions, commercial uses and housing west of Broadway to SW 4th Avenue.
- Policy 5.SD-2** **South Auditorium character.** Retain the modernist feel and pedestrian-focused character of the South Auditorium Plan District, respecting in particular the National Register of Historic Places Halprin Open Space Sequence. Add new uses to increase pedestrian activity in the subdistrict. Connect the pedestrian pathways to adjacent subdistricts while maintaining the character, safety, and livability of this neighborhood.
- Policy 5.SD-3** **RiverPlace character.** Encourage the continued development of RiverPlace with a broad mix of residential, commercial, recreational and boating uses. Maintain and enhance the cohesive design aesthetic, generous landscaping, and close relationship of the public realm to the river.
- Policy 5.SD-4** **Street hierarchy and development character.** Support the retail/commercial character of 4th Avenue, Broadway and College Streets; as well as the flexible character of Park Avenue and Montgomery Street.
- Policy 5.SD-5** **Open space network.** Support existing open spaces, including the Halprin Open Space Sequence and the Willamette River, to be more accessible, usable and engaging spaces for the community while also supporting the development of new open spaces where opportunities arise. Broaden the range of available recreation experiences.

PHOTO COLLAGE

6. HEALTH AND ENVIRONMENT

Portland's Central City continues to be a national leader in demonstrating how a city center can become more livable, prosperous and attractive through urban development that embraces environmental and human health. Stakeholders expressed interest in the public and private sectors continuing to implement and experiment with new infrastructure that contributes to environmental health: integrating energy conservation with energy production; stormwater management with urban habitat; and transportation alternatives that lower the City's regional carbon footprint and promote human health. The Health and Environment policies are intended to support these priorities.

Central City Goals

Goal 6.A: The Central City is a living laboratory that demonstrates how the design and function of a dense urban center can provide equitable benefits to human health, the natural environment and the local economy.

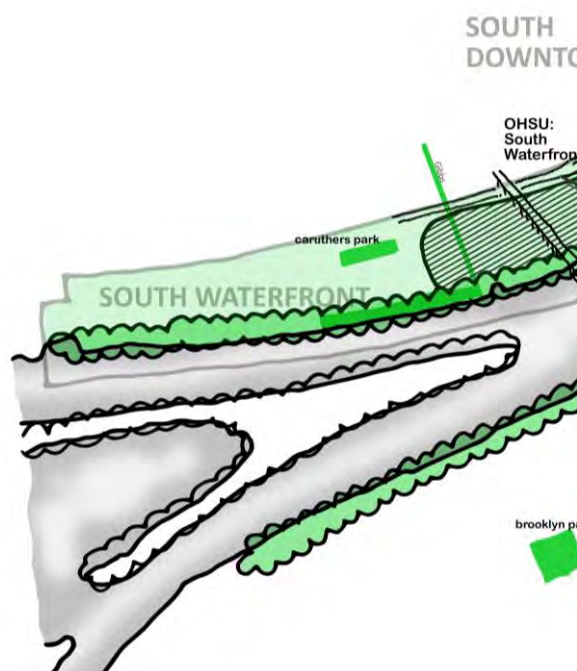
Resilience

These policies support the Central City's ability to prepare for and respond to natural hazards and disasters; and plan for climate change resilience.

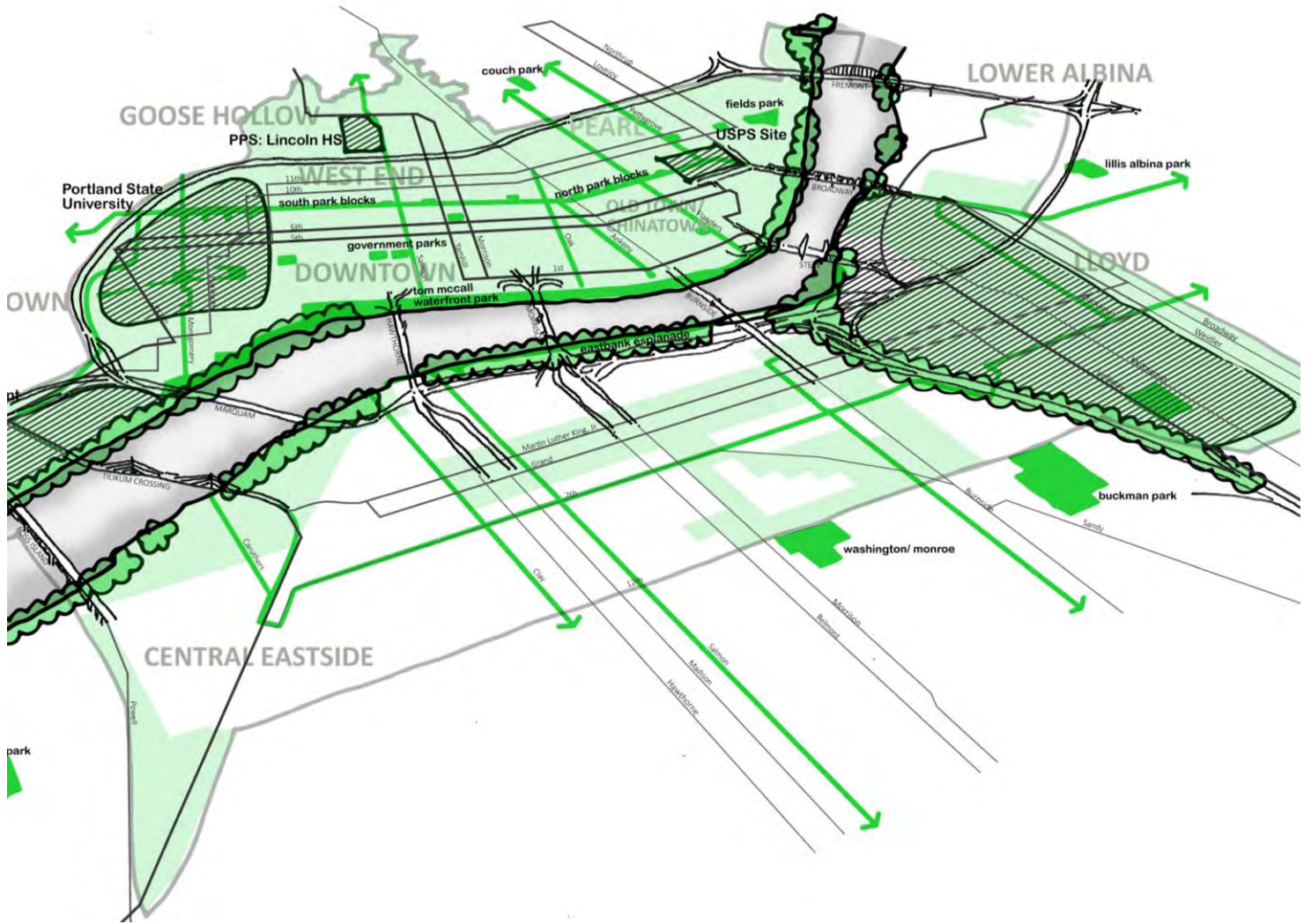
HEALTH AND ENVIRONMENT

LEGEND

- Enhanced open space network
- Enhanced natural resource opportunity area
- High performance development opportunity area
- Green infrastructure opportunity area



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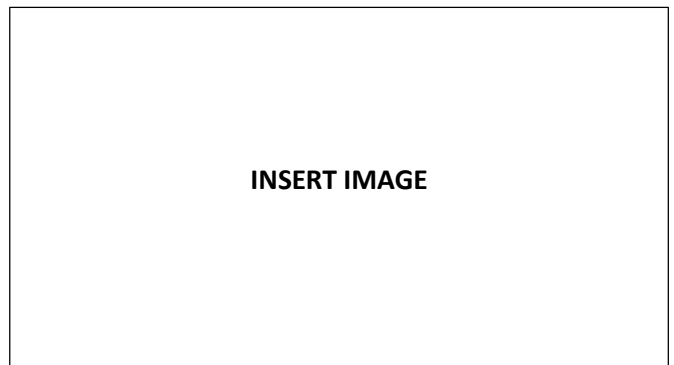
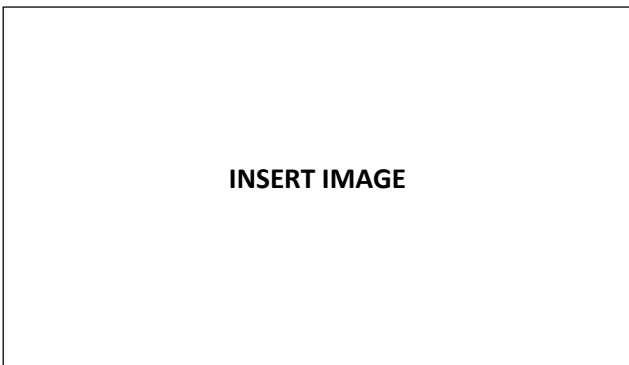


Health

These policies support the health of the Central City and all of its residents and visitors, both human and non-human.

Building Development

These policies support environmentally-friendly, energy efficient development, pushing Portland's Central City forward as a leader in sustainable urban development



CENTRAL CITY POLICIES: HEALTH AND ENVIRONMENT

Resilience

- Policy 6.1** **Resilient Central City.** Use planning and design in the Central City to help prevent or minimize the impacts of natural hazards. Support all Central City residents and businesses by planning and preparing for hazard-related emergency response situations.
- Policy 6.2** **Green infrastructure.** Increase the use of ecoroofs, vertical gardens, sustainable site development, landscaped setbacks and courtyards, living walls and other vegetated facilities to manage stormwater, improve the pedestrian environment, reduce heat island effects, improve air and water quality and create habitat for birds and pollinators.
- Policy 6.3** **Multiple functions.** Encourage green infrastructure, parks, open space, and recreation opportunities in the Central City that serve multiple functions to improve stormwater management, reduce heat island effects, create pockets of refuge and habitat, and provide places of respite and recreation for employees, residents and visitors.
- Policy 6.4** **Climate change resilience.** Assess, monitor and update plans, services and infrastructure in the Central City to anticipate and respond to evolving climate change conditions.
- a. **Flooding.** Monitor and adapt to changes in hydrology, including future river levels, changes in flood frequency and duration, and changes in stormwater runoff rates.
 - b. **Heat island.** Reduce the adverse impacts of urban heat island effects on public health, especially in under-served and under-represented communities.
 - c. **Wildlife movement.** Protect and improve terrestrial and aquatic wildlife movement corridors.

Health

- Policy 6.5** **Human health.** Encourage the use of active modes of transportation by creating and enhancing a network of bike and pedestrian facilities that provide access to services and destinations including natural areas. Improve access for all people to locally grown and healthy foods. Encourage the use of building construction materials and products that do not have harmful effects on human health and the environment. Encourage social health by fostering community in a hospitable public realm.
- Policy 6.6** **Water quality.** Improve water quality and watershed health by reducing effective impervious surfaces, increasing the quality and diversity (both species and age distribution) of the tree canopy, and protecting and restoring in-water, riparian and upland habitat to conserve native fish and wildlife populations.

Policy 6.7 **Upland habitat connections.** Create an upland wildlife habitat corridor using street trees, native vegetation in landscaping, public open spaces and ecoroofs that provide a connection for avian and pollinator species between the West Hills and Willamette River.

Building Development

Policy 6.8 **Buildings and energy.** Increase the energy efficiency of buildings, the use of onsite renewable energy systems, and the development of low-carbon district energy systems. Conserve resources by encouraging the reuse of existing building stock and recycling materials from construction and demolition.

Policy 6.9 **Bird-friendly development.** Encourage bird-friendly building and lighting design and management practices, to reduce hazards to resident and migrating birds.

Policy 6.10 **Low-carbon development.** Reduce carbon emissions from existing and new buildings, transportation systems and infrastructure.

- a. **Building retrofits.** Support retrofits to existing buildings to reduce energy use, improve indoor air quality, preserve historic resources, and improve seismic resilience.
- b. **Green building.** Require high-performance new buildings that meet the energy targets of Architecture 2030, including net-zero energy use in all new buildings by 2030.
- c. **High performance areas.** Encourage “high performance areas” that conserve energy and water; use renewable energy sources; reduce waste and recycle; manage stormwater; improve occupant health; and enhance the character of the neighborhood, particularly in areas with large amounts of planned new development or redevelopment.
- d. **Solar energy.** Encourage the installation of on-site solar photovoltaic systems.
- e. **Clean district energy.** Enable the expansion and establishment of district energy systems that reduce carbon emissions.
- f. **Low-carbon transportation.** Reduce carbon emissions from transportation systems, including supporting electric vehicle infrastructure.
- g. **Carbon sequestration.** Maintain and enhance green infrastructure to increase carbon sequestration and reduce energy needed to cool buildings in summer.

SUBDISTRICT POLICIES: HEALTH AND ENVIRONMENT

This section contains Health and Environment policies which are specific to a particular Central City subdistrict: West End, Goose Hollow, the Pearl, Old Town/Chinatown, Lloyd, Central Eastside, South Waterfront or South Downtown/University. There are no subdistrict-specific policies for Downtown or Lower Albina.

West End

Policy 6.WE-1 **Build on existing high performance areas.** Encourage “high performance areas” that promote energy efficiency and green building technologies and practices at a neighborhood scale, particularly in new development adjacent to the Pearl’s Brewery Blocks.

Goose Hollow

Policy 6.GH-1 **High performance Lincoln High School.** Encourage “high performance areas” in areas with large amounts of planned new development or redevelopment, especially the Lincoln High School site.

Policy 6.GH-2 **Water management and reuse.** Take advantage of Goose Hollow’s topography, identify opportunities for stormwater management, as well as rainwater harvesting and reuse within the subdistrict.

The Pearl

Policy 6.PL-1 **High performance large sites.** Encourage “high performance areas” that promote energy efficiency, green building technologies, sustainable site design and practices at a neighborhood scale, particularly in areas with large amounts of planned new development or redevelopment such as the US Postal Service site.

Old Town/Chinatown

Policy 6.OT-1 **High performance rehabilitation.** Support the inclusion of carbon reducing and environmentally friendly features and technologies in the rehabilitation of historic structures while preserving their historic character.

Lloyd

Policy 6.LD-1 **Sustainable subdistrict.** Promote innovation and leadership in the Lloyd in the areas of sustainable and restorative development, energy efficiency, water conservation, waste reduction and climate adaptation. Support partnerships that facilitate subdistrict-wide strategies.

Policy 6.LD-2 **Sullivan’s Gulch.** Protect and enhance natural resources within Sullivan’s Gulch to improve its function as a habitat corridor, reduce the risk of wildfire and landslide, and maintain and enhance public views, while providing flexibility to incorporate a recreation trail.

Central Eastside

- Policy 6.CE-1** **Freight-compatible green infrastructure.** Plan for the development of green infrastructure, in the public right-of-way and on private property, taking into account freight street hierarchy by prioritizing city walkways and bikeways and mixed-use corridors for improvements such as trees and living walls throughout the subdistrict.
- Policy 6.CE-2** **Strategic tree canopy enhancement.** Plant and preserve trees, where appropriate, throughout the subdistrict. Prioritize planting along mixed use commercial corridors with higher employment densities and residential uses. Also, encourage plantings along pedestrian and bike corridors. Select trees and locations that provide adequate clearance for freight movement on streets prioritized for freight mobility.

South Waterfront

- Policy 6.SW-1** **High performance subdistrict.** Encourage “high performance areas” that promote energy efficiency and green building technologies and practices at a neighborhood scale particularly in areas with large amounts of planned new development.

South Downtown/University

- Policy 6.SD-1** **High performance university campus.** Support PSU as an urban laboratory to promote energy efficiency and green building technologies and practices, as well as sustainable site design and development.

PHOTO COLLAGE

D. OTHER AMENDMENTS TO THE COMPREHENSIVE PLAN/ TRANSPORTATION SYSTEM PLAN

The City of Portland is updating the Transportation System Plan (TSP), the long-range plan guiding transportation investments in the City.

The TSP meets state and regional planning requirements and addresses local transportation needs for cost-effective street, transit, freight, bicycle, and pedestrian improvements. The plan will provide transportation options for residents, employees, visitors, and firms doing business in Portland, making it more convenient to walk, bike, take transit—and drive less—while meeting their daily needs. The TSP provides a balanced transportation system to support neighborhood livability and economic development.

The Central City 2035 Plan will include Central City-specific amendments to the Comprehensive Plan policies and Transportation System Plan (TSP).

As the final plan is compiled, the following items may be integrated into other sections, but for review, documents related to the update are consolidated here:

- D-1. TSP/Comprehensive Plan policy amendments
- D-2. Transportation performance targets
- D-3. Street classifications
 - i. Traffic
 - ii. Transit
 - iii. Emergency Response
 - iv. Freight
 - v. Bicycle
 - vi. Pedestrian
 - vii. Street Design
- D-4. TSP Studies List
- D-5. Central City Candidate Project Map
- D-6. TPS Candidate Project List

D-1. Central City Policies and Objectives to be amended into the TSP as part of Central City 2035 Plan process

Goal 9.I The Central City has a safe, affordable, efficient and accessible multimodal transportation system that supports growth and reinforces the role of the Central City as the region's high density center.

Central City

The Central City is expected to continue to be the region's unique center for commerce and employment, arts and culture, entertainment, tourism, education and government. As such, it is imperative that the Central City provide the highest levels of accessibility, travel options and pedestrian amenities to support the planned residential and employment densities and other goals stated in the Central City 2035 Plan. Goal 9.I and the following policies provide the transportation policy framework for the Central City.

- Policy 9.40** **Regional transportation hub.** Strengthen the Central City as the highly accessible and multimodal hub for moving people and goods, reinforcing its regional center roles, enabling successful high-density employment and housing development, and thereby affirming its role in Metro's Region 2040 Framework Plan.
- Policy 9.41** **Optimized street network.** Improve street design and function to increase efficiency and safety for all transportation modes and the ability of the existing network to meet the access needs of businesses, shoppers, residents and visitors. Establish a system and standards that emphasize pedestrian, bicycle, transit and freight access while continuing to provide automobile access.
- Policy 9.42** **Regional corridors and connections.** Elevate the presence, character and role of physical and visual corridors such as trails, transit lines, busy streets and significant public views, helping to bridge neighborhoods across physical and psychological barriers.
- Policy 9.43** **Street diversity.** Differentiate the character of key streets to offer a diversity of urban experiences and connections, and reflect the character of unique districts.
- Policy 9.44** **Streetscape.** Improve the street environment and pedestrian experience by providing urban greenery and community uses of the right-of-way and by integrating high-density uses.
- Policy 9.45** **Active Transportation.** Encourage walking and bicycling with improved infrastructure and other means as a way to increase access and transportation choices, enhance livability and reduce carbon emissions in the Central City.
- Policy 9.46** **Transit.** Continue to strengthen the regional role of transit in the Central City. Facilitate safe, pleasant and efficient access and transfer opportunities for transit riders. Work with TriMet to increase frequency, reliability and safety, expansion of the rail, bus and streetcar system. Explore river transit opportunities.

- Policy 9.47** **Transportation Demand Management.** Foster the development of business and property owner-supported programs, incentives and activities that encourage employees, residents, students and visitors to use walking, bicycling, transit, carpool and car-share.
- Policy 9.48** **Regional multimodal access.** Work with the Oregon Department of Transportation on improvements to I-405, I-5 and US26 to enhance regional access to the Central City. Minimize through traffic on Central City streets, improve pedestrian and bicycle connectivity across the freeways and create opportunities for capping freeways to lessen the barrier effect of the freeway and open new areas for potential development and/or parks, open space, and recreation opportunities.
- Policy 9.49** **Portals.** Manage entry points into the district to provide balanced multimodal access to efficiently accommodate the increase in person trips and goods delivery as a result of growth and development. Discourage through trips from using district streets.
- Policy 9.50** **Transportation System Management.** Manage access and circulation to reduce traffic speeds and provide for safe street crossings, while balancing the need for vehicle and freight access to and from the district.
- Policy 9.51** **Parking.** Support Central City parking needs, particularly for retail, employment and residential growth, as well as for access to major attractions such as universities and event venues. Continue to limit the growth of the overall parking supply, and maximize the joint use of existing and new stalls to manage parking in a more efficient and dynamic manner, lower the costs of construction and meet mode split and climate action goals for the city.
- Policy 9.52** **Loading.** Support the delivery of goods in the Central City. Pursue strategies that bring new ways of delivering goods to the Central City in a way that optimizes loading and freight access and makes efficient use of limited urban space.

D-2. 2035 Performance Targets (from Quadrant Plans)

Downtown: In 2035, at least 85% of commute trips to and from the district are by non-single occupancy vehicle (SOV).

River: In 2035, at least 80% of commute trips to and from the district are by non-single occupancy vehicle (SOV).

Goose Hollow: In 2035, at least 80% of commute trips to and from the district are by non-single occupancy vehicle (SOV).

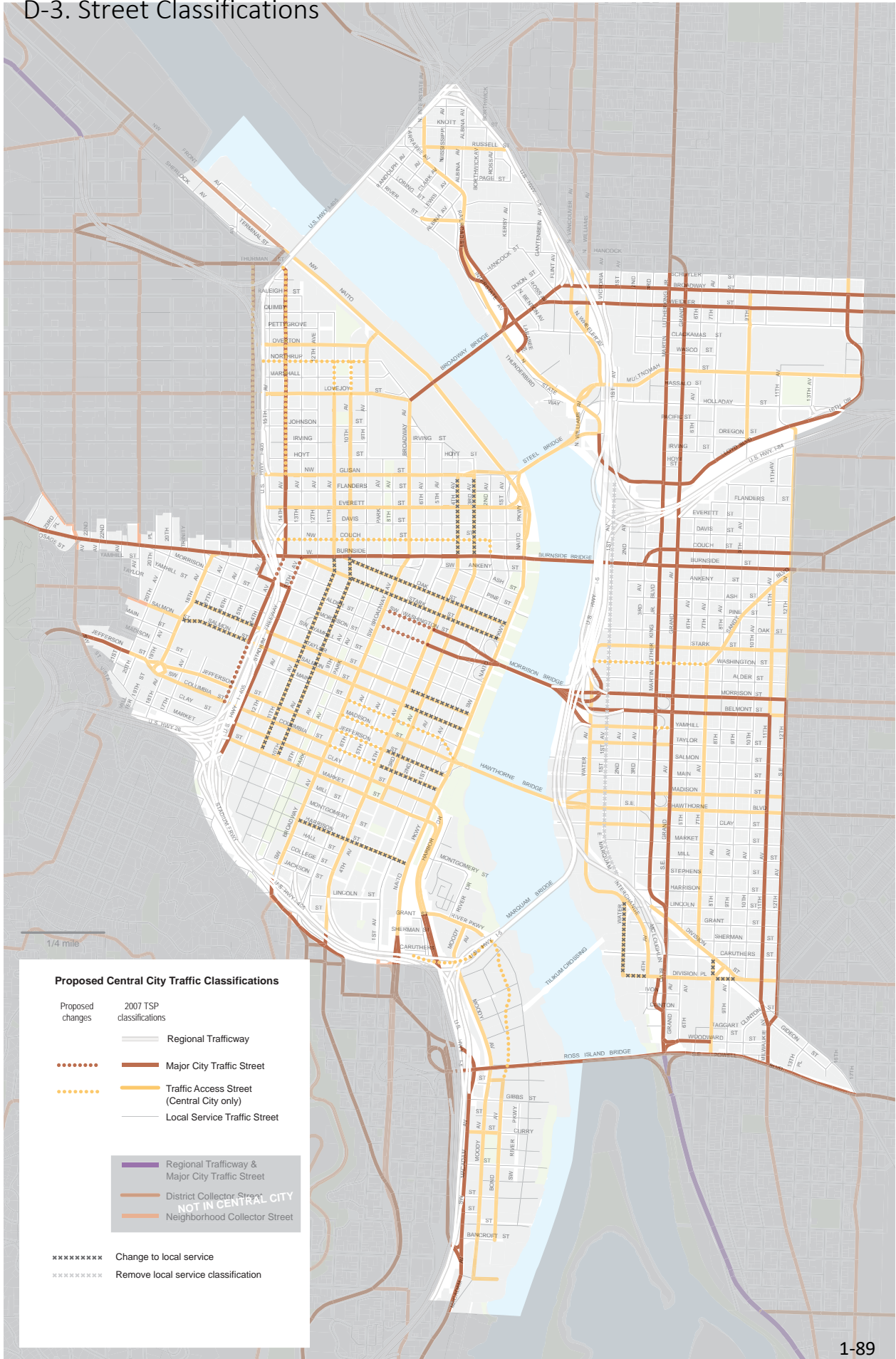
South Waterfront: In 2035, at least 75% of commute trips to and from the district are by non-single occupancy vehicle (SOV).

Lloyd: In 2035, at least 75% of commute trips to and from the district are by non-single occupancy vehicle (SOV).

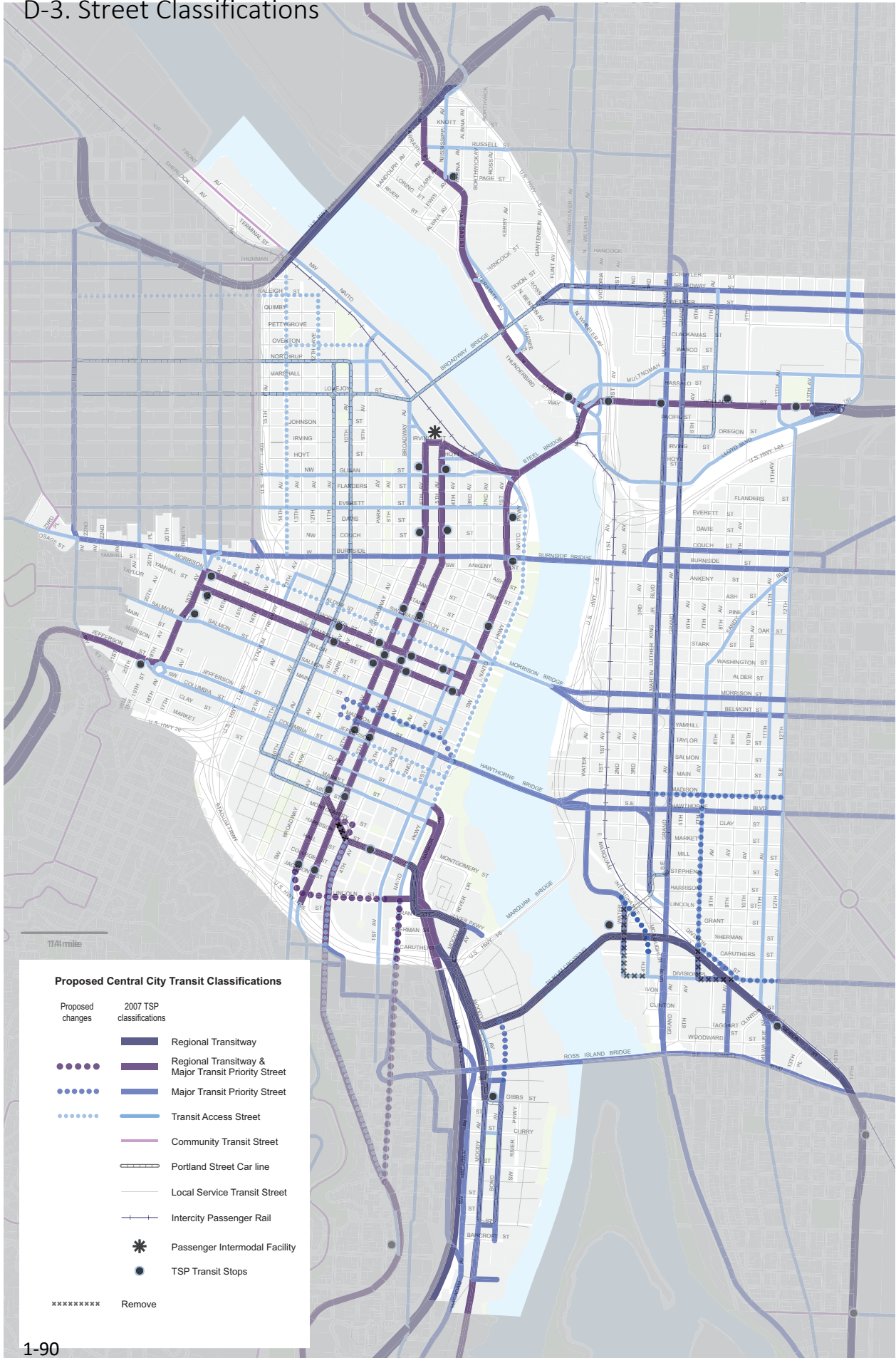
Central Eastside: In 2035, at least 60% of commute trips to and from the district are by non-single occupancy vehicle (SOV).

Lower Albina: In 2035, at least 40% of commute trips to and from the district are by non-single occupancy vehicle (SOV).

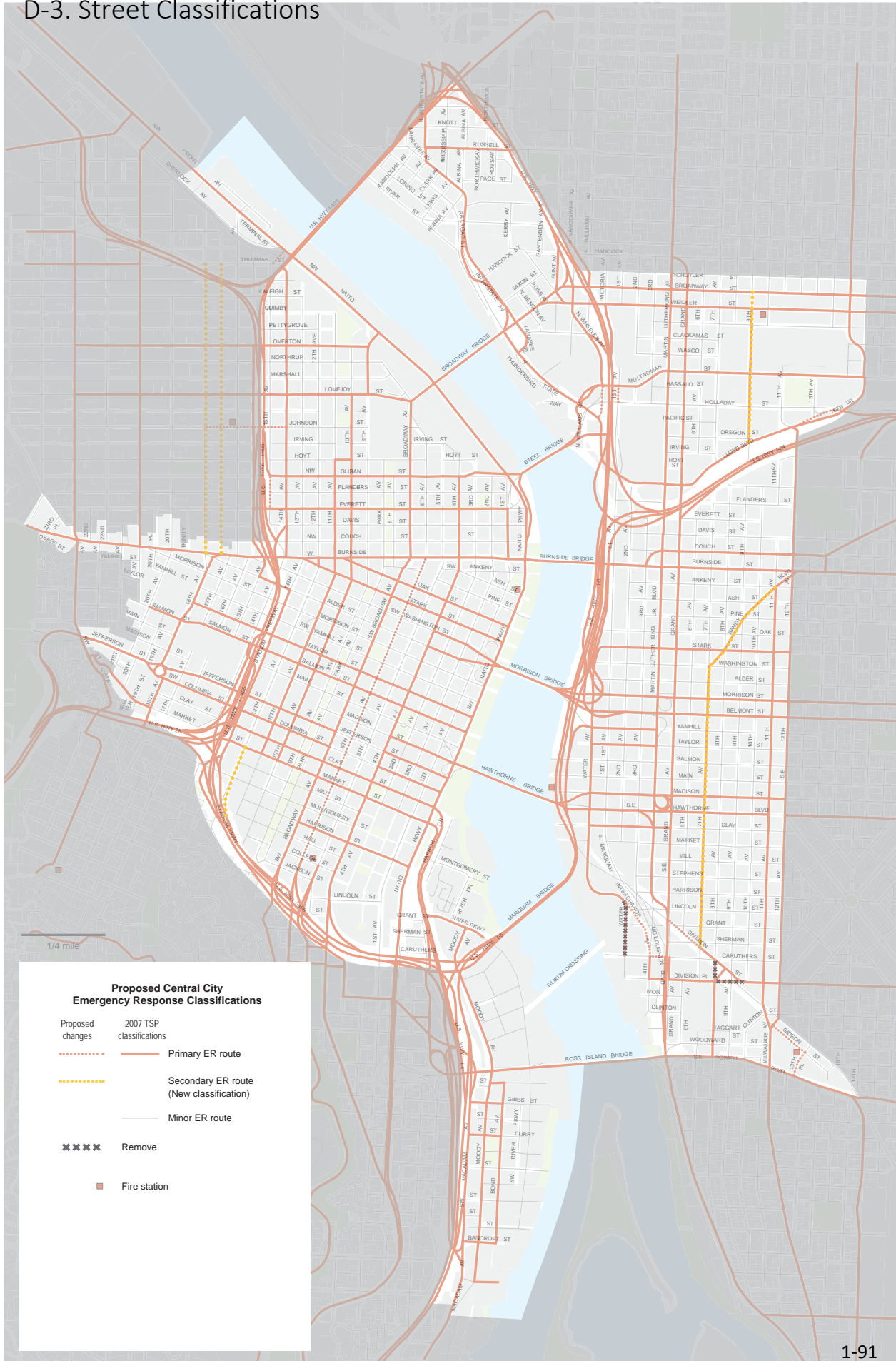
D-3. Street Classifications



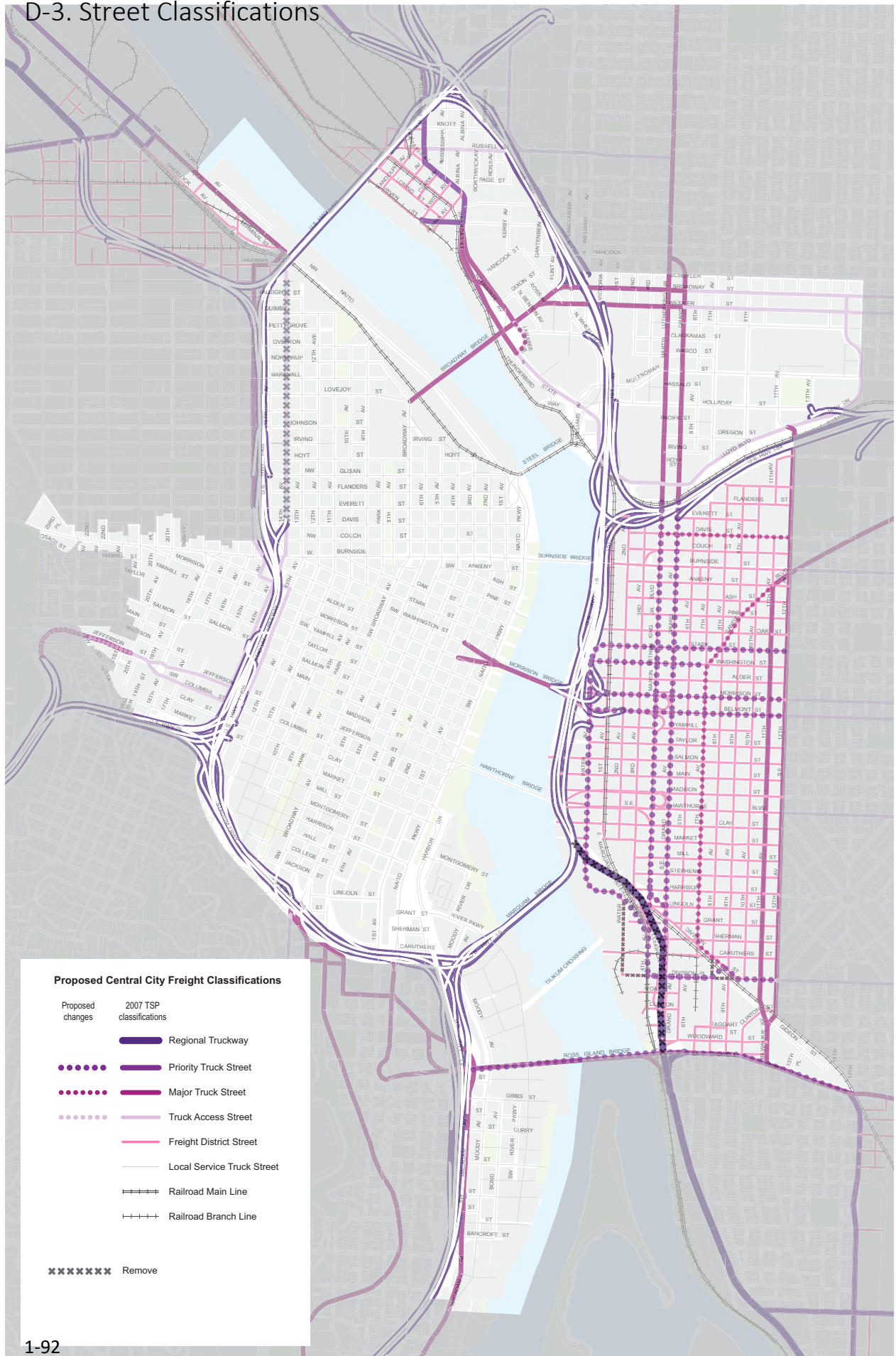
D-3. Street Classifications



D-3. Street Classifications



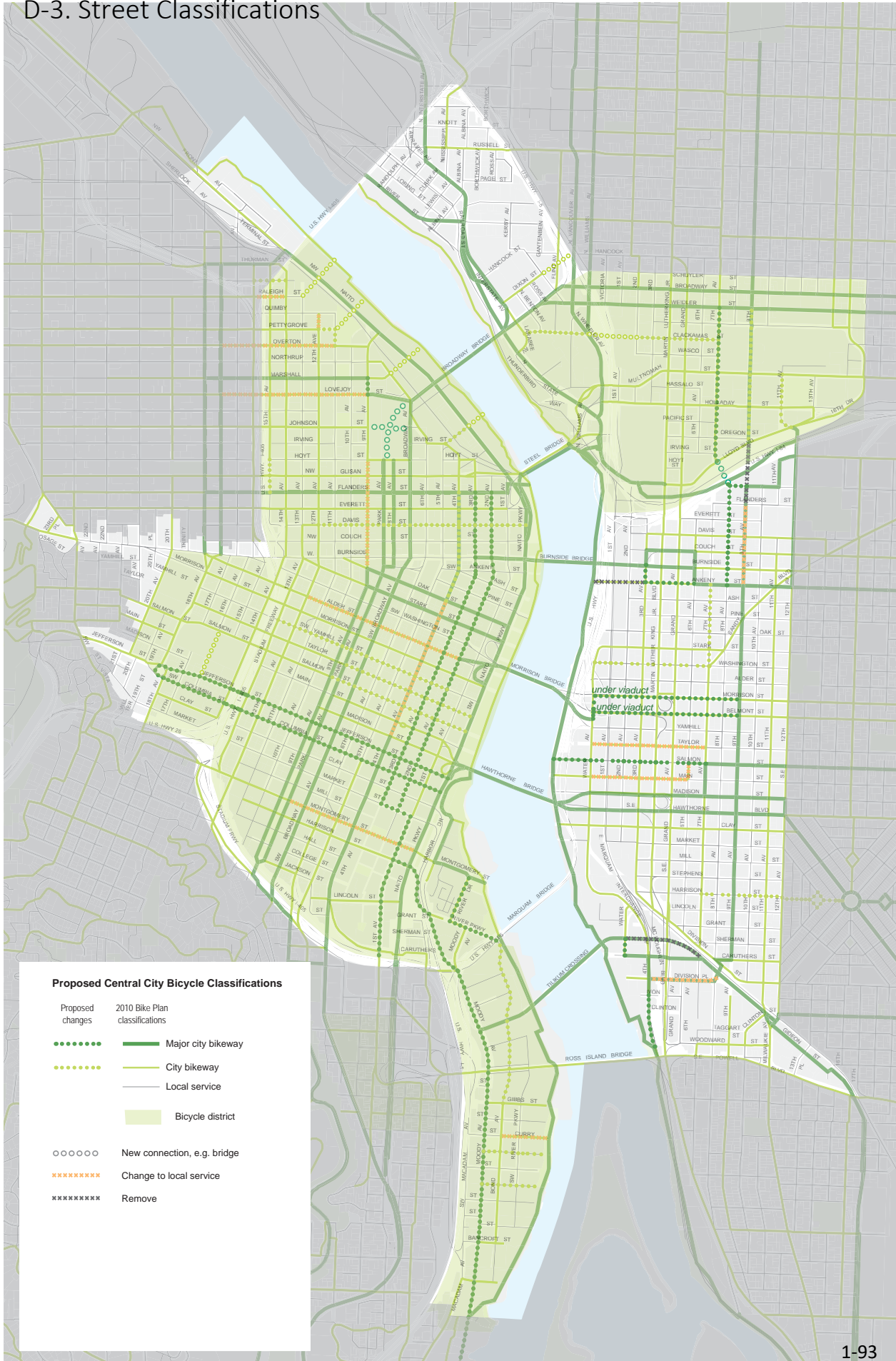
D-3. Street Classifications



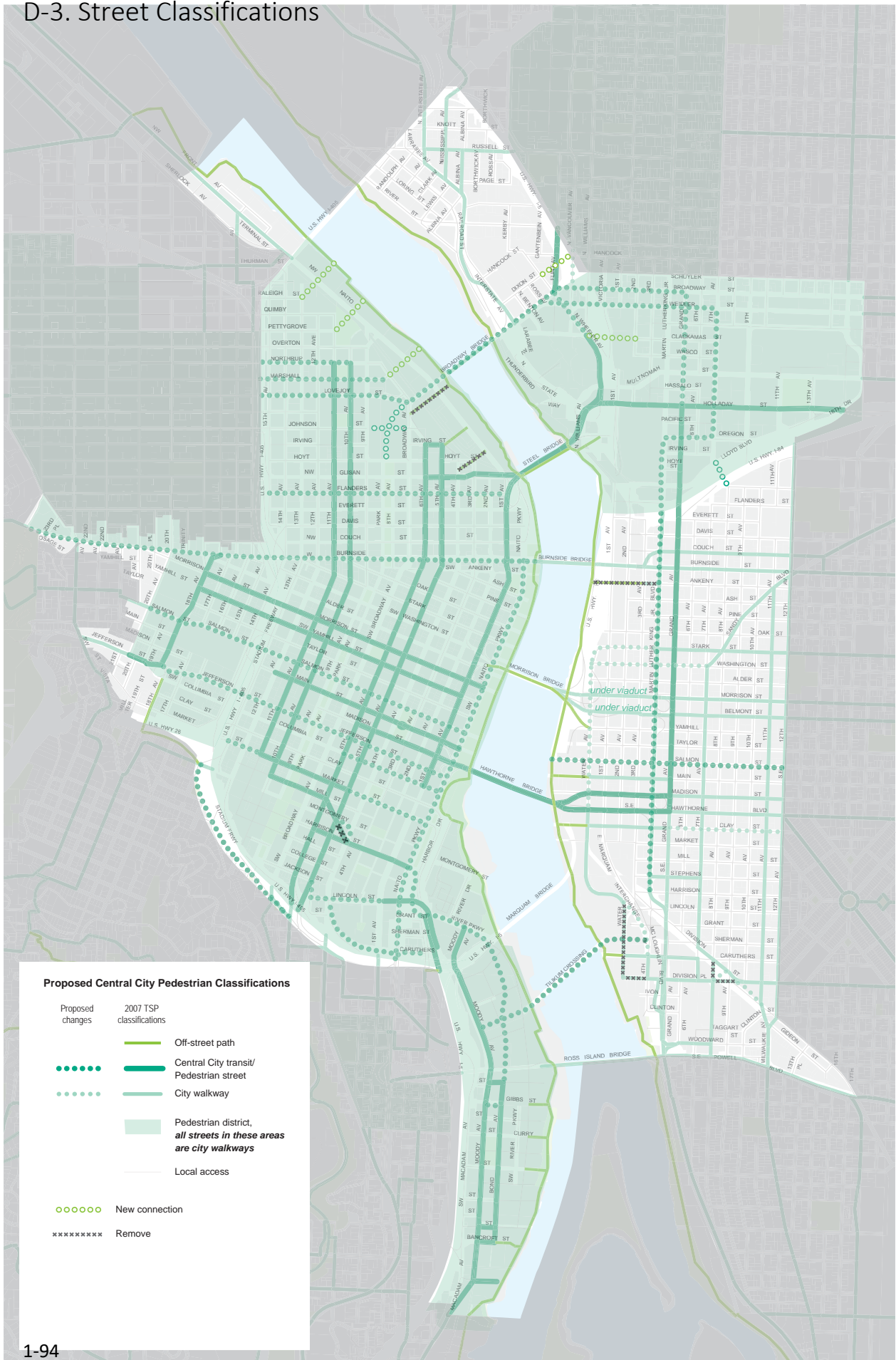
Proposed Central City Freight Classifications

- | Proposed changes | 2007 TSP classifications |
|------------------|----------------------------|
| | Regional Truckway |
| | Priority Truck Street |
| | Major Truck Street |
| | Truck Access Street |
| | Freight District Street |
| | Local Service Truck Street |
| | Railroad Main Line |
| | Railroad Branch Line |
| | Remove |

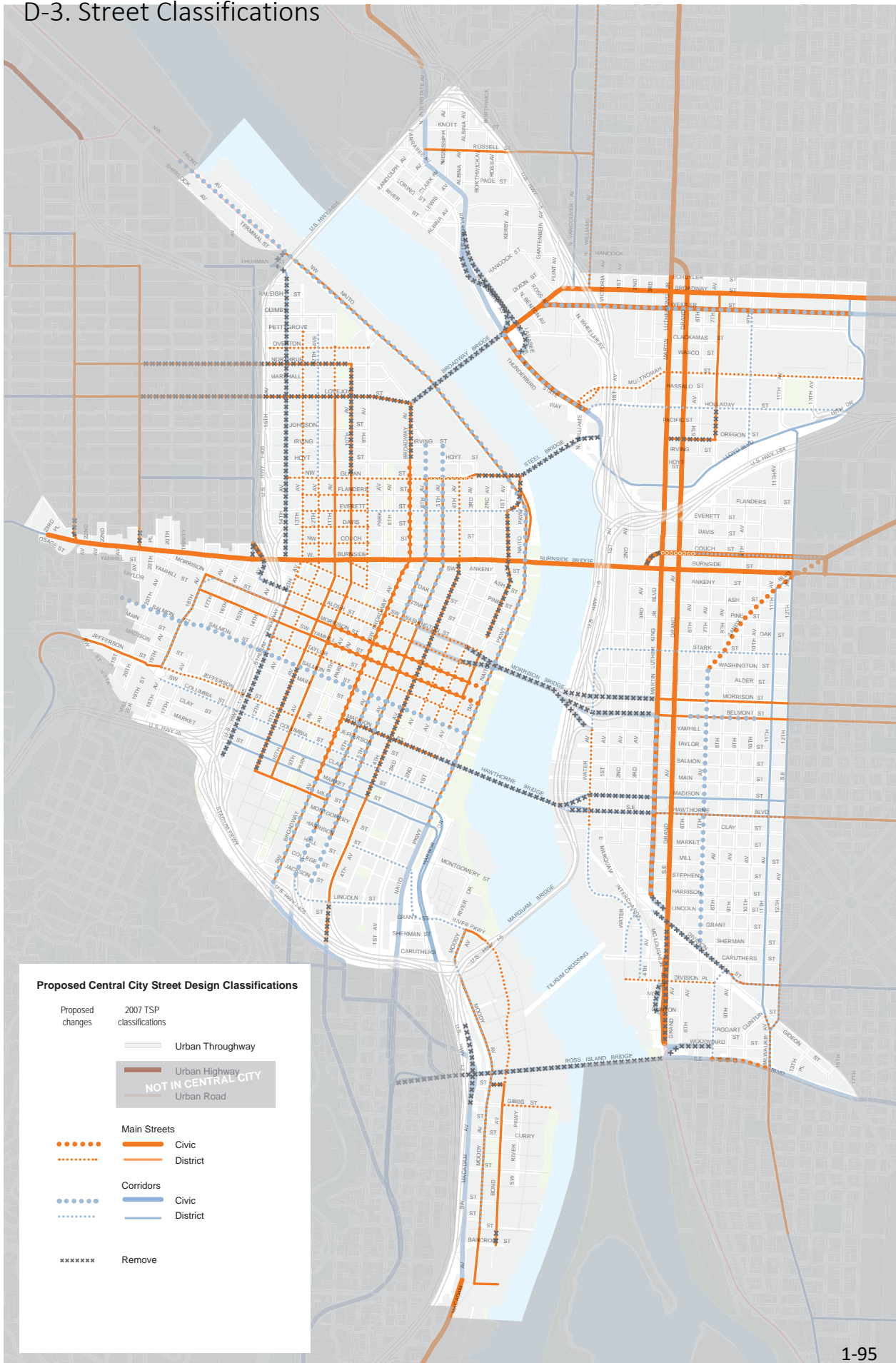
D-3. Street Classifications



D-3. Street Classifications



D-3. Street Classifications



D-4. Draft TSP Central City Studies List

Study Name	Description
Goose Hollow Access and Circulation Plan	Complete a local circulation study for Goose Hollow that explores possible changes to street operations and configurations including oneway vs. two-way streets east of SW 18th , including Jefferson and Columbia; enhanced transit, bicycle facilities and on-street parking to help meet district goals.
Old Town Chinatown Access and Circulation Plan	Prepare a local circulation study for the area north of Burnside. Consider street configurations including travel directions, travel lanes, traffic control, bicycle access and parking, and transit mobility and circulation. Address barriers created by NW Broadway, W Burnside, NW Naito Parkway, the Steel Bridge ramps, Waterfront Park and the railroad tracks.
Green Loop Concept Plan	Study the feasibility of a connecting network of bicycle and pedestrian ways that creates a new 'loop' through Central City. A feasibility study is needed to determine whether bicycle facilities could be constructed in the right-of-way to complete the 'loop'. The study would need to determine the alignment and whether new facilities or enhancements to existing facilities are needed. It will examine how TSP projects can help build momentum. The Green Loop concept is part of a system that connects parks and places in the Central City that would be designed to provide access to all people of Portland.
Morrison Bridge Westside Ramps Reconfiguration Study	Working with Multnomah County, study the feasibility of removing or reconfiguring the ramps and approaches to the Morrison bridge to create more developable land parcels and improve multimodal connectivity to the river. Consider the impacts to providing southbound freeway access from the Central Eastside.
Morrison Bridge Eastside Ramps Reconfiguration Study	Study feasibility of realigning the Morrison Bridge off ramp to MLK to allow for through eastbound traffic on Yamhill.
Jefferson Main Street Plan	Develop and implement a strategy to encourage main street-friendly streetscape and stormwater management improvements on SW Jefferson Street. Explore the feasibility of burying utilities as part of improvements and planting additional trees.
River Transit Feasibility Study	Explore funding mechanisms, phasing, and the implementation of river transit in Central City.
Central Eastside Railroad Quiet Zone Feasibility Study	Explore the feasibility of implementing a Railroad Quiet Zone along SE 1st Ave.

Central City Transit Network Study	Study potential improvements to public transportation services along Naito Parkway and the riverfront as development density and activity increases over time. Determine the feasibility of adding new light rail station(s) on the Blue/Red line near SW 14th or 15th Avenue as development density increases in the Hollow. Enhance existing service to meet demand and support the desired expansion of transit service to rapidly developing areas in the North Pearl and NW Portland. Study shifting bus service from Salmon to Alder to improve efficiency and usability of the bus line and improve the pedestrian/bicycle environment on Salmon. Study the feasibility of consolidating routes and stops on fewer corridors by placing bus lines onto the southern end of the Transit Mall and on SW Lincoln and Naito Parkway. Study the potential to better link the Clinton and OMSI Station Areas with LRT stations in the Lloyd District and Rose Quarter. Study the potential for bus service along SE Water Avenue. Study the feasibility of adding a new light rail station on the Yellow line near Dixon to serve the N Broadway area and PPS Blanchard site. Work with TriMet to improve the Steel Bridgehead and Rose Quarter Transit Center area to improve transit, local circulation, access to the Eastbank Esplanade, and development opportunities.
Salmon Green Street Concept Plan	Improve Salmon Street as a unique east-west connection linking Washington Park to the Willamette River with stormwater management, landscaping, and active transportation facilities. Encourage additional, activating retail.
West Burnside / Couch Refinement Plan	Enhance West Burnside to improve streetscape quality, multimodal access, and bicycle and pedestrian safety. Explore opportunities for consolidating and/or redeveloping Burnside's "jug handles" (triangular shaped spaces) into public spaces.
University District Access and Circulation Plan	Complete a PSU area access and circulation study that includes multimodal improvements including pedestrian safety; campus loading; drop offs; parking; and bicycle access to and from the campus to adjacent areas, South Waterfront, Goose Hollow and South Portland.
Broadway Weidler Corridor Plan Update	Review the 1996 Broadway-Weidler Corridor Plan to identify any needed updates to implement the N/NE Quadrant Plan, as well as the stretch of the corridor east of 16th to the Hollywood area. Implement the plan emphasizing pedestrian safety projects, installation of traffic signals and maintenance of parking supply.
Downtown, Goose Hollow and University District Right of Way Standards	Develop a Right-of-Way standard document for the Downtown, Goose Hollow and University subdistricts to, in

	part, implement the Street and Development Character Concept for these subdistricts.
Lloyd District Standard Plans and Details within the Right of Way Update	Update the Lloyd District Standard Plans and Details within the Right-of-Way document to in part implement the Street and Development Character Concept for the district.
"The Strand" Concept Plan	Develop the concept for the Strand through Lower Albina.
Clackamas Flexible Street Strategy	Develop a strategy for the Clackamas Flexible Street and private development extending from the Rose Quarter to NE 9th Avenue via a new pedestrian/bicycle bridge over I-5.
Interstate-Larrabee Concept Plan	Study options for Interstate Ave and the Larrabee Street flyover ramp that would preserve auto, bicycle and freight access while accommodating the Greenway Trail and pedestrian and bicycle access to the district and river.
Steel Bridge Ramps Reconfiguration Study	Study possible reconfiguration of the Steel Bridge ramps and the rail line to improve pedestrian and bike access to/along the greenway trail, NW Flanders and McCormick Pier and create new development opportunities.
Naito Parkway Traffic Study	Study ways to lessen the impact of freight and general traffic on Naito Parkway destined to I-5 south from the Central Eastside.
Morrison and Hawthorne Bridgeheads Connectivity and Accessibility Study	Study ways to improve multimodal accessibility at the Morrison and Hawthorne bridges
Cultural District Streetscape Plan	Develop a package of streetscape improvements for the cultural district to enhance the pedestrian experience between attractions including OHS, the Art Museum and the Arlene Schnitzer Concert Hall.
USPS Site Master Plan	Improve access through the US Postal Service site to Union Station as it redevelops.
North Macadam Transportation Development Strategy Update	Review, update and implement recommendations from the North Macadam Transportation Development Strategy (2009) (includes earlier South Portland Circulation Study Recommendations)
US 26 Circulation Study	Complete a study that explores long-term reconfigurations of local and regional connections on and around I-405 between the Ross Island Bridge and Sunset Highway interchanges.

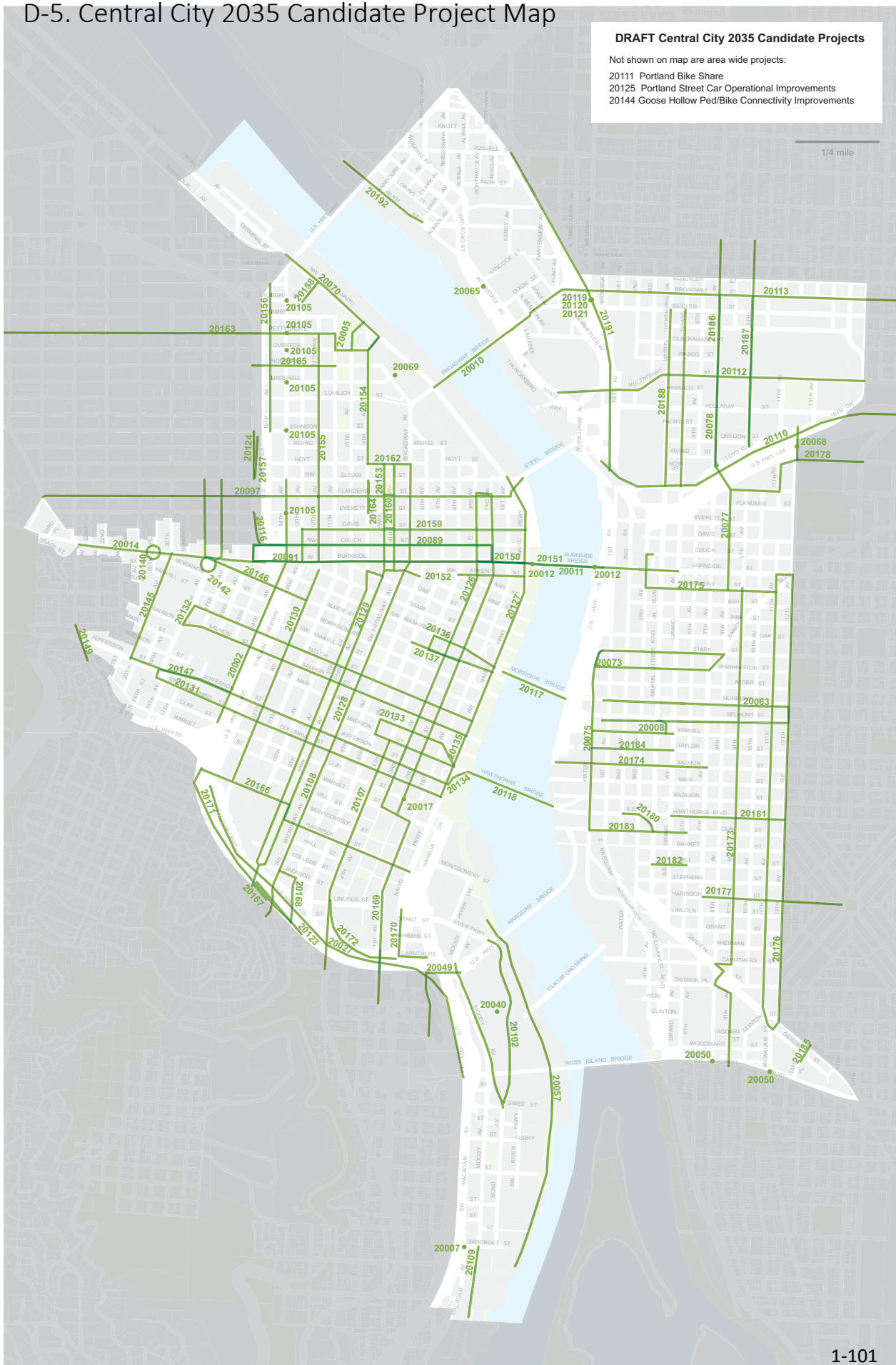
D-5. Central City 2035 Candidate Project Map

DRAFT Central City 2035 Candidate Projects

Not shown on map are area wide projects:

- 20111 Portland Bike Share
- 20125 Portland Street Car Operational Improvements
- 20144 Goose Hollow Ped/Bike Connectivity Improvements

1/4 mile



DRAFT Central City 2035 Candidate Projects

TSP ID	Lead Agency	Facility Owner	District	Project Name	Project Location	Project Description	Project Source	Estimated Cost (\$2015)
20002	Portland	Portland / ODOT	Goose Hollow	I-405 Corridor ITS	14th/16th, NW (Glisan - Burnside); 13th/14th, SW (Burnside - Clay)	ITS improvements at six signals between Clay and Glisan including communications infrastructure; closed circuit TV cameras, variable message signs for remote monitoring and control of traffic flow.	TSP Major Projects List	\$ 500,000
20005	Portland	Portland / Railroad	Pearl	Fields Park Pedestrian / Bicycle Bridge	10th, NW (Overton - Naito Parkway)	Construct a pedestrian/bicycle bridge over the railroad tracks.	TSP Major Projects List	\$ 2,300,000
20007	Portland	Portland / ODOT	South Waterfront	South Portal Intersection Improvements	Bancroft/Hood/Macadam, SW	Improve the South Portal to the North Macadam District (intersection of Bancroft, Hood, and Macadam) to address safety and capacity issues.	TSP Major Projects List	\$ 10,000,000
20010	MultCo	MultCo	Willamette River Bridges	Broadway Bridge Rehabilitation	Broadway Bridge	Rehabilitate mechanical system, approach structure, corrosion control, phase 1 seismic.	TSP Major Projects List	\$ 22,700,000
20011	MultCo	MultCo	Willamette River Bridges	Burnside Bridge Rehabilitation, Phase 1	Burnside Bridge	Rehabilitate mechanical system, approach structure, corrosion control, phase 1 seismic.	TSP Major Projects List	\$ 25,000,000
20012	Portland	Portland / MultCo	Burnside	Burnside Bridge Access Improvements	Burnside Bridge, E/W	Construct a stairway and elevator to provide access from the Burnside Bridge to Waterfront Park. Construct an elevator alongside existing staircase to provide an accessible connection between the Eastbank Esplanade and the Burnside Bridge.	TSP Major Projects List	\$ 2,000,000
20014	Portland	Portland	Burnside	W Burnside Corridor Improvements	Burnside St, W (NW 15th to NW 23rd)	Design and construct boulevard improvements including pavement reconstruction, wider sidewalks, curb extensions, safer crossings, new traffic signals, and traffic management.	TSP Major Projects List	\$ 8,000,000
20016	Portland	Portland / ODOT	Central Citywide	Central City TSM	Central City	Implement Central City TSM improvements to arterials.	TSP Major Projects List	\$ 3,250,000
20027	ODOT	ODOT	South Downtown / University	South Portland Connectivity Improvements	I-405 / US26 / Ross Island Bridge, SW	Construct new freeway access from Ross Island Bridge to I-405 and US 26 to improve connections between regional facilities and separate traffic from neighborhood streets.	TSP Major Projects List	\$ 50,000,000
20040	Portland	Portland	South Waterfront	South Waterfront Street Connections	Multiple Streets, SW (River Parkway - Moody)	New streets will be constructed in phases according to the South Waterfront District Street Plan as development occurs.	TSP Major Projects List	\$ 5,250,000
20049	Portland	Portland	South Waterfront	North Portal Street Improvements	Sheridan St, SW (Water - Bond); Water / Corbett Ave, SW (Sheridan - Kelly)	Improve access into the northern end of the North Macadam District by improving SW Corbett and SW Sheridan Street, including their connections with SW Kelly Way, SW Harbor Drive, and SW River Parkway.	North Macadam Transportation Development Strategy	\$ 9,256,116

TSP ID	Lead Agency	Facility Owner	District	Project Name	Project Location	Project Description	Project Source	Estimated Cost (\$2015)
1 2004	Portland	Portland / ODOT	Central Eastside	Southern Triangle Access Improvements	Powell Blvd, SE (at 8th and/or Milwaukie)	Improve access to the Southern Triangle district from Powell Blvd by allowing protected left turns from Powell to 8th Ave (new signal) and/or Milwaukie Ave (modify existing signal), and adding a marked pedestrian crossing on the east leg of the intersection at Milwaukie.	TSP Major Projects List	\$ 2,000,000
20057	Portland	Portland	South Waterfront	Willamette Greenway Trail Extension	Willamette Greenway Trail, SW (Marquam Br - Hamilton)	Provide two paths in order to separate bicyclists from pedestrians in remaining gaps of South Waterfront's Willamette Greenway trail.	TSP Major Projects List	\$ 2,500,000
20063	Portland	Portland	Central Eastside	Central Eastside Belmont/Morrison Bikeway	Belmont/Morrison St, SE (Water - 12th)	Design and implement bikeways on Belmont from Water to 7th and on Morrison from 12th to Water. The project will utilize the roadway space underneath and beside the viaducts west of Grand, and will convert Morrison St east of Grand Ave from two-way to one-way operation to improve traffic safety and provide space for the bikeway while maintaining vehicle capacity.	Bicycle Plan for 2030	\$ 1,000,000
20065	Portland	Portland	Lower Albina	Interstate-Larrabee Corridor Improvements	Interstate Ave, N (Tillamook - Larrabee)	Remove the existing weight-restricted, low-clearance, poor-condition Interstate to Larrabee southbound flyover ramp (Bridge #153). Replace the existing weight-restricted, poor-condition Interstate Semi-viaduct (Bridge #152). Construct multimodal transportation improvements to the alternate southbound routes to N Broadway.	TSP Major Projects List	\$ 5,250,000
20068	Portland	Portland	Central Eastside	NE 12th Ave Bridge Replacement	12th Ave, NE (over I-84 and railroad tracks)	Replace the existing fracture critical and seismically deficient 12th Ave bridge (Bridge #025) over I-84 and railroad tracks with a new structure. Provide multimodal transportation improvements on the new structure.	TSP Major Projects List	\$ 9,400,000
20069	Portland	Railroad	Pearl	NW Marshall Pedestrian/Bicycle Bridge	Marshall, NW (9th - Naito Parkway)	Construct a pedestrian/bicycle bridge over the railroad tracks.	TSP Major Projects List	\$ 2,750,000
20070	Portland	Portland	Pearl	NW Naito Parkway Safety Improvements	Naito Pkwy, NW (9th - 15th)	Construct multimodal safety and capacity improvements including a lane reconfiguration, pedestrian improvements, and bicycle facilities.	Pearl District Access and Circulation Plan	\$ 250,000

TSP ID	Lead Agency	Facility Owner	District	Project Name	Project Location	Project Description	Project Source	Estimated Cost (\$2015)
20073	Portland	Portland	Central Eastside	SE Stark/Washington Couplet	Stark / Washington, SE (Water - Sandy)	Improve safety and capacity for all modes by restriping and signaling Stark and Washington as they intersect with MLK, Grand, and Sandy, forming a two-way couplet including bicycle facilities. Project includes repaving SE Washington St to arterial standards.	TSP Major Projects List	\$ 4,000,000
20075	Portland	Portland	Central Eastside	Water Ave Corridor Improvements	Water Ave, SE (Stark - Clay)	Remove rails from roadway, repair pavement, build sidewalks, and enhance existing bikeway.	TSP Major Projects List	\$ 2,000,000
20077	Portland	Portland	Lloyd	Inner Eastside Pedestrian/Bicycle Bridge	7th to 8th Ave, NE (over I-84); 8th Ave, NE/SE (Glisan - Ankeny); Glisan / 11th / Irving, NE (8th - 12th)	Construct a pedestrian/bicycle bridge across Interstate 84 connecting the Lloyd District to the Central Eastside Industrial District. Project includes a signal or other improved crossing at 7th & Lloyd as well as neighborhood greenway connections south to Ankeny and east to Irving.	TSP Major Projects List	\$ 9,000,000
20078	Portland	Portland	Lloyd	Lloyd District Streetscape Improvements	7th/9th Ave, NE (Lloyd to Broadway)	Construct sidewalk improvements, mid-block crossings, and other enhancements to create a more pedestrian-oriented streetscape.	TSP Major Projects List	\$ 5,000,000
20079	Portland	Portland	Lloyd	Lloyd Blvd Ped/Bike Improvements	Lloyd Blvd, NE (Grand - 12th)	Widen and enhance the pedestrian walkway along the south edge of Lloyd Blvd and enhance the existing bikeway to improve safety and comfort.	TSP Major Projects List	\$ 2,000,000
20089	Portland	Portland	Burnside	W Burnside/Couch Corridor Improvements, Phase 1	Burnside/Couch, W/NW (Burnside Bridge - NW 15th)	Construct transportation improvements including pavement reconstruction, traffic signals, turn lanes, curb extensions, bicycle network improvements, and crossing improvements.	TSP Major Projects List	\$ 6,000,000
20091	Portland	Portland	Burnside	W Burnside/Couch Corridor Improvements, Phase 2	Burnside/Couch, W/NW (Burnside Bridge - NW 15th)	Implements a one-couplet design including new traffic signals, widened sidewalks, curb extensions, bike lanes, on-street parking and street trees. This project will be coordinated with ODOT to address potential impacts to the I-405 interchanges, overcrossings and ramps.	TSP Major Projects List	\$ 70,000,000
20097	Portland / ODOT	Portland / ODOT	Pearl	NW Flanders Neighborhood Greenway	Flanders St, NW (24th - Steel Bridge)	Design and implement a neighborhood greenway from the Steel Bridge to NW 24th, including a pedestrian/bicycle bridge over I-405, signal at 16th, signal at Broadway, improved crossing at Naito, and other crossing and traffic calming improvements as needed.	TSP Major Projects List	\$ 8,000,000
1102	Portland	Portland	South Waterfront	Bond Ave, Phase 2	Bond Ave, SW (River Parkway - Gibbs)	Extend SW Bond one-way northbound from Gibbs to River Parkway and convert Moody to one-way southbound operation to form a couplet.	TSP Major Projects List	\$ 9,700,000

TSP ID	Lead Agency	Facility Owner	District	Project Name	Project Location	Project Description	Project Source	Estimated Cost (\$2015)
20105	Portland	Portland	Pearl	NW 14th Ave Bikeway and Crossing Improvements	Pearl District, NW	Construct improved crossings with curb extensions and/or rapid flash beacons at 14th & Everett, 14th & Johnson, 14th & Marshall, 14th & Overton, 14th & Pettygrove, and 14th & Raleigh. Enhance existing bikeway at major intersections.	Pearl District Access and Circulation Plan	\$ 500,000
20107	Portland	Portland	South Downtown / University	SW 4th Ave Corridor Improvements	4th Ave, SW (Sheridan - Madison)	Improves the street environment on SW 4th Avenue adjacent to Portland State University by adding bicycle facilities, curb bulb-outs, signalized pedestrian crossings, green street features, and marked crosswalks. As part of the project, reconfigure 4th Ave from Sheridan to Lincoln to enhance and extend the bike lane over I-405, and modify the signal at Lincoln to improve bicycle access.	Innovation Quadrant TSDC Overlay	\$ 2,500,000
20108	Portland	Portland	South Downtown / University	SW Broadway Bikeway and Streetscape Improvements	Broadway, SW (Clay - Sherman)	Enhances the existing protected bikeway and sidewalks on SW Broadway adjacent to Portland State University. Includes the construction of a raised bikeway, sidewalk amenities, green street features, ADA improvements, pedestrian islands, and curb bulb-outs. Enhance the existing bikeway on SW Broadway from Jackson to Sherman across I-405 to improve safety and comfort.	Innovation Quadrant TSDC Overlay	\$ 1,250,000
20109	Portland	Portland	South Waterfront	Moody Ave Extension	Moody Ave, SW (Bancroft - Hamilton Ct)	Extend SW Moody Ave from Bancroft to Hamilton Ct to improve circulation within the South Waterfront neighborhood.	TSP Major Projects List	\$ 20,590,000
20110	Portland	Railroad / ODOT	Lloyd	Sullivan's Gulch Trail, Segment 1	Banfield Corridor, NE (Eastbank Esplanade - 21st)	Construct a multi-use trail for pedestrians and bicycles within the Banfield (I-84) Corridor from the Eastbank Esplanade to NE 21st Ave.	TSP Major Projects List	\$ 12,500,000
20111	Portland	Portland	Central Citywide	Portland Bike Share	Central City and Inner Neighborhoods	Design and implement a bike share system.	TSP Major Projects List	\$ 4,690,000
20112	Portland	Portland	Lloyd	NE Multnomah Protected Bikeway Improvements	Multnomah St, NE (Interstate - 16th)	Construct permanent improvements to the NE Multnomah St protected bikeway.	TSP Major Projects List	\$ 2,000,000
20113	Portland	Portland	Lloyd	NE Broadway Corridor Improvements, Phase 1	Broadway/Weidler, N/NE (Broadway Bridge - 24th)	Design and implement a separated bikeway and improve pedestrian/bicycle crossings. Construct traffic signals, improve transit stops, and construct streetscape improvements.	TSP Major Projects List	\$ 9,000,000
20116	Portland	Portland/ODOT	Goose Hollow	I-405 Safety and Operational Improvements	15th/16th/Burnside/Couch, NW (at I-405 interchange)	Improve pedestrian and bike access from NW Portland to Central City across I-405 at Burnside and Couch. Improves traffic operations for I-405 off-ramp.	TSP Major Projects List	\$ 2,240,000

TSP ID	Lead Agency	Facility Owner	District	Project Name	Project Location	Project Description	Project Source	Estimated Cost (\$2015)
20117	MultCo	MultCo	Willamette River Bridges	Morrison Bridge Rehabilitation	Morrison Bridge	Rehabilitate mechanical system, approach structure, corrosion control, phase 1 seismic.	TSP Major Projects List	\$ 45,000,000
20118	MultCo	MultCo	Willamette River Bridges	Hawthorne Bridge Rehabilitation	Hawthorne Bridge	Rehabilitate mechanical system, approach structure, corrosion control, phase 1 seismic.	TSP Major Projects List	\$ 13,300,000
20119	ODOT	ODOT	Lloyd	I-5 / Broadway / Weidler Interchange, Phase 1	Interstate 5, N/NE (I-405 - I-84)	Conduct planning, preliminary engineering and environmental work to improve safety and operations on I-5, connection between I-84 and I-5, and access to the Lloyd District and Rose Quarter.	TSP Major Projects List	\$ 44,407,000
20120	ODOT	ODOT	Lloyd	I-5 / Broadway / Weidler Interchange, Phase 2	Interstate 5, N/NE (I-405 - I-84)	Acquire right-of-way to improve safety and operations on I-5, connection between I-84 and I-5, and access to the Lloyd District and Rose Quarter.	TSP Major Projects List	\$ 40,516,000
20121	ODOT	ODOT	Lloyd	I-5 / Broadway / Weidler Interchange, Phase 3	Interstate 5, N/NE (I-405 - I-84)	Construct improvements to enhance safety and operations on I-5, connection between I-84 and I-5, and access to the Lloyd District and Rose Quarter. Project includes a pedestrian/bicycle bridge across I-5 at Clackamas St.	TSP Major Projects List	\$ 126,864,000
20122	Portland / ODOT	Portland / ODOT	Central Eastside	Yamhill & Water Traffic Improvements	Yamhill / Water, SE	Install signal at the SE Yamhill St / SE Water Ave intersection with turn lane and queue detection treatments on the I-5 NB Exit Ramp to reduce queue length and/or provide advanced warning sign of queue on the exit ramp.	SE Quadrant Plan	\$ 750,000
20123	Portland / ODOT	Portland / ODOT	South Downtown / University	SW Broadway Traffic Improvements	Broadway, SW (Grant - 5th)	Make improvements on SW Broadway and/or other city streets to reduce the vehicle queue on the I-405 SB Exit Ramp that connects to SW Broadway.	MMA	\$ 2,000,000
20124	Portland / ODOT	Portland / ODOT	Pearl	I-405 / Glisan Traffic Improvements	I-405 / Glisan, NW (southbound off-ramp)	Make improvements on city streets near the I-405 SB Exit Ramp to reduce the queue on the exit ramp.	MMA	\$ 1,000,000
20125	Portland	Portland	Central Citywide	Portland Streetcar Operational Improvements	Central City	Design and implement projects to improve the operational efficiency of Portland Streetcar.	Streetcar Needs Analysis	\$ 2,000,000
20126	Portland	Portland	Downtown	1st / 2nd / 3rd Ave Bikeway	1st / 2nd / 3rd Ave, SW (Arthur - Flanders)	Design and implement bikeways on 1st / 2nd / 3rd from Arthur to Flanders to create a safe and comfortable north-south bicycle connection through the Central City. Project includes a traffic signal at SW 2nd & Clay.	West Quadrant Plan	\$ 2,000,000
20127	Portland	Portland	Downtown	Better Naito Walkway / Bikeway	Naito Pkwy, SW/NW (Salmon - Railroad)	Design and implement a separated two-way walkway and bikeway on the east side of Naito Parkway.	West Quadrant Plan	\$ 500,000

ISP ID	Lead Agency	Facility Owner	District	Project Name	Project Location	Project Description	Project Source	Estimated Cost (\$2015)
20128	Portland	Portland	Downtown	Broadway Bikeway Improvements	Broadway, NW/SW (Hoyt - Clay)	Enhance the existing bikeway along Broadway to provide a more safe and comfortable bicycling environment, and provide a northbound bikeway on Broadway or a parallel street.	West Quadrant Plan	\$ 1,000,000
20129	Portland	Portland	Downtown	South Park Blocks Bikeway	9th / Park Ave, SW (Clifton - Oak)	Design and implement a neighborhood greenway, with traffic calming, signals, and improved crossings as needed.	Bicycle Plan for 2030	\$ 500,000
20130	Portland	Portland	West End	SW 12th Ave Bikeway	12th Ave, SW (Montgomery - Stark)	Design and implement a bikeway on 12th Ave to provide a safe and comfortable northbound bicycle connection through the Central City.	West Quadrant Plan	\$ 750,000
20131	Portland	Portland	Downtown	Jefferson / Columbia Bikeway	Jefferson / Columbia St, SW (Naito - 18th)	Design and implement a bikeway on SW Columbia St and enhance existing bikeway on SW Jefferson St to create a safe and comfortable east-west bicycle connection through the Central City.	West Quadrant Plan	\$ 1,250,000
20132	Portland	Portland	Downtown	Salmon / Taylor Bikeway	Salmon / Taylor, SW (Naito - 18th)	Design and implement bikeways on Salmon and Taylor Streets.	West Quadrant Plan	\$ 1,000,000
20133	Portland	Portland	Downtown	SW Main / Madison Bikeway and Transit Improvements	Main / Madison St, SW (1st - 5th)	Enhance and extend bikeways on Main and Madison to create a safe and comfortable east-west bicycle connection in the Central City. Reconfigure roadway to add a bus-only lane on SW Madison from 5th to 1st, with right turns allowed where necessary. Repair pavement and construct a concrete bus pad at SW Main & 1st.	West Quadrant Plan	\$ 500,000
20134	Portland	MultCo	Downtown	Hawthorne Bridge Ramp Signal	Hawthorne Bridge	Signalize the top of the ramp from SW Naito to Hawthorne Bridge to improve safety and capacity for all modes.	North Macadam Transportation Development Strategy	\$ 500,000
20135	Portland	Portland / MultCo	Downtown	Hawthorne Bridgehead Pedestrian Improvements	Hawthorne Bridgehead, SW	Add improved crossings with flashing beacons at Naito/Jefferson and Naito/Main.	West Quadrant Plan	\$ 250,000

TSP ID	Lead Agency	Facility Owner	District	Project Name	Project Location	Project Description	Project Source	Estimated Cost (\$2015)
20136	Portland	Portland / MultCo	Downtown	Morrison Bridgehead Pedestrian Improvements	Morrison Bridgehead, SW	Add missing crosswalks at 2nd & Alder and 2nd & Washington to improve pedestrian safety and connectivity. Convert dual left-turn lanes to single left-turn lanes at 3rd & Washington and 4th & Alder to improve pedestrian crossing safety.	West Quadrant Plan	\$ 100,000
20137	Portland	Portland	Downtown	SW Alder Transit Improvements	Alder St, SW (5th - 2nd)	Reconfigure roadway to add a bus-only lane on SW Alder from 5th to 2nd to improve transit speed and reliability.	Central City Transit Delay Analysis	\$ 100,000
20138	Portland	Portland	West End	Burnside / 10th Public Plaza	Burnside / 10th, SW	Convert the "jughandle" left turn lane at Burnside & 10th into a public plaza.	West Quadrant Plan	\$ 100,000
20139	Portland	Portland	Downtown	Burnside / Ankeny / Broadway Public Plaza	Burnside / Ankeny / Broadway, SW	Reconfigure the section of Broadway between Burnside, Pine, and Ankeny to improve pedestrian safety and provide a public plaza.	West Quadrant Plan	\$ 100,000
20140	Portland	Portland	Goose Hollow	Burnside / 20th Place Public Plaza	Burnside / 20th Place, SW	Convert the slip lane at Burnside & 20th Pl into a public plaza.	West Quadrant Plan	\$ 100,000
20141	Portland	Portland	Goose Hollow	Collins Circle Public Space Improvements	Jefferson / Columbia / 18th, SW	Improve Collins Circle to make the public space more accessible and engaging for the community.	West Quadrant Plan	\$ 100,000
20142	Portland	Portland	Goose Hollow	Firefighters Park Public Space Improvements	18th / 19th / Alder, SW	Improve Firefighters Park to make the public space more accessible and engaging for the community.	West Quadrant Plan	\$ 100,000
20143	TriMet	TriMet	Goose Hollow	Goose Hollow Bike Hub	Goose Hollow/SW Jefferson MAX Station	Establish a west-side commuter bike hub at the Goose Hollow/SW Jefferson MAX station, accommodating the needs of transit riders transferring to or from bicycles at this location.	West Quadrant Plan	\$ 500,000
20144	Portland	Portland	Goose Hollow	Goose Hollow Ped/Bike Connectivity Improvements	Goose Hollow	Improve bicycle and pedestrian connectivity throughout Goose Hollow, including connections on SW 16th Ave through the Lincoln High School site.	West Quadrant Plan	\$ 500,000
20145	Portland	Portland	Goose Hollow	SW 20th Ave Neighborhood Greenway	20th Ave, SW (Jefferson - Burnside)	Design and implement a neighborhood greenway, with traffic calming and improved crossings as needed.	TSP Major Projects List	\$ 100,000
20146	Portland	Portland	Goose Hollow	NW 18th/19th/Alder Bikeway Gap	18th / 19th Ave, NW (Alder - Glisan); Alder / Morrison, SW (12th - 18th)	Design and implement separated bikeways to extend the 18th/19th Bikeway and connect to the Alder Bikeway. Provide bikeway connections in both directions along Alder and/or Morrison from 12th to 18th.	West Quadrant Plan	\$ 400,000
20147	Portland	Portland	Goose Hollow	SW Jefferson Main Street Improvements	Jefferson St, SW (14th - 20th)	Construct streetscape improvements to enhance SW Jefferson as a Main Street for the Goose Hollow neighborhood.	West Quadrant Plan	\$ 2,000,000

TSP ID	Lead Agency	Facility Owner	District	Project Name	Project Location	Project Description	Project Source	Estimated Cost (\$2015)
20148	Portland	ODOT	Goose Hollow	SW Salmon/Taylor Pedestrian Improvements	Salmon / Taylor / I-405, SW	Pedestrian improvements at the SW Salmon / I-405 off-ramp area and SW Taylor / I-405 on-ramp area, including adding pedestrian facilities on the south side of the Salmon and Taylor overpasses between 13th and 14th Avenues.	MMA	\$ 100,000
20149	Portland	Portland	Goose Hollow	Vista Bridge Renovation	Vista Bridge, SW	Renovate the structurally deficient Vista Bridge (Bridge #036).	West Quadrant Plan	\$ 3,000,000
20150	Portland	Portland	Burnside	W Burnside Bridgehead Ped/Bike Improvements	Burnside Bridgehead, SW	Extend bike lanes west to 3rd Ave, with turning boxes as needed to provide access to and from 2nd and 3rd Aves. Install a marked pedestrian crossing at the east leg of 2nd & Burnside.	West Quadrant Plan	\$ 100,000
20151	Portland	Portland / MultCo	Burnside	Burnside Bridge Transit and Bikeway Improvements	Burnside Bridge	Reconfigure lanes to provide an eastbound bus-only lane SW 3rd Ave to SE Grand Ave to reduce transit delay and improve pedestrian and bicycle safety. Enhance existing bike lanes across the bridge to provide climbing lanes and more physical separation from traffic. Project may include a modified signal at Burnside & MLK Jr Blvd to separate transit, bicycle, and pedestrian traffic from right-turning vehicle traffic.	Central City Transit Delay Analysis	\$ 250,000
20152	Portland	Portland	Old Town / Chinatown	SW Ankeny Pedestrian Street Improvements	Ankeny St, SW (Naito - 5th; Broadway - Park)	Develop SW Ankeny as a pedestrian-oriented street, including some pedestrian-only segments providing public space and outdoor seating.	West Quadrant Plan	\$ 100,000
20153	Portland	Portland	Pearl	North Park Blocks Bikeway	8th / Park Ave, NW/SW (Oak - Glisan)	Restripe Park and 8th to provide continuous bike lanes, with traffic signals or flashing beacons at Burnside, Everett, and Glisan to provide safe pedestrian and bicycle crossings.	Pearl District Access and Circulation Plan	\$ 750,000
20154	Portland	Portland	Pearl	NW 9th Ave Bikeway	9th Ave, NW (Hoyt - Naito)	Design and implement a separated bikeway to provide a safe and comfortable bicycle connection from the Pearl District to Naito Parkway.	West Quadrant Plan	\$ 500,000
20155	Portland	Portland	Pearl	NW 12th Ave Bikeway	12th Ave, NW (Burnside - Pettygrove); 13th Ave, NW (Burnside - Davis)	Design and implement a bikeway, with traffic calming, signals, and improved crossings as needed.	West Quadrant Plan	\$ 750,000

TSP ID	Lead Agency	Facility Owner	District	Project Name	Project Location	Project Description	Project Source	Estimated Cost (\$2015)
20156	Portland	Portland	Pearl	NW 15th Ave Walkway / Bikeway	15th Ave, NW (Johnson - Savier)	Restripe NW 15th Ave to provide a striped pedestrian walkway on the west side of the street and bicycle sharrows in the travel lanes. Remove abandoned railroad tracks from the roadway as part of the project.	Pearl District Access and Circulation Plan	\$ 100,000
20157	Portland	Portland	Pearl	NW 16th Ave Bikeway Improvements	16th Ave, NW (Johnson - Glisan)	Fill the gap in the NW 16th Ave Bikeway by reconfiguring parking and/or travel lanes to provide a southbound bike lane.	MMA	\$ 100,000
20158	Portland	Railroad	Pearl	NW 13th Ave Ped/Bike Bridge	13th Ave, NW (Raleigh - Naito)	Construct a pedestrian and bicycle bridge over the railroad tracks to connect the North Pearl District to Naito and the waterfront.	West Quadrant Plan	\$ 2,500,000
20159	Portland	Portland	Pearl	NW Davis St Neighborhood Greenway	Davis St, NW (Naito - 13th)	Design and implement a neighborhood greenway, with traffic calming, signals, and improved crossings as needed.	West Quadrant Plan	\$ 250,000
20160	Portland	Portland	Pearl	North Park Blocks Festival Streets	Davis St, NW (Park - 8th); Flanders St, NW (Park - 8th)	Redesign streets crossing the Park Blocks with special designs and traffic calming to enhance the pedestrian environment and complement the function of the park.	Pearl District Access and Circulation Plan	\$ 1,000,000
20161	Portland	Portland / ODOT	Pearl	NW Glisan Walkway / Bikeway Improvements	Glisan / 15th, NW	Construct a curb extension on the NW corner of Glisan and 15th to improve visibility and shorten crossing distance for pedestrians and bicyclists, and enhance existing bike lane through the intersection to improve visibility in the conflict zone.	Pearl District Access and Circulation Plan	\$ 100,000
20162	Portland	Portland	Pearl	NW Hoyt St Bikeway	Hoyt St, NW (9th - Broadway)	Redesign NW Hoyt Street to provide bike lanes in both directions.	Pearl District Access and Circulation Plan	\$ 100,000
20163 1-111	Portland	Portland	Pearl	Overton / Pettygrove Bikeway	9th Ave, NW (Naito - Overton); Overton St, NW (9th - 11th); 11th Ave, NW (Overton - Pettygrove); Pettygrove St, NW (11th - 26th)	Design and implement a bikeway, with separated bicycle facilities on 9th and Overton and a neighborhood greenway on 11th and Pettygrove. Remove sharrows on Overton upon completion of the project.	Bicycle Plan for 2030	\$ 250,000

TSP ID	Lead Agency	Facility Owner	District	Project Name	Project Location	Project Description	Project Source	Estimated Cost (\$2015)
20164	Portland	Portland	Pearl	NW 9th Ave Traffic Signals	9th & Everett / 9th & Glisan, NW	Construct traffic signals at 9th & Everett and 9th & Glisan to improve safety and traffic flow.	Pearl District Access and Circulation Plan	\$ 500,000
20165	Portland	Portland	Pearl	NW Northrup Traffic Signals	Pearl District, NW	Construct new traffic signals at Northrup & 11th, Northrup & 12th, Northrup & 13th, Northrup & 14th, Northrup & 15th, and Northrup & 16th to improve traffic flow and streetcar operations.	Pearl District Access and Circulation Plan	\$ 1,500,000
20166	Portland	Portland	South Downtown / University	Harrison / Montgomery Bikeway	Harrison St, SW (Naito - Park); Montgomery St, SW (Park - 14th)	Design and implement bikeways along SW Harrison St from Naito to 4th to complete the bicycle connection between the Tiikum Bridge and PSU. Improve pedestrian crossings of Harrison from Naito to 4th. Continue bikeway through PSU campus along Harrison and Montgomery.	West Quadrant Plan	\$ 500,000
20167	Portland	ODOT	South Downtown / University	I-405 (Park Ave to Broadway) Ped/Bike Connection	South side of I-405 (Park Ave - Broadway)	Construct a new pedestrian and bicycle connection along the south side of the freeway to directly connect Park Ave to Broadway.	MMA	\$ 250,000
20168	Portland	ODOT / TriMet	South Downtown / University	6th / I-405 Multimodal Safety Improvements	6th Ave, SW (Broadway - Jackson); Jackson St, SW (6th - Park)	Reconfigure intersection of SW 6th, Jackson, and freeway off-ramp to provide a signalized pedestrian crossing and allow westbound buses on Jackson to access 6th Ave northbound. Enhance and extend the bike lane on 6th north to Jackson and south to Broadway. Design and implement a bikeway on Jackson St from 6th to Park. Extend sidewalk on east side of 6th Ave from I-405 to Jackson.	I-405 Gateway Bikeway Feasibility Study	\$ 500,000
20169	Portland	Portland	South Downtown / University	1st Ave / I-405 Crossing Improvements	1st Ave / I-405, SW	Add improved pedestrian crossings of 1st Ave on either side of I-405.	MMA	\$ 100,000
20170	Portland	Portland	South Downtown / University	SW Naito Pkwy Multi-use Path	Naito Pkwy, SW (I-405 - Lincoln)	Extend multi-use path on east side of Naito from Lincoln to I-405, with a connection to Caruthers to allow southbound bicycle access to Gibbs Street Bridge via Water and Corbett.	MMA	\$ 500,000
20171	Portland	ODOT	South Downtown / University	Lower I-405 Trail	I-405 (6th - Montgomery)	Design and implement a pedestrian and bicycle connection along I-405.	Bicycle Plan for 2030	\$ 500,000
20172	Portland	ODOT	South Downtown / University	Upper I-405 Trail	I-405 (Water - 4th)	Design and implement a pedestrian and bicycle connection along the I-405 off-ramp to 4th & Lincoln.	North Macadam Transportation Development Strategy	\$ 2,800,000

TSP ID	Lead Agency	Facility Owner	District	Project Name	Project Location	Project Description	Project Source	Estimated Cost (\$2015)
20173	Portland	Portland	Central Eastside	SE 9th Ave Bikeway	9th Ave, SE (Ankeny - Powell)	Design and implement a neighborhood greenway along 9th Ave from Ankeny to Powell, with separated bikeway segments, neighborhood greenway segments, and crossing improvements as needed.	TSP Major Projects List	\$ 1,000,000
20174	Portland	Portland	Central Eastside	SE Salmon Multimodal Improvements	Salmon / MLK, SE; Salmon / Grand, SE; Salmon / 7th, SE	Improve multimodal safety, alleviate congestion, and improve mobility and accessibility by installing traffic signals at MLK & Salmon, Grand & Salmon, and 7th & Salmon. Extend the Salmon neighborhood greenway from 7th to the Eastbank Esplanade.	SE Quadrant Plan	\$ 1,000,000
20175	Portland	Portland	Central Eastside	SE Ankeny Multimodal Improvements	Ankeny / MLK, SE; Ankeny / 11th, SE	Improve multimodal safety, alleviate congestion, and improve mobility and accessibility by installing traffic signals at MLK & Ankeny and 11th & Sandy & Ankeny. Extend the Ankeny neighborhood greenway to 3rd Ave, along 3rd north to Couch Ct, and connecting to the Burnside Bridge.	SE Quadrant Plan	\$ 500,000
20176	Portland	Portland	Central Eastside	11th/12th Ave Crossing Safety Improvements	12th & Ankeny; 11th & Salmon; 12th & Salmon; 12th & Madison; 12th & Hawthorne; 11th & Clay; 12th & Clay, SE	Enhance pedestrian and bicycle safety and access by installing improved crossings at 12th & Ankeny, 11th & Salmon, 12th & Salmon, 12th & Madison, 12th & Hawthorne, 11th & Clay, and 12th & Clay.	SE Quadrant Plan	\$ 1,000,000
20177	Portland	Portland	Central Eastside	SE Harrison Neighborhood Greenway	Harrison St, SE (7th - Ladd Circle)	Extend the Harrison Neighborhood Greenway from Ladd Circle to 7th, including traffic calming and improved crossings at 7th, 11th, and 12th.	SE Quadrant Plan	\$ 500,000
20178	Portland	Portland / ODOT	Central Eastside	Irving / I-84 Traffic Improvements	Irving / 16th, NE	Improve multimodal safety, alleviate congestion, and improve mobility and accessibility by installing a traffic signal at Irving & 16th and modifying signals (if necessary) at 12th & Irving and 12th & Lloyd.	SE Quadrant Plan	\$ 250,000
20179	Portland	MultiCo / TriMet	Central Eastside	Hawthorne Viaduct Transit Platform	Hawthorne Viaduct	Construct a transit platform to allow buses to serve the stop without crossing over bicycle traffic.	Central City Transit Delay Analysis	\$ 100,000

TSP ID	Lead Agency	Facility Owner	District	Project Name	Project Location	Project Description	Project Source	Estimated Cost (\$2015)
20180	Portland	MultCo	Central Eastside	Hawthorne-Clay Ramp Signal	Hawthorne Viaduct	Signalize the top of the ramp from the Hawthorne Viaduct to Clay/MLK to improve safety and capacity for all modes.	Central City Needs Inventory	\$ 250,000
20181	Portland	MultCo	Central Eastside	SE Hawthorne Bikeway & Transit Improvements	Hawthorne Blvd, SE (Grand - 12th)	Construct an eastbound protected bikeway with transit platforms to improve pedestrian and bicycle safety and comfort as well as transit operational efficiency.	Central City Needs Inventory	\$ 1,000,000
20182	Portland	Portland	Central Eastside	SE Clay / Mill Circulation Improvements	Clay/MLK and Mill/MLK, SE	Improve safety and traffic flow by restricting left turns from Clay to MLK, adding a protected left turn signal from Mill to MLK, and providing way-finding to direct traffic to use Mill to turn left onto MLK.	SE Quadrant Plan	\$ 250,000
20183	Portland	Portland	Central Eastside	SE Clay Corridor Improvements	Clay St, SE (Water - Grand)	Reconstruct deteriorating pavement on SE Clay St, regrade railroad crossing, and restripe to include a climbing bike lane.	Central City Needs Inventory	\$ 1,000,000
20184	Portland	Portland	Central Eastside	SE Yamhill / Taylor Couplet	Yamhill / Taylor, SE (Water - Grand)	Improve traffic safety and capacity by converting Yamhill and Taylor to couplet operation between Water and Grand Ave, including new traffic signals at Yamhill / MLK, Yamhill / Grand, and Taylor / Water. As part of the project, reconfigure the ramp from Belmont viaduct to MLK.	SE Quadrant Plan	\$ 3,000,000
20185	Portland	TriMet	Central Eastside	Gideon Street Pedestrian / Bicycle Bridge	Clinton MAX Station	Construct a pedestrian / bicycle bridge over the railroad and light rail tracks to connect the Clinton MAX Station with the adjacent neighborhood.	TSP Major Projects List	\$ 10,000,000
20186	Portland	Portland	Lloyd	NE 7th Ave Bikeway Improvements	7th Ave, NE (Lloyd - Tillamook)	Enhance the existing bikeway on 7th from Lloyd to Tillamook to improve safety and comfort, including protected bikeway elements where needed, separation from traffic, and crossing improvements.	TSP Major Projects List	\$ 100,000

TSP ID	Lead Agency	Facility Owner	District	Project Name	Project Location	Project Description	Project Source	Estimated Cost (\$2015)
20187	Portland	Portland	Lloyd	NE 9th Ave Bikeway	9th Ave, NE (Lloyd - Tillamook)	Design and implement a bikeway on 9th Ave from Lloyd to Tillamook, including a lane reconfiguration, protected bikeway treatments, crossing improvements, and pavement repair north of Broadway.	TSP Major Projects List	\$ 1,000,000
20188	Portland	Portland	Lloyd	Lloyd District Grand / MLK Traffic Signals	Grand / MLK, NE (Lloyd - Broadway)	Improve multimodal safety and traffic flow by constructing traffic signals at Halsey & MLK, Wasco & MLK, Wasco & Grand, Hassalo & MLK, Hassalo & Grand, Pacific & Grand, and Irving & Grand.	N/NE Quadrant Plan	\$ 1,750,000
20189	Portland	Portland	Lloyd	Oregon / Grand Streetcar Turnaround	Oregon / Grand, NE	Construct a streetcar turnaround to enable east-west streetcar service between NW 23rd and the Lloyd District.	Streetcar Needs Analysis	\$ 750,000
20190	Portland	Portland	Lloyd	Grand / Weidler Streetcar Turnaround	Grand / Weidler, NE	Construct a streetcar turnaround to enable standalone north-south streetcar service on the Eastside.	Streetcar Needs Analysis	\$ 500,000
20191	Portland	ODOT	Lloyd	Freeway Underpass Improvements	Lloyd Blvd / Multnomah St / Holladay St / Oregon St / Russell St, N/NE (under I-5)	Enhance the pedestrian and bicycling environment under the I-5 freeway at Lloyd Blvd, Multnomah, Holladay, Oregon, and Russell. Improve the appearance of publicly owned storage yards located under and adjacent to the I-5 and I-405 freeways.	N/NE Quadrant Plan	\$ 100,000
20192	Portland	Portland	Lower Albina	N River St Reconstruction	River St, N (Tillamook - Essex)	Rebuild N River Street from the Tillamook overpass to Essex Street.	N/NE Quadrant Plan	\$ 750,000

E. GLOSSARY

The Central City 2035 Plan uses clear, everyday language as much as possible. Words and terms in the glossary have the specific meaning stated below when used in the Central City 2035 Plan, unless the context clearly indicates another meaning. The definitions below are consistent with those in the Comprehensive Plan. Words not included in this Glossary are defined by their dictionary meaning, or in some cases, by their meaning in state or federal law.

Active transportation: Transportation that involved physical activity including walking, biking and using transit.

Adopt: This directs the City to adopt a specific plan or regulation.

Affordable housing: Housing that serves extremely low, very low, and low-income households. In determining affordability, the cost of housing, utilities, and transportation are considered. The U.S. Department of Housing and Urban Development (HUD) defines “affordable” as housing that costs no more than 20 percent of a household’s monthly income.

Bird-friendly building design: Structural design approaches that reduce the risk of mortality or harm to resident and migratory birds. Approaches may include windows and building façade treatments that deter bird strikes (such as patterned glass or reduced exterior glass), exterior and interior lighting designs that direct light downward or otherwise avoid light spill, and turning lights off at night during specified periods.

Capitalize: To gain by turning something that already exists into an advantage.

City: City is capitalized when it refers specifically to City of Portland government. When it is used to designate a geographic area it is not capitalized.

Complete neighborhood: A neighborhood where people have safe and convenient access to the goods and services needed in daily life, which include a variety of housing options, grocery stores and other commercial services, high-quality public schools, and parks. Complete neighborhoods are also easily accessible by foot, wheelchair, bike and transit for people of all ages and abilities.

Complete streets: Complete streets provide accessibility to all users of the right-of-way regardless of age, ability, or mode of transportation. They are designed and operated to make better places and to enable safe access for all modes, including people walking and bicycling, those using a mobility device, motorists, and transit riders.

Consider: Take into account when planning or making decisions.

Continue: Persist in an activity or process.

Coordinate: Work together with others toward a common goal; collaborate.

Cultural resource: Aspects of cultural systems that contain significant information about a culture. These resources include, but are not limited to, districts, sites, buildings, structures, and objects that are associated with people, cultures, and human activities and events, either in the present or in the past.

Design: Determine the shape or configuration of something. This verb is used for physical outcomes for which the City will establish parameters for plans and through implementation.

Discourage: To try to deter or prevent from happening.

Displacement: Households or businesses involuntarily forced to move from a neighborhood because of increasing market values, rents, or changes in the neighborhoods' ability to meet basic needs in the case of households or erosion of traditional client base in the case of businesses.

Ecological function: The physical, chemical, and biological functions of a watershed such as flow conveyance and storage, channel dynamics, nutrient cycling, microclimate, filtration, control of pollution and sedimentation, water quality, terrestrial and aquatic habitat, and biodiversity.

Enable: To supply with the means, knowledge, or opportunity; make able.

Encourage: Promote or foster something that people or other organizations are already doing or could do.

Enhance: To further improve the quality or value of something that is already valuable.

Ensure: To make something certain; to make sure that something will happen or be available.

Equity: Equity is when everyone has access to the opportunities necessary to satisfy their essential needs, advance their well-being, and achieve their full potential.

Establish: Create something, such as a program or project that does not yet exist.

Expand: Make something that already exists more extensive.

Evaluate: Assess the range of outcomes, and identify costs and benefits.

Facilitate: To make something easier; to help bring about or make run more smoothly.

Foster: This directs the City to encourage or guide the incremental development of something over a long period of time.

Green infrastructure: Public or private assets – either natural resources or engineered green facilities – that protect, support or mimic natural systems to provide stormwater management, water quality, public health and safety, open space, and other complementary ecosystem services. Examples include trees, ecoroofs, green street facilities, wetlands, and natural waterways.

Guide: Shape or direct actions over time to achieve certain outcomes. This verb is used when the City has a role in shaping outcomes, but implementation involves multiple other implementers and actions taking place over a long period of time.

Habitat Corridor: Natural and built areas that provide safe, healthy places for resident and migratory fish and wildlife species that live in and move through the city. As a system they link habitats in Portland and the region, facilitating safe fish and wildlife access and movement through and between habitat areas. Enhanced habitat corridors are places where there is existing significant fish or wildlife habitat, as identified in the Natural Resource Inventory, and where habitat connectivity will be improved over time. Potential habitat corridors will be established over time. They are places where habitat features and functions (e.g., trees, vegetation, nesting and perching sites and food, etc.) will be integrated into generally more developed areas of the city.

High-capacity transit: High capacity transit is public transit that has an exclusive right of way, a non-exclusive right of way, or a combination of both. Vehicles make fewer stops, travel at higher speeds, have more frequent service, and carry more people than local service transit such as typical bus lines.

High-capacity transit can be provided by a variety of vehicle types including light rail, commuter rail, streetcar, and bus.

Historic resource: A structure, place, or object that has a relationship to events or conditions of the human past. Historic resources may be significant for architectural, historical, and cultural reasons. Examples include historic landmarks, conservation landmarks, historic districts, conservation districts, and structures or objects that are identified as contributing to the historic significance of a district, including resources that are listed in the National Register of Historic places. Structures, places, and objects that are included in historic inventories are potential historic resources.

Improve: Make the current situation better; increase; enhance; expand services or facilities; to become better in terms of quality or condition.

Infrastructure: Consists of assets in two general networks that serve whole communities— transportation modalities (roads, rail, etc.) and utilities. These are necessary municipal or public services, provided by the government or by private companies and defined as long-lived capital assets that normally are stationary and can be preserved for a significant number of years. Examples are streets, bridges, tunnels, drainage systems, water and sewer lines, pump stations and treatment plants, dams, and lighting systems. Beyond transportation and utility networks, Portland includes buildings, green infrastructure, communications, and information technology as necessary infrastructure investments that serve the community.

Invest: Spend money and/or other resources.

Limit: Minimize something or the effects of something.

Maintain: Keep what you have; conserve; preserve; continue.

Older adults: Population over 65 (as defined by the Age-Friendly City Action Plan)

Placemaking: The collaborative act of identifying current or creating new, distinctive public environments or places to be experienced by people. These places build on existing assets that include physical, social, or natural characteristics.

Portlanders: People who live, work, do business, own property, or visit Portland, including people of any race, ethnicity, sex, gender or gender identify, sexual orientation, belief system, policy ideology, ability, socioeconomic status, educational status, veteran status, place of origin, language spoken, age, or geography.

Prevent: Don't allow at all; stop from happening; prohibit.

Prioritize: To treat something as more important than something else. Policies that use this verb must identify the thing that will be treated as more important, and the thing that will be treated as less important.

Prosperity: When the term prosperity is used, it includes prosperity for households not just for businesses.

Protect: To defend or guard against loss, injury, or destruction.

Provide: To supply, offer, or make available. The City must be able to supply the item or service in question.

Public realm: The system of publicly accessible spaces that is made up of parks and other open spaces, streets, trails, public or civic buildings, and publicly-accessible spaces in private buildings (such as lobbies or courtyards). This system works with, and is framed by, adjacent development and building edges that help energize and define the public spaces of streets, sidewalks and parks.

Reduce: Have less of something than in the current situation.

Reinforce: To strengthen something that already exists with additional investment or effort.

Remove: To do away with; eliminate.

Require: Compel; demand something.

Resilience/resiliency: The capability to anticipate, prepare for, respond, and recover from significant multi-hazard threats with minimum damage to social well-being, the economy, and the environment.

Restore: Recreate elements that are missing; move something back to its original condition; rehabilitate.

Strengthen: To make or become stronger; to build up; give strength to.

Strive: Devote serious effort or energy to; work to achieve over time.

Support: To keep from weakening.

Traded sector: A business sector consisting of companies that compete in markets extending beyond the metropolitan region. These companies include exporters to markets outside the region, suppliers to regional exporters, and businesses whose products substitute for regional imports.

Transit Station Areas: Areas within ½ mile of light rail and other high-capacity transit station.

Transparency: Reliable, relevant, and timely publicly available information about government activities and decision making.

Under-served: People and places that historically and currently do not have equitable resources, access to infrastructure, health environments, housing choice, etc. Disparities may exist both in services and outcomes.

Under-represented: People and communities that historically and currently do not have an equal voice in institutions and policy-making, and have not been served equitably by programs and services.

Urban heat island: The urban heat island effect is a measurable increase in ambient urban air temperatures resulting primarily from the replacement of vegetation with buildings, roads, and other heat-absorbing infrastructure. The heat island effect can result in significant temperature differences between rural and urban areas.

Utilize: To put to use; to make practical or worthwhile use of. Conveys intention to apply a resource toward a purpose.

Watershed: A watershed is the area that catches rain and snow and drains into a corresponding river, stream, or other water body. It is a geographic area that begins at ridge tops (highest elevations) and ends at a river, lake, or wetland (lowest elevation). Within a watershed, there can also be sub-watersheds. These drainage areas are smaller and are defined by their tributaries.

CENTRAL CITY 2035

VOLUME 2: ZONING CODE AND MAP AMENDMENTS

IN-HOUSE REVIEW DRAFT | OCTOBER 9, 2015

COMMENTS DUE NOVEMBER 9, 2015



Bureau of Planning and Sustainability
Innovation. Collaboration. Practical Solutions.

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Charlie Hales, Mayor • Susan Anderson, Director



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A. Introduction

This section contains the major and minor zoning code amendments that staff is proposing to implement the policy framework of the draft *Central City 2035 Plan* along with code commentary pages that are intended to help clarify the intent of the code change and expected implementation. The section is formatted to facilitate readability; showing proposed code changes on the right-hand pages and related commentary on the facing left-hand pages.

DRAFT

Major Amendments

Commentary on major amendments and new code provisions also includes staff questions which will most likely result in additional amendments to these sections. Language to be added is underlined. Language to be deleted is shown in ~~strike through~~. Shading indicates blocks of text with no substantive changes.

These major code amendments are to:

- 33.510 Central City Plan District
- 33.475 River Overlay Zones (New)
- 33.430 Environmental Zones
- 33.440 Greenway Overlay Zones
- 33.480 Scenic Resources
- 33.865 River Review (New)
- 33.900s List of Terms and Definitions

DRAFT

33.510 Central City Plan District

Commentary on draft Central City plan district code amendments and new code provisions also includes staff questions which will most likely result in additional amendments to these sections. Language to be added is underlined. Language to be deleted is shown in ~~strikethrough~~. Shading indicates blocks of text with no substantive changes.

Commentary

Sections:

General

- 33.510.010 Purpose
- 33.510.020 Where the Regulations Apply
- 33.510.030 Application of Regulations Along Proposed Rights-of-Way and Accessways

Use Regulations

- 33.510.100 Vehicle Repair, Sales and Leasing Uses
- ~~33.510.105 Vehicle Sales or Leasing~~
- 33.510.110 Mixed Use Waterfront Development
- 33.510.112 Commercial Parking
- 33.510.113 Retail Sales And Service and Office Uses in the IG1 Zone
- ~~33.510.114 Exemptions for Portland State University~~
- 33.510.115 Additional Uses Allowed in the Open Space Zone
- 33.510.116 Retail Sales And Service Uses for Specified Sites in the CX and EX Zones
- 33.510.117 Retail Sales And Service and Office Uses in the RX Zone
- ~~33.510.118 Use Regulations for Specified Sites in the West End Subdistrict Subarea~~
- 33.510.119 Retail Sales And Service and Office Uses in Specified Historic Resources in the IG2 and IH Zones
- 33.510.XXX Residential Use Restrictions in the EX zone

Development Standards

- 33.510.200 Floor Area Ratios
- 33.510.205 Height
- 33.510.210 Floor Area and Height Bonus Options
- 33.510.215 Required Building Lines
- 33.510.220 Ground Floor Windows
- ~~33.510.221 Required Windows Above the Ground Floor~~
- ~~33.510.223 Exterior Display and Storage~~
- ~~33.510.224 Mechanical Equipment along the Portland Streetcar Alignment~~
- 33.510.225 Ground Floor Active Uses
- ~~33.510.226 Minimum Active Floor Area~~
- 33.510.230 Required Residential Development Areas
- 33.510.240 Drive-Through Facilities
- 33.510.242 Demolitions
- 33.510.XXX Eco Roofs
- 33.510.XXX Low Carbon Buildings
- 33.510.XXX Locker Room and Bike Facilities
- 33.510.251 Additional Standards in the North Pearl Subarea
- 33.510.252 Additional Standards in the South Waterfront Subdistrict
- 33.510.XXX Additional Standard in the Central Eastside Subdistrict
- 33.510.253 Greenway Overlay Zone in the South Waterfront Subdistrict
- 33.510.255 Central City Master Plans
- 33.510.257 Signs for Additional Uses Allowed in the Open Space Zone

Commentary

33.510.010 Purpose: The purpose statement has been rewritten and now references the CC2035 Plan, which will supersede the Central City Plan and the other plans mentioned.

Parking and Access (removed – update will be available in November)

- 33.510.261 Parking
- 33.510.263 Parking in the Core Area
- 33.510.264 Parking in Lloyd District
- 33.510.265 Parking in the Goose Hollow Subdistrict, Lower Albina Subdistrict, Central Eastside Subdistrict, and River District Sectors 1 and 2
- 33.510.267 Parking in the South Waterfront Subdistrict

Map 510-1 Central City Plan District and Subdistricts

Map 510-2 Maximum Floor Area

Map 510-3 Maximum Heights

Map 510-4 Maximum Heights with Eligible Height Increases

Map 510-~~5~~4 Bonus Options Target Areas

Map 510-~~6~~5 Required Residential Development Areas

Map 510-~~7~~6 Required Building Lines

Map 510-8 Ground Floor Windows

Map 510-~~9~~7 Active Building Use Areas

Map 510-~~10~~8 Core and Parking Sectors

~~Map 510-9 Parking Access Restricted Streets~~

Map 510-~~11~~0 Areas Where Additional Uses are Allowed in the OS Zone

Map 510-~~12~~4 Special Areas

Map 510-~~13~~2 Streetcar Alignment

Map 510-~~14~~3 Park Blocks Frontages

~~Map 510-14 Areas Where Additional Uses are Allowed in the RX Zone~~

Map 510-15 South Waterfront Greenway Public Access Map

Map 510-16 North Pearl and South Waterfront Height Opportunity Area

~~Map 510-17 South Waterfront 2002 Top of Bank Line~~

Map 510-~~17~~8 Area where Vehicle Repair and Vehicles Sales and Leasing Uses, and Exterior Display and Storage are Restricted

Map 510-~~18~~9 North Pearl Subarea special Building Height Corridor

~~Map 510-20 Pearl Development Transfer Opportunity Area~~

~~Map 510-21 Required Retail Sales and Service Use in South Waterfront~~

Map 510-19 Required Master Plan Sites

General

33.510.010 Purpose

The Central City plan district implements the Central City 2035 Plan. The regulations address the unique role the Central City plays as the region’s premier center for jobs, services, tourism and entertainment. They provide for a high-density, broad mix of commercial, residential, industrial and institutional uses while fostering transit-supportive development, pedestrian and bicycle-friendly streets, a vibrant public realm and a healthy urban waterfront. Central City Plan and other plans applicable to the Central City area. These other plans include the Downtown Plan, the River District Plan, the University District Plan, and the Central City Transportation Management Plan. The Central

Commentary

City plan district implements portions of these plans by adding code provisions that address special circumstances existing in the Central City area.

Commentary

33.510.020 Where the Regulations Apply Any other standards to call out?
Greenway?

33.510.100 Vehicle Repair Uses

33.510.105 Vehicle Sales or Leasing

These two sections have been combined and staff is proposing to expand areas where the restriction of vehicle repair use, sales and leasing applies. Map 510-17 (previously Map 510-18) has been updated to reflect the area.

Specifically, the identified area on the new map will:

- a. continue to reflect the existing exclusion of the western tip of Goose Hollow;
- b. exclude areas where the MAX alignment is above grade or otherwise separated from the surface street system, presenting no potential conflicts with cars. In these areas, the prohibition area will be targeted at conflict points, primarily intersections where the two systems interact.

33.510.020 Where the Regulations Apply

The regulations of this chapter apply to the Central City plan district. The boundaries of the plan district and its subdistricts are shown on Map 510-1 at the end of this chapter, and on the Official Zoning Maps. The plan district standards for uses, floor area ratio, height, bonuses, transfer of development rights, required residential development, amount of parking, and Central City master plans control when in conflict with any base or overlay zone. For other regulations, in cases of conflict the most restrictive regulation controls. The information depicted on Maps 510-1 through 510-7 510.19 is part of the plan district regulations and is subject to the same amendment procedures as amendments to the text of this chapter.

33.510.030 Application of Regulations Along Proposed Rights-of-Way and Accessways

Where Maps 510-1 through 510-196 identify a right-of-way as a “proposed right-of-way” or “proposed accessway,” the location of the right-of-way or accessway on the map represents only a conceptual location. When dedicated or improved, the location of the right-of-way or accessway may vary from the conceptual location shown on these maps. Regulations of this chapter that are based on the location of a proposed right-of-way or accessway apply as follows:

- A. If the right-of-way or accessway has been improved or dedicated, the regulation applies based on the actual location of the right-of-way, tract, or easement.
- B. If the right-of-way or accessway has not been improved or dedicated, the regulation applies based on the location of the facility as shown on the street plan for the area that has been accepted by City Council. The street plan is maintained by the Portland Office of Transportation and is documented in the Transportation Element of Portland’s Comprehensive Plan.

Use Regulations

33.510.100 Vehicle Repair and Vehicle Sales and Leasing Uses

Vehicle Repair uses are prohibited in the portions of the Central City shown on Map 510-17. The sale or leasing of consumer vehicles, including passenger vehicle, motorcycles, light and medium trucks, travel trailers, and other recreational vehicles, is also prohibited in the areas shown on Map 510-17, with the exception that offices for the sale or leasing of consumer vehicles where the vehicles are displayed or stored elsewhere are allowed.

~~33.510.100 Vehicle Repair Uses~~

~~Vehicle Repair uses are prohibited in the Downtown subdistrict, and in the Goose Hollow subdistrict on the portion of a site within 500 feet of a light rail alignment.~~

~~33.510.105 Vehicle Sales or Leasing~~

~~Sale or lease of consumer vehicles, including passenger vehicles, motorcycles, light and medium trucks, travel trailers, and other recreational vehicles, is prohibited in the portions of the Downtown and Goose Hollow subdistricts shown on Map 510-18. Offices for sale or lease of vehicles, where the vehicles are displayed or stored elsewhere, are allowed.~~

33.510.110 Mixed Use Waterfront Development

- A. **Purpose.** The Central City 2035 Plan area fronts on portions of the working harbor. The working harbor is the area downstream from the Broadway Bridge. Sites developed for mixed use projects in residential zones along the working harbor will better implement the

Commentary

33.510.112 Commercial Parking

The plan district parking code is being updated. It will be available for review as part of the Discussion Draft in December 2015.

Central City 2035 Plan, Willamette Greenway Plan, Lower Willamette River Management Plan, and Comprehensive Plan if compatible river dependent industrial activities are allowed as part of mixed use projects.

- B. Where these regulations apply.** The regulations of this section apply to portions of sites in the RX zone that are next to the Willamette River, and are downstream from the Broadway Bridge.
- C. Additional uses allowed.** The following uses are allowed in the nonresidential portion of a mixed use development:
 - 1. Passenger ship docking facilities and accessory customs and cargo handling facilities; and
 - 2. Marinas.
- D. Minimum residential density.** Where there are any non-residential uses on the site, minimum residential densities are one dwelling unit for each 2,000 square feet of site area.

33.510.112 Commercial Parking

Commercial Parking is subject to special regulations in Sections 33.510.261 through .267. Visitor Parking and Undedicated General Parking, as described in Section 33.510.261, are Commercial Parking. The other types of parking are accessory parking, although some of them may operate as commercial parking.

33.510.113 Retail Sales And Service and Office Uses in the IG1 Zone

A. Generally.

- 1. Where these regulations apply. The regulations of this subsection apply to sites in the IG1 Zone that are not subject to Subsections B and C, below.
- 2. Allowed uses. One Retail Sales And Service or Office use is allowed per site. The square footage of the floor area plus the exterior display and storage area may be up to 3,000 square feet.
- 3. Conditional uses.
 - a. More than one Retail Sales And Service or Office use on a site is a conditional use.
 - b. Retail Sales And Service uses where the net building area plus the exterior display and storage area is more than 3,000 square feet are a conditional use. Retail Sales And Service uses where the net building area plus the exterior display and storage area is more than 25,000 square feet, or the square square footage of the site area, whichever is less, are prohibited.
 - c. Office uses where the net building area plus the exterior display and storage area is more than 3,000 square feet are a conditional use. Office uses where the net building area is more than 60,000 square feet or the square footage of the site area, whichever is less, are prohibited.

B. Historic resources.

- 1. Where these regulations apply. The regulations of this subsection apply in the IG1 Zone to historic resources that are listed on the National Register of Historic Places or

Commentary

33.510.113 Retail Sales And Service and Office Uses in the IG1 Zone

C. Employment Opportunity Subarea: This section has been updated as part of the Comprehensive Plan, Task 5 Employment Zoning Project. The Discussion Draft contains the following language. The new EOS code language will be incorporated into the Plan District when Central City 2035 is adopted. New Language:

C. Central Eastside Subdistrict.

1. Purpose. The regulations of this subsection promote the preservation of industrial land and development and support the vitality of industrial businesses while providing opportunities for a broad and diverse mix of employment uses that are compatible with industrial activities and that build on the economic strengths, locational advantages and urban character of the Central Eastside.

2. Where these regulations apply. The regulations of this subsection apply to sites zoned IG1 in the Central Eastside Subdistrict that are not subject to Subsection B.

3. Allowed uses.

a. Retail Sales And Service and Traditional Office uses.

(1) Sites up to 40,000 square feet in size. The following regulations apply to Retail Sales And Service and Traditional Office uses on sites that are 40,000 square feet or less in size:

-Up to 5,000 square feet of the net building area including the exterior display and storage area on a site may be in Retail Sales And Service use. More than 5,000 square feet in Retail Sales And Service use on a site is prohibited.

-Up to 5,000 square feet of net building area on a site may be in Traditional Office use. More than 5,000 square feet in Traditional Office use on a site is prohibited.

(2) Sites over 40,000 square feet in size. The following regulations apply to Retail Sales And Service and Traditional Office uses on sites that are more than 40,000 square feet in size:

-Retail Sales and Service uses on a site are limited to an amount equal to 12.5 percent of the total site area. The limitation includes all exterior display and storage areas. More than 12.5 percent in Retail Sales And Service use is prohibited.

-Traditional Office uses on a site are limited to an amount equal to 12.5 percent of the total site area. More than 12.5 percent in Traditional Office use is prohibited.

b. Industrial Office.

(1) Generally, Industrial Office uses are allowed up to an amount equal to three times the square footage of the site. Unless allowed by one of the exceptions below, Industrial Office use in excess of three times the square footage of the site is prohibited.

are identified as contributing to the historic significance of a Historic District or a Conservation District.

2. Allowed uses. Up to 12,000 square feet on a site may be in Retail Sales And Service or Office use. The total amount of square footage includes net building area, exterior display, and storage area of all Retail Sales And Service and Office uses on the site. More than 12,000 square feet on a site in Retail Sales And Service uses is prohibited.
3. Conditional uses. More than 12,000 square feet on a site may be in Office uses if approved through a conditional use. The total amount of square footage includes net building area, exterior display, and storage area of Office uses on the site. If there are also Retail Sales And Service uses on the site, no more than 12,000 square feet may be in Retail Sales And Service use.

~~C. Employment Opportunity Subarea.~~

- ~~1. Purpose. The regulations of this subsection promote the preservation of industrial land and development and support the vitality of industrial businesses while providing opportunities for a broad and diverse mix of employment uses that are compatible with industrial activities and that build on the economic strengths, locational advantages and urban character of the Central Eastside.~~
- ~~2. Where these regulations apply. The regulations of this subsection apply to sites in the IG1 Zone in the Employment Opportunity Subarea of the Central Eastside Subdistrict that are not subject to Subsection B.~~
- ~~3. Allowed uses:
 - ~~a. Retail Sales And Service. Up to 5,000 square feet of the net building area plus the exterior display and storage area on a site may be in Retail Sales And Service use. More than 5,000 square feet in Retail Sales And Service use on a site is prohibited.~~
 - ~~b. Traditional Office. Up to 5,000 square feet of net building area on a site may be in Traditional Office use.~~
 - ~~c. Industrial Office. Up to 60,000 square feet of the net building area on a site may be in Industrial Office use.~~~~
- ~~4. Conditional uses:
 - ~~a. More than 5,000 square feet in Traditional Office use on a site is a conditional use. More than 60,000 square feet in Traditional Office use on a site is prohibited.~~
 - ~~b. More than 60,000 square feet in Industrial office use on a site is a conditional use.~~~~

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(2) Exceptions.

Up to 60,000 square feet of Industrial Office use is allowed on sites that are 20,000 square feet or less in size. More than 60,000 square feet of Industrial Office use per site is prohibited.

Industrial Office uses are allowed in buildings that existed on (*insert adoption date*). In this case, 100 percent of the gross building area may be in an Industrial Office use including gross building area added inside of the building as it existed on (*insert adoption date*). In addition, up to 5,000 square feet of floor area added to the roof of the building as it existed on (*insert date*) can be in Industrial Office use. Industrial Office use in more than 5,000 square feet of floor area added to the roof of the building is prohibited.

33.510.114 Exemptions for Portland State University

Through the West Quadrant Planning process, RX portions of these sites are proposed to be rezoned to CX, eliminating the need for this provision.

33.510.115 Additional Uses Allowed in the Open Space Zone

Through the quadrant planning processes stakeholders discussed the need to activate the riverfront and develop multifunctional riverfront open spaces that would be a regional attraction. Portland Parks and Recreation has also expressed an interest in increasing Retail Sales use allowances in the Central City.

Staff is proposing to increase retail sales use allowances for Tom McCall Waterfront Park and also Holladay Park. These sites are shown on Map 510-11. Square footage allowances have been increased. It is no longer just one retail sales and service use allowed per site.

Staff is also proposing that the River "r" overlay be changed to River "g" or general. This will allow for retail sales and service uses as described without the river dependent requirements that come with the "r" overlay.

Questions: Parks is interested in "moveable rental units" such as kiosks or concession stands. Current language allows food and drink stands but food carts have different regulations that require the use of a parking space. Parks would like the ability to have these moveable units in the park, not necessarily in a parking space. Do we want to allow these structures in areas other than a parking space?

33.510.114 Exemptions for Portland State University

- ~~A. Development by Portland State University within the University District, is exempt from the Conditional Use requirements of Section 33.815.070, Sites with Split Zoning;~~
- ~~B. Development by Portland State University within the University District is exempt from the Conditional Use requirements of Chapter 33.815, Conditional Uses, in situations where a use would be allowed if it was not associated with the University. Instead, such development is subject only to the regulations of the base zone, overlay zone, and plan district.~~

33.510.115 Additional Uses Allowed in the Open Space Zone

- A. Purpose.** Additional uses are allowed on certain sites zoned OS within the Central City plan district in recognition of the diversity of functions that Central City and riverfront open spaces provide to residents and visitors. The Central City's open spaces tend to be more urban than open spaces found outside the Central City. Plazas, parks, and other improved outdoor spaces found in the Central City may be designed for a more intensive use, and may include little or no green space. Tom McCall Waterfront Park along the Willamette River is a regional attraction which supports the public's enjoyment in and along the river. In some cases, more intense activities are appropriate when the open space site is located near a Transit Station. These open spaces may contain buildings, benches, art, coffee shops or restaurants, or other small retail shops. These uses are encouraged in some urban parks in the Central City to help ~~promote downtown as a regional attraction~~, enhance the Central City's role in culture and entertainment, provide space for outdoor activities that are appropriate in an urban setting, and increase desirable activity within and near the open space.
- B. Additional uses allowed.** The following uses are allowed on sites in the OS zone that are also shown on Map 510-~~10~~11:
 - 1. ~~One~~ Retail Sales and Service uses such as flower, food and drink stands, and other similar pedestrian-oriented uses, ~~per site is~~ are allowed as follows:
 - a. On sites that are 5 acres or less, the net building area of all retail sales and service uses may be up to 2,500 3,000 square feet, but no larger than 5 percent of the area of the site.
 - b. On sites that are more than 5 acres, the net building area of all retail sales and service uses may be up to 10,000 square feet.
 - 2. Parking that is totally below grade and existed as of February 9, 2000; and
 - 3. The uses listed in B3.a are allowed on sites that meet the requirements of B.3b. Adjustments to this paragraph are prohibited.
 - a. Uses allowed:
 - (1) Major Event Entertainment;
 - (2) Commercial Outdoor Recreation; and

Commentary

33.510.115 Additional Uses Allowed in the Open Space Zone

B4.b Staff proposes to limit the additional uses allowed in the new parks that are being added. This provision is specifically applicable to Providence Park but a park as large as Tom McCall Waterfront Park would also be eligible per current code. Staff has added that sites within the River General Overlay are not eligible.

C-D - no changes proposed

- (3) Up to 15,000 square feet of Office.
- b. Requirements for sites where uses in B.3.a are proposed:
 - (1) The site must be at least 5 acres in area;
 - (2) The site must be within 500 feet of a Transit Station;
 - (3) The site is not within the River General Overlay Zone;
 - (4) The standards of Chapter 33.262, Off-Site Impacts, must be met;
 - (5) The site must have an unexpired Good Neighbor Agreement that is approved by City Council as described in 33.510.115.C, below;
 - (6) The site must have a Comprehensive Transportation Management Plan that is approved by City Council as described in 33.510.115.D, below; and
 - (7) If the site is not managed by the owner, the site must have an Operating Agreement that is approved by City Council.

C. Good Neighbor Agreement

1. Purpose. The Good Neighbor Agreement requirements provide an opportunity to consider the impacts of a Major Event Entertainment or Commercial Outdoor Recreation use on nearby residents and businesses. This is achieved by requiring owners or operators to meet with interested parties and by requiring the formulation of a written implementation program referred to as a "Good Neighbor Agreement" before a building permit is issued.
2. When a Good Neighbor Agreement is required. A Good Neighbor Agreement, approved by the City Council, is required before a building permit will be issued for sites with a Major Event Entertainment or Commercial Outdoor Recreation use. The Good Neighbor Agreement does not have to be updated before each building permit is issued, but it must be current at the time of permit issuance.
3. Required process for development and approval of a Good Neighbor Agreement. The owner or operator of the Major Event Entertainment or Commercial Outdoor Recreation use must complete the steps listed in this paragraph. For purposes of this requirement, "applicant" means the owner or operator.
 - a. Develop a Draft Good Neighbor Agreement. The applicant must develop a Draft Good Neighbor Agreement that includes all of the elements listed in Paragraph C.4., below.
 - b. Contact the neighbors. The applicant must contact neighboring property owners and organizations as described below:
 - (1) Schedule a meeting. The applicant must schedule a meeting to discuss the draft agreement;
 - (2) Mail notice of the meeting to neighbors. The applicant must mail written notice of the meeting, as specified below:
 - The notice must be mailed at least 14 days before the date of the meeting;

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- The notice must be mailed to all property owners within 1,000 feet of the site and to recognized organizations in which the site is located and recognized organizations within 1,000 feet of the site; and
- The notice must include the date, time, and place of the meeting, and a copy of the Draft Good Neighbor Agreement.

c. Hold the Good Neighbor Agreement meeting. Hold the meeting as described below:

- (1) Purpose of meeting. The purpose of the meeting is to provide the opportunity for all interested parties to identify concerns that should be considered through the Good Neighbor Agreement. The anticipated outcome of the meeting is an agreement between the neighbors—including residents and businesses—and the applicant as to how each issue will be considered in the Good Neighbor Agreement. However, a consensus is not required;
- (2) Attendance by City staff. City staff may attend the meetings to offer suggestions or information, identify potential problems with the Draft Good Neighbor Agreement, or to observe. Participation by City staff in the meeting is not required and does not indicate City approval of the Good Neighbor Agreement;
- (3) Additional meetings. Additional meetings may be held.

d. City Council hearing. The applicant must request a City Council hearing. The applicant must request City Council to consider both the Comprehensive Transportation Management Plan and the Good Neighbor Agreement at the same hearing. The purpose of the hearing is for Council to ensure that the applicant has taken the procedural steps required by this paragraph and has adequately addressed the elements in the Good Neighbor Agreement required by Paragraph C.4. The Council may approve, approve with modifications, or reject the Good Neighbor Agreement.

At least 14 days before the hearing, the applicant must file the following materials with the City Auditor’s Office:

- (1) A copy of the notice of the Good Neighbor Agreement meeting mailed to neighbors as required by C.3.b.(2), above;
- (2) The names and addresses of all those to whom the notice of the Good Neighbor Agreement meeting was mailed;
- (3) The names and addresses of those who attended the meeting;
- (4) The Draft Good Neighbor Agreement and, if different, the version of the Good Neighbor Agreement that the applicant requests Council to approve;
- (5) Any other versions of the Good Neighbor Agreement which were reviewed at the meeting;
- (6) A copy of the notice of City Council hearing required by C.3.e.(1), below; and

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(7) The names and addresses of all those to whom the notice of City Council hearing was mailed.

e. Notice of City Council hearing. The applicant must mail written notice of the City Council hearing as specified below:

- (1) The notice must be mailed to all property owners within 1,000 feet of the site, to recognized organizations in which the site is located and recognized organizations within 1,000 feet of the site, and to those who attended the Good Neighbor Agreement meeting;
- (2) The notice must also be published in a recognized newspaper;
- (3) The notice must be mailed at least 14 days before the hearing; and
- (4) The notice must contain at least the following information:
 - The date, time, and place of the City Council hearing;
 - A copy of the Good Neighbor Agreement that is filed with the City Auditor's Office, as specified in C.3.d.(4);
 - The street address or other easily understood geographical reference to the property to be covered by the Good Neighbor Agreement;
 - A statement that the purpose of the hearing is for Council to ensure that the applicant has taken the procedural steps required by Paragraph 33.510.115.C.3. of the Zoning Code, and has included the elements in the Good Neighbor Agreement required by Paragraph 33.510.115.C.4. of the Zoning Code;
 - A statement that Council may approve, approve with modifications, or reject the Good Neighbor Agreement;
 - An explanation of the local decision-making process for making this decision, as described in this section of the Zoning Code;
 - An invitation to comment, in writing, on the proposal and the place, date, and time that comments are due. This date and time must be at least 14 days from the mailing date of the notice;
 - A statement that all information submitted by the applicant is available for review from the City Auditor, and that copies can be obtained for a fee equal to the City's cost for providing the copies; and
 - A statement that issues which may provide the basis for an appeal to the Land Use Board of Appeals must be raised before the comment period expires and that such issues must be raised with sufficient specificity to afford the City Council an opportunity to respond to the issues.

f. Notice of City Council decision. The City Auditor will file the notice of decision by the next working day after the decision is made. Within 5 days of filing the notice of decision, the City Auditor will mail a notice of the decision to all property owners within 1,000 feet of the site, to recognized organizations in which the site is located and recognized organizations within 1,000 feet of the site, and to all who testified at the Council hearing, submitted written comments, or requested such notice in writing.

Commentary

4. Elements of a Good Neighbor Agreement. The Good Neighbor Agreement must consider all of the following items:

- a. Event schedules, including coordination with nearby facilities to minimize impacts on the neighborhood of concurrent events;
- b. Event limitations;
- c. Noise management;
- d. Box Office hours of operation;
- e. Litter management;
- f. Lighting;
- g. Communications, including a process for receiving, recording, and responding to community comments;
- h. Alcohol management;
- i. Security;
- j. Hours of operation including those for set-up and take-down;
- k. Community use of the site;
- l. Motorized events;
- m. Oversight committee;
- n. Enforcement of the Good Neighbor Agreement;
- o. Exceptions to the Good Neighbor Agreement;
- p. Process and requirements for updating, amending, or terminating the Good Neighbor Agreement; and
- q. Effective date, term of the agreement, and date of expiration.

D. Comprehensive Transportation Management Plan

1. Purpose. The Comprehensive Transportation Management Plan requirements provide an opportunity to consider the impacts of traffic and parking on nearby residents and businesses. This is achieved by requiring owners or operators to complete an analysis of traffic issues, suggest mitigation measures, and make the draft report available to the neighbors of the site.
2. When a Comprehensive Transportation Management Plan is required. A Comprehensive Transportation Management Plan is required before a building permit will be issued for sites with a Major Event Entertainment or Commercial Outdoor Recreation use.
3. Required process for development and approval of a Comprehensive Transportation Management Plan. The owner or operator of the Major Event Entertainment or Commercial Outdoor Recreation use must complete the steps listed in this paragraph. For purposes of this requirement, “applicant” means the owner or operator

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- a. Develop a Draft Comprehensive Transportation Management Plan. The applicant must develop a Draft Comprehensive Transportation Management Plan that includes all of the elements listed in Paragraph D.4., below.
- b. Notice of Draft Plan. The applicant must mail written notice to all property owners within 1,000 feet of the site and to recognized organizations in which the site is located and recognized organizations within 1,000 feet of the site that the Draft Comprehensive Transportation Management Plan is available.
- c. City Council hearing. The applicant must request a City Council hearing. The Comprehensive Transportation Management Plan must be considered at a City Council hearing held to also consider the Good Neighbor Agreement. The hearing must be at least 14 days after the notice to neighbors that the Draft Comprehensive Transportation Management Plan is available, as required by Subparagraph D.3.b., above, is mailed.

The purpose of the hearing is for Council to ensure that the applicant has taken the procedural steps required by this paragraph and has adequately addressed the elements in the Comprehensive Transportation Management Plan required by Paragraph D.4. The Council may approve, approve with modifications, or reject the Comprehensive Transportation Management Plan.

At least 14 days before the hearing, the applicant must file the following materials with the City Auditor's Office:

- (1) A copy of the notice to neighbors that the Draft Comprehensive Transportation Management Plan is available, as required by D.3.b., above;
- (2) The names and addresses of all those to whom notice that the Draft Comprehensive Transportation Management Plan is available was mailed;
- (3) The Draft Comprehensive Transportation Management Plan that has been made available to the neighbors, and, if different, the version of the Comprehensive Transportation Management Plan that the applicant requests Council to approve;
- (4) A copy of the notice of City Council hearing required by Subparagraph D.3.d., below; and
- (5) The names and addresses of all those to whom the notice of City Council hearing was mailed.

- d. Notice of City Council hearing. The applicant must mail written notice of the City Council hearing as specified below:

- (1) The notice must be mailed to all property owners within 1,000 feet of the site, and to recognized organizations in which the site is located and recognized organizations within 1,000 feet of the site;
- (2) The notice must also be published in a recognized newspaper;
- (3) The notice must be mailed at least 14 days before the hearing; and
- (4) The notice must contain at least the following information:

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- The date, time, and place of the City Council hearing;
- A copy of the Comprehensive Transportation Management Plan requested to be approved by Council and filed with the City Auditor's Office, as specified in D.3.c.(3);
- The street address or other easily understood geographical reference to property to be covered by the Comprehensive Transportation Management Plan;
- A statement that the purpose of the hearing is for Council to ensure that the applicant has taken the procedural steps required by Paragraph 33.510.115.D.3. of the Zoning Code, and has included the elements in
- the Comprehensive Transportation Management Plan required by Paragraph 33.510.115.D.4. of the Zoning Code;
- A statement that Council may approve, approve with modifications, or reject the Comprehensive Transportation Management Plan;
- An explanation of the local decision-making process for making this decision, as described in this section of the Zoning Code;
- An invitation to comment, in writing, on the proposal and the place, date, and time that comments are due. This date and time must be at least 14 days from the mailing date of the notice;
- A statement that all information submitted by the applicant is available for review, and that copies can be obtained for a fee equal to the City's cost for providing the copies; and
- A statement that issues which may provide the basis for an appeal to the Land Use Board of Appeals must be raised before the comment period expires and that such issues must be raised with sufficient specificity to afford the City Council an opportunity to respond to the issues.

e. Notice of City Council decision. The City Auditor will file the notice of decision by the next working day after the decision is made. Within 5 days of filing the notice of decision, the City Auditor will mail a notice of the decision to all property owners within 1,000 feet of the site, to all neighborhood associations and business associations within 1,000 feet of the site, and to all who testified at the Council hearing, submitted written comments, or requested such notice in writing.

4. Elements of a Comprehensive Transportation Management Plan. The Comprehensive Transportation Management Plan must consider all of the following items:

- a. Existing conditions, including traffic counts, parking availability, attendee mode splits, and site access and circulation;
- b. Impacts of anticipated Major Event Entertainment and Commercial Outdoor Recreation uses, including a parking demand analysis; and
- c. Proposed mitigation measures.

Commentary

33.510.116 Retail Sales And Service Uses for Specified Sites in the ~~CX~~ and ~~EX~~ Zones

The amended criteria will continue to apply to specific sites in the Pearl subdistrict (River District) and South Waterfront subdistricts., in addition OMSI and Clinton Station Areas in the Central Eastside subdistrict will be added.

Although the original standards allowed Retail Sales and Service uses up to 60,000 sq. ft. in the South Waterfront subdistrict (CX zone) and up to 50,000 sq. ft. in the Pearl subdistrict (EX zone) as a conditional use, the new standard limits these uses to 50,000 sq. ft. on all sites identified on Map 510-12 to be consistent and to ensure that the development of commercial uses larger than a typical city block is not allowed by these provisions. The intent is to prevent large scale retail uses in the Central City that could be a regional draw, increase traffic in the downtown as well as potentially increasing conflicts with the primary land use direction and character of the subdistricts.

33.510.117 Retail Sales And Service and Office uses in the RX zone.

2a (1) Limited Uses

Through the West Quadrant planning processes, a desire was expressed to increase ground floor flexibility in the RX zone, particularly to encourage ground floor retail. If the ground floor is in retail sales and service or office, an additional, moderate amount of building square footage could be allowed to be in this use - allowing for more mixed use development but maintaining residential as the dominant use. The exception is to allow for lobby space and things accessory to the residential development.

33.510.116 Retail Sales And Service Uses for Specified Sites in the CX and EX Zones

- A. **Purpose.** Limits on the size of Retail Sales And Service uses promote neighborhood-serving commercial development and help reduce traffic congestion associated with large-scale retailers.
- B. **Limitation.** On sites shown on Map 510-12, Retail Sales and Service uses are allowed up to 40,000 square feet of net building area for each use. Retail Sales and Service uses larger than 40,000 square feet for each use are a conditional use. Retail Sales and Service uses larger than 50,000 square feet for each use are prohibited. This limitation does not apply to hotel uses.
- ~~B. **CX Zone limitation.** On sites in the CX zone within the South Waterfront Subdistrict as shown on Map 510-11, Retail Sales And Service uses are allowed up to 40,000 square feet of net building area for each use. Retail Sales And Service uses larger than 40,000 square feet for each use are a conditional use. Retail Sales And Service uses larger than 60,000 square feet for each use are prohibited. This limitation does not apply to hotel uses.~~
- ~~C. **EX Zone limitation.** On sites in the EX zone within the area shown on Map 510-11, Retail Sales And Service uses larger than 40,000 square feet for each use are a conditional use. Retail Sales And Service uses larger than 50,000 square feet of floor area for each use are prohibited.~~

~~And Service uses are allowed up to 40,000 square feet of net building area for each use.~~

33.510.117 Retail Sales And Service and Office Uses in the RX Zone

- A. **Purpose.** The provisions of this section enhance the residential character of the RX zone and improve the economic viability of residential development by allowing commercial uses. At the same time, commercial uses are regulated to assure that residential uses are the primary use in the zone.
- B. **Where these regulations apply.** The regulations of this section apply to sites in the RX zone, ~~except in the area shown on Map 510-14, and supersede the regulations of the base zone. Sites in the area shown on Map 510-14 are subject to the regulations of Section 33.510.118, Use Regulations for Specified Sites in the West End Subarea, not those of this section.~~

The regulations of Paragraph D.2. apply to sites that are not on the Park Block frontages; the regulations of Paragraph D.3. apply to sites that are on the Park Block frontages. The Park Block frontages are shown on Map 510-~~13~~14.

- C. **Adjustments prohibited.** Adjustments to the regulations of this section are prohibited.
- D. **Retail Sales And Service and Office uses in the RX zone.**
 - 1. Outdoor activities on all sites. All commercial uses must be conducted entirely within fully enclosed buildings. Exterior display of goods and exterior storage are not allowed. Outdoor seating for restaurants and pedestrian-oriented accessory uses, such as flower, food, or drink stands, are exempt from this requirement.
 - 2. Sites not on Park Block frontages. On sites that are not on the Park Block frontages, shown on Map 510-~~13~~14, the following regulations apply:

Commentary

2a(2) Conditional Uses

The first conditional use is no longer necessary. Regarding the second, with the elimination of the RX in the northern portion of the West End, this provision would not apply to any RX areas in the Central City. There was a question about whether this provision should be expanded to include streetcar stops, as well as Transit Stations (i.e., MAX stations), but that would make the provision apply to nearly the entire southern West End and would not differentiate one area from another in a meaningful way.

2b Conversion of existing multi-dwelling development

The RX Zone is intended to be primarily residential. The possibility of allowing up to 100 percent was discussed as part of the West Quadrant process but this percentage may be too high to maintain the intent of the zone. 60 percent seemed like a meaningful increase, but would still maintain a critical and sustainable number of units in each building and support the desire for residential development in the zone.

3. Sites on Park Block frontages: Retail allowances along the Park Blocks have been updated to increase the allowance for ground floor retail and office to be consistent with CC 2035 plan policies to activate areas around the potential green loop. A conditional use review is required if any retail or office is located above the ground floor

Question: During the West Quad Plan a desire was expressed to preserve older buildings (esp. in West End) that are not formally designated as historic, including non-residential buildings in the RX zone. Should a special provision be created to allow existing **non-residential buildings** in RX zone (e.g. meeting halls, churches, community centers) be used for non-residential use, e.g. one that has lost non-conforming rights or one desiring to convert from an institutional use to commercial use? Most of these buildings are not suited to residential use and are at risk of demolition if their current non-residential use ends or is no longer feasible. A recent example illustrating the issue is the former YWCA building, which has struggled to find a new use. See 33.445.610.C.7 and C.8 and 33.846.050 for example existing allowance for landmarks.

- a. New multi-dwelling development. Retail Sales and Service or Office uses are allowed as part of a new multi-dwelling development if the following are met:
- (1) ~~Limited uses.~~
- Up to 20 percent of the net building area of a new multi-dwelling development may be in Retail Sales and Service or Office use;
- (2) Up to 40 percent of the net building area of a new multi-dwelling development may be in Retail Sales and Service or Office Use if 100 percent of the area of the ground floor contains the following:
- Retail Sales and Service uses;
 - Office uses;
 - Common Areas associated with Household Living or Group Living uses.
 - ~~If all of the Retail Sales And Service or Office uses are on the ground floor, up to 40 percent of the net building area of a new multi-dwelling development may be in Retail Sales And Service or Office uses;~~
 - ~~If any portion of the Retail Sales And Service or Office uses is not on the ground floor, up to 20 percent of the net building area of a new multi-dwelling development may be in Retail Sales And Service or Office uses.~~
- (2) ~~Conditional uses.~~
- ~~If any portion of the Retail Sales And Service or Office uses is not on the ground floor, more than 20 and up to 40 percent of the net building area of a new multi-dwelling development may be in Retail Sales And Service or Office uses if approved as a conditional use;~~
 - ~~If the entire site is within 500 feet of a Transit Station, more than 20 and up to 50 percent of the net building area of a new multi-dwelling development may be in Retail Sales And Service or Office uses if approved as a conditional use.~~
- b. Conversion of existing multi-dwelling development. Up to 640 percent of existing net building area in a multi-dwelling development that existed on [DATE] may be converted to Retail Sales And Service and Office uses, if the following are met:
- (1) ~~All of the Retail Sales And Service or Office uses must be on the ground floor; and~~
- (2) ~~The conversion may not result in a net loss of the square footage in residential use, or a net loss in the number of dwelling units in the development.~~
3. Sites on Park Block frontages. On sites that are on the Park Block frontages, shown on Map 510-1314, the following regulations apply:
- a. Ground floor. Up to 100 percent of the net building area of the ground floor of a development may be in Retail Sales And Service or Office uses.
- b. Conditional uses. Conditional use review is required if any of the net building area above the ground floor of a development is in Retail Sales And Service or Office uses. More than 20 percent of the net building area above the ground floor of a development in Retail Sales And Service or Office uses is prohibited.

Commentary

33.510.118 Use Regulations for Specified Sites in the West End Subarea

At this time, staff proposes to eliminate this whole section. During the West Quadrant process there was interest in allowing more flexibility in this area for non-residential uses. Staff is proposing that the zoning in the area goes to CX.

The original *Downtown's West End Plan* (2002) proposed the creation of A, B, and C sites within a mapped area of the West End. The strategy for the area was to preserve RX zoning but increase flexibility for a wider range of non-residential uses on some sites. Type C sites were the most restrictive in terms of allowances of other uses, but even these sites could accommodate a wider range of uses if certain criteria were met.

Since 2002 none of the Type C sites has redeveloped and the housing replacement provisions available for these sites have never been used. It's unclear whether this is a result of the zoning pattern or simply of the market. This area of the West End is special in that an applicant can bonus up to 12:1 from 6:1 (<33 percent residential building) or 9:1 (>33 percent residential building). Bonuses need to be earned, and in most areas of the Central City, *at least* the first 2:1 must be through the new proposed affordable housing bonus. In this specific area, to continue supporting affordable housing as the area transitions to CX, staff is proposing that at least the first 3:1 be earned through the affordable housing bonus.

The bonus would apply to the entire area and not just Type C sites. Staff believes there is potential for this area to heavily utilize the bonus, producing units or money for the affordable housing fund. Portland Housing Bureau supports the change.

- a. ~~New multi-dwelling development. Up to 20 percent of the net building area of a new multi-dwelling development may be in Retail Sales And Service or Office uses if approved as a conditional use;~~
- b. ~~Conversion of existing multi-dwelling development. Conversion of existing multi-dwelling development to Retail Sales And Service and Office uses is prohibited.~~

~~33.510.118 Use Regulations for Specified Sites in the West End Subarea~~

- ~~**A. Purpose.** Provisions within this section are intended to encourage an infill pattern of development in the portion of the West End Subarea shown on Map 510-14. This infill strategy preserves the Central Residential zone while encouraging a wider range of nonresidential uses. These provisions limit redevelopment pressure on existing housing.~~
- ~~**B. Where these regulations apply.** The regulations of this section apply to sites in the area shown on Map 510-14, and supersede the regulations of the base zone. Minimum residential densities must be met only where specified in this section. The regulations of Subsection D. apply to Type C sites. Where the site, or a portion of the site, occupies a full block, the regulations of Subsection E. apply to the full block portion of the site. Portions of the site that are not part of the full block must meet the regulations for sites that are less than a full block. The regulations of Subsections F., G., and H. apply where the site occupies less than one full block.~~
- ~~**C. Adjustments prohibited.** Adjustments to the regulations of this section are prohibited.~~
- ~~**D. Demolition on Type C sites.** Demolition on Type C sites as shown on Map 510-14, is subject to Subsection 33.510.242.C.~~
- ~~**E. Full block sites.** Where the site, or a portion of the site, occupies a full block, at least 50 percent of all net floor area on the full block portion of the site must be in Household Living uses, and the minimum residential density requirement of the RX Zone must be met. The net floor area that is not in Household Living uses is regulated as specified in Subsection F., with all percentages of allowed development based on the floor area in nonresidential use, not the total floor area on the block.~~
- ~~**F. Type A sites.** On Type A sites, as shown on Map 510-14, where the site occupies less than one full block, the following use regulations apply:

 - ~~1. Household Living, Retail Sales And Service, Office, Schools, Parks And Open Areas, Colleges, Medical Centers, Religious Institutions, and Daycare Uses. Up to 100 percent of the net floor area may be in Household Living, Retail Sales And Service, Office, Schools, Parks And Open Areas, Colleges, Medical Centers, Religious Institutions, and Daycare uses;~~
 - ~~2. Group Living. Group Living for up to 15 residents is allowed. Group Living for more than 15 residents is a conditional use. See Chapter 33.239;~~
 - ~~3. Basic Utilities and Community Service uses:~~~~

Commentary

- a. Up to 20 percent of the net floor area may be in Basic Utilities and Community Service uses; and
 - b. More than 20 percent of the net floor area in Basic Utilities and Community Service uses is a conditional use;
 - 4. Radio Frequency Transmission Facilities. Some Radio Frequency Transmission Facilities are allowed by right, while others are conditional uses. See Chapter 33.274;
 - 5. Commercial Parking is subject to Central City Parking Review;
 - 6. Rail Lines And Utility Corridors are a conditional use;
 - 7. Uses and amounts of uses not specifically listed in this subsection are prohibited.
- G. Type B sites.** On Type B sites, as shown on Map 510-14, where the site occupies less than one full block, the following use regulations apply:
- 1. Household Living uses. Up to 100 percent of the net floor area may be in Household Living uses;
 - 2. Schools, Colleges, Medical Centers, Religious Institutions, Parks And Open Areas, and Daycare uses. Up to 100 percent of the net floor area may be in Schools, Colleges, Medical Centers, Religious Institutions, Parks And Open Areas, and Daycare uses if the requirements of Subsection I. are met;
 - 3. Group Living. Group Living for up to 15 residents is allowed. Group Living for more than 15 residents is a conditional use. See Chapter 33.239;
 - 4. Retail Sales And Service and Office uses:
 - a. Up to 125 percent of the net floor area that existed on the site on January 1, 2002 may be in Retail Sales And Service or Office uses if the requirements of Paragraphs I.2. and 3. are met. The applicant must document the amount of floor area that existed on the site on January 1, 2002;
 - b. More than 125 percent of the net floor area that existed on the site on January 1, 2002 in Retail Sales And Service and Office uses is a conditional use, subject to the approval criteria of 33.815.122 and the requirements of Subsection I. Only the square footage above 125 percent is a conditional use, and only the square footage above 125 percent must meet the requirements of Paragraph I.1.
 - 5. Basic Utilities and Community Service uses:
 - a. Up to 20 percent of the net floor area may be in Basic Utilities and Community Service uses; and
 - b. More than 20 percent of the net floor area in Basic Utilities and Community Service uses is a conditional use;
 - 6. Radio Frequency Transmission Facilities. Some Radio Frequency Transmission Facilities are allowed by right, while others are conditional uses. See Chapter 33.274.
 - 7. Commercial Parking is subject to Central City Parking Review.
 - 8. Rail Lines And Utility Corridors are a conditional use;
 - 9. Uses and amounts of uses not specifically listed in this subsection are prohibited.

Commentary

H. Type C sites. On Type C sites, as shown on Map 510-14, where the site occupies less than one full block, the following use regulations apply:

1. Household Living, Parks And Open Areas, and Daycare uses. Up to 100 percent of the net floor area may be in Household Living, Parks And Open Areas, and Daycare uses.
2. Group Living. Group Living for up to 15 residents is allowed. Group Living for more than 15 residents is a conditional use. See Chapter 33.239.
3. Retail Sales And Service and Office uses:
 - a. Up to 20 percent of the floor area may be in Retail Sales And Service and Office uses;
 - b. More than 20 percent and up to 40 percent of the floor area in Retail Sales And Service and Office uses is a conditional use, subject to the approval criteria of 33.815.110; and
 - c. If all portions of the site are within 500 feet of a Transit Station, more than 20 percent and up to 50 percent of the floor area in Retail Sales And Service and Office uses is a conditional use, subject to the approval criteria of 33.815.110;
 - d. Up to 100 percent of the floor area may be in Retail Sales And Service or Office uses if the requirements of Subsections I. and J. are met.
4. Up to 100 percent of the floor area may be in College, Religious Institution, Medical Center, and School uses if the requirements of Subsections I. and J. are met.
5. Basic Utilities and Community Service uses:
 - a. Up to 20 percent of the floor area may be in Basic Utilities and Community Service uses; and
 - b. More than 20 percent of the floor area in Basic Utilities and Community Service uses is a conditional use;
6. Radio Frequency Transmission Facilities. Some Radio Frequency Transmission Facilities are allowed by right, while others are conditional uses. See Chapter 33.274.
7. Commercial Parking is subject to Central City Parking Review.
8. Rail Lines And Utility Corridors are a conditional use;
9. Uses and amounts of uses not specifically listed in this subsection are prohibited.

I. Development standards. The development standards of this subsection must be met when required by Subsections G. or H.

1. Mixed use character. The following formula is used to determine the maximum square footage of nonresidential development allowed on the site:
— (Residential net floor area developed in the area shown on Map 510-14 since January 1, 2002) minus (Nonresidential net floor area developed in the area shown on Map 510-14 since January 1, 2002) equals the maximum nonresidential net floor area allowed on the site. Net floor area is considered to be “developed” when an occupancy permit has been issued.

Commentary

- If the result of the calculation is zero or a negative number, no nonresidential net floor area is allowed on the site;
- 2. — No surface parking. Surface parking on the site is prohibited. All existing surface parking on the site must be removed as part of the proposal; and
- 3. — Active ground floor uses. The proposed development must meet the requirements of Section 33.510.225, Ground Floor Active Uses. Parking is not allowed in portions of a building that are required to meet this standard.

J. — Housing mitigation. The standards of this subsection must be met when required by Subsection H. The applicant must mitigate for the lost housing using one of the three methods in this subsection:

- 1. — Method 1: Replace the housing as part of the proposed development, as follows:
 - a. — The development proposed for the site must include at least the same number of dwelling units as existed on the site on January 1, 2002;
 - b. — The development proposed for the site must include at least the same amount of square footage in residential use as existed on the site on January 1, 2002; and
 - c. — There must be a covenant for the dwelling units and square footage used to meet this provision; the covenant must meet the requirements of Paragraph J.4.;
- 2. — Method 2: Donate another site for residential development, as follows:
 - a. — The donated site must be at least 5,000 square feet in area, or at least half the size of the area of the site proposed for development, whichever is larger;
 - b. — The donated site must be within the Central City plan district and west of the Willamette River; and
 - c. — The site must be donated to the Portland Development Commission (PDC). PDC will ensure that the donated site is developed to replace both the number of dwelling units and the residential square footage lost through the proposal. PDC will also ensure that the dwelling units will be affordable to households earning less than 60 percent of median family income for the region, and that the units will remain so for at least 60 years;
- 3. — Method 3: Ensure preservation of existing affordable housing, as follows:
 - a. — For each dwelling unit that existed on the site on January 1, 2002, two existing dwelling units must be preserved as specified in this paragraph;
 - b. — The units to be preserved must be in the West End subarea of the Downtown subdistrict; and
 - c. — There must be a covenant for the dwelling units used to meet this provision; the covenant must meet the requirements of Paragraph J.4.;
- 4. — Dwelling unit preservation and affordability. Where required by this subsection, the property owner must submit a letter from the Portland Development Commission (PDC) certifying the following. The letter must be included with the development

Commentary

33.510.119 Retail Sales And Service and Office Uses in Specified Historic Resources in the IG2 and IH Zones

This section has been amended to remove reference to the IG2 zone, which no longer exists in Central City.

33.510.XXX Residential Use Restrictions in the EX zone

This is a new provision defining residential use restrictions in the EX zone. This code provision identifies areas in the Lower Albina and Central Eastside where EX zoning exists or is proposed, but should have restrictions for the development of housing. The SE Quadrant Plan proposed EX zoning with residential uses prohibited for multiple areas and allowed only as a conditional use for others. This maintains the employment focus of this area. The N/NE Quadrant Plan proposed a zone change from IG1 to IG1 with an EX Comprehensive Plan designation. Should this area be rezoned to EX at a later date, housing will be prohibited. These restrictions reduce the chance for conflicts between residential uses and industrial employment uses.

Map 510-12 (previously Map 510-11) Special Areas has been updated to show:

1) Residential Uses Prohibited

Includes proposed IG1 (EX) in Lower Albina, OMSI Station Area south of Caruthers and west of OR-99E, properties bounded by SE Woodward and Powell Streets to the north and south and OR-99E and SE Milwaukie Ave to the west and east.

2) Residential Uses Allowed as Conditional Use (Also see 510.255 Central City Master Plans) Includes OMSI Station Area bounded by SE Caruthers and SE Clay St to the south and north and Water Ave/Union Pacific Rail Line/OR-99E to the east.

application, except for situations described in Subsection 33.510.118.D., where the letter must be included with the application for a demolition permit.

- a. That the owner has executed a covenant with the City that complies with the requirements of Section 33.700.060;
- b. That the covenant ensures that:
 - (1) The dwelling units will be affordable to households earning less than 60 percent of median family income for the region, and that the units will remain so for at least 60 years; and
 - (2) The dwelling units will be preserved for at least 60 years.

33.510.119 Retail Sales And Service and Office Uses in Specified Historic Resources in the ~~IG2~~ and IH Zones

- A. Where these regulations apply.** The regulations of this subsection apply in the ~~IG2~~ and IH Zones to historic resources that are listed on the National Register of Historic Places or to structures or objects that are identified as contributing to the historic significance of a Historic District or a Conservation District.
- B. Allowed uses.** Up to 12,000 square feet on a site may be in Retail Sales And Service or Office use. The total amount of square footage includes floor area, exterior display, and storage area of all Retail Sales And Service and Office uses on the site. More than 12,000 square feet on a site in Retail Sales And Service uses is prohibited.
- C. Conditional uses.** More than 12,000 square feet on a site may be in Office uses if approved through a conditional use. The total amount of square footage includes floor area, exterior display, and storage area of Office uses on the site. If there are also Retail Sales And Service uses on the site, no more than 12,000 square feet may be in Retail Sales And Service use.

33.510.XXX Residential Use Restrictions in the EX zone

- A. Purpose.** Residential uses are restricted in portions of the Lower Albina and Central Eastside subdistricts in order to minimize conflicts with industrial activities. These limitations minimize the potential for residential traffic and differing environmental expectations that can result in conflicts with industrial operations.
- B. Residential Use Limitations.** The following limitations apply to sites zoned EX that have residential use limitations identified on Map 510-12.
 - 1. Residential Uses are prohibited on sites zoned EX in the area identified as Residential Uses Prohibited, shown on Map 510-12.
 - 2. Residential Uses are allowed if approved through 33.510.255, Central City Master Plan in the area identified as Residential Uses subject to Central City Master Plan, shown on Map 510-12.

Commentary

33.510.200 Floor Area Ratios

B3: The existing Map 510-14 Areas Where Additional Uses are Allowed in the RX Zone is going away and the West End area where the floor area standard applies is shown as a target area on Map 510-5 Bonus Options Target Areas. The area is currently proposed to go to CX but staff proposes to maintain the ability for a development to reach 9:1 if 33 percent of building is in residential use. This aligns with stakeholder interests in the area to allow more flexibility but maintain residential in the area.

33.510.200 Floor Area Ratios

C. Limit on increased floor area.

2) Staff proposes to eliminate the Residential and the SRO transfer provisions. Staff proposes to keep Historic resources transfer and Transfer FAR within a project (with some tweaks to tighten up the transfer geography). A provision has been added to clearly state that FAR transferred using residential and SRO transfer provisions prior to the execution of this new code can still be used. Also, Staff proposes to keep the SOWA transfer provision.

3) Staff proposes that sites in the West End subdistrict must use the affordable housing bonus or fund first, for at least 3:1, prior to accessing other bonus or transfer provisions. This is higher than other areas in the Central City that must use the affordable housing bonus for the first 2:1 because this district has the ability to exceed the 3:1 maximum FAR through bonuses and transfers. It is also a subdistrict that is mostly RX to the south and staff is proposing CX to the north of Salmon St. We'd like to maintain some residential, both affordable and market rate in the northern area that is proposed to go to CX zoning.

Development Standards

33.510.200 Floor Area Ratios

A. Purpose. The maximum floor area ratio (FAR) standards are intended to accomplish several purposes of the Central City 2035 Plan. These include coordinating private development with public investments in transportation systems and other infrastructure, limiting and stepping down building bulk to the Willamette River, and residential neighborhoods, and within historic districts. While consistent with these purposes, the floor area ratios are intended to be the largest in the Portland region.

B. Floor area ratio standard.

1. Generally. The maximum floor area ratios for all sites in the Central City plan district are shown on Map 510-2 at the end of this chapter. Floor area ratios greater than shown on Map 510-2 are prohibited unless allowed by Subsections C. through G., below, or by 33.510.210.
2. Goose Hollow. The minimum floor area ratio in the Goose Hollow subdistrict is 1 to 1.
3. Specified sites in the West End ~~Subarea~~Subdistrict. In the area shown on the Bonus Options Target Areas, Map 510-514, the following regulations apply:
 - a. Maximum. The maximum floor area ratio is 6 to 1. If at least 33 percent of floor area is in residential use, the maximum floor area ratio is 9 to 1.
 - b. Minimum. The minimum floor area ratio is 2 to 1.
4. South Waterfront Subdistrict. In the South Waterfront Subdistrict, floor area used for automated parking is not counted towards maximum FAR for the site. The automated parking facility must rely on a mechanical system instead of a vehicle operator to transport vehicles to a storage space within the facility.

C. Limit on increased floor area.

1. Generally. Except as provided under C.23.through C.5-6, below, increases in FAR, whether by transfers of floor area or bonus floor area options, of more than 3 to 1 are prohibited;
2. Status of prior floor area transfers. Floor area transfers that used the SRO housing transfer or transfer of residential floor area provisions in the Central City plan district prior to [DATE] continue to be in effect for the sending and receiving sites. Building permits or land use reviews that change the amount of net building area on these sites are required to provide a copy of the executed covenant with the permit or review.
23. West End Subdistrict. In the West End Subdistrict at least 3:1 FAR must be earned through the affordable housing bonus or the affordable housing fund before other bonuses or transfer provisions. There is no maximum to the amount of bonus or transfer floor area that may be earned. However, the total floor area on a site, including bonus floor area and transferred floor area, may not be more than 12 to 1. Adjustments are prohibited.

Commentary

C. Limit on increased floor area.

5)c2- this is a clarification staff is proposing because the timing of the dedication has caused confusion at BDS in the past.

- ~~3. In the portion of the West End subarea that is not shown on Map 510-14, the following applies. There is no maximum to the amount of bonus floor area that may be earned. However, the total floor area on a site, including bonus floor area and transferred floor area, may not be more than 12 to 1. Adjustments are prohibited.~~
34. South Park Blocks frontages. Transfers of floor area to RX-zoned sites on the Park Block frontages shown on Map 510-~~13~~14 are prohibited. This prohibition applies to all RX-zoned sites on the Park Block frontages, including those within the West End subareaSubdistrict.
45. South Waterfront sSubdistrict. In the South Waterfront Subdistrict the following applies:
- a. Generally. Except as allowed under Subparagraphs ~~5~~4.b. and c., below, no more than 2:1 FAR may be earned on a site through the use of bonuses. There is no maximum to the amount of floor area that may be transferred to a site. However, the total floor area on a site, including bonus floor area and transferred floor area, may not be more than 9 to 1, except as allowed under C.~~5~~4.c., below. Adjustments to the regulations of this paragraph are prohibited.
 - b. An FAR of more than 2 to 1 may be earned on a site through the use of bonuses if at least 1 to 1 FAR is earned on the site through the use of the open space bonus option, open space fund bonus option, or South Waterfront Willamette River Greenway bonus option. However, the total floor area on the site, including bonus floor area and transferred floor area, may not be more than 9 to 1.
 - c. The total floor area on a site, including bonus floor area and transferred floor area, may be more than 9 to 1 if all of the following are met:
 - (1) The floor area above the 9 to 1 ratio must be transferred from the South Waterfront Greenway Area; and
 - (2) The portion of the South Waterfront Greenway Area that floor area is being transferred from must have been dedicated to the City ~~since~~ after September 1, 2002.
- ~~6~~5. North Pearl Subarea. In the North Pearl Subarea bonus options target area, shown on Map 510-~~4~~5, the following applies:
- a. An FAR increase of more than 3 to 1 may be earned on a site through the following provisions. However, the total floor area on a site may not be more than 9 to 1, except as allowed under 5.b below. Adjustments to the regulations of this paragraph are prohibited:
 - (1) Floor area bonuses;
 - (2) Transfers from the site of an historic resource meeting Subsection H. below.
 - b. The total floor area on a site, including bonus floor area and transferred floor area, may be more than 9 to 1 if the floor area above the 9 to 1 ratio is transferred from the site of an historic resource as specified in Subsection H. below.

Commentary

33.510.200 Floor Area Ratios

D. Transfer of floor area within a project.

In an effort to reduce transfer options and focus on the historic preservation transfer this provision is proposed to be streamlined to reduce options for transferring FAR within a project. This transfer has likely been widely used, but there is a question about the need to preserve the "sites developed jointly" component. Staff is also proposing to eliminate the ability to transfer across a right-of-way. This would continue to be an option as part of the master plan process.

Question: Should we keep the allowance for project to be able to transfer across a right of way (except in Downtown and parts of Goose Hollow)? Or, should this allowance only be allowed if using the new master plan provision?

E. SRO housing transfer of floor area

Staff proposes to eliminate this transfer provision in an effort to reduce competition for the new affordable housing bonus. In the past the transfer provisions have competed with bonus options. However, staff research indicates that this bonus has been used one time since 1988.

The original intent of this transfer provision was to allow the transfer of density from sites occupied by single room occupancy housing (SROs) to encourage the development of new SROs and reduce market pressure for removal of existing SROs, which often serve as a form of affordable market-rate housing. Portland Housing Bureau has indicated that these SROs are already largely protected.

D. Transfer of floor area ~~within a project~~ in the CX and EX zones. In the CX and EX zones, floor area, including bonus floor area, may be transferred between abutting lots within a site or sites being developed jointly on the same block. ~~This also applies to lots within a site which would be abutting but for a right-of-way.~~ Floor area transfers are subject to the following restrictions:

1. ~~If the site is within the Downtown, South Downtown/University, or West End subdistricts as shown on Map 510-1, floor area may be transferred between abutting lots within a site or sites being developed jointly provided the lots are within the same block. Floor area transfers across rights-of-way are prohibited in the Central City in the Downtown Subdistrict.~~
2. Buildings on each site may not exceed the height limit established for that site by the regulations of this chapter;
3. If bonus floor area is included in the transfer, those facilities to be provided in exchange for the bonus floor area must be completed in advance or at the time of issuing any occupancy permit for the other lot; and
4. The property owner(s) must execute a covenant with the City which is attached to and recorded with the deed of both the lot transferring and the lot receiving the floor area reflecting the respective increase and decrease of potential floor area. The covenant must meet the requirements of 33.700.060.

~~E. SRO housing transfer of floor area.~~

1. ~~Purpose. Transfer of floor area ratio potential from sites occupied by single room occupancy housing (SROs) is allowed in order to encourage the development of new SROs and reduce market pressure for removal of existing SROs.~~
2. ~~Allowable floor area transfers.~~
 - a. ~~The owners of qualifying sites may sell the rights to their unused floor area potential. The rights to the floor area may be used anywhere in the Central City plan district.~~
 - b. ~~Floor area increases transferred to a site are limited to that allowed by Subsection C. above.~~
 - c. ~~The SRO property owner must execute a covenant with the City which reflects the decrease of potential floor area. The covenant must require future continuation and maintenance of the SRO housing in conformance with the standards of this subsection. The covenant must meet the requirements of 33.700.060.~~
3. ~~Qualifying SRO projects and restrictions.~~
 - a. ~~Vacant, existing, and new SRO housing developments located in a CX or EX zone qualify for the floor area transfer. Vacant, existing, and new SRO housing developments located in the RX zone qualify for the floor area transfer if the sending and receiving sites are located in the RX zone, or if the sending site is within the RX zone and the receiving site is in the CX or EX zone. At least 60 percent of the floor area of the SRO structure must be used for housing.~~

Commentary

33.510.200 Floor Area Ratios

F. Transfer of residential floor area.

The original intent of this transfer provision was to reduce market pressure for removal of existing housing and preserve existing housing. The market is providing significant residential development and this provision is likely no longer needed. According to BDS staff this has not been used very much, if at all.

(The biggest concern we've heard expressed by development community is to allow them to continue to use the residential floor area that they have transferred.)

- b. For existing SRO housing, the building must be in full compliance with the Oregon Structural Specialty Code (the Uniform Building Code as amended by the State of Oregon) at the time of transfer of the development rights. If not, the structure must be brought into compliance before an occupancy permit is issued for a development using the transferred floor area.
- c. For proposed new SRO housing, the excess floor area rights may be transferred prior to construction if done as part of a development proposal to which the floor area is being transferred. The SRO units must receive an occupancy permit in advance of issuing an occupancy permit for any other part of the development.
- d. The SRO structure may not be demolished or converted to other uses unless the number of SRO units lost will be replaced either on the site or at another location in the Central City plan district. SRO units being provided at another site must receive an occupancy permit in advance of issuing an occupancy permit for a new use on the former SRO site or issuing a demolition permit for the site. In addition, the decreased floor area potential on the SRO site continues.

F. Transfer of residential floor area.

- 1. Purpose. Transfer of floor area ratio potential from sites occupied by residential development is allowed in order to reduce market pressure for removal of existing housing.
- 2. Allowable floor area transfers.
 - a. The owners of qualifying sites may transfer the rights to their unused floor area potential. The rights to the floor area may be used anywhere in the Central City plan district.
 - b. Floor area transferred to a site is limited to that allowed by 33.510.200.C.
 - c. The sending residential property owner must execute a covenant with the City that reflects the decrease of potential floor area. The covenant must require future continuation and maintenance of the housing in conformance with the standards of this subsection. The covenant must meet the requirements of 33.700.060.

EG. Transfer of floor area within the South Waterfront Subdistrict. In the South Waterfront Subdistrict, floor area, including bonus floor area, may be transferred between sites. The sites are not required to be abutting; however, both the sending site and the receiving site must be located within the South Waterfront Subdistrict. Floor area transfers are subject to the following:

- 1. Buildings on each site may not exceed the height limit established for that site by the regulations of this chapter;
- 2. If bonus floor area is included in the transfer, those facilities to be provided in exchange for the bonus floor area must be completed in advance or at the time of issuing any occupancy permit for buildings taking advantage of the bonus floor area; and

Commentary

F. Transfer of floor area from Historic Resources

Expanding the historic resource transfer provision throughout the Central City aligns with City historic preservation policies. Section 510.200.H (Pearl district historic transfer) is rewritten to create a new Central City-wide historic resource FAR transfer provision. It allows landmarks and contributing resources in historic districts as possible sending sites. Properties that transfer FAR are subject to historic resource review and demolition review (some historic resources are already subject to these rules).

Question: Should staff also consider historic resources inventory properties?

Seismic Retrofits: Staff is considering adding a provision to this transfer that would allow unreinforced masonry buildings (URMS) to transfer FAR if the owner has completed safety seismic retrofits on their building. This aligns with a City priority to create mechanisms to help building owners retrofit their buildings. A seismic committee, commissioned by Commissioner Novick and facilitated by PBEM is developing recommendations for City Council consideration on how to increase the number of seismic upgrades voluntarily, through regulatory measures and grant programs. Adding this incentive for building owners could encourage more seismic retrofits of URMs by allowing the owner to recoup some costs. More discussion is need on this with BDS, PBEM and the seismic committee to determine if the zoning code is the right tool to encourage seismic upgrades.

F.3 See H.5.a for an exception that allows sites to transfer FAR to receiving sites outside the Central City plan district.

Question: How does the transfer provision, as it applies to RX sites, relate to Transfer of commercial development rights in 33.120.100.B.3.f? Do we need to have a similar provision here?

Policy question: Should there be a provision (probably in the base zone transfer provisions) that prohibits transfer of FAR from *outside* the Central City to sites *within* the Central City (this was one of the aspects of the previous 510.200.H Pearl district historic transfer.)

F.4 A covenant must be executed for both sites indicating the respective increase and decrease of FAR. The covenant for the sending site must also state that the sending site is subject to historic resource and demolition review. These reviews are already required for some historic resources, but not all of them. The intent is to help ensure the preservation of all historic resources that have taken advantage of the option to transfer FAR.

F5.a: This exception allows historic resources to continue to be able to transfer to sites outside of the Central City, by using the existing base zone transfer provisions.

3. The property owners must execute a covenant with the City that is attached to and recorded with the deed of both the sending and receiving sites reflecting the respective increase and decrease of potential floor area. The covenant must meet the requirements of 33.700.060.

F. Transfer of floor area from Historic Resources

1. Purpose. The transfer of unused floor area encourages the preservation of historic resources by providing a potential source of income and decreasing redevelopment pressure on the resources.
2. Sites eligible to send floor area. Sites eligible to send floor area must be in a RH, RX, CX or EX zone and must contain:
 - a. A Historic or Conservation Landmark; or
 - b. A contributing resource in a Historic District.
3. Sites eligible to receive floor area. Sites eligible to receive floor area must be zoned RH, RX, CX or EX, must be within the Central City plan district, and must not be within a Historic or Conservation District.
4. Covenants. The owners of both the sending and receiving sites must execute a covenant with the City that is attached to and recorded with the deed. The covenants may not be revoked or rescinded. The covenants must meet the requirements of Section 33.700.060, Covenants with the City. The covenants must include the following:
 - a. Both sites. The covenant for each site must reflect the respective increase and decrease of potential floor area.
 - b. Sending site. The covenant for the sending site must state that:
 - (1) Non-exempt proposals for alterations to the historic resource are subject to historic resource review; and
 - (2) The owner will not demolish or relocate the historic resource unless the City approves the demolition or relocation through demolition review.
5. Exceptions.
 - a. Sites with eligible historic resources may elect to transfer floor area to a receiving site outside of the Central City plan district if they meet the standards of 33.120.205.E, 33.130.205.C or 33.140.205.C.
 - b. Sites with historic resources in the R1, R2 and R3 zones may transfer density to a site within the Central City if they meet the standards of 33.120.205.E.
6. Adjustments. Adjustments and modifications to these regulations are prohibited.

H. ~~Transfer of floor area from Historic Resources in specified areas.~~

1. ~~Where these regulations apply. These regulations apply to sites located in the Pearl Development Transfer Opportunity Area on Map 510-20.~~

Commentary

33.510.200 F Historic Resources (continued)

F.5.b: The goal of this exception is to allow historic resources in the R1-R3 zones to continue to be able to transfer from a historic site within the Central City, using the existing base zone historic transfer provision in the multi-dwelling zones chapter.

Question: Not sure if an exception is the way to accomplish this, maybe instead incorporate into F.2 and F.3?

33.510.200 Floor Area Ratios

I. ~~Neighborhood facilities within the North Pearl Subarea.~~

The neighborhood facilities provisions are being expanded Central City-wide to address the growing need of Central City residents to have access to essential public services such as public schools, community centers, libraries and daycare. As the population within Central City neighborhoods grow and diversify, access to these types of services will be needed by residents of all ages. The location of these services in the Central City would also serve the needs of residents in "close-in neighborhoods as not adequately served by such uses.

2. ~~Sites eligible to transfer floor area. Sites eligible to transfer floor area must be located within the area shown on Map 510-20 and must contain:

 - a. ~~A landmark;~~
 - b. ~~A contributing resource in an Historic District; or~~
 - c. ~~A Rank I, II, or III resource listed in the City's Historic Resource Inventory.~~~~
3. ~~Sites eligible to receive floor area. A site within the area shown on Map 510-20 is eligible to receive floor area from the historic resources listed above in H.2.~~
4. ~~Covenants. The owners of both the sending and receiving sites must execute a covenant with the City that is attached to and recorded with the deed. The covenants may not be revoked or rescinded. The covenants must include the following:

 - a. ~~Both sites. The covenant for each site must reflect the respective increase and decrease of potential floor area. The covenant must meet the requirements of Section 33.700.060, Covenants with the City.~~
 - b. ~~Sending site. The covenant for the sending site must state that the owner will not demolish or relocate the historic resource unless the City approves the demolition or relocation through demolition review.~~~~
5. ~~Exception for Landmarks. Landmarks located in the Pearl Development Transfer Opportunity Area on Map 510-20 may elect to transfer floor area to a receiving site outside of the area on Map 510-20 if they meet the standards of 33.130.205.C or 33.140.205.C.~~
6. ~~Adjustments. Adjustments and modifications to these regulations are prohibited.~~

I. Neighborhood facilities ~~within the North Pearl Subarea.~~

1. Purpose. This regulation encourages creation of facilities to serve those who live and work in the Central City North Pearl Subarea. These facilities are necessary elements of a complete neighborhood.
2. Standards. ~~In the North Pearl Subarea, F~~ floor area used for specified neighborhood facilities is not counted towards maximum FAR for the site. The specified neighborhood facilities are public schools, public community centers, daycare facilities for children, and public libraries. To qualify for this provision, the following requirements must be met:
 - a. Schools. Floor area to be used for public schools does not count towards maximum FAR for the site if the school will be operated by or for a public school district.
 - b. Daycare. Floor area to be used for daycare facilities for children does not count towards maximum FAR for the site. ~~Applicants may choose to either earn bonus FAR under 33.510.210.C.2, or to have the daycare not counted towards maximum FAR for the site under this subsection. Both provisions may not be used on a site.~~ The facility must be open at least five days each week and fifty weeks each calendar year.

Commentary

33.510.205 Height

Purpose Statement: This statement has been modified to describe a diverse and varied skyline with taller structures along the transit mall.

Map 510-3 Maximum Height shows maximum heights and areas eligible for height increases. Map 510-4 is a new map which shows the ultimate height that could be reached on a site through bonuses.

Note: Heights may change in some areas as a result of the Scenic Resources Update. The maps will be updated for the Discussion Draft.

C. Performance standard for sites adjacent to designated open spaces.

The performance standard is being applied along the south and west of open spaces west of the river. This is shown on the maximum height Map 510-3. This is a recommendation that came out of the West Quadrant Planning process.

- c. Libraries. Floor area to be used for public libraries does not count towards maximum FAR for the site if the library will be operated by the Multnomah County Library or does not charge membership fees.
- d. Public community centers. Floor area to be used for community centers does not count towards maximum FAR for the site. Public community centers are not for exclusive use by residents of a site and their guests.
- e. All facilities. All neighborhood facilities must meet the following:
 - (1) The floor area of the facility must be reserved for the exclusive use of the neighborhood facility for at least 10 years from the date a certificate of occupancy is issued for the qualifying floor area. No uses other than those listed in this subsection are allowed.
 - (2) The applicant must document that there is a binding agreement with an operator for each facility. This documentation must be submitted with the application for design review; and
 - (3) The property owner must execute a covenant with the City which is attached to an recorded with the deed of the site. The covenant must ensure that the owner will reserve the floor area as specified in I.2.e(1). The covenant must comply with the requirements of Section 33.700.060.

33.510.205 Height

- A. Purpose.** The maximum building heights are intended to accomplish several purposes of the Central City 2035 Plan. These include locating the tallest buildings along the transit mall, protecting public views, creating a step-down of building heights to the Willamette River, emphasizing bridgehead locations, limiting shadows on public open spaces, ensuring building height compatibility ~~and step-downs to within~~ historical districts, and limiting shadows from new development on neighborhoods ~~in and~~ at the edges of the Central City.
- B. The height standard.** The maximum building height for all sites in the Central City plan district is shown on Map 510-3 at the end of this chapter. Heights greater than shown on Map 510-3 are prohibited unless allowed by Subsections C. through G., ~~below~~, or by 33.510.210.D. through ~~GE~~, ~~below~~.
- C. Performance standard for sites adjacent to designated open spaces.**
 - 1. Eligible sites. Building heights to the south and/or west of certain areas designated Open Space on the Comprehensive Plan map may be increased above the limits specified on Map 510-3. Sites eligible for this standard are shown on Map 510-3.
 - 2. The performance standard. Building heights may be increased if the amount of shadow cast by the proposed building on the adjacent open space will be less than or equal to the shadow that would result from an allowed building constructed to the maximum height shown on Map 510-3. The shadow from an allowed building is based on the shadow that would be cast by a structure covering the entire site at the height

Commentary

33.510.205 Height

D. Performance standard for sites adjacent to historic districts

This subsection is proposed for deletion and Map 510-3 is amended to remove the area eligible for this provision, which allowed height increases adjacent to historic districts. BDS and applicants have found this code section very confusing and hard to implement. The proposal means that the heights on Map 510-3 control the maximum heights allowed.

limit of Map 510-3. Shadows must be analyzed for noon and 3:00 p.m. on April 21 to determine compliance with this provision.

3. Limit on the height increase. Increases in height are prohibited in either of the following situations:
 - a. The development projects into an established view corridor, or
 - b. The development does not project into an established view corridor, but results in buildings over 460 feet in height.

D. Performance standard for sites adjacent to historic districts. Building heights on blocks adjacent to the Yamhill and Skidmore Fountain/Old Town Historic Districts may be increased above the limits stated on Map 510-3. Requests for the increases are reviewed as part of the design review process.

1. The development proposal must comply with all of the following standards.
 - a. The site encompasses a single block that is subject to two different height limits, and the block is adjacent to but not part of a historic district.
 - b. The project does not include removal of any historical landmarks and no historical landmarks were cleared from the site during the 60 months prior to the date of application for the exception.
 - c. Historical landmarks on the site are preserved and restored as part of the proposed project.
 - d. A building wall, called the "street wall," must be constructed abutting the street lot line facing the historic district. Street walls must extend along the entire frontage facing the historic district. When the project's frontage on its block is larger than the historic district's frontage on the facing block, the street wall must extend 25 feet beyond the end of the historic district.
 - e. The street wall must be at least 30 feet in height or equal to the distance of the horizontal encroachment into the area regulated by the lower height limit, whichever is more. However, portions of the building that front the historic district may not exceed 75 feet in height within 25 feet of the street lot line.
 - f. The existing building wall of an historical landmark incorporated into the project is exempt from the requirements of Subparagraphs d. and e., above.
 - g. Portions of the structure located behind the street wall must comply with the Ground Floor Active Use standard of 33.510.225;
 - h. The project may not result in a building that exceeds a maximum height of 250 feet or the higher of the two height limits on the block, whichever is lower.
2. Approval of a height increase based on this subsection in no way limits the ability of the review body conducting design review to require reconfiguration of the building's design, including lowering the height of the building or reducing the amount of the increase. The review body will base its review on application of both the general design guidelines applicable to the area, and the subdistrict guidelines applicable to the adjacent historic district.
3. Adjustments to requirements and standards of this subsection are prohibited.

Commentary

D. Open space height transfers.

The reference to the 1988 Central City Plan map is being removed. While sites on that map are relevant today the provision is being edited to require an applicant to go through the approval process for an open space site.

Question: Would Parks prefer to create a new map to complement this code and if so, are there still sites that are eligible by right?

(The North Pearl Subarea open space requirement is being eliminated so this reference will need to be removed if the decision is made to delete the requirement).

DE. Open space height transfers.

1. Purpose. These regulations provide an incentive for the creation and development of needed open space in the Central City plan district.
2. Requirements for open space areas eligible for the height transfer.
 - a. The proposed open space area must be in the Central City plan district outside of the South Waterfront Subdistrict. ~~If the open space is at a Proposed Open Space location, as shown on the Central City plan map, the site is eligible by right. If the site is not a Proposed Open Space location, the site is subject to the review requirements stated in Paragraph 4, below. Open space sites resulting from the North Pearl Subarea open area requirement are not eligible for the height transfer.~~
 - b. The area designated for the open space must be dedicated to the City as a public park. The minimum size of the open space must be a full block at least 35,000 square feet in size. However, the open space may be 20,000 square feet in size if located along the alignment of the North Park Blocks.
 - c. All park improvements must be made by the applicant prior to dedication to the City. The improvements to the park are subject to a ~~major~~ design review using the specific area's design guidelines. ~~The Parks Bureau will provide advice to the Design Commission.~~
3. Amount of height potential that can be transferred. The allowed height at the proposed open space site shown on Map 510-3 may be transferred within the Central City plan district consistent with the limits stated below.
 - a. The maximum amount of height that may be transferred is 100 feet. The transfer may only be to a site eligible for a height bonus as shown on Map 510-3. Increases in height that result in buildings greater than 460 feet or that which are higher than an established view corridor are prohibited. The transferred height may not be used in addition to any allowed bonus heights of 33.510.210.
 - b. ~~The open space improvements must be approved and the site must be dedicated to the City before the issuance of building permits for the building receiving the increased height.~~
4. Design Review. Reviews for sites not designated Proposed Open Space on the Central City plan map:
 - a. Procedure. The review is processed with a Type III procedure. The Parks Bureau will provide advice to the Design Commission.
 - b. Approval criteria. The proposed open space site will be approved for the height transfer if the review body finds that the applicant has shown that all of the following approval criteria are met:
 - (1) The proposed site will help to alleviate an area's identified projected future open space deficiency. This determination is based on such things as proximity to parks, proximity to people living or working in the Central City plan district, and how the site relates to the Central City 2035 Plan's park and open space policies system (covered in Policy 8 of the plan);

Commentary

33.510.205 Height

E. Height standard for housing on specified sites in the West End subarea

The map reference has been amended in this section.

- (2) The proposed improvements on the open space site are consistent with the design guidelines for the area; and
- (3) The Parks Bureau approves of the site.

EF. Height standard for housing on specified sites in the West End Subdistrictsubarea. In the area shown as the West End residential bonus target area on Map 510-145, building heights 175 feet higher than shown on Map 510-3 are allowed if all the floor area constructed above the limits shown on Map 510-3 is used exclusively for housing.

FG. South Waterfront height opportunity area.

1. Purpose. In the core of the South Waterfront Subdistrict, additional building heights may be appropriate to support the goals of the South Waterfront Plan. The regulations of this subsection are intended to:
 - Support the growth of a Science & Technology Quarter Innovation Quadrant in the Central City;
 - Provide diverse housing opportunities;
 - Support the density goals of the subdistrict while ensuring quality design;
 - Create additional opportunities for visual access through the subdistrict;
 - Promote the development of slender towers with an east-west orientation;
 - Develop an exceptional and varied skyline enhancing the district’s setting against the Tualatin Hills to the west and the Cascade range to the east;
 - Establish and maintain a pedestrian environment with access to sunlight;
 - Contribute to the district’s urban variety, adding visual interest at the pedestrian level and from vantage points outside of the district;
 - Create an urban form that is visually permeable; and
 - Continue to maintain all protected public views and view corridors, on the east and west side of the Willamette River, as identified in adopted plans.
2. Additional building height may be requested as a modification through design review as follows:
 - a. The site must be in the height opportunity area shown on Map 510-16;
 - b. The maximum height that may be approved is 325 feet, including projections, roof top mechanical equipment, and any other structures that project above the roof of the building;
 - c. One of the following must be met:
 - (1) The average floor-to-floor height in the building is at least 16 feet and floors of the building above 75 feet are 25,000 square feet in area or less; or
 - (2) Floors of the building above 75 feet are 10,000 square feet in area or less;
 - (3) Adjustments to the standards of this subparagraph are prohibited; however, modifications through design review may be requested as follows:
 - A modification to the 25,000 square foot limitation in G.2.c(1) may be requested;

Commentary

North Pearl Subarea Height Opportunity Area. This section is being revised and updated. The updated proposals will be released with Part 2 of this review.

- A modification to the 10,000 square foot limitation in G.2.c(2) may be requested if the north-south dimension of the building above 75 feet is 112 feet or less. The north-south dimension is measured as specified in 33.510.252.A.3.e. However, modifications to allow floors larger than 12,500 square feet are prohibited;

- d. The portion of the proposed building that is greater than 250 feet in height must be at least 200 feet from the portion of any other existing or approved building that is greater than 250 feet in height, and that used the provisions of this subsection to achieve additional height. Approved buildings are those with an unexpired design review approval. Adjustments to this standard are prohibited; however, modifications to the 200 foot minimum distance requirement may be requested through design review. In reviewing such a request, the review body will consider the results of the South Waterfront Public Views and Visual Permeability Assessment for the proposal;
- e. Where a block is less than 80,000 square feet in area, only one building on the block may use the provisions of this subsection. Where a block is at least 80,000 square feet in area but less than 120,000, only two buildings on the block may use the provisions of this subsection. Where a block is at least 120,000, only three buildings on the block may use the provisions of this subsection.
- Applications for land divisions of sites that include a building that has used the provisions of this subsection must show how the land division will not move the site out of conformance with this subsection.
- f. The applicant must contribute \$10.60 to the South Waterfront Public Open Space Fund (SWPOSF) for every square foot of floor area over 250 feet in height. The contribution to the SWPOSF must be made before the building permit is issued for the building. Contributions to the fund used to earn bonus floor area under 33.510.210.C.18, Open space fund bonus option, do not count towards meeting this requirement. Adjustments to this standard are prohibited.
- g. The applicant must request advice from the Design Commission as described in 33.730.050.F. The design advice request must be submitted before the request for a pre-application conference. In providing their advice to the applicant, the Design Commission will consider protection and enhancement of public views from both the east and west, as identified in adopted plans; development of a diverse, varied and visually interesting skyline; and creation of a district that is visually permeable. These factors will be considered at different scales, including the site of the proposal, the site and adjacent blocks, and the subdistrict as a whole.

GH. North Pearl Subarea height opportunity area.

1. Purpose. In the North Pearl Subarea, additional building height may be appropriate to support the goals of the North Pearl Plan. The regulations of this subsection:
 - Promote the use of development bonus and transfer provisions to create and support a range of community amenities to serve the diversity of residents and employees in the Central City;

Commentary

2b(3) This sentence is being edited because the Historic Resources transfer option is no longer applicable to only specified sites. It applies across the entire Central City.

- Create a skyline and urban form that is visually permeable by providing visual access to locations within and beyond the subarea;
- Encourage the development of taller buildings that may accommodate a range and diversity of land uses;
- Result in a dynamic and varied skyline and urban form that contributes to the health, vibrancy, and livability of urban living;
- Shape building massings that allow light and air to penetrate to the street level, enhance pedestrian scale, and create a pleasant, versatile, and active public realm; and
- Provide flexibility to allow a range of uses and building types to be developed in a manner that fulfills the design objectives of this purpose statement.

Additionally, along the waterfront of the North Pearl Subarea the regulations of this subsection also:

- Increase access to sunlight along the greenway and within public and private open space areas developed along the waterfront;
- Develop a dense, active urban waterfront with a vibrant public realm;
- Work with the open area and waterfront development provisions of the North Pearl Subarea in the creation of well designed public and private urban open space amenities;
- Facilitate visual and physical access to and along the riverfront for all members of the public;
- Create expanded opportunities for views of the river as viewed from Naito Parkway and Front Avenue, landward portions of the subarea, and locations west of the subdistrict; and
- Ensure bonus height granted to sites adjacent to the Fremont Bridge does not significantly affect views of or diminish the aesthetic qualities of the bridge or its iconic stature in the Portland skyline.

2. Additional building height above the maximum height limits shown on Map 510-3 may be approved as a modification through design review if H.2.a and b are met, and either H.2.c or d. Except as specifically allowed, adjustments and modifications to this paragraph are prohibited.
 - a. The site must be in the height opportunity area shown on Map 510-16.
 - b. The floor area of the building above the maximum height limit shown on Map 510-3 must be:
 - (1) Earned through bonus FAR provisions;
 - (2) Transferred by a Central City Master Plan; or
 - (3) Transferred from an Historic Resource in conformance with **33.510.200.FH**.
Transfer of floor area from Historic Resources in specified areas.
 - c. The regulations of this subparagraph apply to sites northeast of SW Naito Parkway. Building heights may be increased to 175 feet in the height opportunity area if the following are met:

Commentary

33.510.210 Floor Area and Height Bonus Options

Staff proposes to redesign the Central City bonus system to prioritize affordable housing in the Central City. Currently developers have a "menu" of 19 bonuses and five transfers they can access if they provide a public benefits in exchange for increased density. BPS proposes to simplify the system by reducing the overall number of options, prioritizing bonuses that support the production and preservation of affordable housing. Bonus options would be available to residential, mixed-use and commercial developments.

B- General Regulations:

4. Staff recommends prioritizing affordable housing as the initial 2 to1 FAR increase that may be accessed in the new bonus or transfer system. Staff recommends that developers be allowed to choose to build affordable housing on site as part of a project or pay into a public benefit fund for the production and preservation of affordable housing. Or, a developer could choose to do a combination of these options.

Question: Do we need to more clearly call out that South Waterfront has different regulations that it must follow for transfer and bonus usage? (see 33.510.200 C5)

5. Staff recommends that the Historic preservation transfer may be used prior to the affordable housing bonus only if the FAR is transferred from the Skidmore/Old Town or New Chinatown/Japantown historic districts. This aligns with West Quadrant Plan's historic preservation strategy to preserve these historic districts.

Question: Structurally it seems like we've got some general FAR increase guidelines in the FAR increase section and we have some here. Does this belong here or in 33.510.200C?

- (1) The floors of the building above 100 feet are limited to 12,500 square feet in area or less; and
- (2) The length of any facade above 100 feet may not exceed 120 feet. However, a dimension of up to 150 feet may be requested as a modification through design review.

d. The regulations of this subparagraph apply to sites southwest of SW Naito Parkway. For sites in the height opportunity area where the maximum height allowed for the site by Map 510-3 is 100 feet, applicants may choose to increase height using one of the options of this subparagraph.

- (1) Option One: The height may be increased to 175 feet if the length of any facade above 100 feet in height does not exceed 150 feet. However, a dimension of up to 180 feet may be requested as a modification through design review; or
- (2) Option Two: There is no maximum height limit if the following are met:
 - The floors of the building above 100 feet are limited to 12,500 square feet in area or less; and
 - The length of any facade above 100 feet may not exceed 120 feet. However, a dimension of up to 150 feet may be requested as a modification through design review.

33.510.210 Floor Area and Height Bonus Options

A. Purpose. Floor area and height bonus options are offered as incentives to encourage affordable housing and facilities and amenities that implement the Central City 2035 Plan.

B. General regulations.

1. The bonus options are only allowed in situations where stated. Only new developments are eligible for the bonuses unless specifically stated otherwise. Exceptions to the requirements and the amount of bonus floor area or height earned are prohibited.
2. Projects may use more than one bonus option unless specifically stated otherwise. Bonuses may be done in conjunction with allowed transfers of floor area.
3. The maximum floor area increase that may be earned through the bonus options must be within the limits for overall floor area increases stated in 33.510.200.C.
4. Buildings using bonus floor area must not exceed the maximum height limits shown on Map 510-3 unless eligible for bonus height.
5. Except as follows, the first 2 to 1 FAR increase must be achieved using either the affordable housing bonus or the Affordable Housing Fund bonus.
 - a. Increased FAR can be achieved using the historic resources transfer provisions of 33.510.200.F. before using the affordable housing or Affordable Housing Fund bonuses if the site eligible to transfer floor area is in either the Skidmore/Old Town historic district or New Chinatown/Japantown historic district. ~~For residential bonus target areas, as shown on Map 510-4, the residential bonus option must be used before any other bonus. A bonus floor area ratio of at least~~

Commentary

Continued: 33.510.210 Floor Area and Height Bonus Options

6. The residential bonus target area is being eliminated. This map has been updated.

6 (new with renumbering): Willamette River Greenway bonus: This bonus remains intact for South Waterfront. A new bonus option for all other riverfront properties in the Central Reach has been created (described with the bonus provisions). The target area for South Waterfront will not change but the map will be updated to reflect g and r overlay areas along the river that will be eligible outside of SOWA. (Many of the maps are being renumbered -this is now Map 510-5)

A. Bonus floor area options

Staff proposes 6 bonuses for the new system. Three bonuses that have been used in South Waterfront are proposed to remain for this subdistrict including the open space bonus, open space fund, and the Willamette River Greenway bonus. The new bonus system contains: an affordable housing bonus, affordable housing fund bonus, and a Riverfront open space bonus. Below offers a brief description of new bonuses and justification for eliminating the others.

1. NEW: Affordable housing bonus: This bonus would be used for developments that want to build the affordable housing on site. Based on the bonus/transfer study this bonus remains economically feasible for a developer with 25% of the bonus floor area used for affordable housing at 80% MFI. The 25% is currently being evaluated through some continued consultant work and may change based on additional analysis.

2.(moved up from # 15): Affordable Housing Fund. The current code language of the existing Affordable housing fund has been edited to reflect proposed fund regulations. Staff discussions at PHB and BPS our continuing on the best mechanism for updating the fee. Our consultant team recommended that the fee should be updated with a rerun of the economic model at least every three years. There are two mechanisms for updating this fee. PHB has the ability to do it through an Administrative Rule or BPS could consider doing it through the RICAP process. Staff proposes that the fee is updated through PHB Admin Rule approved by City Council.

Questions: Staff is working with the Housing Bureau to figure out: How the funds are used (either for acquisition, rehabilitation, remodeling or construction), the level of affordability, where the funds can be used and other additional requirements. Much of this information will be part of an administrative rule and/or PHB's Fund implementation guidelines.

~~1.5 to 1 from the residential bonus option must be earned before the project qualifies for other bonus options.~~

- ~~6b.~~ If any portion of the site is in the Greenway bonus target area, as shown on Map 510-54, the South Waterfront Willamette River Greenway bonus option must be used before any other bonus. Bonus floor area of at least 7,500 square feet from the South Waterfront Willamette River Greenway bonus option must be earned before the project qualifies for other bonus options.
- c. Increased FAR can be achieved using the Riverfront Open Space bonus as described in C4 below before using the affordable housing or Affordable Housing fund bonuses.

C. Bonus floor area options. Additional development potential in the form of floor area is earned for a project when the project includes any of the specified features listed below. The bonus floor area amounts are additions to the maximum floor area ratios shown on Map 510-2.

- 1. Affordable housing bonus. Proposals that include affordable housing may receive bonus floor area. New development and alterations to existing development are eligible for this bonus if the following requirements are met:
 - a. In the CX, EX and RX zones, an additional 3 to1 FAR is allowed, if at least 25 percent of the increased floor area is dedicated to housing affordable to those earning no more than 80 percent of the area median family income;
 - b. The applicant must provide a letter from the Portland Housing Bureau certifying that the development will meet the standards of this subsection and any administrative requirements have been met; and
 - c. The property owner must execute a covenant with the City that complies with the requirements of Section 33.700.060. The covenant must ensure that affordable dwelling units created using this bonus will remain affordable to households meeting the income restrictions and meet the reporting requirements of the Portland Housing Bureau or qualified administrator.
- 2. Affordable Housing Replacement Fund bonus option. Projects that contribute to the Affordable Housing Replacement Fund (AHRF) receive floor area bonuses. The project may earn up to a maximum 3 to 1 increase in floor area by paying into the fund. For each square foot purchased a fee is paid to the Portland Housing Bureau (PHB). PHB determines the fee per square foot and updates the fee at least every three years. The Fee schedule is available in the Bureau of Development Services Permit Center. For each \$21.70 contributed to the AHRF, one square foot of bonus floor area is earned, up to a maximum of two ~~three~~ square feet per square foot of site area. To qualify for this bonus, the following requirements must be met:
 - a. The applicant must submit with the development application a letter from the Portland Housing Bureau ~~Portland Development Commission (PDC)~~ documenting the amount that has been contributed to the AHRF;
 - b. ~~The bonus floor area may be used only in the Central City plan district.~~

Commentary

Continued:33.510.210 C : Bonus floor area options

Eliminate:Residential bonus option: Staff proposes to eliminate this bonus. In 1988 when this bonus provision was created a clear goal of the Downtown and Central City plans was to construct new housing. In specified areas throughout the Central City an applicant could earn a bonus of 1 square foot of additional floor area, up to an additional floor area ratio of 3 to 1 if residential uses were included as part of the development. This bonus has been used approximately 51 times since 1988- this is more than any of the other bonuses. The 1988 Central City Plan housing policy promoted the construction of at least 5,000 new housing units in the Central City by the year 2010. This bonus was developed at a time when there was little residential development in the Central City. However, since the adoption of the Central City Plan in 1988, the number of housing units has grown by more than 12,000. Staff feels that the original goal of the 1988 Central City plan has been met. Increasing the amount of affordable housing is the public benefit that needs to be the focus with this new Central City 2035 plan.

Eliminate: Day Care bonus option. Staff proposes to eliminate this bonus. Designed to encourage more daycare providers in the Central City; it was thought that additional facilities would be beneficial in the employee recruitment process over places with more limited access. Though numerous day care facilities have been constructed in the Central City this bonus has only been utilized twice since 1988.

Staff has proposed to expand the Neighborhood Facilities within the North Pearl Subarea (33.510.200I) to apply across the entire Central City. This provision encourages the creation of facilities to serve those who live and work in the City. If this provision is expanded to the entire Central City as proposed, the floor area ratio that is used for daycare facilities for children does not count towards the maximum FAR for the site.

- c. The Affordable Housing Replacement Fund is to be collected and administered by the Portland Housing Bureau, Portland Development Commission (PDC). The funds collected may be used only within the Central City plan district, either for acquisition, rehabilitation, remodeling or construction of housing affordable to those households earning no more than 60 percent of area median income.
1. ~~Residential bonus option.~~
 - a. ~~In specified areas, proposals that include Residential uses receive bonus floor area. New development and alterations to existing development are eligible for this bonus.~~
 - (1) ~~In the CX and EX zones outside of the South Waterfront Subdistrict and the North Pearl Subarea, for each square foot of floor area developed and committed as housing, a bonus of 1 square foot of additional floor area is earned, up to an additional floor area ratio of 3 to 1. Sites in the required residential opportunity areas are eligible for this bonus.~~
 - (2) ~~In the CX and EX zones in the North Pearl Subarea, for each square foot of floor area developed and committed as housing, a bonus of 1 square foot of additional floor area is earned, up to an additional floor area ratio of 2 to 1.~~
 - b. ~~The additional floor area may be used entirely for housing or partially for nonresidential uses. Projects that include housing built under building permits issued prior to July 1, 1998 may commit up to 2/3 of the bonus floor area to nonresidential uses. Projects built under building permits issued after July 1, 1998 may commit up to 1/2 of their bonus floor area to nonresidential uses.~~
 - c. ~~Residential portions of mixed-use projects using this bonus must be completed and receive an occupancy permit in advance or at the same time as an occupancy permit for any nonresidential portion of the project. The property owner must execute a covenant with the City ensuring continuation and maintenance of the housing by the property owner. The covenant must comply with the requirements of 33.700.060.~~
 2. ~~Day care bonus option. In the CX, EX, and RX zones outside of the South Waterfront Subdistrict, projects providing day care facilities for children receive bonus floor area. For each square foot of area developed and committed to exclusive use as a day care facility, a bonus of 3 square feet of additional floor area is earned. To qualify for this bonus, the day care facility must meet all of the following requirements:~~
 - a. ~~The day care facility must be used for the purpose of day care for the life of the building. The facility must be open during normal business hours at least five days each week and fifty weeks each calendar year.~~
 - b. ~~The day care facility must be maintained and kept in a good state of repair throughout the life of the building.~~
 - c. ~~The property owner must execute a covenant with the City ensuring continuation and maintenance of the day care facility by the property owner. The covenant must comply with the requirements of 33.700.060.~~

Commentary

Eliminate: Retail use bonus option. Staff proposes to eliminate this bonus. The Downtown and Central City plans both expressed clear intentions to strengthen and concentrate the downtown retail core on the east-west corridor centered on SW Morrison Street. This bonus has been used four times since 1988. Active building use, building lines and ground floor window standards require similar, but not necessarily identical space to those produced. Given this information, and that staff is updating the code sections related to street and development character standards in the Central City to more clearly identify requirements in our retail core this bonus is not be needed.

Eliminate: Rooftop gardens option. Staff proposes to eliminate this bonus. This bonus was intended to limit urban heat island effect and stormwater runoff, as well as provide outdoor recreational space and air quality improvements. Staff research shows that it has been used three times since 1988. It is possible that it was competing with the eco-roof bonus which is less expensive and provides more bonus.

Eliminate: Theaters on Broadway bonus option. Staff proposes to eliminate this bonus option. The Central City Plan adopted policy statements to create a bright lights district along SW Broadway. The bonus was intended to encourage the concentration of new entertainment venues along this historically important avenue. Staff research found that this bonus was used one time in 1998.

Eliminate: Percent for Art bonus option. Staff proposes to eliminate this bonus option. The original intent was to provide funding for the installation of public art in the Central City. Staff research indicates it has been used six times. Developers do not have control over artwork selected for project, however the cost equation provides certainty.

Optional Artwork is still part of the ground floor windows code provision which allows applicants to go through the adjustment process as part of design review to meet a portion of their ground floor window requirement.

3. ~~Retail use bonus option. In the retail use bonus target area, shown on Map 510-4, projects providing retail uses receive bonus floor area. To qualify for this bonus option, floor area equal to at least 1/2 of the site area must be committed to retail space. For each square foot of retail space over this amount, one additional square foot of floor area is earned. The property owner must execute a covenant with the City attached to the deed of the site ensuring continuation and maintenance of the qualifying retail spaces by the property owner. The covenant must comply with the requirements of 33.700.060.~~
4. ~~Rooftop gardens option. In CX, EX, and RX zones outside of the South Waterfront Subdistrict, developments with rooftop gardens receive bonus floor area. For each square foot of rooftop garden area, a bonus of one square foot of additional floor area is earned. To qualify for this bonus option, rooftop gardens must meet all of the following requirements:~~
 - a. ~~The rooftop garden must cover at least 50 percent of the roof area of the building and at least 30 percent of the garden area must contain plants.~~
 - b. ~~The property owner must execute a covenant with the City ensuring continuation and maintenance of the rooftop garden by the property owner. The covenant must comply with the requirements of 33.700.060.~~
5. ~~"Theaters on Broadway" bonus option. In the Broadway Theater bonus target area, projects providing theaters receive bonus floor area. For each square foot of floor area developed as theater, a bonus of 2 square feet of additional floor area is earned. Existing and new theaters qualify for this bonus. The Broadway Theater target area is shown on Map 510-4. To qualify for this bonus, a theater must meet all the following requirements:~~
 - a. ~~The theater facilities must provide seating for at least 150 people.~~
 - b. ~~The theater space must be used for the life of the building and at least 200 performances must be given each calendar year. Live theater performances and film exhibitions meet this requirement.~~
 - c. ~~The theater facilities must be maintained and kept in a good state of repair throughout the life of the building.~~
 - d. ~~The property owner must execute a covenant with the City ensuring compliance with these standards by the property owner. The covenant must comply with the requirements of 33.700.060.~~
6. ~~"Percent for Art" bonus option. In all zones outside of the South Waterfront Subdistrict, new development or alterations to existing development which commit funds to public art receive bonus floor area. Projects which commit 1 percent of their threshold value to public art earn additional floor area equal to the size of the site. Projects committing more than 1 percent to public art earn additional floor area equal to 0.1 of the site area for each additional 0.1 percent of the project's threshold value up to a maximum total floor area increase of 2 times the site area. **For new development**, threshold value is the sum of all construction costs shown on all building permits associated with the project, including site preparation. Where some or all of the bonus floor area is being transferred, this includes costs for both the lot transferring the bonus and the site receiving the transfer of floor area. **For alterations**~~

Commentary

Eliminate: Water features or public fountains bonus option. Staff proposes to eliminate this bonus option. The original intent by City Council to create this bonus was to reinforce fountains as a character-giving thematic element, building on and extending a civic tradition begun in the previous century. The bonus performs similarly to the percent for art bonus. Staff research indicates that this has been used two times.

to existing development, the threshold value is the sum of all construction costs as defined above plus the value of existing improvements to the property, as listed in the County Assessor's records. Where some or all of the bonus floor area is being transferred, this includes costs and values for both the lot transferring the bonus and the site receiving the transfer of floor area. To qualify for this bonus, the public art must meet the following requirements:

- a.— At least 25 percent of the project's public art funds must be placed in a Central City Public Art Trust fund, maintained by the Regional Arts and Culture Council. The developer may place all of the public art funds in the trust fund. The Central City Public Art Trust Fund is used to purchase and install public art only in the Central City plan district.
 - b.— The process and budget for selecting the artist and for selecting and installing the specific works of art to be included in the project must be approved by the Regional Arts and Culture Council. The Regional Arts and Culture Council maintains and publishes guidelines and procedures for review, selection, installation, and payment for works of art included in a project.
 - c.— Works of art must be approved by the Regional Arts and Culture Council.
 - d.— Works of art must be placed on the outside of the building or at a location clearly visible and freely accessible to the public from the sidewalk during daylight hours. The location of each work of art will be approved by the Regional Arts and Culture Council. The Design Commission will recommend appropriate locations prior to the Regional Arts and Culture Council approval.
 - e.— The public art may not also be used to satisfy other requirements of City, State, or Federal law.
 - f.— The property owner must execute a covenant with the City ensuring installation, preservation, maintenance, and replacement if necessary of the public art. The covenant must comply with the requirements of 33.700.060.
- 7.— Water features or public fountains bonus option. In CX, EX, and RX zones, projects which provide water features or public fountains as part of the development receive bonus floor area. For each 0.1 percent of their threshold value that a project commits to development of water features or public fountains, an additional floor area equal to 0.1 of the site area is earned, up to a maximum of 0.5 of the site area. **For new development**, threshold value is the sum of all construction costs shown on all building permits associated with the project, including site preparation. Where some or all of the bonus floor area is being transferred, this includes costs for both the lot transferring the bonus and the site receiving the transfer of floor area. **For alterations to existing development**, the threshold value is the sum of all construction costs as defined above plus the value of existing improvements to the property, as listed in the County Assessor's records. Where some or all of the bonus floor area is being transferred, this includes costs and values for both the lot transferring the bonus and the site receiving the transfer of floor area. To qualify for this bonus, the water feature or public fountain must meet all of the following requirements:

- a.— The water feature or public fountain must be located outdoors on the site or abut the site in a right-of-way, unless another site is approved by the Design

Commentary

Eliminate:Locker Room bonus option. Staff proposes to eliminate this bonus, but provide language for a requirement across the Central City. This bonus was adopted as part of the 1996 Transportation Planning Rule Package to encourage bicycle commuting. Staff research indicates that it has been used nine times. It applies to the CX and EX zones outside of South Waterfront. South Waterfront has a requirement for bike locker room and additional bike parking. Staff has modeled a new requirement for the entire Central City after the existing provision in South Waterfront as well as looking at how LEED provides points for such facilities and other cities have implemented this type of requirement.

Keep:South Waterfront Willamette River Greenway bonus option. Staff proposes to keep this bonus as it applies in the South Waterfront Subdistrict. Since the South Waterfront Greenway Overlay has moved to 33.475 the referenced Figure 510-2 has also moved. Staff needs to decide whether we copy the figure in 510 or reference the new section in 33.475.XXX.

The current provision was intended to encourage the dedication of North Macadam riverfront land to the City for use as park and natural area. Within South Waterfront the regulated greenway setback is a minimum of 100 feet from the top-of-bank; however, the South Waterfront Plan aspires to achieve an average setback of 150 feet through incentives. Staff research shows this bonus has been used twice since 1997.

~~Commission. It must be visible and accessible by the public from the sidewalks that provide access to the project.~~

~~b. The water feature or fountain must be designed to use water efficiently with a low water make-up rate. A method of keeping the water clean must be provided.~~

~~c. The design and location of the water feature or public fountain must be approved as part of the design review of the total project.~~

~~d. Water features and public fountains may not be counted to meet both this bonus option and the "Percent for Art" bonus option at the same time.~~

~~e. The property owner must execute a covenant with the City ensuring the preservation, maintenance, and continued operation of the water feature or public fountain by the property owner. The covenant must comply with the requirements of 33.700.060.~~

~~8. Locker room bonus option. To encourage bicycling, projects in the CX and EX zones outside of the South Waterfront Subdistrict that provide locker room facilities and extra long term bicycle parking receive bonus floor area. For each square foot of area developed and committed to locker room facilities, a bonus of 40 square feet of additional floor area is earned. To qualify for the bonus, the following must be met:~~

~~a. The locker room facility must include showers, a dressing area, and lockers;~~

~~b. All tenants of the building must be able to use the locker room facility; and~~

~~c. At least 110 percent of the required long-term bicycle parking for the site must be provided and must meet the standards of 33.266.220.B., Long term Bicycle Parking.~~

39. South Waterfront Willamette River Greenway bonus option. To complement and enhance the existing public corridor, projects along the Willamette River Greenway in the South Waterfront Subdistrict that provide open space for public activity will receive bonus floor area. For each square foot of open space dedicated, a bonus of three square feet of additional floor area is earned. Open space that will earn bonus floor area under 33.510.210.C.517, Open Space bonus option, may not be used to earn additional floor area under this bonus. To qualify for this bonus, the following requirements must be met:

a. Location. The open space must abut the South Waterfront Greenway Area, as shown on Figure 510-2;

b. Size and dimensions. The open space must include at least 2,500 square feet of contiguous area; the north-south dimension of the area must be at least twice as long as the east-west dimension of the area;

c. Connection to the trail. A direct pedestrian connection must be provided between the open space and any required trail or trail easement on the site;

d. Ownership and use. One of the following must be met:

(1) The open space and pedestrian connection must be dedicated to the City; or

Commentary

NEW: Riverfront Open Space Bonus option

Riverfront open space bonus: The Willamette River and riverbank is the signature open space amenity in the Central City and needs to accommodate a growing number of residents, employees and visitors in an urban setting. The River Open Space bonus would only be available to properties within the River Overlay Zones that have River Setback on site. This is a small geography of the Central City, but a critical geography in terms of open space. Most properties that are likely to redevelop in the Central City are actually located outside of the River Overlay Zones and would not be able to use this bonus. Therefore, the River Open Space bonus should not reduce the capacity of the Affordable Housing Bonus.

Staff is recommending a River Setback of 50ft from top of bank. Through the Riverfront Bonus option an applicant could access an additional 3 square feet of bonus floor area for each square foot of dedication (outside of the river setback).

Question:

Staff is still thinking about the minimum dimension -- We need to define the dimension that we would like to see adjacent to the river setback. We don't want just a long strip, but would like a usable space.

(2) A public access easement must be provided that allows for public access to and use of all the open space and the pedestrian connection.

- e. Maintenance. The property owner must execute a covenant with the City that ensures the installation, preservation, maintenance, and replacement, if necessary, of the open space features, and that meets the requirements of 33.700.060, Covenants with the City;
- f. Landscaping. The open space must be landscaped to meet the requirements of Paragraphs 33.510.253.E.2. and E.7. that apply to South Waterfront Greenway subarea 3;
- g. Open space features. Public seating such as benches must be provided at a ratio of at least 5 seats per 1,000 square feet of open space; and
- h. Timing. The requirements of this paragraph must be met before an occupancy permit for any building using the bonus floor area is issued.

4. Riverfront open space bonus option. The riverfront open space bonus provides an opportunity to expand publically accessible open space along the Willamette River. In the River General Overlay Zone proposals that provide open space adjacent to the river setback area will receive bonus floor area. For each square foot of open space provided, a bonus of three square feet of additional floor area is earned. To qualify for this bonus, the following requirements must be met:

- a. Location. The open space must be located outside of, but adjacent to the river setback.
- b. Size and dimensions. The open space must include at least 2,500 square feet of contiguous area. Each area must be designed so that a 25-foot X 25-foot square will fit entirely within it.
- c. Ownership and use. A public access easement must be provided that allows for unrestricted public access from 7 am to 9 pm. The property owner must also execute a covenant with the City ensuring the preservation, maintenance, and continued operation of the open space by the property owner. The covenant must comply with the requirements of Section 33.700.060.
- d. Landscaping. The open space provided to receive the bonus must be landscaped to meet 75 percent of the landscaping requirement of subarea 3 as described in 33.475.XXX Subarea 3 Standard.
- e. Public Seating. Public seating, such as benches, must be provided at a ratio of at least 1 seat per 200 square feet; and
- f. Timing. The requirements of this paragraph must be met before an occupancy permit for any building using the bonus floor area is issued.

Commentary

Eliminate: Ecoroof bonus option: Staff proposes to eliminate this bonus and require ecoroofs in some instances. This bonus, created in 2001 was largely intended to meet the same policy objectives as the rooftop gardens bonus. Ecoroofs provide stormwater runoff retention, building heating/cooling efficiencies and air cleansing attributes superior to rooftop gardens. Since 2001 staff research indicates that approximately 35 ecoroofs have been built in the Central City as part of new development. Seventeen of these used the bonus option.

Eliminate: Large dwelling unit bonus option. (only applies to the West End Subarea shown previously on Map 510-14 which is also proposed for deletion)

Staff proposes to eliminate this bonus option so that it does not compete with the new affordable housing bonus. This bonus was created in 2003 and staff research indicates that it has been used one time. It was created to encourage developers to create larger residential units within an area where smaller units would be more common. Larger residences, especially those with two or more bedrooms, are likely to find a market with larger households or households of middle incomes. This bonus was intended to foster two-bedroom housing units.

Eliminate: Large household dwelling unit bonus option. (only applies in South Waterfront)

Staff proposes to eliminate this bonus option. The large dwelling unit bonus was created to encourage the development of larger dwelling units (3 or more bedrooms) in residential projects to support the desire to see a diversity of housing types within South Waterfront. While a diversity of housing types is needed in South Waterfront the current priority Citywide is to encourage the development of more affordable housing. Staff research indicates that this bonus has never been used.

10. ~~Eco-roof bonus option. Eco-roofs are encouraged in the Central City because they reduce stormwater run-off, counter the increased heat of urban areas, and provide habitat for birds. An eco-roof is a rooftop stormwater facility that has been certified by the Bureau of Environmental Services (BES). Proposals that include eco-roofs receive bonus floor area. A proposal may earn bonus floor area for both the eco-roof option and the rooftop gardens option. However, the same square footage may not be counted towards both bonuses.~~
- ~~a. — Bonus. Proposals that include eco-roofs receive bonus floor area as follows:~~
- ~~(1) — Where the total area of eco-roof is at least 10 percent but less than 30 percent of the building's footprint, each square foot of eco-roof earns one square foot of additional floor area.~~
- ~~(2) — Where the total area of eco-roof is at least 30 percent but less than 60 percent of the building's footprint, each square foot of eco-roof earns two square feet of additional floor area.~~
- ~~(3) — Where the total area of eco-roof is at least 60 percent of the building's footprint, each square foot of eco-roof earns three square feet of additional floor area.~~
- ~~b. — Before an application for a land use review will be approved, the applicant must submit a letter from BES certifying that BES approves the eco-roof. The letter must also specify the area of the eco-roof. Final plans and specifications must be submitted with building permit applications.~~
- ~~c. — The property owner must execute a covenant with the City ensuring installation, preservation, maintenance, and replacement, if necessary, of the eco-roof. The covenant must comply with the requirements of 33.700.060.~~
11. ~~Large dwelling unit bonus option. In the West End subarea, new development with dwelling units larger than 750 square feet receive bonus floor area. Where a dwelling unit is larger than 750 square feet, each square foot over 750 square feet earns a bonus of one square foot. For example, if a building includes one 700 square foot unit, one 900 square foot unit, and one 950 square foot unit, a bonus of 350 square feet will be earned. To qualify for this bonus option, the property owner must execute a covenant with the City ensuring that the units used for bonuses will not be reduced in size. The covenant must comply with the requirements of Section 33.700.060.~~
12. ~~Large household dwelling unit bonus option. In the South Waterfront Subdistrict, new development that includes dwelling units with more than two bedrooms receives bonus floor area. To be counted towards this bonus, a bedroom must be at least 70 square feet in area, have at least one window that can be opened, have at least one closet, and be separated by walls and or doors from kitchen, bath, and garage. In addition, the bedroom may not provide the sole access to any other room except a~~

Commentary

Eliminate: Middle income housing bonus option. Staff proposes to eliminate this bonus option and prioritize the new affordable housing bonus and fund. This bonus was intended to encourage the development of housing affordable to households earning between 80 and 150 percent of Portland's median family income (MFI). In the Central City, this type of housing is not commonly provided by the market and households in this income bracket do not generally qualify for public housing subsidies. A moderate-income policy was included in an early draft of the West Quadrant Plan, but direction from PSC and City Council was that with limited resources, the focus of all tools available to the City should be affordability, at 80% or less. Staff research found that this bonus has never been used.

Eliminate: Small development site bonus option. (only applies in the West End) Staff proposes to eliminate this bonus option. Originally adopted to encourage development on smaller sites in the West End. This was a response to the pattern of small parcels that are found within the blocks in this West End subarea where surface parking lots have been a dominant use on sites. This bonus has not been used. Going taller may be cost prohibitive as construction type changes and rents generated by the small floorplates can't offset the increase. Staff found that this bonus has never been used.

[Modify: Affordable housing replacement fund. This bonus has been moved to #2 and has been modified to describe parameters for current bonus fund option.]

Eliminate: Below grade parking bonus option (only applies to the West End). Staff proposes to eliminate this bonus option. Staff research indicates that this provision has been used three times. The original intent was to promote the conversion of surface parking lots and other underutilized properties to residential, mixed-use and commercial development. The intent to see the transition of surface parking lots is still valid, but staff proposes to eliminate the bonus to limit competition with the affordable housing bonuses.

bathroom. Each dwelling unit with more than two bedrooms receives floor area based on the number of bedrooms in excess of two bedrooms. Each additional bedroom earns 150 square feet of bonus floor area. To qualify for this bonus option, the property owner must execute a covenant with the City ensuring that the units used for bonuses will not be reduced in number of bedrooms. The covenant must comply with the requirements of Section 33.700.060.

13. Middle-income housing bonus option. Housing for middle-income residents receives bonus floor area. For each square foot of floor area certified by the Portland Development Commission, three square feet of bonus floor area is earned. To qualify for this bonus, the proposed development must meet all of the following requirements:
 - a. The applicant must submit with the development application a letter from the Portland Development Commission (PDC) certifying that at least 30 percent of new dwelling units in the proposed development will be affordable to those earning no more than 150 percent of the area median family income;
 - b. The property owner must execute a covenant with the City that complies with the requirements of 33.700.060. This covenant must ensure that:
 - (1) Rental units used for this bonus will remain affordable to those earning no more than 150 percent of the area median family income for at least 60 years after an occupancy permit is issued; and
 - (2) Units for sale used for this bonus will be initially sold at a price that is affordable to those earning no more than 150 percent of area median family income.
 - c. Residential portions of mixed-use projects using this bonus must be completed and receive an occupancy permit in advance of or at the same time as an occupancy permit for any nonresidential portion of the project.
14. Small development site option. In the West End subarea, developments on small development sites receive floor area bonuses. To qualify for this bonus, the development site must be 15,000 square feet or less. The development site is all of the lots, lots of record, and plots proposed for the development, including accessory uses. Lots, lots of record, and plots that are under the same ownership, and that are vacant or used for surface parking, and that abut those proposed for the development are included in the development site.

— The amount of the bonus varies with the size of the development site, as follows:

 - a. Where the development site is up to 5,000 square feet, the FAR is increased by 1.5;
 - b. Where the development site is larger than 5,000 square feet and up to 10,000 square feet, the FAR is increased by 1.0;
 - c. Where the development site is larger than 10,000 square feet and up to 15,000 square feet, the FAR is increased by 0.5.

Commentary

Modified: Affordable Housing Replacement Fund. Staff has moved this bonus to #2 and modified it to reflect the new proposed affordable housing fund.

Keep: Open Space bonus option. (currently only applies in South Waterfront). Staff proposes to keep this bonus as it current applies to South Waterfront. Staff research found that this bonus has been used six times since 2003.

- ~~15. Affordable Housing Replacement Fund bonus option. Contributors to the Affordable Housing Replacement Fund (AHRF) receive floor area bonuses. For each \$21.70 contributed to the AHRF, one square foot of bonus floor area is earned, up to a maximum of two square feet per square foot of site area. To qualify for this bonus, the following requirements must be met:~~
- ~~a. The applicant must submit with the development application a letter from the Portland Development Commission (PDC) documenting the amount that has been contributed to the AHRF;~~
 - ~~b. The bonus floor area may be used only in the Central City plan district.~~
 - ~~c. The Affordable Housing Replacement Fund is to be collected and administered by the Portland Development Commission (PDC). The funds collected may be used only within the Central City plan district, either for acquisition, rehabilitation, remodeling or construction of housing affordable to those households earning no more than 60 percent of area median income.~~
- ~~16. Below grade parking bonus option. In the West End subarea, where parking on the site is located below grade, a bonus of two additional square feet of floor area is earned for each square foot of below grade parking. To qualify for this bonus, the following requirements must be met:~~
- ~~a. Except as allowed by Subparagraph C.15.c., all parking on the site must be below grade. This includes both commercial and accessory parking;~~
 - ~~b. Where accessory parking is off site, it must be below grade; and~~
 - ~~c. One parking space per 5,000 square feet of site area may be on the ground floor of the building if both the parking spaces and any vehicles parked there are completely screened from all adjacent rights of way. These spaces do not qualify for bonus floor area.~~
- ~~17. Open Space bonus option. In the South Waterfront Subdistrict. Proposals that provide open space that may be used by the public will receive bonus floor area. For each square foot of open space provided, a bonus of one square foot of additional floor area is earned. Open space that will earn bonus floor area under 33.510.210.C.39, South Waterfront Willamette River Greenway bonus option, may not be used to earn additional floor area under this bonus. To qualify for this bonus, the following requirements must be met:~~
- ~~a. Size and dimensions. The open space must include at least 2,500 square feet of contiguous area;~~
 - ~~b. Ownership and use. One of the following must be met:
 - ~~(1) The open space must be dedicated to the City; or~~
 - ~~(2) A public access easement must be provided that allows for public access to and use of all the open space;~~~~
 - ~~c. Maintenance. The property owner must execute a covenant with the City that ensures the installation, preservation, maintenance, and replacement, if necessary, of the open space features, and that meets the requirements of 33.700.060, Covenants with the City;~~

Commentary

Keep:Open Space fund bonus option (currently only applies to South Waterfront). Staff research found that this bonus has never been used. However, staff proposes to keep this bonus fund as it applies to South Waterfront.

Eliminate:Efficient family size unit housing bonus.(only applies to the North Pearl Subarea). Staff proposes to eliminate this bonus. The North Pearl District Plan addressed the need to provide more diverse housing opportunities and a range of public amenities to serve the growing number of families with children that are emerging in the Pearl District. While this bonus has been used two times in the last few years, and a diversity of housing types is needed in the Pearl District, the current priority Citywide is to encourage the development of more affordable housing.

- d. Parks approval. The applicant must submit with the application for land use review a letter from Portland Parks and Recreation stating that the open space features meet the requirements of the bureau, and that the space is acceptable to the bureau; and
 - e. The bonus floor area may be used only in the South Waterfront Subdistrict.
- ~~618.~~ Open space fund bonus option. Contributors to the South Waterfront Public Open Space Fund (SWPOSF) receive floor area bonuses. For each \$21.70 contributed to the SWPOSF, one square foot of bonus floor area is earned. To qualify for this bonus, the following requirements must be met:
- a. The applicant must submit with the application for land use review a letter from Portland Parks and Recreation documenting the amount that has been contributed to the SWPOSF;
 - b. The bonus floor area may be used only in the South Waterfront Subdistrict;
 - c. The SWPOSF is to be collected and administered by Portland Parks and Recreation. The funds collected may be used only within the South Waterfront, either for acquisition, improvement, or maintenance of public open space or for bank restoration or improvement projects along the Willamette River.
- ~~19.~~ Efficient family size unit housing bonus option. In the North Pearl Subarea shown on Map 510-1, new development that is designed for family housing receives bonus floor area. Adjustments and modifications to these standards are prohibited.
- a. ~~Number of units.~~ The proposal must include at least 20 efficient family size units.
 - b. ~~Size and bonus.~~ The bonus earned varies with the size of the unit, as follows:
 - (1) ~~Units with three bedrooms that have no more than 1,200 square feet of floor area earn an additional 3 square feet of floor area for each square foot of area in the unit.~~
 - (2) ~~Units with two bedrooms that have no more than 1,000 square feet of floor area earn an additional 2 square feet of floor area for each square foot of area in the unit.~~
 - c. ~~Outdoor play area.~~ The proposal must include an outdoor play area that is at least 1,400 square feet in area and is designed so that a 25-foot x 25-foot square will fit entirely within it. No portion of this area may be shared with any vehicle area. ~~Outdoor play areas may be sited within plazas, courtyards, rooftop gardens, or similar open area features and may contain play equipment, sports courts, hard or soft surface areas, or other features that accommodate or facilitate play.~~
 - d. ~~Indoor common rooms.~~ The proposal must include at least 400 square feet of indoor occupiable common space that is provided in one or more rooms that are not used for mechanical equipment or storage. These rooms must be accessible to all residents and each room must be at least 200 square feet in area.

Commentary

33.510.210.D General bonus height

The height bonus provisions of Sections 33.510.210.D-F have been simplified and revised to work together with the amended FAR bonus and transfer provisions of sections 33.510.200 and 33.510.210. Subsection 33.510.210.D General bonus height, has been rewritten and provides the means to achieve bonus height in certain areas outside the South Waterfront Subdistrict and the North Pearl Subarea.

D.1. Bonus height is available on sites in eligible locations shown on Map 510-3. Sites in the South Waterfront Subdistrict and the North Pearl Subarea cannot use the height bonus options of this section and instead must use the height increase options of 33.510.205.G and 33.510.210.G, and 33.510.205.H.

D.2. Bonus height must be approved through design review and meet the approval criteria listed in D.4, and the total building height may not exceed the maximums shown on Map 510-4. Applicants achieving 75 feet of bonus height under D.3.A (Option A), may also use D.3.b (Option B), described below.

D.3.a. (Option A) Development proposals that have achieved an additional FAR of at least 1:1 through the use of any combination of affordable housing FAR bonuses and/or FAR transfers from historic resources earn 75 feet of bonus height (the maximum height limit shown on Map 510-4 may limit the bonus height to less than 75 feet in some locations).

D.3.b. (Option B) Development proposals that have not earned FAR through the use of affordable housing bonuses and/or historic FAR transfers may earn bonus height by paying into the Affordable Housing Fund, administered by the Portland Housing Bureau. For each square foot of floor area above the maximum height shown on Map 510-3, applicants must pay \$10.60.

Additionally, proposals that have achieved 75 of bonus height under Option A may earn additional bonus height above the 75 feet by paying into the Affordable Housing Fund; in these cases applicants must pay only for the additional height that is above the 75 feet earned under Option A. Note: the dollar value for additional height fee needs additional discussion (the \$10.60 figure is taken from the existing provision for additional height in the South Waterfront height opportunity area, 33.510.205.F). The fee should probably be relatively low in order to encourage people to access the additional height.

D.4. In order for the bonus height to be approved, the applicant must show that the increased height: will not violate an established view corridor; will not cast shadows that have significant negative impacts on nearby dwelling units in R zones; will result in a project that better meets the applicable design guidelines; and is consistent with the purposes stated in Subsection 33.510.205.A.

D. Bonus height. In addition to bonus floor area, bonus height may be earned at certain locations as follows:

1. Where the bonus height regulations apply. The bonus height regulations of this subsection apply in the area shown as eligible for height increases on Map 510-3 except for the South Waterfront Subdistrict and the North Pearl Subarea. In the South Waterfront Subdistrict additional height is regulated by 33.510.205.F and 33.510.210.E, and in the North Pearl Subarea bonus height is regulated by 33.510.205.G.
2. General regulations:
 - a. Proposals taking advantage of a bonus height option must be approved through design review, and must meet the approval criteria of Paragraph D.4;
 - b. More than one bonus height option may be used; and
 - c. The use of height bonuses may not result in a building that exceeds the maximum height limits shown on Map 510-4. Adjustments are prohibited.
3. Bonus height options:
 - a. Option A. Proposals that achieve an additional floor area ratio of at least 1 to 1 through any of the following floor area bonus or transfer options are allowed up to 75 feet of bonus height:
 - (1) The affordable housing bonus option of Subsection 33.510.210.C;
 - (2) The affordable housing fund floor area bonus option of Subsection 33.510.210.C;
 - (3) The historic resource transfer of Subsection 33.510.200.F; or
 - (4) The historic resource transfers of the base zones.
 - b. Option B. Bonus height may be earned by paying into the Affordable Housing Fund. For each square foot of floor area above the maximum height shown on Map 510-3, applicants must pay \$10.60 to the Affordable Housing Fund. Proposals that are taking advantage of options A and B need only pay for bonus height above the 75 feet earned through option A. The Portland Housing Bureau manages the Affordable Housing Fund. The applicant must submit a letter from the Portland Housing Bureau documenting the amount contributed to the Affordable Housing Fund.
4. Approval criteria. The following approval criteria apply to proposals taking advantage of the bonus height options of this subsection. The bonus height may be approved if the review bony finds that all of the following have been met:
 - a. The increased height will not violate an established view corridor;
 - b. If the site is within 500 feet of an R zone, the proposed building will not cast shadows that have significant negative impacts on dwelling units in R zoned lands;
 - c. The increased height will result in a project that better meets the applicable design guidelines; and

Commentary

- E. **Bonus height option housing.** Staff proposes to eliminate this section. The goal is to align access to bonus height with the new affordable housing FAR bonuses and historic resource FAR transfers.

- e. Approval of the increased height is consistent with the purposes stated in Subsection 33.510.205.A.

~~**D.—General bonus heights.** Bonus height is also earned at certain locations in addition to the bonus floor area achieved through the bonus options. Bonus height is in addition to the maximum heights of Map 510-3. Qualifying areas, shown on Map 510-3, are located such that increased height will not violate established view corridors, the preservation of the character of historical districts, the protection of public open spaces from shadow, and the preservation of the City's visual focus on important buildings (such as the Union Station Clock Tower).~~

~~—The height bonus allowed is based on the floor area bonuses and transfers listed in Paragraph D.1., below. The amount of bonus height awarded is specified in Paragraphs D.2. and D.3., below.~~

- ~~1.—The height bonus allowed is based on the following:
 - a.—The floor area bonus options of Subsection 33.510.210.C., above;
 - b.—The transfer of floor area from sites occupied by SROs, as allowed by Subsection 33.510.200.E; and
 - c.—The transfer of floor area from sites of Historic Landmarks, as allowed by the regulations of the base zones.~~
- ~~2.—In areas qualifying for a height bonus, on sites up to 40,000 square feet in area, the amount of bonus height awarded is based on the following schedule:
 - a.—For achieving a bonus floor area ratio of at least 1 to 1, but less than 2 to 1, a height bonus of 15 feet is earned.
 - b.—For achieving a bonus floor area ratio of at least 2 to 1, but less than 3 to 1, a height bonus of 30 feet is earned.
 - c.—For achieving a bonus floor area ratio of 3 to 1, a height bonus of 45 feet is earned.~~
- ~~3.—In areas qualifying for a height bonus, on sites larger than 40,000 square feet in area, the amount of bonus height awarded is based on the following schedule. The height bonus is applied only to the building where the bonus floor area is achieved or transferred, not to the entire site:
 - a.—For achieving bonus floor area of at least 40,000 square feet, but less than 80,000 square feet, a height bonus of 15 feet is earned.
 - b.—For achieving bonus floor area of at least 80,000 square feet, but less than 120,000 square feet, a height bonus of 30 feet is earned.
 - c.—For achieving bonus floor area of 120,000 square feet or more, a height bonus of 45 feet is earned.~~

~~**E.—Bonus height option for housing.**~~

- ~~1.—Generally, in the bonus height areas, building heights may be allowed to be greater than shown on Map 510-3 if the bonus height is for housing. Although this subsection allows the review body to approve bonus height, the review body may also require~~

Commentary

- F. **Bonus height option for high ceilings in the West End.** Staff proposes to eliminate this section. It has not been used according to BDS and the goal is to align access to bonus height with the new affordable housing FAR bonuses and historic resource FAR transfers.

reconfiguration of the building, including reducing its height, and may approve all, some or none of the bonus height requested, based on application of the criteria in E.4, below.

2.—Standard. The maximum height bonus that may be allowed is 75 feet.

3.—Relationship to Subsection D.

a.—On sites shown on Map 510-3 as eligible for general and housing height bonuses, both the bonus height options of this subsection and Subsection D., above may be used. However, if both options are used, the combined bonus height may not exceed 75 feet. Bonus height in excess of the maximum allowed through Subsection D., above, must be used exclusively for housing, and may not be used to qualify for the residential floor area bonus option in Subsection C.1., above;

b.—On sites shown on Map 510-3 as eligible for housing height bonuses, only the housing height bonus of this subsection may be used.

4.—Approval Criteria. The approval of the bonus height is made as part of the design review of the project. The bonus height may be approved if the review body finds that the applicant has shown that all of the following criteria have been met:

a.—The increased height will not violate an established view corridor;

b.—If the site is within 500 feet of an R zone, the proposed building will not cast shadows that have significant negative impacts on dwelling units in R-zoned lands;

c.—If the site is shown on Map 510-3 as eligible for the Open Space (OS) performance standard, the project must meet the performance standards of Subsection 33.510.205.E.;

d.—If the site is on a block adjacent to the Yamhill or Skidmore Fountain/Old Town Historic Districts, the project must meet the performance standards of Subsection 33.510.205.D.;

e.—The increased height will result in a project that better meets the applicable design guidelines; and

f.—Approval of the increased height is consistent with the purposes stated in Subsection 33.510.205.A.

F.—Bonus height option for high ceilings in the West End. In the West End subarea, proposals where any of the residential floor to ceiling heights exceed 8 feet receive bonus height. Each floor that has a ceiling height of more than 8 feet may receive up to four feet of bonus height; for each foot of floor to ceiling height over 8 feet, an additional foot of height is allowed above that shown on Map 510-3. To be eligible for this bonus, the floors where this bonus is earned must be in residential use, and at least 75 percent of ceiling square footage must qualify for the bonus that is being sought.

—For example, the height bonus for a ten-story, totally residential building where 3 floors have 10-foot ceilings (3x2=6), two floors have 12-foot ceilings (2x4=8), two floors have 14-foot ceilings (2x4=8) and three floors have 8-foot ceilings (3x0=0), the height bonus allowed would be 22 feet.

Commentary

A description of the Street and Development Character concept for the Central City has been provided with the Required Building lines map. The application of the street and development character concept in the Central city resulted in some proposed changes to required building lines, active ground floor uses, and ground floor windows requirements and maps.

NEW: 33.510.XXX West Burnside Required Setback

Staff proposes to remove the special building lines provision for West Burnside and make it a required setback standard. Staff also proposes to increase the length of street along West Burnside where it applies between 10th and 23rd Avenues (current provision applies to 21st Avenue).

Question: Do we want to make this a required setback? It can be modified through design review. Because Burnside also has required building lines the provision under 33.510.215, 3a has been edited to align with the setback requirement.

33.510.215 Required Building Lines

C1) The existing required building line provisions are being applied to the commercial/retail core. In the event that an applicant would like to set back from the street lot line then the setback area needs to be an extension of the side walk committed to active uses.

C2) On these streets we want to require landscaping if a setback is provided. This means if they do setback (up to 12 ft for 75% of the lot line) it will be required to be landscaped to L2. (We need more discussions on the level of landscaping to require)

Question: Do we want to do anything else outside of areas defined above? Or let the base zone handle all other areas?

C3) These provisions apply to South Waterfront. No change here but the restructuring of this section has moved some language around.

C4) This is an existing provision which applies to West Burnside. The only proposed language changed is to refer to the "special building line" as a "required setback."

~~E.G.~~ **Bonus height in the South Waterfront Subdistrict.** Within the South Waterfront Subdistrict, buildings receive bonus height if they include bonus floor area or floor area transferred onto the site. Buildings that include any floor area achieved through bonuses or from transfers onto the site earn a height bonus of 125 feet, up to a maximum building height of 250 feet. The additional height may not be applied to any portion of a building within 150 feet of the top of bank. ~~line as shown on Map 510-17, South Waterfront 2002 Top of Bank Line.~~

33.510.XXX West Burnside Required Setback.

- A. Purpose.** A setback along a portion of West Burnside is required where substandard sidewalks exist in order to promote a streetscape that is consistent with the surrounding commercial downtown core and reinforce a pedestrian orientation.
- B. Where this regulation applies.** The regulation of this section applies to site frontages on West Burnside between 10th and 23rd Avenues as shown on Map 510-7.
- C. Setback Standard.** New development must meet a minimum setback of 10 feet from the street lot line.

33.510.215 Required Building Lines

- A. Purpose.** Required building lines are intended to enhance the urban quality of the Central City plan district.
- B. Where the required building lines apply.** Sites subject to this standard are shown on Map 510-67 at the end of this chapter.
- ~~**C. Special building lines.** On West Burnside between 10th and 21st Avenues, the special building line is 10 feet from the street lot line along West Burnside.~~
- CD. Required building line standards.** New development and major remodeling projects along a frontage containing a required building line must comply with the following requirements. Exterior walls of buildings designed to meet the requirements of this section must be at least 15 feet high.
 - 1. ~~Extension of the sidewalk: New development and major remodeling projects along a frontage containing a required buildings line must comply with either Subparagraphs a. or b. below , except where there is also a special building line. Exterior walls of buildings designed to meet the requirements of this paragraph must be at least 15 feet high.~~
 - a. The building must extend to the street lot line along at least 75 percent of the lot line; or
 - b. The building must extend to within 12 feet of the street lot line for 75 percent of the lot line. Except in the South Waterfront Subdistrict, the space between the building and the street lot line must be designed as an extension of the sidewalk and committed to active uses such as sidewalk cafes, vendor's stands, or developed as "stopping places."

Commentary

33.510.220 Ground Floor Windows

Staff has aligned this provision with the Street and Development Character work that our Urban Design staff have been working on through the quadrant plans. Staff also aligned updates with the Mixed Use project that has defined new percentages in the base zones and will also apply to the CX zone. Much of Central City is CX. A new ground floor window map has been created --Map 510-8 to highlight window coverage requirements for core retail/commercial streets. The new requirement will be 60% along the frontages as mapped. All other streets will be subject to the window requirements of the base zone.

2. Landscaped Area: Buildings must comply with either Subparagraphs a. or b.
 - a. The building must extend to the street lot line along at least 75 percent of the lot line; or
 - b. The building must extend to within 12 feet of the street lot line for 75 percent of the lot line. The space between the building and the street lot line must be landscaped to meet the L2 standard.

3. In the South Waterfront Subdistrict, Buildings must comply with either Subparagraphs a. or b.
 - a. The building must extend to the street lot line along at least 75 percent of the lot line; or
 - b. The building must extend to within 12 feet of the street lot line for 75 percent of the lot line. The space between the building and the street lot line may contain landscaping if one of the following is met:
 - (1) The proposed landscaping must meet the L2 standard;
 - (2) The proposed landscaping must meet the landscaping regulations of 33.510.253.E.7. that apply to subarea 3 of the South Waterfront Greenway Area. However, trees are not required; or
 - (3) BES approval. The applicant must submit with the application for a land use review a letter from the Bureau of Environmental Services stating that the landscaping meets the guidelines of the Stormwater Management Manual.

43. Where a site with frontage on a required building line street also has a required setback special building line, new development or additions of floor area to the site must comply with either Subparagraphs a. or b. below. ~~Exterior walls of buildings designed to meet the requirements of this paragraph must be at least 15 feet high.~~
 - a. The building must extend to the required setback special building line along at least 75 percent of the street lot line; or
 - b. The building must extend to within 12 feet of the required setback special building line for 75 percent of the street lot line and the space between the building and the street lot line must be designed as an extension of the sidewalk and committed to active uses such as sidewalk cafes, vendor's stands, or developed as "stopping places."

33.510.220 Ground Floor Windows

- A. Purpose.** In the Central City plan district, blank walls on the ground level of buildings are limited in order to:
- Provide a pleasant, rich, and diverse pedestrian experience by connecting activities occurring within a structure to adjacent sidewalk areas;
 - Encourage continuity of retail and service uses;

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Chapter 33.510, Central City Plan District

Commentary

- Encourage surveillance opportunities by restricting fortress-like facades at street level; and
- Avoid a monotonous pedestrian environment.
- The plan district modifications to the base zone standards for ground floor windows are intended to promote ground floor windows in a larger number of situations than in the base zones and to provide additional flexibility in meeting the standard.

B. Ground Floor Windows:

1. In the RX, CX, and EX zones, all major remodeling projects must also meet the ground floor window standard of the base zone.
2. Sites with frontage along a street shown on Map 510-8 must meet the following ground floor window standards instead of the base zone standards:
 - a. Windows must cover at least 60 percent of the ground level wall area of street-facing facades that are 20 feet or closer to a street lot line adjacent to a street shown on Map 510-8. For the purposes of this standard, ground level wall areas include all exterior wall areas from 2 feet to 10 feet above the finished grade.
 - b. All other ground level street-facing facades that are closer than 20 feet to a street lot line must have windows that cover at least 25 percent of the ground level wall area. The walls of a parking structure are exempt from the 25 percent standard if the façade is set back at least 5 feet and landscaped to the L2 standard;
 - c. Required ground floor window areas must be either windows that allow views into working areas or lobbies, pedestrian entrances, or display windows set into the wall. Windows into storage, parking, garbage and recycling areas, and display cases attached to outside walls, do not qualify. The bottom of the windows of nonresidential spaces must be no more than 4 feet above the finished grade.

~~**B. Major remodeling projects.** In the RX, CX, and EX zones, all major remodeling projects must also meet the ground floor window standard of the base zone, or the option below.~~

C3. Optional artwork. Projects proposing to use artwork as an alternative to the ground floor window requirements may apply for this through the adjustment procedure. Projects may also apply for a modification through design review if they meet the following qualifications. Buildings having more than 50 percent of their ground level space in storage, parking, or loading areas, or in uses which by their nature are not conducive to windows (such as theaters), may be allowed to use the design review process. Artwork and displays relating to activities occurring within the building are encouraged. In these instances, the artwork will be allowed if it is found to be consistent with the purpose for the ground floor window standard.

33.510.221 Required Windows Above the Ground Floor

~~**A. Purpose.** Windows on building facades above the ground floor ensure opportunities for active uses, contribute to the skyline, and add interest to the built environment in the area near the streetcar alignment.~~

~~**B. Where this regulation applies.** The regulation of this section applies to sites near the streetcar alignment shown on Map 510-12.~~

Commentary

33.510.221 Required Windows Above the Ground Floor

This section is being deleted

33.510.223 Exterior Display and Storage

This section is being deleted. The provision as updated in the base zone through the mixed use project is sufficient to address this in the Central City.

33.510.224 Mechanical Equipment along the Portland Streetcar Alignment

This provision dates from when several telecom facilities were being proposed in the then-industrial areas of NW. It was put in place to prevent/limit at-grade diesel generators that were proposed adjacent to sidewalks along the soon-to-open streetcar line. Staff proposes to eliminate this -it is outdated and no longer needed.

1. ~~In the River Pearl District subdistrict, the regulation applies to the portion of a site within 200 feet of a streetcar alignment, if the site is in the EX zone.~~
2. ~~In the West End subdistrict, the regulation applies to the portion of a site within 200 feet of a streetcar alignment.~~
3. ~~In the South Waterfront Subdistrict, the regulation applies to the portion of a site within 200 feet of a streetcar alignment. The regulation also applies to the portion of a site within 200 feet of a proposed streetcar alignment, as shown on the street plan for the area that has been accepted by City Council. The street plan is maintained by the Portland Office of Transportation.~~

G. Standard. Windows must cover at least 15 percent of the area of street-facing facades above the ground level wall areas. This requirement is in addition to any required ground floor windows. Ground level wall areas include all exterior wall areas up to 9 feet above the finished grade.

33.510.223 Exterior Display and Storage

Exterior display of goods and exterior storage are not allowed in the portions of the Downtown, West End, Old Town/Chinatown and Goose Hollow subdistricts shown on Map 510-18. Outdoor seating for restaurants and pedestrian-oriented accessory uses, such as flower, food, or drink stands, are exempt from this requirement.

33.510.224 Mechanical Equipment along the Portland Streetcar Alignment

A. Purpose. These regulations reduce the negative visual and noise impacts of mechanical equipment in areas that allow a mix of residential, commercial, and industrial uses to protect the residential livability, economic vitality, and appearance of these areas. They also minimize the impact of ground-level mechanical equipment along streets and other public areas.

B. Where these regulations apply. The regulations of this section apply to sites shown on Map 510-11.

C. Screening and enclosure.

1. If mechanical equipment is within nine feet of the grade of the adjacent sidewalk, it must be screened or enclosed as follows:
 - a. If the area occupied by the mechanical equipment is less than 500 square feet, the equipment must be completely screened from the sidewalk by walls, fences, or plants;
 - b. If the area occupied by the mechanical equipment is less than 3 percent of the site area, but it is not larger than 1,000 square feet, the equipment must be completely screened from the sidewalk by walls, fences, or plants; or
 - c. All other mechanical equipment must be within a building that is completely enclosed on all sides;
2. If mechanical equipment is more than nine feet above the grade of the adjacent sidewalk, the equipment must be completely screened from the sidewalk by walls, fences, or plants.

Commentary

33.510.225 Ground Floor Active Uses

Active use area has been updated. Residential is being deleted from the purpose statement as an active uses. The goal is to prohibit dwelling units on the ground floor but residential lobbies are ok. A standard is being added that prohibits residential dwelling units on the ground floor within the mapped area. Everywhere outside mapped area reverts to base zone requirements for ground floor residential.

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~~D. **Noise.** The Portland Noise Control Office regulates noise. Noise control regulations can be found in other Titles of the Portland City Code.~~

33.510.225 Ground Floor Active Uses

- A. Purpose.** The ground floor active use standards are intended to reinforce the continuity of pedestrian-active ground-level building uses. The standards are also to help maintain a healthy urban district through the interrelationship of ground-floor building occupancy and street level accessible public uses and activities. Active uses include but are not limited to: lobbies, retail, ~~residential~~, commercial, and office.
- B. Sites and development subject to the ground floor active use standard.** Ground floor active use areas are shown on Map 510-97 at the end of this chapter. ~~On identified sites,~~ On sites fronting these streets, all new development and all major remodeling projects must meet the standard below.
- C. Ground Floor Dwelling units.** Dwelling units are prohibited on the ground floor of buildings.
- DC. Ground floor active use standard.** Buildings must be designed and constructed to accommodate uses such as those listed in Subsection A., above. Areas designed to accommodate these uses may be developed at the time of construction, or may be designed for later conversion to active uses. This standard must be met along at least 50 percent of the ground floor of walls that front onto a sidewalk, plaza, or other public open space.

Areas designed to accommodate active uses must meet the following standards:

1. The distance from the finished floor to the bottom of the structure above must be at least 12 feet. The bottom of the structure above includes supporting beams;
2. The area must be at least 25 feet deep, measured from the street-facing facade;
3. The area may be designed to accommodate a single tenant or multiple tenants. In either case, the area must meet the standards of the Accessibility Chapter of the State of Oregon Structural Specialty Code. This code is administered by BDS; and
4. The street-facing facade must include windows and doors, or be structurally designed so doors and windows can be added when the space is converted to active building uses.

Commentary

D. Parking restriction in the South Waterfront Subdistrict.

This section is proposed to be deleted. This provision means that to create access to off-street parking facility in South Waterfront, an applicant must first seek a modification through the Type III design review process. Although such modifications are typically granted, this process can add time, cost, and unpredictability to the design review process for a programming element that is in support of district goals.

Further, this regulation predates the South Waterfront Plan and actually was designed to address the street and block pattern that had been adopted for the area prior to the creation of the South Waterfront Plan. At that time the area was called the North Macadam subdistrict and the street plan proposed much larger blocks than were eventually adopted for and developed within the South Waterfront subdistrict. As the street plan developed in South Waterfront is more like the rest of the Central City than the street plan adopted for the North Macadam subdistrict, it is recommended that this regulation be deleted.

E. Parking restriction near a streetcar alignment.

Streetcar Alignment Map has been updated and there may be more changes to this section as a result. PBOT is currently discussing this.

D. ~~Parking restriction in the South Waterfront Subdistrict.~~

- ~~1. Purpose. The South Waterfront Subdistrict is intended to be a multi-modal, mixed-use, pedestrian-oriented neighborhood. Developments are anticipated to include larger site areas than in other parts of the Central City where ground floor active uses are applied. These larger sites afford greater flexibility in the planning and design of ground level uses. Also, due to the larger block size, the potential impact of less active uses, such as structured parking, along expanses of street facing facades is greater. Disallowing parking in ground floor active use areas lessens this impact. It also encourages either the provision of active building uses at the time of initial construction or a quicker transition from less active to more active uses. This provision will encourage and maintain a pedestrian-oriented street environment of exceptional quality that is safe, active with uses, and comfortable for residents, visitors, and others moving through the subdistrict.~~
- ~~2. Regulation. In the South Waterfront Subdistrict, vehicle areas are not allowed in the portions of a building that are required to meet the ground floor active building uses standard of Subsection C., above.~~

E. Parking restriction near a streetcar alignment.

1. Purpose. This provision is intended to encourage a transit-supportive, pedestrian-oriented environment adjacent to a streetcar that is safe, active with uses, and comfortable for residents, visitors, and others.
2. Regulation. In the River Pearl SubDistrict and West End subdistricts ~~and in the West End subarea~~, on the portion of a site within 100 feet of a streetcar alignment (Map 510-132), parking is not allowed in the portions of a building that are required to meet the ground floor active use standard of Subsection DC., above.

Commentary

33.510.226 Minimum Active Floor Area

This section is being deleted.

33.510.226 Minimum Active Floor Area

- A. Purpose.** This requirement ensures that development within one block of a streetcar alignment supports City goals to decrease reliance on automobile travel and increase opportunities for housing and employment, by requiring a transit-supportive level of activity and intensity.
- B. Where this regulation applies.** The regulations of this section apply to sites shown on Map 510-7 at the end of this chapter.
- C. Standard.** On the portion of a site within 200 feet of a streetcar alignment, at least 50 percent of floor area in each building must be in one or more of the active uses listed below, where allowed by the base zone. Parking areas, both accessory and commercial, are not included in active floor area. Areas shared among the active uses listed below are included in active floor area. Areas shared by a use not listed below are not included in active floor area. Only those balconies that serve only residential uses and are at least 48 square feet in area and at least 6 feet long and 6 feet wide are included in active floor area. The active uses are:

 - 1. Household or Group Living;
 - 2. Retail Sales And Service;
 - 3. Office;
 - 4. Manufacturing And Production;
 - 5. Industrial Service;
 - 6. Community Service;
 - 7. Schools;
 - 8. Colleges;
 - 9. Medical Centers;
 - 10. Religious Institutions; and
 - 11. Daycare.

Commentary

33.510.230 Required Residential Development Areas

Section C has been revised to remove reference to the floor area bonus of 33.510.210.C.1, which has been deleted. Staff proposes to reduce the number of sites subject to this required residential provision. Map 510-6 Required Residential Development Areas (previously Map 510-5) has been updated to reflect this.

33.510.240 Drive-Through Facilities

Drive-Through Facilities, currently prohibits the creation of drive-through facilities in specific subdistricts of the Central City, while continuing to allow them in the Pearl, Old Town China Town, Lloyd, Lower Albina, and Central Eastside subdistricts. In these latter districts the prohibition extends only to sites within 100 feet of light rail, and 200 feet of street car alignments. The basis for why these provisions apply in some districts but not others that have a similar land use direction and multimodal transit orientation (such as the Pearl and South Waterfront subdistricts) is inconsistent.

This amendment is intended to encourage a high density, pedestrian and transit oriented urban form and discourage lower-density land uses that are dependent upon queuing lanes. It would bring a more consistent approach to how such facilities are addressed Central City-wide. It would encourage redevelopment in places like the Lloyd district where a higher-density, less auto oriented urban form, less traffic congestion, and enhanced public realm is envisioned. The only exception proposed is intended to ensure that existing service stations on the east side the Central City, of which there are a limited number, would be able to continue operating.

Staff recognizes the new regulation would create a number of non-conforming developments, but the desired outcome is to promote a dense, pedestrian- and bike-friendly urban form. In addition this amendment is needed in order for the Central City to qualify as a "Multi-modal, Mixed-Use Area" (MMA) under state regulations related to the Transportation Planning Rule.

Question: The following text was deleted from the standard because it appears to be unnecessary: "This prohibition includes curb cuts and driveways used to approach and leave the drive-through facility, stacking areas for waiting vehicles, and the facility itself, such as a drive-up window or gas pump island." Is there a reason to keep it?

33.510.230 Required Residential Development Areas

- A. Purpose.** The requirements of this section promote new housing in areas suitable and attractive for housing. The requirement is imposed as an alternative to the creation of exclusively residential zoning. This maintains development flexibility while still promoting the housing objectives of the Central City 2035 Plan.
- B. Sites and development subject to the required residential standard.** Sites subject to this standard are shown on Map 510-65 at the end of this chapter. On identified sites, all new development must meet the standards below.
- C. Required residential standard for new development.** For this standard, net site area is the total site area minus land dedicated to public rights-of-way or public open spaces, or land used for a regional public attraction such as a museum or aquarium. New development must include at least 1 dwelling unit per 2,900 square feet of net site area (15 units per acre). ~~The floor area of the required housing units qualifies for the floor area bonus option stated in 33.510.210.C.1~~
- D. Timing and location of the housing.** Required housing must be located on the site and if developed as part of a mixed-use project must receive an occupancy permit in advance of or at the same time as an occupancy permit for nonresidential portions of the project. Exceptions to this may be approved as part of a Central City master plan. See 33.510.255, Central City Master Plans.

33.510.240 Drive-Through Facilities

~~Drive-through facilities are prohibited in the Downtown, Goose Hollow, and South Waterfront Subdistricts. In the rest of the plan district, drive-through facilities are prohibited on the portion of a site within 100 feet of a light rail alignment. In the River District subdistrict, drive-through facilities are prohibited on the portion of a site within 200 feet of a streetcar alignment. This prohibition includes curb cuts and driveways used to approach and leave the drive-through facility, stacking areas for waiting vehicles, and the facility itself, such as a drive-up window or gas pump island.~~

A. Standard. Drive-through facilities are prohibited.

33.510.242 Demolitions

- A. Landscaping.** In R, C, and E zones, sites must be landscaped within 6 months of the demolition of buildings unless there is an approved development for the site. Approved development means a project approved through design review in design zones, and issuance of a building permit outside of design zones. The landscaping must meet at least the L1 standard of Chapter 33.248, Landscaping and Screening, except that no shrubs or trees are required.

Commentary

33.510.242 Demolitions:

B(1) AND B(2): The references to the Core Area on existing Map 510-10 (previously Map 510-8) is being updated along with the Parking and Access section. An early draft of the new Map 510-10 Core and Parking Sectors is included.

Question: Is subsection B really needed? It seems likely that much more than the square footage of the ground floor of a demolished building will be replaced by any subsequent development on the site. What is the purpose of distinguishing the core area vs. the rest of the plan district?

Subsection C has been deleted because section 33.510.118 is proposed for deletion.

33.510.XXX Eco Roofs. The bonus option for Eco roofs is proposed to be eliminated and staff is proposing that eco roofs become a requirement for some building types in the Central City. BES and BPS staff have worked together to develop the draft language.

Question: Should BES provide a letter certifying the ecoroof meets the requirement or will BES signing off at the time of permit be sufficient?

33.510.XXX Low-Carbon Buildings. The US Green Building Council's Leadership in Energy and Environmental Design (LEED) certification program verifies and recognizes buildings designed and constructed to save money and natural resources, protect the health of the occupants and contribute to the long-term viability of the community. To develop a full program that addresses time of certification vs. development review, certification tracking and enforcement, the following steps would need to occur:

- 1) Determine where this regulation should be adopted into City Code so there can be administrative rules to clarify the requirements and enforcement process
- 2) Determine how to review for compliance during development review :
Considerations: Could BDS issue a temporary occupancy permit and give the applicant a limited amount of time to get certified? Once they are certified, then they get the permanent occupancy permit. We'd have to figure out how long the temporary would be valid, and what happens if they don't get certified.
- 3) Develop a program to track development of buildings and certification with US Green Building Council
 - a. Determine appropriate enforcement if LEED Gold is not achieved- Corrections or penalties?
 - b. Other issues that still need to be considered: How to address affordable housing projects?

- B. Replacement of demolished ground floor area.** In R, C, and E zones, if a building is demolished after September 1, 1994, the square footage of the ground floor of the demolished building must be replaced as follows. Adjustments to the requirement of this subsection are prohibited.
1. In the Core Area, as shown on Map 510-810, the square footage must be replaced on the same block as the demolished building. This replacement must occur before or at the same time as any other development or redevelopment on the block, other than landscaping.
 2. Outside the Core Area, as shown on Map 510-810, the square footage must be replaced on the same site as the demolished building. This replacement must occur before or at the same time as any other development or redevelopment on the site, other than landscaping.
- ~~**C. Demolition on Type C sites.** If an applicant requests a demolition permit for a Type C site as shown on Map 510-14, and proposes development that requires compliance with Subsections 33.510.118.I. or J., a conditional use, or a Central City Parking Review (CCPR), the application for a demolition permit must include documentation that the requirements of those subsections are met, or that the required land use review has been approved.~~

33.510.XXX Eco Roofs

- A. Purpose.** The Central City is the most densely developed area of Portland. Ecoroofs provide multiple benefits in the built environment including managing stormwater, reducing the heat island effect, providing habitat for birds and pollinators and providing open space.
- B. Standard.** In the CX, EX, RX, IG1 base zones new buildings at least 20,000 total square feet in size must install an ecoroofs that covers a minimum of 60 percent of the roof area. Roof area does not include areas covered by solar panels, skylights or mechanical equipment, or areas used for fires and access routes. The ecoroof must be approved by the Bureau of Environmental Services.

33.510.XXX Low-Carbon Buildings

- A. Purpose.** This requirement ensures that new buildings are designed and constructed to meet LEED gold level standard.
- B. Standard.** In the Central City Plan District, all new buildings at least 50,000 square feet in size will register at the gold level for the US Green Building Council's Leadership in Energy and Environmental Design (LEED) standards. At the time of building permit the applicant must submit a letter signed by the owner that they have registered and are pursuing LEED gold level standard.

Commentary

33.510.XXX Locker Room and Bicycle Facilities. The current development bonus for creating bike locker facilities is proposed to be eliminated. To ensure that the benefit of such facilities are provided to Central City employees, students and faculty of universities and colleges in the city center, BPS proposes that such facilities be required for development that is 40,000 sq. ft. or larger. This is equal to 1:1 FAR on a typical city block. The provisions proposed are an amended version of those that currently apply only to the South Waterfront subdistrict. These existing provisions have been modified as follows:

- Reduce the amount of floor area required to trigger these provisions from 100,000 sq. ft. to 40,000 sq. ft.
- Provide exemption for new development on sites that contain existing facilities with enough capacity to serve new development as well as existing.
- Require that at least one locker room be provided for women and one for men.

D: Staff is researching numerical formulas to determine the number of shower stalls that should be included. One used in Palo Alto for government buildings uses gross square feet: 10,000-19,000 SF = 1 stall; 20,000-49,000 sf = 2 stalls; 50,000 and up = 4 stalls.

- LEED requirements use a formula based on number of occupants:
- $\leq 100 = 1$ stall
- $> 100 = 1$ stall + $(\text{occupants}-100)/150$

Electric Car Charging Facilities.

During the West Quadrant planning process creating a provision was discussed to install necessary wiring in large buildings (residential and non-residential) so that charging facilities can be easily added in the future. This work directly links to the Climate Action Plan policy:

Expand Electric Car Charging Stations - Support electric car charging stations in publicly accessible locations. Work with developers, building owners and managers and parking managers to add charging stations and consider electric-vehicle-ready guidelines and codes.

Staff is researching what other cities are doing and drafting a code provision. This will be drafted for review as part of Part 2 of this review process.

33.510.251 Additional Standards in the North Pearl Subarea

Staff recommends removing the Open Area Requirement provision. These provisions were adopted in 1985 as part of the North West Triangle plan a decade before the River District Plan and a few years before the 1988 Central City Plan. At the time,

33.510.XXX Locker Room and Bicycle Facilities

- A. Purpose.** Locker room and bicycle facilities encourage non-automotive commuting by supporting those who use active transportation to go to and from work. These facilities reduce vehicle miles traveled, encourage the use of transit and support other human health, sustainability, and environmental goals.
- B. When these regulations apply.** The regulations of this subsection apply to proposals that will add 40,000 or more square feet of nonresidential floor area to a site.
- C. Exemption.** Development on a site that already contains locker room and bicycle facilities is exempt from providing additional facilities if the existing facilities meet the standards of Sections D and E.
- D. Locker room standard.** A locker room facility serving men and a locker room facility serving women must be included in the proposal. The facility must include showers, a dressing area, and lockers. The facility must be available for use by all tenants of the site; and
- E. Bicycle parking.** At least 110 percent of the required long-term bicycle parking for the site must be included in the proposal. The bicycle parking must meet the standards of 33.266.220.B, Long-Term Bicycle Parking.

33.510.251 Additional Standards in the North Pearl Subarea. Sites in the North Pearl Subarea south of the Fremont Bridge must meet the following standards:

- A. Special building height.** A special building height corridor shown on Map 510-1819 is designated along NW 13th Avenue. In this corridor the portion of a building that is within 20 feet of the property line along NW 13th Avenue may be no more than 75 feet in height. Adjustments and modifications to this requirement are prohibited.
- B. Open area requirement.**

 - ~~1. Purpose. The open area requirement promotes adequate amounts of light and air, year-round opportunities for outdoor active and passive recreation, visual relief from the built environment, and facilitates circulation for pedestrians to and throughout the North Pearl Subarea. The open area requirement is intended to produce open areas at a scale comparable to what large sites would have if divided by the 200-foot street grid pattern.~~
 - ~~2. The open area requirement.~~

 - ~~a. On sites over 40,000 square feet in the North Pearl Subarea, a minimum of 30 percent of the area over 40,000 square feet must be devoted to open area. The boundaries of the subarea are shown on Map 510-1 at the end of this chapter.~~
 - ~~b. Sites where at least one-half the site area is in industrial use are exempt from the open area requirement. However, changes resulting in more than one-half of the site area being in non-industrial uses require compliance with the open area requirement.~~

Commentary

large swaths of this area were old rail yards or vacant underutilized properties. The street grid that created the 200' by 200' block structure that the area enjoys today has not been adopted nor developed. Plans at the time were considering super blocks and office campus development rather than a high density mixed use environment.

When the North Pearl Plan was adopted in 2008, these provisions were carried forward and prior references to the North West Triangle Plan were changed to North Pearl. The provisions were carried forward as numerous large parcels existed North of NW Northrup Street. Since that time most of these parcels have been developed as has the remaining right-of-way serving this area. These provisions are no longer necessary. However, as the waterfront areas of the North Pearl remain much the same as they did when these provisions were created, the standards applicable to those larger parcels should remain in place to ensure development on these large sites maintains vertical as well as horizontal, physical and visual access to the Willamette River.

- c. ~~Open areas may include parks, plazas, covered or uncovered walkways, public fountains, and landscaped features or areas. Open areas do not include areas used for parking or loading, or landscaping within parking areas.~~
- d. ~~Developments which utilize the Central City master plan option may consolidate the required open area of this section and locate it within the boundary of the master plan.~~

~~C. Required open area development standards.~~

- 1. ~~At least 50 percent of the open area must be in the form of parks or plazas, and at least 25 percent of the open area must be devoted to one plaza or space.~~
- 2. ~~Walkways may not constitute more than 25 percent of the required open area.~~
- 3. ~~Shadow standard. Parks and plazas must be sited so that shadows from buildings cover no more than 50 percent of a park or plaza at noon and 75 percent at 3:00 PM on April 21 of any year. Trees are not to be included in consideration of the limitation on shadows.~~
- 4. ~~Tree standard. A minimum of one tree per 1,000 square feet of plaza or park area is required.~~
- 5. ~~Border standard. Peripheral lines of trees, low walls, planters, or other similar treatment along the edges are required to ensure that parks and plazas have clearly defined borders.~~
- 6. ~~Linkages. Open areas and walkways must provide safe, attractive, and convenient linkages to adjacent development and sidewalks.~~
- 7. ~~Design quality. Open areas must be designed and constructed at a high level of quality consistent with an attractive, pleasant, and convenient environment for pedestrians.~~

~~DB. North Pearl Subarea waterfront development.~~

- 1. Purpose. These standards are intended to assure both frequent views of the river and physical connections to the river and its activities.
- 2. Where these standards apply. This section applies only to lands between NW Front Avenue and the Willamette River within the North Pearl Subarea.
- 3. Development standards.
 - a. View corridors. At least 25 percent of the width of the site (as measured along NW Naito Parkway) must be maintained as a view corridor or corridors. Buildings and covered structures are not allowed in the view corridor.
 - b. Setbacks for all development from the Willamette River. The minimum setback for all development from the Willamette River is regulated by the River Greenway Overlay zones; see Chapter 33.440475. In addition, buildings or portions of buildings over 35 feet in height must be set back from the Greenway setback line 1 foot for every 1 foot of height above 35 feet.
 - c. Maximum building dimension. The maximum building dimension is 200 feet. This standard applies to both building length and depth.

Commentary

- d. Public access. As part of each development, public access for pedestrians must be available and clearly posted between NW Naito Parkway and the Greenway trail.

33.510.252 Additional Standards in the South Waterfront Subdistrict

Sites in the South Waterfront Subdistrict must meet the following standards:

A. Special building height corridors and tower orientation.

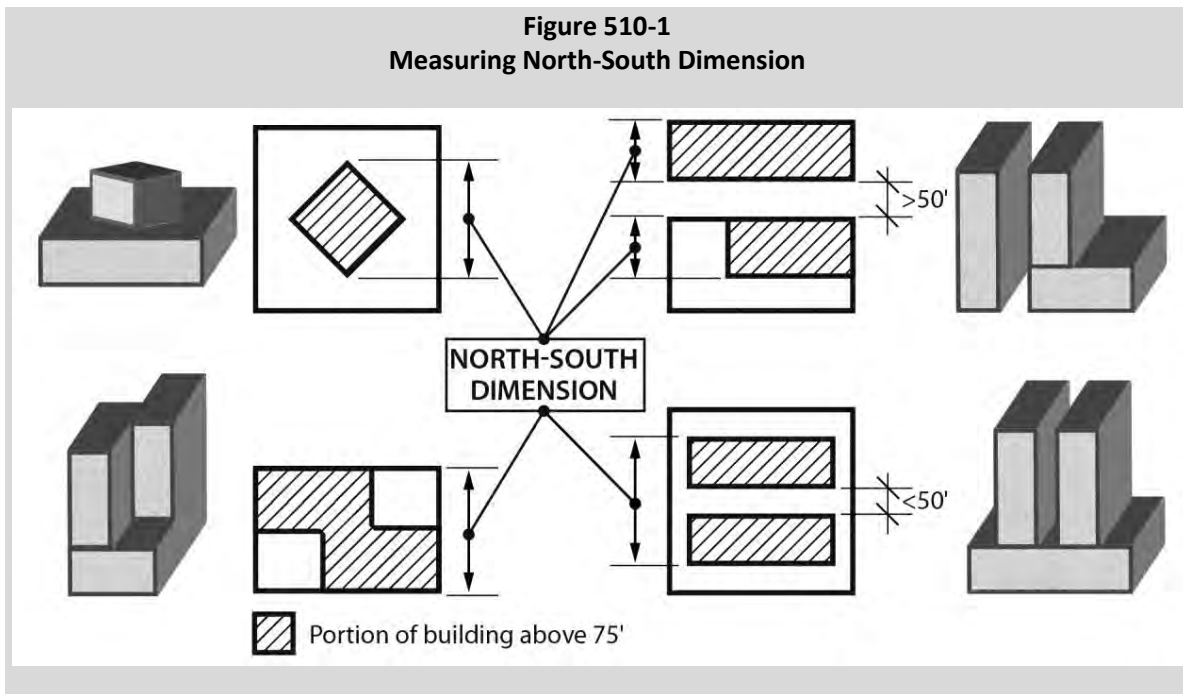
1. Purpose. Special building heights along designated east-west corridors and tower orientation standards provide visual access to the Greenway from points west of the district, provide visual access to the Tualatin Hills from points east of the district, provide access to sunlight along designated streets, and encourage an urban form that is visually permeable and varied.
2. Special building heights. The portion of a building that is within 50 feet of the centerline of a street or accessway designated as a special building height corridor on Map 510-15 may be no more than 50 feet in height.
3. Maximum north-south dimension. The north-south dimension is measured as specified in 3.e., below. See Figure 510-1. Adjustments to this paragraph are prohibited; however, modifications to the standards of this paragraph may be requested through design review. In reviewing such a request, the review body will consider the results of the South Waterfront Public Views and Visual Permeability Assessment for the proposal. The north-south dimensions of buildings are limited as follows:
 - a. Less than 75 feet in height. For the portion of a building less than 75 feet in height, there is no limit on the north-south dimension, and no required space between buildings or portions of buildings;
 - b. 75 feet in height and above. The portion of a building that is at least 75 feet in height may have a north-south dimension up to 125 feet in width;
 - c. Where there is more than one building on a site there must be at least 50 feet between the portions of the buildings that are at least 75 feet in height. If there is less than 50 feet between these portions of the buildings, the north-south dimension is the total of the north-south dimension of each building and the north-south dimension of the space between them. The total may be up to 125 feet in width;
 - d. Where a building has more than one element that is at least 75 feet in height, the two elements are measured and regulated as two separate buildings;
 - e. Measurements for this paragraph. The measurements for the regulations of this paragraph are as follows. See Figure 510-1:
 - (1) The north-south dimension of a building is measured as follows:
 - From the northernmost point of the portion of a building that is at least 75 feet in height, a line is drawn running due east-west;

Commentary

- From the southernmost point of the portion of a building that is at least 75 feet in height, a line is drawn running due east-west;
- A line drawn at right angles between the two east-west lines is the north-south dimension;

(2) The space between buildings on a site is measured using the east-west lines created under A.3.e.(1). A line drawn at right angles between the northern east-west line of one building and the southern east-west line of the other is the distance between the buildings.

**Figure 510-1
Measuring North-South Dimension**



B. Accessways.

1. Purpose. Accessways provide physical access and connections to the Greenway for neighbors, visitors, and residents of South Waterfront who might otherwise be cut off from the Willamette River and the Greenway trail. Accessways are generally extensions of existing and planned east-west public rights-of-way, and may or may not provide vehicle access. Accessways provide safe and convenient bicycle and pedestrian connections to and from the Greenway trail. Accessways contribute to stormwater management in the subdistrict. They also provide a visual connection to the South Waterfront Greenway Area and provide a transition from the natural emphasis of the South Waterfront Greenway Area to the urban emphasis of the rest of the district.
2. Where these regulations apply. These regulations apply to development and landscaping on sites with frontage on accessways that are east of River Parkway;
3. Setback. If the accessway is 60 feet wide or less, buildings must be set back at least 30 feet from the centerline of the accessway. If the accessway is wider than 60 feet, the

Commentary

33.510.252 Additional Standards in the South Waterfront Subdistrict

D. Required Ground Floor Retail Sales and Service Uses in the South Waterfront Subdistrict

This section is proposed for deletion, as the code amendments implementing the Street and Development character concept for the Central City are meeting the intent of this section (see 33.510.215, 33.510.220, and 33.510.225).

building must meet the building line requirements of Section 33.510.215 on the accessway frontage;

4. Landscaping. The area between the building and the accessway must meet the landscaping standards of 33.510.253.E.7. that apply to subarea 3 of the South Waterfront Greenway Area. However, along accessways that are designated as special building height corridors on Map 510-15, trees are not required.

C. Locker rooms and additional bicycle parking.

1. Purpose. These standards support the transportation strategy of the South Waterfront Subdistrict by requiring amenities that support the use of alternative modes of transportation, including bicycling and walking;
2. When these regulations apply. The regulations of this subsection apply to proposals that will add at least 100,000 square feet of nonresidential floor area to a site;
3. Locker rooms. At least one locker room facility must be included in the proposal. The facility must include showers, a dressing area, and lockers. The facility must be available for use by all tenants of the building; and
4. Bicycle parking. At least 110 percent of the required long-term bicycle parking for the site must be included in the proposal. The bicycle parking must meet the standards of 33.266.220.B., Long-Term Bicycle Parking.

~~D. Required Ground Floor Retail Sales and Service Uses in the South Waterfront Subdistrict~~

- ~~1. Purpose. This requirement ensures that Retail Sales And Service uses are developed at key locations throughout South Waterfront; these uses activate and enrich the public realm. The requirement specifically focuses on Retail Sales And Service uses because they generate more activity and interaction within the public realm than do other active ground floor uses, and help to establish and reinforce a lively and vibrant public realm at key locations throughout the district.~~
- ~~2. Where this regulation applies. This regulation applies to the areas shown on Map 510.21 at the end of this chapter. New development or major remodeling on the portion of a site within the areas shown on Map 510-21 must meet the standard of this subsection.~~
- ~~3. Standards. Buildings must be designed and constructed to accommodate Retail Sales And Service uses. This standard must be met along the ground floor walls that front onto a sidewalk, plaza, greenway, or other public open space. Ground level wall areas include the exterior wall areas up to 9 feet above the finished grade.
 - ~~a. Areas where the corner is shown on Map 510.21. Where Map 510-21 shows that the standard must be met on a corner, the standard must be met along the length of walls extending in both directions for 25 feet. The corner may be the intersection of two streets, or the intersection of a street and the greenway,~~
 - ~~b. Areas where a block face is shown on Map 510-21. Where Map 510-21 shows that the standard must be met on a block face, the standard must be met for at least 50 percent of the length of the block face.~~~~

Commentary

- c. ~~Areas designed to accommodate Retail Sales And Service uses must meet the following standards:~~
- ~~(1) The distance from the finished floor to the bottom of the structure above must be at least 12 feet. The bottom of the structure above includes supporting beams;~~
 - ~~(2) The area must be at least 25 feet deep, measured from the street-facing facade;~~
 - ~~(3) The area may be designed to accommodate a single tenant or multiple tenants. In either case, the area must meet the standard of the Accessibility Chapter of the State of Oregon Structural Specialty Code. This code is administered by BDS; and~~
4. ~~The street-facing facade must include windows and doors.~~

Commentary

33.510.XXX Additional Standards in the Central Eastside Subdistrict

A. Disclosure Statement. Staff proposes a new code provision for the Central Eastside. This provision and the associated Central Eastside Industrial Disclosure Statement seeks to make all property buyers/owners and prospective tenants aware of the industrial character of the Central Eastside subarea. The provision requires new developments for all uses, except those in the industrial use category, to record a covenant and provide it to all tenants. The statement will indicate that the use is located in an industrial area where impacts from industrial uses are present, such as noise, vibrations, fumes, odors, glare, traffic, and freight operations. Industrial uses will not be expected to mitigate impacts to adjacent uses within the Central Eastside beyond what is required by law.

B. Noise Insulation Requirement. The Southeast Quadrant Plan identified the need to apply new standards to EX properties adjacent to IG1 zoned sites to reduce the potential for conflicts between uses. This new code section provides sound insulation standards for EX projects with the goal of reducing the impact of noise from industrial operations on residents in the EX zone within the subdistrict.

Question: Should we create a new map to show the area that must meet this requirement or can we describe the sites fronting on streets in the EX zone that are adjacent to the IG1 zone? It is the transition area between these two zones that we want to target for this provision.

33.510.XXX Additional Standards in the Central Eastside Subdistrict

The following additional standards apply in the Central Eastside Subdistrict.

A. Industrial Impacts Disclosure Statement.

1. Purpose. This requirement is intended to make property owners and tenants of non-industrial uses aware of the potential impacts of industrial uses in the Central Eastside Subdistrict, such as noise, vibrations, fumes, odors, glare, traffic and freight movement.
2. Standard. Before a building permit is issued, the owner must record a disclosure statement with the County, and provide a copy of the signed statement to the Bureau of Development Services (BDS). The property owner must also provide a copy of the disclosure statement to every tenant or buyer, and post the disclosure statement on the premises in a location that is accessible to all tenants. The statement is available in the Development Services Center.
3. Exemption. Uses in the Industrial categories are exempt from the disclosure statement requirement.

B. Noise Insulation Standard.

1. Purpose. This standard is intended to protect residential uses in the vicinity of industrial area from potential noise impacts generated by industrial operations.
2. Where this standard applies. This standard applies to sites in the EX zone that have a property line adjacent to, or across the street from, an IG1 zone.
3. Noise insulation standard. All new dwelling units located within X feet of a property line adjacent to, or across the street from, an IG1 zone must be constructed with sound insulation or other means to achieve a day/night average noise level of 45 dBA. An engineer registered in Oregon who is knowledgeable in acoustical engineering must certify that the building plans comply with the standard for noise insulation prior to issuance of a building permit. Garages or other similar attached accessory structures that do not include living space are exempt for this standard.

Commentary

33.510.253 *Greenway Overlay Zone in South Waterfront Subdistrict*

Moved to 33.475.230

33.510.253 Greenway Overlay Zone in South Waterfront Subdistrict

A. Purpose. The regulations of this section:

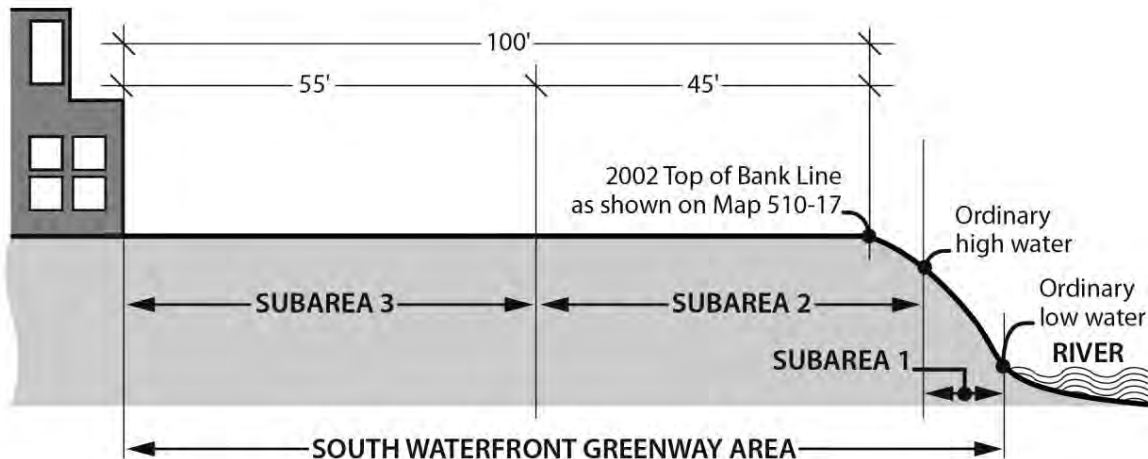
1. Protect, conserve, enhance, and maintain the natural, scenic, historical, economic, and recreational qualities of lands along the Willamette River within the South Waterfront Subdistrict of the Central City plan district;
2. Increase public access to and along the Willamette River for the purpose of increasing recreational and transportation opportunities;
3. Support the development of the South Waterfront Subdistrict as a vibrant mixed-use neighborhood within the Central City plan district;
4. Ensure a clean and healthy river for fish, wildlife, and people;
5. Embrace the river as Portland's front yard;
6. Enhance stormwater management in the South Waterfront Subdistrict;
7. Respond to the federal Endangered Species Act and Clean Water Act; and
8. Implement the Willamette Greenway Plan and State law.

B. Relationship to other regulations. Development within the Greenway Overlay Zone in the South Waterfront Subdistrict is also subject to other regulations of the Portland City Code. Development within the Greenway Overlay Zone may also be subject to the regulations and review procedures of state and federal agencies including the Oregon division of State Lands, the National Marine fisheries Service, the US Army Corps of Engineers, and the Oregon Department of Fish and Wildlife.

C. Where these regulations apply. The regulations of this section apply to sites within the South Waterfront Subdistrict where any portion of the site is in the Greenway Overlay Zone, shown on the Official Zoning Map.

Commentary

**Figure 510-2
South Waterfront Greenway Area and Subareas**



Greenway Area = from ordinary low water to 100' from 2002 Top of Bank Line as shown on Map 510-17
 Subarea 1 = from ordinary low water to ordinary high water
 Subarea 2 = from ordinary high water to 45' in from 2002 Top of Bank Line as shown on Map 510-17
 Subarea 3 = from 45' in from top of bank to 100' in from 2002 Top of Bank Line as shown on Map 510-17

D. Required South Waterfront Greenway improvements. Adjustments and modifications to this subsection are prohibited.

1. Required landscaping.

a. When development on the site, or alterations to structures, the site, or rights-of-way are made, and BDS determines that the value of the proposed alterations on the site is more than \$153,450, the site must be brought into conformance with the landscape requirements of Paragraph E.5.f. that apply to subareas 2 and 3 of the South Waterfront Greenway Area. The value of the alterations is based on the entire project, not individual building permits. It is the responsibility of the applicant to document the value of the required improvements.

The following alterations and improvements do not count toward the dollar threshold of this subsection:

- (1) Alterations required by approved fire/life safety agreements;
- (2) Alterations related to the removal of existing architectural barriers, as required by the Americans with Disabilities Act, or as specified in Section 1113 of the Oregon Structural Specialty Code;
- (3) Alterations required by Chapter 24.85, Interim Seismic Design Requirements for Existing Buildings;

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- (4) ~~Improvements to on-site stormwater management facilities in conformance with Chapter 17.38, Drainage and Water Quality, and the Stormwater Management Manual; and~~
 - (5) ~~Improvements made to sites in order to comply with Chapter 21.35, Wellfield Protection Program, requirements.~~
- b. ~~Caps on the cost of required landscaping. Required landscaping costing more than 10 percent of the value of the proposed alterations does not have to be installed. When all required landscaping is not being installed, the priority for which landscaping is to be installed is:~~
- (1) ~~Trees in subarea 2;~~
 - (2) ~~Shrubs in subarea 2;~~
 - (3) ~~Ground cover in subarea 2;~~
 - (4) ~~Trees in subarea 3;~~
 - (5) ~~Shrubs in subarea 3;~~
 - (6) ~~Ground cover in subarea 3; and~~
 - (7) ~~Other required landscaping;~~
- c. ~~Supplemental application requirement. Where landscaping is required by this paragraph, the applicant must submit a landscape plan to BDS that shows that the landscaping will grow to meet the landscape standards of Subparagraph E.5.f, below, within five years. The landscape plan must be certified by a licensed landscape architect, or by a qualified restoration specialist as part of a formal City revegetation project under authority of Portland Parks and Recreation or the Bureau of Environmental Services.~~
2. ~~Bank improvements. In subarea 1, when there is any regarding, bank stabilization, or other activities affecting the contours and composition of soil, the requirements of Paragraph E.5.f for subarea 1 must be met.~~
3. ~~Trail and pedestrian connections and public viewpoints. When development on a site, or alterations to structures, the site, or rights-of-way are made which add more than 50,000 square feet of floor area to the site, the applicant must provide public access easements that will accommodate a trail, pedestrian connections that meet the standards of Paragraph e.5.d., Trail and pedestrian connections; and Paragraph E.5.e., Public viewpoints. The square footage added to the site is calculated based on the total amount added, regardless of the amount demolished;~~
4. ~~Timing of improvements. The applicant may choose one of the following options for making the improvements required by this subsection:~~
- a. ~~Option 1. Under Option 1, required improvements must be made as part of the development or alteration that triggers the required improvements;~~

Commentary

- b. ~~Option 2. Under Option 2, the required improvements may be deferred if the following are met:

 - (1) ~~The applicant must provide the BDS with a performance guarantee for the improvements. See 33.700.050, Performance guarantees; and~~
 - (2) ~~The required improvements must be constructed or installed within 4 years of issuance of the Certificate of Occupancy or within the timeline approved through a South Waterfront Greenway Review. See Chapter 33.851.~~~~
5. ~~Landscaping monitoring and reporting. Monitoring required landscaping is the ongoing responsibility of the property owners. If landscaping is required by the subsection, the owner must submit a report to BDS documenting that the landscape standards of Subparagraph E.5.f., below, have been met on the site. The report must be submitted within 1 year of the installation date, or within the timeline approved through a South Waterfront Greenway Review. See Chapter 33.851.~~

E. ~~Development standards.~~ ~~Generally, proposals are subject to design review. In most instances, applicants may choose between meeting development standards or going through South Waterfront greenway review. In some instances South Waterfront greenway review is required:~~

- 1. ~~Where these regulations apply. The regulations of this subsection apply in the South Waterfront Greenway Area as shown on Figure 510-2. The regulations apply to development and alterations to structures, sites, and rights-of-way.~~
- 2. ~~Design review. New development, and changes to the land or structures including excavations and fills, bridges, and docks are subject to design review, unless exempted by Paragraph E.4.~~
- 3. ~~South Waterfront greenway review. South Waterfront greenway review is required for the following:

 - a. ~~New development or exterior alterations that do not meet the standards of Paragraph E.5 and are not exempted by Paragraph E.4;~~
 - b. ~~New development, or changes to the land or structures, riverward of top of bank, including excavations and fills, bridges, and docks, unless exempted by Paragraph E.4.~~~~
- 4. ~~Exempt from design review and South Waterfront greenway review. The following are exempt from design review and South Waterfront greenway review;

 - a. ~~Changes to the interior of a building where there are not exterior alterations;~~
 - b. ~~Normal maintenance and repair;~~
 - c. ~~Excavations and fills of less than 50 cubic yards;~~
 - d. ~~Dredging, channel maintenance, and the removal of gravel from the river; and~~
 - e. ~~Emergency procedures necessary for safety or the protection of property.~~
 - f. ~~The placement of up to four single piles, or two multiple pile dolphins for each 100 feet of shoreline for an existing river dependent or river-related use.~~~~

Commentary

5. ~~Development standards. The following development standards must be met unless the applicant chooses South Waterfront greenway review. Adjustments and modifications to these standards are prohibited.~~
- a. ~~Non-landscaped area. Limiting the percentage of non-landscaped area allowed in the South Waterfront Greenway Area ensures that the area will be configured to accommodate a minimum percentage of living plant cover. Non-landscaped area includes all aboveground structures and paving materials, including permeable paving materials.~~
- (1) ~~Subareas 1 and 2. Up to 20 percent of the portion of the site in subareas 1 and 2 may be covered by non-landscaped area; however, paved surfaces that are required under the provisions of Paragraph E.5.d., Public viewpoints, are exempt from this limitation. Non-landscaped area may be no closer than 10 feet of the top of bank line as shown on Map 510-17, South Waterfront 2002 Top of Bank Line;~~
- (2) ~~Subarea 3. Up to 20 percent of the portion of the site in subarea 3 may be covered by non-landscaped area. However, required trail and pedestrian connection improvements are exempt from this limitation.~~
- b. ~~Buildings. Buildings are allowed within the South Waterfront Greenway Area if they meet E.5.b.(1) and (2) and either E.5.b.(3) or (4). Other buildings or portions of buildings are not allowed within the South Waterfront Greenway Area.~~
- (1) ~~The site meets the non-landscaped area requirements under E.5.a., above; and~~
- (2) ~~The building does not obstruct required pedestrian connections and trails; and~~
- (3) ~~The building is river dependent or river related; or~~
- (4) ~~All of the floor area of the building is in Retail Sales And Service uses and the following are met:~~
- ~~• The building has less than 1,000 square feet of floor area;~~
 - ~~• The building is entirely within subarea 3; and~~
 - ~~• The building is located landward of the South Waterfront trail.~~
- c. ~~Fences and walls. Fences and walls are allowed in subarea 3 of the South Waterfront Greenway Area if they are no more than 3 feet in height and do not obstruct the required pedestrian connections and trails. Fences and walls are not allowed in subareas 1 and 2 of the South Waterfront Greenway Area.~~
- d. ~~Trails and pedestrian connections.~~
- (1) ~~Purpose. Public trails provide public access to and along both sides of the Willamette River. Public trails are one of the tools used to comply with the public access requirements of the Comprehensive Plan and the Willamette Greenway Plan. Pedestrian connections ensure that~~

Commentary



there is adequate, safe, and direct pedestrian access from the adjacent development and from the district as a whole to the trails.

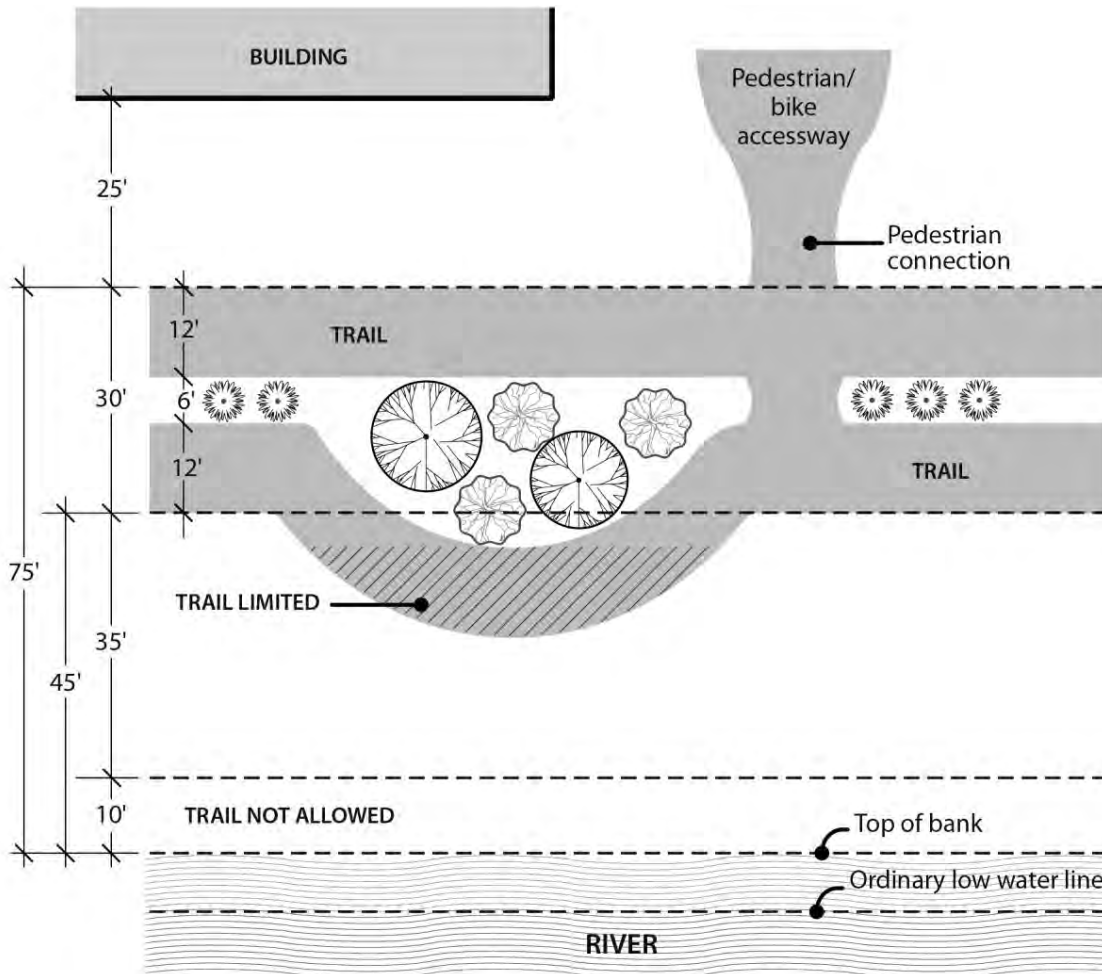
(2) ~~Public recreational trails. Public recreational trails must meet the following standards. When required by Subsection D., sites with a public recreational trail symbol shown on the Official Zoning Maps must provide easements that would accommodate construction, maintenance, and public use of a trail that meets the following standards. See Figure 510-3.~~

- ~~• Location. The trail must be located in the South Waterfront Greenway Area shown on Figure 510-2. All portions of the trail must be at least 10 feet and no more than 75 feet from the top of bank line as shown on Map 510-17, South Waterfront 2002 Top of Bank Line; however, any portion of the trail that is within 45 feet of the top of bank line as shown on Map 510-17, South Waterfront 2002 Top of Bank Line, is subject to the maximum non-landscaped area limitations of Subparagraph E.5.a.;~~
- ~~• Width. The trail must consist of two paths, each at least 12 feet in width;~~
- ~~• Landscaped median. The two paths must be separated by a landscaped median at least 6 feet wide. Landscaping within this median must meet the requirements of Paragraph E.7. The landscaping may be interrupted by pedestrian connections between the two paths;~~
- ~~• Use. The path closest to the river must be designated for pedestrians only. The path farthest from the river must be designated for bicycles and other non-motorized transportation modes;~~
- ~~• Connectivity.
 - ~~— The trail or trail easement must connect to the existing trails or trail easements on adjacent sites; and~~
 - ~~— The trail or trail easement must connect to the required pedestrian circulation system on the site.~~~~
- ~~• Additional standards. In addition to the standards of this subparagraph, the standards of Chapter 33.272, Public Recreational Trails, must also be met.~~

(3) ~~Pedestrian connections. When a public recreational trail or trail easement is required, at least one pedestrian connection must be provided between the trail easement and any accessway that terminates on the site.~~

Commentary

**Figure 510-3
South Waterfront Greenway Trail**



e. Public viewpoints.

- (1) Purpose. Public viewpoints provide stopping places and clearings along the South Waterfront Greenway trail and the Willamette River where the public can view and enjoy the natural and scenic qualities of the Greenway and the river. Public viewpoints are one of the tools used to comply with the public access requirements of the Comprehensive Plan and the Willamette Greenway Plan.
- (2) Viewpoint requirements. A public viewpoint must be provided on sites designated with a viewpoint symbol on **Map 510-15**. There are two types of viewpoints within the district:
 - Minor viewpoint. Minor viewpoints are locations along the South Waterfront Greenway trail where views of the Willamette River are provided through the use of special landscaping standards. The

Commentary

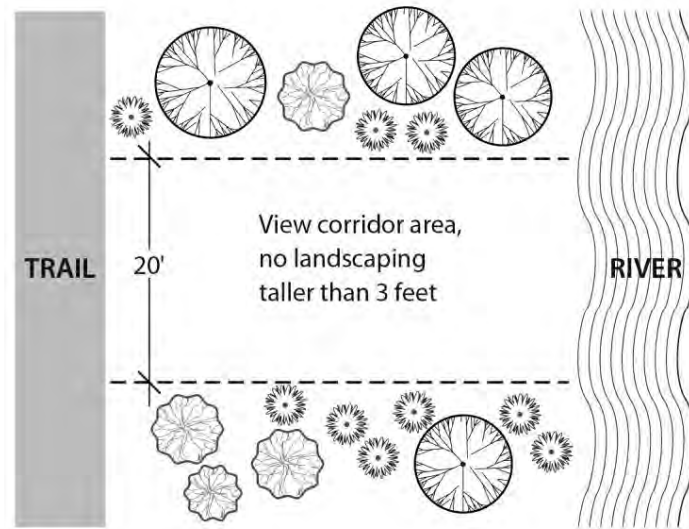
- standards discourage plantings that will grow to block views of the river. Sites with a minor viewpoint designation shown on **Map 510-15** must meet the following standards:
 - A view corridor at least 20 feet wide must be provided and maintained between the trail and the river. See Figure 510-4;
 - If an accessway or street that is mapped as a special building height corridor on Map 510-15 terminates on the site, the view corridor must continue the projected centerline of the accessway or street;
 - Within the view corridor, landscaping must be no higher than 3 feet in height at maturity. The site must continue to meet the landscaping requirements of Paragraph E.5.f., below.
- Major viewpoint. Major viewpoints are locations along the South Waterfront Greenway trail where additional space is provided to allow people to safely stop and view the Willamette River and the Greenway. Where required by Subsection D.3, sites with a major viewpoint designation must provide a viewpoint that meets the following standards:
 - The viewpoint area must be at least 1,600 square feet in area;
 - The viewpoint area must abut the Greenway trail or a pedestrian connection must be provided from the Greenway trail to the viewpoint area;
 - The viewpoint area and any pedestrian connection to the viewpoint area from the Greenway trail must comply with the Use of Trail, Hours of Use, Trespass, and Trail Maintenance and Liability sections of Chapter 33.272, Public Recreational Trails;
 - Materials, benches, and lighting used in the viewpoint area must meet the requirements of the Portland Bureau of Parks and Recreation; and
 - A view corridor must be provided that meets the standards of the second bullet under E.5.e(2), above.

f. Landscaping.

- (1) Coverage. Eighty (80) percent of the area that is not covered by buildings, trails, or other allowed non-landscaped area must be covered by shrubs or ground cover, and all trees required by this paragraph must be installed in the ground and healthy;
- (2) Existing landscaping. Existing plants may be used to meet the standards of this paragraph, if protected and maintained during construction as specified in Section 33.248.065. However, the following plants must be removed:
 - Plants listed as a nuisance or prohibited on the Portland Plant List;
 - Plants listed in Table 510-4, South Waterfront Greenway Nuisance Plants.

Commentary

**Figure 510-4
Public Viewpoint View Corridor**



- (3) Required landscaping in subarea 1. In subarea 1, the area beginning 3 feet above the ordinary low water line must meet the following requirements:
- Shrubs. At least 80 percent of the required landscaped area must be planted in shrubs;
 - Trees. Trees are not required, but are allowed;
 - Ground cover. All of the required landscaped area that is not planted with shrubs or trees must be fully covered with ground cover plants;
 - Plant list. Only plants listed in Table 510-2, Subarea 1 Plant List, may be planted; and
 - Installation of landscaping. All planting must be of a sufficient size and number to meet the coverage standards within five years. Restoration size plant material, including bare root, is allowed and recommended. Planting is not required to meet the size and spacing requirements of 33.248.030, Plant Materials. Planting is not allowed during the summer.
- (4) Required landscaping in subarea 2. In subarea 2 the required landscaping is:
- Shrubs. At least 80 percent of the landscaped area must be planted in shrubs;
 - Trees. At least one tree must be planted for every 400 square feet of landscaped area. Trees may be clustered;
 - Ground cover. All of the landscaped area that is not planted with shrubs or trees must be fully covered with ground cover plants;
 - Plant list. Only plants listed in Table 510-3, Subarea 2 and 3 Plant List, may be planted. At least eight different species must be planted; and

Commentary

- Installation of landscaping. All planting must be of a sufficient size and number to meet the coverage standards within 5 years.
- Planting is not required to meet the size and spacing requirements of 33.248.030, Plant Materials.

(5) ~~Required landscaping in subarea 3. In subarea 3, the required landscaping is:~~

- ~~Shrubs. At least 60 percent of the landscaped area must be planted in shrubs. At least 50 percent of the shrubs used to meet this requirement must be listed on Table 510-3, Subarea 2 and 3 Plant List;~~
- ~~Trees. At least 1 tree must be planted for every 1,000 square feet of landscaped area. At least 50 percent of the trees used to meet this requirement must be listed on Table 510-3, Subarea 2 and 3 Plant List;~~
- ~~Ground cover. All of the landscaped area that is not planted with shrubs or trees must be fully covered with ground cover plants. At least 50 percent of the ground cover plants must be listed on Table 510-2, Subarea 2 and 3 Plant List;~~
- ~~Plant list. Except as allowed by (1), (2) and (3), only plants listed on Table 510-3, Subarea 2 and 3 Plant List, may be planted. The following plants are prohibited:~~
 - ~~Plants listed as a nuisance or prohibited on the *Portland Plant List*;~~
 - ~~Plants listed in Table 510-4, South Waterfront Greenway Nuisance Plants.~~
- ~~Installation of landscaping. All planting must be of a sufficient size and number to meet the coverage standards within five years. Planting is not required to meet the size and spacing requirements of 33.248.030, Plant Materials.~~

g. ~~Other development. Other development is allowed within the South Waterfront Greenway Area if it meets Subparagraphs g.(1) and (2) and either g.(3) or (4).~~

- (1) ~~The site meets the non-landscaped area requirements under E.2., above;~~
- (2) ~~The development does not obstruct required pedestrian connections and trails; and~~
- (3) ~~The development is located in subarea 3; or~~
- (4) ~~The development is river dependent or river related.~~

F. ~~Greenway goal exception.~~ ~~Approval of an exception to Statewide Planning Goal 15, Willamette Greenway, is required to locate development or a right-of-way that is not river-dependent or river-related within 25 feet of the top of bank. A greenway goal exception is not required to add revetments to a riverbank. The approval criteria are in Section 33.440.360, Greenway Goal Exception.~~

Commentary

Table 510-2 Subarea 1 Plant List		
Scientific Name	Common Name	Planting Notes
Trees		
Populus balsamifera var. trichocarpa	Black Cottonwood	Avoid use where falling limbs could be a safety or maintenance concern.
Fraxinus latifolia	Oregon Ash	Avoid use where falling limbs could be a safety or maintenance concern.
Shrubs		
Spirea douglasii	Western Spirea	
Cornus sericea spp Sericea	Red-osier Dogwood	
Rosa pisocarpa		
Salix fluviatilis	Columbia River Willow	
Salix lasiandra	Pacific Willow	
Salix sitchensis	Sitka Willow	
Ground Cover		
Carex obnupta	Slough Sedge	
Juncus ensifolius	Dagger leaf Rush	
Scirpus microcarpus	Small fruited Bullrush	

Table 510-3 Subarea 2 and 3 Plant List		
Scientific Name	Common Name	Planting Notes
Trees		
Abies grandis	Grand Fir	Avoid use where security concerns related to thick coverage are an issue.
Acer macrophyllum	Big-Leaf Maple	
Alnus rubra	Red Alder	
Arbutus menziesii	Pacific Madrone	
Crataegus douglasii	Black Hawthorn	
Crataegus suksdorfii	Black Hawthorn (upland)	Note limited availability.
Fraxinus latifolia	Oregon Ash	Avoid use where falling limbs could be a safety or maintenance concern.
Malus fusca	Western Crabapple	
Pinus ponderosa	Ponderosa Pine	
Populus balsamifera var. trichocarpa	Black Cottonwood	Avoid use where falling limbs could be a safety or maintenance concern.
Prunus emarginata	Bitter Cherry	
Pseudotsuga menziesii	Douglas Fir	
Quercus garryana	Garry Oak	
Rhamnus purshiana	Cascara	
Salix lucida ssp. lasiandra	Pacific Willow	
Salix rigida var. macrogemma	Rigid Willow	

Commentary

Salix scouleriana	Scouler Willow	
Thuja plicata	Western Red Cedar	Avoid use of large size plant material in hot, exposed location.
Tsuga heterophylla	Western Hemlock	
Umbellularia californica	California Laurel	Use primarily in subarea 3.
Table 510-3		
Subarea 2 and 3 Plant List		
Scientific Name	Common Name	Planting Notes
Shrubs		
Acer circinatum	Vine Maple	
Amelanchier alnifolia	Western Serviceberry	
Berberis aquifolium	Tall Oregongrape	
Berberis nervosa	Dull Oregongrape	
Ceanothus sanguinens	Oregon Tea-tree	
Cornus sericea spp. Sericea	Red-osier Dogwood	
Gaultheria shallon	Salal	
Holodiscus discolor	Ocean Spray	
Mahonia aquifolium	Tall Oregon Grape	
Malus fusca	Western Crabapple	
Oemleria cerasiformis	Indian Plum	
Philadelphus lewisii	Mockorange	
Physocarpus capitatus	Pacific Ninebark	
Polystichum munitum	Sword Fern	
Prunus virginiana	Common Chokecherry	
Rhamnus purshiana	Cascara Sagrada	
Ribes	Pioneer Gooseberry	Note limited availability.
Ribes sanguineum	Red-flowering Currant	
Rosa gymnocarpa	Baldhip Rose	
Rosa pisocarpa	Swamp Rose	
Rubus parviflorus	Thimbleberry	
Rubus spectabilis	Salmonberry	
Salix fluviatilis	Columbia River Willow	Suitable for bioengineering.
Salix sessilifolia	Soft-leaved Willow	Suitable for bioengineering.
Salix sitchensis	Sitka Willow	Suitable for bioengineering.
Salix lucida ssp. Lasiandra	Pacific Willow	Suitable for bioengineering.
Salix rigia var. macrogemma	Rigid Willow	Suitable for bioengineering.
Salix scouleriana	Scouler Willow	
Sambucus mexicana	Blue Elderberry	
Sambucus racemosa	Red Elderberry	
Spirea douglasii	Douglas Spirea	
Symphoricarpos albus	Common Snowberry	
Symphoricarpos mollis	Creeping Snowberry	
Viburnum edule	Squashberry	Note limited availability.
Ground Cover		
Achillea millefolium	Yarrow	
Aquilegia formosa	Red Columbine	
Arctostaphylos uva-ursi	Kinnikinnick	

Commentary

Aruncus-sylvester	Goatsbeard	
Aster chilensis ssp. Hallii	Common California Aster	
Aster subspicatus	Douglas's Aster	
Athyrium filix-femina	Lady Fern	
Bromus carinatus	California Brome-grass	
Bromus sitchensis	Alaska Brome	
Calytonia perfoliata	Miner's Lettuce	
Carex obnupta	Slough Sedge	

**Table 510-3
Subarea 2 and 3 Plant List**

Ground Cover		
Collinsia grandiflora	Large flowered Blue-eyed Mary	
Collomia grandiflora	Large flowered Collomia	
Elymus glaucus	Blue Wildrye	
Epilobium angustifolium	Fireweed	
Eriophyllum lanatum	Woolly Sunflower	
Eschscholzia californica	California Poppy	Be careful of seed source.
Festuca rubra commutata	Red Fescue	
Fragaria vesca	Wood Strawberry	
Fragaria vesca var. bracteata	Wood Strawberry	
Fragaria virginiana var platypetala	Broadpetal Strawberry	
Gilia capitata	Bluefield Gilia	
Heracleum lanatum	Cow parsnip	
Iris tenax	Oregon Iris	
Juncus ensifolius	Dagger leaf Rush	
Lotus purshiana	Spanish Clover	
Lupinus latifolia	Broadleaf Lupine	
Lupinus polyphyllus	Bigleaf Lupine	
Lupinus rivularis	Stream Lupine	
Madia sativa	Chile Tarweed	
Mimulus guttatus	Yellow Monkeyflower	
Penstemon ovatus	Broad-leaved Penstemon	
Polystichum munitum	Sword fern	
Potentilla glandulosa	Sticky Cinquefoil	
Prunella vulgaris var. lanceolata	Heal-all	
Pteridium aquilinum	Bracken	
Ranunculus occidentalis	Western Buttercup	
Sidalcea campestris	Meadow Sidalcea	
Solidgo canadensis	Canada Goldenrod	
Tellima grandiflora	Fringecup	
Tolmiea menziesii	Pig-a-back	
Vancouveria hexandra	White Inside-Out Flower	

Commentary

**Table 510-4
South Waterfront Greenway Nuisance Plants**

Scientific Name	Common Name
<i>Agropyron repens</i>	Quack grass
<i>Agrostis capillaris</i> [A. tenuis]	Colonial bentgrass
<i>Agrostis stolonifera</i> [A. alba]	Creeping bentgrass
<i>Anthoxanthum odoratum</i>	Sweet vernalgrass
<i>Arctium minus</i>	Common burdock
<i>Arrhenatherum elatius</i>	Tall oatgrass
<i>Borago officinalis</i>	Borage
<i>Bromus</i> sps.	Annual brome-grasses
<i>Buddleia alternifolia</i>	Fountain butterfly bush
<i>Buddleia davidii</i>	Butterfly bush
<i>Centaurea cyanus</i>	Bachelor buttons
<i>Centaurea diffusa</i>	Diffuse Knapweed
<i>Centaurea maculosa</i>	Spotted Knapweed
<i>Centaurea pratensis</i>	Meadow knapweed
<i>Chrysanthemum leucanthemum</i>	Ox-eye daisy
<i>Chicorium intybus</i>	Chicory
<i>Chondrilla juncea</i>	Rush Skeletonweed
<i>Cyperus eragrostis</i>	Flatsedge
<i>Dactylis glomerata</i>	Orchard grass
<i>Daphne laureola</i>	Daphne
<i>Digitalis purpurea</i>	Foxglove
<i>Dipsacus sylvestris</i>	Common teasel
<i>Euphorbia esula</i>	Leafy spurge
<i>Euphorbia lathyris</i>	Mole plant
<i>Festuca arundinacea</i>	Tall fescue
<i>Foeniculum vulgare</i>	Fennel
<i>Holcus lanatus</i>	Velvet grass
<i>Hydrilla verticillata</i>	Hydrilla
<i>Hypochaeris radicata</i>	Spotted cat's ear
<i>Juncus effusus</i> v. <i>effusus</i>	European Soft Rush
<i>Lactuca muralis</i>	Wall lettuce
<i>Lactuca seriola</i>	Prickly lettuce
<i>Ligustrum</i> spp.	Privet
<i>Lolium multiflorum</i>	Annual ryegrass
<i>Lolium perenne</i>	Perennial ryegrass
<i>Lotus corniculatus</i>	Bird's foot trefoil
<i>Matricaria matricariodes</i>	Pineappleweed
<i>Melissa officianalis</i>	lemon balm
<i>Melilotus alba</i>	Sweetclover
<i>Parentucellia viscosa</i>	Parentucellia
<i>Phalaris aquatica</i>	Harding grass
<i>Phlem praetensis</i>	Timothy
<i>Pea praetensis</i>	Kentucky bluegrass
<i>Polygonum cuspidatum</i>	Japanese knotweed
<i>Polygonum polystachum</i>	Himalayan knotweed

Commentary

Populus alba	White poplar
Prunus avium	sweet cherry
Prunus lusitanica	Portugal laurel
Prunus mahaleb	Mahaleb cherry [rootstock]
Ranunculus ficaria	
Ranunculus repens	Creeping buttercup
Robinia pseudoacacia	black locust
Rosa eglanteria	sweet briar
Rosa multiflora	Multiflora rose
Rumex acetosella	Red sorrel
Rumex crispus	Curly dock
Secale cereale	Cultivated rye
Silene alba	White campion
Table 510-4	
South Waterfront Greenway Nuisance Plants	
Sisyrinchium officinale	Hedge Mustard
Sonchus arvensis ssp. Arvensis	Perennial sowthistle
Sorbus aucuparia	European mountain ash
Taeniatherum caput-medusa	Medusahead
Tanacetum vulgare	
Ulmus pumila	Siberian elm
Verbena bonariensis	Tall verbena
Verbascum thapsus	Mullein
Vicia villosa	Hairy vetch

Commentary

33.510.255 Central City Master Plans

Existing Provisions

The Central City Master Plan provisions (Section 33.510.255) allow FAR transfers from parcels located on non-contiguous parcels and those owned by separate parties. The provisions also allow the deferral of required housing as well as the development of required housing outside of the areas in the Central City mapped as required housing areas (see Map 510-5).

Research indicates that these provisions have been used most often to transfer FAR from one site to another. An example of where FAR transfer through a Central City Master Plan was supported was the transfer of FAR from Director Park to the new Park West tower. This transfer allowed FAR to be transferred from a former surface parking lot to an adjacent site separated only by right-of-way (which is not allowed in the Downtown subdistrict except by a Central City Master Plan). As a result the sending site was developed as Director Park, and the transferred FAR was used to develop Park West.

However, there have been proposals to transfer FAR from sites and districts that are not contiguous that became controversial because neighborhood interests felt that the receiving site was taking on additional burden while the potential benefit was provided to a different (see the Allegro case involving the transfer of FAR from the Lloyd District to Goose Hollow).

City Council as part of the North Pearl District Plan, appeal of the Allegro design review approval, and adoption of all the N/NE, West and Southeast Quadrant Plans have directed BPS to create a new master plan provisions to ensure that more direct local benefits are derived from the transfer of FAR. Council also directed that master plans be required for large opportunity sites, such as the Main Post Office and OMSI station area, to ensure that larger urban design issues are addressed as redevelopment occurs on these large sites.

New Provisions and Approach

In response to these issues, BPS staff is proposing the creation of a new master planning tool applicable to key major redevelopment sites in the Central City. The sites where this tool would be required at this time are limited to the following:

- Blanchard PPS School District HQ - Lloyd District
- Main Post Office - Pearl District
- Lincoln High School - Goose Hollow
- OMSI Station Area - Central Eastside
- Clinton Station Area - Central Eastside

33.510.255 Central City Master Plans

- A. Purpose.** The Central City master plan adds development potential and flexibility for projects in specified areas. The additional development potential and flexibility is possible because the plan is used to demonstrate that the policy objectives of the Central City Plan and the public service needs of the area are addressed. The Central City master plan is an option; it is not a requirement. A Central City master plan may also be created through a legislative process initiated by the City.
- B. Flexibility achieved.** An approved Central City master plan allows additional flexibility in any of the following situations:
1. Allocates allowed floor area to individual development sites that will not remain in the same ownership;
 2. Defers the building of any required housing; or
 3. Allows the development of required housing at a location outside of the required residential development area.
- C. Central City master plan contents.** In addition to the general application requirements for land use reviews, Central City master plans must contain the information listed below, as relevant to the area and proposal.
1. Floor area ratio. The plan must show the amount of allowable floor area which is to be assigned to each lot. Floor areas greater or less than shown on Map 510-2 may be assigned on a site-specific basis. The total combined floor area for all sites in the plan area must be within the maximum allowed for the plan area before any allocations. Floor area transfers outside of a master plan area is prohibited.
 2. Infrastructure capability. The adequacy of infrastructure must be addressed if there is a proposal to shift allowable floor area between separate development sites. The plan must identify and link the development of each phase of the project to the provision of services necessary to meet the infrastructure service needs of the development associated with that phase.
 3. Circulation.
 - a. The plan must identify a clear internal circulation system that joins the surrounding street system at logical points and meets the needs of pedestrians, bicyclists, and drivers.
 - b. At locations adjacent to the Willamette River, the plan must include a proposal for access to the water as well as along the top of the bank.
 - c. The plan must identify open spaces that are convenient for use both by those living and working in the plan area and by the general public. At locations adjacent to the Willamette River, the open space areas must tie the pedestrian and bicycle circulation system to the Willamette River.
 4. Views. The plan must identify significant public viewpoints and significant view corridors down rights-of-way. The plan must show how the views are being protected,

Commentary

33.510.255 Central City Master Plans (Continued)

This tool would conceptually be reviewed as a Type III land use review by the Design Commission. The tool, potentially called a Central City Urban Design Master Plan (CCUDMP), would focus on how the urban form of these key sites are developed over time. Key issues to be explored could include:

- **Site Layout:** Identification of building locations, open space features, land uses, and phasing of development.
- **Circulation & Multimodal Orientation:** Identification of internal circulation for all applicable travel modes, connections to adjacent rights-of-way, trails, and transit lines, and the projected location and number of parking spaces for automobiles and bicycles.
- **Building Massing/Urban Form Diagrams:** Presentation of the anticipated building massings and urban form to be created on site and how this transitions with the context of the surrounding parts of the city and impacts public view corridors through or near the site.

This tool would be required before new development of major redevelopment on site, or could be triggered with the first major development/redevelopment on site. Following adoption of a CCUDMP subsequent development on site would be reviewed for consistency with the adopted plan, as well as Central City Fundamental Design Guidelines. However, it is anticipated that issues related to how each building relates to and contributes to the urban form of the city adjacent to the plan area would not need to be readdressed unless an amendment to the adopted plan was being proposed.

In addition to the sites identified above, there would be the ability for applicants to voluntarily enter into a CCUDMP if they had a site larger than 60,000 square feet and they were requesting the ability to:

- Transfer floor area from adjacent sites that are not in the same ownership;
- Transfer floor area from adjacent sites that are separated by public right-of-way; or
- Transfer floor area from an adjacent site that will result of the transfer site becoming a public park or publicly accessible open space, and the facility will be at least 10,000 square feet in area.

Specific details regarding the "purpose statement," components and approval criteria for a CCUDMP, and how and when amendments to such as plan are required are currently being developed and BPS will be working with BDS Design Review staff before releasing a internal review draft.

including in situations where there is a proposal to increase the height above the base FAR of Map 510-3 in areas eligible for ultimate height.

5. ~~Required housing. The plan must identify the location, density, and general type of housing to be built in compliance with the required residential development standards of 33.510.230. Required housing may be deferred subject to the requirements of Subparagraph a. below. Required housing may be built outside of the required residential area subject to the requirements of Subparagraph b. below.~~

a. ~~If the required housing is not proposed to be built in advance or concurrently with other development, the plan must demonstrate that the proposed housing site is of suitable size and location, is reasonable, and is attractive for the housing. The proposed site must be reserved for housing through a concurrent application for a Comprehensive Plan map designation of Central Residential and an RX zone. The plan must identify a schedule or development phase when the required housing will be built.~~

b. ~~If the required housing is proposed for a location outside of the required residential development area, the proposed site must meet the following requirements. The site must be under the applicant's control. The site must be vacant or used for surface parking, or have improvements with an assessed value less than one-third the value of the land. The site must be within the Central City plan district and be zoned CX or EX. The proposed housing site must be of suitable size and location to be attractive for the required amount of housing. The site must be reserved for housing through a concurrent application for a Comprehensive Plan map designation of Central Residential and an RX zone.~~

~~**D. Approval procedure.** Central City master plans requests are processed through a Type III procedure.~~

~~**E. Approval criteria.** A Central City master plan application will be approved if the review body finds that the applicant has shown that all of the following approval criteria are met:~~

- ~~1. The proposed plan is consistent with the policy objectives of the Central City Plan;~~
- ~~2. The plan ensures that there will be adequate and timely infrastructure capacity for the proposed developments;~~
- ~~3. The plan provides for a useful and pleasant circulation system and for adequate open space within the plan boundaries;~~
- ~~4. Development will be placed and sized to protect significant public viewpoints and public view corridors; and~~
- ~~5. There are adequate assurances that required housing that is deferred or proposed for another site will be built.~~

~~**F. Development in conformance with Central City master plans.** Development within a Central City master plan boundary must be in full conformance with the approved plan. Review for conformance will be done as part of the design review of a specific proposal. Additional approval criteria for the design review are:~~

Commentary

33.510.261-33.510-267 Parking and Access

Staff has removed these sections of code for the internal bureau review. PBOT and BPS staff are currently working on updates to the Central City parking section of the plan district. Updates will be available in November prior to the release of the discussion draft.

Transportation Demand Management Plans

One provision that will be added to the parking section will be a requirement for Transportation Demand Management (TDM) Plans throughout the Central City. The plans will be required for all development in the Central City with 21 dwelling units or at least 25,000 square feet of gross building area.

Under the Mixed Use zone project a TDM requirement has been proposed for commercial and mixed use zones (which captures the CX zone). That language requires an applicant to choose one of a pre approved TDM plans described in Title 17 if the development has more than 20 dwelling units. BPS and PBOT would like to expand this to include all development in the Central City. By defining a square footage it will capture the non-residential developments.

The 25,000 square foot threshold was derived based on Oregon's Employee Commute Options (ECO) rule, which applies to sites with 100 or more commute trips. Using the industry standard of four employees per 1000 square feet (250 square feet per employee), a 25,000 square foot building would generate approximately 100 commute trips.

A pre-approved plan would likely include:

- on-site improvements, such as secure bicycle parking;
- a Multimodal Incentive, such as, for a limited time, a \$50/month/employee subsidy toward a TriMet or Portland Streetcar pass, or bikeshare usage; and
- commitment to ongoing performance monitoring and corrective action if the building was not meeting performance targets.

1. ~~The proposed development is consistent with and conforms to the specific Central City master plan; and~~
 2. ~~Any transportation, water, stormwater disposal, or wastewater disposal systems identified in the plan as necessary to serve the development are in place or will be in place when the project is ready for occupancy.~~
- ~~**G. Central City master plan amendments.** Amendments to an approved Central City master plan are processed through a Type II procedure. The amendment may be approved if the proposed change results in a plan which continues to meet all of the approval criteria in Subsection E., above.~~

33.510.257 Signs for Additional Uses Allowed in the Open Space Zone

The sign standards are stated in Title 32, Signs and Related Regulations.

33.510.261-267 Parking and Access (removed until revised)

Commentary

(Amended by: Ord. No. 165376, effective 5/29/92; Ord. No. 166313, effective 4/9/93; Ord. No. 166702, effective 7/30/93; Ord. No. 167189, effective 1/14/94; Ord. No. 167515, effective 3/30/94; Ord. No. 167464, effective 4/15/94; Ord. No. 167650, effective 6/10/94; Ord. No. 169535, effective 1/8/95; Ord. No. 168702, effective 7/1/95; Ord. No. 169535, effective 1/8/96; Ord. No. 169699, effective 2/7/96; Ord. No. 170704, effective 1/1/97; Ord. No. 171219, effective 7/1/97; Ord. No. 171522, effective 9/19/97; Ord. No. 171648, effective 10/8/97; Ord. No. 172040, effective 3/13/98; Ord. No. 173259, effective 5/14/99; Ord. No. 174160, effective 2/9/00; Ord. No. 174263, effective 4/15/00; Ord. No. 174980, effective 11/20/00; Ord. No. 175163, effective 1/1/01; Ord. No. 175204, effective 3/1/01; Ord. No. 175294, effective 3/2/01; Ord. No. 175837, effective 9/7/01; Ord. No. 175877, effective 9/21/01; Ord. No. 175966, effective 10/26/01; Ord. Nos. 176024 and 176193, effective 2/1/02; Ord. No. 176469, effective 7/1/02; Ord. No. 177028, effective 12/14/02; Ord. No. 177082, effective 1/20/03; Ord. No. 177422, effective 6/7/03; Ord. No. 177920, effective 11/8/03; Ord. No. 178172, effective 3/5/04; Ord. No. 178425, effective 5/20/04; Ord. No. 178509, effective 7/16/04; Ord. No. 178832, effective 10/21/04; Ord. No. 179084, effective 3/26/05; Ord. No. 179092, effective 4/1/05; Ord. No. 179925, effective 3/17/06; Ord. No. 179980, effective 4/22/06; Ord. No. 180619, effective 12/22/06; Ord. No. 180667, effective 1/12/07; Ord. No. 181357, effective 11/9/07; Ord. No. 182319, effective 12/5/08; Ord. No. 182429, effective 1/16/09; Ord. No. 183517, effective 3/5/10; Ord. No. 183269, effective 10/21/09; Ord. No. 183518, effective 03/05/10; Ord. No. 183598, effective 4/24/10; Ord. No. 185915, effective 5/1/13; Ord. No. 186639, effective 7/11/14.)

510 Maps

This section contains maps with commentary that describe edits staff have or will make. A new feature of these maps are references to the code sections related to each map. These references are currently placeholders. Staff are planning to update the South Waterfront streets layer to remove the proposed right-of-way dotted lines where streets have recently been built. Proposed zoning and overlay changes can be found on maps at the end of this volume.

New #	Old #	Name	Note
510-1	Same	Central City Plan District and Subdistricts	Updated
510-2	Same	Maximum Floor Area	Updated
510-3	Same	Maximum Heights	Updated
510-4	New	<i>Maximum Heights with Eligible Height Increases</i>	<i>Created</i>
510-5	510-4	Bonus Options Target Areas	Updated
510-6	510-5	Required Residential Development Areas	Updated
510-7	510-6	Required Building Lines	Updated
510-8	New	<i>Ground Floor Windows</i>	<i>Created</i>
510-9	510-7	Ground Floor Active Use Areas	Updated
510-10	510-8	Core and Parking Sectors	Updated
	510-9	Parking Access Restricted Streets	Deleted
510-11	510-10	Areas Where Additional Uses are Allowed in the OS Zone	Updated
510-12	510-11	Special Areas	Updated
510-13	510-12	Streetcar Alignment	Updated
510-14	510-13	Park Blocks Frontages	No Changes
	510-14	Areas Where Additional Uses are Allowed in the RX Zone	Deleted
510-15	Same	South Waterfront Greenway Public Access Map	Updated
510-16	Same	North Pearl Height Opportunity Area / South Waterfront Height Opportunity	To Be Updated
	510-17	South Waterfront 2002 Top of Bank Line	Deleted
510-17	510-18	Area Where Vehicle Repair and Vehicle Sales and Leasing Uses are Restricted	Updated
510-18	510-19	North Pearl Subarea Special Building Height Corridor	To Be Updated
	510-20	Pearl Development Transfer Opportunity Area	Deleted
	510-21	Required Retail Sales and Service Use in South Waterfront	Deleted
510-19	New	<i>Required Master Plan Sites</i>	<i>Created</i>

Commentary

Map 510-1 Central City Plan District and Subdistricts

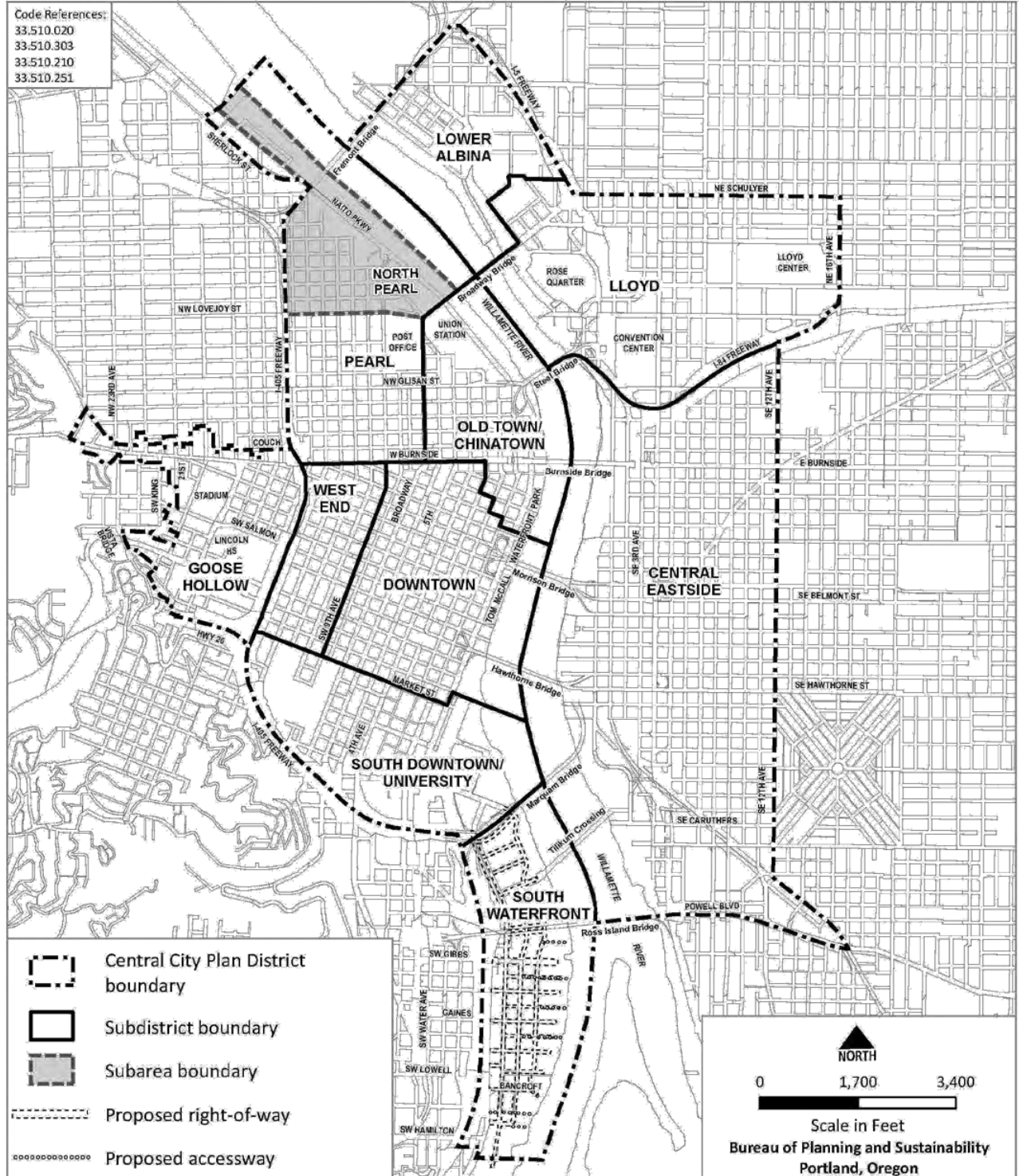
Updated to show new subdistrict boundaries including:

- West End subarea becoming a subdistrict.
- River District has gone away and the Pearl District and Old Town/Chinatown are defined subdistricts.
- Downtown subdistrict is smaller (with the creation of West End subdistrict and expansion of Old town Chinatown Subdistrict).
- Other proposed changes:
- The Employment Opportunity Subarea (EOS) has been removed from this map as the provision has been expanded to the entire Central Eastside subdistrict as a part of the Employment Zones Project.
- Central City Plan District boundary is expanding to include the Clinton Triangle
- Some minor updates to reduce the number of tax lots split by the boundary.

Draft Central City Plan District and Subdistricts

Map 510-1

Map Revised Xxxxx, 2015



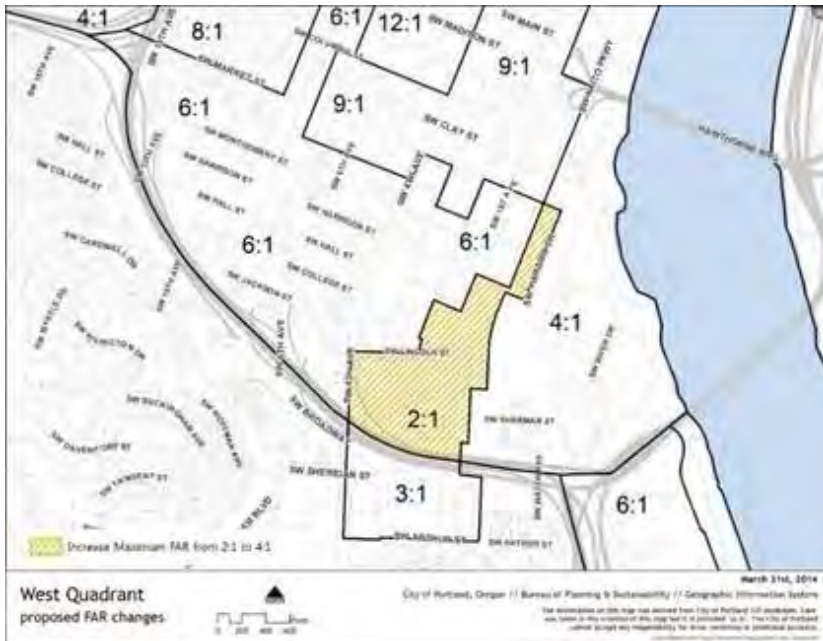
10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
 Chapter 33.510, Central City Plan District

Commentary

Map 510-2 Maximum Floor Area Ratios

Based on West Quadrant Plan the following changes were made: Map 510-2 - Area as shown below in image from West Quadrant plan is proposed to go from 2:1 to 4:1 within the Central City boundary. One of the reasons for this change is to be consistent with FAR base entitlements on adjacent properties within the Central City. (Staff is not proposing to change the base entitlement outside the Central City).

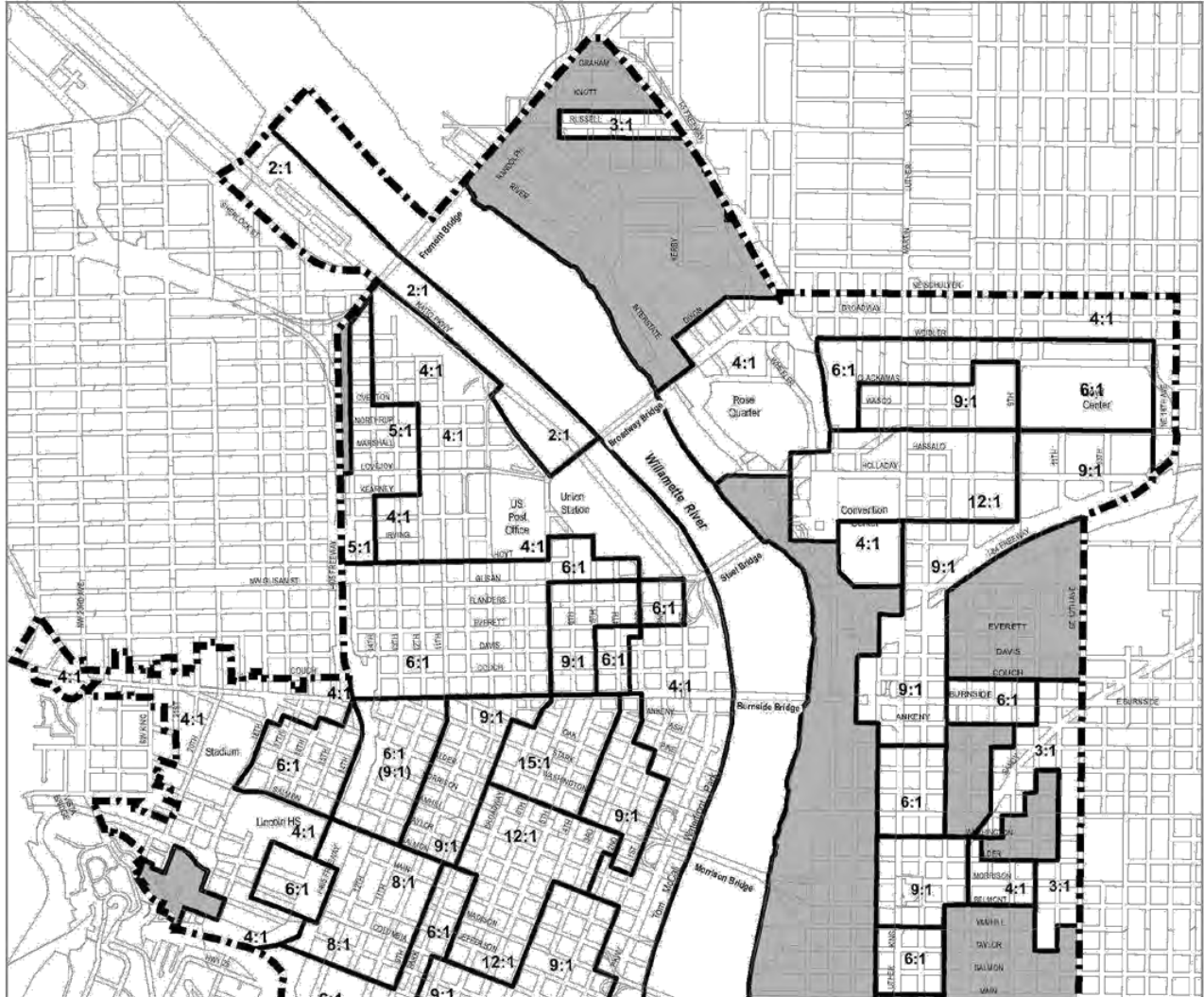


Draft Maximum Floor Area Ratios

Map 510-2

Map 1 of 2

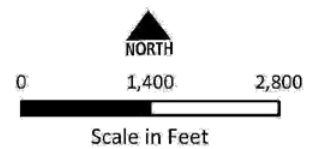
Map Revised Xxxx XX, 2015



Legend

- X = Gross square foot of building
- Y = Square foot of site
- X:Y Maximum FAR
- Central City Plan District boundary
- Maximum FAR area boundary
- Area where floor area ratio (FAR) is determined by base zone

Central City Plan District boundary



Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

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Portland, Oregon

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2-171

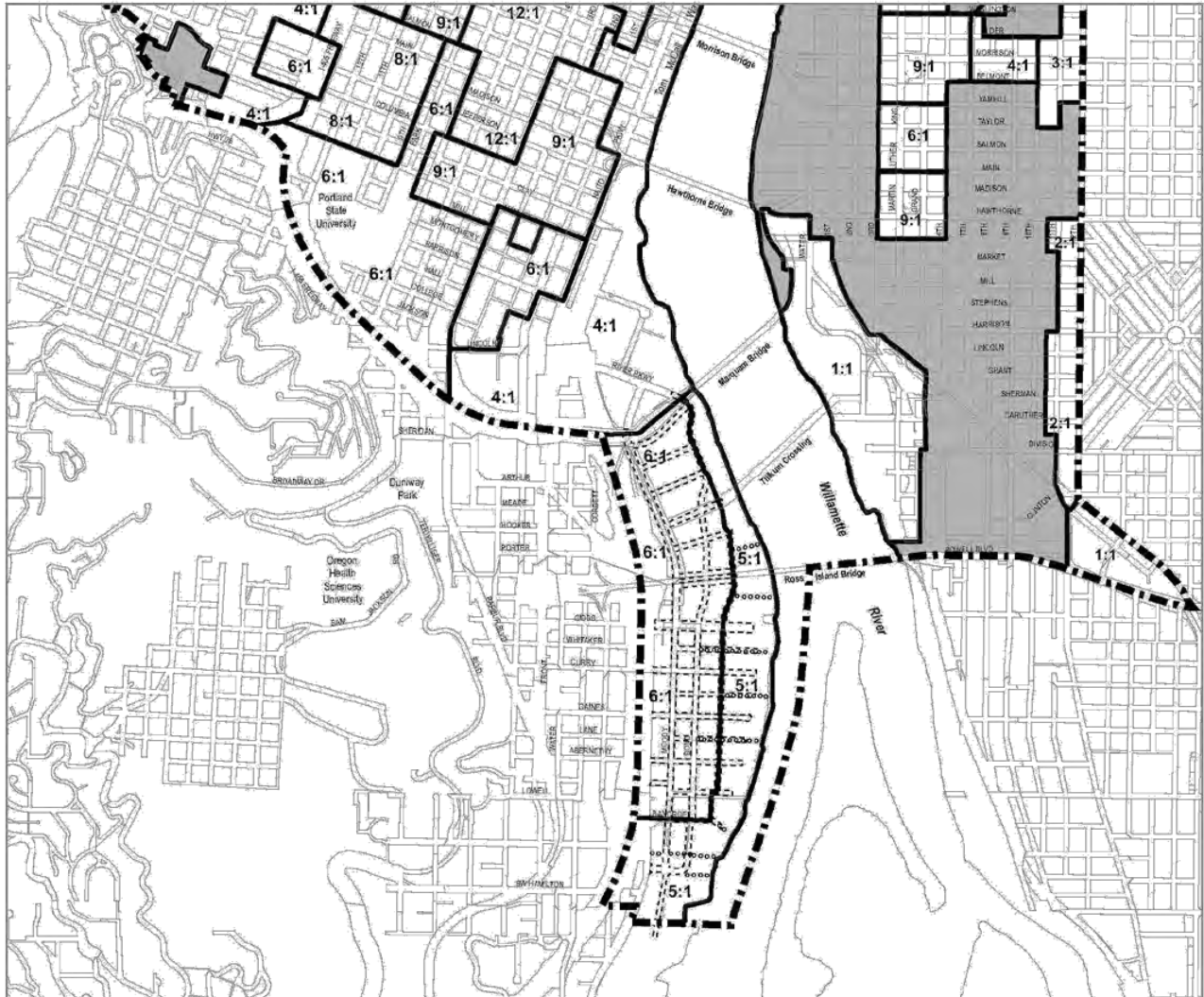
Commentary

Draft Maximum Floor Area Ratios

Map 510-2

Map 2 of 2

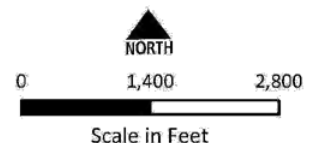
Map Revised XXXX XX, 2015



Legend

X	= Gross square foot of building		Maximum FAR area boundary		Proposed right-of-way
Y	= Square foot of site		Area where floor area ratio (FAR) is determined by base zone		Proposed accessway
X:Y	Maximum FAR				

Central City Plan District boundary



Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

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10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Chapter 33.510, Central City Plan District

Commentary

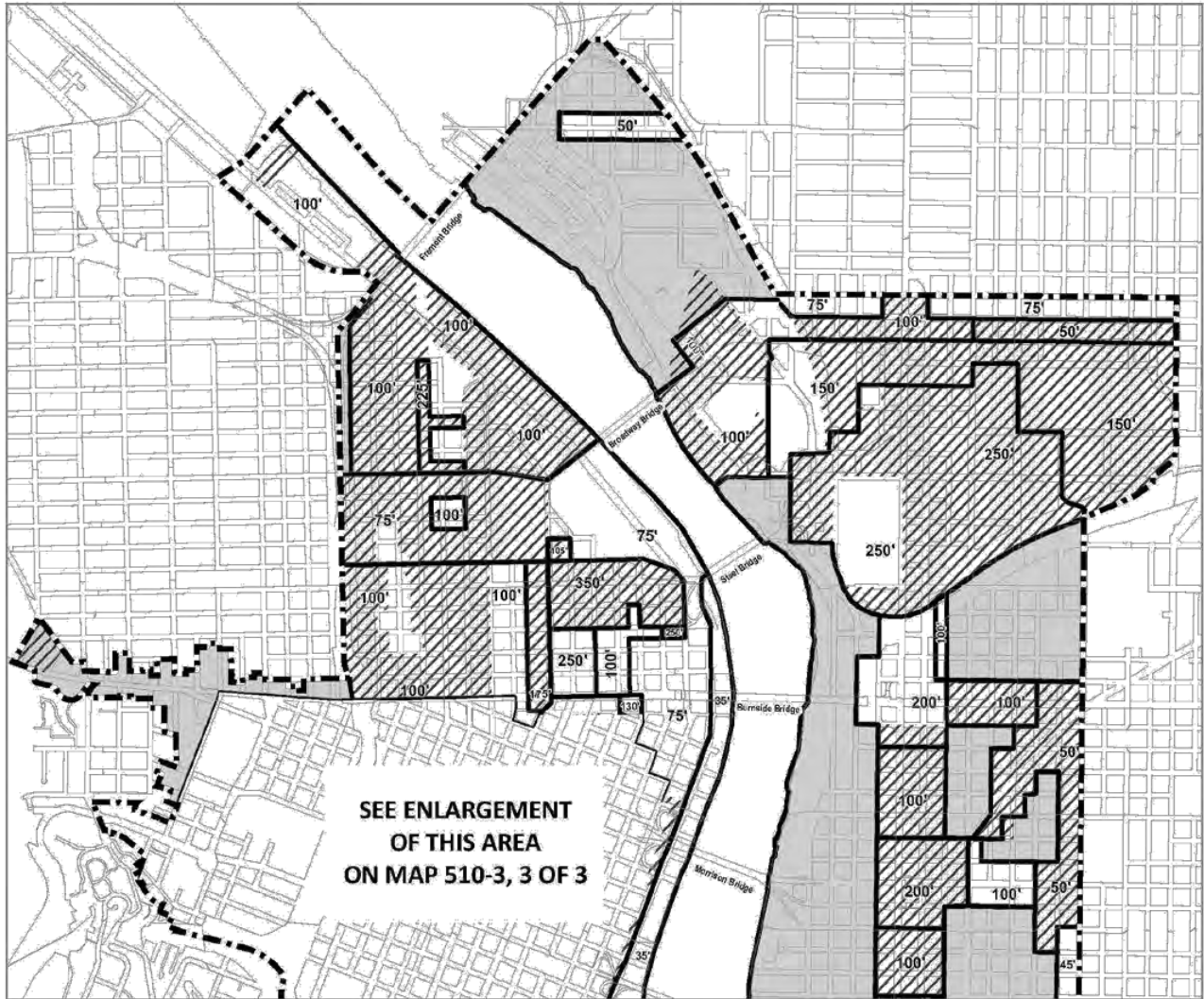
Map 510-3 Maximum Heights

The existing 510-3 map has become two maps.

Map 510-3 shows maximum height and areas where height increases are possible.

NEW: Map 510-4 shows the ultimate height possible with bonuses and height transfers included.

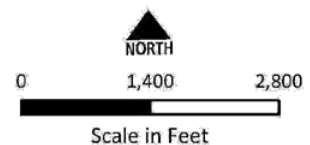
Heights may be changed as a result of the ongoing update to the Scenic Resources Inventory. Staff expect to incorporate this work into height related maps before the release of the Discussion Draft.



Legend

X'	Maximum building height		Area eligible for height increase
	Areas where maximum height is determined by base zone		Maximum height limit of 75' for first 125 feet from top of bank

Central City Plan District boundary



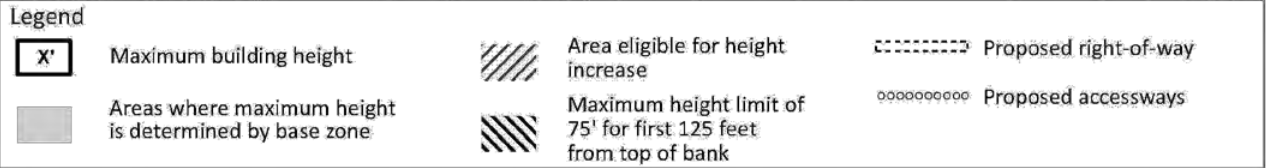
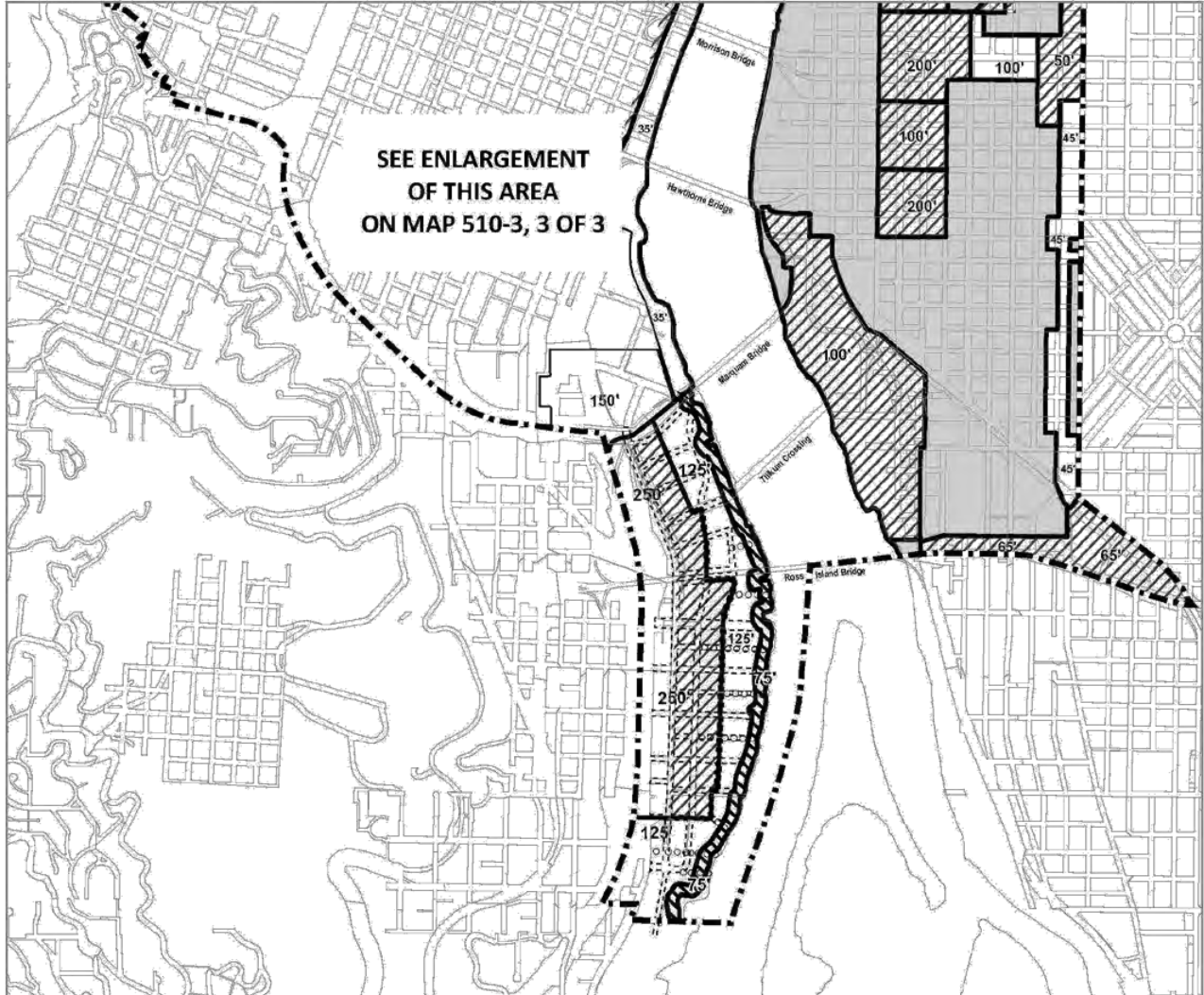
Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

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Portland, Oregon

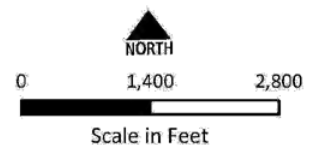
10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Chapter 33.510, Central City Plan District

Commentary



Central City Plan District boundary



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Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Chapter 33.510, Central City Plan District

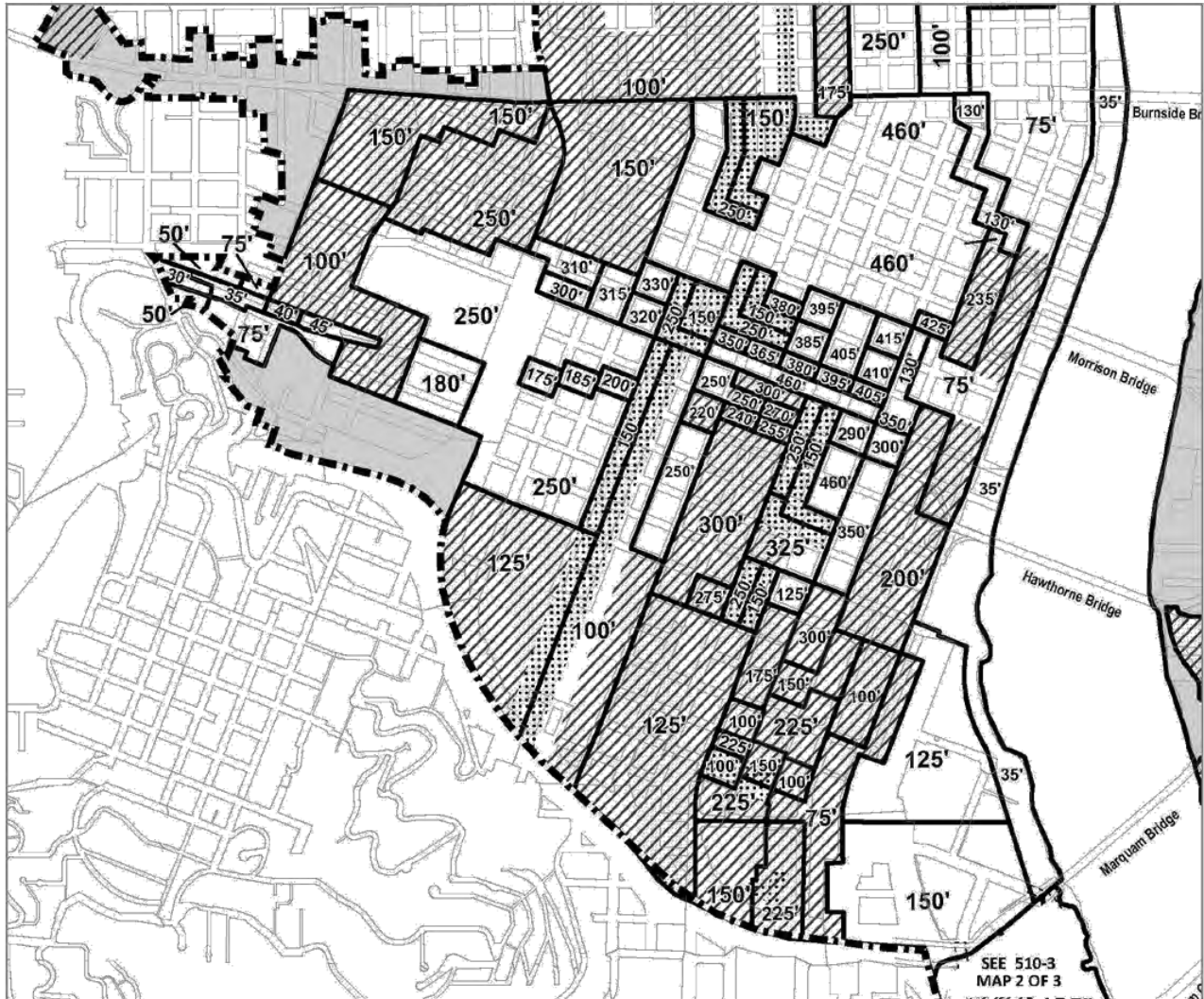
Commentary

Draft Maximum Heights

Map 510-3

Map 3 of 3

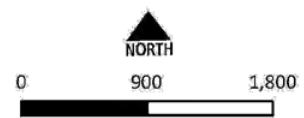
Map Revised June 5, 2015



Legend

- X' Maximum building height
- Areas where maximum height is determined by base zone
- Area eligible for height increase
- Area eligible for housing height bonus only

 Central City Plan District boundary



Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

Scale in Feet
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Portland, Oregon

10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Chapter 33.510, Central City Plan District

Commentary

Map 510-4 Maximum Height with Eligible Height Increases (New)

This new map includes the ultimate height possible with bonuses and transfers.

Heights may be changed as a result of the ongoing update to the Scenic Resources Inventory. Staff expect to incorporate this work into height related maps before the release of the Discussion Draft.

Draft Maximum Height with Eligible Height Increases

Map 510-4

Map 1 of 3

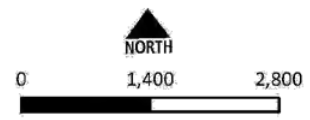
Map Revised Xxxxx XX, 2015



Legend

- Maximum building height including eligible height increases
- Areas where maximum height is determined by base zone
- UL = Unlimited

Central City Plan District boundary



Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

Note: See Map 510-16 for additional height opportunity areas in the North Pearl subarea and South Waterfront subdistrict.

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IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Chapter 33.510, Central City Plan District

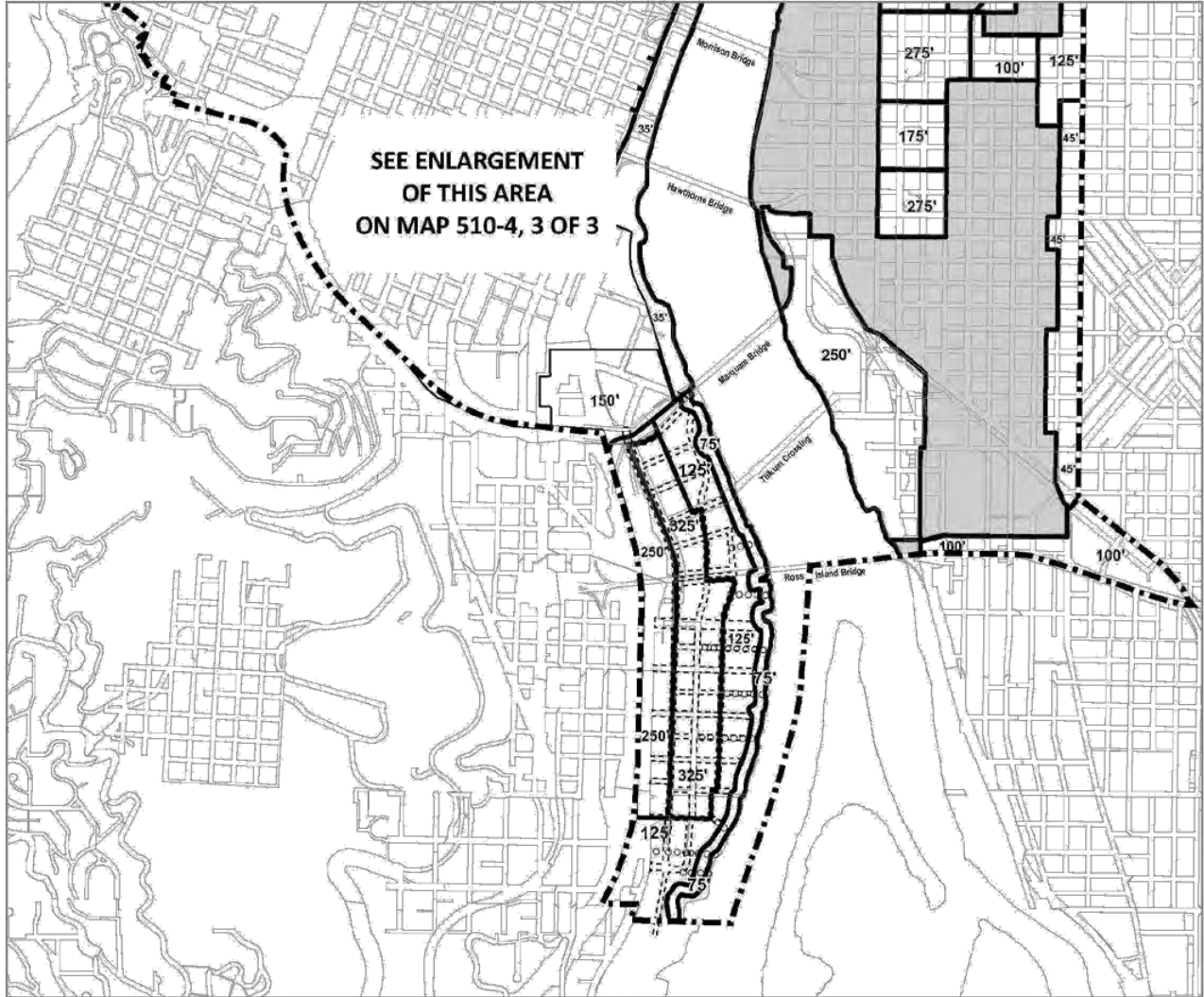
Commentary

Draft Maximum Height with Eligible Height Increases

Map 510-4

Map 2 of 3

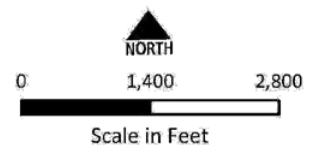
Map Revised Xxxxx XX, 2015



Legend

Maximum building height including eligible height increases	UL = Unlimited	Proposed right-of-way
Areas where maximum height is determined by base zone		Proposed accessways

Central City Plan District boundary



Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

Note: See Map 510-16 for additional height opportunity areas in the North Pearl subarea and South Waterfront subdistrict.

Bureau of Planning and Sustainability
Portland, Oregon

10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Chapter 33.510, Central City Plan District

Commentary

Draft Maximum Height with Eligible Height Increases

Map 510-4

Map 3 of 3

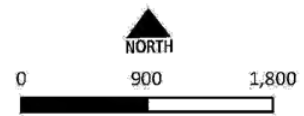
Map Revised Xxxxx XX, 2015



Legend

- X' Maximum building height including eligible height increases
- UL = Unlimited
- Proposed right-of-way
- Areas where maximum height is determined by base zone
- Proposed accessways

Central City Plan District boundary



Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

Note: See Map 510-16 for additional height opportunity areas in the North Pearl subarea and South Waterfront subdistrict.

Scale in Feet
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Portland, Oregon

10/9/2015

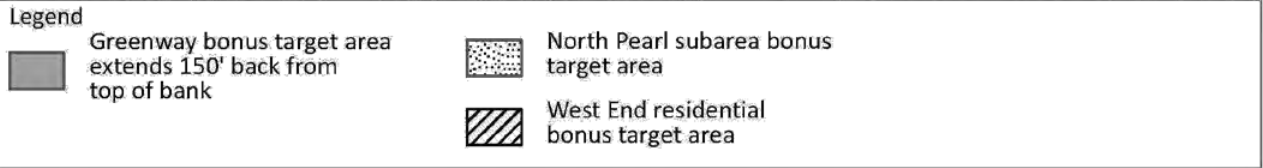
IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Chapter 33.510, Central City Plan District

Commentary

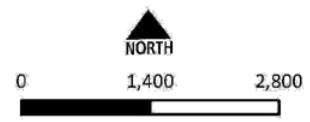
Map 510-5 Bonus Options Target Areas (Previously Map 510-4)

This map is proposed to be updated because a number of the existing bonuses are proposed to be eliminated and the bonus areas will no longer exist. However, these areas will be eligible for the new proposed set of bonuses. The Residential Bonus Target Area, Retail Use Bonus Target Area, and Theaters on Broadway Bonus Target Area have been removed.

A new bonus target area is noted for the West End. The subarea boundary on the existing 510-14 map is referenced in 33.510.200.C(2) and allows the subarea to earn bonus FAR above the 3:1 maximum. As a result, this boundary and labeled the "West End bonus target area."



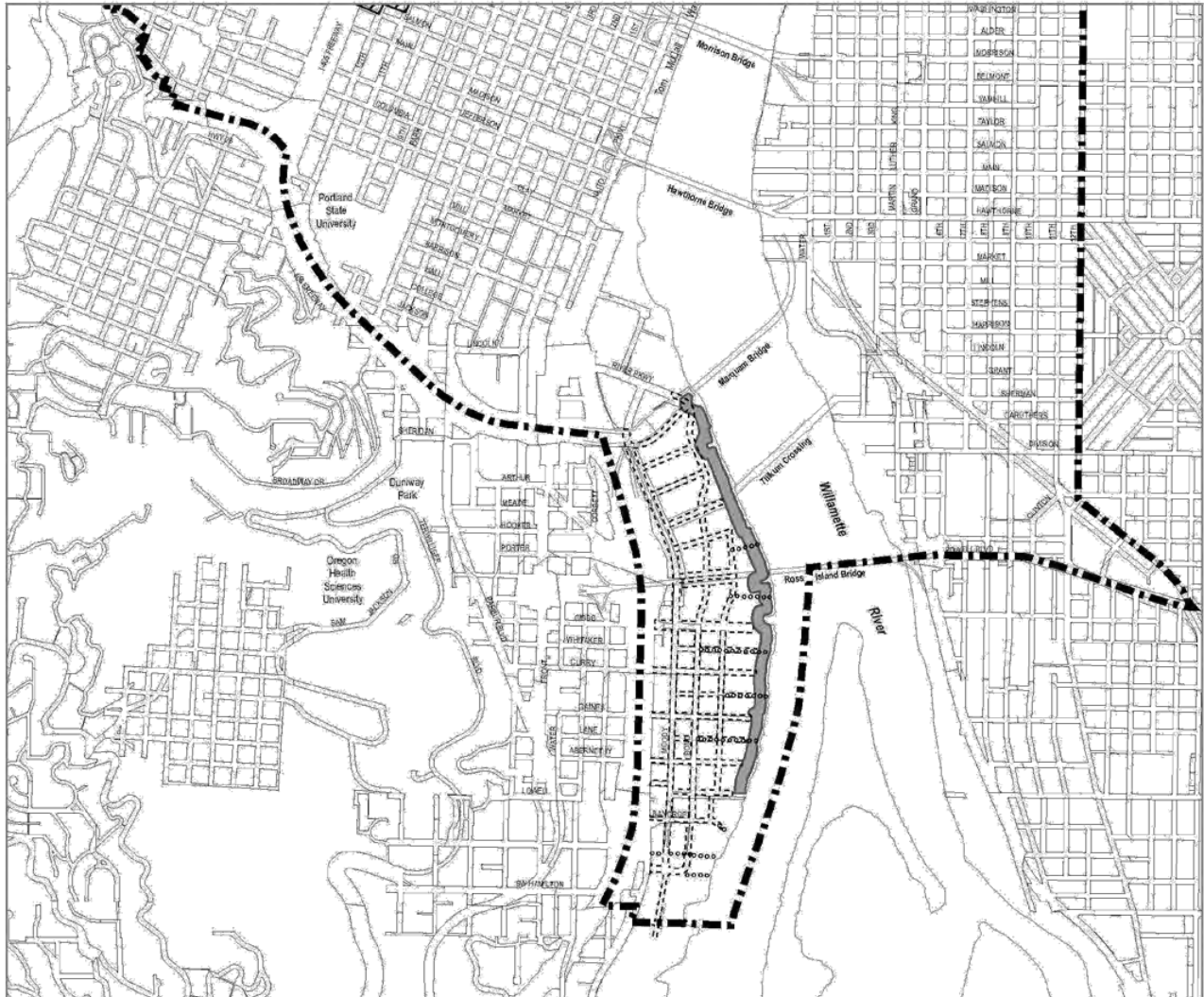
Central City Plan District boundary








Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

Scale in Feet
Bureau of Planning and Sustainability
Portland, Oregon

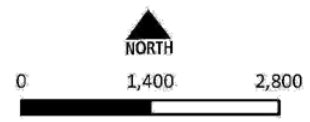
Commentary



Legend

-  Greenway bonus target area extends 150' back from top of bank
-  North Pearl subarea bonus target area
-  Proposed right-of-way
-  West End residential bonus target area
-  Proposed accessway

 Central City Plan District boundary



Code References:
 33.510.XXX, 33.510.XXX
 33.510.XXX, 33.510.XXX

Scale in Feet
 Bureau of Planning and Sustainability
 Portland, Oregon

Commentary

Map 510-6 Required Residential Development Areas (Previously Map 510-5)

Required Residential has been removed in areas of Goose Hollow as discussed in the West Quadrant Plan to help support future Lincoln High School redevelopment. Most of the area is not currently in residential use. In addition, to support future Lincoln High School redevelopment and the goal of a vibrant Jefferson main street, the requirement was removed from the area between Lincoln High School and SW Jefferson, but was retained on SW Columbia to provide a buffer for the RH-zoned area to the south.

Draft Required Residential Development Areas

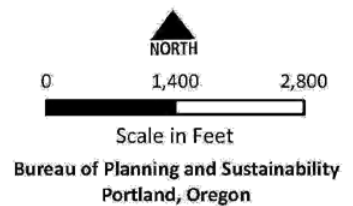
Map 510-6

Map 1 of 2

Map Revised Xxxxx XX, 2015



 Central City Plan District boundary



Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

10/9/2015

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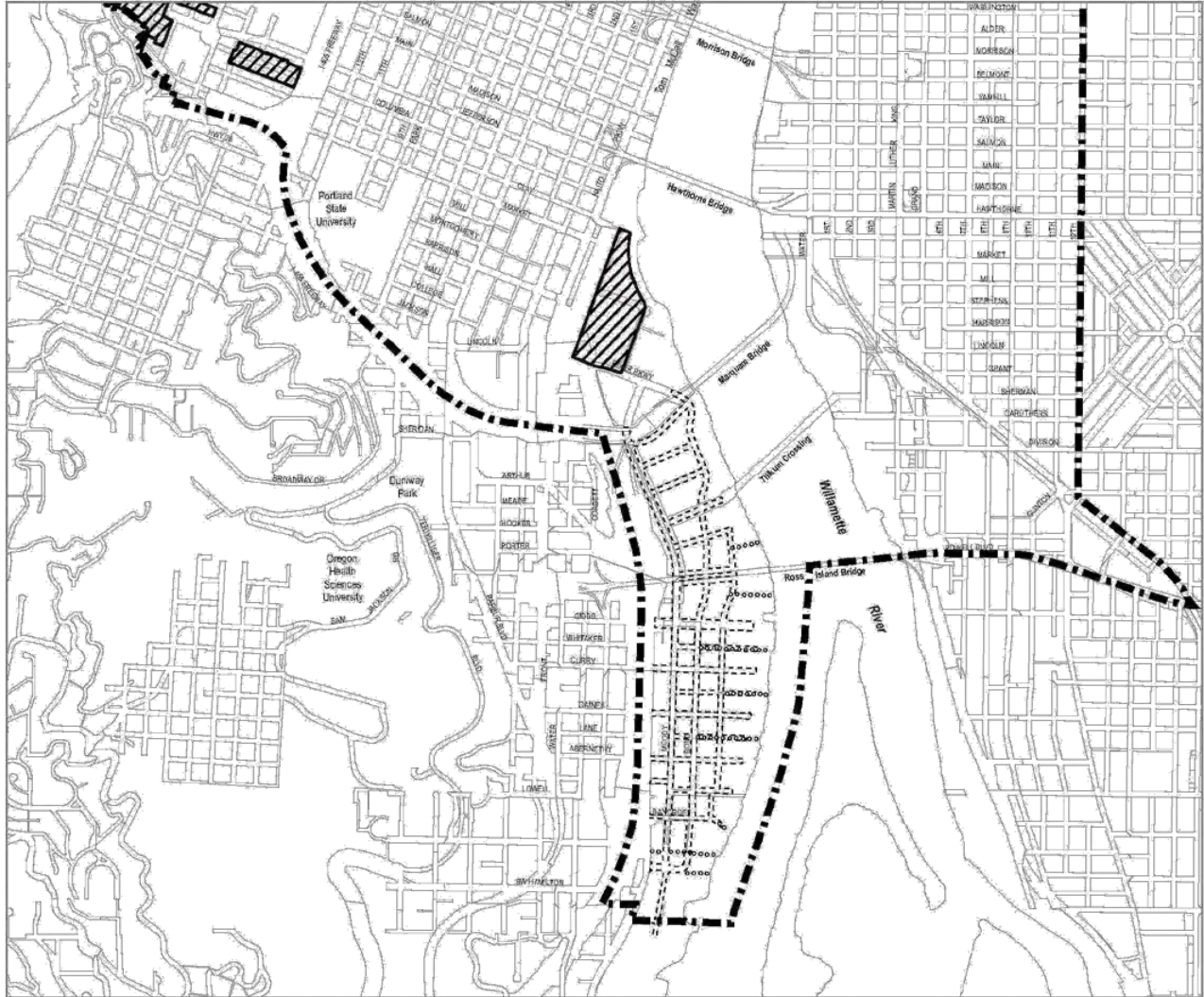
Commentary

Draft Required Residential Development Areas

Map 510-6

Map 2 of 2

Map Revised Xxxxx XX, 2015



Legend



Required residential

----- Proposed right-of-way

..... Proposed accessway



Central City Plan District boundary



0 1,400 2,800



Scale in Feet

Bureau of Planning and Sustainability
Portland, Oregon

Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

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Chapter 33.510, Central City Plan District

Commentary

Street and Development Character Concept

The Central City's streets and associated public rights-of-way account for some 40% of its land area, and are therefore a significant opportunity to meet multiple objectives. Compared with streets in other U.S. downtowns, the Central City's streets are typically narrower and many appear very similar in function, design and character. The intent of the "Street and Development Character" concept developed during the quadrant planning process was to introduce a more intentional street hierarchy to the Central City's street network yielding a more diverse range of experiences. It acknowledges that the character of a street is part public right-of-way and streetscape, and part ground floor uses and design of adjacent buildings. It is assumed all streets would continue to have active ground floor uses, good sidewalks with safe crossings, attractive public amenities and furnishings, and integrated stormwater management features. The concept proposes three types of streets:

Retail Streets

These are busy, continuous streets with retail activity throughout the day, evenings and weekends. Ground-floor retail uses are required or strongly encouraged. Some of these street corridors are "civic" scaled - those that are major corridors beyond the boundaries of the Central City.

Boulevard Streets

These streets can also be very busy - they can be the "second" street of a couplet pair or define a district edge - but they offer a greener, more landscaped character with fewer retail storefronts. Like the retail commercial type, these streets are broken into the "civic" and "district" scales to reflect the fact that some of these streets reach far beyond the district.

Flexible Streets

These streets, pathways and trails are part of the pedestrian and bicycle friendly system of routes that offer quieter and "lower stress" experiences. The forms and characters of these connections can vary considerably: some could look and feel more like typical streets, some could be trails through or along open spaces or plazas, and other could even go through interior spaces of buildings.

Map 510-7 Required Building Lines (Previously Map 510-6)

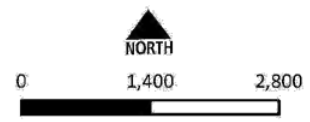
Required Building Lines were updated to reflect the above concept. Retail Streets identified through the quadrant plans now require sidewalk extension standards in optional setbacks. Boulevard and Flexible Streets require landscaping to an L2 standard allowed in the optional setback. All other areas will be allowed to choose handscaping or landscaping if they choose to have a portion of the building set back.



- Legend**
- Extension of the sidewalk standards (see Section 33.510.XXX)
 - Landscaped standards (see Section 33.510.XXX)
 - South Waterfront (see Section 33.510.XXX)
 - Required building setback (see Section 33.510.XXX)

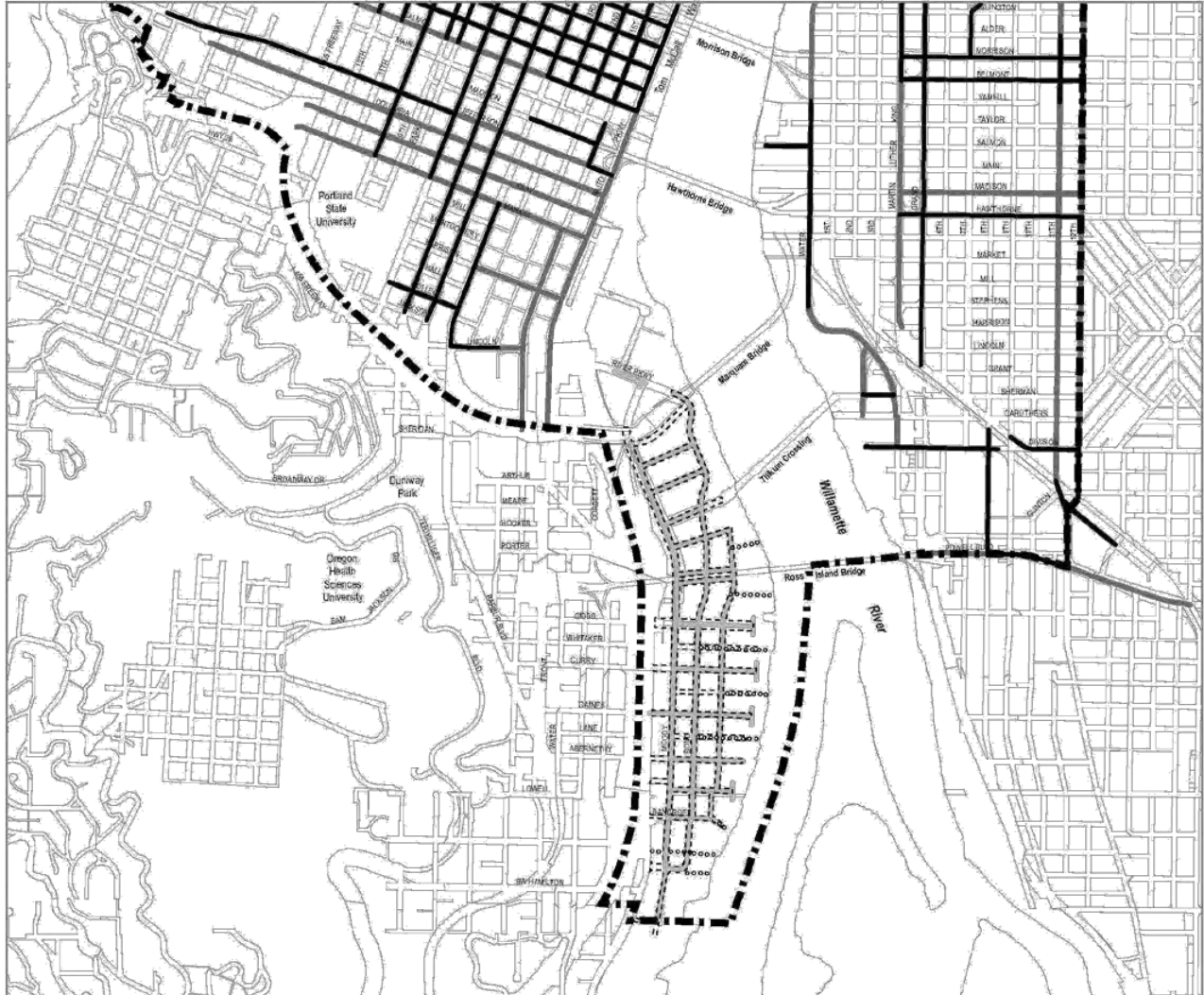
Central City Plan District boundary

Code References:
 33.510.XXX, 33.510.XXX
 33.510.XXX, 33.510.XXX



Scale in Feet
 Bureau of Planning and Sustainability
 Portland, Oregon

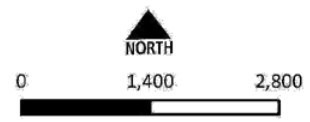
Commentary



Legend

- Extension of the sidewalk standards (see Section 33.510.XXX)
- Landscaped standards (see Section 33.510.XXX)
- South Waterfront (see Section 33.510.XXX)
- Required building setback (see Section 33.510.XXX)
- Proposed right-of-way
- Proposed accessway

Central City Plan District boundary



Code References:
 33.510.XXX, 33.510.XXX
 33.510.XXX, 33.510.XXX

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 Chapter 33.510, Central City Plan District


Commentary

Map 510-8 Ground Floor Windows (New)

This is a new map created to identify streets where higher levels of glazing are required based on the Street and Development Character concept for the Retail Core. The new 60% glazing streets and 40% glazing elsewhere in the CX is consistent with citywide update to mixed use zones.

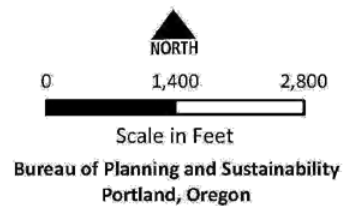


Legend

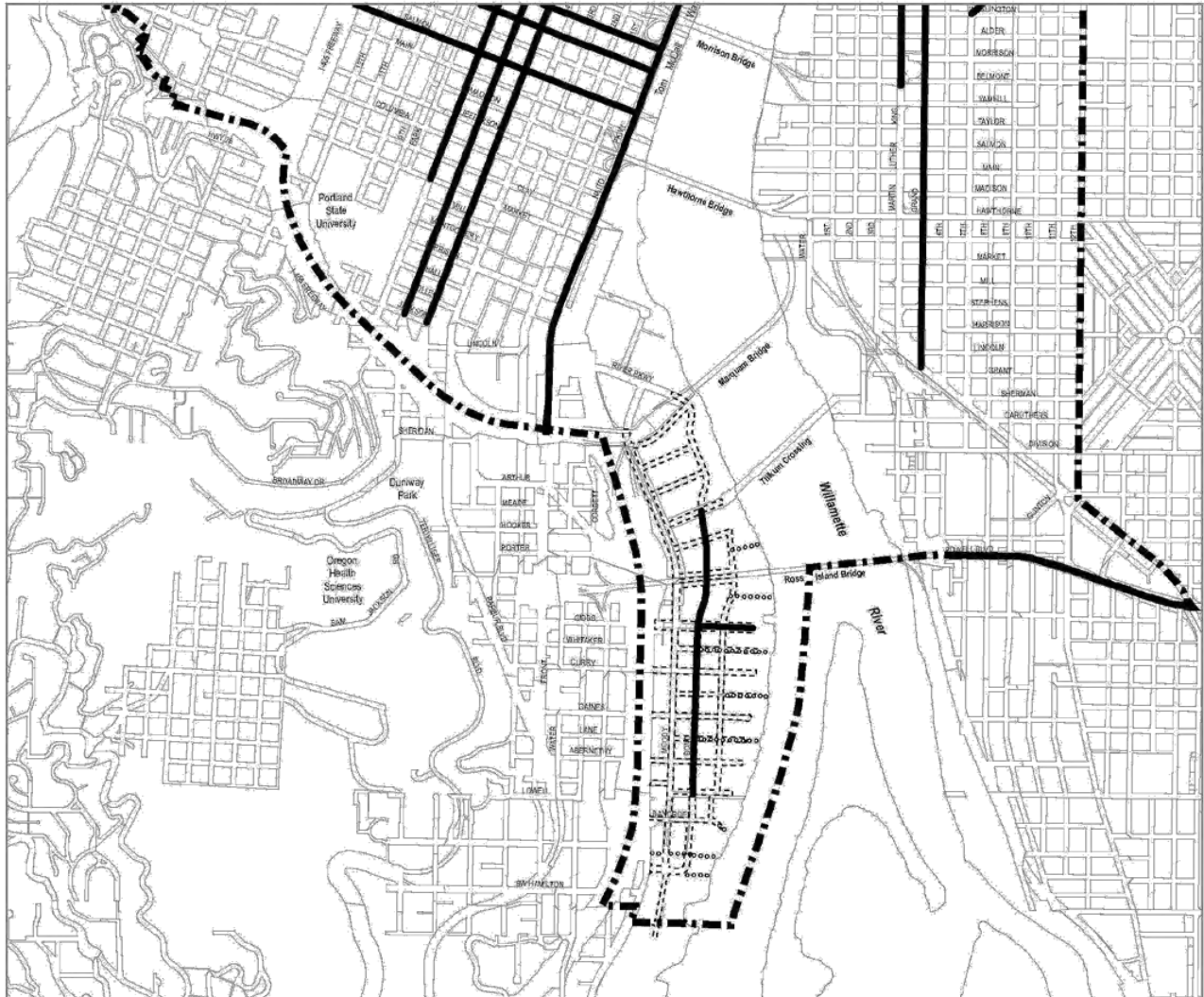
 60% ground floor window requirement (see Section 33.510.XXX)

 Central City Plan District boundary

Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX



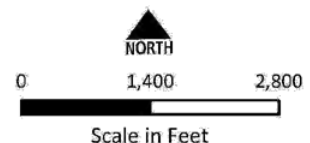
Commentary



Legend

 60% ground floor window requirement (see Section 33.510.XXX)	 Proposed right-of-way
	 Proposed accessway

 Central City Plan District boundary



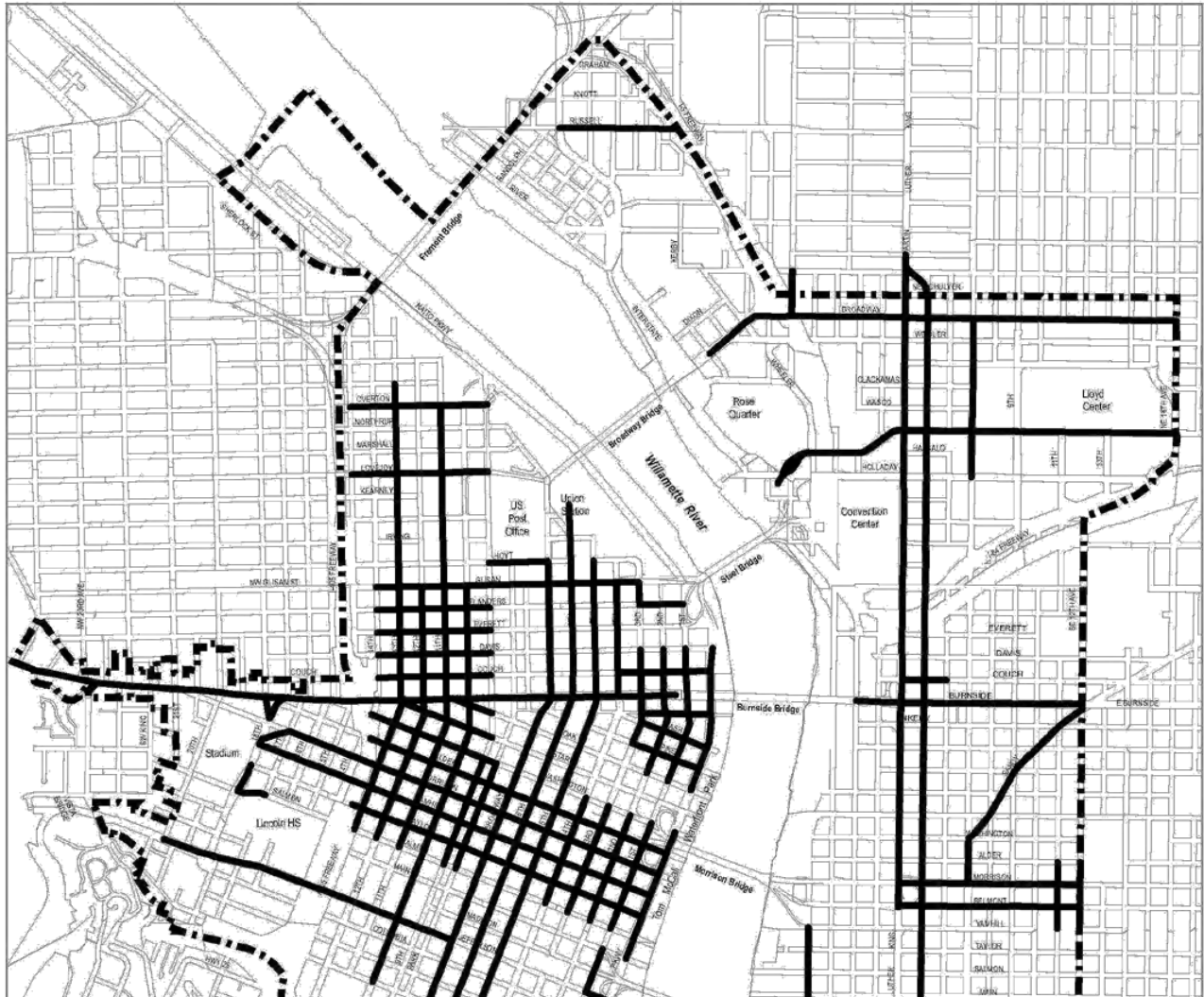
Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

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Commentary

Map 510-9 Ground Floor Active Use Areas (Previously Map 510-7)

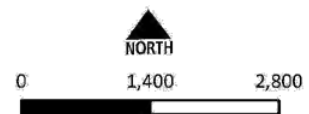
This map has been updated based on the Street and Development Character Concept to incorporate Retail Street designations from the Street Development and Ground Floor Character concepts from the quadrant plans. For consistency and to improve clarity, the existing mix of areas and lines to depict Ground Floor Active Use areas have been converted to lines to apply to sites with frontage on these streets.



Legend

-  Required ground floor active uses (see
-  Proposed right-of-way
-  Proposed accessway

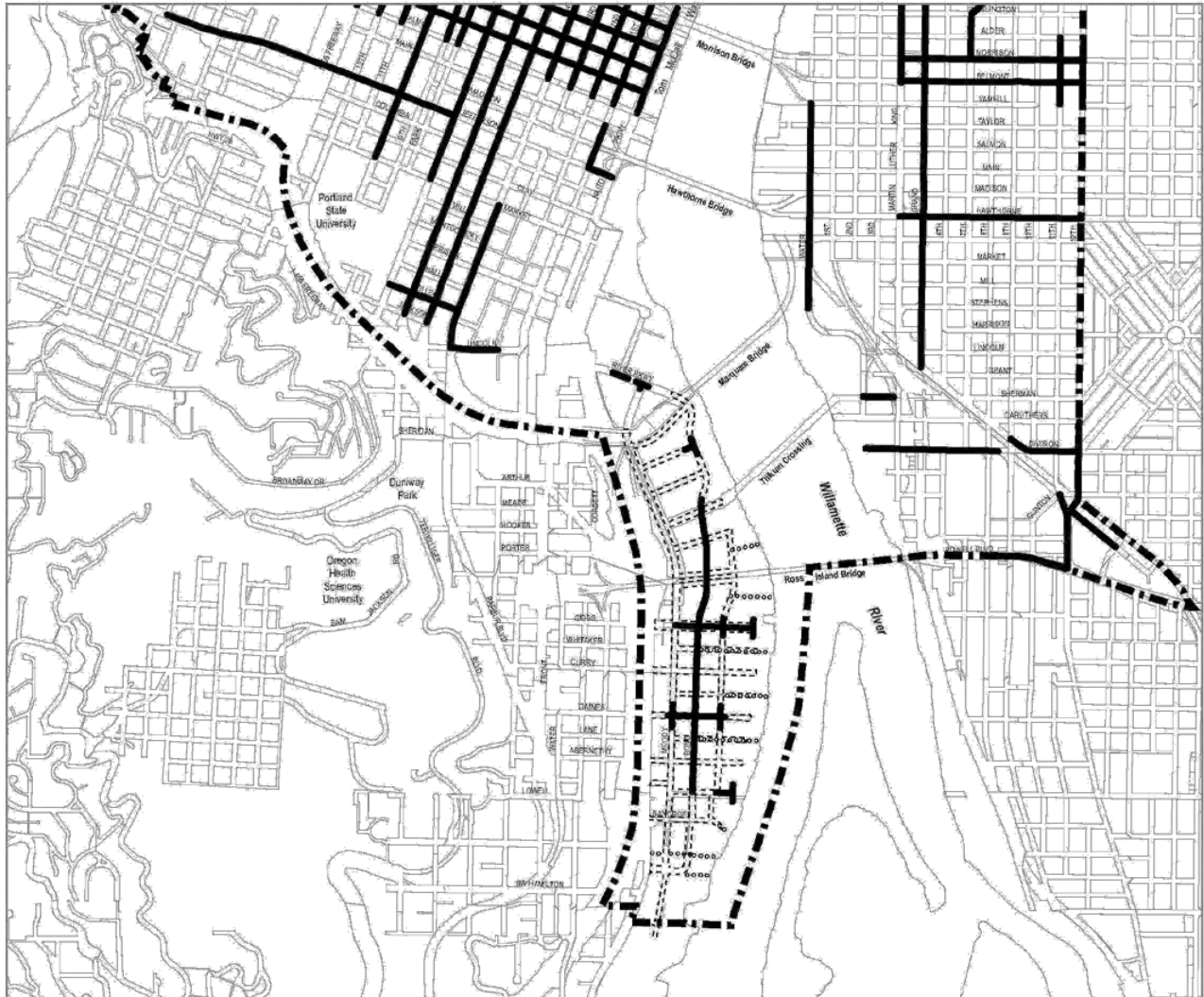
 Central City Plan District boundary



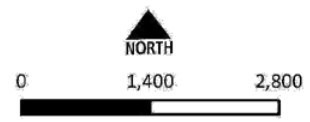
Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

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Portland, Oregon

Commentary



Central City Plan District boundary



Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

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Portland, Oregon

Commentary

Map 510-10 Core and Parking Sectors

This map has been updated in conjunction with the PBOT Central City Parking Study. The number of sectors is proposed to be reduced from 26 to 6 to better match Central City subdistrict geographies. This map is used primarily with the new draft parking code which will be ready for review in November.

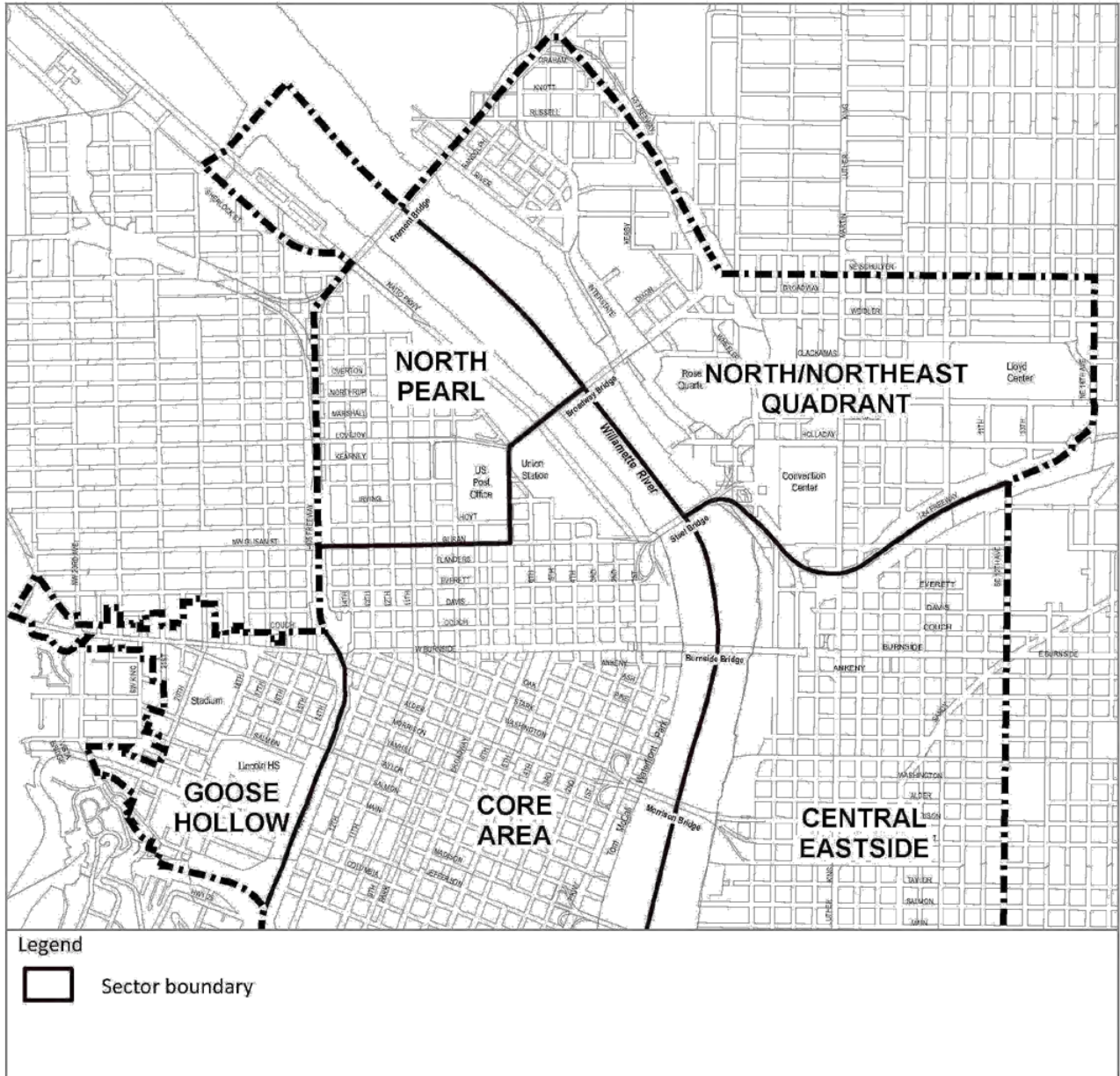
Draft Core and Parking Sectors

Parking Code Coming Soon

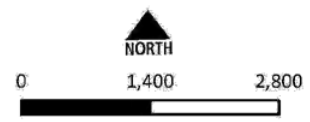
Map 510-10

Map 1 of 2

Map Revised Xxxxx X, 2015



 Central City Plan District boundary



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Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

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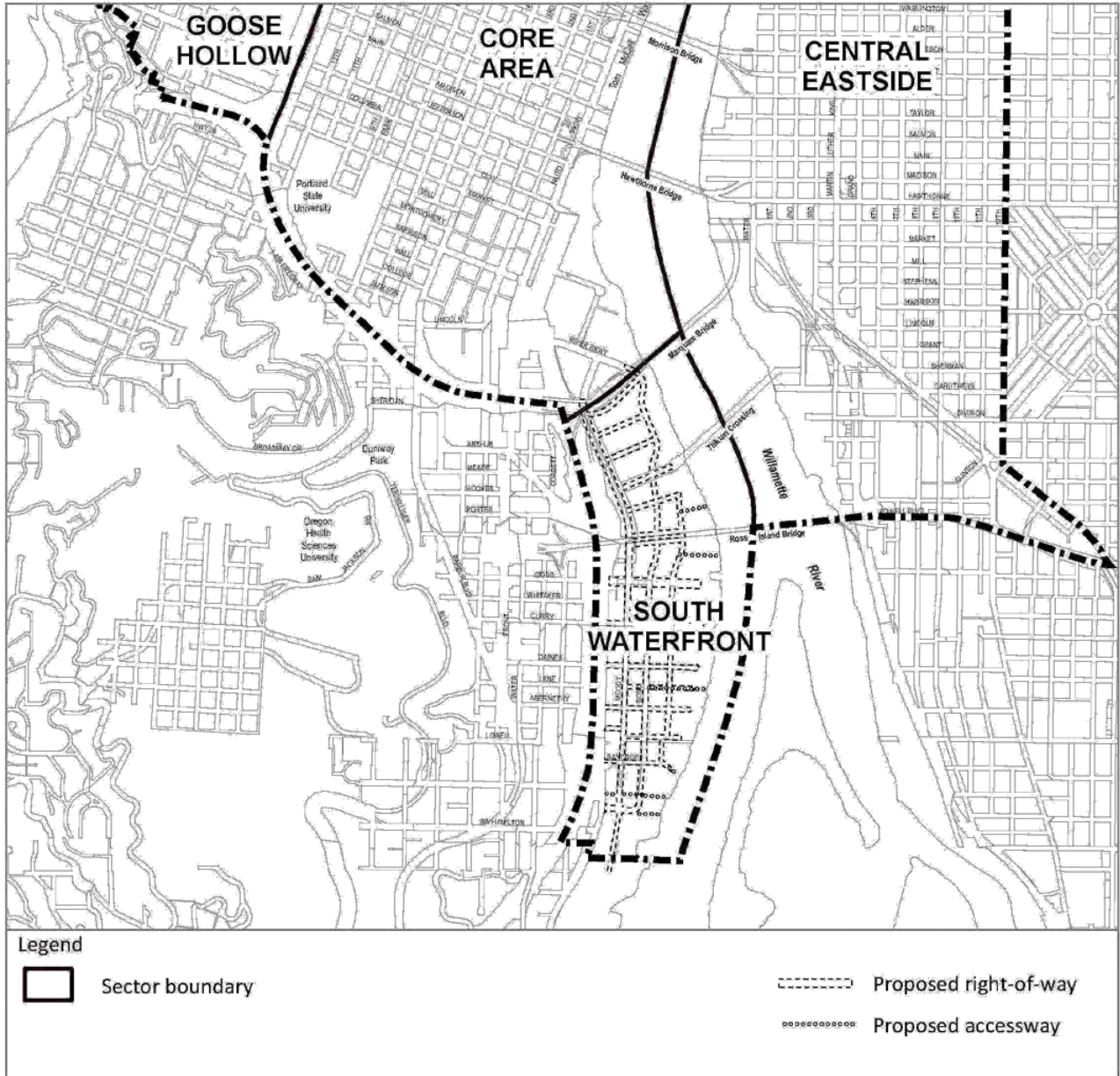
Commentary

Draft Core and Parking Sectors
 Parking Code Coming Soon

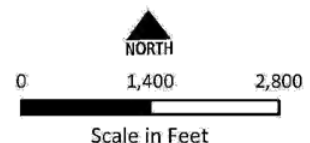
Map 510-10

Map 2 of 2

Map Revised Xxxxx X, 2015



Central City Plan District boundary



Code References:
 33.510.XXX, 33.510.XXX
 33.510.XXX, 33.510.XXX

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 Chapter 33.510, Central City Plan District

Commentary

Proposed for Deletion: Existing Map 510-9 Parking Access Restricted Streets

Currently, there is a lack of clarity behind how streets are regulated by the Parking Access Restricted Streets map (e.g., the streets with the three light rail lines downtown are each regulated differently). PBOT is proposing to replace the map with criteria for all off-street parking access in the Central City, which cite TSP classifications. The criteria will be structured in a way that would prohibit parking access that crosses a rail alignment or bike facility, without the need for a static map.

The Parking Access Restricted Streets code section will be folded into the full draft of the parking code.

Parking Access Restricted Streets

Map 510-9

Map 1 of 2

Map Revised March 1, 2015



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Chapter 33.510, Central City Plan District

34133

2-211

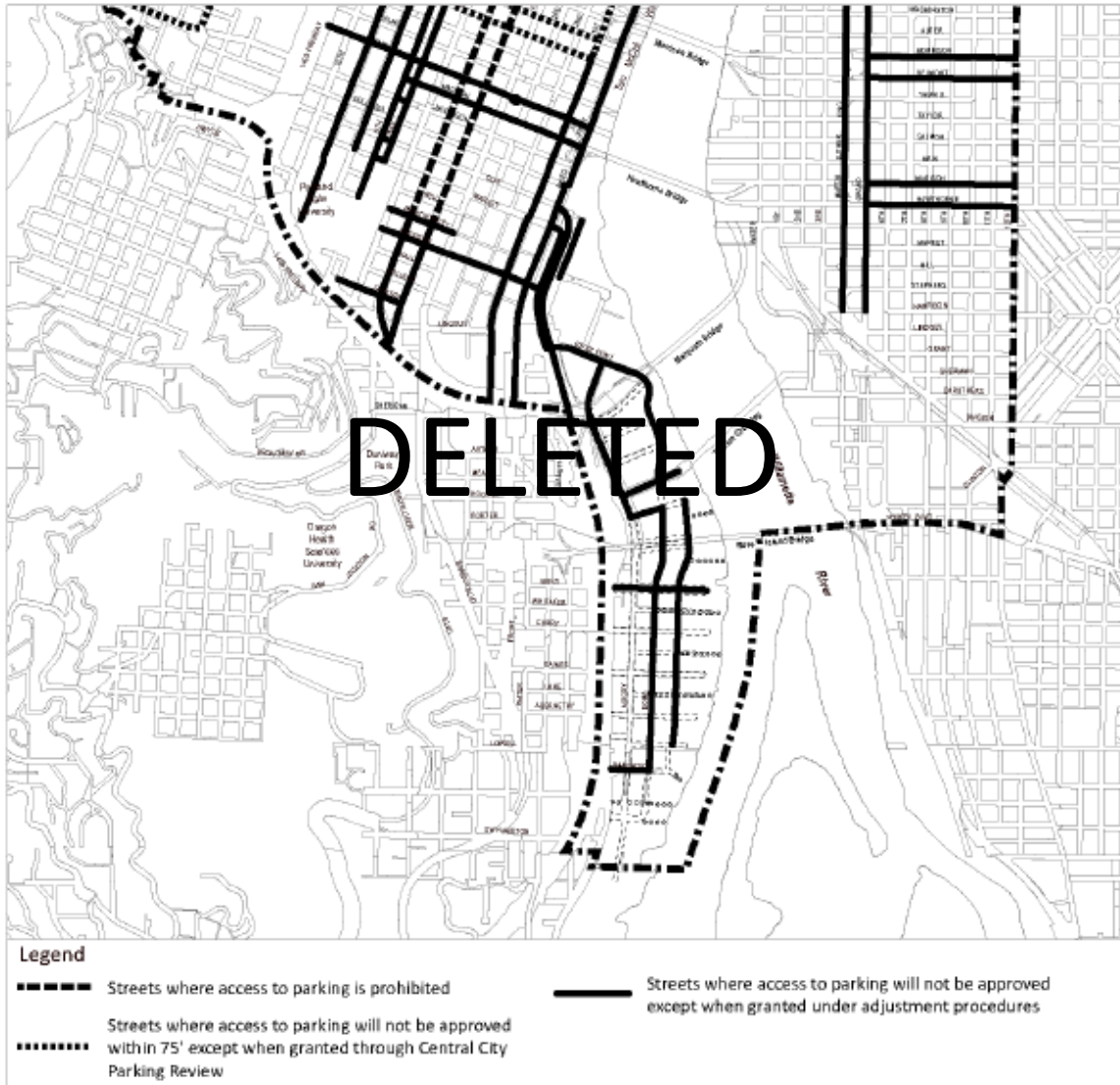
Commentary

Parking Access Restricted Streets

Map 510-9

Map 2 of 2

Map Revised March 1, 2015



Commentary

Map 510-11 Areas Where Additional Uses are Allowed in the OS Zone (Previously Map 510-10)

This map has been updated to include Tom McCall Waterfront Park and Holladay Park.

Draft Areas Where Additional Uses are Allowed in the OS Zone


Map 510-11




Map 1 of 2

Map Revised Xxxxx X, 2015



Legend

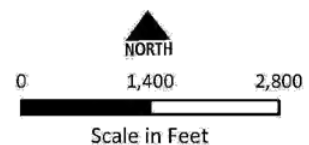
 OS sites where additional uses are allowed

-  Central City Plan District boundary
-  Subdistrict boundary
-  Subarea boundary

Code References:
33.510.XXX, 33.510.XXX

10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
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Portland, Oregon

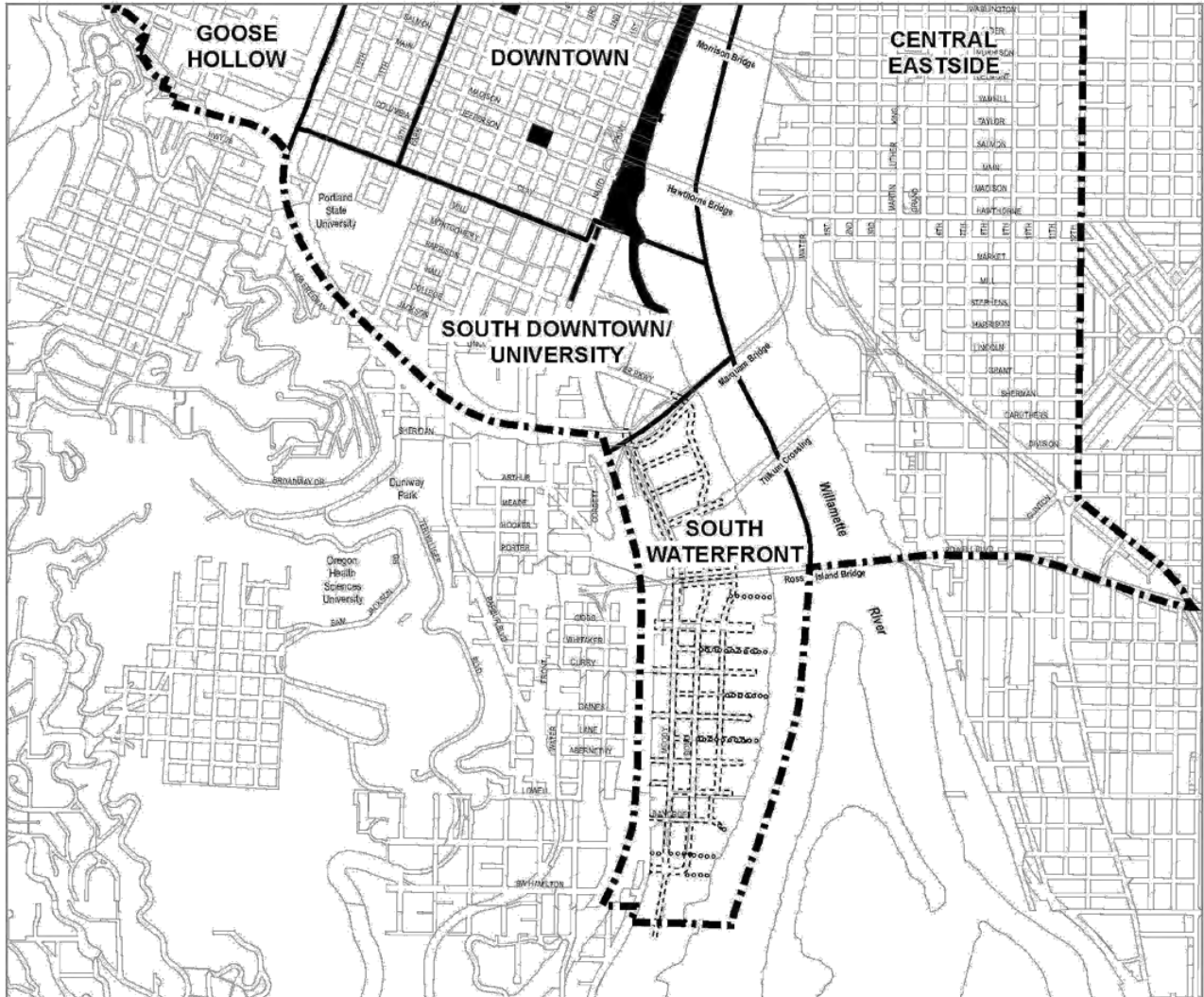
Commentary

Draft Areas Where Additional Uses are Allowed in the OS Zone

Map 510-11

Map 2 of 2

Map Revised Xxxxx X, 2015



Legend



OS sites where additional uses are allowed



Proposed right-of-way



Proposed accessway



Central City Plan District boundary



Subdistrict boundary

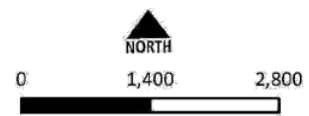


Subarea boundary

Code References:
33.510.XXX, 33.510.XXX

10/9/2015

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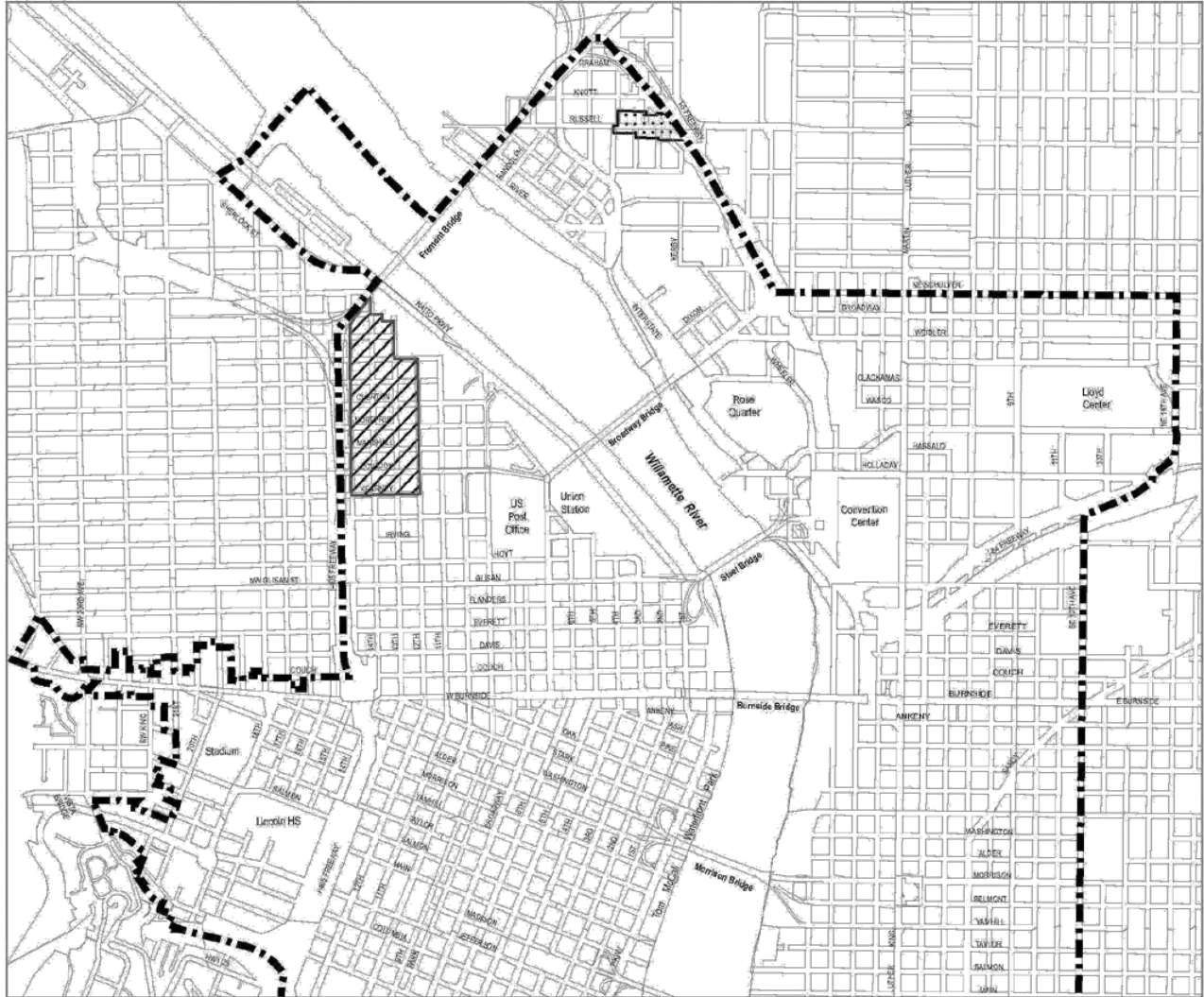
Commentary

Map 510-12 Special Areas (Previously Map 510-11)




This map was updated to include areas where Residential uses will not be allowed or will only be allowed as a Conditional Use as part of a Master Plan process.

In Lower Albina, an area receiving EXd Comprehensive Plan designation would prohibit Residential uses if rezoned, so this is included as well.

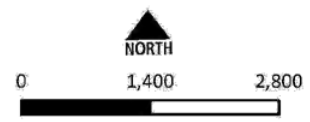
Staff are eliminating section 33.510.224 Mechanical Equipment along the Portland Streetcar Alignment. This language was added to the code to prohibit the diesel generators associated with "Telecom Hotels" - a technology no longer in use. The area associated with this provision has been removed from the map.



Legend

-  Areas where size of retail sales and service uses is limited
-  Residential uses prohibited
-  Residential uses allowed as Conditional Use (see 33.510.255 Central City Master Plans)

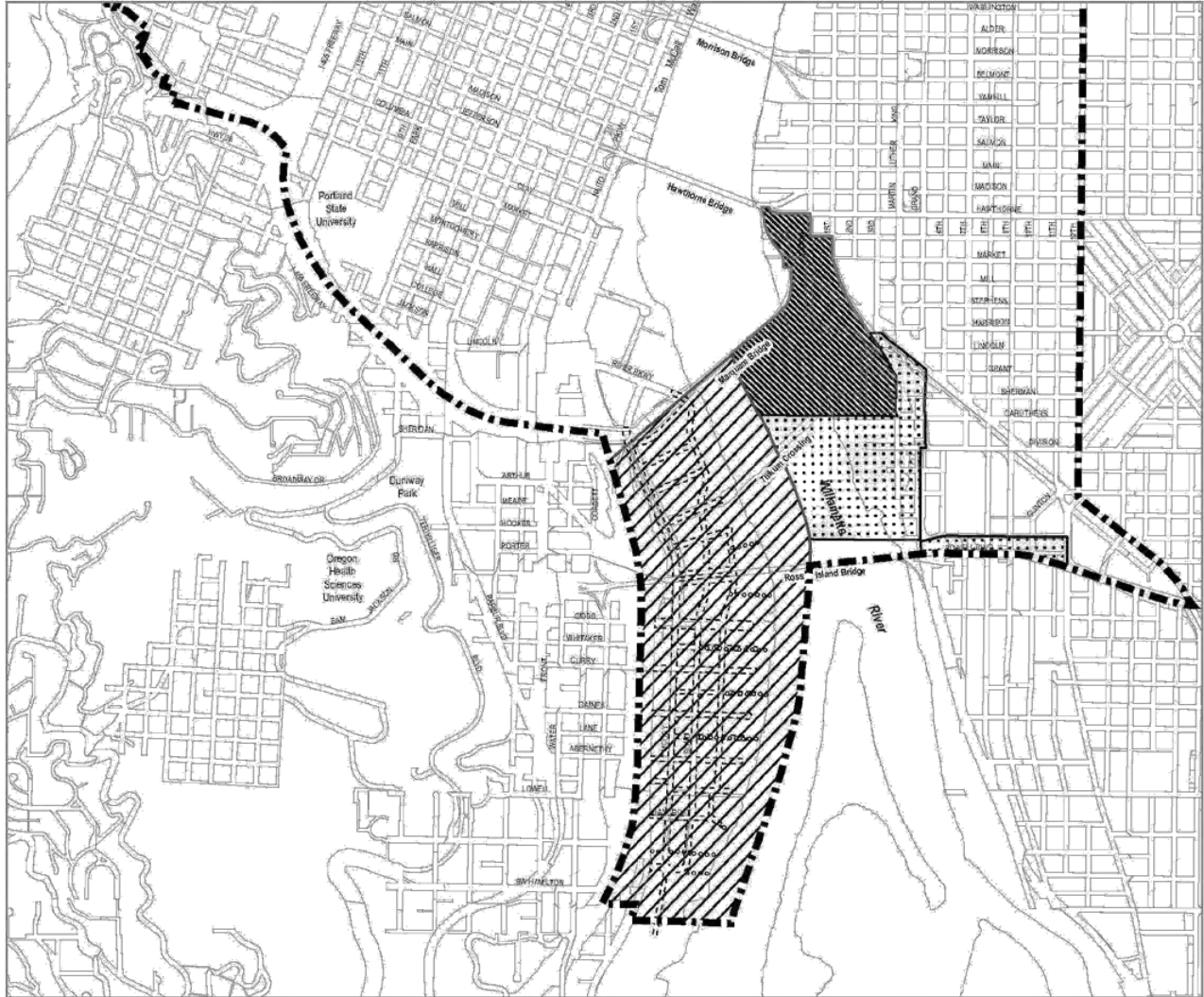
 Central City Plan District boundary








Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

Scale in Feet
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Portland, Oregon

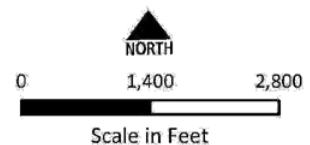
Commentary



Legend

-  Areas where size of retail sales and service uses is limited
-  Residential uses prohibited
-  Proposed right-of-way
-  Residential uses allowed as Conditional Use (see 33.510.255 Central City Master Plans)
-  Proposed accessway

 Central City Plan District boundary



Code References:
 33.510.XXX, 33.510.XXX
 33.510.XXX, 33.510.XXX

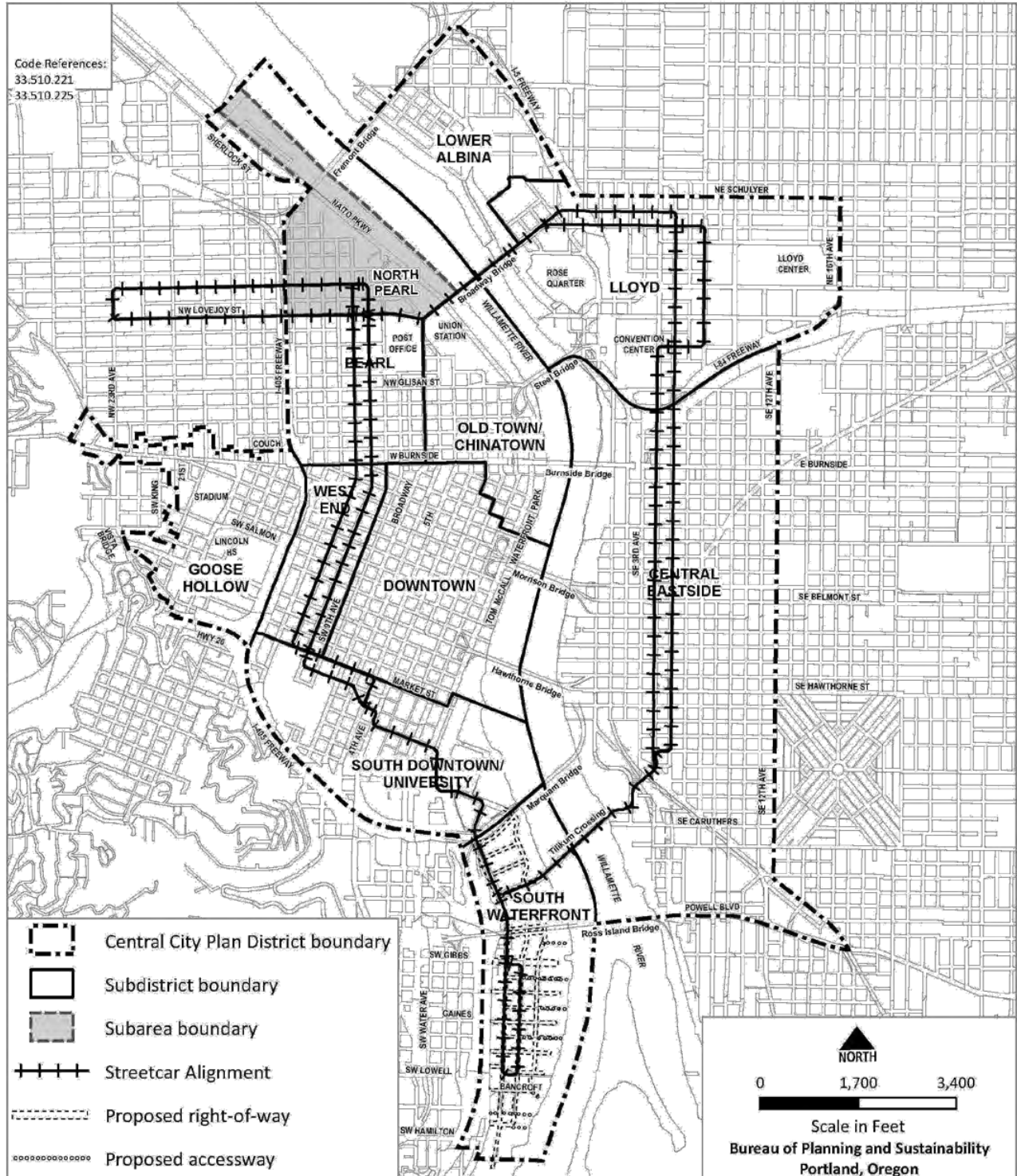
Scale in Feet
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 Portland, Oregon

Commentary

Map 510-13 Streetcar Alignment (Previously Map 510-12)

Updated to include the east side street car line.

Map Revised Xxxxx XX, 2015



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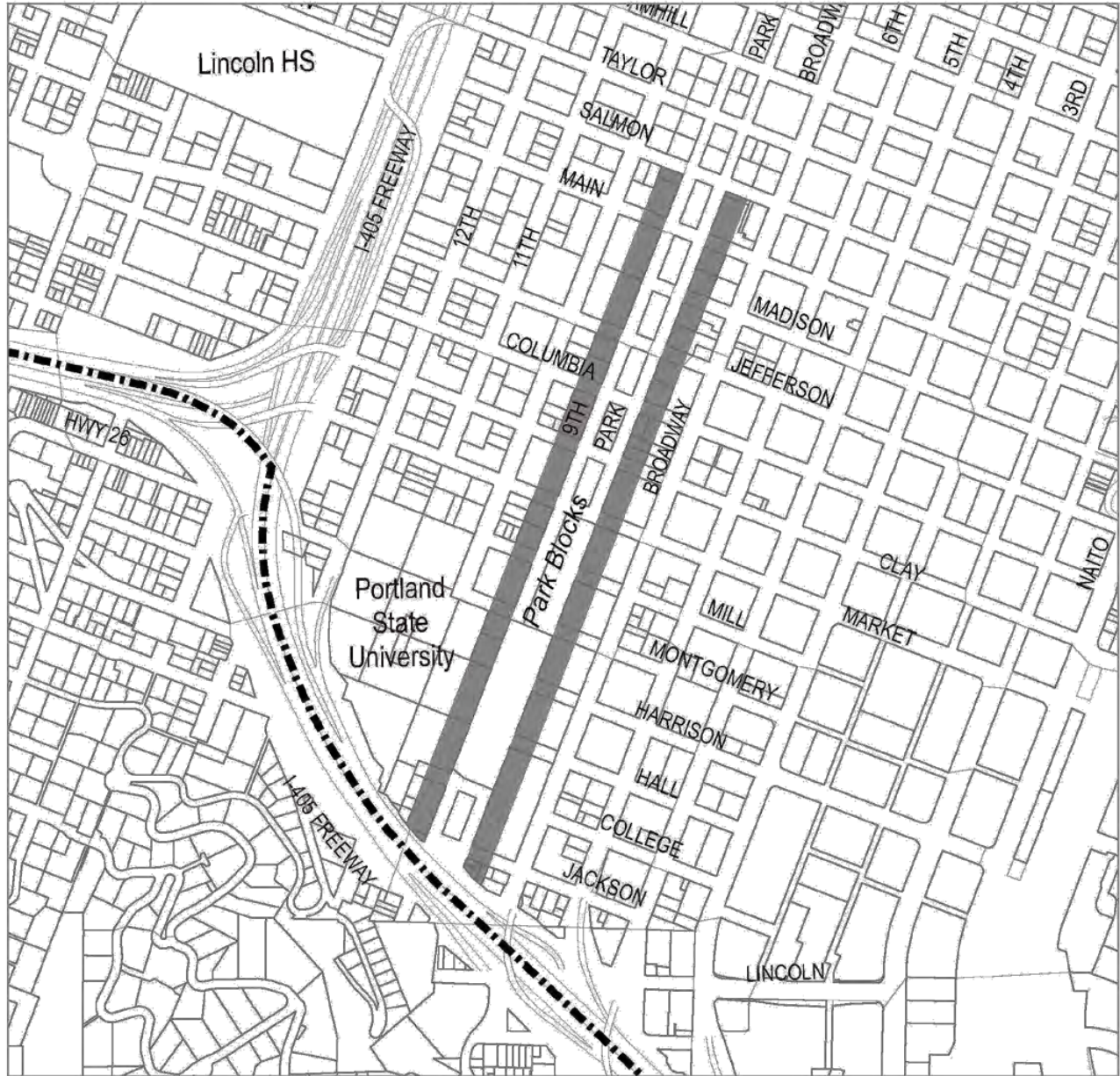
IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
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Commentary

Map 510-14 Park Block Frontages (Previously Map 510-13)

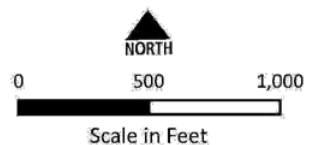
No changes are proposed for this map.

Map Revised Xxxxx XX, 2015



-  Central City Plan District Boundary
-  Park block frontage

Code References:
 33.510.XXX, 33.510.XXX
 33.510.XXX, 33.510.XXX



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Commentary

Proposed for Deletion: Existing Map 510-14 Areas Where Additional Uses are Allowed in the RX Zone

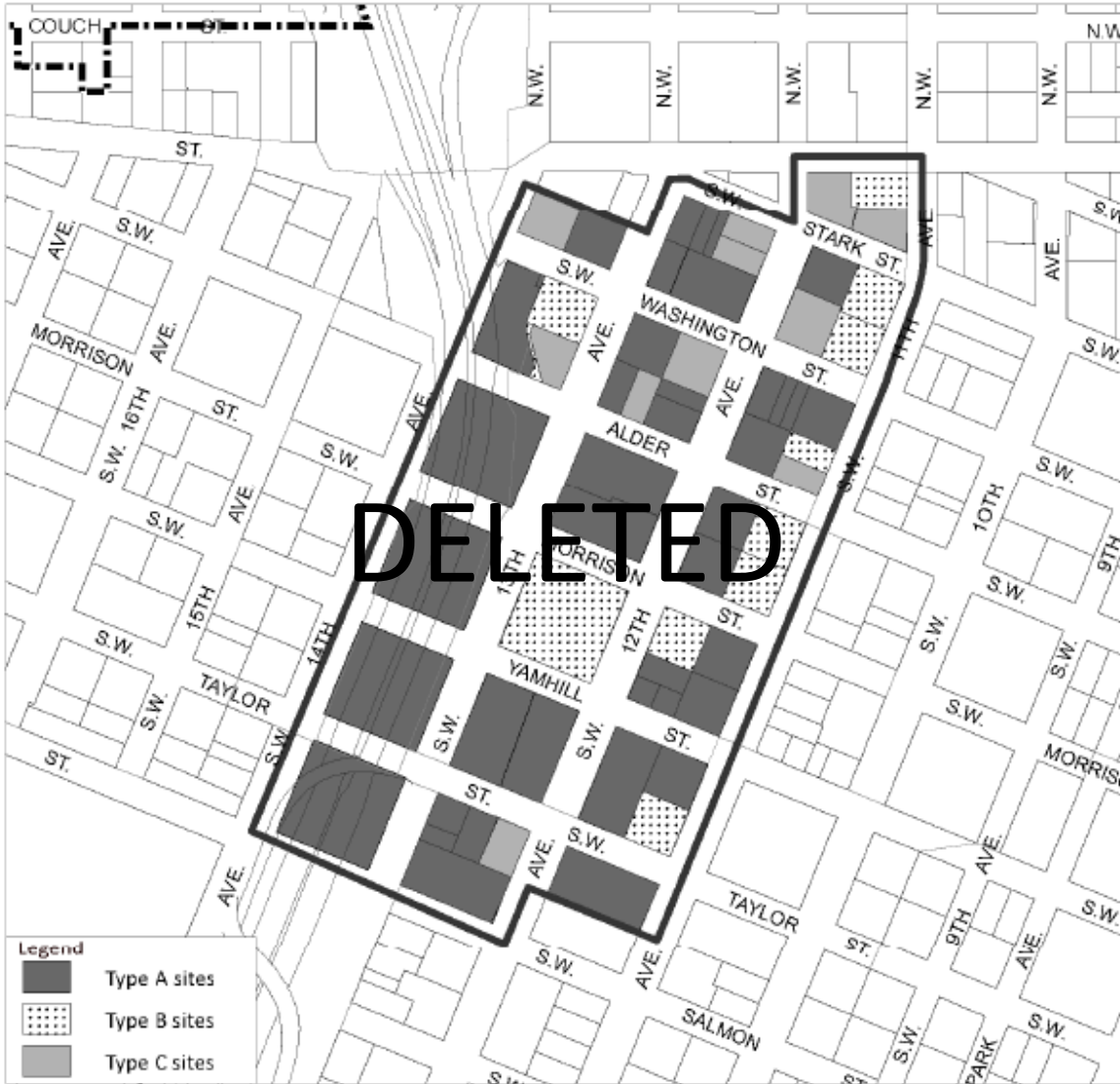
This map is being deleted because the primary section of the Code that references this map, 33.510.118 "Use Regulations for Specified Sites in the West End Subarea," is being deleted. This section of Code allowed for different uses as well as different mitigation measures for certain types of development within this RX zoned area. Staff proposes to change the zoning here to CX, making most of these provisions irrelevant.

The subarea boundary on 510-14 map is also referenced in 33.510.200.C(2), but not the A, B and C sites. This section of the Code allows the subarea to earn bonus FAR above the 3:1 maximum. The boundary is now shown on Map 510-5 as a new "West End bonus target area."

Areas Where Additional Uses may be Allowed in the RX Zone

Map 510-14

Map Revised March 1, 2015



- Central City Plan District boundary
- Area Boundary



Commentary

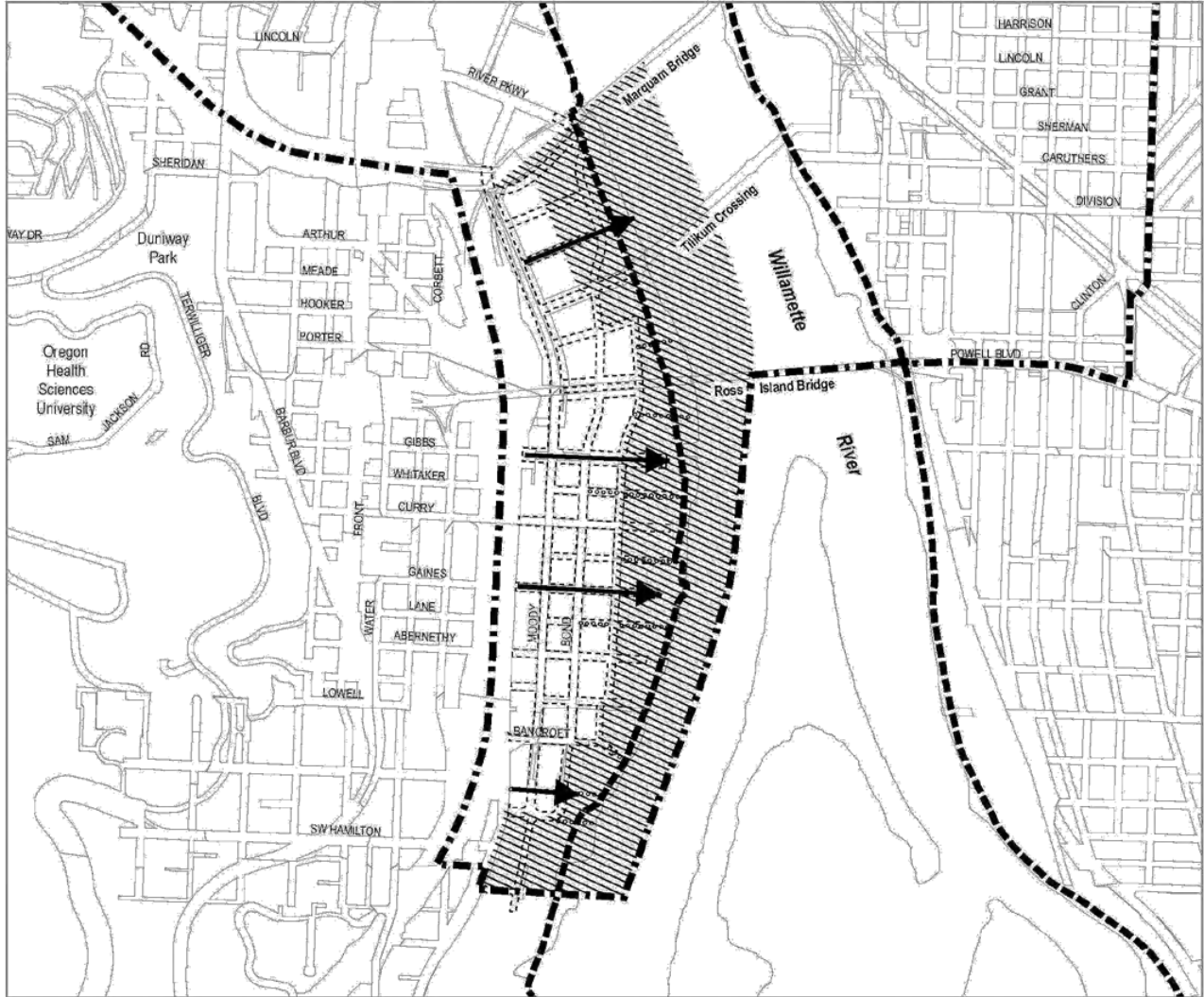
Map 510-15 South Waterfront Greenway Access Map

Updated to move the Major and Minor viewpoints from this map to the Scenic Resources section.

South Waterfront Greenway Public Access

Map 510-15

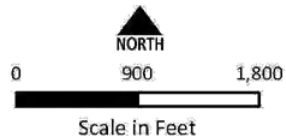
Map Revised Xxxxx X, 2015



Legend

- Special building height corridor
- Primary Greenway Trail
- "'g' River General overlay
- Proposed right-of-way
- Proposed accessway

Central City Plan District boundary



Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

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Commentary

To Be Updated: Map 510-16 North Pearl Height Opportunity Area / South Waterfront Height Opportunity Area

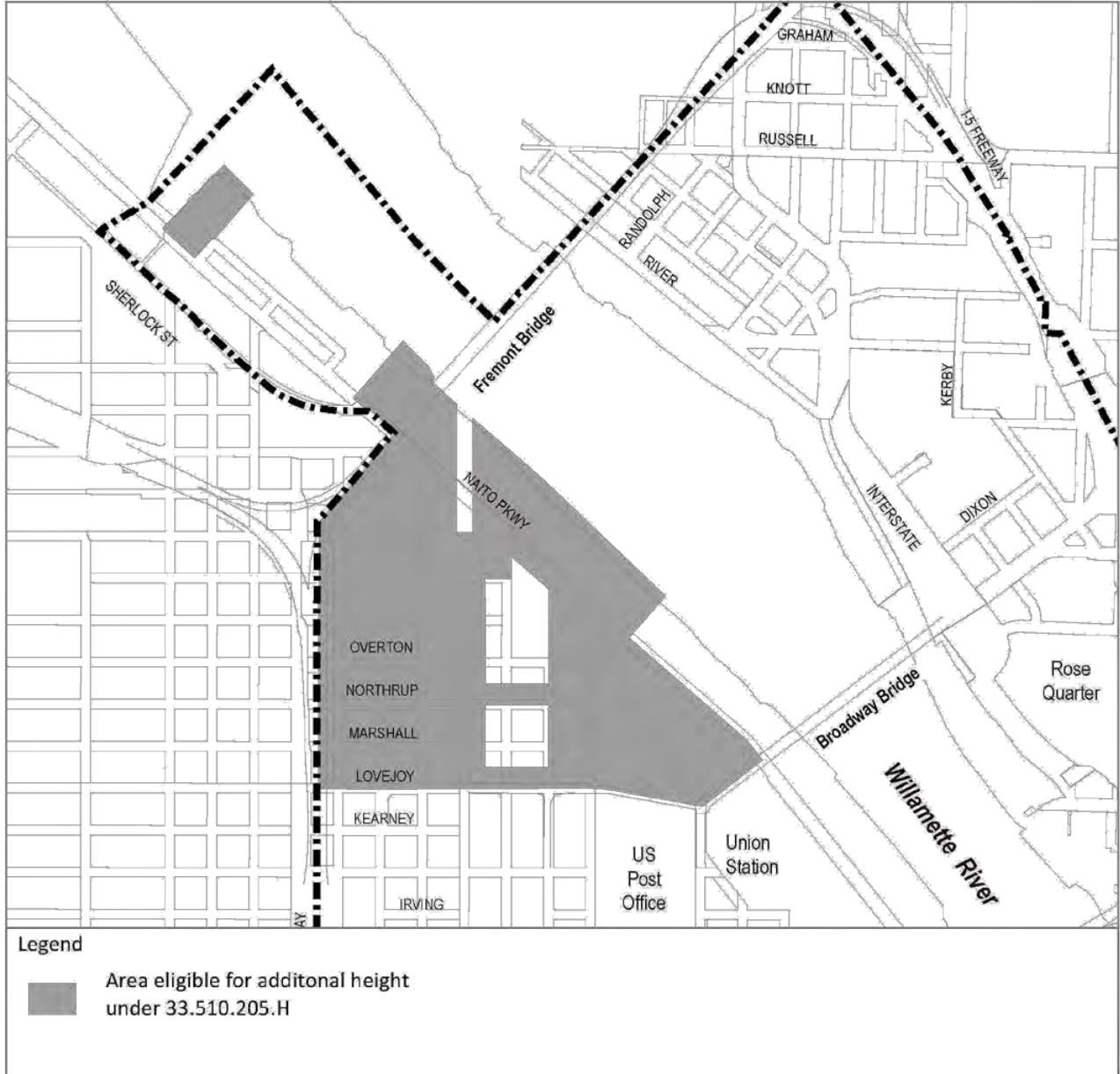
This map will be updated before the Discussion Draft based on input from ongoing Scenic Resources Inventory modeling.

North Pearl Height Opportunity Area

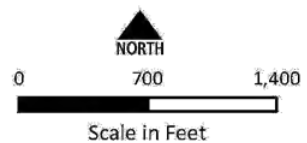
Map 510-16

Map 1 of 2

Map Revised Xxxxx X 2015



Central City Plan District boundary



Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

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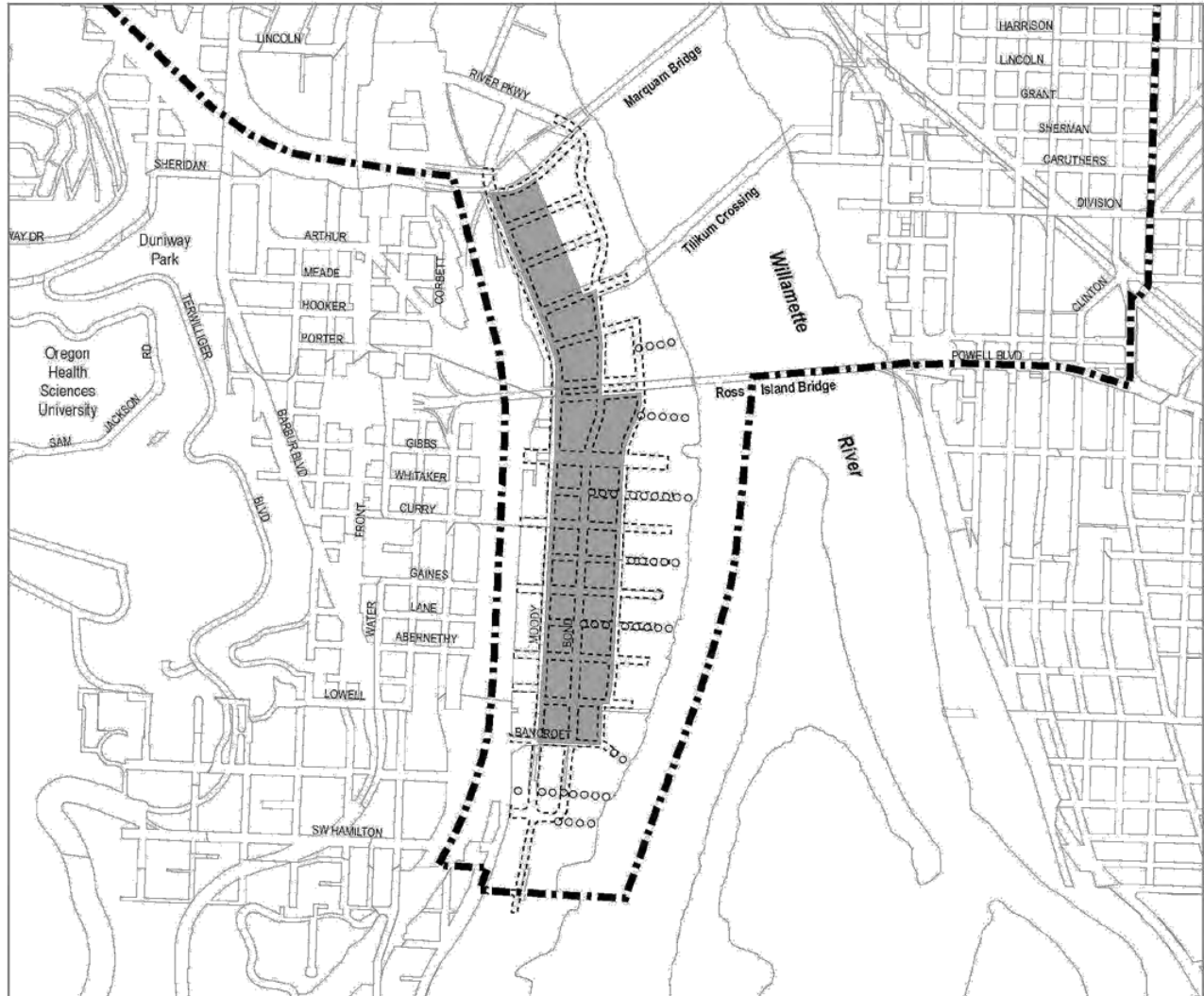
Commentary

South Waterfront Height Opportunity Area


Map 510-16

Map 2 of 2

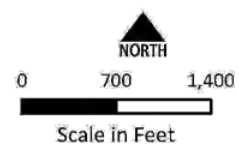
Map Revised Xxxxx X 2015



Legend

 Area eligible for additional height under 33.510.205.G

 Central City Plan District boundary



Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

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Portland, Oregon

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IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Chapter 33.510, Central City Plan District

Commentary

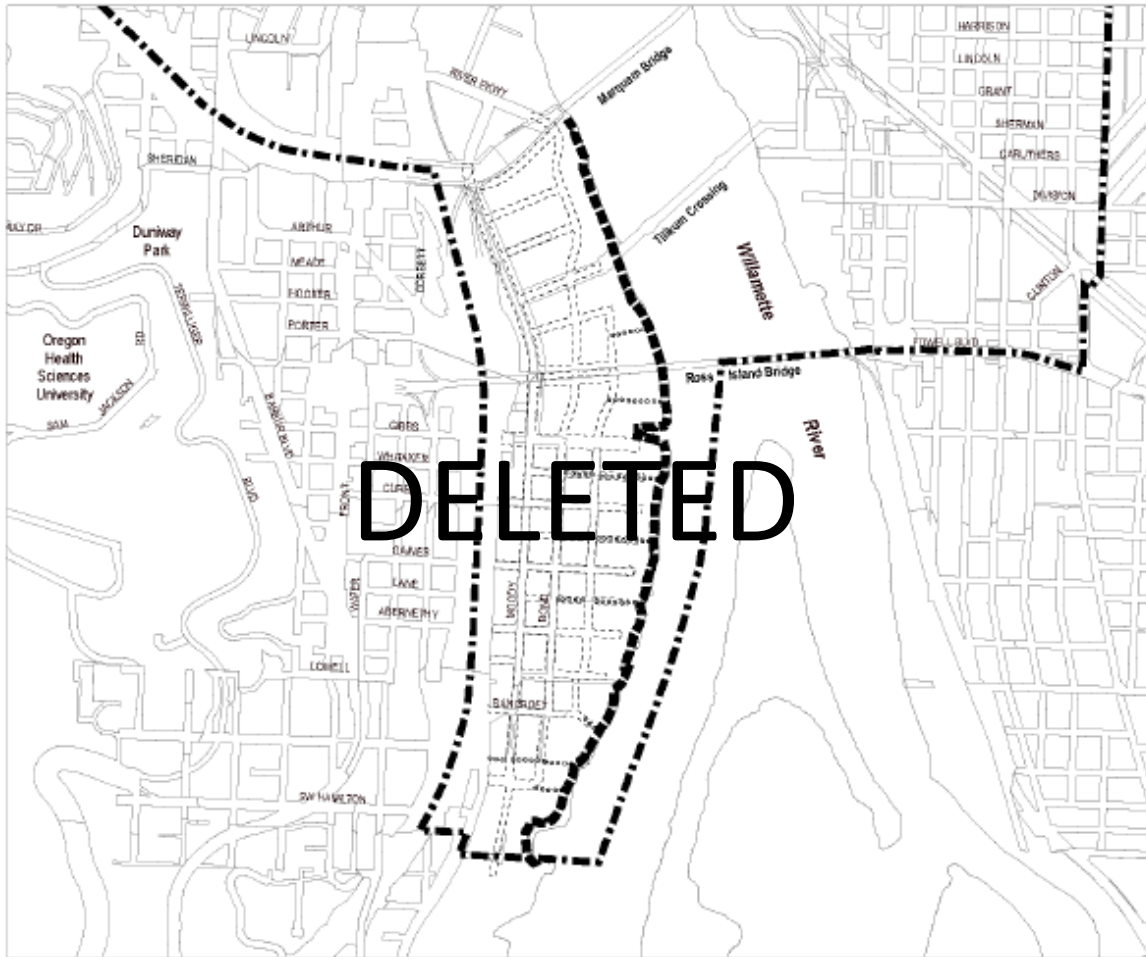
Proposed for Deletion: Existing Map 510-17 South Waterfront 2002 Top of Bank Line

Staff is proposing to eliminate this map because the area where it applies is fully described in the code by saying 150 feet from top of bank. Top of bank is defined in 33.910 and measurements are explained in 33.930.

South Waterfront 2002 Top of Bank Line

Map 510-17

Map Revised March 1, 2015



Legend

- 2002 Top of Bank line
- Proposed right-of-way
- Proposed accessway

Note: See map in Development Services Center for more detail

Central City Plan District boundary



Commentary

Map 510-17 Areas Where Vehicle Repair and Vehicle Sales and Leasing Uses are Restricted (Previously Map 510-18 Area Where Vehicle Sales and Leasing, and Exterior Display and Storage are Restricted)

This map has been renamed and updated to prohibit vehicle sales and leasing within 500 ft of MAX lines when they are at grade or can be crossed by vehicles. In the Central Eastside, where the new Orange MAX Line largely travels along the UPRR alignment only small areas where vehicles can cross the line are included in the provision. Exterior Display and Storage is no longer being mapped.

Draft Area Where Vehicle Repair and Vehicle Sales and Leasing Uses are Restricted




Map 510-17

Map 1 of 2

Map Revised Xxxxx XX, 2015

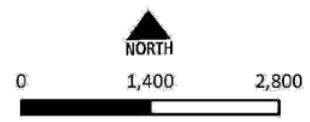


Legend

-  Area where restrictions apply
-  MAX Light Rail line and stops
- 

 Central City Plan District boundary

Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX



Scale in Feet
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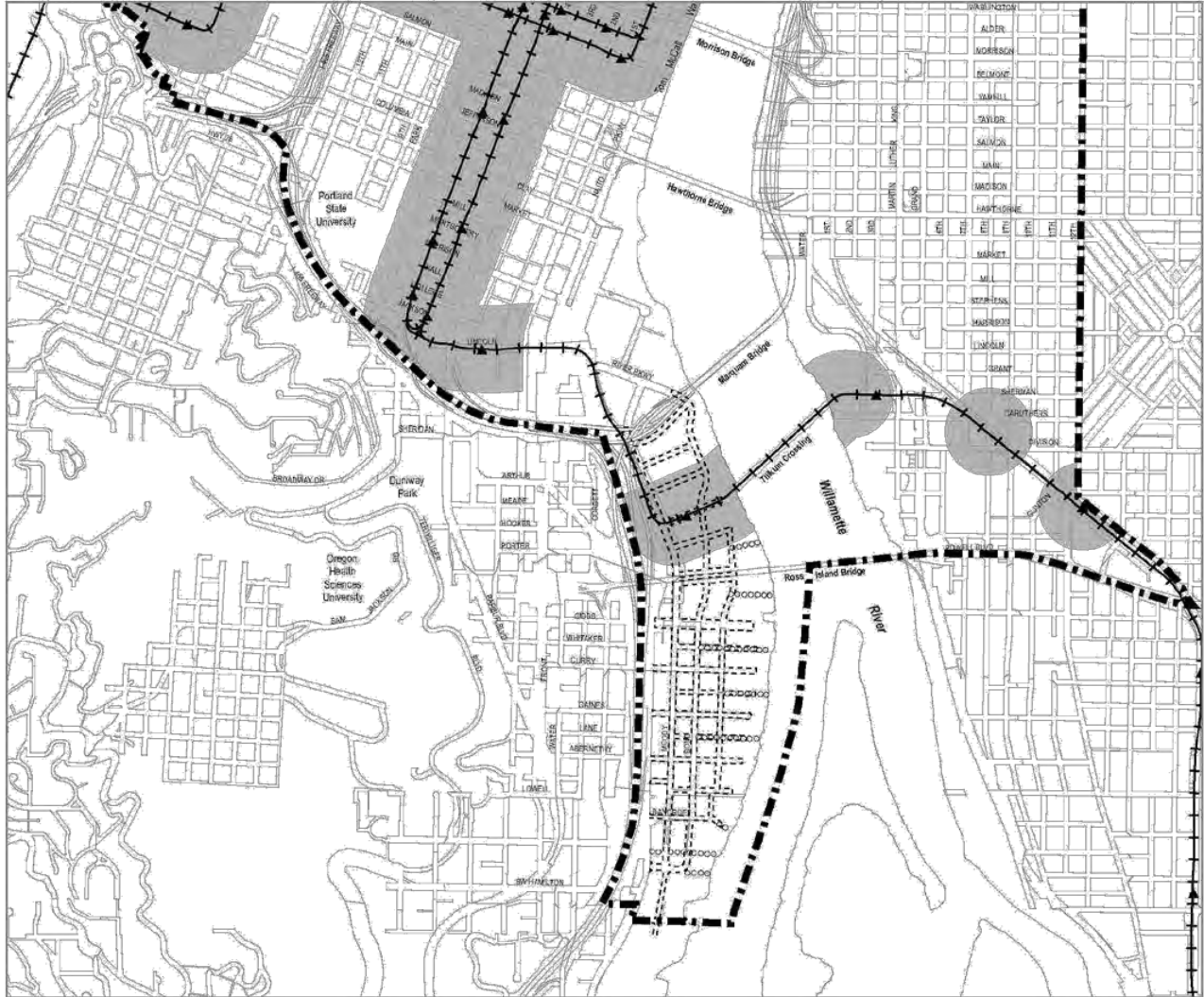
Commentary

Draft Area Where Vehicle Repair and Vehicle Sales and Leasing Uses are Restricted

Map 510-17

Map 2 of 2

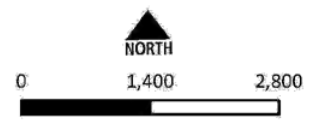
Map Revised Xxxxx XX, 2015



Legend

-  Area where restrictions apply
-  MAX Light Rail line and stops
- 
-  Proposed right-of-way
-  Proposed accessways

 Central City Plan District boundary



Bureau of Planning and Sustainability
Portland, Oregon

Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
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Commentary

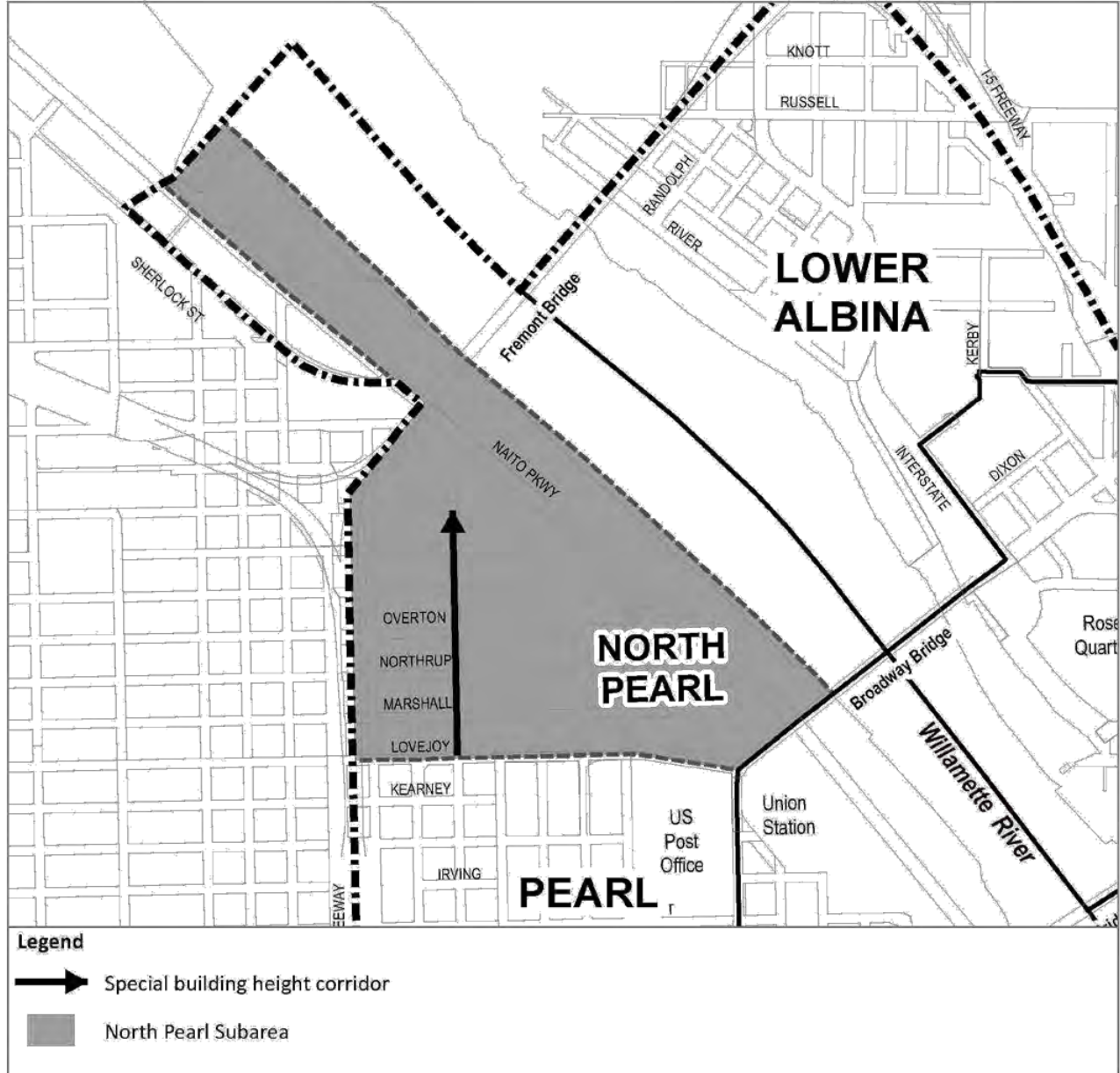
Map 510-18 North Pearl Subarea Special Building Height Corridor (Previously Map 510-19)

This map will be updated based on input from ongoing Scenic Resources Inventory modeling.

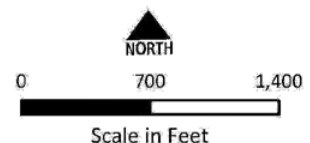
North Pearl Subarea Special Building Height Corridor

Map 510-18

Map Revised Xxxxx X, 2015



- Central City Plan District boundary
- Subdistrict Boundary
- Subarea boundary



Bureau of Planning and Sustainability
Portland, Oregon

Code References: 33.510.XXX, 33.510.XXX, 33.510.XXX, 33.510.XXX

10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Chapter 33.510, Central City Plan District

Commentary

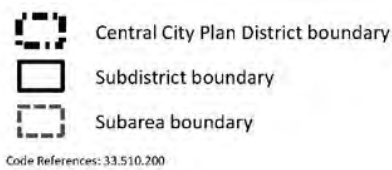
Proposed for Deletion: Existing Map 510-20 Pearl Development Transfer Opportunity Area

Staff propose eliminating this map. This map was used to support the historic resources transfer provision. That transfer has been updated and is proposed to be applied across the Central City Plan District.

Draft Pearl Development Transfer Opportunity Area

Map 510-20

Map Revised Xxxxx XX, 2015



Commentary

Proposed for Deletion: Existing Map 510-21 Required Retail Sales and Service Use in South Waterfront

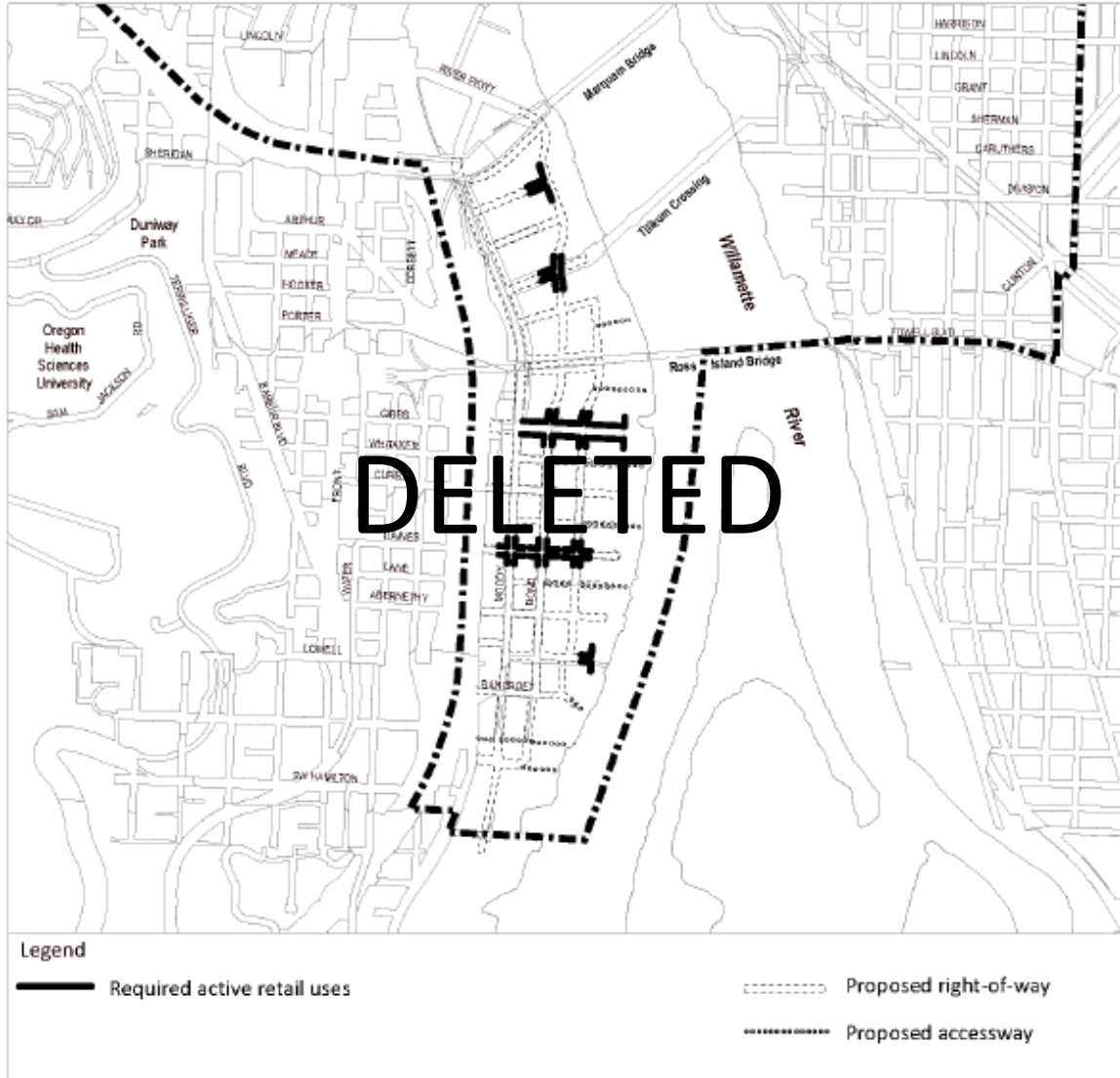
Staff propose to eliminate 33.510.252 -Required Ground Floor Retail Sales and Service Uses in the South Waterfront Subdistrict. Proposed code amendments implementing the Street and Development character concept for the Central City meet the intent of this section.

Staff have incorporated guidance from this map into the Street and Development Character concept and have updated Map 510-9 Ground Floor Active Use Area accordingly. For this reason, staff propose deleting this map.

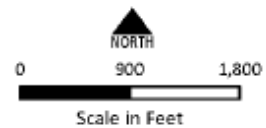
Required Retail Sales and Service Use in South Waterfront

Map 510-21

Map Revised March 1, 2015



Central City Plan District boundary



Bureau of Planning and Sustainability
Portland, Oregon

Commentary

Map 510-19 Required Master Plan Sites (New)

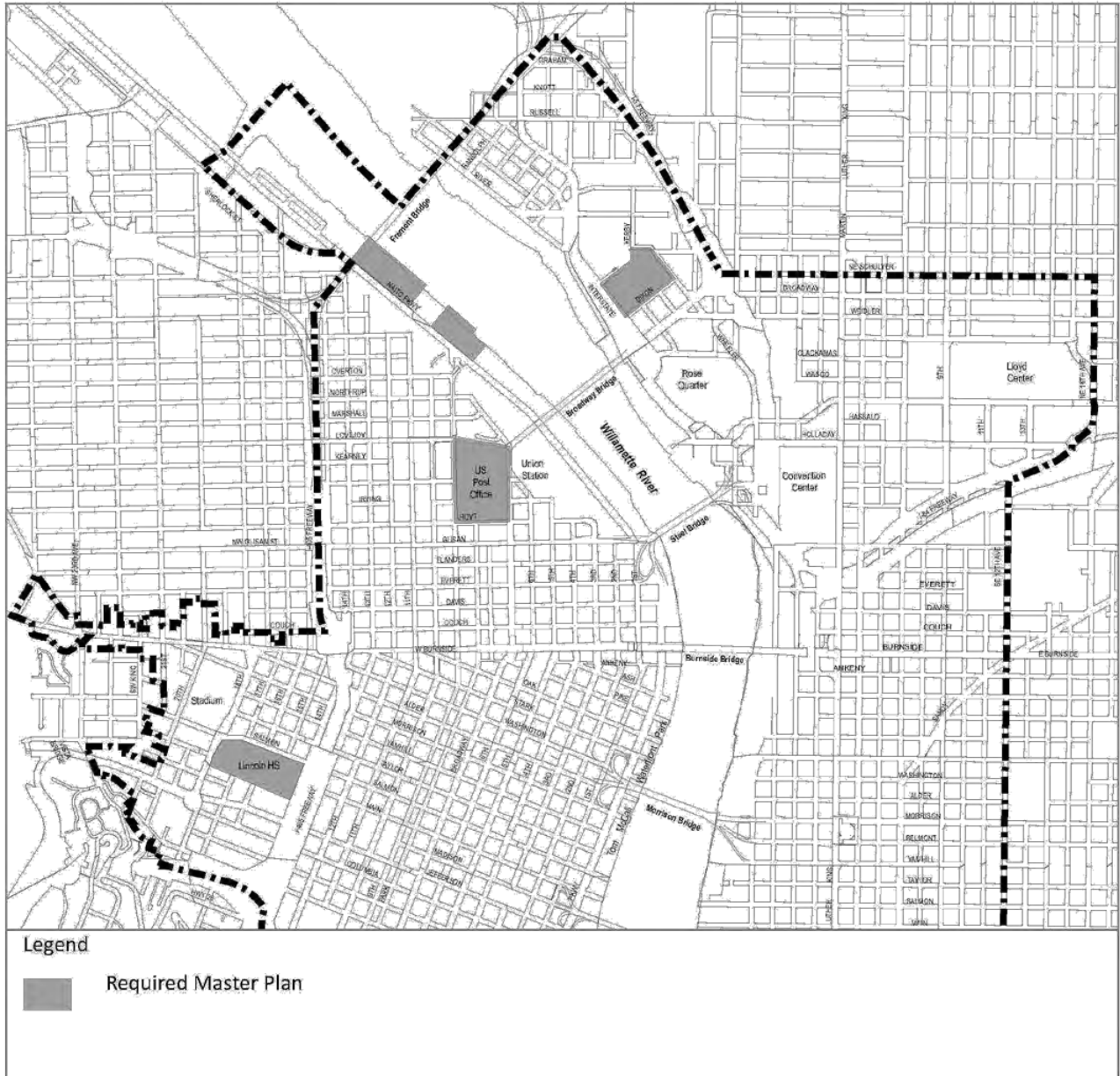
This new map shows areas where Master Plans will be required. In some cases this includes properties owned by multiple property owners. The new master plan concept is provided in the Code Commentary. The draft code will be available for review with Part 2 of this internal review package.

Draft Required Master Plan Sites

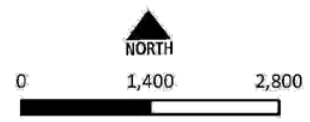
Map 510-19

Map 1 of 2

Map Revised Xxxxx XX 2015



Central City Plan District boundary



Bureau of Planning and Sustainability
Portland, Oregon

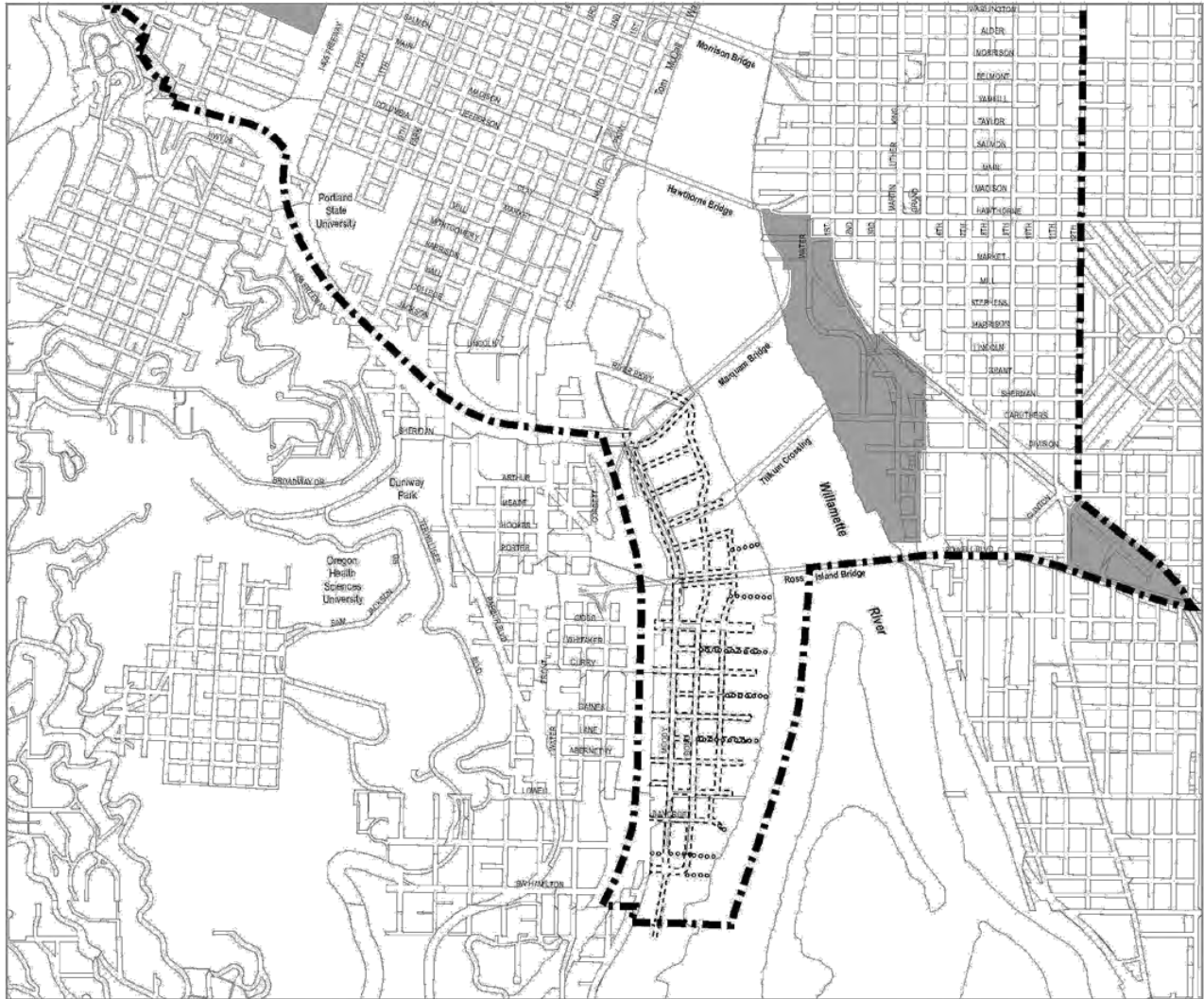
Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

10/9/2015

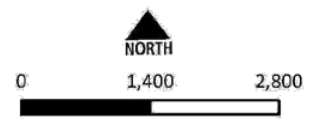
IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Chapter 33.510, Central City Plan District

Commentary

Map Revised Xxxxx XX 2015



 Central City Plan District boundary



Bureau of Planning and Sustainability
Portland, Oregon

Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Chapter 33.510, Central City Plan District

Commentary

New Chapter 33.475 River Overlay Zones

This is a new chapter that establishes the development regulations for sites within the Willamette Greenway boundary in the Central Reach.

In the future, as river planning for the North and South reaches is completed, Chapter 475 will be updated and will replace Chapter 440.

Sections:

General

- 33.475.010 Purpose
- 33.475.020 River Overlay Zones
- 33.475.030 Where These Regulations Apply
- 33.475.040 Relationship to Other City, State and Federal Reviews
- 33.475.050 Property Line Adjustments
- 33.475.060 Supplemental Permit Application Requirement

River General Overlay Zone

- 33.475.200 Use Regulations
- 33.475.210 River Setback
- 33.475.220 Landscaping
- 33.475.230 South Waterfront River General Overlay Zone

River Environmental Overlay Zone

- 33.475.400 Use Regulations
- 33.475.405 Environmental Report
- 33.475.420 Review Procedure
- 33.475.430 Exemptions
- 33.475.440 Development Standards
- 33.475.450 Corrections to Violations of River Environmental Overlay Zone
Development Standards

Clean Up of Contaminated Sites

- 33.475.500 Removal or Remediation of Hazardous Substances

Map 475-1

Commentary

33.475.020.A. Purpose

The River Environmental Overlay Zone will be applied to the river and riverbank and land within 50 feet of the top of bank. These resources are identified in the Central Reach Natural Resources Inventory as high and medium ranked riparian corridors and wildlife habitat. Best available science, include Metro's Title 13 Nature in Neighborhoods Program and City of Portland's Natural Resources Inventory, have documented that the absolute minimum functional riparian corridors around rivers, streams and wetlands is 50 feet. Low ranking resources are not be included in the River Environmental Overlay Zone.

BPS is waiting on new LiDAR data to remap a more accurate top of bank line. Once that information is available, draft zoning maps will be produced that show the extent of the River Environmental Overlay Zone on each property along the Willamette River Central Reach.

33.475.020.B. Map Symbols

There are two river overlay zones in the Central Reach: River General and River Environmental. See overlay zone map proposals for two staff recommended river overlay zone changes.

The River General Overlay Zone has a map symbol *g** to differentiate it from the River General Overlay Zones in the North and South reaches that must meet the regulations of Chapter 440.

33.475.010 Purpose

The River Overlay Zones generally promote the protection, conservation, restoration, enhancement and maintenance of the economic, natural, scenic, and recreational qualities of lands along the central reach of the Willamette River. This purpose is achieved by applying regulations that control development of land, change of use and intensification of use. The regulations reflect the desired character of the central reach of the Willamette River—a character that includes:

- a healthy river and watershed;
- a thriving riverfront with regional gathering spaces, active and passive recreational uses, maritime and commercial activities, and, and a welcoming mixed-use community; and ,
- multi-modal access to, along and in the river.

The River Overlay Zones also implement the City’s responsibilities under ORS 390.310 to 390.368.

33.475.020 River Overlay Zones

- A. Purpose.** The River Overlay Zones implement the land use pattern identified in the River Plan/Central Reach. There are two River Overlay Zones each with their own purpose:
1. River General. The River General Overlay Zone allows for uses and development that are consistent with the base zoning and allows for public use and enjoyment of the riverfront.
 2. River Environmental. The River Environmental Overlay Zone protects, conserves and enhances important natural resource functions and values while allowing environmentally sensitive development. The River Environmental overlay zone applies to specific natural resource areas identified in a detailed study titled *Willamette River/Central Reach Natural Resources Inventory (2015)*. This overlay zone applies in combination with one of the other River Overlay zones.
- B. Map symbols.** The River Overlay zones are shown on the official zoning maps with the following symbols:

<u>Overlay Zone</u>	<u>Map Symbol</u>
River General	g*
River Environmental	e

Commentary

We are holding code section spaces between the River General and River Environmental Overlay Zone regulations to insert two other river overlay zones in the future. Outside of the Central City, in the North and South reaches of the Willamette River is the River Industrial and River Recreational overlay zones. When the City updates the Willamette Greenway Plan for these reaches, we will be moving and updating the overlay zone regulations from 33.440 to 33.475. The final 33.475 will have the following sections:

- 33.475.100 River Industrial Overlay Zone (future - not included)
- 33.475.200 River General Overlay Zone (included)
- 33.475.300 River Recreational Overlay Zone (future- not included)
- 33.475.400 River Environmental Overlay Zone (included)
- 33.475.500 Clean Up of Contaminated Sites (included)

33.475.030 Where These Regulations Apply

This section clarifies that the regulations in this chapter apply to activities that occur on the land and in the water. This section also references a map that shows the area within which the River Overlay zones and regulations apply. A corollary map has been added to 33.440, *Greenway Overlay Zones*, delineating the area within which the *Greenway Overlay zoning code* applies. This section describes which regulations apply in each overlay zone, and which regulations apply to the removal and remediation of hazardous substances.

33.475.040 Relationship to other City, State and Federal Reviews

The City is in the process of developing an enhanced coordination process to improve the city/state/federal permitting process.

33.475.030 Where These Regulations Apply

The regulations of this chapter apply to the land and the water within the Central Reach portion of the Willamette Greenway Plan boundary shown on Map 475-1 and designated on the Official Zoning Maps with the River General and the River Environmental overlay zones. The regulations of this chapter do not apply to the River General Overlay Zone located within the Greenway Overlay Zones boundary shown on Map 440-1. See Chapter 33.440, Greenway Overlay Zones for regulations that apply to the River General Overlay Zone within the Greenway Overlay Zones boundary. The regulations of this chapter apply as follows:

- A.** The regulations of sections 33.475.010 through 33.475.070 apply to all sites in the River Overlay Zones
- B.** The regulations of sections 33.475.200 through .2XX apply to sites in the River General Overlay Zone.
- C.** The regulations of sections 33.475.400 through .450 apply to sites in the River Environmental Overlay Zone.
- E.** The regulations of section 33.475.500 apply to actions taken to remove or remediate hazardous substances. Actions taken to remove or remediate hazardous substances are exempt from all other regulations in this chapter.

33.475.040 Relationship to Other City, State and Federal Reviews

In addition to the requirements of this Title, other City regulations may apply to development within the River Overlay Zones. Development may also require the approval of the Division of State Lands and the U.S. Army Corps of Engineers. City approval of uses or activities pursuant to this chapter does not imply compliance with other chapters of Title 33, other City regulations, or the regulations of state and federal agencies. Approval by other agencies does not imply approval by the City of Portland.

Commentary

33.475.050 Property Line Adjustments

Property Line Adjustments may not result in a property that is in more than one river overlay zone, unless the second overlay is the River Environmental overlay zone.

33.475.060 Supplemental Permit Application Requirements

The information specified in Subsection A. is required when a permit for development or exterior alteration in the River Overlay Zones is reviewed for compliance with this chapter. The supplemental information specified in Subsection B. is required when a permit for development or exterior alteration in the River Environmental Overlay Zone is reviewed for compliance with this chapter.

- A. Top of Bank.** If the site has river frontage, the applicant must provide a site plan depicting the top of bank of the Willamette River, and the structures and topographic contours referenced to determine the top of bank. The site plan depicting the top of bank must be drawn accurately to scale, and be suitable for reproduction on paper no smaller than 8.5 x 11 inches and no larger than 36 x 48 inches. The scale of the drawing must be between 1 inch = 50 feet, and 1 inch = 10 feet. Ground elevations must be shown by contour lines at 2-foot vertical intervals. See Section 33.910.030 for more information on top of bank.
- B. Additional information required for the River Environmental overlay.** The following additional information is required for building or development permit applications that are reviewed for compliance with the standards of the River Environmental overlay. The information in paragraphs 1 and 2 must be submitted with permit application plans. Submission of the information in paragraph 3 is optional.
 - 1. An existing conditions site plan including:
 - a. Location of River Environmental overlay zone lines on the site;
 - b. Outline of any existing development, including existing utility locations, paved areas, river bank stabilization treatments, and buildings;
 - c. Location of any wetlands or water bodies on the site or within 50 feet of the site. Indicate the location of the top of bank, centerline of stream, ordinary high water, or wetland boundary as appropriate;
 - e. Trees, including the location of the trunk and crown cover, must be identified as follows:
 - (1) The location, size and species of trees that are 4 inches or greater in diameter that are within the area where ground disturbance or vegetation removal will occur, or have crown cover that overlaps that area, must be indicated on the site plan; and
 - (2) Trees outside of the area where ground disturbance and vegetation removal will occur may be shown as general crown cover with an indication of species composition.

Commentary

- f. Topography shown by contour lines at 2 foot vertical contours in areas of slopes less than 10 percent and at 5 foot vertical contours in areas of slopes 10 percent or greater.
- 2. A proposed development or exterior alterations plan including:
 - a. Outline of the proposed project area, including all areas of ground disturbance, vegetation removal, grading, new structures, new paving, new river bank stabilization treatments, any proposed utility work, and proposed mitigation areas;
 - b. Trees, 6 or more inches in diameter, proposed to be removed;
 - c. Location and description of all proposed erosion control devices;
 - d. Location and description of all stormwater management facilities; and
 - e. A landscaping plan indicating the size, species, and location of all vegetation to be planted.
- 3. Photographs of the site are not required but are encouraged to supplement the existing conditions site plan.

Commentary

33.475.205

NOTE - Staff are attempting to incorporate the South Waterfront Greenway requirements from 33.510 into 33.475. We have not completed incorporation. For now there are two sets of requirements - those that apply outside of South Waterfront and those that apply inside South Waterfront.

33.475.210 River Setback

OAR 660-015-0005 and Goal 15 require that a setback line be established to keep structures separated from the river. However, the requirement does not apply to "water-related or water-dependent uses". The existing greenway regulations require that development be setback 25 feet from the top of bank. The setback does not apply to development such as buildings, structures, storage areas, and equipment that is river-dependent and river-related development. The setback also does not apply to the Greenway Trail, viewpoints located on the trail, hazardous material clean up or to natural resource enhancement or mitigation. The setback does apply to buildings, equipment and structures that are not river-dependent or river-related.

Staff are recommending increasing the setback to a 50 feet from the top of bank of the Willamette River.

One of the main goals of the River Plan/Central Reach is to provide enough spaced within the River Setback for public recreation, natural resource enhancement and other river related development and activities. The current setback of 25 feet does not provide enough space for all of these elements to be located along the Willamette River. In particular, the 25 foot setback is not protective of natural resources. Best available science, include Metro's Title 13 Nature in Neighborhoods Program and City of Portland's Natural Resources Inventory, have documented that the absolute minimum functional riparian corridors around rivers, streams and wetlands is 50 feet. In fact an even wider setback, like the 100 feet setback applied in South Waterfront, allows space for public uses such as trails and viewpoints to be moved out of the minimum 50 feet riparian corridor. In the Central City, unlike South Waterfront, the most of the riverfront sites are already developed making a 100 feet setback unreasonable.

The setback is based on the location of the top of bank. The definition and measurement of top of bank has been problematic. Staff recommends amending the definition and adding a new section regarding how to measure the top of bank.

River General Overlay Zone

33.475.200 Use Regulations

There are no special use restrictions in the River General overlay zone.

33.475.205 Where these regulations apply.

- A. The regulations of 33.475.210-33.475.220 apply to the River General Overlay Zone except for the area shown on Map X as the South Waterfront Subdistrict; and
- B. The regulations of 33.475.230 apply the River General Overlay Zone within the South Waterfront Subdistrict as shown on Map X.

33.475.210 River Setback

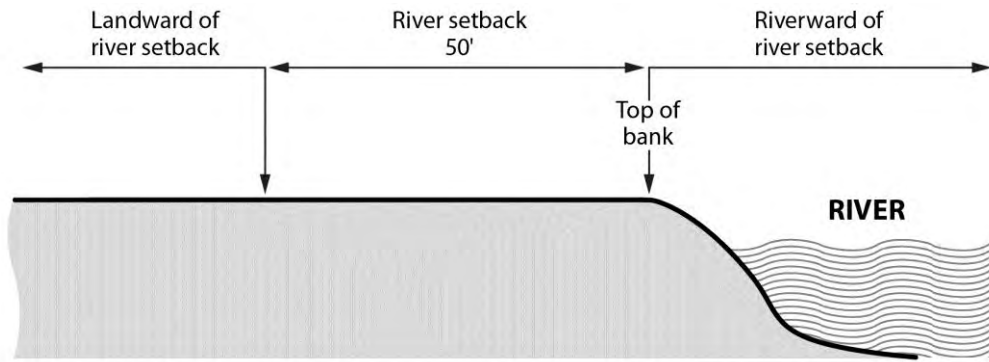
The following regulations apply in the River General overlay zone outside the South Waterfront subdistrict shown on Map 475-x.

- A. Purpose.** The purpose of the river setback is to keep structures separated from the river in areas where the land is not being reserved for river-dependent and river-related uses. Separating structures from the river facilitates protection, maintenance, restoration, preservation and enhancement of the natural, scenic, historic and recreational qualities of the Willamette River in the Central Reach by reserving space for the conservation and enhancement of natural vegetation and the opportunity for public access. In addition, OAR 660-015-0005 requires the establishment of a setback line.
- B. General.** The requirements of this section focus on whether the development is **river-dependent** or **river-related**. The focus is not on the primary use of the land. For example in the River General Overlay Zone, a passenger dock for marine transportation is a river-dependent primary use, but not all development associated with the passenger dock is river-dependent. The dock is river-dependent, but the parking lot, storage areas, and corporate offices are not.
- C. The river setback.** The location of the setback is measured from the top of bank. (See Chapter 33.910, Definitions and 33.930, Measurements). The river setback extends from the top of the bank to a point 50 feet landward of the top of the bank. See Figure 475-1. Where alteration to the river bank carried out to meet subparagraph 33.475.440.G results in the top of bank shifting landward, the applicant may choose to measure the setback from the original top of bank. When this occurs, a survey of the original top of bank line and new top of bank line must be submitted for verification that the top of bank has been measured according to the standard in 33.930.150, Measuring Top of Bank and then recorded with the County recorder. In all cases the setback line must be at least 5 feet landward of the new top of bank line.

Commentary

33.475.210.E Encroachment into the setback. One of the main goals of the River Plan/Central Reach is to revise regulations where reasonable so that property owners in the Central City have the flexibility to expand and redevelop on site. As a corollary to the recommendation to increase the setback from top of bank from 25 feet to 50 feet, staff also recommends allowing non-river-dependent and non-river-related development to minimally encroach into the setback as long as the setback is enlarged an amount equal to the square footage of the encroachment. This change will allow flexibility in the regulation while ensuring that the average setback remains 50 feet from top of bank. The regulations will also stipulate that at no point can development encroach closer than 45 feet from top of bank. Staff does not recommend further encroachment into the river setback due to the importance of retaining as much of a 50' setback to serve urban dwellers, employees and visitors in this regional center as well as addressing environmental needs and improvements.

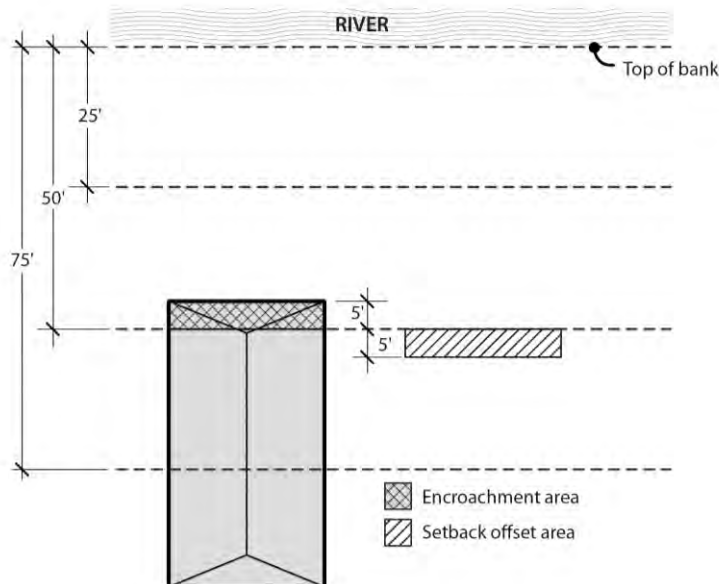
**Figure 475-X
River Setback**



D. River setback development standards.

1. Development landward of the river setback. Development, exterior alterations, excavations, and fills landward of the river setback are not required to be river-dependent or river-related.
2. Development within or riverward of the river setback. Development, exterior alterations, excavations, and fills within or riverward of the river setback must be river-dependent or river-related. Development, exterior alterations, excavations, or fills that are not river-dependent or river-related are allowed within or riverward of the river setback only if approved through a Greenway Goal Exception.

E. Encroachment into the setback. Development that is not river-dependent or river-related may encroach into the river setback as long as the setback is increased by an amount of square footage equal to the encroachment. At no point can development that is not river-dependent or river-related encroach closer than 5 feet from the landward most setback area unless approved through a Greenway Goal Exception. See Figure 475-X.



Commentary

33.475.220.B. When Landscaping is Required

BPS is discussing adding a threshold so that when small improvements, under 1,500 square feet, are added to the site it doesn't trigger the landscaping requirement. The landscape requirement is more than was required under *Greenway 33.440*. If an applicant wants to add a viewing area or benches or bike parking that would trigger significant landscaping requirements. However, if the applicant is doing many improvements, each of which is small but adds up to a lot, then we want the landscaping requirement to be triggered. We are looking for suggestions from BDS as to how to meet this intent.

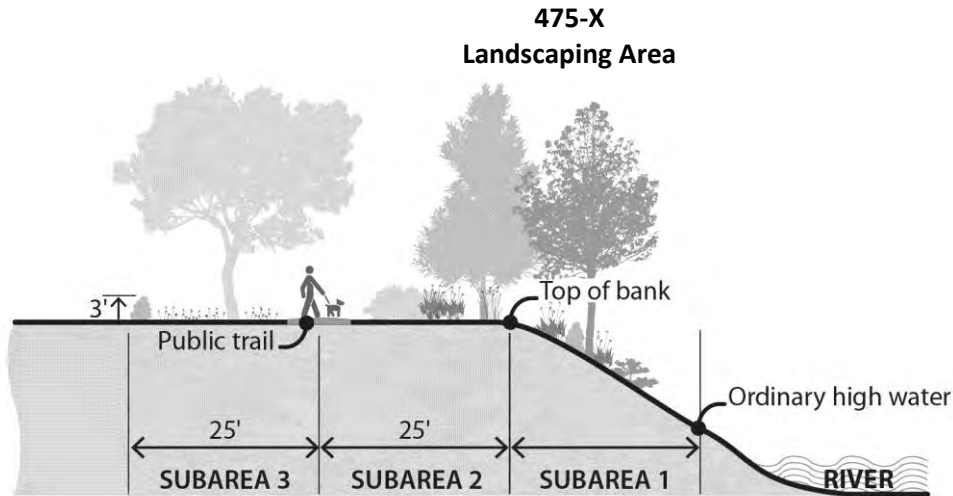
33.475.220 Landscaping

The following regulations apply in the River General overlay zone outside the South Waterfront subdistrict shown on Map 475-X.

- A. Purpose.** The landscaping standard is intended to increase vegetation along the Willamette River. Adding a diversity of vegetation within the river setback will improve multiple ecosystem functions and increase fish and wildlife habitat. The standard is also intended to accommodate safe and enjoyable public access to and along the Willamette River. Additional vegetation will provide shade, cool the air and create visual diversity for river and trail users.
- B. When landscaping is required.** Landscaping is required for any new development or exterior alterations on the site. Tom McCall Waterfront Park, shown on Map 475-X, is exempt from this Section.
- C. Required landscaping.**
 - 1. Required landscaping for the beach areas shown on map 475-X. On the beaches sites shown on Map 475-X, the land within and riverward of the river setback must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre. Trees and shrubs are not required, however if they are planted within the landscaped area, they must meet the requirements of Subparagraph C.2.b.
 - 2. Required landscaping for area not shown on Map 475-X. For all areas not shown on Map 475-Z, the land within and riverward of the river setback must be landscaped as follows. Subareas are shown on Figure 475-X:
 - a. Subarea 1. Subarea 1 is the area between of the ordinary high water mark and the top of bank of the Willamette River, as shown on Figure 475-X. Except for areas exempt by C.2.d., subarea 1 must be planted with one tree, six shrubs, and eight other ground cover plants for every 200 square feet of required landscaped area. Trees may be clustered. Trees must not be planted within a Scenic Resources Overlay Zone. All plants must be native.
 - b. Subarea 2. Subarea 2 extends from the top of bank to a point 25 feet landward of the top of bank of the Willamette River, as show on Figure 475-X. Except for areas exempt by C.2.d., subarea 2 must be planted to meet one of the following options:
 - (1) Option 1. One tree and three shrubs for every 200 square feet of required landscaped area, and the planting area must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre. Trees must be separated from other trees by at least 20 feet on center. Trees must not be planted within a Scenic Resources Overlay Zone. ; or
 - (2) Option 2. One tree, three shrub and eight other groundcover plants for every 200 square feet of required landscaped area. Shrub species must not exceed 3 feet in height at maturity. Trees must be planted 20 feet apart. Trees must not be planted within a Scenic Resources Overlay Zone.

Commentary

- c. Subarea 3. Subarea 3 extends from a point 25 feet landward of the top of bank and a point 50 feet landward of the top of bank of the Willamette River, as show in Figure 475-X. Except for the areas exempt by C.2.d., subarea 3 must be planted with one tree for every 200 square feet and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre. Trees must be planted 20 feet apart. Trees must not be planted within a Scenic Resources Overlay Zone. Shrubs or other groundcover plants are not required, however if shrubs or other groundcover plants are included, they must meet the standards of C.2.b.



- d. Exceptions.
- (1) Landscaping is not required within resource enhancement areas that meet the standards of 33.475.440.G;
 - (2) Landscaping is not required within mitigation areas that meet the standards 33.475.440.K;
 - (3) Landscaping is not required within portions of sites that were contaminated and were clean-up under provision of ORS (insert citation here); and
 - (4) On sites that have a Maritime Transportation Security Act regulated facility, trees and shrubs are not required within 10 feet of a fence but the area must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre.

Commentary

D. Landscaped area site preparation.

1. All prohibited and nuisance plants listed on the *Portland Plant List* must be removed within and riverward of the river setback.
2. All structures and debris located within and riverward of the river setback must be removed except for river-dependent or river-related structures, erosion control measures, large wood and bioengineered structures. Examples of bioengineered structures include bundles of plant materials, or soil cells wrapped in biodegradable fabrics.
3. For land that is currently not vegetated and will be planted to meet the required landscaping standard, the soil must be amended with 12 inches of growing medium. The composition of the growing medium must meet one of the following:
 - a For all revegetation areas located outside of the flood hazard area, the growing medium must be a blend of loamy soil, sand, and compost that is 30 to 40 percent plant material compost (by volume); or
 - b For all revegetation areas located within the flood hazard area, the growing medium must be a blend of loamy soil, sand, small gravels and compost. A civil engineer must certify that the growing medium is adequate to support the establishment and growth of vegetation, and is heavier than water.
4. Placement of the growing medium is not allowed when the ground is frozen or saturated; and
5. Temporary erosion control measures are required until permanent stabilization measures are functional.

- E. Plant requirements.** Trees must be a minimum ½-inch caliper or bareroot unless they are oak or madrone, which may be one gallon size. Shrubs must be a minimum of one gallon size or bareroot. All other species must be a minimum of four-inch pots or equivalent. For planting areas over 600 square feet, at least two different tree, three different shrub, and four different groundcover species must be used.

Commentary

33.475.230 South Waterfront River General Overlay Zone

This section has been moved here from 33.510.253. The intention is to fully incorporate the requirements of 33.510.253 into 33.475.200s. In the meantime, staff have included the 33.510.253 requirements as their own sections of the River General Overlay Zone code. We invite comments on ways to incorporate and simplify the code.

33.475.230 South Waterfront River General Overlay Zone

The following regulations apply in the River General overlay zone inside the South Waterfront subdistrict shown on Map 475-X.

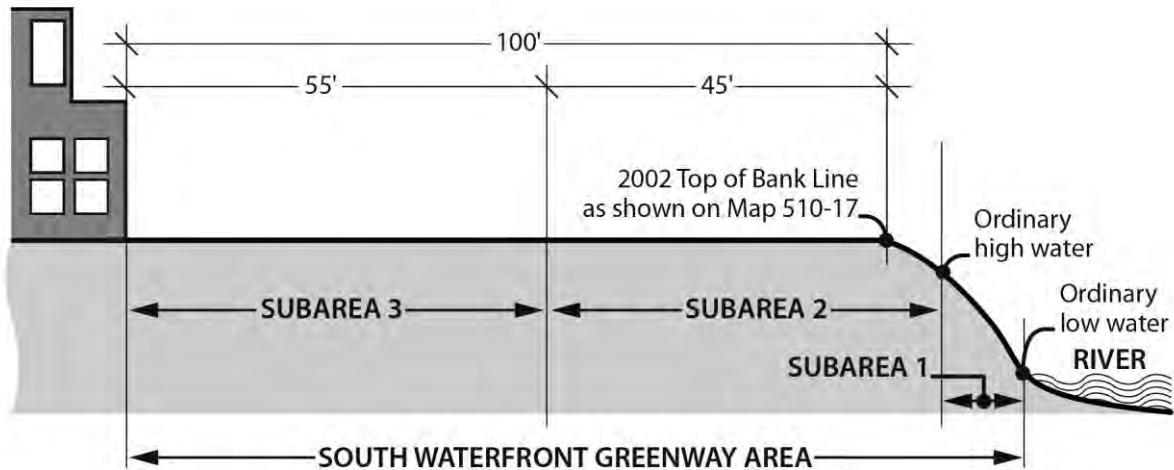
A. Purpose. The regulations of this section:

1. Protect, conserve, enhance, and maintain the natural, scenic, historical, economic, and recreational qualities of lands along the Willamette River within the South Waterfront Subdistrict;
2. Increase public access to and along the Willamette River for the purpose of increasing recreational and transportation opportunities;
3. Support the development of the South Waterfront Subdistrict as a vibrant mixed-use neighborhood;
4. Ensure a clean and healthy river for fish, wildlife, and people;
5. Embrace the river as Portland's front yard;
6. Enhance stormwater management in the South Waterfront Subdistrict;
7. Respond to the federal Endangered Species Act and Clean Water Act; and
8. Implement the Willamette Greenway Plan and State law.

B. Relationship to other regulations. Development within the River General Overlay Zone in the South Waterfront Subdistrict is also subject to other regulations of the Portland City Code. Development within the River General Overlay Zone may also be subject to the regulations and review procedures of state and federal agencies including the Oregon division of State Lands, the National Marine fisheries Service, the US Army Corps of Engineers, and the Oregon Department of Fish and Wildlife.

Commentary

**Figure 475-X
South Waterfront Greenway Area and Subareas**



Greenway Area = from ordinary low water to 100' from 2002 Top of Bank Line as shown on Map 510-17
 Subarea 1 = from ordinary low water to ordinary high water
 Subarea 2 = from ordinary high water to 45' in from 2002 Top of Bank Line as shown on Map 510-17
 Subarea 3 = from 45' in from top of bank to 100' in from 2002 Top of Bank Line as shown on Map 510-17

C. Required South Waterfront improvements. Adjustments and modifications to this subsection are prohibited.

1. Required landscaping.

- a. When development on the site, or alterations to structures, the site, or rights-of-way are made, and BDS determines that the value of the proposed alterations on the site is more than \$153,450, the site must be brought into conformance with the landscape requirements of Paragraph D.5.f. that apply to subareas 2 and 3 of the South Waterfront River General Overlay Zone. The value of the alterations is based on the entire project, not individual building permits. It is the responsibility of the applicant to document the value of the required improvements.

The following alterations and improvements do not count toward the dollar threshold of this subsection:

- (1) Alterations required by approved fire/life safety agreements;
- (2) Alterations related to the removal of existing architectural barriers, as required by the Americans with Disabilities Act, or as specified in Section 1113 of the Oregon Structural Specialty Code;
- (3) Alterations required by Chapter 24.85, Interim Seismic Design Requirements for Existing Buildings;

Commentary

- (4) Improvements to on-site stormwater management facilities in conformance with Chapter 17.38, Drainage and Water Quality, and the Stormwater Management Manual; and
 - (5) Improvements made to sites in order to comply with Chapter 21.35, Wellfield Protection Program, requirements.
- b. Caps on the cost of required landscaping. Required landscaping costing more than 10 percent of the value of the proposed alterations does not have to be installed. When all required landscaping is not being installed, the priority for which landscaping is to be installed is:
- (1) Trees in subarea 2;
 - (2) Shrubs in subarea 2;
 - (3) Ground cover in subarea 2;
 - (4) Trees in subarea 3;
 - (5) Shrubs in subarea 3;
 - (6) Ground cover in subarea 3; and
 - (7) Other required landscaping;
- c. Supplemental application requirement. Where landscaping is required by this paragraph, the applicant must submit a landscape plan to BDS that shows that the landscaping will grow to meet the landscape standards of Subparagraph E.5.f, below, within five years. The landscape plan must be certified by a licensed landscape architect, or by a qualified restoration specialist as part of a formal City revegetation project under authority of Portland Parks and Recreation or the Bureau of Environmental Services.
- 2. Bank improvements.** In subarea 1, when there is any regarding, bank stabilization, or other activities affecting the contours and composition of soil, the requirements of Paragraph E.5.f for subarea 1 must be met.
- 3. Trail and pedestrian connections and public viewpoints.** When development on a site, or alterations to structures, the site, or rights-of-way are made which add more than 50,000 square feet of floor area to the site, the applicant must provide public access easements that will accommodate a trail, pedestrian connections that meet the standards of Paragraph D.5.d., Trail and pedestrian connections; and public viewing areas. The square footage added to the site is calculated based on the total amount added, regardless of the amount demolished;
- 4. Timing of improvements.** The applicant may choose one of the following options for making the improvements required by this subsection:
- a. Option 1. Under Option 1, required improvements must be made as part of the development or alteration that triggers the required improvements;

Commentary

33.475.230.D Development Standards

Currently the South Waterfront Greenway requires in 33.510 include an option for a South Waterfront Greenway Review. As part of the River Plan/Central Reach, Greenway Review is being replaced with River Review (and Design Review). However, the River Review has not been updated to incorporate the South Waterfront Greenway Review. This will be done as part of the next draft of code recommendations.

- b. Option 2. Under Option 2, the required improvements may be deferred if the following are met:
 - (1) The applicant must provide the BDS with a performance guarantee for the improvements. See 33.700.050, Performance guarantees; and
 - (2) The required improvements must be constructed or installed within 4 years of issuance of the Certificate of Occupancy. See Chapter 33.851.
 - 5. Landscaping monitoring and reporting. Monitoring required landscaping is the ongoing responsibility of the property owners. If landscaping is required by the subsection, the owner must submit a report to BDS documenting that the landscape standards of Subparagraph D.5.f., below, have been met on the site. The report must be submitted within 1 year of the installation date. See Chapter 33.851.
- D. Development standards.** Generally, proposals are subject to design review and River Review. In most instances, applicants may choose between meeting development standards or going through River Review.
- 1. Where these regulations apply. The regulations of this subsection apply in the South Waterfront Greenway Area as shown on Figure 510-2. The regulations apply to development and alterations to structures, sites, and rights-of-way.
 - 2. Design review. New development, and changes to the land or structures including excavations and fills, bridges, and docks are subject to design review, unless exempted by Paragraph D.4.
 - 3. South Waterfront greenway review. South Waterfront greenway review is required for the following:
 - a. New development or exterior alterations that do not meet the standards of Paragraph D.5 and are not exempted by Paragraph D.4;
 - b. New development, or changes to the land or structures, riverward of top of bank, including excavations and fills, bridges, and docks, unless exempted by Paragraph D.4.
 - 4. Exempt from design review and River Review. The following are exempt from design review and River Review;
 - a. Changes to the interior of a building where there are not exterior alterations;
 - b. Normal maintenance and repair;
 - c. Excavations and fills of less than 50 cubic yards;
 - d. Dredging, channel maintenance, and the removal of gravel from the river; and
 - e. Emergency procedures necessary for safety or the protection of property.

Commentary

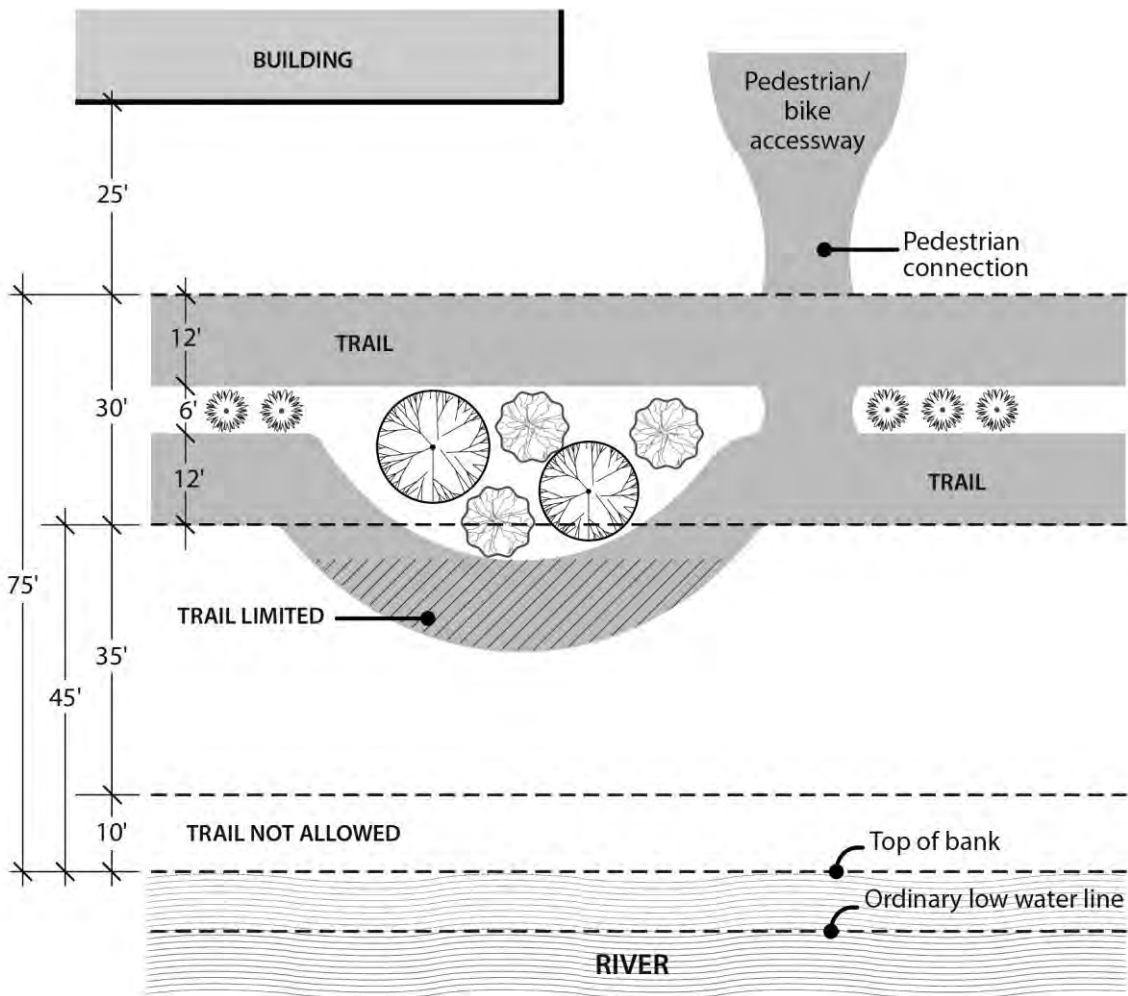
- 5. Development standards.** The following development standards must be met unless the applicant chooses South Waterfront greenway review. Adjustments and modifications to these standards are prohibited.
- a. Non-landscaped area.** Limiting the percentage of non-landscaped area allowed in the South Waterfront River General Overlay Zone ensures that the area will be configured to accommodate a minimum percentage of living plant cover. Non-landscaped area includes all aboveground structures and paving materials, including permeable paving materials.
- (1) Subareas 1 and 2. Up to 20 percent of the portion of the site in subareas 1 and 2 may be covered by non-landscaped area; however, paved surfaces that are required under the provisions of Paragraph D.5.d., Public viewpoints, are exempt from this limitation. Non-landscaped area may be no closer than 10 feet of the top of bank line as shown on Map 510-17, South Waterfront 2002 Top of Bank Line;
 - (2) Subarea 3. Up to 20 percent of the portion of the site in subarea 3 may be covered by non-landscaped area. However, required trail and pedestrian connection improvements are exempt from this limitation.
- b. Buildings.** Buildings are allowed within the River General Overlay Zone subareas 1-3 if they meet D.2.a and b and either D.2.c or d. Other buildings or portions of buildings are not allowed within the South Waterfront River General Overlay Zone subareas 1-3.
- (1) The site meets the non-landscaped area requirements under E.5.a., above; and
 - (2) The building does not obstruct required pedestrian connections and trails; and
 - (3) The building is river-dependent or river related; or
 - (4) All of the floor area of the building is in Retail Sales And Service uses and the following are met:
 - The building has less than 1,000 square feet of floor area;
 - The building is entirely within subarea 3; and
 - The building is located landward of the South Waterfront trail.
- c. Fences and walls.** Fences and walls are allowed in subarea 3 of the South Waterfront River General Overlay Zone if they are no more than 3 feet in height and do not obstruct the required pedestrian connections and trails. Fences and walls are not allowed in subareas 1 and 2 of the South Waterfront River General Overlay Zone.

Commentary

- d. Trails and pedestrian connections.** Public trails must meet the following standards. When required by Subsection D., sites with a public trail symbol shown on the Official Zoning Maps must provide easements that would accommodate construction, maintenance, and public use of a trail that meets the following standards. See Figure 510-3.
- (1) **Location.** The trail must be located in Subarea 2 or 3 shown on Figure 510-2. All portions of the trail must be at least 10 feet and no more than 75 feet from the top of bank line as shown on Map 510-17, South Waterfront 2002 Top of Bank Line; however, any portion of the trail that is within 45 feet of the top of bank line as shown on Map 510-17, South Waterfront 2002 Top of Bank Line, is subject to the maximum non-landscaped area limitations of Subparagraph E.5.a.;
 - (2) **Width.** The trail must consist of two paths, each at least 12 feet in width;
 - (3) **Landscaped median.** The two paths must be separated by a landscaped median at least 6 feet wide. Landscaping within this median must meet the requirements of Paragraph E.7. The landscaping may be interrupted by pedestrian connections between the two paths;
 - (4) **Use.** The path closest to the river must be designated for pedestrians only. The path farthest from the river must be designated for bicycles and other non-motorized transportation modes;
 - (5) **Connectivity.**
 - The trail or trail easement must connect to the existing trails or trail easements on adjacent sites; and
 - The trail or trail easement must connect to the required pedestrian circulation system on the site.
 - (6) **Additional standards.** In addition to the standards of this subparagraph, the standards of Chapter 33.272, Public Trails, must also be met; and
 - (7) **Pedestrian connections.** When a public trail or trail easement is required, at least one pedestrian connection must be provided between the trail easement and any accessway that terminates on the site.

Commentary

**Figure 475-X
South Waterfront Greenway Trail**

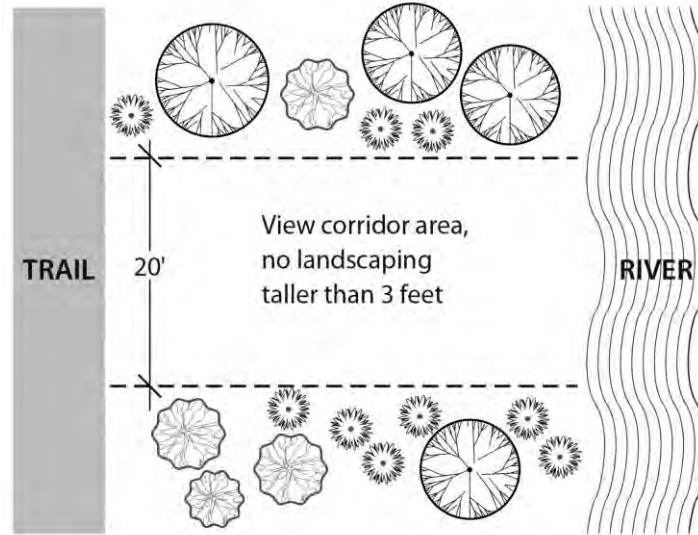


e. Landscaping.

- (1) Coverage. Eighty (80) percent of the area that is not covered by buildings, trails, or other allowed non-landscaped area must be covered by shrubs or ground cover, and all trees required by this paragraph must be installed in the ground and healthy;
- (2) Existing landscaping. Existing plants may be used to meet the standards of this paragraph, if protected and maintained during construction as specified in Section 33.248.065. However, the nuisance or prohibited on the Portland Plant List must be removed.

Commentary

**Figure 475-X
Public Viewpoint View Corridor**



- (3) Required landscaping in subarea 1. In subarea 1, the area beginning 3 feet above the ordinary low water line must meet the following requirements:
- Shrubs. At least 80 percent of the required landscaped area must be planted in shrubs;
 - Trees. Trees are not required, but are allowed, and must not be planted within the Scenic Resources Overlay Zone;
 - Ground cover. All of the required landscaped area that is not planted with shrubs or trees must be fully covered with ground cover plants; and
- (4) Required landscaping in subarea 2. In subarea 2 the required landscaping is:
- Shrubs. At least 80 percent of the landscaped area must be planted in shrubs;
 - Trees. At least one tree must be planted for every 400 square feet of landscaped area. Trees may be clustered. Trees must not be planted with the Scenic Resources Overlay Zone;
 - Ground cover. All of the landscaped area that is not planted with shrubs or trees must be fully covered with ground cover plants; and

Commentary

- (5) Required landscaping in subarea 3. In subarea 3, the required landscaping is:
- Shrubs. At least 60 percent of the landscaped area must be planted in shrubs. At least 50 percent of the shrubs used to meet this requirement must be listed on Table 510-3, Subarea 2 and 3 Plant List;
 - Trees. At least 1 tree must be planted for every 1,000 square feet of landscaped area. Trees must not be planted in the Scenic Resources Overlay Zone;
 - Ground cover. All of the landscaped area that is not planted with shrubs or trees must be fully covered with ground cover plants.;
- (6) Installation of landscaping. All planting must be of a sufficient size and number to meet the coverage standards within five years. Planting is not required to meet the size and spacing requirements of 33.248.030, Plant Materials. Planting is not allowed in the summer.

f. **Other development.** Other development is allowed within the South Waterfront Greenway Area if it meets Subparagraphs g.(1) and (2) and either g.(3) or (4).

- (1) The site meets the non-landscaped area requirements under D.2., above;
- (2) The development does not obstruct required pedestrian connections and trails; and
- (3) The development is located in subarea 3; or
- (4) The development is river-dependent or river-related.

Commentary

33.475.410 Environmental Reports

The River Environmental overlay zone is a new overlay that has been created specifically to address the protection and conservation of remaining high and medium ranked natural resource areas in the Willamette River. The natural resource inventory for the Willamette River has been updated and documents the location, extent and relative condition of resources that provide important riparian corridors and wildlife habitat functions in the Central Reach. The River Environmental overlay zone does not apply to low-ranked natural resources, for example unvegetated river banks.

The primary focus of the River Environmental overlay zone is to limit the impacts from development on the natural resources and functional values contained within the zone. When impacts cannot be avoided, mitigation will be required. Development in the zone will not be precluded if proposed development meets the standards or if there are no practicable alternatives that will avoid adversely affecting the resource—in that sense the zone will function more like the environmental conservation zone than the environmental protection zone.

33.475.420 When River Review is Required

As with the other environmental overlay zones in the City, some types of development and activity will be exempt from regulation, some development and exterior alteration will be allowed if it meets standards, and some development will require a land use review. This recommended code diverges from the other environmental overlay codes in that there are no standards that apply to development in general. Rather, the standards in the River Environmental overlay zone have been written to apply only to a narrow set of development types and activities. This means that more development in the River Environmental overlay zone will trigger discretionary review than triggers environmental review in the rest of the city.

River Environmental Overlay Zone

33.475.400 Use Regulation

There are no special use restrictions associated specifically with the River Environmental Overlay Zone. However, any use restrictions that apply as a result of an accompanying River Overlay zone also apply within the River Environmental Overlay Zone.

33.475.410 Environmental Report

The River Environmental Overlay Zone is intended to protect and conserve specific natural resource features and functional values identified in a detailed study titled *Willamette River/Central Reach Natural Resources Inventory (2015)*. The report identifies the type, location, extent and relative condition of natural resource features and describes functional values they provide within the study area. Functional values are the benefits provided by resources. The values for each resource site are described in the inventory section of the report.

33.475.420 Review Procedures

Development and exterior alterations within the River Environmental Overlay Zone will be reviewed through one of the following tracks:

- A. Exemptions.** Some development, alterations and other items are exempt from the standards of the River Environmental Overlay Zone and exempt from River Review. In this case, development is exempt only from the River Environmental Overlay Zone regulations but may be subject to the other regulations in this Chapter. Development that is exempt from meeting the River Environmental Overlay Zone regulations is listed in 33.475.430.A. If the development is not included on the list of exemptions, then the proposal is subject to either the River Environmental Overlay Zone standards or River Review.
- B. Standards.** Several specific types of development and alterations are allowed within the River Environmental Overlay Zone if the proposal meets certain standards. Standards are provided for bulkheads, rights-of-way, utility lines, stormwater outfalls, trails and viewpoints, resource enhancement, and site investigative work. ¹The standards are intended to encourage sensitive development while providing clear limitations on disturbance, including tree removal, and minimizing impacts on resources and functional values. Adjustments to the standards are prohibited. Modification of the standards may be approved through River Review. When a proposal can meet the standards, the applicant may choose to meet the objective standards of this section or go through the discretionary River Review process. When there are no applicable standards, the proposal must be approved through River Review. Compliance with the standards is determined as part of the building permit or development permit application process. The standards are listed in 33.475.430.B.

¹ Update

Commentary

33.475.430 Exemptions

Some development and activities that occur within the River Environmental overlay zone will be exempt from regulation. The activities that are exempt from the regulations are important for the continued operation of existing facilities and they have little or no impact on resources or the activity is adequately regulated by a state or federal agency. Examples include operation, maintenance, repair and replacement of existing structures and improvements, alterations that do not change the footprint of a building, and placement of a certain number of piles and dolphins. The majority of the recommended exemptions mirror the levels of development and alteration that are currently exempt from the regulations of the Environmental Overlay zones or are exempt from Greenway Review.

- C. **Review.** River Review is required when the proposed development or exterior alteration is subject to the River Environmental Overlay Zone regulations, and the development or exterior alteration either does not meet the River Environmental development standard or there are no River Environmental development standard that apply to the proposal. The process and approval criteria for River Review can be found in Chapter 33.865, River Review.

33.475.430 Exemptions

The following items are exempt from the River Environmental development standards and do not require River Review:

- A. Change of ownership;
- B. Temporary emergency procedures necessary for the protection of life, health, safety, or property;
- C. Existing development, operations, and improvements including the following:
 - 1. Operation, maintenance, alterations, repair, and replacement of existing structures, exterior improvements, roads, utilities, public trails and paths, public viewpoints, and public interpretive facilities. Alterations and replacement is not exempt whenever coverage or utility size is increased;
 - 2. Changes to interior of a building or structure where there are no exterior alterations;
 - 3. Removal of existing structures. Removal is not exempt whenever there is ground disturbance;
 - 4. Alterations to buildings that do not change the building footprint and do not require adjustments to site-related development standards;
 - 5. Structures located over existing docks, wharf, piers or paved surfaces;

Commentary

33.475.430.C.6

Under the current greenway regulations all dredging, channel maintenance and removal of gravel/materials from the river is exempt from greenway review. This narrows the exemption because dredging in or near shallow water and beaches could have significant detrimental impacts on the habitat that the shallow water provides. Beaches and shallow water play important roles in the life cycle of aquatic species, including salmon, and impacts to these areas should be avoided when practicable and mitigated if the impacts can't be avoided. The exemption language allows dredging in the main federal navigation channel and dredging in waters more than 35 feet deep without having to meet development standards or go through River Review. Shallow water is identified as water between zero and 20 feet deep, however using 35 feet as the trigger for review because the area between 20 and 35 feet deep represents an area of concern where the impacts of dredging could affect the habitat in the more shallow areas.

Maintenance dredging that occurs outside the main river channel that has been approved by the U.S. Army Corps of Engineers will continue to be exempt from the River Environmental overlay zone regulations.

6. Operation, maintenance, repair and replacement of irrigation systems, stormwater facilities, non-potable water systems, and erosion control measures. Replacement is not exempt whenever coverage or utility size is increased;
7. Dredging, channel maintenance, and the removal of materials as follows:
 - a. Dredging, channel maintenance, and the removal of materials within the federal navigation channel.
 - b. Dredging, channel maintenance, and the removal of materials outside of the federal navigation channel as follows:
 - (1) Dredging and the removal of material in areas in waters that are 35 feet deep or deeper; or
 - (2) Channel, slip and berth maintenance that has been approved by the U.S. Army Corps of Engineers.
 - d. The placement of dredged materials within the River Environmental Overlay Zone is not exempt.
8. Continued maintenance of existing gardens, lawns, and other planted areas, including the installation of new plants except those listed on the *Nuisance Plants List*;
9. Changes to existing disturbance areas to accommodate outdoor activities such as events, play areas and gardens so long as plantings do not include plants on the *Nuisance Plants List* and no trees six or more inches in diameter are removed;
10. Removal and pruning of vegetation when no development or other activities subject to development standards or review requirements of this chapter are proposed, if the following are met:
 - a. The vegetation that is proposed for removal or pruning is one of the following:
 - (1) Vegetation listed on the *Nuisance or Prohibited Plant Lists*, when removed with hand-held equipment, except for trees;
 - (2) Dead, dying or dangerous trees or portions of trees when they pose an immediate danger, as determined by the City Forester or certified arborist. Removing these portions is exempt only if all section of wood more than 12 inches in diameter remain, or are placed, in the River Environmental Overlay Zone on which they are cut; or

Commentary

33.475.430.D.1

The River General Overlay Zone requires landscaping and that landscaping requires removal of structures and debris and amending the soil prior to planting vegetation. If the landscaping standards is met then it is exempt from the River Environmental Overlay Zone requirements.

33.475.430.D.2

This is from the South Waterfront River General overlay zone. In order for it to be exempt from review is needs to be address in the River Environmental Overlay Zone chapter.

(3) Pruning trees and shrubs within 10 feet of existing structures.

- b. All vegetation removal activities must be surrounded or protected to prevent erosion and sediment from leaving the site or negatively impacting resources on the site. Permanent erosion control, such as replanting areas of bare soil with native plants, must be installed.

D. The following new development and improvements:

1. Removal of structures and debris, application of soil amendments and planting of vegetation as required by 33.475.220 Landscaping Standards;
2. The placement of up to four single piles or two multiple-pile dolphins for each 100 feet of shoreline for an existing river-dependent or river-related use;
3. Planting of native vegetation listed on the *Portland Plant List* when planted with hand-held equipment;
4. Public street and sidewalk improvements meeting all of the following:
 - a. Improvements must be within an existing public right-of-way used by truck or automobile traffic; and
 - b. Streets and sidewalks must not exceed the minimum width standards of the Bureau of Transportation Engineering.
5. Groundwater monitoring wells constructed to the standards of the Oregon Water Resources Department and water quality monitoring stations, where access is by foot only;
6. Installation of security cameras provided that no more than 100 square feet of ground surface is disturbed landward of top of bank, no ground is disturbed riverward of the top of bank, native trees 4 inches and greater in diameter are not removed, and any disturbed area is restored to pre-construction conditions;
7. Utility service using a single utility pole or where no more than 100 square feet of ground surface is disturbed landward of the top of bank of water bodies, no ground is disturbed riverward of top of bank, and where the disturbed area is restored to the pre-construction conditions;
8. Utilities installed above or below developed portions of the public right-of-way, and stormwater management facilities within the public right-of-way;
9. Temporary site investigative work including soil tests, land surveys, groundwater

Commentary

33.475.430.C.10

To be added

33.475.440 Standards

As previously mentioned, some development and alteration will be allowed within the River Environmental overlay zone without requiring a discretionary review. The types and levels of development and alteration allowed are generally low-impact activities that can be readily mitigated. The standards limit the amount of disturbance that can occur and limit how close the development or alteration can be to the river, a stream or a wetland. Tree removal is limited and mitigation is always required.

Development standards have been drafted for the installation of rail road tracks, the installation of utility lines and stormwater outfalls, public trails and viewing areas, scenic resources, resource enhancement projects, site investigative work not done with hand-held equipment, and the removal of trees. These categories represent the extent of the activities that will be allowed within the River Environmental overlay zone without further discretionary review. Mitigation and tree replacement will be required for these activities.

and water quality monitoring stations when all of the following are met:

- a. The work is conducted using hand-held equipment only;
 - b. The disturbance is temporary;
 - d. Disturbance areas are restored to pre-existing conditions; and
 - e. No native trees are removed.
10. Installation of fencing in the following situations:
- f. Fencing on an already paved surface;
 - g. Fencing required by the Maritime Transportation Security Act; or
 - h. Temporary fencing to protect resource enhancement project planting areas, prevent access to hazardous material spill areas or contaminated sites, or to close off or control the use of illegal trails. The fence must be removed within five years;
11. Installation of signage as part of public trail development, for interpretive purposes, as part of navigational aids, as part of resource enhancement projects, as part of operational aids, or to provide public safety or health warnings provided no native trees are removed;
12. Removal of trash, provided that native vegetation is not removed or damaged. This includes removal of trash from the river bed, or from the water. Removal of trash does not include the removal or remediation of hazardous substances.

33.475.440 Development Standards

Unless exempted by 33.475.430 the standards in this section apply to development and exterior alterations in the River Environmental Overlay Zone. Modification of any of these standards requires approval through River Review.

- A. Standards for rail right-of-way.** The following standards apply to installation of rail within rail rights-of-way:
1. Disturbance associated with the construction of a rail right-of-way may occur within a corridor that is up to 20 feet wide. No disturbance is allowed outside of the 20 foot wide corridor;

Commentary

33.475.440.A Standards for rail rights-of-way

The width of corridor allowed for the development of a rail right-of-way is based on discussions with BDS staff who have reviewed the installation and extension of rail road track in the Central Reach. The width is intended to accommodate standard gauge rail (4 feet 8 inches) with added space for ballast and any equipment that may be necessary for track operations.

33.475.440.B-C Standards for utility lines and stormwater outfalls

The standards in these paragraphs mirror standards for the installation of a utility line or stormwater outfall in the Environmental Overlay zones.

2. Disturbance associated with the rail corridor or installation of the rail corridor may not occur riverward of the top of bank of the Willamette River, within the river channel, or within 30 feet of the top of bank of a stream, wetland or other water body;
3. Tree removal as allowed by paragraph J, below; and
4. Mitigation is required as specified in paragraph K, below.

B. Standards for utility lines. The following standards apply to new utility lines, including stormwater conveyance facilities, private connections to existing or new utility lines, and upgrades of existing utility lines:

1. Disturbance associated with the installation of a utility line, including utility trenching, may occur within a corridor that is no greater than 10 feet wide. Disturbance may not occur outside of the 10 foot corridor;
2. Disturbance associated with the installation of a utility line may not occur riverward of the top of bank of the Willamette River, within the river channel, or within 30 feet of the top of bank of a stream, wetland, or other water body;
3. Tree removal as allowed by paragraph J, below; and
4. Mitigation is required as specified in paragraph K, below.

C. Standards for stormwater outfalls. The following standards apply to the installation of new stormwater outfalls:

1. Disturbance associated with the installation of a stormwater outfall may occur within an area that is up to 10 feet wide;
2. When constructed open channels or vegetated swales are proposed, the slope between the stormwater source and the water body does not exceed 15 percent at any point;
3. If an outfall riprap pad is used it must be planted with live stakes of native plant stock, one-half inch in diameter. Stakes must be installed at a density of three stakes per square yard. Detailed specifications for installing live stakes are found in the *Erosion Control Manual*;
4. Tree removal as allowed by paragraph J, below; and
5. Mitigation is required as specified in paragraph K, below.

Commentary

33.475.440.D Standards for Trails

The intention of this standards is to allow for a public trail within the River Environmental Overlay Zone but to limit the impacts of the trails, and associated human use, on the natural resource functions of the riparian corridor.

33.475.440.E-F Standards for Viewing Areas and Scenic Resources

The intention is to allow for public viewing areas to be constructed and view corridors to be maintained in the River Environmental Overlay Zone. Trees (6-12 inches in diameter), including native trees, may be removed in the s overlay zones. The area where vegetation is removed should be revegetated with ground cover. Tree replacement will include shrubs as well as trees. Trees cannot be planted in the s overlay zone, but shrubs can be planted along with the ground cover.

D. Standards for trails. The disturbance associated with the construction of a new trail must meet all of the following:

1. The trail must be setback least 5 feet from the top of bank of the Willamette River, and 30 feet from the top of bank of a stream, drainageway, wetland or other water body;
2. The total width of trail must be no more than 16 feet;
3. Tree removal as allowed by paragraph J, below; and
4. Mitigation is required as specified in paragraph K, below.

E. Standards for public viewing areas. The following are standards for public viewing areas. All of the standards must be met.

1. The viewing area may create up to 500 square feet of permanent disturbance area;
2. The viewing area must not be located below the top-of-bank of the Willamette River or within 30 feet from the top-of-bank of a stream, drainageway, wetland or other water body;
3. The viewing area must not be within the floodway;
4. Tree removal as allowed by paragraph J, below; and
5. Mitigation is required as specified in paragraph K, below.

F. Standards for vegetation maintenance within a Scenic Resources Overlay Zones. The following are standards for vegetation within the Scenic Resources Overlay Zone. All of the standards must be met.

1. Tree removal as allowed by paragraph J, below; and
2. Temporary disturbance area caused by the removal must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre.

Commentary

33.475.430.G Standards for resource enhancement

These standards are intended to ensure that the river bank is shallower than before the enhancement project because a shallow bank provides better resource function than a steep bank. The standards also require that the bank be stabilized with vegetation rather than rock armoring.

For projects that occur landward of the top of bank, the standards allow disturbance of the ground as long as there is no net increase in soil within the River Environmental overlay zone and the area disturbed is replanted with native vegetation. Resource enhancement projects, by definition, must result in a net increase in functional value and an improvement in the quantity or quality of resources. Mature native vegetation in many cases provides high quality natural resource function. The removal of native vegetation is limited so that staff can evaluate whether or not the removal of vegetation will result in a net increase in functional value and an improvement in quality or quantity of resource.

33.475.440.H Site investigative work

This set of standards will allow site investigative work, including the installation of monitoring wells, when the work is done with mechanical equipment. An exemption allows this type of work when the work is done exclusively with hand-held equipment.

G. Standards for resource enhancement. The following standards apply to resource enhancement projects:

1. No fill is placed below the ordinary high water mark of the Willamette River;
2. The riverbank may be re-graded if the slope after grading is shallower than the slope prior to grading. In no case can the final slope be greater than 20 percent (20 percent slope represents a rise to run ratio equal to 1:5);
3. There must be no excavation or fill, or construction activity, within any stream, drainageway or wetland;
4. Rock armoring must not be used on the surface between the top of bank and the ordinary high water mark except as required surrounding outfalls;
5. The placement of large wood and bioengineered structures on the bank is allowed to reduce localized erosion and improve bank stabilization. Examples of bioengineered structures include bundles of plant materials or soil cells wrapped in biodegradable fabrics;
6. No structures are proposed landward of the top of bank except public viewing areas developed as part of the project. The public viewing areas must meet the following:
 - a. The viewing area may create up to 500 square feet of permanent disturbance area;
 - b. The viewing area must not be located below the top-of-bank of the Willamette River or within 30 feet from the top-of-bank of a stream, drainageway, wetland or other water body; and
 - c. The viewing area must not be within the floodway;
7. All prohibited and nuisance plants listed on the *Portland Plant List* must be removed; and
8. Areas where ground disturbance has occurred must be planted to meet the landscaping planting standards of 33.475.220.D.

H. Standards for site investigative work. The following standards apply to site investigative work within the River Environmental Overlay Zone. Site investigative work includes soil tests, land surveys, groundwater and water quality monitoring stations. All of the applicable standards must be met.

1. No more than 100 square feet of disturbance is allowed per site investigative work activity;
2. Disturbance associated with site investigative work is temporary;
3. No trees over 4 inches in diameter are removed; and
4. Disturbance areas are restored to pre-existing conditions.

Commentary

33.475.440.I Standards for development in the River Recreational Overlay Zone

These standards allow the City of Portland Parks and Recreation department to install park amenities in City parks located in the Central Reach. The types of amenities that Parks envisions being installed without river review include park benches, picnic tables, drinking fountains, bicycle racks, trash cans, playgrounds, memorials, kiosk, etc. The standards limit the amount of disturbance that will occur within the river environmental overlay zone for the construction of each amenity to 1,800 square feet. The standards also limit tree removal and require mitigation.

33.475.440.J Removal of trees

These standards allow the removal of non-native trees, including those that are listed as nuisance or prohibited on the *Portland Plant List*. These trees must be replaced with native trees. This is a change from existing allowances in the Environmental Overlay zones. Currently, nuisance and prohibited trees may be removed and replacement is not required.

Under certain circumstances, the standards also allow the removal of native trees up to 12 inches in diameter. The removal of trees is limited to the areas within which the development or activity will occur and replacement is required for trees over 6 inches in diameter.

Trees may not be replaced within the s overlay zone. Trees grow and block views that are intended to be protected.

Standards for other development in a City of Portland park. The following standards apply to development in a City of Portland park that is not subject to other standards in this subsection. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review.

1. Disturbance areas must not be located below the top-of-bank of the Willamette River or within 30 feet from the top-of-bank of a stream, drainageway, wetland or other water body;
2. Up to 500 square feet of permanent disturbance area is allowed;
3. Tree removal as allowed by paragraph J, below; and
4. Mitigation is required as specified in paragraph K, below.

J. Standards for tree removal. The following standards apply to the removal of trees 6 inches or greater in diameter from within the River Environmental Overlay Zone:

1. Trees that are not native trees on the *Portland Plant List* may be removed with hand-held equipment; and
2. Generally, native trees on the *Portland Plant List* may not be removed except native trees more than 6 inches but less than 12 inches in diameter may be removed or pruned in conjunction or development and exterior improvements approved under the standards of this section as follows:
 - a. Within the rail right-of-way and within 10 feet of the rail right-of-way;
 - b. Within the utility line corridor;
 - c. Within the area where the stormwater outfall will be constructed;
 - d. Within a public trail;
 - e. Within a public viewing areas;
 - f. Within a Scenic Resource Overlay Zone; and
 - g. Within the disturbance area associated with development in a City of Portland park.

Commentary

2. Trees that are over 6 inches in diameter that are removed must be replaced as shown in Table 475-# and must meet the following:

Table 475 – X		
Tree Replacement in Environmental Overlay Zones		
Size of tree to be removed (inches in diameter)	Option A (no. of natives trees to be planted)	Option B (combination of native trees and shrubs)
At least 6 and up to 12	2	Not applicable
More than 12 and up to 20	3	1 tree and 3 shrubs
More than 20 and up to 25	5	3 tree and 6 shrubs
More than 25 and up to 30	7	5 tree and 9 shrubs
More than 30	10	7 tree and 12 shrubs

4. Replacement vegetation must meet all of the following:
- a. Trees must be a minimum ½-inch caliper or bareroot unless they are oak or madrone, which may be one gallon size. No more than ten percent of the trees may be oak or madrone. Shrubs must be a minimum of one gallon size or bareroot. All other species must be a minimum of four-inch pots or equivalent;
 - b. The planting must occur within the River Overlay Zones. Trees must not be planted within a Scenic Resources Overlay Zone. If the vegetation is not planted on the applicant’s site, then the applicant must own the property or have an easement or deed that ensures the vegetated area will not be developed; and
 - c. The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met.

Commentary

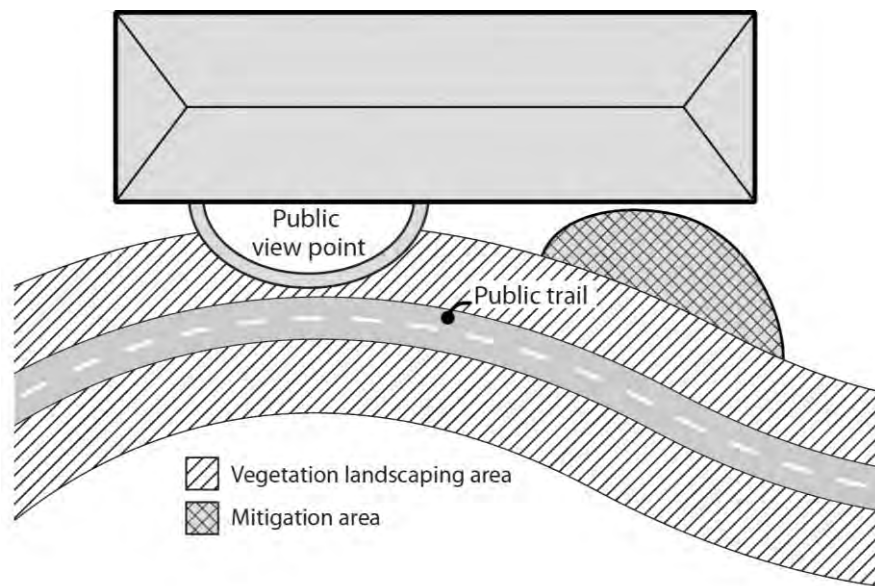
33.475.430.K Mitigation

In order to develop in or alter the River Environmental overlay zone, mitigation is required. Mitigation must occur in an area that is one and one-half times the size of the area that will be disturbed for the development. This ratio is intended to mitigate for the fact that when mature, established vegetation is removed and replaced with new plantings there is a loss of resource functional value until the new vegetation becomes established.

Mitigation should be installed within the River Environmental Overlay Zone. However, if the land within the River Environmental Overlay Zone is already planted at a high density, then the mitigation can be done on-site provided that the mitigation area is contiguous to the River Environmental Overlay Zone.

- K. Standards for mitigation.** The following standards apply to mitigation required by Paragraphs 33.475.440.A-F and I.
1. Mitigation must occur at a 1.5:1 ratio of mitigation area to project impact area. Project impact area is the total area within the River Environmental overlay zone where structures will be built, vegetation will be removed, or ground disturbance will occur as a result of the proposal. Mitigation area is not counted as part of the project impact area.
 2. Mitigation must occur in the River Environmental Overlay Zone or in an area that is contiguous to the River Environmental Overlay Zone, see Figure X.
 3. If the mitigation area is not on the site where the project occurs, then the applicant must own the property or have an easement or deed restriction sufficient to ensure the right to carry out, monitor, and maintain the mitigation for 10 years.

475-X
Mitigation Area Contiguous to River Environmental Overlay Zone



Commentary

3. The mitigation must be conducted no later than six months from the time of development or alteration. The mitigation can occur at the same time as the proposed development or alteration;
4. Nuisance and prohibited plants identified on the *Portland Plant List* must be removed within the area to be replanted. Trees removed to meet this subparagraph must be replaced as specified in paragraph J, above;
5. Plantings required for tree removal, as specified in paragraph J, above, can be counted towards mitigation if the planting is located within the River Environmental Overlay Zone or in an area that is contiguous to the River Environmental Overlay Zone;
6. Required plants and planting densities:
 - a. One tree, three shrubs, and four other plants are required to be planted for every 100 square feet of replanting area. Trees may be clustered. Trees must not be planted within a Scenic Resources Overlay Zone. Plants must be selected from the *Portland Plant List* and must be compatible with the conditions of the site; or
 - b. One tree and three shrubs are required for every 100 square feet of replanting area, and the planting area must be seeded with a native grass and forb seed mix at a ratio of 30 pounds per acre. Trees may be clustered. Trees must not be planted within a Scenic Resources Overlay Zone. Plants and seeds must be selected from the *Portland Plant List* and must be compatible with the conditions of the site;
7. If more than 10 trees, shrubs or groundcover plants are used to meet the above standard, then no more than 50 percent of the trees, shrubs or groundcover plants may be of the same genus. If more than 40 trees, shrubs or groundcover plants are used, then no more than 25 percent of the plants may be of the same genus;
8. Trees must be a minimum ½-inch caliper or bareroot unless they are oak or madrone, which may be one gallon size. No more than ten percent of the trees may be oak or madrone. Shrubs must be a minimum of one gallon size or bareroot. All other species must be a minimum of four-inch pots or equivalent;
9. The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met; and
10. Mitigation carried out to meet these standards may be installed in conjunction with planting carried out to meet the landscaping standard 33.475.220, but plantings installed as mitigation will be in addition to what the landscaping standard requires.

Commentary

33.475.450 Corrections to Violations of River Environmental Overlay Zone Development Standards

- A. Purpose.** The purpose of the correction regulations is to ensure the timely restoration of natural resources and functional values that have been degraded due to a violation of the River Environmental Overlay Zone standards.

These regulations establish a process to determine which review requirements will be applied to remedy a violation that takes place in the River Environmental Overlay Zone. The type of review required depends on the circumstances of the violation. Section 33.475.450.B details methods for correcting such violations and Title 3 of the City Code details the enforcement penalties.

- B. Correction Options.** Applicants must choose one of the following options to correct environmental code violations.
1. When these options may be used.
 - a. If all of the following are met, the applicant may choose Option One, Option Two, or Option Three:
 - (1) No more than 12 diameter inches of trees were removed;
 - (2) No more than one Madrone 4 inches or less, Garry Oak 4 inches or less, or Pacific Yew 2 inches or less was removed;
 - (3) No ground disturbance occurred riverward of the top of bank of the Willamette River or within 30 feet of the top of bank of a stream, wetland or other water body;
 - (4) The correction will remove all illegal development; and
 - (5) The correction will replant illegal clearing.
 - b. If any of the following occurred, the applicant may not use Option One, but may choose either Option Two or Option Three:
 - (1) More than 12 diameter inches of trees were removed;
 - (2) More than one Madrone 4 inches or less, Garry Oak 4 inches or less, or Pacific Yew 2 inches or less was removed;
 - (3) A Madrone larger than 4 inches, Garry Oak larger than 4 inches, or Pacific Yew larger than 2 inches was removed;
 - (4) Disturbance occurred riverward of the top of bank of the Willamette River, or within 30 feet of the top of bank of a stream, wetland or other water body.

Commentary

- c. If the applicant cannot meet Options One or Two, Option Three must be used.
 - d. If the violation also violates a condition of approval of a land use review, no trees have been removed, and disturbance did not occur riverward of the top of bank of the Willamette River or within 30 feet of the top of bank of a stream, wetland or other water body, the applicant may choose Option One or the process described in Section 33.730.140. The applicant may not choose Options Two or Three.
 - e. If the violation also violates a condition of approval of a land use review, trees have been removed, and disturbance occurred riverward of the top of bank of the Willamette River or within 30 feet of the top of bank of a stream, wetland or other water body, the applicant must use the process described in Section 33.730.140. The applicant may not choose one of the options in this section.
2. Option One, Remove and Repair. This option results in removal of illegal development and replanting and repair of any damage. All of the requirements of this paragraph must be met. Adjustments and modifications to these requirements are prohibited.
- a. All items and materials placed in the area of violation are removed and no new disturbance area is created;
 - b. Any soil compaction resulting from the violation is tilled or otherwise broken up to a depth of 6 inches prior to planting;
 - c. Violation remediation planting. The area to be planted is the area disturbed by the violation. All of the following must be met:
 - (1) The area disturbed by the violation activity must be replanted;
 - (2) One tree, six shrubs, and eight other ground cover plants are required to be planted for every 200 square feet of planting area. For planting areas over 600 square feet, at least two different tree, three different shrub, and four different groundcover species must be used. All plants must be native;
 - (3) A second area, equal in size to the area disturbed by the violation activity, must also be replanted as remediation, or seven additional plants as described in B.2.c.2 must be planted on the site for every 50 square feet disturbed;
 - (5) Any Nuisance or Prohibited Plants listed on the *Portland Plant List* must be removed from the planting area and within 10 feet of the planting area;
 - (6) Trees must be a minimum one inch in diameter unless they are oak, madrone, or conifer, which may be three- to five-gallon size. No more than 10 percent of the trees may be oak or madrone. Trees must not be planted within a Scenic Resources Overlay Zone. Trees may be clustered. Shrubs must be a minimum of two-gallon size. All other species must be a minimum of four-inch pots; and

Commentary

- (7) The requirements of Section 33.248.090, Mitigation and Restoration Planting, must be met; and
 - d. For violations involving the removal of trees, two times the number of diameter inches removed must be planted on the site, in addition to other remediation vegetation planted. If any tree removed was a Garry Oak, Madrone, or Pacific Yew, the replacement trees must be of the same species. Planted trees must be a minimum one inch in diameter unless they are oak, Madrone, or conifer, which may be three- to five-gallon size.
3. Option Two, Retain and Mitigate. This option results in legalizing the illegal development and mitigating for any damage. All of the requirements of this subsection must be met. Adjustments and modifications to these standards are prohibited.
- a. The applicable standards of paragraphs 33.475.440.B must be met;
 - b. Violation remediation planting. The area to be planted is the area disturbed by the violation. Where development is approved for the area disturbed by the violation, an area of the same size elsewhere on the site must be planted. All of the following must be met:
 - (1) The area disturbed by the violation activity must be replanted;
 - (2) One tree, one shrub, and five groundcover plants are required to be planted for every 50 square feet of planting area. Plants must be native and selected from the *Portland Plant List*.
 - (3) A second area, equal in size to the area disturbed by the violation activity, must also be replanted as remediation, or seven additional plants as described in B.3.b.2 must be planted on the site for every 50 square feet disturbed;
 - (4) Any Nuisance or Prohibited Plants listed on the *Portland Plant List* must be removed from the planting area and within 10 feet of the planting area;
 - (5) Trees must be a minimum one inch in diameter unless they are oak, madrone, or conifer, which may be three- to five-gallon size. No more than 10 percent of the trees may be oak or madrone. Shrubs must be a minimum of two-gallon size. All other species must be a minimum of four-inch pots; and
 - (6) The requirements of Section 33.248.090, Mitigation and Restoration Planting, must be met; and

Commentary

- c. For violations involving the removal of trees, two times the number of diameter inches removed must be planted on the site, in addition to other remediation vegetation planted. If any tree removed was a Garry Oak, Madrone, or Pacific Yew, the replacement trees must be of the same species. Planted trees must be a minimum 1 inch in diameter unless they are oak, Madrone, or conifer, which may be three- to five-gallon size.
4. Option Three, River Review. This option requires River Review, using the approval criteria and procedures below:
- a. Approval criteria. The applicable approval criteria of Subsection 33.865.120 must be met.
 - b. Review procedures. Reviews are processed as follows:
 - (1) Type III. A Type III review is required for any development, exterior alteration, or exterior improvement within a wetland, stream channel, drainageway, or water body.
 - (2) Type II. All other reviews to correct violations are processed through a Type II procedure.
 - (3) All River Reviews must provide the information required in Section 33.865.040, Supplemental Application Requirements

Commentary

33.475.500 Removal or Remediation of Hazardous Substances

The regulations in this section apply to removal or remediation of hazardous substances. The goal of these regulations is ensure that these cleanup actions do not unnecessarily impair river-dependent and river-related uses or natural resources.

Oregon State Law (ORS 465.315(3)) governs whether local requirements, such as the River Plan, apply to state approved cleanups. The onsite portion of a state approved cleanup may be exempt from the procedural requirements of the Code to obtain local permits. What constitutes the on-site portion of the remedial action is generally identified in the record of decision or other cleanup approval or selection documents.

When a cleanup activity is exempt from local procedures, the person conducting the cleanup is required to ensure that the local government's substantive requirements are met. The Bureau of Development Services implements what it calls an "exempt process" for evaluating hazardous substance removal or remediation plans compliance with the City's substantive regulations. The regulations in this section are the City's substantive requirements for clean ups that are applied through the exempt permit process or the standard permit process if the cleanup project is not exempt. Cleanup conducted under state law in a City right of way is not exempted and must comply with all applicable City requirements.

Under federal law (42 U.S.C. 9621 (e)(1)), EPA has its own process for determining the extent to which substantive requirements of City Code will be considered in a federal approved cleanup.

The requirements are intended to refine the cleanup design to be in conformance with City requirements and the Oregon Statewide Planning Goals particularly Goal 15: the Willamette Greenway. Goal 15 includes requires protection of significant fish and wildlife habitats, protection of natural vegetative fringe along the river, and setbacks from the river for non-water related or non-water dependent uses. The regulations have been written in a way that will provide the person conducting the cleanup and the regulating agency with the flexibility required to design the most appropriate removal or remediation action.

33.475.500.E.1 Goal 15 requires that buildings be separated from the river. The City's river setback (called greenway setback outside of the Central Reach) requires that development in the river general zone be set back 50 feet from the top of bank. This regulation is intended to ensure that the setback standard can be implemented at the time of development or redevelopment.

Clean Up of Contaminated Sites

33.475.500 Removal or Remediation of Hazardous Substances

- A. General.** The following regulations are substantive requirements that apply to actions taken to remove or remediate hazardous substances. All of the regulations must be met unless it demonstrated to be impracticable pursuant to subsection G, below.
- B. Where these regulations apply.** The regulations of this section apply to the portion of the site located within the boundaries of the removal or remediation action.
- C. Review procedure.**
1. Except as described in paragraph C.2, below, compliance with these regulations is processed through a Type II procedure.
 2. If the action to remove or remediate hazardous substances is subject to this Code but exempt from procedural requirements, the action must comply with the substantive requirements of these regulations to the extent required under state or federal law.
- D. Relationship to other regulations in this chapter.** Actions to remove or remediate hazardous substances that are approved or selected under Oregon or federal cleanup law are exempt from the procedural requirements of this chapter. When development is occurring in conjunction with actions taken to remove or remediate hazardous substances, but which is not in itself a remediation or removal action, then that development must meet all other applicable regulations and procedural requirements of this chapter. Remedial actions within City rights of way or not approved or selected by state or federal cleanup authorities must meet all other applicable regulations and procedural requirements of this chapter. A person conducting a cleanup otherwise exempted from the procedural requirements may choose to obtain a permit.
- E. Regulations that apply to all actions to remove or remediate hazardous substances.** The following regulations apply to all proposals for the removal or remediation of hazardous substances:
1. Buildings, structures and equipment installed in the River General Overlay Zone for the purpose of removing or remediating hazardous substances must not be located within or riverward of the river setback. The river setback is described in section 33.475.210. When designing and locating buildings, structures or equipment the person conducting the cleanup must take into account the purpose of the setback standard which is to keep structures away from the river, and reserves space for development of the greenway trail in cases where the greenway trail is designated on the site.

Commentary

33.475.500.F.1

The requirements of this subsection are aimed at encouraging the person conducting the cleanup to design a remedy that leaves identified natural resource areas intact as much as possible. The City is aware that this will not be possible in all cases, and therefore requires re-vegetation when ground disturbance and native plant removal cannot be avoided. The re-vegetation requirements are modeled on the Pleasant Valley Natural Resource overlay zone mitigation planting requirements. The tree replacement requirement is similar to requirements in the environmental overlay zones and the Pleasant Valley Natural Resource overlay zone.

F. Regulations that apply to actions to remove or remediate hazardous substances that occur in specific areas. The following regulations apply to actions to remove or remediate hazardous substances based on specific locations:

1. The following regulations apply to areas within the River Environmental Overlay Zone landward of the top of bank:
 - a. Disturbance of the ground outside of the actual soil removal areas and removal of native vegetation must be avoided. If avoiding disturbance or native vegetation removal is not practicable, disturbance and removal must be minimized.
 - b. Where ground disturbance or removal of native vegetation cannot be avoided, the area must be replanted. The replanting standards are as follows:
 - (1) Nuisance and prohibited plants identified on the *Portland Plant List* must be removed within the area to be replanted and within 10 feet of any plantings;
 - (2) Plant density. The replanting area must meet one of the following plant and planting density standards:
 - One tree, three shrubs, and four other plants are required to be planted for every 100 square feet of replanting area. Trees may be clustered. Plants must be selected from the Portland Plant List and must be compatible with the conditions of the site; or
 - One tree and three shrubs are required for every 100 square feet of replanting area, and the planting area must be seeded with a native grass and forb seed mix at a ratio of 30 pounds per acre. Trees may be clustered. Plants and seeds must be selected from the Portland Plant List and must be compatible with the conditions of the site;
 - (3) Plant diversity. If more than 10 trees, shrubs or groundcover plants are used to meet the above standard, then no more than 50 percent of the trees, shrubs or groundcover plants may be of the same genus. If more than 40 trees, shrubs or groundcover plants are used, then no more than 25 percent of the plants may be of the same genus;

Commentary

- (4) Plant size. Trees must be a minimum ½-inch caliper or bareroot unless they are oak or madrone, which may be one gallon size. No more than ten percent of the trees may be oak or madrone. Shrubs must be a minimum of one gallon size or bareroot. All other species must be a minimum of four-inch pots or equivalent; and
 - (5) The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met.
- c. Tree replacement. Trees that are 4 inches or greater in diameter that are removed must be replaced as follows:
- (1) Ratio. One diameter inch of tree must replace every one inch of tree removed. Every diameter inch of evergreen tree removed must be replaced with an equal number of inches of evergreen tree;
 - (2) Size. The replacement trees must be a minimum ½-inch diameter;
 - (3) Type. The replacement trees must be native trees selected from the *Portland Plant List*;
 - (4) Location. All replacement trees must be planted within the River Environmental Overlay Zone, within 50 feet of the River Environmental Overlay Zone, or within 50 feet of the top of bank of the Willamette River in the North Reach. The person conducting the cleanup must own the property where the trees are planted or have an easement or deed restriction sufficient to ensure the success of the tree planting; and
 - (5) Replacement trees can be counted toward meeting the requirements of subparagraph F.1.b(2), above.
- d. All vehicle areas and construction staging areas installed for purposes of conducting the removal and remediation actions must be removed from the River Environmental Overlay Zone when they are no longer necessary for remedy construction. All such areas must be removed by the time the project is complete and the areas must be replanted according to the standards of subparagraph F.1.b, above.

Commentary

33.475.500.F.2.a

If the river bank will be altered significantly as a result of the removal or remediation of hazardous substances, the City requires that the bank be restored using soil bioengineering instead of engineered inert materials to the extent practicable. The City's priority is a natural bank that can sustain vegetation for soil stabilization, improve ecological values and provide riparian functionality. However, the City recognizes that there will be cases when bioengineering will not be practicable. If rock armoring is used on the bank, the City requires re-grading to a slope level that will allow vegetation to be maintained, and requires that live willow or dogwood stakes be planted between the rocks to provide a minimum level of vegetative cover.

2. The following regulations apply to the area between the top of bank and the ordinary high water mark:
 - a. When there is significant alteration of the area between the top of bank and the ordinary high water mark the regulations of this subparagraph must be met. A significant alteration is an alteration that affects a substantial portion of the bank, includes more than 50 cubic yards of excavation or fill, changes the ground contours, results in the removal of buildings, or requires significant engineering or in-water work. Minor bank alterations such as installation of monitoring wells, sampling cores, installation of extraction systems, repair and maintenance of storm water systems, removal of debris, temporary road access to the shoreline, relatively small amounts of grading and fill, and installation of temporary erosion control measures do not constitute significant alteration.
 - (1) The area between the top of bank and the ordinary high water mark where the alteration occurs must be designed using biotechnical techniques including soil bioengineering. Figures 475-8 and 475-9 show examples of biotechnical techniques. If the person conducting the cleanup stabilizes the river bank using biotechnical techniques, additional development on the site will be exempt from meeting the River Landscaping Standard in 33.475.220, above. In addition to using biotechnical techniques, the following requirements apply:
 - Rock armoring or other hard surface armoring methods must not be used in substantial amounts on the surface between the top of bank and the Ordinary High Water Mark. This is not intended to preclude using rock or other hard surface stabilization methods below the surface if necessary to contain hazardous substances or to preclude the use of rocks or gravel as part of the biotechnical technique;
 - The bank must be sloped or terraced in a way that allows the establishment and maintenance of vegetation as the primary soil stabilization method;
 - Large wood, including root wads, tree boles and logs, must be used to reduce localized erosion, improve bank stabilization, and improve ecological values; and
 - At least eighty percent of the area between the top of bank and the ordinary high water mark that is being altered as a result of the remedy must be planted with shrubs. At least one tree must be planted for every 400 square feet of altered area. All of the area that is not planted with shrubs or trees must be fully covered with ground cover plants. All plants must be selected from the Portland Plant List and should be appropriate for the conditions on the site. The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met.

Commentary

- (2) If biotechnical techniques are not practicable and rock armoring is used on the surface between the top of bank and the Ordinary High Water Mark, then the slope of the bank must be shallow enough to allow a combination of rock and vegetation. At a minimum, live native willow or dogwood stakes should be planted in the interstices between the rocks at a ratio of three stakes for every square yard of rock armoring.
 - b. When there is a minor alteration to the area between the top of bank and the ordinary high water mark, the regulations of paragraph F.1, above apply.
3. In the area that is riverward of the Ordinary High Water Mark, the substrate must be natural. If a natural substrate is not practicable and a hard treatment is necessary, the project must incorporate as many of the following as practicable:
 - a. Provide shallow beaches in the near shore area. Shallow means zero to 20 feet deep measured from the ordinary low water mark;
 - b. Avoid a submerged slope that would require engineered treatments to remain stable such as a slope steeper than 1:7 (rise to run ratio);
 - c. Integrate large wood, or other natural wave deflection structures or techniques that mimic the function of large wood, into the near-shore environment. Rock armoring, chemically treated wood, articulated block, and industrial debris is discouraged;
 - d. Avoid in-water structures that will impact the navigation channel; and
 - e. Consider water access to abutting upland industrial sites and avoid in-water structures that will preclude river-dependent or river-related development from accessing and utilizing the river for transport, transfer and conveyance of goods and materials to and from the upland site.

G. Demonstration of Impracticability. A person conducting a cleanup may be exempted from full compliance with a requirement in this section if the person demonstrates that compliance with the regulation is not capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project remedial purposes. The person must still comply with that requirement to the extent practicable and remains subject to all other applicable requirements.

Commentary

Figures 475-8 and 475-9

The examples that accompany this subsection were developed as part of a bank design charrette conducted by River Plan staff and attended by biologists, bank design experts, landscape architects, and City, state and federal agency representatives.

Figure 475-X

Soil Bioengineering

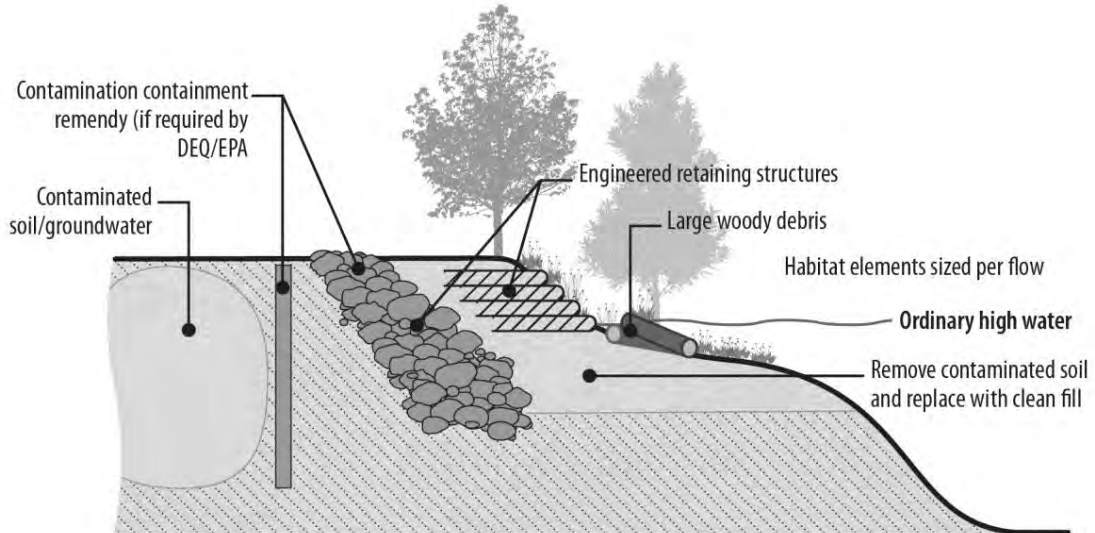
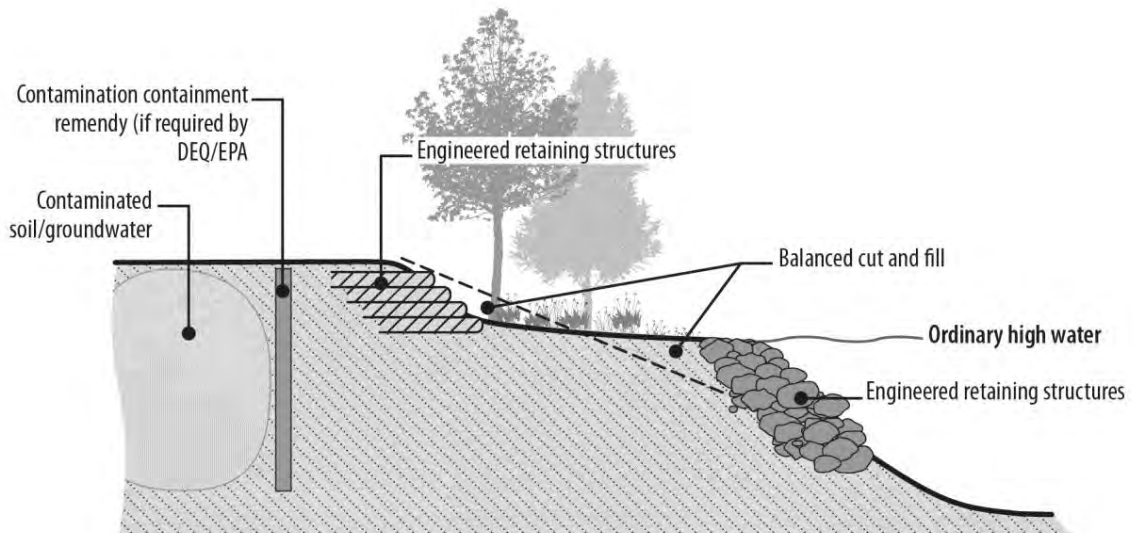


Figure 475-X

Marsh Bench



Commentary

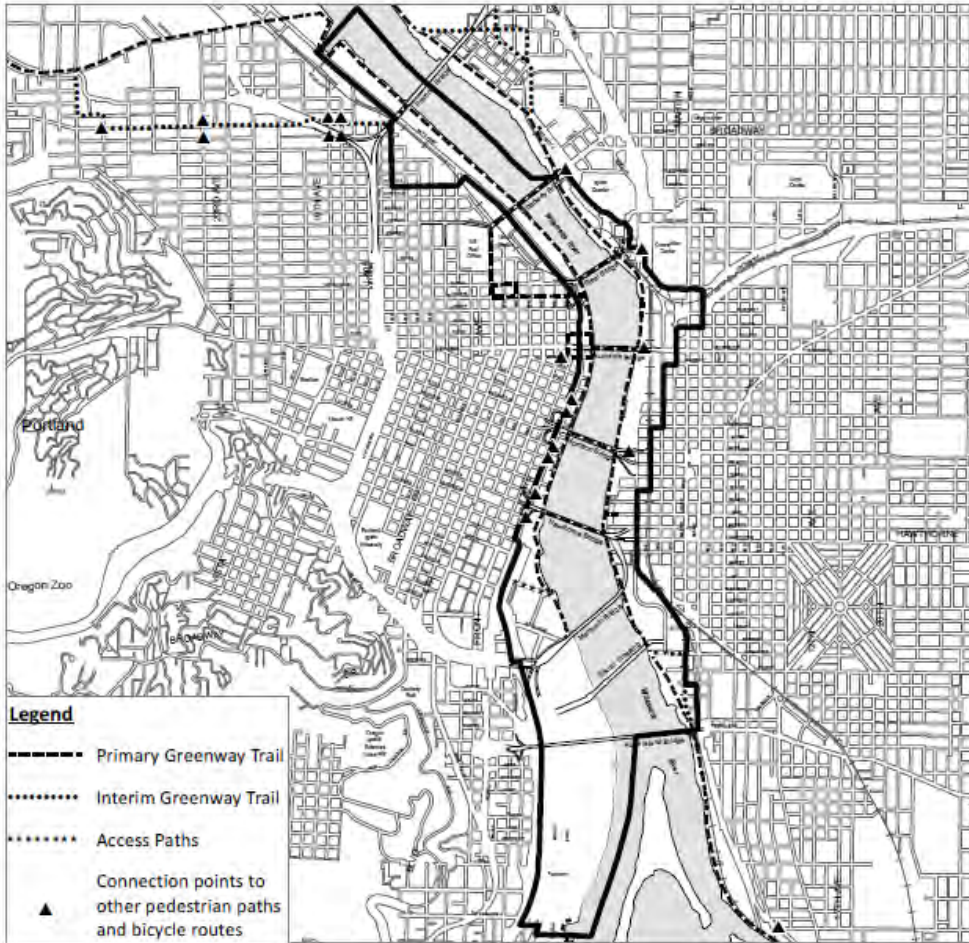
Map 475-1

This map depicts the *Central Reach* portion of the *Willamette Greenway Boundary*. It is sites within this boundary that are subject to the regulations of Chapter 475.

Draft Central Reach Portion of the
Willamette Greenway Boundary and Public Access

Map 475-1

Map Revised XXXXX X, 2015



Legend

- Primary Greenway Trail
- Interim Greenway Trail
- Access Paths
- ▲ Connection points to other pedestrian paths and bicycle routes

- Central Reach Overlay Boundary
- City Boundary
- Proposed Right-of-Way

October 7, 2015

▲
NORTH

0 2,400 4,800

Scale in Feet
Bureau of Planning and Sustainability
Portland, Oregon

Commentary

Only the sections that are edited are included in the table of contents.

33.430 Environmental Zones

Sections:

General

- 33.430-010 – 33.430.017 No Change
- 33.430.020 Environmental Reports
- 33.430.030 – 33.430.070 No Change
- 33.430.080 Items Exempt Form These Regulations
- 33.430.090 No Change

Development Standards

- 33.430.110-33.430.165 No Change
- 33.430.070 Standards for Resources Enhancement Projects
- 33.430.080 No Change
- 33.430.090 Standards for Public ~~Recreational~~ Trails
- 33.430.195 Standards for Tree Removal in the Scenic Resources Overlay Zone

Environmental Review

- 33.430.210-33.430.240 No Change
- 33.430.250 Approval Criteria

Natural Resource Management Plans

- 33.430.310-33.430.350 No Change

Commentary

33.430.020 Environmental Reports

The application of the environmental zones is based on detailed studies that have been carried out within ~~eight~~ ten separate areas of the City. The City's policy objectives for these study areas are described in the reports. Each study report identifies the resources and describes the functional values of the resource sites. Functional values are the benefits provided by resources. The values for each resource site are described in the inventory section of these reports. The City has adopted the following ~~eight~~ nine environmental study reports:

- bullets 1-8 no change
- Middle Columbia Corridor/Airport

33.430.080 Items Exempt From These Regulations

The following items, unless prohibited by Section 33.430.090, below, are exempt from the regulations of this chapter. Other City regulations such as Title 10, Erosion Control, must still be met:

A.-B. No change

C. Existing development, operations, and improvements, including the following activities:

1. Maintenance, repair, and replacement of existing structures, exterior improvements, roads, public recreational trails, public rest points, public viewing ~~points~~ areas, public interpretative facilities, and utilities. Replacement is not exempt whenever coverage or utility size is increased;

D. No change

33.430.170 Standards for Resource Enhancement Projects

A.1-7. No change

8. No structures are proposed except for public viewing areas developed as part of the project. The public viewing areas must meet the following:
 - a. The viewing area contains no more than 500 square feet of permanent disturbance area;
 - b. The viewing area is at least 30 feet from the top of bank of a stream, drainageway, wetland or other water body;

Commentary

33.430.190.D Tree removal is being moved to the end of the subsection because tree removal is allowed in both the trail and the viewing area associated with the trail. The tree removal standards are being updated to simplify them and make them the same as the standards for tree removal within a scenic resources overlay zone.

33.430.190 Standards for Public Recreational Trails

The following standards apply to public recreational trails and public viewing areas developed in conjunction with the recreational trail. All of the standards must be met.

A-C. No change

~~D.~~ ~~Tree removal and replacement standards are as follows:~~

- ~~1. Native trees 12 or more inches in diameter may not be removed. Each native tree more than 6 but less than 12 inches in diameter removed must be replaced as shown in Table 430-3;~~
- ~~2. Non-native non-nuisance trees may be removed if each tree at least 6 inches in diameter is replaced as shown in Table 430-3;~~
- ~~3. Trees listed on the Nuisance Plants List may be removed if each tree at least 6 inches in diameter is replaced with one tree; and~~
- ~~4. Replacement trees and shrubs must meet the planting standards of Subsection 33.430.140.K; and~~

ED. If a public viewing area is proposed, the following must be met:

1. The viewing area may create up to 500 square feet of permanent disturbance area;
2. The viewing area is at least 30 feet from the top of bank of a stream, drainageway, wetland or other water body; and
3. The viewing area is not in the floodway;

E. Tree removal and replacement standards are as follows:

- a. Native trees up to 12 inches in diameter and non-native trees may be removed with hand-held equipment;
- b. Trees that are more than 6 inches in diameter that are removed must be replaced as shown in Table 430-3; and
- c. Replacement plantings must meet the planting standards in 33.430.140.K.

Commentary

33.430.190.D This is a new standard. Before application of the c and p overlay zones there were s overlay zones. The s overlays were removed when the c and p overlays were applied. It was assumed that scenic resources would be addressed by the new environmental overlay zones. However, without the s overlays it is not possible to know when scenic resources must be considered. Therefore, the City will be reapplying the s overlay zones.

Trees within the s overlay zones grow and block the views that are intended to be protected. Where the s overlay overlaps with a c or p overlay, tree removal is allowed through standards. Tree should be replaced outside of the s overlay zone.

33.430.195 Standards for Tree Removal in the Scenic Resources Overlay Zone

The following standards apply to tree removal in the Scenic Resources Overlay Zone. All of the standards must be met.

- A. Native trees up to 12 inches in diameter and non-native trees may be removed with hand-held equipment;
- B. Trees that are more than 6 inches in diameter that are removed must be replaced as shown in Table 430-3;
- C. Temporary disturbance area caused by the removal must meet one of the following options:
 - 1. Option 1. Three shrubs and four other plants must be planted for every 100 square feet of temporary disturbance area; or
 - 2. Option 2. Three shrubs must be planted for every 100 square feet of temporary disturbance area and the remainder of the temporary disturbance area must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; and
- D. Replacement plantings must meet the planting standards in 33.430.140.K.

Environmental Review

33.430.250 Approval Criteria

A. – B. (NO CHANGE)

C. Public recreational facilities. In resource areas of environmental zones, public recreational trails, rest points, public viewing points areas, and interpretative facilities will be approved if the applicant's impact evaluation demonstrates that all of the following are met:

D.– E. (NO CHANGE)

Commentary

Sections:

General

- 33.440.010 Purpose
- 33.440.030 Greenway Overlay Zones
- 33.440.050 Relationship to State and Federal Reviews
- 33.440.060 Sunset Provision

Use Regulations

- 33.440.100 Use-Related Restrictions

Development Regulations

- 33.440.200 Application of the Development Standards
- 33.440.210 Development in the Greenway Setback
- 33.440.220 Floor Area Ratios
- 33.440.230 Landscaping
- 33.440.240 Public ~~Recreational~~ Trails
- 33.440.250 Public Viewpoints
- 33.440.260 View Corridors
- 33.440.270 Nonconforming Uses and Development

Greenway Review

- 33.440.300 Purpose
- 33.440.310 Where Greenway Review Applies
- 33.440.320 Items Exempt from Greenway Review
- 33.440.330 Procedures
- 33.440.340 Notice to State Parks and Recreation Division
- 33.440.345 Supplemental Application Requirements
- 33.440.350 Approval Criteria
- ~~33.440.360 Greenway Goal Exceptions~~

Map 440-1 Willamette Greenway Public Access

33.440.030 Greenway Overlay Zones

A. Purpose. The purpose of the greenway overlay zones is to implement the land use pattern identified in the Willamette Greenway Plan and the water quality requirements of Metro Code 3.07.340.B (Title 3). There are five greenway overlay zones, each with its own focus and purpose. The purpose of each of the overlay zones is stated below.

1. River Natural. The River Natural zone protects, conserves, and enhances land of scenic quality or of significant importance as wildlife habitat.

Commentary

33.440.030.B Where these regulations apply

Chapter 33.440 will no longer apply to the Central Reach of the Willamette River. A new Chapter 33.475 replaces the *Greenway Overlay Zones* for the Central Reach. Chapter 33.440 will continue to apply to the North and South Reach of the Willamette River.

This subsection is being amended to improve readability and clarity.

2. River Recreational. The River Recreational zone encourages river-dependent and river-related recreational uses which provide a variety of types of public access to, and along and in the river, and which enhance the river's natural and scenic qualities.
3. River General. The River General Overlay Zone allows for uses and development which are consistent with the base zoning, which allow for public use and enjoyment of the ~~water~~riverfront, and which enhance the river's natural and scenic qualities.
4. River Industrial. The River Industrial zone encourages and promotes the development of river-dependent and river-related industries which strengthen the economic viability of Portland as a marine shipping and industrial harbor, while preserving and enhancing the riparian habitat and providing public access where practical.
5. River Water Quality. The River Water Quality zone is designed to protect the functional values of water quality resources by limiting or mitigating the impact of development in the setback.

B. Where these regulations apply.

1. General. The regulations of this chapter apply to all land and fills and structures in water within the North and South reach portions of the Willamette Greenway Plan boundary. The North and South reach portions of the Willamette Greenway Plan boundary are shown on Map 440-1 and are designated on the Official Zoning Maps with River Natural, River Recreational, River General, River Industrial, or River Water Quality overlay zones.

(Renumber Map 440-1 to 440-2)

2. Exceptions.
 - a. ~~except that the area within~~The interior of Ross and Hardtack Islands which is presently subject to the Ross Island Management Plan will not be subject to the regulations of this chapter during such time as the Ross Island Management Plan ~~remains~~ is in effect.
 - b. ~~In addition,~~The public trail standards of Section 33.440.240, below, apply to all lands ~~designated on~~ within the Willamette Greenway Plan boundary designated with the ~~recreational~~ public trail symbol but which are outside of the greenway zones.

C.-D. [No change]

33.440.050 Relationship to State and Federal Reviews

In addition to any City requirements, ~~all~~ development within or riverward of the greenway setback, including fills, ~~must be approved~~ may be regulated by the Oregon Division of State Lands and the U.S. Army Corp of Engineers. City approval does not imply approval by these agencies.

Commentary

33.440.100.B.4

The River Water Quality zone (q-zone) was not intended to affect the uses allowed in the Greenway. The zone applies in combination with other greenway overlay zones—some of which affect allowed use on a site. The purpose statement for the q-zone says that the zone is designed to protect the functional values of water quality resources by limiting or mitigating the impact of development in the setback (emphasis added). The use limitation as currently written has no practical affect on the allowed uses within the greenway setback. There are no greenway review approval criteria related to use in the q-zone, so greenway review is not required for a use that is not river-dependent or river-related. This amendment is intended to clarify the code and to ensure that development within the greenway setback will continue to require greenway review and will continue to be subject to the River Water Quality zone application requirements and approval criteria (limit impacts, mitigate for unavoidable impacts).

33.440.060 Sunset Provision

The River Water Quality Overlay Zone will be deleted from the Zoning Code when revised Willamette River Greenway regulations are adopted.

33.440.100 Use-Related Restrictions

A. Generally. In most cases, the greenway zones do not restrict primary uses that are allowed in the base zones by right, with limitations, or as a conditional use. Exceptions to this are in the River Recreational, River Industrial, and River Water Quality zones. The restrictions on uses are stated in Subsection B. below. The location of development for an allowed use is regulated by the development standards below. Any changes to the land associated with the use are subject to greenway review unless exempted. See 33.440.310 and 33.440.320 below.

B. Use restrictions.

1. River Recreational zone. Primary uses in the River Recreational zone are limited to recreational uses which are river-dependent or river-related.
2. River Industrial zone. In the River Industrial zone, river-dependent and river-related primary uses are allowed by right on sites that front the river. Primary uses that are not river-dependent or river-related may be allowed on sites that front the river if they are approved through greenway review. They must comply with the approval criteria of 33.440.350.B. below. There are no special use restrictions on sites that do not have river frontage.
3. River Natural and River General zones. There are no special use restrictions in the River Natural and River General zones.
4. River Water Quality zone. There are no special use restrictions associated specifically with the River Water Quality zone. However, any use restrictions that apply as a result of an accompanying Greenway Overlay Zone also apply within the River Water Quality zone. ~~In the River Water Quality zone, use restrictions apply only within the greenway setback. Primary uses that are river dependent or river related are allowed and do not need to comply with Section 33.440.345, Supplemental Application Requirements or the approval criteria of Subsection 33.440.350.G. Primary uses that are not river dependent or river related may be allowed if they are approved through greenway review. Existing uses that change to a non river dependent or non river related use are subject to greenway review.~~

C.-D. No Change

Commentary

33.440.210.C.2

The River Water Quality zone (q-zone) applies an expanded setback area as a way to limit impacts from development on water quality resources. In the q-zone, the setback is expanded from 25 feet landward of top of bank to 50 feet or 200 feet landward from top of bank. While the expanded setback is intended to require minimization of impacts and mitigation for unavoidable impacts, the q-zone regulations were not intended to effectively prohibit non-river-dependent and non-river-related development within the expanded setback area. By requiring a greenway goal exception within the entire q-zone greenway setback, this type of development is effectively prohibited in the entire area. The recommended change limits the requirement for a greenway goal exception to the area that is within 25 feet from top of bank, consistent with the requirement in all other greenway zones. Greenway review will continue to be required for all development that is within the q-zone greenway setback.

33.440.210 Development in the Greenway Setback

A.-B. No change

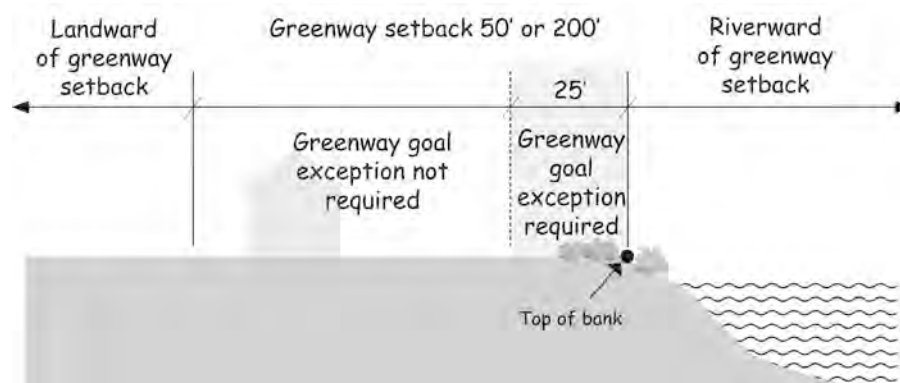
C. Development regulations.

1. Development landward of the greenway setback. Development, exterior alterations, excavations, and fills landward of the greenway setback are not required to be river-dependent or river-related and are subject to greenway review, unless exempt under Section 33.440.320, Exemptions.
2. Development within the greenway setback.
 - a. River-dependent and river-related development. Development, exterior alterations, excavations, fills, and associated tree removal within the greenway setback that are river-dependent or river-related may be allowed if approved through greenway review, unless exempt under Section 33.440.320, Exemptions.
 - b. Development that is not river-dependent or river-related.
 - (1) General. Development, exterior alterations, excavations, or fills that are not river-dependent or river-related require greenway review and a Greenway Goal Exception to locate in the greenway setback.
 - (2) Exception. Within the River Water Quality zone, development, exterior alterations, excavations, and fills that are not river-dependent and river-related do not require a Greenway Goal Exception when located outside of the area that is within the first 25 feet landward of the top of bank. See Figure 440-3.
3. Development riverward of the greenway setback. Development, exterior alterations, excavations, fills, and associated tree removal riverward of the greenway setback that are river-dependent or river-related may be allowed if approved through a greenway review, unless exempt under Section 33.440.320, Exemptions. Development, exterior alterations, excavations, or fills that are not river-dependent or river-related require greenway review and a Greenway Goal Exception to locate riverward of the greenway setback.

Commentary

Figure 440-3

Greenway Goal Exception in the River Water Quality Zone



(renumber Figure 440-3 to Figure 440-4)

33.440.220 Floor Area Ratios

The maximum floor area ratio (FAR) is 2 to 1 for the first 200 feet inland measured from the ordinary high water line, except in any of the following situations:

- A.** The site is already subject to a more restrictive FAR; or
- ~~**B.** The site is located in the Central City plan district, where the plan district FAR limits apply;~~
~~or~~
- ~~**C.** The use is an industrial use in an IH or IG base zone.~~

33.440.240 Public Recreational Trails

- A. Purpose.** Public ~~recreational~~ trails provide public access to and along both sides of the Willamette River. Public ~~recreational~~ trails are one of the tools used to comply with the public access requirements of the Comprehensive Plan and the Willamette Greenway Plan.
- B. Public ~~recreational~~ trail requirements.** All sites with a public ~~recreational~~ trail symbol shown on the Official Zoning Maps must comply with the requirements of Chapter 272, Public ~~Recreational~~ Trails, provide and install the official Greenway Trail signs as required by the Parks Bureau, and meet the trail design guidelines contained in the Willamette Greenway Plan.

Commentary

- C. ~~Recreational~~ Trails in the River Natural and River Water Quality zones. ~~Recreational~~ Trails must be designed to minimize disturbances on the natural environment of the River Natural and the River Water Quality zoned lands.

33.440.320 Exemptions from Greenway Review

Greenway review is not required for any of the situations listed below. The situations listed below are still subject to the Greenway development standards. When no development is proposed, removal of trees allowed under the exemptions below are subject to the tree permit requirements of Title 11, Trees. Exempt situations are:

A.- C. [No change]

- D. Development of or changes to the greenway trail or access paths provided that all development standards including the standards of Chapter 33.272, Public ~~Recreational~~ Trails, are met. Development of or changes in a viewpoint or view corridor, as indicated on Map 440-1, will require greenway review;

(No changes to E.-M.)

Commentary

33.440.345.A.1.b Supplemental Application Requirements

The application requirements have been amended to be consistent with the revised definition of top of bank and the new measurements section which describes how to measure top of bank.

33.440.330 Procedures

All development that does not require a Greenway Goal Exception is processed through the Type II procedure. All development that requires a Greenway Goal Exception is processed through a Type III procedure, and must be approved by City Council. See ~~Section Chapter 33.440.360-840~~, Greenway Goal Exception and Chapter 33.850, Statewide Planning Goal Exceptions.

33.440.345 Supplemental Application Requirements

In addition to the application requirements of Section 33.730.060, Application Requirements, the following information is required for Greenway review applications:

- A. Supplemental site plans.** One copy of each plan must be at a scale of at least one inch to 100 feet.
1. An existing conditions site plan, showing the following:
 - a. Topography shown by contour lines at two foot vertical contours in areas of slope less than 10 percent and at five foot vertical contours in areas of slope ten percent or greater;
 - b. The top of bank and the setback area and the structures and topographic contours referenced to determine the top of bank. The site plan depicting the top of bank must be drawn accurately to scale, and be suitable for reproduction on paper no smaller than 8.5 x 11 inches and no larger than 36 x 48 inches. The scale of the drawing must be between 1 inch = 50 feet, and 1 inch = 10 feet. Ground elevations must be shown by contour lines at 2-foot vertical intervals. See the definition of top of bank in 33.910.030.
 - c. Distribution outline of shrubs and ground covers with a list of most abundant species;
 - d. Trees identified by species, including the location of the drip line;
 - e. Streams, wetlands, other water bodies, and drainage patterns, using arrows to indicate the direction of major drainage flow;
 - f. Existing improvements such as structures, buildings, utility lines, fences, paved areas, roads, culverts, and bridges;
 - g. Areas of known soil or groundwater contamination, areas of uncontained hazardous materials, and underground storage tanks; and

Commentary

33.440.360 The approval criteria for a *Greenway Goal Exception* have been moved to a new Chapter 33.840. This change is consistent with the structure of the zoning code that has approval criteria primarily in the 800's.

h. Stormwater management facilities.

2.-3. (No change)

B. (No change)

33.440.360 Greenway Goal Exception

~~A. When a greenway goal exception is required. Approval of an exception to Statewide Planning Goal 15 Willamette Greenway, is required to locate a development or right-of-way that is not river dependent or river related within or riverward of the greenway setback. A greenway goal exception is not required to add revetments to a riverbank.~~

~~B. Approval criteria. Requests for greenway goal exceptions will be approved if the review body finds the applicant to have shown that all of the following approval criteria are met:~~

- ~~1. The proposed use is allowed in the base zone by right, with limitations, or as a conditional use;~~
- ~~2. The proposal will not have a significant adverse effect on the inventoried greenway values of the site or on abutting sites or water areas;~~
- ~~3. The proposal will not significantly reduce lands available for river dependent or river related uses within the City;~~
- ~~4. The proposal will provide a significant public benefit;~~
- ~~5. The intensification of existing uses or change in use must be limited, to the greatest possible degree, so that such lands will remain compatible with the preservation of the natural, scenic, historical, and recreational qualities of such lands;~~
- ~~6. The proposal cannot reasonably be accommodated in a location which does not require a goal exception;~~
- ~~7. Of all other potential locations within the greenway that require a goal exception, there are none with significantly better long term environmental, economic, social, and energy consequences after mitigation measures;~~
- ~~8. The proposal is compatible with other adjacent uses, or will be so rendered through measures designed to reduce adverse impacts; and~~
- ~~9. Development and fills riverward of the greenway setback must show that there are no practical on-site alternatives which achieve the same level of public benefit.~~

Commentary

Maps 440-1 Willamette Greenway Public Access Map (Maps 1-5)

Map 440-1 is a series of maps that delineate the Willamette Greenway Boundary, primary and interim trail alignments, access paths and connection points to other pedestrian paths and bicycle routes. The creation of Chapter 475, River Overlay Zones, applies to the Central Reach/ Central City portion of the Willamette Greenway Boundary area and this area will be no longer under the regulations of Chapter 440. Therefore, staff proposes deletion of Map 440-1, Map 4 of 5 that applies to the Central Reach. It will be replaced by a new Map 475-1.

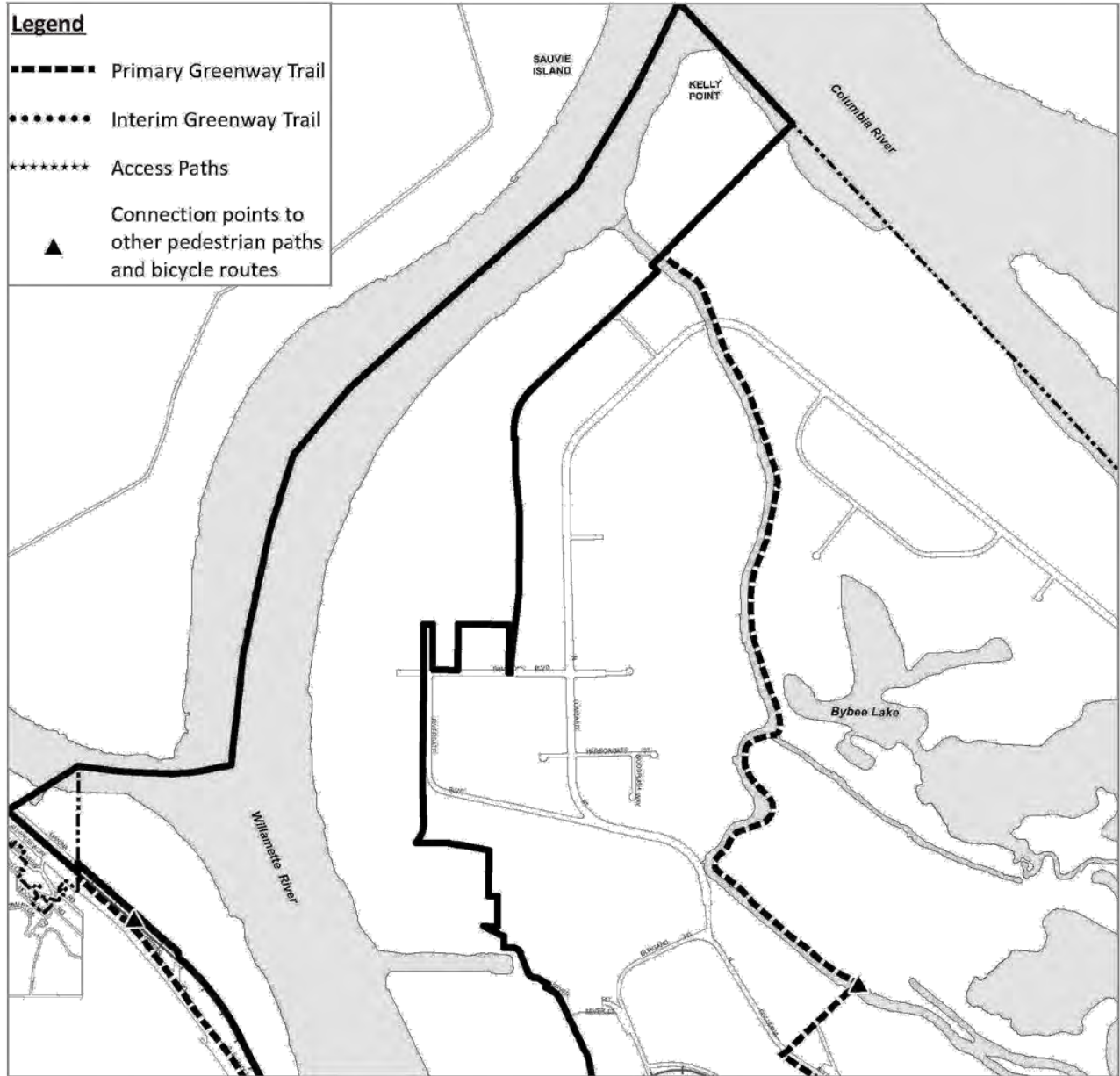
There are no changes to Maps 1-3 of 5 and Map 5 of 5. These maps are included in this draft for information only.

Draft Willamette Greenway Public Access Map

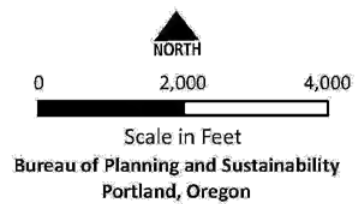
Map 440-1

Map 1 of 5

Map Revised Xxxxx X, 2015



- City Boundary (dashed line)
- Greenway Boundary (solid line)
- Proposed Right-of-Way (dotted line)



10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Chapter 33.440, Greenway Overlay Zones

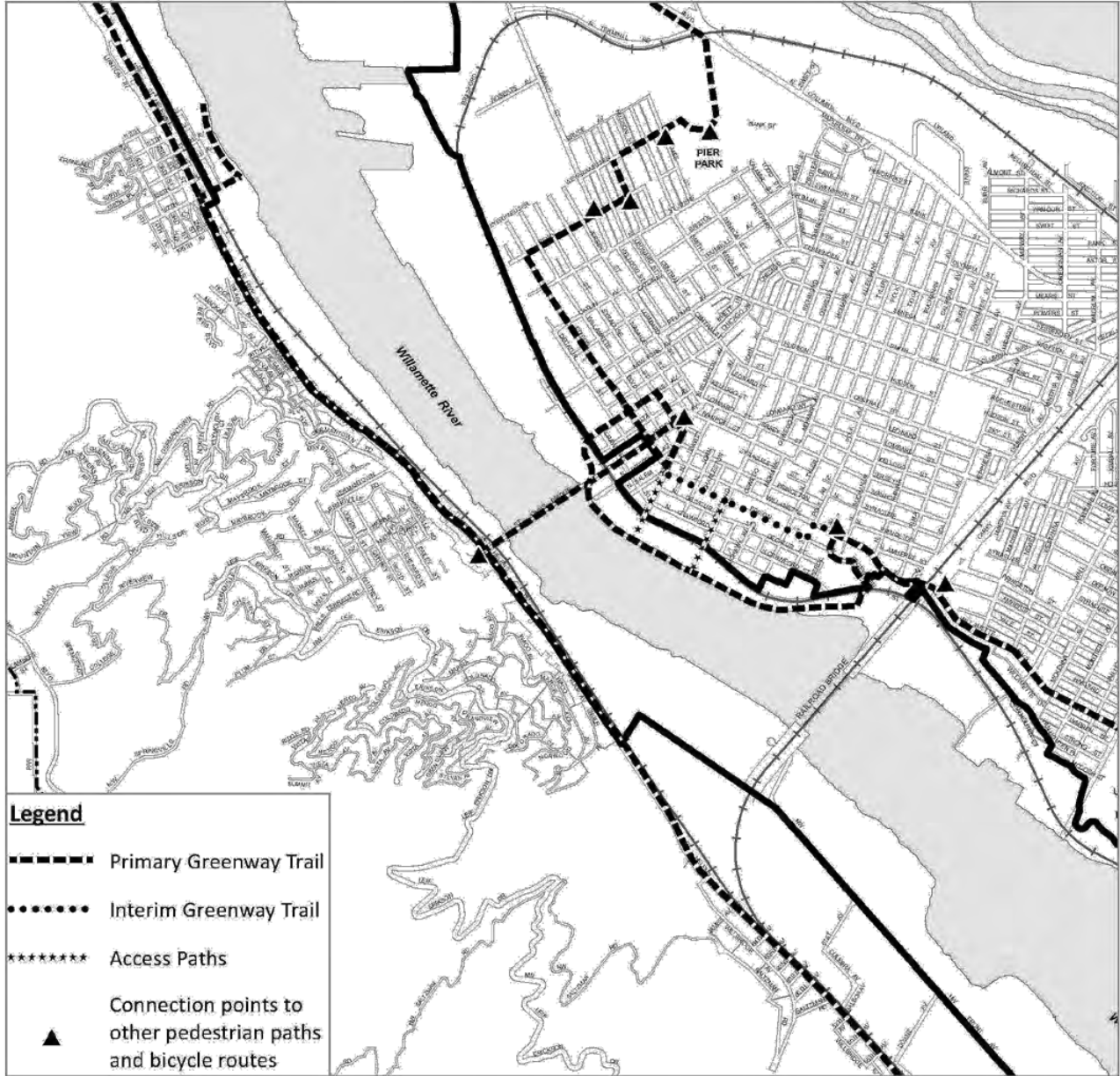
Commentary

Draft Willamette Greenway Public Access Map

Map 440-1

Map 2 of 5

Map Revised Xxxxx X, 2015



Legend

- Primary Greenway Trail
- Interim Greenway Trail
- ***** Access Paths
- ▲ Connection points to other pedestrian paths and bicycle routes

- City Boundary
- Greenway Boundary
- Proposed Right-of-Way

▲
NORTH

0 2,000 4,000

Scale in Feet
Bureau of Planning and Sustainability
Portland, Oregon

10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Chapter 33.440, Greenway Overlay Zones

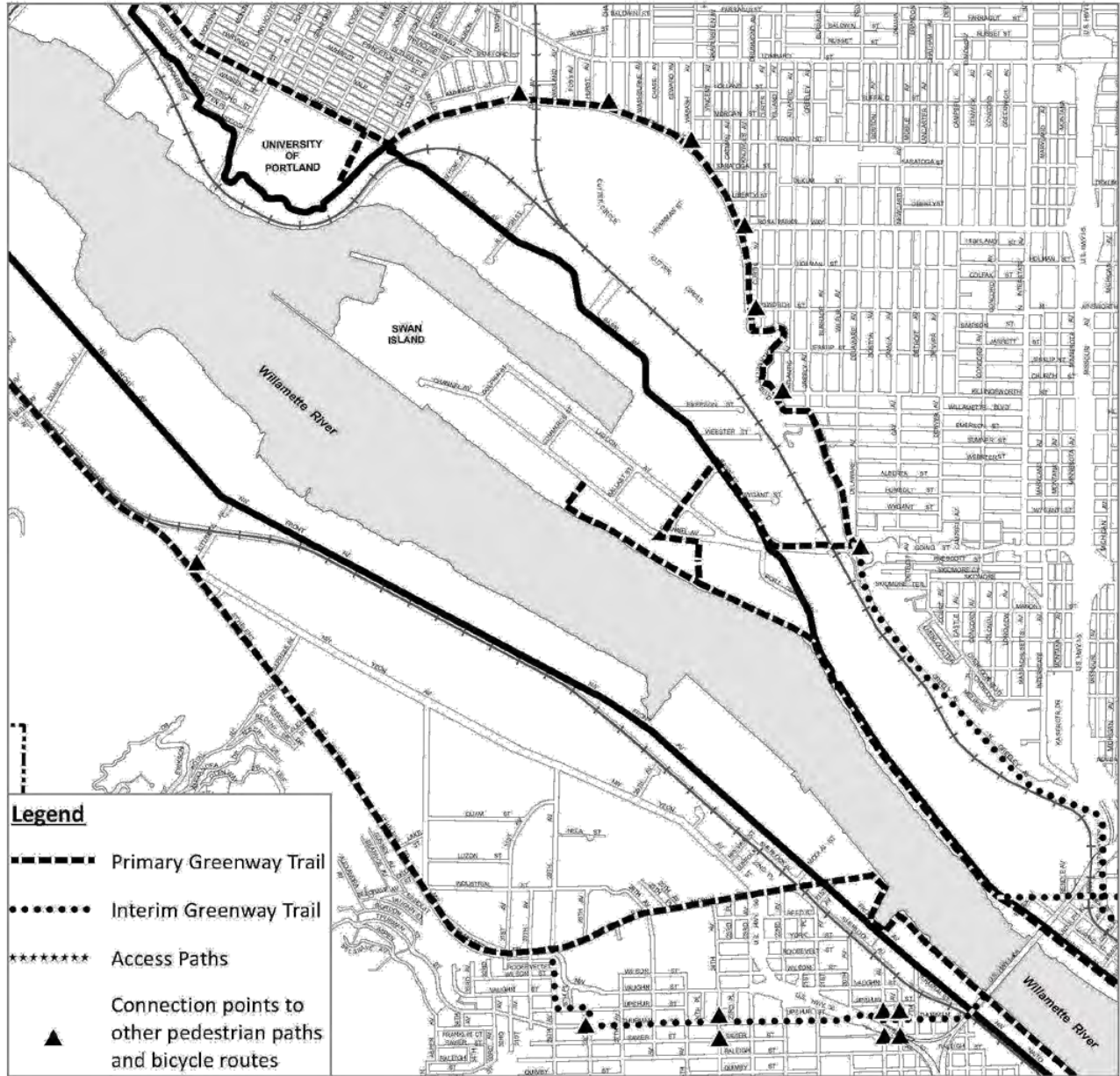
Commentary

Draft Willamette Greenway Public Access Map

Map 440-1

Map 3 of 5

Map Revised Xxxxx X, 2015



Legend

- Primary Greenway Trail
- Interim Greenway Trail
- ***** Access Paths
- ▲ Connection points to other pedestrian paths and bicycle routes

- City Boundary
- Greenway Boundary
- Proposed Right-of-Way

▲
NORTH

0 2,000 4,000

Scale in Feet

Bureau of Planning and Sustainability
Portland, Oregon

10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Chapter 33.440, Greenway Overlay Zones

Commentary

**Map 440-1 Map 4 of 5 Deleted
(see Map 475-1)**



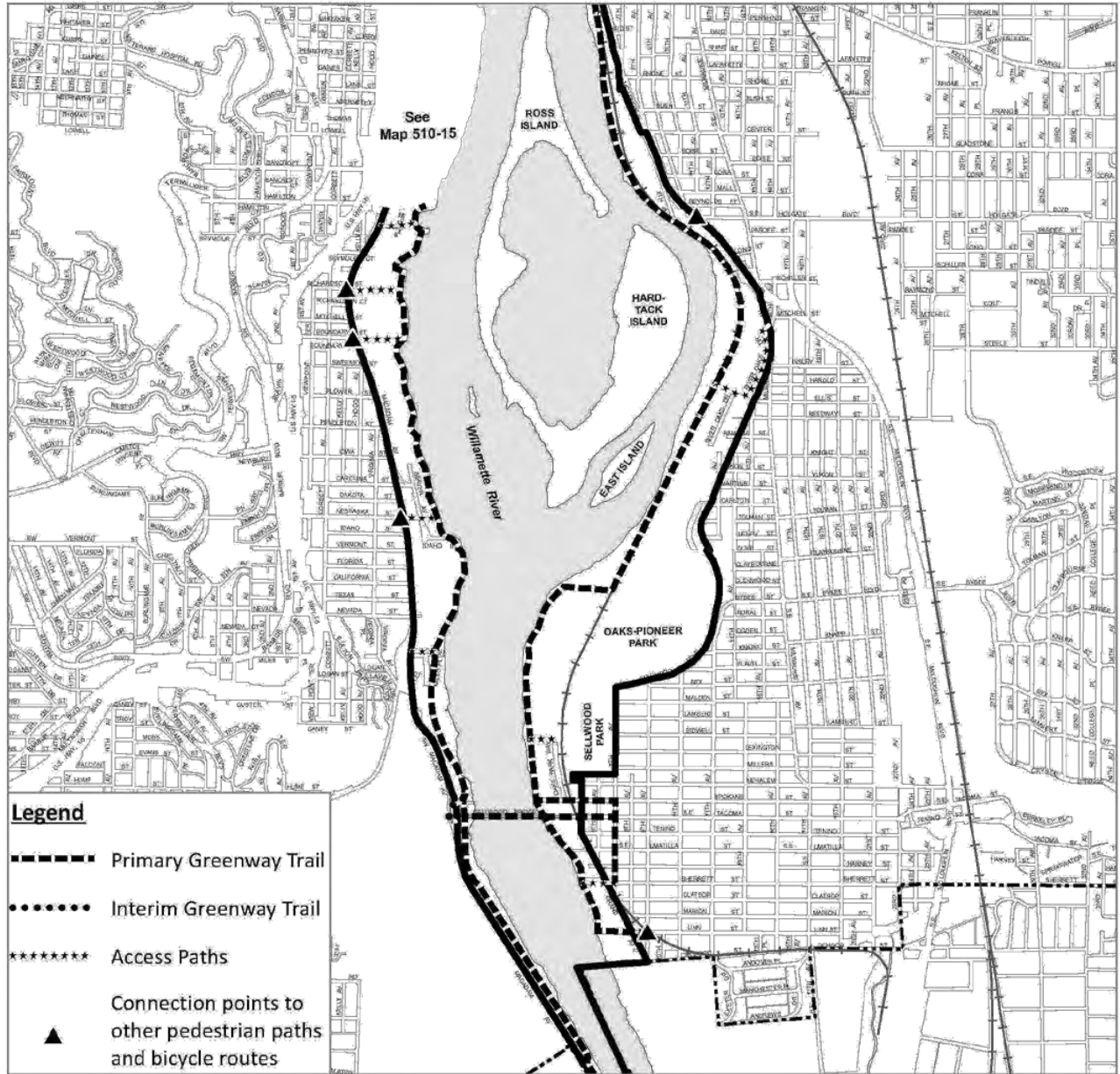
Commentary

Draft Willamette Greenway Public Access Map

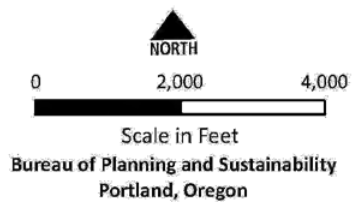
Map 440-1

Map 5 of 5

Map Revised Xxxxx X, 2015



- City Boundary
- Greenway Boundary
- Proposed Right-of-Way



10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Chapter 33.440, Greenway Overlay Zones

Commentary

33.480.010 Purpose

BPS has produced a new scenic resources inventory and protection plan for the Central City and areas with view of or across the Central City. The *Central City Scenic Resources Protection Plan* updates and replaces some of the information and decisions of the *Scenic Resources Protection Plan*.

33.480.020 Map Symbol

Before application of the c and p overlay zones there were s overlay zones based on the Scenic Resources Protection Plan. The s overlays were removed when the c and p overlays were applied. It was assumed that scenic resources would be addressed by the new environmental overlay zones. However, without the s overlays it is not possible to know when scenic resources must be considered. Therefore, the City will be reapplying the s overlay zones.

There will be updated s overlay zones applied in the Central City and for some of the views that are of or across the Central City. In the rest of the city the s overlay zones will be based on the Scenic Resources Protection Plan.

33.480 Scenic Resource Zones

Sections:

33.480.010 Purpose

33.480.020 Map Symbol

33.480.030 Application of the Scenic Resource Zone

33.480.0640 Relationship to Environmental Zones

33.480.0450 Development Standards

33.480.0560 Tree Removal Review

~~33.480.060 Relationship to Environmental Zones~~

33.480.010 Purpose

The Scenic Resource zone is intended to:

- Protect Portland's significant scenic resources that have been as identified by the City as providing benefits to the public in the Scenic Resources Protection Plan;
- Enhance the appearance of Portland to make it a better place to live and work;
- Create attractive entrance ways to Portland and its districts;
- Improve Portland's economic vitality by enhancing the City's attractiveness to its citizens and to visitors;
- Implement the scenic resource policies and objectives of Portland's Comprehensive Plan.
- Implement the goals and objectives of the *Scenic Resources Protection Plan (1991)* and the *Central City Scenic Resources Protection Plan (2016)*.

The purposes of the Scenic Resource zone are achieved by establishing height limits within view corridors to protect significant views and by establishing additional landscaping and screening standards to preserve and enhance identified scenic resources.

33.480.020 Map Symbol

The Scenic Resource zone is shown on the Official Zoning Maps with a letter "s" map symbol.

33.480.030 Application

The Scenic Resource zone is to be applied to all significant scenic resources identified in the Scenic Resources Protection Plans. Any changes to land or development, including rights-of-way, within the Scenic Resource zone are subject to the regulations of this chapter.

33.480.0640 Relationship to Environmental Overlay Zones

When an environmental zone has been applied at the location of a designated scenic resource, the environmental review must include consideration of the scenic qualities of the resource as identified in the ~~ESEE Analysis for Scenic Resources~~ Plans. The development standards of this Chapter must be considered as part of that review.

Commentary

33.480.0450 Development Standards

The development standards of the Scenic Resource zone apply based on the mapping designations shown in the Scenic Resources Protection Plans. The standards for each subsection below apply only to areas with that designation in the Plans. For scenic corridors, ~~the~~ resource is defined as the width of the right-of-way or top of bank to top of bank ~~for scenic corridors~~. Setbacks are measured from the outer boundary of the right-of-way unless specified otherwise in the ESEE Analysis and as shown on the Official Zoning Maps. In some cases, more than one development standard applies. For example, within a scenic corridor, a view corridor standard will apply where a specific view has been identified for protection.

- A. Standards for View Corridors.** All development and vegetation with a view corridor designation in the *Scenic Resources Protection Plan* are subject to the regulations of this Subsection.
1. Purpose. The intent of the view corridor designation is to establish maximum heights within view corridors to protect ~~significant~~ views from specific designated viewpoints.
 2. Standard. All development within the designated view corridors are subject to the height limits of the base zone, except when a more restrictive height limit is established by the view corridor. In those instances, the view corridor height limit applies to both development and vegetation. Removal of trees or limbs necessary to maintain the view corridor is allowed. When no development is proposed, tree removal is subject to the requirements of Title 11, Trees. Public safety facilities are exempt from this standard.

Commentary

B. Standards for Scenic Corridors. All development and vegetation within a scenic corridor designation in the *Scenic Resources Protection Plan* are subject to the regulations of this Subsection.

1. Purpose. The scenic corridor designation is intended to preserve and enhance the scenic character along corridors, and where possible, scenic vistas from corridors. This is accomplished by limiting the length of buildings, preserving existing trees, providing additional landscaping, preventing development in side setbacks, screening mechanical equipment, and restricting signs. Property owners and others are encouraged to make every effort to locate buildings, easements, parking strips, sidewalks, and vehicle areas to preserve the maximum number of trees.
2. Standards.
 - a. Scenic Corridor Setback. A scenic corridor setback per Table 480-1 applies along street lot lines that abut the Scenic Corridor identified in the Scenic Resources Protection Plan.

Table 480-1 Scenic Corridor Setback [1]	
Zone	Minimum Setback from Street Lot Line
IR	1' per 2' of building height, not less than 10'
R1	3'
EG1, IH	5'
EG2, IG2	25'
All other base zones	20'

[1] Larger minimum setbacks in overlay zone and plan district supersede this setback

- b. Side building setbacks. Buildings, garages, and covered accessory structures are not allowed within the side building setbacks within the first 100 feet from the designated resource.
- c. Limiting structure length. No more than 80 percent of the length of any site can be occupied by structures, excluding fences, as measured parallel to the scenic corridor. This standard applies to an entire attached housing project rather than to individual units.

Commentary

- d. Limiting blank facades. Long, blank facades create uninteresting elements along a scenic corridor. This standard applies to all portions of buildings within 100 feet of the designated resource. Residential structures are exempt from this standard. Blank facades must be mitigated for in at least one of the following ways:
 - (1) The maximum length of any building facade is 100 feet.
 - (2) Two rows of trees, one deciduous and one evergreen, must be planted on 30-foot centers along the length of the building between the structure and the protected resource.
 - (3) Facades facing the scenic corridor must have a minimum of 40 percent of surface area in glass. Mirrored glass with a reflectance greater than 20 percent is prohibited.

- e. Landscaping. The entire required scenic corridor setback must be landscaped to at least the L1 level unless the more stringent standards below or in other chapters of this Title apply. Up to 25 percent of the entire area of the scenic corridor setback may be used for vehicle and pedestrian areas except that each lot is allowed at least a 9-foot wide driveway or parking area and a 6-foot wide pedestrian area. Additionally, areas within the adjacent right of way must be landscaped to standards approved by the City engineer. The required landscaping in the setback and adjacent right of way must be provided at the time of development, except as allowed in B.2.e(1) below.
 - (1) When alterations are made to a site with an existing nonconforming use, allowed use, limited use, or conditional use, and the alterations are over the threshold stated in 33.258.070.D.2.a, the site must be brought into conformance with the landscape standards above. The value of the alterations is based on the entire project, not individual building permits. The cost of the upgrades required by this chapter may be counted toward the cost of upgrades required by Subsection 33.258.070.D. However, the upgrades required by this chapter must be completed first.
 - (2) Area of required improvements. Except as provided in 33.258.070.D.2.c(2), Exception for Sites With Ground Leases, required improvements must be made to the entire site and adjacent right of way. If the ground lease is adjacent to a right of way within the scenic corridor, the upgrades required by this chapter also apply to the right of way adjacent to the ground lease.
 - (3) Timing and cost of required improvements. The timing and cost of the required improvements is specified in 33.258.070.D.2.d. However, where 33.258.070.D.2.d refers to the standards listed in 33.258.070.D.2.b, the landscape standards above, are also included.

Commentary

h.1 Most scenic corridors will have multiple view corridors located along the street or trail. Tree removal within the view corridors needs to be allowed to maintain view.

- f. Screening. All exterior garbage cans, garbage and recycling collection areas, and mechanical equipment (including heat pumps, air conditioners, emergency generators, and water pumps) must be screened from view or not visible from the designated scenic corridor. Small rooftop mechanical equipment, including vents, need not be screened if the total area of such equipment does not exceed 10 square feet per structure.
- g. Fences and hedges. The total maximum height of fences, hedges, and berms within the scenic corridor setback, and when allowed in the adjacent right of way is 3-1/2 feet. This provision does not apply to any required screening and buffering.
- h. Preservation of trees. This provision does not apply if the property is regulated by state statutes for forest management practices. All trees 6 or more inches in diameter that are within the scenic corridor setback and right of way must be retained unless removal conforms to one or more of the following standards.

(1) The tree is located within view corridors;

~~(12)~~ The tree is located within the footprint or within 10 feet of existing or proposed buildings and structures attached to buildings, such as decks, stairs, and carports, or within 10 feet of a proposed driveway;

~~(23)~~ The tree is determined by an arborist to be dead, dying or dangerous;

~~(34)~~ The tree is on the *Nuisance Plants List*;

~~(45)~~ The tree must be removed due to installation, repair, or maintenance of water, sewer, or stormwater services. For new installation of services, tree removal allowed under this provision is limited to a single 10 foot wide utility corridor on each site;

~~(56)~~ The tree is within a proposed roadway or City-required construction easement, including areas devoted to curbs, parking strips or sidewalks, or vehicle areas;

~~(67)~~ The tree is within 20 feet of a Radio Frequency Transmission Facility antenna that is a public safety facility. The distance to the antenna is measured vertically and horizontally from the edge of the antenna. See Figure 480-1.;
or

~~(78)~~ The tree is at least 6 and up to 12 inches in diameter and does not meet any of the other standards of this subparagraph, but is replaced within the scenic corridor setback or adjacent right of way according to Table 480-2. Replacement plantings must meet Section 33.248.030, Plant Materials.

Commentary

33.480.0560 Tree Removal Review

- A. Tree removal without development. When no development is proposed, tree removal allowed by the standards of Subparagraph 33.480.040.B.2.h is subject to the tree permit requirements of Title 11, Trees.
- B. Tree removal in development situations. When tree removal is proposed as part of development, the standards of Subparagraph 33.480.040.B.2.h apply in addition to the tree preservation standards of Title 11, Trees.
- C. Trees that do not qualify for removal under Subparagraph 33.480.040.B.2.h may be removed if approved through tree review as provided in Chapter 33.853, Tree Review. However, where the tree removal would require environmental review, only environmental review is required.

Commentary

Figure 480-1
Measuring from an RF Transmission Facility Antenna

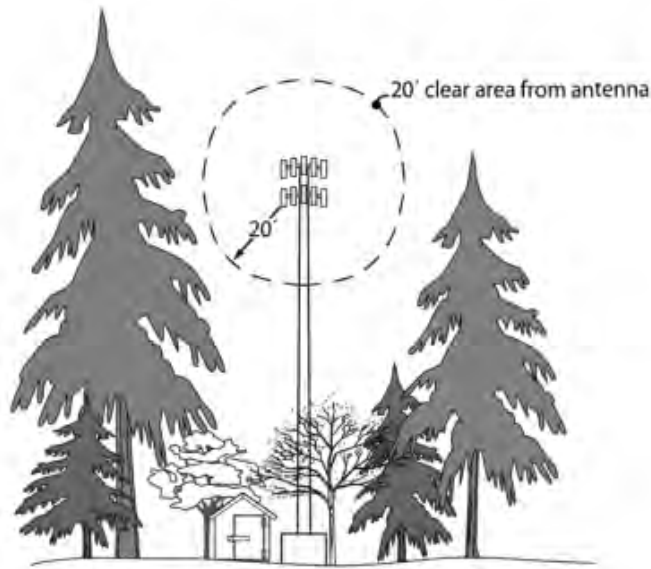


Table 480-2 Tree Replacement Requirements In Scenic Overlay Zone		
Applicants may choose either Option A or Option B [1]		
Size of tree to be removed (inches in diameter)	Option A (no. of trees to be planted)	Option B (combination of trees and shrubs)
Up to 9	1 tree	Not applicable
More than 9 and up to 12	3 trees	2 trees and 2 shrubs
More than 12	Tree Review Required (see 33.480.050 below)	

[1] Trees and Shrubs must be species listed in the Scenic Resources Protection Plan

33.480.060 Relationship to Environmental Overlay Zones

When an environmental zone has been applied at the location of a designated scenic resource, the environmental review must include consideration of the scenic qualities of the resource as identified in the ESEE Analysis for Scenic Resources. The development standards of this Chapter must be considered as part of that review.

Commentary

Chapter 33.865 is a new chapter is not underlined for ease of reading.

33.865 River Review

This chapter contains the review process, application requirements and approval criteria for River Review. This is a new chapter and it replaces Greenway Review in the Central Reach, along with the application of Zoning Code development standards and Design Review.

33.865.010 Purpose

Staff will be incorporating the South Waterfront Greenway Review from 33.851 to 33.865. This work has not been completed and will be included in Part 2 of the review.

Sections:

- 33.865.010 Purpose
- 33.865.020 When River Review is Required
- 33.865.030 Procedure
- 33.865.040 Supplemental Application Requirements
- 33.865.100 Approval Criteria
- 33.865.110 Modification of Site-Related Development Standards
- 33.865.120 Corrections to Violations of the River Environmental Overlay Zone Standards
- 33.865.200 Use of Performance Guarantees
- 33.865.210 Special Evaluations by a Trained Professional

33.865.010 Purpose

River Review is intended to:

- Protect, conserve and enhance identified resources and functional values in the River Environmental overlay zone, compensate for unavoidable significant detrimental impact to those resources and functional values, and ensure the success of mitigation and enhancement activities;
- Help the City meet existing and future requirements pursuant to federal and state laws including the Clean Water Act, the Safe Drinking Water Act, the Endangered Species Act, the Migratory Bird Treaty Act, and the National Flood Insurance Act;
- Provide flexibility for unusual situations. River Review allows for evaluation of alternative development scenarios that may have less detrimental impact on protected resources, and allows for the evaluation of off-site mitigation proposals;
- Provide a mechanism for the evaluation of detailed, site-specific information on the location or quality of resources and functional values;
- Provide a mechanism for modifying the location of the River Environmental overlay zone to reflect permitted changes in the location or quality of resources and functional values.

Commentary

33.865.020 When River Review is Required

River Plan staff anticipate that there will be fewer River Reviews in the future than there are greenway reviews today due the new option of meeting river environmental overlay zone development standards and the elimination of the *Greenway Design Guidelines*.

- Provide for the replacement of resources and functional values that are lost through violations of the River Environmental overlay zone standards;
- Provide a mechanism to modify the River Environmental overlay zone standards of Chapter 33.475, River Overlay Zones; and
- Allow for modifications to site-related development standards when modification will result in greater resource protection.

33.865.020 When River Review is Required

River Review is required in the following situations:

- A. When an applicant proposes non river-dependent or river-related primary uses within or riverward of the River Setback;
- B. When a development or regulated activity in the River Environmental overlay zone is not exempt from the River Environmental overlay zone regulations and either does not meet the standards of subsection 33.475.440 or there are no development standards applicable to the proposal;
- C. When River Review is required to correct a violation of the River Environmental overlay zone regulations, as described in subsection 33.475.450;
- D. When an applicant wishes to fine tune the boundary of the River Environmental overlay zone based on a detailed environmental study that more accurately identifies the location and quality of resources and functional values. Minor boundary changes are allowed through River Review. Map error corrections are reviewed under 33.855.070, Corrections to the Official Zoning Maps, and removal of the River Environmental overlay zone is processed as a change of overlay zone as stated in 33.855.060, Approval Criteria for Other Changes; or
- E. To modify the boundary of River Environmental overlay zone to reflect permitted changes in the location or quality of resources or functional values. The River Review zone boundary change procedure does not apply to changes caused by violations of subsection 33.475.440.

33.865.030 Procedure

A River Review is processed through a Type IIx procedure, except as described in subsection 33.475.450.B when River Review is required to correct a violation of the River Environmental overlay zone regulations.

Commentary

33.865.040 Supplemental Application Requirements

In addition to the application requirements of Section 33.730.060, the following information is required when the River Review application is for development in the River Environmental overlay zone, or for modification of the River Environmental overlay zone boundary:

A. Supplemental site plan requirements. One copy of each plan must be at a scale of at least one inch to 40 feet. Site plans must show existing conditions, conditions prior to a violation (if applicable), proposed development, and construction management. A mitigation site plan is required when the proposed development will result in unavoidable significant detrimental impact on the identified resources and functional values ranked high or medium in the *Willamette River Natural Resource Inventory*. A remediation action site plan is required when significant detrimental impacts occur in violation of the Code and no permit was applied for. The Director of BDS may waive items listed in this subsection if they are not applicable to the specific review; otherwise they must be included. Additional information such as wetland characteristics or soil type may be requested through the review process.

1. The existing conditions site plan must show the following:
 - a. For the entire site:
 - (1) Location of any wetlands or water bodies on the site or within 50 feet of the site. Indicate the location of the top of bank, centerline of stream, ordinary high water, or wetland boundary as appropriate;
 - (2) 100-year floodplain and floodway boundaries;
 - (3) The top of bank of the Willamette River, and the structures and topographic contours referenced to determine the top of bank. The site plan depicting the top of bank must be drawn accurately to scale, and be suitable for reproduction on paper no smaller than 8.5 x 11 inches and no larger than 36 x 48 inches. The scale of the drawing must be between 1 inch = 50 feet, and 1 inch = 10 feet. Ground elevations must be shown by contour lines at 2-foot vertical intervals. See Section 33.910.030, Environmental-Related Definitions, Top of Bank;
 - (4) Boundaries of the River Environmental overlay zone. These boundaries may be scaled in relation to property lines from the Official City Zoning Maps;
 - (5) Location and boundaries of designated scenic resources. The location of viewpoints, view corridors and scenic corridors must be show in relation to the property lines, existing and proposed public trails and boundaries of the River Environmental overlay zone;
 - (6) Topography shown by contour lines at two foot vertical contours in areas of slopes less than ten percent and at five foot vertical contours in areas of

Commentary

- slopes ten percent or greater;
 - (7) Drainage patterns, using arrows to indicate the direction of major drainage flow; and
 - (8) Existing improvements such as structures, or buildings, utility lines, fences, etc.
- b. Within the River Environmental overlay zone:
- (1) Distribution outline of shrubs and ground covers, with a list of most abundant species; and
 - (2) Trees over 4 inches in diameter identified by species and size, including the location of the trunk and the root zone or canopy drip line. In the case of a violation, also identify the trees that were cut or damaged by showing stump diameter and species.
2. A proposed development site plan must show the following:
- a. Location of all proposed development;
 - b. Location of proposed utility lines and connections, stormwater systems and septic or sewer facilities;
 - c. Location of protected view corridors;
 - d. Proposed final contour lines at 2-foot vertical intervals in areas of slopes less than ten percent and at 5-foot vertical contours in areas of slopes ten percent or greater;
 - e. All areas where ground disturbance and vegetation removal will occur; and
 - f. Location and species of existing tree, shrubs and ground covers to remain;
3. A construction management site plan must show the following:
- a. All areas where ground disturbance and vegetation removal will occur including equipment maneuvering areas;
 - b. Proposed grading plan with existing and proposed contours. The grading plan must show proposed alteration of the ground at 2-foot vertical contours in areas of slopes less than ten percent and at 5-foot vertical contours in areas of slopes ten percent or greater;;

Commentary

- c. Location of excavation and fill and total quantities of each;
 - d. Areas where existing topography and vegetation will not be affected by the development proposal;
 - e. Identification of trees to be removed using a bold X and the location of trees to remain including the required root protection zone;
 - f. Location of site access and egress;
 - g. Equipment and material staging and stockpile areas;
 - h. Erosion control measures; and
 - i. Measures to protect trees and vegetation.
4. An on-site or off-site mitigation or remediation site plan must show the following
- a. Distribution outline, species composition, and percent cover of ground covers to be seeded or planted;
 - b. Distribution outline, species composition, size, and spacing of shrubs to be planted;
 - c. Location, species, and size of each tree to be planted;
 - d. A planting table listing all trees, shrubs, groundcover or seeds to be installed including the ratio of seeds to area to be planted, species name (common and scientific), number, size and spacing;
 - e. The area of the mitigation site in square feet;
 - f. Stormwater management features, including retention, infiltration, detention, discharges, and outfalls;
 - g. Location of protected view corridors;
 - h. Water bodies to be created, including depth;
 - j. Water sources to be used, including volumes; and
 - k. Information showing compliance with Section 33.248.090, Mitigation and Restoration Plantings.

Commentary

B. Supplemental narrative. The following is required:

1. **Impact evaluation.** An impact evaluation is required to determine compliance with the approval criteria, and to evaluate practicable development alternatives for a particular site. The alternatives must be evaluated on the basis of their impact on identified resources and functional values. Significant resources and functional values are identified in the *Willamette River North Reach Natural Resources Inventory: Riparian Corridors and Wildlife Habitat (2008)*, and a supplemental environmental assessment can be provided to more accurately identify resources and functional values on the site. In the case of a violation, the impact evaluation is used to determine the nature and scope of the significant detrimental impacts.

a. An impact evaluation includes:

- (1) Identification, by characteristic and quantity, of the natural resources and their functional values found on the site. The *Willamette River North Reach Natural Resources Inventory: Riparian Corridors and Wildlife Habitat (2008)* provides site-specific information on natural resource features including:

- open water;
- shallow water (river depth 0-20 feet);
- beach;
- riparian vegetation;
- upland and bottomland forest;
- grassland;
- flood area and floodplain;
- wetlands, streams and ponds; and
- special habitat area.

The *Willamette River/Central Reach Natural Resources Inventory (2015)* provides site-specific information on the functional values provided by the various natural resource features including:

- Microclimate and shade;
- Stream flow moderation and water storage;
- Bank function, and sediment, pollution and nutrient control;
- Large wood and channel dynamics;
- Organic inputs, food web and nutrient cycling;
- Fish and wildlife habitat;
- Habitat connectivity/movement corridor;

Commentary

The *Willamette River/Central Reach Natural Resources Inventory (2015)* also provides information on wildlife and plant special status species that are known or reasonably expected to occur within or use a site. The application must contain current information regarding any special status species known or expected to occur on the site;

- (2) Identification of the scenic resources on the site. The *Central City Scenic Resources Protection Plan (2015)* provides site-specific information on the scenic resources. The application must contain current information regarding the scenic resources.¹
- (3) Identification of significant unavoidable detrimental impacts on identified natural and scenic resources and functional values. Actions that could cause detrimental impacts and should be identified include:
 - excavation and fill both in the water and above the ordinary high water mark. The quality and source of fill material is an important factor to be considered;
 - clearing and grading;
 - construction;
 - vegetation removal;
 - tree planting;
 - altering bathymetry;
 - altering a vegetated riparian corridor or upland vegetated area;
 - altering the floodplain;
 - altering the temperature of the river especially the altering of existing cold water sources;
- (3) Evaluation of practicable alternative locations, design modifications, or alternative methods of development that both achieve the project purpose, taking into account cost and technology, and minimize significant detrimental impacts on identified natural and scenic resources and functional values; and
- (4) Determination of the practicable alternative that best meets the applicable approval criteria.

¹ 480, Scenic Resources says that adjustments and medications to the standards can be made through Environmental or River Review. Therefore, 475 and 430 must contain information about scenic resource.

Commentary

- b. An impact evaluation for a violation includes:
 - (1) Description, by characteristics and quantity, of the natural and scenic resources and functional values on the site prior to the violation; and
 - (2) Determination of the impact of the violation on the natural and scenic resources and functional values.
2. **Biological assessment.** A biological assessment developed for the purposes of a federal or state permit may be submitted in place of some or all of the impact evaluation if the biological assessment includes the information described in subparagraph B.1, above. In the event that the applicant submits a biological assessment in place of some or all of the impact evaluation, the applicant must identify which aspects of the impact evaluation are covered by the biological assessment and, if necessary, identify which pieces of information will be included in the impact evaluation.
3. **Supplemental environmental site assessment.** A site-specific environmental assessment, prepared by a qualified consultant, to more precisely determine the existence, location, type, extent, and quality of the natural resources and functions on the site can be provided as part of the supplemental narrative. The assessment may verify, supplement, or challenge the information in the City's inventory for the purpose of informing the impact evaluation and identifying mitigation obligations;
4. **Construction management plan.** Identify measures that will be taken during construction or remediation to protect the remaining natural and scenic resources and functional values at and near the construction site and provide a description of how areas that are not affected by the construction will be protected. For example, describe how trees will be protected, erosion controlled, construction equipment controlled, and the timing of construction; and
5. **Mitigation or remediation plan.** The purpose of a mitigation or remediation plan is to compensate for unavoidable significant detrimental impacts on identified natural and scenic resources and functional values that result from the chosen development alternative or violation. A mitigation or remediation plan includes:
 - a. Natural or scenic resources and functional values to be restored, created, or enhanced within mitigation or remediation area. If credits will be purchased from a City certified mitigation bank, the mitigation plan must identify the total number and the type of credits being purchased;
 - b. Documentation of coordination with appropriate local, regional, special district, state, and federal regulatory agencies;

Commentary

33.865.100.B Development within the River Environmental Overlay Zone

The approval criteria for development within the River Environmental overlay zone are intended to protect and conserve the natural resources and functional values that exist in the overlay zone. The approval criteria are modeled on the environmental conservation overlay zone approval criteria and will allow development to occur as long as the applicant can show that all other practicable alternatives to locating development in the resource area have been explored and are not practicable within the context of project purpose. In cases where development will occur and resource values will be diminished, mitigation is required to compensate for the loss of function due to the development.

- c. Construction timetables;
- d. Operations and a long-term maintenance plan;
- e. Monitoring and evaluation procedures that include periodic reporting;
- f. Remedial actions for unsuccessful mitigation;
- g. Information showing compliance with Section 33.248.090, Mitigation and Restoration Plantings; and
- h. If off-site mitigation is proposed, demonstration that on-site mitigation is not practicable or ecologically beneficial.

33.865.100 Approval Criteria.

Requests for a River Review will be approved if the review body finds that the applicant has shown that all applicable approval criteria have been met.

B. Development within the River Environmental overlay zone. The applicant's impact evaluation must demonstrate that all of the following are met:

- 1. Resource enhancement projects:
 - a. There will be no net loss of total resource area; and
 - b. There will be a significant improvement of at least one functional value.
- 2. All other proposals in the River Environmental overlay zone:
 - a. Proposed development minimizes the loss of identified natural or scenic resources and functional values consistent with the uses that are generally permitted or allowed in the base zone without a land use review, or permitted or allowed by an approved conditional use;
 - b. Proposed development locations, designs, and construction methods have the least significant detrimental impact on identified natural and scenic resources and functional values of all practicable and significantly different alternatives, including alternatives on the same site but outside of the River Environmental overlay zone ;

Commentary

33.865.100.B.2.d Mitigation

Mitigation for unavoidable impacts from development will be required for every River Review.

The applicant will be required to show that the proposed mitigation compensates for all significant detrimental impacts to identified natural resources and functional values including the interim loss of resource area and functionality. Lost resource features and functions on the site will have to be fully replaced with in-kind resources, and any interim loss of functionality that will happen between the time the impacts occur and the time the mitigation site is mature will have to be addressed. This reflects a policy of no-net-loss of resource features and functional values.

On-site mitigation opportunities must be explored first before off-site mitigation can be approved. On-site mitigation is a priority in cases where there is adequate space, and appropriate conditions exist to support successful mitigation. An adequate on-site mitigation area should be able to sustain on-going resource functionality and habitat connectivity without being negatively impacted by surrounding development. On-site opportunities will be evaluated within the context of existing, proposed and future development on the site.

- c. There will be no significant detrimental impact on areas of the site reserved for mitigation, areas within the River Environmental overlay zone not proposed for development at this time, downstream river habitat within the Central Reach, or other sites in the Central Reach where environmental restoration is in progress or complete;
- d. Mitigation:
- (1) The mitigation plan must demonstrate that all significant detrimental impacts on identified scenic and natural resources and functional values, and the interim loss of functional value will be compensated for.
 - (2) To the extent practicable, the natural and scenic resources and functional values restored or enhanced as mitigation must be the same kind of resource, performing the same functional value as the lost resource.
 - (3) The amount of natural resource mitigation due as compensation will be based on the amount and relative condition of the resources and functional values impacted by the proposal and the extent to which the project design minimizes impacts. The amount of natural resource mitigation required will be no less than 1.5:1 of mitigation area to impact area, but may be more to address the following:
 - a. the uniqueness of the resources and functional values impacted;
 - b. the relative condition of the mitigation area;
 - c. the distance between the impact area and mitigation area; and
 - d. the time lag between when the resources and functional values are lost due to the impacts and the point when the mitigation site will achieve full functions.²
 - (4) Mitigation must occur on-site when practicable, and ecologically beneficial. Factors to be considered when evaluating this criterion include:
 - The potential for the long-term success of the restored resources and functional values in the mitigation area;

² This is new. We have not required a minimum mitigation ratio before. Based on past city projects – North Reach, Airport Future and West Hayden Island – the least amount of mitigation that accounts for time lag is 1.2:1, which was for grassland mitigation and grasslands can be restored relatively quickly. Given that the river’s resources are a mix of trees, shrubs and groundcover a minimum of 1.5:1 is appropriate.

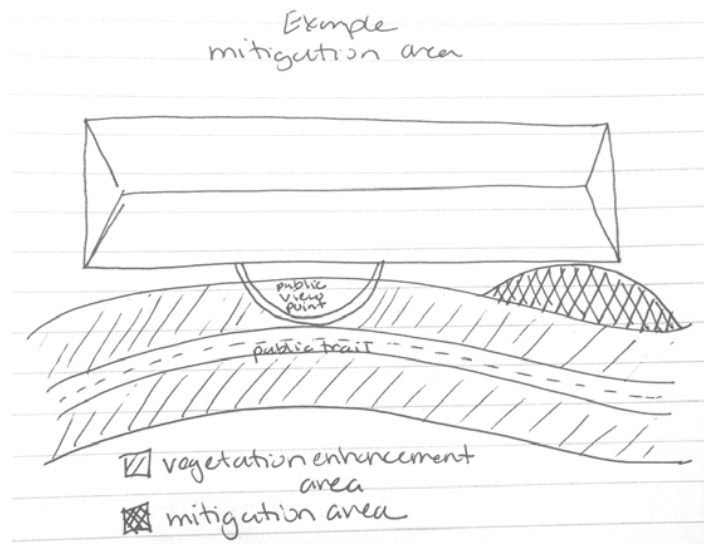
Commentary

33.865.100.B.2.d.5 Mitigation

There are three options for off-site mitigation:

1. The first option is for the applicant to develop a mitigation plan and implement it at a site in the Central Reach. A higher ratio of mitigation to impacts is applied to off-site mitigation because there are natural resources functions lost when resources are removed at one location and replaced at a different locations. A higher ratio ensure that compensation for moving the resources is accounted for. The mitigation can be completed outside of the River Environmental Overlay Zone provided that it is contiguous to the River Environmental Overlay Zone.

- The amount, size, shape, and connectivity potential of on-site mitigation areas;
 - The location of the mitigation area in relation to existing, proposed or future development on the site, and the impact development may have on the mitigation area;
 - Contamination; and
 - Any other site specific issue or constraint.
- (5) If on-site mitigation is not practicable or ecologically beneficial, the applicant must meet one of the following options:
- Option 1: Off-site Mitigation. The mitigation area must be located within the Central Reach and the applicant must own the property or have an easement or deed that ensures the mitigation area will not be developed. Mitigation must occur at a minimum 3:1 ratio of mitigation area to project impact area. Mitigation must occur within the River Environmental overlay zone except when the Vegetation Enhancement Standard, 33.4745.100, must be met. When the Vegetation Enhancement Standard must be met, the mitigation area may be located outside of but contiguous to the River Environmental overlay zone, see **Figure X**; or



Commentary

33.865.100.B.2.d.5 Mitigation (continued)

2. The second option is to pay a fee-in-lieu of mitigation. The applicant will be required to provide information about the resources on the site in order for the City to determine the appropriate fee. The methodology for quantifying the mitigation requirement will be based on methodologies used by the federal government when assessing mitigation requirements. The first methodology is called Habitat Evaluation Procedure and is used by the U.S. Fish and Wildlife Service. The procedure is based on indicator species and uses models to calculate a score for the habitat area being evaluated. The HEP models are run and scores are derived for the site both before and after the development, or habitat alteration, occurs and the difference between the two scores represents the impact, or loss of habitat value, that must be mitigated for. The second methodology is called Habitat Equivalency Assessment and is used by the National Oceanic and Atmospheric Administration. HEA provides an analytical framework for estimating how much restoration is needed to compensate for the temporal loss of natural resources functions (i.e. the time between when the resource function is lost and the replacement habitat has grown into full function). The outcome of the HEA equation is typically an additional number of square feet/acres/credits of restoration necessary to compensate for the interim loss of the habitat.
3. The third option is to by credits from an accredited mitigation bank. Currently there are no accredited mitigation banks within the City of Portland on the Willamette River. Should one become available, applicants can purchase credits equivalent to 3:1 mitigation.

33.865.100.B.2.e Other Regulatory Approvals

This approval criterion is intended to reduce the potential for the City to render decisions or conditions of approval that are duplicative or inconsistent with state and federal agencies that are reviewing the same proposal. One of the goals of the River Plan is to improve regulatory efficiency and reduce instances when a City land use review decision or recommendation is at odds with or duplicative of decisions that are rendered by the Oregon Department of State Lands or the United States Army Corps of Engineers. That said, this approval criterion is not intended to obligate the City to render synonymous decisions, but the City must ensure that its decisions and recommendation do not undermine or contradict the decisions and recommendations of DSL or the USACE. In most cases, meeting this approval criterion will require coordination with the state and federal agencies.

- Option 2: Fee-in-Lieu. The applicant must pay a fee-in-lieu of mitigation to the Bureau of Environmental Services; or
 - Option 3: Through the purchase of mitigation credits from an accredited mitigation bank located on the Willamette River within the City. The applicant must purchase credits that equal mitigation at a ratio of 3:1 mitigation to impact area.
- (6) In cases where the proposal is subject to mitigation as the result of obtaining permits from the Oregon Department of State Lands or the U.S. Army Corps of Engineers, the mitigation required for those permits can count toward meeting this mitigation requirement as long as that mitigation is found to adequately compensate for impacts to the identified natural resources and functional values.
- e. If other regulatory approvals have been obtained from the Oregon Department of State Lands or the U.S. Army Corps of Engineers, the conditions of approval for this River Review must not contradict, circumvent or otherwise undermine decisions made by those agencies.

Commentary

33.865.100.C Modifications to zone boundaries

These approval criteria are the same criteria used for modifications of Environmental Overlay zone boundaries and the boundary of the Pleasant Valley Natural Resource Overlay zone.

33.865.110 Modification of Site-Related Development Standards

This approval criterion allows adjustments to site-related development standards to be considered and approved as part of a River Review. The applicant must show that granting the adjustment will result in greater protection of the resources and functional values on the site and that the proposal is consistent with the purpose of the standard that is being adjusted. This approval criterion is the same as a criterion used in Environmental Overlay zones and the Pleasant Valley Natural Resource Overlay zone.

33.865.120 Corrections to Violations of the River Environmental Overlay Zone Standards

These approval criteria are the same criteria that are used for violations of the Environmental Overlay zones and for violations of the Pleasant Valley Natural Resource Overlay zone.

- C. Modification of River Environmental overlay zone boundaries.** Modifications of River Environmental overlay zone boundaries that reflect permitted changes in the location or quality of resource areas will be approved upon finding that the applicant's statement demonstrates that either Paragraph C.1 or C.2 are met. For the minor modification of environmental zone boundaries based on a more detailed site specific environmental study, the applicant's impact evaluation must demonstrate that Paragraph C.3, below, is met:
1. Successful mitigation. An approved mitigation plan has been successful and a new, restored, or enhanced resource exists which should be included in the River Environmental overlay zone; or
 2. Approved loss of resource area. All of the following must be met:
 - a. All approved development in a resource area has been completed;
 - b. All mitigation required of this development has been successful; and
 - c. The identified resources and functional values at the developed site no longer exist, or have been subject to a significant detrimental impact.
 3. Minor modification of River Environmental overlay zone boundaries based on a more detailed site-specific environmental study. The River Environmental overlay zone line location may be modified to more accurately reflect the location of natural resources and functional values on the site.

33.865.110 Modifications of Site-Related Development Standards

The review body may consider modifications to site-related development standards as part of the River Review process. These modifications are done as part of the River Review process and are not required to go through the adjustment process. Adjustments to use-related development standards (such as floor-area ratios, intensity of use, size of the use or concentration of uses) are subject to the adjustment process of Chapter 33.805. In order to approve these modifications, the review body must find that the development will result in greater protection of the resources and functional values identified on the site and will, on balance, be consistent with the purpose of the applicable regulations.

33.865.120 Corrections to violations of the River Environmental Overlay Zone Standards

For corrections to violations of the River Environmental development standards the application must meet all applicable approval criteria stated in Subsection 33.865.100.B, above, and Subsection A, and Paragraphs B.2 and B.3, below. If these criteria cannot be met, then the applicant's remediation plan must demonstrate that all of the following are met:

Commentary

- A. The remediation is done in the same area as the violation; and
- B. The remediation plan demonstrates that after its implementation there will be:
 - 1. No permanent loss of any type of resource or functional value;
 - 2. A significant improvement of a least one functional value; and
 - 3. There will be minimal loss of resources and functional values during remediation until the full remediation program is established.

33.865.200 Performance Guarantees

The Director of BDS may require performance guarantees as a condition of approval to ensure mitigation or remediation. See Section 33.700.050, Performance Guarantees.

33.865.210 Special Evaluation by a Professional

A professional consultant may be hired to evaluate proposals and make recommendations if the Director of BDS finds that outside expertise is needed due to exceptional circumstances. The professional will have expertise in the specific resource or functional value or in the potential adverse impacts on the resource or functional value. A fee for these services will be charged to the applicant in addition to the application fee.

Commentary

33.900.010 List of Terms and 33.910 Definitions

Both the List of Terms and Definitions and have been updated to include the following:

Bulkhead: This term is not defined in the Zoning Code.

Dredge Material: This term is not defined in the Zoning Code.

Ordinary High Water Mark: This term is used in several chapters of the Zoning Code and currently the code does not provide a definition. There are several different understandings of how to identify this mark. Stakeholders have asked for a clear statement regarding which definition to apply in relation to Zoning Code regulations. The definition included here is the definition that the U.S. Army Corps of Engineers uses and requires that the location of the mark be determined in the field.

Top of Bank: The existing definition of top of bank is problematic when the shoreline is variable. The definition has been clarified and a section has been added to 33.930 describing how to measure top of bank.

This new definition would also apply to other banks outside the Central Reach. The change from degrees to percent slope makes this language more consistent with other code chapters, which refer to percent slope.

Other existing terms and definitions are not shown.

Please also review related to changes to 33.930 Measurements.

33. 900.010 List of Terms

The following terms are defined in Chapter 33.910, Definitions, unless indicated otherwise.

Bulkhead

Dredge Material

Ordinary High Water Mark

33. 910.030 Definitions

Bulkhead. A retaining wall along a waterfront

Dredge Material. Rock, gravel, sand, silt and other inorganic substances removed from waters of the state.

Ordinary High Water Mark. The line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.³

Top of Bank. The first major change in the slope of the incline from the ordinary high water mark~~level~~ of a water body. See Section 33.930.150, Measuring Top of Bank. ~~A major change is a change of ten degrees or more.~~ If there is no major change within a distance of 50 feet (measured horizontally) from the ordinary high water ~~mark~~level, then the top of bank will be the default location described in Section 33.930.150, Measuring Top of Bank~~the elevation 2 feet above the ordinary high water level.~~

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Minor Amendments

Commentary on minor amendments and new code provisions also includes staff questions which will most likely result in additional amendments to these sections. Language to be added is underlined. Language to be deleted is shown in ~~strike through~~. Shading indicates blocks of text with no substantive changes.

The minor code amendments are to:

- 33.10 Legal Framework and Relationships
- 33.140.230 Ground Floor Windows in the EX Zones
- 33.248 Mitigation Restoration Plantings
- 33.258 Nonconforming Development
- 33.272 Public ~~Recreational~~ Trails
- 33.465.230 Pleasant Valley Natural Resources Overlay Zone
- 33.508.290 Cascade Station/Portland International Center Plan District
- 33.515 Columbia South Shore Plan District (Table of Contents)
- 33.700.060 Covenants with the City
- 33.700.110 Prior Conditions of Land Use Approvals
- 33.815 Conditional Uses
- 33.825.025 Review Procedures
- 33.840 Greenway Goal Exception
- 33.825.025 Review Procedures
- 33.846.080 Demolition Review
- 33.920.240 Office
- 33.930 Measurements

Commentary

33.10.130.B.1 Clarification for rights-of-way

The amendment in this paragraph clarifies that land within public rights-of-way that are also within one of the City's environment-related overlay zones is regulated by Title 33.

33.10.130.C Clarification for water bodies

The amendment in this subsection eliminates dredging from the list of activities on or in water bodies that Title 33 does not regulate. Staff recommends that dredging in the Central Reach be regulated by Title 33 when the dredging will occur outside of the federal navigation channel in water that is less than 35 feet deep. The land use review will ensure that the dredging has the least detrimental impact to shallow water and other aquatic habitats as practicable, and that mitigation is conducted to offset any unavoidable impacts to aquatic habitat.

33.10 Legal Framework and Relationships

33.10.030 When the Zoning Code Applies

- A. All land and water.** The zoning code applies to all land and water within the City of Portland except as provided in Subsections B., C., and D. below. All land divisions, uses and development must comply with all of the requirements specified in the zoning code for that location.
- B. Clarification for rights-of-way.** Land within private rights-of-way, including rail rights-of-way and utility rights-of-way, is regulated by Title 33. Land within public rights-of-way is regulated by Title 17, Public Improvements, and not by Title 33, except in the following situations where both Titles apply:
1. Rights-of-way in the greenway, river environmental, environmental conservation, environmental protection, pleasant valley natural resource, and scenic resource overlay zones, including the creation of new rights-of-way and the expansion or vacation of existing rights-of-way;
 2. The act of creating or dedicating public rights-of-way through a land division;
 3. Development within design districts when specified in Chapter 33.420, Design Overlay Zone;
 4. Structures that project from private property over rights-of way, such as oriel windows; and
 5. Proposals for park-and-ride facilities for mass transit.
- C. Clarification for waterbodies.** The siting of fills or structures on or over waterbodies is subject to the zoning code provisions. The zoning code does not regulate shipping, ~~ereading~~, boating, and other similar uses on or in water bodies.
- D. Private rights-of-way.** The creation of private rights-of-way is regulated by Title 33, Planning and Zoning. Street improvements in private rights-of-way are allowed by right in all zones.

Commentary

33.10.050.A Official Zoning Maps

This minor code amendment updates trail terminology to recognize that public trails are used for multiple purposes including transportation corridors for pedestrians and bicyclists.

33.10.050 Official Zoning Maps

- A. All Content of the Official Zoning Maps.** The boundaries of the base zones, overlay zones, and plan districts are shown on the Official Zoning Maps of the City of Portland. The maps also show the location of historical landmarks, special street setbacks, and existing and planned public recreational trails. The Official Zoning Maps are a part of the zoning code, but are published separately. Maps that delineate areas subject to additional zoning regulations may be included in the zoning code, attached to the adopting ordinance, or adopted by reference. The Bureau of Planning and Sustainability maintains the Official Zoning Maps.
- B.-C.** No change

Commentary

33.140.230 Ground Floor Windows in the EX Zones

Ground floor window requirements are being increased Citywide through the Mixed Use Zoning project. The CX zone in the Central City will be subject to the new base zone 40% coverage requirement proposed by the Mixed Use Zoning project, or, in certain mapped areas, by the 60% coverage requirement in proposed amendments to 33.510.220.

Similarly, the EX zone in the Central City will be subject to a new base zone 40% coverage requirement proposed by this amendment. Some mapped EX zoned areas will be subject the 60% coverage requirement in proposed amendments to 33.510.220.

The language of this amendment has been taken from the proposed ground floor window requirements of the Mixed Use Zoning project.

Note: The provisions of this amendment as well as parallel amendments of the Mixed Use Zoning project include requirements that are beyond strictly ground floor windows, including the requirement for "flexible ground floor design," front setbacks and raised ground floors. These provisions might belong in separate sections, or the titles of the sections should be changed to better reflect the breadth of requirements.

33.140.230 Ground Floor Windows in the EX Zone

- A. **Purpose.** In the EX zone, blank walls on the ground level of buildings are limited in order to:
- Provide a pleasant, rich, and diverse pedestrian experience by connecting activities occurring within a structure to adjacent sidewalk areas, or allowing public art at the ground level;
 - Encourage continuity of retail and service uses;
 - Encourage surveillance opportunities by restricting fortress-like facades at street level; and
 - Avoid a monotonous pedestrian environment.

B. Ground floor window standard.

1. General standard.

- a. Windows must cover at least 40 percent of the ground level wall area of street-facing facades that are 20 feet or closer to a street lot line or a publicly-accessible plaza. For the purposes of this standard, ground level wall areas include all exterior wall areas from 2 feet to 10 feet above the finished grade. See Figure 130-11.
- b. If the lot has more than one street frontage, then the ground floor window standard in Subparagraph B.1.a. applies to the façade that faces the highest transit street classification. All other ground level street-facing facades that are 20 feet or closer to the street lot line must have windows that cover 25 percent of the ground level wall area. If two or more streets have the same highest transit street classification, then the applicant may choose on which of those street to meet the higher standard. Transit street classifications are identified in the Transportation Element of the Comprehensive Plan.

2. Exemptions:

- a. Houses, attached houses, manufactured homes, and duplexes are exempt from this Section;
- b. Ground floor street-facing walls of dwelling units are exempt from Paragraph B.1., but the walls must meet one of the standards in Subsection D.; and
- c. The walls of a parking structure that face a secondary street frontage are exempt from the 25 percent standard in Subparagraph B.1.b. if the façade is set back at least 5 feet and landscaped to the L2 standard.

- C. **Qualifying window features.** Required ground floor window areas must be either windows that allow views into working areas or lobbies, pedestrian entrances, or display windows set into the wall. Windows into storage, parking, garbage and recycling areas, and display cases attached to outside walls, do not qualify. The bottom of the windows of nonresidential spaces must be no more than 4 feet above the finished grade.

Commentary

- D. **Ground floor window standard for ground floor residential.** Ground floor street facing walls of dwelling units that are 20 feet or closer to a street lot line must meet at least one of the following standards:
1. **Flexible ground floor design.** The ground floor window standard of 33.130.230.B.1.a. must be met, and the ground level of the building must be designed and constructed as follows:
 - a. The distance from the finished floor to the bottom of the ceiling structure above must be at least 12 feet. The bottom of the structure above includes supporting beams;
 - b. The area meeting this standard must be at least 25 feet deep, measured from the street-facing façade; and
 - c. Each unit must include a front entrance that is located at the level of the finished grade and can be accessed without steps.
 2. **Front setback.**
 - a. The portions of the building with residential dwelling units on the ground-floor must be set back at least 8 feet from the street lot line. The setback must be landscaped to at least the L1 level and/or hard-surfaced for use by pedestrians; and
 - b. Windows must cover at least 25 percent of the ground level wall area of the portion of the building with residential dwelling units on the ground-floor.
 3. **Raised ground floor.**
 - a. The portion of the building with residential dwelling units on the ground-floor must have the finished floor of each residential unit at least 2 feet above the grade of the closest adjoining sidewalk.
 - b. Window must cover at least 25 percent of the ground level wall area of the portion of the building with residential dwelling units on the ground-floor.
- E. **Exception for Public Art.** Public art may be used to meet up to one half of the required window coverage of the ground floor window provision. Covenants for the public art will be required, following the regulations of Section 33.700.060, Covenants with the City, to ensure the installation, preservation, maintenance, and replacement of the public art. To qualify for this exception, documentation of approval by the Regional Arts and Culture Council must be provided prior to approval of the building permit.
- F. **Exception for Vegetated Green Walls.** Vegetated green walls may be used to meet up to one half of the required window coverage of the ground floor window provision. Covenants for the vegetated green wall will be required, following the regulations of Section

Commentary

33.700.060, Covenants with the City, to ensure the installation, preservation, maintenance, and replacement of the vegetated green wall. Vegetated green walls must be set back at least 2 feet from street lot lines and must meet the standards for vegetated green walls in Chapter 33.248, Landscaping and Screening. (Note: these standards and their location in the Zoning Code are under development.)

- ~~**B. Required amounts of window area.** In the EX zone, all exterior walls on the ground level which are 20 feet or closer to a street lot line, sidewalk, plaza, or other public open space or right of way must have windows. The windows must be at least 50 percent of the length and 25 percent of the ground level wall area. Ground level wall areas include all exterior wall areas up to 9 feet above the finished grade. The requirement does not apply to the walls of residential units, and does not apply to the walls of parking structures when set back at least 5 feet and landscaped to at least the L2 standard.~~
- ~~**C. Qualifying window features.** Required window areas must be either windows that allow views into working areas or lobbies, pedestrian entrances, or display windows set into the wall. Display cases attached to the outside wall do not qualify. The bottom of the windows must be no more than 4 feet above the adjacent exterior grade.~~
- ~~**D. Exceptions for Public Arts.** Outside of the Central City plan district, public art is allowed instead of meeting the ground floor window provision. Covenants for the public art will be required, following the regulations of Section 33.700.060, Covenants with the City, to ensure the installation, preservation, maintenance, and replacement of the public art. To qualify for this exception, documentation of approval by the Regional Arts and Culture Council must be provided prior to approval of the building permit.~~

Commentary

33.248.090.D Landscape Area Preparation

The amendment adds the River Environmental overlay zone to the list of zones where nuisance trees must be removed.

33.248.090 Mitigation Restoration Plantings

A.-C. No change

D. Landscaped Area Preparation. All new required mitigation areas must be cleared of groundcovers and shrubs listed on the Nuisance Plants Lists. If the site is within the Environmental Overlay Zone, the Pleasant Valley Natural Resource Overlay Zone, ~~and the River Natural Overlay Zone, and the River Water Quality Overlay Zone, or the River Environmental Overlay Zone in the Greenway Overlay Zone,~~ then trees listed on the Nuisance Plants List must be removed from the required mitigation area.

E.-G. No Change

Commentary

33.258.070.D.2.a(6) Nonconforming Development

What is nonconforming development?

Nonconforming development exists where a site met all the regulations at the time it was developed but does not meet the current regulations because of subsequent changes to the Zoning Code. For example, many parking lots were built before Portland required landscaping. Such development is “grandfathered in,” meaning that it can remain as long as there are no changes to the site.

What are upgrades to nonconforming development?

Upgrading nonconforming development means bringing it closer to compliance with the current regulations.

When are such upgrades required?

If an owner is making alterations to the site, upgrading nonconforming development may be required. This upgrade is typically required when the alterations cross a certain dollar threshold. Some items are exempt from the threshold, meaning they do not count toward the threshold. These can include improvements that are required by City regulations, such as seismic upgrades, or improvements that contain a substantial public benefit, such as earthquake upgrades or stormwater management facilities.

In keeping with the kinds of exemptions described above, staff recommends exempting actions to remove or remediate hazardous substances from the threshold that triggers nonconforming upgrades, because the cleanup of hazardous substances has substantial public benefit.

33.258.070 Nonconforming Development

A.-C. No change

D. Development that must be brought into conformance.

1. No change
2. Nonconforming development with an existing nonconforming use, allowed use, limited use, or conditional use. Nonconforming development associated with an existing nonconforming use, an allowed use, a limited use, or a conditional use, must meet the requirements stated below. When alterations are made that are over the threshold of Subparagraph D.2.a., below, the site must be brought into conformance with the development standards listed in Subparagraph D.2.b. The value of the alterations is based on the entire project, not individual building permits
 - a. Thresholds triggering compliance. The standards of Subparagraph D.2.b., below, must be met when the value of the proposed alterations on the site, as determined by BDS, is more than \$124,100. The following alterations and improvements do not count toward the threshold:
 - (1) Alterations required by approved fire/life safety agreements;
 - (2) Alterations related to the removal of existing architectural barriers, as required by the Americans with Disabilities Act, or as specified in Section 1113 of the Oregon Structural Specialty Code;
 - (3) Alterations required by Chapter 24.85, Interim Seismic Design Requirements for Existing Buildings;
 - (4) Improvements to on-site stormwater management facilities in conformance with Chapter 17.38, Drainage and Water Quality, and the Stormwater Management Manual; and
 - (5) Improvements made to sites in order to comply with Chapter 21.35, Wellfield Protection Program, requirements-; and
 - (6) Removal or remediation of hazardous substances conducted under ORS 465.200-545 &900.

Commentary

33.272 Public Trails

Staff recommends deleting the word "Recreation" from the title of this chapter. Public trails provide more than just a recreational purpose and the chapter title should be consistent with the purpose. This chapter has also been reorganized to be more consistent with the formatting of other zoning code chapters.

33.272 Public ~~Recreational~~ Trails

Sections:

- 33.272.010 Purpose
- 33.272.020 ~~Where These Regulations Apply~~
- 33.272.030020 ~~Dedication of Public Right-Of-Way or Easement~~
- 33.272.040030 ~~Construction of the Trail~~
- 33.272.050 ~~Trail Standards~~
- 33.272.060040 ~~Use of Trail~~
- 33.272.070050 ~~Hours of Use~~
- 33.272.080060 ~~Trespass~~
- 33.272.090070 ~~Trail Maintenance and Liability~~
- 33.272.100080 ~~Standards for City Acceptance of Deeded Land~~

33.272.010 Purpose

The public ~~recreational~~ trail requirements are intended to:

- Increase recreational opportunities within the City of Portland and connect these recreational opportunities with a regional recreational trail system;
- Increase public access to and along the Willamette River and to other significant natural resource areas;
- Provide emergency vehicle access;
- Provide access to increase public safety;
- Assist in flood protection and control;
- Assist in shoreline anchoring;
- Support alternative modes of transportation;
- Provide connections to other transportation systems;
- Implement the City's Comprehensive Plan policies regarding public ~~recreational~~ trails;
- Help create a pleasant, aesthetically pleasing urban environment; and
- Provide consistent standards for trail development.

Commentary

33.272.020.A

This subsection is being added to address the requirements of the Dolan vs. City of Tigard Supreme Court decision. The results of that case require local governments to find that an exaction is roughly proportional to the impacts of the proposed development before the exaction can be required. The standards of chapter 33.272, Public Trails constitutes an exaction for the purpose of construction of the trail. Staff recommends updating the language in this subsection to refer specifically to rough proportionality.

33.272.020.B

The regulations of this chapter will not apply when removal and remediation of hazardous substances is being conducted. The development of the greenway trail should occur when the site is being developed rather than when it is being cleaned up. In addition, the City does not want to add cost and complexity to the removal and remediation of hazardous substances.

33.272.020 Where These Regulations Apply

- A. General.** The regulations of this chapter apply to all sites that have the public trail symbol designation shown on the Official Zoning Maps. The regulations of this chapter apply when application of the regulations is determined to be logically related and roughly proportional to the impacts of the proposed development. A determination that the regulations of this chapter do not apply does not preclude acquisition and construction of a public trail through other legal means.
- B. Exception.** The regulations of this chapter do not apply when the proposal is for the removal or remediation of hazardous substances and the actions are conducted under ORS.465.200 through .545 and 465.900.
- C. Columbia South Shore Plan District.** Sites in the Columbia South Shore Slough Trail area and Cross-Levee Trail area must also comply with the regulations of 33.515.260. These areas are shown on Map 515-4.
- D. South Waterfront subdistrict of the Central City Plan District.** Sites in the South Waterfront subdistrict of the Central City Plan District must also comply with the regulations of 33.475.230. The regulations of that section specify when public trails must be constructed within the South Waterfront subdistrict.

33.272.030~~020~~ Dedication of a Public Right-Of-Way or Easement

All applicants for a land use review or for building permits on lands designated with a ~~recreational~~ public trail symbol on the zoning map are required to grant an easement for the ~~recreational~~ trail. The easement must be recorded with the County Recorder/Auditor's Office ~~done as part of recording a land use review~~ and finalized prior to obtaining a final certificate of occupancy. The land may be donated to the City instead of granting an easement when the standards of Section 33.272.0~~80~~100 are met. Trails shown adjacent to public rights-of-way may be constructed in the public right-of-way, subject to approval from the Office of Transportation.

Commentary

33.272.040 Construction of Trails

This zoning code section states the requirements for trail construction. Staff acknowledges that other federal and state legislation might determine trail location on particular lands. An example is where a development is subject to the Maritime Transportation Security Act and must develop and adhere to a Maritime Security Plan that limits public access across the site to protect homeland security. In this case, there is/will be flexibility in where the trail is located, and it may be located somewhere else on the site. Each site has unique conditions and characteristics that will affect how this section is implemented.

33. 272.040930 Construction of Trails

~~A. **Single-dwelling zones.** The construction of the recreational public trail in single-dwelling residential zones is only required for Land Divisions subdivisions and Planned Developments PUDs that involve the creation of a street. Construction of the trail is not required as part of development on an existing single-dwelling lot. s are not required to construct the trail.~~

~~B. **Columbia South Shore Plan District.** Sites in the Columbia South Shore Slough Trail area and Cross Levee Trail area must also comply with the regulations of Section 33.515.260. These areas are shown on Map 515 4. Other trails in the Columbia South Shore Plan District must comply only with the regulations of this chapter.~~

~~C. **South Waterfront subdistrict of the Central City plan district.** Sites in the South Waterfront subdistrict must comply with the regulations of Section 33.510.253. The regulations of that section specify when recreational trails must be constructed within the South Waterfront subdistrict.~~

~~B.D. **All other zones.** Construction of the recreational public trail is required on lands designated with a recreational public trail symbol on the zoning maps in any of the following situations listed below.~~

- ~~1. When there is new development;~~
- ~~2. When exterior alterations to existing development are 35 percent or greater of the assessed improvement value of the total improvements on the site; or~~
- ~~3. When there is a Land Division or Planned Development. When streets are constructed in a subdivision, industrial park, or PUD.~~

~~C.E. **Prior to certificate of occupancy.** The trail must be constructed prior to the issuance of a certificate of occupancy, unless the site is eligible for the trust fund provisions of 33.515.260.B, or the special timing provisions of Paragraph 33.510.253.D.4.~~

33. 272.050 Trail Standards

~~F. **Trail standards.** A public recreational trail must comply with the standards of Portland Parks and Recreation for recreational trails or, where the trail is located in a public right-of-way, it must comply with the standards of the Portland Office of Transportation.~~

~~G. **Environmental review.** If the trail is located within the Environmental zones, the trail must comply with the requirements of Chapter 33.430.~~

Commentary

33.465.230 Procedure This minor code amendment updates trail terminology to recognize that public trails are used for multiple purposes including transportation corridors for pedestrians and bicyclists.

33.465.230 Procedure

Pleasant Valley Resource reviews are processed through the following procedures:

- A.** Resource enhancement activities are processed through the Type Ix procedure
- B.** The following are processed through the Type II procedure:
 - 1. Roads, driveways, walkways, stormwater disposal, and buried connections to existing utility lines;
 - 2. Public ~~recreational~~ trails;
 - 3. Public safety facilities;
 - 4. Mitigation;
 - 5. Pleasant Valley natural Resources overlay zone boundary modifications; and
 - 6. All other uses and development in the Pleasant Valley Natural Resources overlay zone.

Commentary

33.508.290 Open Space Plan

This minor code amendment updates trail terminology to recognize that public trails are used for multiple purposes including transportation corridors for pedestrians and bicyclists.

33.508.290 Open Space Plan

B. Pedestrian and bicycle circulation system.

1. Purpose. The Columbia Slough Trail, shown on Figure 508-13, is a significant open space resource as well as a means of pedestrian and bicycle access. Trails in this area run along the Columbia Slough and provide an inviting environment to run, walk, or bike. Bike routes (bike lanes and signed routes) must work in an integrated way with this existing resource to form an extended network of trails.
2. Public ~~recreational~~ trail requirements. All sites designated on Figure 508-13 as off-road public ~~recreational~~ trails must meet the requirements of this subsection and Chapter 33.272. Figure 508-13 illustrates the general location of the CS/PIC Bicycle and Pedestrian system, which provides for additional off-road trails and connections to the Columbia Slough Trail.

If the trail is located within an Environmental Overlay zone, the trail must also comply with the requirements in Sections 33.508.300 through .340.

3. No change

Commentary

33.515.260

This minor code amendment updates trail terminology to recognize that public trails are used for multiple purposes including transportation corridors for pedestrians and bicyclists.

33. 515 Columbia South Shore Plan District

515

Sections:

General

33.515.010-33.515.025 No Change

Use Regulations

33.515.110-33.515.130 No Change

Development Standards

33.515.200-33.515.257 No Change

33.515.260 Public ~~Recreational~~ Trails

33.515.262 No Change

Environmental Zones

33.515.265-33.515.280 No Change

Commentary

33.515.260 Public ~~Recreational~~ Trails

A. Public ~~recreational~~ trail requirements. All sites with a public recreational trail symbol shown on the Official Zoning Maps must comply with the requirements of Chapter 33.272, Public Recreational Trails, except those in the Columbia South Shore Slough Trail area or Cross-Levee Trail area. Sites in these areas, shown on Map 515-4, must also comply with the regulations of this section. If the trail is located within the Environmental zones, the trail must also comply with those requirements.

B.-D. No change

Commentary

33.700.110 Prior Conditions of Approval

According to current code, conditions of approval for a greenway review will no longer apply in the Central Reach after the River Plan is adopted because greenway review will no longer be in effect in the Central Reach. While technically greenway review will no longer be in effect, Design and River reviews will replace greenway review, and the approval criteria are similar in nature and purpose to greenway review approval criteria. In adopting the River Plan, the City is not retreating from the policies implemented through a greenway review, instead the City is merely utilizing an existing review and renaming the greenway review. Therefore, this section will be amended to ensure that the conditions of approval for a greenway review continue to apply after the River Plan/Central Reach is adopted.

33. 700.110 Prior Conditions of Land Use Approvals

This section addresses situations where a use, development, or land division was approved with conditions as part of a land use review under zoning or land division regulations that no longer apply to the site. Over time, there are instances when uses or development previously approved with conditions are subject to new zoning or land division regulations. This may result from a change of the content of zoning or land division regulations or from legislative zone changes including annexation rezonings.

A. Conditions of approval prior to 1981. (No Change)

B. Conditions of approval after 1981. The regulations stated below apply to all prior conditions of approval for all types of land divisions, Planned Unit Developments (PUD), and any other quasi-judicial review approved in association with a land division or PUD, and for land use reviews applied for after January 1, 1981, unless the conditions of approval or the ordinance adopting the conditions provide for their continuance.

1.-3. (No Change)

4. Greenway review. If a use or development is subject to conditions under a greenway review, the conditions continue to apply.

4.5. Other land use actions. If the use or development was approved with conditions under a review which is no longer in effect on the site (such as site review, design review, significant environmental concern review), the conditions no longer apply.

Commentary

33.815.122 Nonresidential Uses on Specified Sites located in the RX Zone within the Central City Plan District

This section is proposed for deletion because Section 33.510.118 and Map 510-14 to which these approval criteria apply are proposed for deletion.

33.815.125 Specified Uses in Industrial Zones

The applicability provisions have been amended to specify that the criteria of 33.815.126 are now an option only in Lower Albina, because amendments to Chapter 510 have deleted options for conditional use approval of office uses in the Central Eastside. The reference 33.815.132 has been removed because that section is proposed for deletion by the Employment Zoning Project.

~~33.815.122 Nonresidential Uses on Specified Sites located in the RX Zone within the Central City Plan District.~~

~~These approval criteria apply to certain proposals that include nonresidential uses on RX zoned sites in the area shown on Map 510-14. The proposals that are subject to these approval criteria are specified in Section 33.510.118, Use Regulations for Specified Sites in the West End Subarea. The approval criteria are:~~

- ~~A. **Minimized negative impacts on the desirability of future residential development.** The location and amount of nonresidential uses in the project will not by itself or in combination with nearby developments decrease the desirability of the area for the retention of existing housing or the development of new housing.~~
- ~~B. **Small businesses.** The proposal increases opportunities for small businesses. A high percentage of the ground floor is suitable for occupancy by small businesses.~~
- ~~C. **Public services.** Existing infrastructure is sufficient to support the proposed development. Examples of factors to be considered include whether:
 - ~~1. The proposed use is in conformance with the Central City Transportation Management Plan;~~
 - ~~2. The transportation system is capable of safely supporting the proposed use in addition to the existing uses in the area. Evaluation factors include street capacity and level of service, access to arterials, transit availability, parking impacts, access requirements, neighborhood impacts, and pedestrian safety.~~~~

33.815.125 Specified Uses in Industrial Zones

These approval criteria apply for uses in the following categories in the industrial zones: Retail Sales And Service, Office, Commercial Outdoor Recreation, Commercial Parking Facilities, Community Service, and Daycare uses. Office uses in the IG1 zone in the Lower Albina Subdistrict of the Central City Plan District may use the approval criteria listed in 33.815.126: Office Uses in the IG1 Zone in the Lower Albina Subdistrict Central City Plan District, if they contain characteristics of manufacturing businesses. Office uses in individually listed structures on the National Register of Historic Places and structures identified as contributing to the historic significance of a Historic District or a Conservation District in the I zones in the Central City Plan District may use the criteria listed in 33.815.129, Office Uses in Specified Historic Resources in the Industrial Zones in the Central City Plan District. ~~Office uses in the IG1 zone in the Employment Opportunity Subarea in the Central City Plan District may use the approval criteria listed in 33.815.132, Office Uses in the IG1 Zone in the Employment Opportunity Subarea in the Central City Plan District.~~ These approval criteria promote preservation of land for industry while allowing other uses when they are supportive of the industrial area or not detrimental to the character of the industrial area. The approval criteria are:

[A-E No Change]

Commentary

33.815.126 Office Uses in the IG1 Zone in the Central City Plan District

The title has been amended to indicate that the criteria of this section are now applicable only in Lower Albina. The amendments to chapter 510 have removed all options for conditional use approval for office uses in the Central Eastside, so these criteria will only apply in Lower Albina.

The reference 33.815.132 has been removed because that section is proposed for deletion through the Employment Zoning Project.

Question: Staff does not believe this CU provision has ever been used. Criterion D seems problematic, as it is getting into (re)defining a use and may create complications/conflicts with the proposed amendments to the definition of Industrial Office:

D. At least 33 percent of the net building area of the proposed use is dedicated for the development, testing, manufacturing, processing, fabrication, packaging, or assembly of goods. "Goods" include products made from man-made, raw, secondary, or partially completed materials. "Goods" does not include the products or services offered by traditional Office uses described in 33.920.240, but may include electronic or digital products such as internet home pages, computer software, advertising materials, and others. Should this section be deleted?

33.815.304 Retail Sales And Service Uses on Specified Sites in the South Waterfront and the River District Subdistricts

The title and text reference to the River District has been amended to reflect the division of the River District into the Pearl District and Old Town/Chinatown subdistricts. The area where Retail Sales And Service uses are limited is shown on Map 510-12.

33.815.126 Office Uses in the IG1 Zone in the Lower Albina Subdistrict ~~Central City Plan District~~

These approval criteria promote preservation of land for industry while providing opportunity for businesses that contain both an office and a manufacturing or production component. Office uses that do not meet the criteria below may apply for conditional use status through the criteria listed in 33.815.125, Specified Uses in the Industrial Zones. Office uses in individually listed structures on the National Register of Historic Places and structures identified as contributing to the historic significance of a Historic District or a Conservation District in the IG1 zone in the Central City Plan District may use the criteria listed in 33.815.129, Office Uses in Specified Historic Resources in the Industrial Zones in the Central City Plan District. ~~Office uses in the IG1 zone in the Employment Opportunity Subarea may use the approval criteria listed in 33.815.132, Office Uses in the IG1 Zone in the Employment Opportunity Subarea in the Central City Plan District.~~ The approval criteria are:

[A-E No Change]

33.815.304 Retail Sales And Service Uses on Specified Sites in the South Waterfront and the ~~River~~ Pearl District Subdistricts

For Retail Sales And Service uses in the South Waterfront subdistrict of the Central City plan district with more than 40,000 square feet of net building area, all approval criteria apply. For Retail Sales And Service uses in the Pearl ~~River~~ District subdistrict of the Central City plan district with more than 40,000 square feet of net building area, approval criteria A, B and D apply.

[A-D: No Change]

Commentary

33.825.025.A.4 Review Procedures, models of proposals in the Central City plan district

This section is revised to require applicants to submit a digital model of proposed new developments and redevelopments that change an existing building's mass. These models will be added to the City's existing 3D digital model of the Central City and help keep that model up-to-date. This model has been helpful not only to the City for planning projects but also to the development community, architects and urban designers.

BPS will develop 3D model submittal guidelines to assist applicants but this requirement will not be a significant burden on developers, as the data for the 3D model will already have been developed by project architects during the building design process.

Map 825-1 will need to be deleted and the rest of the 33.825 series of maps and references thereto in the code will need to be renumbered.

Question:

Do we need to define what a change to a building's mass is? We may want to exclude small changes to mass, e.g. a new mechanical penthouse. Define a cubic square footage threshold?

33.825.025 Review Procedures

A.4. Models of proposals in the Central City plan district. For proposals located in the ~~area of the~~ Central City plan district shown on Map ~~825-1 510-1~~, a three dimensional ~~cardboard~~ digital model of the proposal is required with an application for Design Review. This requirement applies only to new developments or changes in the bulk of existing buildings. ~~The scale of the model must be 1 inch equals 50 feet.~~

Before a building permit is issued, a three dimensional ~~wooden~~ digital model of the proposal as approved must be submitted to the Bureau of Planning and Sustainability. ~~be placed in the City's downtown model. The scale of the model must be 1 inch equals 50 feet.~~ The model requirements will be waived if the application does not involve a change in the bulk of buildings on a site for which the City possesses an accurate ~~wooden~~ digital model.

Commentary

This is a new chapter. For ease of readability, the text is not underlined.

33.840 Greenway Goal Exception

Statewide Planning Goal 15 requires that development be separated from the river. In order to meet this requirement the City of Portland implements a greenway setback that requires that development that is non-river-dependent and non-river-related set back a certain distance from the top of bank. In the South Waterfront subdistrict, the setback is 100 feet. Staff is recommending requiring a 50 foot setback in certain areas of the Central Reach. The bulk of the greenway boundary area outside of the Central Reach has 25 foot setback.

A greenway goal exception is currently required in situations where an applicant proposes to place development that is not river-dependent or river-related within or riverward of the greenway setback.

Sections

- 33.840.010 Purpose
- 33.840.020 When a Greenway Goal Exception is Required
- 33.840.040 Procedure
- 33.840.100 Application Requirements
- 33.840.200 Approval Criteria

33.840.010 Purpose

Statewide Planning Goal 15 requires that structures be set back from the river to protect, maintain, preserve, and enhance the natural, scenic, historic, and recreational qualities of the Willamette River Greenway. This requirement is carried out by a setback standards in the Greenway and River overlay zones that limits development within or riverward of the setback to development that is river-dependent or river-related. A Greenway Goal Exception is required to establish development that is not river-dependent or river-related within or riverward of the setback. The regulations in this chapter describe the review procedure and approval criteria for a Greenway Goal Exception.

33.840.020 When A Greenway Goal Exception is Required

Approval of an exception to Statewide Planning Goal 15 - Willamette Greenway, is required to locate a development or right-of-way that is not river-dependent or river-related within or riverward of the greenway or river setback. A greenway goal exception is not required to add revetments to a riverbank.

33.840.040 Procedure

A greenway goal exception is processed through a Type III procedure.

33.840.200 Approval Criteria

Requests for a greenway goal exception will be approved if the review body finds that the applicant has shown that all of the following approval criteria are met:

- A. The proposed use is allowed in the base zone by right, with limitations, or as a conditional use;
- B. The proposal will not have a significant adverse effect on identified natural resources and functional values of the site or on abutting sites or water areas;
- C. The proposal will not significantly reduce lands available for river-dependent or river-related uses within the City;
- D. The proposal will provide a significant public benefit;

Commentary

- E. The intensification of existing uses or change in use must be limited, to the greatest possible degree, so that such lands will remain compatible with the preservation of the natural, scenic, historical, and recreational qualities of such lands;
- F. The proposal cannot reasonably be accommodated in a location that does not require a goal exception;
- G. Of all other potential locations within the greenway that require a goal exception, there are none with significantly better long-term environmental, economic, social, and energy consequences after mitigation measures;
- H. The proposal is compatible with other adjacent uses, or will be so rendered through measures designed to reduce adverse impacts; and
- I. Development and fills riverward of the river setback must show that there are no practical on-site alternatives that achieve the same level of public benefit.

Commentary

33.846.080 Demolition Review

This is a clean-up edit; contributing structures in Conservation Districts are not subject to demolition review unless they have a preservation agreement.

33.846.080 Demolition Review

A. Purpose. Demolition review protects resources that have been individually listed in the National Register of Historic Places or are identified as contributing to the historic significance of a Historic District ~~or a Conservation District~~. It also protects Historic Landmarks and Conservation Landmarks that have taken advantage of an incentive for historic preservation and historic resources that have a preservation agreement. Demolition review recognizes that historic resources are irreplaceable assets that preserve our heritage, beautify the city, enhance civic identity, and promote economic vitality.

Commentary

33.920.240 Office

Staff were asked to strengthen the definition of Industrial Office. The Southeast Quadrant Plan proposed expanding the Employment Opportunity Subarea provision to all IG1 zoned properties in the Central Eastside subdistrict and will expand the amount of Industrial Office allowed per site from 60,000 square feet to three times the site area (3:1 FAR).

The proposed amendments to the definitions are an attempt to improve the tool and make it easier for BDS staff and clients to determine what use category they belong in. In addition to BDS and public input, staff have utilized the 2012 version of the North American Industry Classification System (NAICS) to clarify the Examples section of the Use Category definition. NAICS is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.

There are a few areas where staff are still working on improvements based on input from partner bureaus. For Industrial Office, these include:

1. Amending the Characteristics section as follows:
 - a. To make sure the language matches as well as possible, the new more detailed Examples list. For example, "production" could be added back. This would specify that digital and physical production are part of the characteristics of Industrial Office consistent with listed examples such as commercial photography, architects and building development businesses.
 - b. The phrase "digital and physical goods" allows for considerable overlap with similar elements of Manufacturing and Production. Language should be crafted to separate these out.
2. Amending the Examples section to remove overlap between this and Manufacturing and Production and Industrial Services.

33.920.240 Office

- A. Characteristics.** Office uses are characterized by activities conducted in an office setting that focus on the provision of goods and services, usually by professionals.
1. Traditional Office: Uses are characterized by activities that generally focus on business, government, professional, medical, or financial services. Customer and client visits to the site may be a regular and necessary component of these uses.
 2. Industrial Office: Uses are characterized by activities that, while conducted in an office-like setting, are more compatible with industrial activities, businesses, and districts. Their operations ~~are less service-oriented than Traditional Office uses and~~ focus on the research, development, and testing, production, processing, packaging, or assembly of digital and physical goods and products, which may include digital products such as internet home pages, media content, designs and specifications, computer software, advertising materials, and others. They primarily provide products to other businesses. They do not require customers or clients to visit the site; any such visits are infrequent and incidental.
- B. Accessory uses.** Accessory uses may include cafeterias, health facilities, parking, or other amenities primarily for the use of employees in the firm or building. Accessory uses may also include food membership distribution.
- C. Examples.** Examples include uses from the two subgroups listed below:
- Traditional Office: Professional services such as lawyers or accountants; financial businesses such as lenders, brokerage houses, bank headquarters, or real estate agents; sales offices; government offices and public utility offices; medical and dental clinics, and blood collection facilities. Finance and insurance; real estate and rental leasing; office/administrative services; employment services such as employment placement agencies, executive search services and temporary help services; business support services such as document preparation services, telephone call centers, business service centers, collection agencies and credit bureaus; travel arrangement and reservation services; investigation and security services; other support services such as convention and trade show organizers and packaging and labeling services; educational services; health care and social assistance; public administration; news syndicates; legal services; accounting, tax preparation, bookkeeping and payroll services; management consulting services except environmental, scientific and technical, and process, physical distribution and logistics consulting services; advertising, public relations and related services; marketing research and public opinion polling; and veterinary services including veterinary medicine, dentistry and surgery clinics.
 - Industrial Office: Software and internet content development and publishing; computer systems design and programming; graphic and industrial design; engineers; architects; telecommunication service providers; data processing; television, video, radio, and internet studios and broadcasting; scientific and technical services; and medical and dental labs. Newspaper, periodical, book and directory publishers; software publishers such as games, operating systems, programming, and utility software; motion picture and sound recording; broadcasting; wired, wireless, and satellite telecommunications such as establishments engaged in operating and maintaining switching and transmission facilities; architectural, engineering and related services including landscape architects, drafting services, building inspection services, and geophysical surveying and mapping services; specialized design services such as interior, industrial,

Commentary

and graphic design; computer systems design and related services including establishments primarily engaged in planning and designing computer systems, and writing, modifying, testing and supporting custom software, and providing on-site management and operation of systems; environmental consulting services; scientific and technical consulting services for fields such as agriculture, motion pictures, biology, physics, chemistry, radio, economics, safety, energy and security; scientific research and development services for fields such as physical, engineering and life sciences and biotechnology; commercial photography but not portrait photography studios; technical and trade schools; data processing, hosting and related services; non-public libraries and archives, internet publishing and broadcasting and web search portals; process, physical distribution, and logistics consulting services; medical, dental, and veterinary labs primarily engaged in providing testing services to practitioners; and real estate development such as establishments that rehabilitate or redevelop property, or serve as construction contractors for their own properties.

D. Exceptions.

1. Offices that are part of and are located with a firm in another category are considered accessory to the firm's primary activity. Headquarters offices, when in conjunction with or adjacent to a primary use in another category, are considered part of the other category.
2. Contractors and others who perform services off-site are included in the Office category if equipment and materials are not stored on the site and fabrication, services, or similar work is not carried on at the site.

Commentary

33.930.150 Measuring Top of Bank:

This more specific description of how to measure top of bank supplements the definition. See section 33.910.030 for the definition of top of bank.

This staff proposed measurement language responds to several common points of confusion identified by the Bureau of Development Services. The section provides prescriptive standards that must be followed in order to locate the top of bank and determine compliance with development standards that refer to the location of top of bank. Examples and graphics are used in describing how to measure top of bank. It should be recognized that all possible scenarios cannot be anticipated. In situations where the measurement does not provide a clear determination, the purpose and intent of the development standard in question and its relationship to other regulations and situations must be consulted. Common surveying practices may be taken into consideration when applying this measurement standard as well.

The Bureau of Planning and Sustainability is about to use new LIDAR mapping technology to establish a top of bank map for the Central Reach. This section may be further amended at that time.

33. 930 Measurements

Sections:

33.930.010-110 No change

33.930.120 Setback Averaging

33.930.130-140 No change

33.930.150 Measuring Top of Bank

33. 930.120 Setback Averaging

Certain regulations allow for setbacks to be averaged. In these situations the required setback may be reduced to the average of the existing setbacks of the lots that are on both sides of the site. See Figure 930-18. The following rules apply in calculating the average. The regulation of setback averaging detailed in this section does not apply to the river setback averaging that is allowed in Chapter 33.475, River Overlay Zones.:

- A. The setbacks used for the calculations must be for the same type of structure that is being averaged. For example, only garage entrance setbacks may be used to average a garage entrance setback, and only deck setbacks may be used to average a deck setback.
- B. Only the setbacks on the lots that abut each side of the site and are on the same street may be used. Setbacks across the street or along a different street may not be used.
- C. When one abutting lot is vacant or if the lot is a corner lot, then the average is of the setback of the nonvacant lot and the required setback for the zone.

33.930.150 Measuring Top of Bank

See Section 33.910.030, Environmental-Related Definitions, Top of Bank.

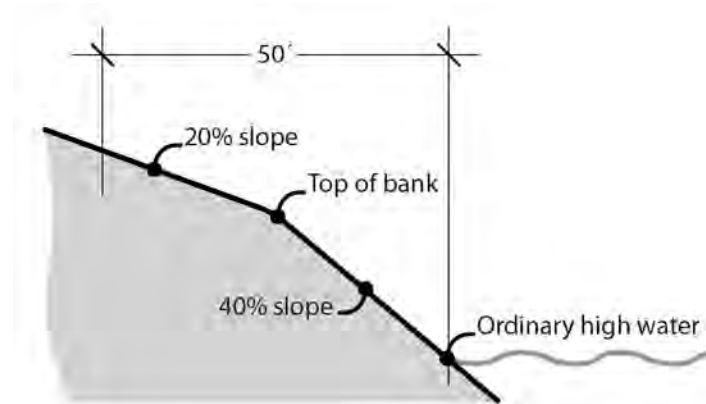
- A. Using Percent Slope. Percent slope is determined by dividing the vertical rise by the horizontal run, and converting that decimal to a percentage. For example, a slope section that rises 10 feet over a distance of 20 feet is a 50 percent slope.
- B. Identifying the Major Change in Slope that is the Top of Bank. A major change in slope is a change in percent slope of twenty or more, from a steeper grade to a less steep grade. For example, a change from a 40 percent slope to a 20 percent slope is a major change in the slope. See Figure 930–20.

Commentary

33.930.150.C Default Top of Bank

For smaller streams, the existing definition has been difficult to apply consistently, especially in areas where a stream is in a deep ravine, or where the stream is within a relatively level plain. The recommended 50 foot and 15 foot default locations would create greater certainty, and reduce the number of instances where a survey is necessary to determine the top of bank.

Figure 930-20



C. Default Top of Bank. If there is no major change in slope within a distance of 50 feet (measured horizontally) from the ordinary high water mark, then the top of bank will be one of the following default locations:

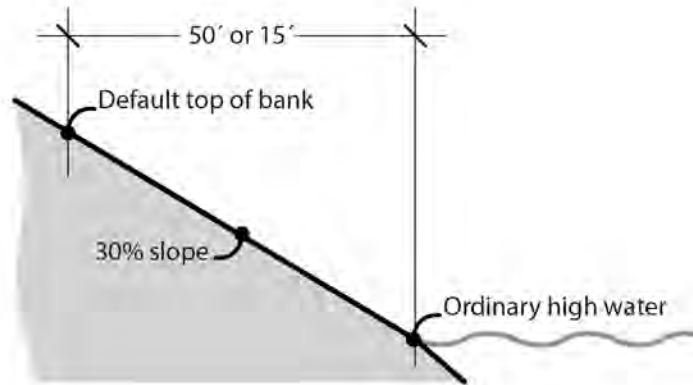
1. For the Willamette and Columbia Rivers, the default top of bank is 50 feet (measured horizontally) from the ordinary high water mark. See Figure 930-21.
2. For perennial streams, the default top of bank is 15 feet (measured horizontally) from the ordinary high water mark.
3. For intermittent and ephemeral streams, the default top of bank is 15 feet (measured horizontally) from the centerline of the stream.
4. For seeps, wetlands and other water bodies, the default top of bank is 15 feet (measured horizontally) from the ordinary high water mark.

Commentary

33.930.150.D Relationship to Other Structures

The graphic below provides some examples of how the measurement of top of bank is influenced by structures located on or near the river bank. As mentioned previously, not all situations can be anticipated. In situations where the measurement standard does not provide a clear determination, the purpose and intent of the development standard in question and its relationship to other regulations and situations must be consulted. Common surveying practices may be taken into consideration when applying this measurement standard as well.

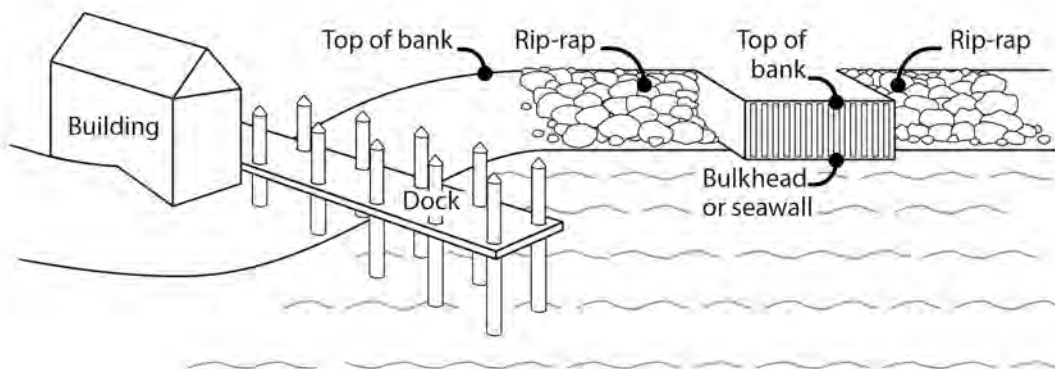
Figure 930-21



D. Relationship to Other Structures.

1. Where a structure straddles the top of bank, the top of bank line is drawn as a straight line through the structure, connecting the top of bank line on either side.
2. Where there is a vertical bulkhead or seawall, the top of bank is the point at the top of the bulkhead that is closest to the river.
3. Docks, pilings, slips, wharves and other similar structures built over the water are not factored into the determination of top of bank. Where there is a dock, wharf or other structure on the bank, measurements of slope are taken on the underlying dry land.
4. Where the bank itself is a structure, such as a rip-rap slope at the edge of reclaimed land, the top of bank line is based on the predominant slope of that structure, rather than the slope of individual boulders or structural elements.

Figure 930-22



Commentary

DRAFT
Zoning Map Amendments

This section contains existing and proposed changes to additional maps not found in other code sections.

- Central City Existing Zoning Map
- Central City Proposed Zoning Map
- River Overlay Map Amendment - Map 1
- River Overlay Map Amendment - Map 2

Commentary

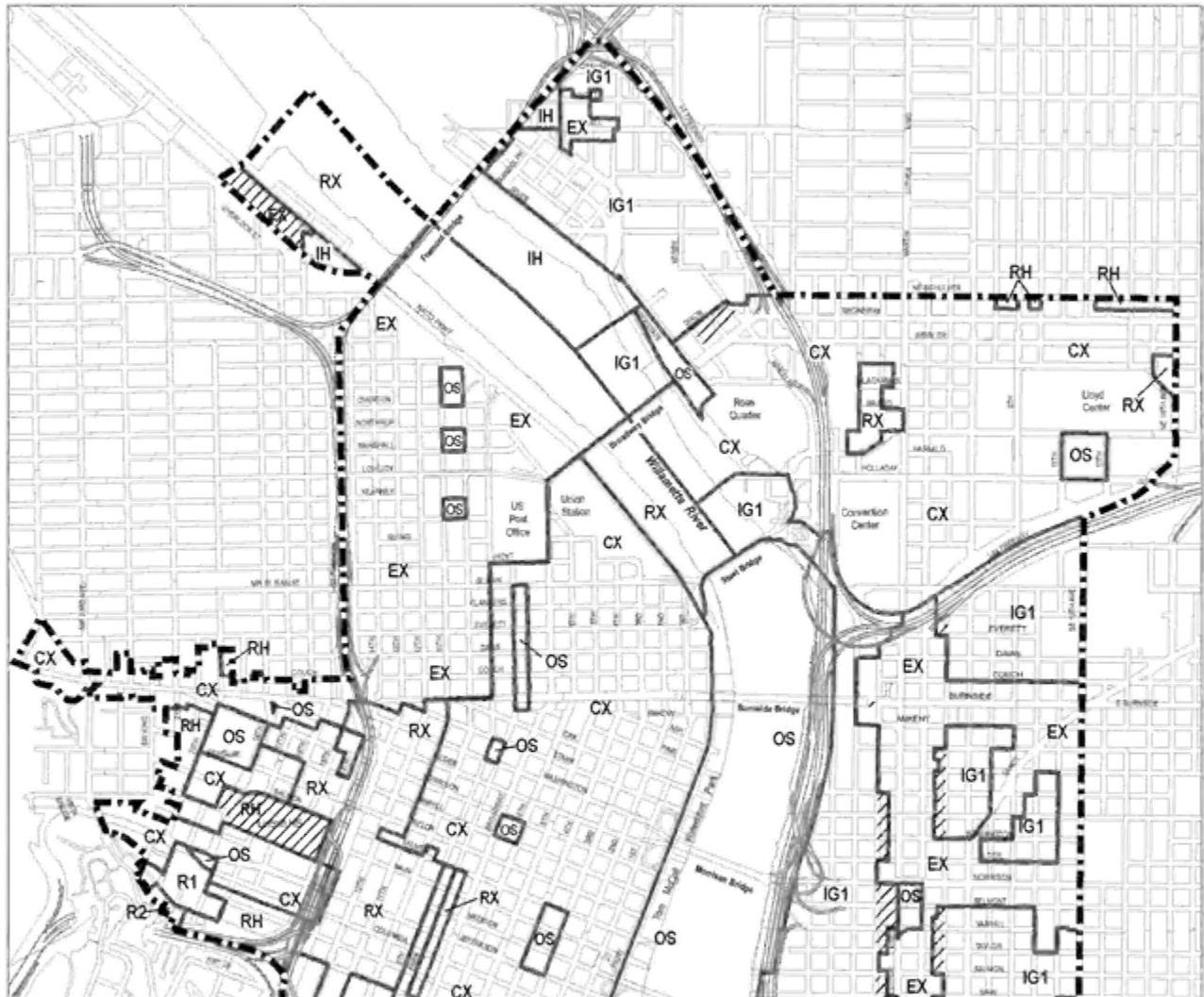
Central City Existing and Proposed Zoning Maps

Staff have used feedback during the three quadrant planning efforts as well as other input to develop the proposed zoning maps. The existing zoning is shown for reference.



Central City Existing Zoning

Map 1 of 2

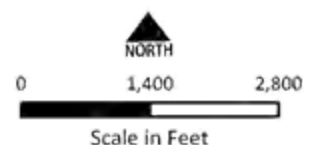
Map Revised Xxxx XX, 2015



Legend

-  Exist Base Zones
-  Area where Comprehensive Plan differs from Zone

 Central City Plan District boundary



Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

Bureau of Planning and Sustainability
Portland, Oregon

10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Zoning Map Amendments

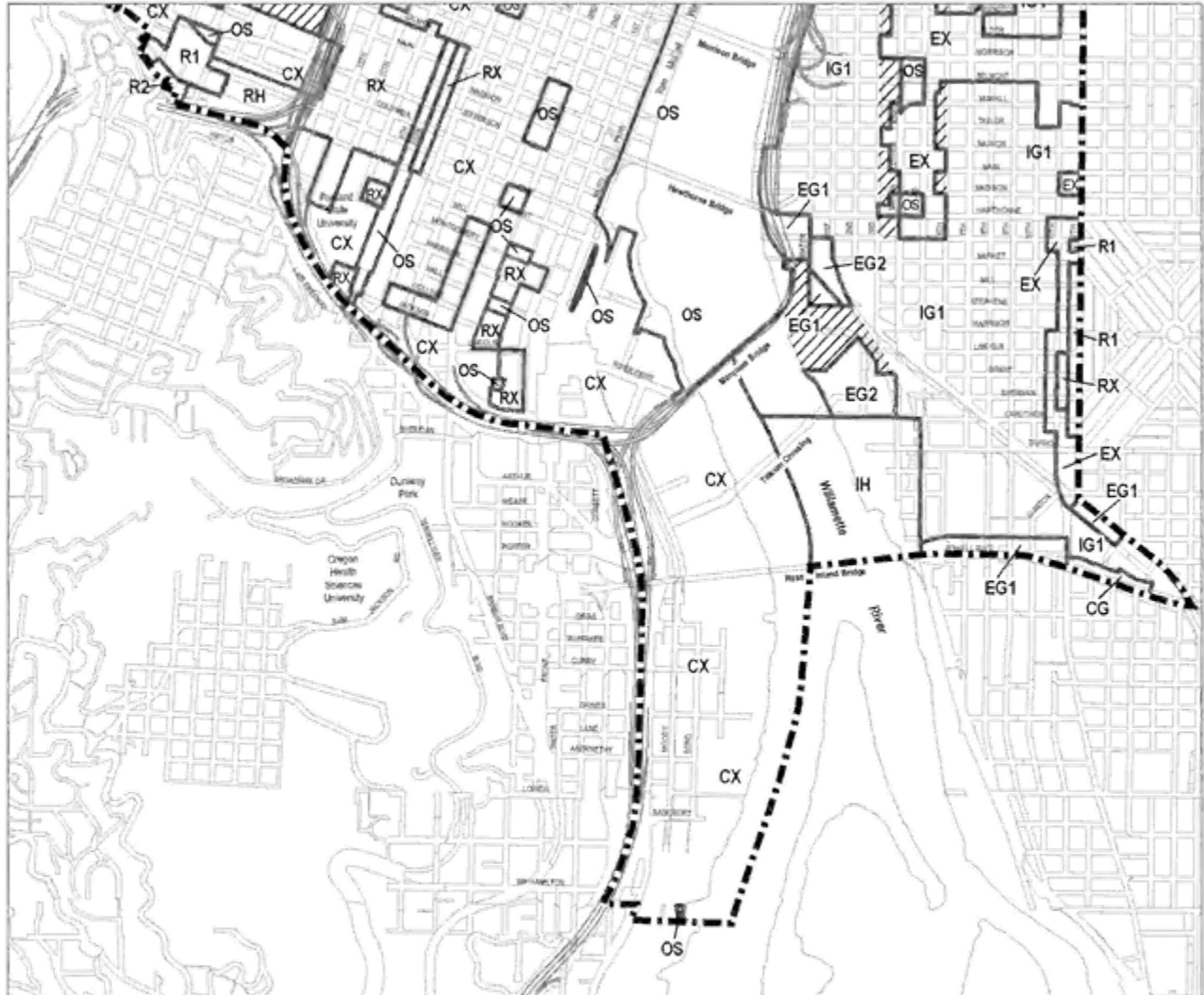
2-469

Commentary



Central City Existing Zoning

Map 2 of 2

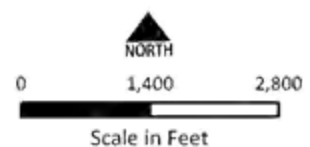
Map Revised XXXX XX, 2015



Legend

-  Exist Base Zones
-  Area where Comprehensive Plan differs from Zone

 Central City Plan District boundary



Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

Bureau of Planning and Sustainability
Portland, Oregon

10/9/2015

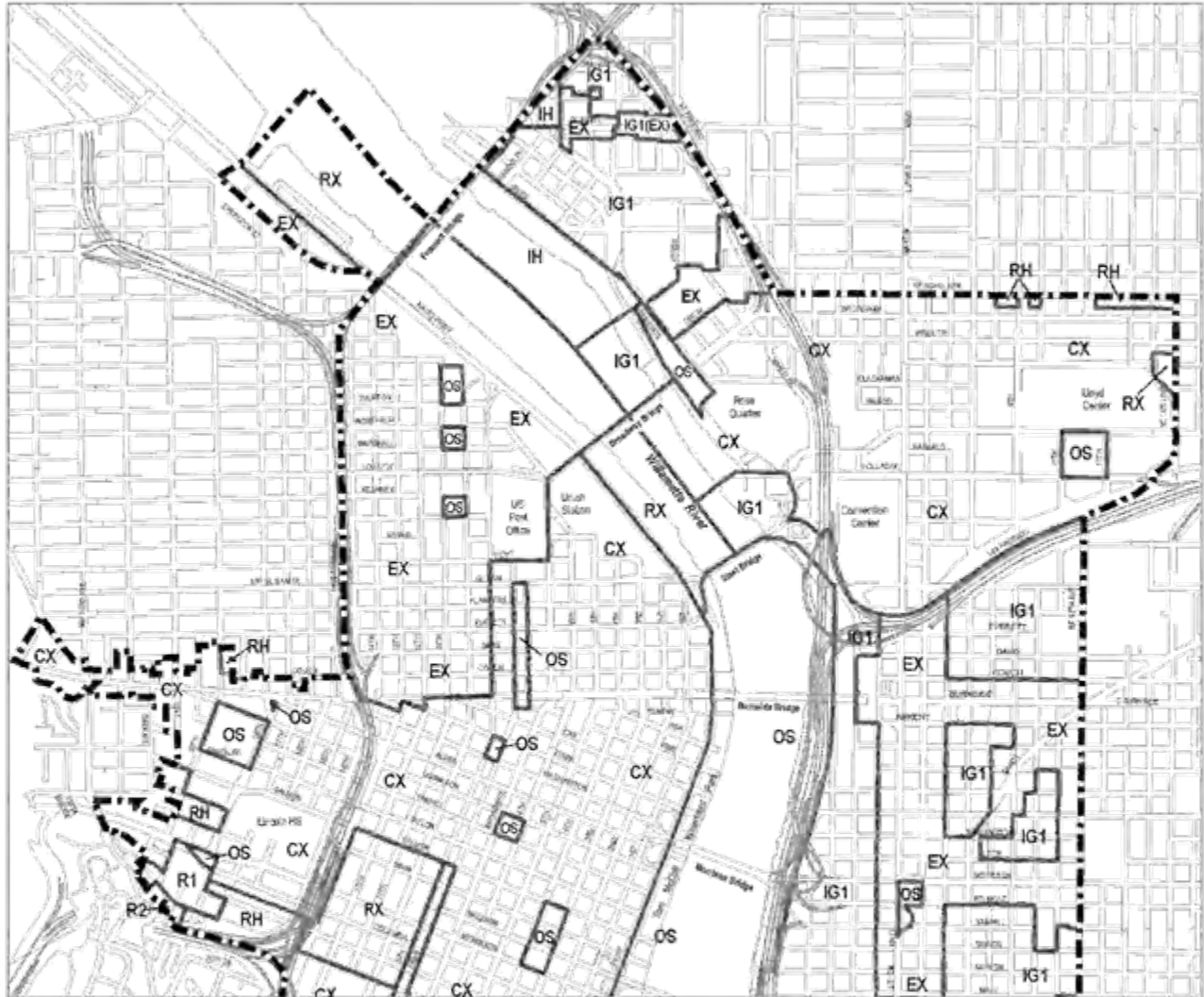
IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Zoning Map Amendments

Commentary


Central City Proposed Zoning


Map 1 of 2


Map Revised XXXX XX, 2015

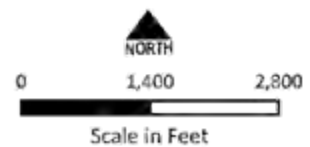


Legend

 Proposed Base Zones

 City Boundary

 Central City Plan District boundary



Scale in Feet
Bureau of Planning and Sustainability
Portland, Oregon

Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

10/9/2015

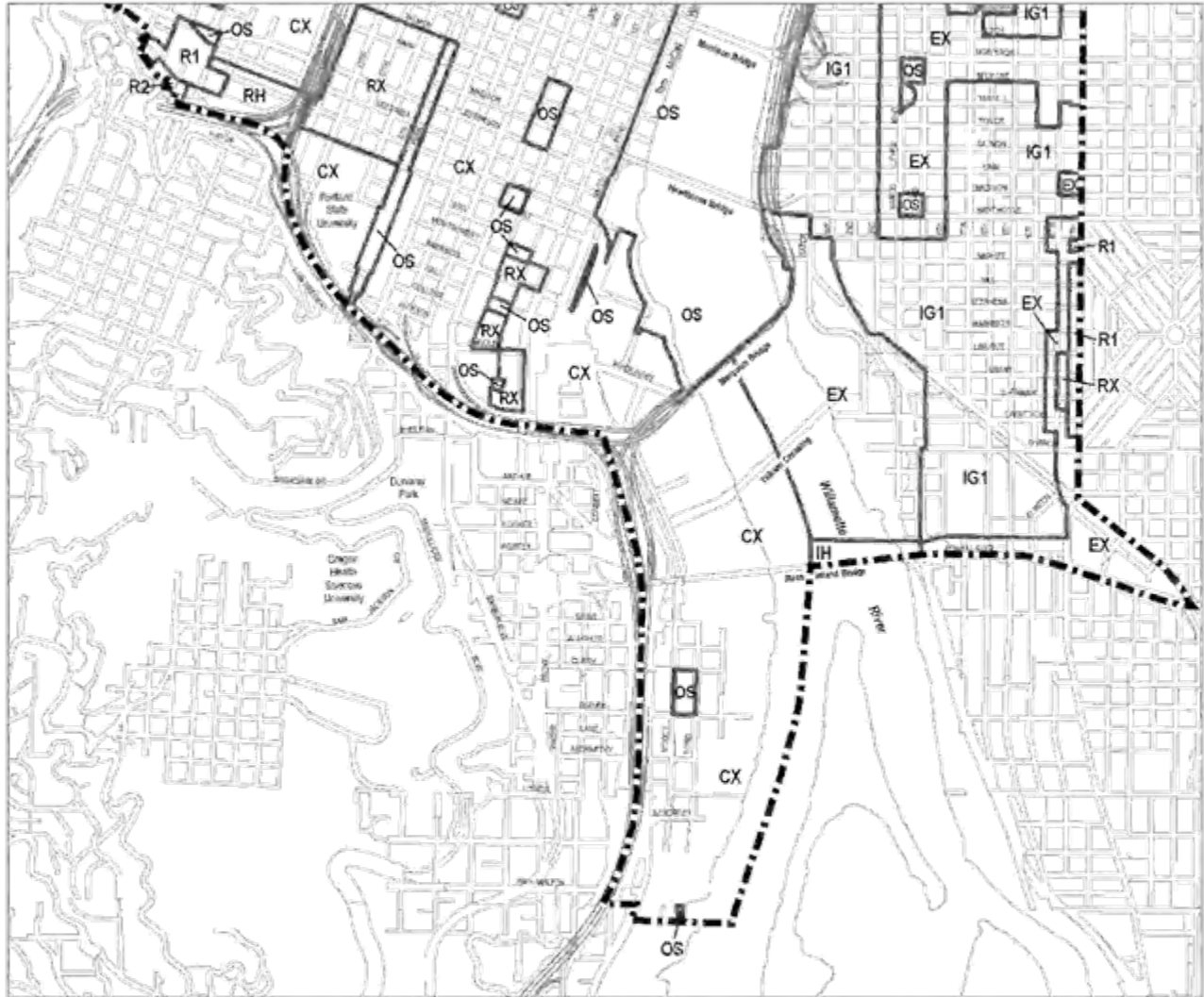
IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Zoning Map Amendments

Commentary


Central City Proposed Zoning


Map 2 of 2

Map Revised XXXX XX, 2015

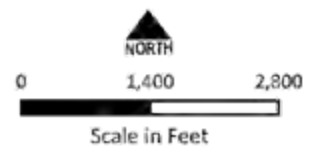


Legend

 Proposed Base Zones

 City Boundary

 Central City Plan District boundary



Bureau of Planning and Sustainability
Portland, Oregon

Code References:
33.510.XXX, 33.510.XXX
33.510.XXX, 33.510.XXX

10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Zoning Map Amendments

Commentary

River Overlay Map Amendment - Map 1

The boundary for the River Water Quality Overlay Zone (q) is mapped incorrectly and staff recommends removing a small portion of River q that is on the north side of the Ross Island Bridge and replacing it with a River General (g) Overlay Zone. The River Water Quality Overlay Zone still exists to the south of the Ross Island Bridge in a large area around the Ross Island/Oaks Bottom complex.

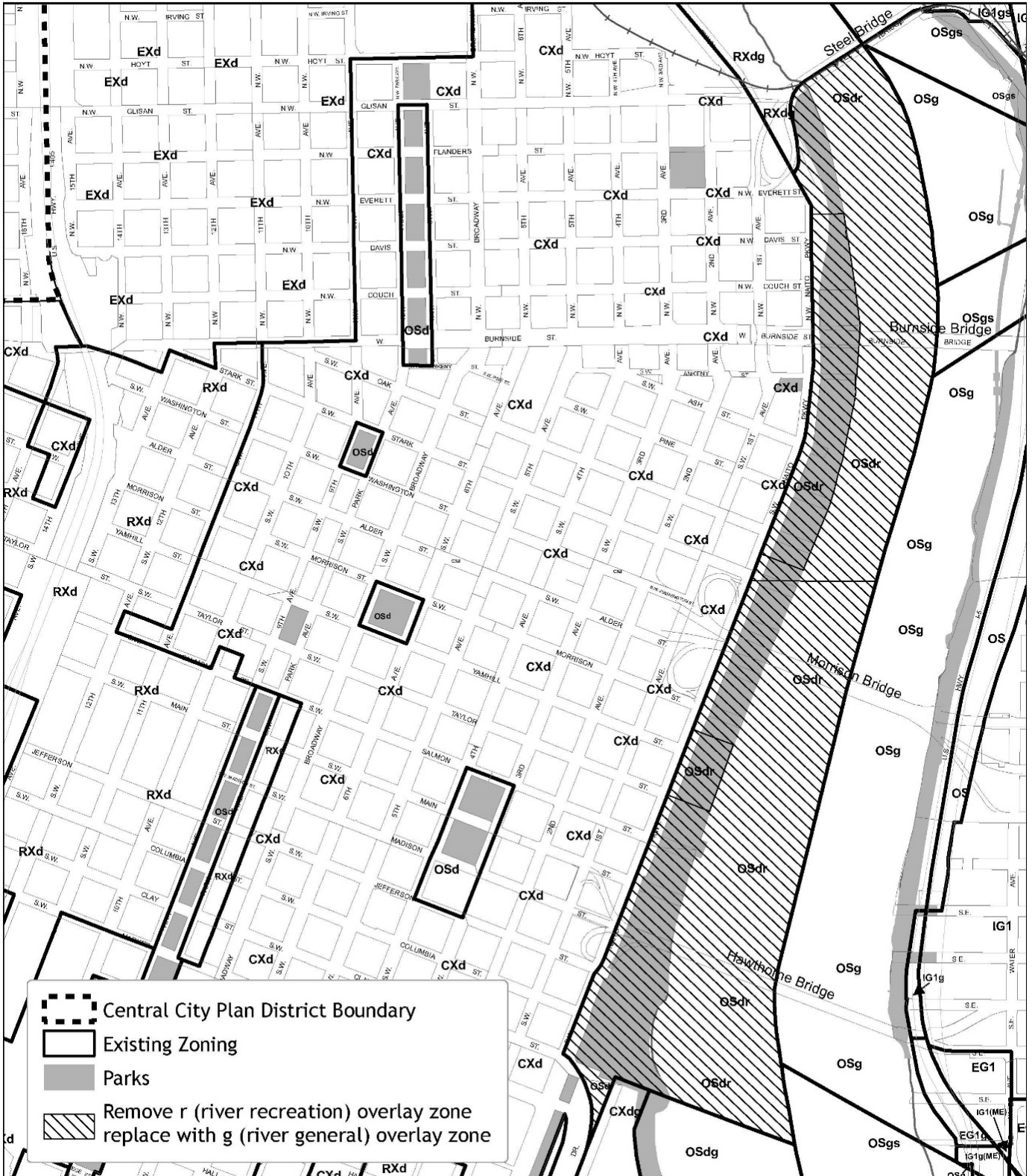
Commentary

River Overlay Map Amendment - Map 2

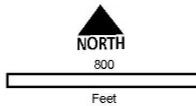
Throughout the Central City 2035/River Plan Central Reach planning process, many have expressed the desire to activate Tom McCall Waterfront Park with a limited amount of small retail and other uses that support residents, employees and visitors to this central urban riverfront park. Today, Tom McCall Waterfront Park has a River Recreational (r) Overlay Zone, which only allows river-dependent recreational uses. In order to allow a limited amount of retail and other uses and activities to happen at the park, staff recommends amending the river overlay designation for Tom McCall Waterfront Park from River Recreational (r) to the River General (g) Overlay Zone.

This map amendment along with the previously described River Overlay Map Amendment would result in all of the Central Reach being designated River General Overlay Zone, which fits the CC2035 Plan's goal for the Willamette riverfront as an active riverfront with a mix of activities and uses.

Proposed Overlay Zone - Map 2



Central City 2035
October 7, 2015



Bureau of Planning and Sustainability
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City of Portland, Oregon
Charlie Hales, Mayor - Susan Anderson, Director



10/9/2015

IN-HOUSE REVIEW DRAFT: Central City 2035 Plan
Zoning Map Amendments

2-479

34401

CENTRAL CITY 2035 VOLUME 5: IMPLEMENTATION WORKPLAN

IN-HOUSE REVIEW DRAFT | OCTOBER 9, 2015

COMMENTS DUE NOVEMBER 9, 2015



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City of Portland, Oregon
Charlie Hales, Mayor • Susan Anderson, Director



Questions about Performance Measures?

Contact: Mindy Brooks

Mindy.Brooks@portlandoregon.gov

503-823-7831

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1. Central City 2035 Performance Targets Overview

Introduction

Several performance targets are being proposed for adoption through a non-binding resolution as part of the CC2035 plan. The targets will help measure the City's progress toward achieving the CC2035 and will allow the City to adjust its course after 5, 10 or 15 years of plan implementation. For example, if we calculate that we are not meeting the tree canopy target, the City could choose to fund additional street tree plantings.

The following summaries briefly describe each of the proposed targets. A full explanation of the targets and methodology used to set and evaluate progress follows.

Transportation

The target for the Central City is 40%-85% of commute trips to and from the Central City to be by non-single occupancy vehicles. Here are the targets for each district:

- Downtown: 85%
- River: 80%
- Goose Hollow: 80%
- South Waterfront: 75%
- Lloyd: 75%
- Central Eastside: 60%
- Lower Albina: 40%

Jobs/Housing Projections

To be added.

Tree Canopy

Unlike the other targets, BPS is developing scenarios that will result in different tree canopy ranges. These scenarios will be discussed through the public hearings and work session process and then a final option will be selected. This approach is being used because there are different options to choose from that will result in significantly different ranges.

Riverbank Enhancement

The target selected for the Central City is 12,600 linear feet (32% of the Central City riverfront) of new riverbank enhancement and at least five riverbank restoration sites complete by 2035. The targets by ownership are shown below:

- City or Portland Ownership: 2,890 In ft
- Other Public Ownership: 3,740 In ft
- Private Redevelopment: 4,170 In ft
- City/Private Partnerships: 1,800 In ft

Ecoroofs

The ecoroof target for the Central City is 18% of total existing or redeveloped roof area. This target equates to 408 acres of total ecoroof area by 2035.

2. Transportation Performance Targets

2035 Performance Targets (from Quadrant Plans)

Downtown: In 2035, at least 85% of commute trips to and from the district are by non-single occupancy vehicle (SOV).

River: In 2035, at least 80% of commute trips to and from the district are by non-single occupancy vehicle (SOV).

Goose Hollow: In 2035, at least 80% of commute trips to and from the district are by non-single occupancy vehicle (SOV).

South Waterfront: In 2035, at least 75% of commute trips to and from the district are by non-single occupancy vehicle (SOV).

Lloyd: In 2035, at least 75% of commute trips to and from the district are by non-single occupancy vehicle (SOV).

Central Eastside: In 2035, at least 60% of commute trips to and from the district are by non-single occupancy vehicle (SOV).

Lower Albina: In 2035, at least 40% of commute trips to and from the district are by non-single occupancy vehicle (SOV).

3. Jobs/Housing Projections

To be added: projections by Central City subdistrict, methodology

4. Tree Canopy Target

Central City 2035 - Tree Canopy Targets - Overview

Updated October 2015

Introduction

As part of the Central City 2035 plan, targets related to many topics (e.g., jobs, parking, tree canopy) are being proposed. Staff anticipates that the City Council will adopt these targets by resolution, and the targets will serve to help the city know if the plan is being achieved as envisioned. The targets are expected to be non-binding. However, they will allow the city to track progress after 5, 10 or 15 years of plan implementation, which will help the city adjust its course where needed. For example, the city could choose to fund additional street tree plantings or revisit specific policies or practices in areas not meeting the targets.

This overview presents the general approach that will be used to identify tree canopy targets for the Central City. An additional methodology summary is provided as an appendix.

Background

Tree canopy targets for Portland were first established in the 2004 Urban Forestry Management Plan (UFMP). The UFMP set a 15% tree canopy coverage target for commercial/industrial/institutional areas, a 35% canopy target for rights-of-way, a 35-40% canopy target for residential areas, and a 30% canopy target for parks. The UFMP does not include a citywide canopy target; however, when the targets for different development types are aggregated and applied across the entire area of the city, the average is 33%.

The Portland Plan, adopted in 2012, calls for tree canopy to cover one-third of the city on average by 2035. It also includes a Central City tree canopy target of 10 – 15% and calls for a minimum of 20 – 25% canopy in all residential neighborhoods as measures of success. The Central City canopy target reflects the fact that the Central City is much more urbanized and development generally covers lot line to lot line. This is in contrast with more residential or less intensive non-residential areas where there is often more room for trees in yards and landscaped areas.

The Climate Change Preparation Strategy adopted in 2015 also features tree preservation and planting as a tool to help meet key objectives and strategies such as decreasing the urban heat island effect and increasing the resilience of the built environment to increased winter rainfall. Actions defined in the strategy include implementing the UFMP, using trees and other green infrastructure to reduce impervious area, and maintaining tree canopy in parks. The strategy does not modify or clarify the targets set by the UFMP or the Portland Plan; however, the Climate Action Preparation Strategy has a schedule of being met by 2030.

Through the Central City 2035 planning process, the following Central City-wide goals, policies and actions pertain to tree canopy. There are specific district actions in some cases; however, the overall intention is that tree canopy is increased throughout the Central City.

CC2035 Goal G. Support the ability to meet human and health service needs of at-risk populations concentrated within the Central City.

CC2035 Policy 15 Promote healthy active living. Design and develop Central City neighborhoods to support physically and socially active healthy lifestyles for all people through inclusion of plazas, parks and open spaces, a safe and inviting public realm, access to healthy food and active transportation and the density of development needed to support these economically.

Proposed CC2035 Policy Streetscape. Improve street environment and pedestrian experience by providing urban greenery and community uses of the right-of-way and by integrating high-density uses.

Proposed CC2035 Policy Green Infrastructure. Increase the use of ecoroofs, vertical gardens, sustainable site development, landscaped setbacks and courtyards, living walls and other vegetated facilities to manage stormwater, improve the pedestrian environment, reduce the heat island effect, improve air and water quality and create habitat for birds and pollinators on new buildings.

Proposed CC2035 Policy Urban Habitat Connections. Create upland wildlife habitat connections using street trees, native vegetation in landscaping, public open spaces and ecoroofs that provide a connection for avian and pollinator species between the West Hills and Willamette River.

Proposed CC2035 Policy Climate Change Preparation. Reduce the adverse impacts of urban heat island effects on public health, especially in underserved and under-represented communities.

Proposed CC2035 Policy Climate Change Preparation. Protect and improve terrestrial and aquatic wildlife movement corridors.

Community stakeholders expressed a range of viewpoints relating to trees in the Central City during the quadrant planning efforts. Some stakeholders support ambitious targets that call for significant increases in Central City tree canopy and the benefits it provides, including air cooling, stormwater management, aesthetic beauty, improved pedestrian environment, and habitat for birds and pollinators. Others expressed concern about potential constraints and conflicts between land uses and trees, such as impacts on freight movement and visibility, and obscuring storefronts and signs.

The Portland City Council has endorsed preliminary tree canopy targets that were developed in conjunction with the North/Northeast, West, and Southeast quadrant plans. (See 5.4 Table 1) These targets were developed using 2007 vegetation data and a largely qualitative assessment of existing and potential tree canopy. This analysis reflects an assumption that future increases in tree canopy would come primarily from additional trees in Central City rights-of-way (ROW). The analysis also drew on the 2004 Urban Forestry Management Plan targets, particularly the UFMP citywide 35% ROW tree canopy target. For example, preliminary targets for the N/NE quadrant were derived in large part by applying the 35% target to the ROWs in that district.

5.4 Table 1. Preliminary 2035 Tree Canopy Targets by Central City District

Central City District	District Size (acres)*	Existing Tree Canopy (acres)	Existing Tree Canopy (%)	Preliminary Tree Canopy Target (acres)	Preliminary Tree Canopy Target (%)	Additional Tree Canopy Acres Needed to Reach Preliminary Target
Lloyd	407	28	7	73	18	45
Lower Albina	201	10	5	20	10	10
Downtown	261	34	13	65	25	31
West End	95	7	7	19	20	12
Goose Hollow	175	23	13	35	20	12
Pearl	349	14	4	70	20	56
Old Town/Chinatown	178	12	7	18	10	5
South Waterfront	243	15	6	49	20	34
University	243	49	20	73	30	24
Central Eastside	802	24	3	80	10**	56
Total	2,954	207	7	502	17	295

*Does not include water.

**This is a placeholder and is the same as Lower Albina. Like Lower Albina, the Central Eastside District has a lot of industrial uses. Putting in a placeholder allows staff to calculate a target for all of the Central City.

In response to the preliminary targets some stakeholders requested a more rigorous, in-depth analysis to confirm that the targets are appropriate, and to be clearer about how and where Central City tree canopy would change in the future. The quadrant plans also included a draft methodology to guide additional refinements to the canopy targets prior to adoption of the Central City 2035 Plan.

Currently the Bureau of Planning and Sustainability (BPS) is working with Portland Parks and Recreation (PP&R), the Bureau of Environmental Services (BES), and the Portland Bureau of Transportation (PBOT) to update the methodology and the preliminary tree canopy targets contained in the quadrant plans. Staff will update the 2007 vegetation data with 2014 LiDAR data to represent existing tree canopy, and will use GIS analysis to estimate the tree canopy changes associated with development and redevelopment, changes in policies and regulations, proactive tree planting, and riverbank enhancements.

This approach will allow the review and refinement of preliminary targets and will allow staff to assess how different policy assumptions and options could affect future tree canopy in the Central City. This approach will also facilitate monitoring and tracking of future tree removal, planting, and canopy coverage in the Central City over time.

The proposed approach is summarized below.

Central City Tree Canopy Scenarios and Targets – Proposed Approach

Prior to refining the preliminary tree canopy targets in the quadrant plans, staff will develop several future tree canopy scenarios to illustrate how different policy and investment options would affect tree canopy. Staff will also address the respective pros and cons of the scenarios. The scenarios are intended to help inform the refinement of the tree canopy targets.

Each of the tree canopy scenarios will reflect analyses of:

- Tree canopy associated with rights-of-way
- Tree canopy associated with tax lots in private and public ownership
- Tree canopy associated with parks and public spaces

Given the diversity of landscape and land uses in the Central City, future tree canopy scenarios and targets will be developed for each quadrant and districts within the quadrants. Scenarios will reflect the following key factors:

- Replacement of the 2007 vegetation data used to develop the preliminary tree canopy targets with 2014 LiDAR vegetation data. This will greatly improve the accuracy of information on existing tree canopy.
- Field survey data on tree planting spaces along Central City rights-of-way.
- GIS modeling to estimate:
 - Existing and potential tree canopy capacity along Central City rights-of-way.
 - Changes in tree canopy on tax lots and along rights-of-way associated with development and redevelopment (sites identified as vacant and/or underutilized in the Buildable Lands Inventory).
 - Changes in tree canopy based on proposed river setbacks and riverbank enhancements.
- Preferred canopy ranges for existing and anticipated future parks and public spaces in the Central City.
- Evaluation of previous and potential future investments in street tree planting.

Staff anticipates that the new LiDAR vegetation data will be available by the end of calendar year 2015. When this data become available staff can incorporate it the tree canopy scenarios for presentation in the Discussion Draft. Future tree canopy scenarios include a “Baseline” scenario, a “Central City 2035 Plan” scenario, and a number of additional alternative scenarios. These scenarios will provide a “reality check” for the preliminary tree canopy targets contained in the quadrant plans, and will inform an update these targets.

Taking into consideration public comments on the Discussion Draft, staff will develop recommended tree canopy targets for inclusion in the Proposed Draft for the Planning and Sustainability Commission (anticipated winter 2016).

The future tree canopy scenario concepts are presented below.

“Baseline” future tree canopy scenario

The baseline future tree canopy scenario is intended to reflect future canopy in the Central City given existing policies, regulations, and investment levels. For this scenario, the existing tree canopy data will be adjusted to reflect changes associated with:

- a. Anticipated Central City development and redevelopment between now and 2035. This analysis will assume development or redevelopment will occur on Central City vacant and/or under-utilized sites identified in the Recommended Buildable Lands Inventory (BLI). The BLI was approved by the Planning and Sustainability Commission July 2015, and will be going to the City Council for adoption in fall 2015.

This analysis will project canopy changes on tax lots and rights-of-way associated with development or redevelopment of sites identified in the BLI. The analysis will reflect current zoning code (Title 33) and tree code (Title 11) allowances and requirements (e.g., building coverage, landscaping, tree planting/density). The analysis will also reflect current streetscape and street tree planting policies (e.g., minimum pedestrian through zone, furnishing zone width, sidewalk dedication requirements, etc.). It should be noted that net tree canopy could increase or decrease as a result of development and redevelopment depending on the current state of the vacant or underutilized site in relation to the proposed development/redevelopment.

- b. Anticipated increases or decreases in tree canopy associated with existing City-managed parks. Portland Parks and Recreation (PP&R) has produced preferred canopy ranges for City-managed parks and public spaces in the Central City. The preferred canopy ranges reflect consideration of current and desired park uses, maintenance, and security issues, along with goals for improved quantity and quality of tree canopy.
- c. Assumed continuation of periodic, limited City tree planting initiatives in the Central City. The City periodically offers to plant trees free of cost based on property owner agreement to accept and maintain the trees.
- d. Anticipated increases in canopy associated with recently developed/redeveloped areas that contain a large number of newly planted trees. In these cases, the existing canopy layer will not sufficiently represent expected 2035 canopy and additional modeling will need to be conducted to account for anticipated tree growth. This will only apply to relatively large areas of land with large numbers of newly planted trees, like the Pearl District and South Waterfront.

Central City 2035 Plan scenario, and additional alternative future tree canopy scenarios

Building on the baseline tree canopy scenario, an additional scenario will be developed to reflect changes in existing policy, regulations, and investments that are expected to be included in the draft Central City 2035 plan. The assumptions in this scenario will reflect concepts and direction from the adopted quadrant plans.

Additional alternative tree canopy scenarios will also be developed to evaluate more options to improve tree canopy in the Central City. The various scenarios will include general discussions of relative advantages, disadvantages, and tradeoffs.

It may not be possible to model every potential options so it may be necessary to describe the potential options and issues qualitatively.

Options to be considered in the Central City 2035 Plan future tree canopy scenario, and/or additional alternative scenarios, include:

- a. Changes to Title 33 zoning regulations such as:
 - building coverage allowances or requirements
 - building setback allowances or requirements
 - building step-backs (e.g., podium)
 - landscaping allowances or requirements
 - Willamette River setback and planting requirements

Much of the land in the Central City is within zones that allow 100% building coverage, with no required setbacks or landscaping. This reduces the space for trees on tax lots and inhibits the planting or growth of street trees. Changes to building coverage, setback, building design, and landscaping requirements would provide more room for street tree canopy to reach its potential, and for trees to be planted on tax lots. Changes could be evaluated for specific zones, areas, or street typologies.

The quadrant plans call for an evaluation of the width of the Willamette River setback. An increased river setback would provide more space for tree planting along the Willamette River.

- b. Changes to Title 11, Trees regulations. Currently Title 11 exempts development that is occurring in commercial and industrial zones that do not have landscaping requirements from tree preservation and tree density (planting) standards. Removing these exemptions in the Central City and applying tree preservation and/or tree density standards in all zones would improve tree canopy associated with development and redevelopment.
- c. Changes in tree canopy associated with anticipated new parks. Portland Parks and Recreation is evaluating existing and potential future tree canopy scenarios that support City urban forest goals while also meeting other parks related needs and priorities.
- d. Increased City investment in street tree planting and maintenance. A key barrier to additional street tree planting in the Central City and elsewhere is property owner resistance to the additional responsibility and cost of tree maintenance. Scenarios involving substantial increases in Central City street tree planting will likely include assumptions that the City has at least some responsibility for maintaining the trees. It may require code changes for the City to assume street tree maintenance responsibilities.
- e. Streetscape improvement projects that could involve additional street tree planting and maintenance along major street segments, not just on sections of the street abutting sites that are expected to develop or redevelop between now and 2035. Streetscape improvements could also result in larger trees being planted if the improvement included tree bulb-outs on corners and/or mid-block, or if the improvement involved a road diet or median.

- f. Investment in riverbank enhancements on City-owned and other public property, and through public and private partnerships. Use riverbank enhancement targets from the Southeast Quadrant Plan.
- g. Increased right-of-way dedications associated with new development. Increased ROW dedications could allow more or bigger trees to be planted. In order to require additional sidewalk dedication for trees (tree canopy) specifically, the City would have to establish a nexus and proportionality between new development and impacts on trees (tree canopy).
- h. Require new developments to install “Silva Cells” or other tools to improve soil volume for street trees or tax lot trees. This could increase the number of trees or the size of trees that can be planted.
- i. Limitations on the placement of vaults, voids, or other encroachments to avoid or reduce intersection with sidewalk corridors and barriers to tree planting.

Staff have produced preliminary results for the Baseline Future Tree Canopy Scenario and the Central City 2035 Plan Future Tree Canopy Scenario. These results are provided in the attached Methodology Summary report. These results will be revised when the 2014 LiDAR tree canopy data become available.

The additional alternative future tree canopy options are under development. Methodologies and preliminary results for these will be provided in the Discussion Draft.

Once all the updated future tree canopy scenarios are available, staff will provide an analysis of the results, along with respective benefits, costs, constraints (e.g., legal and otherwise), concerns, and tradeoffs, including the ability to meet multiple City goals and policies. This will inform the refinement of the preliminary Central City tree canopy targets, and support the establishment of canopy targets that are both practical and aspirational.

Central City Tree Canopy Scenarios – Methodology Summary

I. Baseline Future Tree Canopy Scenario

A baseline Central City tree canopy estimate will provide a snapshot representing what canopy might look like across the Central City if the conditions, policies, regulations, etc. existing today persist through 2035. The Baseline Scenario builds on the existing canopy analysis outlined above, and models anticipated changes in canopy in the right-of-way, on tax lots, and in parks/open spaces assuming anticipated future growth, development, and investment play out in accordance with current policies and regulations (e.g., land use, zoning, sidewalk widths and street dedications), and programmatic practices (public investment in tree planting).

The specific approaches to estimate baseline future tree canopy in rights-of-way (ROW), on tax lots, and in parks and public spaces are described below. It should be noted the analysis reflects assumptions that apply “on average” across Central City quadrants and districts, and is not intended, unless otherwise noted, to apply to specific properties, ROW, or parks and public spaces.

The preliminary results of the Baseline Future Tree Canopy Scenario are presented at the end of this document, but will be recalculated for the Discussion Draft when new LiDAR tree canopy data become available (expected Nov/Dec 2015).

A. Baseline Existing Tree Canopy

To date, existing tree canopy coverage has been calculated with the “High Structure Vegetation Value” of Metro’s 2007 vegetation layer. Two calculations were carried out: 1) Total existing canopy, by zone, by Central City district, and 2) Existing canopy on vacant/underutilized sites (these sites were generated by the City of Portland’s Buildable Lands Inventory [BLI] Model).

Total existing canopy was calculated for the entirety of each zoning category and Central City district. Total area of each zoning category and Central City district excludes water. Existing canopy on vacant/underutilized sites only includes the area within vacant and/or underutilized tax parcels. The analysis conducted for BLI-designated vacant and underutilized sites also excludes all parcels zoned as Open Space.

For the purposes of this project, existing tree canopy will be recalculated and replaced with 2014 LiDAR data when it becomes available.

B. Baseline Right-of-Way Tree Canopy

Developing Central City right-of-way (ROW) tree canopy scenarios involves analyzing how existing street tree canopy is anticipated to change in the future. This analysis includes several components. One component involves analyzing how street tree canopy is expected to change in conjunction with development and redevelopment. Another involves analyzing how street tree canopy could change in conjunction with voluntary or proactive investment in tree planting and establishment.

For the purposes of this analysis, it is assumed that existing street tree canopy will remain constant overall, recognizing that existing street trees will grow, die, and be replanted in an assumed dynamic equilibrium. However, in portions of the Central City that are newly developed, street trees have been planted recently and are still small, but are expected to grow over time (e.g., South Waterfront, the Pearl). For these districts the baseline scenario will incorporate an estimate of the future canopy of these existing trees when they are fully grown. This “tree canopy capacity” estimate will be developed based on the existing planting spaces and planting strip codes referenced in the next section. Modeled ROW canopy capacity will replace existing ROW canopy in these districts.

This section starts with a description of key data used in the analysis, followed by methodology summaries for changes in ROW canopy associated with development/redevelopment as well as changes in ROW canopy associated with tree planting investment.

Underlying ROW tree data

Right-of-way tree canopy analysis requires basic information on existing street trees and potential street tree planting spaces in the Central City. The Central City street tree survey conducted by the Bureau of Environmental Services (BES) provides a strong foundation. This survey was conducted between 2012 and 2014 and identifies by address for much of the Central City the number of planting spaces with existing trees, and the number of potential planting spaces. (See 5.4 Table 2).

5.4 Table 2. Existing and Potential Planting Spaces by District

Geography	Area (acres)*	# Existing (Planted) Planting Spaces	# Potential Planting Spaces	Total # of Planting Spaces
Central Eastside	706	2,071	2,167	4,238
SE Quadrant Totals	706	2,071	2,167	4,238
Lloyd District	385	1,600	516	2,116
Lower Albina	138	141	187	328
N/NE Quadrant Totals	523	1,741	703	2,444
Downtown	222	1,748	579	2,327
Goose Hollow	175	793	375	1,168
Old Town/Chinatown	130	939	184	1,123
Pearl District	277	1,795	482	2,277
South Downtown/University	218	915	81	996
South Waterfront	177	483	155	638
West End	95	639	355	994
W Quadrant Totals	1,294	7,312	2,211	9,523
Central City Totals	2,523	11,124	5,081	16,205

* Does not include water.

The BES survey also assigned planter strip codes that reflect planting strip width and the presence or absence of overhead high voltage wires. Planter strip codes are associated with different tree sizes (small, medium, or large) that are appropriate to plant in that space. These three tree size categories are

a proxy for the more diverse range of tree shapes and sizes that exist currently and will be planted in the future. The BES survey also denotes planter strips and sidewalk corridors that are too narrow for potential tree plantings. These records were considered as no potential tree plantings in the analysis. The canopy areas associated with small, medium, and large trees are based on categories provided by Portland Parks and Recreation, Urban Forestry program.

This information is summarized in 5.4 Table 3.

5.4 Table 3. Planting Strip Codes and Tree Size

Planting Strip Code ¹	Planting Strip Width ¹	High-Voltage Overhead Wires ¹	Potential Tree Size ²	Potential Tree Canopy Diameter ²	Potential Tree Canopy Area (sq ft)
A	2.3-2.9'	with or without	Small	20'	314
B	3.0-3.9'	with or without			
C	4.0-5.9'	without	Medium	40'	1256
D	4.0-5.9'	with			
F	6' and greater	with			
E	6.0-8.4'	without	Large	60'	2826
G	8.5' and greater	without			
X	<2.3' OR sidewalk corridor <8.5'	with or without	No Tree	0	0
MS	Based on average planting strip code ³				
U/UC	Unspecified	Unspecified	Based on average tree size by district ⁴		

1 BES, Planting Strip Guide For Inspectors 2014

2 Urban Forestry, Street Tree Inventory Data Available Site Codes; Urban Forestry, personal communication.

3 MS code indicated an address with more than two frontages; an A-X planting strip code was assigned to each frontage and listed in a notes column during data collection. This analysis used the average tree size based on the A-G codes across all frontages.

4 U/UC code indicated an unimproved site without or with a curb. This analysis assumed the average tree size based on the average planter strip width by district.

The Bureau of Planning and Sustainability (BPS) conducted additional analyses to fill in data gaps for portions of the Central City 2035 planning area that BES did not canvass during the survey, or portions where BES did canvas but did not note planting strip width. Where BES did not canvas, BPS used the average tree sizes and number of existing/potential tree planting spaces per tax lot by district and base zone (see 5.4 Table 4) to extrapolate the data.

5.4 Table 4. Average number of street tree planting spaces and tree sizes per tax lot by sub-district

Subdistrict	ZONE	Average Existing Trees	Average Potential Trees	Average Tree Size
CENTRAL EASTSIDE	CG	2	0	Small
CENTRAL EASTSIDE	EG1	1	1	Small
CENTRAL EASTSIDE	EG2	5	0	Small
CENTRAL EASTSIDE	EX	2	2	Small

CENTRAL EASTSIDE	IG1	2	2	Small
CENTRAL EASTSIDE	IH	0	1	Small
CENTRAL EASTSIDE	R1	1	1	Small
CENTRAL EASTSIDE	RX	2	1	Small
DOWNTOWN	CX	5	2	Medium
DOWNTOWN	OS	10	6	Medium
DOWNTOWN	RX	3	1	Medium
GOOSE HOLLOW	CX	3	1	Small
GOOSE HOLLOW	OS	22	12	Small
GOOSE HOLLOW	R1	1	1	Small
GOOSE HOLLOW	R2	0	0	Small
GOOSE HOLLOW	RH	3	3	Small
GOOSE HOLLOW	RX	5	1	Small
LLOYD DISTRICT	CX	7	2	Medium
LLOYD DISTRICT	EG1	0	7	Medium
LLOYD DISTRICT	IG1	1	2	Medium
LLOYD DISTRICT	OS	14	7	Medium
LLOYD DISTRICT	RH	2	1	Medium
LLOYD DISTRICT	RX	5	3	Medium
LOWER ALBINA	EX	2	1	Medium
LOWER ALBINA	IG1	1	2	Medium
LOWER ALBINA	IH	0	0	Medium
OLD TOWN / CHINATOWN	CX	5	1	Medium
OLD TOWN / CHINATOWN	RX	13	0	Medium
PEARL DISTRICT	CX	2	2	Medium
PEARL DISTRICT	EX	6	1	Medium
PEARL DISTRICT	IH	2	8	Medium
PEARL DISTRICT	OS	19	3	Medium
PEARL DISTRICT	RX	7	0	Medium
SOUTH DOWNTOWN/UNIVERSITY	CX	6	0	Medium
SOUTH DOWNTOWN/UNIVERSITY	OS	2	2	Medium
SOUTH DOWNTOWN/UNIVERSITY	RX	5	1	Medium
SOUTH WATERFRONT	CX	9	3	Medium
WEST END	CX	5	2	Medium
WEST END	EX	1	1	Medium
WEST END	RX	3	1	Medium

Baseline right-of-way tree canopy associated with development and redevelopment

In order to determine how street tree canopy might change with anticipated development and redevelopment in the Central City, it was necessary to determine how many existing street trees and

potential planting spaces are associated with the vacant and underutilized sites designated in the Buildable Lands Inventory. (See 5.4 Table 5)

5.4 Table 5. Existing and Potential Planting Spaces Associated with BLI sites, by District

Geography	District Area (acres)	BLI Sites Area (acres)	# Existing (Planted) Planting Spaces adjacent to BLI sites	# Potential Planting Spaces adjacent to BLI sites	Total# of Planting Spaces adjacent to BLI sites
Central Eastside	706	109.7	434	447	881
SE Quadrant Total	706	109.7	434	447	881
Lloyd District	385	77.4	505	198	703
Lower Albina	138	2.7	13	25	38
N/NE Quadrant Totals	523	80.1	518	223	741
Downtown	222	20.7	207	99	306
Goose Hollow	175	24.0	194	127	321
Old Town/Chinatown	130	18.9	203	29	232
Pearl District	277	66.6	250	166	416
South Downtown/University	218	36.8	225	48	273
South Waterfront	177	90.6	152	54	206
West End	95	13.3	110	109	219
W Quadrant Totals	1294	270.9	1341	632	1973
Central City Total	2523	460.6	2293	1302	3595

For the Baseline Scenario, it will be assumed that the existing street trees associated with BLI-designated vacant and underutilized sites will be retained or replaced and that 70% of the potential planting spaces will be planted with trees according to the planting strip category associated with those BLI-designated vacant and underutilized sites. This 30% constraint on planting future street trees is intended to account for known and potential constraints to street tree planting and root growth. A key constraint is the impact of underground vaults and voids. Other constraints include driveways and curb cuts, conflicts with other sidewalk furnishings, freight streets, etc.

BPS evaluated the extent of sub-surface encroachment associated with vaults and voids, using GIS data layers for tax lots and vaults and voids. This analysis also required the generation of hypothetical average sidewalk corridor widths by district. Estimated existing encroachments between underground vaults and sidewalk corridors vary by district, and were estimated to range from 0 to 32 percent, which includes an assumed 5 foot buffer around existing vaults and voids. It is not possible to determine the extent to which these existing encroachments affect potential tree planting spaces as the data does not

include locational information for the potential tree planting spaces. It is also not possible to predict future encroachments associated with new vaults and voids. However, according to PBOT staff, vaults are an increasing barrier to planting street trees.

In addition, the street tree canopy will be further adjusted to reflect constraints on tree growth associated with buildings that abut the sidewalk corridor. This occurs through much of the Central City in zones that allow 100 percent building coverage (i.e. lot-line-to-lot-line) and that do not require landscaping. In these zones the buildings keep the street trees from growing to their full capacity. For zones that allow lot-line to lot-line development, street tree canopy will be adjusted by applying a 20% reduction to medium tree canopy and a 30% reduction to large tree canopy. These percent reduction numbers will be derived from geometry related to the area of a circle/circle segment and assuming a typical sidewalk corridor of 12'.

Some of these baseline assumptions and constraints will be revisited in developing alternative tree canopy scenarios. For example, the establishment of optional or mandatory building setbacks would provide more room for street tree canopy and trees on tax lots. If new development were required to install Silva Cells to increase underground soil volume this too could facilitate the planting of larger trees in a given planting space.

Baseline proactive street tree planting

Proactive street tree planting scenarios will be incorporated into the baseline and alternative tree canopy scenarios. The baseline scenario will assume that the City maintains a basic investment level in street tree planting over the Central City 2035 planning horizon. It will also assume current programmatic approaches and city policies, specifically that the City will, periodically, offer trees to be planted free of cost, at the adjacent property owner's discretion. And, per current city policy, the ongoing maintenance for the tree is the responsibility of the adjacent property owner.

For the Baseline Scenario, the additional tree canopy increment associated with this basic level of investment was based on information provided by the Bureau of Environmental Services. BES reviewed response rates to recent planting efforts in the Central Eastside to develop the recommendations. Given the number of districts in the Central City and the fact that a majority of Portland is outside of the Central City, the baseline scenario will reflect an assumption that the City will invest in one additional planting initiative per district over the Central City 2035 planning horizon. It is further assumed that each initiative will involve reaching out to property owners and offering to provide and plant trees at no cost during two consecutive years. Based on the recent planting effort in the Central Eastside, it is expected that the two-year effort would result in the additional planting of approximately 20% of the potential planting spaces on average for each district.

Alternative tree canopy scenarios will include a greater level of effort and investment in Central City street tree planting. Given that property owner resistance to cost of tree and sidewalk maintenance is a documented barrier to tree planting, alternative scenarios will likely assume that the City will take some level of responsibility for tree maintenance and sidewalk repair.

C. Baseline Tax Lot Tree Canopy

For the Baseline Future Tree Canopy Scenario, existing canopy on tax lots is assumed to remain constant except for lots that are expected to develop or redevelop during the Central City 2035 planning horizon. To estimate the potential canopy for parcels expected to develop or re-develop (derived from the vacant/underutilized sites as designated in the BLI), low and high estimates of potential canopy were calculated. To determine the expected changes in tree canopy associated with development and redevelopment of tax lots, existing canopy on BLI sites will be subtracted from the modeled low and high range estimates by district.

The Baseline Future Tree Canopy Scenario applies existing zoning and other regulations, including the provisions of Title 11, Trees (see 5.4 Table 6).

5.4 Table 6. Existing Zoning and Tree Standards, by Zone

Zone	Total Area of BLI Sites (acres)	Area as % of Total BLI Sites	Max Building Coverage Limit (Title 33)	Min Landscaped Area (Title 33)	Min Landscaping Abutting R Zoned Lot (Title 33)	Min Building Setback – Street Lot Line (Title 33)	Max Building Setback – Transit Street or Ped District (Title 33)	Tree Density (Planting) Standard (Title 11)
CX	249.7	54.21%	No limit	None	5 ft. at L3	0	10 ft.	Exempt
EX	77.9	16.91%	100% of site area	None	5 ft. at L3	0	10 ft.	Exempt
IG1	76.4	16.58%	100% of site area	None	5 ft. at L3	0	None	Exempt
RX	24.4	5.29%	100% of site area	None		0	10 ft.	20%
IH	9.8	2.13%	100% of site area	None	10 ft. at L3	5 ft.	None	Exempt
EG2	9.3	2.03%	85% of site area	15% of site area	10 ft. at L3	25 ft.	None	10% (industrial) 15% (commercial)
EG1	5.7	1.24%	85% of site area	15% of site area	5 ft. at L3	5 ft.	10 ft.	10% (industrial) 15% (commercial)
RH	4.4	0.96%	85% of site area	15% of site area		0	20 ft.	20%
R1	2.4	0.51%	60% of site area	20% of site area		3 ft.	20 ft.	20%
CG	0.7	0.15%	85% of site area	15% of site area	5 ft. at L3	0	10 ft.	15%
R5	0.0	0%	40% of site area			10 ft.		40%

For BLI vacant and underutilized parcels that are zoned CX, EX, IG1, or IH, it will be assumed that the low estimate of potential canopy would be zero as these zones have no minimum landscaping requirement and allow a the maximum building coverage of 100%. In addition, the Title 11 (Trees) development standards for tree preservation and tree density (planting) do not apply in these zones. For the high estimate it is assumed that the average tree canopy that currently exists on fully developed (non BLI) sites could be either retained or planted on the BLI sites as they develop or redevelop. The low and high tax lot canopy estimates for each of these zones will be adjusted where tax lots abut residential-zoned parcels. In these instances the Zoning code requires a minimum landscaped area along the tax lot abutment with residential parcels (see table below). It is assumed that canopy covers 100% of the required landscaped area along tax lot abutment. This increment is then added to the low and high estimates for each tax lot.

For BLI-designated vacant and underutilized parcels that are zoned EG1 and EG2, the low baseline future tree canopy estimate will be 10% of the total tax parcel area and the high estimate will be 15%. This reflects the existing 85% maximum building coverage and 15% minimum landscaping requirements in the Zoning Code for EG1 and EG2 zones. This also reflects, Title 11 tree density standards which require 10% minimum future tree canopy for industrial sites and 15% tree area for commercial/retail/office/mixed use development, or payment of a fee in lieu of planting to the City's Tree Fund.

For BLI parcels that are zoned RX, R1, R5, and RH, the low baseline future tree canopy estimate will be 10% of the total tax parcel area and the high estimate will be 20%. This reflects the existing 20% minimum landscape requirement for R1 and 15% minimum landscape requirement for RH. In addition, Title 11 tree density standards require a 20% minimum future canopy coverage for sites in multi-family residential zones, or payment of a fee in lieu of planting to the City's Tree Fund. The low baseline estimate reflects an assumption that many developers may choose to pay a fee in lieu of meeting density standards given relatively small sites and block sizes, and relatively high property values.

In addition to the base zone-specific landscaping requirements, the Zoning Code also requires development to meet specific planting requirements along the river frontage within the existing 25-foot Willamette River setback. In addition, a 25' proxy will be used to estimate the area between ordinary high and top of bank; this will be added to the 25' river setback area for a total of 50' for the Baseline Scenario. For this analysis, an additional increment of tree canopy will assigned to this area on BLI-designated vacant and underutilized tax lots along the Willamette River that are not owned by Portland Parks and Recreation (PP&R-owned lots will be addressed below). This additional increment is added to both the low and high baseline future tree canopy estimates. For the low estimate, the additional canopy increment is assumed to be 40% of the area within the riverbank and river setback. For the high estimate, the additional canopy increment is assumed to be 80% of the area within the riverbank plus and river setback. This canopy range is based on the current river setback landscaping standard of one tree for every 20' of river frontage, acknowledging that, in many cases, trees will be clustered or a view corridor will need to be maintained. River setback landscaping requirements are in addition to any landscape requirements of other chapters of Title 33.

D. Baseline Parks and Public Spaces Tree Canopy

To develop tree canopy scenarios for existing and potential future Central City public parks and public spaces, the Portland Parks and Recreation (PP&R) analyzed existing tree canopy and developed preferred tree canopy ranges for 2035.

PP&R’s Planning, Urban Forestry, Zone, and City Nature East staff conducted a tabletop exercise, using Google Maps (and Street View), Bing, City of Portland GIS data, and current canopy cover data in Central City parks. Staff viewed images of each existing Central City park and property boundaries, examined existing canopy cover at each Central City park, and discussed existing and future tree health/species mix, maintenance issues, programming issues, and unresolved issues from various perspectives.

From these qualitative discussions, individual PP&R staff developed proposed low to high ranges of preferred tree canopy cover in 2035 for each existing Central City park. Staff compiled these recommendations and developed a single set of low and high preferred tree canopy ranges, which reflect the diverse professional opinions and perspectives. These preferred canopy ranges are presented in 5.4 Table 7. This table will be updated and PP&R may choose to refine this analysis when the 2014 LiDAR data become available and the existing tree canopy statistics for Central City parks and public spaces are revised.

5.4 Table 7. Preferred Central City 2035 Tree Canopy Scenario for existing PP&R parks/open spaces

Central City District	Existing Park Area (acres)	Existing Park Canopy (acres)	Preferred future canopy – LOW (acres)	Preferred future canopy – HIGH (acres)	Difference between LOW and existing (acres)	Difference between HIGH and existing (acres)
SE QUAD						
Central Eastside	9.09	2.41	2.47	3.00	0.06	0.59
SE Quad Total	9.09	2.41	2.47	3.00	0.06	0.59
N/NE QUAD						
Lloyd	4.54	3.32	2.72	3.33	-0.60	0.01
Lower Albina	0.00	0.00	0.00	0.00	0.00	0.00
N/NE Quad Total	4.54	3.32	2.72	3.33	-0.60	0.01
WEST QUAD						
Downtown	23.12	10.16	9.67	11.18	-0.48	1.02
Goose Hollow	0.00	0.00	0.00	0.00	0.00	0.00
Old Town/Chinatown	11.02	3.98	4.07	4.78	0.09	0.80
Pearl District	8.14	2.38	2.93	3.53	0.54	1.15
South Downtown/University	17.58	7.94	8.44	9.69	0.50	1.75
South Waterfront	6.62	0.24	1.81	2.14	1.57	1.90
West End	0.00	0.00	0.00	0.00	0.00	0.00
West Quad Total	66.48	24.70	26.92	31.32	2.23	6.62
CENTRAL CITY TOTAL	80.11	30.43	32.12	37.65	1.69	7.22

II. Central City 2035 Plan - Future Tree Canopy Scenario

The Central City 2035 Future Tree Canopy Scenario builds on the Baseline Scenario described above. This scenario incorporates several regulatory and investment options that are anticipated to be part of the Central City 2035 Plan recommendations. These options have been discussed as part of the quadrant planning process and are alluded to directly or indirectly in quadrant plan policies.

The preliminary results of the Central City 2035 Plan - Future Tree Canopy Scenario are presented at the end of this document. These results will be recalculated for the Discussion Draft when new LiDAR tree canopy data become available (expected Nov/Dec 2015).

A. Optional Front Setbacks for New Development and Redevelopment

It is anticipated that the Central City 2035 Plan will propose additional allowances for building setbacks. The anticipated proposal would allow buildings to be set back up to 12 feet from the front property line. Treatment of these setbacks would vary by street typology. Proposed street typologies for the Central City are currently referred to as “Red,” “Blue,” and “Green” streets. Red streets are the retail/commercial corridors and are intended to be busy with active ground floor uses throughout the day. Blue streets are boulevards and are intended to be greener, though still may support active uses. Green streets are flexible and meant to be quieter, low-stress streets that are bicycle and pedestrian friendly. Along Red streets, setbacks are envisioned as an extension of the sidewalk and would be hardscaped. Trees could be planted in tree wells or planters. Along Blue and Green streets, property owners would be required to install vegetative landscaping in the setback from the street. On all other streets, property owners could choose to treat their setback with hardscape, vegetated landscaping, or both. A setback, vegetated or hardscaped, would allow increased room for street tree canopy to grow. In addition, a setback could be expected to provide additional canopy within the setback itself, with a vegetated setback likely providing more additional canopy than a hardscaped setback.

For the purpose of this exercise, it is assumed that 25 percent of new BLI developments would include the setback. It is expected that most property owners and developers would not choose a setback given impacts on developable area and Portland’s relatively small city blocks (200’x200’). It is also assumed that the setback will not span the entire length of the building, and that constraints associated with vaults and voids will continue to be applied.

The assumed impacts on tree canopy from the optional setbacks are as follows:

- An optional setback, whether hardscaped or vegetated, would result in increased room for street tree canopy. Specific assumptions regarding street tree canopy are:
 - 25% of the small potential planting spaces associated with BLI sites, by district, would be able to accommodate medium trees. This would require the installation of Silva Cells to increase soil volume in narrow planting spaces.
 - 25% of the medium potential planting spaces associated with BLI sites in zones allowing 100% maximum building coverage and that have no landscaping requirements, by district, will regain the 20% canopy constraint subtracted in the Baseline Scenario.

- 25% of the large potential planting spaces associated with BLI sites in zones that allow 100% maximum building coverage and that have no landscaping requirements, by district, will regain 20% of the 30% canopy constraint subtracted in the Baseline Scenario.
- The 30% constraint on planting due to vaults/voids, etc. still applies.
- In addition, an optional setback would allow for increased canopy within the setback itself. For 25 percent of the BLI lots in each district, it will be assumed a setback will be incorporated into future development, and that 1 – 3 small trees will be planted for each of those sites. This assumed range is intended to reflect uncertainty associated with whether BLI lots abutting will be allowed a hardscaped, mixed, or vegetated setback.

B. Streetscape Improvements for the Green Loop and the Central City Multi-Modal Safety and Access Project

Anticipated Green Loop east-west connection streets include NW Pettygrove, NW Flanders, SW Oak/Stark, SW Salmon, and SW Montgomery. TSP Greenscape streets and Willamette River access ways could also be included.

- Assume that X percent of the potential planting spaces along these streets would be planted, regardless of whether or not the planting space abuts a BLI site.
- Curb bump-outs, which would likely only occur at corners and/or mid-block, could also result in larger trees being planted and, therefore, additional canopy.

C. Willamette River Setback

It is anticipated that the proposed Central City 2035 Plan will include an expanded Willamette River setback. An expanded setback will help advance numerous City policies calling for improved access to and along the river, and for improved protection and enhancement of riparian ecological functions.

For the purposes of this analysis, it is assumed that the plan will propose expanding the existing 25' river setback to 50' from top-of-bank. The 40% to 80% tree canopy coverage range will be applied to the 25-foot proxy for the riverbank plus the area within the expanded setback on BLI vacant and under-utilized sites with Willamette River frontage.

D. Riverbank Enhancements

The Central City 2035 Plan is expected to call for riverbank enhancement as specified in the Southeast Quadrant Plan. For the purposes of this analysis it is assumed that the additional tree canopy will be associated with enhancement of vegetated banks as follows:

- City-owned and other publicly owned land: Assume 70% of the linear feet of vegetated riverbank will be enhanced. Multiply by 75' (50' setback area plus ~ 25' between ordinary high and top of bank). Assume 40-80% tree canopy coverage for that area. Existing canopy on city or other publicly-owned vegetated banks will be subtracted from modeled low and high range estimates.

- City/private partnerships: Assume 1800 linear feet of privately owned vegetated riverbank will be enhanced. Assume proportional distribution of 1800 linear feet based on the percent of the Central City privately-owned vegetated riverbank contained in each district. Multiply linear feet by 75' and assume 40-80% tree canopy coverage within that area.

Specific locations of the 1800 linear feet of enhancement generated by city/private partnerships are not known, so it is not possible to subtract existing tree canopy from the proposed enhancement area. However, the Central City 2035 Plan will likely include a recommended new River Open Space Bonus which would allow property developers to choose to increase their setback width in exchange for increased FAR. The increased setback would have to be landscaped. For the purposes of this analysis, it was assumed that the existing tree canopy and any potential new canopy from the river open space bonus would balance each other out.

E. Future Central City Parks and Public Spaces

During the Central City quadrant planning processes, a number of potential new parks and public spaces were identified. For the Baseline Future Tree Canopy Scenario, Portland Parks & Recreation (PP&R) evaluated the existing canopy for existing Central City parks and public spaces, and determined preferred future canopy ranges for each.

For potential new parks in the Central City, PP&R recommends applying an average tree canopy range rather than creating specific canopy cover estimates for individual potential future parks. Determining the amount of tree canopy that will be desirable and feasible for each future park would require a robust planning process and consideration of factors that are not known at this time, such as desired park uses, landscape objectives, etc.

When PP&R acquires or redevelops park land in the Central City, incorporation of trees, along with other park needs, will be considered via a master planning process. In the meantime, for the purposes of this analysis, the average low and high preferred tree canopy estimates that PP&R prepared for existing Central City parks will be applied to estimate future tree canopy for anticipated future Central City parks.

F. Additional Investment in Street Tree Planting

The Central City 2035 Plan calls for a number of goals and policies related to increased tree canopy. For example, Central City-wide Policy 58, watershed health, calls to “Improve watershed health by reducing effective impervious surfaces, increasing the quality and diversity (both species and age distribution) of the tree canopy, and protecting and restoring riparian and upland fish and wildlife habitat,” while Central City-wide Action EN4 calls to “Identify tree preservation and planting opportunities and implementation strategies (e.g., street tree planting and maintenance programs) that meet multiple objectives, including reducing urban heat island, improving local air quality, intercepting stormwater and providing habitat.” Based on these specific tree canopy related policies and actions, it is probable that there will be additional investment in street tree planting across the Central City.

For the Central City 2035 Future Tree Canopy Scenario, it is assumed that there will be two, two-year City-sponsored planting initiatives in each district over the plan time horizon (increased from the one tree planting initiative assumed for the Baseline Scenario). This is projected to result in an additional 20% of the potential planting spaces being planted.

III. Alternative Future Central City Tree Canopy Scenarios

In addition to the Baseline and Central City 2035 Future Tree Canopy Scenarios, additional options to encourage or remove barriers to increasing tree canopy in the Central City will be evaluated. Staff will explore, to the extent feasible, potential tree canopy impacts associated with the following hypothetical changes in assumptions, policies, investments and practices:

- Replacing optional building setbacks with required landscaped setbacks.
- Increased City investment in street tree planting and City assumes partial or complete responsibility to maintain street trees.
- Title 11 tree density (planting) standards apply to zones that are currently exempt. These include commercial and employment zones with no existing Title 33 landscaping requirements.
- The City undertakes proactive streetscape improvements (e.g., targeted planting of large trees, replacing a traffic lane with a treed median, etc.).
- Requiring installation of Silva Cells to increase subsurface soil volume allowing the planting of larger trees without increasing planting strip size (may be coupled with building setback requirements).
- Limiting the placement of new vaults/voids under the sidewalk corridor.

Methodologies under development and will be presented, along with preliminary results, in the Discussion Draft.

5.4 Table 8. Baseline Central City Future Tree Canopy Scenario

	PROJECTED CHANGES IN TREE CANOPY (from existing canopy)										BASELINE FUTURE TREE CANOPY SCENARIO		
	District Area (water not included) (acres)	Existing Canopy (2007) (acres)	ROW				BLI TAX LOTS ³		PARKS ⁴		Existing tree canopy as percent of total district area	Baseline Tree Canopy - LOW	Baseline Tree Canopy - HIGH
			Investment: street tree planting (non-BLI sites) (acres) ¹	Districts with recently planted street trees (acres)	Potential planting spaces (BLI sites) (acres) ²	LOW (acres)	HIGH (acres)	LOW (acres)	HIGH (acres)				
Central City District													
SE QUAD													
Central Eastside	706	20.3	2.8	0.0	2.6	-1.0	1.5	0.1	0.6	2.9%	3.5%	3.9%	
SE Quad Total	706	20.3	2.8	0.0	2.6	-1.0	1.5	0.1	0.6	2.9%	3.5%	3.9%	
N/NE QUAD													
Lloyd District	385	28.9	1.3	0.0	2.7	-4.9	-3.6	-0.6	0.0	7.5%	7.1%	7.6%	
Lower Albina	138	5.2	0.5	0.0	0.4	0.0	0.0	0.0	0.0	3.8%	4.4%	4.5%	
N/NE Quad Total	523	34.1	1.8	0.0	3.1	-4.9	-3.5	-0.6	0.0	6.5%	6.4%	6.8%	
WEST QUAD													
Downtown	222	28.0	2.1	0.0	1.4	-1.6	-1.3	-0.5	1.0	12.6%	13.2%	14.0%	
Goose Hollow	175	23.1	0.6	0.0	0.7	-4.1	-2.4	0.0	0.0	13.3%	11.7%	12.7%	
Old Town/Chinatown	130	8.8	0.6	0.0	0.3	-0.5	-0.3	0.1	0.8	6.7%	7.2%	7.9%	
Pearl District	277	9.4	1.3	33.9	2.0	0.1	3.1	0.5	1.2	3.4%	17.1%	18.4%	
South Downtown/University	218	43.3	0.1	0.0	0.7	-7.0	-3.7	0.5	1.7	19.9%	17.2%	19.3%	
South Waterfront	177	10.2	0.3	5.7	0.5	-2.3	2.0	1.6	1.9	5.8%	9.1%	11.7%	
West End	95	6.7	1.2	0.0	1.6	0.4	1.4	0.0	0.0	7.0%	10.3%	11.4%	
West Quad Total	1,294	129.5	6.3	39.6	7.3	-15.0	-1.1	2.2	6.6	10.0%	13.1%	14.5%	
Central City Total	2,523	183.9	10.9	39.6	13.0	-20.9	-3.1	1.7	7.2	7.3%	9.0%	10.0%	

1. Additional canopy associated with city investment in street tree planting - 20% of potential planting spaces in the ROW (not adjacent to BLI sites).

2. Additional canopy due to planting potential ROW planting spaces associated with development/redevelopment (BLI sites).

3. BLI tax lot analysis reflects canopy impact from zoning, landscape requirements, and landscaping the river setback.

4. Reflects PP&R preferred future tree canopy ranges for existing PP&R managed parks.

5.4 Table 9. Central City 2035 Plan Future Tree Canopy Scenario

	PROJECTED CHANGES IN TREE CANOPY (from Baseline Scenario)										CC2035 PLAN			
	ROW					TAX LOTS					PARKS		OTHER	
	District Area (water not included) (acres)	Baseline canopy - LOW (acres)	Baseline canopy - HIGH (acres)	Investment: street tree planting (non-BLI sites) ¹ (acres)	PENDING Green Loop/ Streetscape improvements (non-BLI sites) (acres)	Optional front setbacks - ROW (BLI sites) ² (acres)	Optional front setbacks - tax lots (BLI sites) ² (acres)	Increased river setback - LOW ³ (acres)	Increased river setback - HIGH ³ (acres)	Investment: new parks - LOW ⁴ (acres)	Investment: new parks - HIGH ⁴ (acres)	Investment: riverbank enhancement - LOW ⁵ (acres)	Investment: riverbank enhancement - HIGH ⁵ (acres)	Tree Canopy - LOW
Central City District														
SE QUAD														
Central Eastside	706	24.4	27.2	2.2	0.0	1.0	0.4	0.3	0.5	0.4	1.8	3.8	4.3%	5.2%
SE Quad Total	706	24.4	27.2	2.2	0.0	1.0	0.4	0.3	0.5	0.4	1.8	3.8	4.3%	5.2%
N/NE QUAD														
Lloyd District	385	27.4	29.3	1.0	0.0	0.2	0.7	0.0	0.0	3.0	4.4	0.3	8.4%	9.3%
Lower Albina	138	6.1	6.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	4.8%	4.9%
N/NE Quad Total	523	33.5	35.5	1.4	0.0	0.2	0.7	0.0	0.0	3.0	4.4	0.4	7.5%	8.2%
WEST QUAD														
Downtown	222	29.4	31.2	1.7	0.0	0.1	0.1	0.0	0.0	0.0	-0.1	0.0	14.0%	14.9%
Goose Hollow	175	20.4	22.1	0.5	0.0	0.4	0.4	0.0	0.0	0.0	0.4	0.0	12.4%	13.7%
Old Town/Chinatown	130	9.4	10.3	0.5	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.3	7.8%	8.7%
Pearl District	277	46.6	49.4	1.0	0.0	0.2	0.4	0.6	1.1	0.4	1.5	0.2	17.8%	19.6%
South Downtown/University	218	37.6	42.2	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.5	17.4%	19.8%
South Waterfront	177	15.0	18.6	0.3	0.0	0.0	0.2	1.9	3.9	4.5	6.2	1.9	12.8%	17.5%
West End	95	9.8	10.8	1.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	11.5%	12.6%
West Quad Total	1,294	168.1	184.6	5.0	0.0	0.9	1.6	2.5	5.0	4.9	8.2	3.3	14.2%	16.1%
Central City Total	2,523	226.0	247.3	9.6	0.0	2.1	2.7	2.8	5.5	8.3	14.4	7.5	10.1%	11.5%

1. Additional canopy resulting from a second 2-year city street tree planting effort - an additional 20% of potential planting spaces planted (not adjacent to BLI sites).

2. Optional setback associated with new development/redevelopment (BLI sites). Setback may be landscaped, vegetated, or a mix, based on street typology. It is assumed that 25% of developers will choose the optional setback. Includes additional canopy from ROW and tax lot trees.

3. Additional canopy from increasing river setback from 25' to 50'. Also includes area between ordinary high water and top of bank, using 25 feet as a proxy.

4. Includes anticipated future parks (PP&R-managed and other).

5. Additional canopy based on the 2035 riverbank enhancement targets. Includes canopy within 75' landward from ordinary high water.

5.4 Table 10. Central City Existing Tree Canopy, Baseline Future Tree Canopy, and Central City 2035 Plan Future Tree Canopy Scenarios

	Existing tree canopy as percent of total district area	Baseline Future Tree Canopy Scenario		CC2035 Plan Future Tree Canopy Scenario	
		LOW	HIGH	LOW	HIGH
CC District					
SE QUAD					
Central Eastside	2.9%	3.5%	3.9%	4.3%	5.2%
SE Quad Total	2.9%	3.5%	3.9%	4.3%	5.2%
N/NE QUAD					
Lloyd District	7.5%	7.1%	7.6%	8.4%	9.3%
Lower Albina	3.8%	4.4%	4.5%	4.8%	4.9%
N/NE Quad Total	6.5%	6.4%	6.8%	7.5%	8.2%
WEST QUAD					
Downtown	12.6%	13.2%	14.0%	14.0%	14.9%
Goose Hollow	13.3%	11.7%	12.7%	12.4%	13.7%
Old Town/Chinatown	6.7%	7.2%	7.9%	7.8%	8.7%
Pearl District	3.4%	17.1%	18.4%	17.8%	19.6%
South Downtown/University	19.9%	17.2%	19.3%	17.4%	19.8%
South Waterfront	5.8%	9.1%	11.7%	12.8%	17.5%
West End	7.0%	10.3%	11.4%	11.5%	12.6%
West Quad Total	10.0%	13.1%	14.5%	14.2%	16.1%
Central City Total	7.3%	9.0%	10.0%	10.1%	11.5%

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5. Riverbank Enhancement Target

As part of the Central City 2035 plan, targets related to many topics (e.g., jobs, parking, tree canopy) are being proposed. City Council will adopt these targets by resolution and the targets will serve to help the city evaluate if the plan is being achieved as envisioned. The targets are non-binding. However, measuring how we are doing after 5, 10 or 15 years of plan implementation will help the city adjust its course. For example, the city could choose to fund additional street tree plantings in areas not meeting the tree canopy target.

A technical team with staff from Bureau of Planning and Sustainability (BPS), Bureau of Environmental Services (BES), and Portland Parks (Parks) developed an updated methodology for setting riverbank enhancement and restoration targets in the Willamette River Central Reach. The methodology was adopted by resolution in June 2015.

Definitions

River enhancement is a process to improve/enhance/heighten functions of *existing habitat*. Enhancement does not increase the size of a habitat area.

For example, a site includes shallow water with no in-water structure and a river bank that has a 30% slope and vegetated with invasive plants. Enhancement actions would include installing root wads, large wood and other beneficial structure in the shallow water and revegetating the bank with a mix of native riparian plants.

River restoration is when habitat is re-established on a site or a portion of a site. Restoration increases the size of the habitat area or reintroduces habitat functions that are currently absent.

For example, taking the same site as above, restoration actions would include laying back the river bank to make it less steep, moving non-habitat uses (e.g., a trail) further from the river and vegetating the bank with native plants. The size of the habitat area would be increased.

In both enhancement and restoration areas, long-term maintenance is a vital component to ensure the actions are successful.

Introduction

The following Central City wide goals, policies and actions pertain to in-water and riverbank enhancement. There are specific district actions in some case; however, the overall intention is that riverbank enhancement occur everywhere there is an opportunity.

CC2035 Goal I: Protect and improve in-water and riverbank habitat, water quality and flood storage capacity to make and keep the river healthy for fish, wildlife and people.

CC2035 Policy In-water Habitat: Maintain and enhance in-water habitat throughout the Central Reach and focus on two-three specific shallow water habitat restoration areas to promote the conservation and restoration of fish and wildlife populations.

CC2035 Action WR4: Enhance and create connectivity between in-water, river bank and upland areas to maintain and improve fish and wildlife habitat.

Examples of riverbank enhancement actions include:

- Removing invasive, non-native plants and installing native or appropriate climate-adaptive vegetation. A mix of trees, shrubs and ground cover is appropriate; however, an enhancement action does not have to include large structure vegetation. For example, along the Greenway Trail there are developed viewpoints at which people can stop and enjoy views of the river, bridges and the city skyline. An enhancement action in front of a developed viewpoint could include removing Himalayan blackberries and planting native spirea, nokta rose and snow berry shrubs that will not grow tall and block the view. That said, enhancement actions that include large structure vegetation will result in additional functional improvements to the habitat. Therefore, trees should be included in enhancement areas to the maximum extent practicable.
- In some sections riverbank the soil type, amount of moisture and steepness of slope may make it difficult to establish vegetation. There are bioengineering techniques that could be used in these situations. Installing small terraces or planting wells creates less steep locations where soil can be brought in and then planted. These types of enhancement actions do not constitute restoration unless the overall habitat footprint is increased.
- Removing rip rap or other materials that are no longer necessary to stabilize the riverbank and planting native, or appropriate climate-adaptive vegetation. Some locations along the Central Reach riverbank are less steep and include a mix of rip rap and other unconsolidated fill (e.g., broken concrete or asphalt). For a variety of reasons, that material may no longer be necessary to stabilize the riverbank and could be removed and the bank planted. Removal of the rip rap may require re-engineering or grading the riverbank. Re-engineering the riverbank does not constitute restoration until either the overall footprint of the habitat is increased and/or a function that is not currently present at the site is re-established (e.g., flooding).

Riverbank restoration includes the same actions as enhancement; however, there would be additional actions that either increase the footprint or width of the habitat area or re-establish a function not currently present at the site (e.g., flooding). Examples of riverbank restoration actions include:

- Laying back the riverbank to reduce its steepness while simultaneously moving non-habitat uses and development further away from the river. The riverbank would also be revegetated with native or appropriate climate-adaptive vegetation. This action would increase the width of the functioning riparian area.
- Removing or breaching a levee or other flood control structure and/or removing fill to re-establish flooding within the historic floodplain of the river. Flooding contributes to a number of important riparian functions including nutrient cycling, sediment transfer, habitat creation and maintenance and water storage.

Existing Conditions

The existing riverbank conditions are presented below. The riverbank data was produced by the Bureau of Environment Services and is maintained by Bureau of Planning and Sustainability. The riverbank data is divided into these six categories:

- 1) Vegetated with any mix of native or non-native/invasive plants
- 2) Non-vegetated and stabilized with rip rap or unconsolidated fill with an estimated slope less than 30% steep
- 3) Non-vegetated and stabilized with rip rap or unconsolidated fill with an estimated slope 30% or greater (steeper)
- 4) Stabilized with pilings,
- 5) Stabilized with seawall
- 6) Beach

5.5 Table 1 presents the linear feet of existing riverbank by ownership of the land.

Riverbank	Ownership	North/Northeast Quadrant (In ft)	West Quadrant (In ft)	Southeast Quadrant (In ft)	Total (In ft)
Vegetated	Public	1,019	3,959	3,344	8,321
	Private	1,607	8,141	2,349	12,098
Beaches	Public	0	455	186	642
	Private	0	899	0	899
Non-vegetated; rip rap; unconsolidated fill less than 30% slope	Public	337	24	524	886
	Private	184	970	259	1,414
Non-vegetated; rip rap; unconsolidated fill 30% or greater slope	Public	135	0	1,527	1,663
	Private	3,224	1,186	572	4,982
Pilings	Public	0	960	159	1,119
	Private	552	545	0	1,097
Seawall	Public	0	5,193	451	5,644
	Private	0	451	0	451
Sub-Total	Public	1,492	10,592	6,191	18,275
	Private	5,567	12,192	3,180	20,940
Total		7,058	22,785	9,372	39,215

Of the total riverbank in the Central City, 39,270 linear feet, 53% is privately owned and 47% is owned by the City of Portland or other public entities such as Oregon Department of Transportation (ODOT). The Eastbank Esplanade, which represents nearly 6,000 linear ft of riverbank, is located almost entirely on ODOT right-of-way but is managed by Portland Parks and Recreation.

Based on the *Central City Development Capacity Study* (2011), approximately 4,960 linear feet of private property, 13% of the riverbank, is likely to redevelop by 2035.¹ The remaining 15,980 linear feet is not expected to redevelop by 2035. This is important because the Greenway requirements apply during redevelopment; outside of redevelopment there is no requirement to enhance the riverbank.

Restoring riverbanks and in-water habitat will be most successful where the existing conditions include relatively shallow water, which is critical factor for ESA-listed fish species. It would be very difficult to attempt to create a new shallow water areas without the river washing it away. There are seven (7) locations in the Central City with existing shallow water where restoration might occur:

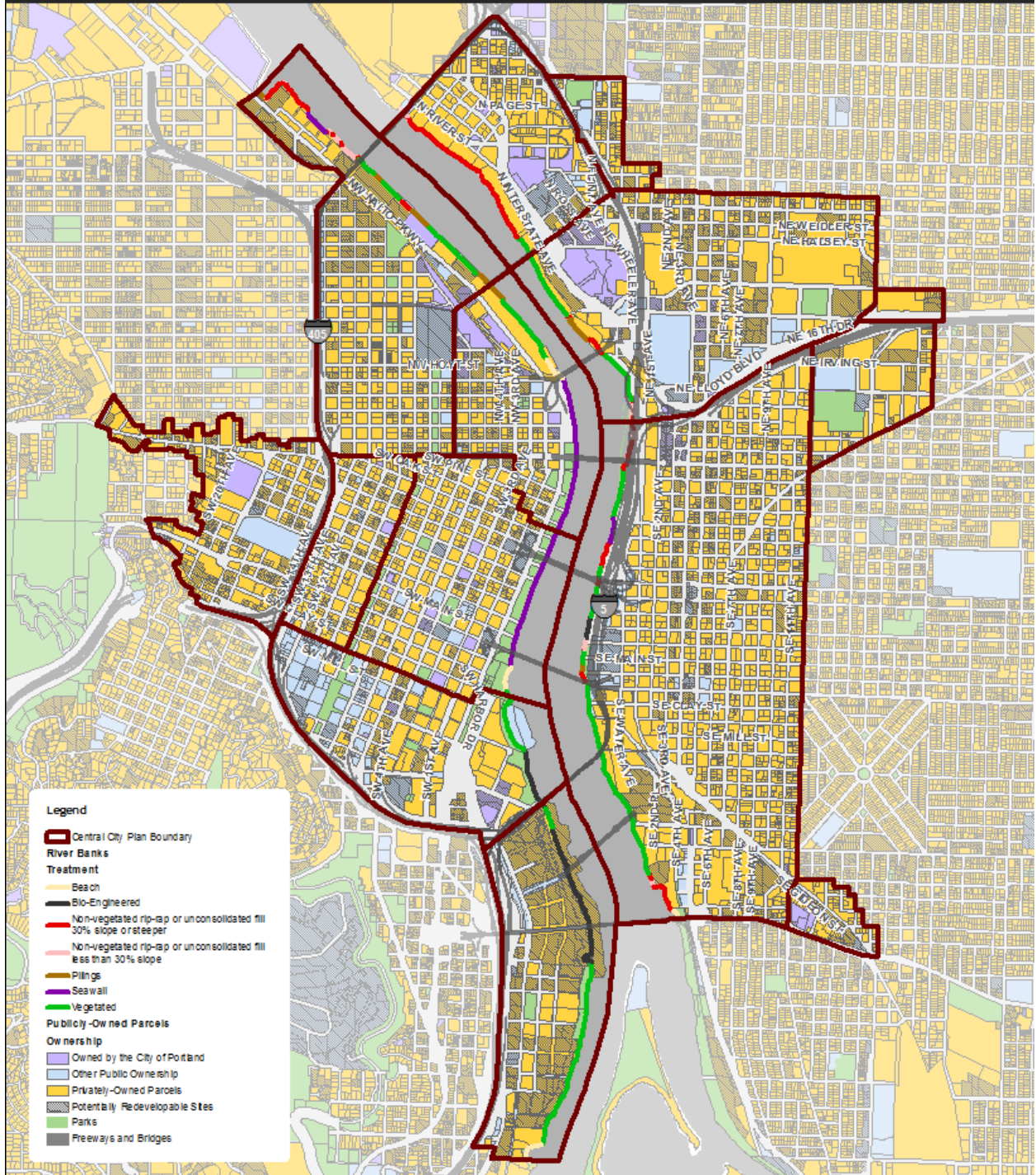
- Centennial Mills
- McCormick Pier
- I84/I5 Interchange Area (near Duckworth Dock)
- Eastbank Crescent (Morrison Bridge to Hawthorn Bridge)
- Hawthorn Bowl
- Eastbank Crescent (near Hollman Dock)
- Ivon Street Area

Portions of these restoration opportunity areas overlap with areas counted in this memo towards riverbank enhancement. A separate memo is being produced that explores restoration concepts. If restored, the linear feet of restoration should be counted towards meeting the riverbank enhancement target.

The map below shows the public and private ownership of land, parcels that are likely to redevelop by 2035 and existing riverbank conditions.

¹ Portions of South Waterfront are subject to a development agreement. As part of that agreement riverbank enhancement has already been completed and redevelopment of the parcels is underway. In addition, clean-up activities have been completed at the Zidell property. These areas are not included in the linear feet of parcels likely to redevelop by 2035.

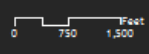
Central City River Bank Treatments



September 26, 2014

City of Portland, Oregon // Bureau of Planning & Sustainability // Geographic Information System

The information on this map was derived from City of Portland GIS databases. Care was taken in the creation of this map but no warranty is provided. The City of Portland cannot accept any responsibility for errors, omissions or potential inaccuracy.



Bureau of Planning and Sustainability
 Bureau of Information Technology
 City of Portland, Oregon
 2014 Plan Update - Public Review Period



Methodology

Riverbank Enhancement

In order to set a target, reasonable assumptions must be made about how much of the riverbank that can support a mix of native vegetation will be enhanced by 2035.

Below are assumptions regarding the types of riverbank that could be enhanced using a mix of native and appropriate climate-adaptive vegetation:

Vegetated Riverbanks

It is assumed that any riverbank with existing vegetation can be enhanced because these areas, through on-going maintenance, can support a mix of native vegetation. The underlining riverbank treatment may be riprap or other fill material.

Riverbank with an existing condition of “bioengineered” are vegetated but are assumed to have already been enhanced.

Beaches

Areas that are beach also tend to have less steep slopes, allowing for accumulation of sand and silt to maintain the beach. It is assumed that the riverbank above beach can be enhanced to support a mix of native vegetation. Beaches also represent opportunity areas for in-water enhancement; however, in-water enhancement is not included in the target for riverbank enhancement.

Non-vegetated, Rip Rap, or Unconsolidated Fill Less than 30% Slope

It is assumed that riverbanks that are not currently vegetated with an underlying treatment of rip rap or unconsolidated fill and have a slope less than 30% can be enhanced. Through bioengineering and on-going maintenance, these banks should support a mix of native vegetation.

Non-vegetated, Rip Rap, or Unconsolidated Fill 30% or Greater Slope

It is assumed that riverbanks that are not vegetated with an underlying treatment of rip rap or unconsolidated fill and have a slope of 30% or greater cannot support a mix of native vegetation because the soil will not retain the necessary moisture to support native species.

Pilings and Seawall

Riverbanks stabilized with pilings or seawall cannot be planted with native vegetation. However, there are innovative approaches to installing habitat along seawalls that are being tested in other locations. Such approaches include floating habitat mats and under water planted habitat walls.

In summary, the riverbanks that are assumed to have the potential for successful enhancement actions are those that are:

- 1) vegetated**
- 2) beaches**
- 3) non-vegetated, rip rap or unconsolidated fill with less than 30% slope, and**
- 4) a few, small innovative approaches along a seawall.**

All other riverbanks types are assumed to not support riverbank enhancement actions; restoration actions may be appropriate.

Below are assumptions about the amount of enhancement likely to occur based on property ownership. The assumptions are applied to only the riverbank types that have the potential to support enhancement actions.

Publicly Owned

Publicly owned riverbank can be enhanced. The City of Portland owns or manages parks and recreational facilities, such as the Eastbank Esplanade and Hawthorne Bowl. Other riverbank that is publically owned includes Oregon Department of Transportation, Multnomah County, Metro and public rights-of-way.

Considering the existing uses of these properties and how much land is available for habitat enhancement actions, staff assumes that:

- 70% of river banks owned by the City of Portland will be enhanced, and
- 70% of the riverbanks owned by other public entities will be enhanced.

There are many current and desired uses on public property including events (e.g., Blues Festival), boating, swimming, walking and biking. Those activities can have negative impacts on habitat. There are ways to design or program a site to reduce the impacts; however, staff were conservative regarding how much area could be dedicated to habitat.

It is assumed that some habitat enhancement will occur along the Tom McCall Waterfront Park seawall. Being conservative, staff assume that 200 linear feet of enhancement will occur along some portions of the seawall.

Centennial Mills is owned by the City of Portland. Although most of the riverbank at the site is pilings or too steep for enhancement, it is assumed that if the pilings are removed, the riverbank behind the pilings would be enhanced. Staff assume that 200 linear feet of enhancement will occur at the Centennial Mills site. Additional restoration actions may also be appropriate for this site.

Privately Owned Parcels that are Likely to Redevelop

Based on the *Central City Development Capacity Study* (2011), 4,960 linear feet of private property, 13% of the riverbank, is likely to redevelop by 2035, excluding portions of South Waterfront that have already been enhanced. Staff looked at those properties, considered the desired uses, such as connecting the Greenway Trail, and how much land may be available for habitat enhancement or restoration actions.

Staff assumed that, through compliance with the Willamette Greenway Plan, the riverbanks of private property will be enhanced during redevelopment. Sites with river-dependent uses, such as a dock that is required for loading/unloading goods and services, would retain some riverbank for that

purpose; however, through redevelopment much of the riverbank would be enhanced. Sites without river-dependent uses could be fully enhanced.

There are 4,960 linear feet of riverbank likely to redevelop in the Central City. Of that 4,630 linear feet is vegetated, beach or non-vegetated, rip rap or unconsolidated fill and less than 30% slope. It is assumed that 90% of the 4,630 linear feet will be enhanced by 2035.

Partnerships with Private Property

There are 15,980 linear feet of privately owned riverbank that are not likely to redevelop by 2035; 11,460 of which is vegetated, beach, or non-vegetated, rip rap or unconsolidated fill and less than 30% slope. The City and property owners could proactively partner to enhance the riverbanks. There are some grants available riparian enhancement. Staff assume that 1,800 linear feet of enhancement could be accomplished through partnerships with private property.

Riverbank Enhancement Targets

Based on the methodology above, including which riverbanks can support enhancement actions and assumptions about property ownership, the targets for riverbank enhancement in the Central City are:

City or Portland Ownership

Vegetated/Beach/<30%	Total = 3,550 ln ft	Target = 2,490 ln ft
Tom McCall Waterfront Park Seawall	Total = 5,200 ln ft	Target = 200 ln ft
Centennial Mills	Total = 690 ln ft	Target = 200 ln ft

Other Public Ownership

Vegetated/Beach/<30%	Total = 5,340 ln ft	Target = 3,740 ln ft*
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*Note – This includes the Eastbank Esplanade, which is on ODOT right-of-way but managed by City of Portland.

Private Redevelopment

Vegetated/Beach/<30%	Total = 4,630 ln ft	Target = 4,170 ln ft
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City/Private Partnerships

Total = 11,460 ln ft	Target = 1,800 ln ft
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Riverbank Enhancement Target = 12,600 linear feet (41% of riverbanks that meet the criteria for enhancement; 32% of all Central City riverbanks, regardless of bank type or likeliness to redevelop)

Riverbank Restoration

Restoring riverbanks and in-water habitat will be most successful where the existing conditions include relatively shallow water, which is critical factor for ESA-listed fish species. It would be very difficult to attempt to create a new shallow water areas without the river washing it away.

Within the Central Reach there are seven (7) locations with existing shallow water where restoration might occur:

- Centennial Mills
- McCormick Pier
- I-5/I-84 Interchange
- Eastbank Esplanade
- Hawthorne Bowl
- Eastbank Crescent
- Cottonwood Bay

There are other goals and priorities for each of these sites including boating, commerce, swimming, events, etc. For restoration to be successful, public access to the restoration area must be limited, thus uses within a single site will be need to be split. In addition, a feasibility study would need to be completed to determine what restoration actions can occur or the cost to restore (note – some areas may require contamination clean-up prior to restoration).

It is assumed that by 2035, at least five (5) of the seven (7) opportunity areas could be restored. The other opportunity sites could be enhanced and contribute towards meeting the enhancement target.

Riverbank Restoration Target = at least five sites

Implementation Cost Estimates

Estimating enhancement and restoration costs is difficult because each site will require different actions. Without specific project sites and knowing details about underlying soil, amount of overbuild and armoring, structures and other information, many assumptions must be made. What is presented below is intended to give a ball-park estimate regarding riverbank *enhancement* costs in the Central City. Restoration costs are not estimated here because the engineering and construction costs are too site-specific.

Some general assumptions have been made about enhancement sites in the Central City:

1. Enhancement sites would be clean; no contamination clean up would be necessary.
2. No real estate acquisition is necessary. The owner of the property would perform the enhancement work on-site.
3. No utility movement or relocation would necessary.
4. All actions will require long term managements and maintenance.

Much research has been done over the years to estimate the cost of riverbank enhancement actions. The primary source of information use here is the *River Plan/North Reach Willamette River Mitigation In-Lieu Fees Technical Report* produced by Tetra Tech, Inc. (October 2010). The in-lieu fees report evaluated three sites in the Portland Harbor and broke out costs by the actions taken to restore the site. The costs are based primarily on prior US Army Corps of Engineer or City of Portland Environmental Services and Portland Transportation projects.

Riverbank enhancement in other documents is known as riparian enhancement. The riparian area is the land adjacent to a river, stream, drainage way or wetland. Riparian areas in the Central City include a mix of habitat types: floodplain, sparsely vegetated, grassland, shrubland (includes blackberries) and woodland. The estimated costs in the Tetra Tech memo considered all habitat within the riparian area together, which results in a wide range of costs. For example, in some cases bioengineering or grading to create terraces or planting wells would be necessary and some case not.

The total costs for enhancement actions within the riparian area for the three Portland Harbor sites researched in the Tetra Tech memo was \$10 to \$97 per square foot; an average of \$45 per square foot.

Line Item	Average Unit Costs
Site Preparation	\$380,000 - \$2.1M
Erosion Control	\$3.50 / square foot
Structure Removal	\$200 / ton
Grading	\$35 / ton
Revegetation	\$22,000 / acre
Markups	\$4.6M - \$16M

Long-term maintenance is also a requirement for any enhancement action to be successful. As part of the West Hayden Island project, the City of Portland Bureau of Environmental Services estimated the long-term maintenance costs for a riparian forest. The cost was based on their experience with multiple enhancement and restoration actions throughout Portland. Again, there is a mix of habitat types in the Central City, not just forest; however, this estimate provides a conservative ball-park estimate. The estimate is \$230/acre; however, the first 5 years will cost more and the out years will cost less. Maintenance is calculated for 100 years, discounted every year, and then reported in 2012 dollars.

Note, all of these estimates are per unit, such as a square footage or ton. It is not possible to do a direct calculation without knowing how large each enhancement site is. Therefore, the purposes of coming up with an estimate, it is assumed that the width of any given enhancement area in the Central City is 50 feet. There are wider enhancement areas, such as the Hawthorne Bowl, and narrow enhancement areas, such as portions of the East bank Esplanade.

Using these numbers and assumptions, the range of costs to achieve the riverbank enhancement targets are:

City or Portland Ownership Total = 144,500 sq ft Initial Cost = \$1.4M – 14M Maintenance = \$1M

<u>Other Public Ownership</u>	Total = 187,000 sq ft	Initial Cost = \$1.9M - \$18M	Maintenance = \$1.1M
<u>Private Redevelopment</u>	Total = 207,500 sq ft	Initial Cost = \$2.1M - \$20M	Maintenance = \$1.4M
<u>City/Private Partnerships</u>	Total = 90,000 sq ft	Initial Cost = \$1M - \$8.7M	Maintenance = \$0.5M

DRAFT

6. Ecoroofs Target

See the following memo.



CITY OF PORTLAND ENVIRONMENTAL SERVICES



1120 SW Fifth Avenue, Room 1000, Portland, Oregon 97204 ■ Nick Fish, Commissioner ■ Michael Jordan, Director

MEMORANDUM

Date: June 17, 2015

To: BPS Central City 2035 Planning Team

From: Matt Burlin

CC: Jane Bacchieri, Paul Ketcham, Kaitlin Lovell, Dawn Uchiyama

Subject: Setting Ecoroof Targets for the Central City 2035 Plan

As part of the Central City 2035 plan, targets related to many topics (e.g., jobs, parking, tree canopy) are being proposed. City Council will adopt these targets by resolution, and the targets will serve to help the city know if the plan is being achieved as envisioned. The targets are non-binding. However, measuring how we are doing after 5, 10 or 15 years of plan implementation will help the city adjust its course.

1. Background

Ecoroofs replace conventional roofing with a vegetated roof system that slows and retains stormwater runoff. An ecoroof consists of a layer of vegetation and growing medium on top of a synthetic, waterproof membrane. In addition to decreasing stormwater runoff, ecoroofs can insulate buildings and save energy, reduce air pollution, absorb carbon dioxide, cool urban temperatures. Ecoroofs also increase habitat for birds and pollinators and can provide much needed greenspace for people in highly urbanized areas of Portland.

In 2008, as part of the Grey to Green Initiative, Environmental Services (BES) administered a direct financial incentive to increase ecoroof implementation on non-City property. In five years, the program supported the construction of 135 ecoroofs totaling 8.37 acres. The \$1.9M of incentive funding leveraged an additional \$6M in private investment¹. These construction projects created jobs and helped build capacity in the green roof industry despite slowing development trends due to the economic recession.

The ecoroof incentive is now closed; however, ecoroofs remain a tool in the stormwater management toolbox. With 12,500 acres of roof area in Portland, ecoroofs are an important tool to address stormwater system capacity issues as well as other common urban challenges associated with expansive impervious area, dense development and watershed health such as energy use, carbon dioxide, and urban heat island mitigation.

¹ Cost Analysis for the Portland Ecoroof Incentive. December 2014. <http://www.portlandoregon.gov/bes/article/522382>

2. Planning Context for Ecoroof Targets

Ecoroofs are a key component of green infrastructure and are referenced in several city planning documents (listed in Appendix A). As part of the CC2035, many watershed and green infrastructure elements have been converted to actions with short term and long term targets. Examples include tree canopy expansion and linear feet of riverbank enhancement.

The Stormwater Management Manual and that ecoroofs are one mechanism that can be used to meet the requirements of the manual. Within the Central City, where lot-line to lot-line development is allowed, there is often not room on a site for stormwater management and ecoroofs become the only viable options. While the focus and establishment of an ecoroof target has been driven by stormwater system needs, the outcome will help other city bureaus focused on those additional benefits of green infrastructure including the Climate Action Plan.

3. Baseline Conditions for Targets

An analysis of ecoroof potential in the Central City 2035 Plan will be limited to the opportunity for retrofits (existing building inventory) and new construction (potential for development or redevelopment).

Existing roof coverage was calculated using building data² via the City of Portland GIS HUB. Using these data, the total roof area for the Central City is 2,383 acres, which is % of the whole area (minus the Willamette River). Ecoroofs on existing buildings will likely have more structural and cost limitations, though a complete structural analysis is necessary to indicate potential on the site scale. This analysis assumes that all existing buildings have the potential for an ecoroof, and that site conditions will be assessed in a later exercise.

As of May 2015, there are 93 ecoroofs in the Central City totaling 13.9 acres, or roughly 0.6% of the Central City roof area.

4. Methodology

The Ecoroof Prioritization Strategy (EPS) is an existing tool, developed by BES staff, that provides a framework for selecting optimal ecoroof locations across the City of Portland. The EPS can be used to guide program outreach, policy and code development, and inform watershed and citywide planning efforts. The purpose of EPS is to develop a strategic approach to identify areas where ecoroof applications would provide the greatest benefit to Portland's storm and sewer infrastructure, watershed health, and community livability.

4.1 Process

The EPS process develops and assigns a composite value of total potential ecoroof benefit for every building and underutilized lot in the city, allowing a comparative analysis across the city, watershed, or neighborhood. For the purpose of this analysis, the process was modified to prescribe an ecoroof target in the Central City:

- a. **Collect data layers that convey storm, sewer, watershed, and community livability needs.** Collect all the GIS data sets available that quantify each of the multiple benefits

² Metadata:

http://www.portlandmaps.com/metadata/index.cfm?action=DisplayLayer&header=no&DatasetName=building_footprints_pdx

provided by ecoroofs. It's unlikely all relevant data sets exist, so this step will be continuous as more or better data is made available.

- b. **Document relevance of ecoroof benefits addressing those needs.** Data sets vary in their relevance and applicability to ecoroof benefits, so the EPS documents the data source and all assumptions made for each driver.
- c. **Apply value to benefits provided through ecoroof application for each driver.** The EPS applies a qualitative numeric value for each benefit provided.
- d. **Calculate total potential for ecoroof application meeting all drivers for all parts of the city.** With each data set given a numeric value, they are compiled to show total benefit from all data sets for all parts of the city.
- e. **Identify areas where ecoroof application would have the greatest value.** Once the data sets are compiled into a composite score, identify hot spots across the city and flag buildings and underutilized lots in those areas. The result is a comprehensive inventory of buildings city-wide that provide the greatest ecoroof potential.

4.2 Supporting Data

Ecoroof value was assessed by combining qualitative values from available data sets including combined sewer capacity risk, water quality, habitat connectivity, environmental protection zones, and urban heat island. For the purpose of this analysis, sewer and storm system needs were given a higher weight than other drivers to ensure that ecoroof targets meet stormwater and sewer system capacity goals, with value added for additional the benefits identified through the analysis. More information on supporting data can be found in Appendix B.

4.3 Identifying Target Inventory

- a. **Identify existing buildings that are high targets.** The next step was to apply composite scores to all Central City buildings. The analysis identified 2,763 buildings totaling 2,383 acres (mean building size 37,509 ft²).
- b. **Identify lots that are high targets and likely to be redeveloped.** The Development Capacity GIS Model³ is a tool developed by the Bureau of Planning and Sustainability to inform the development of the Portland Plan. Using the model, it is possible to identify underutilized lots across the city that are likely to be developed or redeveloped and may be opportunities for ecoroofs. For all underutilized lots (excluding single-family residential), a composite score was calculated using the same analysis in the previous section. Within the Central City the analysis identified 1,359 lots likely to be developed totaling 408 acres (mean lot size 13,079 ft²).
- c. **Perform sensitivity Analysis.** The EPS assigns priority to high value buildings and redevelopment opportunities. Using a sensitivity analysis of the highest priorities allows us to set the target at a realistic level.

³ City of Portland Development Capacity Analysis. City of Portland Bureau of Planning and Sustainability. May 2010.

Priority Targets	Ex. Building Acres	Redevelopment Acres	Total Acres
Highest 1% priority	23.8	4.1	27.9
Highest 5%	119.1	20.4	139.5
Highest 10%	238.3	40.8	279.1
Highest 15%	357.4	61.2	418.6
Highest 25%	595.7	102.0	697.7

4.4 Additional Considerations

Developing a 2035 target should consider several factors:

- Annual ecoroof implementation to date: Since, 2004, the City of Portland has seen 19 acres of ecoroofs installed, or 1.9 acres per year. Annual implementation has increased. In the last five years, average annual ecoroof implementation was over 2.3 acres. In that same timeframe the ecoroof incentive supported an average of 1.7 acres per year.
- The recession had a huge impact on development, which affected the available opportunities for ecoroof construction. As development trends improve, we can expect opportunities to increase.
- While it's unclear if other American cities have comparable targets, a survey of green roof programs in cities like Portland may allow comparison. Green Roofs for Healthy Cities, an international trade association, summarizes annual ecoroof implementation for their North American constituents. In 2013, GRHC reported 10% growth in the green roof industry, and have reported double-digit growth every year for the last decade.⁴
- Technological advancements that expand the applicability of ecoroofs is expected. The industry is already responding to structural and economic limits to implementation. Thinner, lighter-weight, lower-cost, minimal-irrigation designs are making ecoroofs more possible on more types of buildings, and this trend is likely to continue.
- The uncertainties of climate change will mean that resources to combat warmer and wetter seasons will be more limited. Roof space may become a more important asset in managing our storm and sewer systems.
- Ecoroofs may be more applicable in areas of the Central City that expect redevelopment or present constraints for ground-level stormwater management. Further analysis of Central City quads will permit the assignment of ecoroof targets on that scale.

5. Recommended Ecoroof Targets

Evaluating existing conditions, the above considerations, and analysis through the Ecoroof Prioritization Model, the recommended overall ecoroof target for the Central City is 15% of total area or approximately 18% of existing or redeveloped roof area by 2035. This target equates to 408 acres of green roofs by 2035. Variations in district character may result in the concentration of green roof areas in certain districts. Next steps will include a finer analysis and an assessment of opportunity for and limits to implementation.

⁴ 2013 Annual Green Roof Industry Survey. Green Roofs for Healthy Cities. April 2014
<http://www.greenroofs.org/resources/GreenRoofIndustrySurveyReport2013.pdf>

Ecoroof costs vary considerably depending on design, a building's structural capacity (for retrofits), and site conditions. As part of the Ecoroof Incentive Program (2008-2013)⁵ BES conducted a cost analysis of 109 incentive projects to identify relationships to installation type, land use, size of roof, and other characteristics. The analysis found that the average cost for ecoroof construction was \$10.34 per square foot. Incentive funding contributed \$1.9 million and leveraged an additional \$6 million for total construction costs of around \$8 million from 2008 to 2015.

Total construction costs to meet 15% coverage target by 2035 would be approximately \$178 million, or \$8.9 million per year. This cost would be bore by private development during the construction of new buildings or reroofing of existing buildings in the Central City. However, research shows that through energy savings, improved roof durability, reduced stormwater fees, and several other benefits, the costs would be paid off in just over 6 years⁶. A more robust economic analysis is recommended to determine the true potential for ecoroofs in the Central City and the appropriate tools needed to reach 2035 targets.

⁵ <http://www.portlandoregon.gov/bes/article/522380>

⁶ The Benefits and Challenges of Green Roofs on Public and Commercial Buildings: A Report of the United States General Services Administration. May 2011
http://www.gsa.gov/portal/mediald/158783/fileName/The_Benefits_and_Challenges_of_Green_Roofs_on_Public_and_Commercial_Buildings.action

Ecoroof Target

APPENDIX A: Supporting City Planning Documents

Portland Watershed Management Plan

The Portland Watershed Management Plan (PWMP) uses comprehensive approach to meet state and federal regulations for water quality and endangered species protection. Ecoroofs help to implement the stormwater management strategy of the PWMP.

Portland Plan

The Portland Plan, adopted in 2012, includes...

- H-3 Continue to manage and invest in quality basic public services. These services include public safety, emergency services, transportation and transit, drinking water, sewer, stormwater and green infrastructure, parks and natural areas and civic buildings.
- H-24 Develop the network of habitat connections, neighborhood greenways and plan for civic corridors as a spine of Portland's civic, transportation and green infrastructure systems. Enhance safety, livability and watershed health and catalyze private investment and support livability.
- P-10 Continue to promote innovation in public projects related to transportation and environmental services, including the following: (1) green infrastructure approaches as part of cleaning up the Willamette River, (2) an innovative active transportation system transit, walking, use of mobility devices, biking, car and bike sharing, etc., and (3) urban parks and natural areas. These will enhance the livability of the city and give Portland a competitive advantage in retaining and attracting an educated, productive workforce.

Climate Action Plan

Central City 2035

The following Central City goals, policies and actions pertain to ecoroofs. There are specific district actions in some cases; however, the overall intention is that increasing ecoroof coverage occurs throughout the Central City.

Willamette River

- Policy 45. Water Quality. Improve the quality of stormwater runoff from the street using stormwater management tools such as bioswales and street trees. Increase the use of ecoroofs, green walls and rain gardens with redevelopment.
- Action WR3: Improve water quality in the Willamette River by integrating green infrastructure and urban design.

Urban Design

- Policy 48. Signature open spaces. Advance the Central City's iconic interconnected system of parks, trails, and natural areas by offering a wide range of social, recreational, contemplative and respite functions to serve an increasingly diverse population of residents, workers and visitors.
- Action UD1: Develop incentives to encourage publicly accessible, private plazas, ecoroofs and pocket parks as new development occurs.

Health and the Environment

- Goal R: Advance the Central City as a living laboratory that demonstrates how the design and function of a dense urban center can provide equitable benefits to human health, the natural environment and the local economy.
- Policy 56. Green infrastructure. Expand the use of green infrastructure, such as trees, vegetation, swales and ecoroofs, as a component of the Central City's overall infrastructure system.
- Policy 59. Green Infrastructure. Increase the use of ecoroofs, vertical gardens, sustainable site development, landscaped setbacks and courtyards, living walls and other vegetated facilities to manage stormwater, improve the pedestrian environment, reduce the heat island effect, improve air and water quality and create habitat for birds and pollinators on new buildings.
- Policy 61. Upland Habitat Connections. Create an upland wildlife habitat corridor using street trees, native vegetation in landscaping, public open spaces and ecoroofs that provides a connection for avian and pollinator species between the West Hills and Willamette River.

Ecoroof Target

APPENDIX B: Supporting Data

A. Storm and Sewer Infrastructure

Ecoroofs help to retain and slow stormwater runoff from roofs and thus can assist in reducing the timing and volume of stormwater managed by the storm and sewer pipe system.

1. Present Worth of Capacity Deficiency Risk - These data, shown in Figure 4-10 of the March 2012 City of Portland System Plan⁷, show the geographic distribution of capacity deficiency risk within the BES service area (combined and sanitary sewer basins) in terms of 100 year present worth value. This capacity deficiency risk includes basement sewer back up risk and the risk of future CSOs.
2. Municipal Separate Storm Sewer System (MS4) Drainage sub-basins - MS4 sub-basins will generate runoff that drains into waterways. Ecoroofs on these buildings will reduce the volume of stormwater runoff from roofs, and the remaining volume will be cooler and potentially cleaner when it leaves the roof.

B. Watershed Health

Ecoroofs are part of the Stormwater Management Strategy in the Portland Watershed Management Plan to improve hydrologic function and watershed health⁸. The impervious area reduction from ecoroof installations can reduce stormwater runoff volume and reduce impacts to ecologically sensitive areas and those prone to landslide risk.

1. Habitat Connectivity - The 2011 Terrestrial Ecology Enhancement Strategy⁹ (TEES) identifies ecoroofs as a tool to address barriers to or gaps in habitat connectivity. Ecoroofs provide habitat for insects and birds, and help connect habitat corridors and fill gaps. For the purpose of this analysis, all buildings within 50 feet of habitat corridors, gaps, or anchors will be valued as providing habitat benefit.
2. Environmental Zones¹⁰ - Environmental zones protect resources and functional values that have been identified by the City as providing benefits to the public. For properties developing in an e-zone, minimal site enhancements include the removal of impervious surface and installation of native plants. For the purpose of this analysis, all surveyed buildings within 100 feet of designated environmental zones will be valued positively based on the reduction and removal of roof runoff.

C. Community Livability

Ecoroofs provide an additional suite of benefits to community livability and health, including air quality, cooling, and aesthetics. Data are limited for these drivers.

1. Urban Heat Island - Through evapotranspiration and shading of the roof membrane, ecoroofs reduce heat transfer between buildings and the atmosphere, which helps to

⁷ City of Portland System Plan: Combined and Sanitary Sewer Elements: Executive Report. March 2012

⁸ Actions for Watershed Health: 2005 Portland Watershed Management Plan. City of Portland Environmental Services, 2005

⁹ Terrestrial Ecology Enhancement Strategy. City of Portland, Oregon. June, 2011.

<http://www.portlandoregon.gov/bes/article/354986>

¹⁰ Overlay Zones, BPS website. <http://www.portlandoregon.gov/bps/article/64465>

reduce the temperature in urban centers, particularly in dense urban areas with high impervious area and low vegetation. GIS data modeled and provided by Portland State University show that the warmest areas of Portland's heat islands are in the Central City, industrial areas, and along major arterials, and are more than 2°C warmer. For the purpose of this analysis, all surveyed buildings within these areas will be valued positively for reducing roof contribution to temperature increases.

B. BUREAU WORK PLANS/ACTION CHARTS

Bureau work plans/action charts will be included in a future draft.